

BASIC ASSESSMENT REPORT



environment & tourism

Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

(For official use only)

File Reference Number:	
Application Number:	
Date Received:	

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, 2006

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, 2006 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. In addition, if it is clear to the EAP that because of the particular circumstances of the case it is not sensible to complete any of the sections indicated under paragraph 3 of this report, he or she may apply for exemption from completing that part of the report in the spaces provided in the report. It must however be noted that if the application for exemption is turned down, the report may have to be resubmitted.

SECTION A: APPLICATION FOR EXEMPTION

The relevant parts of this section must be completed if the environmental assessment practitioner (EAP) on behalf of the applicant wishes to apply for exemption from completing or complying with certain parts of this basic assessment report.

1. APPLICATION FOR EXEMPTION FROM ASSESSING ALTERNATIVES:

At least two alternatives (site or activity) should be assessed. If that is not possible, the applicant should apply for exemption from having to assess alternatives. Such exemption will, however, not apply to the no-go alternative that must be assessed in all cases.

Provide a detailed motivation for not considering alternatives including an explanation of the reason for the application for exemption (supporting documents, if any, should be attached to this report):

I declare that the above motivation is accurate and, hereby apply for exemption in terms of regulation 51 of the Environmental Impact Assessment Regulations, 2006, from having to assess alternatives in this application as required in section 24(4)(b) in the National Environmental Management Act, 1998 (Act No. 107 of 1998)

Signature of the EAP: _____ Date: _____

2. APPLICATION FOR EXEMPTION FROM COMPLYING WITH PARTS OF REGULATION 23(2) REGARDING THE CONTENT OF THIS BASIC ASSESSMENT REPORT:

Application for exemption from certain parts of regulation 23(2) regarding the completion of certain parts of this basic assessment report may be made by completing the relevant sections below.

Indicate the numbers of the sections of this report for which exemption is applied for:

Section B:	7(a)	7(b)	7(c)	7(d)	8	9	10(c)	10(e)	10(f)	10(g)	10(h)	10(i)	10(k)	12
Section C:	1	2	3	4	5	6								
Section D:	1(a)	1(b)	1(c)	1(d)	1(f)	1(g)	3							

Provide a detailed motivation including an explanation of the reason for the application for exemption (supporting documents, if any, should be attached to this report):

I declare that the above motivation is accurate and, hereby apply for exemption in terms of regulation 51 of the EIA Regulations, 2006, from having to complete the indicated sections of the Basic Assessment Report.

Signature of the EAP: _____ Date: _____

SECTION B: ACTIVITY INFORMATION

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for in detail (A1):

SANParks proposes to construct a new conference centre at the Skukuza Rest Camp, in the Kruger National Park. The proposed conference centre and associated infrastructure, including parking area for approximately forty cars and landscaped area will replace existing staff housing units currently on the site. In addition, two existing guest accommodation units (huts) and the existing car wash will be demolished as part of the realignment of the existing access road to the western part of the camp that currently exists within the footprint of the proposed conference centre. As part of the proposed development, a part of the existing access road within the camp between the Reception and Shop / Restaurant complex that runs to the east of the Stevenson-Hamilton Memorial Library is proposed to be decommissioned and rehabilitated. A new access road providing access to the conference centre as well as the restaurant / shop complex will be constructed to the west of the Stevenson-Hamilton Memorial Library, running adjacent to the proposed conference centre buildings.

2. ALTERNATIVES

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.

2(a) Site alternatives**:

**** - Please note that site alternatives were provided to the EAP by the project proponent for comparative assessment.**

Describe site alternative 1 (S1), for the activity described above, or for any other activity alternative:

New conference facilities and access road in the western section of the Skukuza Rest Camp, next to the Stevenson-Hamilton Memorial Library and the media centre. This would involve the removal and demolition of staff housing on the site and re-alignment of other infrastructure, as described in section 1 above.

Describe site alternative 2 (S2), if any, for the activity described above, or for any other activity alternative:

New conference facilities in the camping area in the eastern section of the Skukuza Rest Camp.

Describe site alternative 3 (S3), if any, for the activity described above, or for any other activity alternative:

New conference facilities in the far western section of the Skukuza Rest Camp. This would involve the demolition of an existing staff house.

Describe site alternative 4 (S4), if any, for the activity described above, or for any other activity alternative:

New conference facilities to the south of the Skukuza Rest Camp, outside the existing camp perimeter, in an area of undisturbed natural veld.

Describe site alternative 5 (S5), if any, for the activity described above, or for any other activity alternative:

No-go Alternative

(2)(b) Activity alternatives:

Please note that no reasonable or practical activity alternatives have been identified through the alternatives assessment process.

Describe activity alternative 2 (A2), if any, for any or all of the site alternatives as appropriate:

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4. 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.

Alternative:

- Alternative S1¹ (preferred or only site alternative)
- Alternative S2 (if any)
- Alternative S3 (if any)
- Alternative S4 (if any)

Latitude (S):

Longitude (E):

24°	59'37"	31°	35'29"
24°	59'41"	31°	35'40"
24°	59'33"	31°	35'18"
24°	59'49"	31°	35'38"

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):

°	'	°	'
°	'	°	'
°	'	°	'

°	'	°	'
°	'	°	'
°	'	°	'

°	'	°	'
°	'	°	'
°	'	°	'

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.

5. 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)
- Alternative A4 (if any)

Size of the activity:

3950m ²
3950m ²
3950m ²
3950m ²

or, for linear activities:

Alternative:

- Alternative A1 (preferred activity alternative)
- Alternative A2 (if any)
- Alternative A3 (if any)

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)
- Alternative A4 (if any)

Size of the site/servitude:

3950m ²
3950m ²
3950m ²
3950m ²

¹ "Alternative S." refers to site alternatives.

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

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6. SITE ACCESS

Does ready access to the site exist, or is access directly from an existing road?

YES**

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

500 m

Describe the type of access road planned:

A single lane tar surfaced road is proposed.

**** - Please note that an existing access road to the staff housing and guest accommodation at Site 1 on the western side of Skukuza Rest Camp already exists. As part of the proposed development at Site 1, this road is proposed to be slightly re-aligned.**

Include the position of the access road on the site plan.

7. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

7(a) Solid waste management

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

YES

If yes, what estimated quantity will be produced per month?

12 m³

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

Solid waste produced during construction will be disposed of at a landfill site outside the Kruger National Park.

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

Solid waste produced during construction will be disposed of as part of the KNP waste management system

Will the activity produce solid waste during its operational phase?

YES

If yes, what estimated quantity will be produced per month?

2 m³

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

Solid waste produced during operation will be disposed of as part of the KNP waste management system

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

See above

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, the application 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?

NO

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?

NO

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.

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

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General Waste Management

- o Litter and rubble on the construction site and in the construction camp will be monitored strictly by a dedicated housekeeping team.
- o All waste generated on site will be separated into metal, paper, plastic, glass & contaminated paper, glass, plastic and polystyrene and will be recycled as part of the current waste handling and disposal system operating in the Skukuza area of the KNP.
- o Waste disposal will take place in terms of Section 20 of the Environmental Conservation Act (Act No. 73 of 1989).

Construction rubble

- o All rubble from demolition activities will be used on site as part of the existing development, or will be taken off the construction site and disposed of to a borrow-pit within the Park as part of the rehabilitation process in accordance with the instructions of a ranger.
- o No material shall be left on site that may harm man or animals. Broken, damaged and unused nuts, bolts and washers shall be picked up and removed from site.
- o Surplus concrete will not be dumped indiscriminately.
- o Concrete water will be re-used in the batching process

Has a specialist been consulted to assist with the completion of this section?		NO
Are any further specialist studies recommended by the specialist?		NO
If YES, is such a report(s) attached?		NO

7(b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?		NO
If yes, what estimated quantity will be produced per month?		
Will the activity produce any effluent that will be treated and/or disposed of on site?		NO
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
If yes, provide the particulars of the facility:		

Facility name:	Kruger National Park Sewage Treatment Facility		
Contact person:	Blake Schraader		
Postal address:	Private Bag X402, Skukuza		
Postal code:	1350		
Telephone:	+27(0)137354278/23	Cell:	+27(0)828089661
E-mail:	blakes@sanparks.org	Fax:	+27(0)137354059

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

<ul style="list-style-type: none"> o Rainwater to be captured from roofs and stored in tanks below conference centre will be used for irrigation of landscaped areas. o Possible grey water recycling. (To be investigated). o Water saving devices to be used on all fittings.
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Has a specialist been consulted to assist with the completion of this section?		NO
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7(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

	NO
	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:

Some emissions may be produced by construction vehicles during the construction phase of the project. Dust may also be created during the construction phase, especially during demolition of existing buildings on the site. The EMP will however address mitigation measures. No emissions will be produced during operation of the facility.

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

	NO
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7(d) Generation of noise

Will the activity generate noise?

