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Department:
 Environment & Nature Conservation
 NORTHERN CAPE PROVINCE
 REPUBLIC OF SOUTH AFRICA

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	(For official use only)
File Reference Number:	
Application Number:	
Date Received:	

Basic Assessment Report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

- This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 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.
- This report format is current as of **08 December 2014**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
- 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.
- Where applicable **tick** the boxes that are applicable in the report.
- An incomplete report may be returned to the applicant for revision.
- 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.
- This report must be handed in at offices of the relevant competent authority as determined by each authority.
- No faxed or e-mailed reports will be accepted.
- The signature of the EAP on the report must be an original signature.
- The report must be compiled by an independent environmental assessment practitioner.
- 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.
- A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
- Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.

THE PROPOSED BUSINESS HUB DEVELOPMENT ON ERF 4440, KURUMAN, NORTHERN CAPE

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.		

- **ACTIVITY DESCRIPTION**

a) **Describe the project associated with the listed activities applied for**

The Sishen Iron Ore Company Community Development Trust is proposing that a portion of Erf 4440, Kuruman be subdivided and rezoned to Business Zone I, for a business development and associated infrastructure, details of which will be provided later in the process. The site is located on the corner of Seodin Road and Cunningham Ave, north-east of the Kuruman CBD.

The development will consist of a two-storey building and parking area. The buildings will consist of multi-levels with maximum double storey complex configured with containers.

The total area to be developed measures approximately 0.5 hectare (5 000m²).

Site co-ordinates: 27° 27' 10.90" S, 23° 26' 13.16" E.

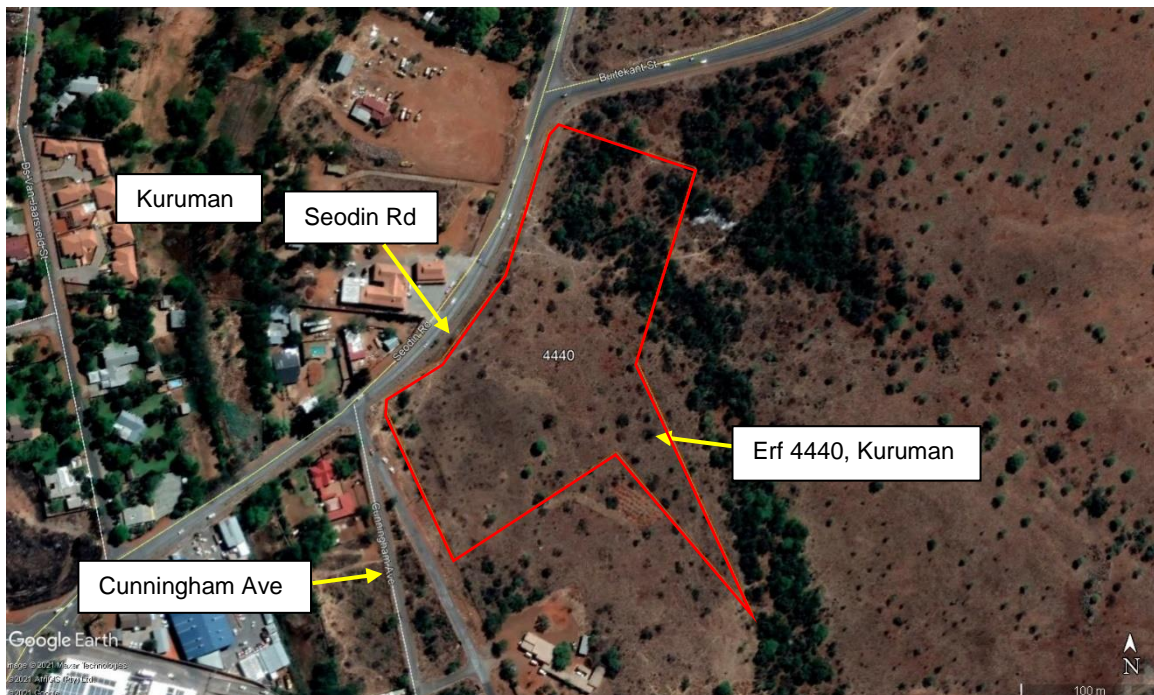
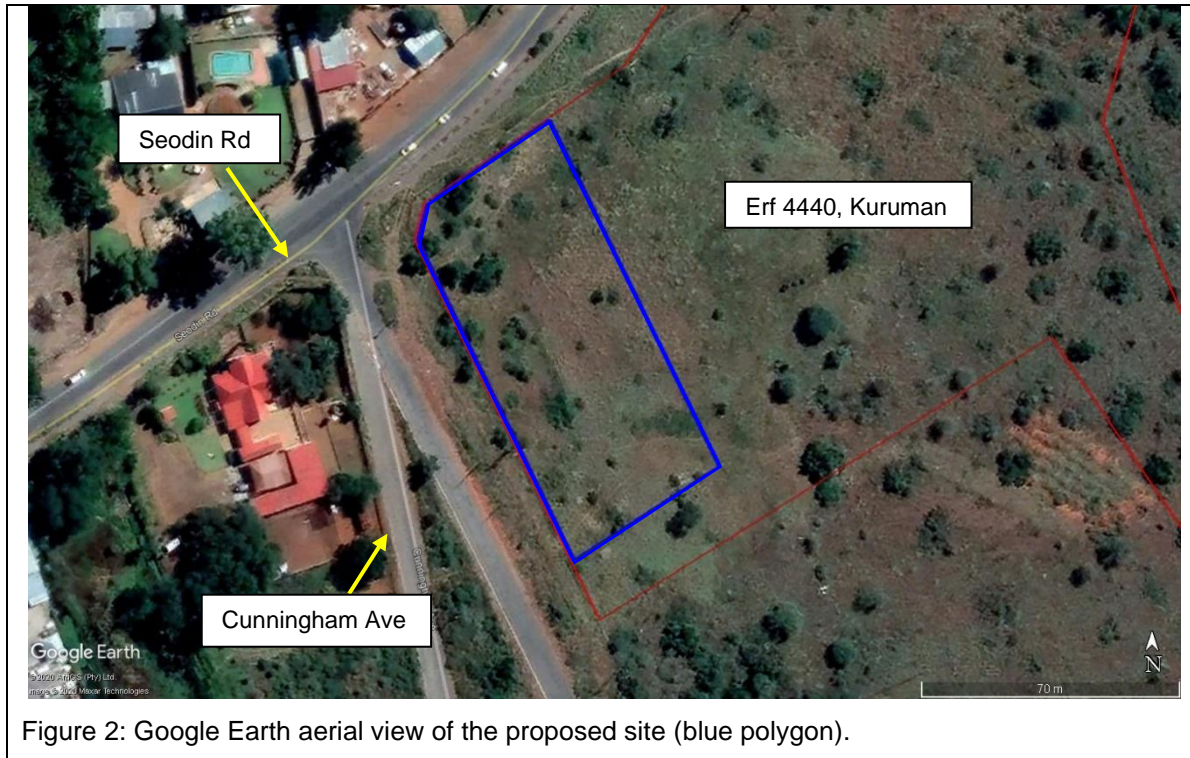


