

APRIL 2024

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)
FOR THE REZONING OF THE REMAINDER OF ERF 1064 IN GROOTFONTEIN
EXTENSION 2 FROM RESIDENTIAL TO BUSINESS

CLIENT: Mrs. Izette Munkonge



PREPARED BY:



PROJECT INFORMATION

PROPONENT:	Mrs. Izette Munkonge
PROJECT TITLE:	Rezoning of the Remainder of Erf 1064 in Grootfontein Extension 2 from Residential to Business
PROJECT TYPE:	Environmental Impact Assessment Study
PROJECT LOCATION:	Grootfontein, Otjozondjupa Region, Namibia
ENVIRONMENTAL ASSESSMENT PRACTITIONER	Turnix Environmental Consulting cc Contact person: Mr. Olavi Makuti Cell: +264 811405033 E-mail: olavi.makuti@gmail.com P.O Box 27488, Windhoek, Namibia
DATE OF RELEASE	April 2024
AUTHOR <small>(LEAD ENVIRONMENTAL ASSESSMENT PRACTITIONER)</small>	Mr. Olavi Makuti

NON-TECHNICAL SUMMARY

Turnix Environmental Consulting (herein referred to as the Consultant) has been engaged by Mrs. Izette Munkonge (herein referred to as the Proponent) to undertake an Environmental Impact Assessment for the proposed rezoning of the remainder of Erf 1064, Grootfontein Extension 2 from Residential to Business. The proponent intends to use the erf once rezoned for a hospitality business. This will add value to the tourism sector in Grootfontein. A hospitality business will blend in well in the area, as it is a type of business that is compatible and can peacefully coexist with residential areas.

The Remainder of Erf 1064 is located in the town of Grootfontein (Sinclair Street) in the Otjozondjupa Region of Namibia in central Namibia. The Erf is 1,280 m² in extent. Grootfontein is located about 450 km north of Windhoek.

The remainder of Erf 1064 has already been developed and is currently used for residential purposes. It is the intention of the Proponent to use the erf, once rezoned to operate a hospitality business to cater for accommodation and associated services. The structure and facilities on the erf will be able to cater for the hospitality business with minor additions.

In terms of the Environmental Management Act No.7 of 2007 and the Environmental Impact Assessment (EIA) Regulations of 2012, the project triggers listed activities that cannot be undertaken without an Environmental Clearance Certificate (ECC). An environmental clearance application will be submitted to the Ministry of Environment, Forestry and Tourism (MEFT) for approval before the commencement of the anticipated project activities.

The identification of potential impacts included impacts that may occur during the upgrading of facilities on the erf and operational phases of the envisaged hospitality facility.

The following potential impacts on the environment during the upgrading of facilities on the erf and operational phases of the envisaged hospitality facility have been identified:

Negative Impacts

- Generation of noise
- Visual impact
- Generation of waste
- Impact on traffic
- Health and safety
- Failure in reticulation pipelines

Positive Impacts

- More efficient use of land
- Creation of employment and skills transfer

Due to the limited scope of the proposed activities, the significance of potential environmental impacts of the proposed project activities on the receiving environment will be medium and localized extent. All the impacts identified and assessed during this study are generic impacts associated with the operation of a hospitality facility. With strict adherence to the recommended mitigation measures, the significance of these impacts can be reduced to a “low” significance rating.

It can therefore be concluded from this study that the proposed rezoning of Erf RE 1064, Grootfontein Extension 2 from “Residential” to “Business” will not cause any irreversible threats to the biophysical and socio-economic environment of the area. In fact, the rezoning of Erf RE 1064 will contribute to the socio-economic well-being of the Grootfontein community by providing employment opportunities and contributions to the town coffers through rates and taxes.

It is thus recommended that the project be issued with Environmental Clearance on condition that the mitigation measures recommended in the Environmental Management Plan are fully implemented.

