

**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED  
SUBDIVISION OF ERF 3076, EXTENSION 13 AND CREATION OF A  
PUBLIC ROAD (STREET), ONDANGWA, OSHANA REGION**



**ENVIRONMENTAL SCOPING REPORT**

**PREPARED FOR:**

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## DOCUMENT DESCRIPTION

<b>Project Name</b>	<b>ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED SUBDIVISION OF ERF 3076, EXTENSION 13 AND CREATION OF A PUBLIC ROAD (STREET), ONDANGWA</b>
<b>Location</b>	Extension 13, Ondangwa
<b>Proponent</b>	Combo Property development cc  P. O. Box 2879  Oshakati
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## **LIST OF ACRONYMS**

EAP:	Environmental Assessment Practitioner
EAPAN:	Environmental Assessment Professionals Association of Namibia
ECC:	Environmental Clearance Certificate
EIA:	Environmental Impact Assessments
EMA:	Environmental Management Act
EMP:	Environmental Management Plan
I&APs:	Interested and Affected Parties
GN:	Government Notice
LED:	Local Economic Development
MAWF:	Ministry of Agriculture, Water and Forestry
MET:	Ministry of Environment and Tourism
NamWater:	Namibia Water Corporation
NORED:	Northern Electricity Distributor
OTC:	Ondangwa Town Council
NSA:	Namibia Statistic Agency
POS:	Public Open Space
SDF:	Spatial Development Framework

# 1. EXECUTIVE SUMMARY

## 1.1 Background

Combo Property Development cc, herein after referred to as the proponent are the owners and developer for the Ondangwa Extension 13. Erf 3076 in Extension 13, herein after referred to as the development site measures approximately 1640m<sup>2</sup>. in extent and is currently zoned General residential as per the Ondangwa Town Planning Scheme.

The proponent had reached an agreement with the Ondangwa Town Council (OTC) to increase the development potential of the property by building 11 houses. To realize this proposal, certain statutory town planning procedures should be applied for the rezoning of Erf 3076 from General Residential to Single residential, Consolidation of Erf 3076 with adjacent Erf 3094, 3095 & 3096 into consolidated Erf X and subsequent subdivision of the consolidated Erf X into 11 portions and remainder as street. The proposed subdivision layout has already been approved by the OTC but final approval by the Urban and Regional Planning Board (URPB) is required.

In terms of the Environmental Management Act of 2007 (Schedule 10.2) and its regulations (GN No. 30 of 2012), the creation of a public road (street) cannot be undertaken without an Environmental Impact Assessment (EIA) being conducted and Environmental Clearance Certificate (ECC) is obtained.

Green Gain Environmental Consultants cc has been appointed as an independent Environmental Assessment Practitioner (EAP) to conduct an EIA and apply for the ECC from the Ministry of Environment, Forestry, and Tourism (MEFT) for the proposed Subdivision of Erf 3076 and creation of a public road.

The study conducted conformed to the requirements of the Environmental Management Act No.07 of 2007 and its Regulations (GN No. 30 of February 2012). The study was conducted in a multidisciplinary approach where potential Interested and Affected Parties (I&APs) and relevant stakeholders were invited to participate and give their inputs.

## **1.2 Scope of the Study**

The environmental scoping study was conducted in line with the Namibia's Environmental Management Act (EMA, No.07 of 2007) and the Environmental Impact Assessment Regulations (GN No. 30 of 2012). It indicates a description of the affected environment and the manner in which the proposed activities may affect the environment. Information pertaining to the receiving environment and its social surroundings has been sourced through baseline site investigations, review of relevant legislation, use of Geographic Information Systems (GIS) mapping and Google Earth maps.

## **1.3 Terms of Reference**

The Terms of Reference for the proposed project are based on the requirements set out by the Environmental Management Act (No. 7 of 2007) and its EIA Regulations (GN No. 30 of 2012). The process covered the following steps, which are reported in this scoping report as follows:

- Provide a detailed description of the proposed activity.
- Identify all policies, legislation and guidelines that are relevant to the proposed development.
- Evaluate the suitability of the proposed activities against the biophysical and socio-economic of the area.
- Identify the possible environmental and socio-economic impacts of the proposed project activities and identify any gaps in information that require specialist studies.
- Notify and consult all I&AP's and relevant stakeholders regarding the proposed development and provide them with reasonable opportunity to participate during the process.
- Propose the appropriate mitigation measures to avoid, mitigate or lessen the negative impacts; and
- Above all, comply with the EMA requirements.

This scoping report will be submitted to the Environmental Commissioner, as required by Section 27(3) of the Environment Management Act (No. 7 of 2007).



## 2. PROJECT DESCRIPTION

### 2.1 Site Locality

The proposed development site (Erf 3076) is located in Ondangwa Extension 13 on the following coordinates -17.903326° S and 15.981258° E.

