


**ENVIRONMENTAL IMPACT ASSESSMENT FOR  
THE RENEWAL OF THE ENVIRONMENTAL  
CLEARANCE FOR THE OPERATION OF THE  
SPITZKOPPE CAMPSITE AND OBTAINING AN  
ENVIRONMENTAL CLEARANCE FOR THE  
PROPOSED MAERUA SELF CATERING CAMP,  
SPITZKOPPE, ERONGO REGION**

**2022**

**App - 221124000421**

<p>Project Name:</p>	<p><b>ENVIRONMENTAL IMPACT ASSESSMENT FOR THE RENEWAL OF THE ENVIRONMENTAL CLEARANCE FOR THE OPERATION OF THE SPITZKOPPE CAMPSITE AND OBTAINING AN ENVIRONMENTAL CLEARANCE FOR THE PROPOSED MAERUA SELF CATERING CAMP, SPITZKOPPE, ERONGO REGION</b></p>
<p>The Proponent:</p>	<p><b>The Management #Gaingu Conservancy Committee P O Box 1367 GOBABIS</b></p>
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## EXECUTIVE SUMMARY

*Green Earth Environmental Consultants* were appointed by the Proponent, #Gaingu Conservancy Committee, to conduct an Environmental Impact Assessment for the **renewal of the Environmental Clearance for the operation of the Spitzkoppe campsite and obtaining an Environmental Clearance for the proposed Maerua Self-Catering Camp, Spitzkoppe, Erongo Region.** In terms of the Regulations of the Environmental Management Act (No 7 of 2007) an Environmental Impact Assessment must be done to address the following 'Listed Activities':

### ***TOURISM DEVELOPMENT ACTIVITIES***

*6. The construction of resorts, lodges, hotels or other tourism and hospitality facilities.*

The current campsite is in operation under an existing ECC issued on 11 June 2019 which has expired and must be renewed. It is also the intension to add 10 tents (wooden frames with Ripstop cladding) to the campsites as an additional offering to tourists who do not have their own tents and / or camping facilities or who cannot pitch their own tents due to disabilities or age. These tents will provide self-catering accommodation and will include 2 x tented ablution blocks (communal) with a dish washing facility, a barbeque facility and there will also be 1 x communal cooking area for group bookings and 1 x supervisor's tent accommodation. The proposed tented camp will be called the Maerua Self-Catering Camp and be in a separate location, away from the existing campsites, and will also be under the management of the exiting Proponent, the #Gaingu Conservancy Committee. The existing Environmental Clearance must be expanded to include the activities of the proposed Maerua Self-Catering Camp.

The negative impacts associated with the project are the impact on the vegetation, the natural drainage systems, noise and dust during construction and operation, the danger of visitors and workers being injured during construction, the transmission of diseases from people or to people involved in construction and the loss of land. However, mitigation measures will be provided that can control the extent, intensity, and frequency of these named impacts in order not to have substantial negative effects or results.

The type of activities that will be carried out on the site will not negatively affect the amenity of the locality and the activities do not adversely affect the environmental quality of the neighbouring areas. None of the potential impacts identified are regarded as having a significant impact to the extent that the proposed project should not be allowed. However, the operational activities further on need to be controlled and monitored by the assigned subcontractors and the proponent.

The Environmental Impact Assessment which follows upon this paragraph was conducted in accordance with the guidelines and stipulations of the Environmental Management Act (No 7 of 2007) meaning that all possible impacts have been considered and the details are presented in the report.

Based upon the conclusions and recommendations of the Environmental Impact Assessment Report and Environmental Management Plan following this paragraph, the

Environmental Commissioner of the Ministry of Environment, Forestry and Tourism is herewith requested to:

1. Accept the Environmental Impact Assessment;
2. Approve the Environmental Management Plan;
3. Issue a renewal of the Environmental Clearance for the operation of the Spitzkoppe campsite and obtain an Environmental Clearance for the proposed Maerua Self-Catering Camp, Spitzkoppe, Erongo Region and for the following "listed activities":

***TOURISM DEVELOPMENT ACTIVITIES***

*6. The construction of resorts, lodges, hotels or other tourism and hospitality facilities.*

# TABLE OF CONTENTS

LIST OF FIGURES.....	7
LIST OF ABBREVIATIONS .....	8
1. INTRODUCTION .....	9
2. TERMS OF REFERENCE .....	9
3. NEED AND DESIRABILITY .....	10
4. BACKGROUND INFORMATION ON PROJECT .....	11
4.1. PROPOSED PROJECT.....	11
4.2. APPROVALS OBTAINED.....	17
5. BULK SERVICES AND INFRASTRUCTURE .....	18
5.1. ACCESS REQUIREMENTS .....	18
5.2. WATER SUPPLY .....	18
5.3. ELECTRICITY .....	18
5.4. SEWAGE DISPOSAL .....	18
5.5. SOLID WASTE.....	19
6. APPROACH TO THE STUDY .....	19
7. ASSUMPTIONS AND LIMITATIONS .....	20
8. ADMINISTRATIVE, LEGAL AND POLICY REQUIREMENTS .....	20
9. AFFECTED RECEIVING ENVIRONMENT .....	30
9.1. BIODIVERSITY AND VEGETATION.....	30
9.2. GEOLOGY AND SOILS .....	30
9.3. SOCIO ECONOMIC ENVIRONMENT .....	31
9.4. CLIMATE .....	32
9.5. HYDROLOGICAL COMPONENT.....	33
9.6. CULTURAL HERITAGE.....	33
10. IMPACT ASSESSMENT AND EVALUATION.....	33
10.1. IMPACTS DURING THE CONSTRUCTION ACTIVITY .....	34
10.1.1. WATER USAGE.....	34
10.1.2. ECOLOGICAL IMPACTS.....	35
10.1.3. DUST POLLUTION AND AIR QUALITY .....	35
10.1.4. NOISE IMPACT.....	36
10.1.5. HEALTH, SAFETY AND SECURITY.....	36
10.1.6. CONTAMINATION OF GROUNDWATER.....	37
10.1.7. SEDIMENTATION AND EROSION .....	37
10.1.8. GENERATION OF WASTE .....	38
10.1.9. CONTAMINATION OF SURFACE WATER .....	38
10.1.10. TRAFFIC AND ROAD SAFETY .....	38

10.1.11.	FIRES AND EXPLOSIONS .....	39
10.1.12.	SENSE OF PLACE .....	39
10.2.	IMPACTS DURING THE OPERATIONAL PHASE .....	39
10.2.1.	ECOLOGICAL IMPACTS.....	39
10.2.2.	DUST POLLUTION AND AIR QUALITY .....	40
10.2.3.	CONTAMINATION OF GROUNDWATER.....	40
10.2.4.	GENERATION OF WASTE .....	41
10.2.5.	FAILURE IN RETICULATION PIPELINES.....	41
10.2.6.	FIRES AND EXPLOSIONS .....	41
10.2.7.	HEALTH, SAFETY AND SECURITY.....	42
10.3.	CUMULATIVE IMPACTS.....	42
11.	ENVIRONMENTAL MANAGEMENT PLAN .....	43
12.	CONCLUSION .....	43
13.	RECOMMENDATION.....	43
	APPENDIX A: NEWSPAPER NOTICES.....	46
	APPENDIX B: CURRICULUM VITAE OF CHARLIE DU TOIT .....	50
	APPENDIX C: CURRICULUM VITAE OF CARIEN VAN DER WALT .....	52
	APPENDIX D: ENVIRONMENTAL MANAGEMENT PLAN .....	53

## LIST OF FIGURES

<i>Figure 1: Locality Plan of the proposed Spitzkoppe Tented Camp</i> .....	12
<i>Figure 2: Locality plan zoomed in</i> .....	13
<i>Figure 3: Location where tented lodge will be located</i> .....	14
<i>Figure 4: Layout of the proposed lodge</i> .....	14
<i>Figure 5: Proposed structure guidelines</i> .....	15
<i>Figure 6: Image of area (1)</i> .....	15
<i>Figure 7: Image of area (2)</i> .....	16
<i>Figure 8: Access to Project Site</i> .....	18
<i>Figure 9: Flowchart of the Impact Process</i> .....	29
<i>Figure 10: Vegetation in area</i> .....	30
<i>Figure 11: Geology and soils in the area</i> .....	31

## **LIST OF ABBREVIATIONS**

CAN	Central Area of Namibia
EC	Environmental Clearance
ECO	Environment Control Officer
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
I&APs	Interested and Affected Parties
MEFT	Ministry of Environment, Forestry and Tourism
SQM	Square Meters



## 1. INTRODUCTION

The Proponent (#Gaingu Conservancy Committee) appointed Green Earth Environmental Consultants to conduct an Environmental Impact Assessment and develop an Environmental Management Plan for the renewal of the Environmental Clearance for the operation of the Spitzkoppe campsite and to obtain an Environmental Clearance for the proposed Maerua Self-Catering Camp, Spitzkoppe, Erongo Region.

The Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) stipulates that an Environmental Impact Assessment (EIA) report and management plan is required as the following 'Listed Activities' are involved:

### ***TOURISM DEVELOPMENT ACTIVITIES***

*6. The construction of resorts, lodges, hotels or other tourism and hospitality facilities.*

The Environmental Impact Assessment below contains information on the proposed project and the surrounding areas, the proposed activities, the applicable legislation to the study conducted, the methodology that was followed, the public consultation that was conducted, and the receiving environment's sensitivity and any potential ecological, environmental, and social impacts.

## 2. TERMS OF REFERENCE

To be able to implement the proposed project, an Environmental Impact Assessment and Environmental Clearance is required. For this environmental impact exercise, Green Earth Environmental Consultants followed the terms of reference as stipulated under the Environmental Management Act.

The aim of the environmental impact assessment was:

- To comply with Namibia's Environmental Management Act (2007) and its regulations (2012).
- To ascertain existing environmental conditions on the site to determine its environmental sensitivity.
- To inform I&APs and relevant authorities of the details of the proposed development and to provide them with an opportunity to raise issues and concerns.
- To assess the significance of issues and concerns raised.
- To compile a report detailing all identified issues and possible impacts, stipulating the way forward and identify specialist investigations required.
- To outline management guidelines in an Environmental Management Plan (EMP) to minimize and/or mitigate potentially negative impacts.

The tasks that were undertaken for the Environmental Impact Assessment included the evaluation of the following: climate, water (hydrology), vegetation, geology, soils, socio economic impact, cultural heritage, groundwater, sedimentation, erosion, biodiversity, sense of place, socio-economic environment, health, safety and traffic.

The EIA and EMP from the assessment will be submitted to the Environmental Commissioner for consideration. The Environmental Clearance will only be obtained (from the DEA) once the EIA and EMP has been examined and approved for the listed activity.

The public consultation process as per the guidelines of the Act has been followed. The methods that were used to assess the environmental issues and alternatives included the collection of data on the project site and surrounding area, info obtained from the proponent and the Ministry of Environment, Forestry and Tourism and identified and affected stakeholders. Consequences of impacts were determined in five categories: nature of impact, expected duration of impact, geographical extent of the event, probability of occurring and the expected intensity.

All other permits, licenses or certificates that are further on required for the operation of the proposed project still needs to be applied for by the proponent.

### **3. NEED AND DESIRABILITY**

Determining what the impact of the operations would be are broken down into different categories and environmental aspects and dealt with in the Environmental Management Plan (EMP). As per the ISO 14001 definition: *an environmental aspect is an element of an organization's activities, products and/or services that can interact with the environment to cause an environmental impact e.g., land degradation or land deterioration among others, that will cause harm to the environment.*

All concerns and potential impacts raised during the public participation process and consultative meetings were evaluated. Predictions were made with respect to their magnitude and an assessment of their significance was made according to the following criteria:

The Nature of the activity: The possible impacts that may occur are that water will be used in the construction and operational phases, wastewater will be produced that will be handled either by the proponent, land will be used for the proposed activities, a sewage system will be constructed, and general construction activities will take place, namely the building of infrastructure.

The Probability of the impacts to occur: The probability of the above-named impacts to occur and have a negative or harmful impact on the environment and the community is small since the Environmental Management Plan will also guide these activities. Water will still be used, and wastewater produced, however guidelines will be set that will ensure the impact is minimum.

The Extent of area that the project will affect: The specific project will most likely only

have a small impact on the proposed project site itself and not on the surrounding or neighbouring land except for noise, traffic, roads, electricity and dust and there may be a visual impact because of the size of the proposed development. Therefore, the extent that the project will have a negative impact on is not extensive.

The Duration of the project: The duration of the project is uncertain. Water will still be used, and waste produced on a continuous basis and the structures that were constructed will remain and may be visually unpleasing to surroundings.

The Intensity of the project: The intensity of the project is mostly limited to the site however for the above-named items/processes where the intensity of the project will be felt outside the borders of the project site.

According to the information that was present while conducting the Environmental Impact Assessment for the construction and operation of the project, no high-risk impacts were identified and therefore it is believed that the operations will be feasible in the short and long run. Most of the impacts identified were characterized as being of a low impact on the receiving and surrounding environment and with mitigation measures followed, the impacts will be of minimum significance or avoided.

## **4. BACKGROUND INFORMATION ON PROJECT**

### **4.1. PROPOSED PROJECT**

The Project Site is located in the Erongo Region at Spitzkoppe. The proposed Environmental Impact Assessment is for the renewal of the Environmental Clearance for the operation of the Spitzkoppe campsite and to obtain an Environmental Clearance for the proposed Maerua Self Catering camp. **The current campsite is operated under an existing ECC issued on 11 June 2019 which has expired and must be renewed.** It is also the intention to add 10 tents (wooden frames with Ripstop cladding) to the campsites as an additional offering to tourists who do not have their own tents and / or camping facilities or who cannot pitch their own tents due to disabilities or age. These tents will provide self-catering accommodation and will include 2 x tented ablution blocks (communal) with a dish washing facility, a barbeque facility and there will also be 1 x communal cooking area for group bookings and 1 x supervisor's tent accommodation.

The proposed tented camp will be called the Maerua Self-Catering Camp and be in a separate location, away from the existing campsites, and will also be under the management of the existing Proponent, the #Gaingu Conservancy Committee. The existing Environmental Clearance must be expanded to include the activities of the proposed Maerua Self-Catering Camp.

The camp's name will provisionally be "Maerua Self Catering Camp @Spitzkoppe" and will be located within the borders of the Community Rest Camp. It is expected that 4 (four) permanent jobs will be created in the operation of the camp site and in the construction time period which will be about 3 (three) months there will 10 (ten) temporary jobs created during construction. See below maps showing the location of the proposed tented camp:




<p>Scale: 1/30 000</p> <p>DATE: JUNE 2022</p> <p>PLAN NO. SPITZ_TENT</p>	<p>LOCALITY PLAN OF THE SPITZKOPPE TENTED CAMP</p> <p>( SPITZKOPPE CONSERVANCY )</p>	
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Figure 1: Locality Plan of the proposed Spitzkoppe Tented Camp

