



BASIC ASSESSMENT REPORT

Project applicant:	Kgalagadi Trading and Investments BK		
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(For official use only)

File Reference Number:

Application Number:

Date Received:

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Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2010.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
3. Where applicable **tick** the boxes that are applicable or **black out** the boxes that are not applicable in the report.
4. An incomplete report may be returned to the applicant for revision.
5. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
6. This report must be handed in at offices of the relevant competent authority as determined by each authority.
7. No faxed or e-mailed reports will be accepted.
8. The report must be compiled by an independent environmental assessment practitioner.
9. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
10. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?
 If YES, please complete form XX for each specialist thus appointed:
 Any specialist reports must be contained in Appendix D.

YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
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1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail:

The applicant, Kgalagadi Trading and Investments BK, consulted with MEG Environmental Impact studies to do an Basic assessment Report of the proposed tourist resort development.

The following activities have been identified:

GN. 544 – Activity 23: The transformation of undeveloped, vacant or derelict land to –

- (i) Residential, retail, commercial, recreational, industrial or institutional use, inside an urban area, and where the total area to be transformed is 5ha or more, but less than 20ha, or
- (ii) Residential, retail, commercial, recreational, industrial or institutional use, outside an urban area and where the total area to be transformed is bigger than 1ha but less than 20ha

GN. 546 – Activity 6: The construction of resorts, lodges or other tourism accommodation facilities that sleep 15 people or more.

Activity 13: The clearance of an area of 1 ha or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation, ...

2. FEASIBLE AND REASONABLE ALTERNATIVES

“alternatives”, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Paragraphs 3 – 13 below should be completed for each alternative.

The proposed development site is Mier Municipal land, located within a remote area directly adjacent to the entrance gate of the Kgalagadi Transfrontier Park. The property was not earmarked for any specific development except for agricultural and vacant land. Due to this and the nature of the property, no other alternatives could be considered as this property was made available to Mr Van Wyk for this proposed development. The proposed development therefore entails no so called “Infill Planning”, but add additional tourist facilities to the National Park and the remote Mier area.

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Alternative concept lay-out

Concept

The first concept layout is attached as figure 4. Final layout plans will be part of the Final BAR.

No-go alternative:

No new, additional tourist accommodation would be available to this remote land.

The site will stay untidy and invested with alien vegetation

No employment will be created.

No computer training will be made available to the local community.

3. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

List alternative sites if applicable.

Alternative:

Alternative S1¹ (preferred or only site alternative)

Alternative S2 (if any)

Alternative S3 (if any)

In the case of linear activities:

Alternative:

Alternative S1 (preferred or only route alternative)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

Alternative S2 (if any)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

Alternative S3 (if any)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

Latitude (S):		Longitude (E):	
26°	28,56'	20°	36,65'
°	'	°	'

Latitude (S):		Longitude (E):	
°	'	°	'
°	'	°	'
°	'	°	'
°	'	°	'
°	'	°	'

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:

Alternative A1² (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

or, for linear activities:

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Size of the activity:
47 000m ²
m ²
m ²

Length of the activity:
M
M
M

Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Size of the site/servitude:
m ²
m ²

¹ "Alternative S.." refer to site alternatives.

² "Alternative A.." refer to activity, process, technology or other alternatives.

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5. SITE ACCESS

Does ready access to the site exist?

YES X	NO
M	

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

At this stage the entrance road is a few metres of gravel road after a turn from the tar road (Appendix A).

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

6. SITE OR ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

- 6.1 the scale of the plan which must be at least a scale of 1:500;
- 6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 6.4 the exact position of each element of the application as well as any other structures on the site;
- 6.5 the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
- 6.6 all trees and shrubs taller than 1.8 metres;
- 6.7 walls and fencing including details of the height and construction material;
- 6.8 servitudes indicating the purpose of the servitude;
- 6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
 - rivers;
 - the 1:100 year flood line (where available or where it is required by DWA);
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation (even if it is degraded or invested with alien species);
- 6.9 for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- 6.10 the positions from where photographs of the site were taken.

A detailed site plan has been included as part of this report as Appendix A.

7. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this form. It must be supplemented with additional photographs of relevant features on the site, if applicable.

Colour photographs taken of the proposed location of the infrastructure to be installed on the site as well as the various viewpoints from the site with a description of each photograph are included in Appendix B.

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

A concept illustration of the proposed tourist infrastructure is included in Appendix C.

9. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

R4 million	
R1,8 million	
Will the activity contribute to service infrastructure?	YES

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure?

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Is the activity a public amenity?	Yes, the public will use the facility but it is not own by the public, but privately.
How many new employment opportunities will be created in the development phase of the activity?	30
What is the expected value of the employment opportunities during the development phase?	R200 000
What percentage of this will accrue to previously disadvantaged individuals?	95%
How many permanent new employment opportunities will be created during the operational phase of the activity?	15
What is the expected current value of the employment opportunities during the first 10 years?	R700 000 per annum
What percentage of this will accrue to previously disadvantaged individuals?	100%

9(b) Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

The applicant was born and raised in the Mier Rural area and is still a resident of this area. He is also an established business person with businesses in some of the towns such as the nearby rural settlement of Welkom. The Mier Rural area belongs to the community of Mier and is also managed as such. The property, on which the application is made, belongs to the Mier Municipality and was leased to the applicant for the purposes of tourism facilities. The Municipality therefore also gave their approval/blessing for the proposed development. The proposed development site is located in close vicinity of the entrance gate to the Kgalagadi Trans frontier Park and is therefore ideally situated to ensure the success of a development of this nature. The main motive for the proposed development lies in the need for additional tourism accommodation facilities in close proximity of the Kgalagadi Trans frontier Park as tourism accommodation in the Park is currently heavily under pressure. The proposed development will also focus on additional tourism activities such as the local culture of the people, farming practices and local art, just to mention a few.

The proposed development area is situated in the Eco Tourism Corridor as included in the approved Provincial Spatial Development Framework (PSDF) for the Northern Cape Province. It is also located direct adjacent to the existing access road and tourism route to the Kgalagadi Trans frontier Park and other well-known tourism destinations such as the Molopo Lodge. Although visitors to the park were seasonal in the past it is definitely not the case anymore as accommodation in the park is almost fully booked throughout the year.

The developer plans to construct the buildings on the premises in such a manner as to ensure that it blends in with the natural environment by using natural material such as thatching for the roofs etc.

Indicate any benefits that the activity will have for society in general:

The proposed development has the potential to make a huge economic and social contribution towards the nearby communities who mainly relies on farming (mostly subsistence farming) and who's opportunities for economic development is very slim at the moment. The development will provide temporary as well as permanent work opportunities for the communities in the area and it will also create opportunities for local people and crafters to display and sell their products.

On a wider scale, the proposed development will also provide much needed tourism accommodation in close proximity of the Kgalagadi Trans Frontier Park and tourists will be able to stay over in this lodge within walking distance of the entrance gate of the park. This development will therefore create an opportunity for more tourists to experience the natural wonders of the Kgalagadi Trans frontier Park without putting more pressure with regard to accommodation facilities on the Park itself.

As the developer also plans to provide facilities where the local residents can be trained in computer literacy, this development will also, beside all of the abovementioned advantages, contribute towards the social upliftment of the local people of the Kalahari.

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Indicate any benefits that the activity will have for the local communities where the activity will be located:

A direct benefit from the proposed development for the nearby (adjacent) community is the employment opportunities to the remote Mier Rural area. As part of the proposal to the Mier Municipality to develop this proposed facility, the developer undertook to develop a computer training facility where a number of Kgalagadi Trans frontier Park employees and local communities will have access to training.