TABLE OF CONTENTS

1. INTRODUCTION.....	9
1.1 BACKGROUND.....	9
1.2 ACTIVITIES REQUIRING ENVIRONMENTAL CLEARANCE.....	9
1.3 NEED AND DESIRABILITY.....	10
1.4 TERMS OF REFERENCE.....	10
1.5 ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP).....	11
2. PROPOSED PROJECT DESCRIPTION.....	12
12	
2.1 LOCATION.....	12
2.2 SURROUNDING USES.....	12
2.3 PROPOSED USE OF REZONED ERF	13
2.4 PROVISION OF SERVICES TO THE ERF	13
2.4.1 WATER SUPPLY	13
2.4.2 ELECTRICITY	13
2.4.3 SEWAGE AND WASTE MANAGEMENT	14
2.4.4 ACCESS ROAD	14
3. LEGAL REQUIREMENTS.....	15
4. DESCRIPTION OF THE RECEIVING ENVIRONMENT.....	17
4.1 CLIMATE.....	17
4.2 GEOLOGY AND SOILS	17
4.3 HYDROLOGY AND HYDROGEOLOGY	18
4.4 BIODIVERSITY AND ECOLOGY	18
4.5 SOCIO-ECONOMIC SETTING.....	19
4.6 ARCHAEOLOGY.....	19
5. PUBLIC CONSULTATION.....	20
5.1 OBJECTIVES OF PUBLIC CONSULTATION	20
5.2 PUBLIC PARTICIPATION DURING THE SCOPING PHASE	20
6. ENVIRONMENTAL IMPACT ASSESSMENT	22
6.1 METHOD OF ASSESSMENT.....	22
6.2 POTENTIAL IMPACTS IDENTIFIED AND ASSESSED	23
6.2.1 NEGATIVE IMPACTS.....	23
6.2.2 POSITIVE IMPACTS.....	26
7. CONCLUSIONS.....	28
8. REFERENCES	29

LIST OF FIGURES, TABLES AND PICTURES

FIGURES

Figure 1: Location of Erf RE 1064, Grootfontein.....	12
---	----

TABLES

Table 1: Legal framework of the project.....	15
Table 2: Criteria used to determine the significance of impacts and their definitions....	22
Table 3: Definition of the various significance ratings.....	23
Table 4: Assessment of impacts associated with noise.....	23
Table 5: Assessment of impacts associated with visual impacts.....	24
Table 6: Assessment of impacts associated with waste generation.....	24
Table 7: Assessment of impacts associated with traffic.....	25
Table 8: Assessment of impacts associated with health and safety.....	25
Table 9: Assessment of impacts associated with reticulation pipelines.....	26

PICTURES

Picture 1: Structure on erf RE 1064.....	13
---	----

LIST OF APPENDICES

APPENDIX A: ENVIRONMENTAL MANAGEMENT PLAN

APPENDIX B: CV OF ENVIRONMENTAL ASSESSMENT PRACTITIONER

APPENDIX C: INTERESTED AND AFFECTED PARTIES REGISTER

APPENDIX D: BACKGROUND INFORMATION DOCUMENT

APPENDIX E: PRESS NOTICES

1. INTRODUCTION

1.1 BACKGROUND

Turnix Environmental Consulting has been engaged by Mrs. Munkonge (Proponent) to undertake an Environmental Impact Assessment for the proposed rezoning of the remainder of Erf 1064, Grootfontein Extension 2 from “Residential” to “Business”. The remainder of Erf 1064 has already been developed and is currently used for residential purposes. The provisions of the Grootfontein Town Planning Scheme do not allow business activities on an erf zoned for residential purposes. It is therefore required that the erf needs to be rezoned first before business activities can be supported.

The proponent has therefore engaged Turnix Environmental Consulting to fulfil the requirements of the Environmental Management Act before an application can be lodged with the relevant planning authorities.

