

**ENVIRONMENTAL IMPACT ASSESSMENT
FOR THE SUBDIVISION OF ERF 103, 345 & 329
AND CREATION OF PUBLIC ROADS (STREET)
IN OKONGO PROPER, OHANGWENA
REGION.**

ENVIRONMENTAL SCOPING REPORT



Prepared For

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AUGUST 2021

DOCUMENT INFORMATION

Project Name	Subdivision of Erf 103, 345 & 329, and Creation of public roads (streets) in Okongo Proper, Ohangwena region.
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Report Type	Environmental scoping Report
Application No.	APP02871
Assessment Period	June to August 2021

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LIST OF ACRONYMS

CEB:	Cuvelai-Etosha Basin
DEAF:	Directorate of Environmental Affairs and Forestry
EAP:	Environmental Assessment Policy
EIA:	Environmental Impact Assessments
EMA:	Environmental Management Act
EMP:	Environmental Management Plan
I&APs:	Interested and Affected Parties
MAWLR	Ministry of Agriculture, Water, and land Reform
MEFT:	Ministry of Environment, Forestry and Tourism
MGCW:	Ministry of Gender and Child Welfare
MURD:	Ministry of Urban and Rural Development
NORED	Northern Regional Electricity Distributor
NSA:	Namibia Statistic Agency
PPE:	Personal Protective Equipment
URPB:	Urban and Regional Planning Board

EXECUTIVE SUMMARY

The Okongo village Council has appointed Plantek Town and Regional Planner cc to subdivide Erf 103, Erf 345 and Erf 329 located in Okongo proper into portions and remainders as streets. The proposed subdivisions will result in creation of public roads (streets) to provide access to the created erven. Town Planning procedures will be applied for these subdivisions and approval will be obtained from the newly established planning board, Urban and Regional Planning Board (URPB).

In terms of the Environmental Management Act (EMA) No. 7 of 2007 (Schedule 5.1) and its regulations (GN No. 30 of 2012), the construction of a public road or a road which caters for more than one lane of traffic in both directions cannot take place without an ECC being obtained.

Green Gain Consultants cc was appointed to conduct the required Environmental Impacts Assessment (EIA) study and apply for the ECC for the proposed activities. This study was carried out in line with the requirements of the Environment and Management Act (Act No. 07 of 2007) and its Regulations (GN No. 30 of February 2012). Since the proposed project is of a small scale with limited impacts only a scoping process was employed. A multidisciplinary approach was used which include collection of baseline information both biophysical environment and socio-economic as well as consultation with potential Interested and Affected Parties (I&APs) and relevant stakeholders.

This Scoping Report presents an assessment of potential environmental and socio-economic impacts. Also attached is an Environmental Management Plan (EMP) which detail a list of mitigation measures to avoid and minimize potential negative impacts and optimize the potential positive impacts. It also outlines roles and responsibilities of the proponent and other different role players. The EMP, upon approval by the Ministry of Environment and Tourism (MEFT) will be a legally binding document to which the proponent will be needed to adhere to. Thus, a copy should always be given to any contractor or sub-contractor to be involved in the construction or maintenance of the proposed road.

1. INTRODUCTION AND BACKGROUND

1.1 BACKGROUND

The Okongo village Council has appointed Plantek Town and Regional Planner cc to subdivide Erf 103, Erf 345 and Erf 329 located in Okongo proper into portions and remainders as streets. Erf 103 and Erf 345 are located west side of the town and are to be used mainly for residential purposes, while Erf 329 is in the towns CBD and will be used for business purposes. The proposed subdivisions will result in creation of public roads (streets) to provide access to the created erven.

In terms of the Schedule 5.1 of the EMA 7 of 2007 and its regulations (GN No. 30 of 2012), the construction of a public road or a road which caters for more than one lane of traffic in both directions cannot take place without an Environmental Clearance Certificate being obtained, hence this study.

1.2 SCOPE OF THE STUDY

The environmental scoping study was conducted in line with the Namibia's Environmental Impact Assessment Regulations (GN No. 30 of 2012). It indicates a description of the affected environment and the way the proposed activities may affect the environment.

A multidisciplinary approach was used to collect baseline information. Information pertaining to the receiving environment and its social surroundings has been sourced through site investigations, Village Council documents and the use of Geographic Information Systems (GIS) mapping. The study also benefited a great deal from Interested and Affected Parties contributions.

1.3 PURPOSE OF THE STUDY

The aims of this Scoping process are.

- Evaluate the suitability of the proposed activities against the biophysical and socio-economic of the area.
- Propose the appropriate mitigation measures to avoid, mitigate or lessen the negative impacts.
- Consult all I&AP’s and relevant stakeholders.
- Above all, comply with the EMA, No. 07 of 2007.

1.4 Environmental Assessment Practitioner (EAP)

Green Gain Consultants cc is a Namibian based professional environmental and natural resources consulting firm established and driven through belief, passion, and dedication to sustainable development. Established in 2012, Green Gain has grown into a substantial team of environmental practitioner in Namibia providing innovative and cost-effective solutions to environmental challenges and help our clients meet regulatory and stakeholder expectations for environmental performances. The table below presents detailed information about Green Gain Consultants cc.

Table 1: Details of the EAP

Environmental Assessment Practitioner (EAP): Green Gain Consultants cc	
Physical address	Cnr. Joe Davis and Paul van Harte, Narraville, Walvis Bay
Postal address	P.O. Box 5303, Walvis Bay
Contact numbers	0813380114 or 0811422927
Email address	info@greengain.com.na
Expertise	<p>Name: Mr. J.K. Amushila</p> <p>Qualifications: M. Sc. Environmental Management, B. Honors Agriculture, B. Degree Agriculture, National Diploma in Agriculture.</p> <p>Experience: He is a registered EAPAN member (No.165) He has worked on several EIA and SEA projects. Through his consulting work he gained experience of not only EIA project management, but also environmental specialist experience as well as public consultations.</p>

2. APPROACH TO THE STUDY

Given the nature of the proposed activities, a combined scoping assessment and EMP approach was followed, this includes the following methods.

- **Site visits to collect primary data.**
- **Legal and policy review**
- **Gleaning over existing information pertaining to similar developments and issues**
- **Discussions, meetings, and site visits with the Authority and in this case the proponent**
- **Incorporate opinions and concerns raised by interested and affected parties.**
- **Make professional judgment and recommendations.**

2.1 Baseline study

a). Site Visits:

Sites visit was conducted to collect biophysical data such as.

