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KUMBA IRON ORE LTD

SISHEN IRON ORE COMPANY (PTY) LTD

DEVELOPMENT OF AN AIRPORT NEAR POSTMASBURG, NORTHERN CAPE

SCOPING REPORT

DENC REFERENCE: NC/EIA/06/ZFM/TSA/POS1/2020

DRAFT FOR PUBLIC COMMENT

EXM Advisory Services

ENVIRONMENTAL • MINERAL RIGHTS • SOCIAL & SD

SISHEN IRON ORE COMPANY (PTY) LTD

DEVELOPMENT OF AN AIRPORT NEAR POSTMASBURG, NORTHERN CAPE

SCOPING REPORT

DRAFT FOR PUBLIC COMMENT

NAME OF APPLICANT: Sishen Iron Ore Company (Pty) Ltd – Kolomela Mine

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FAX NO: 078 560 5600

POSTAL ADDRESS: Private Bag X3003, Postmasburg, 8420

PHYSICAL ADDRESS: Kolomela Mine, Farm Strydfontein, Postmasburg

REF NUMBER: TBA

SUBMITTED FOR AUTHORISATION IN TERMS OF:

LISTED ACTIVITIES UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT

PREPARED BY: EXM Environmental Advisory (Pty) Ltd

Date: 12 August 2020

Address: Office Quadrum Office Park, Quadrum 4, Ground Floor, 50 Constantia Blvd, Constantia Kloof, Johannesburg, 2000
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Company Reg: 2014/189068/07

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Name	**Designation**	**Signature**	**Date**
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Divan van der Merwe	EXM Advisory Services (Pty) Ltd Director		2020/08/12
Kerry Fairley	EXM Advisory Services (Pty) Ltd Report Reviewer Pr.Sci.Nat.		2020/08/12

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ACRONYMS AND ABBREVIATIONS

	Definition
BID	Background Information Document
DENC	Northern Cape Department of
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
GNR	Government Notice Regulation
IAP	Interested and Affected Party
IWWMP	Integrated Water and Waste Management Plan
mamsl	Metres above mean sea level
NDCR	National Dust Control Regulations
NEMA	National Environmental Management Act
NEM: BA	National Environmental Management Biodiversity Act
NEM: WA	National Environmental Management Waste Act
NFEPA	National Freshwater Ecosystem Priority Areas
NHRA	National Heritage Resources Act
NIA	Noise Impact Assessment
SIOC	Sishen Iron Ore Company
SACNASP	South African Council for Natural & Scientific Professionals
SAHRA	South African Heritage Resource Agency
SANS	South African National Standards
SIOC	Sishen Iron Ore Company (Pty) Ltd
SLP	Social Labour Plan
TOPS	Threatened or Protected Species
TIA	Traffic Impact Assessment

1. EXECUTIVE SUMMARY

1.1 Project overview

Sishen Iron Ore Company (Pty) Ltd (SIOC) – Kolomela mine, part of Kumba Iron Ore (Kumba) proposes to develop an airport on the Farm Kalkfontein 474, located approximately 3.4 km south of the town of Postmasburg, Tsantsabane Local Municipality, in the Northern Cape Province. The airport will be used to accommodate air traffic related to passengers travelling to and from Kolomela mine which is currently accommodated by Tommy's Airfield, situated 10km north west of Postmasburg. Tommy's Airfield does not have sufficient capacity to convey the current air traffic, resulting in overflow passengers flying to Kathu and being shuttled over 100 km by road.

The runway at Tommy's Field does not have sufficient space to accommodate larger airplanes which enhances the capacity deficiency. The airport will also serve the general public and scheduled flights will be implemented. Furthermore, the short runway presents a safety hazard as the existing planes in use cannot take off a full capacity on hot days. In order to address safety risks and accommodate more commuters, SIOC proposes to develop a new airport in line with the requirements of the Civil Aviation Authority.

The footprint of the project will cover approximately 80 hectares and will entail the development of the following structures/infrastructure.

- A runway of approximately 2.2 km.
- Helipad(s).
- Fuel farm to house fuel storage tanks.
- Water storage tanks.
- Access road (approximately 1600m).
- Parking area.
- Septic tank system.
- Terminal building and supporting facilities.
- Waste management area.
- Electricity supply lines (11kV).

Water supply to the airport will be sourced from groundwater boreholes. The preferred option is to develop a borrow pit on site for the sourcing of fill material used in construction, subject to geotechnical investigations.

1.2 Environmental Authorisations

1.2.1 Environmental Impact Assessment Process

The proposed airport development triggers activities published in Listing Notice 1 (GN R. 983 of

2014, as amended), Listing Notice 2 (GN R. 984 of 2014, as amended) and Listing Notice 3 (GN R. 985 of 2014, as amended), promulgated in terms of the National Environmental Management Act (Act 107 of 1998). A full Environmental Impact Assessment (EIA) and Scoping process in terms of the Environmental Impact Assessment Regulations (GN R982 of 2014, as amended by GN R326 of 2017) must therefore be undertaken to obtain Environmental Authorisation (EA) prior to commencement. The Northern Cape Environmental Affairs and Nature Conservation (DENC) is the Competent Authority (CA) responsible for administering the EIA process.

EXM Environmental Advisory (Pty) Ltd ("EXM") has been appointed as the independent Environmental Assessment Practitioner (EAP) to facilitate the EIA as well as the supporting public consultation process. This scoping report has been developed according the requirements of the EIA regulations to verify and assess the scope of work that will be undertaken during the impact assessment phase.

1.2.2 Water Use Licence Application

A separate Integrated Water Use Licence will be undertaken for the following activities listed in Section 21 of the National Water Act (Act No. 36 of 1998):

- Section 21 (a) – abstraction of groundwater from a borehole to supply the airport;
- Section 21 (c&i) – impeding or diverting the flow of water in a watercourse & altering the bed, banks or characteristics of a watercourse for developments within or close to wetland pans and watercourses.
- Section 21 (f&g) discharging water containing waste into a water resource and disposing of waste in a manner which may detrimentally impact on a water resource.

The application for the water use licence will be take place concurrent to the EIA process.

1.3 Key Potential Impacts

1.3.1 Biodiversity and Surface Water Resources

The proposed airport will be developed in an area that is relatively undisturbed by human activities. The establishment of the project footprint as well as the construction of the access road will result in the removal of vegetation which will cause impacts on biodiversity, both in terms of physical disturbance and habitat fragmentation.

Several pans are distributed across the flat-lying, central portions of the area which will potentially be disturbed by the project footprint. A prominent drainage area is situated in the south eastern corner of the property towards the Groenwaterspruit which is situated in the western section of the property. It is not anticipated that the development will have a direct impact on the Groenwaterspruit or the prominent drainage feature.

Runoff from disturbed areas during the construction phase and increased runoff volumes from artificial surfaces during operations may also result in erosion and sedimentation of downstream water courses.

1.3.2 Noise

The runway of the proposed airport will be situated relatively close to residences to the south east (2 km), north east (1.3 km) and north west (1.7 km) of the site. Other residence as well as a guest house are also situated on the Farm Soetfontein approximately 2.5km from the proposed facility. It is anticipated that noise from the proposed airport and associated air traffic may result in potential nuisance conditions for these residents. The closest residential area in Postmasburg is situated 2.5 km north of the site.

1.3.3 Traffic

The proposed airport will result in increased traffic travelling on the R325 regional road and through Postmasburg. The development will therefore result in potential traffic impacts related to congestion and deterioration of road conditions.

1.3.4 Heritage Resources

The establishment of the project footprint may result in the disturbance of sites of archaeological, palaeontological, cultural or heritage importance.

1.3.5 Soil and groundwater

The project will entail the management of hazardous substances, including bulk fuel storage. Spillages may result in contamination of soil and seepage to groundwater.

1.4 Specialist studies to be undertaken

It is proposed that the following specialist studies will be undertaken to provide input to the EIA:

- Noise Impact Assessment
- Traffic Impact Assessment
- Aquatic Ecological Impact Assessment
- Terrestrial (Fauna and Flora) Ecological Impact Assessment
- Heritage Impact Assessment
- Paleontological Phase 1 Assessment
- Social and Human Rights Impact and Risk Analysis
- Hydropedological Assessment
- Groundwater Supply Study

1.5 Public Participation Process

A public participation process is conducted in terms of the Chapter 6 of the National Environmental Management Act and the EIA regulations. The purpose of the public

participation process is to inform all the identified Interested and Affected Parties (IAPs) of the proposed development and associated application process and allow them to raise comments/concerns. The requirements of the Directions (GN 43412 of 5 June 2020) issued by the Department of Environment, Forestry and Fisheries (DEFF) in terms of the Disaster Management Act (57/2002) in terms of the correct protocol for public participation will be adhered to and has been incorporated in the below description.

The draft Scoping report is available for a 30 day commenting period after which the comments will be incorporated and the final scoping report will be submitted to the Competent Authority (CA) for approval. The final Scoping report will also be distributed to the IAPs.

2. DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

2.1 Details of EAP

2.1.1 The Environmental Assessment Practitioner (EAP) who prepared the report

Name of The Practitioner: EXM Environmental Advisory (Pty) Ltd

Tel No.: 010 007 3617

Fax No.: 086 527 4619

e-mail address: trevor@exm.co.za

TABLE 2-1: EXPERTISE OF THE EAP.

EAP	Qualification	Years' experience
Trevor Hallatt	BSc Geography and Zoology (NWU) BA (hons) Environmental Management (NWU) MA Environmental Management (NWU)	9 Years
	South African Council for Natural Scientific Professions (SANASP) Registration no.: 300123/15	

CV with experience is attached as Appendix A.

3. DESCRIPTION OF THE PROPERTY

Farm Name:	Remaining Extent of Farm Kalkfontein 474
Application area (Ha	Property size: 1 371 hectares Development footprint size: +/- 80 hectares
Magisterial district:	The Hay Magisterial District (Tsantsabane Local Municipality) ZF Mgcawu District Municipality
Distance and direction from nearest town	3 km south west of the Postmasburg CBD 80 km south of Kathu 60 km north west of Griekwastad
21-digit Surveyor General Code for each farm portion	C03100000000047400000
Locality map	Figure 4-1.

4. LOCALITY MAP

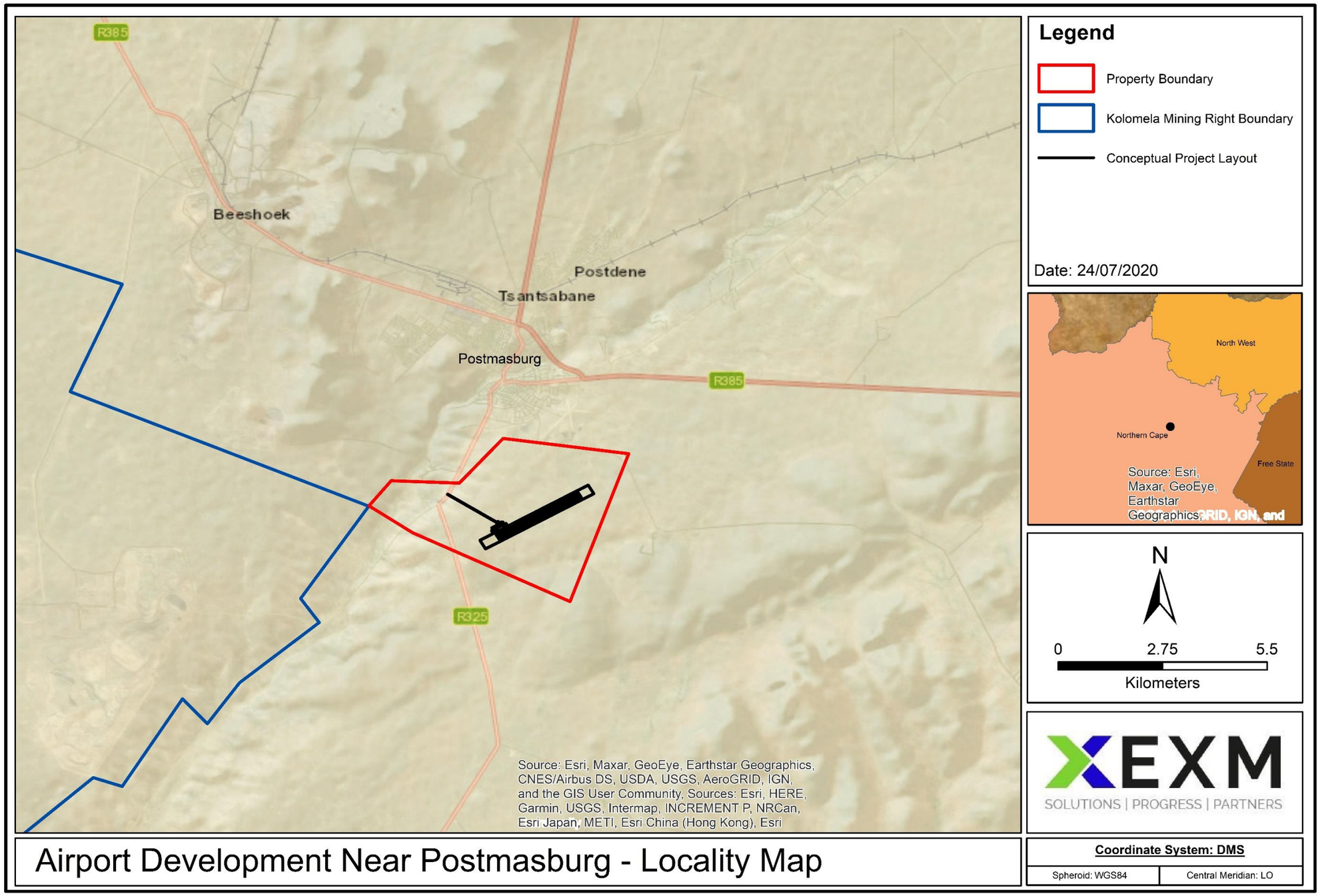


FIGURE 4-1: LOCALITY MAP

5. DESCRIPTION OF THE SCOPE OF THE PROPOSED OVERALL ACTIVITY

5.1 Listed and specified activities

Applicable Regulation		Project Infrastructure triggering the Listed Activity
Listing Notice 1 (GN R. 983 as amended in 2017)		
Activity 12	The development of— (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs— (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse	Several pans (water courses) are situated on the property which will potentially be impacted by the project footprint. A WUL application will be submitted to obtain authorisation in terms of activities listed in Section 21 of the National Water Act (No. 36 of 1998).
Activity 14	The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.	The development will entail the storage of fuel that will be used in the re-fuelling of airplanes.
Activity 19	The infilling or depositing of any material of more than [5] 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than [5] 10 cubic metres from [—(i)] a watercourse; [(ii) the seashore; or i. (iii)the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or estuary, whichever distance is the greater.	Several pans (water courses) are situated on the property which will potentially be impacted by the project footprint. A WUL application will be submitted to obtain authorisation in terms of activities listed in Section 21 of the National Water Act (No. 36 of 1998)
Activity 24	The development of a road— (i) [a road] for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or (ii) [a road] with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres; but excluding a road— (a) [roads] which [are] is identified and included in activity 27 in Listing Notice 2 of 2014; (b) [roads] where the entire road falls within an urban area; or i. (c) which is 1 kilometre or shorter.	The length of the access road that will be constructed as part of the project will be approximately 2.5 km and will be wider than 8 meters.
Activity 28	Residential, mixed, retail, commercial, industrial or institutional developments where	The property on which the

Applicable Regulation		Project Infrastructure triggering the Listed Activity
	such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	proposed airport will be developed has been used for the purpose of game farming.
Listing Notice 2 (GN R. 984 as amended in 2017)		
Activity 6	The development of facilities or infrastructure for any purpose or activity which a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation of release of emissions, pollution or effluent, excluding- (i) activities which are identified and included in Listing Notice 1 of 2014; (ii) activities which are in the list of waste management activities published in terms of section 19 of the National Environmental Management: Wate Act, 2008 (Act 59 of 2008) in which case the National Environmental Management: Waste Act, 2008, applies; (iii) the development of facilities or infrastructure for the treatment of effluent, polluted water, wastewater or sewage where such facilities have a daily throughput capacity of 2 000 cubic metres or less; or (v) where the development is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will it exceed 50 cubic metres per day.	Effluent will be released from the on-site wastewater treatment works into evaporation ponds. The release of effluent requires a licence in terms of activities listed under Section 21 of the National Water Act (No. 36 of 1998)
Activity 8	Activity 8. The development of— (i) airports; or (ii) runways or aircraft landing strips longer than 1,4 kilometres.	The project entails the development of an airport with a runway exceeding 1,4km.
Activity 15	Activity 15. The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	The project footprint will cover approximately 80 hectares and will entail the clearance of indigenous vegetation exceeding 20 hectares.

Applicable Regulation		Project Infrastructure triggering the Listed Activity
Listing Notice 3 (GN R. 985 as amended in 2017)		
Activity 10	The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres. g. Northern Cape ii. Areas within a watercourse or wetland; or within 100 metres from the edge of a watercourse or wetland;	The development will entail the storage of fuel that will be used in the re-fuelling of airplanes. A portion of the property on the proposed airport will be developed is classified as a Critical Biodiversity Area according to the Northern Cape Critical Biodiversity Map. Refer to Appendix 7 for the environmental sensitivity map.

5.2 Description of activities to be undertaken

5.2.1 Background

Sishen Iron Ore Company (Pty) Ltd (SIOC) – Kolomela mine, part of Kumba Iron Ore (Kumba) is proposing the development of a new airport on the Farm Kalkfontein 474 R/E, south of Postmasburg in the Tsantsabane Local Municipal area. The purpose of the airport will be to accommodate air traffic related to passengers travelling to and from Kolomela mine.

Currently, flights carrying passengers for Kolomela are serviced by Assmang's Tommy's Airfield. SIOC makes use of SA Airlink for air travel to Postmasburg. This involves 7 flights in 29-seater J41 turbo-prop aeroplanes per week. However, there is a shortage of capacity on the Kolomela flights and many passengers are forced to fly to Sishen and are subjected to a long (over 100 km) and potentially dangerous road transfer from Kathu to Postmasburg. The existing runway at Tommy's Field is too short to accommodate larger planes. The short runway also does not allow for safe departures of fully-loaded aircraft under 'hot and high' conditions and various safety incidents have been reported. Furthermore, it is probable that SA Airlink will retire the fleet of J41 aircraft currently servicing Kolomela in the future. There is thus a need for a longer, safer runway to accommodate air traffic to Kolomela mine.

5.2.2 Infrastructure

The proposed new airport and associated infrastructure will cover approximately 80 hectares. A conceptual layout of the airport is given in Figure 5-1.

FIGURE 5-1: AIRPORT CONCEPTUAL LAYOUT

5.2.2.1 Runway and helipad(s)

The runway will be approximately 2.2 km in length and 30 meters wide, assuming a level runway. The dimensions of the runway have been calculated in terms of the type of aircraft that will be accommodated by the airport. Factors such as take-off and landing velocity of the aircrafts were considered. A helipad(s) will also be developed to accommodate helicopters at the facility.

5.2.2.2 Access road

A paved access road will be developed which will connect the proposed airport with the R325 regional road. The road will be approximately 900 m in length and 7 meters wide.

5.2.2.3 Fuel storage and supply

A fuel farm will be developed to accommodate fuel storage tanks that will be used for the refuelling of aircraft. The J41 turbo-prop aeroplanes that will be the dominant aircraft in the fleet has a fuel capacity of 6 000 liters and fuel will be delivered on 2-week intervals. The storage capacity of the fuel farm will be sized accordingly. Currently it is estimated that a total volume of +/- 40 000 liters will be stored on site. A re-fuelling depot with pumps and delivery systems will also be developed.

5.2.2.4 Parking area

A parking area will be developed for airport staff and travellers. The parking area will also accommodate car hire vehicles.

5.2.2.5 Fire station

A fire station building will be developed which will include an elevated fire lookout. Dedicated water tanks will be established for firefighting purposes.

5.2.2.6 Electricity supply lines

A new electricity supply line of 11kV will be developed to connect the proposed facility with a substation nearby the existing Postmasburg airport or alternative substation.

5.2.2.7 Terminal and supporting facilities.

The terminal will entail a departures lounge with 60 seat capacity plus standing room for 20 pax at 1,2 m^2. The terminal will also include a baggage reclamation area, offices, a kitchen and ablution facilities. For reliable security and passenger processing, 2x X ray machines will be installed to improve throughput, provide redundancy and reduce boarding times. An initial conceptual layout of the terminal is given in Figure 5-2..

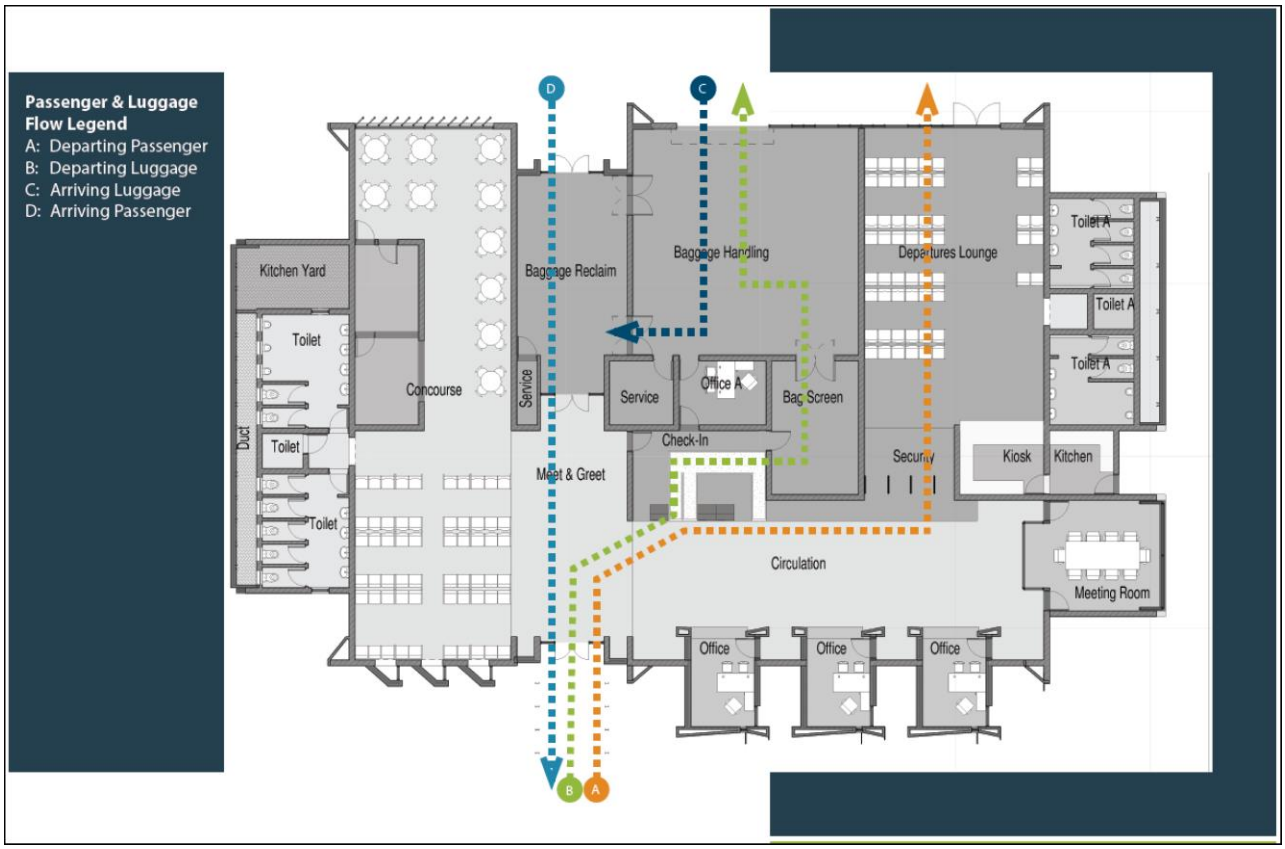


FIGURE 5-2: CONCEPTUAL TERMINAL LAYOUT

5.2.3 Water storage and supply

Water use required at the new facility is expected to be in the form of drinking, sanitation, firefighting, maintenance and general use. The water demand for the will be approximately 11 000 litres/day. SIOC proposes to abstract groundwater from a borehole(s) in the surrounding area to supply the water requirements at the airport. Water storage tanks will be established at the facility for distribution/pumping to the respective areas. Figure 5-3 illustrates the water supply system that will be installed at the facility. A Water Use Licence (IWUL) application will be submitted to the Department of Water and Sanitation (DWS) for Activity (a) listed under Section 21 of the National Water Act (No. 36 of 1998) to obtain authorisation for the abstraction of groundwater (see Section 6.7).

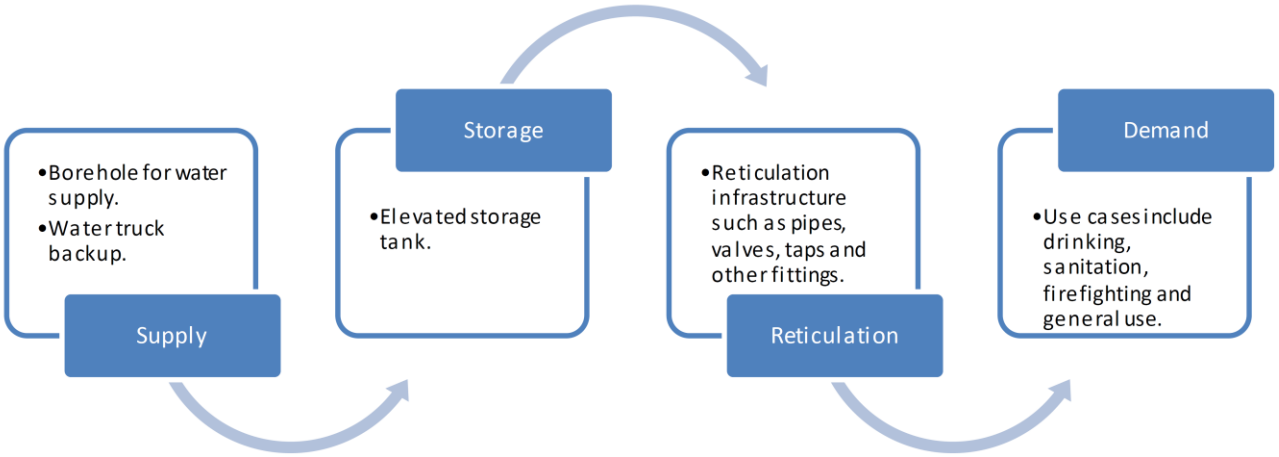


FIGURE 5-3: ONSITE WATER SUPPLY SYSTEM

5.2.4 Wastewater management

A septic tank system will be utilised at the facility for the management of grey water and sewage emanating from the airport operations. A septic tank system utilises settling and anaerobic digestion to provide primary treatment to wastewater. The septic tank(s) will be located underground to facilitate gravity flow into the tank. Sludge emanating from the system requires secondary treatment which will be conducted. The sludge will be removed via a vacuum truck and transported to the Postmasburg Wastewater Treatment Works for secondary treatment.