Figure 1: Google Earth Aerial view of the property.



b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN 324, 325 and 327	Description of project activity
<p><u>GN 327 Activity 12:</u> The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</p> <p>Northern Cape</p> <ul style="list-style-type: none"> i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; ii. Within critical biodiversity areas identified in bioregional plans; iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuary, whichever distance is the greater, excluding where such removal will occur 	<p>More than 300m² of vegetation will be cleared. The site is within a CBA.</p>

<p>behind the development setback line on erven in urban areas.</p> <p>On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning.</p>	
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• **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 as required by Appendix 1 (3)(h), Regulation 2014. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) 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.

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, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

a) Site alternatives

Property alternatives are limited, as the property is owned by the Applicant. There is ample area on the property for various site alternatives within the property, however, these would not be viable. The preferred Site alternatives is located on the far western corner of the property, leaving the rest of the property undeveloped. This is considered the best site location as it will not fragment the property, and is closest to the surrounding developed area.

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)

Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

In the case of linear activities:

Alternative:	Latitude (S):	Longitude (E):
Alternative S1 (preferred)		
• Starting point of the activity		
• Middle/Additional point of the activity		
• End point of the activity		
Alternative S2 (if any)		
• Starting point of the activity		
• Middle/Additional point of the activity		
• End point of the activity		

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.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A of this form.

b) Lay-out alternatives

There are no feasible layout alternatives that were considered

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
There are no feasible alternative layouts considered that would mitigate any potential environmental impact, as the entire development site will be developed, and is limited between the parking area and the buildings.		
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

c) Technology alternatives

No technology alternatives were considered.

Alternative 1 (preferred alternative)
Alternative 2

Alternative 3

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)
The proposed building will be constructed out of shipping containers. This option is preferred over conventional building practices (brick and mortar construction), since it will use less natural resources (water, cement, bricks etc.) to construct.
Alternative 2
Alternative 3

e) No-go alternative

<p>This would mean that no-development would take place and the proposed site will remain as is. The business and innovation hub will not be constructed, and its benefits to the business community, especially on SMME (Small, Medium and Micro Enterprises) will not be realised.</p> <p>Although this option would result in no significant potential negative environmental impacts, the positive socio-economic benefits from implementing the activity would not be achieved.</p> <p>The no-go option would only have been recommended if it were found that the construction of the proposed development on this site or in this area might potentially cause substantial detrimental harm to the environment.</p> <p>According to the Biodiversity Assessment (Appendix D1), the No-Go option is not likely to result in a “no-impact” scenario, as constant slow degradation is expected to continue as a result of urban activities and grazing in and around the site.</p>

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

• **PHYSICAL SIZE OF THE ACTIVITY**

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

Alternative:	Size of the activity:
Alternative A1 (preferred activity alternative)	5000m ²
Alternative A2 (if any)	m ²
Alternative A3 (if any)	m ²

or, for linear activities:

Alternative:	Length of the activity:
Alternative A1 (preferred activity alternative)	m
Alternative A2 (if any)	m

Alternative A3 (if any)		m
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b) **Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):**

Alternative:		Size of the site/servitude:
Alternative A1 (preferred activity alternative)		m ²
Alternative A2 (if any)		m ²
Alternative A3 (if any)		m ²

• **SITE ACCESS**

Does ready access to the site exist?	YES	NO
If NO, what is the distance over which a new access road will be built	N/A	

Describe the type of access road planned:

No new access roads will be required. Direct access will be from Cunningham Ave.
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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.

• **LOCALITY MAP**

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s);
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (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).

- **LAYOUT/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:

- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

- **SENSITIVITY MAP**

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWS);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

- **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 report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

- **FACILITY ILLUSTRATION**

A detailed illustration of the activity must be provided at a scale of at least 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.

• **ACTIVITY MOTIVATION**

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

<ul style="list-style-type: none"> • Is the activity permitted in terms of the property's existing land use rights? 	YES	NO	Please explain
<p>The portion of Erf 4440 will need to be rezoned from Authority Zone II to Business zone. The rezoning Application in terms of SPLUMA will be conducted of the NEMA Application</p>			
<ul style="list-style-type: none"> • Will the activity be in line with the following? 			
<ul style="list-style-type: none"> (a) Provincial Spatial Development Framework (PSDF) 	YES	NO	Please explain
<p>Unknown</p>			
<ul style="list-style-type: none"> (b) Urban edge / Edge of Built environment for the area 	YES	NO	Please explain
<p>The site is located on the edge of the Kuruman CBD. The proposed business development will however be an extension of the existing business areas located to the west of the study area.</p>			
<ul style="list-style-type: none"> (c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?). 	YES	NO	Please explain
<p>According to the Ga-Segonyana Municipality Integrated Development Plan (IDP)(2019-2020), Strategic Goal F1: Create a conducive environment for prosperous business investment: Smart Objective: To create a platform for economic growth opportunities and job creation through continuous promotion of Ga-Segonyana as ideal investment destination.</p>			
<ul style="list-style-type: none"> (d) Approved Structure Plan of the Municipality 	YES	NO	Please explain
<p>The proposed development, business premises to accommodate a business and innovation hub, especially focussed on SMME (Small, Medium and Micro Enterprises) development, which will be implemented upon the approval of this land use change proposal, will address a need that has been identified by the proposed buyer, Sishen Iron Ore Company Community Development Trust. The space that will be created for businesses such as these is much needed as it will specifically cater to the needs of such smaller businesses, thereby strengthening their position and chances at success. At present no specific space in Kuruman is set apart for such development, as such there truly exists a need to provide such a space.</p> <p>Furthermore, the involved property is in municipal ownership at present and a formal council decision was taken by the local authority to provide land for this purpose, for purchasing by SIOC Cdt, at this location.</p>			

