Environmental Assessment Scoping Report for

Rezoning of Erf 119, Oshakati North Proper from "General Residential" to "Accommodation", Oshana Region.

APP-005673

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April 2025



PROJECT DETAILS

	Environmental Scening Bon	ort for the	
	Environmental Scoping Report for the: Rezoning of Erf 119 Osbakati North Proper from "General"		
Title	 Rezoning of Erf 119, Oshakati North Proper from "General Residential" to "Accommodation", Oshana Region 		
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EXECUTIVE SUMMARY

Introduction

Mr Antonio Manuel Cerveira Rocha hereinafter referred to as the proponent intends to undertake the following activities:

 Rezoning of Erf 119, Oshakati North Proper from "General Residential" with a density of 1:600 to "Accommodation"

The above development triggers listed activities in terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012).

As such the proponent appointed Stubenrauch Planning Consultants (SPC) to undertake an independent Environmental Assessment (EA) in order to obtain an Environmental Clearance Certificate (ECC) for the above activities. The competent authority is the Ministry of Environment, Forestry and Tourism: Department of Environmental Affairs and Forestry (MEFT: DEAF).

Project Description

Mr Antonio Manuel Cerveira Rocha, the owner of Rochas Hotel and Restaurant, is facing a dilemma regarding his property, Erf 6, Evululuko Proper. The land, which serves as accommodation for his employees, is impacted by ongoing road construction. As a result, he has been instructed to demolish certain structures to make way for the project.

He subsequently approached the Oshakati Town Council to discuss the matter and determine the best course of action. the council extended an Offer to Purchase for Erf 119, Oshakati North Proper. He accepted the offer, and the Deed of Sale was signed. The transfer process is currently in progress. His plans for Erf 119 include developing a hotel and conference center, along with cottages to accommodate his employees.

Public Participation

Communication with Interested and Affected Parties (I&APs) about the proposed development was facilitated through the following means and in this order:

- A Background Information Document (BID) containing descriptive information about the proposed activities was compiled and sent out to all identified and registered I&APs via email on 17 January 2025;
- Notices were placed in the New Era newspapers and the Namibian newspapers dated 17
 January 2025 and 24 January 2025, briefly explaining the activity and its locality, inviting
 members of the public to register as I&APs (Appendix B); and
- A notice was fixed at the project site (see Appendix A);

Public consultation was carried out according to the Environmental Management Act's EIA Regulations. After the initial notification, the I&APs were given two weeks to submit their comments on the project (until **07 February 2025**). The comment period remained open until the final scoping report is submitted to MEFT.

The Draft Scoping Report was circulated from the **18 March 2025 until the 04 April 2025** so that the public could review and comment on it. The overall commentary received from the public on the draft report was documented in the comments and responses report document of this report.

Conclusions and Recommendations

With reference to **Table 10**, none of the negative construction phase impacts were deemed to have a high significant impact on the environment. The construction impacts were assessed to a *Medium to Low (negative)* significance, without mitigation measures. With the implementation of the recommended mitigation measures in Chapter 7 as well as in the EMP, the significance of the construction phase impacts is likely to be reduced to a *Low (negative)*.

With reference to **Table 10**, none of the negative operational phase impacts were deemed to have a high significance impact on the environment. The operational impacts were assessed to a *Medium* (*negative*) significance, without mitigation measures. With the implementation of the recommended mitigation measures in Chapter 7 as well as in the EMP, the significance of the construction phase impacts is likely to be reduced to a *Low* (*negative*).

It is recommended that this project be authorised because should the development not proceed the subject area would remain undeveloped, potentially delaying urban growth and missing an opportunity to enhance the area's infrastructure. The local community is expected to benefit from the development as a result of the potential job opportunities during construction as well as the increased development within the area. The significance of the social impact was therefore deemed to be *Medium (positive)*.

The "no go" alternative was thus deemed to have a *High (negative)* impact, as all the benefits resulting from the development would not be realised.

The significance of negative impacts can be reduced with effective and appropriate mitigation provided in this report and the EMP. If authorised, the implementation of the EMP should be included as a condition of approval.

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I&AP Database & Registered List

Notification Letters and Emails sent of BID Notification Letters and Emails sent of DESR Comments (if any comments received)

Annexure D: Consent Letter

Annexure E: Curriculum Vitae of Environmental Assessment Practitioner

Annexure F: Environmental Management Plan

LIST OF ACRONYMS

AIDS Acquired Immune Deficiency Syndrome

CRR Comments and response report

dB Decibels

DESR Draft Environmental Scoping Report

EA Environmental Assessment

EAP Environmental Assessment Practitioner
EAR Environmental Assessment Report
ECC Environmental Clearance Certificate

ECO Environmental Control Officer

EIA Environmental Impact Assessment
EMA Environmental Management Act
EMP Environmental Management Plan
FESR Final Environmental Scoping Report

Gesellschaft für Technische Zusammenarbeit

HIV Human Immunodeficiency Virus

1&AP Interested and Affected Party

IUCN International Union for Conservation of NatureMEFT Ministry of Environment, Forestry and Tourism

MEFT: DEAF Ministry of Environment, Forestry and Tourism: Department of Environmental

Affairs and Forestry

MURD Ministry of Urban and Rural Development

MWTC Ministry of Works Transport and Communication

NAMPAB Namibia Planning Advisory Board
NPC Namibia Planning Commission

POS Public Open Space

PPP Public Participation Process

SADC Southern African Development Community

SME Small Medium Enterprise

SPC Stubenrauch Planning Consultants

USAID United States Agency for International Development

VMMC Voluntary Medical Male Circumcision

1.1 PROJECT BACKGROUND

The Antonio Manuel Cerveira Rocha hereinafter referred to as the proponent intends to undertake the following activities:

 Rezoning of Erf 119, Oshakati North Proper from "General Residential" with a density of 1:600 to "Accommodation"

The above are listed activities in terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012).

In terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012), the following listed activities in **Table 1** were triggered by the proposed project:

Table 1: List of triggered activities identified in the EIA Regulations which apply to the proposed project.

Activity description and No(s):	Description of relevant Activity	The portion of the development as per the project description that relates to the applicable listed activity
Activity 6 Tourism	The construction of resorts, lodges,	The proposed project involves the
Development Activities	hotels or other tourism and hospitality facilities.	rezoning of land from general residential to accommodation

The above activities will be discussed in more detail in Chapter 4. The proponent appointed Stubenrauch Planning Consultants (SPC) to undertake an independent Environmental Assessment (EA) in order to obtain an Environmental Clearance Certificate (ECC) for the above activities. The competent authority is the Ministry of Environment, Forestry and Tourism: Department of Environmental Affairs and Forestry (MEFT: DEAF).

The process will be undertaken in terms of the gazetted Namibian Government Notice No. 30 Environmental Impact Assessment Regulations (herein referred to as EIA Regulations) and the Environmental Management Act (No 7 of 2007) (herein referred to as the EMA). The EIA process will investigate if there are any potential significant bio-physical and socio-economic impacts associated with the intended activities. The EIA process would also serve to provide an opportunity for the public and key stakeholders to provide comments and participate in the process.

1.2 PROJECT LOCATION

Erf 119 is located in the neighbourhood of Oshakati North Proper. It is located north of Ehenye Primary School and west of Kristene Court, and it measures 5 182 m² in extent as depicted in **Figure 1** below.

1.3 LAND USE

Erf 119, Oshakati North Proper is currently vacant with no development having taken place on the property. The subject property is located on a fairly flat terrain topography on the subject property can be described as relatively flat as depicted by the contours on the attached maps. The subject erf is not prone to inundations and the proposed development is also not expected to obstruct the natural flow of water

Erf 119, Oshakati North Proper is currently zoned "General Residential" with a density of 1:600 in accordance with the Oshakati Zoning Scheme.

1.4 OWNERSHIP

Ownership of Erf 119, Oshakati North Proper currently vests with the Town Council of Oshakati. However, a Deeds of Sale is in place, signed by both the Oshakati Town Council and Mr. Antonio Manuel Cerveira Rocha (the purchaser) which authorizes the transfer of Erf 119, Oshakati North Proper into the purchaser's name.