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:

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The following conclusions may be drawn from the Noise Impact Assessment (Appendix D1):

- o The existing ambient noise climate of the area surrounding the conference centre development site is relatively quiet and suitable for such a complex. Note that this excludes the noise from the present construction work occurring in the Skukuza Rest Camp that forms part of the ongoing infrastructure upgrading project in the KNP.
- o There is a potential for a significant noise impact during the demolition of existing buildings on the proposed conference centre site. This impact will be likely to be experienced most intensely by sensitive receptors at the following locations:
 - o The huts to the north and west of the conference centre site.
 - o The Stevenson-Hamilton Memorial Library and Media Centre to the south-east of the conference site due to the construction of the conference building and parking lot and the construction of the road link to the west of the Stevenson-Hamilton Memorial Library.
- o There is a potential for a significant noise impact during the construction phase of the conference centre and the appurtenant roadworks. This impact will be likely to be experienced most intensely by sensitive receptors at the following locations:
 - o The huts to the north and west of the conference centre site.
 - o The huts to the east of the current access road to the shop and restaurant complex during the demolition of the road and follow-up landscaping works.
 - o The Stevenson-Hamilton Memorial Library and Media Centre to the south-east of the conference site due to the construction of the conference building and parking lot and the construction of the road link to the west of the Stevenson-Hamilton Memorial Library
- o Without the appropriate architectural acoustic treatment of the conference building, there is a potential for noise impact during the operational phase at the north and west of the conference centre site from various plant and equipment at the centre.
- o Without the appropriate architectural acoustic treatment of the conference building, there is a potential for noise from traffic (and particularly from heavy vehicles) on the new road Link to the east of the proposed centre to have a significant impact on the internal noise climate of the main conference hall and breakaway rooms.
- o There is a potential for noise from traffic (and particularly from heavy vehicles) on the new road to the east of the proposed conference centre to have a significant impact on the internal noise climate of some rooms on the western side of the Stevenson-Hamilton Memorial Library and Media Centre.
- o Traffic generated by the conference centre will not have a significant impact on the noise climate of the rest camp.
- o The closure of the existing access road to the restaurant / shop complex will improve the noise climate at the huts just to the east of this road.
- o There are appropriate mitigating measures that can be implemented to reduce or prevent any potential noise impact.

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

If YES, please complete:

Name of the specialist:	Derek Cosijn		
Qualification(s) of the specialist:	Professional engineer registered with the Engineering Council of South Africa (ECSA), a Fellow of the South African Institution Civil Engineering, a Member of the Southern African Acoustics Institute, a member of IAIA, South African Chapter and also certified as an Environmental Assessment Practitioner of South Africa.		
Postal address:	207 Albert Street, Waterkloof, Pretoria		
Postal code:	0181		
Telephone:	+27 (0) 12 460 4481	Cell:	+27 (0) 82 600 6347
E-mail:	dcosijn@absamail.co.za	Fax:	+27 (0) 12 460 4481

Are any further specialist studies recommended by the specialist? **NO**

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8. 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	surface water abstracted from the Sabie River (as part of the water supply to the Skukuza Camp)	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:

20 000 liters
NO**

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

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

**** - please note a permit from the Department of Water Affairs and Forestry for the abstraction of this water is already held by the KNP.**

9. ENERGY EFFICIENCY

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

- o Insulated walls to be installed to insulate the building thermally and acoustically.
- o Air conditioning to be used as venue needs to be "black-out" and therefore minimal windows are provided. However the lack of windows ensures lower heat gain in air conditioned areas.
- o Outside lighting to be installed only where necessary.
- o Low voltage lamps to be used where possible.

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

- o Solar geysers are planned to be installed for all kitchen hot water that is needed.
- o The installation of a solar air conditioning system is being investigated.

10. 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:

- 10(a) The scale of the plan which must be at least a scale of 1:500;
- 10(b) the property boundaries and numbers of all the properties within 50m of the site;
- 10(c) the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 10(d) the exact position of each element of the application as well as any other structures on the site;
- 10(e) 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;
- 10(f) all trees and shrubs taller than 1.8m;
- 10(g) walls and fencing including details of the height and construction material;
- 10(h) servitudes indicating the purpose of the servitude;
- 10(i) sensitive environmental elements within 100m 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 DWAF);

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- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or invested with alien species);

10(j) for gentle slopes the 1m 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

10(k) the positions from where photographs of the site were taken.

11. SITE PHOTGRAPHS

Colour photographs from the center 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 should be supplemented with additional photographs of relevant features on the site, if applicable.

12. 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.

13. ACTIVITY MOTIVATION

13(a) Socio-economic value of the activity

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

R 18 million

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

R 250 000.00

Will the activity contribute to service infrastructure or is it a public amenity?

YES

How many new employment opportunities will be created in the development phase of the activity?

50

What is the expected value of the employment opportunities during the development phase?

R 7 million

What percentage of this will accrue to previously disadvantaged individuals?

90%

How many permanent new employment opportunities will be created during the operational phase of the activity?

5

What is the expected current value of the employment opportunities during the first 10 years?

R 4,8 million

What percentage of this will accrue to previously disadvantaged individuals?

90%

13(b) Need and desirability of the activity

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

<p>The auditorium in Skukuza is currently utilised to host conferences. Due to the recent increase in popularity of Skukuza as a conference venue, the current auditorium facilities no longer meet the requirements of conference groups and a need has therefore been identified by SANParks and Kruger National Park Management for the upgrade or relocation of the conferencing facilities.</p>
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Indicate any benefits that the activity will have for society in general:

- | |
|--|
| <ul style="list-style-type: none"> o The Kruger National Park has a long history of nature conservation and biodiversity management, being one of the first formerly conserved areas in the world. The development of the conference centre will provide the Kruger National Park with a facility of sufficient size to host meetings, conferences and forums at a national and international level to facilitate the transfer of skills and experience in the conservation and management of biodiversity (and relating to the KNP's other mandates) to the overall benefit of environmental conservation. |
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Indicate any benefits that the activity will have for the local communities where the activity will be located:

The construction of the proposed conference centre will have short term positive impacts from a socio-economic point of view due to the temporary employment of staff during the construction phase. Some job creation is expected during the operational phase of the conference facilities.

14. 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:
Section 19 of Regulations 28181 of Government Gazette 3838, Vol. 484, dated 25 October 2005, promulgated on 1 November 2005, in terms of the National Environmental Management Protected Areas Act (NEMPAA, Act No. 57 of 2003).	Department of Environmental Affairs and Tourism	25 October 2005
The Occupational Health and Safety Act, 85 of 1993	Department of Health	23 June 1993
The National Water Act, 36 of 1998	Department of Water Affairs and Forestry	26 August 1998
The National Environment: Air Quality Act, 39 of 2004	Department of Environmental Affairs and Tourism	
The Atmospheric Pollution Prevention Act, 45 of 1965	Department of Minerals and Energy	17 April 1965
Constitution of South Africa (Act No. 108 of 1996)	Parliament	18 December 19 96
Environment Conservation Act (Act No 107 of 1998) – ECA (Regulations in terms of Section 25 – Noise Control – R 154/ 1992)	Department of Environmental Affairs and Tourism	
Environment Conservation Act (Act No 73 of 1989)	Department of Environmental Affairs and Tourism	9 June 1989
National Heritage Resources Act (Act No 25 of 1999)	South African Heritage Resources Act	28 April 1999
Protected species – provincial ordinances	Department of Environmental Affairs and Tourism	None
National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	Department of Environmental Affairs and Tourism	7 June 2004
National Environmental Management Protected Areas Act	Department of Environmental Affairs and Tourism	2003
National Veld and Forest Fire Act (Act No 101 of 1998)	Department of Environmental Affairs and Tourism	28 November 1998
National Environmental Management: Air Quality Act (Act No. 39 of 2004)	Department of Environmental Affairs and Tourism	
The White paper on integrated pollution and waste management of South Africa	Department of Environmental Affairs and Tourism	17 March 2000

SECTION C: SITE/AREA DESCRIPTION

1. GRADIENT OF THE SITE

Indicate the general gradient of the sites.

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:

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:

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 S4:

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.

Alternative S1:

Ridgeline	Plateau	Closed valley	Open valley	Plain	Undulating plain/low hills
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Alternative S2:

Ridgeline	Plateau	Closed valley	Open valley	Plain	Undulating plain/low hills
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Alternative S3:

Ridgeline	Plateau	Closed valley	Open valley	Plain	Undulating plain/low hills
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Alternative S4:

Ridgeline	Plateau	Closed valley	Open valley	Plain	Undulating plain/low hills
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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:	Alternative S3:	Alternative S4:
Shallow water table (less than 1.5m deep)	NO	NO	NO	NO
Dolomite, sinkhole or doline areas	NO	NO	NO	NO
Seasonally wet soils (often close to water bodies)	NO	NO	NO	NO
Unstable rocky slopes or steep slopes with loose soil	NO	NO	NO	NO
Dispersive soils (soils that dissolve in water)	NO	NO	NO	NO
Soils with high clay content (clay fraction more than 40%)	NO	NO	NO	NO
Any other unstable soil or geological feature	NO	NO	NO	NO

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An area sensitive to erosion

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).

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

If YES, please complete:

Name of the specialist:	H.J. Schurink <i>Pr.Sci.Nat.</i> of GEO3 cc – Consulting Engineering, Hydro and Environmental Geologist		
Qualification(s) of the specialist:			
Postal address:	PO Box 6559, Nelspruit		
Postal code:	1200		
Telephone:	013 758 1226	Cell:	
E-mail:	Geo3@iafrica.com	Fax:	013 758 1786

Are any further specialist studies recommended by the specialist?

4. GROUNDCOVER

Tick the types of groundcover present on the site.

Alternative S1:

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.

Has a specialist been consulted?

If YES, please complete the following:

Name of the specialist:	Liesl Koch		
Qualification(s) of the specialist:	MSc in African Mammalogy (University of Pretoria RSA 2002-2004)		
Postal address:	PO Box 2129, Rivonia		
Postal code:	2128		
Telephone:	+27 (0) 11 798 0633	Cell:	
E-mail:	lieslk@sivest.co.za	Fax:	+27 (0) 11 803 7272

Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites?