- Flora and Fauna of the area
- Roads and traffic information
- Land use and adjacent areas
- Hydrological features
- Soil and Geology
- Topographic features, etc.

b). Review of Policy and Relevant Documents/Literatures

The following Literatures were reviewed.

- **Okongo Town Planning Scheme**
- **Local Authorities Act, (Act 23 of 1992)**

2.2 Public participation process

The Environmental Assessment Regulations specifies that a Public Participation Process must be conducted as an integral part of the EIA study. This was adhered to, as potential I& AP and relevant stakeholders were invited to register and forward concerns / comments to the EAP to ensure an equitable and effective participation.

2.2.1 Notification of IAPs and Stakeholders

Potential interested and affected parties (I&APs) were notified through newspaper advertisements and public notices which provided brief information about the proposed project and the EIA process. Public notices were advertised twice in two local newspapers New Era 28 May and 04 of June 2021 and the Confidante newspaper for 27 May and 03 of June 2021. Some public notices were also displayed at the Council offices and other public notice boards within Okongo. Residents were also invited through the local radio station.



Figure 1: Public notices

2.2.2 Public meeting

A public meeting was held on the 07th of June 2021 at the Ministry of Gender and Social Welfare (MGSW) Hall 16:30. During the meeting, the EAP made a presentation on the intended development and the EIA study being undertaken. He also presented the locality map of the proposed development site. Attendees were requested to ask questions and give their inputs on the proposed development. These inputs were compiled and will be incorporated in the Scoping report.



Figure 2:Public meeting

3. DESCRIPTION OF THE PROPOSED ACTIVITIES

3.1 Locality

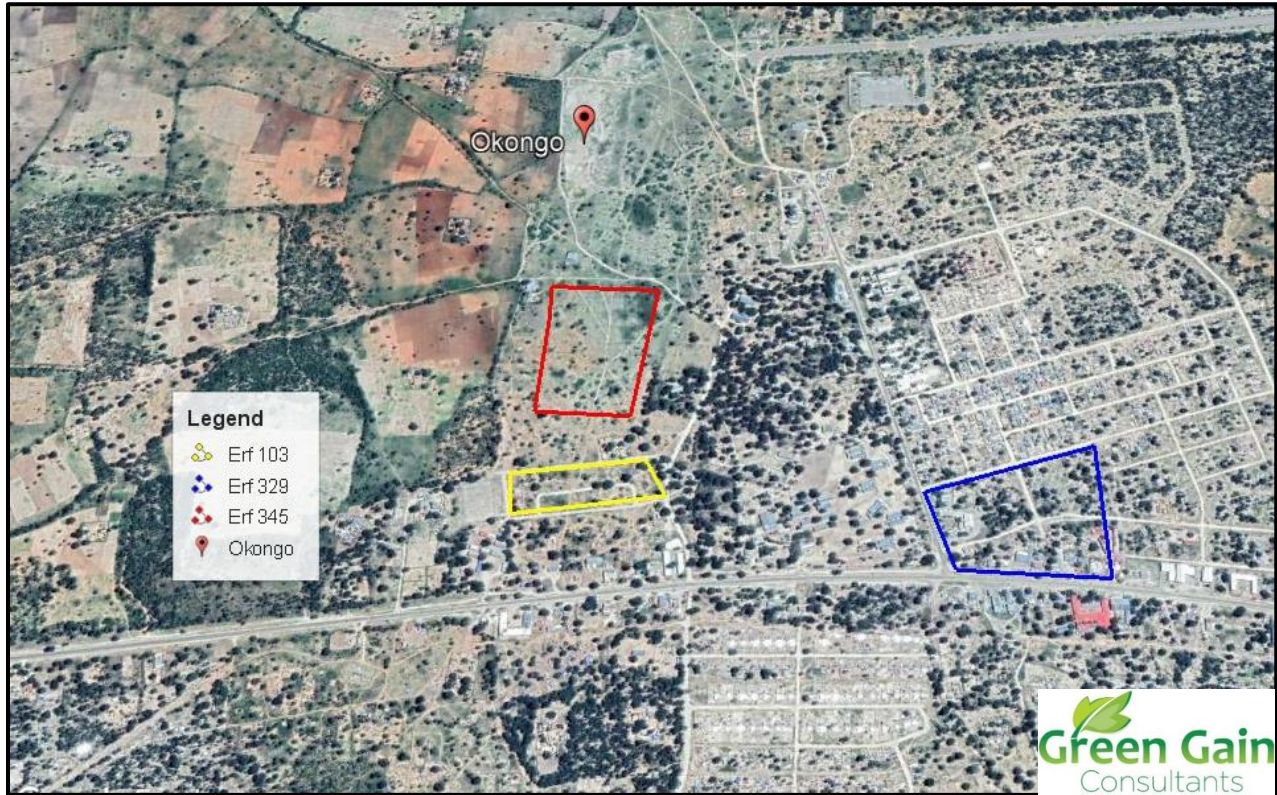


Figure 3: Locality map

All sites are located within the existing township extension of Okongo proper. Erf 103 is located west of the town's CBD in Okongo proper and can be found on the following geographical coordinates -17.573889" S, 17.213889" E.

The Erf is located west of the town's CBD in Okongo proper and can be found on the following geographical coordinates -17.577222" S; 17.213611" E.

Erf 329 is in the Okongo Proper in the town's CBD and is located adjacent to the B10 main road. It can be located on the following coordinates -17.578181" S; 17.223158" E.

3.2 Site Descriptions and proposed subdivisions

a) Erf 103

As it can be seen in the picture above, portion of the site is occupied with some informal residential properties while the larger part remains vacant. The site has a flat topography with no major drainage lines. The vegetation of the site is consisting of acacia thorns and some large trees of the Okongo Woodland.



Figure 4: Overview of Erf 103

Proposed subdivision

Erf 103 measures 29 008 m² in extent and will be subdivided into 44 portions, which include 38 single residential, 2 General residential, 2 Institutional and 2 Public Open Spaces and remainder as a street. The street to be created will cover an area of approximately 3241 m² in extent and 12 m wide.