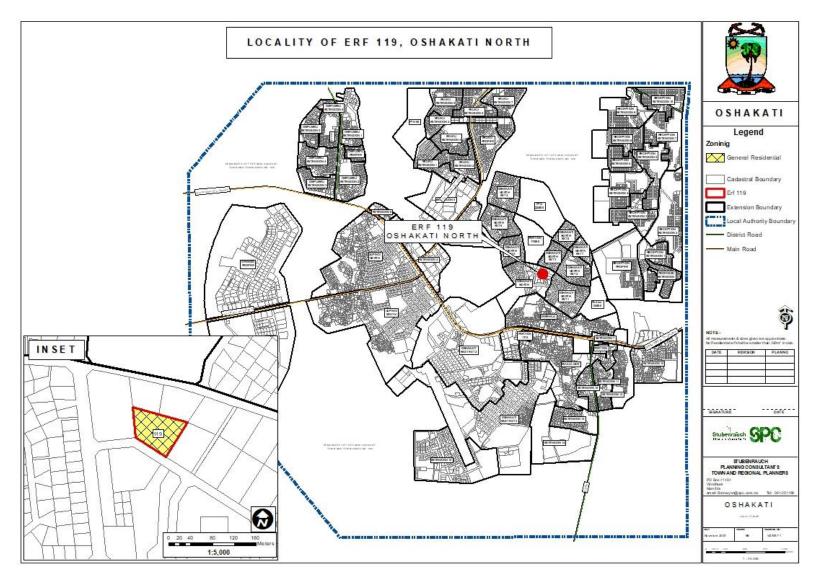


Figure 1: Locality map of Erf 119, Oshakati North

1.5 TERMS OF REFERENCE AND SCOPE OF PROJECT

The scope of this project is limited to conducting an environmental impact assessment and applying for an Environmental Clearance Certificate for the following as indicated in section 1.1 above:

 Rezoning of Erf 119, Oshakati North Proper from "General Residential" with a density of 1:600 to "Accommodation"

1.6 ASSUMPTIONS AND LIMITATIONS

In undertaking this investigation and compiling the Environmental Scoping Report, the following assumptions and limitations apply:

- Assumes the information provided by the proponent is accurate and discloses all information available.
- The limitation that no alternative except for the preferred layout plans and the 'no-go' option was considered during this assessment. The unique character and appeal of Oshakati were however taken into consideration with the design perspective. Various layout alternatives were initially considered by the proponent, also taking terrain and environmental constraints into account, thus the current design plans being the most feasible result.

1.7 CONTENT OF ENVIRONMENTAL ASSESSMENT REPORT

Section 8 of the gazetted EIA Regulations requires specific content to be addressed in a Scoping / Environmental Assessment Report. **Table 2** below is an extract from the EMA and highlights the required contents of a Scoping / Environmental Assessment Report whilst assisting the reader to find the relevant section in the report.

Table 2: Contents of the Scoping / Environmental Assessment Report

Section	Description	Section of FESR/ Annexure
8 (a)	The curriculum vitae of the EAPs who prepared the report;	Refer to Annexure D
8 (b)	A description of the proposed activity;	Refer to Chapter 4
8 (c)	A description of the site on which the activity is to be undertaken and the location of the activity on the site;	Refer to Chapter 3
8 (d)	A description of the environment that may be affected by the proposed activity and the manner in which the geographical, physical, biological, social, economic and cultural	Refer to Chapter 3

Section	Description	Section of FESR/ Annexure
	aspects of the environment may be affected by the proposed listed activity;	
8 (e)	An identification of laws and guidelines that have been considered in the preparation of the scoping report;	Refer to Chapter 2
8 (f)	Details of the public consultation process conducted in terms of regulation 7(1) in connection with the application, including	Refer to Chapter 5
	(i) the steps that were taken to notify potentially interested and affected parties of the proposed application	Refer to Chapter 5
	(ii) proof that notice boards, advertisements and notices notifying potentially interested and affected parties of the proposed application have been displayed, placed or given;	Refer to Annexures A and B for site notices and advertisements respectively.
	(iii) a list of all persons, organisations and organs of state that were registered in terms of regulation 22 as interested and affected parties in relation to the application;	Refer to Annexure C
	(iv) a summary of the issues raised by interested and affected parties, the date of receipt of and the response of the EAP to those issues;	Refer to Annexure C
8 (g)	A description of the need and desirability of the proposed listed activity and any identified alternatives to the proposed activity that are feasible and reasonable, including the advantages and disadvantages that the proposed activity or alternatives have on the environment and on the community that may be affected by the activity;	Refer to Chapter 4
8 (h)	A description and assessment of the significance of any significant effects, including cumulative effects, that may occur	Refer to Chapter 7

Section	Description	Section of FESR/ Annexure
	as a result of the undertaking of the activity or identified alternatives or as a result of any construction, erection or decommissioning associated with the undertaking of the proposed listed activity;	
8 (i)	terms of reference for the detailed assessment;	NB – Assessment of impacts are included in this EA Report
8 (j)	An environmental management plan	Refer to Annexure F

2.1 LEGISLATION RELEVANT TO THE PROPOSED DEVELOPMENT

There are multiple legal instruments that regulate and have a bearing on good environmental management in Namibia. Table 3 below provides a summary of the legal instruments considered to be relevant to this development and the environmental assessment process.

Table 3: Legislation applicable to the proposed development

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
The Constitution of the Republic of Namibia as Amended	Article 91 (c) provides for duty to guard against "the degradation and destruction of ecosystems and failure to protect the beauty and character of Namibia."	Sustainable development should be at the forefront of this development.
	Article 95(I) deals with the "maintenance of ecosystems, essential ecological processes and biological diversity" and sustainable use of the country's natural resources.	
Environmental Management Act No. 7 of 2007 (EMA)	Section 2 outlines the objective of the Act and the means to achieve that. Section 3 details the principle of	The development should be informed by the EMA.
	Environmental Management	
EIA Regulations GN 28, 29, and 30 of EMA (2012)	GN 29 Identifies and lists certain activities that cannot be undertaken without an environmental clearance certificate.	Activity 6 Tourism Development Activities
	GN 30 provides the regulations governing the environmental assessment (EA) process.	
Convention on Biological Diversity (1992)	Article 1 lists the conservation of biological diversity amongst the objectives of the convention.	The project should consider the impact it will have on the biodiversity of the area.
Draft Procedures and Guidelines for conducting EIAs and compiling EMPs (2008)	Part 1, Stage 8 of the guidelines states that if a proposal is likely to affect people, certain guidelines should be considered by the proponent in the scoping process.	The EA process should incorporate the aspects outlined in the guidelines.

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
Namibia Vision 2030	Vision 2030 states that the solitude, silence and natural beauty that many areas in Namibia provide are becoming sought after commodities and must be regarded as valuable natural assets.	Care should be taken that the development does not lead to the degradation of the natural beauty of the area.
Water Act No. 54 of 1956	Section 23(1) deals with the prohibition of pollution of underground and surface water bodies.	The pollution of water resources should be avoided during construction and operation of the development.
The Ministry of Environment and Tourism (MET) Policy on HIV & AIDS	MET has recently developed a policy on HIV and AIDS. In addition, it has also initiated a programme aimed at mainstreaming HIV and gender issues into environmental impact assessments.	The proponent and its contractor have to adhere to the guidelines provided to manage the aspects of HIV/AIDS. Experience with construction projects has shown that a significant risk is created when migrant construction workers interact with local communities.
Urban and Regional Planning Act 5 of 2018	The Act provides to consolidate the laws relating to urban and regional planning; to provide for a legal framework for spatial planning in Namibia; to provide for principles and standards of spatial planning; to establish the urban and regional planning board; to decentralise certain matters relating to spatial planning; to provide for the preparation, approval and review of the national spatial development framework, regional structure plans and urban structure plans; to provide for the preparation, approval, review and amendment of zoning schemes; to provide for the establishment of townships; to provide for the alteration of boundaries of approved townships, to provide for the disestablishment of approved townships; to provide for the subdivision and consolidation of land; to provide for the alteration,	The subdivision, closure and rezoning is to be done in accordance with the act.

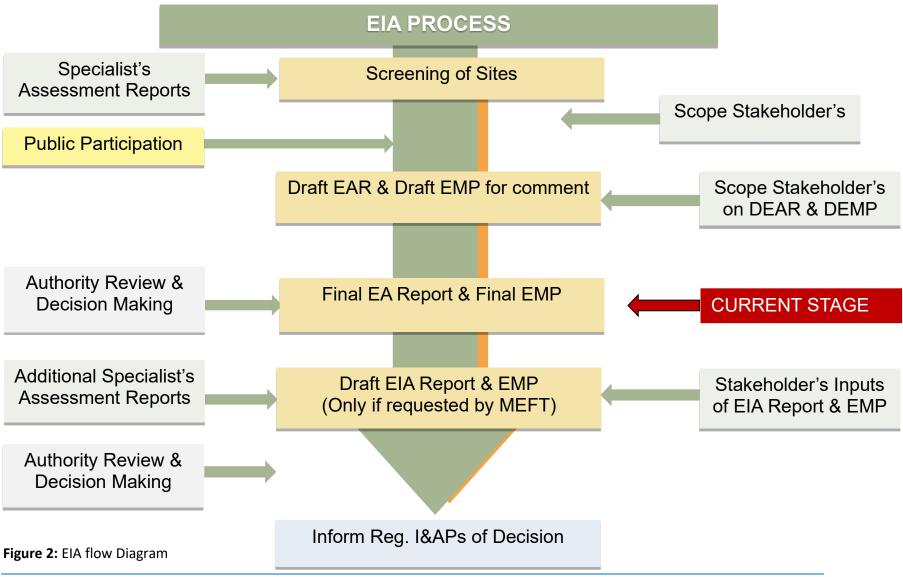
LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
	suspension and deletion of conditions relating to land; and to provide for incidental matters.	
Local Authorities Act No. 23 of 1992	The Local Authorities Act prescribes the manner in which a town or municipality should be managed by the Town or Municipal Council.	The development must comply with provisions of the Local Authorities Act.
Labour Act no. 11 of 2007	Chapter 2 details the fundamental rights and protections. Chapter 3 deals with the basic conditions of employment.	Given the employment opportunities presented by the development, compliance with the labour law is essential.
National Heritage Act No. 27 of 2004	The Act is aimed at protecting, conserving and registering places and objects of heritage significance.	All protected heritage resources (e.g. human remains etc.) discovered, need to be reported immediately to the National Heritage Council (NHC) and require a permit from the NHC before they may be relocated.
Roads Ordinance 17 of 1972	 Section 3.1 deals with width of proclaimed roads and road reserve boundaries Section 27.1 is concerned with the control of traffic on urban trunk and main roads Section 36.1 regulates rails, tracks, bridges, wires, cables, subways or culverts across or under proclaimed roads Section 37.1 deals with Infringements and obstructions on and interference with proclaimed roads. 	Adhere to all applicable provisions of the Roads Ordinance.
Public and Environmental Health Act of 2015	This Act (GG 5740) provides a framework for a structured uniform public and environmental health system in Namibia. It covers notification, prevention and control of diseases and sexually transmitted	Contractors and users of the proposed development are to comply with these legal requirements.