If YES, specify and explain:

<p>Potential Protected trees under Forest Act. No Red Data Plant Species were found on site. Two protected tree species (<i>Lonchocarpus capassa</i> Apple leaf and <i>Sclerocarya birrea</i> Marula) (under the National Forest Act (Act No. 84 of 1998) as amended) are present on the site and will either need to be protected during construction or permits from the Department of Water Affairs and Forestry applied for.</p> <p>No Red Data fauna species are expected to occur on the site.</p>
--

BASIC ASSESSMENT REPORT

Are there any special or sensitive habitats or other natural features present on any of the alternative sites? **NO**

If YES, specify and explain:

Are any further specialist studies recommended by the specialist? **NO**

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

Alternative S2:

Natural veld - good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	<input checked="" type="checkbox"/> Gardens
Sport field	Cultivated land	<input checked="" type="checkbox"/> Paved surface	<input checked="" type="checkbox"/> Building or other structure	<input checked="" type="checkbox"/> 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.

Has a specialist been consulted? **YES**

If YES, please complete the following:

Name of the specialist:	Liesl Koch		
Qualification(s) of the specialist:	MSc in African Mammalogy (University of Pretoria RSA 2002-2004)		
Postal address:	PO Box 2129, Rivonia		
Postal code:	2128		
Telephone:	+27 (0) 11 798 0633	Cell:	
E-mail:	lieslk@sivest.co.za	Fax:	+27 (0) 11 803 7272

Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites? **YES**

If YES, specify and explain:

Are there any special or sensitive habitats or other natural features present on any of the alternative sites? **NO**

If YES, specify and explain:

Are any further specialist studies recommended by the specialist? **NO**

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

Alternative S3:

Natural veld - good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	<input checked="" type="checkbox"/> Gardens
Sport field	Cultivated land	<input checked="" type="checkbox"/> Paved surface	<input checked="" type="checkbox"/> Building or other structure	<input checked="" type="checkbox"/> 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.

Has a specialist been consulted? **YES**

If YES, please complete the following:

BASIC ASSESSMENT REPORT

Name of the specialist:	Liesl Koch		
Qualification(s) of the specialist:	MSc in African Mammalogy (University of Pretoria RSA 2002-2004)		
Postal address:	PO Box 2129, Rivonia		
Postal code:	2128		
Telephone:	+27 (0) 11 798 0633	Cell:	
E-mail:	liesik@sivest.co.za	Fax:	+27 (0) 11 803 7272
Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites?		YES	
If YES, specify and explain:	Potential Protected trees under Forest Act. No Red Data fauna species are expected to occur on the site.		
Are there any special or sensitive habitats or other natural features present on any of the alternative sites?			NO
If YES, specify and explain:			
Are any further specialist studies recommended by the specialist?			NO

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

Alternative S4:

<input checked="" type="checkbox"/> 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" 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.

Has a specialist been consulted?	YES	
----------------------------------	------------	--

If YES, please complete the following:

Name of the specialist:	Liesl Koch		
Qualification(s) of the specialist:	MSc in African Mammalogy (University of Pretoria RSA 2002-2004)		
Postal address:	PO Box 2129, Rivonia		
Postal code:	2128		
Telephone:	+27 (0) 11 798 0633	Cell:	
E-mail:	liesik@sivest.co.za	Fax:	+27 (0) 11 803 7272
Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites?		YES	
If YES, specify and explain:	Potential Protected trees under Forest Act. A number of Red Data Mammal and Bird Species may inhabit the site. These species are listed in Appendix D5.		
Are there any special or sensitive habitats or other natural features present on any of the alternative sites?			NO
If YES, specify and explain:	Site 4 is located in an undisturbed, untransformed area of natural vegetation outside of the boundaries of the Camp.		
Are any further specialist studies recommended by the specialist?			NO

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

5. LAND USE CHARACTER OF SURROUNDING AREA

Black out land uses and/or prominent features that does not currently occur within a 500m radius of the site

Alternative S1:

Natural area	Low density residential		
	Office/consulting room	Military or police base/station/compound	Hospitality facility
Hospital/medical center			
			Filling station ^H
		River, stream or wetland	Nature conservation area
	Museum	Historical building	
Other land uses (describe):			

If any of the boxes marked with an "N" are ticked, please consult an appropriate noise specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Will the ambient noise level have a negative impact on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

If any of the boxes marked with an "A" are ticked, please consult an appropriate air quality specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Will the ambient air pollution level have a negative impact on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

BASIC ASSESSMENT REPORT

Signature of specialist: _____ Date: _____

If any of the boxes marked with an "H" are ticked, please consult an appropriate health assessment specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

Please note the presence of the Skukuza Rest Camp filling station approximately 300m away from Site 1 is not expected to pose any health risk to the conference centre facility, or users of the conference centre facility, hence no health specialist has been consulted.

If YES, please complete the following:

Name of the specialist:	_____		
Qualification(s) of the specialist:	_____		
Postal address:	_____		
Postal code:	_____		
Telephone:	_____	Cell:	_____
E-mail:	_____	Fax:	_____

Will the surrounding land use pose any unacceptable health risk on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

Signature of specialist: _____ Date: _____

Alternative S2:

Natural area	Low density residential		
Retail	Commercial & warehousing		
	Office/consulting room	Military or police base/station/compound	Hospitality facility
Hospital/medical center			
			Filling station ^H
		River, stream or wetland	Nature conservation area
	Museum	Historical building	
Other land uses (describe):	_____		

If any of the boxes marked with an "N" are ticked, please consult an appropriate noise specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist:	_____		
Qualification(s) of the specialist:	_____		
Postal address:	_____		
Postal code:	_____		
Telephone:	_____	Cell:	_____
E-mail:	_____	Fax:	_____

Will the ambient noise level have a negative impact on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

BASIC ASSESSMENT REPORT

If YES, is such a report(s) attached?

YES	NO
-----	----

Signature of specialist: _____

Date: _____

If any of the boxes marked with an "Au" are ticked, please consult an appropriate air quality specialist to assist in the completion of this section.

Has a specialist been consulted?

YES	NO
-----	----

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____

E-mail: _____

Cell: _____

Fax: _____

Will the ambient air pollution level have a negative impact on the proposed activity?

YES	NO
-----	----

If YES, specify and explain:

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:

If YES, is such a report(s) attached?

YES	NO
-----	----

Signature of specialist: _____

Date: _____

If any of the boxes marked with an "H" are ticked, please consult an appropriate health assessment specialist to assist in the completion of this section.

Has a specialist been consulted?

NO	NO
----	----

Please note the presence of the Skukuza Rest Camp filling station approximately 250m away from Site 2 is not expected to pose any health risk to the conference centre facility, or users of the conference centre facility, hence no health specialist has been consulted.

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____

E-mail: _____

Cell: _____

Fax: _____

Will the surrounding land use pose any unacceptable health risk on the proposed activity?

NO	NO
----	----

If YES, specify and explain:

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:

Signature of specialist: _____

Date: _____

Alternative S3:

Natural area	Low density residential	Medium density residential	
Retail			
	Office/consulting room	Military or police base/station/compound	Hospitality facility
Hospital/medical center			Church
	Sport facilities		
		River, stream or wetland	Nature conservation area

BASIC ASSESSMENT REPORT

	Museum	Historical building	
Other land uses (describe):			

If any of the boxes marked with an "N" are ticked, please consult an appropriate noise specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Will the ambient noise level have a negative impact on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

If any of the boxes marked with an "A" are ticked, please consult an appropriate air quality specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Will the ambient air pollution level have a negative impact on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

If any of the boxes marked with an "H" are ticked, please consult an appropriate health assessment specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Will the surrounding land use pose any unacceptable health risk on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

Signature of specialist: _____ Date: _____

BASIC ASSESSMENT REPORT

Alternative S4:

Natural area	Low density residential		
Retail	Commercial & warehousing		
	Office/consulting room	Military or police base/station/compound	Hospitality facility
Hospital/medical center			
	Sport facilities		Filling station ^H
		River, stream or wetland	Nature conservation area
	Museum	Historical building	
Other land uses (describe):			

If any of the boxes marked with an "N" are ticked, please consult an appropriate noise specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Will the ambient noise level have a negative impact on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

If any of the boxes marked with an "Au" are ticked, please consult an appropriate air quality specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Will the ambient air pollution level have a negative impact on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

If any of the boxes marked with an "H" are ticked, please consult an appropriate health assessment specialist to assist in the completion of this section.

BASIC ASSESSMENT REPORT

Has a specialist been consulted? NO

Please note the presence of the Skukuza Rest Camp filling station approximately 150m away from Site 4 is not expected to pose any health risk to the conference centre facility, or users of the conference centre facility, hence no health specialist has been consulted.

If YES, please complete the following:

Name of the specialist:			
Qualification(s) of the specialist:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	
Will the surrounding land use pose any unacceptable health risk on the proposed activity?	NO		
If YES, specify and explain:			
Are any further specialist studies recommended by the specialist?	YES	NO	
If YES, specify:			

Signature of specialist: _____ Date: _____

6. CULTURAL/HISTORICAL FEATURES

Alternative S1

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 palaeontological sites, on or close (within 20m) to the site?	YES	
If YES, explain:	The Stevenson-Hamilton Memorial Library (Please note – the library is adjacent to the site of the proposed development, but will not be physically affected in any way).	
Will any building or structure older than 60 years be affected in any way?		NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?		NO

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 D: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The environmental assessment practitioner must follow any relevant guidelines adopted by the competent authority in respect of public participation and must at least –

- 1(a) Fix a notice in a conspicuous place, on the property where it is intended to undertake the activity which states that an application will be submitted to the competent authority in terms of these regulations and which provides information on the proposed nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations on the application may be made.
- 1(b) inform landowners and occupiers of adjacent land of the applicant's intention to submit an application to the competent authority
- 1(c) inform landowners and occupiers of land within 100 metres of the boundary of the property where it is proposed to undertake the activity and whom may be directly affected by the proposed activity of the applicant's intention to submit an application to the competent authority;
- 1(d) inform the ward councillor and any organisation that represents the community in the area of the applicant's intention to submit an application to the competent authority;
- 1(e) inform the municipality which has jurisdiction over the area in which the proposed activity will be undertaken of the applicant's intention to submit an application to the competent authority; and
- 1(f) inform any organ of state that may have jurisdiction over any aspect of the activity of the applicant's intention to submit an application to the competent authority; and
- 1(g) place a notice in one local newspaper and any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of these regulations.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

Advertisements and notices must indicate that an application will be submitted to the competent authority in terms of the EIA 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;

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 site alternatives where appropriate.

