

**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE  
PROPOSED SUBDIVISION OF ERF 3573 AND REZONING OF  
RESULTING PORTIONS FROM PUBLIC OPEN SPACE TO  
SINGLE RESIDENTIAL, EXTENSION 16, ONDANGWA,  
OSHANA REGION**



**ENVIRONMENTAL SCOPING REPORT**

**PREPARED FOR:**

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## DOCUMENT DESCRIPTION

<b>Project Name</b>	<b>Proposed Subdivision of Erf 3573 and Rezoning of Resulting Portions (A-D) from “Public Open Space” to Single Residential, Ondangwa Extension 16.</b>
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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

Easy Care Trading Enterprises cc has purchased a Portion measuring 2770 m<sup>2</sup> of the Erf 3573 from the Ondangwa Town Council with the aim of a housing development project. The property measures approximately 10.4ha and is currently zoned “Public Open Space” (POS). In terms of the Town Planning Ordinance (18 of 1954), certain town planning procedures needs to be applied for the subdivision of Erf 3573 and subsequent Rezoning of the purchased Portions from “POS” to “Single Residential” with Density 1:600 to enable the intended development.

The proponent has appointed Toya Urban and Regional Planners to apply for the subdivision and subsequent Rezoning of Portions A, B, C & D from POS to Single Residential. In terms of the Environmental Management Act of 2007 (Schedule 5.1) and its regulations (GN No. 30 of 2012), the rezoning of land zoned “Public Open Space” to any other land use 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 Environmental Impact Assessment (EIA) and apply for the Environmental Clearance Certificate with the Ministry of Environment and Tourism on behalf of the Developer. The study conducted conformed to the requirements of the Environmental Management Act No.07 of 2007 and it's 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.

Although public open spaces serves a number of functions, the proposed development site currently appears as eyesore and pose safety risks to the residents. Hence, the proposed development will improve the aesthetic view of the area and surrounding. Moreover, the intended development can act as a catalyst for the aesthetical quality of similar developments within the CBD and subsequently set the tone and standard for other developments within the CBD.

## **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 of 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

Erf 3572 measures 63 223m<sup>2</sup> in size and is situated in the vicinity of the Ondangwa Town Council offices opposite the new Ondangwa fire station in Ondangwa Extension 16. The proposed development site (Portion A) measures 4 220m<sup>2</sup> in size.



Figure 1: Locality of the site



## 2.2 Site context

### a). Site physical features and topography overview

The proposed development site (Erf 3573) is currently vacant but highly disturbed due to the movement of people through the site. There are few trees on the site with local grass species but there are no sensitive habitats. The site topography is generally flat but is surrounded by low-lying areas draining towards the southeast of the site.



Figure 2: Physical features of the site

### b). Site landscape overview

The proposed portion for development has less vegetation and does not appear to a biodiversity hotspot compared to the rest of the site. The proposed portion is somehow disturbed due to the existing informal paths crossing through. The proposed development will also not disrupt the interconnectedness of the open space network since it's on the end part of the site.



Figure 3: Site land scape overview

### b). Hydrological setting of the site

Part of the site has a low-laying water depression feature which receive water during the rainy season and connected to the major catchment area (Catch 7) in Extension 16.

