

Proposed expansion of the tented camp at Nkomazi Game Reserve, Mpumalanga Province

Draft Basic Assessment Report

Nkomazi Game Reserve

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EXECUTIVE SUMMARY

Nkomazi Game Reserve constructed a tented camp along the Komati River in 2007 and 2008 and as no environmental authorisation was received prior to construction, Aurecon South Africa (Pty) Ltd conducted a Section 24G rectification process in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) to obtain the required environmental authorisation for this camp. During September 2018, the Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (MDARDLEA) issued an Environmental Authorisation for the existing tourism facilities.

In 2019, Nkomazi Game Reserve explored the possibility of expanding the existing tented camp with an additional 14 tents and subsequently appointed Aurecon South Africa (Pty) Ltd as Environmental Assessment Practitioner to apply for the required Environmental Authorisation for this expansion as well as the application required in terms of the National Water Act, 1998 (Act No. 36 of 1998) (NWA). The expanded tented camp will consist of the following:

- Five tents accommodating four people each;
- 17 tents accommodating two people each;
- Two dining rooms; and
- One spa and gym tent.

The BA process conducted found that the area proposed occurs within the footprint of the existing Nkomazi Game Reserve tented camp. The fenced off area has already been impacted upon during construction of the existing facility. The potential impacts associated with the construction and operation of the additional tents within this area are minimal.

This assessment has not identified any potential impacts on the biophysical or social environments that are so severe as to suggest that the proposed expansion of the tented camp should not proceed.

With regards to the construction phase impacts, the significance of these impacts is likely to be curtailed by the relatively short duration of construction. Moreover, many of the construction phase impacts could be mitigated by the effective implementation of the recommended mitigation measures. If these measures were put into practice the significance of all construction phase impacts would be reduced to **low**.

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ABBREVIATIONS

amsl	above mean sea level
BAR	Basic Assessment Report
BID	Background Information Document
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
GN	General Notice
I&AP	Interested and Affected Party
IDP	Integrated Development Plan
MDARDLEA	Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs
NEMA	National Environmental Management Act
NWA	National Water Act
PPP	Public Participation Process
SG	Surveyor General
WUL	Water Use License

1. INTRODUCTION

Nkomazi Game Reserve constructed a tented camp along the Komati River in 2007 and 2008. As no environmental authorisation (EA) was received prior to construction, Aurecon South Africa (Pty) Ltd conducted a Section 24G rectification process in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) to obtain the required environmental authorisation for this camp. During September 2018, the Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (MDARDLEA) issued an EA for the existing tourism facilities.

In 2019, Nkomazi Game Reserve explored the possibility of expanding the existing tented camp with an additional 10 tents and subsequently appointed Aurecon South Africa (Pty) Ltd as Environmental Assessment Practitioner to apply for the required EA for this expansion and for the amendment of the existing Water Use License in terms of the National Water Act, 1998 (Act No. 36 of 1998) (NWA). Nkomazi Game Reserve is proposing to expand the tented camp by adding an additional 14 tents. The Nkomazi Game Reserve tented camp will ultimately consist of the following:

- Five tents accommodating four people each;
- 17 tents accommodating two people each;
- Two dining rooms; and
- One spa and gym tent.

According to the NEMA, an EA is required by means of conducting a Basic Assessment Report (BAR) for the expansion of the tented camp.

1.1 PROJECT LOCALITY

The tented camp is located on the remainder of the farm Nkomazi 722-JT, near Emanzana in Albert Luthuli Local Municipality, in Mpumalanga Province (SG Code: T0JT00000000072200000) (see Figure 1.1).

Coordinates of the proposed site:

Latitude: 25° 25' 3.11" S Longitude: 30° 44' 11.90" E

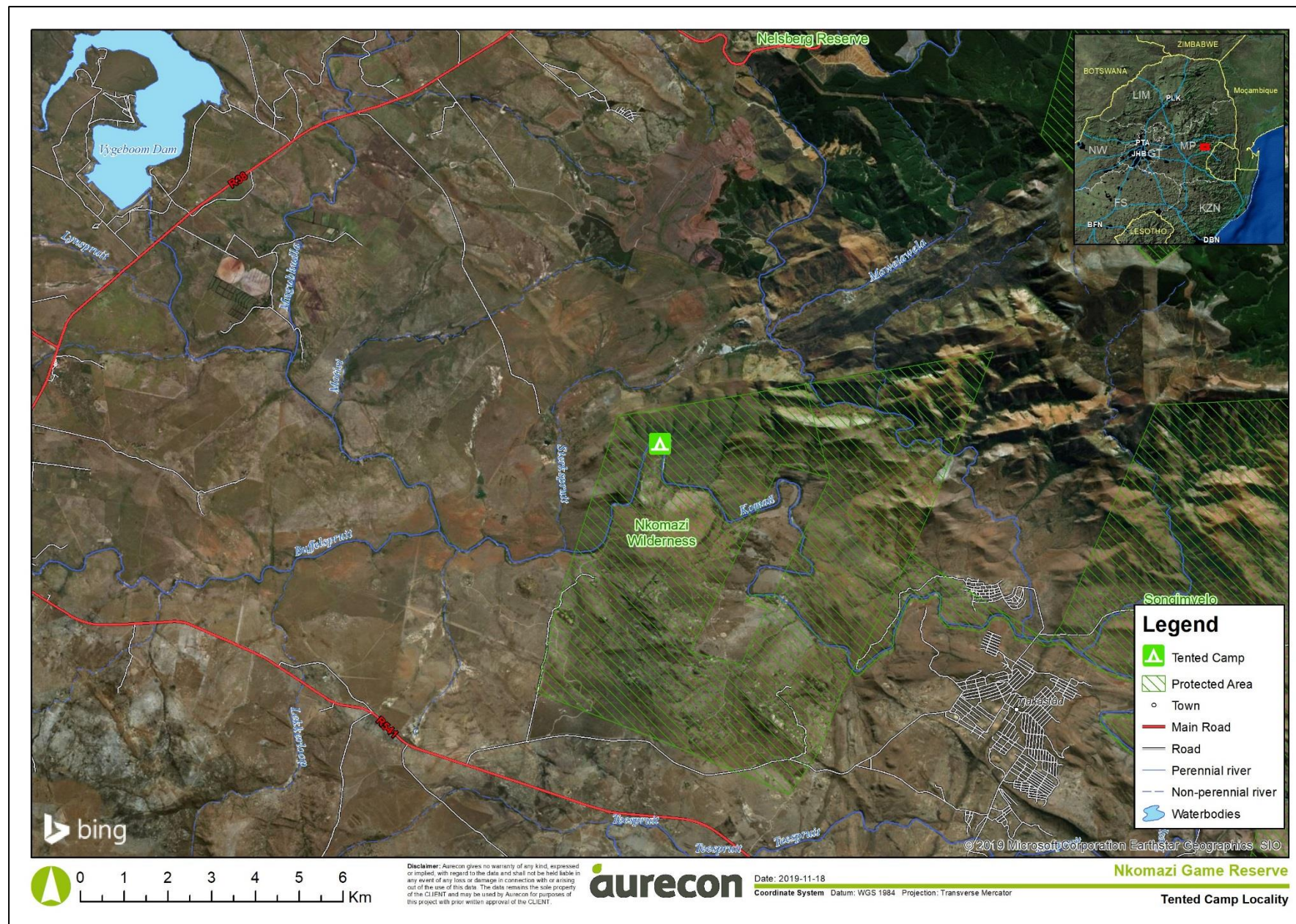


Figure 1| Locality map of Nkomazi Game Reserve tented camp

1.2 DETAILS OF THE EAP

The coordination of the EIA process is managed by Ms Anne-Mari White, an environmental project leader with Aurecon. She is also responsible for the overall project management of the project, including client liaison, financial management and progress reporting. Ms White is an environmental specialist who started her studies at the North-West University (NWU) and completed her Bachelor of Science: Environmental Management at the University of South Africa (UNISA) in 2007. Ms White is registered with the South African Council for Natural Scientific Professions as a Natural Scientist (Reg. No 300067/15). In addition to her qualification, she has completed short courses in soil classification and wetland delineation (Terrasoil Science), Geographic Information Systems (University of KwaZulu-Natal), and Environmental Impact Assessments (North-West University).