An evapotranspiration (ET) system is proposed to manage the effluent emanating from the septic tanks. An ET system utilises the evaporation effect for the management of effluent. An ET system features a network of slotted distribution pipes surrounded by a layer of filter sand and, if needed, a geotextile. Effluent is channelled into the distribution pipes via gravity and allowed to infiltrate into the surrounding material. The effluent is then evaporated in the ET bed via the evapotranspiration mechanism. Effluent is stopped from exiting the ET bed via a seepage mechanism by means of two layers of geosynthetic clay liner (GCL) below a 1.5 mm HDPE liner.

The septic tank system and the management of the effluent will also trigger activities f and g listed in Section 21 of the NWA and will therefore be included in the WUL application.

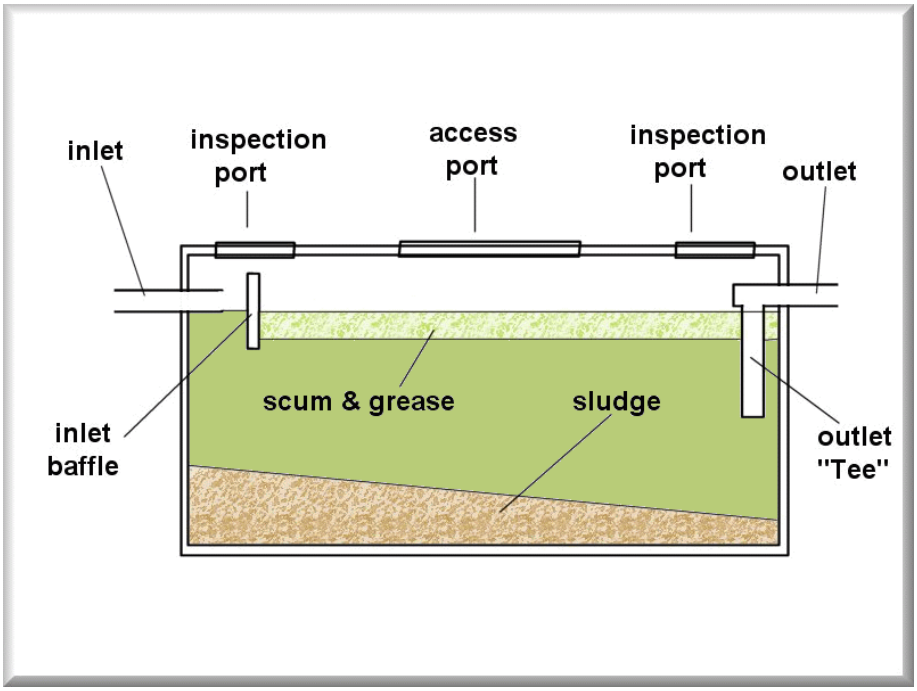


FIGURE 5-4: ILLUSTRATION OF A TYPICAL SEPTIC TANK SYSTEM

5.2.5 Stormwater management

There is no existing stormwater infrastructure in the area on which the proposed airport will be developed. The runway will be designed to allow stormwater to be removed from the surface as swiftly as possible to maintain skid resistance and enhance safety. Minor systems such as culverts and channels will be utilised to convey upstream and on-site runoff. There will be no open ditches, holes or embankments on the aircraft overrun area.

5.2.6 Borrow pit

Bulk earthworks related to runway construction is often the dominant cost component for a small airport facility. Fill materials for construction purposes will therefore be sourced from an on-site borrow pit which will reduce costs significantly, compared to the sourcing of such material from external sources. The sandy transported soils are expected to be easily excavated using conventional excavators and/or dozers, however, the hardpan calcrete layers may require the use of pneumatic action and/or blasting before excavation can take place. The development of the borrow pit will be subject to a geotechnical investigation.

6. POLICY AND LEGISLATIVE CONTEXT

This document has been prepared strictly in accordance with the requirements of the National Environmental Management Act (NEMA) (No. 107 of 1998) and the EIA Regulations (GNR 982 as amended in 2017). This section outlines the key legislative requirements applicable to the project.

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

Section 24 of NEMA provides for the Minister of Environmental Affairs to publish activities that require Environmental Authorisation (EA) prior to commencement. This has resulted in the promulgation of Listing Notices 1 (GN. 983), 2 (GN. 984) and 3 (GN. 985) with the Environmental Impact Assessment (EIA) Regulations (GN. 982) of December of 2014 as amended by GN. 324-327 of 7 April 2017. Activities included in Listing Notices 1 and 3 require a Basic Impact Assessment to be undertaken and activities included in Listing Notices 2 require a scoping and full Environmental Impact Assessment (EIA) process to be undertaken in order to obtain EA prior to commencement.

From the initial review, activities under Listing Notice 2 (GN. 984) are triggered and thus the application for environmental authorisation (EA) requires the completion of a scoping and EIA process. The complete list of activities triggered are provided in Section 5.1.

Authorisation is being sought for activities applicable to the development of the airport in terms of the EIA Listing Notices 1, 2 & 3 of GNR. 983-985, as amended.

6.2 National Environmental Management: Waste Act (No. 59 of 2008)

In terms of the National Environmental Management: Waste Act (NEM;WA) (No. 59 of 2008)), waste management activities that are listed in regulations published under NEM:WA may not be undertaken without a Waste Management License (WML). The listed activities for which a WML is required are contained in Government Notice (GN 921). Category A activities require a WML and a Basic Impact Assessment (BA) process must be conducted, and Category B activities require a WML and a full Scoping and EIA process must be conducted. In terms of Schedule 3 of NEM: WA, mining waste (residue stockpiles and deposits) are defined wastes falling under Category A – Hazardous Wastes of NEM: WA which includes waste rock.

The project will not require a Waste Management Licence in term of NEM:WA

6.3 National Environmental Management Act: Air quality Act (No. 39 of 2004)

The National Environmental Management: Air Quality Act (NEMA: AQA)(No. 39 of 2004) controls and regulates atmospheric emissions and provides for Listed Activities (GN. 893, November 2010) which have or may have a significant effect on the environment, including health, social conditions, economic conditions, ecological conditions or cultural heritage. Any activity captured under this list require the person undertaking the activity to apply for an Atmospheric Emission Licence (AEL).

The project will not trigger any activities listed in the Regulation and there is therefore no need for an AEL.

6.3.1 National Dust Control Regulations (GNR 827 of 2013)

The purpose of the regulations is to prescribe general measures for the control of dust in all areas. It is expected that the construction activities will result in increased dust fall. The project will be required to comply with the National Dust Control Regulations (GN. 827 of 1 November 2013).

6.4 National Environmental Management: Biodiversity Act (No. 10 of 2004)

Section 57 of the National Environmental Management Biodiversity Act (NEMBA) (No. 10 of 2004) restricts certain activities involving threatened and protected species (as listed in Regulation GN. 151 and 152, February 2007) without a permit. Restricted activities applicable to the project are limited to the potential removal of Threatened or Protected Species (TOPS) and plants during the clearance of vegetation.

6.5 National Forests Act (No. 94 of 1998)

Sections 12 and 15 of the National Forests (No.94 of 1998) requires any person who damages, cuts, destroys, prunes or relocates a nationally protected tree (as listed in Regulation GN. 690, September 2017) to apply for a permit from the Department of Agriculture, Forestry and Fisheries (DAFF) to do so.

An application will be submitted for the removal of protected species if any such plants are identified during the Ecological Impact Assessment.

6.6 Northern Cape Nature Conservation Act (No. 9 of 2009)

Section 49 and 50 of the Northern Cape Nature Conservation Act (No. 9 of 2009) requires any person that intends to undertake a restricted activity in respect of protected plants and animals as set out in Schedule I and Schedule II of the Act to apply for a permit from the Northern Cape Department of Environment and Nature Conservation. Application will need to be made for the necessary permits prior to the commencement of site clearance in areas (if any) where protected plants are present. The permit applications will be supported by an

Ecological Impact Assessment specialist study.

6.7 An application will be submitted for the removal/disturbance of protected species if any such plants are identified during the Ecological Impact Assessment. National Water Act (No. 36 of 1998)

The purpose of the National Water Act (NWA) (No. 36 of 1998) is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled. Section 21 of the NWA contains a list of activities that require a WUL prior to commencement. The proposed airport development will include water uses as defined in terms of Section 21 of the NWA (see Table 6-2).

TABLE 6-1: SECTION 21 WATER USES TO BE INCLUDED IN THE WULA

Water Use	Activity Description
Section 21 (a)	Abstraction of groundwater from a borehole.
Section 21 (c&i)	Infrastructure that will impact directly on water courses
	New infrastructure within 500 m regulated zone of a wetland/watercourse (specific infrastructure to include in the IWUL application will be confirmed after review of specialist findings)
Section 21 (f&g)	Discharging water containing waste into a water resource and disposing of waste in a manner which may detrimentally impact on a water resource.

An WUL application process is being undertaken in terms of the Regulations Regarding the Procedural Requirements for Water Use Licence Applications and Appeals (GNR. 267 of 2017). The WUL application will be supported by an Integrated Water and Waste Management Plan (IWWMP) compiled in accordance with the requirements of GNR. 267.

The project will require a Water Use Licence from the DWS Provincial Authority

6.8 National Heritage Resources Act (No. 25 of 1999)

The National Heritage Resources Act controls and regulates the interaction with heritage, archaeological, and paleontological artefacts and structures. Sections 34, 35 and 36 require that no person may demolish or alter any structure which is older than 60 years without a permit issued by the relevant provincial heritage resources agency. The NHRA further requires any person that disturbs any archaeological site, paleontological site or grave cannot do so without a permit.

A Heritage and Impact Assessment and Phase 1 Paleontological Study will be undertaken in order to identify any heritage sites within the project footprint area. Should any site need to be altered or destroyed, a permit will need to be obtained in terms of the NHRA. The South

African Heritage Resources Council (SAHRA) will be consulted in terms of Section 38 of the Act.

6.9 Mineral and Petroleum Resources Development Act (No. 28 of 2002)

Section 27 of the Minerals and Petroleum Resources Development Act (MPRDA) (No. 28 of 2002) relates to the application for, issuing and duration of mining permits.

A mining permit may only be issued if-

- the mineral in question can be mined optimally within a period of two years; and
- the mining area in question does not exceed 5.0 hectares in extent.

As a preferred option, subject to geotechnical investigations, SIOC proposes to source construction filling material from an on-site borrow pit for the construction of the airport facility. The extraction of such material from a borrow pit will require a mining permit if the above criteria are met.

A Basic Impact Assessment process will also need to be undertaken according to the EIA regulations in support of the mining permit application. If deemed feasible to source material from a borrow pit, the permitting process will be undertaken as a separate application with the Department of Mineral Resources & Energy as the competent authority responsible for the authorisation.

SIOC will have to apply for a mining permit in terms of Section 27 for the extraction of aggregate/building material from a borrow pit.

6.10 Civil Aviation Act (No 13 of 2009): Civil Aviation Regulations, 2011

According to Regulation 36 of the Civil Aviation Regulations an application for the aerodrome in term of regulation 21 must be supported by proof that the facility will comply with the appropriate noise standards as prescribed in Document SA-CATS 36.

Regulation 139.02.11 requires that an airport must establish an aerodrome environment management programme which relates to foreign object debris (FOD), oil and fuel spillages, bird and wildlife presents or are likely to present a hazard to aircraft operating to or from the aerodrome. The Environmental Management Programme (EMPr) must contain measures to minimise the effects of such hazard or potential hazard. The aerodrome operator shall ensure that an environmental management meeting is conducted with interval not exceeding three months and that the minutes of the meetings must be kept and must clearly indicate all identified environmental issues that may affect the operations and the rectification thereof.

In terms of Regulation 139.02.13, an application for the issuing of an aerodrome licence, or an amendment thereof, shall include an environmental impact report and written approval from all interested Government institutions.

The Civil Aviation Authority must be furnished with a copy of the Environmental Impact Report and the EA once it has been approved in support of the application in terms of the Civil Aviation Act.

7. NEED AND DESIRABILITY OF THE PROPOSED ACTIVITIES

7.1 Supporting function for Kolomela Mine

Kolomela Mine is situated in a remote section of South Africa and the mine is dependent on air transportation to allow contractors and employees to travel from other parts of the country including Kumba's Corporate office located in Gauteng to the mine in an effective and safe manner. Air transportation prevents long overland travelling that would result in a loss of productivity and undue safety risks for the employees and contractors. An airport and associated air travel provides an essential supporting function for the mine's operations. Therefore, a clear need exists for a facility that can accommodate passengers travelling to and from Kolomela mine. The proposed airport will ensure the continued transportation of employees and contractors to the mine.

7.2 Increased capacity to accommodate of air traffic

The purpose of the airport will be to accommodate air traffic related to passengers travelling to and from Kolomela mine from Johannesburg. While the Sishen mine is currently serviced by 19 flights per week of 37 seat regional jet aircraft, Kolomela is serviced by Assmang's Tommy's Field involving 7 flights in 29-seater J41 turbo-prop aeroplanes. Given the shortage of capacity on the Kolomela flights, many passengers are forced to fly to Sishen and are subjected to a long and a potentially dangerous road transfer over 100 km from Sishen airport in Kathu to Postmasburg.

Furthermore, the runway at Tommy's Field is too short to allow for safe departures of fully-loaded aircraft under 'hot and high' conditions and various safety incidents have been reported. Furthermore, it is likely that SA Airlink will retire the fleet of J41 aircraft currently servicing Kolomela in the future.

The existing runways at Tommy's Field and Postmasburg Airfield were investigated as possible solutions, but these facilities cannot be expanded for various technical reasons, including air space restrictions, proximity to mining activities and residential areas, thus necessitating the need for a new runway and airport to be develop in Postmasburg to support air traffic to Kolomela mine.

A clear need exists to develop a new facility to provide sufficient capacity for air transportation to Kolomela.

7.3 Socio-economic contribution

The project will contribute to economic development in terms of the following:

- Temporary jobs (skilled and unskilled) will be created during the construction phase of which a portion will be sourced from local labour. The project will result the creation of approximately 205 temporary jobs during construction.
- Approximately 23 permanent jobs will be created during the operations phase of which a portion will be sourced from local labour.
- The purchasing of local goods and services during construction and operations (fuel, food, cleaning services, maintenance, building material, etc.)

Social and Human Rights Impact and Risk Analysis (SHIRA) / Social Impact Assessment will be completed to provide input into the social management planning for the development of the new airport.

The project also has the potential to have socio-economic spin offs. The airport can be used by local residents and can be used by other aircraft not related to Kolomela mine operations. It will improve transportation of local residents. The current status of infrastructure development in Postmasburg is not favourable and this project will contribute significantly to infrastructure development in the area.

8. PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORISATION IS REQUIRED

The Kolomela Mine Life of Mine currently stands at 2032 with the potential for future expansion if further ore bodies ae deemed feasible to mine. The operational life of the airport which will correspond to the life of Kolomela mine. The airport could potentially be used as a commercial entity if not required for air travel related to Kolomela after mine closure.

9. DESCRIPTION OF THE PROCESS FOLLOWED TO REACH THE PROPOSED PREFERRED ALTERNATIVES

9.1 Site location alternatives

Four potential site location alternatives have been investigated for the development of the airport as illustrated in Figure 9-1.

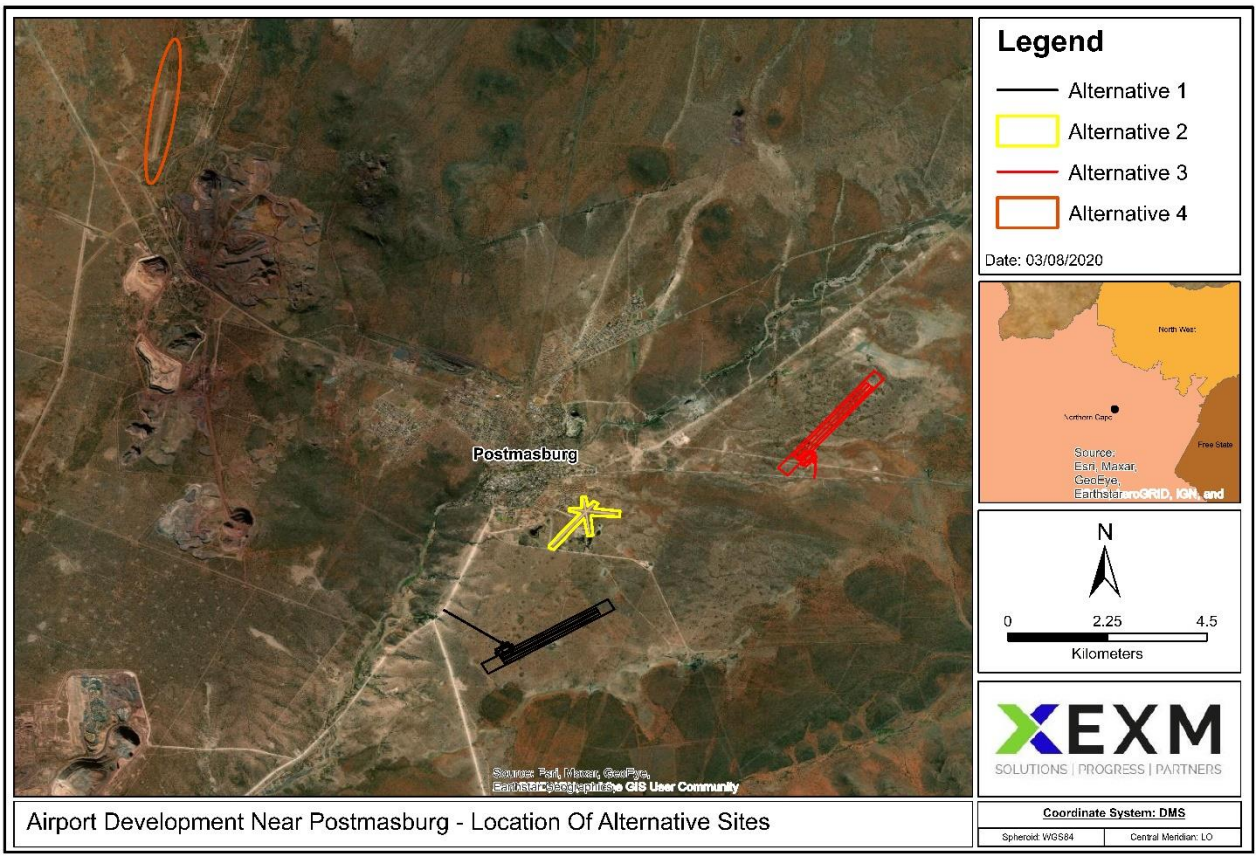


FIGURE 9-1: ALTERNATIVE LOCATIONS

9.1.1 Alternative 1: New Airport Development on the Farm Kalkfontein (preferred alternative)

Alternative 1 entails the development of a new airport on the Farm Kalkfontein 3.4 km south of Postmasburg. The new runway will be approximately 2 200m in length and 30 meters wide. The footprint of the site will cover approximately 80 hectares.

9.1.1.1 Power supply

A new electricity supply line (11kV) will have to be developed for the site, potentially connecting to a substation close to the existing Postmasburg airport.

9.1.1.2 Environmental features

The site is undeveloped and therefore indigenous vegetation will have to be removed. The site falls within the Postmasburg Thornveld vegetation type, regarded as Least Threatened and the site is not located within a Critical Biodiversity Area (CBA). However, the footprint will transect some water bodies, including some pans and minor drainage lines as seen in the

Figure below. The development of the new overhead power line and access road will also entail the removal of additional vegetation.

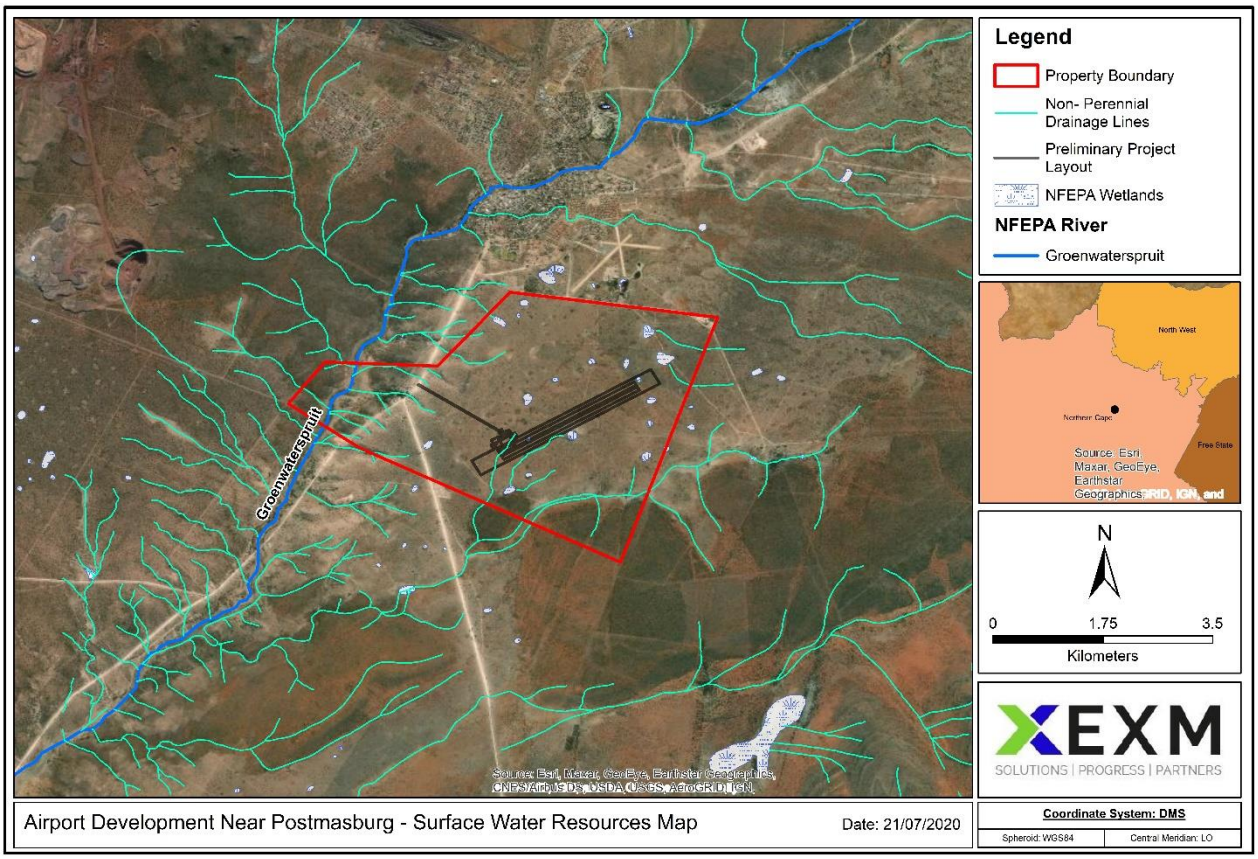


FIGURE 9-2: SURFACE WATER RESOURCES ASSOCIATED WITH ALTERNATIVE 1

9.1.1.3 Airspace availability and aviation restrictions

The site is situated far from the Lohatla Military Bombing Range airspace and no violations are expected. The area is relatively flat and no topographic constraints are expected.

9.1.1.4 Proximity to residential units

The runway will be relatively close to residents to the south east (2 km), north east (1.3 km) and north west (1.6 km) of the site. The closest residential area is situated 2.5 km north of the site.

9.1.1.5 Access to the site and travelling distance to Kolomela Mine

An access road of approximately 1 300 meters will be required to connect the site to the R325 regional road. The site is located approximately 26 km from Kolomela mine.

9.1.1.6 Conclusion

Although Alternative 1 will entail the removal of natural vegetation exceeding 80 hectares and water courses including pans will be affected, the site is situated in the Postmasburg Thornveld vegetation type (Least Threatened) and is not situated in a CBA. The site layout alternatives that will be determined during the EIA phase will potentially mitigate impacts on

pans and sensitive species. Only minor drainage features will be affected compared to site Alternative 3 which is located in a prominent drainage feature (tributary of the Groenwaterspruit).

The site is not characterised by airspace restrictions and is not situation within or close to the Lohatla Military Bombing Range airspace, compared to all the other alternative sites assessed. The site is not located in close proximity to residential areas (compared to Alternative 3), apart from the residents situated to the north, north-west and east of the site. The topography of the proposed site is also relatively flat for the establishment of the runway. Relatively easy access can also be established from the R309 regional road.

Alternative 1 is preferred based on the above factors and will provide a suitable area for the development of the proposed airport.

9.1.2 Alternative 2: Upgrade of the Existing Postmasburg Airport

Alternative 2 entails the upgrade of the existing Postmasburg Airfield. The upgrade will include the extension of the runway that is currently 1 200 m in length and the development of a new terminal and associated structures. The runway must be 2 200 m to accommodate the aircraft that will be used by the facility.

9.1.2.1 Power supply

The electricity supply at the Postmasburg Airfield is currently supplied from an existing 50 kVA 11kV/400 V transformer. The transformer and existing transformer and powerline will potentially require upgrade or replacement.

9.1.2.2 Environmental features

Alternative 2 falls within the Postmasburg Thornveld vegetation type, regarded as Least Threatened. The majority of the footprint of the proposed expansion is located within a Critical Biodiversity Area 1 as per the Northern Cape CBA map (Figure 9-3) which is regarded as highly sensitive. The remaining portion falls within "Other Natural Areas" under the CBA, which are areas with intact ecological sensitivity, situated in a pristine, undisturbed natural environment. The extension of the runway will also transect several water bodies and is also located in close proximity to several other water bodies.

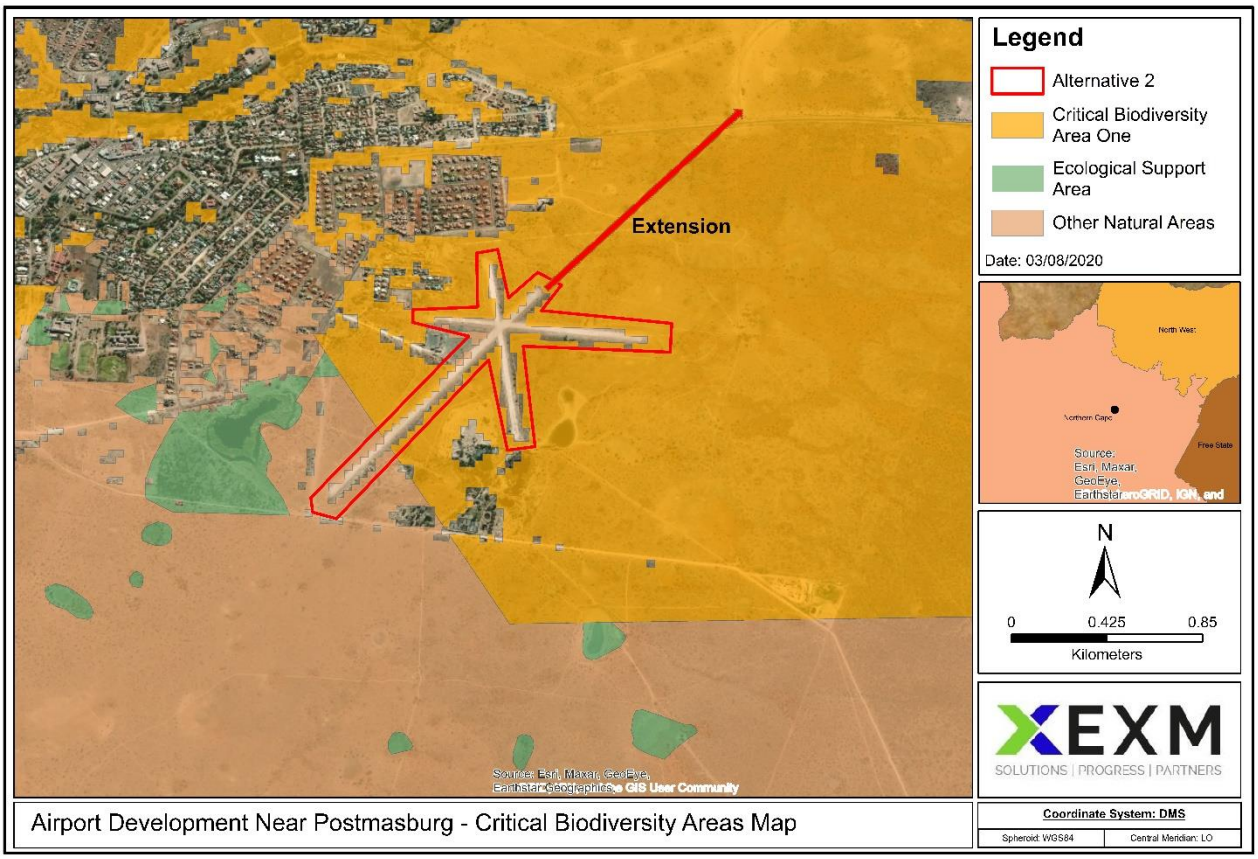


FIGURE 9-3: CRITICAL BIODIVERSITY AREAS MAP FOR ALTERNATIVE 2

9.1.2.3 Proximity to residential units

The runway will be very close to a residential area (less than 250 meters) which is a concern in terms of noise and will have a potential significant impact in terms of sense of place and nuisance conditions for the community. This may also pose a risk in terms of public relations and presents a major constraint for this alternative.