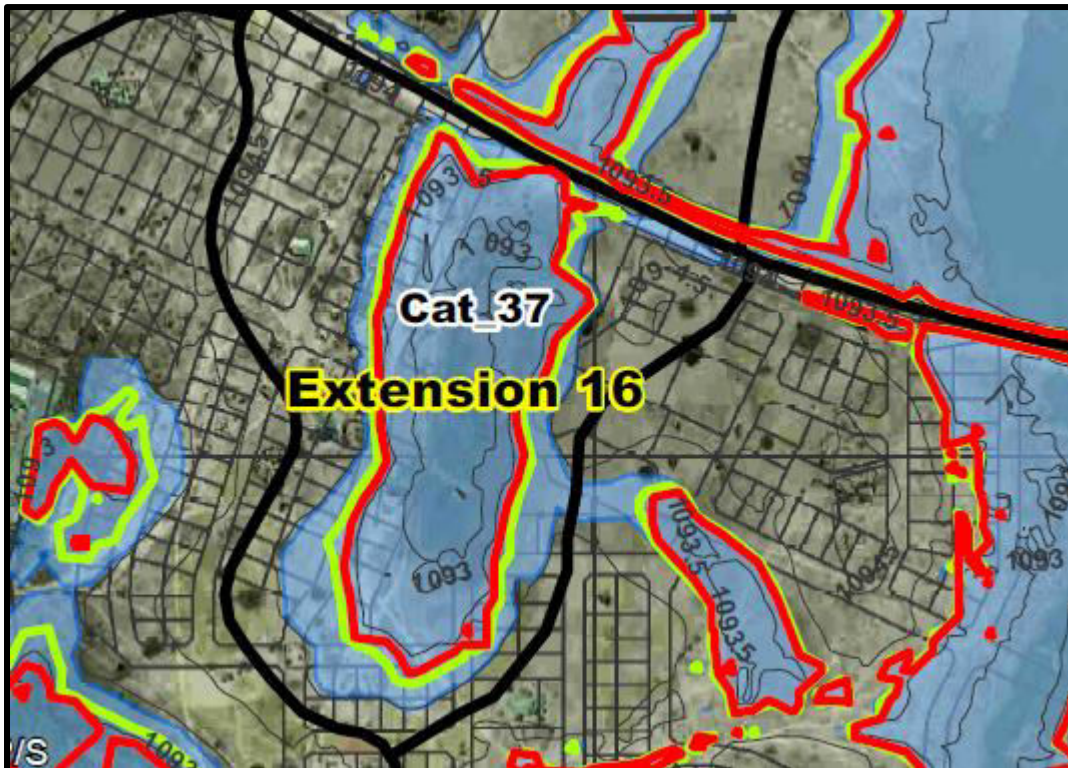


Figure 4: Hydrological feature of the site

### **c). Exiting municipal services and Adjacent development**

The site is surrounded by existing developments consisting mainly of residential properties and is bordered on the east by railway lines. The site is connected to existing street networks, and all major and bulk services such as water, sewerage and electricity are readily available in the area. Connections to the proposed development site will be extended by the developer.



**Figure 5: Adjacent properties.**



## 2.3 Proposed Rezoning

The proposed activities entail the following.

- Subdivision of Erf 3573 into Portions A, B, C, D and the Remainder.
- Permanent Closure of Portions A, B, C, & D as “Public Open Spaces “
- Rezoning of the Portions A, B, C & D from “Public Open Spaces “to “Residential”
- The Remainder