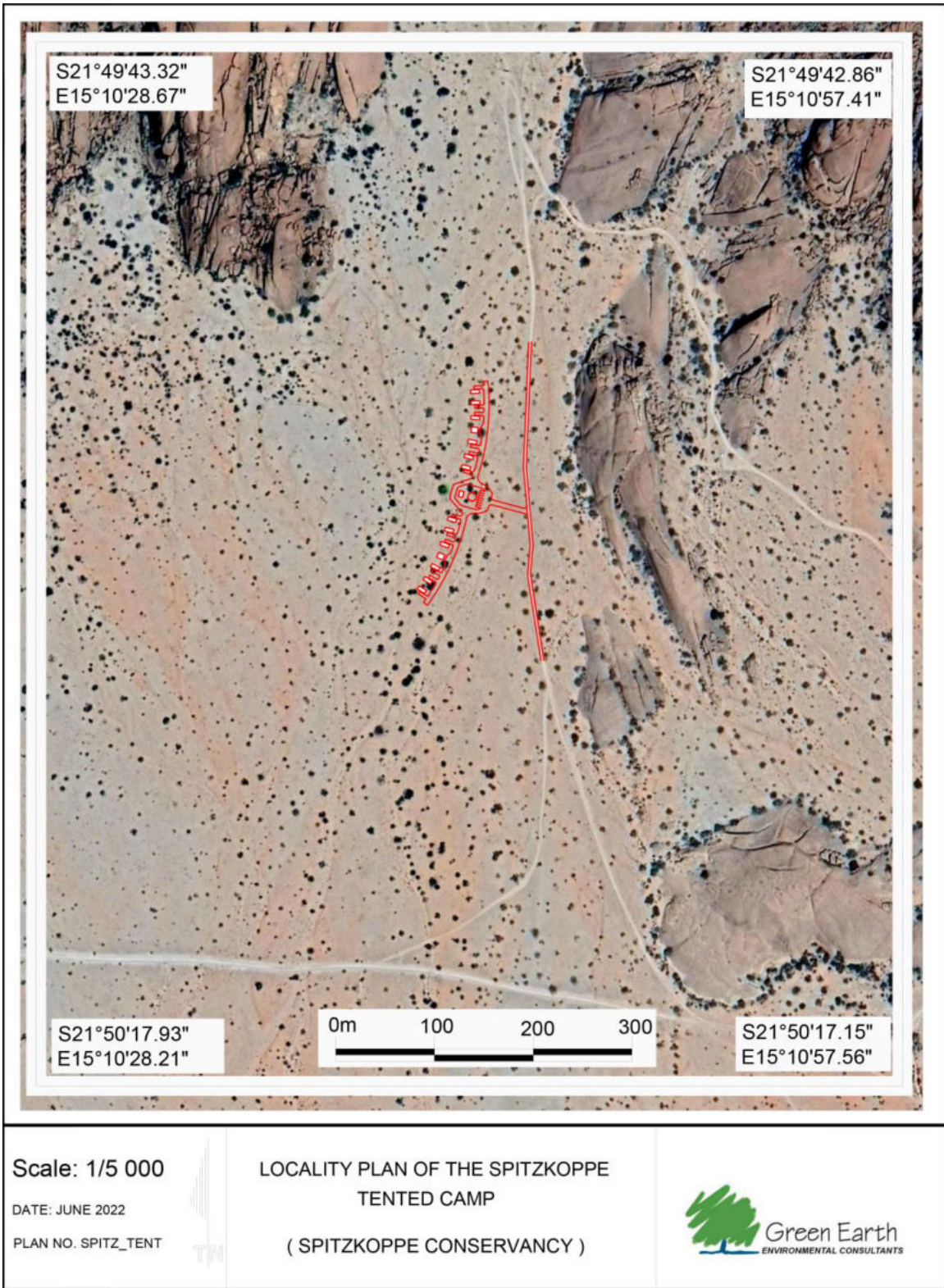


Figure 2: Locality plan zoomed in



Figure 3: Location where tented lodge will be located

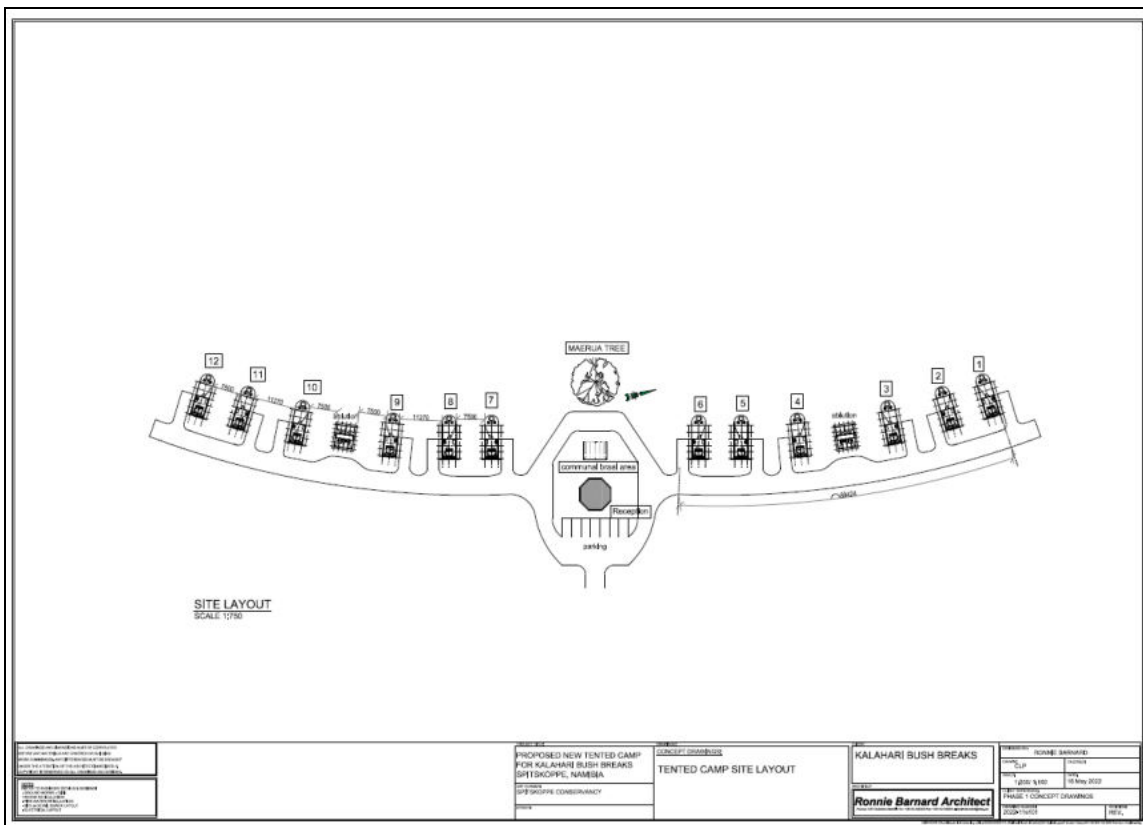


Figure 4: Layout of the proposed lodge

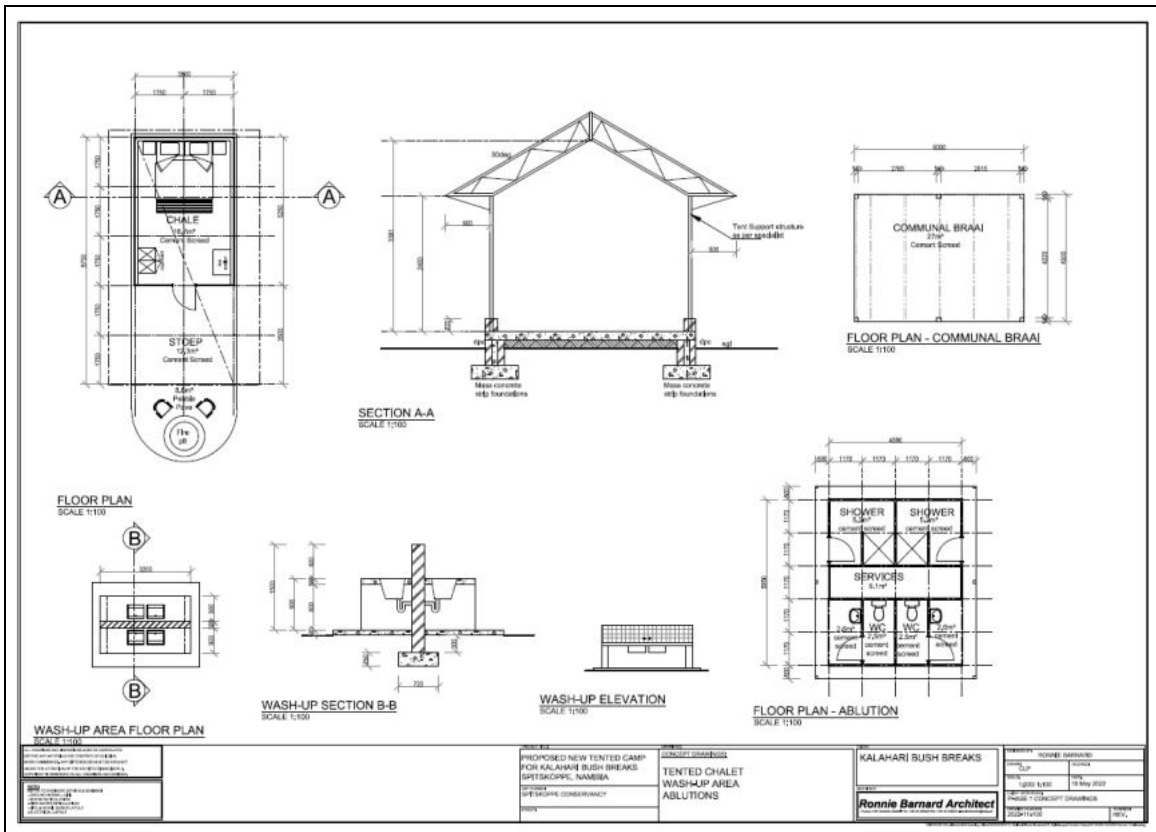


Figure 5: Proposed structure guidelines



Figure 6: Image of area (1)



*Figure 7: Image of area (2)*



## 4.2. APPROVALS OBTAINED

The previous Environmental Clearance Certificate that was obtained from the Ministry of Environment, Forestry and Tourism was dated 11 June 2019:

  
REPUBLIC OF NAMIBIA

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**MINISTRY OF ENVIRONMENT AND TOURISM**

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11 June 2019

**OFFICE OF THE ENVIRONMENTAL COMMISSIONER**

The Managing Member  
#Gaingu Conservancy Committee  
P.O. Box 114  
Usakos  
Namibia

Dear Sir/Madam

**SUBJECT: ENVIRONMENTAL CLEARANCE CERTIFICATE FOR SPITZKOPPE LODGE AND CAMPSITE SITUATED IN SPITZKOPPE, ERONGO REGION**

The Environmental Management Plan submitted is sufficient as it made provisions of the environmental management concerning the proposed activities. From this perspective, regular environmental monitoring and evaluations on environmental performance should be conducted. Targets for improvements should be established and monitored throughout this process.

This Ministry reserves the right to attach further legislative and regulatory conditions during the operational phase of the project.

On the basis of the above, this letter serves as an environmental clearance certificate for the project to continue. However, this clearance letter does not in any way hold the Ministry of Environment and Tourism accountable for any misleading information, nor any adverse effects that may arise from this project's activities. Instead, full accountability rests with #Gaingu Conservancy Committee.

This environmental clearance is valid for a period of 3 (three) years, from the date of issue unless withdrawn by this office.

Yours sincerely,  
  
Fredrick Mupoti Sikabongo  
DEPUTY ENVIRONMENTAL COMMISSIONER

  
Office of the  
Deputy Environmental Commissioner



**“Stop the poaching of our rhinos”**

All official correspondence must be addressed to the Permanent Secretary

## **5. BULK SERVICES AND INFRASTRUCTURE**

The following bulk services are already present on the site:

### **5.1.ACCESS REQUIREMENTS**

Access to the site will be along the current access road (jeep track) which links the Spitzkoppe Campsite with the lodge. No new road has to be created for the construction and/or maintenance of the infrastructure.



*Figure 8: Access to Project Site*

### **5.2.WATER SUPPLY**

Water for all operations will be obtained from the borehole at the campsite.

