ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PERMANENT CLOSURE AND REZONING OF ERF 740, EXTENSION 2, ONDANGWA.



ENVIRONMENTAL SCOPING REPORT

PREPARED FOR:

Coptic Orthodox Church in Namibia

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June 2021

DOCUMENT DESCRIPTION

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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
- MEFT: Ministry of Environment, Forestry 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

The Coptic Orthodox Church in Namibia purchased Erf 740 and Erf 741, Extension 2, Ondangwa in the year 2000. Erf 740 and Erf 741 are located adjacent to each other and currently enclosed in a boundary wall. Erf 741 is zoned institutional and is occupied by the church office building, living quarters and partially by the church main building. Erf 740 is currently zoned Public Open Space (POS) and is partially occupied by the church main building, but the larger part of the Erf is vacant.

According to the Ondangwa Town Council Open Space Policy, "Public Open Spaces" (POS) are defined as *"those areas specifically left free of any intensive development. They can serve many functions, including preservation of fragile ecosystems, natural area, scenic vista, aesthetic quality, wildlife habitats, cultural, historical and archeological areas, outdoor recreation areas of all forms, pedestrian linkages, walkways and trails, aquifer recharge areas, etc".*

The church intends to construct an outbuilding to accommodate at least two flats on Erf 740. The Ondangwa Town Council has requested the church to apply for the permanent closure and rezoning of Erf 740 from POS to institutional in terms of Article 50 (1) (c) of the Local Authorities Act 23 of 1992 as amended and Section 105 (12) (a) of the Urban and Regional Planning Act 5 of 2018.

In terms of the Environmental Management Act of 2007 (Schedule 5.1) and its regulations (GN No. 30 of 2012), the permanent closure of a Public Open Space may not be undertaken without an Environmental Clearance Certificate (ECC) being 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, Forestry and Tourism. The study was conducted in a multidisciplinary approach were 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 way 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 socioeconomic 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).

1.4 Project Team

Developer/Proponent	Coptic Orthodox Church in Namibia
	Tel: 065246363
	Father Akhnoukh Elanbabishoy
Local Authority	Ondangwa Town Council
	Tel: 065 245 700
	Mr. Ismael Ileni Namgongo (CEO)
Town Planner	TOYA Urban Planning Consultants Cc P.O. Box 99294, Windhoek
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Design Engineer	Otweya Consulting Engineers Tel: +264 65 241 118 Mr. Ivambo Ipinge (Civil Engineer)
Environmental Assessment	Green Gain Consultants cc
Practitioner	Office Erf 2696, Joe Davis, Narraville, Walvis
	Вау
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2. PROJECT DESCRIPTION

2.1 Site Locality

The development site (Erf 740) measures approximately 4172.12 m² in extent and is in Extension 2, Ondangwa. The site can be found on the geographical coordinates -17.908333" South, 15.984444" East, along the Patrick Lunganda Street.



Figure 1: Locality of the site

2.2 Site context

a). Site surrounding

The proposed development site (Erf 740) is enclosed within a boundary wall which belongs to the Coptic Orthodox Church. The site is in Ondangwa extension 2 which is made up of mixed uses consisting mainly of residential, businesses and institutions.



Figure 2: Physical features of the site

b). Physical setting

Figure 3 below depict the site plan for Erf 740 and Erf 741 which is enclosed in one boundary wall and accommodates a guard house, the existing living quarters, the church main building (encroaching both Erf 740 and Erf 74) as well as the proposed new outer building (flats) on the vacant portion.



Figure 3: Site plan

c). Site overview

The proposed development site has a flat elevation and has less vegetation consisting mainly of ornamental plants species i.e., *Azadirachta indica*, commonly known as the neem tree. The site is somehow disturbed due to its proximity to the existing church.



