ENVIRONMENTAL SCOPING REPORT (ESR)

ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT FOR THE PROPOSED SUBDIVISION OF PORTIONS 185, 186, 187, 188, 189, 190 AND 192 (PORTIONS OF PORTION 116) OF THE FARM OSONA COMMONGAE NO.65, OTJOZONDJUPA REGION, NAMIBIA

JULY 2023

REF-230807001836

PLAN AFRICA CONSULTING CC

TOWN AND REGIONAL PLANNERS

DOCUMENT DATA SHEET

DOCUMENT VERSION

001

PROJECT NAME	**ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT FOR THE PROPOSED SUBDIVISION OF PORTIONS 185, 186, 187, 188, 189, 190 AND 192 (PORTIONS OF PORTION 116) OF THE FARM OSONA COMMONAGE NO.65, OTJOZONDJUPA REGION, NAMIBIA**
REPORT TITLE	**ENVIRONMENTAL SCOPING REPORT: (ESR)**
PROPONENT	**GERLAD JOHN CLAASEN**
ENVIRONMENTAL CONSULTANT	**PLAN AFRICA CONSULTING CC** **POSTAL BOX:** 4114 Windhoek-Namibia **PHONE NO:** +264 (0) 813782174 **EMAIL ADDRESS:** pafrica@mweb.com
MEFT PROJECT NO.	
AUTHORS	**JASENDA LINUS**
REVIEWER	**TENDAI E. KASINGINETI**
DATE OF SUBMISSION	**07 August 2023**

EXECUTIVE SUMMARY

Plan Africa Consulting CC has been appointed by Gerlad John Claasen to conduct an Environmental Impact Assessment (EIA) and development of an Environmental Management Plan (EMP) for the proposed Subdivision of Portions 185, 186, 187, 188, 189, 190 and 192 (Portions of Portion 116) of the Farm Osona Commonage No.65 and to apply for an Environmental Clearance Certificate (ECC).

The project has triggered the application for an ECC as per the following listed activities:

LAND USE AND DEVELOPMENT ACTIVITIES

- 5.1 (d) the creation of a street

Public & Stakeholders' Consultation and Engagement and Feedback

The public and stakeholders (I&APs) were consulted through the used means, i.e. newspaper adverts, public notices, and face-to-face meetings held in Okahandja. The I&APs have raised few but significant comments and these have been incorporated into the EIA documents for consideration.

Key Adverse Environmental Impacts and Issues identified:

-Vegetation removal (deforestation), i.e., loss of Biodiversity, Pollution (Solid waste, hazardous and wastewater),

-Soil Erosion and Disturbance, Health and Safety Risks, and

Positive Social Impacts

The project is set to improve the socio-economic environment of Osona Commonage through a much-needed affordable accommodation and improved services such as housing as well as temporary employment creation.

Conclusions

Based on the impacts identified by this study during site visit, process analysis, desk study and stakeholder consultations conducted, an integrated environmental risk analysis was carried out using the DEFRA Guidelines for Environmental Risk Assessment and Management 'Green Leaves III' (latest edition) as well as the international Procedures for best practices. The risk

analysis shows that the subdivision establishment and related project activities will have some negative impacts on the biophysical and socio-economic environment. However, based on the impacts' description and assessment, the impacts' significance is rated moderate and can therefore, be reduced by the effective implementation of the provided management and mitigation measures. It has also been noted that the project will bring about some positive impacts on the social and economic aspects. However, it is imperative to note that the project is being undertaken within an already disturbed locale. To prevent or mitigate negative impacts and to increase positive impacts, a coordinated project management strategy according to an Environmental Management Plan developed for the subdivision in Osona Commonage.

To ensure that the significant components of the environment as well as issues raised by I&APs are considered and addressed, and a Report was compiled for this EIA/ESA Study. The aim was to assess the proposed subdivision establishment and related activities and provide measures to mitigate the potential impact thereto.

No further specialist studies were necessary for the Detailed ESA, as the potential risks and impacts will be managed and mitigated by the effective implementation of measures contained in the EMP. To ensure that the EMP implementation is effective and yields the desired management results, implementation monitoring should be done by an Environmental Control Officer and Competent Authority during project construction or upgrading stage. Therefore, the ECC may be issued by the Environmental Commissioner for the establishment of the subdivision in Osona Commonage on Portion 185, 186, 187, 188, 189, 190 and 192 and conditions adhered to by the Proponent and their associated contractors

Contents

List of Figures

LIST OF TABLES

Definitions

TERMS	DEFINITION
BID	Background Information Document
DEFRA	The Department for Environment, Food and Rural Affairs
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
ESA	Environmental Scoping Assessment
ESIA	Environmental and Social Impact Assessment
EMP	Environmental Management Plan
FLTS	Flexible Land Tenure System
I&APs	Interested and Affected Parties
MAWLR	Ministry of Agriculture, Water and Land Reform
MEFT: DEAF	Ministry of Environment, Forestry and Tourism's Department of Environmental Affairs and Forestry
NHC	National Heritage Council
N(EMA)	Namibia Environmental Management Act
PRP	Pit Rehabilitation Plan
ToR	Terms of Reference
UNFCCC	United Nations Framework Convention on Climate Change

1. CHAPTER ONE: BACKGROUND

1.1. INTRODUCTION

Gerald John Claasen, referred to as the Proponent, intends to subdivide Portions 185 to 190 and 192 into 1-hectare land portions in Osona Commonage. The project is initiated in a bid to contribute to effective and efficient use of land and to stimulate development of the area through intensification and other urban mechanisms.

In this respect, the Proponent has appointed Plan Africa Consulting CC to undertake an Environmental Impact Assessment and development of an Environmental Management Plan for the proposed subdivision, land servicing and residential estate development initiative and also apply for an Environmental Clearance Certificate (ECC) to the Ministry of Environment and Tourism (MET): Directorate of Environmental Affairs (DEA).

In Namibia, town planning activities are one of the listed activities under the 2012 Environmental Impact Assessment (EIA) Regulations of the Environmental Management Act (EMA) No. 7 of 2007 that cannot be undertaken without an EIA or Environmental Scoping Assessment (ESA) study done and Environmental Clearance Certificate (ECC) issued by the Environmental Commissioner. The EIA Study is aimed at assessing the proposed project potential, socio-economic aspects, infrastructure, and services, environmental, and geohydrology (hydrogeology) aspects of the site.

The EIA and EMP are focused on Portions 185, 186, 187, 188, 189, 190 and 192 (portions of Portion 116) of the Farm Osona Commonage No.65, which is to be subdivided into 44 Portions and the remainder reserved as streets. As such, this document forms part of the application to be made to the DEA's office for an Environmental Clearance certificate for the proposed subdivision according to the guidelines and statutes of the Environmental Management Act No.7 of 2007 and the environmental impacts regulations (Government Notice 30 in Government Gazette 4878 of 6 February 2012).

1.2. OBJECTIVES OF THIS STUDY

This Environmental Impact Assessment is being undertaken in compliance with the Environmental Management Act No.7 of 2007 and the EIA Regulations (GN 30 in GG 4878 of 6 February 2012). It is a prerequisite by the law to have an Environmental Impact Assessment carried out before the implementation of the prescribed projects as elaborated in the EIA Regulations (GN 30 in GG 4878 of 6 February 2012). The main objectives of this study are to:

- identify and provide mitigation measures of the expected impacts of the proposed project to protect the environment,
- brief the Project Proponent of the legal and policy framework governing the proposed activity,
- identify the possible changes in bio-diversity index that might be because of Project implementation in the area,
- reflect on the various public concerns which will help the National Environmental Action Planners, economist and concerned stakeholders to make decisions,
- develop preventive and precautionary measures for the expected physical and biological environmental negative impacts associated with the proposed project activities, and
- structure an effective environmental management plan for the sub division and servicing of the land to minimise and prevent negative impacts while maximising the positive impacts.