1.2 ACTIVITIES REQUIRING ENVIRONMENTAL CLEARANCE

According to the Environmental Management Act (No.7 of 2007) and the Environmental Impact Assessment Regulations the following activities may not be undertaken without an Environmental Clearance Certificate:

LAND USE AND DEVELOPMENT ACTIVITIES

5.1 The rezoning of land from –

(a) Residential use to Industrial or Commercial use.

The proponent’s intention to rezone the Remainder of Erf 1064, Grootfontein Extension 2 from “Residential” to “Business” therefore triggers the need for an Environmental Impact Assessment and subsequent application for environmental clearance.

1.3 NEED AND DESIRABILITY

The proponent believe that there is a need to use Erf 1064 for business purposes without compromising other land uses in the area. The proponent intends to use the erf once rezoned for a hospitality business. This will add value to the tourism sector in Grootfontein. A hospitality business will blend in well in the area, as it is a type of business that is compatible and can peacefully coexist with residential areas. In fact, there are already other accommodation establishments in the same area such as Grootfontein Guesthouse in the area that has been operating for years with no issues.

The hospitality industry significantly contributes to the socio-economic well-being of Grootfontein by providing the much-needed jobs to Grootfontein residents and by contributing to the income of the town.

Grootfontein and surrounding farms host various attractions, which attracts tourists to the area. About 24 km from Grootfontein is the Hoba Meteorite, which is the largest known meteorite in the world. Located 46 km northwest of Grootfontein, Dragon's Breath Cave is the world's largest non-subglacial underground lake, covering an area of almost 2 hectares. The farms around Grootfontein is abundantly endowed with wildlife and game, which attracts many tourists to the area.

The proposed hospitality facility to be operated on Erf RE 1064 will therefore contribute to the ever-growing tourism industry in Grootfontein by providing high quality accommodation and associated services.

1.4 TERMS OF REFERENCE

The proponent required the Environmental Assessment Practitioner to carry out this study as per the requirements of the Environmental Management Act No.7 of 2007 and the Environmental Assessment Regulations (February 2012).

The EIA process investigated if there are any potential significant biophysical and socio-economic impacts associated with the rezoning of Erf RE 1064 from Residential to Business.

1.5 ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

Turnix Environmental Consulting cc (Reg. No. CC/2012/7856) is a wholly Namibian owned company, established in 2012 to provide consulting services to various public and private sectors in areas such as Strategic Environmental Assessments (SEA) & Environmental Impact Assessments (EIA), development of Environmental Management Systems, Environmental Auditing, Monitoring and Evaluation, Water Management, Solid Waste Management and Project Management.

The Environmental Assessment Practitioner (EAP) for this study was Mr. Olavi Makuti. Mr. Makuti's main area of expertise includes Urban Environmental Management, Biodiversity Conservation, Strategic Environmental Assessments (SEA), Environmental Impact Assessments (EIA), and Environmental Management Systems (EMS). Olavi has 18 years' experience in the field of environmental management and has a Master's Degree in Environmental Management (University of the Free State, South Africa), B.Tech Degree in Natural Resources Management (Polytechnic of Namibia) and National Diploma in Nature Conservation (Polytechnic of Namibia). He has also done the MDP (Management Development Program) with the University of Stellenbosch and other short courses. His CV is attached for further information on his educational qualifications and experience.

2. PROPOSED PROJECT DESCRIPTION

2.1 LOCATION

The Remainder of Erf 1064 is located in the town of Grootfontein in the Otjozondjupa Region of Namibia in central Namibia. The Erf is 1,280 m² in extent. Grootfontein is located about 450 km north of Windhoek. The Remainder of Erf 1064, Grootfontein, Extension 2, is located in Sinclair Street as shown on Figure 1 below. The erf is located at the following coordinates: - 19.564611, 18.096538.



Figure 1: Location of Erf RE 1064, Grootfontein.