Figure 4: Site overview (A-C)

- A- Main entrance to Erf 740 and Erf 741
- B- Main church building
- C- Proposed development site and existing living quarters.

d). Accessibility

Access to the site (Erf 740/741) is obtained from Patrick Lunganda Street and/or James Hamukwa Street which links to the existing road network. The street is wide enough (25 meter) and well-connected thus it will result in smooth traffic flow during construction phase and operation phase.



Figure 5: Site accessibility

2.3 The intended activities

The proposed activities entail the following.

- Permanent closure of Erf 740 as a Public Open Space
- Rezoning of Portion a from "Public Open Space" to "Institutional"
- Consent to start with construction once application is approved by the Ondangwa Town Council

The idea is to construct at least two additional flats with supporting facilities i.e., kitchen, toilets etc. The proposed new building will be constructed as per the building layout and plan presented here below. The building plan will be submitted to the Ondangwa Town Council for approval prior to the construction activities. The proposed building will be constructed within the existing boundary wall, south-east of the existing church main building.



Figure 6: Proposed site layout



Figure 7: Proposed building elevation

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 740 is zoned Public Open Space, it was already sold/allocated to the proponent in 2000. Moreover, it is enclosed in an existing church boundary and is adjacent to the church building. Hence, it is not ideal for activities which can be accommodated on Public Open Spaces i.e., public parks, playgrounds, sport fields etc., as per the Ondangwa Town Planning Scheme. As such, the proposed development site was considered ideal for the intended activities and no other alternative site was considered.
- 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 institutional land to stimulate social-economic growth of the town. 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.

2.5 Need and Desirability

Since the proposed development site (Erf 740) already belongs to the proponent (Coptic Orthodox Church in Namibia) and is the proximity of the church main building, the proposed rezoning is necessary to ensure compliance to the Ondangwa Town Planning Scheme.

Moreover, the intended developments (flats) will be for Institutional use such as place of instructions, house of worship or place of assembly and includes additional "Dwelling Unit" such as flats or outbuildings to supplement the activities of the main building on Erf 740.

The minimum building value of the main building, including the outbuildings, which may be erected on Erf 740 shall be equals to two times the local authority valuation of the Erf as at the date of the approval by the local authority of the building plans relating to such buildings.

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 section21 (2) of the Environmental Regulations of (GG6 of February 2012). Public notices were advertised twice in two local newspapers: New Era 30 April 2021 and 07 May 2021 and the Confidante newspaper for 29 April 2021 and 06 May 2021. Public notices were 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 12 February 2021.

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	
1. National Legislation			
Constitution of the	The articles 91(c) and 95(i) commits the	The proposed development must be of	
Republic of Namibia	state to actively promote and sustain	sound environmental management	
(1990)	environmental welfare of the nation by	objectives.	
	formulating and institutionalizing policies		
	to accomplish the sustainable objectives		
	which include:		
	- Guarding against overutilization of		
	biological natural resources,		
	- Limiting over-exploitation of non-		
	renewable resources,		
	- Ensuring ecosystem functionality,		
	- Maintain biological diversity.		
Environmental	The purpose of this Act is to promote the	"Public Open Space closure is	
Management Act No. 07	sustainable management of the	subjected to an EIA hence this study.	
of 2007	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.		
Water Resources	This Act provides provision for the control,	The protection of ground and surface	
Management Act 2004	conservation and use of water for	water resources should be a priority.	
	domestic, agricultural, urban and industrial	Obligation not to pollute surface water	
	purposes. In addition, the Act clearly gives	bodies.	
	provision that pertain with license or permit		