DESIRABILITY:			
1.	Do the proposed land use / development fit the surrounding area?	YES	NO
2.	Do the proposed land use / development conform to the relevant structure plans, SDF and planning visions for the area?	YES	NO
3.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	YES	NO
4.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation: This is a unique development as it is on Mier Municipal property, but directly adjacent to Kgalagadi Transfrontier National Park. This site will be developed with various opportunities for tourism facilities. Mier Municipality put developing of tourist- and community facilities as priority, but with the necessary guidelines.		
5.	Will the proposed land use / development impact on the sense of place?	YES	NO
6.	Will the proposed land use / development set a precedent?	YES	NO
7.	Will any person's rights be affected by the proposed land use / development?	YES	NO
8.	Will the proposed land use / development compromise the "urban edge"?	YES	NO
9.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanation. As this is a unique development for it is adjacent to a national park the financial impact will be major to develop such a facility and met all the guidelines and requirements. This development will not influence the urban edge as it is too far from the Welkom community, and the surrounding area will stay agricultural land.		

BENEFITS:			
1.	Will the land use / development have any benefits for society in general?	YES	NO
2.	Explain: This facility will raise the value of the property and the adjacent agricultural property. Opportunity for work is at hand and an opportunity for the local community to visit the computer centre for training. Approval for this project will be a positive contribution and beneficial to the community and tourists visiting the area.		
3.	Will the land use / development have any benefits for the local communities where it will be located?	YES	NO
4.	Explain: The nature of the proposed activities is such that it will be possible to make use of local labour during the construction and operational period and therefore the project will definitely benefit the local communities.		

10. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline:	Administering authority:	Date:
Environmental Conservation Act, Act 73	DENC	1989
National Environment Management Act, Act 107	DENC	1998
National Environment Management: Biodiversity Act, Act 10	DEA	2004

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National Environmental Management: Protection Areas Act, Act 57	DEA	2003
National Environmental Management: Waste Act, Act 59	DEA	2008
National Forests Act, Act 84	DAFF	1998
National Water Act, Act 36	DWA	1998

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

YES X	NO
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If yes, what estimated quantity will be produced per month?

3m ³

How will the construction solid waste be disposed of (describe)?

All solid waste generated during the construction phase will be placed in a bulk waste collection area onsite and this waste will be regularly cleared and disposed of at a licensed waste facility.

Litter collection bins will be provided and will be regularly cleared.

Separation of waste and recycling of paper, glass etc. must be encouraged.

Unutilized, construction materials will be removed once construction has ended, e.g. crushed stone may not be left or randomly thrown around the site.

Hazardous materials that require disposal will be disposed of at a registered hazardous landfill site. These materials may be removed by an appropriate hazardous waste Contractor. Proof of appropriate disposal must be obtained by the Contractor.

Where will the construction solid waste be disposed of (describe)?

Solid waste will be removed by Mier Municipality

Will the activity produce solid waste during its operational phase?

YES X	NO
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If yes, what estimated quantity will be produced per month?

2m ³

How will the solid waste be disposed of (describe)?

Solid waste will be generated by the tourism units and will be collected at a central point. This waste will be disposed of as normal domestic waste at the waste site of Mier Municipality. The National Environmental Management: Waste Act (Act No.59 of 2008) covers all aspects relating to waste management and must be adhered to at all times.

Any other relevant legislation must be adhered to.

Waste management at the site shall be strictly controlled and monitored. Only approved waste disposal methods shall be allowed. Management of the facilities shall ensure that all personnel are instructed in the proper disposal of all waste and encouraged staff to participate in a recycling scheme.

NO burning, on-site burying or dumping of waste shall be allowed.

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

If the solid waste (construction or operational phases) will not be disposed of at a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?

YES	NO X
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If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility?

YES	NO X
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If yes, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

11(b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

YES	NO X
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If yes, what estimated quantity will be produced per month?

M ³

Will the activity produce any effluent that will be treated and/or disposed of on site?

Yes	NO X
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If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Will the activity produce effluent that will be treated and/or disposed of at another facility?

YES	NO X
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If yes, provide the particulars of the facility:

Facility name:			
Contact person:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

This usage could be minimized with careful and resourceful planning and use of water. This may include recycling initiatives where possible. Several innovative new technologies are available for this, including recycling of grey water and storm water capture and use for washing and non-drinking purposes. This may include:

- On site filtration and recycling.
- Collection of storm water from the building roofs in storage tanks, etc.

Storm water runoff will be directed in the road reserves and released into the storm water drains on site.

11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

YES	NO X
YES	NO

If yes, is it controlled by any legislation of any sphere of government?

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

The major source of pollution will be the exhaust fumes from motor vehicles from tourist and construction vehicles during the construction phase. As a result of this it is unlikely that any detailed Air Quality studies will be needed.

11(d) Generation of noise

Will the activity generate noise?

YES	NO X
YES	NO

If yes, is it controlled by any legislation of any sphere of government?

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the noise in terms of type and level:

Limited noise will be generated during the construction phase, however due to the remote location of the site noise pollution will not have a negative impact. Construction and management activities involving use of the service vehicles, machinery, hammering etc. must be limited to weekdays and between 7:00am and 01:30pm on Saturdays, with no work on Sundays.

Activities that may disrupt neighbours (e.g. excessive noise, trucks etc.) must be preceded by notice being given tot the affected neighbours at least 24 hours in advance.

Equipment that is fitted with noise reduction facilities must be used as per operating instructions and maintained properly during site operations.

The noise emanating from the adjacent access roads is not expected to increase significantly in terms of the current noise levels.

12. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es)

municipal	water board	groundwater	river, stream, dam or lake	other	the activity will not use water
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If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

20 000m ³
YES X NO

Does the activity require a water use permit from the Department of Water Affairs?

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

13. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

According to the applicant electricity will be supplied and connected to the existing electricity distribution line currently on the property. The applicant however plans to install energy saving devices such as solar geysers, low energy lights etc. to bring down the electricity usage at the facility. Other methods to ensure low energy usage includes amongst others the insulating of the ceilings which will ensure more energy efficient buildings and will bring down energy consumption for the cooling and heating of these buildings. Up to 50% of heat loss in a building can be attributed to a lack of ceilings and ceiling insulation. By insulating a building with efficient ceilings, heating and cooling expenses and energy usage can be minimized.

The flow of air into and out of a building occurs inadvertently as infiltration/infiltration and deliberately as ventilation. Air leakage into and out of the building is one of the contributors to high heating and cooling costs. Air leakage can occur wherever different material or parts of the building meet. Caulking and weather-stripping are the ideal methods that can be used in the design and construction for closing the loopholes through which heat escapes.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

Power supply:

ESKOM Municipality will be the electrical suppliers for the proposed development.

Conservation of energy or the utilization of renewable and sustainable energy technologies is encouraged. This can include solar panels that generate and store electricity in suitable battery packs, solar water heater(s), backed up with gas, as well as gas appliances.

Air Conditioners:

Energy efficient heaters and air conditioners (or rather water coolers) should be purchased.

The outdoor cooling units must be protected from the sun and should rather be placed on the south side of the buildings.

Lighting:

All lights used for non-security purposes should be energy efficient for example compact fluorescent lights and LED lights.

Outside lights will have to be downward shining (eyelid type), low wattage and should not be positioned higher than 1 m above the ground surface.

Fluorescent lamps give five times the light and lasts up to 10 times as long as ordinary bulbs, and should therefore be used instead of the conventional bulbs.

Water Heaters/ Geysers:

Solar water heaters conserve energy and can be backed up with gas or electric geysers.

Installing a geyser blanket and hot water storage tanks will reduce the amount of heat lost by the geyser to cold air outside and thus conserves energy.

Hot water pipes should also be insulated to prevent heat loss.

Cooking and Refrigeration:

The use of gas appliances could be encouraged.

Use the energy saving switch, if one is fitted to the refrigerator.

Convection ovens should be installed as they use less energy than conventional ovens and cooking time is substantially reduced.

SECTION B : SITE/AREA/PROPERTY DESCRIPTION

Important notes:

- For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section C and indicate the area, which is covered by each copy No. on the Site Plan.

Section C Copy No. (e.g. A):

- Paragraphs 1 - 6 below must be completed for each alternative.

- Has a specialist been consulted to assist with the completion of this section?

YES X	NO
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If YES, please complete form XX for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

Property Description/ Physical address:

The proposed resort development on Portion of the remainder of the farm Mier 585, MIER MUNICIPALITY (appendix A).