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
	infections; maternal, ante-natal and neo-natal care; water and food supplies; infant nutrition; waste management; health nuisances; public and environmental health planning and reporting. It repeals the Public Health Act 36 of 1919 (SA GG 979).	
Nature Conservation Ordinance no. 4 of 1975	Chapter 6 provides for legislation regarding the protection of indigenous plants	Indigenous and protected plants must be managed within the legal confines.
Water Quality Guidelines for Drinking Water and Wastewater Treatment	Details specific quantities in terms of water quality determinants, which wastewater should be treated to before being discharged into the environment (see Appendix B).	These guidelines are to be applied when dealing with water and waste treatment
Environmental Assessment Policy of Namibia (1995)	The Policy seeks to ensure that the environmental consequences of development projects and policies are considered, understood and incorporated into the planning process, and that the term ENVIRONMENT is broadly interpreted to include biophysical, social, economic, cultural, historical and political components.	This EIA considers this term of Environment.
Water Resources Management Act No. 11 of 2013	Part 12 deals with the control and protection of groundwater Part 13 deals with water pollution control	The pollution of water resources should be avoided during construction and operation of the development. Should water need to be abstracted, a water abstraction permit will be required from the Ministry of Water, Agriculture and Forestry.
Forest Act 12 of 2001 and Forest Regulations of 2015	To provide for the establishment of a Forestry Council and the appointment of certain officials; to	Protected tree and plant species as per the Forest Act No 12 of 2001 and Forest Regulations of 2015 may

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
	consolidate the laws relating to the management and use of forests and forest produce; to provide for the protection of the environment and the control and management of forest fires; to repeal the Preservation of Bees and Honey Proclamation, 1923 (Proclamation No. 1of 1923), Preservation of Trees and Forests Ordinance, 1952 (Ordinance No. 37 of 1952) and the Forest Act, 1968 (Act No. 72 of 1968); and to deal with incidental matters.	not be removed without a permit from the Ministry of Agriculture, Water and Forestry.
Atmospheric Pollution Prevention Ordinance No 45 of 1965	Part II - control of noxious or offensive gases, Part III - atmospheric pollution by smoke, Part IV - dust control, and Part V - air pollution by fumes emitted by vehicles.	The development should consider the provisions outlined in the act. The proponent should apply for an Air Emissions permit from the Ministry of Health and Social Services (if needed).

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
Hazardous Substance Ordinance 14 of 1974	RELEVANT PROVISIONS To provide for the control of substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or flammable nature or the generation of pressure thereby in certain circumstances; to provide for the division of such substances into groups in relation to the degree of danger; to provide for the prohibition and control of the importation, manufacture, sale, use, operation, application, modification, disposal or dumping of such substances; and to provide	The handling, usage and storage of hazardous substances on site
Soil Conservation Act No 76 of 1969	for matters connected therewith. Act to consolidate and amend the law relating to the combating and prevention of soil erosion, the conservation, improvement and manner of use of the soil and vegetation and the protection of the water sources	The proposed activity should ensure that soil erosion and soil pollution is avoided during construction and operation.

This EIA process will be undertaken in accordance with the EIA Regulations. A Flow Diagram (refer to **Figure 2** below) provides an outline of the EIA process to be followed.



3.1 SOCIAL ENVIRONMENT

3.1.1 Socio-Economic Context

The statistics shown in **Table 4** below are derived from the 2023 Namibia Population and Housing Census (Namibia Statistics Agency, 2023), and presented from a local and regional perspective.

Table 4: Statistics of the Oshakati Constituency (Namibia Statistics Agency, 2023)

OSHANA REGION		
ATTRIBUTE	INDICATOR	
Population	230 801	
Females	124 243	
Males	106 558	
Males per 100 Females	86	
Literacy rate of 15 years old and above	92.0%	
People above 15 years who have never attended school		
	5.7%	
People above 15 years who are currently attending school	24.8%	
People above 15 years who have left school	67.4%	
Population under 5 years	29 303	
Population aged 5 to 14 years	51 036	
Population aged 15 to 34 years	82 000	
Population aged 35 to 59 years	51 578	
Population aged 60 years and above	16 884	
Income from wages & Salaries	39.3%	
Income from Old Age Pension	17.0%	
Income from Business, Non-Farming	14.0%	
Income from Farming	8.2%	
OSHAKATI EAST CONSTITUENCY		
ATTRIBUTE	INDICATOR	
Population	39 915	
Females	21 414	
Males	18 501	

3.1.2 Archaeological and Heritage Context

The subject site is not known to be of any historical significance. No significant archaeological and heritage sites are known to be located within the proposed development area.

3.2 BIO-PHYSICAL ENVIRONMENT

3.2.1 Climate

The climate of the subject area can be described as a semi-arid climate prevailing (Köppen climate classification BWh), with very hot summers and extremely warm winters (with warm days and cold nights). Average annual temperatures are usually more than 22°C, with average maximum temperatures between 34°C and 36°C and average minimum temperatures between 6°C and 8°C (Mendelsohn, Jarvis, Roberts & Roberston, 2002).

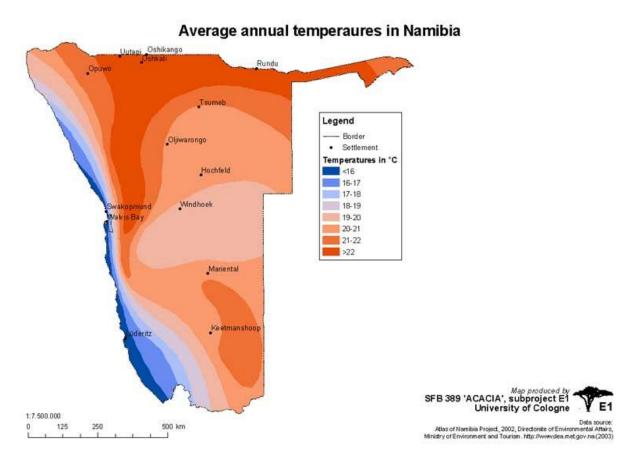


Figure 3: Annual average temperature (http://www.uni-koeln.de/sfb389/e/e1/download/atlas_namibia/e1_download_climate_e.htm#temperature_annual)

The subject area generally experiences more rainfall than the south and west of the country with an average rainfall of 350 to 550 mm as indicated in **Figure 4** below.

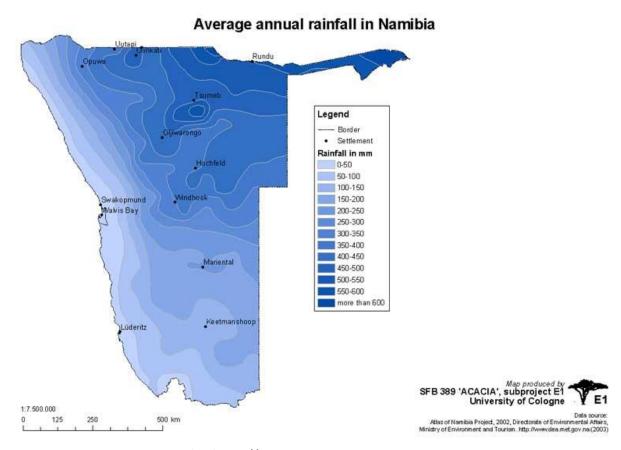


Figure 4: Average annual Rainfall (http://www.uni-koeln.de/sfb389/e/e1/download/atlas_namibia/pics/climate/rainfall-annual.jpg)

3.2.2 Topography, Geology and Soils

The Oshana Region forms part of the Kalahari Group Geological division depicted in pale yellow in **Figure 5** below. The dominant soils within the area are predominantly deep Kalahari and Namib sand that mostly occur in the formation of sands and other sedimentary materials, while the clay sodic sands dominate in the Oshanas (Mendelsohn *et al.*, 2002).