	1	1
	that required abstracting and using water	
	as well as for discharge of endent.	
Draft Urban and Regional	It is envisaged that the current system of	The Developer shall apply for the
Planning Bill and	land use planning and development	rezoning of Public Open Space to the
Regulations	controlled in Namibia will be	MURD as per this Act requirements.
	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 or urban	
	areas	
Pollution Control and	This Bill serves to regulate and prevent the	All activities shall be conducted in an
Waste Management Bill	discharge of pollutants to air and water as	environmental sustainably manner
Waste Management Bill	well as providing for general waste	
	management This Bill will license	
	discharge into watercourses and	
	emissions into the air	
Labour Act (No 11 of	135 (f): "the steps to be taken by the	Contractors, Sub-contractor shall be
2007)	owners of premises used or intended for	guided by this Act when recruiting or
	use as factories or places where	handling employment related issues.
	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)	
Noise Control	It is assential to ansure that before any	Noise generation during
Regulations	development project is approved and	construction/dovelopment/rebabilitation
(Labour Act)	undertaken an assessment or evaluation	should be minimized to the satisfactory
	of expected poise level is done	of peighboring residents and the town
	or expected hoise level is done.	
Town and Regional	This Act establishes the Namibian Council	A registered Town Planner has been
Planners Act, 1996 (Act	for Town and Regional Planners, defines	appointed for this project.
No. 9 of 1996)	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	
	their conduct. The Minister may, on recommendation of the Council prescribe	
	their conduct. The Minister may, on recommendation of the Council prescribe the kinds of work of a town and regional	

	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.	
Town Planning Ordinance (No. 18 of 1954)	Subdivision of land situated in any area to which an approved Town Planning Scheme applies must be consistent with that scheme (S31).	Town Planning Procedures will be registered through the MURD.
Ondangwa Town Planning amendment Scheme No.2	Identify different land use categories, zoning, use and consent use. "Public Open Space" is referring 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. whereas	Consent was obtained from the Town Council for the rezoning of the proposed land from POS to Institution. Town Planning procedures will be registered, and approval will be requested from MURD.
Ondangwa Public Open Space Policy	To ensure that the provision of sufficient and comprehensive mix of parks, recreational facilities and natural areas satisfy the health, safety, welfare, and changing needs of Ondangwa citizens and visitors including special groups such as the elderly and the handicapped.	The proposed development will not compromise the objectives of this Policy, hence only a portion of the POS will be alienated.

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 of Ondangwa 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 and Hydrogeology

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-Etosha 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.

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.

d) 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 its 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).

e) 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

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 in the town, e.g., the Ministry of Education. Since independence, the government has settled 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 practioner's), dentists, and pharmacies. Most of the health facilities in town operate during the day and they also cater for the people living in the 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 several investors have decided to look for investment possibilities elsewhere. Ondangwa is a favorable investment hub for investors seeing that it is in the 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 several 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.

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

Table 2: Significance Assessment criteria

Table 3: Criteria for significance ratings

Low impact	A low impact has no permanent impact of significance. Mitigation measures are feasible and are readily instituted as part of a standing design, construction, or operating procedure.
Medium impact	Mitigation is possible with additional design and construction inputs.
High impact	The design of the site may be affected. Mitigation and possible remediation are needed during the construction and/or operational phases. The effects of the impact may affect the broader environment.
Very high impact	Permanent and important impacts. The design of the site may be affected. Intensive remediation is needed during construction and/or operational phases. Any activity which results in a "very high impact" is likely to be a fatal flaw.
Status	Denotes the perceived effect of the impact on the affected area.
Positive (+)	Beneficial impact
Negative (-)	Deleterious or adverse impact.
Neutral (/)	Impact is neither beneficial nor adverse
It is important to note th Therefore, not all negat	at the status of an impact is assigned based on the status quo – i.e. should the project not proceed. ive 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 several 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 because 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	
1. BIOPHYSICAL Impact on Biodiversity	Vegetation clearance during construction	Site	Low	Low	Improbable	• The site has very few plants, most of which are ornamentals.
Topography and aesthetic view	Change of visual and aesthetic view	Local	Medium term	Low	Probable	• The proposed development will fit in with the existing buildings.
Impact on Soil	 Compaction of soil during construction Extracting filling material might cause secondary impacts to the source area 	Local	Medium- term	Moderate	Probable	 Back filling materials (if needed) and building sand should be sourced from burrow pits with valid ECC.
Impact on Drainage	 Construction activities may affect the flow of storm water of the site. 	Site	Short-term	Moderate	Probable	 Make provision for storm water channel of the site and connect to the existing main town stormwater channel.
Air quality	 Release of dust from building and development activities, equipment, and construction vehicles Generation of fumes from vehicles and construction equipment may pollute the air 	Local	Short-term	Moderate	Probable	Ensure dust-suppressing i.e., spraying with water.