9.1.2.4 Airspace availability and aviation restrictions

The runway positioning and alignment is not in close proximity to the Lohatla Military Bombing Range airspace. However, the existence and location of nearby overhead power line structures and routes within or near the airfield present potential hazardous aviation obstacles. An existing water tower presents a potential obstacle and bird activity from the nearby waste water treatment works also poses a potential aviation risk. Obstacles in terms of aviation therefore pose a significant risk for this alternative.

9.1.2.5 Potential road diversion

The extended runway will potentially cross a road which will require a diversion of the road and associated authorisations.

9.1.2.6 Access to the site and travelling distance to Kolomela mine

The existing access road will have to be upgraded. The site is located approximately 28 km

from Kolomela mine

9.1.2.7 Conclusion

Alternative 2 is optimally located in terms of access and will only entail the extension of an existing facility not a new development. However, alternative 2 has been excluded for further assessment due to the very close proximity (<250m) to a residential area. The footprint of the proposed expansion is partially located within a CBA 1 which is regarded as highly sensitive. This alternative is also not preferred in due to the existence and location of nearby overhead power line structures which present potential hazardous aviation obstacles. An existing water tower presents a potential obstacle and bird activity from the nearby waste water treatment works also poses a potential aviation risk.

9.1.3 Alternative 3: New Airport Development on Municipal Land East of Postmasburg

Alternative 3 entails the construction of a new facility on a portion of undeveloped municipal land east of Postmasburg. This portion of land previously featured a set of perpendicular landing strips which have since been decommissioned. The footprint of the new facility will cover approximately 80 hectares.

9.1.3.1 Power supply

A new electrical supply point will have to be established for the site and a new overhead power line (22 kV) will have to be developed from the nearest substation (Vaalbos), approximately 10.0 km in length. The route of the overhead line shall be dependent on aviation regulations and restrictions to avoid creating aviation obstacles. The servitude for the new overhead line would need to be registered and this would form part of the power supply application procedure and shall require Civil Aviation Authority (CAA) approval which may take considerable time.

9.1.3.2 Environmental features

The site is undeveloped and therefore indigenous vegetation will have to be removed. The site falls within the Postmasburg Thornveld vegetation type, regarded as Least Threatened and the site is not located within a Critical Biodiversity Area (CBA). However, the footprint will transect a number of water bodies, including prominent drainage features (tributaries of the Groenwaterspruit) and wetlands as shown in the Figure below. The development of the new overhead power line (22 kV) will also potentially entail the removal of additional vegetation and disturbance of water courses.

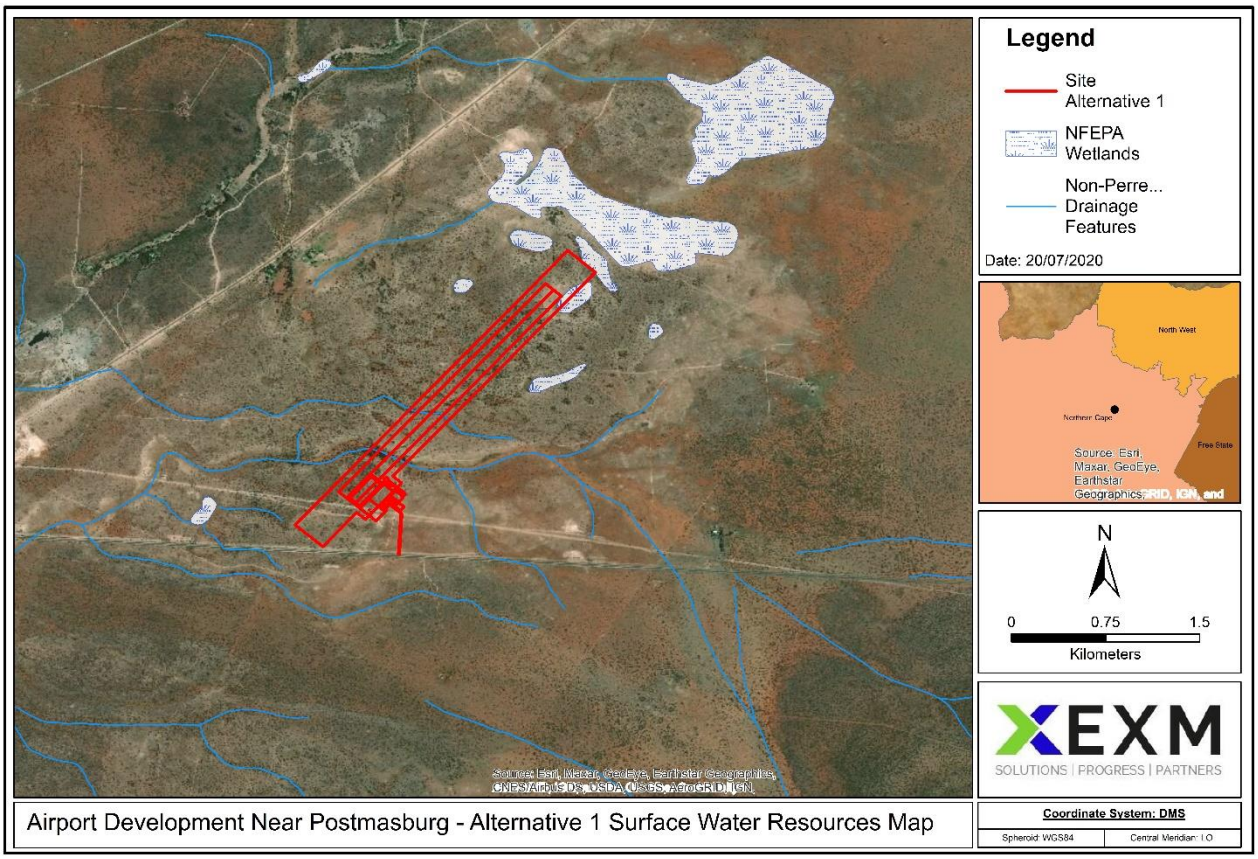


FIGURE 9-4: WATER RESOURCES ASSOCIATED WITH ALTERNATIVE 3

9.1.3.3 Proximity to residential units

Some residential units are located in close proximity to the site and will potentially have to be relocated. The nearest residential area is located 4 km east of the site.

9.1.3.4 Airspace availability and aviation restrictions

The runway positioning and alignment is limited owing to proximity of the Lohatla Military Bombing Range airspace and a ridgeline to the east imposes constraints on approaches and departures. The availability of airspace is a major constraint for this alternative.

9.1.3.5 Access to the site and travelling Distance to Kolomela Mine

An access road of 500 meters will be required. The site is situated 28 km from Kolomela mine.

9.1.3.6 Conclusion

Alternative 3 is not a preferred option and has been excluded for further assessment due to the risks posed in terms of the proximity to military restricted airspace and a ridgeline which poses aviation constraints. The footprint will also impact prominent drainage features related to tributaries of the Groenwaterspruit. A new power supply line of 10 km will also have to be established from the Vaalbos substation which will transect water courses.

9.1.4 Alternative 4: Extension of the Tommy's Field Airfield Runway

Alternative 4 entails the upgrading of the existing Tommy's Field runway to relevant aviation standards. The airfield is currently used by Kolomela Mine, but the short runway does not allow for safe departures of fully loaded aircraft under 'hot and high' conditions and various safety incidents have been reported. The runway is currently 1450 meter in length and will have to be extended by 750 meters to accommodate the aircraft that will be used by the facility.

9.1.4.1 Environmental features

The Tommy's Airfield falls within the Kuruman Thornveld vegetation type, regarded as Least Threatened. The footprint of the proposed development is located within Other Natural Areas (These areas are regarded to have an intact ecological sensitivity, situated in a pristine, undisturbed natural environment). The runway footprint is not foreseen to transects any water bodies. This will be determined during the comprehensive ecological assessment.

9.1.4.2 Power supply

The electricity supply at Tommy's Airfield is currently supplied from a 200 A, 300 V three phase circuit breaker, providing 100 A supply to Assmang and 100 A supply to Kolomela. The site is partially susceptible to power disruptions as it does have a 20 kVA standby generator. The transformer and existing powerline will potentially require upgrade or replacement.

9.1.4.3 Proximity to residential units

The runway is not situated near any residential areas.

9.1.4.4 Access to the site

There is an existing access road at the site.

9.1.4.5 Airspace availability and aviation restrictions

There are potential issues with violation of Lohatla Military Bombing Range airspace and existing incidents have been recorded. Substantial reconfiguration of both the runway and landside infrastructure will be required to ensure CAA compliance. The area is currently heavily impacted by mining activity from Beeshoek mine as shown Figure 9-5. A potential future increase impacts is expected. Extension of the runway will need to be into an existing nature reserve due to constraints introduced by mining activity south of the runway.

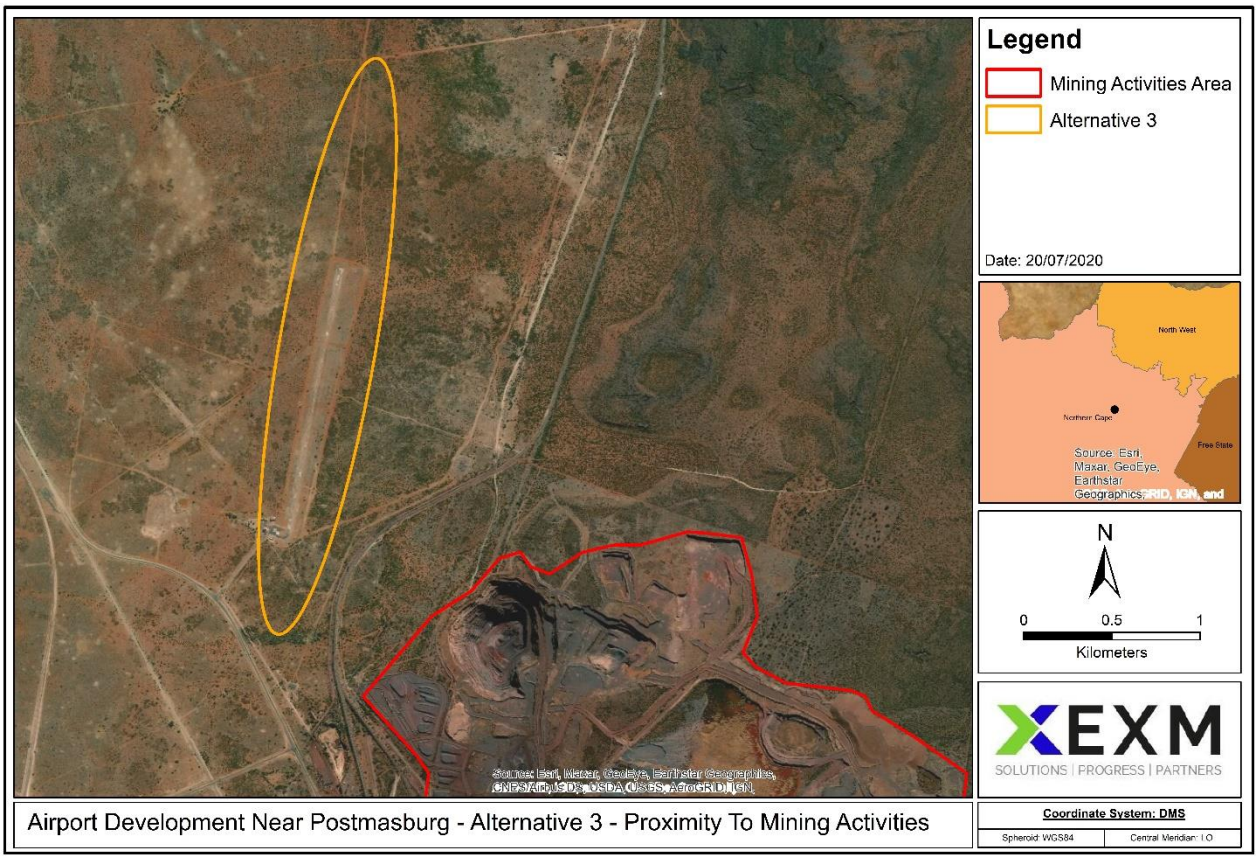


FIGURE 9-5: ALTERNATIVE 4 PROXIMITY TO MINING ACTIVITIES

9.1.4.6 Conclusion

Alternative 4 is optimally located in terms of access and travelling distance to Kolomela. However, Alternative 4 is not a preferred option and has been excluded for further assessment due to the very close proximity (800 m) to Beeshoek mine. The site is located within the Lohatla Military Bombing Range airspace and existing incidents have been recorded.

9.2 The Type of activity to be undertaken

The proposed activity relates to the development of an airport that will be used to accommodate air traffic related to passengers travelling to and from Kolomela which is currently accommodated by Tommy's Airfield. The alternative would be for passengers to fly to Sishen Airport and travel via road to Kolomela which poses significant safety concerns. Travelling from Sishen mine is also time consuming which will reduce the effectiveness and productivity of contractors and employees. This is not a feasible alternative and will not be further assessed during the EIA phase.

9.3 Site Layout Alternatives

No site layout alternatives have been assessed to date. The site layout alternatives will be based on the impact assessment and the findings of the specialist studies, as well as the topography of the study area. The site layout alternatives will be focussed on reducing the

impacts within the preferred site as far as practicable. The layout will also be based on the requirements of the CAA. The site layout alternatives will be assessed and included in the Environmental Impact Report (EIR).

9.4 The operational aspects of the activity

9.4.1 Use of a septic tank system vs Conservancy Tanks

Two options were considered for the management of wastewater (greywater and sewage) on-site, including a septic tank system or conservancy tank system.

A conservancy tank simply stores waste water which is removed on a scheduled basis for treatment at an off-site facility. This option is not optimal as the full volume of wastewater generated at the proposed airport will need to be manually trucked away from the site on a regular basis. The continuous removal of wastewater will be costly and require on-going logistical arrangements. This option will also put additional pressure on the municipal sewage system.

A septic tank system utilises settling and anaerobic digestion to provide primary treatment to wastewater. The septic tank is located underground to facilitate gravity flow into the tank. A sludge forms at the bottom of the tank via settlement, producing a pool of effluent above the sludge. The sludge will have to be removed occasionally and treated at an off-site facility. A septic tank system is the preferred option as it requires minimum maintenance and will not result in significant cost during operations. A septic tank system will also not put additional pressure on the municipal sewage system.

9.4.2 Water supply alternatives

The alternatives considered to supply the facility with water included a connection to the municipal supply line (Alternative 1) and to obtain groundwater from a borehole (Alternative 2).

In order to utilise the municipal water supply, more than 4 000 m of pipelines would be required. The site is however at a lower elevation than the municipal supply area and could be fed using the existing pressures in the distribution network. The construction of pipelines will be extremely costly, time consuming and would potentially require the removal of additional natural vegetation. Municipal water supply could also pose potential disruptions due to maintenance and operational issues.

Groundwater from boreholes is a major source of water in the area and various boreholes are located in the vicinity of the proposed site. This is a viable option if a reliable source (borehole) of water supply can be obtained. The utilisation of groundwater will also prevent potential water supply disruptions from a municipal supply. Relative short pipelines will be required and will minimise vegetation removal. The sourcing of groundwater to supply the water demand

is therefore the preferred option as this will be a relatively cost effective option that is reliable and will require less disturbance of natural vegetation. A Water Use Licence will however be required from the DWS in terms of Section 21 of the NWA for the abstraction of groundwater.

9.5 Travelling routes to Kolomela mine from new airport

Two route alternatives are considered for passengers travelling from the airport to Kolomela as illustrated in Figure 9-6 below.

The first alternative entails passengers travelling from the access road north on the R325 regional road towards Postmasburg. The passengers will travel through Postmasburg and join the R385 and travel north-east towards Kolomela and join the mine main access road approximately 7 km from town. This route has a total distance of approximately 23 km and will result in additional traffic volumes in Postmasburg. A Traffic Impact Assessment (TIA) specialist study will be undertaken to determine potential impacts in terms of safety and potential congestion.

The second route alternative will entail passengers travelling south west on the R309 regional road for approximately 4 km and join an alternative Kolomela access road (Figure 9-6). This access road is currently closed for general access. This route has a total distance of approximately 13 km. Although this alternative will not result in additional traffic volumes through Postmasburg, the route may pose other safety risks related to the status of the gravel road en-route as well as the proximity to mining activities at Kolomela mine. Furthermore, the alternative access currently has no provision for access control into the mining right area. As such the alternative may be deemed unfeasible.

The route alternatives will further be evaluated during the EIA phase, taking into consideration of the outcomes of the TIA specialist study and outcome of the EIA.

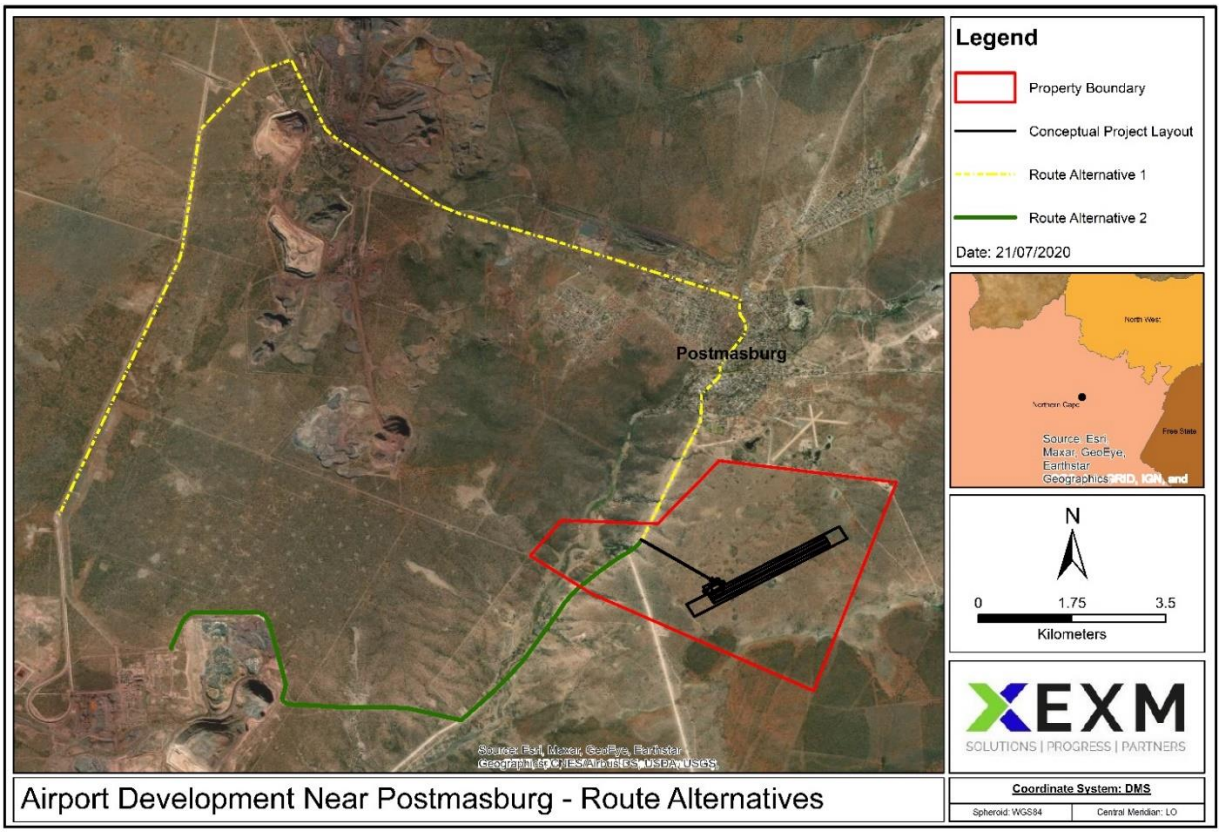


FIGURE 9-6: ALTERNATIVE ROUTES TO KOLOMELA MINE

9.6 Option of not implementing the activity

In accordance with the NEMA Regulations, the no-go alternative is required to be investigated and assessed. The no-go alternative would entail the non-continuation of the airport development. This would mean that Kolomela will continue to use Assmang's Tommy's Airfield. There is currently a shortage of capacity on the Kolomela flights at the airfield and many passengers are forced to fly to Sishen mine near Kathu and are subjected to a long and potentially dangerous road transfer from Kathu to Postmasburg. The existing runway is too short to accommodate larger planes. The short runway also does not allow for safe departures of fully-loaded aircraft under 'hot and high' conditions and various safety incidents have been reported. As previously discussed, the upgrade of the Tommy's Airfield is not a feasible option. The non-continuation of the proposed airport is therefore not a preferred option.

The non-continuation of the airport development will also negate the socio-economic benefits associated with the facility, including job creation (especially during construction) and the purchasing of local goods and services. The project also has the potential to have socio-economic spin offs. The airport can be used by local residents and can be used by other aircraft not related to Kolomela mine operations. The current status of infrastructure development in Postmasburg is not favourable and this project will contribute significantly to infrastructure development in the area. These benefits will be prevented if the project does

not proceed.

The status quo will remain and the no-go alternative would prevent any potential negative environmental impacts associated with the proposed airport, including the disturbance of surface water resources, removal of vegetation and associated biodiversity impacts, noise generation and associated nuisance conditions, soil erosion, etc. The actual social and economic benefits associated with the project as well as the biophysical impacts will be investigated as part of EIA phase of the project and appropriate mitigation will be proposed.

10.DETAILS OF THE PUBLIC PARTICIPATION PROCESS FOLLOWED

A public participation process is conducted in terms of the Chapter 6 of NEMA and the EIA regulations. The purpose of the public participation process is to inform all the identified Interested and Affected Parties (IAPs) of the proposed development and associated EA application process and allow them to raise comments/concerns. The requirements of the Directions (GN 43412 of 5 June 2020) issued by the Department of Environment, Forestry and Fisheries (DEFF) in terms of the Disaster Management Act (57/2002) in terms of the correct protocol for public participation will be adhered to and has been incorporated in the below description.

10.1 Identification of Interested and Affected Parties

Existing IAP databases were updated for the purposes of this project. Potential Interested and Affected Parties (IAPs) were identified based on the definition of IAPs in the EIA regulations. This includes:

- Landowners or tenants adjacent to or within 100 m from the proposed study area. For the purposes of this study all neighbouring landowners have been identified and notified.
- Any organisation of ratepayers that represent the community in the area (if applicable).
- Representatives of the local municipality/ward councillor with jurisdiction in the area.

  This definition was expanded for the purposes of the assessment to include the mayor, councillors of the local council as well as members of the district municipality. This included representatives of:

  - Tsantsabane Local Municipality
  - ZF Mgcawu District Municipality
- Authority or organs of state having jurisdiction in respect of any aspect of the activity, including. The following organs of state have been notified:

- Department of Water and Sanitation (Northern Cape)
- Department of Agriculture, Forestry and Fisheries (Northern Cape)
- Department of Mineral Resources (Northern Cape)
- Department of Environment and Nature Conservation (Northern Cape)
- Department of Land Reform and Rural Development (Northern Cape)
- Department of Economic Development and Tourism (Northern Cape)
- Department of Roads and Public Works (Northern Cape)
- Department of Social Development (Northern Cape)
- South African Heritage Resources Agency
- South African Civil Aviation Authority

- Persons who respond to the Background Information Document (BID), press advertisements and site posters

A list of all parties that have been identified thus far is included as **Appendix B1**

10.2 Notification of Interested and Affected Parties

In accordance with Section 41(2)(b) of Chapter 6 of the EIA Regulations (GN. 982 of 4 December 2014, as amended), written notification (including BID document by email or facsimile) is provided to all persons on the IAP database.

- Site notices have been placed at the access roads to the site as well as at public areas in Postmasburg.
- Email notifications have been sent to the identified I&APs.
- SMS notification have been sent to the identified I&APs.
- Advertisements have been placed in two newspapers (local and regional), one in English and one in Afrikaans which are distributed in the Postmasburg area (Kalahari Bulletin and Volksblad).

A copy of the BID is provided in **Appendix B2.** Proof of notification will be provided in the final Scoping report that will be submitted to the CA for approval

10.3 Distribution of draft Scoping report for comment:

The Scoping Report is distributed for a period of 30 days to the identified IAPs by means of the following methods:

- An electronic link has been provided to the identified IAPs with access to email. Two platforms will be used including OneDrive and Dropbox to ensure access. Electronic versions on a memory stick or can also be couriered if needed.

- Other IAPs for whom only cell phone number are available have been notified of the availability of the reports and provided the opportunity to request access to the documents.
- Hard copies of the Scoping report will be placed at a venue which is accessible to the public (e.g. public library and Kumba Public Affairs Offices), only if the IAPs that cannot access the electronic documents request access to a hard copy.
- Hard copies and/or electronic copies will be sent to the commenting authorities, if requested.

Proof of distribution will be included in the final Scoping report.

10.4 Public meeting

Focus group sessions will be arranged with the IAPs, if sufficient interest is shown by the relevant stakeholders. The meeting will be held remotely either on Microsoft teams or a similar platform such as zoom. A date will be communicated to the IAPs. Meeting minutes will be generated and distributed to the I&APs.

10.5 Response to comments received

All comments received from the IAPs will be addressed and responded to in the form of an email. The comments will be incorporated in the final Scoping Report that will be submitted to the CA. Comment and responses thereto will be incorporated in a comments and response report that will be included in the final Scoping report.