Current Land use/ Zoning:

The current zoning of the land in question is agricultural

Is a change in landuses or a consent use application required?

Yes

Must a building plan be submitted to the local authority?

Yes

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S2 (if any):

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S3 (if any):

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

- 2.1 Ridgeline
- 2.2 Plateau
- 2.3 Side slope of hill/mountain
- 2.4 Closed valley
- 2.5 Open valley
- 2.6 Plain
- 2.7 Undulating plain / low hills
- 2.8 Dune
- 2.9 Seafront

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3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following (tick the appropriate boxes)?

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
Shallow water table (less than 1.5m deep)	YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO	YES	NO	YES	NO
An area sensitive to erosion	YES	NO	YES	NO	YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

4. GROUNDCOVER

Indicate the types of groundcover present on the site:

- 4.1 Natural veld – good condition^E
- 4.2 Natural veld – scattered aliens^E**
- 4.3 Natural veld with heavy alien infestation^E
- 4.4 Veld dominated by alien species^E
- 4.5 Gardens
- 4.6 Sport field
- 4.7 Cultivated land
- 4.8 Paved surface
- 4.9 Building or other structure
- 4.10 Bare soil**

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld – good condition ^E	Natural veld with scattered aliens^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an “^E” is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

5. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that does currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

- 5.1 Natural area**
- 5.2 Low density residential**
- 5.3 Medium density residential
- 5.4 High density residential
- 5.5 Informal residential^A
- 5.6 Retail commercial & warehousing
- 5.7 Light industrial
- 5.8 Medium industrial^{AN}
- 5.9 Heavy industrial^{AN}
- 5.10 Power station
- 5.11 Office/consulting room**
- 5.12 Military or police base/station/compound
- 5.13 Spoil heap or slimes dam^A

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5.14 Quarry, sand or borrow pit

- 5.15 Dam or reservoir
- 5.16 Hospital/medical centre
- 5.17 School
- 5.18 Tertiary education facility
- 5.19 Church
- 5.20 Old age home
- 5.21 Sewage treatment plant^A
- 5.22 Train station or shunting yard^N
- 5.23 Railway line^N
- 5.24 Major road (4 lanes or more)^N
- 5.25 Airport^N
- 5.26 Harbour

5.27 Sport facilities

- 5.28 Golf course
- 5.29 Polo fields
- 5.30 Filling station^H
- 5.31 Landfill or waste treatment site
- 5.32 Plantation

5.33 Agriculture

- 5.34 River, stream or wetland

5.35 Nature conservation area

- 5.36 Mountain, koppie or ridge
- 5.37 Museum
- 5.38 Historical building
- 5.39 Protected Area
- 5.40 Graveyard
- 5.41 Archaeological site
- 5.42 Other land uses (describe)

If any of the boxes marked with an “^N” are ticked, how this impact will / be impacted upon by the proposed activity.

If YES, specify and explain:	
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If any of the boxes marked with an “^{Aⁿ” are ticked, how will this impact / be impacted upon by the proposed activity.}

If YES, specify and explain:	
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If any of the boxes marked with an “^H” are ticked, how will this impact / be impacted upon by the proposed activity.

If YES, specify and explain:	
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6. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site?	YES	NO X
If YES, explain:	Uncertain	
If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.		
Briefly explain the findings of the specialist:	Although no signs of culturally or historical significant elements were found on the site, an archaeological investigation will be undertaken in order to make sure of this and to guide the future environmental management plan for the area. This report is attached in Appendix D.	
Will any building or structure older than 60 years be affected in any way?	YES	NO X
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO X
If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.		

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

- (a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) at a place conspicuous to the public at the boundary or on the fence of—
 - (i) the site where the activity to which the application relates is or is to be undertaken; and
 - (ii) any alternative site mentioned in the application;
- (b) giving written notice to—
 - (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;
 - (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
 - (v) the municipality which has jurisdiction in the area;
 - (vi) any organ of state having jurisdiction in respect of any aspect of the activity; and
 - (vii) any other party as required by the competent authority;
- (c) placing an advertisement in—
 - (i) one local newspaper; or
 - (ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
- (d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and
- (e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—
 - (i) illiteracy;
 - (ii) disability; or
 - (iii) any other disadvantage.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

- (a) indicate the details of the application which is subjected to public participation; and
- (b) state—
 - (i) that the application has been submitted to the competent authority in terms of these Regulations, as the case may be;
 - (ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation;
 - (iii) the nature and location of the activity to which the application relates;
 - (iv) where further information on the application or activity can be obtained; and
 - (v) the manner in which and the person to whom representations in respect of the application may be made.

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

The proposed activity will not have any impacts beyond the municipal area where it is located. Due to this fact and the small-scale nature of the proposed activities it was only deemed necessary to advertise in one newspaper, i.e. *Gemsbok* date 1 March 2013. The advertisement placed detailed the Basic Assessment process, the nature and location of the proposed activity, where further information on the proposed activity could be obtained and the

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manner in which representations on the application could be made. Copies of the advertisement and proof of placement is included within Appendix E.

4. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

The use of a stakeholder database, letters, an advertisement and notice boards notices and site notices was undertaken to involve the public in the process.

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to this application. The comments and response report must be attached under Appendix E.

All interested parties that will be informed will be in the comment and response report as Appendix E. All inputs, comments and/or concerns raised during the public participation process, will form part of the final BAR. All comments received, as well as responses provided will be captured and recorded within the Comments and Response Report attached with the Final Basic Assessment Report.

6. AUTHORITY PARTICIPATION

Authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least 30 (thirty) calendar days before the submission of the application.

List of authorities informed:

Authorities were informed of the Basic Assessment process through the submission of a Draft BAR sent to them, these include:

- Northern Cape Department of Environment and Nature Conservation.
- Mier Municipality
- Department of Water Affairs
- Department of **Agriculture**, Forestry and Fisheries
- Department of Agriculture, **Forestry** and Fisheries

List of authorities from whom comments have been received:

This Draft BAR will be send to all relevant authorities for comments and inputs. All comments received, as well as responses provided, will be captured and recorded within the Comments and Response Report which will be attached to the Final Basic Assessment Report.

7. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub regulation to the extent and in the manner as may be agreed to by the competent authority.

Potentially affected stakeholders have been identified and consulted regarding the proposed project, including, inter alia:

Kgalagadi National Park
Mr Dawid Snyders
Blinkwater 2-Rivieren (Pty) Ltd

BASIC ASSESSMENT REPORT

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application at least 30 (thirty) calendar days before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?

YES	NO
X	

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

Blinkwater 2-Riviern (Pty) Ltd commented on the advertisement. All comments will be addressed within the Final BAR report.
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SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2010, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

Public participation in process. Will be included in Final BAR.

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report):

All issues will be addressed in the Comments and Response Report of Final BAR. Each comment will be addressed by the EAP.

2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

2.1 IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN PHASE

a. Site alternatives

Direct impacts:

Insufficient planning and design strategies may result in practices which may be harmful to the environment. Lack of proper planning and design of the facilities may result in inefficient use of available land, inefficient use of energy and natural resources.

Indirect impacts:

The planning and design of this development must be done in such a way that it will ensure compliance with all the applicable regulations and requirements.

Cumulative impacts: The visual perception of existence of this area will increase however the proposed development area is currently bordered by similar landuses. Due to the nature of the proposed activity, the main impacts will be during the construction phase and not during the planning and/or operational phases as such.

No-go Alternative

Direct impacts:

- No new, positive impacts would be caused
- The site will stay untidy and invested with alien vegetation
- No needed tourist facilities will be developed in this remote Mier Municipal area.

Indirect impacts:

- No employment will be created

Cumulative impacts:

- The pressure on needed tourist facilities will built up to the winter months.