1.3 POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

1.3.1 Environmental Impact Assessment requirements

Chapter 5 of the NEMA regulates, among others, the procedure and criteria for the submission, processing consideration of, and decision on, applications for EAs for the commencement of certain listed activities. The purpose is to avoid detrimental impacts on the environment, or where they cannot be avoided, to ensure mitigation and management of impacts to acceptable levels, and to optimise positive environmental impacts, and for matters pertaining thereto.

Nkomazi Game Reserve is responsible for ensuring that the proposed activity and Basic Assessment (BA) process conform to the principles¹ and procedural requirements of NEMA. In developing the BA process, Aurecon has been cognisant of this need. Consequently, the BA process has been undertaken in terms of NEMA and the EIA Regulations (Government Notice No. R 982 of 2014). Aurecon is also responsible for the amendment of the Water Use Licence Application in terms of the NWA.

The EIA Regulations identify certain activities that require authorisation from the competent environmental authority, in this case the MDARDLEA, before commencement. Projects that include listed activities in Government Notice (GN) No. 984 of 2014 (require a scoping and environmental impact reporting (EIR) process, whilst projects with listed activities in GN R 983

¹ NEMA Principles, Chapter 1, Sections 1-4

and 985 of 2014 require a BA, unless those projects are being assessed under a Scoping and EIR process. The listed activities being applied for in this BA process are indicated in Table 1 below:

Table 1 | Relevant listed activities in terms of NEMA GN No. 985 of 2014 (as amended)

GN No.	Listed Activity	Relevance to the project
R 985 of 2014, Activity 12	<p><i>The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan:</i></p> <p><i>(f) Within Mpumalanga, (iii) On land, where at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning or proclamation in terms of NEMPAA.</i></p>	<p><i>The construction and establishment of 14 additional tents will require some clearance of indigenous vegetation. However, clearance will be limited as the tents are positioned to ensure minimal visibility from adjacent tents and in addition to this, tents area constructed on wooden stilts which minimises the impact on soil surface level.</i></p>
R 985 of 2014, Activity 14	<p><i>The development of—</i></p> <p><i>(i) infrastructure or structures with a physical footprint of 10 square metres or more;</i></p> <p><i>where such development occurs— (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</i></p> <p><i>f. Mpumalanga</i></p> <p><i>i. Outside urban areas in (aa) Protected area identified in terms of NEMPAA</i></p>	<p><i>Some of the additional tents will be located within 32m from the edge of the watercourse. Although the tents are proposed on stilts, and the impact on the soil surface (footprint) is minimised, it is likely that the impact on the soil surface would be 10m².</i></p>
R 985 of 2014, Activity 17	<p><i>The expansion of a resort, lodge, hotel, and tourism or hospitality facilities where the development footprint will be expanded.</i></p> <p><i>(f) Within Mpumalanga: (ii) Outside urban areas in (aa) a Protected Area identified in terms of the (NEMPAA)</i></p>	<p><i>The tented camp will be expanded by adding an additional 14 tents to the current tented camp at Nkomazi Game Reserve.</i></p>

1.3.2 Other legal requirements

Application to the MDARDLEA for the EA in terms of NEMA does not absolve the applicant from complying with other legal requirements such as:

- The Constitution of South Africa, Act 108 of 1996;
- National Environmental Biodiversity Act, 2004 (Act No 10 of 2004);
- National Environmental Management: Waste Act, 2008 (Act No 59 of 2008);
- National Veld and Forest Fire Act, 1998 (Act No 101 of 1998);
- National Heritage Resource Act, 1998 (Act No. 25 of 1999);
- National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008);
- Basic Conditions of Employment Act, 1997 (Act No 75 of 1997); and
- Albert Luthuli Local Municipality Integrated Development Plan (IDP);

As indicated above, Aurecon is also applying for an amendment to the Water Use License for the project, as indicated below.

1.3.2.1 National Water Act (No. 36 of 1998)

The NWA governs all uses of water, a national resource of which the state is the custodian, for the benefit of all people. The NWA sets out central guiding principles in the protection, use, development, conservation, management and control of water resources, primarily by establishing a system of authorising and licencing of various defined water uses. Unless a particular use is exempt from the need for a licence by virtue of one of the particular provisions of the Act, a user will need to apply for and be granted a water use licence before commencing any such use.

A Water Use License (WUL) was issued for all current water uses on Nkomazi Game Reserve in 2019. As additional tents will be added to the reserve, an application for the amendment of the current WUL will have to be submitted to the Inkomati Usuthu Catchment Management Agency (IUCMA) for the following activities as listed in Section 21 of the NWA:

- 21 (c) impeding and/or diverting the flow of water;
- 21 (i) altering the bed, banks, course or characteristics of a watercourse;
- 21 (e) engaging in a controlled activity defined as such in Section 37(1), with specific reference to irrigation of any land with waste or water containing waste generated through any industrial activity or by a water work; and
- 21 (g) disposing of waste in a manner which may detrimentally impact on a water resource.

The public participation for the WUL application was integrated with the public participation for the BA process. Details of the process followed to date are indicated within Section 2 of the Basic Assessment Report (pg 18).

1.4 THE PROJECT

1.4.1 Need and desirability

There are numerous expenses associated with the upkeep of a game reserve, and from an economic viability perspective, the reserve's management must try to recover and offset such costs. The revenue generated by the current capacity of the tented camp has proved unable to recover the cost for the maintaining the game reserve. Therefore, this reserve's management is seeking to expand the luxury camp to accommodate more clients. Thus, the application for additional tents is to earn more revenue, which could be applied towards the operating costs of the reserve, whilst providing more accommodation to visitors wanting to experience the wildlife and natural beauty of the reserve.

1.4.2 Description of the project

The project applied for will entail the construction of the following canvas tents on wooden stilts:

- Nine tents accommodating 2 people (approximately 65m²);
- Three tents accommodating 4 people (approximately 129m²);
- One tent for spa and gym facilities (approximately 200m²) and
- One new dining room (approximately 300m²).



Figure 2| One of the existing tents within Nkomazi Game Reserve

2. PUBLIC PARTICIPATION PROCESS

The purpose of this chapter is to provide an outline of the public participation process (PPP) to date and the way forward with respect to the BA process.

Engagement and consultation with Interested and Affected Parties (I&APs) forms an integral component of the BA process and enables, *inter alia*, potentially directly affected landowners, neighbouring landowners and communities, authorities and key stakeholders to provide input into the proposed development.