10.6 Summary of issues raised by IAPs

TABLE 10-1: COMMENTS AND RESPONSES TO DATE

DATE	NAME	CORRESPONDENCE RECEIVED	EAPs RESPONSE TO ISSUES AS MANDATED BY THE APPLICANT	CONSULTATION STATUS (consensus, dispute, not finalised, etc.)
AFFECTED PARTIES				
Landowners/Lawful Occupiers of Adjacent Properties No comments received yet.				
Local Authorities No comments received yet.				
Organs of state (Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA etc.) No comments received yet.				
Traditional Leaders No comments received yet.				
Competent Authorities affected No comments received yet.				
INTERESTED PARTIES No comments received yet				

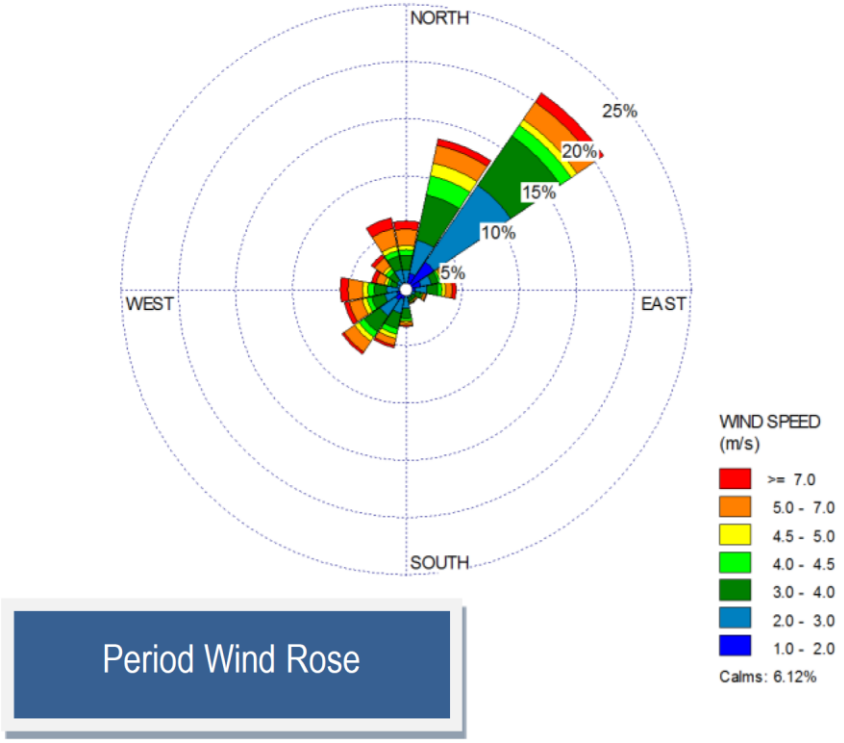
11.THE ENVIRONMENTAL ATTRIBUTES ASSOCIATED WITH THE SITES

11.1 Climate

Kolomela mine is located 7 km south west of the proposed development site. Therefore, climate data recorded at Kolomela mine is pertinent to the site.

11.1.1 Wind

The wind field is dominated by winds from the north-east (see Figure 11-1). The strongest winds (>6 m/s) were also from these directions. Calm conditions occurred only 6% of the time, with the average wind speed being 3.6 m/s. During the day the predominant wind direction are from the north-north east and north east. At night winds tender to blow from the south west and west south west. Strong winds in excess of 6 m/s occurred most frequently during winter and spring months. Calm conditions occur most frequently during autumn months.



Source: Air Quality Impact Assessment for Kolomela Mine (Airshed, 2015)

FIGURE 11-1: PERIOD AVERAGE WIND ROSE FOR KOLOMELA MINE 2011-2014

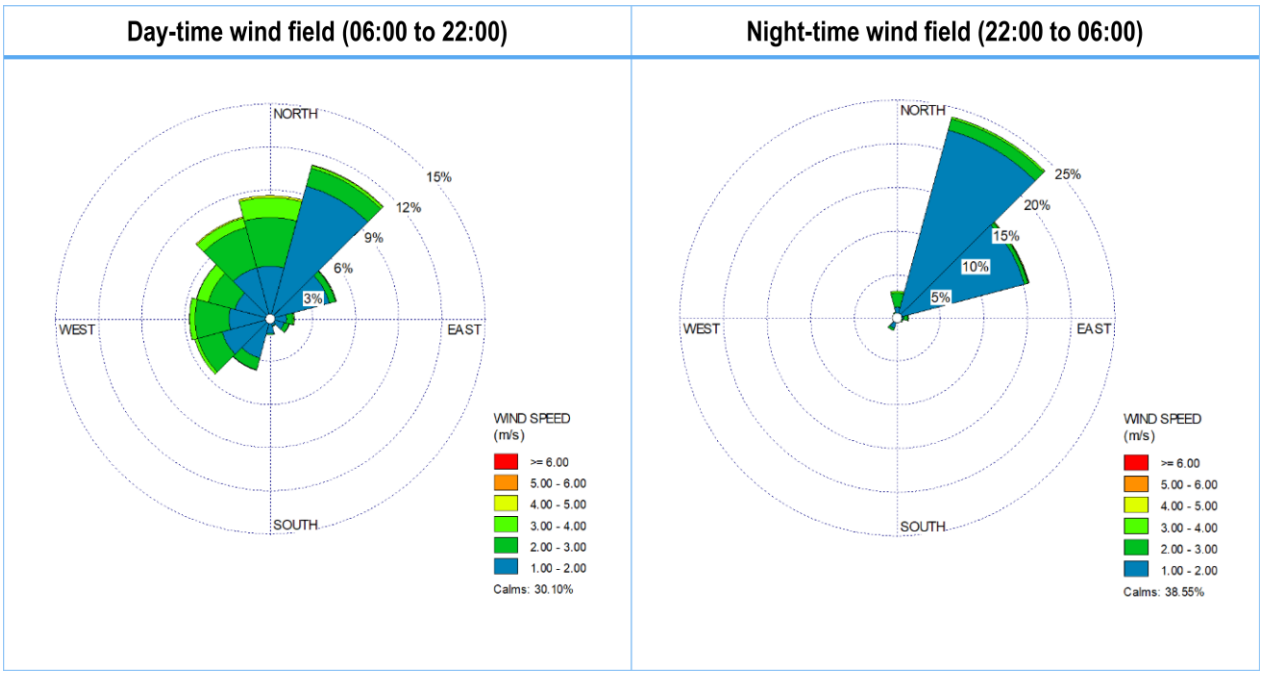


FIGURE 11-2: DAY- AND NIGHT-TIME WIND FIELD (OCTOBER 2014 TO AUGUST 2017)

Source: Noise Impact Assessment for Kolomela Mine (Airshed, 2018)

11.1.2 Temperature

Monthly mean and hourly maximum and minimum temperatures are given in Table 11-1. Temperatures range between -7.2 °C and 40 °C. The highest temperatures occur in December and the lowest in July.

TABLE 11-1: MONTHLY TEMPERATURE SUMMARY

Hourly Minimum, Hourly Maximum and Monthly Average Temperatures (°C)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Minimum	9.0	8.0	5.1	1.9	-5.0	-6.0	-7.2	-6.0	-5.0	1.0	2.0	6.0
Maximum	26.7	25.2	22.7	17.1	14.6	10.1	10.3	12.7	16.3	20.1	23.6	24.4
Average	40.0	39.0	38.0	33.0	32.2	27.0	28.2	32.0	38.1	36.0	38.0	40.0

11.1.3 Rainfall and evaporation

Postmasburg occurs within a low rainfall area (see Figure 11-2) with a mean annual rainfall of approximately 285 mm. Rainfall is highly unpredictable with most rainfall occurring between November and April. The rainfall usually falls as a result of thunderstorms when tropical thunderstorm activity extends southwards over the Kalahari. Mean annual evaporation (2 450mm) is higher than annual rainfall (374 mm), which results in a major net moisture deficit of over 2 000 mm throughout the year.

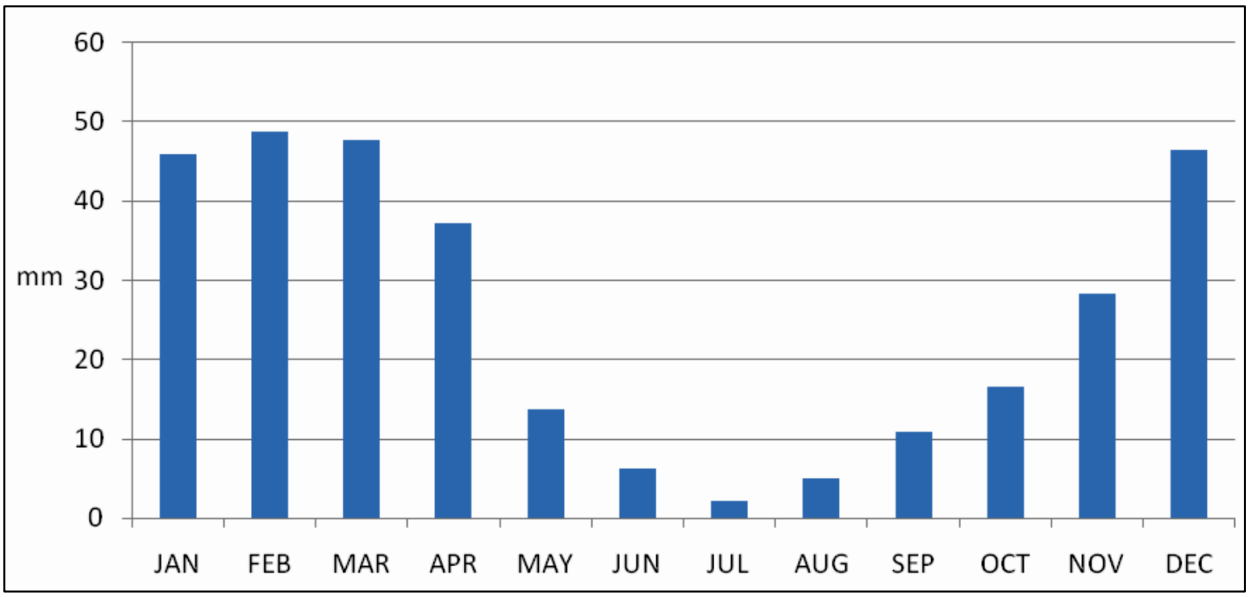


FIGURE 11-3: RAINFALL STATISTICS (POSTMASBURG WEATHER STATION – 1917 TO 1991)

11.2 Topography

The natural topography of the study area is generally flat with an average slope of 0.9% – 1.1 % and a maximum slope of 3.8 %. Refer to Figure 11-4 for a map showing the topography of the area. The majority of the study area slopes gently to the south west towards the Groenwaterspruit which flows south and converges with the Skeifonteinspruit to form the Soutloop river, south of Kolomela mine.

The area has a maximum elevation of approximately 1 334 Metres Above Sea Level (masl) and minimum elevation of 1 312 masl. The slope on the south eastern section is steeper compared to the other areas of the site due to the drainage pattern associated with a natural valley. This tributary also drains south east towards the Groenwaterspruit. Several pans are distributed across the flat-lying, central portions of the area which collect and hold rainwater for short periods after seasonal rainfall.

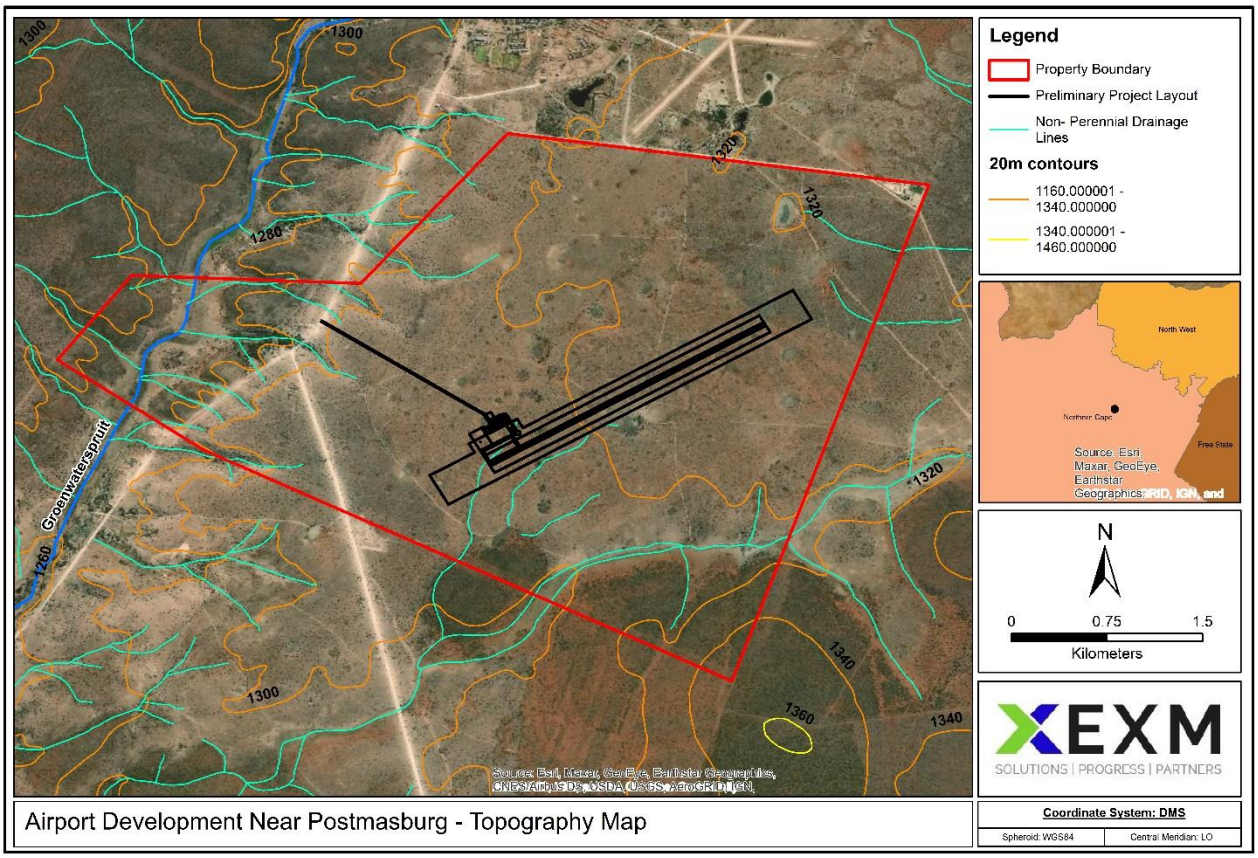


FIGURE 11-4: LOCAL TOPOGRAPHY

11.3 Soil

The study area is located on soil type LP2 as indicated in the Figure 11-5 below. The soil type is characterised by soils with minimal development, usually shallow, on hard or weathered rock with or without intermittent diverse soils. Lime is generally present in part or most of the landscape. The soils associated with the pans situated on site will further be assessed by the wetland specialist study that will be conducted as part of the impact assessment phase of the EIA.

An Ecological Impact Assessment was conducted by Afzelia Environmental Consultants (2015) for the area which included the Farm Kalkfontein. The study indicated that soil from the 'depression/pan' areas are calcrete in nature. A thin topsoil layer was identified to overlay extensive hardpan carbonate (calcrete) deposits that did not show any signs of wetness. These soils can be classified as the Coega and Brandvlei Soil Forms. They are characterised by a weakly to moderately structured horizon overlying calcrete gravels mixed with topsoil. The pans or depressions are thought to be formed through the drying and compaction of the A horizon. These particles are easily removed by water and wind resulting in the formation of an endorheic (inward draining) calcic pan.

All soils outside of the drainage channels and pan areas were identified as the Hutton or

Mispah soil types.

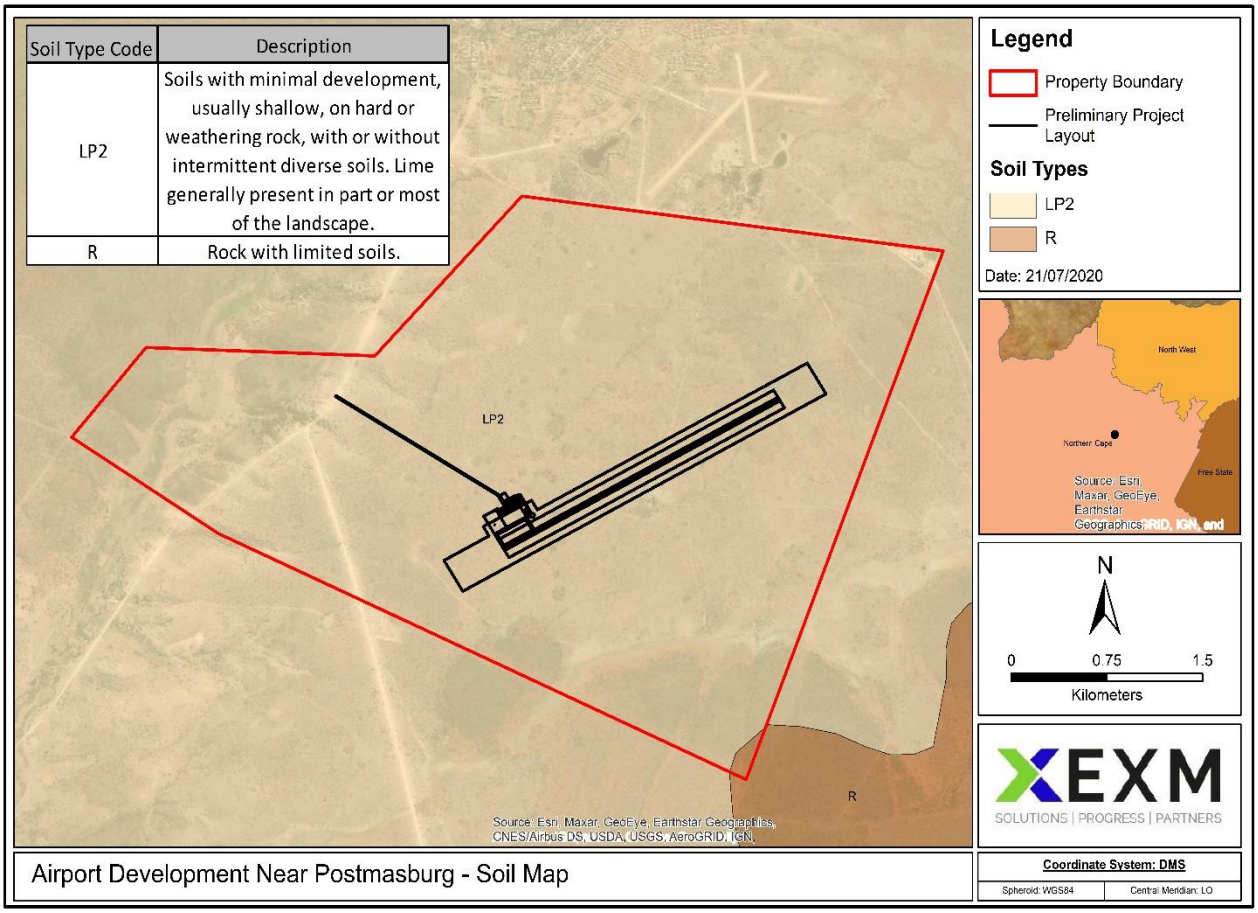


FIGURE 11-5: SOIL MAP

11.4 Air Quality

According to Airshed (2015), the region is characterised by being a relatively dry, arid and dusty area. It is expected that various local and far-a-field sources are expected to contribute to suspended fine particulate (PM2.5 and PM10) and dust concentrations in the region. Local sources include wind erosion from exposed areas, fugitive dust from agricultural activities and mining activities, as well as vehicle entrainment from roadways and veld burning. Traffic on the gravel roads (R325 and R309) to Witsand and Griekwastad contribute substantially to dust levels in the area. Some exceedances in terms of the National Dust Control regulations (GNR 827 of 2013) have been recorded for the area and can be ascribed to the abovementioned sources.

11.5 Noise

According to a Noise Impact Assessment (Airshed, 2018), livestock, community activity, birds, insects and surrounding mining activities are the main contributors to the acoustic environment of the area. Low noise levels have been recorded for the immediate area at the Farm Soetfontein to the west of the Farm Kalkfontein. The airport will be situated relatively

close to residents to the south east (2 km), north east (1.3 km) and north west (1.7 km) of the site. The closest residential area is situated 2.5 km north of the site. Other residence as well as a guest house are also situated on the Farm Soetfontein approximately 2.5km from the proposed facility. It is anticipated that noise from the proposed airport may result in potential nuisance conditions for these residents.

A Noise Impact Assessment will be conducted as part of the EIA phase to determine the potential noise impacts associated with the proposed airport.

11.6 Biodiversity

The following provides an overview of the biodiversity related to the area in general. An Ecological (Fauna and Flora) Impact Assessment will be undertaken to assess potential impacts on biodiversity and to propose mitigation measures to minimise/prevent potential impacts.

11.6.1 Fauna and flora

The study area is situated in the Postmasburg Thornveld vegetation type, as defined by Mucina and Rutherford (2006). The vegetation type has a conservation status of Least Concern. The Postmasburg Thornveld vegetation type is characterised by flats surrounded by mountains supporting open, shrubland characterised by a dense shrub layer and often lacking a tree layer; the grass layer is very sparse. Shrubs are generally low and with a karroid affinity. This vegetation type forms part of the Savanna Biome in the Eastern Kalahari Bushveld Bioregion.

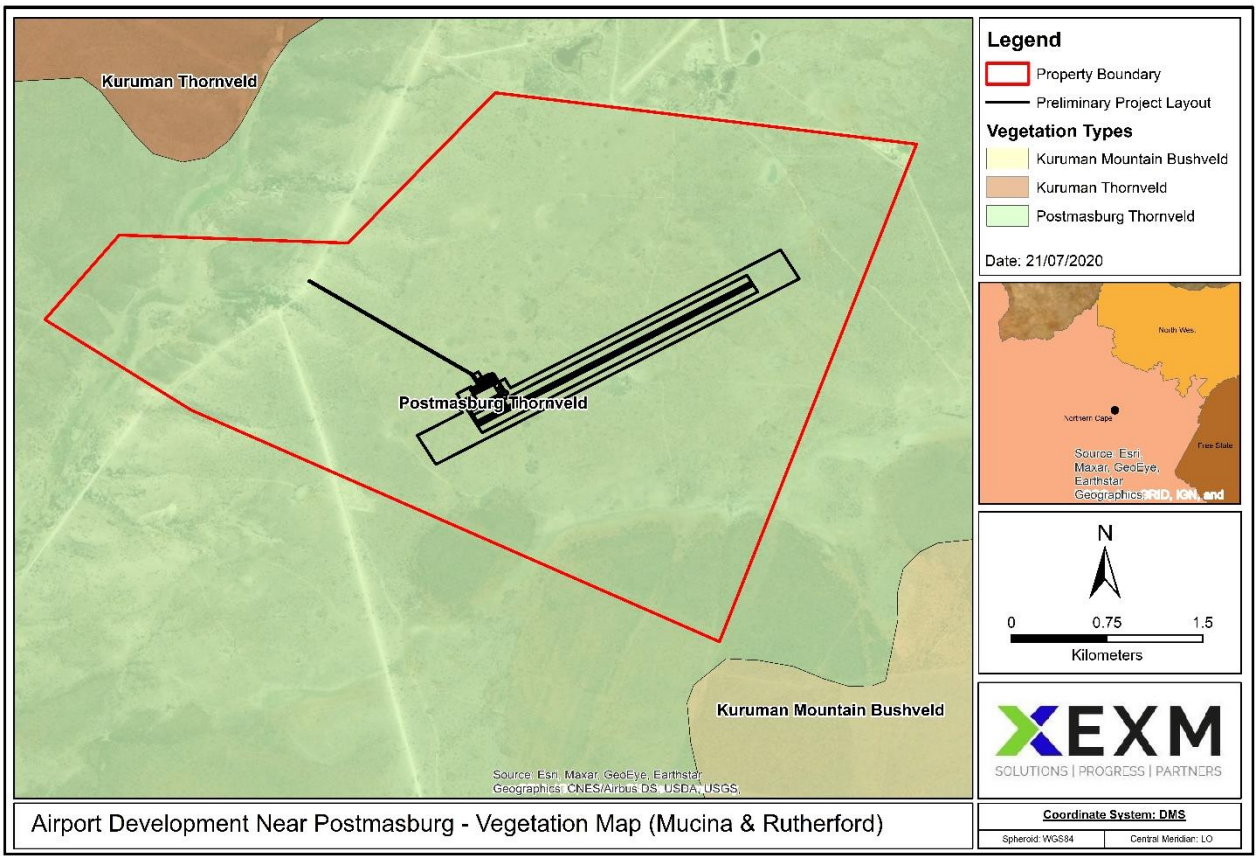


FIGURE 11-6: VEGETATION TYPES

According to Fairley (2019), the vegetation on the Farm Kalkfontein fits the description of Camphor Bush Bushveld described by Anderson (2004). Camphor Bush Bushveld is characterised by large *Tarchonanthus camphoratus* shrubs and has a fairly well-developed grass layer. Other common large shrubs include *Searsia ciliata*, *Diospyros lycioides, Ehretia rigida* and *Grewia flava*, and small *Ziziphus mucronata* trees and large *Searsia lancea* occur at intervals. Key species of conservation importance that occur in the area include *Boscia albitrunca* and *Vachellia haematoxylon* which are protected under the National Forests Act (No. 84 of 1998).

The area also falls within the shrubland habitat described by Harrison (October 2015). According to Harrison (October 2015), this habitat provides important corridors of natural vegetation, cover and foraging opportunities for many faunal species within a largely anthropogenically disturbed landscape.

A total of 139 bird species have been recorded (SABAP2) within the pentad area which includes the Kalkfontein. The high number can be attributed to permanent water bodies located on Soetfontein where there is a natural spring and an artificially water fed pan on Kalkfontein which support many species including water birds as well as several ephemeral drainage lines within the area.

Of importance are records of Kori Bustard (Near Threatened) and White-backed Vulture (Endangered).

11.6.2 Sensitive Biodiversity

The western section and a small section on the north eastern part of the property has been classified as a Critical Biodiversity Area (CBA) One in terms of the Northern Cape CBA map as illustrated in the map below. The CBA to the south western section is associated with the Groenwaterspruit that is also classified as a Freshwater Ecosystem Priority Areas (FEPA) as discussed in the following section. As per the below project layout, it is not anticipated that the development will have a direct impact on the CBA associated with the Groenwaterspruit. Several pans are located in the project area and is classified as Ecological Support Areas as per the definition below.

- **Critical Biodiversity Areas** are areas required to meet biodiversity targets for ecosystems, species and ecological processes, as identified in a systematic biodiversity plan.
- **Ecological Support Areas** are not essential for meeting biodiversity targets but play an important role in supporting the ecological functioning of Critical Biodiversity Areas and/or in delivering ecosystem services.