Indicate **Mitigation measures** to manage the potential impacts listed above:

Alternative 1

As indicated above, there are very few impacts associated with the planning and design phase of the project. The following mitigation measures prior to construction should however be considered/adhered too:

- Building/facilities designs should be done in accordance with relevant legislation and guidelines such as SANS 10400 (design requirements) and applicable scheme and building regulations.
- An Environmental Management Programme (EMP) must be compiled.
- The conditions contained in the EMP must be understood by both the developer and the contractor and must be adhered too.
- A photographic record of the site must be taken prior to construction and regularly updated during construction.
- An Environmental Control Officer (ECO) must be appointed and must provide the relevant authorities with regular environmental report regarding the development.
- The site must be properly zoned and all the necessary land use rights obtained.
- Staff working on the site must be trained with respect to environmental awareness.

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b. Process, technology, layout or other alternatives.

Direct impacts:

- No direct impacts are associated with the planning and design phase. The proposed site is deemed suitable for this type of development and will have a minimal impact on the environment as a result of the following factors:
 - Already disturbed area which will be difficult to rehabilitate.
 - Existing development directly adjacent.
 - The draft conceptual layout includes allowance for some flexibility in terms of the final layout with respect to location of the various facilities. The final layout will be negotiated with the relevant parties.

Indirect impacts:

- The location of the site in relation to existing access roads and infrastructure makes it suitable for a development of this nature.
- The proposed development will improve the level of convenience to visitors of the area as it will provide affordable, high quality tourist facilities in close proximity of work opportunities and facilities.

Cumulative impacts:

- No impacts are expected with the exception of an increase in the business potential of the area.

No-go Alternative

Direct impacts:

- No new impacts would be caused
- The site will stay untidy and invested with alien vegetation
- No additional tourist accommodation facilities.

Indirect impacts:

- No employment will be created

Cumulative impacts:

- None

Indicate **Mitigation measures** to manage the potential impacts listed above:

Alternative 1

The following mitigation measures prior to construction should however be considered/adhered too:

- The layout is not seen as a high impact issue as long as all relevant criteria for waste management, water conservation etc. are adhered too.
- Building/facilities designs should be done in accordance with relevant legislation and guidelines such as SANS 10400 (design requirements) and applicable scheme and building regulations.
- An Environmental Management Programme (EMP) must be compiled.
- The conditions contained in the EMP must be understood by both the developer and the contractor and must be adhered too.
- A photographic record of the site must be taken prior to construction and regularly updated during construction.
- An Environmental Control Officer (ECO) must be appointed and must provide the relevant authorities with regular environmental report regarding the development.

2.2 IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION AND OPERATIONAL PHASES

Due to the nature of the proposed activity the main impacts will be during the construction phase and not during the planning and/or operational phases as such.

Potential impacts associated with the construction of the proposed infrastructure are discussed below:

Direct Impacts:

Historical, cultural and archaeological sites:

- During the site visit, no signs of historical, cultural and archaeological sites have been found. Despite of this a Heritage Impact Assessment will be undertaken and this report will be included in the FBAR.

Soil and groundwater pollution:

- The clearing of the site will cause the surfaces to be exposed which may cause erosion, creation of dust and sedimentation to streams.
- The construction phase may cause increased infiltration of contaminants into the ground, soil and water.
- Should oil, fuel and/or lubricants from construction vehicles, plant and machinery be spilled, it will have the potential to contaminate the soil and groundwater. Any flora in these areas where contamination occurs will die.
- The mixing of cement and the storage of fuel must be done in such a manner as to prevent the contamination of the soil and the groundwater.
- Uncontrolled stormwater run-off may cause erosion of the topsoil and result in sedimentation of streams

BASIC ASSESSMENT REPORT

Impact on Flora & Fauna:

- The activities will have a minimal impact on the loss of habitat and species on the site.
The protection of the camel thorn trees must be ensured.
- Due to the pristine natural areas surrounding the site, the impact on faunal species will be minimal as they can relocate.
- Pollution resulting from the construction site such as litter, solid waste, spills of oils, lubricants and fuel could reduce the quality of the habitats in the surrounding area and directly impact on the health and welfare of the fauna and flora in the vicinity of the site.
- Due to the disturbance of the site, alien plant species may be able to establish and could become a problem by infesting neighboring land.

Noise Pollution:

- There will be an increase in noise during the construction phases of the project.

Visual Intrusion & Light Pollution:

- The proposed development will result in the selective removal of vegetation and the construction of buildings which may be visually intrusive.
- Lights from the construction site will be visually intrusive, but the area very remote.
- Uncontrolled littering and illegal dumping on the site may have an impact on the visual character of the area.

Safety & Security:

- A poorly managed construction site can cause dangerous situations which could result in harm to people and property.
- Construction sites usually act as a magnet to unemployed persons, so large number of people may gather on or around the construction site, which will cause a safety and security hazard if not properly managed.

Atmosphere Pollution and Odours:

- The increased dust, smoke and emissions resulting from construction activities (vegetation clearing, site preparation, earthworks, uncovered topsoil stockpiles and sand piles, loads on vehicles and the burning of waste) ; vehicles, plant and machinery poses a health hazard to construction staff and people living and working in the vicinity of the site.

Traffic & Access:

- The higher volumes of construction vehicles moving onto and off the site during construction may cause increased traffic congestion.

Hygiene:

- Unhygienic working conditions may adversely affect the health of workers on the construction site.

Indirect Impacts:

Socio Economic:

- The proposed development will lead to an increase in the level of local employment in the areas surrounding the proposed development area. During and after construction, both short term and long term job opportunities will be created.
- The development will lead to an increase in skills development in the area as local people which will be employed on the site will be trained.
- The development will lead to an increase in the number of convenience facilities in the local area.
- Indirectly jobs will be created in industries that provide goods, material and services related to the construction sector.

Spread of Alien vegetation;

- The disturbance of the site may cause alien vegetation to establish which may become a problem in that it may infest neighboring land.

Security:

- Construction sites usually attracts large numbers of people which gathers around to seek employment. This may cause a safety and security risk.

Construction traffic:

- Construction traffic may result in increased traffic congestion in the areas where construction supplies will be collected.

Cumulative Impacts:

Increased run off of Water:

- An increase in paved areas and roofs associated with the development, may cause an increase in the amount of run-off water at the site. This will reduce the infiltration of water into the groundwater and may also result in erosion of areas that are not paved.
- Stormwater run-off has the potential to erode the topsoil and cause sedimentation of streams if not properly controlled.

Surface water pollution:

- Spillages of lubricants, oil and/or fuel from plant, equipment and construction vehicles has the potential to contaminate the surface water resources. The surface water will flow in the drainage lines and should therefore be properly controlled.

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Ground water pollution:

- During construction it may be found that there is an increase in the infiltration of contaminants into the groundwater and soil.
- Spillages from oil, lubricants and fuel from construction vehicles, plant and equipment has the potential to contaminate the soil and groundwater.
- The clearing of the site will result in exposed surfaces which may be prone to erosion, creation of dust and sedimentation of streams.
- The mixing of cement and the storage of fuel must take place in such a manner as to ensure that no contamination of soil and groundwater will take place.

Socio Economic:

- The construction work will result in direct jobs being created whilst indirectly jobs are also created in industries that provide goods, services and materials associated with the construction and operation of the facilities.
- The proposed development will lead to an increase in job opportunities in the area. It will create both long term and short term job opportunities.
- The development will lead to an increase in the number of needed tourist accommodation the immediate vicinity.

Faunal Displacement:

- To a very minimal extent, faunal displacement may take place as a result of an increase in ambient noises, vibrations which is likely to remain even with mitigation. The surrounding environment is however transformed which makes the use of the area by fauna very unlikely.

No-go Alternative

Should the site not be developed the following impacts associated with the construction phase will not occur:

Direct impacts:

- No possible soil and/or water pollution
 - More informal dumping that will pollute site and adjacent property
- No possible visual intrusion and light pollution
 - More visual intrusion through more informal dumping.
 - Homeless people settle on site, make fire and overnight on site.
- No increase in construction traffic volumes
- No noise pollution
- No atmosphere and dust pollution
 - Air pollution from informal fires by homeless people
- No destruction of fauna and flora
 - Protected tree can be cut down for firewood
 - More informal dumping will pollution veld
- No problems with safety and security at the site
 - Settlement of homeless people can provide an unsafe situation.
- No hygiene problems as there will be no staff on the site
 - Hygiene problem with informal dumping.

