



**SCOPING ENVIRONMENTAL IMPACT ASSESSMENT FOR
THE ESTABLISHMENT OF OTJININGANDU TOWNLANDS,
SUBDIVISION OF OTJININGANDU TOWNLANDS INTO
OTJININGANDU PROPER, OTJININGANDU EXTENSION 1 &
OTJININGANDU EXTENSION 2 AND SUBSEQUENT
REZONING ON PORTION X OF FARM EPUKIRO RESERVE
NO 329, REGISTRATION DIVISION L, OMAHEKE REGION.**

MEFT PROJECT NO.: 251212006792

OMAHEKE REGIONAL COUNCIL



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MEFT PROJECT NO.: 251212006792

**PREPARED FOR
OMAHEKE REGIONAL COUNCIL**

**PREPARED BY
ECO-WISE ENVIRONMENTAL CONSULTING CC**

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ENVIRONMENTAL AUTHORIZATION INFORMATION

Please note that the environmental clearance certificate should be issued out to the client. All comments and enquiries during the evaluation of this document must be addressed to the Environmental Consultants. Please forward the Environmental Clearance Certificate to the consultant.

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ACRONYM

ACRONYM	MEANING
EIA	Environmental Impact Assessment
EAP	Environmental Assessment Practitioner
EMP	Environmental Management Plan
ECC	Environmental Clearance Certificate
Ha	Hectare
I&APs	Interested and Affected Parties
ToR	Terms of Reference

EXECUTIVE SUMMARY

The Proponent (Omaheke Regional Council) proposes to establish a township namely Otjiningandu Townlands then conduct a subdivision of Otjiningandu Townlands into Otjiningandu Proper, Otjiningandu Extension 1 & Otjiningandu Extension 2 and subsequently carryout a rezoning on Portion X of Farm Epukiro Reserve No 329, Registration Division L, Omaheke Region.

The following is being proposed;

1. Subdivision of farm Epukiro Reserve No 329 situate in Registration Division L, Omaheke Region, into Portion X (Otjiningandu Townland) and Remainder
2. Subdivision of Otjiningandu Townland into portions A, B, C & Remainder situate into Registration Division L, Omaheke Region
3. Subdivision of portions A, B & C of Otjiningandu Townland into Otjiningandu Proper, Otjiningandu Extension 1 & Otjiningandu Extension 2 respectively, situate in Registration Division L, Omaheke Region

The Environmental Impact Assessment (EIA) for the proposed project was conducted by Eco-Wise Environmental Consulting cc. The study was carried out according to the requirements of the Environmental Management Act (Act No.7 of 2007) and its regulations of 2012. The Environmental Consultants undertook this EIA study, to predict the impacts of the proposed development on the environment and to propose mitigation measures. The following methodologies were used during the EIA study; desktop studies, observations through a site visit, advertisement, public consultation, mapping and reporting.

The main findings obtained from the assessment showed that the project will be associated with positive impacts such as employment opportunities during construction and operation of the township, improved service delivery (sewer reticulation, portable water, roads), provision of serviced residential stands, stimulation of township growth, promotion of local businesses and aesthetic enhancements. Possible negative impacts might include; altered land use patterns,

impact on biodiversity, impact on soil, water resources and hydrology, population Influx, cultural and heritage impacts, generation of dust, noise and waste. To note, proper drainage planning must be done so as to prevent flooding. However, the identified negative impacts will remain of low and moderate environmental significance if the Proponent implements the proposed mitigation measures.

Objectives of the EIA

- To determine the potential environmental impacts derived from the proposed project
- To consult with key interested and affected stakeholders so that their concerns are considered in the formulation and implementation of the EMP.
- To comply with Namibia's relevant laws, policies and regulations.
- To propose alternative measures where it is noticed that adverse effects may occur.
- To set up an EMP that will govern all activities of the project for the better protection of the environment.

CHAPTER ONE: BACKGROUND

1.1 INTRODUCTION

Omaheke Regional Council proposes to establish a township namely Otjiningandu Townlands, carry a subdivision of Otjiningandu Townlands into Otjiningandu Proper, Otjiningandu Extension 1 & Otjiningandu Extension 2 and subsequently carryout a rezoning on Portion X of Farm Epukiro Reserve No 329, Registration Division L, Omaheke Region. The proposal entails conducting a rezoning thus from agricultural land to a township establishment and then a subdivision of the townland. The subdivided Otjiningandu Townlands which will have Otjiningandu Proper, Otjiningandu Extension 1 & Otjiningandu Extension 2 will have the following zoning residential, business, urban agriculture, institutional, public open space, local authority, hospitality, office space etc with residential space being dominate. The sizes of the Ervens vary, see Appendix B, Plan Layout.

Eco-Wise Environmental Consulting cc being an independent consultant was therefore hired to conduct an EIA for the intended project. Eco-Wise Environmental Consulting cc conducted a site visit and a public consultation on 20 October 2025. The consultant was mainly guided by the Environmental Management Act (EMA) (No. 7 of 2007) and the Environmental Impact Assessment Regulation (EIAR) (2012) during the process of the EIA. The Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulation (2012) states projects which can not be undertaken without an Environmental Clearance Certificate (ECC). The proposed project therefore falls under;

Section 5; Land use and development activities, 5.1 the rezoning of land from agricultural use to industrial use;

Section 10; Infrastructure, 10.1 the construction of (b) public roads; (g) communication networks including towers, telecommunication and marine telecommunication lines and cables.

Section 1; Energy generation, transmission and storage activities, 1 the construction of facilities for (b) the transmission and supply of electricity.

To note, the competent authority will be, Ministry of Environment Forestry and Tourism.

1.2 NEED FOR THE PROJECT

1.2.1 Provision of serviced land for future residential and business activities

Serviced land will be provided by Omaheke Regional Council for future residential and business activities, see Appendix B, proposed Plan.

1.2.2 Development of Omaheke Region

Subdivision of the proposed land into the following townships namely Otjiningandu Proper, Otjiningandu Extension 1 & Otjiningandu Extension 2 will result in development of more and better infrastructure hence promoting development of the area.

1.2.3 Employment creation

Temporary creation of both skilled and unskilled jobs will be created during the construction phase whereby there will be need to develop infrastructure ranging from houses, shops, roads, sewer etc. In addition, during the operation phase of the township, more people will be employed than usual as there will be additional of shops.

1.3 SCOPE OF THE PROJECT

The scope of the study includes carrying out environmental investigations in line with current provisions on environmental legislations. The Environmental Management Act (No 7 of 2007) and its regulations of 2012 were used as guidelines for the EIA study. The report is aimed at identifying and evaluating environmental and socio-economic impacts associated with the project.

1.4 TERMS OF REFERENCE

The approach to undertake the work was guided by the following ToR;

- Conduct environmental scoping.
- Determine all the possible environmental and socio-economic impacts of the project.
- Conduct a public consultation to gather the views of Interested and Affected Parties.

- Design an Environmental Management Plan with sound and relevant mitigation measures for monitoring purposes.
- Compile an EIA report for submission to Ministry of Environment Forestry and Tourism.
- Coordinate the whole application process of the Environmental Clearance Certificate (ECC) until the issuance of the certificate.