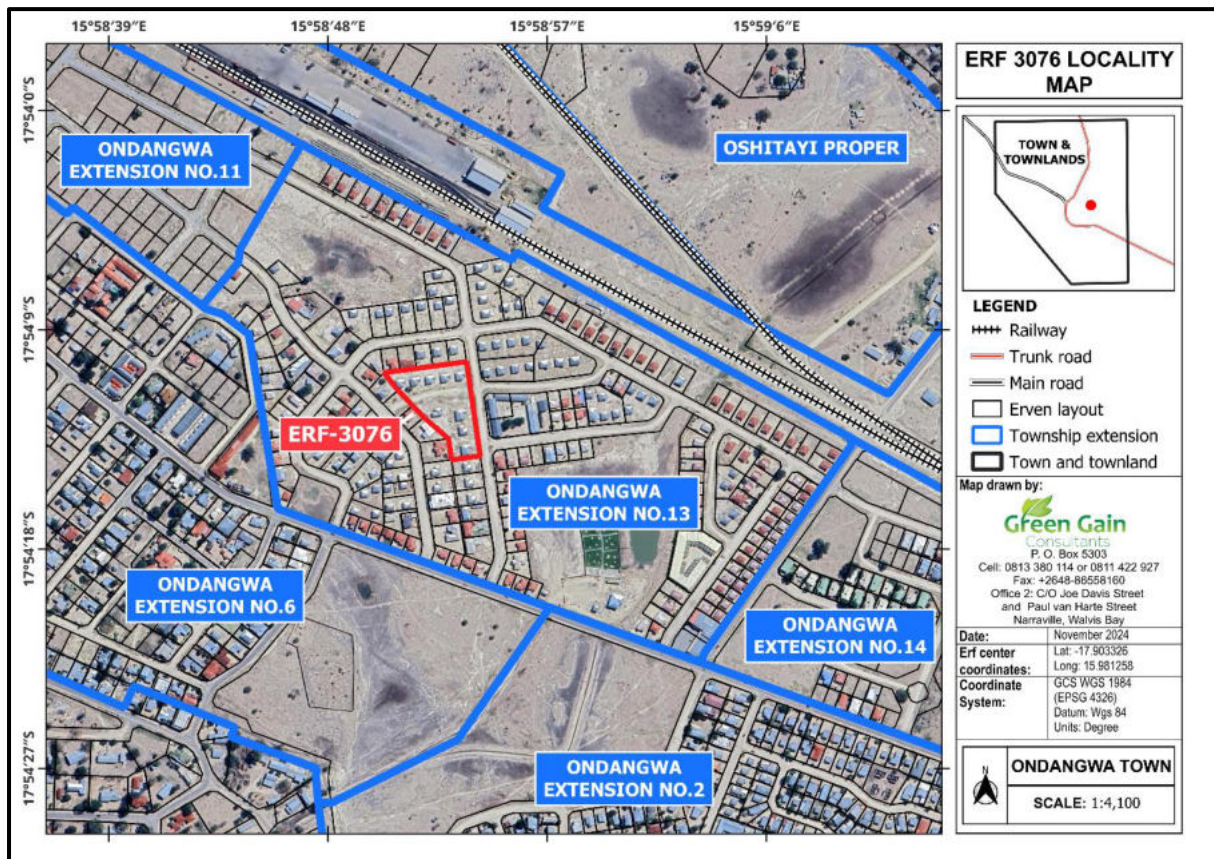


Figure 1: Locality of the site



## 2.2 Site context

### a). Site overview

The proposed development site is located within a build-up area of Extension 13 and is surrounded by single residential properties. The site is occupied by 11 unoccupied houses and crossed by an unnamed gravel road serving as a street (Figure 2 below).



Figure 2: Site overview



Figure 3: Close view of the site

## 2.3 Property zoning

The property (Erf 3076) is currently zoned General residential and measures approximately 1640m<sup>2</sup> in extent.

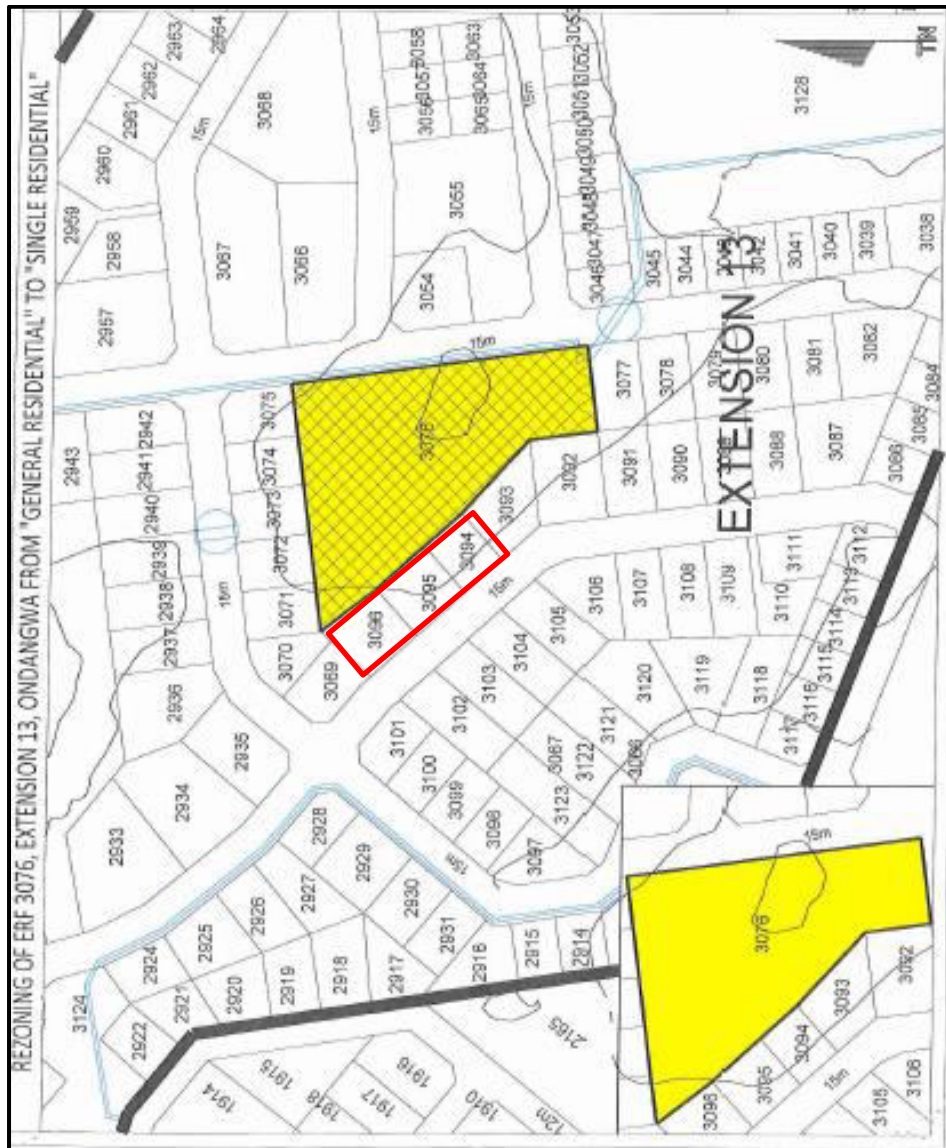


Figure 4: Proposed subdivision and rezoning at Erf



## 2.4 Proposed town planning procedures

The statutory town planning procedures to be applied is as follows:

- Rezoning of Erf 3076 from Genera residential to single residential
- Consolidation of Erf 3076 with adjacent 3094, 3095 & 3096 into Consolidated Erf X
- Subdivision of Consolidated Erf X into 11 individual erven (Erf A, B, C, D, E, F, G, H, I, J, K) and remainder as street as depicted in Figure 5.