Direct impacts associated with the facilities not being constructed includes:

- The security of the adjacent properties could be compromised as the area can be used by criminals to hide.
- Industries that provide goods, material and services will not benefit from the construction.
- The site will stay untidy and invested with alien vegetation
- No provision will be made for needed tourist accommodation and the demand will increase
- No job opportunities and training for the local residents.
- No facilities of this nature will be provided for the local residents who will have to drive long distances to get to work and nearby facilities.

Indirect impacts associated with the facilities not being constructed:

- No employment will be created
- No spin-off employment and opportunities will be created
- Alien vegetation may expand to the adjacent properties
- Tourist to the Mier Municipal area will not benefit from the availability of tourist accommodation.
- The neighboring community will not benefit from the proposed computer training centre.

Cumulative impacts:

- The cumulative impacts associated with not developing the site are a loss of revenue in the local economy and the loss of potential jobs.

Indicate **Mitigation measures** to manage the potential impacts listed above:

Alternative 1

The following mitigation measures during construction should however be considered/adhered too: (See also EMP Appendix F)

Historical, cultural and archaeological sites:

- Should any areas or objects of significant heritage potential be found during the proposed development, the following requirements, according to the National Heritage Resources Act, Act no 25 of 1999 will still apply: ("No person may,

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without a permit issued by the responsible heritage resources authority destroy, damage, excavate, alter, deface or otherwise disturb any archaeological site")

- Should any conservation worthy archaeological or cultural historical finds be made during the proposed development, the necessary expertise of the McGregor Museum should be called upon to investigate any such findings.
- The relevant heritage resources authority and the archaeologist must be informed as a matter of urgency should any remains be exposed on the terrain.
- Human remains younger than 60 years should only be handled by a registered undertaker or an institution declared under the Human Tissues Act.

Soil and Ground water Pollution:

- Appropriate erosion and stormwater management structures must be installed around the construction site
- All construction vehicles, plant, machinery and equipment must be properly maintained to prevent leaks
- Drip trays are to be utilized during daily greasing and re-fuelling of machinery and to catch incidental spills and pollutants.
- Plant and vehicles are to be repaired immediately upon developing leaks.
- Drip trays are to be inspected daily for leaks and effectiveness, and emptied when necessary. This is to be closely monitored during rain events to prevent overflow.
- Vehicles to be used during the construction phase are to be kept in good working condition and should not be the source of excessive fumes.
- Fuels and chemicals must be stored in adequate storage facilities that are secure, enclosed and banded.
- All excavations and foundations must be inspected regularly.
- Once earthworks are complete, disturbed areas are to be stabilized with mulch, straw or other approved method.
- Collection of stormwater from the building roofs in storage tanks.

Impact on Flora & Fauna:

- Site clearing is to be limited to only the area necessary for carrying out the specified works and the destruction of vegetation should be minimized.
- Any invader species such as *Prosopis sp.*- "suidwesdoring", should be removed.
- No disturbance of any protected flora and trees, such as camel thorn tree on site, may take place without the required permit from the relevant department.
- Any possible impacts will be addressed by careful planning, the planting of endemic plants and minimal water abstraction.
- The use of pesticide should be severely limited, or banned entirely to maintain biodiversity.
- Cleared indigenous vegetation can be stockpiled for possible reuse in later rehabilitation or landscaping or as a brush pack for erosion prevention.
- Stockpiles of vegetation are only to be located in areas approved by the ECO, and may not exceed 2 m in height. Methods of stacking must take cognizance of the possible creation of a fire hazard.
- No burning of stockpiled vegetation is permitted.
- Alien vegetation re-growth must be controlled throughout the entire site during the construction period.
- Disturbance to birds, animals and reptiles and their habitats should be prevented at all times.

Noise Pollution:

- Noise levels shall be kept within the acceptable limits, and construction crew must abide by National Noise Laws and local by-laws regarding noise.
- If work is to be undertaken outside normal work hours, permission must be obtained. Prior to commencing any such activity the Contractor is also to advise the potentially affected neighbouring residents.
- No sound amplification equipment such as sirens, loud hailers or hooters are to be used on site except in emergencies and no amplified music is permitted on site.
- Construction/management activities involving use of the service vehicle, machinery, hammering etc. must be limited to the hours between 07:00am and 6:30pm weekdays; 07:00am and 1:30pm on Saturdays; no noisy activities may take place on Sundays.
- Activities that may disrupt neighbours (e.g. trucks, excessive noisy activities etc) must be preceded by notice being given to the affected neighbours at least 24 hours in advance.
- Equipment that is fitted with noise reduction facilities (e.g. side flaps, silencers etc) must be used as per operating instructions and maintained properly during site operations.

Visual Intrusion & Light Pollution:

- The site must be managed appropriately and all rubbish and rubble removed to a recognized waste facility.
- Excess soil and bedrock should be disposed of at an appropriate facility.
- Waste must not remain on site for more than 2 weeks.
- Refuse bins must be provided by the Contractor for rubbish to be placed in by staff.
- Excess concrete must be disposed of correctly and at an appropriate facility.
- No waste may be placed in any excavations on site.
- Indigenous plants or trees should be planted next to buildings to break the lines of the buildings making them less

visually intrusive.

- Advertising signs should blend in with the environment.
- Light pollutions should be minimized.
- The construction footprint should be minimized.
- Lighting on site is to be sufficient for safety and security purposes, but shall not be intrusive to neighbouring residents or interfere with road traffic.
- Should overtime/night work be authorized, the Contractor shall be responsible to ensure that lighting does not cause undue disturbance to neighbouring residents. In this situation low flux and frequency lighting shall be utilized.

Atmosphere Pollution and Odours:

- The building area is to be screened off with a shade cloth fence, to prevent dust from being blown onto the road or neighbouring properties.
- Dust generation should be kept to a minimum.
- Dust must be suppressed on access roads and construction areas during dry periods by the regular application of water or a biodegradable soil stabilization agent.
- Speed limits must be implemented in all areas, including roads and private property to limit the levels of dust pollution.
- It is recommended that the clearing of vegetation from the site should be selective and done just before construction so as to minimize erosion and dust.
- Should construction in areas that have been stripped not be commencing within a short period of time the exposed areas shall be re-vegetated or stabilized. Soil stabilizing measures could include rotovating in straw bales (at a ratio of 1 bale/20 square metres), applying mulching or brush packing, or creating windbreaks using brush or bales.
- Sand stockpiles are to be covered with Hessian, shade cloth or DPC plastic.
- Where possible stockpiles are to be located in sheltered areas and the usable/cut face orientated away from the direction of the prevailing wind for that season.
- Excavating, handling or transporting erodible materials in high wind or when dust plumes are visible shall be avoided.
- All materials transported to and from the site must be transported in such a manner that they do not fly or fall off the vehicle. This may necessitate covering or wetting friable materials.
- No burning of refuse or vegetation is permitted.

Traffic and Access:

- The access, being on an important national route will need to meet certain criteria as required by the Local Authority.

Safety and Security:

- Signs should be erected on all entrance gates indicating that no temporary jobs are available, thereby limiting opportunistic labourers and crime.
- The site and crew are to be managed in strict accordance with the Occupational Health and Safety Act (Act No. 85 of 1993) and the National Building Regulations.
- All structures that are vulnerable to high winds must be secured (including scaffolds and toilets).
- All manhole openings are to be covered and clearly demarcated with danger tape.
- Potentially hazardous areas such as trenches are to be cordoned off and clearly marked at all times.
- The Contractor is to ensure traffic safety at all times, and shall implement road safety precautions for this purpose when works are undertaken on or near public roads.
- Necessary Personal Protective Equipment (PPE) and safety gear appropriate to the task being undertaken is to be provided to all site personnel.
- All vehicles and equipment used on site must be operated by appropriately trained and/or licensed individuals in compliance with all safety measures as laid out in the Occupational Health and Safety Act (Act No. 85 of 1993) (OHSA)
- An environmental awareness training programme for all staff members shall be put in place by the Contractor. Before commencing with any work, all staff members shall be appropriately briefed about the EMP and relevant occupational health and safety issues.
- All construction workers shall be issued with ID badges and clearly identifiable uniforms.
- Access to fuel and other equipment stores is to be strictly controlled.
- No unauthorized firearms are permitted on site.