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.

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.

6. LOCAL AUTHORITY PARTICIPATION

Local 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.

Has any comment been received from the local authority?

YES	<input type="checkbox"/>
-----	--------------------------

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

BASIC ASSESSMENT REPORT

Mr Vusi Zwane, Environmental Officer, Mbombela Local Municipality
Telephonic request received for a site visit. Mr Zwane was requested to put his request in writing as the request needs to be discussed with the proponent (copy of e-mail attached)

7. CONSULTATION WITH OTHER STAKEHOLDERS

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?

NO

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

--

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2006, 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 issues raised by interested and affected parties.

- It was requested that Adansonia Heritage Consultants be registered as an interested and affected party in terms of the NEMA and SA Heritage Resources Act 25 of 1999. Indicated that they are willing to submit a quotation to do the Heritage Impact Assessment if required. Company profile provided. Christine van Wyk, Adansonia Heritage Consultants (E-mail 3 June 2006)
- Company profile provided Mary Mbugua, BA Square Development Management (E-mail 5 June 2008)
- Company profile provided by Jaco Bredell of Vuka Crushers (E-mail: 11 June 2008) The company is situated on the Kruger Park Main Road, 8 km outside of Hazy-view. They specialise in concrete stone, building sand, crusher sand, gabions, road material base coarse and sub base. It was mentioned that the company is in discussions with Lafarge to put up a ready mix plant on site. They are interested in being informed when construction tenders are requested.
- The project team was informed that the Wildlife and Environment Society of SA, Lowveld Region, now employs an Environmental Compliance Officer, and requested that all future correspondence be address that office.

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):

Registrations confirmed and company profiles acknowledged.

2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN PHASE

List the potential site alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase:

PLEASE NOTE – the impact and mitigation tables for the respective alternative sites have been combined as most of the potential impacts and associated mitigation measures for each of the sites are exactly the same due to their location within Skukuza Camp. Site Specific impacts and mitigation measures have been noted as such

Alternative S1, S2, S3 & S4

Direct impacts:

- None expected. The construction site may be demarcated, but this is not expected to be associated with any impacts.

Indirect impacts:

- None expected.

Cumulative impacts:

- None Expected.

No-go alternative (compulsory)

- No impacts are expected, the status quo on the site will remain.

BASIC ASSESSMENT REPORT

Indicate mitigation measures that may eliminate or reduce the potential impacts listed above:

Alternative S1,S2, S3 & S4

- o The contractor must sign that he has read and understands the EMP
- o Before construction begins, all areas to be developed must be clearly demarcated with fencing, if not yet fenced off /barricaded.
- o The contractor must ensure compliance with conditions described in the Record of Decision
- o A system of record-keeping must be established. This would include records of compliance / non-compliance with the conditions of the authorisation and, records of all material environmental incidents that must be kept and be available to DEAT on request.
- o Confirm suitable sites for the construction camp (equipment and batching etc) and storage areas for materials, as well as site offices
- o All construction equipment must be stored at the Technical Services storage area and all associated oil changes etc (no servicing) must take place within this area.
- o An Environmental Control Officer must be appointed
- o Unskilled labourers should be drawn from the local market, insofar as possible.
- o Environmental awareness training for construction staff, concerning the prevention of accidental spillage of hazardous chemicals and oil; pollution of water resources (both surface and groundwater), air pollution and litter control.
- o Project manager shall ensure that the training and capabilities of the Contractor's site staff are adequate to carry out the designated tasks.
- o Staff operating equipment (such as excavators, loaders, etc.) shall be adequately trained and sensitised to any potential hazards associated with their tasks.
- o Ensure compliance with conditions described in the Record of Decision
- o Staff must be trained in the dangers associated with work in a national park and must be informed of how to handle encounters. This must be conducted by a qualified ranger who can inform workers in this regard as well as explain the sensitivities of the area.
- o Project management shall ensure that the training and capabilities of the Contractor's site staff are adequate to carry out the designated tasks.
- o Holiday makers and other visitors to the Rest Camp should be informed of the starting date of construction as well as the phases in which the construction shall take place. It is recommended that signage explaining the nature of the proposed development, timeframes involved, the nature of potential disruption to guests and activities in the camp, and contact details of a liaison official must be placed at key public areas such as the restaurant shop complex and reception area.
- o A complaints and stakeholder feedback system must be set up to address any complaints from guests and other stakeholders who may be affected by the proposed construction activities.
- o Adequate planning of the construction programme to allow for disruptions due to rain and very wet conditions.
- o Adequate planning of the construction programme to allow for periods of high occupancies in the Rest Camp such as school holiday periods. Construction (or certain high impact construction activities such as demolition) must be planned to occur outside of these periods where possible.
- o If any nearby adjacent accommodation units are to remain unused during the construction period, the relevant arrangements must be made with the KNP's tourism division.
- o All green-design provisions must be finalised and included in the EMP prior to the onset of construction.
- o All manmade as well as natural (vegetation) structures within 50m of the boundary of the site shall be materially protected against construction related damage at all times and any such damage shall be rectified reasonably. Vegetation that is not to be removed must be clearly demarcated.
- o In general the design process of the conference centre is to consider, *inter alia*, the following aspects:
 - o The position and orientation of buildings on the site.
 - o The enclosure of noisy plant in buildings where possible and practical.
 - o The design of the buildings to minimise the transmission of noise from the inside to the outdoors.
 - o The insulation of particularly noisy plant and equipment.

3. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION PHASE

List the potential site alternative related impacts (as appropriate) that are likely to occur as a result of the construction phase:

Alternative S1, S2, S3 & S4

Direct impacts:

Fauna and Flora

- o Minor construction related impacts are anticipated, it is however not expected to impact endangered or threatened species due to the location of all sites (except for Site S4) within an existing impacted, transformed area.
- o The removal of vegetation, especially large trees, may have an adverse (but localised) impact on certain avifauna as well as certain mammal species such as bushbabies that typically inhabit trees.
- o The spread of exotic species may result from construction activities. This may have far reaching implications in the park as a whole if this is not controlled.
- o **At Site S4**, the construction of a conference centre would increase the footprint of the rest Camp and would transform an area that is currently undisturbed. While larger fauna would be able to move away from the site, smaller fauna would be highly impacted. There would also be a high impact on the vegetation on the site, as most of the natural vegetation would need to be cleared.

Energy

- o During construction of the proposed project, additional energy will be consumed, resulting in a direct short-term increased demand on this resource.

Noise

- o Short-term impacts from increased noise levels will occur during construction of the proposed project.
- o Noise due to construction activities, especially demolition of existing buildings (at sites S1 and Site S3) could potentially lead to complaints from guests, especially from those receptors located adjacent to the construction site (the Stevenson-Hamilton Memorial Library and the accommodation units to the north and west of the construction site at Site S1).
- o Noise related to road re-alignment may negatively affect sensitive receptors (especially those accommodation units to the east of the current access road to the restaurant / shop complex).
- o Noise from construction staff may negatively affect nearby sensitive receptors.
- o Construction activities and noise generated could impact negatively on the sense of place of the Rest Camp. Visitors to the Rest Camp typically expect a quiet, tranquil environment.

Visual Environment

- o The establishment of the construction site, demolition of buildings and decommissioning and re-alignment of the current access road as well as the removal of vegetation (especially trees) in the footprint of the development is likely to alter the visual environment of this part of the Rest Camp, thus affecting the 'sense of place' of this part of the Rest Camp. This is particularly relevant at Site S1 due to the presence of a number of large trees which form a canopy, creating a shady environment.
- o The movement of construction vehicles through the camp may be associated with a visual impact.
- o The erection of security lighting at the construction camp may create light spill and thus negatively affect the night-time environment of the Rest Camp that is characterised by very little lighting.

Traffic and Access

- o Construction vehicles may cause dust if regular dampening down of exposed surfaces does not take place.
- o If vehicles are not maintained it may lead to contamination and unnecessary noise.
- o Slow moving vehicles, if utilising public access routes, could cause congestion at peak visitor times.
- o If delivery of equipment and materials are not planned carefully it may lead to a visual and noise impacts.
- o The closure of certain roads during construction and associated diverting of traffic may lead to traffic congestion at certain peak times.

Soil and Geology

- Spillage of fuel or oil leaks from construction vehicles may result in the contamination of soil and groundwater.
- Care should be taken not to contaminate topsoil in cases of negligent fuel storage and cement mixing.
- Stormwater runoff may cause erosion of topsoil and concomitant siltation of watercourses, if not carefully controlled.

Stormwater

- Stormwater may carry pollutants to other parts of the site if not carefully controlled.

Air Quality

- Short-term negative impacts on the air quality will occur from heavy equipment, dust and exhaust fumes during construction.

Indirect impacts:

Construction traffic

- The delivery of construction equipment and materials poses congestion and safety problems if it is not strictly controlled.
- Property and roads can be damaged if construction vehicles take routes that are not adequate for heavy vehicle usage.