### **5.3.ELECTRICITY**

Electricity required during construction will be obtained from portable generators to be operated on the construction site and electricity will be obtained from solar panels during operation.

### **5.4.SEWAGE DISPOSAL**

Camp or portable toilets/showers during the construction phase is recommended because it has a limited impact on the environment. During operation, French drains will be used.

## **5.5.SOLID WASTE**

It is proposed that the normal household waste and construction waste which will be generated on the site during construction and be sorted into glass, paper, metal, plastics, noxious materials and be kept in an enclosed cage/container to prevent materials to be blown away by the wind or scavengers (like baboons) from accessing and spreading these materials. The waste material should be transported in an enclosed truck/container to an approved waste site at Usakos Municipality for disposal.

## **5.6.FIRE PROTECTION**

The Proponent will put in the necessary fire protection infrastructure as per requirements.

## **6. APPROACH TO THE STUDY**

The assessment included the following activities:

### a) Desktop sensitivity assessment

Literature, legislation and guidance documents related to the natural environment and land use activities available on the portion and area in general were reviewed to determine potential environmental issues and concerns.

### b) Site assessment (site visit)

The proposed project site and the immediate neighbourhood and surrounding area were assessed through several site visits to investigate the environmental parameters on site to enable further understanding of the potential impacts on site.

### c) Public participation

The public was invited to give input, comments and opinions regarding the proposed project. Notices were placed in the Republikein and New Era (see Appendix) on two consecutive weeks (22 and 29 June 2022) inviting public participation and comments on the proposed project. The closing date for any questions, comments, inputs or information was 15 July 2022.

### d) Scoping

Based on the desk top study, site visit and public participation, the environmental impacts were determined in five categories: nature of project, expected duration of impact, geographical extent of the event, probability of occurring and the expected intensity. The findings of the scoping have been incorporated in the environmental impact assessment report below.

## e) Environmental Management Plan (EMP)

To minimize the impact on the environment, mitigation measures have been identified to be implemented during planning, construction, and implementation. These measures have been included in the Environmental Management Plan to guide the planning, construction and operation of the development which can also be used by the relevant authorities to ensure that the project is planned, developed, and operated with the minimum impact on the environment.

## 7. ASSUMPTIONS AND LIMITATIONS

It is assumed that the information provided by the proponent (#Gaingu Conservancy Committee) is accurate. No alternative site for the proposed project were examined. The site was visited several times and any happenings after this are not mentioned in this report. (The assessment was based on the prevailing environmental conditions and not on future happenings on the site.) However, it is assumed that there will be no significant changes to the proposed project, and the environment will not adversely be affected between the compilation of the assessment and the implementation of the proposed activities.

## 8. ADMINISTRATIVE, LEGAL AND POLICY REQUIREMENTS

To protect the environment and achieve sustainable development, all projects, plans, programs and policies deemed to have adverse impacts on the environment require an EIA according to Namibian legislation. The administrative, legal and policy requirements to be considered during the Environmental Assessment are the following:

- The Namibian Constitution
- The Environmental Management Act (No. 7 of 2007)
- Other Laws, Acts, Regulations and Policies

### THE NAMIBIAN CONSTITUTION

Article 95 of Namibia's constitution provides that:

“The State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at the following:

Management of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future; in particular, the Government shall provide measures against the dumping or recycling of foreign nuclear and toxic waste on Namibian territory.” This article recommends that a relatively high level of environmental protection is called for in respect of pollution control and waste management.

Article 144 of the Namibian Constitution deals with environmental law and it states:

“Unless otherwise provided by this Constitution or Act of Parliament, the general rules of public international agreements binding upon Namibia under this Constitution shall form part of the law of Namibia”. This article incorporates international law, if it conforms to the Constitution, automatically as “law of the land”. These include international agreements, conventions, protocols, covenants, charters, statutes, acts, declarations, concords, exchanges of notes, agreed minutes, memoranda of understanding, and agreements (Ruppel & Ruppel-Schlichting, 2013). It is therefore important that the international agreements and conventions are considered (see section 4.9).

In considering these environmental rights, #Gaingu Conservancy Committee (the Proponent) should consider the following in devising an action plan in response to these articles:

- Implement a “zero-harm” policy that would guide decisions.
- Ensure that no management practice or decision result in the degradation of future natural resources.
- Take a decision on how this part of the Constitution will be implemented as part of the Proponent’s Environmental Control System (ECS).

### **ENVIRONMENTAL MANAGEMENT ACT (NO. 7 OF 2007)**

The Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) of the Environmental Management Act (No. 7 of 2007) that came into effect in 2012 requires/recommends that an Environmental Impact Assessment and an Environmental Management Plan (EMP) be conducted for the following listed activities to obtain an Environmental Clearance Certificate:

#### ***TOURISM DEVELOPMENT ACTIVITIES***

*6. The construction of resorts, lodges, hotels or other tourism and hospitality facilities.*

Cumulative impacts associated with the development must be included as well as public consultation. The Act further requires all major industries and mines to prepare waste management plans and present these to the local authorities for approval.

The Act, Regulations, Procedures and Guidelines have integrated the following sustainability principles. These need to be given due consideration, particularly to achieve proper waste management and pollution control:

#### **Cradle to Grave Responsibility**

This principle provides that those who handle or manufacture potentially harmful products must be liable for their safe production, use and disposal and that those who initiate potentially polluting activities must be liable for their commissioning, operation and decommissioning.

## Precautionary Principle

It provides that if there is any doubt about the effects of a potentially polluting activity, a cautious approach must be adopted.

## The Polluter Pays Principle

A person who generates waste or causes pollution must, in theory, pay the full costs of its treatment or of the harm, which it causes to the environment.

## Public Participation and Access to Information

In the context of environmental management, citizens must have access to information and the right to participate in decisions making.

## CONCLUSION AND IMPACT

The proposed activity will fit in with the surrounding activities and not have a negative impact on the prevailing environment. It will be ensured that all protected trees and plant species will be retained where possible.

## OTHER LAWS, ACTS, REGULATIONS AND POLICIES

The laws, acts, regulations, and policies listed below have also been considered during the Environmental Assessment.

Table 1: Laws, Acts, Regulations and Policies

<b>Laws, Acts, Regulations &amp; Policies consulted:</b>		
<b>Electricity Act (No. 4 of 2007)</b>	In accordance with the Electricity Act (No. 4 of 2007) which provides for the establishment of the Electricity Control Board and provide for its powers and functions; to provide for the requirements and conditions for obtaining licenses for the provision of electricity; to provide for the powers and obligations of licenses; and to provide for incidental matters: the necessary permits and licenses will be obtained.	The Proponent must abide to the Electricity Act.
<b>Pollution Control and Waste Management Bill (guideline)</b>	The <b>Pollution Control and Waste Management Bill</b> is currently in preparation and is therefore included as a guideline only. Of reference to the mining, Parts 2, 7	The Proponent must adhere to the Pollution Control and Waste Management Bill.

only)	<p>and 8 apply. Part 2 provides that no person shall discharge or cause to be discharged, any pollutant to the air from a process except under and in accordance with the provisions of an air pollution license issued under section 23. Part 2 also further provides for procedures to be followed in license application, fees to be paid and required terms of conditions for air pollution licenses. Part 7 states that any person who sells, stores, transports or uses any hazardous substances or products containing hazardous substances shall notify the competent authority, in accordance with subsection (2), of the presence and quantity of those substances. The competent authority for the purposes of section 74 shall maintain a register of substances notified in accordance with that section and the register shall be maintained in accordance with the provisions. Part 8 provides for emergency preparedness by the person handling hazardous substances, through emergency response plans.</p>	
<b>Water Resources Management Act</b>	<p>The <b>Water Resources Management Act (No. 11 of 2013)</b> stipulates conditions that ensure effluent that is produced to be of a certain standard. There should also be controls on the disposal of sewage, the purification of effluent, measures should be taken to ensure the prevention of surface and groundwater pollution and water resources should be used in a sustainable manner.</p>	<p>The Act must be consulted. Fresh water abstraction and waste-water discharge permits should be obtained when required.</p>
<b>Solid and Hazardous Waste Management Regulations:</b>	<p>Provides for management and handling of industrial, business and domestic waste.</p>	<p>The Proponent must abide to the solid waste management provisions.</p>

<b>Local Authorities 1992</b>		
<b>Hazardous Substances Ordinance (No. 14 of 1974)</b>	The <b>Ordinance</b> applies to the manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social Welfare. Its primary purpose is to prevent hazardous substances from causing injury, ill-health or the death of human beings.	The Proponent must abide to the Ordinance's provisions.
<b>Atmospheric Pollution Prevention Ordinance of Namibia (No. 11 of 1976)</b>	Part 2 of the <b>Ordinance</b> governs the control of noxious or offensive gases. The Ordinance prohibits anyone from carrying on a scheduled process without a registration certificate in a controlled area. The registration certificate must be issued if it can be demonstrated that the best practical means are being adopted for preventing or reducing the escape into the atmosphere of noxious or offensive gases produced by the scheduled process.	The proponent should adhere to the stipulations of the Atmospheric Pollution Prevention Ordinance.
<b>Nature Conservation Ordinance</b>	The <b>Nature Conservation Ordinance (No. 4 of 1975)</b> covers game parks and nature reserves, the hunting and protection of wild animals, problem animals, fish and indigenous plant species. The Ministry of Environment, Forestry and Tourism (MEFT) administer it and provides for the establishment of the Nature Conservation Board.	The proposed project implementation is not located in a demarcated conservation area, national park or unique environments.
<b>Forestry Act</b>	The <b>Forestry Act (No. 12 of 2001)</b> specifies that there be a general protection of the receiving and surrounding environment. The protection of natural vegetation is of great importance, the Forestry Act especially stipulates that no living tree, bush, shrub or indigenous plants within 100m from any river, stream or watercourse,	No removal of protected tree species or removal of mature trees should happen. The Ministry of Environment, Forestry and Tourism should be consulted when required.