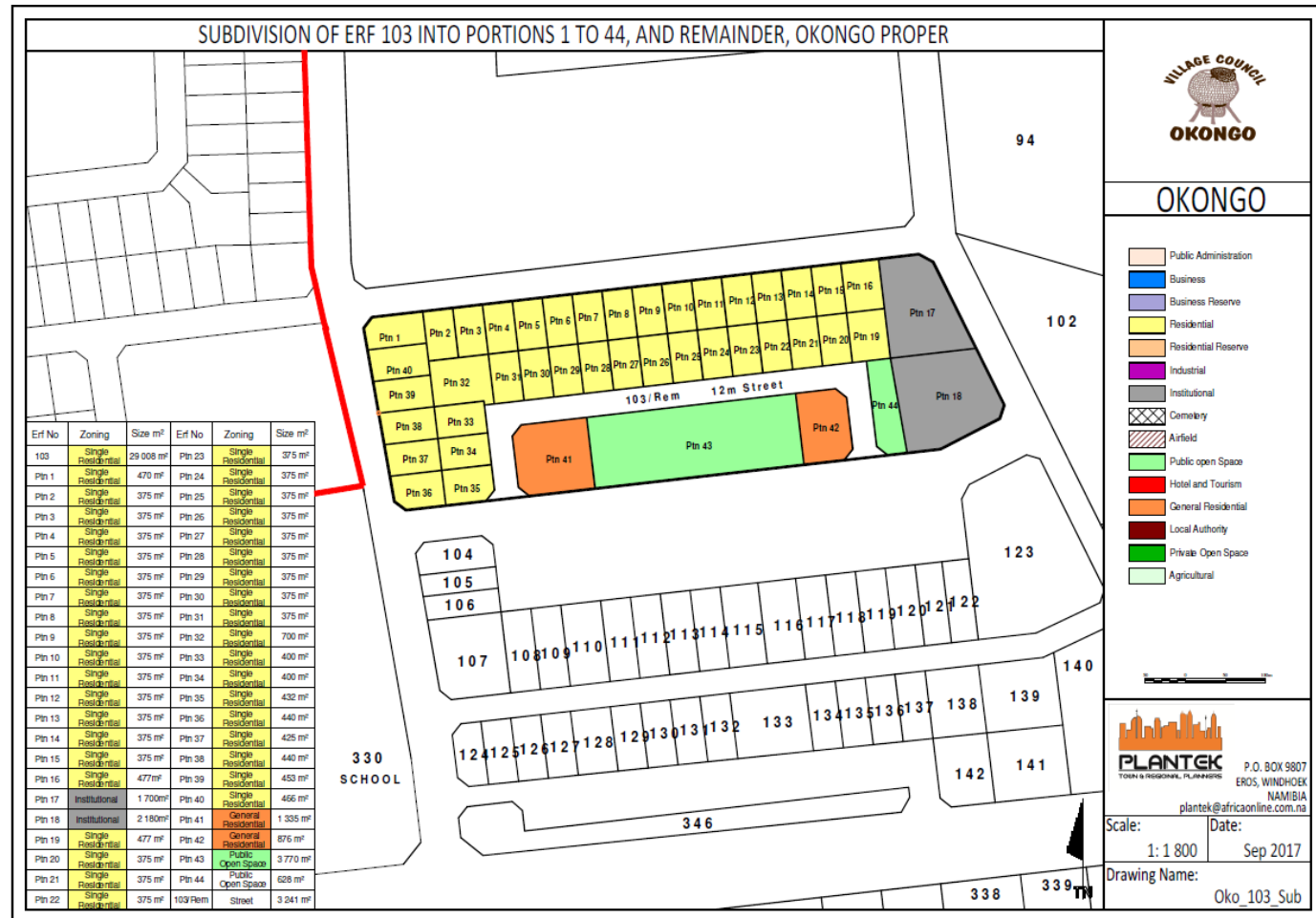


Figure 5: Proposed layout

b). Erf 345

The site has a flat elevation and no major drainage lines. It is occupied by several properties consisting of businesses and households.



Figure 6: Erf 345 overview

Proposed subdivision

Erf 345 measures 86884 m² and will be subdivided into 140 portions of which 138 are Single residential, 1 is Business and 1 is Public Open Space” and remainder as a street. The internal street network will cover an area of approximately 17443 m² in extent and has a width of 12 meter.