1.5 OBJECTIVES

The objectives of the study were derived from the ToR and they are as follows:

- To determine the potential environmental impacts derived from the proposed project
- To consult with key interested and affected stakeholders so that their concerns are considered in the formulation and implementation of the EMP.
- To comply with Namibia's relevant laws, policies and regulations.
- To propose alternative measures where it is noticed that adverse effects may occur.
- To set up an EMP that will govern all activities of the project for the better protection of the environment.

1.6 METHODOLOGY USED FOR THE STUDY

- a) **Desktop Study**- This involved review of project documents and relevant legislations. Documents with climatic, demographic and hydrological data for Namibia were also reviewed.
- b) **Site Visits** -The EIA team visited the site on 20 October 2025. The site visit was meant for physical inspections of the project area in order to gather information on the state of the environment.
- c) **Public Consultation**-The study also sought public opinion/views through advertisement and a public meeting. The meeting was held on 20 October 2025 at the Eiseb Police Station.

- d) **Mapping**-More data was obtained from the maps which were produced by the consultant GIS personal. The maps included hydrogeology, vegetation and location maps.
- e) **Reporting**- all data gathered was used to compile an EIA and EMP report which were submitted to Ministry of Environment Forestry and Tourism.

1.7 LAND OWNERSHIP

The land which is being proposed to be subdivided is under the ownership of Omaheke Regional Council. The sizes of the land are as follows; Remainder of Portion A, a Portion of the Farm Epukiro Reserve No. 329 of Otjiningandu Townland measuring 1175.7 ha, Portion A measuring 61.5889 ha, Portion B measuring 37.0750 ha and Portion C measuring 94.9997 ha.

1.8 OVERVIEW OF EIA REPORT

The remaining part of this report has been designated for the following aspects;

- Project Description.
- Legal and Policy Analysis.
- Environmental Baseline.
- Public Consultation.
- Impact Identification and Analysis.
- Environment Management, Monitoring and Evaluation Plan.
- Conclusions and Recommendations.

CHAPTER TWO: PROJECT DESCRIPTION

The following issues will be clarified under project description;

- Project works
- Project location.
- Project Phase and Scope of work.
- Project cost.

2.1 PROJECT WORKS

Omaheke Regional Council proposes to establish a township; Otjiningandu Townlands, subdivide Otjiningandu Townlands into Otjiningandu Proper, Otjiningandu Extension 1 & Otjiningandu Extension 2 and subsequently carryout a rezoning on Portion X of Farm Epukiro Reserve No 329, Registration Division L, Omaheke Region. The subdivided Otjiningandu Townlands which will have Otjiningandu Proper, Otjiningandu Extension 1 & Otjiningandu Extension 2 will have the following zoning residential, business, urban agriculture, institutional, public open space, local authority, hospitality, office space etc with residential space being dominate. The sizes of the Ervens vary, see Appendix B, Plan Layout.

The following will take place;

1. Subdivision of farm Epukiro Reserve No 329 situate in Registration Division L, Omaheke Region, into Portion X (Otjiningandu Townland) and Remainder
2. Subdivision of Otjiningandu Townland into portions A, B, C & Remainder situate into Registration Division L, Omaheke Region
3. Subdivision of portions A, B & C of Otjiningandu Townland into Otjiningandu Proper, Otjiningandu Extension 1 & Otjiningandu Extension 2 respectively, situate in Registration Division L, Omaheke Region.

2.2 PROJECT LOCATION

The development is being proposed to be conducted on Portion X of Farm Epukiro Reserve No 329, Registration Division L, Omaheke Region. **See figure 1**, Location Map. The GPS coordinate of the location for the proposed project area is -20.613961, 20.846419.

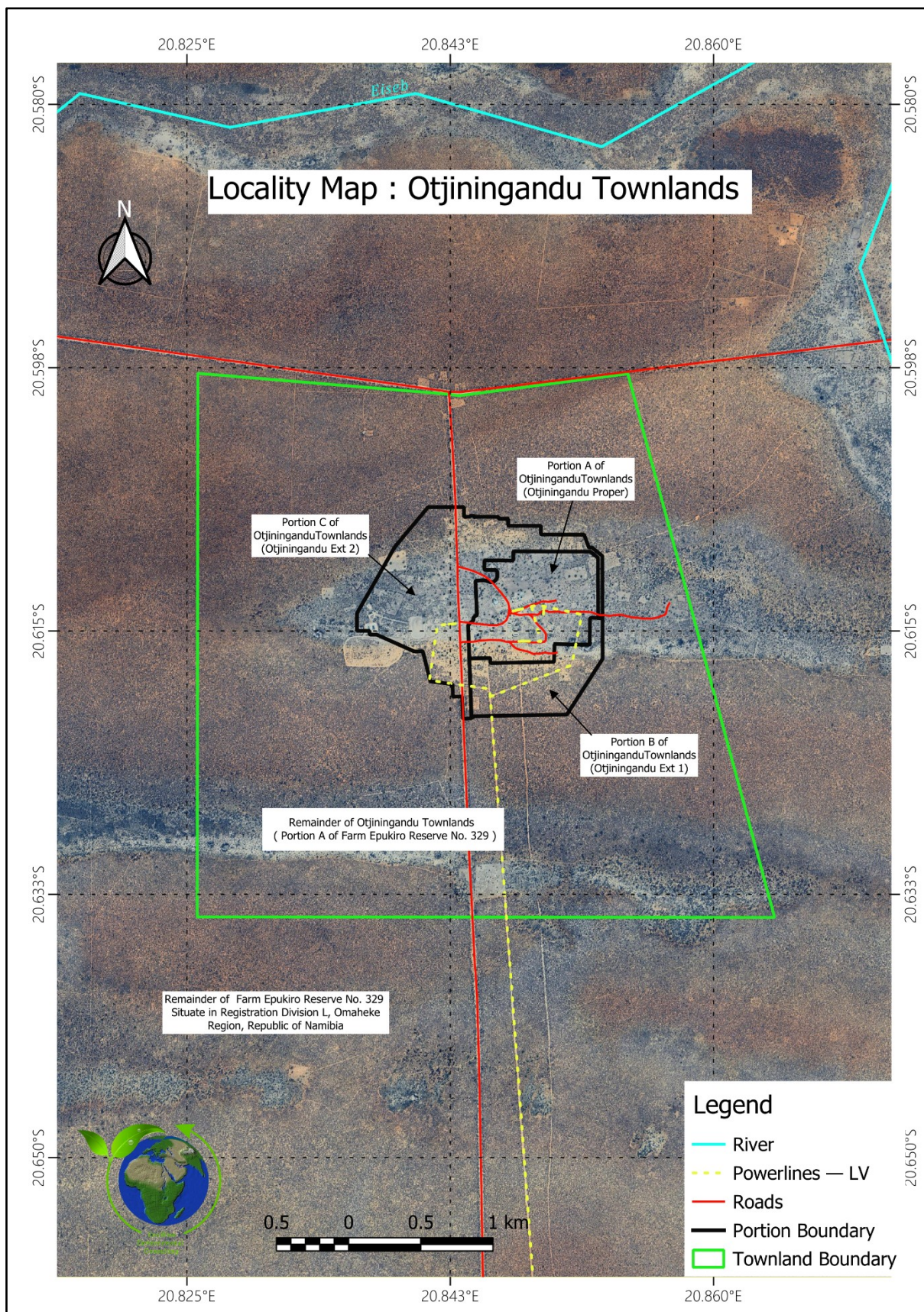


Figure 1: shows location Map

2.3 SURROUNDING LAND USES

The settlement has an area which is already established with a clinic, police station, a school, some few houses, shops, sewer ponds etc. The residential area is underdeveloped with a few permanent structures and a number of temporary zinc structures. The existing settlement is established on a portion of farmland, located on Portion X of Farm Epukiro Reserve No 329, Registration Division L. Below images shows the features found around the site.