1.3. TERMS OF REFERENCE

The Environmental Impact Assessment conducted by Plan Africa Consulting provides a comprehensive evaluation of the proposed project producing both EIA and EMP report documenting the following:

- A complete description of the project site,
- Significant environmental issues of concern that were based on the baseline data compiled by the EIA Team, which took into consideration biophysical, social, cultural and heritage information,

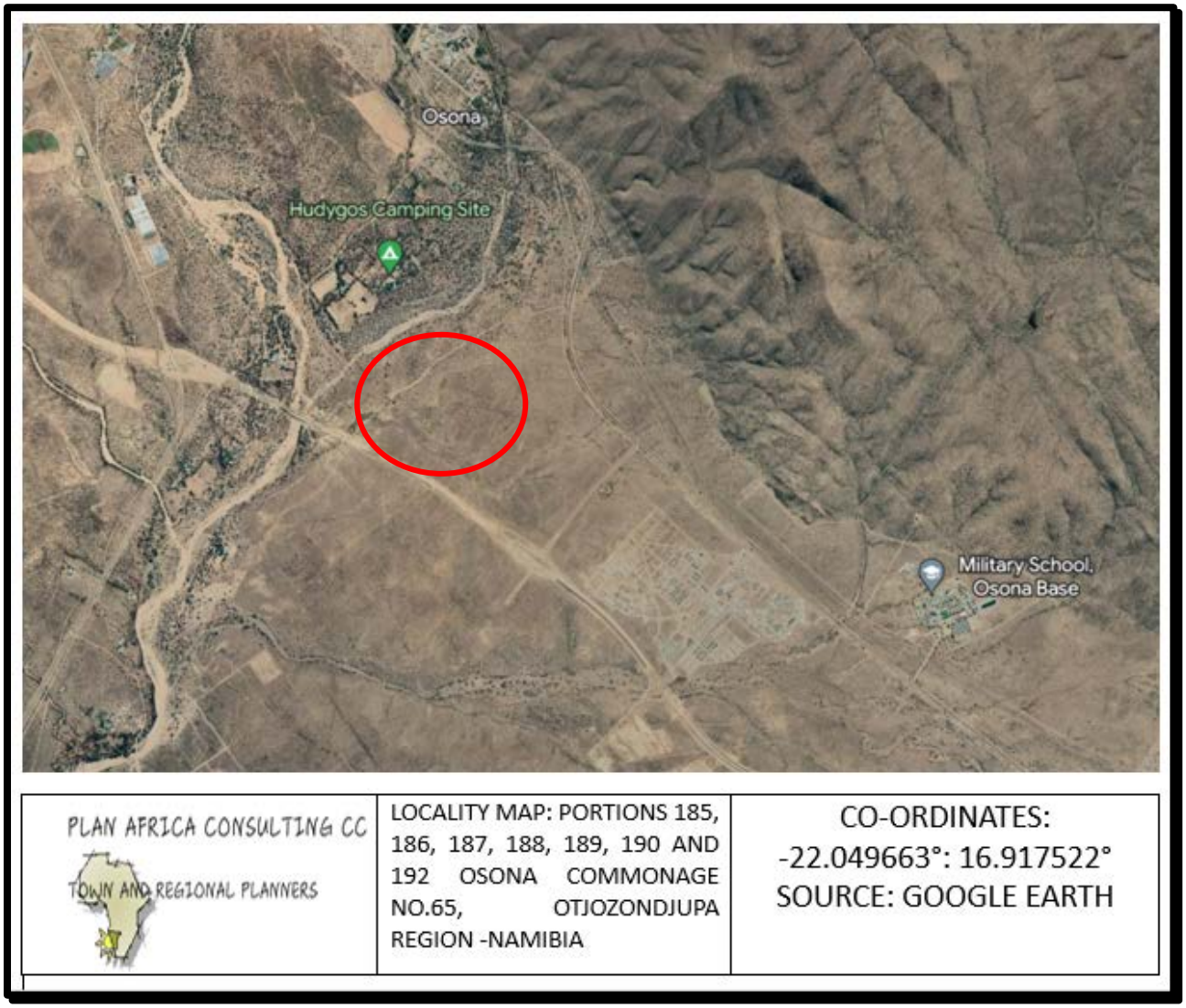
- An assessment of the public perception on the proposed development,
- Identification of Policies, Legislation and Regulations relevant to the project,
- Prediction of the likely short, medium and long-term impact of the project on the environment, including direct, indirect and cumulative impacts, and their relative importance to the design of the project activities/facilities,
- Identification of any mitigation action to be taken to minimize predicted adverse impacts and provide associated costs where applicable and practical;
- Development of an environmental monitoring plan which will ensure that the mitigation measures are adhered to during the implementation phase;
- A conclusion and recommendations remarks for the project Proponent on an advisory note.

1.4. PROJECT DESCRIPTION

Portions 185, 186, 187, 188, 189 to 190 and 192 are located just south of the Swakop River, and is part of Portion 116 of the Farm Osona Commonage No. 65, which was situated west of the B1 road just after/over the railway bridge up to the Osona Village Boundary.

The portions have sizes ranging from 7ha to 8ha approximately and is zoned 'Residential Estate'. Portion 185 to 190 and 192 are currently vacant. **Figure 1** shows the aerial view of the site and **Figure 2** shows the Proposed Subdivision.

The descriptions of the site to be subdivided are based on the site visit conducted on the 21st of July 2023



1.4.1. INFRASTRUCTURE AND SERVICES

Portions 185 to 190 and 192 are located in an area that has existing services such as roads, water and electricity. The available services will be extended to the project site in conjunction with the relevant departments at the municipality and censored, otherwise solar power will be used as an alternative. The developer will be responsible for the internal services and access at own cost. Access to the area is available via a 40m right of way servitude which connects to the B1 road, and the proposed internal streets will be 10m wide. Infrastructure and services observed and found on and around the project.

Photos A and B are showing existing roads. Photo C is showing services and Photo D is showing the existing vegetation cover.

Type of Tenure: The land holds potential for Residential estate development hence the project will accommodate the demand for land delivery. in There are currently no inhabitants on the respective portions.