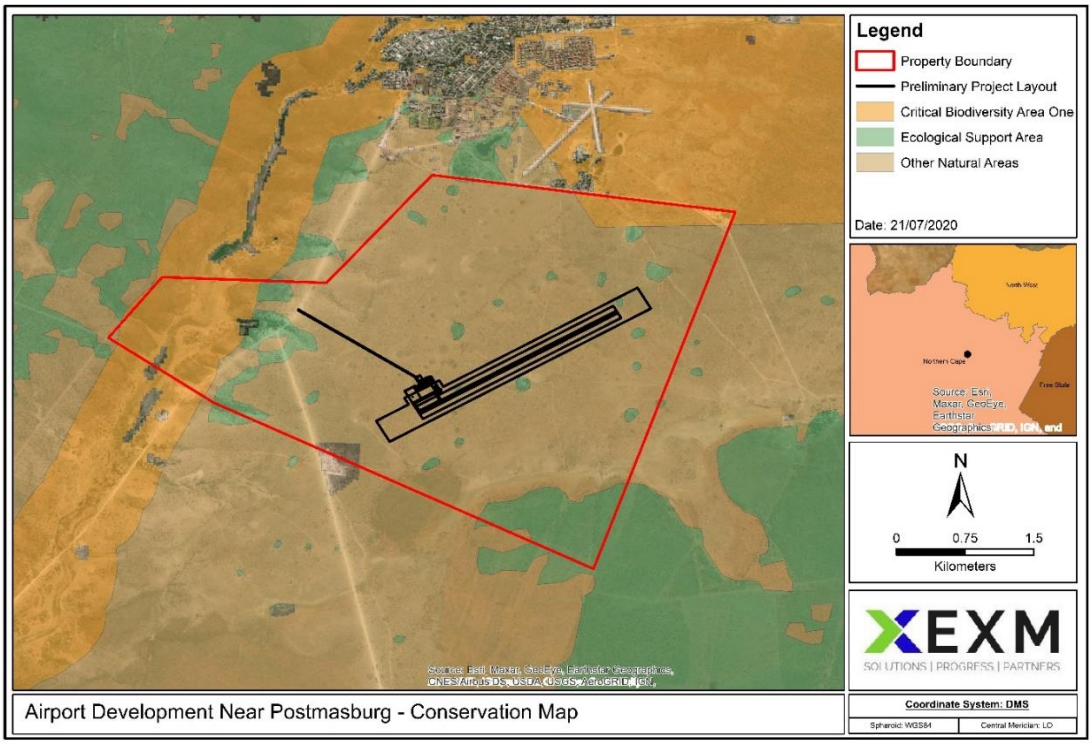


FIGURE 11-7: CRITICAL BIODIVERSITY AREAS MAP

11.7 Surface Water Resources

The study area is located within the Orange River Primary Drainage Region in the D73A Quaternary Catchment. The majority of the study area drains south east towards the Groenwaterspruit which flows south and converges with the Skeifonteinspruit to form the

Soutloop river approximately 34 km south of the site. The Soutloop river converges with the Orange river approximately 100 km south west of the site. The Groenwaterspruit is situated in the study area and is regarded as ecologically sensitive as it provides an important biodiversity corridor within the area.

The Groenwaterspruit River is considered a Freshwater Ecosystem Priority Areas (FEPA) and should remain in a good condition in order to contribute to national biodiversity goals and support sustainable use of water resources (NFEPA database, 2011). Moreover, a prominent drainage area flows through the south eastern corner of the property towards the Groenwaterspruit at farm Soetfontein. As per the below project layout, it is not anticipated that the development will have a direct impact on the Groenwaterspruit or the prominent drainage features to the south east.

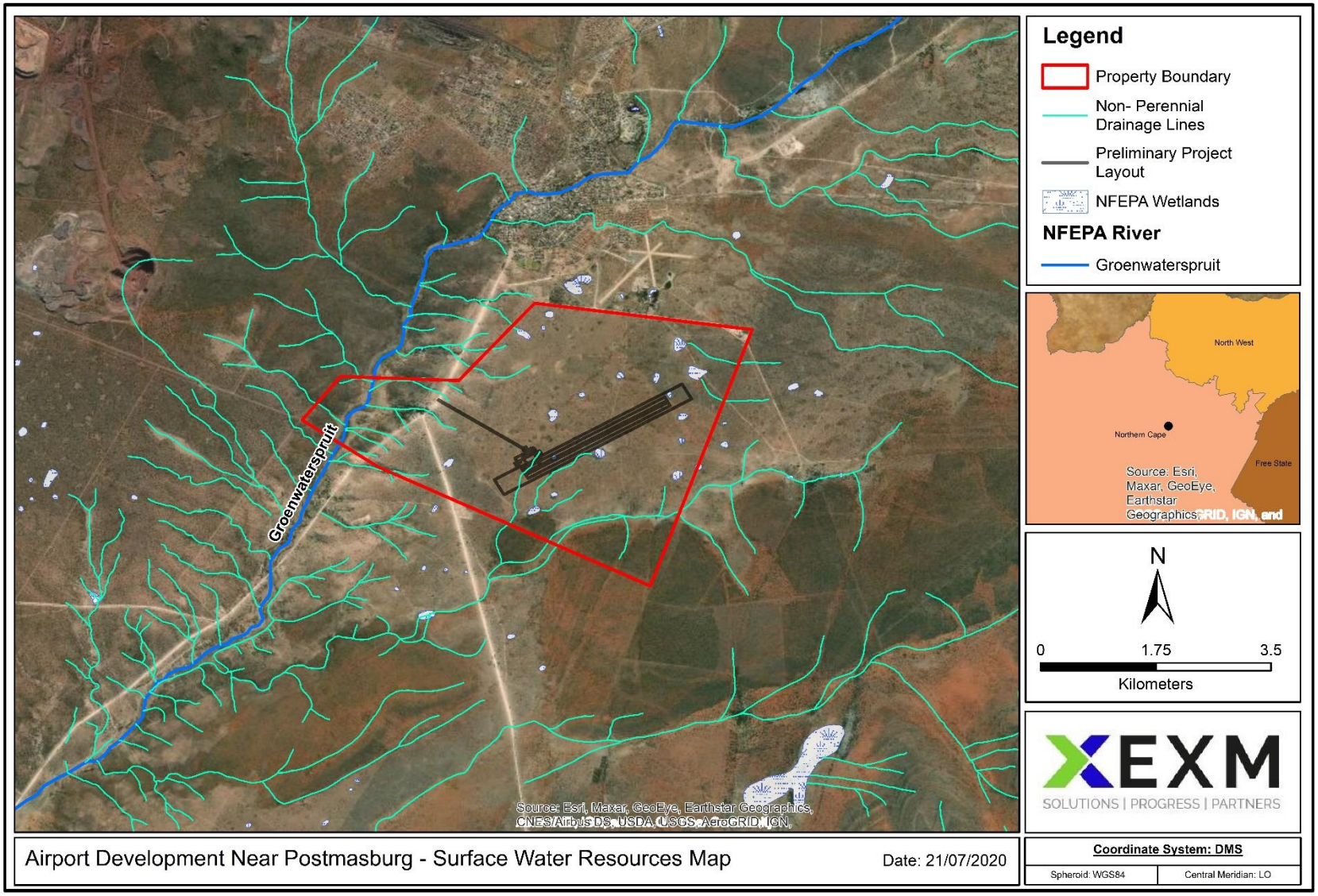


FIGURE 11-8: SURFACE WATER RESOURCES ASSOCIATED WITH THE STUDY AREA

11.8 Geology

The Transvaal Supergroup lithologies have been deposited on a basement of Archaean granite gneisses and greenstones, and/or lavas of the Ventersdorp Supergroup. In the Postmasburg region, the oldest rocks of the Transvaal Supergroup form a carbonate platform sequence (i.e., dolomites with minor limestone, chert and shale) known as the Campbell Rand Subgroup. The upper part of the Transvaal Supergroup comprises a banded iron formation unit (i.e. the Asbestos Hills Subgroup), which has been conformably deposited on the carbonates. The upper portion of the banded iron formations has in places, been supergene-enriched to ore grade. The iron ore / banded iron formation zone is often referred to as the Kuruman Formation. The ores found within this formation comprise the bulk of the higher-grade iron ores in the region.

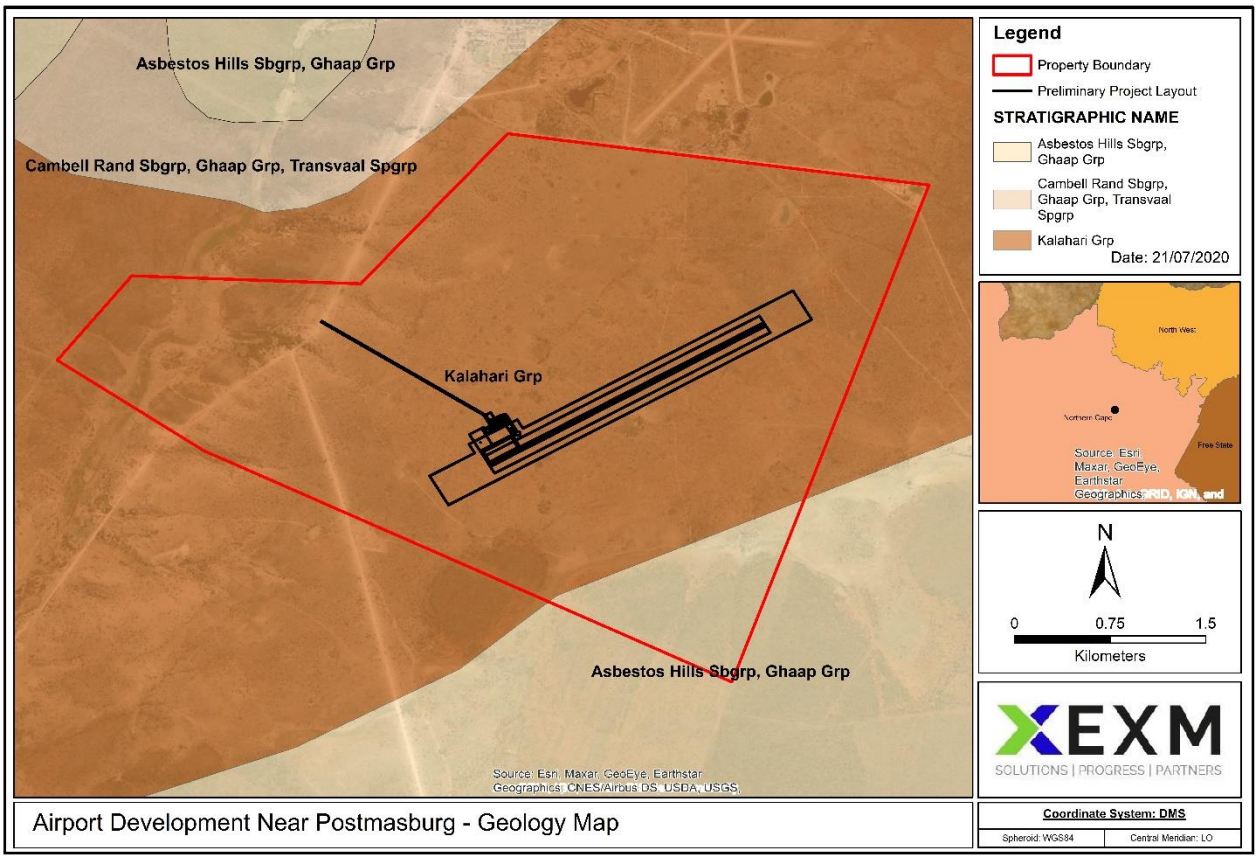


FIGURE 11-9: GEOLOGY MAP

11.9 Groundwater

11.9.1 Aquifers

The geohydrological regime in the area is made up of two main aquifer systems. The first, the upper, unconfined to semi-confined aquifer occurs in the calcrete. The aquifer is usually developed on the contact between the calcrete and underlying clay formations of Kalahari age or in localised pebble horizons within the calcrete. Although relative low yields occur in

this aquifer, it is developed widely throughout most of the region and has been the sole reliable source of water supply to most of the farms in the area for more than a century. Yields of up to 2 litres per second occur in this aquifer with shallow water table and spring formation common in especially the lower-lying topography.

The second aquifer is associated with fractures, fissures, joints and other discontinuities within the consolidated bedrock and associated intrusives of the Transvaal/Griqualand West Sequences. The aquifer occurs at depths from 40 to more than 200 meters below surface in the area. It is semiconfined and has greatly varying yields that are directly associated with the geology and geological structure. Yields of the aquifer are as high as 40 litres per second in mainly the chert breccia and banded iron formation and iron ore formations.

11.9.2 Groundwater levels and abstraction

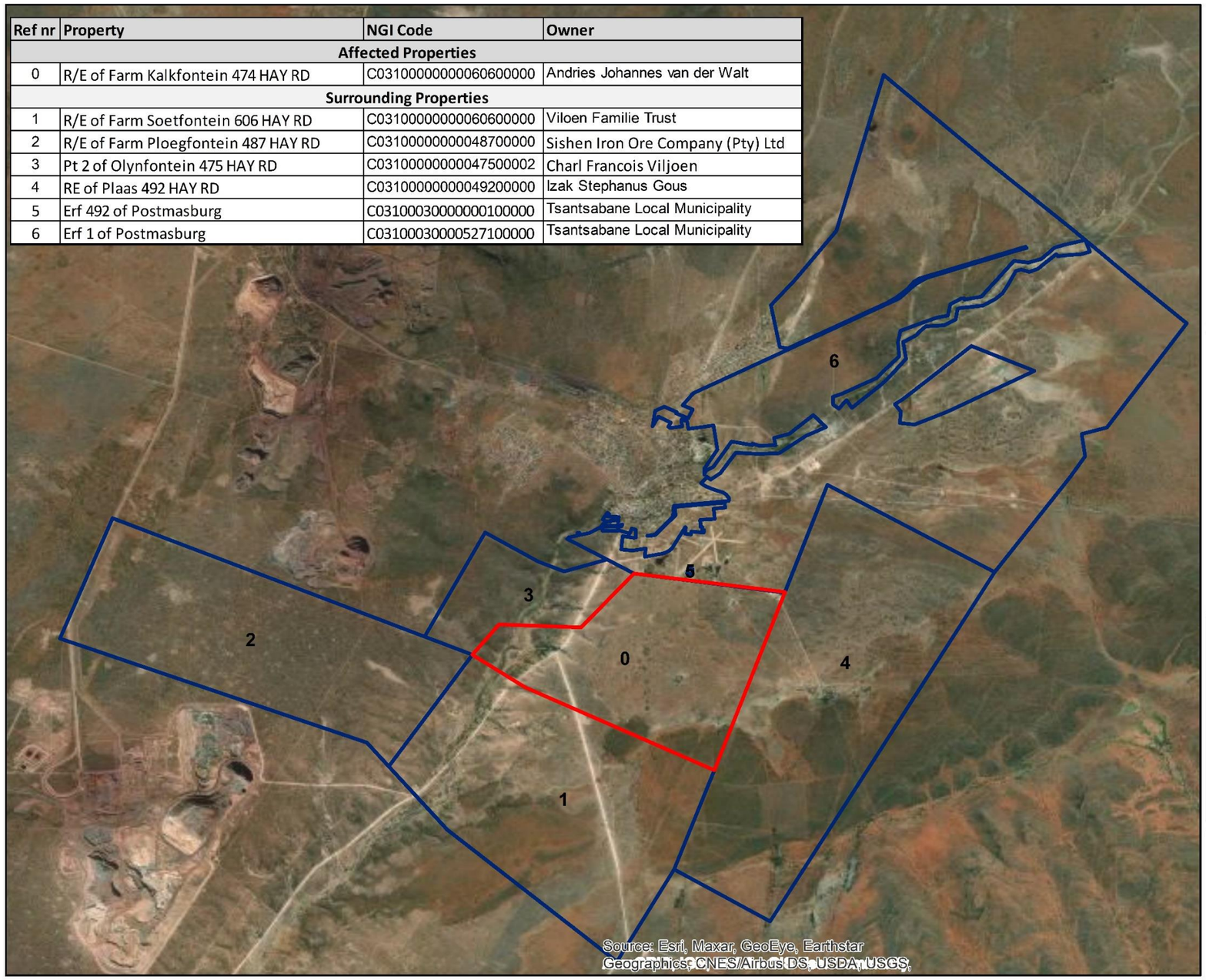
In the Postmasburg area, static groundwater levels vary from zero meters (springs flowing out at surface), usually in the topographically lower lying areas, to a maximum of approximately 75 meters below surface to the north-east of Postmasburg. There are no definite groundwater level trends, apart from a possible distinction of deeper groundwater levels to the east and north-east of Postmasburg on the banded iron formation with shallower groundwater levels to the south-east on the Ghaap Plateau dolomites .

Groundwater is mainly used for domestic supply, livestock watering and watering of gardens. The borehole yields from the upper calcrete aquifer are relatively low and groundwater cannot be pumped in quantities sufficient for extensive crop irrigation purposes. Kolomela Mine conducts dewatering of groundwater for the safe continuation of operations. However, it is not expected that Farm Kalkfontein will be affected in terms of aquifer drawdown.

11.10 Land Tenure

The property on which the proposed airport will be developed is owned by a private person (Andries Johannes van der Walt). Land tenure of affected and neighbouring properties is given in Figure 11-10.

Ref nr	Property	NGI Code	Owner
Affected Properties			
0	R/E of Farm Kalkfontein 474 HAY RD	C03100000000060600000	Andries Johannes van der Walt
Surrounding Properties			
1	R/E of Farm Soetfontein 606 HAY RD	C03100000000060600000	Viloen Familie Trust
2	R/E of Farm Ploegfontein 487 HAY RD	C03100000000048700000	Sishen Iron Ore Company (Pty) Ltd
3	Pt 2 of Olynfontein 475 HAY RD	C03100000000047500002	Charl Francois Viljoen
4	RE of Plaas 492 HAY RD	C03100000000049200000	Izak Stephanus Gous
5	Erf 492 of Postmasburg	C03100030000000100000	Tsantsabane Local Municipality
6	Erf 1 of Postmasburg	C03100030000527100000	Tsantsabane Local Municipality

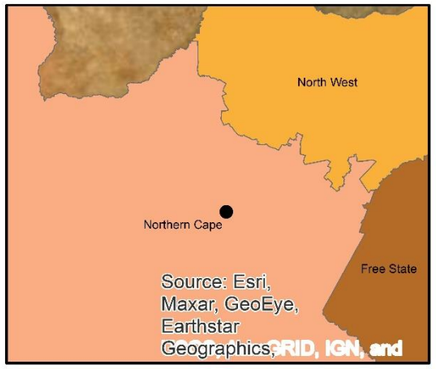


Legend

Affected Property

Surrounding Properties

Date: 21/07/2020



N

0 2.75 5.5

Kilometers

EXM

SOLUTIONS | PROGRESS | PARTNERS

Airport Development Near Postmasburg - Land Tenure

Coordinate System: DMS

Spheroid: WGS84 | Central Meridian: LO

FIGURE 11-10: LAND OWNERSHIP

11.11 Cultural Heritage

The below description was sourced from a Heritage Impact Assessment (HIA) (Van Schalkwyk, 2015) that was conducted in the area and included a portion of the Farm Kalkfontein. The HIA concluded that no heritage sites of significance were located on the site to date. A separate HIA will be conducted for the proposed airport development

Stone Age

Surveys in the area have revealed that the archaeological record is temporarily confined to the Early and Middle Stone Age, with a smaller number dating to the Later Stone Age and is spatially concentrated around the rims of many pans as well as on the banks of stream beds (Morris 2005). However, more to the north in the region of Kathu, occupation of the region already took place during the Early Stone Age.

Less obvious in its presence are the Later Stone Age sites, some of which are indicated by Beaumont & Vogel (1984). They equate these sites, some which occur in the larger region, with Cape Coastal pottery associated with amorphous LSA (herders) or Wilton (hunter-gatherers) in the period 100 BC to AD 1900.

Iron Age

Early Iron Age occupation did not take place in the region and seems as if the earliest people to have settled here were those of Tswana-speaking origin (Tlhaping and Tlharo) that settled mostly to the north and a bit to the west of Kuruman. However, they continued spreading westward and by the late 18th century some groups occupied the Langeberg region. With the annexation of the Tswana areas by the British in 1885, the area became known as British Betchuana Land. A number of reserves were set up for these people to stay in. In 1895 the Tswana-speakers rose up in resistance to the British authority as represented by the government of the Cape Colony. They were quickly subjected and their land was taken away, divided up into farms and given out to white farmers to settle on (Snyman 1986).

Historic period

Many early explorers, hunters, traders and missionaries travelled through the area on their way to Kuruman on what was to become known as the "missionary road". Anderson, Burchell, Harris, Holub, Lichtenstein and Moffat are but a few of the better-known names to pass through here. Wiliam Burchell passed through the area in June 1812 and visited the famous Blinkklipkop specularite mine, as did John Campbell in June 1813. Andries Waterboer took over the area from the Bergenaars in the early 1820s and Blinkklipkop became a permanent settlement for his people. By 845 Waterboer reported that at least 450 of his people were living in the region. In 1834 the London Mision Society established a mission station in the region, but

it operated only for three years and was then abandoned.

In the period 1876 to 1878 farmers of English origin started to buy up farms in the region. However, Griekwaland-Wes rebellion of 1878, resulted in the British, under Sir Charles Warren, decided to station troops in the region and this took place in the region of Blinkklipkop.

11.12 Socio-Economic Environment

The section below provides a description of the baseline socio-economic environment for the area. A Social and Human Rights Impact and Risk Analysis (SHIRA) / Social Impact Assessment will be completed to provide input into the social management planning for the development of the new airport.

11.12.1 Economic sectors

The site is located in the Tsantsabane Local Municipality within the ZF Mgcawu District Municipality. According to Naude (2020), mining and agriculture have been coexisting in the Tsantsabane area for many years as the main economic sectors, although mining has become more prominent in recent years. The Kolomela and Beeshoek Iron Ore mines are the most prominent mines in the immediate area. Some of the smaller, newer mines close to Postmasburg include Lomoteng mine, Mogotlhlo mine, Tsantsabane mine, West end mine, Autumn Skies Iron Ore, Sedibeng Iron Ore, PMG Mining, Pensfontein mine, and Emang mine

The energy sector is becoming more prominent with at least three major green energy projects being established in the Tsantsabane municipal area – Redstone Solar Thermal Power, Jasper Solar Energy and Lesedi Solar Park.

11.12.2 Access to basic services

Access to basic services in Tsantsabane has improved gradually since 2001. However, between 2014 and 2019 there was a drop in the percentage of households with access to the services. The lower number can be attributed to a sharp increase in informal settlements, as well as service delivery pressures on the Tsantsabane Local Municipality. Rural areas such as Groenwater, Maremane, Skeyfontein and Jen Haven do not have access to proper refuse removal services many households do not have access to proper sanitation.

Infrastructure in Tsantsabane is in a poor condition. Tar roads are full of potholes and gravel roads are not being maintained. Bulk infrastructure is old and not able to endure the pressure of a rapidly increasing population. Water and electricity interruptions happen frequently (Naude, 2020).

11.12.3 Population and demographics

The population in the Tsantsabane municipal area has increased significantly since 2001. The population estimate for 2020 according to Stats SA, is 57% higher than in 2001. The population

increase can be attributed to the increased economic activity due to mining development.

The age profile has also changed significantly since 2001. In 2019, 51% of the Tsantsabane population was between 14 and 35 years old. Adding the percentage of the population younger than 14, the total population at 35 years or younger were 70% in 2019 (Naude, 2020).

11.12.4 Education and skills

Education and skills levels in Tsantsabane is low. Only 53% of the Tsantsabane adult population have passed Grade 12. Gender inequality is an issue when it comes to school and post-school education in Tsantsabane. More men than women have completed Grade 12, putting them in a better position to find employment (Naude, 2020).

A skills audit was conducted in the community in 2020. Approximately two-thirds of skills audit participants (65%) have some form of post-school training or education – in most instances on the job training (60% of all participants who have undergone training or education). The high percentage of job seekers with on the job training is in stark contrast with the small percentage who have university or university of technology qualifications – only 3%. Most participants received training or were educated in the skills category for mining, engineering and construction skills (49%).

11.13 Description of current land uses

The property on which the proposed airport will be developed is undeveloped and has been used for game farming purposes. Several pans are located on the property and the Groenwaterspruit is situated to the west of the property. A municipal waste water treatment works (WWTW) is situated on the adjacent property to the north of the site. The existing Postmasburg airport is located just north of the WWTW and a graveyard is located just west of the WWTW.

The R325 regional road is located west of the study area from which access will be obtained for the facility. The R325 splits within the south western corner of the property with two alternative routes to Griekwastad located approximately 75 km to the south. The closest residential units relate to residents to the south east and to the north east of the site. A guest house is located on the Farm Soetfontein adjacent to the property. The closest residential area in Postmasburg is situated 2.5 km north of the site and the Postmasburg CBD is located 3.4km north of the site.

The Beeshoek Iron Ore mine is situated 6km north west of the site and Kolomela mine is located 7 km south west. Neighbouring activities include stock farming (cattle farming).

Land use activities for the area are shown in Figure 11-11.

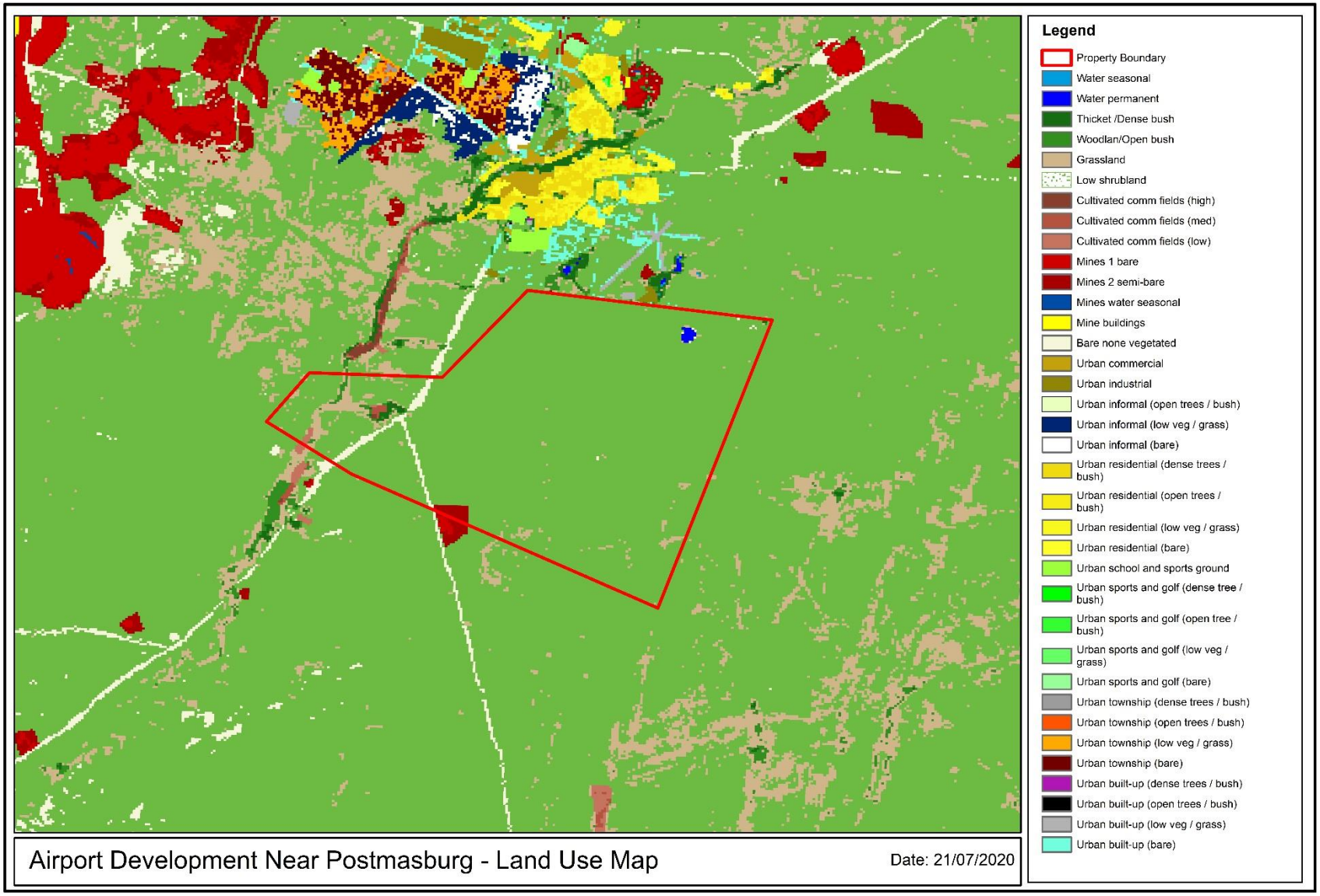


FIGURE 11-11: LAND USE MAP

11.14 Description of specific environmental features on the site

11.14.1 Water resources

Several wetland pans are distributed across the flat-lying, central portions of the area which collect and hold rainwater for short periods after seasonal rainfall. The Groenwaterspruit is situated in the western section of the property. The Groenwaterspruit is considered a Freshwater Ecosystem Priority Areas (FEPA) and should remain in a good condition in order to contribute to national biodiversity goals and support sustainable use of water resources (NFEPA database, 2011). Moreover, a prominent drainage area flows through the south eastern corner of the property towards the Groenwaterspruit at farm Soetfontein.