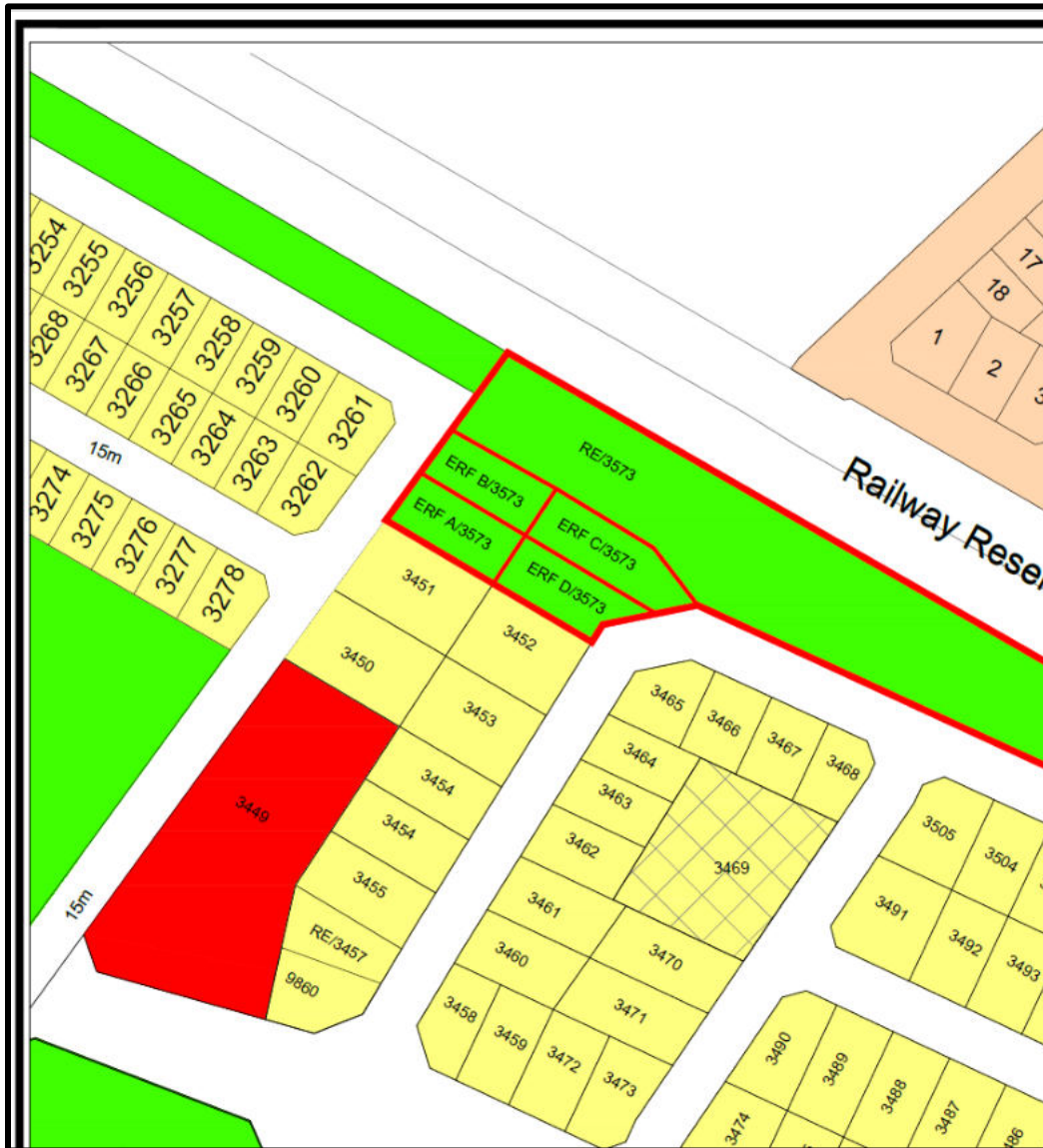


Figure 6: Proposed subdivision and rezoning at Erf 3573

## 2.4 Proposed housing development

The proponent intends to develop four conventional houses (2-3 bedrooms) on the resulting residential Erven. The intended houses will be similar to the conventional houses already existing in Extension 16 (See Figure 4). Access to the proposed houses will be sourced from existing streets and no new street or roads will be created for the new development.



Figure 7: Typical conventional houses (for example ONLY)

## 2.4 Project alternatives

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

**Land use alternatives:** Although Erf 3573 serves important ecological functions, the alienation of a portion would not compromise the integrity of the existing environmental management priorities for the area. Moreover the site is currently an eyesore, given its locality in the town center, after careful consideration and assessment the proposed portion (Portion A) was found to be ideal for the proposed development, given it's easily accessibility and closeness to existing municipal services i.e. road, electricity, water sewage etc.

- *No-Go option* will mean, leaving the site as it is (No subdivision and rezoning will take place). The Ondangwa Town Council, like any other town is in dire need to provide land, including business land in order to stimulate economic growth of the town. In order to succeed in this quest, the Town Council must utilize suitable lands to the fullest capability. Leaving a suitable land such as the one in question to remain as Public Open Space will compromise the chance for the Town Council to achieve its goals.

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.