	may be removed without the necessary license.	
<b>EU Timber Regulation: FSC (2013)</b>	Forest Stewardship Council (FSC) came into effect in March 2013, with the aim of preventing sales of illegal timber and timber products in the EU market. Now, any actor who places timber or timber products on the market for the first time must ensure that the timber used has been legally harvested and, where applicable, exported legally from the country of harvest.	The Proponent is advised to adhere to the regulation.
<b>Labour Act</b>	The <b>Labour Act (No. 11 of 2007)</b> contains regulations relating to the Health, Safety and Welfare of employees at work. These regulations are prescribed for among others safety relating to hazardous substances, exposure limits and physical hazards. Regulations relating to the Health and Safety of Employees at Work are promulgated in terms of the Labour Act 6 of 1992 (GN156, GG1617 of 1 August 1997).	The proponent and contractor should adhere to the Labour Act.
<b>Communal Land Rights</b>	Communal land is land that belongs to the State and is held in trust for the benefit of the traditional communities living in those areas. Communal land cannot be bought or sold, but one can be given a customary land right or right of leasehold to a part of communal land in accordance with the provisions of the <b>Communal Land Reform Act (No. 5 of 2002)</b> and <b>Communal Land Reform Amendment Act (No. 13 of 2013)</b> . The Communal Land Reform Act provide for the allocation of rights in respect of communal land to establish Communal Land Boards to provide for the powers of Chiefs and Traditional Authorities and boards in relation to communal land and to make provision for incidental	Consent should be obtained from Traditional Authorities, Communal Boards, Chiefs, Kings, Queens etc. if required.

	<p>matters. Consent and access to land for the proposed project should be requested from the relevant traditional authority through the Regional Council and Regional Communal Land Boards.</p>	
<p><b>Traditional Authorities Act (No. 17 of 1995)</b></p>	<p>The <b>Traditional Authorities Act (No. 17 of 1995)</b> provide for the establishment of traditional authorities, the designation and recognition of traditional leaders; to define their functions, duties and powers; and to provide for matters incidental thereto.</p>	<p>Traditional Authorities should be consulted when required.</p>
<p><b>Public and Environmental Health Act</b></p>	<p>The Public and Environmental Health Act (No. 1 of 2015) provides with respect to matters of public health in Namibia. The objects of this Act are to: (a) promote public health and wellbeing; (b) prevent injuries, diseases and disabilities; (c) protect individuals and communities from public health risks; (d) encourage community participation in order to create a healthy environment; and (e) provide for early detection of diseases and public health risks.</p>	<p>The proponent and contractor should adhere to the Public and Environmental Health Act.</p>
<p><b>Coronavirus (Covid-19) Pandemic</b></p>	<p>The current global <b>Coronavirus (Covid-19)</b> pandemic and the associated State of Emergency and health restrictions globally may result in some delays and logistic disruptions. The pandemic might have an impact on obtaining equipment, specialist workforce mobilisation and implementation of the project. The health restrictions may have an impact on campsite set-up, traveling of personal/workers and building of the infrastructure. The proponent, contractor and subcontractors should adhere to all the international, regional and local Covid-19 health restrictions and protocols.</p>	<p>The proponent, contractor and workforce should adhere to the restrictions and regulations.</p>
<p><b>National</b></p>	<p>All protected heritage resources</p>	<p>The National Heritage Council</p>

<p><b>Heritage Act (No. 27 of 2004)</b></p>	<p>discovered need to be reported immediately to the National Heritage Council (NHC) and require a permit from the NHC before it may be relocated. This should be applied from the NHC.</p>	<p>should be consulted when required.</p>
<p><b>National Monuments Act of Namibia (No. 28 of 1969) as amended until 1979</b></p>	<p>No person shall destroy, damage, excavate, alter, remove from its original site or export from Namibia:</p> <p>(a) any meteorite or fossil; or</p> <p>(b) any drawing or painting on stone or a petroglyph known or commonly believed to have been executed by any people who inhabited or visited Namibia before the year 1900 AD; or</p> <p>(c) any implement, ornament or structure known or commonly believed to have been used as a mace, used or erected by people referred to in paragraph; or</p> <p>(d) the anthropological or archaeological contents of graves, caves, rock shelters, middens, shell mounds or other sites used by such people; or</p> <p>(e) any other archaeological or palaeontological finds, material or object; except under the authority of and in accordance with a permit issued under this section.</p>	<p>The proposed site for development is not within any known monument site both movable or immovable as specified in the Act, however in such an instance that any material or sites or archeologic importance are identified, it will be the responsibility of the developer to take the required route and notify the relevant commission.</p>
<p><b>Public Health Act (No. 36 of 1919)</b></p>	<p>Under this act, in section 119: “No person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.”</p>	<p>The proponent will ensure that all legal requirements of the project in relation to protection of the health of their employees and surrounding residents is protected and will be included in the EMP.</p> <p>Relevant protective equipment shall be provided for employees in construction.</p> <p>The development shall follow requirements and specifications in relation to water supply and sewerage handling and solid waste management so as not to</p>

		threaten public health of future residents on this piece of land.
<b>Soil Conservation Act (No. 76 of 1969)</b>	The objectives of this Act are to: Make provisions for the combating and prevention of soil erosion; Promote the conservation, protection and improvement of the soil, vegetation, sources and resources of the Republic;	Only the area required for the operations should be cleared from vegetation to ensure the minimum impact on the soil through clearance for construction.
<b>Air Quality Act (NO. 39 of 2004)</b>	The <b>Air Quality Act (No. 39 of 2004)</b> intends to provide for national norms and standards regulating air quality monitoring, management and control by all spheres of government; for specific air quality measures; and for matters incidental thereto.	The proponent and contractor should adhere to the Air Quality Act.
<b>Vision 2030 and National Development Plans</b>	Namibia's overall development ambitions are articulated in the Nation's Vision 2030. At the operational level, five-yearly national development plans (NDP's) are prepared in extensive consultations led by the National Planning Commission in the Office of the President. Currently the Government has so far launched a 4th NDP which pursues three overarching goals for the Namibian nation: high and sustained economic growth; increased income equality; and employment creation.	The proposed project is an important element in employment creation.

## CONCLUSION AND IMPACT

It is believed the above administrative, legal and policy requirements which specifically guide and governs development will be followed and complied with in the planning, implementation and operations of the activity.

A flowchart indicating the entire EIA process is shown in the *Figure* below.