It is not anticipated that the development will have a direct impact on the Groenwaterspruit or the prominent drainage features to the south east. An Aquatic Freshwater and Wetland Impact Assessment will be undertaken to assess potential impacts on surface water resources and to prescribe mitigation measures.

11.14.2 Biodiversity

The study area is situated in the Postmasburg Thornveld vegetation type, as defined by Mucina and Rutherford (2006). The vegetation type has a conservation status of Least Concern. The eastern section of the property has however been classified as a Critical Biodiversity Area One in terms of the Northern Cape CBA and is associated with the Groenwaterspruit.

Key tree species of conservation importance that occur in the area include Boscia albitrunca and Vachellia haematoxylon which are protected under the National Forests Act (No. 84 of 1998).

The study area provides habitat to numerous bird species due to the occurrence of pans. Of importance are records of Kori Bustard (Near Threatened) and White-backed Vulture (Endangered) in the general area. Both these species are of conservation importance and are under threat from electrocutions and collisions with overhead powerlines.

11.14.3 Residential units

The runway will be relatively close to residents to the south east (2km), north east (1.3 km) and north west (1.7 km) of the site. The closest residential area is situated 2.5 km north of the site. It is anticipated that noise from the proposed airport may result in potential nuisance conditions for these residences. A noise impact assessment will be conducted to determine the potential noise impacts associated with the proposed airport.

11.14.4 Environmental sensitivity map

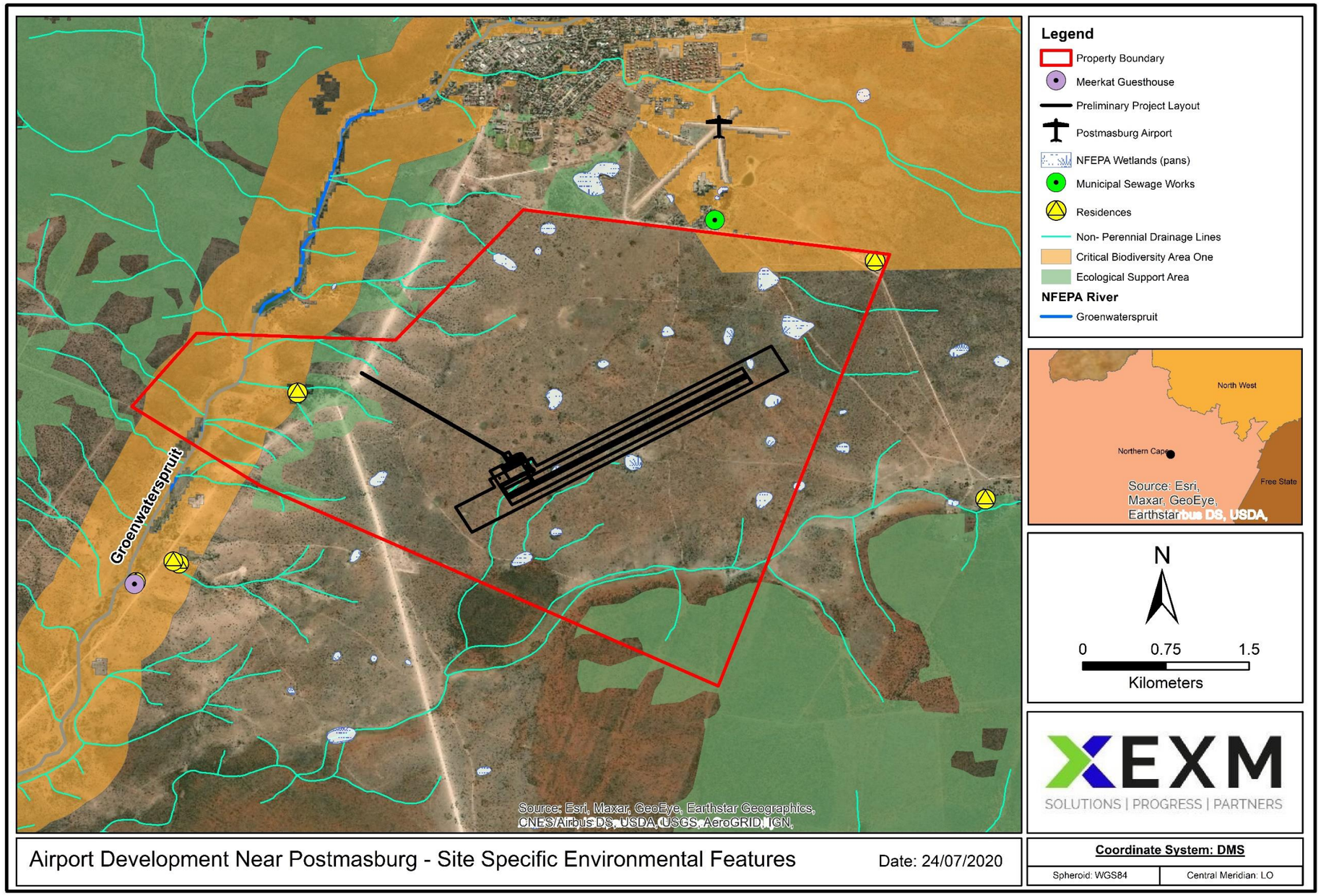


FIGURE 11-12: SITE SPECIFIC ENVIRONMENTAL MAP

12.IMPACTS IDENTIFIED

A scoping level identification of potential environmental impacts (physical, biological, social and economic) associated with the proposed project are listed in Table 12-1. A framework for further work during the EIA phase is also provided.

TABLE 12-1: POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

IMPACT	IMPACT SOURCE	SIGNIFICANCE/COMMENT	SCOPE OF WORK FOR EIA / FURTHER WORK
TRAFFIC			
Increased traffic volumes	Increase in traffic volumes on the R325 regional road as well as through Postmasburg, which may result in congestions or safety related concerns. Increased traffic may also cause deterioration of the roads.	Vehicles travelling from the airport will drive through Postmasburg which will result in increase traffic volumes and impact current road users.	A Traffic Impact Assessment (TIA) will be conducted to assess the impact of the increased traffic volumes on the baseline. The TIA will alco include mitigation measures to minimise potential impacts.
AIR QUALITY			
Increase in ambient dust levels.	Dust emission due to earthmoving activities during construction. Additional traffic on the R325 gravel road during construction and operational phase.	Increased dust levels during construction and operation may result in additional road safety risks.	Mitigation measures will be incorporated in the Environmental Management Programme that are relevant to the project and anticipated impacts. TIA will assess risks associated with dust on roads.
NOISE			
Increase in ambient noise levels	Increased noise levels due top operation of machinery during construction phase. Increased noise levels related to air traffic which may result in nuisance conditions for residents in the immediate area.	The runway will be established relatively close (between1.4 km to 2 km) from residences in the vicinity of the proposed development which may result in nuisance conditions and affect the sense of place of the residents. The site is however situated relatively far from the closest residential area in Postmasburg.	A Noise Impact Assessment is required to assess noise related impacts.
BIODIVERSITY			
Loss of systems, habitats or species of conservation	Clearance of vegetation for the development of the airport	Although the footprint will not be located in a CBA, protected flora species are likely	Sensitive habitats and species to be disturbed due site clearance must be

IMPACT	IMPACT SOURCE	SIGNIFICANCE/COMMENT	SCOPE OF WORK FOR EIA / FURTHER WORK
importance	footprint as well as for the access road development. Secondary impacts related to habitat fragmentation due to the linear nature of road and runway.	to occur in the area. Faunal habitats may also be affected by the proposed development. The development may restrict the movement of animals in the study area due to habitat fragmentation.	identified. The risk of secondary impacts related to habitat fragmentation must be quantified. Mitigation measures must be identified and implemented. A Biodiversity (Ecological) Specialist Study is required.
SURFACE WATER			
Disturbance of surface water resources	Disturbance of watercourses, wetland pans or any other surface water resource due to site clearance including barriers to hydropedological systems that contribute to pans (if applicable).	Several wetland pans are situated in the study area that may be impacted by the development of the facility. Minor drainage lines may also be affected.	Aquatic Ecological Impact Assessment Specialist Study to be undertaken to assess impact on aquatic environment. A Hydropedological Assessment will also be conducted to assess potential impacts on sub-surface flow.
Pollution of surface water resources.	Incorrect or insufficient stormwater management.	Dirty water run-off must be managed and prevented from entering into the surrounding environment.	Stormwater management measures must be incorporated in the EMPr to prevent dirty water runoff from entering the environment.
	Storage, handling and accidental spillage of hazardous chemicals	The management of hazardous substances including hydrocarbons has the potential to result on spillages and potential impacts on clean water run-off.	Spill management procedures must be developed and implemented to ensure that surface water resources are protected.
GROUNDWATER			
Impact on groundwater availability.	Water will be sourced from an on-site borehole(s) to supply the facility's water requirements.	The groundwater abstraction should not exceed the borehole yields.	Pump tests must be conducted to determine the borehole yields. A WUL application will be submitted for the groundwater abstraction.
Pollution of groundwater resources	Storage, handling and accidental spillage of hazardous chemicals.	The project will entail the management of hazardous substances during the construction as well as the operational phase which has the potential to result in contamination of soils and groundwater if not designed and managed properly to ensure the protection of these	Spill containment measures to be in line with the requirements of the regulatory authority.

IMPACT	IMPACT SOURCE	SIGNIFICANCE/COMMENT	SCOPE OF WORK FOR EIA / FURTHER WORK
		environmental features.	
CULTURAL HERITAGE			
Disturbance of sites of archaeological, palaeontological, cultural or heritage importance	Site clearance for the development of the airport.	The presence of heritage resources is to be confirmed at all areas to be disturbed by development.	A Heritage Impact Assessment (including a Palaeontological phase 1) is to be undertaken in accordance with the requirements of the Natural Heritage Resources Act. SAHRA is to be consulted in accordance with Section 38 of the Act.
LAND USE AND INFRASTRUCTURE			
Disturbance of current land use activities	Change in land use from game farming to an airport. Disturbance of neighbouring land uses due to noise related impacts.	Areas that will be impacted is currently used for game farming.	Noise Impact Assessment to assess impact on surrounding land uses..
VISUAL ENVIRONMENT			
Disturbance of natural views and sense of place.	Visibility of project footprint	The expanded mining activities will be visible from receptor points including traffic along the R309 regional road and surrounding residents.	The visual impacts are to be assessed as part of the EIA. Consideration is to be given to the cumulative impact on the visual environment.
SOCIO-ECONOMICS			
Contribution to local economy	Opportunities for procurement and employment.	The project will result in employment opportunities and the purchasing of local goods and services.	Socio-economic Development Plan for the project focussing on maximising the benefit to local communities, A Social and Human Rights Impact and Risk Analysis (SHIRA) will be conducted to evaluate the potential impacts.
In migration of job seekers	The potential for employment (especially during the construction phase) may attract additional job seekers to the area.	Increased in migration into the area places increasing pressure on municipal and social resources in the area already characterised by growing informal communities. Associated with this is increasing social ills.	A Social and Human Rights Impact and Risk Analysis (SHIRA) will be conducted to evaluate the potential impacts and to identify mitigation measures to reduce the potential for in-migration.

12.1 Methodology used in determining the significance of environmental impacts

An initial indication of the potential impacts is described in Table 12-1. This is based on an understanding of the baseline environment, existing information and the details currently available for the project areas. The nature and significance of impacts will be confirmed in the EIA phase of the project. Where required, specialist input will be obtained (as identified in this Scoping Report) to assist with determining the significance of the impacts and to identify mitigation measures to address such impacts.

Further information regarding the methodology for assessing the significance of impacts in the EIA Phase is provided in Section 13.3.

12.2 The positive and negative impacts that the proposed activity (in terms of the initial site layout) and alternatives will have on the environment and the community that may be affected.

The proposed development of the airport near Postmasburg will have a definite impact on the environment and surrounding land uses. The potential significant negative impacts will relate to biodiversity, surface water resources, noise and nuisance conditions and increased traffic. The magnitude and extent of such impacts will be determined in the EIA phase and will be evaluated with input from various specialist studies. The layout planning will be informed by the outcome of the EIA and specialist studies to minimise impacts to sensitive environmental features, including terrestrial biodiversity, surface water resources and cultural resources.

It is anticipated that the proposed development of the airport will contribute to socio-economic development in terms of job creation and purchasing of local goods and services.

12.3 The possible mitigation measures that could be applied and the level of residual risk.

A scoping level description of the impacts, possible mitigation measures and level of residual risk is described in Table 12-2.

TABLE 12-2: PROJECT IMPACTS, MITIGATION MEASURES AND THE LEVEL OF RESIDUAL RISK

PHASE	IMPACT CATEGORY	POTENTIAL IMPACTS	MITIGATION TYPE	POTENTIAL FOR RESIDUAL RISK
PLANNING	Biodiversity	Incorrect planning may lead to the destruction of protected species/habitats.	The site layout must incorporate the outcome of the Biodiversity (Fauna and Flora) Specialist Study to be undertaken. Site layout alternatives to be assessed during EIA phase to minimise impacts. Alternatively, relevant permits must be obtained if impacts are unavoidable.	Medium – The establishment of the project footprint will result in the removal of natural vegetation, however not in a CBA. The footprint can potentially be changed (if required) to protect sensitive environments and species. There could be a loss of some individual species of conservation importance (permits required) To be determined by specialist study.
	Surface water resources	Incorrect planning may lead to the destruction of surface water resources such as prominent drainage features and pans	Site layout must incorporate the outcome of the Aquatic Ecological Impact Assessment. Site layout alternatives to be assessed during EIA phase to minimise impacts. Obtain WUL.	Medium – The establishment of the project footprint will potentially result in the disturbance of water resources including pans. The footprint can potentially be changed (if required) to protect sensitive environments. To be determined by specialist study.
	Heritage resources	Incorrect planning may lead to the destruction of heritage resources.	The site layout must incorporate the outcome of the Heritage Impact Assessment to be undertaken. Site layout alternatives to be assessed during EIA phase. Alternatively, relevant permits must be obtained if impacts are unavoidable.	To be determined by specialist study.
	Noise	Increased noise levels due to air traffic. Nuisance conditions for residents in the surrounding area.	Conduct Noise Impact Assessment to determine noise related impacts.	To be determined by specialist study.

PHASE	IMPACT CATEGORY	POTENTIAL IMPACTS	MITIGATION TYPE	POTENTIAL FOR RESIDUAL RISK
CONSTRUCTION	Biodiversity	Site clearance resulting in the disturbance of vegetation, habitats and/or sensitive environments/ species.	Biodiversity (Fauna and Flora) Specialist Study to be undertaken to identify sensitive habitats and species. Construction limited to demarcated area. Site layout planning to ensure protection of areas of high sensitivity where practicable.	Medium – The establishment of the project footprint will result in the removal of natural vegetation, however not in a CBA. The footprint can potentially be changed (if required) to protect sensitive environments and species. There could be a loss of some individual species of conservation importance (permits required) To be determined by specialist study.
		Establishment of road, powerline and runway resulting in habitat fragmentation.	Biodiversity (Fauna and Flora) Specialist Study to be undertaken to identify sensitive habitats and species. Site layout planning to ensure protection of areas of high sensitivity where practicable.	Low – The footprint will result in habitat fragmentation, however not in a CBA. There could be a loss of some individual species of conservation importance (permits required) To be determined by specialist study.
	Surface water resources	Site clearance resulting in the disturbance of surface water resources, including non-perennial pans and drainage lines	An Aquatic Ecological Impact Assessment Specialist Study to be undertaken to assess impact on aquatic environment. A Hydropedological Assessment to be undertaken to determine the contribution of the vadozone to the functioning of wetland pans. Construction limited to demarcated area Site layout planning to ensure protection of areas of high sensitivity where practicable.	Medium – The establishment of the project footprint will potentially result in the disturbance of water resources including pans. The footprint can potentially be changed (if required) to protect sensitive environments. To be determined by specialist study.
		Pollution of water courses due to sewage spills.	Provide adequate sanitation facilities to construction workers. Toilets to be emptied on a regular basis. Keep facilities clean and tidy.	Low – adequate sanitation facilities to be provided.
		Storage and use of hazardous substances, including hydrocarbon material – spillages that may lead to contamination of surface water	Implement appropriate containment (bunding) measures at designated storage areas.	Low – risk can be managed though the implementation of appropriate mitigation measures

PHASE	IMPACT CATEGORY	POTENTIAL IMPACTS	MITIGATION TYPE	POTENTIAL FOR RESIDUAL RISK
		resources.	Spill response procedures and equipment.	
		Runoff from disturbed areas resulting in soil erosion and sedimentation/ siltation of downstream water sources.	Establish buffer from drainage area to the south east of the property. Rehabilitate disturbed areas not allocated for development as soon as practicable. Rehabilitate borrow pit as soon as practicable after extraction of required material. Visual inspections of the site to proactively identify erosion problems. Implement additional controls if erosion problems are detected. Soil stockpiles to be situated in a demarcated area with stormwater control measures in place. Additional measures to be included in EMPr.	Low – The site is relatively flat and situated in an area with low annual rainfall. However, high rainfall events could result in erosion and sedimentation of water courses.
	Soil	Runoff from disturbed areas resulting in soil erosion and loss of topsoil.		
		Loss of soils and land capability.	Soils to be removed and protected for use in rehabilitation of temporarily disturbed areas and landscaping.	Low – Soils can be salvaged and used in rehabilitation/landscaping.
	Soil/ groundwater	Pollution of soil and groundwater due to spillage and seepage of contaminants used during construction.	Establish appropriate containment measures. Implement measures to protect soil and groundwater resources.	Low – risk can be managed though the implementation of appropriate mitigation measures
	Air quality	Increased dust fall from the following sources: • Earthworks for infilling and to establish foundations. • Borrow pit operations to extract aggregate/building material. • Vehicle movement on exposed surfaces.	Watering of exposed surfaces, i.e., by using a water bowser. Maintain a complaints register. Conduct dust fall monitoring in terms of the National Dust Control Regulations. Implement additional measures if required.	Low – the proposed development site is situated relatively far from receptors that can be impacted by increased dust levels. Impacts will be temporary only associated with the construction phase.
		Vehicle emissions – release of Greenhouse Gas Emissions	Only use vehicles in good working order	Low

PHASE	IMPACT CATEGORY	POTENTIAL IMPACTS	MITIGATION TYPE	POTENTIAL FOR RESIDUAL RISK
	Noise	Increased noise levels from the following sources: • Earth moving equipment. • Generators. • Vehicle movement.	Use will be made of the existing Kolomela public grievance process. IAPs will be informed of the process. Limit construction to the daytime, if possible.	Low – the proposed development site is situated relatively far from receptors that can be impacted by increased noise levels. Impacts will be temporary and only associated with the construction phase.
	Heritage and palaeontology	Site clearance resulting in the disturbance of heritage and palaeontology resources.	Identify heritage resources through a Heritage Impact Assessment and indicate on layout planning. Implement Chance Find Procedure. Revise layout to protect heritage resources, if required.	Low – Should heritage resources be identified these can be protected with buffer zones. A destruction permit will have to be obtained from SAHRA if required.
	Waste management	Incorrect management of hazardous and general waste. Environmental pollution and nuisance conditions due to littering.	Conduct waste management according to relevant legal requirements.	Low
	Traffic	Traffic impacts due to movement of construction vehicles and contractors.	Conduct Traffic Impact Assessment.	To be determined by specialist study.
	Visual	Landscape disturbance	The layout plan to be developed according to local topography.	Medium – the landscape will be permanently altered. However, the facility will be relatively flat.
	Social (sense of place)	Change in land use from agriculture and alteration of sense of place.	Social Impact Assessment to be undertaken. Undertake Noise Impact Assessment and implement necessary mitigation measures. Conduct thorough public consultation process.	The SHIRA and Noise impact Assessment will entail a risk assessment and determine residual risks.
	Socio-economic	Contribution to local economy – job creation and purchasing of goods and service	Local Economic Development Plan for the project	Impacts will be temporary only associated with the construction phase.

PHASE	IMPACT CATEGORY	POTENTIAL IMPACTS	MITIGATION TYPE	POTENTIAL FOR RESIDUAL RISK
OPERATIONS	Biodiversity	Animal/bird strikes on access roads	Enforce speed limit on access roads. Traffic signs – warning of potential animals crossing roads Biodiversity (Fauna and Flora) Specialist Study to be undertaken.	Low – mitigation measures should be sufficient to manage the risk.
		Animal/bird strikes on runway.	Appropriated fencing. Implement measures to repel birds, i.e. sound, visual objects (flags, reflectors,).	Low – mitigation measures should be sufficient to manage the risk.
	Surface water resources	Storage of hazardous substances, including bulk hydrocarbon (fuel) storage – spillages that may lead to contamination of surface water resources.	Implement appropriate containment (bunding) measures at storage areas. Implement hazardous substances management procedure. Develop and implement stormwater management plan.	Low – bulk fuel storage can be easily managed with the implementation of appropriate mitigation measures.
		Spillages during refuelling and from vehicles leaking oil	Site inspections Spill response procedures and equipment.	Low
		Pollution of water courses due to sewage spills.	Maintenance of septic tank system. Establish containment measures. Regular removal of sludge.	Low – system to be maintained by trained operators.
		Increased runoff volume and velocity from acritical surfaces – siltation and sedimentation of downstream water courses	Develop and implement stormwater management plan. Implement flow attenuation measures.	Low - The runway will be relatively flat which will decrease runoff velocity.
	Traffic	Increased traffic travelling through Postmasburg. Increased traffic may also cause deterioration of the roads.	Conduct Traffic Impact Assessment to determine traffic related impacts.	To be determined by specialist study.
	Noise	Increased noise levels due to air traffic. Nuisance conditions for residents in the surrounding area.	Conduct Noise Impact Assessment to determine noise related impacts. Conduct thorough public participation	To be determined by specialist study.

PHASE	IMPACT CATEGORY	POTENTIAL IMPACTS	MITIGATION TYPE	POTENTIAL FOR RESIDUAL RISK
			process during EIA	
	Waste management	Incorrect management of hazardous and general waste. Environmental pollution and nuisance conditions due to littering.	Conduct waste management according to relevant legal requirements.	Low
	Waste management	Spillages of sewage sludge.	Use only registered contractors.	Low
	Fire and explosion – bulk fuel storage	Fires could impact agricultural activities in the area and compromise the safety of surrounding residents.	Implement emergency procedures. On-site fire fighting equipment.	N/A
	Resource consumption	Abstraction of groundwater to supply water requirements – impact on local aquifer and groundwater users.	Abstraction to be conducted in line with sustainable safe yields. Implement water conservation strategy. Awareness among employees and passengers. Low flow taps	Medium – impact on groundwater reserve to be determined.
	Resource consumption	Electricity consumption – resource consumption and indirect Greenhouse Gas Emissions.	The following measures can be considered to manage energy consumption: • Installation of low energy light bulbs. • Use of natural light during day time. • Solar heating systems. • Use of gas in kitchens. • Solar lights on runways if practicable. • Awareness training.	N/A
	Socio-economic	Contribution to local economy – job creation and purchasing of goods and service	Local Economic Development	N/A
DECOMISSIONING AND	Socio-economic	Job losses and discontinuation of local spending	Pro-active consultation with employees	N/A
	Waste management	Incorrect management of hazardous and general waste. Environmental pollution and nuisance conditions	Conduct waste management according to relevant legal requirements.	Low

PHASE	IMPACT CATEGORY	POTENTIAL IMPACTS	MITIGATION TYPE	POTENTIAL FOR RESIDUAL RISK
		due to littering.		
	Erosion	Unsuccessful rehabilitation and vegetation growth may lead to erosion and siltation of downstream water courses.	Unsuccessful rehabilitation and vegetation growth may lead to erosion and siltation of downstream water courses.	Medium – follow up and maintenance of the rehabilitation must be undertaken to ensure sustained vegetation growth and to monitor the site for residual erosion.
	Biodiversity	Encroachment of alien invasive plants	Implement follow up measures to identify and eradicate alien invasive plants	Medium – follow up and maintenance of the rehabilitation must be undertaken to identify and eradicate alien and invasive plants
	Biodiversity	Rehabilitation of the site will reinstate the disturbed area to provide habitat for species in the area.	Rehabilitate the area to achieve functional end land use.	Medium – follow up and maintenance of the rehabilitation must be undertaken to ensure sustained vegetation growth and the functioning of ecosystems.
	Visual	Improved aesthetic character of the area.	Rehabilitate the area to achieve functional end land use.	High – visual appearance will permanently change if rehabilitation measures are successfully implemented.

12.4 The outcome of the site selection - Final site layout plan

The site layouts will be investigated in the EIA phase of the project. Impacts on sensitive sites, including heritage, biodiversity, surface water resources including wetlands will be identified and the layout revised as required and where practicable to minimise impacts.

An alternative layout aimed at minimising such impacts will be developed as an outcome to the EIA for implementation by SIOC.

12.5 Motivation where no alternative sites were considered

Alternative layouts and positioning of infrastructure will be considered as part of the EIA Phase based on the outcomes of specialist studies and in consultation with SIOC.

12.6 Statement motivating the preferred site

Although Alternative 1 (the establishment of a new facility on the Farm Kalkfontein) will entail the removal of natural vegetation exceeding 80 hectares and water courses including pans will be affected, the site is situated in the Postmasburg Thornveld vegetation type (Least Threatened) and is not situated in a CBA. The site layout alternatives that will be determined during the EIA phase will potentially mitigate impacts on pans and sensitive species. Only minor drainage features will be affected compared to site Alternative 1 which is located in a prominent drainage feature (tributary of the Groenwaterspruit).