I&APs were identified during the public participation phase of the project. All the parties identified as an I&APs (surrounding landowners, businesses downstream of the proposed activity, relevant departments, local and district authorities) have automatically been registered as I&APs for the BA. The I&AP list is attached as Appendix C.1.

Other methods for informing the public involved:

- Distributing a Background Information Document (BID) to all registered I&APs. The BID (see Annexure C.1) was available in English. Email BIDs were distributed to certain I&APs, proof of which is also attached in Annexure C.1;
- Placing of a notice at the proposed site took place on 29 November 2019 (see Appendix C.5);
- A newspaper advert appeared in the local newspaper (The Lowvelder) on 26 November 2019 (see Annexure C.3).

To date, no comments have been received.

The draft Basic Assessment Report (BAR) will be made available for review and comment by I&APs from 11 February to 12 March 2020.

3. CONSIDERATION OF ALTERNATIVES

Site selection is a complicated and multi-faceted issue, which is essential to the success of this application and ultimately to the proper, responsible and sustainable operation of the proposed project.

3.1 ALTERNATIVE SELECTION

3.1.1 Location alternatives

Should another location for the tented camp be investigated, the impact of constructing the additional tents at another location would be more than the impact of expanding the footprint of the existing tented camp as additional infrastructure would also be required. Such infrastructure would include access roads, water and electricity supply infrastructure, additional structures for dining and entertainment etc.

Expanding the existing tented camp would have a lower impact than constructing an additional camp within Nkomazi Game Reserve and for this reason, no other location alternatives were found to be feasible.

The location of the project area is therefore limited to within the fenced area of the existing tented camp.

3.1.2 Layout alternatives

The specific locations of each proposed new tent have been informed by the vegetation in the fenced area of the tender camp. The additional tents are proposed on areas where minimal removal of vegetation would be required. It is proposed that all large trees be preserved and incorporated into the design of the tents. The layout presented in Appendix A.2 has been compiled after a site-specific investigation was conducted to identify the preferred areas within the tented camp. It is important to note that the size of the fenced area will not be increased.

3.1.2 No-Go Alternative

The 'no-go' alternative is the option of not adding additional tents to the existing tented camp. The necessity of assessing the no-go option is lessened by the fact that the proposed additional structures would have minimal impact on the environment due to the fact that the tented structures are constructed on stilts while most of the surrounding vegetation is preserved in order to enhance the aesthetic view and ambiance for tourists visiting Nkomazi Game Reserve.

Taking the above into consideration, it is highly unlikely that the impact on the environment would be so severe that mitigation measures would not minimise the impact caused by the expansion and for this reason, the no-go option is not considered for further investigation.

4. DESCRIPTION OF THE AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

The description of the affected environment below draws on existing knowledge from published data, previous studies, specialist investigations, and site visits to the area.

4.1 TOPOGRAPHY

The topography of the Nkomazi Game Reserve area ranges from approximately from 1100 m - 900m above mean sea level (amsl) and slopes in a northerly direction towards the Komati River. The area proposed for the expansion of the tented camp is between 910m and 925m amsl and slopes slightly towards the west in the direction of the Komati River.

4.2 CLIMATE

The Nkomazi Game Reserve is located in a humid subtropical climate zone according to the Köppen Climate Classification System. Hot and humid summers and mild winters are typically experienced in this zone. Mean temperatures in the coldest months vary between 0°C and 18°C and mean temperatures in the warmest month are *more than* 22 °C in this zone.

When measured for the Komati River catchment specifically, rainfall is highest on the western escarpment and more than 1 600 mm/annum recorded in places (DWA, 2009a). The eastern parts of the Komati River catchment are drier, with rainfall of less than 400 mm/annum. In general, the average rainfall in the Komati River catchment is high compared to the average for South Africa, which is 486 mm/annum (DWAF, 2013)

4.3 Ecology

The Nkomazi Game Reserve falls within the Swaziland Sour Bushveld vegetation type located within the Savanna Biome. The vegetation type can be described as an open tree savanna with grass being tall and relatively dense. In accordance with the Mpumalanga Biodiversity Sector Plan 2014 (MBCP, 2014) (see Figure), the project area does not occur within either a Critical Biodiversity Area (CBA) or Ecological Sensitivity Area (ESA), but is classified as an Informal Protected Area (NPAES). In terms of the freshwater systems, the MBCP (2014) classifies the project area as heavily modified.