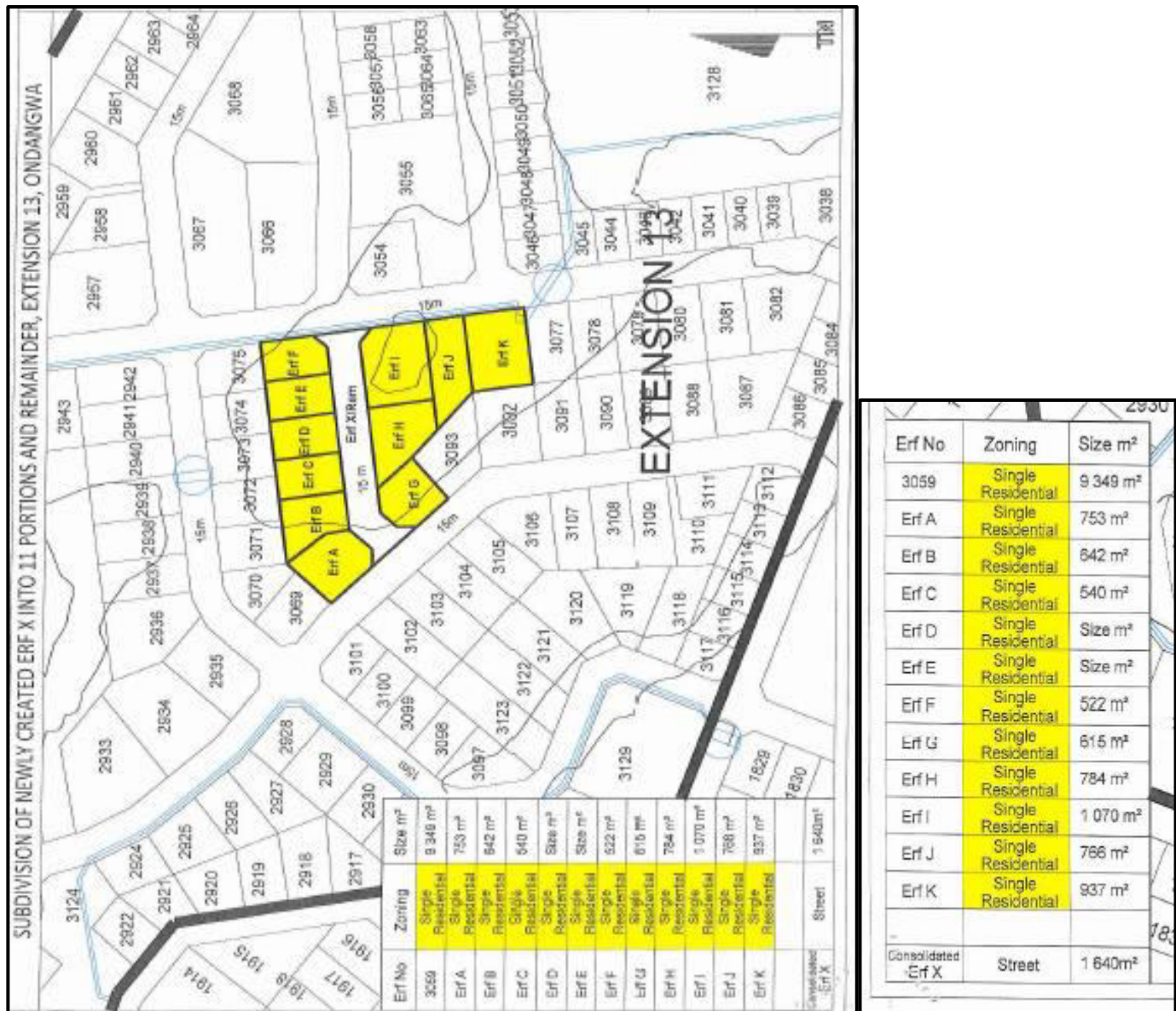


Figure 5: Typical conventional houses (for example ONLY)

## 2.5 Project alternatives

The EIA Regulations stipulate that the Scoping process should investigate alternative development options to any proposed developments. The following alternatives were analyzed.

- *Land use alternatives:* The property is currently zoned for General Residential. Land use activities allowed on General residential zoning are such as flats, townhouses and guesthouses. Considering the dire need for serviced land in the country and Ondangwa town in particular, the proposal by the proponent to increase the development potential of the site by subdividing the site and developing 11 houses will be considered more ideal.
- *The No-Go option* will mean leaving the site as it is (No subdivision and rezoning will take place). For these obvious reasons, the No-Go option is not a preferred alternative, since the area to be rezoned is an open pit which was used for gravel mining, and it was not rehabilitated.

## 2.6 Need and Desirability

The need and desirability of the proposed development is based on the following aspects.

The “**need**” for the project:

- The provision of low-income housing has become a national concern and Ondangwa is not an exemption. The proposed rezoning and subdivision of the property is a good idea as it will create more erven while the street creation is necessary to provide access to the created erven
- The proposed town planning procedures are required to formalize the existing situation which was already approved by the Local Authority as per the designated power in terms of the Local Authorities Act, 23 of 1992.

The “**desirability**” of the project:

- The proposed development site is in the built-up area where Municipal services already exist.
- The location factors favor this land use (associated with the activity applied for) as it is located within a developing-orientated area with much potential for growth.
- The proposed street will be linked to the existing street network, and it will be of the required width and standard

### **3. APPROACH TO THE ENVIRONMENTAL SCOPING STUDY**

Given the nature of the proposed activities, the scoping assessment approach entails the following approaches.

- 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 Authorities
- Incorporate opinions and concerns raised by interested and affected parties
- Make professional judgment and recommendations

#### **3.1 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/Literature**

The following literature was reviewed:

- Flood Risk Management Plan
- Local Authorities Act of 1992 (Act 23 of 1992)
- Town Planning Ordinance of 1954 (Ordinance 18 of 1954)
- Townships and Subdivision of Land Ordinance of 1963 (Ordinance 11 of 1963)
- Ondangwa Town Planning Amendment Scheme No 10.
- Environmental Management Act (Act 7 of 2007)
- Ondangwa Structure Plan
- Ondangwa Storm Water Master Plan

## **3.2 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 Interested and Affected Parties (I&AP's) and relevant stakeholders were invited to register and forward concerns/comments in order to ensure an equitable and effective participation.

### **3.2.1 Notification of I&APs and Stakeholders**

Potential I&APs were notified through newspaper advertisements in accordance with section 21 (2) of the Environmental Regulations of (GG6 of February 2012). Public notices were advertised twice in two local newspapers namely the Windhoek Observer for 19 and 22 November and the Confidante newspaper for 15 and 22 November 2024.

The same notice was also displayed at various public places around Ondangwa town and at the development site. These public notices provided brief information about the proposed project and the EIA process. The deadline for registration for I&AP's and submission of comments was on the 12 December 2024.