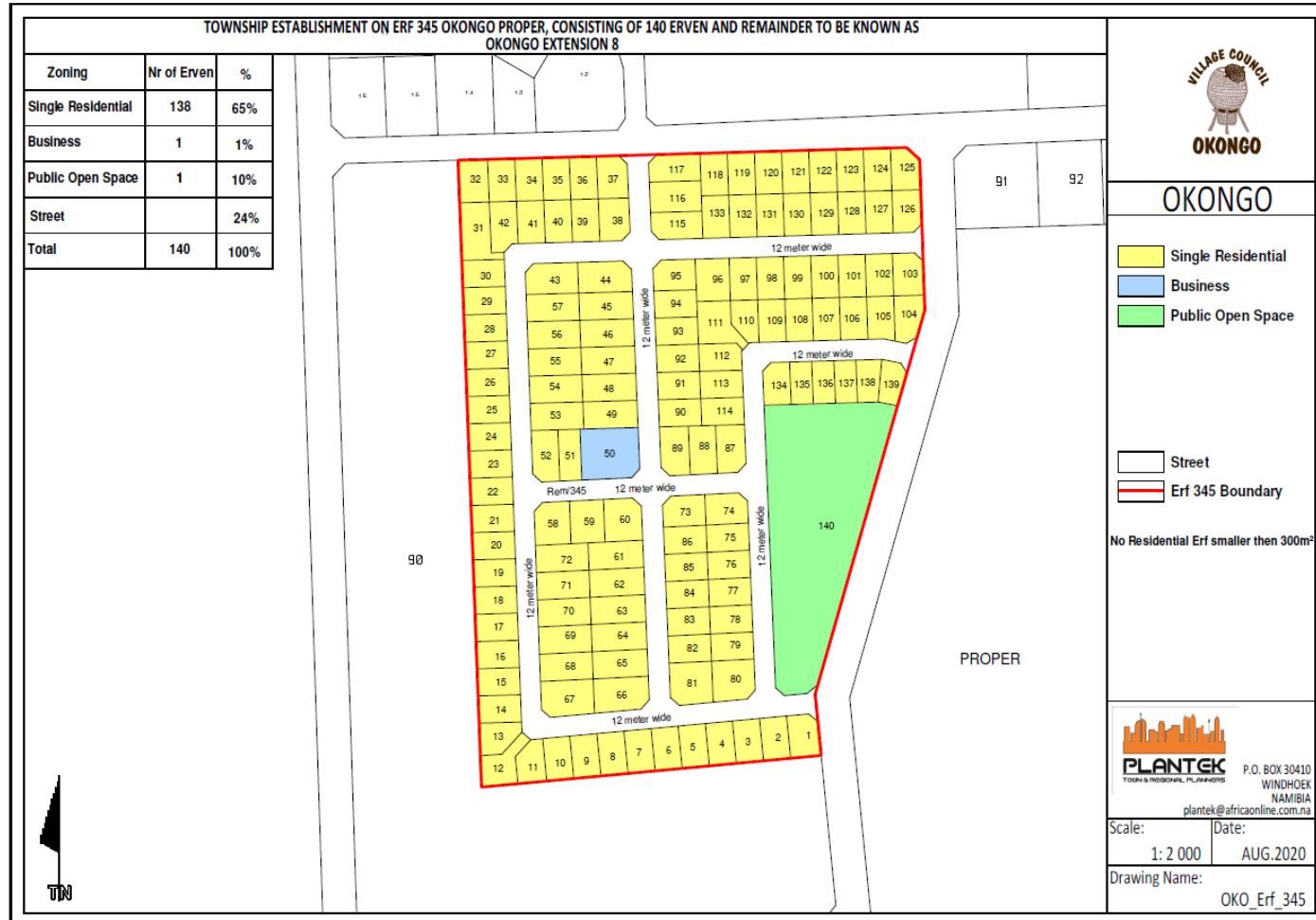


Figure 7: Proposed layout

c). Erf 329

Given its proximity, the site is partially occupied by businesses of different types. However, portion of the site remains vacant, and no formal street exists. The proposed subdivision will allow the Council to formalize the existing situation by allocating business zoning to existing businesses and to provide newly serviced land for commercial purposes.



Figure 8: Erf 329 overview

Proposed subdivision

Erf 329 measures about 80478ha and will be subdivided into 37 portions, all which are to be zoned “Businesses” and remainder as a street. The internal street network to be created will be 15 meter wide and will provide access to newly created erven.

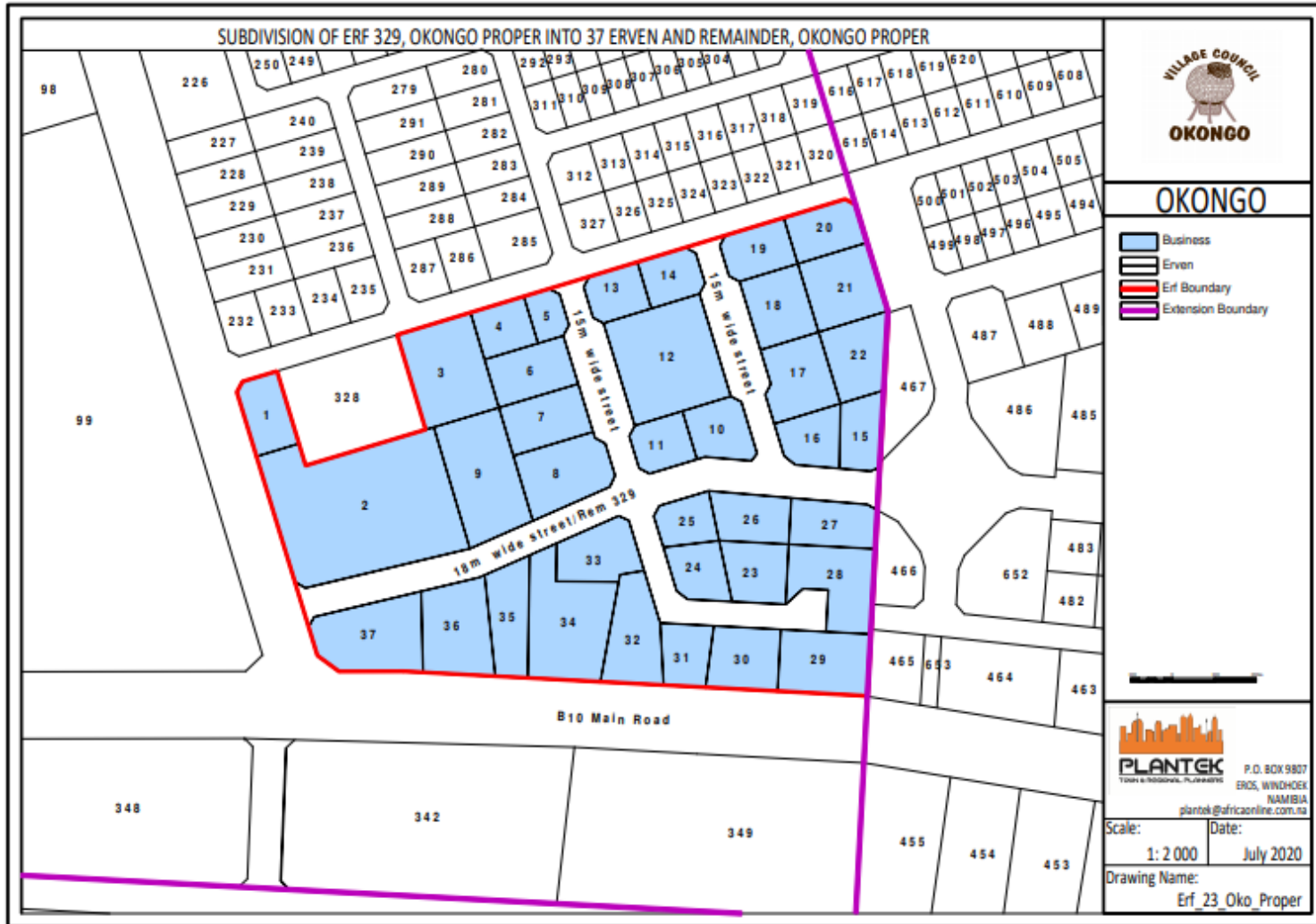


Figure 9: Proposed layout

3.4 Project alternatives

The EIA Regulations stipulates that the Scoping process should investigate alternative development options to any proposed developments/activities. The following alternatives were considered.

a). Do Nothing

The “Do-Nothing” option will imply that no action will be taken. This option will not be ideal as the street is necessary to provide access and enable traffic free flow.

b). Design and layout options

The proposed layouts as presented in Section above were all considered ideal and in accordance with the Townships and Division of Land Ordinance 11 of 1963 and the Okongo Town Planning Scheme, hence no alternative layouts are required.