<p>(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)</p>	YES	NO	Please explain
<p>No EMF was identified</p>			
<p>(f) Any other Plans (e.g. Guide Plan)</p>	YES	NO	Please explain
<p>• Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?</p>	YES	NO	Please explain
<p>• Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)</p>	YES	NO	Please explain
<p>The proposed development, business premises to accommodate a business and innovation hub, especially focussed on SMME (Small, Medium and Micro Enterprises) development, which will be implemented upon the approval of this land use change proposal, will address a need that has been identified by the proposed buyer, Sishen Iron Ore Company Community Development Trust. The space that will be created for businesses such as these is much needed as it will specifically cater to the needs of such smaller businesses, thereby strengthening their position and chances at success. At present no specific space in Kuruman is set apart for such development, as such there truly exists a need to provide such a space.</p> <p>Furthermore, the involved property is in municipal ownership at present and a formal council decision was taken by the local authority to provide land for this purpose, for purchasing by SIOC Cdt, at this location.</p> <p>The proposed development will also provide job opportunities for the community during the construction phase.</p>			
<p>• Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p>	YES	NO	Please explain
<p>According to the Engineering Services Report (Appendix D5), sufficient services and adequate capacity is available.</p>			

<ul style="list-style-type: none"> • Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.) 	YES	NO	Please explain
<p>The involved property is in municipal ownership at present and a formal council decision was taken by the local authority to provide land for this purpose, for purchasing by SIOC Cdt, at this location.</p>			
<ul style="list-style-type: none"> • Is this project part of a national programme to address an issue of national concern or importance? 	YES	NO	Please explain
<ul style="list-style-type: none"> • Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.) 	YES	NO	Please explain
<p>The identified section of land that is subject to the proposed land use changes is not formally developed at present. The proposed development, at this specific location, is extremely suitable as it will merely be an extension of the existing business character of the business area located west thereof. Access to the site will take place via Seodin Road, which is located north-west of the involved property along the north-western property boundary. The site characteristics is not problematic as the site has a very even slope and no topographical or geotechnical anomalies, that is cause for concern, is to be found on site.</p>			
<ul style="list-style-type: none"> • Is the development the best practicable environmental option for this land/site? 	YES	NO	Please explain
<p>The proposed development will result in the loss of indigenous vegetation over the site, however, the Kuruman Thornveld is considered least threatened, although it is also poorly protected. Although the proposed site does fall within any CBA, no red-listed species was observed during the site visit, no species protected in terms of NEM: BA was encountered, and only two Vachelia erioloba (Camel Thorn), species protected in terms of the NFA, was observed within the proposed footprint (although it is possible that these two camel thorns may be preserved as they are within a green, landscaped area.</p> <p>it is also unlikely that any significant archaeological resources will be impacted.</p> <p>The site is also likely to deteriorate in future if no development takes place. According to the Botanical Assessment, as constant slow degradation is expected to continue as a result of urban activities and grazing in and around the site.</p>			
<ul style="list-style-type: none"> • Will the benefits of the proposed land use/development outweigh the negative impacts of it? 	YES	NO	Please explain
<p>No significant negative environmental impacts are expected by the proposed development and the benefits are expected to outweigh any negative impacts.</p>			

<ul style="list-style-type: none"> • Will the proposed land use/development set a precedent for similar activities in the area (local municipality)? 	YES	NO	Please explain
Unknown			
<ul style="list-style-type: none"> • Will any person's rights be negatively affected by the proposed activity/ies? 	YES	NO	Please explain
No person's rights are expected to be negatively affected by the proposed development. The activity is expected to have a general positive impact on the surrounding area.			
<ul style="list-style-type: none"> • Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality? 	YES	NO	Please explain
The site is located on the edge of built-up area of Kuruman. The proposed business development will be an extension of the existing business areas located to the west of the site.			
<ul style="list-style-type: none"> • Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)? 	YES	NO	Please explain
<ul style="list-style-type: none"> • What will the benefits be to society in general and to the local communities? 	Please explain		
<p>The project will provide job opportunities during the construction and the operational phase.</p> <p>This development has the potential to provide an economic injection in the local community, by means of creating employment opportunities.</p> <p>The proposed development, business premises to accommodate a business and innovation hub, especially focussed on SMME (Small, Medium and Micro Enterprises) development, which will be implemented upon the approval of this land use change proposal, will address a need that has been identified by the proposed buyer, Sishen Iron Ore Company Community Development Trust. The space that will be created for businesses such as these is much needed as it will specifically cater to the needs of such smaller businesses, thereby strengthening their position and chances at success. At present no specific space in Kuruman is set apart for such development, as such there truly exists a need to provide such a space.</p> <p>Furthermore, the involved property is in municipal ownership at present and a formal council decision was taken by the local authority to provide land for this purpose, for purchasing by SIOC Cdt, at this location.</p>			
<ul style="list-style-type: none"> • Any other need and desirability considerations related to the proposed activity? 	Please explain		
N/A			
<ul style="list-style-type: none"> • How does the project fit into the National Development Plan for 2030? 	Please explain		
N/A			

• **Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.**

The general objectives of Integrated Environmental Management have been taken into account through the following:

- The actual and potential impacts of the activity on the environment, socio-economic conditions and cultural heritage have been identified, predicted and evaluated, as well as the risks and consequences and alternatives and options for mitigation of activities, with a view to minimizing negative impact, maximizing benefits and promoting compliance with the principles of environmental management – *please refer to Section D below.*
- The effects of the activity on the environment have been considered before actions taken in connection with them – *alternatives have been considered and investigated (please refer to Section A below).*
- Adequate and appropriate opportunity for public participation was ensured through the public participation process – *please refer to Section C for the public participation information, including the list of identified Interested and Affected parties, as well as the methods for identifying and informing I&APs of the application and proposed activity.*
- The environmental attributes have been considered in the management and decision-making of the activity – *an EMP has been included (Appendix G) with the proposed activity and must adhere to the requirements of all applicable state Authorities.*