The slope of the subject area is generally flat, and the soil conditions and topography are suitable for the proposed development.

Geology of Namibia I: major geological divisions Legend Border Settlement Damara Supergroup and Gariep Complex Damara granite intrusions Damaraland Igneous Province Kalahari Group Swakopmund Wawis Bay Karoo Supergroup Namaqua Metamorphic Complex and related rocks Oldest rocks ama Group Mariental Namagua Metamorphic SFB 389 'ACACIA', subproject E1 University of Cologne 1:7.500.000 500 km Atlas of Namibia Project, 2002, Directorate of Environmental Atlains, Ministry of Environment and Tourism. http://www.dea.met.gov.na.(2003)

Figure 5: Geology of Namibia (http://www.uni-koeln.de/sfb389/e/e1/download/atlas_namibia/pics/physical/geology.jpg)

3.2.3 Hydrology and Hydrogeology

In terms of groundwater, the area falls within the Cuvelai-Etosha groundwater basin as depicted in **Figure 6** below. The hydrogeological Cuvelai Basin comprises the Omusati, Oshana, Ohangwena, and Oshikoto Regions and parts of the Kunene Region (Ministry of Agriculture Water and Rural Development, 2011). The groundwater of the Cuvelai Basin is relatively shallow but mostly brackish or saline. All groundwater within the basin flows towards the Etosha Pan (Ministry of Agriculture Water and Rural Development, 2011).

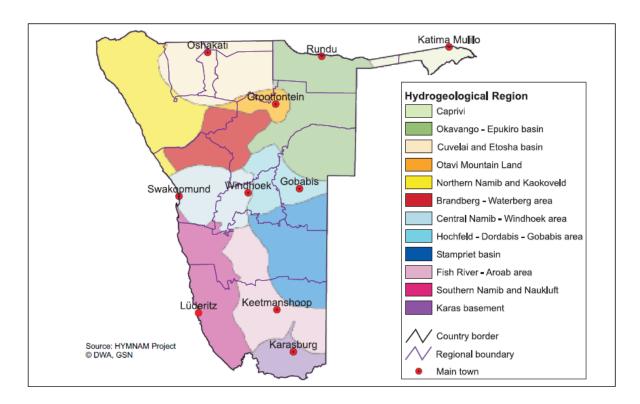


Figure 6: Groundwater basins and hydrogeological regions in Namibia

The Cuvelai Basin consists of thousands of drainage channels or oshanas which flow during the rainy season. The oshanas are "shallow, often vegetated and poorly defined, interconnected flood channels and pans through which surface water flows slowly or may form pools depending on the intensity of the floods ("efundja")" (Ministry of Agriculture Water and Rural Development, 2011).

The Cuvelai Basin is one of the most densely populated areas in the country with most communities living in rural areas largely dependent on agriculture (Ministry of Agriculture Water and Rural Development, 2011). The villages and towns located within the Cuvelai Basin are supplied with water from the Calueque Dam, north of the Angolan border, via an extensive system of canals and pipelines. "Water stored in the Calueque Dam on the Kunene River just north of the border is pumped via a canal to the Olushandja Dam in Namibia, from where it is gravity fed via a concrete-lined canal to Oshakati" (Ministry of Agriculture Water and Rural Development, 2011).

Surface water is only available during the rainy season, people rely on other water sources during the dry season. As such groundwater is sourced in the region through dug wells and boreholes.

Most of the settlements within the Cuvelai basin experience flooding during the rainy season. Oshakati is no exception, however the developed part of the town generally is not severely affected by these seasonal flood occurrences as it is developed on higher ground than the surrounding Oshana areas (Stubenrauch Planning Consultants, 2016). This however cannot be said for the extended Townlands which experiences greater flooding challenges (Lithon Project Consultants, 2016).

Lower lying areas within town coupled with increasing run-off during flood occurrences pose a challenge for stormwater management. As such it is essential that stormwater management systems be implemented within town. Flooding occurring in Oshakati results mainly from local run-off that cannot drain away to the nearby iishana (Lithon Project Consultants, 2016).

3.3 TERRESTRIAL ECOLOGY

3.3.1 Flora and Fauna

The Oshana Region falls within the broader Tree-and-Shrub Savanna Biome and forms part of the Acacia Tree-and-shrub Savanna sub-biome. The Acacia Tree-and-shrub Savanna sub-biome is characterized by large, open expanses of grasslands dotted with Acacia trees (Mendelsohn *et al.*, 2002). The trees within this biome are tallest in the east where they grow in deeper sands and become more shrub-like to the west where they grow in shallower soils.

The region falls within the Cuvelai Drainage vegetation type. Within north-central Namibia, Mopane is a very common tree species in the Cuvelai Drainage where grassy channels of oshana carry floodwater during heavy rains from the higher areas in the north of Angola (Mendelsohn & el Obeid, 2005). The indigenous trees found within the region include the Makalani Palm Trees (*Hyphaene petersiana*) and Mopane Trees (*Colophospermum mopane*). If removal of protected tree species is required a permit needs to be obtained from the local Department of Forestry prior to removal. Trees protected under the Forestry Act 12 of 2001 should be protected within the layout of the proposed development.

Most wildlife is located within the Etosha National Park and thus it is mostly animals such as cattle, donkeys and goats which are dominant within the subject area.

The proposed development is located within the urban locality of Oshakati as such the area has already been developed and can therefore not be considered to be pristine. The natural vegetation within the area has been disturbed by human activities but does accommodate some trees scattered within the proposed sites which need to be considered in the proposed layouts of the development.

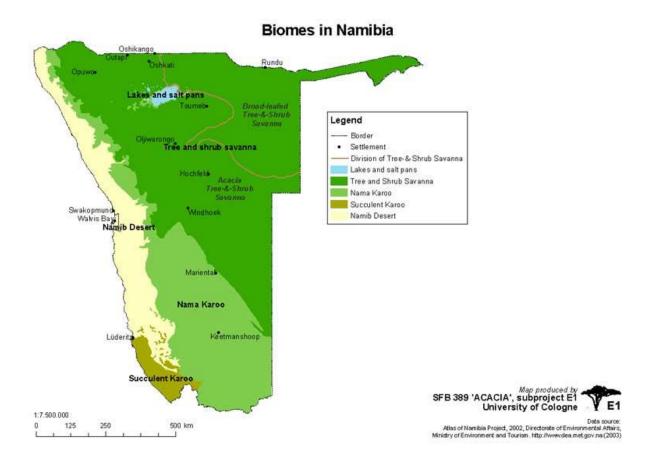


Figure 7: Biomes of Namibia (http://www.uni-koeln.de/sfb389/e/e1/download/atlas namibia/pics/living resources/biomes.jpg)

4.1 PROJECT COMPONENTS

As previously outlined in Section 1.1, the proposed project involves the following activities:

 Rezoning of Erf 119, Oshakati North Proper from "General Residential" with a density of 1:600 to "Accommodation"

These components will be described in further detail below, in terms of their design, layout and footprint.

4.2 ALTERNATIVES

As pointed out in Section 1.4 above various layouts alternatives were initially considered by the proponent, ultimately resulting in the final layouts. As such only the no-go alternative will be discussed below.

4.2.1 No – Go Alternative

It is recommended that this project be authorised because should the development not proceed the subject area would remain undeveloped, potentially delaying urban growth and missing an opportunity to enhance the area's infrastructure. The local community is expected to benefit from the development as a result of the potential job opportunities during construction as well as the increased development within the area. Thus, the no-go alternative is not considered to be the preferred option.

4.3 THE PROPOSED DEVELOPMENT

Mr Antonio Manuel Cerveira Rocha, the owner of Rochas Hotel and Restaurant, is facing a dilemma regarding his property, Erf 6, Evululuko Proper. The land, which serves as accommodation for his employees, is impacted by ongoing road construction. As a result, he has been instructed to demolish certain structures to make way for the project.

He subsequently approached the Oshakati Town Council to discuss the matter and determine the best course of action. the council extended an Offer to Purchase for Erf 119, Oshakati North Proper. He accepted the offer, and the Deed of Sale was signed. The transfer process is currently in progress. His plans for Erf 119 include developing a hotel and conference center, along with cottages to accommodate his employees.

4.3.1 The Rezoning of Erf 119, Oshakati North

The Proponent intends to develop a hotel and conference centre on Erf 119, Oshakati North Proper. The envisioned hotel will comprise of at least 60 rooms, a conference centre that can accommodate up to 300 people, a restaurant and bar, gym and wellness facilities and 15 cottages for employees' accommodation.

To ensure that the envisioned development materialises, it is necessary to rezone Erf 119, Oshakati North Proper from "General Residential" with a density of 1:600 to "Accommodation" as depicted in Figure 8 and Figure 9 below.

The proposed rezoning allows for the optimal use of land by accommodating modern needs for temporary housing and business events. This can justify the transition from a primarily residential area to one that can support a diverse range of functionalities. The development will provide much-needed accommodation facilities for visitors, thereby supporting local events, tourism, and businesses. It can also serve as a venue for community events and activities.

