




***ENVIRONMENTAL IMPACT ASSESSMENT TO  
CREATE 'PUBLIC ROADS' OVER THE  
REMAINDER OF FARM KATIMA MULILO  
TOWNLANDS NO. 1328 TO PROVIDE  
ACCESS TO PORTION 115 OF THE  
REMAINDER OF KATIMA MULILO  
TOWNLANDS NO. 1328 (ZAMBEZI REGION)***

***2024***

***App - 240726004464***

Project Name:	<p><b>ENVIRONMENTAL IMPACT ASSESSMENT TO CREATE 'PUBLIC ROADS' OVER THE REMAINDER OF FARM KATIMA MULILO TOWNLANDS NO. 1328 TO PROVIDE ACCESS TO PORTION 115 OF THE REMAINDER OF KATIMA MULILO TOWNLANDS NO. 1328 (ZAMBEZI REGION)</b></p>
The Proponent:	<p>Roman Catholic Church (Katima Holy Family) P O Box 2420 Katima Mulilo</p>
Prepared by:	<div data-bbox="555 1077 1444 1413" style="border: 1px solid black; padding: 10px;">  <p><b>Green Earth</b> ENVIRONMENTAL CONSULTANTS</p> <p>1<sup>st</sup> floor Bridgeview Offices &amp; Apartments, No. 4 Dr Kwame Nkrumah Avenue, Klein Windhoek, Namibia PO Box 6871, Ausspannplatz, Windhoek</p> </div>
Release Date:	<p>July 2024</p>
Consultant:	<p>C. Du Toit C. Van Der Walt Cell: 081 127 3145 Email: charlie@greenearthnamibia.com</p>

## EXECUTIVE SUMMARY

*Green Earth Environmental Consultants* were appointed by the Proponent, Roman Catholic Church (Katima Holy Family), to conduct an Environmental Impact Assessment to obtain an Environmental Clearance to create public roads in the form of “right of way servitudes” over the Remainder of Farm Katima Mulilo (Zambezi Region) Townlands No. 1328 to provide access to Portion 115 on which the Roman Catholic Church (Katima Holy Family) and supporting infrastructure which include schools, hostels, sport field and housing is located. The right of way servitudes link Portion 115 with Trunk Road 8 Section 7. The land within the immediate vicinity of the project site is predominately characterized by residential, business, and institutional activities. In terms of the Regulations of the Environmental Management Act (No 7 of 2007), an Environmental Impact Assessment must be done to address the following ‘Listed Activities’:

### **INFRASTRUCTURE**

*The construction of:*

- *Public roads.*

*The route determination of roads and design of associated physical infrastructure where:*

- *It is a public road;*
- *The road reserve is wider than 30 meters;*
- *The road caters for more than one lane of traffic in both directions.*

The environmental impacts during the operational phase of the proposed project:

<b>IMPACTS DURING OPERATIONAL PHASE</b>			
<b>Aspect</b>	<b>Impact Type</b>	<b>Significance of impacts Unmitigated</b>	<b>Significance of impacts Mitigated</b>
Ecology Impacts	-	M	L
Dust and Air Quality	-	M	L
Groundwater Contamination	-	M	L
Waste Generation	-	M	L
Failure of Reticulation Pipeline	-	M	L
Fires and Explosions	-	M	L
Safety and Security	-	M	L

<b>IMPACT EVALUATION CRITERION (DEAT 2006):</b>		
<b>Criteria</b>	<b>Rating (Severity)</b>	
<b>Impact Type</b>	+	Positive
	O	No Impact
	-	Negative
<b>Significance of impacts</b>	L	Low (Little or no impact)
	M	Medium (Manageable impacts)
	H	High (Adverse impact)

The negative impacts associated with the project are the impact on the vegetation, the natural drainage systems, noise and dust during construction and operation, the danger of residents and visitors being injured during construction, the transmission of diseases from people or to people involved in construction and the loss of land. However, mitigation measures will be provided that can control the extent, intensity, and frequency of these named impacts in order not to have substantial negative effects or results.

The type of activities that will be carried out on the site will not negatively affect the amenity of the locality and the activities do not adversely affect the environmental quality of the neighbouring erven or areas. None of the potential impacts identified are regarded as having a significant impact to the extent that the proposed project should not be allowed. However, the operational activities further on need to be controlled and monitored by the assigned subcontractors and the proponent.