The site is not characterised by airspace restrictions and is not situation within or close to the Lohatla Military Bombing Range airspace, compared to all the other alternative sites assessed. The site is not located in close proximity to residential areas (compared to Alternative 2), apart from the residents situated to the north, north-west and east of the site. The topography of the proposed site is also relatively flat for the establishment of the runway. Relatively easy access can also be established from the R309 regional road.

Alternative 1 (the establishment of a new facility on the Farm Kalkfontein) is preferred based on the above factors and will provide a suitable area for the development of the proposed airport.

13. PLAN OF STUDY FOR THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

13.1 Description of Alternatives to be Considered including the Option of Not Going Ahead with the Activity.

The following alternatives will be considered as part of the EIA process:

13.1.1 No-Go alternative

The no-go alternative (not proceeding with all or part of the proposed activities) will be further considered in the EIA phase of the project. Should the impacts of the entire or parts of the proposed project be considered to be unacceptable, even with mitigation then the no-go alternative could be considered. However, safety risks associated with the continued use of the current airstrip at Tommy's Field will need to be addressed.

13.1.2 Layout alternatives

The current proposed layout for the development of the airport will be further revised based on the outcomes of the specialist studies and EIA process. This will be done in consultation with SIOC to ensure that the impacts of the project are kept to a minimum.

The presence of water resources (pans), species of conservation importance and heritage resources in the area to be disturbed by the project footprint will be confirmed. Where possible, sensitive sites will be avoided in an updated layout. If this is not possible the recommendations of the relative specialists will be implemented and the necessary licences/permits will be obtained if such sites cannot be avoided. It shou The project also has the potential to have socio-economic spin offs. The airport can be used by local residents and can be used by other aircraft not related to Kolomela mine operations. The current status of infrastructure development in Postmasburg is not favourable and this project will contribute significantly to infrastructure development in the area. No gold be noted that all developments for the project will take place in disturbed areas. The outcome of the noise impact assessment will also provide input to the orientation of the runway.

13.1.3 Routes for Passengers Travelling to and from Kolomela

Two route alternatives are considered for passengers travelling from the airport to Kolomela. The EIA will further assess the route determination alternatives.

13.1.4 Use of a Septic Tank System vs the use of a Conservancy Tank System

The use of septic tank system compared the use of a conservancy tank system diesel will be assessed during the EIA phase.

13.2 Description of the aspects to be assessed as part of the environmental impact assessment process (including aspects to be assessed by specialists)

Where the EAP does not have sufficient expertise or information in a particular field to

adequately determine the baseline environmental conditions or to assess the impacts, specialists in those fields will be appointed to provide the necessary information required to facilitate the EIA.

The requirements for further work have been identified in the scoping phase (see Table 9-7). This forms the terms of reference for the EIA phase of the project.

The following outlines the scope of work for specialist studies to inform the EIA and EMPr. Should it become apparent during the EIA phase that additional specialist studies are required, the terms of reference will be drawn up and these will then be included in the EIA report.

Specialist reports will be structured in terms of *GNR 982 Appendix 6, as amended*. The specialist studies identified thus far are discussed below.

13.2.1 Freshwater Ecological Assessment

Scientific Terrestrial Services will undertake a specialist investigation of the freshwater aquatic environment to be impacted by the proposed airport development.

The study will include:

- A desktop study of available databases and previous work done at the site and in the area;
- Delineation of the watercourses within the study area;
- Delineation of watercourses within 500m of the study area;
- All watercourses identified during the field assessment will be mapped;
- Watercourse classification assessment;
- Applicable buffer zones and/or zones of regulation according to relevant legislation or provincial guidelines will be delineated around the watercourses;
- The watercourse Present Ecological State (PES) will be assessed according to relevant indices;
- Provision of recommendations on management and mitigation measures (including opportunities and constraints) with regards to the development/operation of the proposed development; and
- Compilation of report to incorporate the study findings.

13.2.2 Biodiversity

Scientific Terrestrial Services will undertake a specialist investigation of the terrestrial biodiversity (fauna and flora) that will be impacted by the proposed airport development.

13.2.2.1 Floral Assessment

- A desktop study will be conducted of available databases and previous work done at the site and in the area;

- A description of each habitat type based on conservation importance and present ecological state;
- Vegetation communities will be identified and mapped.
- Species lists and dominant species associated with each vegetation community will be compiled;
- Focus will also be given to identifying areas of severe alien and invader encroachment and Category 1, 2 and 3 species;
- Veld condition will be assessed and will also be compared to the typical vegetation for the vegetation type of the area;
- Sensitive areas will be mapped where detail will be given of the ecological aspect of concern in each sensitivity zone; and
- Recommendations on management and mitigation measures.

13.2.2.2 Faunal Assessment

- Determining the ecological importance and sensitivity of the study area according to the relevant conservation databases;
- Visual observations of actually occurring species;
- Identification of evidence of occurrence, e.g. call spoor, droppings etc
- The reports produced will include sensitive habitat types (which will be mapped) and impacts from habitat disturbance, faunal assemblages at risk and an assessment of impacts on migratory routes;
- An assessment of cumulative impacts on faunal assemblages in the region will also be made, with specific emphasis on avifauna
- Recommendations on management and mitigation measures.

The biodiversity study will be updated to reflect the change in scope of work associated with the project.

13.2.3 Hydropedological Assessment

Zimpande Research Collaborative (Pty) Ltd will conduct a Hydropedological Assessment to assess the impacts that the proposed development will have on unsaturated flow processes and wetlands.

The study will include:

- Desktop review of existing soil, geohydrological data and/or reports, where available;
- Conduct a soil survey to verify current soil conditions on site;
- Subsurface soil observations will be made by means of a standard hand auger method, and soil in the vicinity of the investigated wetland features will be classified according to the South African Soil Classification System (Soil Classification Working Group, 2018);

- Field data will include a description of physical soil properties including the following parameters.
- Hydrological hillslope classification using the Le Roux, et al. (2015) method;
- Collect selected verification samples for textural analysis at an accredited analytical laboratory;
- Identify the potential impacts of the proposed development on the unsaturated flow
- processes and wetlands;
- Quantify hydropedological losses (%) that will occur as a result of the proposed project;
- Determine a scientific buffer taking into consideration important wetland recharge soils;
- Recommend suitable mitigation and management measures to alleviate the identified
- impacts on the wetland hydropedological conditions; and
- Compile a brief report on the conceptual hydropedological regime of the investigated wetlands based on the identified soil types under current conditions
- Estimate the hydraulic conductivity according to soil texture according to the FAO method (FAO, 1980).

13.2.4 Noise Impact Assessment

Airshed Planning Professionals will assess the noise related impacts associated with the proposed development. The following tasks are considered necessary for the assessment:

- Setup of topography for the area and identification of sensitive receptors and existing sources;
- Noise emissions inventory (construction and operations);
- Noise propagation modelling;
- Impact assessment;
- Recommendations on mitigation and management measures; and
- Report compilation.

13.2.5 Heritage Impact Assessment and Phase 1 Palaeontological Assessment

PGS Heritage will undertake a heritage study and Phase 1 Palaeontological Assessment for site. The study will incorporate:

- Desktop study and review of previous studies done in the area;
- Identification of sites of heritage importance at all development areas;
- Classification of resources according to cultural and heritage significance;
- Assessment of impacts in accordance with SAHRA's requirements;
- Photographic evidence of sites; and
- Mitigation.

Heritage resources will be mapped, and the site layout revised to avoid impacts on resources,

where practicable.

13.2.6 Social and Human Rights Impact and Risk Analysis

A Social and Human Rights Impact and Risk Analysis (SHIRA) / Social Impact Assessment will be completed to provide input into the social management planning for the development of the new airport.

The study will include the following:

- Desktop study of recent available information to document the socio-economic context of the project.
- Stakeholder interviews (remote given the current Covid-19 restrictions and precautions) to document stakeholder perspectives.
- Undertake an impact and risk analysis for the including an assessment of cumulative impacts.
- Identify mitigation to address impacts and project risks
- Project Social Management Plan.

13.2.7 Traffic Impact Assessment

EXM proposes to appoint R&G consulting engineers to conduct a Traffic Impact Assessment which will include the following:

- Traffic counts and analysis;
- Analysis of current road conditions;
- Alternative route assessment;
- Impact assessment of additional traffic volumes on base case;
- Proposal of mitigation measures; and
- TIA Report.

13.2.8 Groundwater Supply Study

The main objective of the proposed groundwater study is to assess the groundwater supply potential of existing boreholes to meet the airport water demand of approximately 11 000 litres/day.

EXM will source available data on boreholes on the proposed farm and will identify boreholes for the purpose of pump testing to determine if there is a sustainable supply available that can meet the projects requirements.

13.3 Proposed method of assessing the environmental aspects including the proposed method of assessing alternatives

13.3.1 Impact ranking criteria

The impact assessment method takes into account the current environment, the details of the proposed project and the findings of the specialist studies. Cognisance will be given to both positive and negative impacts that may result from the development. The significance of the impact is dependent on the consequence and the probability that the impact will occur.

impact significance = (consequence x probability)

Where:

consequence = (severity + extent)/2

and

severity = [intensity + duration]/2

Each criterion is given a score from 1 to 5 based on the definitions given in Table 13-1. Although the criteria used for the assessment of impacts attempts to quantify the significance, it is important to note that the assessment is generally a qualitative process and therefore the application of this criteria is open to interpretation. The process adopted will therefore include the application of scientific measurements and professional judgement to determine the significance of environmental impacts associated with the project. The assessment thus largely relies on experience of the environmental assessment practitioner (EAP) and the information provided by the specialists appointed to undertake studies for the EIA.

Where the consequence of an event is not known or cannot be determined, the "precautionary principle" will be adhered to and the worst-case scenario assumed. Where possible, mitigation measures to reduce the significance of negative impacts and enhance positive impacts will be recommended. The detailed actions, which are required to ensure that mitigation is successful, will be provided in the EMPR, which will form part of the EIA report. Consideration will be given to the phase of the project during which the impact occurs. The phase of the development during which the impact will occur will be noted to assist with the scheduling and implementation of management measures.

TABLE 13-1: CRITERIA FOR ASSESSING THE IMPACT SIGNIFICANCE

SEVERITY CRITERIA

INTENSITY = MAGNITUDE OF IMPACT	**RATING**
Insignificant: impact is of a very low magnitude	1
Low: impact is of low magnitude	2
Medium: impact is of medium magnitude	3
High: impact is of high magnitude	4
Very high: impact is of highest order possible	5

DURATION = HOW LONG THE IMPACT LASTS	**RATING**
Very short-term: impact lasts for a very short time (less than a month)	1

Short-term: impact lasts for a short time (months but less than a year)	2
Medium-term: impact lasts for the for more than a year but less than the life of operation.	3
Long-term: impact occurs over the operational life of the proposed extension.	4
Residual: impact is permanent (remains after mine closure)	5

EXTENT = SPATIAL SCOPE OF IMPACT/ FOOTPRINT AREA / NUMBER OF RECEPTORS	**RATING**
Limited: impact affects the project site	1
Small: impact extends to the boundaries of the mining area	2
Medium: impact extends to neighboring properties	3
Large: impact affects the surrounding communities	4
Very Large: The impact extends beyond the neighbouring communities	5

PROBABILITY

PROBABILITY = LIKELIHOOD THAT THE IMPACT WILL OCCUR	**RATING**
Highly unlikely: the impact is highly unlikely to occur	0.2
Unlikely: the impact is unlikely to occur	0.4
Possible: the impact could possibly occur	0.6
Probable: the impact will probably occur	0.8
Definite: the impact will occur	1

IMPACT SIGNIFICANCE

NEGATIVE IMPACTS

≤1	Very low	Impact is negligible. No mitigation required.
>1≤2	Low	Impact is of a low order. Mitigation could be considered to reduce impacts. But does not affect environmental acceptability.
>2≤3	Moderate	Impact is real but not substantial in relation to other impacts. Mitigation should be implemented to reduce impacts.
>3≤4	High	Impact is substantial. Mitigation is required to lower impacts to acceptable levels.
>4≤5	Very High	Impact is of the highest order possible. Mitigation is required to lower impacts to acceptable levels. Potential Fatal Flaw.

POSITIVE IMPACTS

≤1	Very low	Impact is negligible.
>1≤2	Low	Impact is of a low order.
>2≤3	Moderate	Impact is real but not substantial in relation to other impacts.
>3≤4	High	Impact is substantial.
>4≤5	Very High	Impact is of the highest order possible.

CUMULATIVE IMPACTS

Cumulative impacts are defined as: "*the impact of an activity that in itself may not be significant but may become significant when added to the existing and potential impacts eventuating*

from similar or diverse activities or undertakings in the area". Taking into consideration the above definition, the cumulative impacts for the project will be assessed by considering the potential impacts in relation to the current status of the environment which includes existing impacts from surrounding activities.

MITIGATION MEASURES

A **no net loss** approach will be adopted in terms of the management of impacts at the project.

- **Avoidance** – impacts are to be avoided where practicable e.g. through the implementation of alternatives.
- **Mitigation** – should it not be possible to avoid all impacts the remaining impacts are to be mitigated to acceptable levels.
- **Offset** – should it not be possible to avoid and mitigate all impacts to acceptable levels it will be necessary to offset the remaining impacts. Suitable offsets will need to be identified.

Mitigation measures for significant impacts which cannot be avoided will be identified. The impacts will be ranked before and after the implementation of the mitigation measures. Consideration will also be given to the confidence level that can be placed on the successful implementation of the mitigation level as follows:

- **High Confidence:** mitigation measure easy and inexpensive to implement.
- **Medium Confidence:** mitigation measure expensive or difficult to implement.
- **Low Confidence:** mitigation measure expensive and difficult to implement.

Where mitigation is not sufficient to reduce the impact to acceptable levels offsets will need to be considered.

PROJECT PHASES

The environmental impacts for the project will be assessed over the five phases of the project i.e. the planning and design, construction, operation, decommissioning and post-closure phase.

13.3.2 The proposed method of assessing duration significance

The method for assessing duration and significance is included above.

13.4 Stages at which the competent authority will be consulted

The competent authority is the Northern Cape Environmental Affairs and Nature Conservation for the environmental authorisation application. The following specific consultations will be

included:

- Application Consultation – application submitted with scope of work
- Authority Site Visit – still to be completed
- Consultation on approval of Scoping Report (follow-up on approval and comments from the CA on Scoping Report)
- Consultation after submission of the EIA – follow up as required. Provide additional information if required

The scoping, EIA and EMP reports will be submitted to the CA for review

13.5 Particulars of the public participation process with regard to the impact assessment process that will be conducted

13.5.1 Steps to be taken to notify IAPs

All persons registered as IAPs will be given an opportunity to comment on the EIA Report. Note that the notification and registration of additional IAPs will continue throughout the process. IAPs will be contacted regarding the availability of the report via email, registered mail or bulk SMS.

13.5.2 Details of the engagement process to be followed

13.5.2.1 Public Review of the Scoping Report

The draft Scoping Report is made available for public review for 30 days. The report is circulated to the public and commenting authorities. Any new issues raised during review of the Scoping Report will be incorporated in the final scoping report which will be submitted to DENC.

The following processes will be used with respect to the circulation of the draft Scoping Report:

- An electronic link have been provided to the identified IAPs with access to email. Two platforms will be used including OneDrive and Dropbox to ensure access. Electronic versions on a memory stick or can also be couriered if needed.
- Other IAPs for whom only cell phone number are available have been notified of the availability of the reports and provided the opportunity to request access to the documents.
- Hard copies of the Scoping report will be placed at a venue which is accessible to the public (e.g. public library and Kumba Public Affairs Offices), only if the IAPs that cannot access the electronic documents request access to a hard copy.
- Hard copies and/or electronic copies will be sent to the commenting authorities, if requested.

13.5.2.2 Proof of distribution will be included in the final Scoping reportFeedback Meeting/s during EIA

On completion of the EIA Report, public or focus group meetings via electronic platforms (zoom,

teams or skype) may be arranged to present the results of the specialist studies and the identified environmental and social impacts of the development.

13.5.2.3 Public Review of the EIA Report

The EIA report will be made available for public review for a period of 30 calendar days. The same process will be used to ensure that IAPs have access to the report for review.

13.6 Description of the tasks that will be undertaken during the environmental impact assessment process

The scope of work for the EIA phase of the project is detailed in Section 13.2. The following tasks must still to be completed:

- Conduct public consultation and respond to comments on draft Scoping report;
- Submit final amended scoping report (incorporating public and commenting authority comments);
- Address public and authority comment and modify scope of work to EIA as required;
- Completion of specialist studies and collation of additional information;
- Identification of additional mitigation and environmental management requirements for incorporation into the project;
- Assess impacts and revise as required;
- Compile Draft EIA Report;
- Compile Draft EMPr
- Public Review of Draft EIR and EMPr Report
- Address public comment
- Finalise EIA Report and EMPr
- Consult with DENC and address queries as required.

A description of the tasks that will be undertaken during the EIA phase is provided below in Table 13-2.

TABLE 13-2: EIA TASKS AND TIMING

Phase	EAP activity	Opportunities for Consultation and Participation		SCHEDULE
		Competent Authorities	IAPs, State Departments and Organs of State	
	Submit application form to DENC (Electronic & Hard Copy)	DENC acknowledgement of receipt of application	-	Completed May 2019
Scoping	Notification IAPs Inform persons of the amended project	Register interest, concerns and questions	IAPs to register interest, concerns and questions	July 2020
	Submit draft scoping to public and commenting authorities	Draft support submitted	IAPs to provide comments	July - August 2020
	Submit scoping report to DMR and acceptance	Authority to accept scoping report OR refuse (43 days of receipt)	IAPs comments are in the final scoping report	End August 2020
Specialist Assessments and	EAP to manage specialist activities and collate information for EIA.	-	-	July – August 2020
EIA Phase	Assess environmental impacts. Compile draft EIA and EMP report	-	-	September 2020
	Arrange meetings and consultations	Meetings if required.	Public feedback meeting/. Focused consultation with IAPs or commenting authorities if required.	September/ October 2020
	Submit draft EIA report to IAPs authorities.	Review of draft EIA report (30 days). Comments to EAP	Review of draft EIA report (30 days). Comments to EAP	
	Address public comment and finalise EIA and EMPr reports			
	Final EIA report to authority (106 days from acceptance of scoping).	Authority acknowledge receipt of EIA report (10 days).		End October 2020
Authority review and Authorisation	-	Environmental Authorisation Granted / Refused (107 days).	-	March 2021
	Notifications to I&APs regarding environmental authorisation (granted or refused).		-	March 2021
Appeal Phase	EAP to provide guidance regarding the appeal process as and when required.	Consultation during processing of appeal if relevant.	Submit appeal in terms of National Appeal Regulations	As required

13.7 Measures to avoid, reverse, mitigate, or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored.

Refer to Table 12-2.

14. OTHER INFORMATION REQUIRED BY THE COMPETENT AUTHORITY

14.1 Impact on the socio-economic conditions of any directly affected person.

Socio-economic impacts will be assessed in the EIA Phase, including the outcome of the Socio-Economic Impact Assessment.

14.2 Impact on any national estate referred to in section 3(2) of the National Heritage Resources Act.

The impacts on heritage will be assessed in the EIA Phase and impacts avoided as far as practicable based on revised layout planning and the outcome of the Heritage Impact Assessment.

15. OTHER MATTERS REQUIRED IN TERMS OF SECTIONS 24(4)(A) AND (B) OF THE ACT

None applicable at this stage.

16.UNDERTAKINGS BY THE EAP

I, Trevor Winston Hallatt, the Environmental Assessment Practitioner responsible for compiling this report, undertake that:

- the information provided herein is correct;
- the comments and inputs from stakeholders and I&APs has been correctly recorded;
- information and responses provided to stakeholders and I&APs by the EAP is correct; and
- the level of agreement with I&APs and stakeholders has been correctly recorded and reported.

The undersigned declares that this report represents an independent and objective assessment of the risks associated with the proposed development.

Name	Affiliation	Designation	Signature	Date
Trevor Hallatt	EXM Environmental Advisory (Pty) Ltd	Pr.Sci.Nat. Senior Environmental Scientist		12/08/2020

17.REFERENCES

Airshed. 2015. Air Quality Specialist Report for the Proposed Kolomela Amendment Project

Airshed. 2018. Noise Specialist Study for the Kolomela Mine.

Fairley, K. 2019. Review of Ecological and Avifaunal Specialist Reports for the Amendment Application of the Eskom Boichoko 132 KV Powerline Environmental Authorisation.

Harrison, R. Afzelia, October 2015. Ecological Impact Assessment: Proposed Construction of the Boichoko Substation (132/11kv 2x10mva) and Dual 132kv Power Line Project in Postmasburg, Tsantsabane Local Municipality, Northern Cape Province.

Van Schalkwyk, J.A. 2015. Cultural heritage impact assessment for the Proposed Development of the Boichoco 132kv Power Line and Substation, Postmasburg, Siyanda District Municipality, Northern Cape Province.

Appendix A: EAP CV

Surname:	Hallatt
Names:	Trevor Winston
Position:	
Nationality:	RSA
Experience:	9 years environmental consultant in mining and industrial sectors
Professional Registration/Affiliations:	South African Council for Natural Scientific Professions (Reg nr: 300123/15).
Qualification:	MA Environmental Management North West University

Trevor Hallatt has more than 10 years of environmental management experience in mining, power generation, industrial and local government sectors. His duties entail the planning and execution of projects related to environmental management, including Environmental Impact Assessments (EIA), Water Use Licence Applications and IWWMPs, ISO 14001: 2004 and legal compliance audits, Financial Provisioning, Compilation of Environmental Management Programmes, Environmental Risk Assessments and Environmental Management Systems. Trevor also has extensive experience in the application of Geographic Information Systems (GIS) in environmental projects. Trevor is a registered Natural Science Professional with the South African Council for Natural Scientific Professions (Reg nr: 300123/15).

KEY AREAS OF EXPERTISE

- Environmental Impact Assessments;
- Financial Provision and Mine Closure Applications;
- Water Use Licence Applications;
- Atmospheric Emissions Licence Applications;
- Geographic Information Systems;
- Environmental Audits (Legal and EMS);
- Environmental Control Officer: and
- Public Consultation.

SUMMARY RECENT PROFESSIONAL EXPERIENCE RELATED TO ENVIRONEMTNAL IMPACT ASSESSMENT

Client	Designation	Description
Zinoju Coal	EAP and Project Manager	BA and WUL application for the refurbishment of the old Balgray Colliery near Dundee
Vereeniging Refractories	EAP and Project Manager	Vereeniging Refractories Hammanskraal Clay Quarry Waste Management Licence and EMPr amendment Environmental Legal Audits ECO Functions
Izazi Mining Services	EAP and Project Manager	Three Prospecting Right Applications and Basic Impact Assessment Processes
Aquarella Investment	Specialist	Prospecting Right Application and Basic Impact Assessment Process
Sishen Iron Ore Mine	Environmental specialist	Lylyveld Expansion EIA; Closure Costing Calculations.
Ceramic Industries	EAP	Warehouse Development Basic Impact Assessment. Atmospheric Emissions Licence and full EIA for Phoenix Factory.

Client	Designation	Description
		WUL Applications (Pegasus and Phoenix Factories) Environmental Legal Audits
Barberton Mines	Environmental specialist	IWWMPs review 2019/2020
Evander Gold Mines	Auditor	EMP Performance Assessments
Evander Gold Mines	Environmental specialist	Closure Costing Calculations 2020
Ilahle	Environmental specialist	Prospecting Right Applications x 3 Closure Costing Calculations
Altius Trading	Environmental specialist	Prospecting Right Closure Application Closure Costing Calculations
Samncor Eastern Chrome Mines	Environmental specialist	Development of NEMA Closure Documents for Scheiding Mine
Kolomela Iron Ore Mine	Project Manager EAP	Conflict management with local farmers Biodiversity action plan and monitoring Various external audits Various EIA'/ EMP's for expansion projects Various mining permit applications
Canyon Coal	Environmental specialist	BA for a coal siding development near Bronkhorstspruit EIA Review and PPP for Prospecting Right Applications
Kangra Coal	Environmental specialist	IWWMP for Kusipongo Project
Ceramic Industries	EAP	Warehouse Development Basic Impact Assessment. Atmospheric Emissions Licence and full EIA for Phoenix Factory. WUL Applications (Pegasus and Phoenix Factories) Environmental Legal Audits
ArcelorMittal	EAP and Environmental specialist	EIA and Scoping as well as BAR for the decommissioning of the Existing Metallurgical Disposal Site and the Construction of a New Class B Disposal Site Galvanising Line Conversion to Combi-Line Basic Impact Assessment. Environmental Legal Audits
Universal Oil Solutions	EAP and Environmental specialist	Waste Management Licence Application Environmental Legal Audits ECO Functions
TerraNova Ceramics	EAP and Environmental specialist	Atmospheric Emissions Licence and full EIA;
Columbus Stainless	Environmental specialist	Basic Assessment for the Storage of Hazardous Substances.
Bumatech	Environmental specialist	Expansion Project Basic Impact Assessment Process. Environmental Legal Audits ECO Functions
AfriSam SA	Environmental specialist	Environmental Legal Audits ECO Functions

RECENT EMPLOYMENT RECORD

2019-current	**EXM Advisory Services** Senior Environmental Scientist
2015 – 2019	**Zantow Environmental Consulting Services** Senior Environmental Scientist
2010 – 2014	**Centre for Environmental Management (North-West University)** Junior Environmental Scientist

Appendix B1

I&AP Database

NEIGHBOURS AND AFFECTED PARTIES								
NAME		**INTEREST**	**AFFILIATION/FARM**	**EMAIL**	**CELL**	**PHONE**	**FACSIMILE**	**POSTAL ADDRESS**
DRIES	VAN DER WALT	AFFECTED LAND OWNER	KALKFONTEIN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
VILJOEN	VAN DER WALT	AFFECTED LAND OWNER	KALKFONTEIN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
FERDI AND LIZBE	NEL	AFFECTED LAND OWNER	KALKFONTEIN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
VILJOEN				[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PIETER	DU PLESSIS	AFFECTED LAND OWNER	KALKFONTEIN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
IZAK	GOUS	NEIGHBOUR	GROOTFONTEIN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
IZAK	GOUS (SNR)	NEIGHBOUR	GROOTFONTEIN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
CHARL	VILJOEN	NEIGHBOUR	OLIENFONTEIN /GEELBULT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JOHAN	VILJOEN	NEIGHBOUR	SOETFONTEIN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
ALBERTUS	VILJOEN	NEIGHBOUR /TSHIPING WUA	SOETFONTEIN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JOHAN	DE KLERK VAN XYL	LAND OWNER	KAMEELFONTEIN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