3.3 Need and desirability

The “**need**” and “**desirability**” for the intended activities is based on the following aspects.

- There is a need to subdivide all portions into individual erven in line with the Townships and Division of Land Ordinance 11 of 1963
- The creation of public road networks is necessary to provide accessibility to the newly created erven.
- The proposed activities would not compromise the integrity of the town spatial development framework.
- The approval of this application would not compromise the integrity of the existing environmental management priorities for the area.

4. THE AFFECTED ENVIRONMENT

This section provides a brief description of the existing biophysical and built/social environments. It draws on information from site visits, the study team and member's experiences, background literature as well as maps and photographs. It also presents a background against which the positive and negative impacts of the proposed options can be assessed.

4.1 Socio-economic

- About Okongo

Okongo is a village town situated in the far north of Namibia in Ohangwena region, about 120 kilometres east of Eenhana on the B10 main road to Nkurenkuru. The town is the district capital of Okongo Constituency and is governed by a village council that has five seats.



Figure 10: Locality of Okongo town

According to NSA (2011), the population of Ohangwena region is estimated at about 245,100, with a population density of more than 11 persons per km² while the town of Okongo had an urban population of about 5528 inhabitants.

- Social and economic development

Okongo forms a gateway between the Ohangwena region and the Kavango west region and the main road passes through the town. The town has basic amenities such as electricity, water, and sanitation as well as local businesses such as furniture, building equipment & clothing outlets and supermarkets. There are also basic public & private services available such as pharmacy, private doctors, post office, and banking facilities. Many government Ministries and parastatals have offices in the town such as MAWLR, AMTA, NATIS, MGCW, MEFT etc.



Figure 11: Development overview

The town is served with a District Hospital with a 62-bed capacity which serves town and the surrounding villages. There are two pre-primary schools, one primary school (Okongo Primary School), a combined school (Elia Weyulu Combined School) and a secondary school (Oshela Senior Secondary School).

- Investment and opportunities



Okongo is also known for its residential neighbourhoods consisting of low-, middle- and high-income groups. Given its central location between Eenhana and Nkurenkuru and its proximity to the main road, the town is considered favourable for investment by many investors because of large volumes of vehicles and commuters passing through the

town. The town also organise annual Omalundi festival which attracts a lot of people.

4.2 Biophysical

- Climatic conditions

The prevailing climate in the area is classified as a local steppe climate, classified as hot semi-arid climate (BSh) by Köppen and Geiger (1954, 1961). The temperature condition is mainly hot for most part of the year, with an average maximum temperature ranging between 24 °C-36 °C during summer. While during winter, the temperature is mainly cold ranging between 7 °C - 21°C. October is the hottest month while June/July is normally the coldest month.

- Topography and surface drainage

Ohangwena is situated on a flat plain and extends east to west along the Angolan border. The area has a flat topography with drainage highly influenced by the Cuvelai-Etosa-Basin (CEB). Its drainages are made up of networks of shallow watercourses locally known as iishanas.

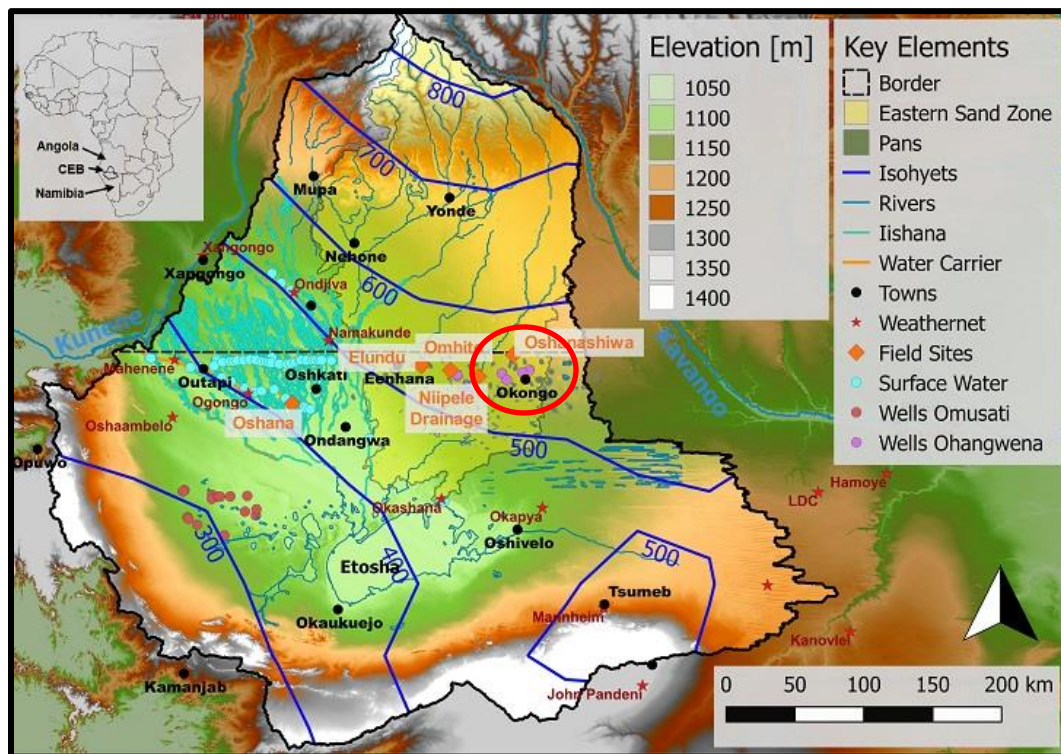


Figure 12: surface drainage of CEB

- Groundwater

Ground water is the main source of water supply in the region. Surface water in the area is found in the iishanas during rainfall season and the end of the rainfall season, water is found in natural ponds (Omadihya). Surface water that normally last between rainfalls seasons are found in manmade lakes (Marsh, A., & Seely, M. (1992).

- Flood risk

The Ohangwena region is affected seriously by floods, especially in the western part of the territory, due to the presence of many iishanas associated to the Cuvelai basin. The Eenhana area is part of the Central area of the region, hence the flood risk is considered a moderate risk zone.