Site image 1: : Eiseb Police Station



Site image 2: Local Clinic



Site image 3: Eiseb School



a)



b)



c)



d)



e) **Site image 4: views around the settlement (a, b, c, d, e)**

2.4 PROJECT ACTIVITIES

The project will involve the following phases namely subdivision and rezoning, construction and operation. It is vital to note that under these phases, a number of activities will take place as indicated below.

- a) Subdivision:** this activity refers to the process of dividing land into smaller lots or plots, which can then be sold or developed individually. The major activity will be pegging of land and the subdivided land shall be sold as residential and business ervens. The bulk of the pegged land will be sold as residential ervens.
- b) Rezoning:** is the process of changing the designated land use or zoning classification of an area and in this instance land use will be changed from agricultural to township establishment.
- c) Construction:** this phase will encompass construction of ervens and business properties. This will involve excavation of the ground for foundation works and installation of water and sewage pipes.
- d) Operation:** at this phase the constructed houses will be in use and businesses in operation. Possible negative impacts associated with this phase include population influx in the area which might consequently result in increase of crime and generation of more waste.

2.5 PROJECT COST

The total funding required to set up the project is not yet established.

CHAPTER THREE: ANALYSIS OF ALTERNATIVES

The following chapter will focus on the alternatives to the project. Alternatives to the project are different options, other possibilities or other course of action, which can be adopted. The alternatives to the proposed project development are:

Option 1 – Alternative locations

Option 2 – No project alternative

Option 3 – Continue with the project

3.1 ALTERNATIVE LOCATIONS

Option 1, which is alternative locations, implies that a different location to carry out the development must be acquired somewhere else other than the chosen site. Nevertheless, the following reasons justify the use of the proposed site for the development:

- **Availability of land.** The proponent (Omaheke Regional Council) owns the land hence making it easier to carry the project on the proposed site.
- **Location**-the proposed location is suitable for the project given that the area is already a settlement with already existing infrastructure such as a police station, a clinic, a school etc. The settlement was established around 1992 and it was founded to provide a place for Ovambanderu and Ovaherero refugees returning from Botswana. Following its establishment, more people from other areas around Namibia migrated to the settlement.
- **Accessibility**-the site is already connected with serviced roads which are currently used by local people therefore the site will be easily accessible.

3.2 THE “NO PROJECT” ALTERNATIVE

Option 2, which is “no project alternative”, implies that the project must not be undertaken on the proposed land rather the land should remain undisturbed. However, the “no project alternative” will be less favorable from the socio-economic perspective due to the following factors:

- **Provision of residential and business stands**- subdivision of the land will imply availability of serviced residential and business stands hence providing access to housing.
- **Growth and development**- it will be more ideal to utilize the area into something useful. The proposed land for the development is a portion of a farm therefore if it is developed, it will promote growth of the area.
- **Employment creation**-jobs will be created during construction phase.

3.3 OTHER ALTERNATIVE

3.3.1 Energy

There are two energy alternatives, which are electricity and solar energy. Electricity will be the preferred alternative given that the area is already electrified and generally, it is a convenient source of energy. Solar energy will be the least preferred source of energy given that it requires a lot of capital to implement the project.

3.3.2 Sanitation

The following alternatives are available on sanitation; flash toilets, pit latrines and portable camp toilets. During the construction phase, portable camp toilets shall be temporarily used. During operation phase, the preferred alternative shall be flash toilets because they present low possibility of environmental contamination. To note, parts of the settlement area have already received services such as sewer manholes and sewer ponds have also been constructed but these facilities have not been put to use pending proper planning and implementation.

3.4 ALTERNATIVES ASSESSMENT OUTCOMES

Option 3, which promotes the continuation of the project, has been reckoned as the preferred alternative. Option 3, was viewed as beneficial given the environmental and economic benefits that come with the project.

CHAPTER FOUR: RELEVANT LEGISLATION

This chapter reviews various applicable legislations, which govern the project. The objective is to ensure that the proposed project comply with Namibia's relevant laws, policies and regulations. Table 1 below indicates laws and policies, which relates to the project.

Table 1: Relevant legislations related to the project

Aspect	Legislation	Relevant Provisions	Relevance to the Project
The Constitution	Namibian Constitution First Amendment Act 34 of 1998	“The State shall actively promote maintenance 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” (Article 95(l)).	The aim of the EIA is to promote sustainability hence the project shall follow all the steps so as to achieve ecological sustainability.
Environmental	Environmental Management Act 7 of 2007	<ul style="list-style-type: none"> - States that, projects with significant environmental impacts are subject to an environmental assessment process (Section 27). - Requires for adequate public participation during the environmental assessment process for interested and affected parties to voice their opinions on a project (Section 2). 	<ul style="list-style-type: none"> - The EMA guided the process of the EIA. - Adverts were published in local newspapers. - The public was consulted during the process of public participation as per the requirement of the act - The EMP which will guide on the management of the environment will however be drafted as per the requirement of the act
Environmental	Environmental Impact Assessment Regulation (2012)	<ul style="list-style-type: none"> - Highlights projects which cannot be undertaken without an EIA. - <i>Land use and development activities</i>, 5.1 the rezoning of land from agricultural use to industrial use; - <i>Infrastructure</i>, 10.1 the construction of (b) public roads; (g) communication networks including towers, telecommunication and marine telecommunication lines and cables. - <i>Energy generation, transmission and storage activities</i>, 1 the construction of facilities for (b) the transmission and supply of electricity. 	<ul style="list-style-type: none"> - The proposed project falls under section 5.1, 10.1 and 1. - Therefore, the project cannot be undertaken without an EIA - There will be land rezoning from agricultural use to township establishment and some portions will be zoned for industrial, residential etc. - Infrastructure in the form of roads and telecommunication shall be established i.e. under Proper, number 290 the area will be reserved for telecommunication see Appendix B, Plan Layout

	Pollution and Waste Management Bill (draft)	<ul style="list-style-type: none"> - The bill underpins issues such as; to prevent and regulate the discharge of pollutants to the air, water and land; to make provision for the establishment of an appropriate framework for integrated pollution prevention and control and to regulate noise, dust and odour pollution. The bill further emphasis on the establishment of a system for waste planning and management. 	<ul style="list-style-type: none"> - It is definite that waste will be produced during construction and operation phases of the project, however, it is advised to comply with the bill. - A waste management plan that follows recycling, reuse and reducing must be implemented
Water	Water Act 54 of 1956	<ul style="list-style-type: none"> - Prohibits the pollution of underground and surface water bodies. - Requires application of a permit to abstract water from a water resource. 	<ul style="list-style-type: none"> - Water shall be obtained from existing boreholes. In future if need arise to drill more boreholes, there will be need to apply for a water abstraction permit
	Town Planning Ordinance 18 of 1954	<ul style="list-style-type: none"> - Subdivision of land situated in any area to which an approved Town Planning Scheme applies must be consistent with that scheme (S31). 	<ul style="list-style-type: none"> - The proposed use of the project site must be consistent with the Omaheke Regional Council Scheme.
	Townships and Division of Land Ordinance 11 of 1963	<ul style="list-style-type: none"> - Details the functions of the Township Board including what they consider when receiving an application for Township Establishment. 	<ul style="list-style-type: none"> - The proposed layout and land uses should be informed by environmental factors.
	Heritage Act	<ul style="list-style-type: none"> - The Heritage Act of 2004 makes provision for the developer to identify and assess any archaeological and historical sites of significance. The existence of any such sites should be reported to the Monuments Council as soon as possible. The Council may serve notice that prohibits any activities as prescribed within a specified distance of an identified heritage/archaeology site. 	<ul style="list-style-type: none"> - Currently no archaeological remains have been identified. - The developers should work together with the local authority and the locals as they are the ones who know their area better

N.B: The Proponent shall be required to comply with the legislations. Where there is need to engage private consultants to facilitate compliance, the Proponent is encouraged to consult qualified and certified personnel.