Access and Security

- If construction staff access is not strictly controlled it may lead to safety concerns for guests, especially those being accommodated in units adjacent to the construction site.

Change in Landuse

- The change in landuse in S1, S2 and S3 is not expected to have a negative impact, as this area has been impacted and already consists of built up structures. In the case of Site S4, the impact will be significant as this falls outside the existing camp infrastructure, in an undeveloped, untransformed area characterised by natural vegetation.

Spread of alien / invasive vegetation

- The removal of indigenous vegetation and increase in human traffic would create additional opportunities for the spread of invasive plants and noxious weeds.

Cumulative impacts:

- Construction traffic will cause increased congestion on KNP roads (especially on the H1-1 road between Skukuza and Paul Kruger Gate) and in the Skukuza Rest Camp. This construction traffic may lead to increased congestion and adverse impacts on the visitor experience to the Park which is already an impact / issue on this road.

Water Resource Issues

- Water used on the construction site for human construction and construction activities such as damping down may lead to extra demands on the finite water resources (water abstracted from the Sabie River) available to be used by the Skukuza complex.

Water, soils and air

- The pollution of water, soils and air resulting from separate small events / sources in the Skukuza complex could have additive effects on the ecosystem in the context of the location of the area within a National Park (protected area).

Waste management

- The creation of extra construction waste may result in extra impacts on the waste collection and disposal system in the Kruger National Park.

Noise, Visual environment and Nuisance

- The construction activities may add to the negative impacts currently being exerted by other construction activities in the Skukuza Rest Camp that are occurring as part of the infrastructure upgrading project. The addition of this large construction activity (construction of conference centre and re-alignment / decommissioning of roads) would be likely to add to the negative impacts in terms of noise, visual environment and nuisance value potentially experienced by guests and visitors to the Rest Camp.

BASIC ASSESSMENT REPORT

No-go alternative (compulsory)

No negative impacts are foreseen for the no-go alternative, as negative impacts associated with construction activities construction activities would not occur. However the positive socio-economic activities in terms of job creation would not occur.

Indicate mitigation measures that may eliminate or reduce the potential impacts listed above:

PLEASE NOTE: The mitigation measures listed below are the key mitigation measures relating the impacts identified above. The Environmental Management Plan for the proposed development (Appendix F) lists all of the mitigation measures relating to the construction phase of the proposed development.

Alternative S1, S2, S3 & S4

(Please refer to the EMP in Appendix F for detailed mitigation measures)

1. Construction traffic and Access

- o Construction routes must be clearly defined and construction vehicles should not be permitted.
- o If possible, access to the preferred site (S1) should be via the Staff area to the south of the car wash, and not through the main access into the camp past the filling station.
- o Delivery of equipment must be undertaken with the minimum reasonable amount of trips.
- o Planning of site delivery hours must be scheduled to avoid weekends and evenings, insofar as possible.
- o Wheel washing and damping down of un-surfaced roads must be implemented to reduce dust.
- o Servicing must be done off-site in a service yard that is located off-site (in the Technical Services workshop area) which has been properly prepared and certified as acceptable by the Environmental Control Officer.
- o Construction traffic should insofar as possible not use public KNP roads, but roads leading to the site that are designed to accommodate larger vehicles, within reason.
- o Routes should be clearly defined as not to endanger fauna, flora and guests to the park.
- o Damping down of roads and wheel washing should be done using water with discretion, so as not to waste water unnecessarily.
- o Planning of access routes to the site for construction purposes shall be done in conjunction between the Contractor and the developer. All agreements reached should be documented and no verbal agreements should be made. The Contractor shall properly mark all access roads. Roads not to be used shall be marked with a "NO ENTRY" sign.
- o A site speed limit of 20km/h must not be exceeded.

1. Construction

- o Only designated areas must be used for storage of construction materials, soil stockpiles, machinery and other equipment.
- o Specific areas must be designated for cement batching plants. Sufficient drainage for these plants must be in place to ensure that soils do not become contaminated.
- o The construction site must be kept clear of litter at all times.
- o Food preparation areas should not be allowed on the site. Food should be prepared off-site and brought to the construction workers at meal times.
- o No washing or servicing of vehicles on site must occur.
- o Construction activities are to be contained to reasonable hours during the day. No night-time construction activities (after 18h00) should be allowed. No construction should be allowed on weekends from 14h00 on Saturday afternoons to 06h00 the following Monday morning.
- o Spillages within the construction camp need to be cleaned up immediately and disposed of in the hazardous skip bin for correct disposal.
- o Under no circumstances may any labourers be housed on the construction site.
- o The construction footprint in the area where the current access road is to be decommissioned and

rehabilitated should not extend beyond the footprint of the current road.

2. Soil and Geology

Fuel storage

- o Topsoil and subsoil to be protected from contamination.
- o Fuel and material storage must be away from stockpiles.
- o Contaminated soil must be contained and disposed of off site at a licensed landfill site.

Earthworks

- o All earthworks must be adequately controlled and managed.
- o Any excavations must be clearly marked and demarcated.

Geology of the site

- o It is recommended that foundations of the proposed buildings at Site 1 be taken down to the dense residual gneiss or mafic xenolith present at depths between 0.3 and 1.1m and be designed to impose pressures not exceeding 350kPa. It is recommended that the masonry be lightly re-reinforced with construction joints at regular intervals throughout the structure.

3. Groundwater

- o In view of the susceptibility of the site to a shallow, perched groundwater table, damp proofing measures are recommended throughout all structures, while a subsoil drain is recommended along the upslope of the structure.
- o Water usage, land use, waste management, and on-site sanitation associated with the proposed new development must be designed and managed so as not to impact, insofar as possible negatively on the groundwater resources on the site.
- o Facilities for the collection and disposal of waste on the site should occur in sealed surfaces which would ensure that there is no waste entering the soil profile.
- o Infrastructure associated with sewage (such as underground piping) should be adequately designed to ensure that no underground leakages, which may pollute soils and potentially groundwater would occur.

4. Hydrology and Stormwater

- o The site must be managed in order to prevent pollution of drains, downstream watercourses or groundwater, due to suspended solids, silt or chemical pollutants.
- o Silt fences should be used to prevent any silt entering the stormwater drains, insofar as possible. This measure must be installed on all parts of the site, including the length of road being decommissioned.
- o Promote water saving mind set with construction workers in order to ensure less water wastage.
- o New stormwater construction must be developed strictly according to specifications from engineers in order to ensure efficiency.
- o The installation of the stormwater system must take place as soon as possible to attenuate stormwater from the construction phase as well as the operation phase.
- o Grids / Litter traps should be placed at the entry point to drains and should be cleaned on a regular basis.
- o The development (at Site S1) is unlikely to be affected by, or be located within any floodlines.

5. Air Quality

Dust control

- o Wheel washing and damping down of un-surfaced and un-vegetated areas, taking water saving into account.
- o Retention of vegetation where possible will reduce dust travel
- o Excavations and other clearing activities must only be done during agreed working times and permitting weather conditions to avoid drifting of sand and dust into adjacent areas where guest accommodation is located.
- o The Contractor shall be responsible for dust control on site to ensure no nuisance is caused for sensitive receptors, especially the guests being accommodated in the closest units.
- o Any complaints or claims emanating from the lack of dust control shall be attended to immediately by the Contractor and ECO.

6. Noise

- o SANS 10103 and the National Noise Control Regulations should be used as the main guidelines for

addressing the potential noise impact on this project.

- o With regard to unavoidable very noisy construction activities in the vicinity of noise sensitive areas, these should be screened off with acoustic screens, where possible. If no acoustic screening is used during exceptionally noisy construction times, prior warning to guests would be extremely important.
- o It is highly recommended that the closest accommodation units to Site 1 (those to the north and west of the conference centre site) remain unoccupied during the construction period, or at least during the noisiest periods such as when demolition activities are occurring.
- o As construction workers operate in a very noisy environment, it must be ensured that their working conditions comply with the requirements of the Occupational Health and Safety Act (Act No 85 of 1993). Where necessary ear protection gear should be worn.
- o Ambient noise levels must not exceed within reason the acceptable standards for a suburban residential district as mentioned above or at most must not exceed the levels for an urban residential district, namely 55dBA during the day and 45dBA during the night, except in exceptional circumstances and then properly controlled under the guidance of the ECO.
- o Noisy operations should be combined so that they occur where possible at the same time.
- o Loitering from construction workers will not be tolerated. Noise from workers must be strictly controlled.

7. Flora

Existing vegetation

- o Existing indigenous vegetation must be retained where possible. The infrastructure associated with the proposed development (such as parking area and re-aligned roads) must be designed so that as many trees are retained as possible. It is particularly important that as much vegetation as possible be retained on the northern edge of the conference centre building, and between the proposed building and the Stevenson-Hamilton Library.
- o Materials should not be delivered to the site prematurely which could result in additional areas being cleared or affected.
- o No vegetation must be used for firewood.
- o The protected tree species on Site 1, namely the Apple Leaf (*Lonchocarpus capassa* / *Philenoptera violacea*) and Marula (*Sclerocarya birrea subsp caffra*) must be clearly demarcated with danger tape and designated as no go areas. If these trees have to be removed, a permit for their removal must be sought from DWAF.
- o Construction site office and laydown areas must be clearly demarcated and no encroachment must occur beyond demarcated areas.
- o All impacted areas during construction must be rehabilitated with locally indigenous plants.
- o Design of the landscaped areas shall consider aspects such as habitat provision for a range of bird species, amphibians, reptiles and small mammals, as well as the (long term) restoration of trees that were removed in the construction of the proposed building and associated infrastructure.