• **Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.**

The principles of environmental management as set out in section 2 of NEMA have been taken into account. The principles pertinent to this activity include:

- People and their needs have been placed at the forefront while serving their physical, psychological, developmental, cultural and social interests – *the proposed activity will have a beneficial impact on people, as it will provide much needed additional housing opportunities.*
- Development must be socially, environmentally and economically sustainable. Where disturbance of ecosystems, loss of biodiversity, pollution and degradation, and landscapes and sites that constitute the nation's cultural heritage cannot be avoided, are minimised and remedied.
- Where waste cannot be avoided, it is minimised and remedied through the implementation and adherence of EMP.
- The use of non-renewable natural resources is responsible and equitable – *no exploitation of non-renewable natural resources occurs with the proposed activity.*
- The negative impacts on the environment and on people's environmental rights have been anticipated and prevented, and where they cannot be prevented, are minimised and remedied - *refer to Section F below.*
- The interests, needs and values of all interested and affected parties have been taken into account in any decisions through the Public Participation Process – *please refer to Section C for the public participation information.*
- The social, economic and environmental impacts of the activity have been considered, assessed and evaluated, including the disadvantages and benefits – *refer to Section B below.*
- The effects of decisions on all aspects of the environment and all people in the environment have been taken into account, by pursuing what is considered the best practicable environmental option – *the proposed activity is expected to have minimal/negligible environmental impacts, especially after mitigation measures as described under Section D and E and in the EMP are implemented.*

• **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	Applicability to the project	Administering authority	Date
National Water Act	Water Use Licence	Department of Water and Sanitation	Not yet
SPLUMA	Rezoning	Local Municipality	Not yet
Northern Cape Nature Conservation Act, Act 9 of 2009	NCNCA Protected plant species located on the site	Department of Environment and Nature Conservation (DENC)	Not yet

• **WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT**

a) **Solid waste management**

Will the activity produce solid construction waste during the construction/initiation phase?	YES	NO
If YES, what estimated quantity will be produced per month? Unknown	m ³	

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

The general solid waste generated during construction will be consolidated on site during construction and disposed of at the nearest approved municipal landfill site.

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

The general solid waste generated during construction will be consolidated on site during construction and disposed of at the nearest approved municipal landfill site.

Will the activity produce solid waste during its operational phase?	YES	NO
If YES, what estimated quantity will be produced per month?	m ³	
How will the solid waste be disposed of (describe)?		
Solid waste is expected to be generated during the operational phase. Solid waste will be disposed of via the municipal waste stream.		
If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.		
Nearest registered landfill site in Kuruman		
Where will the solid waste be disposed of if it does not feed into a municipal waste stream (describe)?		
N/A		

If the solid waste (construction or operational phases) will not be disposed of in 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 NEM:WA?	YES	NO
If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.		

Is the activity that is being applied for a solid waste handling or treatment facility?	YES	NO
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. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.		

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	YES	NO
If YES, what estimated quantity will be produced per month? Please refer to Section 4.3 of the Engineering Services Report (Appendix D5).		
Will the activity produce any effluent that will be treated and/or disposed of on site?	YES	NO
<i>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.</i>		

Will the activity produce effluent that will be treated and/or disposed of at another facility?	YES	NO
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:

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c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other than exhaust emissions and dust associated with construction phase activities?	YES	NO
If YES, is it controlled by any legislation of any sphere of government?	YES	NO

If YES, the applicant must 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:

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?	YES	NO
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If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?	YES	NO
If YES, is it controlled by any legislation of any sphere of government?	YES	NO
Describe the noise in terms of type and level:		
The activity is not expected to produce significant noise that would be a nuisance to any nearby residents.		

• 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: Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs? If YES, please provide proof that the application has been submitted to the Department of Water Affairs.	N/A	
	YES	NO

Please note that this application is for the desalination of groundwater currently being extracted from boreholes, as well as any additional boreholes that will be required.

• ENERGY EFFICIENCY

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

N/A

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

N/A

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 B and indicate the area, which is covered by each copy No. on the Site Plan.

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

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

<ul style="list-style-type: none">Has a specialist been consulted to assist with the completion of this section?	YES	NO
If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.		

Property description/physical address:	Province	Northern Cape	
	District Municipality	John Taolo District Municipality	
	Local Municipality	Ga-Segonyana Local Municipality	
	Ward Number(s)		
	Farm name and number	Erf 4440	
	Portion number		
	SG Code	C04100030000444000000	
	Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.		
Current land-use zoning as per local municipality IDP/records:	Authority Zone		
	In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.		
Is a change of land-use or a consent use application required?		YES	NO

- 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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- LOCATION IN LANDSCAPE**

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

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

- GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE**

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

	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.

- **GROUNDCOVER**

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

Natural veld in 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.

- **SURFACE WATER**

Indicate the surface water present on and or adjacent to the site and alternative sites?