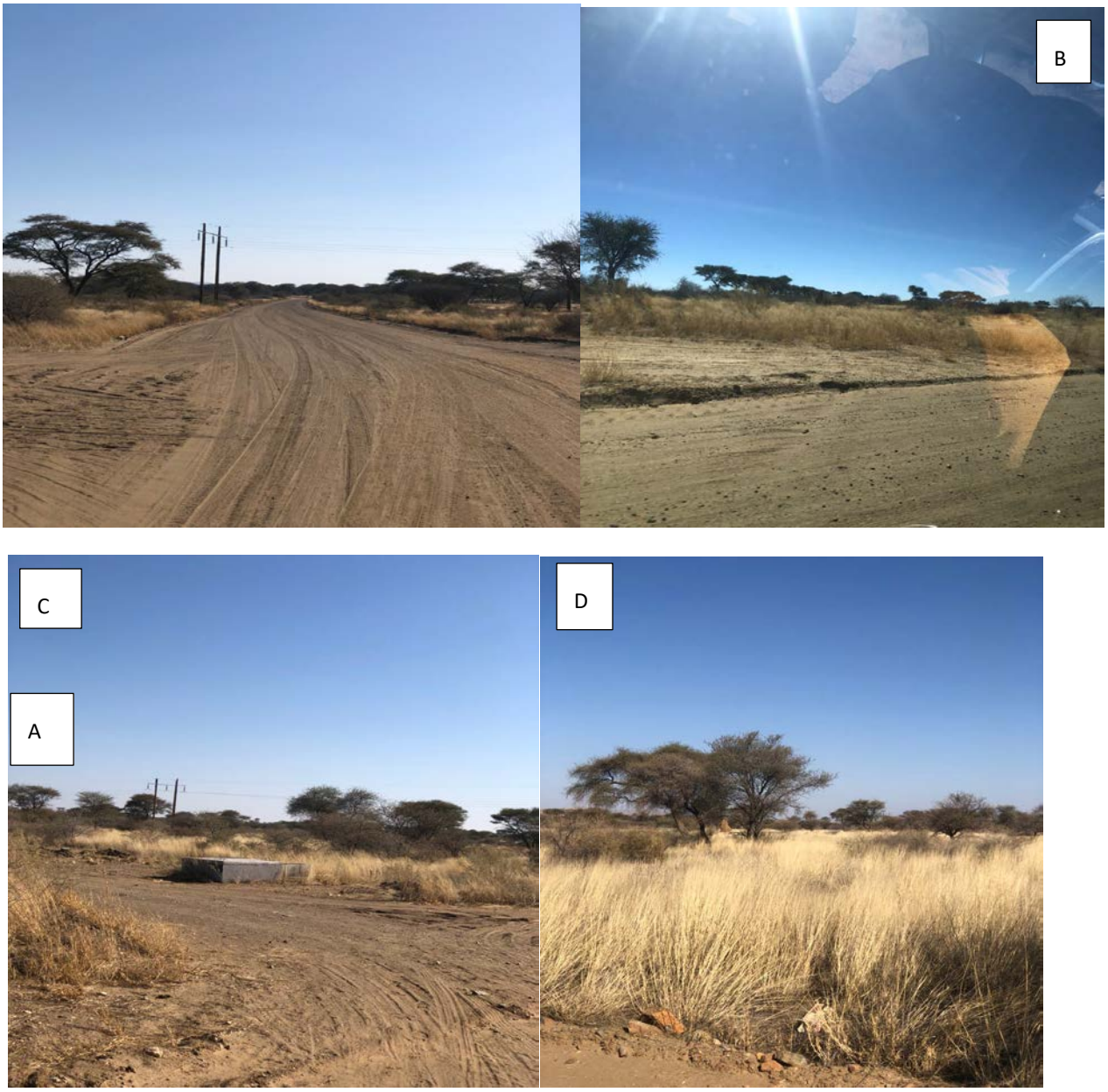


Figure 2: Services and Vegetation observed on and around the respective portions

1.4.2. THE PROPOSED DEVELOPMENT

Portions 185, 186, 187, 188, 189, 190 and 192 is to be subdivided into a total of 44 Portions and the Remainders are to be reserved as streets. The proposed subdivision will create portions with a

maximum size of 10 000m² in extent and the Remainder (to be created as Streets) will be approximately 10m wide.

1.4.3. STREET ACCESS AND UTILITY SERVICES

The estate will gain access from the existing 40m wide servitude (which lies on Portion 195 of the Farm Osona Commonage). The 40m wide servitude passes between Portions 189 and Portion 193. The 1ha newly portions will gain access from the proposed 10m wide streets. The owner as the developer will be responsible for the provision of reticulation services to each erf. All newly created portions will be linked to the municipal bulk reticulation network (water, sewer and electricity).

1.4.4. SEWER SYSTEM

There is no final decision on a central sewer system for the development at this stage of planning. However, the proponent proposes French drain systems, with the possibility of allowing each dwelling the liberty to make decide on their own sewer system. However, the proponent may choose to consider another approach to the sewer system for the development, to ensure that the project uses most sustainable approach as far as possible.

1.4.5. PROJECT ALTERNATIVES

SEWER SYSTEMS

French drains are the proposed sewer system for the development. However, other alternatives can be considered for the proposed development.

Table 1: Alternatives for sewer system

Type of Sewer System	Pros	Cons
French Drain System: utilizes a buried perforated pipe installed in a gravel bed with a filter sock or geotextile fabric envelope lining the trench. Water from the surrounding soil enters the gravel bed, flows into the drain pipe and utilizes gravity to flow towards the discharge point	- Cost effective - Can handle excessive moisture from soils and protect dwelling foundations from excess ground water.	- migrating soil fines will accumulate on the filter fabric or in the drain pipe, potentially inhibiting water flow and eventually clogging, limiting the life of the drain system.

Conservancy Tanks: An underground tank, which stores wastewater until the time of emptying. The tanks are watertight to prevent the leakage of foul water or the ingress of groundwater. They may be constructed by brick or concrete, or modern from glass-reinforced plastics, polythene or steel. Conservancy tanks must be emptied frequently.	- Flexible and adaptable to a wide variety of individual household waste disposal requirements. - Essentially no maintenance needs except the periodic emptying. - Can accommodate for a pump station to be developed eventually.	- Requires continuous emptying - Expensive to maintain - Risk of leakage and groundwater pollution
Trickling filter: A fixed-bed, biological reactor that usually operates under aerobic conditions. Pre-settled wastewater is continuously 'trickled' or sprayed over the filter. As the water migrates through the pores of the filter, organics are degraded by the biofilm covering the filter material. The filter is usually 1-2.5 m deep, but filters packed with lighter plastic filling can be up to 12 m deep. The ideal filter material is low cost and durable, has a high surface to volume ratio, is light, and allows air to circulate.	- Can be operated at a range of organic and hydraulic loading rates - Efficient nitrification (ammonium oxidation) - Small land area required compared to constructed wetlands	- Costly - Requires expert design and construction, especially, the dosing system - Requires a constant source of electricity and constant wastewater flow. - Prone to flies and bad odours. - Risk of clogging, depending on type of treatment - Not all necessary materials needed to assemble may be locally available

		- most appropriate for cold climates as compared to warm/hot climates

Sources: *Ulrich et al (2009)*

Other types of sewer systems such as oxidations ponds, trench drain systems and other innovative systems may also be considered as alternatives for this project. The consultant suggests that a feasibility study is conducted by the Proponent to determine the best sewer system for the proposed development in terms of cost, maintenance and sustainability.

1.5. NEED AND DESIRABILITY

The proponent wishes to subdivide Portions 185 to 190 and 192 162 into 44 Portions and the Remainder (Street) to develop a residential estate and to create smaller portions. The general shortage of land in Okahandja demands that land and the capacity of the existing infrastructure be utilized to its full potential. The potential of the portion is currently wasted and the proposed subdivision would result in optimal utilization of land and promote further growth of the town. The proposed subdivision and estate development can only have positive impacts to the town's development. The proposed subdivision will also allow for the increase in the number of individual portions in the area thereby contributing to effective and efficient use of land. Such development will also add revenue to the Town Council via taxes and rates and an income for the owner. Access to affordable housing is driving incentive to increase economic and investment opportunities to the town. Furthermore, the proposed cadastral change will decrease unit cost, increase feasibility of project, and accommodate more households.