The rezoning from "general residential" to "accommodation" will not only facilitate the development of a hotel, conference center, and employee accommodation facilities but will also support economic growth, enhance community amenities, provide job opportunities, and align with modern planning principles. The proposed development represents a strategic investment in the future of the community that embraces both local needs and wider economic trends.

The construction and operation of a hotel and conference center will also create numerous job opportunities, both during the construction phase and in the long term. This contributes to local employment and economic growth.

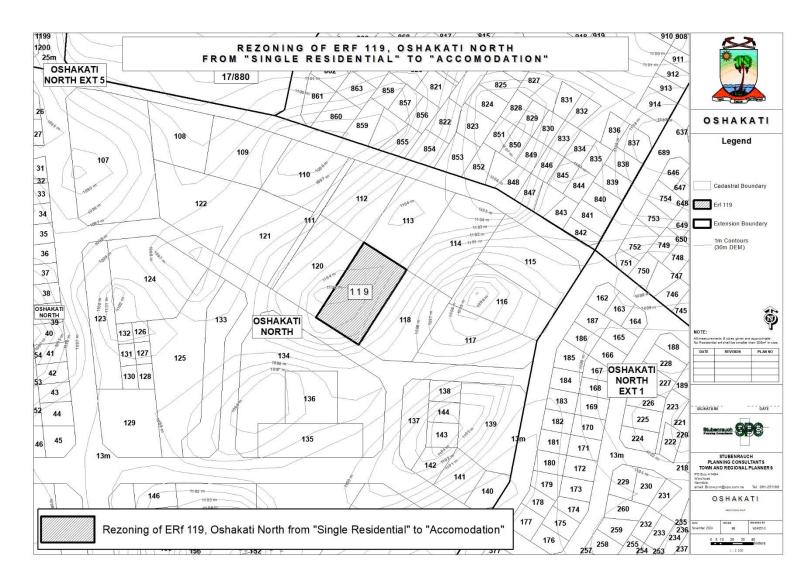


Figure 8: Rezoning of Erf 119, Oshakati North

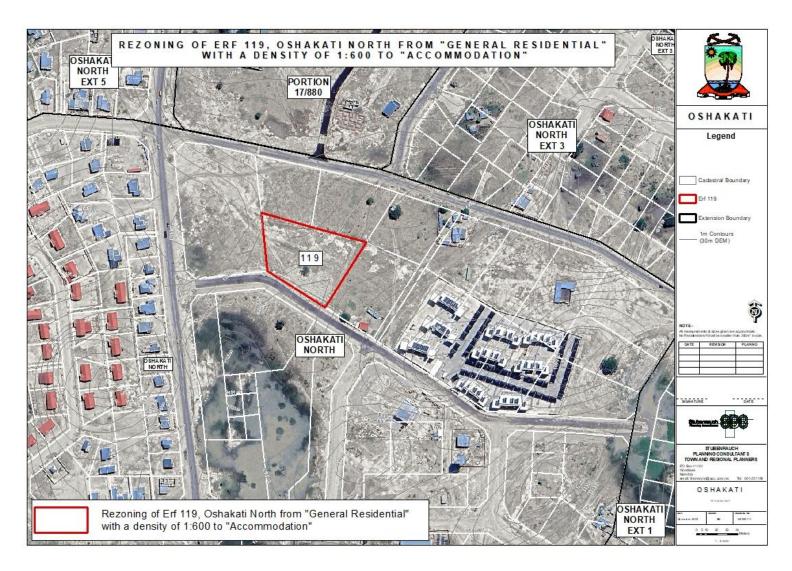


Figure 9: Rezoning of Erf 119, Oshakati North

4.3.2 Engineering Services and Access Provision

4.3.2.1 Water and Sewer

Erf 119, Oshakati North Proper is fully connected to the bulk water and sewer reticulation system as provided by the Oshakati Town Council. Should any service upgrading be required, it will be done in accordance with the Engineering Standard of the Oshakati Town Council.

4.3.2.2 Electricity

Erf 119, Oshakati North Proper is connected to the Oshakati Premier Electric grid which provides electricity to the neighbourhood of Oshakati North Proper and to the entire development of Oshakati. Should any service upgrading or additional connections be required, it will be done in accordance with the standards of the Oshakati Premier Electric.

4.3.2.3 Storm Water

Stormwater drainage on Erf 119, Oshakati North Proper follows the natural drainage patterns on the erf and is further accommodate on the drainage patterns within Oshakati North Proper in terms of the Stormwater Drainage System of the Oshakati Town Council.

4.3.2.4 Access Provision

Access to Erf 119, Oshakati North Proper is obtained from the internal street network of Oshakati North Proper. Hence, no access approval is required from the Road Authority for this application.

5.1 PUBLIC PARTICIPATION REQUIREMENTS

In terms of Section 21 of the EIA Regulations a call for open consultation with all I&APs at defined stages of the EIA process is required. This entails participatory consultation with members of the public by providing an opportunity to comment on the proposed project. Public Participation has thus incorporated the requirements of Namibia's legislation, but also takes account of international guidelines, including Southern African Development Community (SADC) guidelines and the Namibian EIA Regulations. Public participation in this project has been undertaken to meet the specific requirements in accordance with the international best practice. Please see **Table 5** below for the activities undertaken as part of the public participation process. The I&APs were given time to comment from **17** January **2025** to **07** February **2025**.

Table 5: Table of Public Participation Activities

ACTIVITY	REMARKS
Placement of site notice/poster in Oshakati	See Annexure A
Placing advertisements in two newspapers namely the Namibian and New Era (17 January 2025 and 24 January 2025)	See Annexure B
Written notice to surrounding property owners and Interested and Affected Parties via Email (17 January 2025)	See Annexure C

5.1.1 Environmental Assessment Phase 2

The second phase of the PPP involved the lodging of the Draft Environmental Scoping Report (DESR) to all registered I&APs for comment. Registered and potential I&APs was informed of the availability of the DESR for public comment *via* a letter/email dated **18 March 2025**. An Executive Summary of the DESR was also included in the letters to the registered I&APs. I&APs had until **04 April 2025** to submit comments or raise any issues or concerns they may have with regard to the proposed project.

The purpose of this chapter is to describe the assessment methodology utilized in determining the significance of the construction and operational impacts of the proposed project, and where applicable the possible alternatives, on the biophysical and socio-economic environment.

Assessment of predicted significance of impacts for a proposed development is by its nature, inherently uncertain — environmental assessment is thus an imprecise science. To deal with such uncertainty in a comparable manner, a standardised and internationally recognised methodology has been developed. Such accepted methodology is applied in this study to assess the significance of the potential environmental impacts of the proposed development, outlined as follows in **Table 6**.

Table 6: Impact Assessment Criteria

CRITERIA	CATEGORY	
Impact	Description of the expected impact	
Nature	Positive: The activity will have a social / economical /	
Describe type of effect	environmental benefit.	
	Neutral: The activity will have no effect	
	Negative: The activity will have a social / economical /	
	environmental harmful effect	
Extent	Site Specific: Expanding only as far as the activity itself (onsite)	
Describe the scale of the	Small: restricted to the site's immediate environment within 1 km	
impact	of the site (limited)	
	Medium: Within 5 km of the site (local)	
	Large: Beyond 5 km of the site (regional)	
Duration	Temporary: < 1 year (not including construction)	
Predicts the lifetime of the	Short-term: 1 – 5 years	
impact.	Medium term: 5 – 15 years	
	Long-term: >15 years (Impact will stop after the operational or	
	running life of the activity, either due to natural course or by	
	human interference)	
	Permanent: Impact will be where mitigation or moderation by	
	natural course or by human interference will not occur in a	
	particular means or in a particular time period that the impact can	
	be considered temporary	
Intensity	Zero: Social and/or natural functions and/ or processes remain	
Describe the magnitude	unaltered	
(scale/size) of the Impact	Very low: Affects the environment in such a way that natural	
	and/or social functions/processes are not affected	
	Low: Natural and/or social functions/processes are slightly	
	altered	

CRITERIA	CATEGORY
	Medium: Natural and/or social functions/processes are notably
	altered in a modified way
	High: Natural and/or social functions/processes are severely
	altered and may temporarily or permanently cease
Probability of occurrence	Improbable: Not at all likely
Describe the probability of	Probable: Distinctive possibility
the Impact <u>actually</u> occurring	Highly probable: Most likely to happen
	Definite: Impact will occur regardless of any prevention measures
Degree of Confidence in	Unsure/Low: Little confidence regarding information available
predictions	(<40%)
State the degree of	Probable/Med: Moderate confidence regarding information
confidence in predictions	available (40-80%)
based on availability of	Definite/High: Great confidence regarding information available
information and specialist	(>80%)
knowledge	
Significance Rating	Neutral: A potential concern which was found to have no impact
The impact on each	when evaluated
component is determined by	Very low: Impacts will be site specific and temporary with no
a combination of the above	mitigation necessary.
criteria.	Low: The impacts will have a minor influence on the proposed
	development and/or environment. These impacts require some
	thought to adjustment of the project design where achievable, or
	alternative mitigation measures
	Medium: Impacts will be experienced in the local and surrounding
	areas for the life span of the development and may result in long
	term changes. The impact can be lessened or improved by an
	amendment in the project design or implementation of effective
	mitigation measures.
	High: Impacts have a high magnitude and will be experienced
	regionally for at least the life span of the development, or will be
	irreversible. The impacts could have the no-go proposition on
	portions of the development in spite of any mitigation measures
	that could be implemented.