CHAPTER FIVE: DESCRIPTION OF THE AFFECTED ENVIRONMENT

This chapter describes the environmental setting of the project, which includes the biophysical environment and the socio-economic environment.

5.1 BIO-PHYSICAL ENVIRONMENT

5.1.1 Climate

Table 2: General climate data for the region

Average Annual rainfall:	Average rainfall in the area is between 350-400mm per year
Variation in rainfall:	Variation in annual rainfall is averaged to be 40-50 % per year
Average evaporation:	Average evaporation in the area is between 1960-2100mm per year.
Precipitation:	January & February receives high rainfall, with January being the wettest. June and July being the driest month
Water Deficit:	Water deficit in the area is between 1700-1900mm per year.
Temperatures	Annual temperatures are around 18-20 °C per year Average maximum temperature 32°C-34°C Hottest month December Average minimum temperatures 2°C-4°C Coldest month July
Wind direction	Winds blow from NE to SW
Humidity	Most humid month is March with 70%-80% and September being the least with 10%-20%

(Source: Atlas of Namibia, 2003)

5.1.2 Topography and Drainage

The Eiseb area lies within the Kalahari Sandveld on the western fringe of the extensive Kalahari Basin. Omaheke's landscape is dominated by flat to gently undulating sandy plains. The proposed area for the development is generally flat terrain. Drainage at the site is expected to flow from east to west. Proper drainage structures should be planned so as to prevent flooding.

5.1.3 Hydrogeology

The general geology of the study region comprises of the sands of the Kalahari group. Most of the few rock formations that are exposed or that lie just below the surface of sands were formed about 550 to 600 million years ago and consist of sandstones, marble, dolomite and limestone that are part of the Damara super group (Mendelsohn 2002). The geology of the study area comprises of the sands and calcrete, see hydrogeological map below.

Furthermore, the Omaheke Region has the pans namely the Nyae Nyae, Dobe and Gautscha pans. Dry Omuramba drainage lines may carry water for very short periods after heavy rain. Groundwater is generally available throughout the landscape, and the quality of water is also generally good. Higher yielding aquifer is in the Eiseb area of the Omaheke Region. Local community obtain drinking water from boreholes. The nearest river (Epukiro River) is approximately 1.67km and the nearest representative borehole (39907) is approximately 5.08km from the Townland boundary.

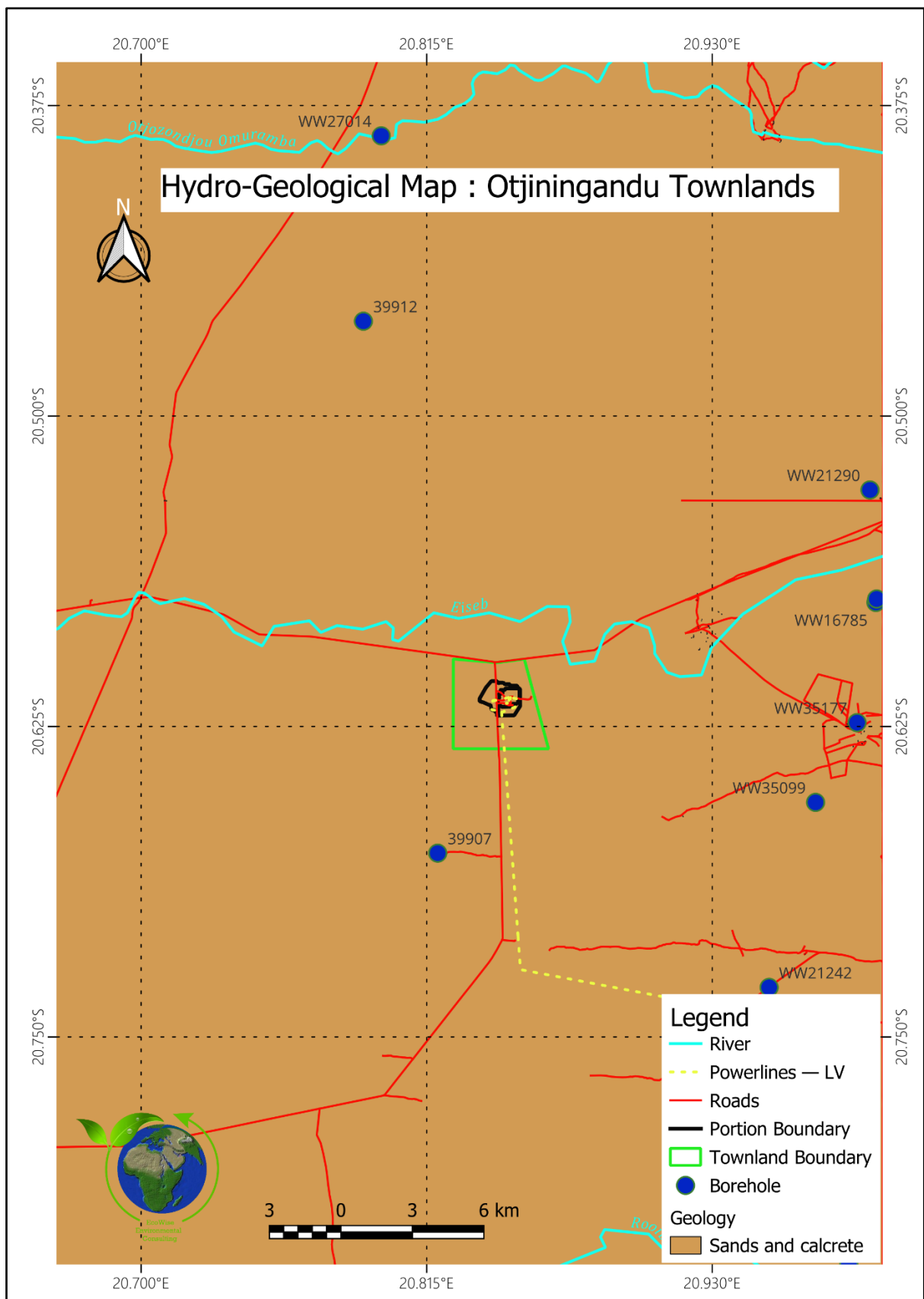


Figure 2: Hydrogeological Map

5.1.4 Soils

The study area is dominated by sandy soils. Sandy soils allow water to drain through rapidly, leaving very little moisture at depth to which most plants can reach. In addition, sandy soils allow high infiltration rate which results in high saturation rate and eventually runoff, resulting in washing away of the little available nutrients in the soil.