2. CHAPTER TWO: POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

2.1. INTRODUCTION

An important part of the EIA is identifying and reviewing the administrative, policy and legislative situation concerning the proposed activity, to inform the proponent about the requirements to be fulfilled in undertaking the subdividing and servicing activities. The section is a presentation of the legislative framework within which the proposed development related activities will be established and operate under.

The focus is on compliance with the legislation during the planning, construction and operational phases. All relevant legislation, policies and international statutes applying to the project are highlighted in Table 1. below as specified in the Environmental Management Act, 2007 (Act No.7 of 2007) and the regulations for Environmental Impact Assessment as set out in the Schedule of Government Notice No. 30 (2012).

Table 2: Policies, legal and administrative regulations governing the proposed project

Legislation / Policy / Guiding document	Provision	Project implication
The Constitution of the Republic of Namibia (1990)	The articles 91(c) and 95(i) commits the state to actively promote and sustain environmental welfare of the nation by formulating and institutionalizing policies to accomplish the sustainable objectives which include: - Guarding against overutilization of biological natural resources, - Limiting over-exploitation of non-renewable resources, - Ensuring ecosystem functionality, - Maintain biological diversity.	Through implementation of the environmental management plan the proposed development will be in conformant to the constitution in terms of environmental management and sustainability.
Vision 2030 and National Development Plans	Namibia's overall Development ambitions are articulated in the Nations Vision 2030. At the operational level, five-yearly national development plans (NDP's) are prepared in extensive consultations led by the National Planning Commission in the Office of the President. Currently the Government has so far launched a 5th NDP that pursues three overarching goals for the Namibian nation: high and sustained economic growth; increased income equality; and employment creation.	The proposed project will increase availability of accommodation in Okahandja as well as creating employment in construction, which will be in fulfilment to the NDP and Vision 2030.
Environmental Assessment Policy of Namibia 1994	The Environmental Assessment Policy of Namibia requires that all projects, policies, Programmes, and plans that have detrimental effect on the environment must be accompanied by an EIA. The policy provides a definition to the term "Environment" broadly interpreted to include biophysical, social, economic, cultural, historical and political	The development establishment will only commence after being awarded an environmental clearance certificate, thus by abiding to the requirements of the Environmental Assessment Policy of Namibia. The EIA and EMP will cater for the sustainable management of bio-physical environment.

Legislation / Policy / Guiding document	Provision	Project implication
	components and provides reference to the inclusion of alternatives in all projects, policies, programmes and plans.	
Environmental Management Act No. 7 of 2007	The Act aims at ✓ Promoting the sustainable management of the environment and the use of natural resources by establishing principles for decision-making on matters affecting the environment; ✓ To provide for a process of assessment and control of projects which may have significant effects on the environment; ✓ To provide for incidental matters. The Act gives legislative effect to the Environmental Impact Assessment Policy. Moreover, the act also provides procedure for adequate public participation during the environmental assessment process.	This document is compiled in a nature that project implementation is in line with the objectives of the EMA Act. Guiding procedures were also drawn from the act to facilitate for the carrying out of the EIA and drafting the EMP for the proposed development.

Legislation / Policy / Guiding document	Provision	Project implication
The National Solid Waste Management Strategy, 2018	Having identified solid waste as a hazard, the Ministry of Environment, Forestry and Tourism developed the Solid Waste Management Strategy (SWMS) to guide future directions, develop regulations. The SWMS has also been aimed at funding strategy and action plans to improve solid waste management and ensure these are properly coordinated and are consistent with national policy to facilitate cooperation among stakeholders. The objectives of this Strategy are: (a) to strengthen the institutional, organisational and legal framework for solid waste management, including capacity development; (b) to instil a culture of waste minimisation and expand recycling systems; (c) to implement formalised waste collection and management systems in all populated areas; (d) to enforce improvements in the municipal waste disposal standards; and	In terms of the subdivision the SWMS would be enforced to ensure that the risks to the environment and public health emanating from waste disposal sites and illegal dumping in Namibia. This will include complete improvement of waste collection at all local authorities, in particular in the informal housing settlements, etc.

Legislation / Policy / Guiding document	Provision	Project implication
	(e) to plan and implement feasible options for hazardous waste management.	
Local Authorities Act No. 23 of 1992	To provide for the determination, for purposes of local government, of local authority councils; the establishment of such local authority councils; and to define the powers, duties and functions of local authority councils; and to provide for incidental matters.	The Proponent should ensure that the subdivision and related activities are in compliance with the relevant requirements the local authority by-laws.
Public and Environmental Health Act No. 1 of 2015	The Act serves to protect the public from nuisance and states that no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.	The Proponent and their contractors should ensure that the project infrastructure, vehicles, equipment, and machinery are designed and operated in a way that is safe, or not injurious or dangerous to public health and that the noise which could be considered a nuisance remain at acceptable levels. The Proponent should ensure that the public as well as the environmental health is preserved and remain uncompromised.
Public Health Act No. 36 of 1919	Under this act, in section 119: "No person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health."	The project Proponent will ensure that all legal requirements of the project in relation to protection of the health of their employees and surrounding residents is protected. -Personal protective equipment shall be provided for employees in construction.

Legislation / Policy / Guiding document	Provision	Project implication
		-The development shall follow requirements and specification in relation to water supply and sewerage handling so as not to threaten public health of future residents on this land portion.
Soil Conservation Act No. 76 of 1969	The objectives of this Act are to: ✓ Make provisions for the combating and prevention of soil erosion, ✓ Promote the conservation, protection and improvement of the soil, vegetation, sources and resources of the Republic.	The project will have a rather localized impact on soils and on the soil through construction and access roads construction hence soil protection measures will be employed and preservation of trees as much as possible.
Nature Conservation Ordinance 1996	To consolidate and amend the laws relating to the conservation of nature; the establishment of game Parks and nature reserves; the control of problem animals; and to provide for matters incidental thereto.	The proposed project implementation is not located in any known or demarcated conservation area, national park or unique environments. The project site was selected with this ordinance in mind to ensure that Namibian nature is conserved.
Protected Areas and Wildlife Management Bill	This bill, when it comes into force, will replace the Nature Conservation Ordinance 4 of 1975. The bill recognizes that biological diversity must be maintained, and where necessary, rehabilitated and that essential ecological processes and life support systems be maintained. It protects all indigenous species and control the exploitation of all plants and wildlife.	The project has ensured that their activities do not fall within the boundaries of any protected area and that the project will not affect heavily endangered vegetation and animals on its site.
Forest Act No. 12 of 2001	The Act gives provision for the protection of various plant species through the Ministry of Agriculture, Water and Forestry (MAWF), Directorate of Forestry).	- The Proponent will also have to ensure that there is no indiscriminate cutting down of trees.