*NOTE: Where applicable, the magnitude of the impact has to be related to the relevant standard (threshold value specified and source referenced). The magnitude of impact is based on specialist knowledge of that particular field.

For each impact, the EXTENT (spatial scale), MAGNITUDE (size or degree scale) and DURATION (time scale) are described. These criteria are used to ascertain the SIGNIFICANCE of the impact, firstly in the case of no mitigation and then with the most effective mitigation measure(s) in place. The decision as to which combination of alternatives and mitigation measures to apply lies with the proponent, and their acceptance and approval ultimately with the relevant environmental authority.

The SIGNIFICANCE of an impact is derived by taking into account the temporal and spatial scales and magnitude. Such significance is also informed by the context of the impact, i.e. the character and identity of the receptor of the impact.

6.1 MITIGATION MEASURES

There is a mitigation hierarchy of actions which can be undertaken to respond to any proposed project or activity (See **Figure 10** below). These cover avoidance, minimization, restoration and compensation. It is possible and considered sought after to enhance the environment by ensuring that positive gains are included in the proposed activity or project. If negative impacts occur, then the hierarchy indicates the following steps.



Figure 10: Mitigation Hierarchy

Impact avoidance: This step is most effective when applied at an early stage of project planning. It can be achieved by:

- not undertaking certain projects or elements that could result in adverse impacts;
- avoiding areas that are environmentally sensitive; and
- putting in place preventative measures to stop adverse impacts from occurring.

Impact minimization: This step is usually taken during impact identification and prediction to limit or reduce the degree, extent, magnitude, or duration of adverse impacts. It can be achieved by:

- scaling down or relocating the proposal;
- redesigning elements of the project; and
- taking supplementary measures to manage the impacts.

Restoration: This step is taken to improve degraded or removed ecosystems following exposure to impacts that cannot be completely avoided or minimised. Restoration tries to return an area to the original ecosystem that occurred before impacts. Restoration is frequently needed towards the end of a project's life cycle but may be possible in some areas during operation.

Impact compensation: This step is usually applied to remedy unavoidable residual adverse impacts. It can be achieved by:

- rehabilitation of the affected site or environment, for example, by habitat enhancement;
- restoration of the affected site or environment to its previous state or better; and
- replacement of the same resource values at another location (offset), for example, by wetland engineering to provide an equivalent area to that lost to drainage or infill.

7 ASSESSMENT OF POTENTIAL IMPACTS AND POSSIBLE MITIGATION MEASURES

7.1 INTRODUCTION

This Chapter describes the potential impacts on the biophysical and socio-economic environments, which may occur due to the proposed activities described in Chapter 4. These include potential impacts, which may arise during the operation of the proposed development (i.e. long-term impacts) as well as the potential construction related impacts (i.e. short to medium term). The assessment of potential impacts will help to inform and confirm the selection of the preferred layouts to be submitted to MEFT: DEAF for consideration. In turn, MEFT: DEAF's decision on the environmental acceptability of the proposed project and the setting of conditions of authorisation (should the project be authorised) will be informed by this chapter, amongst other information, contained in this EA Report.

The baseline and potential impacts that could result from the proposed development are described and assessed with potential mitigation measures recommended. Finally, comment is provided on the potential cumulative impacts which could result should this development, and others like it in the area, be approved.

7.2 PLANNING AND DESIGN PHASE IMPACTS

During the planning and design phase consideration should be given on aspects such as impacts of traffic and existing municipal infrastructure.

7.2.1 Traffic Impacts

The intended development may have an impact on traffic in the subject area as the sites are currently undeveloped. Once the proposed sites are developed traffic in the area is expected to increase. The traffic is not expected to increase significantly as the portions are in close proximity to an already developed area within the town.

7.2.2 Existing Service Infrastructure Impacts

The subject erf is fully connected to the municipal reticulation system of the Oshakati Town Council, which consists of water, electricity and sewer connections, this connection will be maintained. Storm water run-off will be accommodated within the street reserves or then as stipulated by the Oshakati Town Council.

7.3 CONSTRUCTION PHASE IMPACTS ON THE BIOPHYSICAL ENVIRONMENT

The construction phase impacts are those impacts on the biophysical and socio-economic environment that would occur during the construction phase. These impacts are inherently temporary in duration but may have longer lasting effects.

7.3.1 Flora and Fauna Impacts (Biodiversity)

The land uses that currently exist in the area, the natural environment and drainage patterns are respected, and as such, no negative impacts on the natural or urban environment of Oshakati are expected to arise from the proposed development. The physical land use for the property will also not negatively impact the natural environment as most of the vegetation found on-site will be respected in all the town planning processes.

7.3.2 Surface and Ground Water Impacts

Surface and groundwater impacts may be encountered during the construction and operation phase, especially if development takes place within the rainy season. The risk of contaminating such water sources can be increased by accidental spillage of oils and fuels and any other equipment used during construction. This risk is minimized by the fact that the construction phase will be a short-term activity.

The area is located on higher grounds, limiting the effect of possible inundations from the natural stormwater drainage lines (iishana) which surround the subject area.

7.3.3 Soil Erosion Impacts

Given the characteristics of the proposed site, soil erosion is likely to be encountered especially if construction will take place during the rainy season, the removal of the sparse vegetation will render the soil vulnerable to erosion as they also serve the purpose of keeping the soils compacted.

7.4 CONSTRUCTION PHASE IMPACTS ON THE SOCIO-EONOMIC ENVIRONMENT

7.4.1 Heritage impacts

No archaeological and heritage resources are expected to be found on the site. The project management should however be made aware of the provisions of the National Heritage Act regarding the prompt reporting of archaeological finds. Section 3.1.2 provides an overview of the archaeological and heritage context of the town and region.

7.4.2 Health, Safety and Security Impacts

Due to the demand for construction workers during the construction of the proposed project an influx of migrant workforce who will require temporary accommodation in Oshakati might be experienced. Experience with other construction projects in a developing-world context has shown that, where migrant construction workers have the opportunity to interact with the local community, a significant risk is created for the development of social conditions and sexual behaviors that contribute to the spread of HIV and AIDS.

In response to the threat the pandemic poses, MEFT has developed a policy on HIV and AIDS. This policy, which was developed with support from USAID, GTZ and the German Development Fund, provides for a non-discriminatory work environment and for workplace programs managed by a Ministry-wide committee. The MEFT has also recently initiated a programme aimed at mainstreaming HIV and gender issues into environmental impact assessments.

7.4.3 Traffic Impacts

Traffic is expected to increase during the construction phase of the project in areas where construction will take place. A number of trucks and other heavy machinery will be required to deliver, handle and position construction materials as well as to remove spoil material. Not only will the increase in traffic result in associated noise impacts, but it will also impact on the roads in the area.

7.4.4 Noise Impacts

Construction may result in associated noise impacts. These noise impacts will mainly be associated with construction machinery and construction vehicles. The impact is however limited mainly to the construction period only.

7.4.5 Dust and Emission Impacts

Excavation and stockpiles during the construction phase could result in dust impacts, if not managed correctly. Dust could impact negatively on the health of the nearby community if mitigation measures are not implemented. Dust impacts are primarily associated with the construction phase.

7.4.6 Municipal Services

The construction phase will result in additional people on-site, who will require provision of the following services:

- Potable water for domestic (ablution and drinking) and construction purposes.
- Temporary toilets during the construction phase.

Solid waste management (domestic and construction waste).

These services if not managed well are likely to create an opportunity for water wastage; litter; solid and human waste pollution.

7.4.7 Storage and Utilisation of Hazardous Substances

Hazardous substances are regarded by the Hazardous Substance Ordinance (No. 14 of 1974) as those substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or flammable nature or the generation of pressure thereby in certain circumstances. During the construction period, the use and storage of these types of hazardous substances, such as shutter oil, curing compounds, types of solvents, primers and adhesives and diesel, on-site could have negative impacts on the surrounding environment if these substances spill and enter the environment.

7.5 OPERATIONAL PHASE IMPACTS

The operational phase impacts are those impacts on the biophysical and socio-economic environment that would occur during the operational phase of the proposed project and are inherently long-term in duration.

7.5.1 Visual and Sense of Place Impacts

The extent of this disturbance will depend on how highly the interested and affected parties valued the initial aesthetic quality of the site. The intended activities for the proposed site may alter the sense of place for the existing community and property owners situated in close proximity to the site, as well as the residents of Oshakati who frequent the sites.

7.5.2 Noise Impacts

The operational activities may result in associated noise impacts, depending on the exact type of activities taking place on the properties. However due to the nature of the land uses proposed for the subject erven it is not expected that the noise levels will be significant if managed well.