Site image 5: Surface soil texture

5.1.5 Vegetation of the study area

The project area is located within the Northern Kalahari (Mendelsohn *et al*, 2003). The alien species found in the region is the acacia reficiens. Alien or invasive species are seen as problematic species in the area due to their abundance and their likelihood of causing bush encroachment. However, the study area is already disturbed given that, part of the land has an already existing settlement. No red listed or protected species were identified or recorded in the study area. Image below shows vegetation around the site.

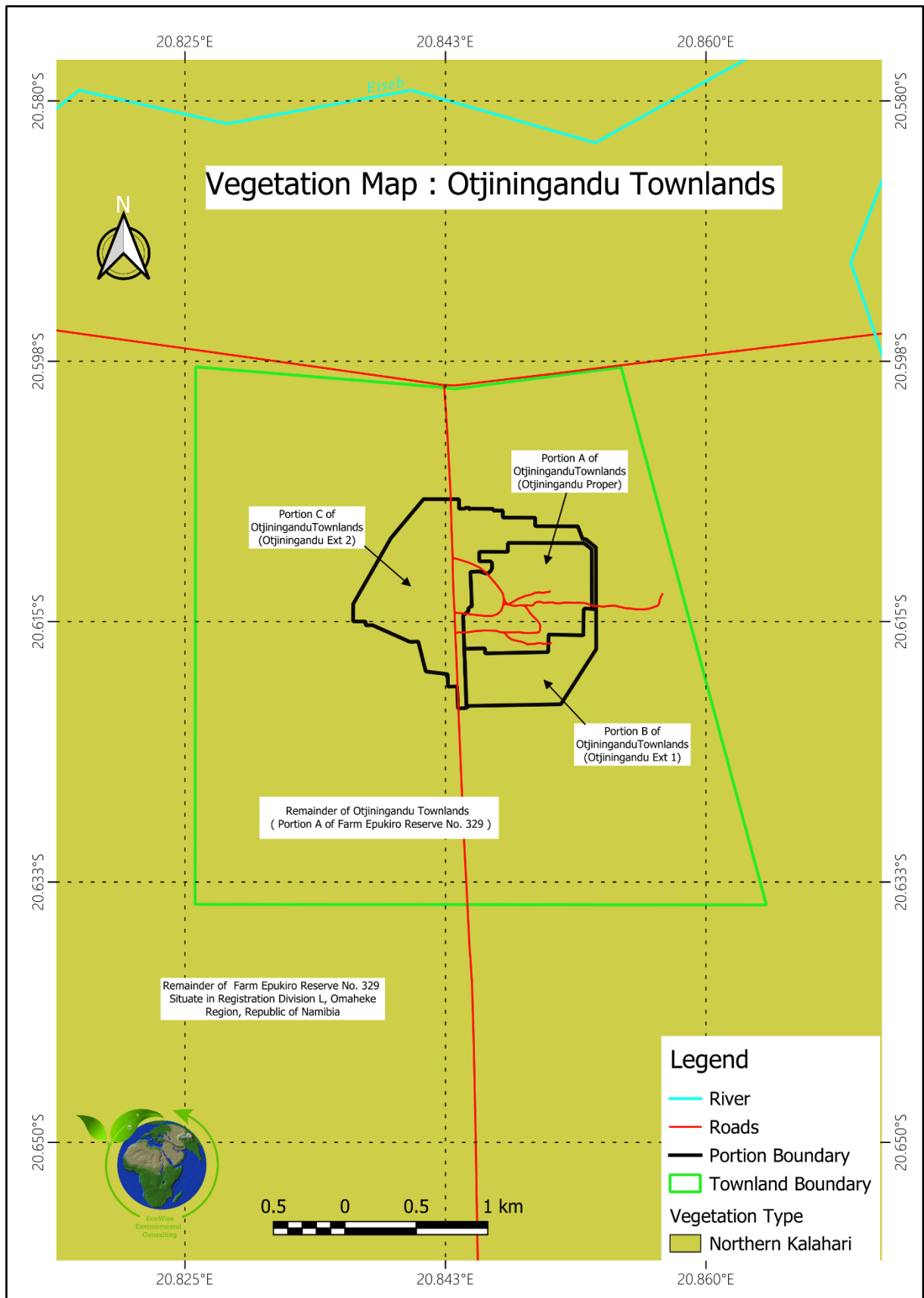


Figure 3: Vegetation Map



a)



b)



c)

Site image 6: Vegetation around the site (a, b, c)

5.1.6 Fauna

Animals like cattle and goats are mainly domesticated by the locals. The population of cattle within the region is high. It is vital to note that, part of the area of study is already disturbed and has already existing structures. The area which might be affected is the portion which will be extended to the already existing settlement. This area will be cleared to pave way for the development hence fauna inhabiting in the area will be affected. During the site visit animals which were identified around the site were cattle, goats and sheep. Table 3 below shows fauna in the region.

Table 3: Summary of General Fauna Data

Type of fauna	Number of different species/genera	Total around Namibia
Mammal Diversity	61-75 Species	217
Bird Diversity	81-110 Species	658
Reptile Diversity	51-60 Species	258
Frog Diversity	4-7 Species	50
Termite Diversity	7-9 Genera	19
Scorpion Diversity	6-9 Species	21

Source: Atlas of Namibia (2003)

5.2 SOCIO-ECONOMIC ENVIRONMENT

5.2.1 Population

The area of study is located in the Omaheke region and according to NSA (2011) the population of the region was 68039 in 2001 and in 2011 it was 71233. The annual population growth rate grew from 0.5 (2001) to 2.5 (2011) (NSA, 2011). The majority (70%) of the people live in rural areas.

5.2.2 Education Profile

According to (EMIS, 2012) there are 30 Primary schools, 4 Combined schools and 8 Secondary schools, in total there are 42 schools which is too low as compared to other regions. Of the 42 schools, 35 are state owned and 7 privately owned. 86 out of 706 teachers in Omaheke Region are without training. The total number of learners in Omaheke Region was 18 365 in 2012 (EMIS, 2012). In conclusion, the number of schools, learners and teachers is too low comparing with other regions in Namibia.

5.2.3 Employment Opportunities

According to NSA (2011), 61 % of the economically active population aged 15 years and above is employed and 40% unemployed in Omaheke region. Unemployment rate increased in the region because in 2001 it was 24%. Given the increase in unemployment rate, it is vital to note that more development is needed to create more jobs for the people. Many people depend on wages and salaries and farming which contribute 49% and 22% respectively (NSA 2011).

Tourism is also one of the fastest growing economic sectors in the region, with development of safaris and lodges becoming increasingly popular. The Trans Kalahari End Resort and East Gate Rest Camp are some of the prominent guest lodges. Its border with Botswana in the east, lends itself to vast open savannas, which in itself leads to ideal game viewing opportunities. This has resulted in many Safaris' tour and Game Farms in the area, contributing to Namibia's ever growing tourism industry.

CHAPTER SIX: PUBLIC PARTICIPATION

Public consultation process is a fundamental principal of the EIA process and it involves engaging members of the public to express their views about a certain project. Public involvement is a valuable source of information on key impacts, potential mitigation measures and the identification and selection of alternatives. The Environmental Management Act (No 7 of 2007) and the Environmental Impact Assessment Regulations of 2012 empower the local community to participate in projects conducted within their jurisdiction. Section 21 to 24 of the EIA regulations of 2012 describe the public consultation process. During the public consultation of the project, the following principals were used: inclusivity, transparency and relevance.