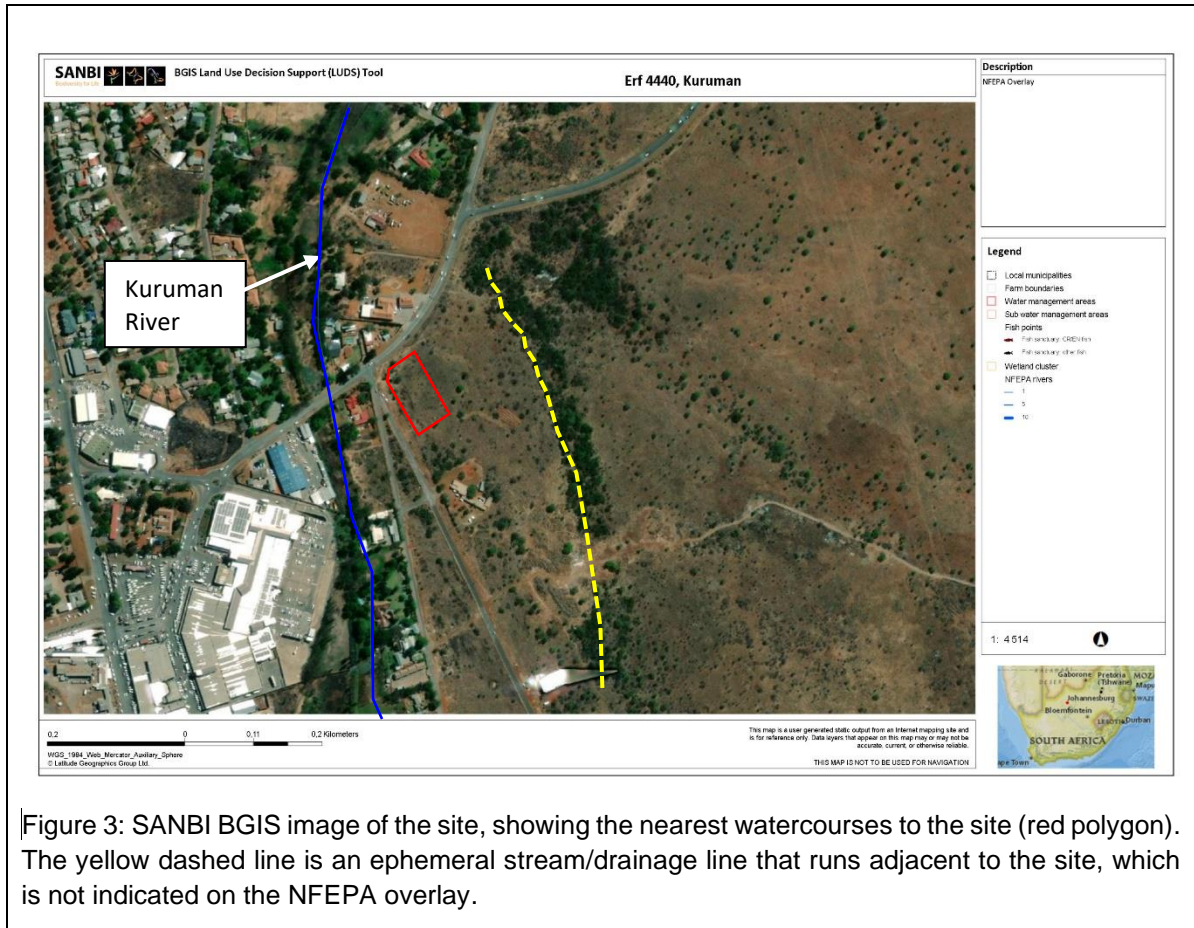
Perennial River	YES	NO	UNSURE
Non-Perennial River	YES	NO	UNSURE
Permanent Wetland	YES	NO	UNSURE
Seasonal Wetland	YES	NO	UNSURE
Artificial Wetland	YES	NO	UNSURE
Estuarine / Lagoonal wetland	YES	NO	UNSURE

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

There are no watercourses on the proposed site. According to the SANBI BGIS NFEPA overlay, the nearest watercourse to the site is the Kuruman River which is located approximately 85m from the proposed site.

Although not indicated on the NFEPA overlay, there is also a drainage line on the eastern boundary of the property, but is at least 170m away from the proposed site.

According to the Freshwater Report (**Appendix D2**), the drainage line is densely overgrown with mainly sweet thorn trees (*Vachellia karoo*). There was a camel thorn tree (*Vachellia erioloba*) as well.



- **LAND USE CHARACTER OF SURROUNDING AREA**

Indicate land uses and/or prominent features that 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:

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ^H
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church	Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland
Light industrial	Sewage treatment plant ^A	Nature conservation area
Medium industrial ^{AN}	Train station or shunting yard ^N	Mountain, koppie or ridge
Heavy industrial ^{AN}	Railway line ^N	Museum
Power station	Major road (4 lanes or more) ^N	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	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? Specify and explain:

No impacts are expected.

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

No impacts are expected.

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

N/A

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	NO
Core area of a protected area?	YES	NO
Buffer area of a protected area?	YES	NO
Planned expansion area of an existing protected area?	YES	NO
Existing offset area associated with a previous Environmental Authorisation?	YES	NO
Buffer area of the SKA?	YES	NO

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A

• **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? If YES, explain:	YES	NO
	Uncertain	
<p>According to the Heritage Impact Assessment (Appendix D3), one isolated incidence of MSA lithic material was recorded across the property. The material includes a retouched flake or point made from Banded Ironstone Formation (BIF). The material was documented as a surface scatter, with no archaeological context. The resources will be affected negatively by the proposed development, but due to the low significance of the material, the impact is negligible. An unfenced graveyard is located adjacent, to the southeast of the property. Construction activities may affect this site negatively, and therefore mitigation is recommended. The proposed project will not lead to detrimental impacts on the palaeontological resources of the area.</p> <p>It must be noted that no archaeological resources or graves were identified in the proposed development footprint.</p>		

If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

Will any building or structure older than 60 years be affected in any way?	YES	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO
If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.		
Please note that the site is larger than 5 000m ² and the character of the site will change. The project is therefore subject to Section 38(1) of the NHRA. The project will be registered with SAHRA through SAHRIS.		

• **SOCIO-ECONOMIC CHARACTER**

a) **Local Municipality**

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

According to Municipalities.co.za, Ga-Segonyana Municipality had an unemployment rate of 33.7% in 2011. No later unemployment figures could be found

Economic profile of local municipality:

According to the Ga-Segonyana Municipality Final IDP 2019-2020, the finance and business services sector is a relatively significant contributor to GDP and shows good growth. It is a consumption sector therefore its strength is dependent on other sectors that generate wealth.