7.5.3 Emission Impacts

The air quality in the area is considered to be fairly good. Additional emissions are not expected due to the land uses that are intended for the site.

7.5.4 Waste Impacts

Increased amounts of waste may be generated as a result of the operational activities at the sites. Effective waste management on site should be practiced as per the recommendations in the EMP.

7.5.5 Social Impacts

The rezoning of Erf 119, Oshakati North Proper as outlined above will enable the development of a hotel and conference centre, as well as cottages for employees accommodation. This development is expected to support local economic growth, enhance community amenities and create numerous job opportunities, both during the construction phase and in the long term, which will contribute to local employment and economic growth.

7.6 CUMULATIVE IMPACTS

The cumulative impact of the proposed developments regarding the degradation of the project area is very difficult to rate. If all proposed mitigation measures are however in place to minimise the overall impacts then the cumulative impact can be expected to be rated as *Medium-Low (negative)* for the proposed developments.

7.7 ENVIRONMENTAL MANAGEMENT PLAN

An Environmental Management Plan (EMP) is contained in **Annexure F** of this report. The purpose of the EMP is to outline the type and range of mitigation measures that should be implemented during the construction, operation and decommissioning phases of the project to ensure that negative impacts associated with the development are avoided or mitigated.

7.8 SUMMARY OF POTENTIAL IMPACTS

A summary of all the potential impacts from the proposed project assessed above is included in **Table 7**. The **Tables 8 – 10** provide a summary of the mitigation measures proposed for the impacts. While some difference in magnitude of the potential impacts would result from the proposed alternatives this difference was not considered to be significant for any of the potential impacts. As such, the table below applies to all proposed alternatives.

 Table 7: Summary of the significance of the potential impacts

Description of potential impact	Project alternative	No mitigation / mitigation	Extent	Magnitude	Duration	Significance	Probability	Confidence	Reversibility	Cumulative impact
				PLANNING	AND DESIGN	PHASE				
	Oshakati	No mitigation	Local	Medium	Medium term	Medium	Probable	Certain	Reversible	Medium (- ve)
Traffic Impacts	Osiiakati	Mitigation	Local	Low	Medium term	Low	Probable	Certain	Reversible	Low (-ve)
1. Hame impacts	No go	No mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
	Oshakati	No mitigation	Local	Medium	Medium term	Medium	Probable	Certain	Reversible	Medium (- ve)
2. Proposed	Osilakati	Mitigation	Local	Low	Medium term	Low	Probable	Certain	Reversible	Low (-ve)
services	No go	No mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
				CONST	RUCTION PH	ASE				
	Oshakati	No mitigation	Local	Medium- Low	Short term	Medium	Probable	Certain	Reversible	Medium (- ve)
3. Biodiversity		Mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
(Fauna and Flora)	No go	No mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
4. Surface & ground water	Oshakati	No mitigation	Local	Medium	Short term	Medium	Probable	Certain	Reversible	Medium (- ve)

Description of potential impact	Project alternative	No mitigation / mitigation	Extent	Magnitude	Duration	Significance	Probability	Confidence	Reversibility	Cumulative impact
		Mitigation	Local	Low	Short term	Medium -	Probable	Certain	Reversible	Medium -
	No go	No mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Low (-ve) Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
	Oshakati	No mitigation	Local	Medium	Short term	Medium – low	Probable	Certain	Reversible	Medium – low (-ve)
5. Soil erosion		Mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
5. Suil el usion	No go	No mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		No mitigation	Local	Very low	Short term	Very low	Probable	Certain	Irreversible	Very low(-ve)
6. Heritage	Oshakati	Mitigation	Local	Negligible	Short term	Negligible	Probable	Certain	Irreversible	Negligible (- ve)
	No go	No mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
	Oshakati	No mitigation	Local	Medium- Low	Short term	Medium- Low	Probable	Certain	Reversible	Medium- Low (-ve)
7. Health, safety		Mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
and security	No go	No mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
8. Traffic impacts	Oshakati	No mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
		Mitigation	Local	Very low	Short term	Very low	Probable	Certain	Reversible	Very low

Description of potential impact	Project alternative	No mitigation / mitigation	Extent	Magnitude	Duration	Significance	Probability	Confidence	Reversibility	Cumulative impact
	No go	No mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
	Oshakati	No mitigation	Local	Medium	Short term	Medium - low	Probable	Certain	Reversible	Medium - Low (-ve)
9. Noise impacts	Oshakati	Mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Very low (- ve)
	No go	No mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
	Oshakati	No mitigation	Local	Medium	Short term	Low	Probable	Certain	Reversible	Low (-ve)
10. Emissions		Mitigation	Local	Low	Short term	Very Low	Probable	Certain	Reversible	Very Low (- ve)
impacts	No go	No mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
	Och chat:	No mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
11. Municipal	Oshakati	Mitigation	Local	Very low	Short term	Very low	Probable	Certain	Reversible	Very low (- ve)
services	No go	No mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
12. Waste	Oshakati	No mitigation	Local	Low	Short term	Medium	Probable	Certain	Reversible	Medium (- ve)
		Mitigation	Local	Very low	Short term	Low	Probable	Certain	Reversible	Low (-ve)

Description of potential impact	Project alternative	No mitigation / mitigation	Extent	Magnitude	Duration	Significance	Probability	Confidence	Reversibility	Cumulative impact
		No	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
	No go	mitigation			a.					
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
	Oshakati	No mitigation	Local	Low	Short term	Medium	Probable	Certain	Reversible	Medium (- ve)
13. Hazardous Substances	Osiiakati	Mitigation	Local	Very low	Short term	Low	Probable	Certain	Reversible	Very low (- ve)
Substances	No go	No mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
	_	Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
				OPE	RATIONAL PH	ASE				
1. Visual & sense of place		No mitigation	Local	Medium	Medium term	Medium	Probable	Certain	Reversible	Medium (- ve)
	Oshakati	Mitigation	Local	Medium- Low	Medium term	Medium- Low	Probable	Certain	Reversible	Medium- Low (-ve)
	No go	No mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
2. Noise		No	Local	Medium-	Medium	Medium-	Probable	Certain	Reversible	Medium-
	Oshakati	mitigation		Low	term	Low				Low (-ve)
	OSHUKULI	Mitigation	Local	Low	Medium term	Low	Probable	Certain	Reversible	Low (-ve)
	No go	No mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral

Descri	ption of potential impact	Project alternative	No mitigation / mitigation	Extent	Magnitude	Duration	Significance	Probability	Confidence	Reversibility	Cumulative impact
3.	Emissions		No	Local	Medium-	Medium	Low	Probable	Certain	Reversible	Low (-ve)
		Oshakati	mitigation		Low	term					
		Osilakati	Mitigation	Local	Low	Medium	Very Low	Probable	Certain	Reversible	Very Low (-
						term					ve)
		No go	No	Local	Neutral	Medium	Neutral	Probable	Certain	Reversible	Neutral
			mitigation			term					
			Mitigation	Local	Neutral	Medium	Neutral	Probable	Certain	Reversible	Neutral
						term					
			No	Local	Low	Long term	Medium	Probable	Certain	Reversible	Medium (-
		Oshakati	mitigation								ve)
4.	Waste		Mitigation	Local	Very low	Long term	Low	Probable	Certain	Reversible	Low (-ve)
4.	waste		No	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		No go	mitigation								
			Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
5.	Social impact		No	Local	High	Long term	Medium (+)	Probable	Probable	Reversible	Medium (+)
		Oshakati	mitigation								
			Mitigation	Local	High	Long term	Medium (+)	Probable	Probable	Reversible	Medium (+)
		No go	No	Local	Neutral	Long term	Neutral	Probable	Probable	Reversible	Neutral
			mitigation								
			Mitigation	Local	Neutral	Long term	Neutral	Probable	Probable	Reversible	Neutral

Table 8: Proposed mitigation measures for the planning and design phase

	PLANNING AND DESIGN PHASE IMPACTS
Impact	Mitigation Measures
Traffic	 Ensure that road junctions have good sightlines. Provide formal road crossings at relevant areas. Provide for speed reducing interventions such as speed bumps at relevant road sections.
Existing Service Infrastructure	 It is recommended that alternative and renewable sources of energy be explored and introduced into the proposed development to reduce dependency on the grid. Solar geysers and panels should be considered to provide for general lighting and heating of water and buildings. Water saving mechanisms should be considered for incorporation within the developments in order to further reduce water demands. Re-use of treated wastewater should be considered wherever possible to reduce the consumption of potable water.

Table 9: Proposed mitigation measures for the construction phase

	CONSTRUCTION PHASE IMPACTS
Impact	Mitigation Measures
Flora and Fauna	 Adapt the proposed developments to the local environment – e.g. small adjustments to the site layout could avoid potential features such as water bodies and vegetation. Prevent the destruction of protected and endemic plant species. Prevent contractors from collecting wood, veld food, etc. during the construction phase. Do not clear cut the entire development site, but rather keep the few individual trees/shrubs not directly affecting the developments as part of the landscaping. The plants that are to be kept should be clearly marked with "danger tape" to prevent accidental removal.