2.2 SURROUNDING USES

To the west of the Erf, residential dwellings are observed. Star Wave Accommodation is located to the immediate south of the Erf. Grootfontein Guesthouse that is operated by the Proponent is located to the north of the Erf along Moltke Street. The Erf borders an open space to the east. The Grootfontein District Hospital is located to the north east of the Erf. Erf RE 1064 is thus located in an area with a mix use character and rezoning it to 'business' will not negatively impact on the surrounding erven as it would be in line with the current uses.

2.3 PROPOSED USE OF REZONED ERF

It is the intention of the Proponent to use the erf, once rezoned to operate a hospitality business to cater for accommodation and associated services. The structure and facilities on the erf as shown on the picture below will be able to cater for the hospitality business with minor additions.



Picture 1: Structure on erf RE 1064

2.4 PROVISION OF SERVICES TO THE ERF

2.4.1 WATER SUPPLY

Water to the Erf is obtained from the Grootfontein water reticulation network. The Proponent will ensure that the envisaged hospitality establishment will use water sparingly and sustainably. This will be done by implementing a number of water demand management strategies such as the retrofitting of bathrooms with water saving taps and showerheads.

2.4.2 ELECTRICITY

Electricity is obtained from the Central North Regional Electricity Distributor (CENORED) electrical supply grid. The option of installing a few solar panels at the

establishment to reduce the ecological footprint and improve energy efficiency of the operation will be investigated and possibly implemented.

2.4.3 SEWAGE AND WASTE MANAGEMENT

Only household sewer will be generated on site from toilet and kitchen facilities. There is an existing connection to the Municipal sewer system. The capacity of the sewer system is adequate to cater for the proposed land use. The Grootfontein Municipality has a legal obligation to collect all sewerage generated in the town, treat it and safely discharge it.

The Grootfontein Municipality collects the solid waste generated on the Erf through their waste collection and management system on a weekly basis and dispose it of at their waste disposal facility.

2.4.4 ACCESS ROAD

Erf RE 1064 is accessible via the well-established Sinclair Street. The Grootfontein Municipality as part of their road maintenance program regularly maintain this access road. The operation of a hospitality business on the erf is not expected to significantly increase the traffic volume on this road. Residents to access their houses mainly use this low volume road. Even the already existing hospitality businesses in the street did not result in an increase in vehicular traffic.

3. LEGAL REQUIREMENTS

This section provides an analysis of the policies and legislations that are relevant to the proposed rezoning of Erf RE 1064. This section aims to inform the proponent about the requirements to be fulfilled in undertaking the proposed project.

The table below lists the various environmental and developmental policies and legislations that have relevance to the project.

Table 1: Legal framework of the project.

LEGISLATION	PROVISION	REGULATORY AUTHORITY	APPLICATION TO THE PROJECT
The Constitution of the Republic of Namibia	Article 91 (c) and 95 (i) which commit the state to actively promote and maintain environmental welfare of all Namibians by promoting sustainable development	Government of the Republic of Namibia	The proposed rezoning should not pose a threat to the natural and human environment.
Environmental Management Act No.7 of 2007 and EIA Regulations (2012)	Provides principles of environmental management in Namibia.	Ministry of Environment, Forestry and Tourism (Office of the Environmental Commissioner)	Environmental sustainability principles should be observed when undertaking this project.
Water Resources Management Act, No.11 2013	Control of disposal of sewage, the purification of effluent, the prevention of surface and groundwater pollution, and the sustainable use of water resources.	Ministry of Agriculture, Water and Forestry (Department of Water Affairs)	The Proponent should ensure that waste generated on the Erf is properly disposed of in the municipal sewer network.

Forestry Act No 27 of 2004	The Act affords protection to certain indigenous plant species.	Ministry of Environment, Forestry and Tourism (Directorate of Forestry)	No protected tree species should be removed from the Erf without a permit.
Town Planning Ordinance 18 of 1954	The Grootfontein Town Planning Scheme was approved in terms of this ordinance.	Ministry of Urban and Rural Development	The rezoning must be undertaken in line with the provisions of the Grootfontein Town Planning Scheme.
The Labour Act of 1992	Employees are subject to the terms of the Labour Act. The act also contains the Health and Safety Regulations.	Ministry of Labour	<ul style="list-style-type: none"> • Health and safety conditions provided by the Act should be adhered to during the operations of the hospitality facility. • The Act should be adhered to in all employment contracts that will be entered into.