## 2.5 Need and Desirability

The proposed developments has potential to improve the economic value of the proposed land which is currently an eyesore of the surrounding environment. Furthermore, the intended development can act as a catalyst for the aesthetical quality of similar developments within the CBD and subsequently set the tone and standard for other developments within the CBD. It is also believed that this development will benefit the Ondangwa Town Council and the Town as a whole due to job creation and economic spin offs created by the development.

The “need” for the project:

- The provision of low-income housing has become a national concern. With the growing demand for serviced land due to rapid urbanization, it is of high priority that the available and developable land surrounding the town area is developed to provide land, especially for housing and businesses.
- The project 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 “desirability” of the project:

- The proposed development site is located 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 development will ensure service delivery is provided while creating business opportunities for developers and creating of local employment.



### **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; **Kundana 28 September and 05 October 2018** and the **Confidante newspaper for 27 September and 04 October 2018 (see attached)**. Public notices was also displayed at the Ondangwa Town Council notice board. 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 19 October 2018.

### **3.2.2 Key stakeholders Consulted**

Key stakeholders were identified and invited to submit their input/comments on the proposed development. These includes; Officials from various Town Council Departments, Government ministries and authorities. A full list of the IAPs and Stakeholders is appended to this report.

## 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.

<p><b>Draft Urban and Regional Planning Bill and Regulations</b></p>	<p>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.</p>	<p>The Developer shall apply for the rezoning of Public Open Space to the Township Board/NAMPAB as per this Act requirements.</p>
<p><b>Forestry Act (No. 12 of 2001) Nature Conservation Ordinance (No. 4 of 1975)</b></p>	<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>	<p>These provisions will be used as a guideline for conservation of vegetation if need be. Intended removal of such vegetation would require a permit.</p>
<p><b>Pollution Control and Waste Management Bill</b></p>	<p>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.</p>	<p>All activities shall be conducted in an environmental sustainably manner.</p>
<p><b>Labour Act (No 11 of 2007)</b></p>	<p>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)</p>	<p>Contractors, Sub-contractor shall be guided by this Act when recruiting or handling employment related issues.</p>
<p><b>Noise Control Regulations (Labour Act)</b></p>	<p>It is essential to ensure that before any development project is approved and undertaken, an assessment or evaluation of expected noise level is done.</p>	<p>Noise generation during construction/development/rehabilitation should be minimized to the satisfactory of neighboring residents and the town Council.</p>
<p><b>Town and Regional Planners Act, 1996 (Act No. 9 of 1996)</b></p>	<p>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</p>	<p>A registered Town Planner has been appointed for this project.</p>

	<p>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 or 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 <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, welfare, and</p>	<p>The proposed development will not compromise the objectives of this Policy, hence only a portion of the POS will be alienated.</p>

	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-Etoshia groundwater Basin. The flood water cover 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.