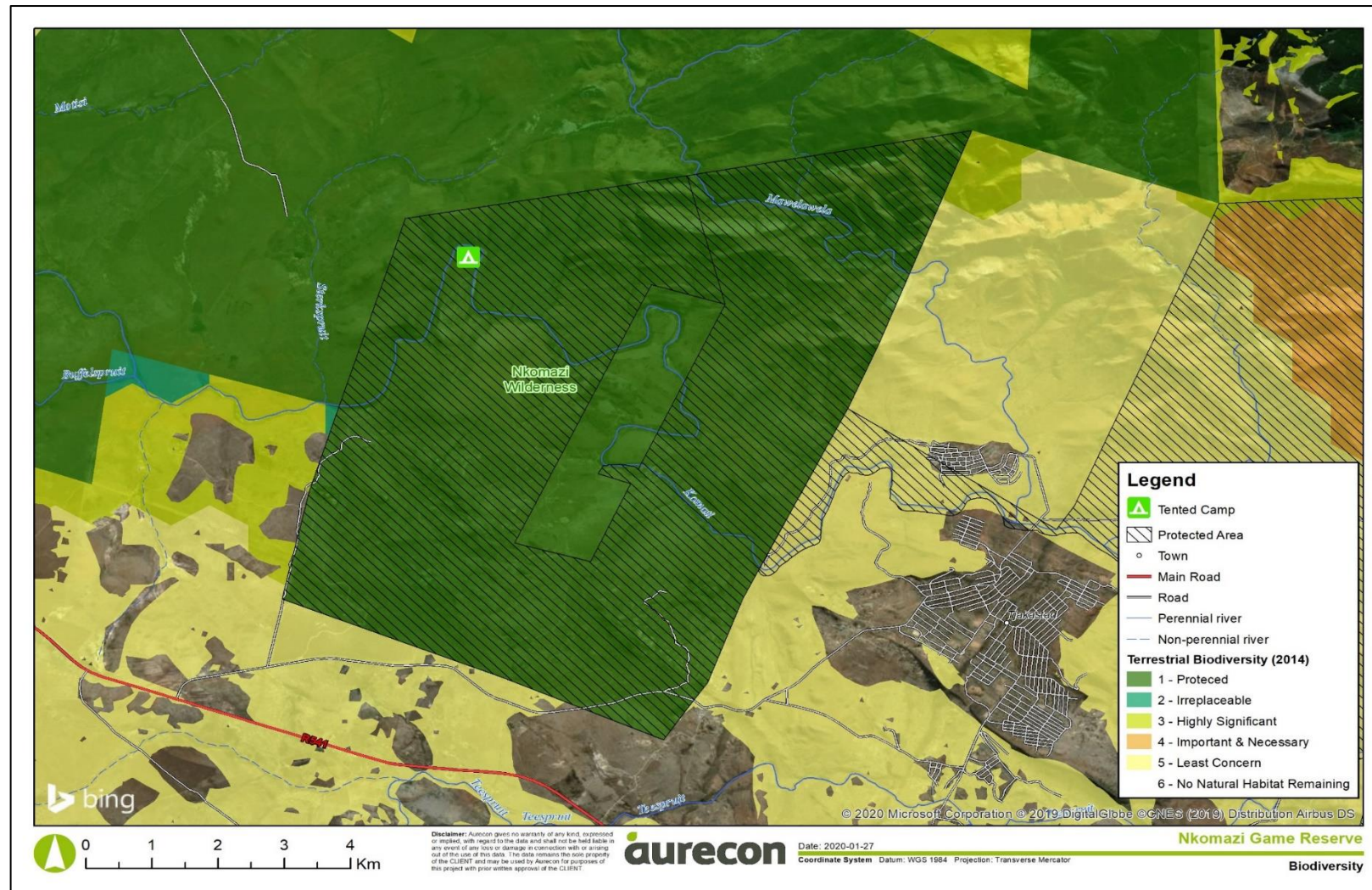


Figure 3 | Mpumalanga Biodiversity Sector Map, 2014, Nkomazi Game Reserve

4.4 GEOLOGY AND SOILS

The mountains within the Nkomazi Game Reserve lie on the eastern edge of the Kaapvaal Craton. The range is best known for having some of the oldest exposed rocks on Earth, estimated to be between 3.2 and 3.6 billion years old. The range is also known for its gold deposits and a number of komatiites, an unusual type of ultramafic volcanic rock named after the Komati River.

The major soil types present within the project area are shallow soils with minimal development. These soil types include Mispah, Dresden and Glenrosa, which are less than 25cm deep before hitting an impervious layer that prevents further root growth.

4.5 HERITAGE

The Nkomazi Game Reserve forms part of the Barberton Makhonjwa Mountains, which has recently been inscribed as a World Heritage Site. The Barberton Makhonjwa Mountains contains the oldest and best-preserved sequence of volcanic and sedimentary rocks and is one of the few places on earth where the development of the earth and earliest evolution of life can be studied.

As the Nkomazi Game Reserve forms part of the recently declared World Heritage Site, the proposed activity will provide an opportunity for more tourists to visit and appreciate the Barberton Makhonjwa Mountains.

The additional tents are all proposed within the footprint of the existing tented camp and therefore the area has previously been transformed. No artefacts of cultural or historical value were identified within the proposed project area.

4.6 LAND USE

The area proposed for the additional tents is located within the fenced-off area of the current tented camp which, has been constructed and used for this purpose since 2007. The proposed area is therefore currently being used for tourism facilities.

The areas surrounding the proposed footprint for the expansion of the tented camp are mostly undisturbed and used for wildlife grazing.

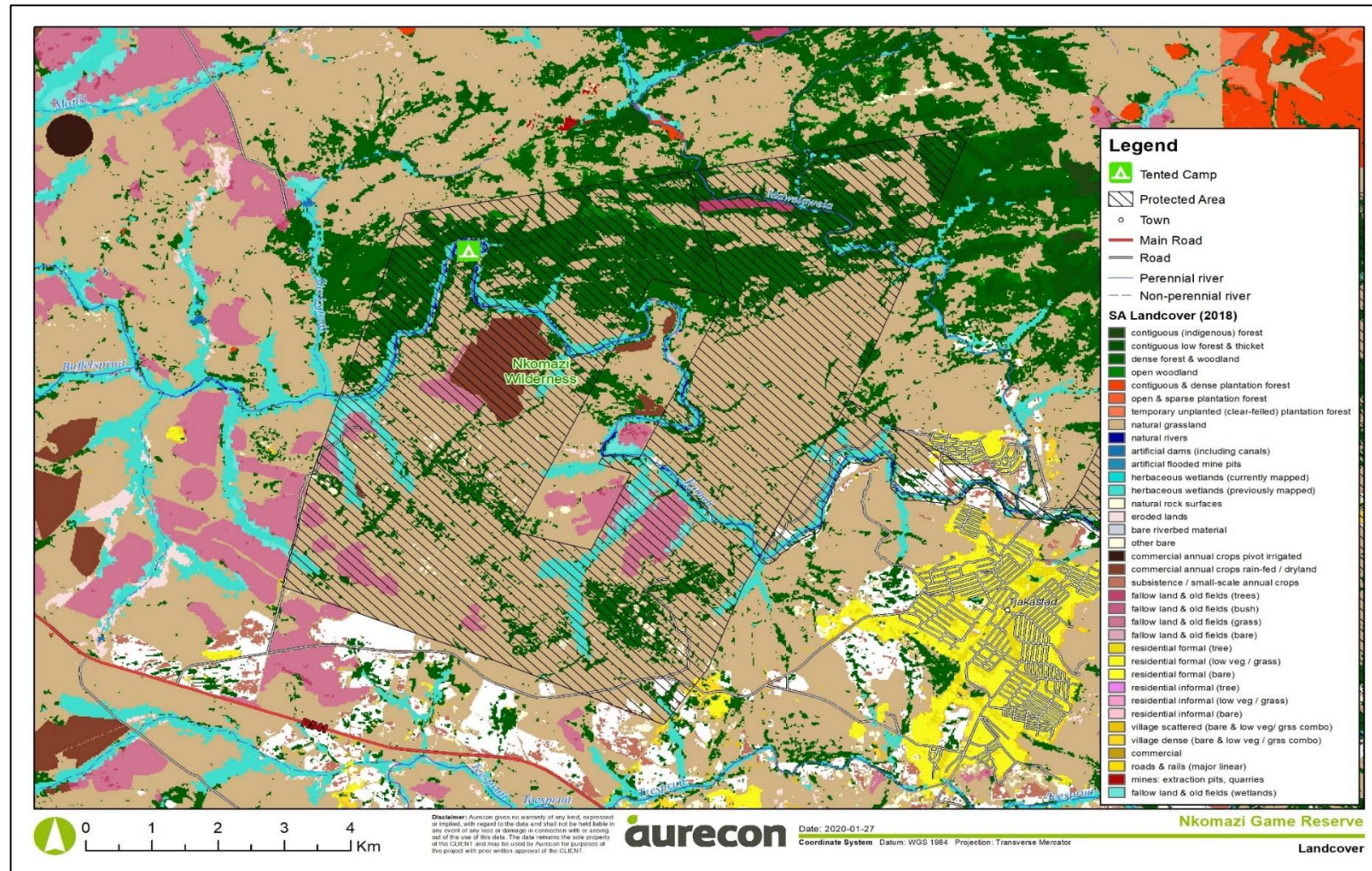


Figure 4| Land cover map, Nkomazi Game Reserve and surrounding land uses

4.7 ECONOMY

The Chief Albert Luthuli Local Municipality (ALLM) currently has an unemployment rate of 31%. Of the 45,116 economically active individuals (i.e. those who are employed or unemployed but looking for work), 35.4% are unemployed.

In terms of education it is noted that of those aged 20 years and older, 4.4% have completed primary school, 28.8% have some secondary education, 27% have completed matric and 6.3% have some form of higher education.

In the first chapter of the 2014/15 IDP for the Albert Luthuli Local Municipality (ALLM), reference is made to the Municipal Manager's "heeding of governments call to concentrate on existing policies". To realise this call, the Mpumalanga Provincial Growth and Development Strategy defines six priority areas, including *Economic Development* through, inter alia, business and tourism development, and *Environmental Development* through the "protection of the environment and sustainable development".

The Nkomazi Game Reserve adds value in both these priority areas through its contribution in the local economy through ecotourism. It is unlikely that the activities would jeopardise the integrity of the municipal IDP and SDF.