Noise	Noise impacts during construction phase will occur from construction vehicles etc. which might be a nuisance to residents and employees.	Local	Short-term	Moderate	Probable	 Construction should be limited to normal working days and office hours (08h00-17h00). Limit the number of Vehicle and heavy implements at the site. Watering of all construction haulage.
Waste	 Generation of waste through construction and rehabilitation activities mainly building rubbles and domestic waste. Sewage waste will be generated from temporary construction toilets on site. 	Site	Short-term	Low	Probable	 All solid waste generated must be gathered and disposed to the dumpsite. All properties must be provided with a standard ablution facility and connected to the municipal sewer system
Water	Contamination of surface water and groundwater from construction activities	Local	Short-term	Low	Probable	 Contaminated soil must be cleaned up.
Occupational and Public safety	 Construction activities may create several health risks to the employees and public at large. 	Local	Short-term	Moderate	Probable	 All employees must have PPE. Signage should be place at the entrance of the construction. Construction equipment must be of required engineering standards.
2. SOCIO-ECONOMIC Traffic impacts	 Increase in traffic congestion within the area during construction phase. 	Site	Medium term	Moderate	Probable	 There is already an existing access road which provide access to the site and adjacent properties. Flagmen and traffic controls should be appointed to regulate traffic flow of construction vehicles.

Crime	 Construction activities are associated with an increase on criminal activities due to an influx of temporary, migrant workers 	Site	Short-term	Low	Probable	 All equipment can be stored away from the site or in a secure place. Recruit as many locals as possible.
Employment opportunities	• The construction phase will provide temporary employment opportunities during construction (+ve)	Local	Short-term	High	Definite	 Employment opportunities will be created during development
Economic Development	Construction phase will create economic opportunities for the local businesses (+ve)	Local	Short-term	Low	Highly probable	 Economic drives will be generated from development of the site

Table 5: Potential Impacts during Operation phase

ASPECT	POTENTIAL IMPACTS	RATING			MEASURES AND REMARKS	
		Extent	Duration	Intensity	Probability	
1. BIOPHYSICAL Impact on Biodiversity	 Impact the local biodiversity 	Site	Long-term	Low	Improbable	• The development must include greenery as part of landscaping to enhance biodiversity and aesthetic view.
Impact on Soil	 Possibility of erosion soil erosion during rainy season due to altered drainage. Contamination of soil from building or ablution facilities 	Local	Long-term	Moderate	Improbable	 Ensure proper drainage from the site. Provide proper maintenance of sewage pipes and rehabilitate the area in case of spillage/leaks
Impact in Groundwater	Potential pollution of groundwater from leaking sewage pipes or other contaminants	Local	Long-term	Moderate	Improbable	 Fix all leaking sewage pipes. Do not allow direct discharge of pollutants in the surface runoff. Ensure proper drainage of storm water by installing and maintenance of culverts that carries rainwater away from the site to avoid flooding of neighboring properties.
Waste generation	 Generation of domestic waste Sewage waste will be generated from toilets 	Site	Short-term	Low	Probable	 All solid waste generated must be gathered and disposed to the dumpsite. Ensure maintenance of sewage system.
Increase Water demand	 Increase local water demand 	Local	Long-term	Moderate	Probable	• Encourage rainy water harvesting for domestic use to reduce water consumption