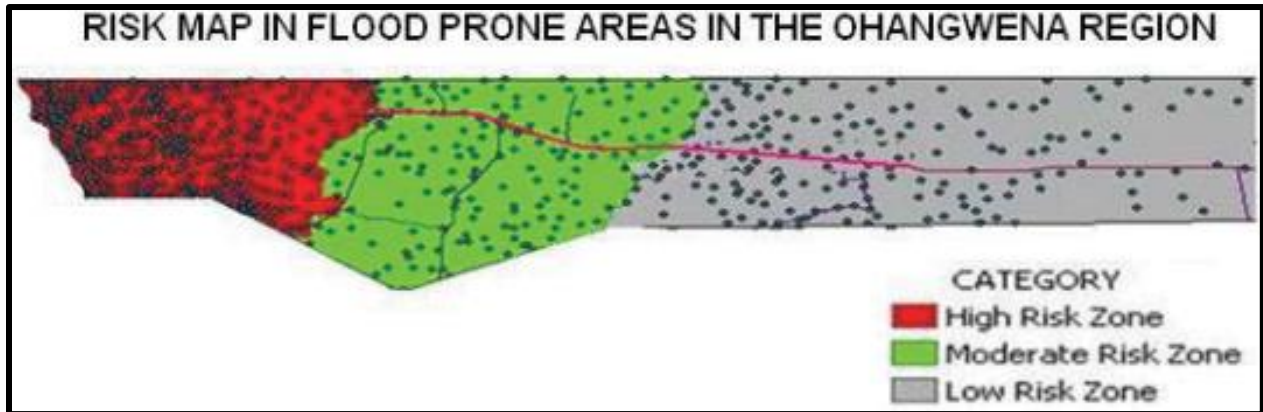


Figure 13: Flood risk map for north-east Namibia (Source: MURD)

- Soil

Namibia's northern part, commonly known as the "Cuvelai-Etoshia-Basin" is formed by sand deposit from water borne deposit millions of years ago. These deposit of sand and water borne deposits formed the Kalahari Basin. The deposits of sands, clay and calcretes makes up the Kalahari Group. Eenhana is part of an extensive sedimentary basin which is part of the much larger Kalahari Basin covering parts of Angola, Namibia, Zambia, Botswana, and South Africa.

- Flora and fauna

The vegetation of Okongo and its surrounding is almost homogenous and is part of the North-eastern Kalahari Woodland which is composed of broadleaved trees and shrubland. All proposed development sites are somehow disturbed due to their proximity to the town's CBD. The vegetation that can be found onsite is mainly characterized by large trees, shrubs, and grass species such as *Burkea Africana*, *Terminalia species*, *Combretum species* and a few *Acacia erioloba*, whereas the local occurring grass species consist mainly of sub-climax species such as *Panicum maximum*, *Digitaria sericia*, *Brachiaria*, *Eragrostis species* etc.



Figure 14: Vegetation of Erf 103, 345 and 329

5. LEGAL REQUIREMENTS

The following is a brief overview of all pertinent Acts, bills, laws, policies, and standards regarding the environment which were considered while conducting the Scoping study for the intended activity.

Table 2: Applicable National Laws

LEGISLATION	PROVISION	PROJECT IMPLICATION
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: <ul style="list-style-type: none"> - Guarding against overutilization of biological natural resources, - Limiting over-exploitation of non-renewable resources, - Ensuring ecosystem functionality, - Maintain biological diversity. 	The proposed development must be of sound environmental management objectives.
Environmental Management Act No. 07 of 2007	The purpose of this Act is to promote 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; and 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 for the interested and affected parties to voice and register their opinions and concern about the proposed project.	This has been complied with; thus, an EIA has been carried out and an ECC will be applied for prior to the creation of the proposed roads.
Water Resources Management Act 2004	The Water Resources Management Act (No 11 of 2013) stipulates conditions that ensure effluent that is produced to be of a certain standard. There should also be controls on the disposal of	The protection of ground and surface water resources should be a priority. Obligation not to pollute surface water bodies.

	sewage, the purification of effluent, measures should be taken to ensure the prevention of surface and groundwater pollution and water resources should be used in a sustainable manner.	
Pollution Control and Waste Management Bill	This Bill serves to regulate and prevent the discharge of pollutants to air and water as well as providing for general waste management. This Bill will license discharge into watercourses and emissions into the air.	All activities shall be conducted in an environmental sustainably manner.
Labour Act (No 11 of 2007)	135 (f): “the steps to be taken by the owners of premises used or intended for use as factories or places where machinery is used, or by occupiers of such premises or by users of machinery in connection with the structure of such buildings of otherwise in order to prevent or extinguish fires, and to ensure the safety in the event of fire, of persons in such building;” (Ministry of Labour and Employment Creation)	Contractors, Sub-contractor shall be guided by this Act when recruiting or handling employment related issues.
Noise Control Regulations (Labour Act)	It is essential to ensure that before any development project is approved and undertaken, an assessment or evaluation of expected noise level is done.	Noise generation during construction/development should be minimized to the satisfactory of neighboring residents and the town Council.
Town and Regional Planners Act, 1996 (Act No. 9 of 1996)	This Act establishes the Namibian Council for Town and Regional Planners, defines functions, and powers of the Council and provides for the registration of town and regional planners and the supervision over their conduct. The Minister may, on recommendation of the Council prescribe the kinds of work of a town and regional planning nature which shall be reserved for town and regional planners. The Act also defines improper conduct and defines disciplinary powers of the Council. Furthermore, the Act provides for the establishment of national, regional, and urban structure plans, and the development of zoning schemes. It also deals with a variety of related land use control issues such as	A registered Town Planner has been appointed for this project.

	the subdivision and consolidation of land and the establishment and extension or urban areas.	
Town Planning Ordinance (No. 18 of 1954)	Subdivision of land situated in any area to which an approved Town Planning Scheme applies must be consistent with that scheme (S31).	Town Planning Procedures will be registered through the URPB
Townships and Division of Land Ordinance 11 of 1963, as amended	The objective of this Ordinance is to consolidate and amend the laws relating to the establishment of townships and to provide for the regulation and control of the development and subdivision of land and for matters incidental thereto.	Subdivision of land situated in any area to which an approved Town Planning Scheme applies must be consistent with that scheme (S31).
Land Survey Act 33 of 1993	To regulate the survey of land; and to provide for matters incidental thereto.	Surveying procedures must be applied accordingly
Local Authorities Act (No. 23 of 1992)	The purpose of the Local Authorities Act is 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 is a Local Authority. The need and desirability for the proposed subdivision has been approved.
Soil Conservation Act 76 of 1969	The Soil Conservation Act stipulates that the combating and preventing of soil erosion should take place; the soil should also be conserved, protected, and improved, vegetation and water sources and resources should also be preserved and maintained. When proper mitigation measures are followed along the construction and implementation phase of the project, the natural characteristic of the property is expected to have a moderate to low impact on the environment.	This should be complied with during the construction phase as outlined in the EMP for this project.