**Figure 6: Copy of the Public Notice**

## 4. LEGAL REQUIREMENTS

This section provides a review of applicable and relevant Namibian legislation, policies and guidelines regarding the environment which was considered while conducting the Scoping/EIA for the proposed project.

**Table 1: Namibian Legislation relevant to the project**

LEGISLATION	PROVISION	PROJECT IMPLICATION
<b>1. National Legislation</b>		
<b>Constitution of the Republic of Namibia (1990)</b>	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"> <li>- Guarding against overutilization of biological natural resources,</li> <li>- Limiting over-exploitation of non-renewable resources,</li> <li>- Ensuring ecosystem functionality,</li> <li>- Maintain biological diversity.</li> </ul>	The proposed development must be of sound environmental management objectives.
<b>Environmental Management Act No. 07 of 2007</b>	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.	"Public Open Space closure is subjected to an EIA hence this study.
<b>Water Resources Management Act 2004</b>	This Act provides provision for the control, conservation and use of water for domestic, agricultural, urban and industrial purposes. In addition the Act clearly gives provision that pertain with license or permit that required abstracting and using water as well as for discharge of effluent.	The protection of ground and surface water resources should be a priority. Obligation not to pollute surface water bodies.



<b>Draft Urban and Regional Planning Bill and Regulations</b>	It is envisaged that the current system of land use planning and development controlled in Namibia will be comprehensively reformed by the enactment of the draft Urban and Regional Planning Bill and regulation. The Bill 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 the subdivision and consolidation of land and the establishment and extension of urban areas.	The Developer shall apply for the rezoning of Public Open Space to the Township Board/NAMPAB as per this Act requirements.
<b>Forestry Act (No. 12 of 2001) Nature Conservation Ordinance (No. 4 of 1975)</b>	<ul style="list-style-type: none"> <li>Prohibits the removal of any vegetation within 100 m from a watercourse (Forestry Act S22 (1)).</li> <li>Prohibits the removal of and transport of various protected plant.</li> </ul>	These provisions will be used as a guideline for conservation of vegetation if need be. Intended removal of such vegetation would require a permit.
<b>Pollution Control and Waste Management Bill</b>	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 sustainable manner.
<b>Labour Act (No 11 of 2007)</b>	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.
<b>Noise Control Regulations (Labour Act)</b>	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/rehabilitation should be minimized to the satisfaction of neighboring residents and the town Council.
<b>Town and Regional Planners Act, 1996 (Act No. 9 of 1996)</b>	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	A registered Town Planner has been appointed for this project.

	<p>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 the subdivision and consolidation of land and the establishment and extension of urban areas.</p>	
<b>Town Planning Ordinance (No. 18 of 1954)</b>	<p>Subdivision of land situated in any area to which an approved Town Planning Scheme applies must be consistent with that scheme (S31).</p>	<p>Town Planning Procedures will be registered through the NAMPAB</p>
<b>Ondangwa Town Planning amendment Scheme No.2</b>	<p>Identify different land use categories, zoning, use and consent use.</p> <p>“Public Open Space” is refer to as a land which is under or will be under the ownership of the local authority, which is not leased nor will it be leased on a long term basis, and which is utilized or will be utilized as an open space or a park, garden, picnic area, playground or square and includes a public place.</p> <p>whereas “Business” or Business premises is defined as a site or building or structure on or in which business is done and includes <i>shops, offices, financial institution or restaurants or site, building or structure of similar uses</i> but does not include places of <i>assembly or entertainment, institutions, service station, public garages, industries, noxious trades</i>.</p> <p>Consent use on “Business “ zone includes</p> <p><i>Assembly or entertainment, institutions, service station, public garages, industries, noxious trades.</i></p>	<p>Consent was obtained from the Town Council for the rezoning of the proposed land from POS to Business. Town Planning procedures will be registered and approval will be requested from NAMPAB.</p> <p>The development to be used should be of the approved business categories and Consent must be obtained if any other activities are required.</p>
<b>Ondangwa Public Open Space Policy</b>	<p>To ensure that the provision of sufficient and comprehensive mix of parks, recreational facilities and natural areas satisfy the health, safety,</p>	<p>The proposed development will not compromise the objectives of this Policy, hence only a portion of the POS will be alienated.</p>

	welfare, and changing needs of Ondangwa citizens and visitors including special groups such as the elderly and the handicapped.	
<b>Road Ordinance 1972 (No. 17 of 1972)</b>	<p>Width of proclaimed roads and road reserve boundaries (S3.1)</p> <p>Control of traffic on urban trunk and main roads (S27.1)</p> <p>Rails, tracks, bridges, wires, cables, subways or culverts across or under proclaimed roads (S36.1)</p> <p>Infringements and obstructions on and interference with proclaimed roads. (S37.1)</p> <p>Distance from proclaimed roads at which fences are erected (S38)</p>	The limitations applicable on RA proclaimed roads should inform the proposed layout and zonings where applicable.

## **5. DESCRIPTION OF THE EXISTING ENVIRONMENT**

This chapter provides an overview of the baseline biophysical and social environmental conditions, with which the proposed project will interact. This information has been sourced from observations made and photographs taken during site visits, the team's experience and existing literature from previous research conducted in the area. It also presents a background against which the positive and negative impacts of the proposed options can be assessed.

### **5.1 Biophysical**

#### **a) Climate**

Northern Central is defined as a semi-arid to sub-humid climate, with hot summers and warm winters. The average annual rainfall in Ondangwa is about 470 mm occurring between October and April, with the heaviest falls from January to March and the peak in February. The soils are sandy, allowing high infiltration and the average annual evaporation is about 2 800 mm. Consequently, there is no flow in the drainage channels during the dry season. The rainfall pattern is highly variable in amount and distribution. Temperatures are also cooler and more moderate, with approximate seasonal variations of between 10 and 30 °C (Kangombe, 2010).

#### **b) Topography**

The town is situated on the eastern edge of the Cuvelai system which is characteristics by shallow drainage channels called "oshanas" with pockets or islands of higher lying land in between. The topography of the Ondangwa town is a gently sloping plain with a gradient of about 1:2 500 (Cronje G, 2013). The oshanas periodically carry water after heavy local rains or good falls in highland areas to the north in Angola. In Ondangwa, floods are mainly provoked by heavy rains and the lack of storm water drainage system. Floods in town affect low lying areas within town boundaries and accessibility to surrounding areas. The continued growth of the town means that the pressure for suitable land in the town increased to a point where many people settled in lower lying areas on the edges of the higher lying land portions and sometimes even within oshanas.