4. DESCRIPTION OF THE RECEIVING ENVIRONMENT

4.1 CLIMATE

Namibia has a low humidity in general, and the lack of moisture in the air has a major impact on its climate by reducing cloud cover and rain and increases the rate of evaporation. The average annual rainfall in the area around Grootfontein is 500-550 mm. The average annual temperature is 18-20 °C. During the hottest month of the year which is mainly December the average maximum temperature is about 32-34 °C. During July, which is the coldest month, the average minimum temperature is 6-8 °C (Mendelsohn, et al 2001).

4.2 GEOLOGY AND SOILS

The area around Grootfontein geologically belong to the Otavi Mountain Land. The Otavi Mountain Land lies on the northern shelf platform of the Otjiwarongo branch of the Damara Orogen. Approximately 6 000 m of sediments of the northern facies of the Damara Sequence have been accumulated on the granites and gneisses of the Grootfontein Basement Complex. The Proterozoic Damara Sequence consists of a basal arenaceous unit (Nosib Group, up to 1500 m), a middle carbonate unit (Otavi Group, up to 3 000 m) and an upper clastic unit (Mulden Group, up to 1700 m). The rocks of the Otavi Group have been stratigraphically subdivided into the Abenab and the Tsumeb subgroups and a number of Formations (Christelis & Struckmeier, 2001).

The Kalahari Sequence is represented locally by a thin aeolian sand blanket and by calcretes which contain substantial amounts of silt and clayey material. The calcretes, in general, cover the low-lying groundwater discharge areas. They can be up to 20m thick around Tsumeb, across the Nosib Anticline and the Basement high near Grootfontein, and up to 50m thick near Brandwag/Uitkomst on the eastern tip of the Otavi Valley-Uitkomst Syncline (I). They widely cover the foreland where the

thickness increases to 70m towards the south and even 150m towards the north (Christelis & Struckmeier, 2001).

4.3 HYDROLOGY AND HYDROGEOLOGY

The area around Grootfontein (Otavi Mountain Land) have a high groundwater potential. This is evident in the high inflow of groundwater into the abandoned Berg Aukas, Abenab and Abenab West mines and the operating Kombat, Tsumeb and Khusib Springs mines, the large perennial springs such as Otavifontein (1 Mm³ /a), Olifantsfontein (0.3 Mm³ /a) and Strydfontein (0.1 Mm³ /a), and former flows from the now dry springs at Grootfontein and Rietfontein (Christelis & Struckmeier, 2001).

Underground water in this area is mainly characterized by carbonaceous rocks in which the fractures have been enlarged by the chemical solution of the rock in the water percolating through the aquifer system. These aquifers are called karstified aquifers that are mainly found in the Grootfontein-Tsumeb-Otavi Mountain Land.

Grootfontein Karst Aquifers (GKA) characterizes the hydrology. The GKA comprise of the famous Kombat, Brandwag and the Abenab aquifers. The area is believed to have more of Ground Water Rivers and aquifers than surface water body. The water table ranges from 60m, which makes groundwater to be the main source of water supply in the area.

4.4 BIODIVERSITY AND ECOLOGY

The vegetation around Grootfontein is characterized as Mountain Savanna and Karstveld. Trees such as *Kirkia acuminata*, *Gyrocarpus americanus*, *Berchemia discolor*, *Pachypodium lealii*, *Croton* spp., and many others characterize the vegetation. Areas with surface limestone deposits and shallow soil, often supports *Combretum imberbe* (Leadwood), *Dichrostachys cinerea* and *Terminalia prunioides*. These are the species causing bush encroachment in the area. Grass species of

ecological importance include *Brachiaria serrata*, *Digitaria Seriata*, *Panicum maximum*, *Eragrostis scopelophila*, *Danthonlopsis dinteri* and many others. Erf RE 1064 and surrounding areas is void of any indigenous vegetation as it is located in a developed part of Grootfontein. No animal game species are also found in the developed part of Grootfontein. All big game species such as antelopes are only found in the farms around Grootfontein.