5. SPECIALIST ASSESSMENT REQUIREMENTS AS IDENTIFIED IN THE DEA SCREENING TOOL

The Screening Report generated by the screening tool of the national Department of Environmental Affairs identifies a number of specialist assessment to be conducted as part of the BA. The identification of these assessments is based on the selected classification and environmental sensitivities of the proposed development footprint. However, upon conducting a site investigation and pre-application meeting with Mr. surgeon Marebane from MDARDLEA on 21 January 2020, it was concluded that no specialist investigation is required for the proposed application. The following motivation for the above is provided:

- Visual Impact

The tented camp within Nkomazi Game Reserve is secluded and surrounded by mountains and is not visible to any surrounding land user. As there are no visual receptors to be impacted by the proposed expansion of the tented camp, it is the opinion of the EAP that no Visual Impact Assessment is required for the proposed application.

- Heritage Impact

The additional tents are all proposed within the boundary of the existing tented camp. Therefore, the area has previously been transformed. The footprint of the additional structures adds to approximately 1,000 m² and is therefore below the threshold of 5 hectares, which requires a Heritage Impact Assessment in accordance with the National Heritage Resources Act, 1999 (Act No. 25, 1999). For this reason, no Heritage Impact Assessment was conducted for the proposed expansion.

- Palaeontology

The Screening Report issued by the Department of Environmental Affairs showed no paleontological sensitivities. In addition to this, it must be noted that the additional tents will be constructed on tents and therefore no excavations that could damage fossils will be undertaken. For this reason, it is not expected that the small footprint associated with the establishment of the additional tents will have any impact on paleontological resources and therefore no paleontological assessment was conducted.

- Terrestrial Biodiversity, Plant and Animal Species

Although the proposed area is located within a Protected Area according to the MBCP of 2014, the area on which the tented camp is proposed to be expanded, has previously been transformed when the tented camp was established. The additional tents are all proposed within the fenced camp. For this reason, MDARDLEA confirmed that no biodiversity, plant and animal impact assessment is required for the proposed activities.

- Aquatic Biodiversity

According to the Screening Report, aquatic biodiversity was found to be of low sensitivity and in terms of the Freshwater Critical Biodiversity Area classified within the MBCP, 2014, the project area is classified as heavily modified. It is therefore the opinion of the EAP that no Aquatic Impact Assessment is required.

- Avian Impact

As most of the vegetation will remain, it is unlikely that the construction of the 14 additional tents will have any impact on avian species and for this reason it is the opinion of the EAP that no Avian Impact Assessment is required.

- Socio-Economic Impact

The proposed project will not have any negative impact on the socio-economic environment. Contrary to this, an additional 50 job opportunities will be created during the operational phase of the project, which will impact the surrounding community positively. Additional income will also be generated by being able to accommodate more tourists.

As no negative socio-economic impact is expected with the expansion of the tented camp, it is the opinion of the EAP that no Socio-Economic Impact Assessment is required.

6. METHOD OF ASSESSING THE SIGNIFICANCE OF POTENTIAL ENVIRONMENTAL IMPACTS

This section outlines the method used for assessing the significance of the potential environmental impacts. These include both operational and construction phase impacts.

For each impact, the EXTENT (spatial scale), MAGNITUDE and DURATION (time scale) would be described, as shown in Table 6-1. These criteria are then used to determine the SIGNIFICANCE of the impact, firstly in the case of no mitigation and then with the most effective mitigation measure(s) in place. The mitigation described in the BAR represents the full range of plausible and pragmatic measures but does not necessarily imply that they would be implemented.

The following tables show the scale used to assess these variables and defines each of the rating categories.

Table 6-1 | Assessment criteria for the evaluation of impacts

Criteria	Category	Description
Extent or spatial influence of impact	Regional	Beyond a 30 km radius of the candidate site.
	Local	Within a 30 km radius of the candidate site.
	Site-specific	On site or within 100 m of the candidate site.
Magnitude of impact (at the indicated spatial scale)	High	Natural and/ or social functions and/ or processes are <i>severely</i> altered
	Medium	Natural and/ or social functions and/ or processes are <i>notably</i> altered
	Low	Natural and/ or social functions and/ or processes are <i>slightly</i> altered
	Very low	Natural and/ or social functions and/ or processes are <i>negligibly</i> altered
	Zero	Natural and/ or social functions and/ or processes remain <i>unaltered</i>
Duration of impact	Long-term	More than 10 years after construction
	Medium-term	Up to 5 years after construction
	Construction-term	Up to 3 years

The SIGNIFICANCE of an impact is derived by taking into account magnitude, duration and extent of each impact. The criteria employed in arriving at the different significance ratings is shown in Table 6-2.

Table 6-2 | Definition of significance ratings

Significance ratings	Level of criteria required
High	<ul style="list-style-type: none"> High magnitude with a regional extent and long-term duration High magnitude with either a regional extent and medium-term duration or a local extent and long-term duration Medium magnitude with a regional extent and long-term duration
Medium	<ul style="list-style-type: none"> High magnitude with a local extent and medium-term duration High magnitude with a regional extent and construction period or a site-specific extent and long-term duration High magnitude with either a local extent and construction period duration or a site-specific extent and medium-term duration Medium magnitude with any combination of extent and duration except site specific and construction period or regional and long term Low magnitude with a regional extent and long-term duration
Low	<ul style="list-style-type: none"> High magnitude with a site-specific extent and construction period duration Medium magnitude with a site-specific extent and construction period duration Low magnitude with any combination of extent and duration except site specific and construction period or regional and long term Very low magnitude with a regional extent and long-term duration
Very low	<ul style="list-style-type: none"> Low magnitude with a site-specific extent and construction period duration Very low magnitude with any combination of extent and duration except regional and long term
Neutral	<ul style="list-style-type: none"> Zero magnitude with any combination of extent and duration

Once the significance of an impact has been determined, the PROBABILITY and CONFIDENCE of this impact are determined using the rating systems outlined in Table 6-3 and Table 6-4. The significance of an impact should always be considered in concert with the probability of that impact occurring. Lastly, the REVERSIBILITY of the impact is estimated using the rating system outlined in Table 6-5.

Table 6-3 | Definition of probability ratings

Probability ratings	Criteria
Definite	Estimated greater than 95 % chance of the impact occurring.
Probable	Estimated 5 to 95 % chance of the impact occurring.
Unlikely	Estimated less than 5 % chance of the impact occurring.

Table 6-4 | Definition of confidence ratings

Confidence ratings	Criteria
Certain	Wealth of information on and sound understanding of the environmental factors potentially influencing the impact.
Sure	Reasonable amount of useful information on and relatively sound understanding of the environmental factors potentially influencing the impact.
Unsure	Limited useful information on and understanding of the environmental factors potentially influencing this impact.

Table 6-5 | Definition of reversibility ratings

Reversibility ratings	Criteria
Irreversible	The activity will lead to an impact that is in all practical terms permanent.
Reversible	The impact is reversible within 2 years after the cause of the impact is removed.

6. CONSTRUCTION AND OPERATIONAL PHASE IMPACTS

6.1 CONSTRUCTION PHASE IMPACTS

The construction phase is likely to result in a number of negative impacts on the biophysical environment. The significance of construction phase impacts is likely to be curtailed by the short duration of construction (approximately 2 months). Moreover, many of the construction phase impacts can be mitigated by the implementation of an approved Environmental Management Programme (EMPr) (**see Appendix D**).