Legislation / Policy / Guiding document	Provision	Project implication
		-The proposed site is sparsely vegetated with white thorn tree species, which are not threatened or protected.
National Biodiversity Strategy and Action Plan (NBSAP2)	The action plan was operationalised in a bid to make aware the critical importance of biodiversity conservation in Namibia putting together management of matters to do with ecosystems protection, biosafety, biosystematics protection on both terrestrial and aquatic systems.	The proponent has been advised by the EIA Team and recognises the need for ecosystems protection to manage the changing climatic environment. -Through this project, there will be reforestation and fostering of green development, which will be promoting the protection and conservation of the biophysical environment, and with this EIA, it will be ensured that almost 40% of grown tree species on site will not be removed but rather will be part of the development, to promote Greed development.
National Policy on Climate Change for Namibia, 2010	In harmony with the findings of the IPCC over time and the Earth Summits being held annually the policy seeks to outline a coherent, transparent and inclusive framework on climate risk management in accordance with Namibia's national development agenda, legal framework, and in recognition of environmental constraints and vulnerability. Furthermore, the policy pursues the strengthening of national capacities to reduce climate change risk and build resilience for any climate change shocks.	The proposed project will ensure that there will be limited release of greenhouse gasses such as methane, carbon dioxide, nitrous oxides. Methods such as wet surface operations to reduce dust emissions will be utilised to remove aerosols emitted into the near-surface atmosphere.

Legislation / Policy / Guiding document	Provision	Project implication
The National Land Policy, 1998	The National Land Policy provides for a unitary land system for Namibia in which all citizens have equal rights, opportunities and security across a range of tenure and management systems. The policy has specific gender provisions consistent with the Namibian Constitution. Women are accorded the same status as men with regards to all forms of land rights, either as individuals or as members of family land ownership trusts. The Policy also provides for multiple forms of land rights, including customary, leaseholds, freeholds, licences, certificates or permits and state ownership. It has provisions on the urban poor, providing that informal settlements need to be given attention through appropriate planning, land delivery, tenure, registration and finance in an environmentally sustainable manner.	The subdivision project will need to adhere to the requirements of this Policy by ensuring that the: -establishment and proclamation of urban areas as townships and municipalities to promote decentralisation and the close involvement of communities in their own administration. -need to pay attention to the establishment of a transparent, flexible and consultative local authority planning system and development regulations.
Wetland Policy, 2004	The policy provides a platform for the conservation and wise use of wetlands, thus promoting inter-generational equity regarding wetland resource utilization. Furthermore, it facilitates the Nation's efforts to meet its commitments as a signatory to the International Convention on Wetlands (Ramsar) and other Multinational Environmental Agreements (MEA's).	In compliance to this policy the development will ensure a standard environmental planning such that it does not affect any wetlands within its locale through recognition of wetlands to promote the conservation and wise utilization of wetlands resources.

Legislation / Policy / Guiding document	Provision	Project implication
Water Resources Management Act No. 11 of 2013	This Act provides for the management, protection, development, use and conservation of water resources and the regulation and monitoring of water services and to provide for incidental matters. (Department of Water Affairs).	The protection (both quality and quantity/abstraction) of water resources should be a priority. Water usage during construction will be supplied by Okahandja Town Council.
National Heritage Act 27 of 2004	Heritage resources to be conserved in development. (National Heritage	During the project implementation as soon as objects of cultural and heritage interests are observed such as graves, artefacts and any other object believed to be order than 50 years, all measures will be taken protect these objects until the National Heritage Council of Namibia have been informed, and approval to proceed with the operations granted accordingly by the Council.
National Monuments Act of Namibia (No. 28 of 1969) as amended until 1979	"No person shall destroy, damage, excavate, alter, remove from its original site or export from Namibia: (a) any meteorite or fossil; or (b) any drawing or painting on stone or a petroglyph known or commonly believed to have been executed by any people who inhabited or visited Namibia before the year 1900 AD; or	The proposed site of development is not within any known monument site both movable or immovable as specified in the Act, however in such an instance that any material or sites or archeologic importance are identified, it will be the responsibility of the Proponent to take the required route and notify the relevant commission.

Legislation / Policy / Guiding document	Provision	Project implication
	(c) any implement, ornament or structure known or commonly believed to have been used as a mace, used or erected by people referred to in paragraph (b); or (d) the anthropological or archaeological contents of graves, caves, rock shelters, middens, shell mounds or other sites used by such people; or (e) any other archaeological or palaeontological finds, material or object; except under the authority of and in accordance with a permit issued under this section.	
Pollution Control and Waste Management Bill	This bill has not come into force. Amongst other the bill aims to "prevent and regulate the discharge of pollutants to the air, water and land" Of particular reference to the Project is: Section 21 "(1) Subject to sub-section (4) and section 22, no person shall cause or permit the discharge of pollutants or waste into any water or watercourse." Section 55 "(1) No person may produce, collect, transport, sort, recover, treat, store, dispose of or otherwise manage waste in a manner that results in or creates a significant risk of harm to human health or the environment."	To control air, water and land pollution as agitated by the Act the project proponent will ensure that erven will have approved drainage on site and that sanitation facilities do not threaten public health, adding on an integrated pollution management strategy following the EMP and will be operationalised on site. Adequate stormwater drainage systems will be designed for the project area.
Convection on Biological Diversity (CBD)	Namibia is a signatory of the Convention on Biological Diversity and thus is obliged to conserve its biodiversity.	The project will preserve tree species on as part of their plans for green and sustainable development.

Legislation / Policy / Guiding document	Provision	Project implication
United Nations Convection to combat Desertification	Namibia is bound to prevent excessive land degradation that may threaten livelihoods.	It will be the responsibility of the Proponent and future land title holders to conserve vegetation on and around the portions.

3. CHAPTER THREE: RECEIVING ENVIRONMENT

3.1. BIOPHYSICAL CONDITIONS

3.1.1. CLIMATE

The climatic conditions of Okahandja is classified as semi-desert climate, mild winters with rare night of negative temperature. While in summer _September to March) temperatures are rather hot with temperatures reaching 45˚c at noon.

A. **Rainfall and Precipitation:** Okahandja is located in Otjozondjupa region which receives about 120mm annual rainfall.

B. **Temperatures:** In the Okahandja area, the summers are hot and partly cloudy and the winters are short, cool, dry, windy, and clear. Over the course of the year, the temperature typically varies from *9°C* to *33.8°C* and is rarely below *6.6°C* or above *37°C*.

3.1.2. TOPOGRAPHY

The project site lies on an elevation of 1305m above sea level. The area is a well-drained development to avoid flash flooding on the area.

3.1.3. GEOLOGY AND SOILS

The first part of this route follows road B1 from Windhoek to Okahandja. The area between these two towns belongs to the Southern Zone of the Damara Orogen and is underlain entirely by schist of the Kuiseb Formation This Southern Zone developed from an intra-continental rift into a narrow ocean, where the widespread greywacke succession of the Kuiseb Formation, now metamorphosed into schist, was deposited. The schist forms a highly thrusted, kyanite-bearing, high-pressure, low-temperature belt with a southward vergence (Miller 1983,1990). The road follows the Windhoek Graben, which is part of a prominent fault system of Mid-Tertiary age developed as a result of extensional tectonics.

3.1.4. HYDROLOGY

A reconnaissance field assessment was conducted to confirm the current conditions in the area and to identify potential hydrologic risks associated with establishment of the proposed project. The

area is generally flat with very few evidence of surface erosion. The surrounding area is relatively flat giving limited chance for surface drainage, however there is Okahandja River running from the North to South, West of the project side. The Swakop River which flows into the ocean at Swakopmund is located further to the South. The side is located around 1.5km from the Okahandja River therefore, the development does not have interference with any river or stream.

3.2. TERRESTRIAL ECOLOGY: FAUNA AND FLORA

3.2.1. FAUNA

Okahandja area has been growing expanding into the peri-urban environments, this results in movement of wild animals away from the area. However, because most on the land near the project site is privately owned, and poised for development. The proposed project area has already experienced some form of human encroachment and disturbances.