6. ASSESSMENT OF PROJECT IMPACTS

The scoping process has identified potential project impacts during its planning and operation phase and examined each of these issues. In assessing the impact of the proposed development, four rating scales were considered. Each issue identified was evaluated in terms of the most important parameter applicable to environmental management. These include the *extent, intensity, probability, and significance* of the possible impact on the environment. The rating scales used are as follows.

Table 3: Significance assessment

CRITERIA	DESCRIPTION			
EXTENT	National (4) The whole country	Regional (3) Ohangwena region and neighbouring regions	Local (2) Within a radius of 2 km of the proposed site	Site (1) Within the proposed site
DURATION	Permanent (4) Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient	Long-term (3) The impact will continue/last for the entire operational life of the development but will be mitigated by direct human action or by natural processes thereafter.	Medium-term (2) The impact will last for the period of the construction phase, where after it will be entirely negated	Short-term (1) The impact will either disappear with mitigation or will be mitigated through natural process in a span shorter than the construction phase
INTENSITY	Very High (4) Natural, cultural, and social functions and processes are altered to extent that they permanently cease	High (3) Natural, cultural, and social functions and processes are altered to extent that they temporarily cease	Moderate (2) Affected environment is altered, but natural, cultural, and social functions and processes continue albeit in a modified way	Low (1) Impact affects the environment in such a way that natural, cultural, and social functions and processes are not affected
PROBABILITY	Definite (4) Impact will certainly occur	Highly Probable (3) Most likely that the impact will occur	Possible (2) The impact may occur	Improbable (1) Likelihood of the impact materialising is very low
SIGNIFICANCE	Is determined through a synthesis of impact characteristics. Significance is also an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. The total number of points scored for each impact indicates the level of significance of the impact.			

Table 4: Color coding meaning

Low impact	A low impact has no permanent impact of significance. Mitigation measures are feasible and are readily instituted as part of a standing design, construction, or operating procedure.
Medium impact	Mitigation is possible with additional design and construction inputs.
High impact	The design of the site may be affected. Mitigation and possible remediation are needed during the construction and/or operational phases. The effects of the impact may affect the broader environment.
Very high impact	Permanent and important impacts. The design of the site may be affected. Intensive remediation is needed during construction and/or operational phases. Any activity which results in a “very high impact” is likely to be a fatal flaw.
Status	Denotes the perceived effect of the impact on the affected area.
Positive (+)	Beneficial impact
Negative (-)	Deleterious or adverse impact.
Neutral (/)	Impact is neither beneficial nor adverse
It is important to note that the status of an impact is assigned based on the status quo – i.e., should the project not proceed. Therefore, not all negative impacts are equally significant.	

7. ANTICIPATED PROJECT IMPACTS AND MITIGATION MEASURES

Table 5: Potential negative impacts associated with the proposed activities: Construction Phase.

ASPECT	POTENTIAL IMPACTS	RATING (If it does occur)				SIGNIFICANCE OF IMPACT	MITIGATION/ENHANCEMENT MEASURES
		Extent	Duration	Intensity	Probability		
1. BIOPHYSICAL							
Impact on Vegetation	<ul style="list-style-type: none"> Vegetation clearance during construction 	1	1	1	1	Low	<ul style="list-style-type: none"> Vegetation clearance of existing vegetation is inevitable. However, only vegetation directly affected by the development will be cleared.
Soil contamination	<ul style="list-style-type: none"> Contamination of soil with chemicals (sodium chloride, Calcium magnesium acetate, etc.) which found in deicer agents 	1	1	2	2	Moderate	<ul style="list-style-type: none"> Any spillage of oil, lubricant etc. must be cleaned up. Environmentally friendly and recommended products must be used for road marking.

Impact on drainage Impact on the	<ul style="list-style-type: none"> Construction works may divert the natural stormwater drainage of the site. 	1	1	1	1	Low	<ul style="list-style-type: none"> There are no major drainage lines affected. However, provision for culverts must be made to enable surface runoff.
Visual impacts	<ul style="list-style-type: none"> Uncompleted construction works may decrease the visual attraction of the area 	1	1	1	1	Low	<ul style="list-style-type: none"> All temporary structures must be removed after construction and all trenches must be covered. Construction waste should be collected and disposed of weekly.
Air quality	<ul style="list-style-type: none"> Dust generation from construction work may decrease air quality. 	1	1	2	2	Moderate	<ul style="list-style-type: none"> Control dust generation during construction period.
	<ul style="list-style-type: none"> Fumes from traffic (road users) and emission of leads from moving vehicles may pollute the air. 	1	1	1	1	Low	<ul style="list-style-type: none"> Limited impact

Water usage	<ul style="list-style-type: none"> The construction of the proposed road will make use of water in its construction phase. 	1	1	1	1	Low	<ul style="list-style-type: none"> Given the size of the proposed road area, the impact on water resource availability is limited and can be accommodate within the available water resources.
2. SOCIO-ECONOMIC							
Dislocation of people	<ul style="list-style-type: none"> Since the proposed development sites are partially occupied, the intended development might result in dislocation of the affected people. 	1	1	1	1		<ul style="list-style-type: none"> Affected people will be accommodated into newly created erven.
Traffic impacts	<ul style="list-style-type: none"> Construction works will increase traffic congestion in the nearby street. 	1	1	2	2	Moderate	<ul style="list-style-type: none"> Erect construction signals at the construction site. There must be at least two flag bearers at the construction site to direct traffic flow.

Nuisance in the form of noise and vibration	<ul style="list-style-type: none"> • Generation of excessive noise during construction and operation may be nuisance to the residents. 	1	1	1	1	Low	<ul style="list-style-type: none"> • Construction should be limited to daytime. • Provide maintenance to construction plant and machineries
Waste generation	<ul style="list-style-type: none"> • The construction, operation may result in a myriad of waste products in the environment. 	1	1	2	2	Moderate	<ul style="list-style-type: none"> • All waste generated during construction should be contained and disposed properly.
Temporary camps	<ul style="list-style-type: none"> • Construction camps onsite can result in secondary environmental impacts i.e., pollution, noise etc. 	1	1	1	2	Moderate	<ul style="list-style-type: none"> • Construction camps should be established at the site approved by the Local Authority. • Provide ablution facilities at the construction site.
Health, Safety and Security	<ul style="list-style-type: none"> • The safety, security, and health of the labour force, employees and general, public may be compromised during construction. 	1	1	2	2	Moderate	<ul style="list-style-type: none"> • All employees should be provided with personal protective equipment (PPE).