### c) Hydrology

The country has been divided into twelve hydrogeological regions based mainly on geological structure and groundwater flow and according to the national hydrogeological map, Ondangwa area is part of the Cuvelai-Etosa groundwater Basin. The flood water covers the flood prone areas and main access roads interrupting accessibility to some vital services (hospitals and private clinics, schools, shops, etc) and other settlements located nearby.

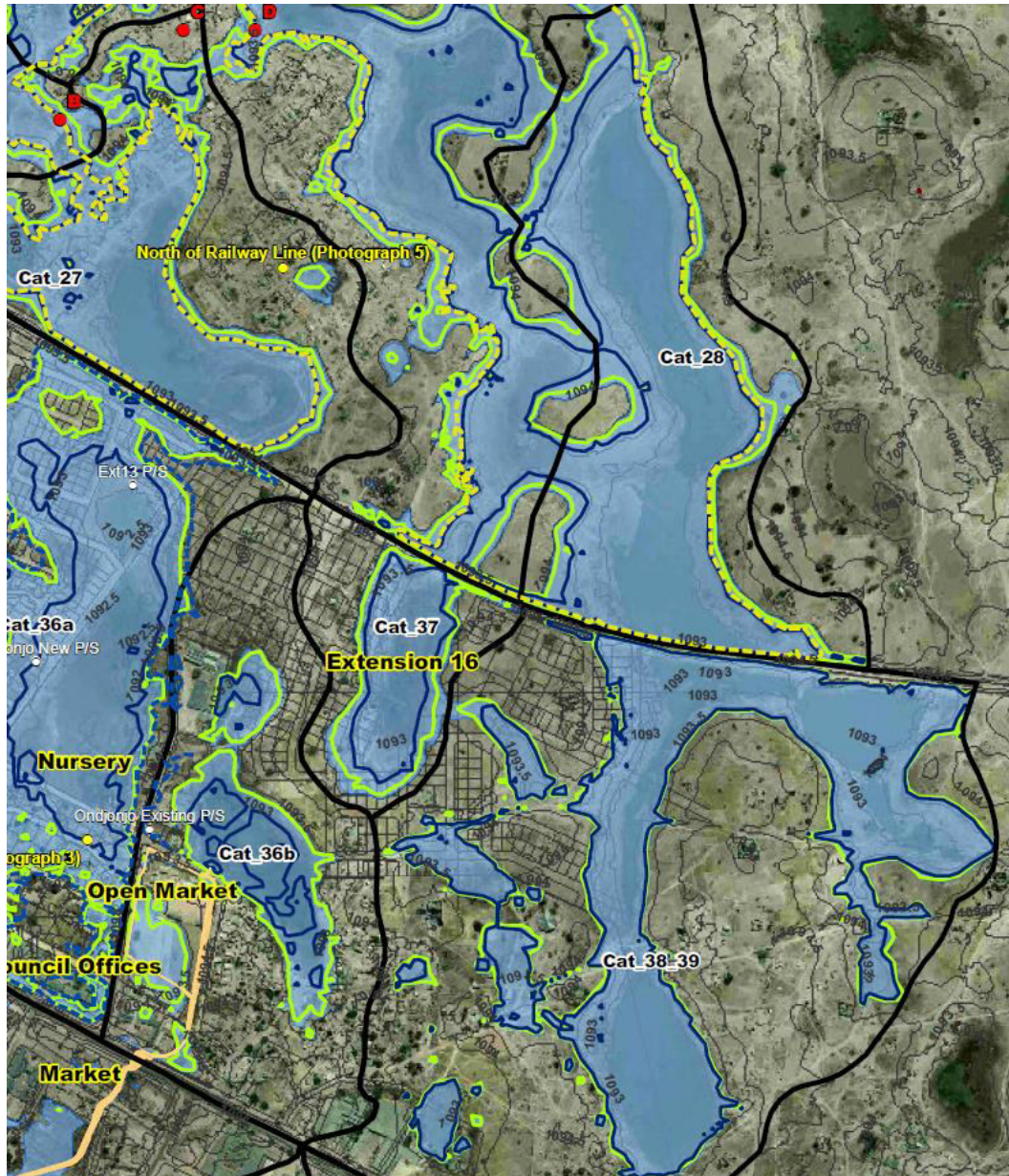
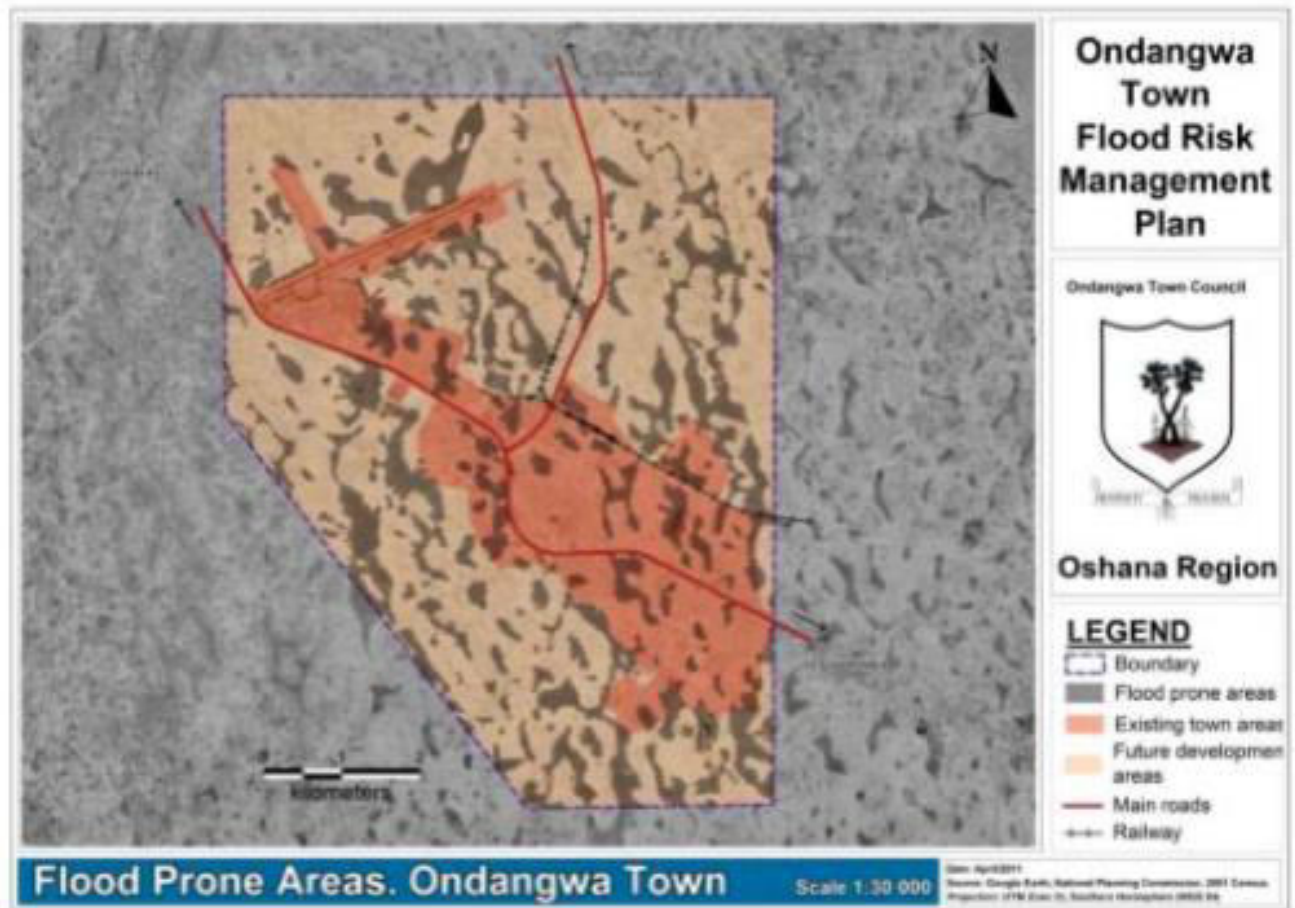