6.1 OBJECTIVES OF THE STAKEHOLDER CONSULTATION PROCESS

The objectives of the public consultation are;

- To inform I&AP about the activity and to give them the opportunity to express their views, concerns or opinions.
- To reduce conflict through early identification of contentious issues
- To gather potential negative and positive environmental impacts associated with the project from the stakeholders' perspectives.

- To engage stakeholders for the effective mitigation and enhancement of negative and positive impacts arising from the project respectively.

6.2 PRINCIPLES GOVERNING PUBLIC CONSULTATION

The following principals were used during the public participation:

6.2.1 Inclusivity

The public participation was open for everyone; invitation to make comments was announced in the local newspapers.

6.2.2 Open and transparency

The consultant took time to explain the background of the project and both positive and negative impacts associated with the project. All people who registered as Interested and Affected Parties were also given a BID and the full document of the EIA was available upon requests.

6.2.3 Relevance

The consultant remained focused on subjects related to the project. Interested and Affected Parties were supposed to make comments relating to socio-economic and environmental impacts associated with the project. Political and other non-related comments were considered not relevant.

6.3 NOTIFICATION OF INTERESTED AND AFFECTED PARTIES

The consultation was facilitated through the following means:

6.3.1 Background Information Document (BID)

The consultant prepared a BID, which was circulated to Interested and Affected Parties. A BID is a short document, which briefly gives the background of the project. The main aim of distributing the BID to Interested and Affected Parties is to bring awareness and clarity about the project to be developed in their area. **A copy of the BID is provided in Appendix A.**

6.3.2 Advertisement

Adverts were placed in the local newspapers namely, Market Watch on Tuesday 9 September 2025 and Tuesday 16 September 2025. Market Watch is published as a daily business news supplement/pamphlet in the following newspapers Republikein, Namibian Sun and the Allgemeine Zeitung. The advert was then circulated on the 9th of September and 16th of September 2025 on the Market Watch in the Republikein, Namibian Sun and the Allgemeine Zeitung. In addition, site notices were also placed at the site and at Eiseb Police Station notice board on 20/10/2025.

6.3.3 Public Meeting and Questionnaires

A public meeting was held on the 20th of October 2025 at Eiseb Police Station Board Room. The meeting was attended by the locals, Omaheke Regional Council and Kakero Urban Planning Consultant. The locals raised their concerns and all the concerns were mainly related to planning. The Consultant further distributed questionnaires during the meeting so as to allow those who wanted to express themselves privately. The questionnaires were open –ended whereby the respondent was free to express their views and ideas. The questionnaires are attached in **Appendix A**.



a)



b)

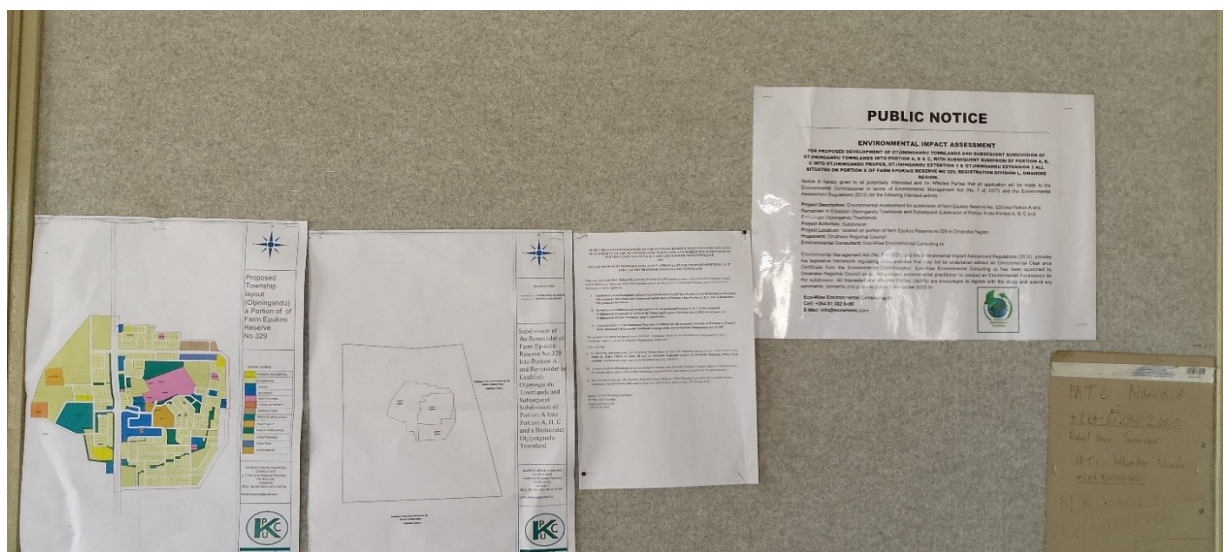
Site image 7: Stakeholders during the public meeting

6.3.4 Public Notices

Notices with project information were placed at the site and at Eiseb Police Station as shown in site images 8 and 9 below.



Site image 8: Public notice at the site



Site image 9: Public notice at Eiseb Police Station

6.4 SUMMARY OF STAKEHOLDERS CONSULTATION

Interested and Affected people who attended the meeting on 20/10/2025 indicated that they do not have a problem with the proposed development. They welcomed the development in their area and they viewed the project as a development which will bring modernization in their area.

6.4.1 Stakeholders' Recommendations

Mr. Gerson recommended for the final end product. Most of the respondents did not give any recommendations.

CHAPTER SEVEN: ASSESSMENT OF ENVIRONMENTAL IMPACTS

This section serves to identify all the potential impacts both negative and positive. In identifying these potential impacts, mitigation measures have been proposed so that the developer may carry the project in an environmentally sound manner. The methodology, which was used to assess impacts and alternatives, include the following:

- Public participation
- Site visit
- Professional experience

7.1 IDENTIFICATION OF POTENTIAL IMPACTS OF THE PROJECT

Positive Impacts	Negative impacts
<ul style="list-style-type: none">- Provision of serviced residential stands- Employment creation.- Stimulation of town growth- Aesthetic Enhancements	<ul style="list-style-type: none">- Air Environment- Dust- Noise- Land Environment- Impact on soil, water resources & hydrology- Generation of waste- Socio -Economics- Population influx- Cultural and Heritage Impacts

7.2 IMPACT ANALYSIS

In this section, the impacts of the proposed project on human and biophysical environment are evaluated and analyzed. Following the identification of the various

potential environmental impacts, the impact analysis framework looked at the impacts under the following categories;

Table 4: Ranking Matrix

Table 11: Ranking matrix				
	Temporal scale			Score
EFFECT	Short term	Less than 5 years		1
	Medium term	Between 5 and 20 years		2
	Long term	Between 20 and 40 years (a generation) and from a human perspective almost permanent.		3
	Permanent	Over 40 years and resulting in a permanent and lasting change that will always be there.		4
	Spatial Scale			
	Study area	The proposed site /within immediate area of the activity		1
	Beyond project boundary	Surrounding area outside the project boundary		2
	Regional	District and Provincial level		3
	National	Country		4
	International	Internationally		5
	Severity		Benefit	
	Slight/Slightly Beneficial	Slight impacts on the affected system(s) or party(ies)	Slightly beneficial to the affected systems(s) or party(ies)	1
	Moderate/Moderately Beneficial	Moderate impacts on the affected system(s) or party(ies)	An impact of real benefit to the affected system(s) or party (ies)	2
	Severe/Beneficial	Severe impacts on the affected system(s) or party(ies)	A substantial benefit to the affected system(s) or party(ies)	4
	Very Severe/Very Beneficial	Very severe change to the affected system(s) or party(ies)	A very substantial benefit to the affected system(s) or party(ies)	8
Likelihood				
LIKELIHOOD	Unlikely	The likelihood of these impacts occurring is slight	1	