	CONSTRUCTION PHASE IMPACTS
Impact	Mitigation Measures
Surface and Ground Water Impacts	 Regular inspection of the marking tool should be carried out. The very important plants should be "camped off" to prevent the unintended removal or damage to these trees. Recommend the planting of local indigenous species of flora as part of the landscaping as these species would require less maintenance than exotic species. Transplant removed plants where possible, or plant new plants in lieu of those that have been removed. Prevent the introduction of potentially invasive alien ornamental plant species such as; Lantana, Opuntia, Prosopis, Tecoma, etc.; as part of the landscaping as these species could infest the area further over time. It is recommended that construction takes place outside of the rainy season in order to limit flooding on site and surface water pollution. No dumping of waste products of any kind in or in close proximity to surface water bodies. Heavy construction vehicles should be kept out of any surface water bodies and the movement of construction vehicles should be limited where possible to the existing roads and tracks. Ensure that oil/ fuel spillages from construction vehicles and machinery are minimised and that where these occur, that they are appropriately dealt with. Drip trays must be placed underneath construction vehicles when not in use to contain all oil that might be leaking from these vehicles. Contaminated runoff from the construction sites should be prevented from entering the surface and ground water bodies. All materials on the construction site should be properly stored. Disposal of waste from the sites should be properly managed and taken to the designated landfill site. Construction workers should be given ablution facilities at the construction sites that are located at least 30 m away from any surface water and regularly serviced.

	CONSTRUCTION PHASE IMPACTS
Impact	Mitigation Measures
	Washing of personnel or any equipment should not be allowed on site. Should it be necessary to wash construction equipment these should be done at an area properly suited and prepared to receive and contain polluted waters.
Soil Erosion	 It is recommended that construction takes place outside of the rainy season in order to limit potential flooding and the runoff of loose soil causing further erosion. Appropriate erosion control structures must be put in place where soil may be prone to erosion. Checks must be carried out at regular intervals to identify areas where erosion is occurring. Appropriate remedial actions are to be undertaken wherever erosion is evident.
Heritage	 The project management should be made aware of the provisions of the National Heritage Act regarding the prompt reporting of archaeological finds. In the event of such finds, construction must stop, and the project management or contractors should notify the National Heritage Council of Namibia immediately.
Health, Safety and Security	 Construction personnel should not overnight at the site, except the security personnel. Ensure that all construction personnel are properly trained depending on the nature of their work. Provide for a first aid kit and a properly trained person to apply first aid when necessary. Restrict unauthorised access to the site and implement access control measures. Clearly demarcate the construction site boundaries along with signage of "no unauthorised access". Clearly demarcate dangerous areas and no-go areas on site. Staff and visitors to the site must be fully aware of all health and safety measures and emergency procedures on site. The contractor must comply with all applicable occupational health and safety requirements. The workforce should be provided with all necessary Personal Protective Equipment where appropriate.

	CONSTRUCTION PHASE IMPACTS
Impact	Mitigation Measures
Traffic	 Limit and control the number of access points to the site. Ensure that road junctions have good sightlines. Construction vehicles need to be in a road worthy condition and maintained throughout the construction phase. Transport the materials in the least number of trips as possible. Adhere to the speed limit.
Noise	 Implement traffic control measures where necessary. No amplified music should be allowed on site. Inform immediate neighbours of construction activities to commence and provide for continuous communication between the neighbours and contractor. Limit construction times to acceptable daylight hours. Install technology such as silencers on construction machinery if noise levels are significantly high. Do not allow the use of horns as a general communication tool but use it only where necessary as a safety measure.
Dust and Emission	 It is recommended that dust suppressants such as Dustex be applied to all the construction clearing activities to ensure at least 50% control efficiency on all the unpaved roads and reduce water usage. Construction vehicles to only use designated roads. During high wind conditions the contractor must make the decision to cease works until the wind has calmed down. Cover any stockpiles with plastic to minimise windblown dust. Provide workers with dust masks.

	CONSTRUCTION PHASE IMPACTS
Impact	Mitigation Measures
Waste	 It is recommended that waste from the temporary toilets be disposed of at an approved Wastewater Treatment Works. A sufficient number of waste bins should be placed around the site for the general waste. A sufficient number of skip containers for the heavy waste and rubble should be provided for around the site. Solid waste will be collected and disposed of at an appropriate local land fill or an alternative approved site, in consultation with the local authority.
Hazardous Substances	 Storage of the hazardous substances in a bunded area, with a volume of 120 % of the largest single storage container or 25 % of the total storage containers whichever is greater. Refuel vehicles in designated areas that have a protective surface covering and utilise drip trays for stationary plant.

 Table 10: Proposed mitigation measures for the operational phase

	OPERATIONAL PHASE IMPACTS
Impact	Mitigation Measures
Visual and Sense	• It is recommended that more 'green' technologies be implemented within the architectural designs and
of Place	building materials of the development where possible in order to minimise the visual prominence of such a
	development within the more natural surrounding landscape.
	Natural colours and building materials such as wood and stone should be incorporated as well as the use of
	indigenous vegetation in order to help beautify the development.
	• Visual pollutants can further be prevented through mitigations (i.e. keep existing trees, introduce tall
	indigenous trees; keep structures unpainted and minimise large advertising billboards).
Noise	Do not allow commercial activities that generate excessive noise levels.
	Continuous monitoring of noise levels should be conducted to make sure the noise levels does not exceed
	acceptable limits.
	No activity having a potential noise impact should be allowed after 18:00 hours if possible.
Emissions	Consider tarring of the internal road network.
	Manage activities that generate emissions.
Waste	Solid waste will be collected from site regularly.
	Waste should be disposed of at an appropriate local land fill, in consultation with the local authority.
	No waste may be buried or burned.
Social Impacts	No specific mitigation measures are required, only that the local community be consulted in terms of possible job
	creation opportunities and must be given first priority if unspecialised job vacancies are available.

8 CONCLUSION

The purpose of this Chapter is to briefly summarise and conclude the FESR and describe the way forward.

8.1 CONSTRUCTION PHASE IMPACTS

With reference to **Table 8**, none of the negative construction phase impacts were deemed to have a high significance impact on the environment. The construction impacts were assessed to a *Medium to Low (negative)* significance, without mitigation measures. With the implementation of the recommended mitigation measures in Chapter 7 as well as in the EMP, the significance of the construction phase impacts is likely to be reduced to a *Low (negative)*.

8.2 OPERATIONAL PHASE

The most significant operational phase impact *medium (positive)* is the social impact. This is as a result of the potential job opportunities during construction as well the increased development within the area. Furthermore, the community of Oshakati are expected to benefit from the new accommodation facility due to it providing housing and additional amenities which may not be readily available in the town.

8.3 LEVEL OF CONFIDENCE IN ASSESSMENT

With reference to the information available at the project planning cycle, the confidence in the environmental assessment undertaken is regarded as being acceptable for the decision-making, specifically in terms of the environmental impacts and risks. The Environmental Assessment Practitioner believes that the information contained within this FESR is adequate to allow MEFT: DEAF to be able to determine the environmental acceptability of the proposed project.

It is acknowledged that the project details will evolve during the detailed design and construction phases. However, these are unlikely to change the overall environmental acceptability of the proposed project and any significant deviation from what was assessed in this FESR should be subject to further assessment. If this was to occur, an amendment to the Environmental Authorisation may be required in which case the prescribed process would be followed.

8.4 MITIGATION MEASURES

With the implementation of the recommended mitigation measures in Chapter 7 as well as in the EMP, the significance of the construction and operational phase impacts is likely to be reduced to a *Low (negative)*. It is further extremely important to include an Environmental Control Officer (ECO)

on site during the construction phase of the proposed project to ensure that all the mitigation measures discussed in this report and the EMP are enforced.

It is noted that where appropriate, these mitigation measures and any others identified by MEFT: DEAF could be enforced as Conditions of Approval in the Environmental Authorisation, should MEFT: DEAF issue a positive Environmental Authorisation.

8.5 OPINION WITH RESPECT TO THE ENVIRONMENTAL AUTHORISATION

Regulation 15(j) of the EMA, requires that the EAP include an opinion as to whether the listed activity must be authorised and if the opinion is that it must be authorised, any condition that must be made in respect of that authorisation.

It is recommended that this project be authorised because should the development not proceed the subject area would remain undeveloped, potentially delaying urban growth and missing an opportunity to enhance the area's infrastructure. The local community is expected to benefit from the development as a result of the potential job opportunities during construction as well as the increased development within the area. The significance of the social impact was therefore deemed to be *Medium (positive)*.

The "no go" alternative on the other hand was deemed to have a *High (negative)* impact, as all the social benefits resulting from the development would not be realised.

The significance of negative impacts can be reduced with effective and appropriate mitigation provided in this report and the EMP. If authorised, the implementation of an EMP should be included as a condition of approval.

8.6 WAY FORWARD

The FESR is herewith submitted to MEFT: DEA for consideration and decision making. If MEFT: DEA approves, or requests additional information / studies all registered I&APs and stakeholders will be kept informed of progress throughout the assessment process.

9 REFERENCES

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