Figure 7: Hydrological feature of Ondangwa



#### d) Flood risk vulnerability

In Ondangwa, floods are mainly provoked by heavy rains and the lack of storm water drainage system. Floods in town affect low lying areas within town boundaries as a result accessibility to numerous houses, commercial and industrial buildings are affected. The continued growth of the town means that the pressure for suitable land in the town increased to a point where many people settled in lower lying areas on the edges of the higher lying land portions and sometimes even within oshanas.



**Figure 8: Flood Risk Assessment of Ondangwa Town**

#### e) Hydrogeology

The groundwater of the Cuvelai-Iishana Sub-Basin is relatively shallow but mostly brackish or saline. The ground water in the area is found in shallow discontinuous aquifers (Perched Aquifers). All groundwater within the basin flows towards the Etosha Pan, due to the structure of the basin and because as the pan deepest point, is the base level of the groundwater flow system.

#### **f) Soil and Geology**

The soil of the northern Namibia is dominated by deep Kalahari and Namib sand that mostly occur in the formation of sands and other sedimentary materials, while the *clay sodic* sands dominate in the Oshanas. The soil type classification is termed to be favorable for crop cultivation and plant grow in general, and this is determined by its physical properties to the nature of water retention, lower salinity and high nutrient level. In principle, the soil comprises of mosaic soil types such as clay and average salty clay. This determines that the main soil dominance is *Eutric Cambisols* that are characteristic by their definition on consistency, colour and structure. To an extent, it is found in the depression of low-lying areas of the landscape, and typically contains accumulations of calcium carbonate. These soils are potentially fertile, but iron and zinc occurrence might be at lower-level concentration sometimes (Mendelssohn, 2002).



## 5.2 Socio-economic profile of the area

### a) Ondangwa town overview

Ondangwa town is located right in the eastern boundary of the Oshana region, bordering the Oshikoto region. It is an important urban centre with easy accessibility to Oshakati town, to the Helao Nafidi town, on the Angolan border where high trade and commercial activities are taking place and to the capital city, Windhoek, through the B1 road. Many local authorities for the Oshana and Oshikoto regions are located in the town, e.g. the Ministry of Education. Since independence, the government has settled up an industry in the north, to create jobs and improve the poor infrastructure. The town of Ondangwa has an urban population of about 9,124 residents while the entire constituency (Ondangwa Urban) has about 30,000 people according to the Namibia Population and Housing Census of 2023 (NSA, 2023). The town shares an airport with Oshakati. Ondangwa is linked to Oshakati and Oshikango by a tarred road.

### b) Bulk service supply

- **Water Supply:** There is a major pipeline that brings water from Oshakati (NAMWATER), serving most of the urban area with a reticulated network, except in some informal settlements, where the service is through communal taps.
- **Sewerage & Drainage:** The existing system serves most of the planned areas through a reticulated network, pump stations and oxidation ponds. The informal settlements are not served by sewerage; the solutions are through septic tanks, pit latrines and others. No drainage system is in place, only partial solutions especially along the main road.
- **Communication & Electricity:** The town has accessibility to selected services/facilities. These include television, radio, newspaper, telephone and computer. Most of the town's electricity is served via NORED, although some areas within the existing informal settlements are not yet served.

### c) Economic development

The town has good infrastructure necessary for economic development. Ondangwa features shopping centres, a large open market, and several tourism facilities. The town also houses shopping malls with well-known retail brands, such as Shoprite, Clicks, Ackermann's, etc. This brings numerous people from nearby villages and towns to come for shopping and other services in town. There are also many other local brands operating, offering good shopping ambiance, especially craft, baskets. Rössing Foundation, Kayec and Cosdec are the three vocational skills schools training young people in building maintenance, sewing, cooking, and Internet Technology. Ondangwa Town also welcomes numerous partnerships for developmental projects such as land servicing and other ventures.

#### **d) Education and Health**

The town has a public hospital, public and private clinics, private doctors (general practitioner's), dentists, and pharmacies. Most of the health facilities in town operate during the day and they also cater for the people living in close proximity to the town. Ondangwa has public and private educational facilities which cater for primary and secondary learners. Some schools have accommodation for learners residing out of town. There are also a few institutions of higher learning which are accredited by Namibia Qualification Authority.

#### **e) Land use and availability**

Ondangwa is also known for its residential neighbourhoods consisting out of low-, middle- and high-income groups. Due to the flooding of Oshakati during the 2007/2008 and the 2009 season a number of investors have decided to look for investment possibilities elsewhere. Ondangwa is a favorable investment hub for investors seeing that it is in close proximity to Ongwediva and Oshikango. The Main Road to Helao Nafidi and Oshikango runs through Ondangwa therefore large volumes of vehicle and pedestrian traffic moves through the Town of Ondangwa which makes it a prime area for investors.

The Ondangwa Town Council needs to cope with the huge demand for available serviced erven, including residential, business and institutional erven. At the current moment the supply of erven is not meeting the demand for serviced erven therefore creating a backlog of available serviced erven. The provision of extra serviced erven in Ondangwa will help to meet the demand from the consumer's side and in the long run will generate much needed income from rates and taxes for the Ondangwa Town Council. These finances can then be used for future expansion and upgrading of existing services in the Town of Ondangwa.