Exotic vegetation

- o All exotic vegetation must be removed from site.
- o Alien vegetation on the site will need to be controlled in terms of Government Notice R1048.
- o The contractor should be responsible for implementing a programme of weed control (particularly in areas where soil has been disturbed); and grassing of any remaining stockpiles to prevent weed invasion.
- o The spread of exotic species occurring throughout the site should be controlled.

Herbicides

- o Herbicide use shall only be allowed with the approval of the developer and according to contract specifications. The application shall be according to set specifications and under supervision of a qualified technician. The possibility of leaching into the surrounding environment shall be properly investigated and only environmentally friendly herbicides shall be used.

8. Fauna

- o Capture or snaring of fauna should be strictly prohibited on site. Anyone found engaged in this activity should be disciplined or prosecuted.
- o The contractor as well as his construction workers must be sympathetic towards any fauna present on site.

- o All construction staff must attend a training workshop during which the dangers of certain faunal species (especially snakes) will be explained. This workshop must be conducted by a qualified ranger. Workers must be instructed not to kill any snakes encountered on the site, but rather to call a suitably qualified park employee to remove it off the site.
- o Any animals (especially baboons and Vervet Monkeys) noted in the vicinity of the site must be reported to the ECO if they become a problem.

9. Employment

- o Training of labour to benefit individuals beyond completion of the project
- o Labour to be sourced from the local area where possible
- o The Contractor must ensure that all staff working on the proposed project must be in possession of a South African Identity Document or valid work permit.

10. Waste Management

- o Care should be taken to not dump waste indiscriminately as this could have a negative impact on the ecosystem and may lead to injury to humans and animals.

Construction rubble

- o All rubble from demolition activities must either be used on site as part of the existing development, or must be taken off the site (out of the KNP) and disposed off at an approved site.
- o Rubble must not be dumped on site but must be placed within a skip bin for regular removal, insofar as possible.

Litter management

- o Refuse bins must be placed at strategic positions to ensure that litter does not accumulate within the construction site. These should be kept covered (and made baboon / monkey proof) and arrangements made for them to be collected regularly from the site.
- o A housekeeping team should be appointed to regularly maintain the litter and rubble situation on the construction site.
- o Waste disposal will need to take place in terms of Section 20 of the Environment Conservation Act (Act No. 73 of 1989).
- o Littering by the employees of the Contractor shall not be allowed under any circumstances. The ECO shall monitor the neatness of the construction site.

Construction equipment safety

- o All equipment used for construction, including drills, TLB's must be in good working order with up to date maintenance records.

11. Security

- o The site should be fenced for the duration of construction.
- o Labour should be transported to and from the site to discourage loitering in adjacent areas and possible increase in crime or disturbance. No construction staff at all should be allowed to stay on the construction site.

12. Social Environment

- o All contact with the affected parties shall be courteous at all times. The rights of the affected parties shall be respected at all times.

13. Visual Impact

- o Cordon off construction site with shade-cloth or other material. This must include the stretch of decommissioned road.
- o Construction traffic must stick to designated routes. If at all possible, construction traffic must access the site from the staff village offices to the south of the camp fence, if an access exists that can be used. This will allow construction traffic to access the construction site and not have to travel along the main tourist access into the camp.
- o It is strongly recommended that the wooden (palisade) fence currently located on the western side of the staff housing in the conference centre footprint be dismantled and re-assembled (and extended) along the re-aligned access road on the western side of the building. This should be done during the construction phase, as the fence will help to shield the conference centre building site from the receptors located to the

west of the conference centre.

- o As much vegetation as possible must be retained to screen off the construction site from potential sensitive receptors.
- o No lighting, unless absolutely necessary should be placed at the construction site. .
- o The site shall be kept visually and aesthetically pleasing, especially in and around the construction camp. The ECO shall regularly inspect the site to ensure that it is neat and clean.

4. IMPACTS THAT MAY RESULT FROM THE OPERATIONAL PHASE

List the potential site alternative related impacts (as appropriate) that are likely to occur as a result of the operational phase:

Alternative S1,S2, S3 & S4

Direct impacts:

Visual Impacts

- o Lighting on the perimeter of the building may cause light spill adversely affecting the sensitive receptors in the vicinity of the proposed development.
- o Waste and other materials stored on the perimeter of the building may cause a visual impact as it would be very unsightly.
- o The rehabilitation of the current access road to the east of the Stevenson-Hamilton Memorial Centre will have a positive visual impact on the guest accommodation units to the east of the centre as the guests within these units will look onto a rehabilitated, landscaped area and not a road, and will not be bothered by vehicle lights.

Waste

- o A lack of management with regards to solid waste collection and sanitation could lead to surface water contamination, and may attract problem animals to the site.
- o Incorrectly stored waste could lead to the development of odours.

Noise

- o Noisy activities at the conference centre could disturb sensitive receptors in the vicinity of the conference centre site.
- o Air conditioning units, refrigeration compressor units and kitchen extractor fans placed on the outside of the building could create a noise impact for sensitive receptors.
- o Noise from vehicles using the new access road may disturb receptors, including the Stevenson-Hamilton Memorial Library.
- o The rehabilitation of the current access road to the east of the Stevenson-Hamilton Memorial Centre will have a positive visual impact on the guest accommodation units to the east of the centre as the guests within these units will not be bothered by vehicle noise.

Energy

- o During operation of the proposed project, additional energy will be consumed, resulting in a direct medium-term increased demand on this resource.

Socio-Economic

- o A number of permanent jobs would be created for staff who will be responsible for operating the conference centre. This would be associated with a positive impact.

Indirect impacts:

Stormwater

- o Hardened surfaces, as apposed to undeveloped areas natural vegetation, will lead to an increase in runoff, which in turn may lead to increased pressure being exerted on the camp's stormwater control system.
- o The decommissioning and rehabilitation of the access road to the east of the Stevenson-Hamilton Memorial Library will have a positive impact, as a current impermeable surface will be replaced by a permeable surface, leading to the reduction of stormwater runoff.

Knowledge and Skills Transfer

- o The creation of the conference centre will provide the KNP with a facility that will enable the Park to host conferences / forums for the disseminating and skills and experience relating to the Park's mandate of conserving biodiversity. This will allow national and international stakeholders to be hosted in the Park,

thus improving the Park's profile and potentially assisting the Park to improve the conservation of biodiversity and other mandates.

Cumulative impacts:

Water Resource Issues

- o As the conference facility would house up to 450 people the existing pressures on water resources due to water usage demands by the conference centre activities would increase significantly. This would place pressure on the water supply to the Skukuza Camp (from the Sabie River).

Change in Landuse

- o **In the case of S4**, the development of a conference centre would increase the physical footprint of man-made infrastructure in the greater Skukuza area. This would increase the already existing anthropogenic impact (human footprint) that has transformed indigenous vegetation in the context of the Kruger National Park. This cumulative impact would not be experienced at Sites 1-3 as these are located within an already transformed area.

Traffic

- o Traffic accessing the Skukuza Rest Camp is expected to increase as conference attendees are likely to access the KNP and the Skukuza Camp by road vehicle. If the conference centre is utilised to its full potential up to 350 vehicles could access the park and the camp. Although most users of the conference centre are expected to be overnight visitors, thus not adding to the existing complement of overnight guests, the cumulative impact on traffic both within the camp and on the access roads around Skukuza and between the camp and the entrance gates (H1-1 and S1 roads) is expected to increase significantly. This impact will add to the existing traffic impact on the roads in this part of the park, especially the H1-1 at peak times. The high volume of traffic is currently adversely affecting the experience of guests to the Park, and the increase in traffic associated with the Conference Centre will increase this impact.

Tourism

- o In the event of the conference centre being used to its full capacity, a significant portion of the camp's accommodation will be utilised by the conference centre's visitors. In peak times this will place significant demand on the remaining accommodation in the camp from non-conference centre guests. This pressure on accommodation resources would lead to demands to create more accommodation within the Skukuza Rest Camp. If the camp is expanded, this will in turn cause further cumulative impacts on water supply, sewage provision and waste disposal as discussed above. This would also be likely to further exacerbate the traffic-related impacts on the Park's roads, especially those in the Skukuza area. The expansion of the accommodation resources in the park will increase the anthropogenic impact in this part of the Park.

Solid Waste Disposal -

- o The collection of solid waste is done by the KNP. This is done on a certain route and to a specific schedule. The increase in conference attendees will create a cumulative impact of solid waste generation and collection thereof and will place pressure on a system that is designed to deal with the existing volumes of waste generated in the Skukuza Conference.

No-go alternative (compulsory)

Direct impacts:

- o The area will stay as is with no re-alignment of roads
- o The number of conference attendees will not increase, and the auditorium will continue to be used for conferencing, but being limited by its size.
- o No negative impacts are foreseen for the no-go alternative
- o The positive impacts related to the creation of employment for the staff working in the conference centre, and the creation of a facility that will enable the KNP to host conferences / forums for the disseminating and skills and experience relating to the Park's mandate of conserving biodiversity will not occur.
- o The positive impacts in terms of stormwater, noise and visual environments from the decommissioning and rehabilitation of the current access road to the east of the Stevenson Hamilton Memorial Library will not occur.

Indirect impacts:

- o No additional accommodation will be required.
- o Additional parking facilities will not be required.

Cumulative impacts:

- o No extra pressure on resources (in terms of water provision and sewage) will be likely to occur. There will also not be any cumulative impacts placed on the KNP's physical infrastructure (such as roads) that would result from added visitor numbers.

Indicate mitigation measures that may eliminate or reduce the potential impacts listed above:

PLEASE NOTE: The mitigation measures listed below are the key mitigation measures relating the impacts identified above. The Environmental Management Plan for the proposed development (Appendix F) lists all of the mitigation measures relating to the operational phase of the proposed development.