Level of education:

According to the Ga-Segonyana Municipality Final IDP 2019-2020, 30% of the population had a Grade 12 as highest level of education.

b) **Socio-economic value of the activity**

What is the expected capital value of the activity on completion?	Unknown at this stage	
What is the expected yearly income that will be generated by or as a result of the activity?	Unknown at this stage	
Will the activity contribute to service infrastructure?	YES	NO
Is the activity a public amenity?	YES	NO
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	Unknown at this stage	

What is the expected value of the employment opportunities during the development and construction phase?	Unknown at this stage
What percentage of this will accrue to previously disadvantaged individuals?	Unknown at this stage
How many permanent new employment opportunities will be created during the operational phase of the activity?	Unknown at this stage
What is the expected current value of the employment opportunities during the first 10 years?	Unknown at this stage
What percentage of this will accrue to previously disadvantaged individuals?	Unknown at this stage

• **BIODIVERSITY**

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult <http://bgis.sanbi.org> or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

- a) **Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)**

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	The site is located within a CBA identified on SANBI BGIS, See also below and see the Botanical Assessment (Appendix D1)

According to the Botanical Assessment (**Appendix D1**), According to the Northern Cape CBA maps the proposed site falls within a CBA area, but also within the urban edge of Kuruman. There is no alternative on the property that will not impact on the CBA.



Figure 4: The Northern Cape Critical Biodiversity Areas Map indicating the location of the development (red).

b) Indicate and describe the habitat condition on site

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	100%	According to the Botanical Assessment (Appendix D1), the area investigated was about 4.1 ha in size covered in Kuruman Thornveld in fair to good condition. The site itself showed little signs of previous disturbance, but had been somewhat degraded by littering and illegal dumping. The vegetation can be described as a well-developed closed herbaceous bottom layer dominated by grass, with a well-developed open tree top layer consisting mostly of <i>Vachellia erioloba</i> . In the northern corner denser woodlands were observed, consisting of a mixture of trees, dense shrubs and climbers.
Degraded (includes areas heavily invaded by alien plants)	0%	

Transformed (includes cultivation, dams, urban, plantation, roads, etc)		
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c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, present on the site; and
- (ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		Aquatic Ecosystems								
Ecosystem threat status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	Critical	Wetland (including rivers, depressions, channelled and unchannelled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline			
	Endangered									
	Vulnerable									
	Least Threatened	YES	NO	UNSURE	YES	NO	YES	NO		

d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

The site would historically have been covered in Kuruman Thornveld (Least Threatened).

According to the Biodiversity Assessment (**Appendix D1**), the area investigated was about 4.1 ha in size, covered in very homogenous vegetation, apart from a denser patch of woodland in the northern corner of the site. The site itself showed little signs of previous disturbance, but had been somewhat degraded by littering and illegal dumping. The denser woodlands in the northern corner also showed signs of people using it for shelter (overnight sleeping area). Carbonate bedrocks of the Cambellrand Subgroup were observed, but generally poorly exposed and karstified near-surface.

In general the vegetation can be described as well-developed closed herbaceous layer dominated by grass varying between 0.7 – 1.5 m in height, with a well-developed open tree top layer consisting mostly of *Vachellia erioloba* which can be between 3 – 10 m in height. In the northern corner denser woodlands (which could reach up to 12 m in height) were observed, consisting of a mixture of trees, dense shrubs and climbers.

Although the Northern Cape in general was still in the grips of a severe drought, Kuruman had experienced recent rains, which could be seen in the dense grassy layer and various annual plants that were visible during the site visit.

The vegetation is typical of Kuruman Thornveld (which is typically not very rich in species). The top tree layer dominated by *Vachellia erioloba* trees often in association with the following small trees; *Diospyros lycioides*, *Grewia flava*, *Gymnosporia buxifolia*, *Tarchonanthus camphorates*, *Searsia lancea*, *Senegalia mellifera*, *Vachellia karroo*, *Ziziphus mucronata* and with larger shrubs like: *Ehretia alba* and *Lycium hirsutum*

The herbaceous layer included the shrubs; *Geigeria ornativa*, *Grewia flava*, *Elephantorrhiza elephantina*, *Ehretia alba*, *Helichrysum* species, *Lasiosiphon polycephalus*, *Senegalia mellifera*, *Senna italica*, *Tarchonanthus camphorates*, *Vachellia hebeclada* the herbs, *Citrullus lanatus*, *Clematis brachiata* (old man's beard), *Geigeria ornativa*, *Justicia spartioides*, *Leonotis cf. ocymifolia*, *Melolobium macrocalyx*, *Momordica balsamina* (laloentjie), *Moraea cf. polystachya*, *Ooptera burchellii*, *Sesamum capense* and a number of grasses, including *Aristida meridionalis*, *Enneapogon cenchroides*, *Eragrostis lehmanniana* and *Stipagrostis uniplumis*.

The denser woodland was dominated by *Vachellia karroo*, *Searsia lancea* and *Vachellia erioloba* together with smaller trees and shrubs like, *Diospyros lycioides*, *Grewia flava*, *Gymnosporia buxifolia*, *Lycium hirsutum*, *Ziziphus mucronata* and climbers like *Momordica balsamina*, *Ooptera burchellii* and *Pergularia daemia* (bobbejaankambro).

Two mature *Vachellia erioloba* trees are found within the development footprint. However, they are located on the north-western boundary, and are possibly located with an area identified as landscaping with the site development plan, and can likely be retained.



Figure 5: Vegetation Map indicating the location of the development (red). The site is located within Kuruman Thornveld (Least Threatened).