#### **f) Public Open Space**

Currently there are more than 53 approved public open spaces in Ondangwa. Most of the public open spaces are in the town centre and run along the local Oshanas of areas that are prone to flooding during the rainy season. Although there are a number of POS in Ondangwa, most of these POS are still undeveloped as result only limited areas in for people to rest or relax.

## 6. ASSESSMENT OF PROJECT IMPACTS

The EIA Regulations require “a description of the significance of any significant effects, including cumulative effects, which may occur as a result of the undertaking of the activity”.

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 2: Significance Assessment criteria**

CRITERIA	DESCRIPTION			
<b>EXTENT</b>	<b>National (4)</b> The whole country	<b>Regional (3)</b> Oshana region and neighbouring regions	<b>Local (2)</b> Within a radius of 2 km of the proposed site	<b>Site (1)</b> Within the proposed site
<b>DURATION</b>	<b>Permanent (4)</b> 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	<b>Long-term (3)</b> The impact will last for the entire operational life of the development, but will be mitigated by direct human action or by natural processes thereafter.	<b>Medium-term (2)</b> The impact will last for the period of the construction phase, where after it will be entirely negated	<b>Short-term (1)</b> The impact will either disappear with mitigation or will be mitigated through natural process in a span shorter than the construction phase
<b>INTENSITY</b>	<b>Very High (4)</b> Natural, cultural and social functions and processes are altered to extent that they permanently cease	<b>High (3)</b> Natural, cultural and social functions and processes are altered to extent that they temporarily cease	<b>Moderate (2)</b> Affected environment is altered, but natural, cultural and social functions and processes continue albeit in a modified way	<b>Low (1)</b> Impact affects the environment in such a way that natural, cultural and social functions and processes are not affected
<b>PROBABILITY</b>	<b>Definite (4)</b> Impact will certainly occur	<b>Highly Probable (3)</b> Most likely that the impact will occur	<b>Possible (2)</b> The impact may occur	<b>Improbable (1)</b> Likelihood of the impact materialising is very low
<b>SIGNIFICANCE</b>	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 3: Criteria for significance ratings**

<b>Low impact</b>	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.
<b>Medium impact</b>	Mitigation is possible with additional design and construction inputs.
<b>High impact</b>	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.
<b>Very high impact</b>	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.
<b>Status</b>	Denotes the perceived effect of the impact on the affected area.
<b>Positive (+)</b>	Beneficial impact
<b>Negative (-)</b>	Deleterious or adverse impact.
<b>Neutral (/)</b>	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

The construction and operation of the proposed development and its associated infrastructures may result into a number of potential impacts on the physical, biophysical and socio-economic environment of the proposed site. These impacts could be positive, negative or neutral. Below is description of potential impacts that may arise as a result of the project based on its context, knowledge of the area, issues raised, and information provided during the Public Participation Process.

**Table 4: Potential Impacts during Planning & Design and Development**

ASPECT	POTENTIAL IMPACTS	SIGNIFICANCE RATING				MEASURES AND REMARKS
		Extent	Duration	Intensity	Probability	
<b>1. BIOPHYSICAL</b>	Impact on Biodiversity	Site	Low	Low	Improbable	• Only plants affected by the activities will be removed.
	Topography and aesthetic view	Local	Medium term	Low	Probable	• The development site must be kept clear of building rubble and general waste.
	Impact on Soil	Local	Medium-term	Moderate	Probable	• All open trenches must be filled and area must be properly rehabilitated • Back filling materials should be sourced from borrow pits with valid ECC.
	Impact on Drainage	Site	Short-term	Moderate	Probable	• Deep water channels must be avoided. • Flood Risk Plan must be prepared prior to development

	Air quality	<ul style="list-style-type: none"> <li>• Release of dust from building and development activities, equipment and construction vehicles</li> <li>• Generation of fumes from vehicles and construction equipment may pollute the air</li> </ul>	Local	Short-term	Moderate	Probable	<ul style="list-style-type: none"> <li>• Use dust-suppressing agents i.e. spraying with water</li> <li>• Limit the number of Vehicle and heavy implements at the site</li> <li>• Avoid dust generating activities i.e. blasting during strong wind.</li> </ul>
	Noise	<ul style="list-style-type: none"> <li>• Noise impacts during construction phase will occur from construction vehicles etc. which might be a nuisance to residents and employees.</li> </ul>	Local	Short-term	Moderate	Probable	<ul style="list-style-type: none"> <li>• Construction should be limited to normal working days and office hours (08h00-17h00).</li> <li>• . Limit the number of Vehicle and heavy implements at the site</li> <li>• Watering of all construction haulage.</li> </ul>
	Waste	<ul style="list-style-type: none"> <li>• Generation of waste through construction and rehabilitation activities mainly building rubbles and domestic waste.</li> <li>• Sewage waste will be generated from temporary construction toilets on site.</li> </ul>	Site	Short-term	Low	Probable	<ul style="list-style-type: none"> <li>• All solid waste generated must be gathered and disposed to the dumpsite.</li> <li>• All properties must be provided with a standard ablution facility and connected to the municipal sewer system</li> </ul>
	Water	<ul style="list-style-type: none"> <li>• Contamination of surface water and groundwater from construction activities</li> </ul>	Local	Short-term	Low	Probable	<ul style="list-style-type: none"> <li>• Since the site has a water depression feature, it is advisable that construction activities be carried out during dry season rather than on rainy season.</li> <li>• Do not park Vehicle or Equipment with leaks for too long at the site.</li> <li>• All containunared soil must be cleaned up.</li> </ul>

Occupational and Public safety	<ul style="list-style-type: none"> <li>Construction activities may create a number of health risks to the employees and public at large.</li> </ul>	Local	Short-term	Moderate	Probable	<ul style="list-style-type: none"> <li>All employees must have PPE</li> <li>Signage should be place at the entrance of the construction.</li> <li>Employees must be trained on the nature of their duties.</li> <li>Construction equipment must be of required engineering standards</li> </ul>
<b>2. SOCIO-ECONOMIC</b>						
Traffic impacts	<ul style="list-style-type: none"> <li>Increase in traffic congestion within the area during construction and rehabilitation activities</li> </ul>	Site	Medium term	Moderate	Probable	<ul style="list-style-type: none"> <li>There is already an existing access road which provide access to the site and adjacent properties.</li> <li>Flagmen and traffic controls should be appointed to regulate traffic flow of construction vehicles.</li> </ul>
Crime	<ul style="list-style-type: none"> <li>Construction activities are associated with an increase on criminal activities due to an influx of temporary, migrant workers</li> </ul>	Site	Short-term	Low	Probable	<ul style="list-style-type: none"> <li>All equipment can be stored away from the site or in a secure place.</li> </ul>
Employment opportunities	<ul style="list-style-type: none"> <li>The construction phase will provide temporary employment opportunities during construction (+ve)</li> </ul>	Local	Short-term	High	Definite	<ul style="list-style-type: none"> <li>Employment opportunities will be created during development</li> </ul>
Economic Development	<ul style="list-style-type: none"> <li>Construction phase will create economic opportunities for the local businesses (+ve)</li> </ul>	Local	Short-term	Low	Highly probable	<ul style="list-style-type: none"> <li>Economic drives will be generated from development of the site</li> </ul>