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- Emergency procedures must be produced and communicated to all the employees on site. This will ensure that accidents are responded to appropriately and the impact thereof is minimized. This will also ensure that potential liabilities and damage to life and the environment are avoided.
- Adequate emergency facilities must be provided to treat emergencies on the site.
- Emergency contact number are to be displayed conspicuously at prominent locations around the construction site and the construction crew camps at all times.
- The Contractor must have a basic spill control kit available at each construction crew camp and around the construction site. The spill kits must include absorptive material that can handle all forms of hydrocarbon as well as floating blankets/pillows that can be placed on water courses.

Hygiene:

- The Contractor shall make available safe drinking water fit for human consumption at the site offices and all other working areas.
- Washing and toilet facilities shall be provided on site and in the Contractors camp.
- Adequate numbers of toilets/chemical toilets must be maintained in the Contractors camp to service the staff using this area. At least 1 toilet must be available per 20 workers using the camp. Toilet paper must be provided.
- All toilets/chemical toilets must be maintained in a good state, and any spills or overflows must be attended to immediately.
- All chemical toilets must be sited taking into account the possibility of the prevailing wind unfavorably dispersing unpleasant odours.
- Care should be taken to adequately drain areas surrounding water points in order to avoid the development of pools of standing water, as these tend to be a breeding source of flies, mosquitoes and other vectors.

Mitigations for Cumulative Impacts identified:

The cumulative impacts can be decreased significantly if the following are adhered to:

- Landscaping of the grounds must be done as soon as possible with indigenous vegetation so as to increase stormwater infiltration, decrease erosion and decrease stormwater runoff.

b. Process, technology, layout or other alternatives.

Direct impacts:

- There will be no technological or activity related alternatives as a result of the construction phase of the project.

Indirect impacts:

- There will be no technological or activity related alternatives as a result of the construction phase of the project.

Cumulative impacts:

- There will be no technological or activity related alternatives as a result of the construction phase of the project.

No-go Alternative

Should the site not be developed the following impacts associated with the construction phase will not occur:

Direct impacts:

- No possible soil and/or water pollution
 - More informal dumping that will pollute site and adjacent property
- No possible visual intrusion and light pollution
 - More visual intrusion through more informal dumping.
 - Homeless people settle on site, make fire and overnight on site.
- No increase in construction traffic volumes
- No noise pollution
- No atmosphere and dust pollution
 - Air pollution from informal fires by homeless people
- No destruction of fauna and flora
 - Protected tree can be cut down for firewood
 - Increase in alien species as no control take place.
 - More informal dumping will pollution veld
- No problems with safety and security at the site

BASIC ASSESSMENT REPORT

- Settlement of homeless people can provide an unsafe situation.
- No hygiene problems as there will be no staff on the site
 - Hygiene problem with informal dumping for children playing.

Direct impacts associated with the facilities not being constructed includes:

- The security of the adjacent properties could be compromised as the area can be used by criminals to hide.
- Industries that provide goods, material and services will not benefit from the construction.
- The site will stay untidy and invested with alien vegetation
- There will be no provision of additional tourist facilities in the area.
- No job opportunities and training for the local residents.

Indirect impacts associated with the facilities not being constructed:

- No employment will be created
- No spin-off employment and opportunities will be created
- Alien vegetation may expand to the adjacent properties
- Community will have to drive long distances for computer training.

Cumulative impacts:

- The cumulative impacts associated with not developing the site are a loss of revenue in the local economy and the loss of potential jobs.

2.3 IMPACTS THAT MAY RESULT FROM THE OPERATIONAL PHASE

a. Site alternatives

Direct impacts:

Visual Intrusion & Light Pollution

- Alteration of the site will alter the visual characteristics of the site and the surroundings.
- Littering, rubbish and illegal dumping on the site is visually intrusive.
- The buildings and infrastructure may be visually intrusive.

Traffic

- Movement of vehicles to and from the area may increase traffic congestion.

Noise

- The noise emanating from the access roads may increase slightly in terms of the current noise levels.

Waste Generation & Disposal

- Waste should be properly managed as it may have a negative impact if not properly managed.

Socio-Economic

- The proposed development will lead to the increase and the level of local employment in the areas surrounding the development site. Both short-term and long-term employment will be created in this case.

Indirect Impacts:

Traffic

- Increase in traffic will not have a negative impact on the surrounding area.

Spread of Alien Vegetation

- Due to the disturbance of the site, alien plants will be able to establish and could become a problem by infesting neighbouring land.

Socio-Economic

- The proposed development will lead to the increase in the level of local employment in the areas surrounding the development. Both short-term and long-term employment will be created in this case.
- The development will lead to the increase in the number of tourists in the area.

Cumulative Impacts:

Surface Water Pollution

- Spillages of oil, lubricants and fuel from vehicles has the potential to contaminate surface water. This surface water will flow into the drainage areas. Flora and fauna in these areas where contamination occurs will die.

Increased run off of Water

- The increase in paved areas such as the roads and driveways will increase the amount of storm water runoff and thus reduce the infiltration of water into the groundwater. This may result in erosion of areas that are not paved.

BASIC ASSESSMENT REPORT

- Storm water run off has the potential to erode the topsoil and result in sedimentation on streams if not controlled.

Ground Water Pollution

- The construction phase will result in increased infiltration of contaminants into the ground water and soil.
- Spillages of oil, lubricants and fuel from the vehicles have the potential to contaminate the soil and groundwater. Flora in these areas where contamination occurs will die.

Socio-Economic

- The proposed development will lead to the increase the level local development in the areas surrounding the development site. Both short-term and long-term employment will be created in this case.
- The development will lead to the increase in the number of tourists in the area.

Faunal Displacement

- The displacement of fauna as a result of an increase in ambient noises, vibrations is likely to remain even with mitigation.

No-go Alternative (compulsory)

Direct impacts:

The direct impacts associated with the development not being constructed include:

- An increase in the number of aliens plants on the site as well as the possible infestation of neighbouring properties.
- The security of the adjacent site may be compromised by the vacant land adjacent. The grass cover becomes dense and high which is ideal cover for criminals.
- No jobs will be created. Thus there will be a loss of income in the local economy.

Indirect impacts:

Should the site not be developed the following indirect impacts associated with the construction phase will not occur:

- Increase in construction traffic volumes.
- The safety and security of the staff will not be a problem.

The indirect impacts associated with this development not being constructed include:

- The alien vegetation on site will increase which will reduce the amount of surface water reaching the rivers and the ground water will be reduced by the large numbers of thirsty alien plants.
- The alien plants may also expand onto neighbouring land.
- Industries that provide goods, materials and services will not benefit from the construction. Resulting in further loss of income in the local economy.
- Local communities will not have the benefit of the income of the visiting tourists.

Cumulative impacts:

The cumulative impacts associated with not developing the site area are loss of revenue in the local economy and the loss of jobs.

Indicate **Mitigation measures** to manage the potential impacts listed above:

Alternative S1

Soil & Groundwater Contamination

- Strict procedures for the management of the site must be developed and adhered to.
- Management must ensure that solid waste collection and sanitation is managed effectively in order to avoid any chances of ground and surface water pollution. Any temporary refuse storage areas must be placed on an impermeable/paved surface.
- Stormwater runoff from any roads should be carefully managed to ensure that excessive deposits of silt do not occur.