INTERESTED PARTIES								
NAME		**INTEREST**	**AFFILIATION/FARM**	**EMAIL**	**CELL**	**PHONE**	**FACSIMILE**	**POSTAL ADDRESS**
GEORGE	BENJAMIN	KOLOMELA MINE	KOLOMELA PUBLIC AFFAIRS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JWM	BOER	SAPS	TSANTSABANE SAPS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
CHRIS	BREDENKAMP	FARMER	KLIPBANKSFONTEIN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JIM	BREDENKAMP	FARMER		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
BENNIE	BREDENKAMP	FARMER	BROOMLANDS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
CHRISTO	BRIEDENHANN	FARMER	SUNNYSIDE 542	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
GERARD	CLAASSENS	FARMER	KOUWATER	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JJ	CLAASSENS	FARMER	NABOT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
CC	CLAASSENS	FARMER	MARTAHSPOORT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
WILLIE	CORNELISSEN	FARMER	WRIGHTLEY	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JOHN	DANIEL	FARMER	LUCASDAM	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
RUDIE	ERASMUS	FARMER	VOELWATER	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
DIRK	ESAU			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JAN	FOURIE			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
DEIDRE	GIBSON	FARMER	KLIPBANKSFONTEIN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
O	HORN	FARMER	DUNHILL	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
HENNIE	KARSTEN	FARMER	PAARDEPAN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

INTERESTED PARTIES								
NAME		**INTEREST**	**AFFILIATION/FARM**	**EMAIL**	**CELL**	**PHONE**	**FACSIMILE**	**POSTAL ADDRESS**
JACO	KARSTEN	FARMER	VLAKPLAAS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
ALIDA	KATZ	BUSINESS	KATZ BUILDING CONSTRUCTION	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JOHAN	KLEYNHANS	FARMER	OLYNFONTEIN 475 AND BEESHOEK 448	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
MAVIS	KOLBERG	KOLOMELA MINE	KOLOMELA PUBLIC AFFAIRS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JOHAN	KOTZE	FARMER	FLORADALE	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
COENRAAD	KOTZE	FARMER	FLORADALE	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
EKSTEEN	KOTZE	FARMER	FLORADALE	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
NICOLAS	LOUBSER	NEIGHBOURING MINE	RINGSIDE TRADING	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
WYNIE	LUBBE	FARMER	WILDEALSPUT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SANET	MARITZ	FARMER	PUTJIE	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
DH	MARITZ	FARMER	PUTJIE	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
HESTIA	MARITZ	FARMER	PUTJIE	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JACQUES	MEYER	KOLOMELA FARM MANAGER	WOLHAARKOP	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
MARTIN	MOLLER	FARMER	AUCAMPSRUS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
MARLENE	MOTLHALANE	ENVIRONMENTAL HEAL OFFICER COMMUNITY SERVICES		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
THEMBI	NIKANI	EMPLOYMENT	TSANTSABANE UNEMPLOYMENT FORUM	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
J	RIET	SAPS	TSANTSABANE SAPS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JAN	SCHOEMAN	FARMER	VLAKPLAAS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
MSIMELELO	SILOMNTU	NEIGHBOURING MINE	BEESHOEK MINE	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

INTERESTED PARTIES								
NAME		INTEREST	AFFILIATION/FARM	EMAIL	CELL	PHONE	FACSIMILE	POSTAL ADDRESS
TJAART	SNYMAN	FARMER	GRASVLAKTE	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
TJ	SNYMAN	FARMER	GRASVLAKTE	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
HEIN	SNYMAN	FARMER		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
MIMI	SWART	RATE PAYERS ASSOCIATION	TSANTSABANE RATE PAYERS ASSOCIATION	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
WILLIE	UYS	FARMER'S UNION		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
CHRIS	VAN DER MERWE	FARMER	MOOIDRAAI	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
CHRISTA	VAN DER MERWE	FARMER	BOSPOORT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JOHAN	VAN DER MERWE	FARMER	BOSPOORT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JOHAN	VAN ZYL	FARMER	KAMEELFONTEIN	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
MARITZA	VILJOEN	FARMER	AUCAMPSRUS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
ALTUS	VILJOEN	FARMER	AUCAMPSRUS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
ADAM	WAHL	FARMER	WILDEALSPUT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SAMUEL	WILLEMSE	FARMER	SWARTMODDER	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
				[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
				[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
				[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
				[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
				[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
				[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
				[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
				[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
				[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Morne	Vd Merwe	FARMER	NOKKI	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

INTERESTED PARTIES								
NAME		**INTEREST**	**AFFILIATION/FARM**	**EMAIL**	**CELL**	**PHONE**	**FACSIMILE**	**POSTAL ADDRESS**
Johan	Sounes	FARMER	Agri Postmasburg	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Hentie	Fourie	4e Innovation	Chief Operating Officer	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Sonet	Du Plooy	BUSINESS	Lead 2 Business	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Burger	Maritz			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SP	Du Plessis			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

AUTHORITIES								
NAME		**POSITION**	**AFFILIATION/FARM**	**EMAIL**	**CELL**	**TEL**	**FAX**	**POSTAL ADDRESS**
ABE	ABRAHAMS	REGIONAL MANAGER	NORTHERN CAPE: DEPARTMENT OF WATER & SANITATION	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PHILANI	MSIMANGO	ACTING VAAL RIVER PROTO - CMA	VAAL RIVER PROTO - CAM	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JACOLINE	MANS	REGIONAL HEAD FORESTER	NORTHERN CAPE: DEPARTMENT OF FISHERIES & FORESTRY	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
VINCENT	MUILA	OFFICER	NORTHERN CAPE: DEPARTMENT OF MINERAL RESOURCES	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
BRYAN	FISHER	HEAD ENVIRONMENT	DEPARTMENT OF ENVIRONMENT AND NATURE CONSERVATION	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
W.	MOTHIBI	HEAD OF DEPARTMENT	NORTHERN CAPE: DEPARTMENT OF LAND REFORM AND RURAL DEVELOPMENT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
DARIUS	BABUSENG	HEAD OF DEPARTMENT	NORTHERN CAPE: DEPARTMENT OF ECONOMIC DEVELOPMENT AND TOURISM	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
KOLEKILE	NOGWILE	HEAD OF DEPARTMENT	DEPARTMENT OF ROADS AND PUBLIC WORKS	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

ELIZABETH	BOTES	HEAD OF DEPARTMENT	DEPARTMENT OF SOCIAL DEVELOPMENT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
P	SAAYMAN	SATELLITE OFFICE POSTMASBURG	DEPARTMENT OF SOCIAL DEVELOPMENT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SAHRIS			SOUTH AFRICAN HERITAGE RESOURCES COUNCIL	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
N	Nkabiti		CIVIL AVIATION AUTHORITY	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
S	Maphanga		CIVIL AVIATION AUTHORITY	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
B	Maphanga		CIVIL AVIATION AUTHORITY	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
BS	Lenkoe	Head of Department	Northern Cape Department: Co-operative Governance, Human Settlements and Traditional Affairs	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
MM	Van den Berg	Traditional Affairs		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
A	Phete	ZF Mgcawu Region		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

MUNCIPALITIES								
NAME		**POSITION**	**AFFILIATION/FARM**	**EMAIL**	**PHONE**	**FACSIMILE**	**POSTAL ADDRESS**	**NOTIFICATION METHOD**
CLLR. M	MASHILLA	MAYOR	TSANTSABANE LOCAL MUNICIPALITY	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
C.	MARAIS	MAYORS SECRETARY	TSANTSABANE LOCAL MUNICIPALITY	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
HEINRICH	MATHOBELA	MUNICIPAL MANAGER	TSANTSABANE LOCAL MUNICIPALITY	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
GLADYS	WITBOOI	SECRETARY TO THE MUNICIPAL MANAGER	TSANTSABANE LOCAL MUNICIPALITY	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
CLLR JJJ	OLYN	EXECUTIVE MAYOR	ZF MCGAWU DISTRICT MUNICIPALITY	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
JG	LATEGAN	MUNICIPAL MANAGER	ZF MCGAWU DISTRICT MUNICIPALITY	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PREMIER ZAMANI	SAUL	PREMIER	NORTHERN CAPE PROVINCIAL GOVERNMENT	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Appendix B2

Copy of BID

SISHEN IRON ORE COMPANY (PTY) LTD

ATTENTION: INTERESTED AND/OR AFFECTED PARTY

NOTICE OF a full environmental impact assessment and Water use licence application

development of an airport near postmasburg in the northern cape

18. 1. INTRODUCTION

Notice is hereby given that Sishen Iron Ore Company (Pty) Ltd (SIOC) proposes to develop an airport on Farm Kalkfontein 474, located approximately 3.4 km south of the town of Postmasburg, Tsantsabane Local Municipality, in the Northern Cape.

The development of the airport triggers various activities listed in Listing Notices 1 (GN R. 983 as amended in 2017), 2 (GN R. 984 as amended in 2017) and 3 (GN R. 985 as amended in 2017) published in terms of the National Environmental Management Act (No. 107 of 1998). Therefore, a full Environmental Impact Assessment and Scoping process must be undertaken in terms of the EIA regulations (GNR 982 as amended in 2017) to obtain Environmental Authorisation (EA) for the proposed project. The Northern Cape Department of Environment and Nature Conservation is the Competent Authority (CA) for the EIA process.

The development of the airport also triggers activities a, c and i listed in Section 21 of the National Water Act (No. 36 of 1998). Therefore, a Water Use Licence (WUL) must be obtained from the Department of Water and Sanitation Northern Cap prior to commencement.

A public participation process must be undertaken in terms of the EIA regulations (GNR 982 as amended in 2017) and the Regulations Regarding the Procedural Requirements for Water Use Licence Applications and Appeals (GNR. 267 of 2017) to inform all relevant Interested and Affected Parties of the proposed project allow the IAPs to comment. This letter serves to **notify you as a landowner, lawful occupier, interested or affected party of the EIA and WUL application processes that are being undertaken.** EXM Environmental Advisory (Pty) Ltd has been appointed as the Independent Environmental Assessment Practitioners (EAP) responsible for administrating the abovementioned application process:

PURPOSE:

This document serves to:

- Notify you of the EIA process and WUL application
- Describe the application processes.
- Inform you as to how you can provide input into the process.

YOUR ROLE:

As an interested and affected party, your role is to:

- Ask questions, raise issues and concerns.
- Attend public meetings.
- Review and provide comment on environmental reports.

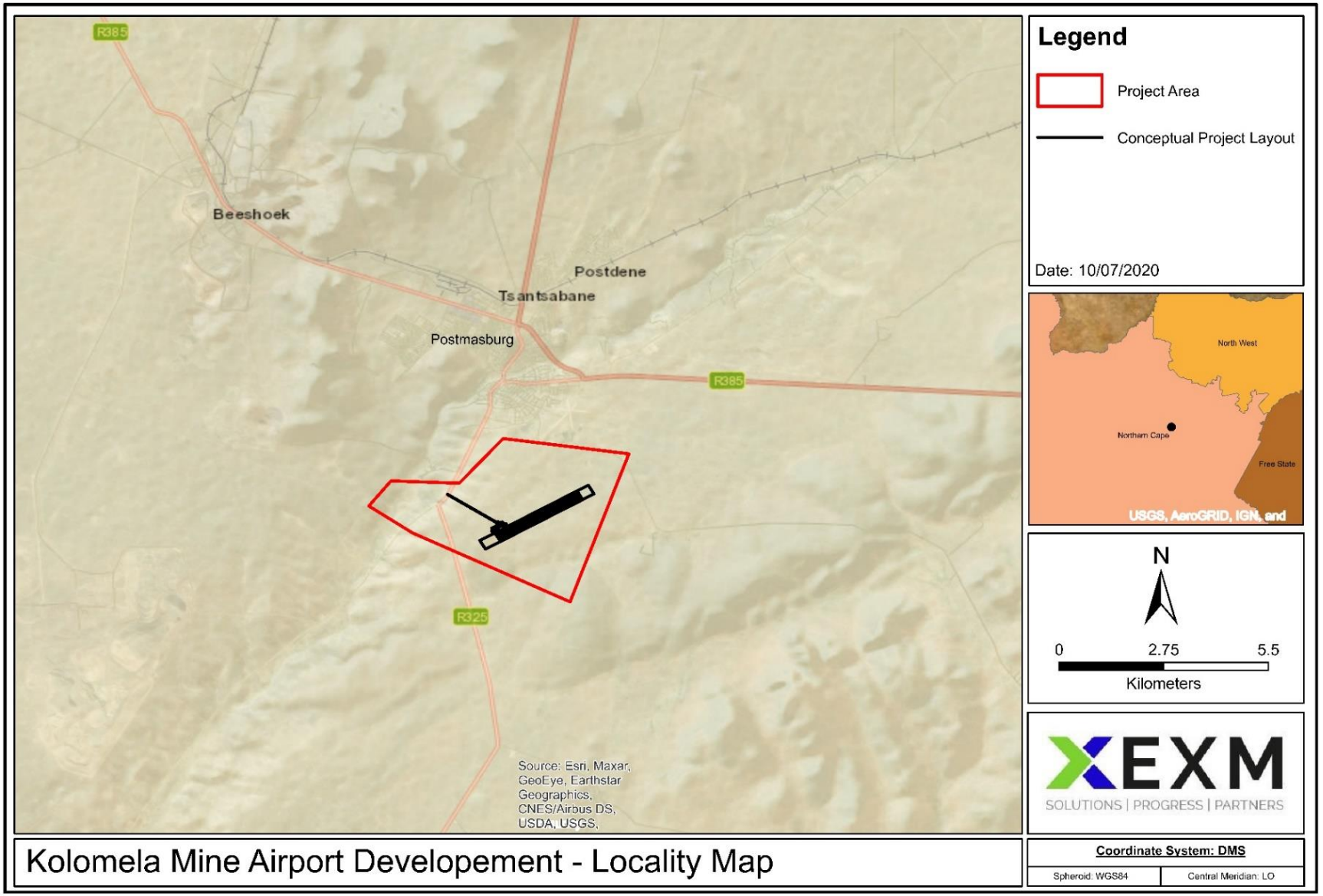


FIGURE 1: GENERAL LOCATION AND LAYOUT

19. 2. PRELIMINARY OVERVIEW OF THE OF THE PROPOSED AIRPORT DEVELOPMENT

SIOC is proposing the development of a new airport on the on the Farm Kalkfontein 474 R/E, south of Postmasburg. The purpose of the will to accommodate air traffic related to passengers travelling to and from Kolomela mine.

While the Sishen mine is serviced by 19 flights per week of 37 seat regional jet aircraft, Kolomela is serviced by Assmang's Tommy's Field by 7 flights in 29-seater J41 turbo-prop aeroplanes. Given the shortage of capacity on the Kolomela flights, many passengers are forced to fly to Sishen and are subjected to a long and potentially dangerous road transfer from Kathu to Postmasburg.

Furthermore, the runway at Tommy's Field is too short to allow for safe departures of fully-loaded aircraft under 'hot and high' conditions and various safety incidents have been reported. Furthermore, it is likely that SA Airlink will retire the fleet of J41 aircraft currently servicing Kolomela in the future.

The existing runways at Tommy's Field and Postmasburg Airfield were investigated as possible solutions, but these facilities cannot be expanded thus necessitating the need for a new runway and airport to be develop in Postmasburg to support traffic to Kolomela mine.

The proposed airport and associated infrastructure will cover approximately 80 hectares and will entail the development of the following structures/infrastructure (See Figure 2).

- A runway of approximately 2.2 km.
- Helipad(s).
- Control tower.
- Fuel farm to house fuel storage tanks.
- Water storage tanks.
- Access road (approximately 2.5 km).
- Water supply tanks.
- Parking area.
- Septic tank system.
- Terminal and supporting facilities.
- Waste management area.
- Electricity supply lines (<33kV).

Water supply to the airport will be sourced from groundwater boreholes.

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FIGURE 2: INITIAL CONCEPTUAL LAYOUT OF AIRPORT

20. 3. ENVIRONMENTAL APPROVALS REQUIRED

3.13.2 National Environmental Management Act (No. 107 of 1998) (NEMA)

The development of the proposed airport triggers various activities listed in Listing Notices 1 (GN R. 983 as amended in 2017), 2 (GN R. 984 as amended in 2017) and 3 (GN R. 985 as amended in 2017) published in terms of the National Environmental Management Act (No. 107 of 1998). The listed activities triggered in terms of these notices are provided in Table 1.

Activities triggered in terms of Listing notice 2 require an environmental authorisation which needs to be supported by a full EIA and Scoping process that must be conducted in terms of the NEMA EIA regulations (GNR. 982 of 2014, as amended). Activities triggered in terms of Listing notices 1 and 3 require an environmental authorisation which needs to be supported by a Basic Impact Assessment, however a full EIA will be required. According to the EIA Regulations, the competent authority for submission of the application for environmental authorisation is the Minister responsible for mineral resources i.e. the Northern Cape Department of Environmental and Nature Conservation. The regulated timeframes for the completion of the EIA process, as provided in the EIA Regulations, are provided in Figure 3.

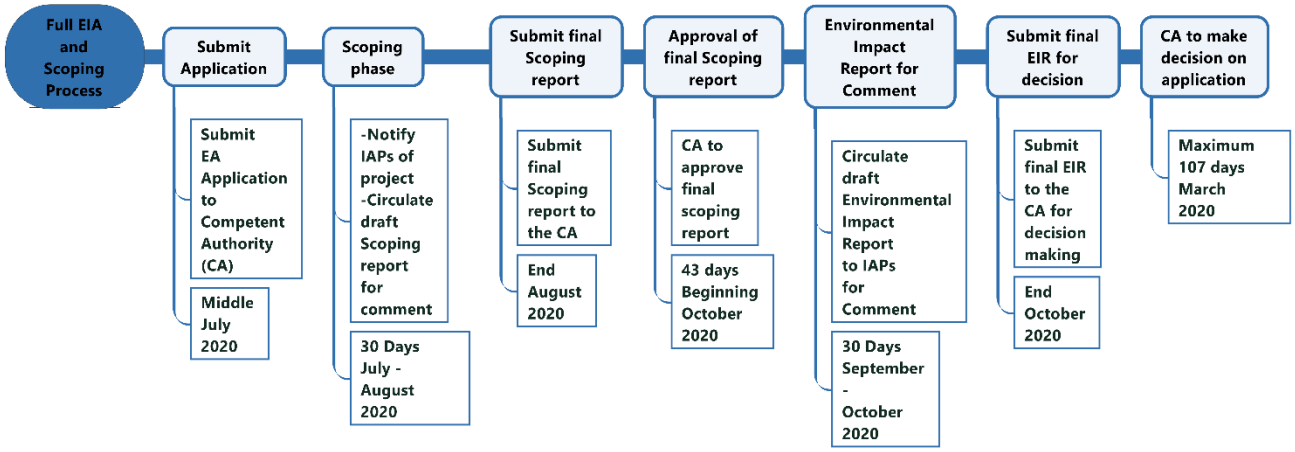

FIGURE 3: EIA Process

Table 1: NEMA Listed Activities triggered by the Project

Applicable Regulation		Project Infrastructure triggering the Listed Activity
Listing Notice 1 (GN R. 983 as amended in 2017)		
Activity 12	The development of— (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs— (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse	Several pans (water courses) are situated on the property which will potentially be impacted by the project footprint. A WUL application will be submitted to obtain authorisation in terms of activities listed in Section 21 of the National Water Act (No. 36 of 1998).
Activity 14	The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.	The development will entail the storage of fuel that will be used in the re-fuelling of airplanes.
Activity 19	The infilling or depositing of any material of more than [5] 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than [5] 10 cubic metres from [—(i)] a watercourse; [(ii) the seashore; or ii. (iii)the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or estuary, whichever distance is the greater.	Several pans (water courses) are situated on the property which will potentially be impacted by the project footprint. A WUL application will be submitted to obtain authorisation in terms of activities listed in Section 21 of the National Water Act (No. 36 of 1998)
Activity 24	The development of a road— (i) [a road] for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or (ii) [a road] with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;	The length of the access road that will be constructed as part of the project will be approximately 2.5 km and will be wider than 8 meters.

Applicable Regulation		Project Infrastructure triggering the Listed Activity
	but excluding a road— (a) [roads] which [are] is identified and included in activity 27 in Listing Notice 2 of 2014; (b) [roads] where the entire road falls within an urban area; or ii. (c) which is 1 kilometre or shorter.	
Activity 28	Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	The property on which the proposed airport will be developed has been used for the purpose of game farming.
<u>Listing Notice 2 (GN R. 984 as amended in 2017)</u>		
Activity 8	Activity 8. The development of— (i) airports; or (ii) runways or aircraft landing strips longer than 1,4 kilometres.	The project entails the development of an airport with a runway exceeding 1,4km.

Applicable Regulation		Project Infrastructure triggering the Listed Activity
Activity 15	Activity 15. The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	The project footprint will cover approximately 80 hectares and will entail the clearance of indigenous vegetation exceeding 20 hectares.
Listing Notice 3 (GN R. 985 as amended in 2017)		
Activity 10	The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres. g. Northern Cape ii. Areas within a watercourse or wetland; or within 100 metres from the edge of a watercourse or wetland;	The development will entail the storage of fuel that will be used in the re-fuelling of airplanes. A portion of the property on the proposed airport will be developed is classified as a Critical Biodiversity Area according to the Northern Cape Critical Biodiversity Map. Refer to Appendix 7 for the environmental sensitivity map.

3.3 National Water Act (No. 36 of 1998) (NWA)

The proposed development will include water uses as defined in terms of Section 21 of the National Water Act (Act 36 of 1998). These proposed water uses are provided in Table 2 below.

Table 2: Section 21 water uses to be included in the IWULA

Water Use	Activity Description
Section 21 (a)	Abstraction of groundwater from a borehole.
Section 21 (c&i)	Infrastructure that will impact directly on water courses
	New infrastructure within 500 m regulated zone of a wetland/watercourse (specific infrastructure to include in the IWUL application will be confirmed after review of specialist findings)

Authorisation of the abovementioned water uses will require an application for an Integrated Water Use Licence (IWUL) in terms of the Regulations Regarding the Procedural Requirements for Water Use Licence Applications and Appeals (GNR. 267 of 2017).

The IWUL application will be supported by a Technical Report compiled in accordance with the requirements of the relevant Annexures of the Regulations Regarding the Procedural Requirements for Water Use Licence Applications and Appeals (GNR. 267 of 2017). The regulated timeframes for an Integrated Water Use Licence Application process in terms of GN R. 267 of 2017 are provided in Figure 4.

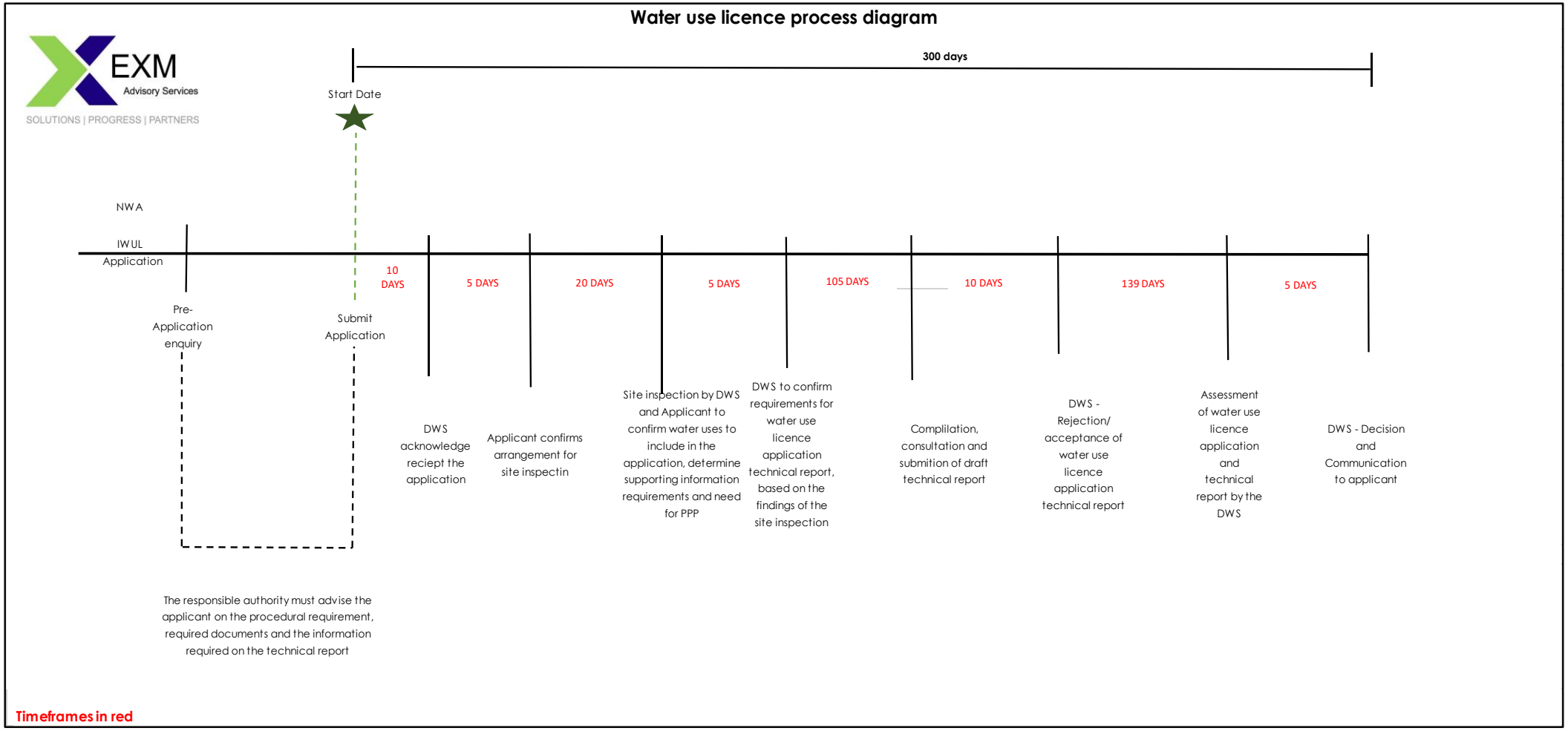

FIGURE 4: INTEGRATED WATER USE LICENCE APPLICATION PROCESS

21. 4. PUBLIC PARTICIPATION PROCESS

A public participation process is being undertaken as part of the applications. The process is conducted in terms of the NEMA EIA regulations (GNR. 982 of 2014, as amended) and the Regulations Regarding the Procedural Requirements for Water Use Licence Applications and Appeals (GNR 267 of 2017) promulgated under the National Water Act, 1998 (Act No.36 of 1998). Stakeholders are offered the opportunity to be informed about the application, raise comments, issues or concerns and provide input into the application and reports.

Interested & affected parties are invited to participate in the environmental process. You can provide input by:

- Registering as an interested & affected party (IAP);
- Asking questions and raising initial concerns by completing and returning the response sheet (attached);
- Reviewing and providing comment on reports.

All I&APs will be inform when all the documents will be available for review.

Should you have questions or require more information, **please contact**:

Trevor Hallatt

EXM Advisory Services

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Yours sincerely

Trevor Hallatt

Environmental Assessment Practitioner

EXM Advisory Services (Pty) Ltd

SISHEN IRON ORE COMPANY (PTY) LTD ENVIRONMENTAL IMPACT ASSESSMENT AND WATER USE LICENCE APPLICATION: DEVELOPMENT OF AN AIRPORT SOUTH OF POSTMASBURG	
Name:	
Address:	
Telephone/cell phone:	
Fax:	
E-mail:	
Date:	
Signature:	

If you know of others who should be informed of this application, please provide us with their contact details:

Name:	
Address:	
Telephone/cell phone:	
Fax:	
E-mail:	

ISSUES, CONCERNS AND QUESTIONS