3.2.2. MAMMALS

The EIA team researched and established that around the proposed project has no wildlife as the project area is already disturbed by illegal occupants around the project area. Some form of deforestation observed in the area may also have contributed to low number of wildlife due to lost and fragmented habitats. Species deemed to be prevalent in the area, but not exactly on and around the project site includes: Black rhino Endangered, Kudu, Gemsbok, Hartmann's mountain zebra, springbok, red hartebeest Endangered, Springhare, Lynx Endemic, Mongoose and Oryx. Okahandja is surrounded by some of the best game and hunting farms in Namibia. Common game found in the area include Oryx and Kudu

3.2.3. BIRDS

The EIA team established that the region has a little over 200 bird species according to I Naturalist 2022

A list of commonly occurring bed species around Okahandja area and these includes mainly the following: Rockrunner and Hartlaub's Spurfowl Black Mongooses, Bradfield's and Alpine Swift, Shorttoed Rock Thrush, Augur Buzzard and Damara Dik-Dik. However, the project proposed, pose no threat to these bird species or any bird species.

3.2.4. AMPHIBIANS, REPTILES AND INVERTEBRATES

With information gathered from NWCT, 2015, Okahandja area is known to have a great variety of snake species. With the Kalahari Desert encroaching closer by, the cobra and the sand puff adder are common in the area in the grassland ecosystems. The area is also known to have different types of lizard s and other dry Savannah reptiles depended on terrain, vegetation cover and soils. The baseline studies also discovered existence of species of snails, centipedes, spiders, scorpions and several types species associated with of the savannah environment.

3.2.5. FLORA

Trees / Shrubs and Grasses

The vegetation of the area can be classified as thornbush savanna. Dominant tree species are Camelthorn, Bluethorn, Sweetthorn and Ringwood. Okahandja has a wide selection of bird life and is truly a feast for the nature lover. We have fine Bed & Breakfast establishments, Lodges and many other types of accommodation to suite the traveler. Cattle farming is prominent and the main source of income for the farming community.

3.3. SOCIO-ECONOMIC CONDITIONS

3.3.1. SOCIAL DEMOGRAPHY

The proposed project site, is within the Farm Osona Commonage which is governed by the Local Authority of Okahandja. Otjozondjupa Region has a population of approximately 24 100 inhabitants according to the Namibian Population and Housing Census of 2011.

The area has predominantly Nama and Herero speaking population, which is composed of mainly Nama and whose history of settlement in the area can be traced to 1800). Okahandja is Located 70 km north of the capital Windhoek.

3.3.2. ECONOMIC ACTIVITIES

Okahandja town, where all industries, factories and other related activities are. There are businesses such as plastic manufacturers of water pipes, water tanks; Okahandja Shopping mall and wood

carvers market (fig xx), diamond polishing company, wooden windows and door frames Prestige, Meatco abattoir for slaughtering cattle for local and international markets, industrial park, poultry farms, agricultural plots that produce vegetable for locals and Namibia at large, Namibian finest biltong is manufacturers are based in Okahandja. Okahandja town is also home to several vegetable and flower farms that surrounds the towns. This produce is consumed locally and nationally and the rest are exported to South Africa and Europe. The newest edition to the industrial sector is Castle Brewing Namibia producing Castle Lager beer.

The town use to host its Annual Tourism & Trade Expo during May each year. The exhibition is good for marketing the tow as tourism and business trade hub. The exposition also provides networking opportunity for local, national and regional to visit and trade in Okahandja. It is also used as a tool to attract much needed investment to the town. On the other hand, the manganese mine is providing much needed employment to the highly unemployed population of Okahandja. In addition there are various small mining activities around the town that are also contributing economically to the town and constituency (Otjozondjupa Regional Council 2022).

4. CHAPTER FOUR: PUBLIC CONSULTATION

Public Consultation forms an important component of the Environmental Assessment process. It is agitated for in the EIA Regulations (2012), Section 21 of the Regulations details steps to be taken during a given public consultation process and these have been used in guiding the EIA process.

Formal public involvement has taken place via newspaper adverts, site notice, registering I&APs and door to door consultation. The public consultation process has been guided by the requirements of Environmental Management Act (EMA) No. 7 of 2007 and the process has been conducted in terms of regulation 7(1) as well as in terms of the EMA Regulations of GN 30 of 6 February 2012.

4.1. PUBLIC CONSULTATION ACTIVITIES

The following tasks have been undertaken during public consultation process which started on the 6th of July 2023.

Identification of Interested and Affected Parties (I&APs)

After the scoping process, the EIA team identified I&APs and key stakeholders of the proposed project. The public participation activities to be undertaken for this EIA process were incorporated into the overall approach of the EIA background information. Among key stakeholders identified were Okahandja Town council, Osona Village and neighbours. Other I&APs could register to the EIA team and a special database created capturing all their names and correspondence details.

Distribution of BID

A Background Information Document (BID) was distributed on request by I&A Parties and it was distributed to key stakeholders identified during the scoping process. The BID provided a description summary of the proposed project, the project proponent and the whole procedure of the EIA to be followed.

Public Announcement.

A public announcement was done to make sure the public is aware of the development proposed by The Proponent. The EIA study was announced publicly through the following means presented in Table 2.

Table 3: Public notification details

Method / Mode	Area of Distribution	Language	Placement Date
Republikein	Country Wide	English	06 July 2023 13 July 2023
Namibian Sun	Country Wide	English	06 July 2023 13 July 2023
Site notices	Okahandja Municipality	English	13 July 2023
	Project Site	English	13 July 2023

4.2. KEY STAKEHOLDER AND PUBLIC ENGAGEMENT (CONSULTATION) MEETING

4.2.1. IDENTIFICATION OF INTERESTED AND AFFECTED PARTIES (I&APS)

The EIA team identified and consulted the following I&APs & key stakeholders for the proposed project:

- Community members,
- Okahandja Municipality.
- Osona Village

Other I&APs were allowed to register to the EIA team and compiled a database containing their names and correspondence details. The registration was accomplished over a period of 28 days. A meeting was held with the Town Planner and Environmental Health Practitioner at the Municipality on the 14th July 2023. Another meeting was held At Osona Village customer centre on 01st August 2023 to accommodate the concerns raised by the Osona Village representatives. The objection due date was on the 27th July 2023, however it was extended to the 11th August 2023 to give Osona Village enough time to read through the Environmental Scoping report to give their comment.

5. CHAPTER FIVE: ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS

5.1. OVERVIEW

The project Proponent is committed to sustainability and environmental compliance through coming up with a corrective action plan for all the anticipated environmental impacts associated with the project. This is also in line with the Namibian Environmental Management legislation and International best practices on township establishment and associated activities.

The Proponent shall implement the hereto attached Environmental Management Plan (EMP) in order to prevent, minimise and mitigate negative impacts. The EMP developed by Plan Africa Consulting CC to address all the identified expected impacts, the plan will be monitored and updated on a continuous basis, with aim for continuous improvement to addressing impacts.

5.2. KEY POTENTIAL POSITIVE AND ADVERSE (NEGATIVE) IMPACTS AND ISSUES

The subdivision and associated activities are associated with certain potential (positive and negative) biophysical and social impacts The key ones and that are relevant to and identified for the subdivision establishment in Okahandja are as follows:

Positive impacts

The project is set to improve the socio-economic environment of the Okahandja Town through the:

- Much needed affordable accommodation and improved services such as housing, and
- Temporary employment creation during the development.