The potential impacts and an assessment of their significance are discussed below.

The bio-physical issues identified include:

- Fauna and flora (destruction and/or fragmentation of habitat)
- Sedimentation and erosion
- Ground and surface water pollution
- Impact on heritage resources
- Sanitation and waste management

The socio-economic impacts identified include:

- “Sense of place” – visual impact
- Noise pollution
- Health and Safety
- Employment opportunities – positive

6.1.1 Biodiversity impacts (fauna and flora)

Description of the potential impact

The Nkomazi Game Reserve does not occur within either a CBA or ESA but is classified as an Informal Protected Area (NPAES). Throughout the existence of Nkomazi Game Reserve, it is envisaged that the area remains largely undisturbed. The majority of the area is untransformed natural environment, affected only by grazing activities of game contained within the Reserve.

Since the establishment of the tented camp in 2008, the area has been rehabilitated and revegetated with indigenous vegetation. The construction of the additional tents would therefore include the removal of some of the re-established vegetation.

Impact Assessment

The establishment of the additional 14 tented facilities will include minimal removal of vegetation. The footprint of the additional tents adds to approximately 1500m² within the existing 10-hectare footprint of the existing tented camp. It is of utmost importance that large trees be conserved to provide privacy to tourists during their visit to the Game Reserve and to ensure a natural 'sense of place'. The tents are also proposed on wooden stilts to allow for vegetation growth underneath the tents and unobstructed movement of smaller animals. It is important for the applicant to ensure that the ecology of the Game Reserve remains in a good state and therefore continuous efforts are made to remove and destroy alien vegetation.

Furthermore, supplementary planting using indigenous species will be undertaken after the additional tents have been constructed. The impact of establishing the additional tents are therefore rated to be of low significance.

In terms of the no-go alternative, there would be no change to the current ecological situation and the impact is therefore rated as neutral.

Table 6-6| Significance of biodiversity impacts

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
Ecological Impact	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Establishment of additional tents	Low	Site-specific	Long term	Definite	Sure	Reversible	Low	Very Low
No-go Alternative	N/A	N/A	N/A	N/A	N/A	N/A	Neutral	Neutral

Mitigation Measures

- Restrict vegetation removal during construction to the minimum;

- The potential presence of important and protected plant species must be investigated before construction and if present these must be managed or relocated as per an ecological specialist's recommendation;
- Ensure the continuation of the removal of all alien invasive species to ensure that invasive vegetation does not establish on site or the surrounding area; and
- Use only locally indigenous flora for landscaping purposes.

6.1.2 Impact of increased soil erosion and sedimentation

Description of the potential impact

The topography of the area suggests that storm water would run towards the Komati River located to the east of the existing and proposed new accommodation facilities. Depending on the velocity of the storm water runoff, the occurrence of erosion is increased when vegetation is cleared, if storm water is not properly mitigated. Construction activities within a close proximity to the Komati River will increase the possibility of sedimentation of the watercourse and therefore special care must be taken when working within close proximity to the watercourse. However, as mentioned above, no tents will be constructed within the 1:50 year flood line, therefore, no closer than ??m from the Komati River. Thus, there is sufficient distance between the tents and the river to allow any additional sediment to settle out before it reaches the river.

Impact Assessment

The clearance of some vegetation during construction, and the disturbance of soil, increases the risk of erosion as well as sedimentation for activities taking place within a close proximity to the Komati River. All additional tents are however proposed to be located outside the 1:50 year flood zone.

The establishment of the additional tents are proposed during the dry season when no rain is expected. However, due to the proximity of the Komati River, the significance of this impact has been given a medium rating, but the impact can be reduced with the implementation of mitigation measures.

Should the additional facilities not be constructed, and the no-go alternative be preferred, there would be no impact on the surrounding environment and therefore the impact is rated to be neutral.

Table 6-7| Significance of increased soil erosion and sedimentation

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Erosion, and sedimentation								
Establishment of additional tents	Medium	Local	Short-term	Probable	Sure	Reversible	Medium	Low
No-go Alternative	N/A	N/A	N/A	N/A	N/A	N/A	Neutral	Neutral

Mitigation Measures

- The contractor must monitor the site and manage drainage of the construction site to avoid standing water and soil erosion. Sand bags must be used in areas that are prone to erosion;
- The time that stripped areas are exposed without vegetation must be minimised; and
- Replacement of topsoil and revegetation must commence immediately after the completion of an activity.

Please refer to the EMPr (Appendix D) for all other measures to be implemented to minimise the impact of increased erosion and sedimentation.

6.1.3 Impact on groundwater and surface water

Description of the potential impact

Some of the proposed new tents and structures are located within close proximity of the Komati River. Therefore, construction activities could have an impact on the watercourse. The use of hazardous substances is minimised with the erection of wooden and canvas structures. However, special care must still be taken during construction to ensure that the Komati River is not impacted by the activities.

Impact Assessment

During construction, storm water will drain in a westerly direction toward the Komati River and therefore any hazardous substances that are spilt on the soil could have an impact on the Komati River. The impact is however minimised by the fact that construction activities are proposed during the period when no rainfall is expected (winter season), as well as by the short duration of two

months proposed for construction. The impact is assessed to be of medium significance prior to mitigation measures being implemented.

Should the no-go alternative be considered, there will be no change in the current situation of the Komati River and therefore the impact is regarded as neutral.

Table 6-8| Significance of impact on groundwater and surface water

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Ground and surface water impact								
Hazardous spillages	Medium	Local	Construction	Probable	Sure	Reversible	Medium	Low
No-go Alternative	N/A	N/A	N/A	N/A	N/A	N/A	Neutral	Neutral

Mitigation Measures

- Spillages of any potentially hazardous materials should be cleaned immediately to avoid contamination of runoff;
- Mixing or decanting of all chemicals and hazardous substances must take place either on a tray or on an impermeable surface; and
- The conditions contained in the Water Use Licence must be adhered to.

Please refer to the EMPr (Appendix D for all other measures to be implemented to minimise any impact on ground or surface water.

6.1.4 Impact on heritage resources

Description of potential impact

The additional tents are all proposed within the footprint of the existing tented camp. Therefore, the area has previously been transformed. The footprint of the additional structures adds to approximately 1400m² and is therefore below the threshold of 5 hectares which requires a Heritage Impact Assessment to be conducted in accordance with the National Heritage Resources Act 25 of 1999 (Act No. 25, 1999). No excavations below the soil are expected, thus there will be no disruption to the underlying geological formations. For this reason, no Heritage Impact Assessment was conducted for the proposed expansion.

Although the area was previously disturbed, and no artefacts were identified during the site investigation which could be of any historical or cultural significance, artefact could be unearthed during the construction process and could therefore be impacted.

Impact Assessment

Although the Nkomazi Game Reserve forms part of the Barberton Makhonjwa Mountains which is a World Heritage Site (WHS), the Screening Report issued by the Department of Environmental Affairs, classified the significance of heritage resources within Nkomazi Game Reserve to be of low significance. The geologically important formations that contribute to the value of the World Heritage Site (e.g. the Greenstone Belt) occurs at much higher altitudes in the highlands close to Barberton, and the core of the WHS is also located around Barberton.

Due to the small footprint of the additional structures, the impact on heritage resources is further minimised. However, artefacts of cultural or historical value could be unearthed during construction and specific measures and protocols must be followed should any artefacts be found.

If the no-go alternative is considered, the additional accommodation facilities will not be constructed and there will be no impact on any possible heritage resources.