	May occur	The likelihood of these impacts occurring is possible	2
	Probable	The likelihood of these impacts occurring is probable	3
	Definite	The likelihood is that this impact will definitely occur	4

Table 5: Ranking matrix for Environmental Significance

Environmental Significance		Positive	Negative
LOW	An acceptable impact for which mitigation is desirable but not essential. The impact by itself is insufficient even in combination with other low impacts to prevent development.	4-7	4-7
MODERATE	An important impact, which requires mitigation. The impact is insufficient by itself to prevent the implementation of the project but which, in conjunction with other impacts may prevent its implementation.	8-11	8-11
HIGH	A serious impact, which, if not mitigated, may prevent the implementation of the project. These impacts would be considered by society as constituting a major and usually long-term change to the natural and/or social environment and result in severe negative or beneficial effects.	12-15	12-15
VERY HIGH	A very serious impact, which may be sufficient by itself to prevent the implementation of the project. The impact may result in permanent change. Very often, these impacts are unmitigable and usually result in very severe effects or very beneficial effects.	16-20	16-20

Table 6: Matrix to show environmental significance

	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2	5	6	7	8	9	10	11	12	13	14	15	16	17	18
3	6	7	8	9	10	11	12	13	14	15	16	17	18	19
4	7	8	9	10	11	12	13	14	15	16	17	18	19	20

7.3 IMPACT EVALUATION

7.3.1 Possible negative impacts associated with the subdivision, rezoning and construction phase:

The proposed rezoning which will involve changing farmland to township establishment and also the subdivision which will involve dividing the land into portions A, B & C and the subsequent construction will cause possible negative impacts. Change of land use will impact on both the local community and animals. In addition, the proposal to put access roads and other services installation will present negative impacts such as generation of dust, increased noise levels from operating machinery, generation of waste, possible increase of surface runoff but these possible impacts are expected to be manageable. Altered land use patterns and impact on biodiversity have a possibility of being moderate impacts. However, these potential impacts must be mitigated through the implementation of suggested mitigation measures.

1. Altered land use patterns

Identified Impact	Effect						Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact	Score			
Altered land use patterns Unmitigated	Permanent	4	Study area	1	Moderate impact	2	Definite	4	11
Mitigated	Permanent	4	Study area	1	Slight impact	1	Definite	4	10

Rezoning can lead to loss of farmland and green spaces if the land becomes developed. Farmland is permanently removed from agricultural use, reducing local food production capacity. This can threaten food security and rural livelihoods, especially where fertile soils are lost. The proposed development will definitely alter the land use pattern as land will be zoned from agriculture to

township establishment. The study area will be altered and the impact will not extend beyond the project boundary. The impact will be permanent as the land use will be permanently altered.

Mitigation measures

- Ensure that all proposed developments will be strictly confined within the proposed townland boundary.

2. Impact on biodiversity

Identified Impact	Effect						Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact	Score			
Impact on biodiversity Unmitigated	Permanent	4	Study area	1	Moderate impact	2	Definite	4	11
Mitigated	Permanent	4	Study area	1	Slight impact	1	Definite	4	10

Clearing land for new roads, buildings and utilities often disrupts natural habitats and reduces biodiversity. It is definite that the proposed development will impact on biodiversity as land will be cleared to pave way for the development. This will also affect the habitats of the animals within the area.

Mitigation measures

- Avoid unnecessary clearing of vegetation

3. Water resources and hydrology

Identified Impact	Effect						Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact	Score			
Impact on water resources and hydrology Unmitigated	Short term	1	Study area	1	Moderate impact	2	May occur	2	6
Mitigated	Short term	1	Study area	1	Slight impact	1	Unlikely	1	4

Increased surface runoff due to impervious surfaces (roads, pavements, roofs) can lead to flooding and decreased groundwater recharge. In addition, there might be possibilities of contamination of nearby water bodies from construction waste, sewage, or stormwater runoff carrying oils. However, it will be unlikely for the nearby surface water body (Eiseb River) to be affected as it is a distance to the proposed development. Moreover, they might also be an increased demand for water supply, which may strain local aquifers.

Mitigation

- Proper drainage planning
- Proper water planning and management to ensure adequate supply to the increasing population
- Drill more boreholes in cases that the available water sources can no longer adequately cater for the increasing population

4. Impact on soil

Identified Impact	Effect						Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact	Score			
Soil Unmitigated	Short term	1	Study area	1	Slight impacts	1	May occur	2	5
Mitigated	Short term	1	Study area	1	Slight impacts	1	Unlikely	1	4

Construction activities (grading, excavation) can lead to soil compaction and erosion. Soil might be partly affected by oil or fuel leakages from vehicular activities, paints and cement. The listed below mitigation measures should be effectively implemented so as to reduce the probability of soil contamination.

Mitigation measures:

- On completion of works (in phases), all temporary structures, surplus materials and wastes to be completely removed
- After completion of construction, the surrounding area where the extra soil and remaining construction material must be cleared and leveling must be done so that the original condition is restored.
- Proper care should be taken so that there is no spill that would cause soil contamination
- Hazardous waste properly handled and sent for disposal to appropriate disposal areas
- Fuels shall not be kept/stored at the site

5. Dust

Identified Impact	Effect						Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact	Score			
Dust Unmitigated	Short term	1	Study area	1	Slight impact	1	May occur	2	5
Mitigated	Short term	1	Study area	1	Slight impact	1	Unlikely	1	4

Construction activities might generate dust which might end up affecting neighbors to the site. However, the impact is expected to be of low environmental significance given that the project will be conducted in phases.

Mitigation measures:

- Use of dust suppression methods (regular sprinkling of water)
- Employees at the site should be provided with respirators
- Regular monitoring and review to ensure safe operation.

6. Noise impact

Identified Impact	Effect					Score	Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact				
Noise Unmitigated	Short term	1	Localized	1	Slight impact	1	Unlikely	1	4
Mitigated	Short term	1	Localized	1	Slight impact	1	Unlikely	1	4

During construction phase, noise above the ambient levels of the area is not expected to be generated. Noise might be generated from frequenting trucks undertaking the civil works or ferrying materials, waste and equipment to and from the site. Activities such as excavation and grading also have the possibility of increasing noise levels. Noise generated might affect employees working at the site. However, the impact of noise will remain of low environmental significance if mitigation measures are implemented.

Mitigation measures:

- Working hours should be limited to minimum of 8 hours per day
- Noise should be addressed and mitigated at an early stage of construction phase.
- Proper and timely maintenance of machineries and vehicles

7. Generation of waste

Identified Impact	Effect					Score	Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact				
Generation of waste Unmitigated	Short term	1	Study area	1	Slight impact	1	May occur	2	5
Mitigated	Short term	1	Study area	1	Slight impact	1	Unlikely	1	4

During construction phase, waste will be generated mainly in form of construction waste and construction effluent (grey water). In general, the impact of waste is expected to be localized and it will be of low environmental significance.