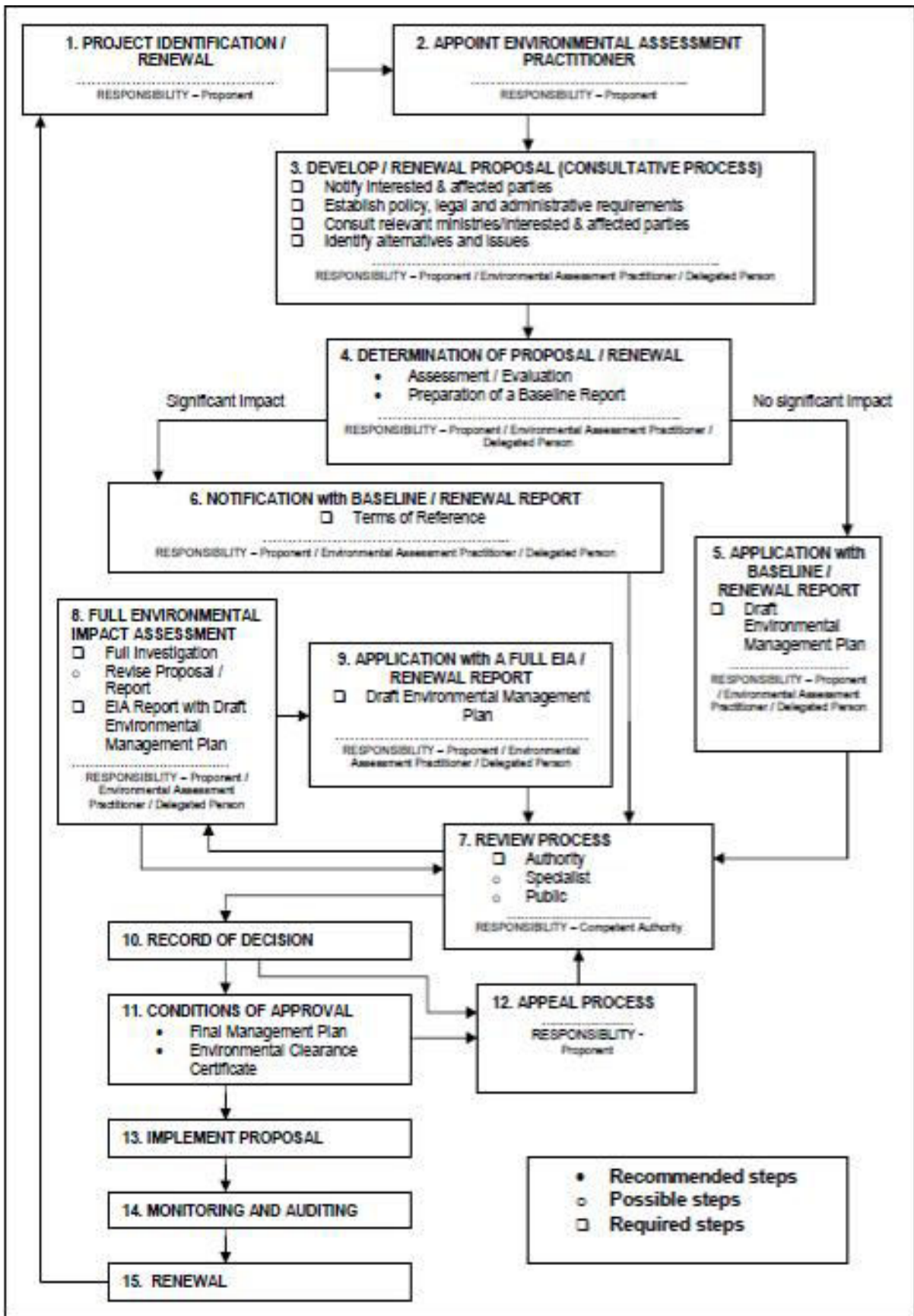


Figure 9: Flowchart of the Impact Process

## 9. AFFECTED RECEIVING ENVIRONMENT

### 9.1. BIODIVERSITY AND VEGETATION

The density of vegetation on the project site is fairly sparse. Nevertheless, every effort will be made to protect the existing vegetation and shrubs, because these are very important to the ambience and aesthetic appeal of the lodge.

Only the necessary plants/vegetation will be removed for the construction phase. The natural characteristics of the project site namely the vegetation clearance and the destruction of habitats is expected to further on have a low impact on the environment before the mitigation measures are taken and after the mitigation measures are taken, the impact will be very low.



Figure 10: Vegetation in area

### 9.2. GEOLOGY AND SOILS

Spitzkoppe belongs to the group of magmatic Post-Karoo complexes, the formation of which dominated the geological events during the Post-Karoo ages in this part of Namibia. The Spitzkoppe were formed by the intrusion of molten magma into the overlying sedimentary layers (*Grunert, 2003*).

The mountain takes the form of very steep sided domes. In places these massive granite outcrops are cracked and fissured. The convex bases of these domes disappear into either talus slopes of large boulders that have fallen from above, and/or coarse gravel and sand that have weathered from the granite. At the proposed lodge site there are few loose boulders, and the steep granite slopes disappear into very low-gradient foot slopes comprised of weathered granite. This material tends to be coarser at the foot of the

granite slopes as most of the finer sand and clay particles have been carried further away by water (*Grunert, 2003*).

Some 150 – 200m downslope from the base of the granite at the lodge site are some patches of calcrete on the surface. These deposits are formed by evaporation and precipitation of the carbonate minerals that were in solution. It is assumed that these calcrete layers are underlain by coarse gravel and sand. Shallow calcrete horizons may also occur elsewhere just below the ground surface (*Grunert, 2003*).

Water from the area near the lodge drains northwards across extensive grassy plains, but there are no major drainage lines on, or near the lodge site.

On those occasions when sufficient rain falls to generate and sustain surface flow for hours or days, all the surface drainage flows to the Omaruru River north of the Spitzkoppe or the Spitzkoppe River south of these mountains. These two rivers converge just upstream of the Omdel Dam near the boundary of the National West Coast Recreation Area (*Grunert, 2003*).

There is no groundwater on or near the current lodge site. The Spitzkoppe Community draws brackish water from a borehole at the ephemeral Spitzkop River to the south of the mountains. This water must be desalinated for human consumption. About 3 m<sup>2</sup>/day of fresh water is made available to the Spitzkoppe community and campsite. The lodge obtain their water from the same source.

Flexible HDPE pipes are used to convey the water from the source to the lodge. These pipes are buried in a trench not exceeding 300mm wide and just deep enough to keep the water cool.



*Figure 11: Geology and soils in the area*

### **9.3.SOCIO ECONOMIC ENVIRONMENT**

The Spitzkoppe Area will benefit from more employment opportunities, skills and technology transfer during construction and operations of the development. The

spending power of locals is likely to increase because of employment during the construction and operational phase.

## 9.4. CLIMATE

Spitzkoppe lies on the inland edge of the Namib Desert and its climate is extremely arid. There is little climatic data available close to the site, so the data in this section is derived from generalised data by Mendelsohn (2002), and Burke (June 2003).

### Temperatures

Spitzkoppe is about 100km inland - far enough to limit the cooling influence of the sea, which is enjoyed by places nearer the coast. The hottest month is February, when the maximum daily temperature averages 34° to 36°C, with the daily maximum often reaching over 40°C. The coldest month is August, when the minimum daily temperature averages 10° – 12°C. Frost does not occur here.

### Rainfall & Evaporation

The annual rainfall in the Spitzkoppe area is highly variable and unreliable. The mean annual rainfall ranges from 50mm in the west to 100mm in the east of the Spitzkoppe (*Burke, 2003*). Most of the rain falls between January and March. The granite slopes are impermeable, except for cracks and fissures, so the areas immediately adjacent to the granite outcrops receive extra runoff, which enables a variety of trees and shrubs to grow in these otherwise very dry conditions. Fog occasionally reaches the study area from the sea, bringing some moisture to the vegetation. Annual average potential evaporation is high - about 3100 mm (*BIWAC, 2003*).

### Winds

There is no wind data available for the Spitzkoppe, so the information below has been interpolated from records at Walvis Bay and Windhoek, and experience of the area.

The prevailing wind at the coast is dominantly from the south – over 50% of the time, but with increasing distance from the sea the frequency and strength of this wind diminishes. It is inferred that the wind direction at the Spitzkoppe is still predominantly from the sea (southerly to north-westerly), with the southerly wind being most common. Easterly winds are infrequent – occurring mainly during the winter and spring months as “Berg Winds”. These are warm dry winds that result from descending air over the interior of the country. Easterly ‘berg winds’ occur for about 10-15 days per year at the coast. These winds are very dry (relative humidity less than 5%) and can increase to sandstorm proportions on a few days a year.

*Table 1: Climate Data*

Classification of climate	Desert
Precipitation	50 – 100mm
Variation in annual rainfall (%)	<100mm
Average annual evaporation (mm/a)	3100mm
Solar radiation	5.8 – 6.0 kWh/m <sup>2</sup> /day



## 9.5. HYDROLOGICAL COMPONENT

The area where the project site is located has generally an average groundwater potential from a permeability and yield perspective (*Grunert, 2003*). However, groundwater is one of the important water sources and the protection thereof should be regarded as a high priority. The main uses of water in the area are for business, institutional, industrial and domestic purposes and activities.

Although most of the surface water evaporates, runoff can be expected due to the impermeability of soils (*Grunert, 2003*). The storage and accumulation of substances, which might pollute river courses or basins because of surface water drainage, should be prevented. No potential pollutants should be channelled or directed towards any rivers.

From the hydrological assessment perspective, no major geological structures that will enhance groundwater recharge or flow are evident on the proposed project site and the development that will take place will not pose any long-term negative effects on the hydrological cycle (*Grunert, 2003*).

## 9.6. CULTURAL HERITAGE

The proposed project site is not known to have any historical significance prior to or after Independence in 1990. The specific area does not have any National Monuments and the specific site has no record of any cultural or historical importance or on-site resemblance of any nature. No graveyard or related article was found on the site.

## 10. IMPACT ASSESSMENT AND EVALUATION

The Environmental Impact Assessment sets out potential positive and negative environmental impacts associated with the proposed project site which is located on Spitzkoppe. The following assessment methodology will be used to examine each impact identified, see *Table* below:

*Table 2: Impact Evaluation Criterion (DEAT 2006)*

Criteria	Rating (Severity)	
Impact Type	+	Positive
	0	No Impact
	-	Negative
Significance of impact being either	L	Low (Little or no impact)
	M	Medium (Manageable impacts)

	<b>H</b>	<b>High (Adverse impact)</b>
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Probability:	Duration:
5 – Definite/don't know	5 - Permanent
4 – Highly probable	4 – Long-term (impact ceases)
3 – Medium probability	3 – Medium term (5 – 15 years)
2 – Low probability	2 – Short-term (0 – 5 years)
1 – Improbable	1 - Immediate
0 - None	
Scale:	Magnitude:
5 – International	10 – Very high/don't know
4 – National	8 - High
3 – Regional	6 - Moderate
2 – Local	4 - Low
1 – Site only	2 - Minor
	0 - None

The impacts on the receiving environment are discussed in the paragraphs below:

## **10.1. IMPACTS DURING THE CONSTRUCTION ACTIVITY**

Some of the impacts that the development will have on the environment includes water will be used for the construction and operation activities, electricity will be used, a sewer system will be constructed and wastewater will be produced on the site that will have to be handled.