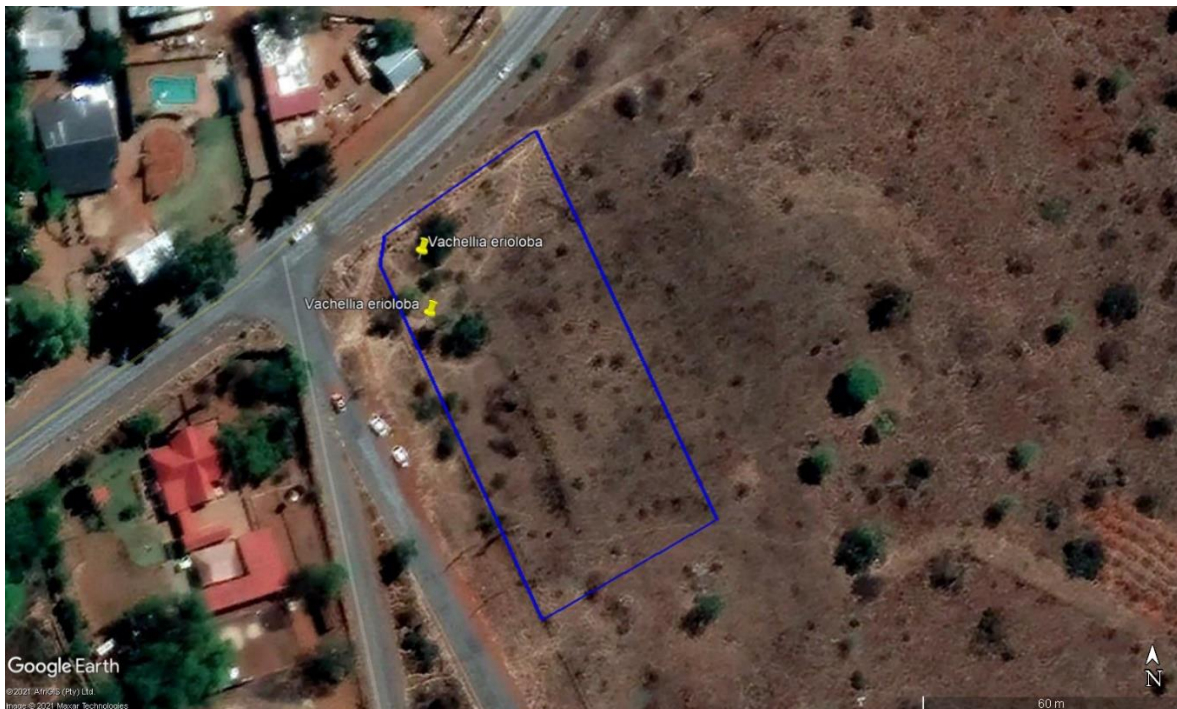


Figure 6: Google Earth image indicating the location of the two Camel Thorns (*Vachellia erioloba*) within the development footprint.

SECTION C: PUBLIC PARTICIPATION

• ADVERTISEMENT AND NOTICE

Publication name	Kalahari Bulletin	
Date published	18 June 2020	
Site notice position	Latitude	Longitude
Date placed	See Appendix E1	

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

• DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 733.

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 733

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

• ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
No comments were received during the initial PPP period	
Traffic - Traffic congestion at the Seodin and Cunningham Ave intersection is a daily thing. The proposal will add to an increase in traffic in this area, especially from the Seodine Road side. A request is made to upgrade the flow and control of traffic at this T-junction.	A Traffic Impact Assessment (TIA) has been conducted (please refer to Appendix D6). According to the TIA, additional traffic generated by the new innovation and business hub will not have a significant impact on the surrounding road network. No upgrades are proposed as a result of the development.

<p>Water – Ensure water pressure is not significantly impacted on Cunningham Ave.</p>	<p>The TIA recommended that both the Seodin Rd/ Cunningham Ave and Seodin Rd/ Buitekant St intersections be upgraded to roundabouts.</p> <p>According to Engineering Services Report (Appendix D5), the existing available pressures on the system are adequate and the development is unlikely to affect the residual pressure substantially.</p>
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- **COMMENTS AND RESPONSE REPORT**

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR 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 the Final BAR as Appendix E3.

- **AUTHORITY PARTICIPATION**

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	Fax No	e-mail	Postal address
NC Department of Agriculture & Land Reform	W. Mothibi (HOD)	(053)838 9102			Private Bag X5018, Kimberley, 8300
Department of Cooperative Governance, Human Settlements and Traditional Affairs (NC)	Gladys Botha	053 830 9513			Private Bag X5005, Kimberley, 8300
Department of Social Development	E. Botes				Private Bag X5042, Kimberley, 8300
Department Economic Development and Tourism	H. Samson				Private Bag X6108, Kimberley, 8300
Department of Roads and Public Works	K. Nogwili (HOD)	(053)839 2241			P O Box 3132, Kimberley, 8300
Northern Cape Economic Development, Trade and Investment	Thobela Dikeni				2nd Floor, Templar Court Building, Bean Street, Kimberley, 8301

Promotion Agency (NCEDA)					
Department : Environment, Forestry and Fisheries; Directorate Forestry Management	J. Mans	054 338 5909		JMans@environment.gov.za	PO Box 2782, Upington, 8800
Department of Water and Sanitation	A. Abrahams	053 830 8803	053 831 4534		28 Central Road, Beaconsfield, Kimberley, 8301
Department of Water and Sanitation - Northern Cape	R. Mazwi	053 7731239			Private Bag X6101, Kimberley, 8300

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

- **CONSULTATION WITH OTHER STAKEHOLDERS**

Note that, for any activities (linear or other) 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.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 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.

- **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**

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts 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. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

Activity	Impact summary	Significance	Proposed mitigation
Alternative 1 (preferred alternative)			
	<p>Direct impacts:</p> <p>Potential impact on freshwater ecosystems</p> <p>*Please note that the below impacts assessed are based on the assumption that the entire erf (4ha) would be developed. The anticipated significance rating for the development of the proposed 0.5ha site will also be given.</p>		
	Construction of the new urban complex. Destruction of the drainage line.	Low (after mitigation) (entire erf)	Leave trees, wherever possible.
	Construction of the new urban complex. Contaminated runoff reaching the river.	Negligible (proposed development) Low (after mitigation) (entire erf)	Due vigilance. Prevent rubble and pollutants reaching the river. Develop the last reach of the drainage line as a biological filter.
	Operation of the new complex. Litter down the drainage line and into the river.	Very Low (proposed development) Low (after mitigation) (entire erf)	Proper solid waste management