Table 6-9| Significance of heritage and palaeontological impact

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
Heritage impact	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Establishment of additional tents	Low	Site-specific	Construction	Unlikely	Sure	Reversible	Low	Very Low
No-go Alternative		N/A	N/A	N/A	N/A	N/A	Neutral	Neutral

Mitigation Measures

Should any artefact of heritage value be unearthed during construction, construction must cease, and a Heritage Specialist must be contacted to investigate the findings and make recommendations for the way forward.

6.1.5 Impact on sanitation and waste management

Description of potential impact

As the Komati River is located within a close proximity to the areas where construction activities are to take place, improper waste disposal and sanitation could have an impact on the water quality of the Komati River.

Impact Assessment

As the Komati river is located in close proximity of the proposed site, the impact is of medium sensitivity. However, due to the extent and short duration of the impact, the significance of the impact is minimised and rated to be of low significance.

Table 6-10| Significance of improper sanitation and waste management

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Sanitation and waste management								
Improper sanitation facilities and refuse bins	Medium	Site-specific	Construction	Probable	Sure	Reversible	Low	Very Low
No-go Alternative	N/A	N/A	N/A	N/A	N/A	N/A	Neutral	Neutral

Mitigation Measures

- If no other toilet facilities can be provided to the construction crew, chemical toilet facilities must be provided for construction staff and must be cleaned regularly. All toilet facilities must be placed at least 50m from any water resource;
- All construction waste must be placed in closed bins and removed to a registered landfill site; and
- Adequate management is required during the construction phase to minimise any risk of littering and pollution.

Other recommended mitigation measures are included within the EMPr (Appendix D).

6.1.6 Visual Impact

Description of the potential impact

Construction activities normally have a negative visual impact on surrounding land users. However, due to the topographical location in a valley, the tented camp is not visible to any surrounding land users. During the construction period of two months, the existing facilities will be closed for the public and thus the visual impact is further minimised.

Impact Assessment

As the tented camp will be closed for the duration of the construction period, the visual impact is of very low significance.

Table 6-11| Significance of the visual impact during construction

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Visual Impact								
Construction activities	Low	Site-specific	Construction	Probable	Sure	Reversible	Low	Very Low
No-go Alternative	N/A	N/A	N/A	N/A	N/A	N/A	Neutral	Neutral

Mitigation Measures

No mitigation required as the impact is of very low significance. However, the site must be kept tidy throughout the duration of construction.

6.1.7 Noise disturbance

Description of the potential impact

Construction activities, construction vehicles and construction personnel on site could cause an increase in noise levels at the construction site, which may negatively affect adjacent land owners or users. However, adjacent land users or occupiers are located further than 500m from the tented camp and any sound generated on the site is likely not to travel far, due to the screening effect of the valley in which the camp is located.

Impact Assessment

Due to the tented camp being located far from adjacent land owners or occupiers, the magnitude of the noise impact is very low. The impact is also site-specific and of a temporary nature and for this reason the impact is rated to be of very low significance.

Table 6-12| Significance of noise during construction

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Noise disturbance								
Construction activities	Very Low	Site-specific	Construction	Probable	Sure	Reversible	Very Low	Very Low
No-go Alternative	N/A	N/A	N/A	N/A	N/A	N/A	Neutral	Neutral

Mitigation Measures

The impact is of very low significance and therefore no mitigation is proposed.

6.1.8 Safety of employees and the public during construction

Description of the potential impact

Construction activities could lead to injuries to staff or the public. These activities include:

- Movement of construction vehicles to and from the site; and
- Handling of equipment and material.

Impact Assessment

The impact is of high magnitude; however, the tented camp will be closed for the duration of the construction period and therefore the risk is mainly restricted to construction personnel. Due to the extent of the impact and temporary nature thereof, the impact is considered to be of low significance if mitigation measures are implemented.

Table 6-13| Significance of health and safety of employees during construction

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
Safety	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Construction activities	High	Site-specific	Construction	Probable	Sure	Reversible	Low	Very Low
No-go Alternative	N/A	N/A	N/A	N/A	N/A	N/A	Neutral	Neutral

Mitigation Measures

- The site and crew are to be managed in strict accordance with the Occupational Health and Safety Act, 1993 (Act No.85 of 1993) and the National Building Regulations;
- Ensure that the handling of equipment and materials is supervised and adequately instructed; and
- Adequate first aid facilities must be available on site for the emergency treatment of staff.

6.1.9 Socio-economic impact (improved employment opportunities)

Description of potential impact

Besides the creation of temporary job opportunities, the construction activities would not have any negative impact on the socio-economic environment during construction.

Impact Assessment

There will be a positive economic impact during the construction phase, as temporary employment will be provided. Should the construction of the proposed expansion of the tented camp not be approved, no job opportunities will be created, and the impact will therefore be neutral.

Table 6-14| Significance of the socio-economic impact during construction

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
Job opportunities during construction	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Job opportunities	High (+)	Local	Construction	Certain	Definite	Reversible	Medium (+)	High (+)

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Job opportunities during construction								
No-go Alternative	High (-)	Local	Construction	Certain	Definite	Reversible	Neutral	Neutral

Mitigation Measures

The contractor should preferentially use local suppliers and labour for the construction of the additional tents.

6.2 Operational Phase Impacts

The following potential operational impacts were identified:

Biophysical impacts:

- Risk to health and safety of tourists during flooding
- Visual impacts, risks to animals and health hazards due to inappropriate management of sanitation and waste

Socio-economic impacts:

- Permanent employment opportunities

6.2.1 Risks to health and safety of tourists caused by flooding

Description of the potential impact

Some of the existing luxury tents are located within the 1:50 year flood line of the Komati River. Flooding of the Komati River could pose a threat to guests in certain tents if the guests were not moved by management to higher-lying areas.

Impact Assessment

In 2009, two tents situated closest to the river were damaged by flood waters when some of the patio furniture washed away. The applicant decommissioned these two tented structures to minimise any future risks to health and safety. Since the construction of the tented camp in 2007/2008, no other tents were damaged as a result of flooding. A flood line assessment is also being conducted and all new tents will be located outside the 1:50 year flood line. Thus the risks to health and safety of guests are minimised, and the impact is therefore of low significance with the implementation of mitigation measures.

Should the additional tents not be constructed, the safety of tourists is still an issue to be considered when existing tents are utilised. Therefore, the impact is also of low significance should mitigation measures be implemented.

Table 6-15| Significance of flooding during the operational phase

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Flooding								
Alternative 3	Medium	Site-specific	Long-term	Unlikely	Sure	Reversible	Medium	Low
No-go Alternative	Medium	Site-specific	Long-term	Unlikely	Sure	Reversible	Medium	Low

Mitigation Measures

The manager of the Game Reserve must monitor the weather patterns and rainfall on the Reserve as well as areas upstream from the tented camp. In the event that river levels start to rise and may inundate any guest tents, the guests in those tents would be moved as a precautionary measure.

6.2.2 Visual impacts, risks to animals and health hazards due to inappropriate management of sanitation and waste

Description of the potential impact

The area is not serviced by the Albert Luthuli Local Municipality. Thus the applicant is responsible for the temporary storage of waste in a manner that minimises impacts on the environment, including animals. Should solid waste not be managed properly, it would cause impacts such as visual impacts (litter), injury or death of animals, act as health and safety hazards to people, and attract vermin.