							<ul style="list-style-type: none"> The construction site must be barricaded and all trenches must be covered to prevent/sealed.
Local employment (positive)	<ul style="list-style-type: none"> The construction phase will generate temporary local employment opportunities. 	1	1	2	2	Moderate	<ul style="list-style-type: none"> Preferences should be given to local people.

ASPECT	POTENTIAL IMPACTS	RATING (If it does occur)				SIGNIFICANCE OF IMPACT	MITIGATION/ENHANCEMENT MEASURES
		Extent	Duration	Intensity	Probability		
Business opportunities (positive)	<ul style="list-style-type: none"> Construction works will also present business opportunity for the local businesses i.e., supplies, construction etc. 	1	1	2	2	Low	<ul style="list-style-type: none"> Construction materials should be sourced locally as far as possible.

Table 6 Potential impacts during Operation phase

ASPECT	POTENTIAL IMPACTS	RATING (If it does occur)				SIGNIFICANCE OF IMPACT	MITIGATION/ENHANCEMENT MEASURES
		Extent	Duration	Intensity	Probability		
1.BIOPHYSICAL							
Impact biodiversity (positive)	<ul style="list-style-type: none"> Roadside plant will enhance biodiversity. 	1	1	1	1	Low	<ul style="list-style-type: none"> Provide more plants along the road to make up for vegetation lost.
Impact on small animals (positive)	<ul style="list-style-type: none"> New road may provide habitat for small animals 	1	1	1	1	Low	<ul style="list-style-type: none"> Culverts and other under road structures may serve as habitat
Visual impacts (positive)	<ul style="list-style-type: none"> The road will improve aesthetic view. 	1	1	1	1	Low	<ul style="list-style-type: none"> The road should be tarred to improve view.
Impact on the soil	<ul style="list-style-type: none"> Contamination of soil with chemicals (sodium chloride, Calcium magnesium acetate, etc.) which found in deicer agents. 	1	1	1	1	Low	<ul style="list-style-type: none"> Use environmentally friendly materials and chemicals for road markings etc.
Water usage and contamination	<ul style="list-style-type: none"> Stormwater and surface contamination during road maintenance. 	1	1	2	2	Moderate	<ul style="list-style-type: none"> Only use environmentally friendly materials and detergents.
Erosion and surface runoff	<ul style="list-style-type: none"> Due to increase hard surface, the surface will become impermeable, thus 	1	1	1	2	Moderate	<ul style="list-style-type: none"> Make provision for stormwater drainage.

	increasing the surface runoff.						
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ASPECT	POTENTIAL IMPACTS	RATING (If it does occur)				SIGNIFICANCE OF IMPACT	MITIGATION/ENHANCEMENT MEASURES
		Extent	Duration	Intensity	Probability		
2. SOCIO-ECONOMICS continue.							
Traffic impacts (positive)	<ul style="list-style-type: none"> New road will allow traffic free flow and accessibility. 	1	2	1	2	Moderate	<ul style="list-style-type: none"> Install Traffic signs to regulate traffic flow.
Development (positive)	<ul style="list-style-type: none"> The proposed road structure will improve the quality of life to the residents. 	1	2	2	1	Moderate	<ul style="list-style-type: none"> Road must be of required engineering standard.

8. CONCLUSION AND RECOMMENDATIONS

The objective of the Scoping Phase was to define the range of the impact assessment and determine the need to conduct any specialist study. It is believed that these objectives have been achieved and adequately documented in the Scoping Report. All possible environment aspects have been adequately assessed and necessary control measures have been formulated to meet statutory requirements thus implementing this project will not have any appreciable negative impacts.

8.1 Assumptions and Conclusions:

- All proposed road networks will not compromise the environmental integrity of the surrounding environment.
- There are no objections or critical issues to the proposed activities.
- The findings of the Scoping Assessment are considered sufficient, and no additional specialist study is required.

It is therefore recommended that the Environmental Commissioner do consider the findings and recommendations of this Scoping process with mitigation measures as outlined herein and in the Environmental Management Plan and subsequently, consider issuing an Environmental Clearance Certificate to authorize for the **“Subdivision of Erf 103, Erf 345 and Erf 329 and Creation of a public roads (Streets), Okongo proper, Ohangwena region.**

9. REFERENCES

- GRN. (2014). 2011 Housing and Population Census Regional Profile, Ohangwena Region. Windhoek: Namibia Statistics Agency.
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- Mendelsohn, J., Jarvis, A., Roberts, C., & Robertson, T. 2002. Atlas of Namibia. New Africa Books (Pty) Ltd: Cape Town.
- Republic of Namibia: Ministry of Environment and Tourism, (2012). Environmental Impact Assessment Regulations, GG 4878, GN 29, Windhoek: MET.
- Ruppel O.C. & Ruppel-Schlichting K. 2013, Environmental Law and Policy in Namibia. OrumbondePress.na & Welwitschia Verlag Dr. A. Eckl, Essen, Windhoek, Namibia.

10. APPENDICES

- APPENDIX A: List of I&APs
- APPENDIX B: Proof of Consultations
- APPENDIX C: EMP

Appendix A: List of IAPs consulted

ORGANIZATION	CONTACT PERSON	CONTACT DETAILS
Okongo Village Council	Mr. W. Haulofu	065288510
	Ms. Ana Amwele	065288510
	Ms. Selma Nuugulu	065288510 snuugulu@okongovc.com.na
	Ms. Frienda David	065288510
	Mr. Victor Nathile	065288510
	Ms. Maria Kaluvi	065288510
Town Planner	Plantek Town and Regional Planners Mr. Jan Britz	0813509810 plantek@africaonline.com.na
Ministry of Gender	Ms. Ndapewa Nghindinwa	0814952017 ndapewanghindinwa@gmail.com
Ministry of Environment, Forestry and Tourism	DoF -Okongo Mr. a. Aushona	0817590101
Roads Authority	Mr. Ashipala	0818797023
NORED	Mr. Shinana	0812525711
Residents	Matias Immanuel	mattynaukushu@gmail.com

Also see the attendance Register as part of the Proof of Consultation