Visual Intrusion & Light Pollution

- Light pollution should be minimized.
- Lighting on site is to be sufficient for safe and security purposes, but shall not be intrusive to neighbouring residents or interfere with road traffic.
- Littering, rubbish and illegal dumping on the site is NOT allowed.
- Refuse must be contained and disposed of at the Municipal land fill site.
- Refuse bins must be provided.
- The buildings may not be visually intrusive.
- All lights used for non-security purposes should be energy efficient for example compact fluorescent lights (CFL).
- Outside lights will have to be downward shining (eyelid type), low wattage and should not be positioned

BASIC ASSESSMENT REPORT

- higher than 1 m above the ground surface.
- Fluorescent lamps give five times the light and last up to 10 times as long as ordinary bulbs.
- Areas that have been landscaped must be maintained.

Traffic

- The access route will need to meet certain criteria: It is recommended that these requirements be communicated with the local authority.
- Road surfaces in the immediate vicinity of the site should be monitored. If the road is damaged the relevant authority must be notified.
- Access to and from the site must not impact on the traffic.

Water Resource Management

- Water-saving devices should be installed in all kitchens and bathrooms in the houses and the use of dual flush toilets should also be considered.
- Toilets must be regularly checked to ensure that no water leakage occurs.
- Rainwater from the roofs of the buildings must be captured, stored, and utilized for irrigation of landscaped areas.

Waste Management

- Solid waste separation and recycling should take place for the duration of the operational phase.
- All waste must be removed promptly to ensure that it does not attract vermin or produce odours.
- Solid waste should be collected on a regular basis by the local authority.
- The National Environmental Management: Waste Act No. 59 of 2008) covers all aspects relating to waste management and must be adhered to at all times. Any other relevant legislation must also be adhered to.
- **NO** burning, on-site burying or dumping of waste shall occur.

b. Process, technology, layout or other alternatives.

Lit the impacts associated with process, technology, layout or other alternatives that are likely to occur during the operational phase

Alternative A1 (preferred alternative)

Direct impacts:

- Rainwater and storm water runoff harvesting will augment the water supply but reduce the water available for infiltration into the ground water.
- Water conservation measures will augment the water supply and reduce consumption of future municipal water and/or borehole water.
- The alternatives for waste management and disposal will not impact on the site as all types of waste will be collected by a recognised waste contractor and disposed of at an appropriate facility.

Indirect impacts:

- None identified.

Cumulative impacts:

- The reduction in the utilisation of water on site will reduce the strain on the water resources in the area.
- The reduction of waste on site will increase the waste entering the municipal and hazardous waste disposal system.

No-go Alternative (compulsory)

Direct impacts:

The direct impacts associated with the development not being constructed include:

- An increase in the number of aliens plants on the site as well as possible infestation of neighboring properties.
- The security of the adjacent site may be compromised by the vacant land adjacent. The grass cover becomes dense and high which is ideal cover for criminals.

Indirect impacts:

Should the site not be developed the following indirect impacts associated with the construction phase will not occur:

- The alien vegetation on site will increase which will reduce the amount of surface water reaching the rivers and the ground water will be reduced by the large numbers of thirsty alien plants.
- The alien plants may also expand onto neighboring land.
- Industries that provide goods, materials and services will not benefit from the construction. Resulting in further loss of income in the local economy.
- Local communities will not have the benefit of additional visiting tourists.

BASIC ASSESSMENT REPORT

Cumulative impacts:

- The cumulative impacts associated with not developing the site are loss of revenue in the local economy, the loss of jobs and a shortage in the affordable housing market.

Indicate **Mitigation measures** to manage the potential impacts listed above:

Alternative 1

- The water recycling system must be monitored and maintained on a regular basis.
- Waste must be reduced as much as possible.
- **NO** burning, on-site burning or dumping of waste shall occur.

2.4 IMPACTS THAT MAY RESULT FROM THE DECOMMISSIONING OR CLOSURE PHASE

a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the decommissioning or closure phase:

Alternatives S1 (preferred alternative)

Direct impacts:

The direct impacts associated with the decommissioning of the sites are likely to be similar to the construction phase.

- Surface water pollution
- Soil & groundwater pollution.
- Dust pollution
- Noise pollution
- Visual impact

The demolition of buildings and the removal of all the fittings will result in waste that needs to be disposed of.

Indirect impacts:

The indirect impacts associated with the decommissioning of the sites are likely to be similar to the construction phase.

- Construction traffic
- Security
- Spread of alien vegetation

Socio-Economic

- The decommissioning of the site will result in a loss of revenue for the local authority. In the short term the decommissioning phase will create jobs for many sectors and people.

Cumulative impacts:

The cumulative impacts associated with the decommissioning of the sites are likely to be similar to the construction phase.

- Surface water pollution
- Increased run off of water
- Ground water pollution
- Socio Economic losses

Faunal Displacement

- The displacement of fauna as a result of an increase in ambient noises, vibrations is likely to remain even with mitigation. However if the site is returned to a state as close to the natural vegetation type of the area there is a possibility that fauna may mitigate back over time.

No –go alternatives (compulsory)

Direct impacts:

As for continued operation.

Indirect impacts:

Spread of Alien Vegetation

- Due to the disturbance of the site alien plants will be able to establish and could become a problem and infest neighbouring land.

Safety & Security

- Safety of property and neighbouring properties may be compromised as a result of the fire risk associated with this development as well by crime.

Cumulative impacts:

Surface Water Pollution

- Spillages of oil, lubricants and fuel from construction vehicles, plant and machinery has the potential to contaminate surface water.

Increased run off of Water

- The increase in paved areas such as the roads and driveways and forecourt will increase the amount of storm water runoff and thus reduce the infiltration of water into the groundwater. This may result in erosion of areas that are not paved.
- Storm water runoff has the potential to erode the topsoil and result in sedimentation on streams if not controlled.

Ground Water Pollution

- The decommissioning phase will result in increased infiltration of contaminants into the ground water and soil.
- The clearing of the site will result in exposed soil surfaces which may be prone to erosion, creation of dust and sedimentation of streams
- Spillage of oil, lubricants and fuel from construction vehicles, plant and machinery has the potential to contaminate the soil and groundwater. Flora in these areas where contamination occurs will die.
- The storage of fuel and refuelling of construction vehicles, during the decommissioning phase must be conducted so as to prevent contamination of the soil and groundwater.

Socio Economic

- The decommissioning will lead to the decrease in the level of local employment in the areas surrounding the site. Both short-term and long-term employment will be lost in this case.

Indicate mitigation measures to manage the potential impacts listed above:

Alternatives S1

There is limited potential for decommissioning or closure of the recreation facilities due to the substantial establishment costs. Decommissioning of the recreation facilities would imply removal of the structures as they are tourism specific, this would produce demolition rubble which would need to be disposed of. Potential erosion and visual eyesore due to the absence of vegetation where the tourism facilities have been demolished.

b. Process, technology, layout or other alternatives

c.

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the decommissioning or closure phase (please list impacts associated with each alternative separately)

BASIC ASSESSMENT REPORT

Alternative A1 (preferred alternative)

Direct impacts:

None

Indirect impacts:

None

Cumulative impacts:

None

No-go alternative (compulsory)

Direct impacts:

None

Indirect impacts:

None

Cumulative impacts:

None

Indicate mitigation measures to manage the potential impacts listed above:

Alternative A1

Prior to decommissioning determine/confirm that nearest solid waste disposal site has capacity to accept demolition rubble – ensure all rubble is properly disposed of.

Re-vegetate site with indigenous ground cover/planting or replant indigenous grasses (depending on surrounding land use at the time) to minimize erosion potential.

Ensure future land use is compatible with prevailing surrounding land use and planning schemes at the time of decommissioning.

2.5. PROPOSED MONITORING AND AUDITING

For each of the project and for each alternative, please indicate how identified impacts and mitigation will be monitored and/or audited.

Alternative S1 (preferred site)

Environmental Management Programme (EMPr)

- The developer and the Contractors must sign that they have read and understand the EMPr.