Sewage is proposed to be treated and disposed of by means of a French drain system at each new tented facility. Waste water will flow into a septic tank from where the liquids will separate from the solids. Once the waste liquids will reach a certain level, it will flow into the French drain and thereafter slowly into the drain field. Should sewage disposal and treatment not be properly managed, it will result in health and safety hazards, and would cause the pollution of surface water, through the release of untreated sewage.

Impact Assessment

Due to the proximity of the Komati River, the impacts associated with the improper storage, disposal and treatment of general waste and effluent would be highly negative. However, if the French drain systems are managed effectively, and sludge is removed annually, and general waste

is removed to a registered landfill site on a regular basis, the probability of the waste affecting the surrounding environment is unlikely. Therefore, the impact is rated to be of low significance after the implementation of mitigation measures.

Should the no-go option be considered, there would be no change in the significance of the impacts associated with the current waste disposal and treatment.

Table 6-16| Significance of improper sanitation and waste management during operation

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Sanitation and waste management								
Waste disposal and effluent treatment	High	Site-specific	Long term	Unlikely	Sure	Reversible	Medium	Low
No-go Alternative	N/A	N/A	N/A	N/A	N/A	N/A	Neutral	Neutral

6.2.3 Permanent employment opportunities

Description of the potential impact

Permanent job opportunities will be created by the establishment of the additional 10 tented facilities. Nkomazi Game Reserve will require the services of at least 50 more resources (skilled and unskilled) in order to effectively service the additional tourists.

Impact Assessment

The establishment of an additional 50 permanent job opportunities will have an additional positive socio-economic impact on the local community as this will give members of the local community the opportunity to provide for their families. Therefore, the impact is positive and of high significance. It is imperative that unskilled labour is sourced locally.

Should the application for the expansion of the tented camp not be approved, the current positive economic impact will remain.

Table 6-17| Positive socio-economic impact during operation

IMPACT	BEFORE MITIGATION							AFTER MITIGATION
	Magnitude	Extent	Duration	Probability	Confidence	Reversibility	Significance	Significance
Job opportunities (+)								
Alternative 1	High	Local	Long-term	Definite	Sure	Reversible	Medium (+)	High (+)
No-go Alternative	High	Local	Long-term	Definite	Sure	Reversible	Neutral	Neutral

Mitigation Measures

The impact is positive and therefore does not require any mitigation measures. However, it is imperative that labour is sourced locally and that the skills of employees be developed, where practicable.

7 CONCLUSIONS AND WAY FORWARD

7.1 Assumptions and Limitations

In undertaking this investigation and compiling the Basic Assessment Report, the following has been assumed:

- The information provided by the applicant is accurate and unbiased;
- The scope of this investigation is limited to assessing the environmental impacts associated with the construction and operation of the proposed additional tented facilities at Nkomazi Game Reserve.

7.2 Conclusions

The essence of all EIA processes is aimed at ensuring informed decision-making and environmental accountability. Furthermore, it assists in achieving environmentally sound and sustainable development. In terms of NEMA, the commitment to sustainable development is evident in the provision that “development must be socially, environmentally and economically sustainable and requires the consideration of all relevant factors”. In addition, the preventative principle is required to be applied, i.e. that the disturbance of ecosystems and loss of biological diversity are to be “...avoided, or ... minimised and remedied” and “disturbance of the landscape and the nation’s cultural heritage is avoided and where it cannot be altogether avoided is minimised and remedied”. Therefore, negative impacts on the environment and on people’s environmental rights in terms of the Constitution (Act 108 of 1996) should be anticipated and prevented, and where they cannot be altogether prevented, they must be minimised and remedied in terms of “reasonable measures”. “Reasonable measures” implies that “every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law and cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment”.

The BA process has found that the proposed additional tents will be constructed within the fenced area of the existing Nkomazi Game Reserve tented camp. This area has already been affected by the existing facility. The potential impacts associated with the construction and operation of the additional tents within the area already utilised for accommodation and recreation purposes, are minimal. **This investigation has not identified any potential impacts on the biophysical or**

social environments that are so severe as to suggest that the proposed expansion of the tented camp should not proceed. The final design will take cognisance of the flood line of the Komati River as well as important and large trees which will be incorporated into the design of the accommodation facilities. Section 6 provides mitigation measures aimed at curtailing the significance of the potential negative environmental impacts of the proposed expansion of the tented camp, and to enhance the potential positive environmental and social impacts.

The significance of the potential environmental (biophysical and social) impacts associated with the proposed project are summarised in Table 7.1.

From **Error! Reference source not found.** it is apparent that the negative impacts associated with the operational phase are likely to be of **low** significance, particularly if the proposed mitigation measures are implemented.

With regards to the short-term or construction phase impacts, the significance of the potential impacts is likely to be curtailed by the short duration of the construction phase. Moreover, many of the construction phase impacts could be mitigated by the effective implementation of the mitigation measures outlined above. If these measures were put into practice the significance of all construction phase impacts would be reduced to **low**. While the probability of the construction phase impacts occurring is high without mitigation, the effective implementation of the mitigation measures will reduce the probability of the impacts occurring.

Table 7.1| Summary of the significance of the potential positive and negative impacts associated with the expansion of the tented camp.

Ref.	Description of impact	Significance of impact	
		Without mitigation	With mitigation
	Construction phase impacts		
6.1.1	Ecological Sensitivity	Low (-)	Very Low (-)
6.1.2.	Erosion and Sedimentation	Medium (-)	Low (-)
6.1.3	Impact on ground and surface water	Medium (-)	Low (-)
6.1.4	Impact on heritage resource	Low (-)	Very Low (-)
6.1.5	Sanitation and Waste management	Low (-)	Very Low (-)
6.1.5	Visual Impact	Low (-)	Very Low (-)
6.1.7	Noise disturbance	Low (-)	Very Low (-)
6.1.8	Health and Safety	Low (-)	Very Low (-)

6.1.9	Socio-economic Impact	Medium (+)	High (+)
Operational phase impacts			
6.2.1.	Loss of Biodiversity	Medium (-)	Low (-)
6.2.2	Health and Safety (Flooding risk)	Medium (-)	Low (-)
6.2.3	Visual impacts, risks to animals and health hazards due to inappropriate management of sanitation and waste	Medium (-)	Low (-)
6.2.4	Socio-economic impact (job creation)	Medium (+)	High (+)

Significance: positive impacts indicated by no shading & (+), negative impacts indicated by shading & (-)

Should the proposed activity be authorised, it is recommended that the Environmental Authorisation be valid for a period of five years from the date the Environmental Authorisation is issued. The most important mitigation measures recommended include the following:

- The Construction Phase EMPr that addresses, *inter alia*, the issues discussed under Construction Phase impacts, should be effectively implemented for the duration of the project; and
- A suitably qualified professional should be appointed to act as the ECO and monitor the implementation of the EMPr during construction.

7.2 Way Forward

The Draft BAR will be distributed to all I&APs for a comment period of 30 days. After the 30-day period, all comments will be addressed and incorporated within the Final BAR to be submitted to the MDARDLEA for consideration. All I&APs will be notified of the decision and be given the opportunity to appeal.

8. REFERENCES

National Environmental Management Act 107 of 1998

General Notice 982, 983, 984 and 985 of 2014, (as amended in 2017)

Section 24G Environmental Rectification Report for activities commenced with at Nkomazi Game Reserve, February 2018

<https://www.mountainlands.co.za>