		Negligible (proposed development)	
	<p>Biodiversity impacts:</p> <p>Land-use and Cover: Possible impact on socio-economic activities as a result of the physical footprint or associated activities.</p> <p>Vegetation Status: Possible loss of vulnerable or endangered vegetation and associated habitat.</p> <p>Conservation Priority Areas: Possible impact on Protected areas, CBA, ESA or centres of endemism.</p> <p>Connectivity: Possible loss of identified terrestrial and aquatic critical biodiversity areas, ecological support areas or ecological corridors.</p> <p>Protected and Endangered Plant Species: Potential impact on threatened or protected plant species.</p> <p>Invasive Alien Species: Possible alien infestation as a result of activities.</p> <p>Veld Fire: The risk of veld fires as a result of the proposed activities.</p>	<p>Low (after mitigation)</p> <p>Low (after mitigation)</p> <p>Low (after mitigation)</p> <p>Low (after mitigation)</p> <p>Low (after mitigation)</p> <p>None</p> <p>Very Low (after mitigation)</p>	<ul style="list-style-type: none"> - All construction must be done in accordance with an approved construction and operational phase Environmental Management Plan (EMP), which must include the recommendations made in this report. - A suitably qualified Environmental Control Officer must be appointed to monitor the construction phase in terms of the EMP and any other conditions pertaining to specialist studies. - The layout of the development footprint should take the sensitivity map into account and should aim to stay out of the green sensitive areas, which will ensure that no significant <i>Vachellia erioloba</i> tree will be impacted. - However, if for viable reasons, the layout could not be placed outside of the above mentioned green areas, the layout must aim at minimum impact on the <i>Vachellia erioloba</i> trees and a permit application must be made in terms of the National Forest Act (protected species regulations). - Before construction begins all <i>Vachellia erioloba</i> trees in the near vicinity of the construction footprint and entrance roads, laydown areas, site offices etc. must be demarcated as NO-GO areas. - Lay-down areas or construction sites must be located within the construction footprint or areas of low botanical significance approved by the ECO. If such lay-down areas or construction camp sites must, for viable reasons, be located outside of the construction footprint areas, these areas must be rehabilitated afterwards. Topsoil must be removed from such areas, and protected for the duration of the construction

			<p>period to be used for rehabilitation after construction is completed.</p> <ul style="list-style-type: none"> - No unnecessary clearing of any area outside of the construction footprint may be allowed. - All waste that had been illegally dumped within the footprint must be removed to a Municipal approved waste disposal site. - An integrated waste management approach must be implemented during construction. <ul style="list-style-type: none"> • Construction related general and hazardous waste may only be disposed of at Municipal approved waste disposal sites.
	The loss of palaeontological resources	Low	No mitigation required.
	The loss of archaeological resources	Low	No mitigation required.
	Impact on informal graveyard	<p>High*</p> <p>*The proposed development footprint is at least 140m from the edge of the identified graveyard, and is therefore expected to have <u>no impact</u> on the graveyard</p>	Sites should be included in the heritage register and may be mitigated.
	Visual Impact		
	Construction Phase	Medium – Low (with mitigation)	Dust mitigation measures as per the EMP.
	Operational Phase	Low (with mitigation)	<ul style="list-style-type: none"> - Use of non reflective colours to blend with the surrounding environment. (examples are grey and green shade in line with the natural vegetation).

			<ul style="list-style-type: none"> - Films should be used to reduce excessive reflection of glazing. - Landscaping should compliment the natural vegetation and reduce the impact of hard surfaces such as the parking area.
	Traffic Impact	Insignificant	Both the Seodin Rd/ Cunningham Ave and Seodin Rd/ Buitekant St intersections be upgraded to roundabouts.
	Indirect impacts: Temporary jobs will be created in the construction industry during the construction phase.	Low - positive	No mitigation measures are required. Temporary jobs will be created during the construction phase
	Cumulative impacts: Biodiversity: Accumulative impact associated with the proposed activity.	Low (after mitigation)	
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
Alternative 2			
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
Alternative 3			
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		

	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
No-go option			
	Direct impacts: According to the Biodiversity Assessment (Appendix D1), slow degradation of the land through urban creep and human activities in the surrounding areas (e.g. littering, dumping, frequent fires etc.).	Low - Negative	N/A
	Indirect impacts:		
	Cumulative impacts:		

A complete impact assessment in terms of Regulation 19(3) of GN 326 must be included as Appendix F.

• **ENVIRONMENTAL IMPACT STATEMENT**

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises 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, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

<p>Alternative A (preferred alternative)</p> <p>The following is a summary of the potential impacts, and their ratings after mitigation, and probability of occurrence:</p> <p>Construction phase.</p> <p>Freshwater ecosystems – Very Low - Negligible, unlikely.</p> <p>Loss of vegetation:</p> <p>Land-use and Cover – Low, unlikely.</p> <p>Vegetation Status – Low, unlikely.</p> <p>Conservation Priority Areas – Low, unlikely.</p> <p>Connectivity – Low, unlikely.</p> <p>Protected and Endangered Flora – Low, possible.</p> <p>Invasive Alien Species – None.</p> <p>Veld Fire – Very Low, unlikely</p>

Potential impacts on heritage resources – **Low, Unlikely.**

Job creation – **Low (Positive), definite.**

Noise impact - **Low (negative), definite, during construction phase.**

Visual impact – **Low (negative), definite, during construction**

Operational Phase

Geographical and/or physical aspects - **No impact expected**

Freshwater ecosystems – **Very Low - Negligible, unlikely.**

Potential impacts on archaeological heritage – **No impact expected**

Socio-economic (additional job opportunities) – **Low (Positive), Definite**

Noise impact – **Very Low, Possible**

Visual impact – **Low, Probable**

Traffic impact – **Insignificant**

Decommissioning

The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.

Alternative B

Alternative C

No-go alternative (compulsory)

This would mean that no-development would take place and the proposed site will remain as is. The business and innovation hub will not be constructed, and it's benefits to the business community, especially on SMME (Small, Medium and Micro Enterprises) will not be realised.

Although this option would result in no significant potential negative environmental impacts, the positive socio-economic benefits from implementing the activity would not be achieved.

The no-go option would only have been recommended if it were found that the construction of the proposed development on this site or in this area might potentially cause substantial detrimental harm to the environment.

According to the Biodiversity Assessment (**Appendix D1**), the No-Go option is not likely to result in a "no-impact" scenario, as constant slow degradation is expected to continue as a result of urban activities and grazing in and around the site.

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	NO
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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).

N/A

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.

Compliance with the EMP and recommendations of the specialists and appointment of an ECO during the construction phase.		
Is an EMPr attached?	YES	NO

The EMPr must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

NAME OF EAP

SIGNATURE OF EAP

DATE

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information