4.5 SOCIO-ECONOMIC SETTING

Grootfontein is located in the Otjozondjupa Region. Otjozondjupa region is in the Eastern Central part of Namibia with a geographical area covering a size of 105,295 km², comprising of seven constituencies.

As per Preliminary Report of the 2023 population census, Grootfontein has a population of 26 839 (12 558 male and 14 281 females). The unemployment rate as per 2011 census stands at 2,365 (19.3%), unemployed male is 873, female 1,492. Grootfontein host the biggest Army Base in Namibia.

There are three Secondary Schools, nine Primary Schools and one Agricultural College to cater for the educational needs of the people. One District Hospital serves Grootfontein and surrounding farms.

4.6 ARCHAEOLOGY

The scoping exercise did not discover any archaeological material on the Erf. Should there be any such discovery during the course of the construction and operation of envisaged hospitality facility, the National Heritage Council of Namibia should be informed immediately. The National Heritage Council will assess the discovery and based on the findings of their assessment they will advise on the way forward.

5. PUBLIC CONSULTATION

5.1 OBJECTIVES OF PUBLIC CONSULTATION

The Public Participation Process is undertaken in response to the requirements of Regulation/Part 21 of the Environmental Management Act. Regulation 21 require that a person who undertakes an environmental impact assessment process to obtain an Environmental Clearance Certificate, must do the public participation process.

Public participation is the cornerstone of the EIA process as this is the stage where Interested and Affected Parties are considered and involved in the decision making process. Its key objective is to assist stakeholders to raise issues of concern and suggestions for enhanced benefits, and to comment on the findings of the EIA.

5.2 PUBLIC PARTICIPATION DURING THE SCOPING PHASE

This project did not garner much interest from potential Interested and Affected Parties. This might be because the erf to be rezoned is located in an area that is already fully developed and has a few existing hospitality establishments already.

Information to Interested and Affected Parties regarding the proposed rezoning of Erf RE 1064, Grootfontein from “Residential” to “Business” was disseminated through the following means:

- **Newspaper notices**

Newspaper notices were placed in the *Namibian Sun*, *Republikein* and *Allgemeine Zeitung* dated 28 March 2024 and 4 April 2024. The notices were placed once a week for two consecutive weeks as required by the EIA Regulations. The newspaper notices are attached as **Appendix E**.

The newspaper notices stated that an application for an Environmental Clearance is to be submitted to the Environmental Commissioner, provided information on the nature of the activity and location, invited I&AP to register as such and provided contact details where further information on the application or activity can be obtained.

- **Background Information Document (BID)**

A BID was prepared for the proposed project (Appendix D). The BID was intended to provide information about the EIA undertaken for the proposed rezoning of Erf RE 1064, Grootfontein from “Residential” to “Business” and provided the following information:

- An overview of the project;
- A description of the manner in which the EIA was undertaken;
- An indication of how Interested and Affected Parties (I&AP) may become involved in the EIA process; and
- Provided contact details of the person to whom I&APs may submit their comments.

6. ENVIRONMENTAL IMPACT ASSESSMENT

6.1 METHOD OF ASSESSMENT

The significance of the identified impacts of the proposed rezoning of Erf RE 1064 from “Residential” to “Business” was assessed using the criteria discussed on table 2 below.

Table 2: Criteria used to determine the significance of impacts and their definitions.