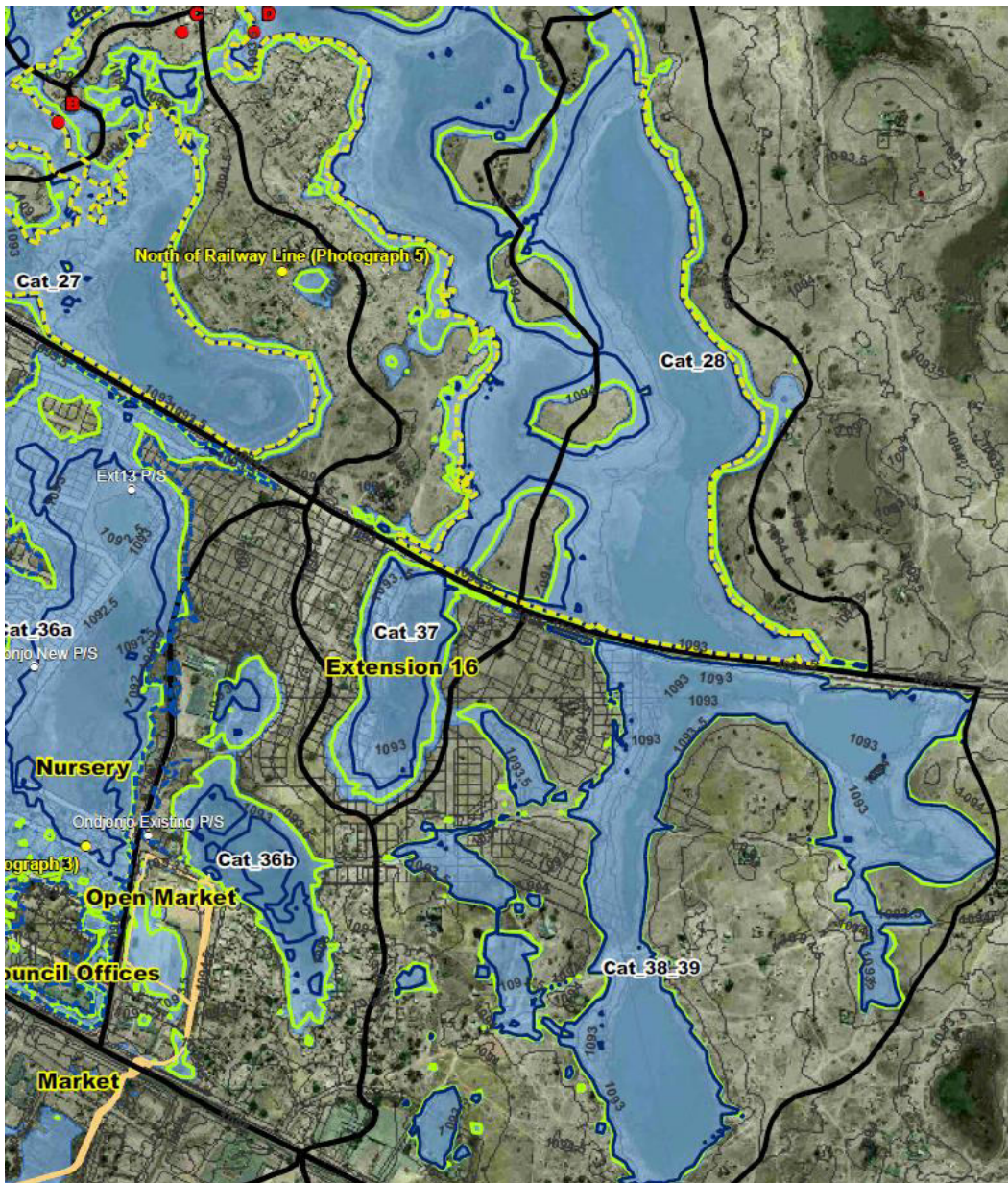


Figure 8: Hydrological feature of Ondangwa

Figure 5 above depict how the water flows in and around Ondangwa CBD areas. The proposed development site is located south of the catchment area 37 in Extension 37.