Increase Electricity demand	Increase demand on electricity	Local	Long-term	Moderate	Probable	• Encourage use of renewable energy i.e., Solar geysers to supplement the electricity supply
Increase demand of Municipal	Increase demand on municipal services i.e., sewer connection and maintenance, waste collection etc.	Local	Long-term	Moderate	Probable	 Most of the required services are readily available i.e., sewer, water, roads, and electricity.
services						
2. SOCIO-ECONOMIC Traffic impacts	 Increase traffic flow on the adjacent roads during operation phase 	Site	Medium term	Moderate	Probable	 The construction of the outbuilding is not expected to increase the number of tenants, thus potential impacts to traffic as a result of construction is expected to be very low.
Socio-economic development						· · · · · · · · · · · · · · · · · · ·
(+ve)	The proposed development will enable the church to provide accommodation to its management staff.	Local	Long-term	High	Probable	

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 approval of this application would not compromise the integrity of the existing environmental management priorities of the town.
- There were no objections or critical issues have been raised by I&AP's.
- 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 is not suitable for development of a public open space i.e., public park due to its proximity to the church premises.
 - The portion was acquired in accordance with Council's sale of land policy and the Local Authorities Act 22 of 1992 and it will be utilized in accordance with the Ondangwa Town Planning Scheme.
- Erf 740, upon rezoning, it will be utilized for Institutional use such as place of instructions, house of worship or place of assembly and includes additional "Dwelling Unit" such as flats or outbuildings to supplement the activities of the main building on Erf 741.

8.2 EAP Recommendations

It is recommended that the Developer must.

- Ensure that the minimum building value of the main building, including the outbuildings, which may be erected on Erf 740 shall be equals to two times the local authority valuation of the Erf as per the Ondangwa Town Council Building Policy.
- Conduct all activities, from Planning to Construction in accordance with the Environmental Management Plan.

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 "**permanent Closure** and Rezoning of Erf 740 from Public Open Space to Institutional, Extension 2, Ondangwa, Oshana region.

9. REFERENCES

- Cronje G, et al Ondangwa Storm Water Management. (2013). Aurecon.
- GRN. (2013). 2011 Population and Housing Census Main Report. Windhoek: National Statistics Agency
- GRN. (2014). 2011 Housing and Population Census Regional Profile, Oshana Region. Windhoek: Namibia Statistics Agency.
- Kangombe, Nd. F, 2010. The vegetation of Omusati and Oshana regions, central north Namibia (Research Thesis for M.Sc. Plant Science). University of Pretoria.
- Mendelsohn, J., Jarvis, A., Roberts, C., & Robertson, T. 2002. Atlas of Namibia. New Africa Books (Pty) Ltd: Cape Town.
- Republic of Namibia: Ministry of Environment and Tourism, (2012). Environmental Impact Assessment Regulations, GG 4878, GN 29, Windhoek: MET.
- Tamayo V, et al, Flood risk management Plan, 2011. Ministry of Regional, Local Government, Housing and Rural Development.
- Ondangwa Town Council, 2016. Ondangwa Public Open Space Policy, prepared by Nghivelwa Planning Consultant

10. APPENDICES

- APPENDIX A: List of IAPs
- APPENDIX B: CV and ID of the EAP
- APPENDIX C Council Approval
- APPENDIX D Proof of Consultation
- APPENDIX E EMP

APPENDIX A: List of I&APs

ORGANISATION	REPRESENTATIVE AND	CONTACT DETAILS			
	TITLE				
Ondangwa Town	CEO	inamgongo@ondangwatc.org.na			
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	Assistant Town Planner	nndeikonghola@ondangwatc.org.na			
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	Sem Gabriel	065-240101			
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Regional Planner	Town Planner				
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Engineers	Consulting Engineer				
NORED	Mr. Isac Nekwaya	i.nekwaya@nored.com.na			