### **10.1.1. WATER USAGE**

Water is a scarce resource in Namibia and therefore water usage should be monitored and limited in order to prevent unnecessary wastage. The proposed project might make use of water in its construction phase and operations.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Water	-	2	2	4	2	L	L

### 10.1.2. ECOLOGICAL IMPACTS

The proposed infrastructure will be constructed in a semi disturbed natural area which is partly covered with vegetation. Special care should be taken to limit the destruction or damage of the vegetation. However, impacts on fauna and flora are expected to be minimal. Disturbance of areas outside the designated working zone is not allowed.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Ecology	-	1	2	4	2	L	L

### 10.1.3. DUST POLLUTION AND AIR QUALITY

Dust generated during the transportation of building materials; construction and installation of bulk services, and problems thereof are expected to be low and site specific due to the fact that most of these roads have already been constructed to be used in the management activities of the site. Dust is expected to be worse during the winter months when strong winds occur. Release of various particulates from the site during the construction phase and exhaust fumes from vehicles and machinery related to the construction of bulk services are also expected to take place. Dust is regarded as a nuisance as it reduces visibility, affects the human health and retards plant growth. It is recommended that regular dust suppression be included in the construction activities, when dust becomes an issue.

### Impact evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Dust & Air Quality	-	2	2	2	2	M	L

## 10.1.4.NOISE IMPACT

An increase of ambient noise levels at the proposed site is expected due to the construction activities. Noise pollution due to heavy-duty equipment and machinery might be generated. It is not expected that the noise generated during construction will impact any third parties due to the distance of the neighbouring activities. Ensure all mufflers on vehicles are in full operational order; and any audio equipment should not be played at levels considered intrusive by others. The construction staff should be equipped with ear protection equipment.

### Impact evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Noise	-	2	1	4	2	M	L

## 10.1.5.HEALTH, SAFETY AND SECURITY

The safety, security and health of the labour force, employees and general public are of great importance. Workers should be orientated with the maintenance of safety and health procedures and they should be provided with PPE (Personal Protective Equipment). A health and safety officer should be employed to manage, coordinate and monitor risk and hazard and report all health and safety related issues in the workplace.

Safety issues could arise from the earthmoving equipment and tools that will be used on site during the construction phase. This increases the possibility of injuries and the contractor must ensure that all staff members are made aware of the potential risks of injuries on site. The presence of equipment lying around on site may also encourage criminal activities (theft).

Sensitize operators of earthmoving equipment and tools to switch off engines of vehicles or machinery not being used. The contractor is advised to ensure that the team is equipped with first aid kits and that these are available on site, at all times. Workers should be equipped with adequate personal protective gear and properly trained in first aid and safety awareness.

No open flames, smoking or any potential sources of ignition should be allowed at the project location. Signs such as 'NO SMOKING' must be prominently displayed in parts where inflammable materials are stored on the premises. Proper barricading and/or fencing around the site especially trenches for pipes and drains should be erected to avoid entrance of animals and/or unauthorized persons. Safety regulatory signs should be placed at strategic locations to ensure awareness. Adequate lighting within and around the construction locations should be erected, when visibility becomes an issue.

## Impact evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Safety & Security	-	1	2	4	2	M	L

### 10.1.6. CONTAMINATION OF GROUNDWATER

Care must be taken to avoid contamination of soil and groundwater. Use drip trays when doing maintenance on machinery. Maintenance should be done on dedicated areas with linings or concrete flooring. The risk can be lowered further through proper training of staff. All spills must be cleaned up immediately. Excavations should be backfilled and sealed with appropriate material, if it is not to be used further.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Groundwater	-	2	2	2	2	M	L

### 10.1.7. SEDIMENTATION AND EROSION

The area is covered by vegetation. The vegetation is stabilizing the area against wind and water erosion. Vegetation clearance and creation of impermeable surfaces could result in erosion in areas across the proposed area. The clearance of vegetation will further reduce the capacity of the land surface to slow down the flow of surface water, thus decreasing infiltration, and increasing both the quantity and velocity of surface water runoff. The proposed construction activities will increase the number of impermeable surfaces and therefore decrease the amount of groundwater infiltration. As a result, the amount of storm water during rainfall events could increase. If proper storm water management measures are not implemented this will impact negatively on the water courses close to the site.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Erosion and Sedimentation	-	1	2	4	2	M	L

### 10.1.8.GENERATION OF WASTE

This can be in a form of rubble, cement bags, pipe and electrical wire cuttings. The waste should be gathered and stored in enclosed containers to prevent it from being blown away by the wind. Contaminated soil due to oil leakages, lubricants and grease from the construction equipment and machinery may also be generated during the construction phase.

The oil leakages, lubricants and grease must be addressed. Contaminated soil must be removed and disposed of at a hazardous waste landfill. The contractor must provide containers on-site, to store any hazardous waste produced. Regular inspection and housekeeping procedure monitoring should be maintained by the contractor.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Waste	-	1	2	4	2	M	L

### 10.1.9.CONTAMINATION OF SURFACE WATER

Contamination of surface water might occur through oil leakages, lubricants and grease from the equipment and machinery during the installation, construction and maintenance of bulk services at the site. Oil spills may form a film on water surfaces in the nearby streams causing physical damage to water-borne organisms.

Machinery should not be serviced at the construction site to avoid spills. All spills should be cleaned up as soon as possible. Hydrocarbon contaminated clothing or equipment should not be washed within 25m of any surface water body.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Surface water	-	2	2	4	3	M	L

### 10.1.10. TRAFFIC AND ROAD SAFETY

All drivers of delivery vehicles and construction machinery should have the necessary driver's licenses and documents to operate these machines. Speed limit warning signs must be erected to minimise accidents. Heavy-duty vehicles and machinery must be tagged with reflective signs or tapes to maximize visibility and avoid accidents.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Traffic	-	2	2	4	3	M	L

## 10.1.11. FIRES AND EXPLOSIONS

There should be sufficient water available for firefighting purposes. Ensure that all fire-fighting devices are in good working order and they are serviced. All personnel have to be trained about responsible fire protection measures and good housekeeping such as the removal of flammable materials on site. Regular inspections should be carried out to inspect and test firefighting equipment by the contractor.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Fires and Explosions	-	2	2	4	2	M	L

## 10.1.12. SENSE OF PLACE

The placement, design and construction of the proposed right of way servitudes should be as such as to have the least possible impact on the natural environment. The proposed activities will not have a large/negative impact on the sense of place in the area since it will be constructed in a manner that will not affect the neighbouring portions and it will not be visually unpleasing.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Nuisance Pollution	-	1	1	2	2	L	L

## 10.2. IMPACTS DURING THE OPERATIONAL PHASE

### 10.2.1. ECOLOGICAL IMPACTS

Staff and visitors should only make use of walkways and existing roads to minimise the impact on vegetation. No firewood may be collected on the site. Minimise the area of

disturbance by restricting movement to the designated working areas during maintenance and drives.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Ecology Impacts	-	1	2	4	2	L	L

### 10.2.2.DUST POLLUTION AND AIR QUALITY

Vehicles transporting goods and staff will contribute to the release of hydrocarbon vapours, carbon monoxide and sulphur oxides into the air. Possible release of sewer odour, due to sewer system failure or maintenance might also occur. All maintenance of bulk services and infrastructure at the project site has to be designed to enable environmental protection.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Dust & Air Quality	-	2	2	4	4	M	L

### 10.2.3.CONTAMINATION OF GROUNDWATER

Spillages might also occur during maintenance of the sewer system. This could have impacts on groundwater especially in cases of large sewer spills. Proper containment should be used in cases of sewerage system maintenance to avoid any possible leakages. Oil and chemical spillages may have a health impact on groundwater users. Potential impact on the natural environment from possible polluted groundwater also exists.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Groundwater contamination	-	2	2	4	2	L	L



## 10.2.4.GENERATION OF WASTE

Household waste from the activities at the site and from the staff working at the site will be generated. This waste will be collected, sorted to be recycled and stored in on site for transportation and disposal at an approved landfill site.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Waste Generation	-	1	2	2	2	M	L

## 10.2.5.FAILURE IN RETICULATION PIPELINES

There may be a potential release of sewage, stormwater or water into the environment due to pipeline/system failure. As a result, the spillage could be released into the environment and could potentially be health hazard to surface and groundwater. Proper reticulation pipelines and drainage systems should be installed. Regular bulk services infrastructure and system inspection should be conducted.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Failure of Reticulation Pipeline	-	1	1	4	2	M	L

## 10.2.6.FIRES AND EXPLOSIONS

Food will be prepared on gas fired stoves. There should be sufficient water available for firefighting purposes. Ensure that all fire-fighting devices are in good working order and they are serviced. All personnel have to be trained about responsible fire protection measures and good housekeeping such as the removal of flammable materials on site. Regular inspections should be carried out to inspect and test firefighting equipment by the contractor.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Fires and Explosions	-	2	1	4	2	M	L

## 10.2.7.HEALTH, SAFETY AND SECURITY

The safety, security and health of the labour force, employees and neighbours are of great importance, workers should be orientated with the maintenance of safety and health procedures and they should be provided with PPE (Personal Protective Equipment). Workers should be warned not to approach or chase any wild animals occurring on the site. No open flames, smoking or any potential sources of ignition should be allowed at the project location. Signs such as 'NO SMOKING' must be prominently displayed in parts where inflammable materials are stored on the premises.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Safety & Security	-	1	2	4	2	M	L

## 10.3. CUMULATIVE IMPACTS

These are impacts on the environment, which results from the incremental impacts of the construction and operation of the proposed project when added to other past, present, and reasonably foreseeable future actions regardless of what person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. In relation to an activity, it means the impact of an activity that in it may not become significant when added to the existing and potential impacts resulting from similar or diverse activities or undertakings in the area.