Alternative S1, S2, S3 & S4**1. Traffic and Access:**

- o Regular maintenance of roads must take place and adequate signage to indicate routes must be implemented.
- o The existing two-way stopped controlled intersection at the southern end of the decommissioned road should be upgraded in concurrence with the stipulations in the traffic study.

2. Noise:

- o The architectural acoustic properties of the Stevenson Hamilton Memorial Library need to be investigated by an acoustical engineer in order to ensure that there are no noise impacts from the traffic on the new access road to the restaurant / shop complex that passes adjacent to the building.
- o Appropriate architectural acoustic measures must be designed into the building. The noise mitigating measures in the conference centre building will need to be designed by an acoustical engineer in order to optimise the design parameters and ensure that the cost/benefit of the measure is optimised.
- o The acoustical consideration must be adequate in order to meet interior noise standards as specified by SANS 10103.
- o High quality air-conditioning equipment should be installed. Equipment with the best noise rating should be used. Roof mounted fans may further require attenuators and need to be screened from noise sensitive areas.
- o High quality refrigeration compressors should be installed. Equipment with the best noise rating should be used. Outside building installation should be acoustically encapsulated.
- o All mechanical equipment is to be well maintained.
- o Night-time use of the facility should be kept to a minimum to ensure that no conferencing activities and regular operational activities, or movement of conference facility users to and from the facility disturb adjacent noise sensitive users.

3. Soils and Geology

- o Correct drainage of the site should ensure that potential contaminants do not come into contact with soil. This is important in the parking area of the conference centre.
- o Ensure that vegetation protection over soil in landscaped areas is maintained during operation to avoid erosion.
- o The design of the conference and surrounds must include the designation of pathways to which movement of people on foot is restricted. This will prevent the chances of erosion occurring through people movement.
- o

4. Groundwater and Surface Water Pollution

- o 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.
- o A fat trap at the washing area is to be installed and is to be cleaned on a daily basis
- o A minimal number and quantity of chemical herbicides, pesticides and fertilisers shall be used for grounds maintenance. Should the use of chemical herbicides be necessary only glyphosphate-based systemic

herbicides (which become inert on making contact with the soil) should be used.

- o Stormwater runoff from any roads should be carefully managed to ensure that excessive deposits of silt do not occur.

5. Water Resource Management

- o Water-saving devices must be installed in all kitchens and bathrooms in the conference centre building. This includes the installation of dual flush toilets.
- o Toilets must be regularly checked to ensure that no water leakage occurs.
- o The site must be landscaped in such a way that minimal irrigation of landscaped areas is required.
- o Rainwater from the roof of the building must be captured, stored, and utilised for irrigation of landscaped areas.

6. Waste Management

- o Solid waste separation and recycling should take place for the duration of the operational phase for the development.
- o All waste must be removed promptly to ensure that it does not attract vermin or produce odours.
- o Solid waste from the conference facilities should be stored in an on-site cage with facilities for waste separation.
- o Solid waste should be collected on a regular basis by reserve management

7. Flora

- o Appropriate indigenous vegetation must be planted around the site. Where trees and other vegetation have had to be removed, these must be re-planted.
- o The rehabilitation of the decommissioned access road to the east of the Stevenson-Hamilton Memorial Library must incorporate the planting of indigenous vegetation and trees, rather than extensive lawns (lawns require constant watering, necessitating the usage of water).
- o Exotic plant management programme should be implemented by management to regularly control the encroachment of alien invasive species
- o The design of the conference and surrounds must include the designation of pathways to which movement of people on foot is restricted.

8. Fauna

- o Litter storage at the conference facility site is to be of the highest standard and out of reach of primates and other animals.
- o Movement corridors for arboreal-inhabiting fauna should be created through the planting of trees adjacent to one another where space allows.

9. Employment

- o A formal training programme shall be implemented to continue the process of skills transfer and enhancement of benefits to employees. Training will include creating awareness among the staff of environmental issues and how these should be mitigated.
- o Local workforce to be favoured in the selection of employees for jobs.

10. Visual Impact

- o High standards of maintenance and management of the landscaping should be carried out in accordance with the best possible practice to ensure that the landscaping ensures that the conference centre blends in with the current visual environment of the camp, by enhancing natural features such as trees and vegetation as much as possible.
- o It is strongly recommended that the wooden (palisade) fence currently located on the western side of the staff housing in the conference centre footprint be dismantled and re-assembled (and extended) along the re-aligned access road on the western side of the building. This will help to shield the conference centre building from the receptors located to the west of the conference centre.
- o The erection of a wooden palisade or other fence on the northern and western side of the building has been recommended as these are the sides of the building located closest to the sensitive receptors, and on both sides staff / service entrances are located that could be viewed by, and adversely affect the guests of the closest rondawels.
- o It is recommended that no external lighting be installed on the perimeter of the conference centre building except low level lighting at the entrance to the car park and the building, and at the two service entrances.

- o Any outside lighting erected must be downward and inward-facing (towards the conference centre building) and be covered to ensure that minimal light spill is created.
- o If possible external lighting at the two service entrances should be able to be switched on / off, or fitted with movement detecting sensors so that it is on only when the service entrance is being utilised.
- o Method and timing of litter collection and storage must be planned to ensure that vermin cannot get to discarded food.

5. IMPACTS THAT MAY RESULT FROM THE DECOMMISSIONING AND CLOSURE PHASE

Indicate potential site alternative related impacts and mitigation measures that may eliminate or reduce the potential impacts:

Infrastructure

All permanent buildings must be removed from the site. Removals should be phased so that rehabilitation can begin and soil surfaces are not exposed for too long. All rubble must be removed to a licensed waste disposal facility.

Roads (construction traffic and access)

The access road and any other roads must be rehabilitated once the decommissioning phase is complete. Ripping and seeding using only indigenous vegetation should be implemented to rehabilitate decommissioned roads. All issues identified in the construction traffic and access impact table above will be of relevance during the decommissioning phase.

Noise Pollution

The demolition of buildings could create significant noise impacts for nearby receptors. Noise-related mitigation measures for the construction phase of the development apply to the decommissioning phase.

Soil Pollution

Infrastructure removal must be phased in order to reduce soil exposure and the risk of soil erosion. Rehabilitation should begin as soon as buildings are removed to ensure that soil is stabilised as soon as possible.. Any fuel required on site must be stored in a bunded area with walls high enough to contain 110% of the total volume of the hazardous material. Care must be taken not to contaminate soils on site. A full rehabilitation plan needs to be compiled in order for the soils to be adequately rehabilitated to their original state.

Solid Waste Pollution

Skip bins must be placed on site during the decommissioning phase to accommodate rubble and other waste. As with the construction and operating phases, separating and recycling of waste must be made a priority. All other waste must be removed to the Landfill site in KNP (this might change in the future and will have to be updated accordingly).

Air Pollution

Dust created during the removal of the conference centre buildings and associated infrastructure could potentially adversely affect nearby accommodation units. This potential issue must be managed through the damping down of exposed soils. The rehabilitation of the site must be made a priority in order to avoid dust becoming an issue in the surrounding areas.

Fauna and Flora

Care must be taken during the decommissioning phase to take account and not disturb any fauna which may have re-inhabited the area since the inception of the camp. No fauna must be harmed through the process. Indigenous vegetation must be utilised for the rehabilitation of the site. Vegetation similar to that of the surrounding areas should be used. A full rehabilitation plan is recommended in this regard to ensure that the site is returned to its original state. Any exotic species must be removed immediately during the rehabilitation process. The process should be carried out as quickly as possible to ensure that the disturbance of fauna is kept to a minimum.

Social Impacts

Employees of the conference facilities must be given sufficient notification of the closure of the facilities in order for them to search for alternative employment. All employees must be compensated for accordingly. Construction workers must be briefed on the dangers of the area.

Visual/Light Impact

All evidence of the conference facilities must be removed so that all possible visual impacts are removed. The rehabilitation of the area should aim to return the footprint to as natural a state as possible to keep the area in line with the visual character and sense of place of the area.

6. PROPOSED MANAGEMENT OF IMPACTS AND MITIGATION

Indicate how identified impacts and mitigation will be monitored and/or audited.

Alternative S1, S2, S3 & S4

1. The contractor must sign that he has read and understands the EMP.
2. The Environmental Control Officer is responsible for the implementation of the EMP during the construction phase and liaison between the developer and the Contractor. The following tasks will fall within his / her responsibilities:
 - o Be aware of the findings and conclusions of the Environmental Impact Assessment and the conditions stated within the Record of Decision.
 - o Be familiar with the recommendations and mitigation measures of the EMP.
 - o Conduct monthly audits of the construction site according to the EMP and Environmental Authorisation.
 - o Educate the construction team about the management measures of the EMP and Environmental Authorisation.
 - o Regular liaison with the construction team and the project leader.
 - o Responsible for keeping records of compliance as well as records of all environmental incidents and a complaints register.
 - o Recommend corrective action for any non-compliance incidents on the construction site.
 - o Compile a regular report highlighting any non-compliance issues as well as good compliance with the EMP.
 - o The contact numbers of the Contractor and the ECO shall be made available on-site to the affected parties / complainants. This will ensure open channels of communication and prompt response to queries and claims.
3. A monitoring programme will be implemented for the duration of the construction phase of the project. This programme will include:
 - o Two weekly audits during first month where after monthly audits will be conducted by the Environmental Control Officer, which are according to the EMP and conditions of the Environmental Authorisation. These audits can be conducted randomly and do not require prior arrangement with the project manager.
 - o Compilation of an audit report with a rating of the compliance with the EMP. This report will be submitted to the relevant authorities (NDEAT).
 - o Proper and continuous liaison between developer, the Contractor and other stakeholders (guests and members of the public) to ensure all parties are appropriately informed at all times

7. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up 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.