#### 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.

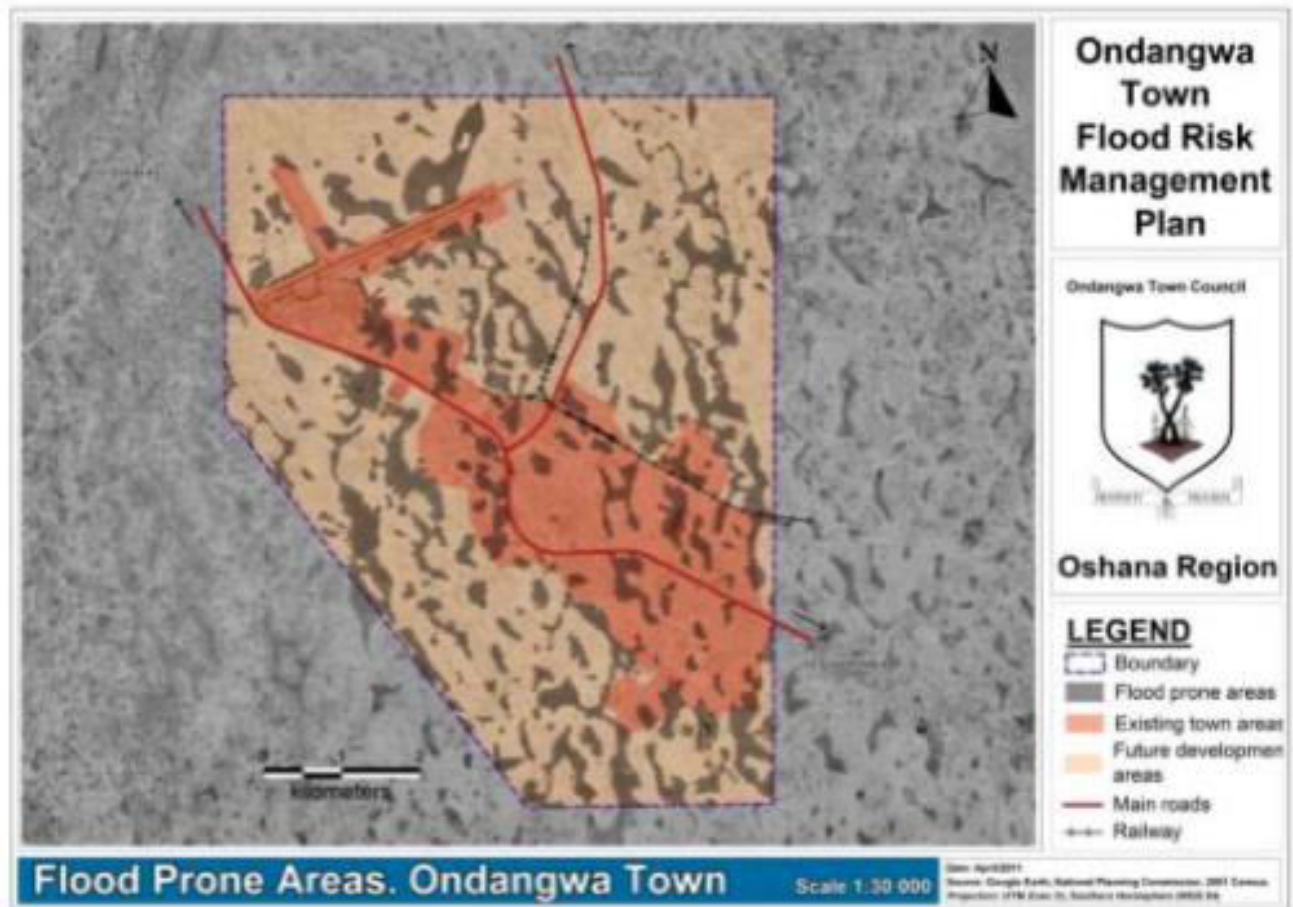


Figure 9: Flood Risk Assessment of Ondangwa Town

#### e) Hydrogeology

The groundwater of the Cuvelai-lishana 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 type such as clay and average salty clay. This determines that the main soil dominance is *Eutric Cambisols* that characteristic by it definition on consistency, colour and structure. On extent, it is found in the depression of low lying areas of the landscape, and typically contain 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 has a population of about 23000 residents according to the Namibia Population and Housing Census of 2011. 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 neighborhoods 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 center 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 issue. 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	DESCRPTION			
<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  Topography and aesthetic view  Impact on Soil  Impact on Drainage	<ul style="list-style-type: none"> <li>Vegetation clearance during construction</li> </ul>	Site	Low	Low	Improbable	<ul style="list-style-type: none"> <li>Only plants affected by the activities will be affected.</li> </ul>
	<ul style="list-style-type: none"> <li>Change of visual and aesthetic view</li> </ul>	Local	Medium term	Low	Probable	<ul style="list-style-type: none"> <li>The development site must be kept clear of building rubble and general waste.</li> </ul>
	<ul style="list-style-type: none"> <li>Possibility of erosion during site clearance</li> <li>Compaction of soil during construction</li> <li>Extracting filling material might cause secondary impacts to the source area</li> </ul>	Local	Medium-term	Moderate	Probable	<ul style="list-style-type: none"> <li>All open trenches must be filled and area must be properly rehabilitated</li> <li>Back filling materials should be sourced from borrow pits with valid ECC.</li> </ul>
	<ul style="list-style-type: none"> <li>Construction activities may affect the flow of storm water of the area</li> </ul>	Site	Short-term	Moderate	Probable	<ul style="list-style-type: none"> <li>Deep water channels must be avoided.</li> <li>Flood Risk Plan must be prepared prior to development</li> </ul>