CRITERIA	DESCRIPTION
NATURE	This criteria indicates whether the proposed activity has a positive or negative impact on the environment (environment comprises both socio-economic and biophysical aspects).
EXTENT	This criteria measures whether the impact will be site specific; local (limited to within 15 km of the area); regional (limited to about 100 km radius); national (limited to within the borders of Namibia) or international (beyond Namibia’s borders).
DURATION	This criteria looks at the lifetime of the impact, as being short (days, less than a month), medium (months, less than a year), long (years, less than 10 years), or permanent (more than 10 years).
INTENSITY	This criteria is used to determine whether the magnitude of the impact is destructive and whether it exceeds set standards, and is described as none (no impact); low (where the environmental functions are negligible affected); medium (where the environment continues to function but in a noticeably modified manner); or high (where environmental functions and processes are altered such that they temporarily or permanently cease).
PROBABILITY	Considers the likelihood of the impact occurring and is described as improbable (low likelihood), probable (distinct possibility), highly probable (most likely) or definite (impact will happen regardless of prevention measures).
DEGREE OF CONFIDENCE IN PREDICTION	This is based on the availability of information and knowledge used to assess the impacts.

The significance of the potential impacts identified for this project is determined using a combination of the criteria discussed on the above table. The significance rating of impacts is described on the table below.

Table 3: Definition of the various significance ratings

SIGNIFICANCE RATING	CRITERIA
Low	Where the impact will have a negligible influence on the environment and no mitigations are required.
Medium	Where the impact could have an influence on the environment, which require some modifications on the proposed project design and/or alternative mitigation.
High	Where the impact could have a significant influence on the environment and, in the case of a negative impact, the activity causing it, should not be permitted.

6.2 POTENTIAL IMPACTS IDENTIFIED AND ASSESSED

6.2.1 NEGATIVE IMPACTS

- **Generation of noise**

The operations of a hospitality facility might increase the background noise in the area. This might cause disturbance to the surrounding residential area. Mitigation measures should therefore be instituted to ensure harmony with the neighbors.

Table 4: Assessment of impacts associated with noise

IMPACT TYPE	EXTENT	DURATION	INTENSITY	PROBABILITY	DEGREE OF CONFIDENCE	SIGNIFICANCE	
						PRE MITIGATION	POST MITIGATION
Negative	Local	Permanent	Low	Probable	Medium	Medium	Low

- **Visual impact**

The construction of the hospitality facility on the erf might disturb the natural setting and aesthetics of the area. It is therefore important to ensure that the proposed hospitality facility blends in well with the natural surroundings.

Table 5: Assessment of impacts associated with visual impacts

IMPACT TYPE	EXTENT	DURATION	INTENSITY	PROBABILITY	DEGREE OF CONFIDENCE	SIGNIFICANCE	
						PRE MITIGATION	POST MITIGATION
Negative	Local	Permanent	Low	Probable	Medium	Medium	Low

- **Generation of waste**

Waste will be generated from the operation of a hospitality establishment and during the refurbishment of the infrastructure. The waste to be generated from the construction activities will be stored in skip containers. Once the containers are full, the waste will be transported to the Grootfontein waste disposal site for proper disposal. A waste management system that will be based on environmental sustainability principles will be introduced to manage waste emanating from operational activities.

Table 6: Assessment of impacts associated with waste generation

IMPACT TYPE	EXTENT	DURATION	INTENSITY	PROBABILITY	DEGREE OF CONFIDENCE	SIGNIFICANCE	
						PRE MITIGATION	POST MITIGATION
Negative	Local	Permanent	Low	Probable	Medium	Medium	Low

- **Potential impact on traffic**

The operation of a hospitality facility might increase traffic using the access road. The proponent should also ensure that adequate parking for the visitors is provided at the site. This will however be minimal as there are already existing hospitality facilities in the area and has not resulted in the increase of traffic in the area.