Environmental Control Officer (ECO)

- An independent Environmental Control Officer (ECO) must be appointed.
- The ECO is responsible for the implementation of the EMPr during the construction phase. The ECO 's responsibility include the following:

1.Compliance Monitoring

Environmental monitoring of the construction of the proposed development will be undertaken by the ECO on a weekly basis during the first month where after monthly audits will be conducted by the ECO. These audits can be conducted randomly and do not require prior arrangement with the project manager. The ECO is responsible for the compliance monitoring on the site, specifically:

- Undertaking routine monitoring and appointing a competent person/institution to be responsible for specialist monitoring, if necessary.
- Ensuring compliance with the EMPr, Environmental Authorisation and any other conditions which may be imposed from time to time.
- Compilation of an audit report with a rating of compliance with the EMP. This report will be submitted to the relevant authorities.
- Reporting on any transgressions by the Contractor.
- Completing start-up, weekly, monthly and site closure checklists.
- Monitoring and verifying that environmental impacts are kept to a minimum.
- Monitoring the removal of person(s) and /or equipment not complying with the specifications.
- Ensuring that activities on site comply with legislation of relevance to the environment.

BASIC ASSESSMENT REPORT

- Check that the Environmental Daily Checklists are filled out on a daily basis.
- Ensure that the Incident and Environmental Log are up to date and all incidences have been dealt with correctly and timeously.
- Ensure that the Environmental Complaints Register is up to date and all complaints have been dealt with correctly and timeously.
- Undertaking a continual internal review of the EMPr and submitting a report to the developer and the responsible Environmental Official at the end of the project.

2. EMPr Monitoring

The main objective of the EMPr is to ensure that the activities carried out during the various phases of the development have a minimal NEGATIVE effect on the natural environment. It is therefore important to ensure that the EMPr is reaching that objective. This can be done through various monitoring programs designed for such a purpose. The ECO is responsible for these monitoring programmes.

- The EMPr must be continually monitored to determine its effectiveness and efficiency.
- Records of all activities discussed in the EMPr should be kept. These records should include any exceptions that may have been made (under permission of the ECO and appropriate authorities), problems that were experienced, methods used to rectify problems as well as the final outcome. This information can then be used to determine flaws in the EMPr. These flaws would be guidelines or recommendations that are ineffective and inefficient. They would then need to be removed or changed/adapted until they are effective and efficient.
- Records of non-compliance must be kept. These records must include details of the offence, offender and penalty.
- All aspects of the EMPr need to be monitored/ audited to ensure compliance and in order to remedy any problems with either the implementation of interpretation of the EMPr. These audits will assist in streamlining methods to avoid future conflict situations.

3. Construction Planning

The ECO will be responsible for:

- Ensuring that Method Statement's are submitted for the activities occurring on the site.
- Informing the Contractors of any decisions that are taken concerning the natural and social environment during the construction phase of the development.
- Informing the Contractors of the necessary corrective actions to be taken against employees transgressing the management activities stipulated in this EMPr.
- Liaison with Contractors regarding environmental management.
- Assisting the Contractors in finding environmental responsible solutions to problems.

4. Method Statement (MS)

MS's are to be completed by the person undertaking the work, the Contractor. The ECO will use the MS to audit compliance by the Contractor with the requirements of the approved MS.

5. Site Handover

The ECO will attend the site handover meeting, where the EMPr will form part of the agenda. Key environmental matters discussed at this meeting will be recorded and submitted as part of the environmental reporting. The construction site layout plan is a key component of site handover and must be finalized before site handover can be completed. The approved plan must be attached to the site handover meeting minutes. Amendments to this plan must be discussed and approved at subsequent site meetings.

6. Site Inspections and Meetings

The ECO will conduct regular compliance inspections and must attend key site meetings. The EMPr will be an agenda item of the monthly site meetings, and the responsible Environmental Official may attend these meetings in order to provide input with respect to compliance with the EMPr. The ECO is responsible for:

- Giving a report back on the environmental issues at the monthly site meetings and other meetings that may be called regarding environmental matters.
- Visiting the site on a regular basis to determine whether compliance with the terms and conditions of the Environmental Authorisation and the EMPr are being maintained.
- Inspecting the site and surrounding areas regularly with regard to compliance with the EMPr and will record the findings of the site inspection in a site inspection checklist, which will serve as the environmental compliance report.
- If any environmental matters occur at or in between the site meetings they must be reflected in written correspondence (email/fax/letter) directed or copied to the ECO. A copy of this correspondence must be placed in the environmental management files. Should it be deemed necessary the ECO must conduct a site visit and the matter must be recorded in the next inspection checklist.

7. Substantial Completion

The ECO will attend the substantial completion inspections.

8. Final Completion and Environmental Performance Certificate

Once the environmental items on the problem list have been addressed to the satisfaction of the ECO, the ECO will provide written signoff confirming that the environmental specifications applicable to the Contractor(s) have been met. This will be submitted to the Project Manager prior to the final Certificate of Completion being issued.

Alternative A1 (preferred alternative)

Same as Alternative S1

3. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential into account, please provide an environmental impact statement that summarizes the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative S1 (preferred site)

The current site determination was made by the following facts:

Location

The applicant plans to use this site, which is suitably and centrally located adjacent to similar landuses and access roads for the proposed development. Alternative locations are currently not available, and would thus involve lease or purchase of land / other sites. The suitability of the location has been assessed in detail during the detailed BA Report, but based on the initial scoping the proposed site is deemed suitable as a result of the following factors:

- Existing footprint of landuses directly adjacent which ensures that the proposed development will ensure integration of landuses.
- Disturbed area, difficult to rehabilitate.
- Good location adjacent to existing infrastructure and services.
- The site is adjacent to similar landuses.

Infrastructure

- There are a powerline on and adjacent to the site.

Road Access

- The development will get access from the existing collector roads bordering the site on both sides. These access roads will meet the requirements of the Local Authority.

Engineering Requirements

- The site is ideal for a tourist development in that the site varies in height

Socio-Economic

- Many of the direct, indirect and accumulative impacts already discussed in this report will have a positive impact of significance on the local community.

ENVIRONMENTAL IMPACT STATEMENT

The construction phase has the greatest impact on the environment even with mitigation. The negative impacts associated with the construction phase include:

- Soil and Ground Water Pollution
- Surface Water Pollution
- Increased runoff of Water
- Visual Intrusion & Light Pollution
- Destruction of Flora & Fauna
- Construction traffic & access
- Noise Pollution
- Atmosphere pollution and odours resulting from dust and construction equipment
- Safety & Security on the site
- Hygiene
- Spread of Alien Vegetation

The construction phase will be associated with positive socio-economic impacts in terms of job creation . A number of mitigation measures to reduce or improve impacts have been identified and are presented in the tables above. A key environmental imperative of the construction phase would be to prevent soil, air, water and noise pollution and erosion on the site.

The negative impacts relating to the operational phase include the following:

- Soil & Groundwater Contamination as a result of surface spillage of fuel and subsurface leaks (lines, tanks)
- Visual Intrusion & Light Pollution
- Movement of vehicles to and from the area and increased traffic congestion
- Noise Pollution
- Due to the disturbance of the site alien plants will be able to establish and could become a problem by infesting neighbouring land.

The primary positive impacts relate to the generation of a number of jobs and the provision of affordable housing units. A number of mitigation measure have been identified to reduce the potential negative impacts.

BASIC ASSESSMENT REPORT

A number of cumulative negative impacts have been identified in the operational phase of the proposed development, for example Surface Water Pollution, Increased run off of water, Ground water pollution and Faunal Displacement. If the mitigation measures outlined in the report are implemented the cumulative impacts should be nullified with the only exception being the faunal displacement.

The construction phase will be of short duration and operational phase will have limited environmental impacts if constructed according to the conditions outlined in this report and if managed according to the EMP. Thus the proposed development is supported from an environmental perspective.

Alternative A1 (preferred alternative)

Same as Alternative S1

No-go Alternative (compulsory)

The positive socio-economic activities in terms of job creation would not occur.

SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES X	NO
YES X	NO

Is an EMPr attached?

The EMPr must be attached as Appendix F.

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

No specific conditions are recommended to be included in the authorization that may be granted by the competent authority, other than specifying that all stipulations and recommendations in the Environmental Management Programme (EMPr) be strictly adhered to. See Appendix F.

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Comments and responses report

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information