Alternative S1 (A) (preferred alternative)

Assessment of Preferred Site

Site A (Site 1) is the preferred site for the reasons as detailed below. The site exists within an already transformed environment, although certain residual aspects of the natural environment such as large riparian trees remain on the site. An existing infrastructure footprint exists on the site of the development in the form of buildings, roads and other services. The vegetation on and immediately adjacent to the site provides habitat for certain types of fauna, including birds and arboreal-inhabiting mammals such as bushbabies. The presence of large trees and other vegetation interspersed between buildings such as the Stevenson-Hamilton Memorial Library adjacent to the site is consistent with the visual character and sense of place of the Rest Camp as a whole, in which natural features of the environment and a low intensity of human activity provides a tranquil environment.

The site has been selected as the preferred site as it exists within an already transformed environment (most of the footprint is already occupied by built infrastructure that will be replaced), thus making it more preferable than Site 4. Site 1 is preferred to Site 2 and 3 which are similarly transformed due to its location close to the hub of the Rest Camp (the restaurant shop complex) that would allow food preparation for the conference centre to be done in the existing camp restaurant, thus minimizing the need for erection of food making facilities in the conference centre, and minimising traffic into other parts of the camp. The location of the site here is line with the KNP policy to remove all staff accommodation currently situated in the camps. This site also promotes the master plan theme for the camp of creating a central "green" tourism activity core around the library, extending down to the shop / restaurant.

Environmental Impact Statement – Site 1

The primary negative potential impacts associated with the proposed development in the construction phase are related to the generation of noise, creation of visual impacts and general disruption of the sense of place within the Rest Camp, as well as stormwater and erosion impacts that may materialise as a result of the construction activities. The construction phase will be associated with positive socio-economic impacts in terms of the creation of jobs. A number of mitigation measures to reduce or ameliorate these impacts have been identified and are presented in the tables above. A key environmental imperative of the construction phase would be the retention of and inclusion of as many trees as possible in the design of the proposed development.

The primary negative impacts relating to the operational phase relate to potential light spill related to external lighting, and noise impacts on sensitive receptors. The primary positive impacts relate to the generation of a number of jobs. In addition the decommissioning of the current access road to the restaurant / shop complex would have a positive impact on the nearest guest accommodation units by reducing current noise and light spill generated by vehicles on the road. A number of mitigation measures have been identified to reduce the potential negative impacts, including the correct acoustic design of the conference to reduce noise generation, the shielding of certain sides of the conference centre building, and the minimisation and correct orientation of external lighting. The landscaping of the area must focus on the restoration of vegetation, including trees that are removed.

A number of cumulative negative impacts have been identified in the operational phase of the proposed development – these relate to the generation of more traffic on the roads, as well as the potential resultant increase in accommodation within the Skukuza Rest Camp to accommodate both conference centre attendees and other guests that would have resultant spin-off impacts in terms of increased demands on water resources, sewage and waste disposal and energy usage. These impacts would add to existing impacts currently being experienced in the Skukuza area. The mitigation of extra traffic on the park roads that is likely to be generated by the conference centre delegates remains a Kruger National Park management responsibility. However KNP management could consider measures such as the parking of conference centre delegate vehicles outside of the park, and bussing delegates to the

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conference centre, or restricting the self-drive movement of vehicles in the Park and rather allowing delegates to undertake organized game drives. The likelihood of the cumulative impacts that are related to the expansion of accommodation facilities occurring depends on the higher level decisions taken by Kruger National Park Management as to whether further accommodation is required and should be allowed to be developed.

The proposed development is therefore supported from an environmental perspective as it is located within an already transformed area, and thus it will not result in the creation of many new biophysical impacts. The development of the conference centre will not spatially increase this footprint. In addition all of the construction and operation-phase impacts that could potentially arise due to the proposed development can be mitigated. However in order for the proposed development to be environmentally sustainable, Kruger National Park management must give serious consideration to the potential secondary cumulative impacts that may arise if new accommodation is developed in association with the conference centre (thus potentially increasing the human footprint in the Skukuza area). Development of further infrastructure, especially accommodation must be carefully considered and undertaken in line with the stipulations and recommendations of the Strategic Environmental Assessment (SEA) currently being undertaken for the Marula Region of the KNP.

Alternative S2

Assessment of Preferred Site

Site 2 exists within an already transformed environment, being located within the camping area on the eastern side of the camp. Certain residual aspects of the natural environment such as trees and small relict patches of natural vegetation remain on the site. An existing human footprint exists on the site of the development in the form of buildings, roads and other services. The vegetation on and immediately adjacent to the site provides habitat for certain types of fauna, including birds and arboreal-inhabiting mammals such as bushbabies.

Environmental Impact Statement – Site 2

The site has been assessed to be suitable for the development of the conference centre from a biophysical perspective as it exists within an already transformed environment, being located within the camping area of the Rest Camp. However if the conference centre was placed at this site, it would be almost entirely surrounded by guest accommodation, thus being likely to exert impacts on these sensitive receptors (see below). The conference centre would be out of place in its surroundings, would be located away from the kitchen facilities at the restaurant and would add extra vehicle traffic to the roads in this part of the Camp, thus potentially creating a nuisance value to other guests. In addition the location of the conference centre at this site would reduce the size of the camping area in the Camp, thus potentially necessitating the relocation of part of the camping area to an additional camping area beyond the southern boundaries of the camp. This would be associated with a whole suite of negative impacts relating to the transformation of currently undeveloped natural vegetation. For this reason Site 1 is preferred.

The primary negative and positive potential impacts that would be associated with the proposed development at this site in the construction and operational phase would be very similar to those identified for Site 1 above. Although mitigation measures could reduce the impacts these would likely to be less effective at this site due to the proximity of receptors on all sides of the site. The cumulative impacts associated with the development of the conference centre at this site would be similar to the wider cumulative impacts associated with the development of the conference centre at Site 1. These would be exacerbated by the loss of camping accommodation and the likely need to increase the camping area to untransformed areas of natural vegetation beyond the boundaries of the site.

Alternative S3

Assessment of Preferred Site

Site 3 exists within an already transformed environment, being located in an area of staff accommodation on the far western boundary of the Rest Camp. Certain residual aspects of the natural environment such as trees remain on the site, although most of the area that is not occupied by the house is a landscaped garden. An existing human footprint exists on the site of the development in the form of buildings, roads and other services.

BASIC ASSESSMENT REPORT

Environmental Impact Statement – Site 3

The site has been assessed to be suitable for the development of the conference centre from a biophysical perspective as it exists within an already transformed environment, being located within an area of staff accommodation. If the conference centre was placed at this site, it would be surrounded by staff accommodation, but limited guest accommodation. Building the conference facilities in this section of the camp will have minimum impact on the tourism area during construction and operation. The access to the conference centre would be located along the road on the Camp's southern boundary fence. The removal of staff housing would be in line with KNP policy to remove all staff accommodation currently existing within the boundaries of the rest camps. However in spite of its location the construction and operation of the conference centre at this location would be likely to exert impacts on sensitive receptors in the immediate vicinity (see below). The major operational disadvantage to the location of the conference centre at this location would be that it would be located away from the kitchen facilities at the restaurant, necessitating the development of the centre's own independent full kitchen facility. This would in turn lead to staff duplication, management and overheads, as well as an increased demand on water and energy resources. The centre would also not be located within the "green" tourism activity core around the library, extending down to the shop / restaurant, as promoted in the camp master plan. For this reason Site 1 is preferred as it is technically and operationally more feasible.

Alternative S4

Assessment of Preferred Site

Site 4 is located outside of the boundaries of the Rest Camp, being located to the south of the camping area. The area is a greenfields site, being characterised by natural vegetation. The eastern part of the site appears to be located within a drainage line that is characterised by thicker riparian vegetation.

Due to Site 4 being located in an untransformed area, it has been assessed to be not suitable for the development of the proposed conference centre. Most of the natural vegetation on the site would need to be removed to accommodate the conference centre building and associated infrastructure. This would exert a significant impact on the localised area and fauna and flora currently found within it; The site has a diverse number of floral species and is likely to house several mammal species at any one time as it is unfenced. The area is also utilised frequently by the local hyaena clan. Impacts that would not be likely to be mitigated / ameliorated. In addition the development of this site would result in the enlargement of the Rest Camp footprint which is already inflicting a large anthropogenic impact on the natural environment in the area due to its size. The development of the conference centre facility on this site would require the undertaking of a full Environmental Impact Assessment and not a Basic Assessment due to the area being undisturbed natural veld. New service infrastructure will have to be installed and this will greatly increase the footprint of development. Due to the significant impacts associated with the development of a conference centre at this site, this site has been ruled out as being suitable for the development of the conference centre.

8. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to

YES

make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner).

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 should be recommended to be included in the authorization that may be granted by the competent authority, other than specifying that all stipulations and recommendations contained with the Environmental Management Plan (EMP) – Appendix F – be strictly adhered to.

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Site Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix D - 1: Noise Impact Assessment

Appendix D - 2: Visual Impact Assessment

Appendix D - 3: Geotechnical Report

Appendix D - 4: Traffic Report

Appendix D – 5: Biodiversity Desktop Assessment

Appendix E: Comments and responses report

Appendix F: Draft Environmental Management Plan

Appendix G: Public Participation Documentation

Appendix G - 1: Example and Proof of Site Notices

Appendix G - 2: Proof of Advertisements

Appendix G - 3: Letters to I&APs

Appendix G - 4: BID