Negative (adverse) impacts

- Vegetation removal (Deforestation), i.e., loss of Biodiversity,
- Pollution (Solid waste, hazardous and wastewater),
- Soil Erosion and Disturbance,
- Health and Safety Risks, and
- Social Grievance due to property relocation/realignment of structures into surveyed ervens.

5.3. IMPACT ASSESSMENT METHODOLOGY

An impact assessment matrix was used to assess all possible impacts of the project on the environment. In line with NEMA No. 7 of 2007 and the Environmental Impacts Regulations (GN 30 in GG 4878 of 6 February 2012) with the direction on impacts analysis the following impact assessment criteria was identified by the team and deemed suitable.

Table 4: Impact Screening Criteria

Aspect	Description
Nature	Focuses on the type of effect that the proposed project will have on environmental components. Addresses questions related to "what will be affected and how?"
Extent	Spatial extend of the project and anticipated spatial extend of impacts indicating whether the impact will be within a limited area (on site where construction is to take place); local (limited to within 15km of the area); regional (limited to ~100km radius); national (extending beyond Namibia's boarders).
Duration	This looks at the temporal issues pertaining to time frames e.g. whether the impact will be temporary (during construction only), short term (1-5 years), medium term (5-10 years), long term (longer than 10 years, but will cease after operation) or permanent.
Intensity	Establishes whether the magnitude of the impact is destructive or innocuous and whether it exceeds set standards, and is described as none (no impact); low (where natural/ social environmental functions and processes are negligibly affected); medium (where the environment continues to function but in a noticeably modified manner); or high (where environmental functions and processes are altered such that they temporarily or permanently cease and/or exceed legal standards/requirements).
Probability	Considers the likelihood of the impact occurring and is described as uncertain, improbable (low likelihood), probable (distinct possibility), highly probable (most likely) or definite (impact will occur regardless of prevention measures).
Significance	Significance is given before and after mitigation. Low if the impact will not have an influence on the decision or require to be significantly accommodated in the project design, Medium if the impact could have an influence on the environment which will require modification of the project design or alternative mitigation (the route can be used, but with deviations or mitigation) High where it could have a "no-go" implication regardless of any possible mitigation (an alternative route should be used).

The application of the above criteria will be used to determine the significance of potential impacts using a combination of duration, extent, and intensity/magnitude, augmented by probability, cumulative effects, and confidence. Significance is described as follows:

Table 4:Impact Rating Criteria

Significance Rating	Criteria
Low	Where the impact will have a negligible influence on the environment and no modifications or mitigations are necessary for the given development description. This would be allocated to impacts of any severity/ magnitude, if at a local scale/ extent and of temporary duration/time.
Medium	Where the impact could have an influence on the environment, which will require modification of the development design and/or alternative mitigation. This would be allocated to impacts of moderate severity/magnitude, locally to regionally, and in the short term.
High	Where the impact could have a significant influence on the environment and, in the event of a negative impact the activity(ies) causing it, should not be permitted (i.e. there could be a 'no-go' implication for the development, regardless of any possible mitigation). This would be allocated to impacts of high magnitude, locally for longer than a month, and/or of high magnitude regionally and beyond.

5.4. IMPACT ASSESSMENT

By subjecting each of the potential impacts to the matrix above, the EIA team established the significance of each impact prior to implementing mitigation measures and then after mitigation measures have been implemented. Some of the mitigation measures are mentioned but detailed descriptions of management actions are contained in the accompanying EMP.

Table 5: Impact Assessment Matrix

Impact	Status/nature	Extent	Duration	Intensity	Probability	Significance		
						Before Mitigation	**Mitigation applied**	**Post Mitigation**
Servicing and Construction Phase								
-Soil physical disturbance during servicing of the land and construction activities	-Erosion -Proliferation of tracks -Negative excavation methods such as blasting.	Local	Short	Medium	Definite	High	-Restrict construction activities on defined areas. -Proper management of stockpiles. Excavated material must be covered in stockpiles until reuse and backfilling. -Restrict movement to defined areas. Use existing roads until access require limited new roads.	Low

Impact	Status/nature	Extent	Duration	Intensity	Probability	Significance		
						Before Mitigation	**Mitigation applied**	**Post Mitigation**
							-Use surface anchored foundations with very limited rock breaking.	
Urbanization/ urban growth	Physical expansion of the Town	Regional	Long	Medium	Definite	Low	-All built structures should be constructed according to the local Authority bylaws to guarantee strength and longevity of structures built.	Low
Noise from land servicing activities and construction vehicles and equipment	-Nuisance and disturbance. -Noise and vibrations will also have an impact on animals such as birds and reptiles. -Birds are known to abandon their nests if subjected to continuous noise. Noise to the nearby	Local	Short	Medium	Definite	High	-All workers on site must be equipped with ear plugs to be used when the noise becomes unbearable. -Switch off machines that are not used. -All locals must be notified about the noise construction activities on time during excavations and ground preparation, servicing of the land and any constructions beyond.	Low

Impact	Status/nature	Extent	Duration	Intensity	Probability	Significance		
						Before Mitigation	**Mitigation applied**	**Post Mitigation**
	locals and to construction workers.						- All noisy construction activities must not be carried during night time, early morning and evenings, they must be done during daytime to ensure minimum disturbance of the nearby residents.	
Physical destruction of vegetation through land servicing, construction activities and the upgrading and opening of new roads	-These activities may result in the removal and destruction of few trees species on site.	Local	Long Term	High	Definite	High	-Limit activity footprint and limit movement to designated areas only. -Implement and monitor the Vegetation Management Plan if there is a significant destruction of the on-site and surrounding areas. -Protected trees must be marked (e.g. with hazard tape) and planning and pegging personnel must know that marked trees are out of bounds (to be left untouched for continued preservation).	Medium/ Low

Impact	Status/nature	Extent	Duration	Intensity	Probability	Significance		
						Before Mitigation	**Mitigation applied**	**Post Mitigation**
							-No destruction or disturbance to the protected species such as Baobab trees found within the project sites.	
Disturbance and killing of both reptiles, and small animals' activities	-reptiles and small animals in the locality are bound and likely to be affected.	Local	Temporary term	Low	probable	Medium	-The discriminate killing of animals and reptiles is prohibited.	Low
Disturbance through noise, movement and temporary occupation of an otherwise less disturbed habitat	-Negatively affect local animals and birds if any	Regional	Temporary	Medium	Highly probable	High	-Minimum disturbance of local environment by ensuring operations do not produce extreme noise that negatively affect nearby animals and birds. -Switch off machines that are not used.	Medium
Archaeological Landscape	-Visual degradation	Local	Long term	Medium	Improbable	Medium	-Demarcate, protect and avoid development near heritage sites. If removal is inevitable, a Consent Letter	Low

Impact	Status/nature	Extent	Duration	Intensity	Probability	Significance		
						Before Mitigation	**Mitigation applied**	**Post Mitigation**
							should be applied for from the Heritage Council via an Archaeologist.	
Change in topography/ landscape character	-Use of caterpillars for servicing (roads construction and paving of the site)	Local	Long term	Medium	Probable	High	-Refill all the excavated pits and trenches to ensure that there are no pits left open on site and creating a new paved landscape (use of cement interlocks)	Low
Environmental contamination by hydrocarbons release into the environment (grease, oils, fuel spills and leakages from machinery and fugitive wastes.)	There will be no storage of oils and fuel on site according to the engaged contractors, however there is risk of spillage of hydrocarbons from vehicles and machinery operations, maintenance through	local	Short Term	Medium	Probable	Medium	-Implement a maintenance programme to ensure all vehicles, machinery and equipment are and remain in proper working order -Vehicle maintenance should be Conducted in designated areas only, preferably off-site. If maintenance is to be conducted on site, these areas should be designed to contain spillages i.e. maintenance site must be	-Low