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 facilities 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 placed 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 provides 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 in 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>

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

ASPECT	POTENTIAL IMPACTS	RATING				MEASURES AND REMARKS
		Extent	Duration	Intensity	Probability	
1. BIOPHYSICAL	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	<ul style="list-style-type: none"> <li>• Generation of domestic waste</li> <li>• Sewage waste will be generated from toilets</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>• Ensure maintenance of sewage system.</li> </ul>
Increase Water demand	<ul style="list-style-type: none"> <li>• Increase local water demand</li> </ul>	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						



### 8.1.2 Authorities

- **Ondangwa Town Council:** The Ondangwa Town Council should provide supervisory and monitoring roles in order to ensure compliance of their respective regulations and laws by renewal or enforcement of respective laws. Of relevance to this project are; the Ministry of Urban Rural Development and MEFT
- **Ministry of Urban Rural Development (MURD)** through the Urban and Regional planning Board (URPB) for registration of the town planning procedures as per the Town Planning Ordinance (Ordinance 188 of 1965).
- **MEFT** should conduct an Environmental compliance monitoring should any instances of non-compliance be found, this must be brought to the attention of the site foreman, along with recommended measures for rectifying the non-compliance.

## 9. 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.

### 9.1 Assumptions and Conclusions:

- The findings of the Scoping Assessment is 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.
- All identified key stakeholders are in support with the proposed activities.
- The proposed will not compromise the objectives of the existing Ondangwa Public Open Space Policy hence;
  - The proposed site is a non-functional public open space and only a portion of the site is affected. The remaining portion will be sufficient to serve the ecological function of the site.
  - 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.
- The proposed development shall be the activities specified under category "Business" in the Town Planning Scheme and that consent must be obtained for establishment other activities not specified.
- Activities such as *Service Station, private garages, noxious trades, and industries* are not recommended hence such activities must be subjected to full EIA studies.



## 9.2 EAP Recommendations

It is recommended that the Developer must

- Develop a Flood Risk Management Plan for the proposed development in line with the Ondangwa Storm Water Management Plan of 2013.
- Obtain Permission from the Town Council –Traffic Department for the construction of access road and 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 **Proposed Subdivision of Erf 3573 and Rezoning of Resulting Portions (A-D) from “Public Open Space” to Single Residential, Ondangwa Extension 16”**

## 10. REFERENCES

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## 11. 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@ondangwadc.org.na">inamgongo@ondangwadc.org.na</a>
	Mr. Shipanga Manager: Technical Services	<a href="mailto:pshipanga@ondangwadc.org.na">pshipanga@ondangwadc.org.na</a> <b>065-240101</b>
	<b>Town Planning Division</b> Mrs. Rachel Naukushu	<a href="mailto:Rnaukushu@ondangwadc.org.na">Rnaukushu@ondangwadc.org.na</a> 0814290777
	W. I Shepya	<b>065-240101</b>
Town Planner	Mr. Simon Shinguto Manager	<a href="mailto:sshinguto@gmail.com">sshinguto@gmail.com</a>
NORED	Mr. Isac Nekwaya	<a href="mailto:i.nekwaya@nored.com.na">i.nekwaya@nored.com.na</a>