**Table 5: Potential Impacts during Operation phase**

ASPECT	POTENTIAL IMPACTS	RATING				MEASURES AND REMARKS
		Extent	Duration	Intensity	Probability	
<b>1. BIOPHYSICAL</b>	Impact on Biodiversity	Site	Long-term	Low	Improbable	<ul style="list-style-type: none"> <li>The development must include greenery as part of landscaping to enhance biodiversity and aesthetic view.</li> </ul>
	Impact on Soil	Local	Long-term	Moderate	Improbable	<ul style="list-style-type: none"> <li>Ensure proper drainage from the site.</li> <li>Provide proper maintenance of sewage pipes and rehabilitate the area in case of spillage/leaks</li> </ul>
	Impact in Groundwater	Local	Long-term	Moderate	Improbable	<ul style="list-style-type: none"> <li>Fix all leaking sewage pipes</li> <li>Do not allow direct discharge of pollutants in the surface runoff</li> <li>Ensure proper drainage of storm water by installing and maintenance of culverts that carries rain water away from the site to avoid flooding of neighboring properties.</li> </ul>
	Waste generation	Site	Short-term	Low	Probable	<ul style="list-style-type: none"> <li>All solid waste generated must be gathered and disposed to the dumpsite</li> <li>Ensure maintenance of sewage system.</li> </ul>
	Increase Water demand	Local	Long-term	Moderate	Probable	<ul style="list-style-type: none"> <li>Encourage rainy water harvesting for domestic use to reduce water consumption</li> </ul>

Increase Electricity demand	<ul style="list-style-type: none"> <li>• Increase demand on electricity</li> </ul>	Local	Long-term	Moderate	Probable	<ul style="list-style-type: none"> <li>• Encourage use of renewable energy i.e. Solar geysers to supplement the electricity supply</li> </ul>
Increase demand of Municipal services	<ul style="list-style-type: none"> <li>• Increase demand on municipal services i.e. sewer connection and maintenance, waste collection etc.</li> </ul>	Local	Long-term	Moderate	Probable	<ul style="list-style-type: none"> <li>• Most of the required services are readily available i.e. sewer, water, roads and electricity.</li> </ul>
<b>2. SOCIO-ECONOMIC</b>						
Traffic impacts	<ul style="list-style-type: none"> <li>• Increase traffic flow on the adjacent roads during operation phase</li> </ul>	Site	Medium term	Moderate	Probable	<ul style="list-style-type: none"> <li>• Traffic impacts during operation is expected to be low due to additional access road provided</li> </ul>
Economic development (+ve)	<ul style="list-style-type: none"> <li>• The proposed development will enhance economic opportunities for local businesses.</li> </ul>	Local	Long-term	High	Probable	<ul style="list-style-type: none"> <li>• The development of this property will have positive economic benefits to the town</li> <li>• Developing the site will create new opportunities for unemployed people in Ondangwa.</li> </ul>
Employment creation						

## 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. The other objective was to identify the gaps of information, hence determine the need for any specialist studies. 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:

- The findings of the Scoping Assessment are considered sufficient, and no additional specialist study is required.
- The proposed activity is planned at a time and place in a developing sector of the town and can be considered to be a natural opportunity associated with the growth of the town.
- The approval of this application would not compromise the integrity of the existing environmental management priorities for the area.
- There were no objections, or critical issues have been raised by I&AP's.
- The portion was acquired in accordance with Councils sale of land policies, the Local Authorities Act 22 of 1992, Ondangwa Town Planning Scheme and Town Planning Ordinance.

### 8.2 EAP Recommendations

It is recommended that the Developer must

- Extend the Storm Water channel to around the site
- All gravel used for fill material be of G7 quality compacted to 90% Modd AASHTO.
- Consult the Town Council –Traffic Department for the construction of access road and for the installation of traffic regulations at the intersections prior to the construction.
- Implement the proposed mitigation measures outlined in **Table 6 and Table 7 (EMP)** of this report.
- The Environmental Commissioner considers the findings and recommendations of this Scoping process

That the Environmental Commissioner Consider issuing an Environmental Clearance Certificate to authorize for Environmental Impact Assessment for the Proposed Subdivision of Erf 3076, Extension 13 And Creation of a Public Road (Street), Ondangwa., Oshana region.

## 9. REFERENCES

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- Ondangwa Town Council, 2016. Ondangwa Public Open Space Policy, prepared by Nghivelwa Planning Consultant

## **10. APPENDICES**

**APPENDIX A: List of IAPs**

**APPENDIX B: Proof of Consultation**

**APPENDIX C EMP**

## APPENDIX A: List of Registered IAPs

ORGANISATION	REPRESENTATIVE AND TITLE	CONTACT DETAILS
Ondangwa Town Council	CEO	<a href="mailto:inamgongo@ondangwatc.org.na">inamgongo@ondangwatc.org.na</a>
	Mr. Shipanga Manager: Technical Services	<a href="mailto:pshipanga@ondangwatc.org.na">pshipanga@ondangwatc.org.na</a>
	Mrs. Rachel Naukushu Town Planning Officer	<a href="mailto:Rnaukushu@ondangwatc.org.na">Rnaukushu@ondangwatc.org.na</a> 0814290777
	Sem Gabriel Economic Development	065-240101
	Mr. Eliaser Ndjalo Building Inspector	<a href="mailto:endjalo@ondangwatc.org.na">endjalo@ondangwatc.org.na</a> <b>0811288629</b>
Proponent	Mr. Lance Wuu Manager	0811800 000 <a href="mailto:combo.nam@hotmail.com">combo.nam@hotmail.com</a>
Plantek Regional and Town Planners	Mr. Jan Britz Town Planner	<a href="mailto:plantek@africaonline.com.na">plantek@africaonline.com.na</a>