Possible cumulative impacts associated with the proposed project include sewer damages/maintenance, vegetation and animal disturbance, uncontrolled traffic and destruction of the natural environment. These impacts could become significant especially if it is not properly supervised and controlled. This could collectively impact on the environmental conditions in the area. Cumulative impacts could occur in both the operational and the construction phase.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Cumulative Impacts	-	1	3	4	3	L	L

## **11. ENVIRONMENTAL MANAGEMENT PLAN**

The Environmental Management Plan (EMP) provides management options to ensure impacts of the proposed construction are minimised. An EMP is an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the operations are prevented, and the positive benefits of the projects are enhanced.

The objectives of the EMP are:

- ✓ to include all components of the proposed project.
- ✓ to prescribe the best practicable control methods to lessen the environmental impacts associated with the project.
- ✓ to monitor and audit the performance of the project personnel in applying such controls.
- ✓ To ensure that appropriate environmental training is provided to responsible project personnel.

The EMP acts as a document that can be used during the various phases of the proposed project. The contractor as well as the management and staff should be made aware of the contents of the EMP. See Appendix for EMP.

## **12. CONCLUSION**

The EIA has been completed in line with the requirements of the Environmental Management Act, 2007 and Regulations and it is concluded and recommended that the specific site identified has the full potential to be used for the proposed activities. The identified environmental and social impacts can be minimized and managed through implementing preventative measures and sound management systems. It is recommended that the environmental performance be monitored regularly to ensure compliance and that corrective measures be taken if necessary.

In general, the construction and operation of the proposed project would pose limited environmental risks, provided that the EMP for the activity is used properly. The EMP should be used as an onsite tool during the construction and operation of the project. Parties responsible for non-conformances of the EMP should be held responsible for any rehabilitation that has to be undertaken. After assessing all information available on this project, Green Earth Environmental Consultants are of the opinion that the proposed project site is suitable for the proposed activities. The accompanying EMP will focus on mitigation measures that will remediate or eradicate the negative or adverse impacts.

## **13. RECOMMENDATION**

It is therefore recommended that the Ministry of Environment, Forestry and Tourism through the Environmental Commissioner support and approve the renewal of the Environmental Clearance for the operation of the Spitzkoppe campsite and to obtain an Environmental Clearance for the proposed Maerua Self-Catering Camp, Spitzkoppe,

Erongo Region and to issue an Environmental Clearance for the following 'Listed Activities':

***TOURISM DEVELOPMENT ACTIVITIES***

*6. The construction of resorts, lodges, hotels or other tourism and hospitality facilities.*

## LIST OF REFERENCES

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004 Last
005 Notices
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If you want to drink, that's your business.
If you want to stop, that's ours.
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Swakopmund: 081 243 2649
E-MAIL: alcoholicsanonymousna@gmail.com

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MEDICAL DOCTOR: A family practice in Walvisbay. Requirements: MB ChB, minimum 5 years working experience...
Vakatures Vacancies
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GARAGE SALE: 2nd July, 9:00 - 1:00 pm, 13 Omatako Str. Eros...

Vakatures Vacancies
REGAFBNPSPOLIS: vir 'n drie familie vanaf N\$1500 vir N\$100000 afhankende van ouderdom en rookgewoontes.
Vakatures Vacancies
Besighede Businesses
REGRAFBNPSPOLIS: vir 'n drie familie vanaf N\$1500 vir N\$100000 afhankende van ouderdom en rookgewoontes...

009 Vakatures Vacancies
QUALIFIED ACCREDITED EPSON FINE ART wide format inkjet printer technician required to carry out repairs...
010 Spesiale dienste Services
DO YOU URGENTLY NEED CASH? Park your car and get up to 45% of its value! Cash in your account in 30 min! No paylip, no bank statement...
012 To Let To Let
SWAKOPMUND - VINETA: Gemeeubde huis te huur, groot erf en tuin. N\$12 000 per maand. Skakel 081-8565446.
014 To Let To Let
SWAKOPMUND - VINETA: Gemeeubde huis te huur, groot erf en tuin. N\$12 000 per maand. Skakel 081-8565446.

012 To Let To Let
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Market Watch
Om te adverteer skakel:
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T: 061-297 2055

032 Veilinge Auctions
PRO-EX Auctioneers
SALVAGE VEHICLE AUCTION
DATE: 6 JULY 2022
REGISTRATION: 29-30 July 2022
AUCTION TIME: 10:00
NS 10 000.00 cash refundable
VIEWING DATE: WEDNESDAY 29 JUNE 08:30 - 11:00
035 Regskennisgewings Legal Notices
STANDARD NOTICE THREE STOREY DWELLING UNIT AND COVERAGE APPLICATION
Notice that the owner, Three Seasons Flat CC intends applying to the Windhoek Municipal Council for the construction of a three storey dwelling unit exceeding of the coverage 800 m² of Erf Klein Windhoek CC.

035 Regskennisgewings Legal Notices
NOTICE OF APPLICATION TO A COMMITTEE IN TERMS OF THE LIQUOR ACT, 1998 (regulations 18, 26 & 33)
Notice is given that an application in terms of the Liquor Act, 1998 (regulations 18, 26 & 33) for a liquor license is being submitted to the Regional Liquor Licensing Committee, Region OITZONDORPA.

In loving memory of
Mardene Margret Kitz
22 SEP 1946 - 24 JUN 2022
No help comes from the LORD, the Maker of heaven and earth.

## APPENDIX B: CURRICULUM VITAE OF CHARLIE DU TOIT

1. **Position:** Environmental Practitioner
2. **Name/Surname:** Charl du Toit
3. **Date of Birth:** 29 October 1960
4. **Nationality:** Namibian
  
5. **Education:**

Name of Institution	University of Stellenbosch, South Africa		
Degree/Qualification	Hons B (B + A) in Business Administration and Management		
Date Obtained	1985-1987		
Name of Institution	University of Stellenbosch, South Africa		
Degree/Qualification	BSc Agric Hons (Chemistry, Agronomy and Soil Science)		
Date Obtained	1979-1982		
Name of Institution	Boland Agricultural High School, Paarl, South Africa		
Degree/Qualification	Grade 12		
Date Obtained	1974-1978		
  
6. **Membership of Professional Association:** EAPAN Member (Membership Number: 112)
  
7. **Languages:**

	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>
English	Good	Good	Good
Afrikaans	Good	Good	Good
  
8. **Employment Record:**

	<u>From</u>	<u>To</u>	<u>Employer</u>	<u>Position(s) held</u>
	2009	Present	Green Earth Environmental Consultants	Environmental Practitioner
	2005	2008	Elmarie Du Toit Town Planning Consultants	Manager
	2003	2005	Pupkewitz Megabuild	General Manager
	1995	2003	Agra Cooperative Limited Namibia	Manager Trade
	1989	1995	Development	Chief Agricultural Consultant

		Corporation	
		Ministry of	Agricultural
1985	1988	Agriculture	Researcher

**Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.



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**Charl du Toit**

## APPENDIX C: CURRICULUM VITAE OF CARIEN VAN DER WALT

1. **Position:** Environmental Consultant
2. **Name/Surname:** Carien van der Walt
3. **Date of Birth:** 6 August 1990
4. **Nationality:** Namibian
5. **Education:**

Institution	Degree/Diploma	Years
University of Stellenbosch	B.A. (Degree) Environment and Development	2009 to 2011
University of South Africa	B.A. (Honours) Environmental Management	2012 to 2013

6. **Membership of Professional Associations:**

EAPAN Member (Membership Number: 113)

7. **Languages:**

Language	Speaking	Reading	Writing
English	Good	Good	Good
Afrikaans	Good	Good	Good

8. **Employment Record:**

From	To	Employer	Positions Held
07/2013	Present	Green Earth Environmental Consultants	Environmental Consultant
06/2012	03/2013	Enviro Management Consultants Namibia	Environmental Consultant
12/2011	05/2012	Green Earth Environmental Consultants	Environmental Consultant

9. **Detailed Tasks Assigned:**

Conducting the Environmental Impact Assessment, Environmental Management Plan, Public Participation, Environmental Compliance and Environmental Control Officer

**Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engage.

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Carien van der Walt

## APPENDIX D: ENVIRONMENTAL MANAGEMENT PLAN