Mitigation measures:

- Recycle and Reuse
- Contaminated wastes in the form of soil, litter, building rubble and other material must be disposed at an appropriate disposal site.
- Strictly, no burning of waste on the site or at the disposal site, as it causes environmental and public health impacts
- To avoid contaminating the soil and underground ecosystem, no wastewater should be disposed on soil.
- Regular inspection of the site
- Portable toilets should be available at the site during construction phase.
- Regular servicing and maintenance of vehicles and machinery to avoid leakage of oils and lubricates.

8. Heritage Impacts

Identified impact	Effect					Score	Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact				
Cultural and Heritage impact Unmitigated	Short term	1	Study area	1	Slight impact	1	May occur	2	5
Mitigated	Short term	1	Study area	1	Slight impact	1	Unlikely	1	4

At the site, there are no known heritage areas or artefacts deemed to be impacted by the operations. In addition, if the proponent come across archaeological features or objects that possess cultural values (e.g. Pottery, bones, shells, ancient clothing or weapons, ancient cutlery, graves etc.), the area should be barricaded off and the relevant authorities should be contacted immediately.

Mitigation measures:

- All works are to be immediately ceased should an archaeological or heritage resource be discovered.
- The National Heritage Council of Namibia (NHCN) should advise with regards to the removal, packaging and transfer of the potential resource.

7.3.2 Possible negative impacts associated with the operation phase

1. Population influx

Identified Impact	Effect					Score	Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact				
Population influx Unmitigated	Short term	1	Study area	1	Moderate impact	2	May occur	2	6
Mitigated	Short term	1	Study area	1	Slight impact	1	Unlikely	1	4

The new development will bring new and more people in the area. The fact that people will be coming from different locations and meeting at one place can result in anti-social behaviours like prostitution hence the spread of HIV/AIDS. Criminal acts and subsequently security threats might also end up being high. In addition, increase in number of people can also result in strain on resources and also generation of more waste.

Mitigation measures:

- To increase the number of police personnel at Eiseb Police Station
- Sensitization campaign on HIV/AIDS and other STDs to be promoted via the local clinic
- Ensure adequate bins around the township
- Safeguard on illegal settlements around the area
- Adequate street lights
- Frequent patrol by the police

2. Cumulative impacts

Identified impact	Effect					Score	Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact				
Cumulative impacts Unmitigated	Short term	1	Study area	1	Slight impact	1	May occur	2	5
Mitigated	Short term	1	Study area	1	Slight impact	1	Unlikely	1	4

The development will bring more people in the area, which can consequently strain the resources like water, generate more waste, increase crime rates, increase the spread of HIV/AIDS, STI.

Mitigation measures:

- To increase the number of police personnel at Eiseb Police Station
- Sensitization campaign on HIV/AIDS and other STDs to be promoted via the local clinic
- Ensure adequate bins around the township

7.3.3 Positive impacts associated with the project

1. Provision of serviced land

Identified Impact	Effect					Score	Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact				
Provision of serviced residential stands Unmitigated	Permanent	4	National	4	Very beneficial	8	Definite	4	20
Mitigated	Permanent	4	National	4	Very beneficial	8	Definite	4	20

The proposed development will definitely result in provision of serviced land improving access to services such as water, sewer, roads and electricity. Title to land will be provided to people who will buy the land and this can add value to the land and also the land can be used as collateral for bank loans and any other forms of financial assistance requiring security.

Enhancement measures:

- Transparency on the allocation of the stands
- Priority should be given to low-income earners when selling the residential stands.

2. Employment creation

Identified Impact	Effect					Score	Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact				
Employment creation Unmitigated	Permanent	4	National	4	Very beneficial	8	Definite	4	20
Mitigated	Permanent	4	National	4	Very beneficial	8	Definite	4	

It is definite that jobs will be created during the life span of the project. The type of jobs will range from skilled, semi-skilled and unskilled.

Enhancement measures:

- Employ locals in all casual labour in the construction and operation phase
- Equity, transparency, to be put into account when hiring and recruiting

3. Aesthetic Enhancements

Identified Impact	Effect					Score	Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact				
Aesthetic Enhancements Unmitigated	Permanent	4	Study area	1	Very beneficial	8	Definite	4	17
Mitigated	Permanent	4	Study area	1	Very beneficial	8	Definite	4	17

Alteration of the rural landscape into a modernized setting affects scenic value. Currently, the area is a settlement with fewer infrastructure therefore the development will beautify the area.

Enhancement measures:

- Proper maintenance of the buildings during operation phase

4. Stimulation of town development

Identified Impact	Effect					Score	Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact				
Stimulation of town development Unmitigated	Permanent	4	Study area	1	Very beneficial	8	Definite	4	17
Mitigated	Permanent	4	Study area	1	Very beneficial	8	Definite	4	

The establishment of the project can pave way for other developments (multiplier effect). The multiplier effect theory states that developments attract more development. The new people who will come to occupy the houses will require services hence the need to create more services.

5. Increased Economic Activities and Revenue

Identified Impact	Effect					Score	Risk or Likelihood	Score	Overall Significance
	Temporal Scale	Score	Spatial Scale	Score	Severity of impact				
Revenues Unmitigated	Permanent	4	National	4	Very beneficial	8	Definite	4	20
Mitigated	Permanent	4	National	4	Very beneficial	8	Definite	4	20

The development will increase the economic activities and revenue for the government through taxes. The taxes will be generated through businesses that will be formed to service the increased population. More taxes will also be generated through contracted and subcontracted companies.

Enhancement measures:

- The contractors and subcontractors will pay taxes as stipulated by the law of Namibia.

7.4 SUMMARY & ANALYSIS OF IMPACTS

The rezoning and subdivision of the land in question will present possible negative impacts. Altered land use pattern and impact on biodiversity might have the possibility of being moderate impacts. Impacts classified under moderate impacts are important impacts, which requires mitigation. The impact is insufficient by itself to prevent the implementation of the project but which, in conjunction with other impacts may prevent its implementation. The rest of the impacts falls under low environmental impacts. Low environmental impacts are acceptable impacts for which mitigation is desirable but not essential. The impact by itself is insufficient even in combination with other low impacts to prevent development.

CHAPTER EIGHT: ENVIRONMENT MANAGEMENT AND MONITORING PLAN

Environmental planning and management as a concept seek to improve and protect environmental quality for both the project site and the neighborhood through segregation of activities that are environmentally incompatible. EMP is a vital output for an Environmental Impact Assessment as it provides a checklist for project monitoring and evaluation.

Environmental Management Plan (EMP) for the proposed development is aimed at providing a logical framework within which identified negative environmental impacts can be mitigated and monitored. **See Appendix C**, for the EMP.

CHAPTER NINE: CONCLUSIONS AND RECOMMENDATIONS

9.1 CONCLUSION

The social and economic rating for this project is positive. The project does not pose serious negative environmental impacts. Mitigation measures have been proposed to address any of the negative impacts arising from the project. Should the Proponent implement all the suggested mitigation measures, the consultant recommends the issuance of the Environmental Clearance Certificate.

9.2 RECOMMENDATIONS

The following recommendations have been brought forward:

- The Proponent should engage the services of a licensed Land Surveyor to ensure integrity of work and also accountability in case of disputes or any other issues that may arise.
- Ensure proper drainage planning
- During construction phase, all activities should be carried out in an environmentally friendly manner

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