Impact	Status/nature	Extent	Duration	Intensity	Probability	Significance		
						Before Mitigation	**Mitigation applied**	**Post Mitigation**
	leakages and spillages which may result in: -Washing away of contaminated soils by rains into nearby rivers -Pollution of soil and affecting small living organisms habituating the soil -Result in possible groundwater pollution. -Possible fire risk on and around the site						bundled and paved and the use of chemicals must be controlled. -Waste oil, fuels and other chemicals from drip trays on stationery vehicles and machinery will be disposed of as hazardous waste at a licensed facility by a specialist hazardous waste handler. -Oil residue will be treated with oil absorbent material such as Drizit or bio-remediation and removed to an approved waste disposal site -Spill kits will be easily accessible and workers will be trained in the use thereof. -Staff and contractors will be trained in the handling and storage of oils, fuels,	

Impact	Status/nature	Extent	Duration	Intensity	Probability	Significance		
						Before Mitigation	**Mitigation applied**	**Post Mitigation**
							chemicals and other hazardous substances -No bins containing organic solvents such as paint and thinners shall be cleaned on site, unless containers for liquid waste disposal are provided on site.	
Land Pollution	-Negative effect on the ecosystem when waste emanating from construction activities is not managed properly.	Local	Temporary	Medium	Probable	Medium	-Ensure that all waste from construction activities must be stored and contained in designated containers and transported to Okahandja Waste Disposal Site for proper disposal. - Adequate mobile toilets must be provided at the construction camps for the use of the workers.	Low
Dust from the general servicing of the land	-Respiratory sicknesses can result	Local	Temporary	High	Probable	Medium	-Equip all the workers exposed to dust with dust masks	Low

Impact	Status/nature	Extent	Duration	Intensity	Probability	Significance		
						Before Mitigation	**Mitigation applied**	**Post Mitigation**
and construction activities	from prolonged exposure to dust -Dust can negative affect the ecosystem in general and the nearby residents -it also causes general pollution of the air						-Water spray all the areas that are sources of dust to minimize dust. - Minimize activities that can generate dust during windy days. - Limit the speed within the whole construction area to a maximum of 10 km/h to avoid excessive generation of dust - Dust will significantly be reduced if excavation and land clearing is carried out after it has rained and the soil is wet or dust suppression can be done	
Employment opportunities during the servicing and construction phases of the development	-The general servicing and all construction activities create job opportunities both to the locals, regional and national, this will have a positive	Regional	Temporary	Low	Highly probable	High	-The Project Manager should make it mandatory to contractors that all unskilled and semi-skilled work should be given to the locals.	high

Impact	Status/nature	Extent	Duration	Intensity	Probability	Significance		
						Before Mitigation	**Mitigation applied**	**Post Mitigation**
	economic impact on surrounding Communities and technical companies involved							
Operational Phase								
Pollution from solid waste and sewerage	-Failure to manage waste properly result in general pollution of the environment and this might have a detrimental impact on the people's well-being and the quality of the environment	Local	Long term	Low	Highly probable	Medium	-The Erven must be serviced and connected to the Okahandja Town Council Sewer reticulation system. -Regular collection of solid waste by the municipal (either directly or through the appointed contractor) -Provisions of domestic solid waste collection bins to the residents	Low
Population influx	-Results in social tensions and an increase infection of	-Local	-long term	Medium	Definite	High	-Educate employees on social integration and sexual behaviour.	Medium

Impact	Status/nature	Extent	Duration	Intensity	Probability	Significance		
						Before Mitigation	**Mitigation applied**	**Post Mitigation**
	sexually transmitted diseases particularly HIV and AIDS, and other STDs.							
Social integration	Potential for conflict between people of different backgrounds and cultural beliefs.	Local	Short Term	Medium	Probable	Medium	-Public relations should adequately address the integrated societal values and morals	Low
Community development	Employment creation	Regional	Long term	High	Definite	High	-Promote local businesses and employ locals	High

5.5. RISK ANALYSIS

Based on the impacts identified by this study during site visit, process analysis, desk study and stakeholder consultations conducted, an integrated environmental risk analysis was carried out using the DEFRA Guidelines for Environmental Risk Assessment and Management 'Green Leaves III' (latest edition) as well as the international Procedures for best practices. The risk analysis shows that the subdivision establishment and related project activities will have some negative impacts on the biophysical and socio-economic environment. However, based on the impacts' description and assessment, the impacts' significance is rated moderate and can therefore, be reduced by the effective implementation of the provided management and mitigation measures. It has also been noted that the project will bring about some positive impacts on the social and economic aspects. However, it is imperative to note that the project is being undertaken within an already disturbed locale. To prevent or mitigate negative impacts and to increase positive impacts, a coordinated project management strategy according to an Environmental Management Plan developed for the subdivision in Okahandja.

Public & Stakeholders' Consultation and Engagement and Feedback

The public and stakeholders (I&APs) were consulted through the used means, i.e. newspaper adverts, public notices, and face-to-face meetings held in Okahandja. The I&APs have raised few but significant comments and these have been incorporated into the EIA documents for consideration and inform the planning & design phase of the subdivision in Okahandja.

To ensure that the significant components of the environment as well as issues raised by I&APs are considered and addressed, a Report was compiled for this EIA/ESA Study. The aim was to assess the proposed subdivision establishment and related activities and provide measures to mitigate the potential impact thereto.

No further specialist studies were necessary for the Detailed ESA, as the potential risks and impacts will be managed and mitigated by the effective implementation of measures contained in the EMP. To ensure that the EMP implementation is effective and yields the desired management results/indicators, monitoring of such implementation should be done by an Environmental Control Officer and Competent Authority during project implementation (specifically construction or

upgrading stage). Therefore, the Environmental Clearance Certificate (ECC) may be issued by the Environmental Commissioner for the subdivision of Portion 185, 186, 187, 188, 189, 190 and 192 (portions of Portion 116) of the farm Osona Commonage No.65 and conditions adhered to by the Proponent and their associated contractors on both sites (selected localities).

6. LIST OF REFERENCES

1. Otjonzondjupa Regional Council. (2022) Economic and Activities.
2. Environam Consultants Trading (2019). Environmental Scoping Report for the proposed Construction of the Etaka Recreational Centre, Omusati Region. Windhoek. Ministry of Environment, Forestry and Tourism.
3. Ministry of Environment and Tourism. (1994) National Environmental Assessment Policy.
4. Ministry of Environment and Tourism. (2002) National Environmental Management Bill.
5. Namibia Statistics Agency (NSA). 2014. Omusati Regional Profile: 2011 Population and National Housing Census. Windhoek. Namibia Statistics Agency.
6. Ulrich, A. (Ed.), Reuter, S. (Ed.), Gutterer, B. (Ed.), Sasse, L., Panzerbieter, T. and Reckerzvºgel, T. (2009). Decentralised Wastewater Treatment Systems (DEWATS) and Sanitation in Developing Countries. A Practical Guide. WEDC, Loughborough University, Leicestershire, UK.