Table 7: Assessment of impacts associated with traffic

IMPACT TYPE	EXTENT	DURATION	INTENSITY	PROBABILITY	DEGREE OF CONFIDENCE	SIGNIFICANCE	
						PRE MITIGATION	POST MITIGATION
Negative	Local	Permanent	Low	Probable	Medium	Medium	Low

- **Health and Safety**

The operation of a hospitality facility has a number of inherent occupational health and safety issues. The management should compile a Health and Safety Plan that should address as a minimum the mitigation measures, as well as the Regulations Pertaining to Health and Safety at the Workplace. No open flames, smoking or any potential sources of ignition should be allowed at the erf. Signs such as 'NO SMOKING' must be placed in parts of the establishment where inflammable materials are stored.

Table 8: Assessment of impacts associated with health and safety

IMPACT TYPE	EXTENT	DURATION	INTENSITY	PROBABILITY	DEGREE OF CONFIDENCE	SIGNIFICANCE	
						PRE MITIGATION	POST MITIGATION
Negative	Local	Permanent	Low	Probable	Medium	Medium	Low

- **Failure in Reticulation Pipelines**

Due to an increase in the number of users, there might be pressure on the existing system that might result in the blockage of the system and over flow of sewage. The spillage could be released into the environment and could potentially be a health hazard. Proper reticulation pipelines and drainage system should be installed and regularly maintained.

Table 9: Assessment of impacts associated with reticulation pipelines

IMPACT TYPE	EXTENT	DURATION	INTENSITY	PROBABILITY	DEGREE OF CONFIDENCE	SIGNIFICANCE	
						PRE MITIGATION	POST MITIGATION
Negative	Local	Permanent	Low	Probable	Medium	Medium	Low

6.2.2 POSITIVE IMPACTS

- **More efficient use of land**

The use of the erf strictly for residential purposes is not beneficial to the Grootfontein community apart from providing housing. On the other hand, the rezoning and the subsequent operation of a hospitality facility will generate many socio-economic benefits to the community and thus a more efficient use of the land.

- **Creation of employment and skills transfer**

The use of the rezoned erf for businesses purposes will create opportunities to provide employment to the residents of Grootfontein at large. The operation of a hospitality facility is a specialized function that requires certain skills. This will provide an opportunity for the few that will be employed at the facility to acquire skills in the

hospitality industry that can be used to improve their lives and stand a good chance to improve their income.

7. CONCLUSIONS

It can be concluded from this study that the proposed rezoning of Erf RE 1064, Grootfontein, Extension 2 from “Residential” to “Business” will not cause any irreversible threats to the biophysical and socio-economic environment of the area. In fact, rezoning of Erf RE 1064 will contribute to the socio-economic well-being of the Grootfontein community by providing employment opportunities and contributions to the town coffers through rates and taxes.

All the impacts identified and assessed during this study are generic impacts associated with the development of hospitality facilities. With strict adherence to the recommended mitigation measures, the significance of the assessed impacts can be reduced to a “low” significance rating.

8. REFERENCES

Barnard, P. (ed.). 1998. Biological diversity in Namibia: a country study. Windhoek: Namibian National Biodiversity Task Force. 332 pp.

Mendelsohn, J., Jarvis, A., Roberts, C. & Roberts, T. 2002. Atlas of Namibia. David Phillip Publishers, Kenilworth, Cape Town.

Christelis, G. and Struckmeier, W (editors). 2001. Groundwater in Namibia: An explanation to the Hydrological Map. Ministry of Agriculture, Water and Rural Development, Government of the Republic of Namibia.

Namibia Statistics Agency. 2012. Namibia 2011 Population and Housing Census Main Report.

Steenkamp, C. 2014. Biodiversity and Ecology Specialist Study: Environmental Impact Assessment for the Development of Marula Game Lodge.

APPENDICES

APPENDIX A: ENVIRONMENTAL MANAGEMENT PLAN

APPENDIX B: CV OF ENVIRONMENTAL ASSESSMENT PRACTITIONER

APPENDIX C: INTERESTED AND AFFECTED PARTIES REGISTER

APPENDIX D: BACKGROUND INFORMATION DOCUMENT

APPENDIX E: PRESS NOTICES