The Environmental Impact Assessment which follows upon this paragraph was conducted in accordance with the guidelines and stipulations of the Environmental Management Act (No 7 of 2007) meaning that all possible impacts have been considered and the details are presented in the report. Based upon the conclusions and recommendations of the Environmental Impact Assessment Report and Environmental Management Plan following this paragraph, the Environmental Commissioner of the Ministry of Environment, Forestry and Tourism is herewith requested to:

1. Accept the Environmental Impact Assessment;
2. Approve the Environmental Management Plan;
3. Issue an Environmental Clearance to create public roads in the form of "right of way servitudes" over the Remainder of Farm Katima Mulilo (Zambezi Region) Townlands No. 1328 to provide access to Portion 115 on which the Roman Catholic Church (Katima Holy Family) is located and supporting infrastructure is located and for the following "listed activities":

#### **INFRASTRUCTURE**

*The construction of:*

- *Public roads.*

*The route determination of roads and design of associated physical infrastructure where:*

- *It is a public road;*
- *The road reserve is wider than 30 meters;*
- *The road caters for more than one lane of traffic in both directions.*

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## **LIST OF ABBREVIATIONS**

CAN	Central Area of Namibia
EC	Environmental Clearance
ECO	Environment Control Officer
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
I&APs	Interested and Affected Parties
MEFT	Ministry of Environment, Forestry and Tourism
SQM	Square Meters



## 1. INTRODUCTION

The Proponent, Roman Catholic Church (Katima Holy Family), appointed Green Earth Environmental Consultants to conduct an Environmental Impact Assessment and develop an Environmental Management Plan to obtain an Environmental Clearance to create public roads in the form of "right of way servitudes" over the Remainder of Farm Katima Mulilo (Zambezi Region) Townlands No. 1328 to provide access to Portion 115 on which the Roman Catholic Church (Katima Holy Family) and supporting infrastructure which include schools, hostels, sport field and housing is located. The right of way servitudes link Portion 115 with Trunk Road 8 Section 7. The Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) stipulates that an Environmental Impact Assessment (EIA) report and management plan is required as the following 'Listed Activities' are involved:

### **INFRASTRUCTURE**

*The construction of:*

- *Public roads.*

*The route determination of roads and design of associated physical infrastructure where:*

- *It is a public road;*
- *The road reserve is wider than 30 meters;*
- *The road caters for more than one lane of traffic in both directions.*

The Environmental Impact Assessment below contains information on the proposed project and the surrounding areas, the proposed activities, the applicable legislation to the study conducted, the methodology that was followed, the public consultation that was conducted, and the receiving environment's sensitivity and any potential ecological, environmental, and social impacts.

## 2. TERMS OF REFERENCE

To be able to implement the proposed project, an Environmental Impact Assessment and Environmental Clearance is required. For this environmental impact exercise, Green Earth Environmental Consultants followed the terms of reference as stipulated under the Environmental Management Act.

The aim of the environmental impact assessment was:

- To ascertain existing environmental conditions on the site to determine its environmental sensitivity.
- To inform I&APs and relevant authorities of the details of the proposed development and to provide them with an opportunity to raise issues and concerns.
- To assess the significance of issues and concerns raised.
- To compile a report detailing all identified issues and possible impacts, stipulating the way forward and identify specialist investigations required.

- To outline management guidelines in an Environmental Management Plan (EMP) to minimize and/or mitigate potentially negative impacts.
- To comply with Namibia's Environmental Management Act (2007) and its regulations (2012).

The tasks that were undertaken for the Environmental Impact Assessment included the evaluation of the following: climate, water (hydrology), vegetation, geology, soils, socio economic impact, cultural heritage, groundwater, sedimentation, erosion, biodiversity, sense of place, socio-economic environment, health, safety and traffic.

The public consultation process as per the guidelines of the Act has been followed. The methods that were used to assess the environmental issues and alternatives included the collection of data on the project site and surrounding area, info obtained from the proponent and the Ministry of Environment, Forestry and Tourism and identified and affected stakeholders. Consequences of impacts were determined in five categories: nature of impact, expected duration of impact, geographical extent of the event, probability of occurring and the expected intensity.

All other permits, licenses or certificates that are further on required for the operation of the proposed project still needs to be applied for by the proponent.

### **3. MOTIVATION, NEED AND DESIRABILITY**

Katima Mulilo Town Council intends to develop the larger Portion of the Remainder of Farm Katima Mulilo Townlands No. 1328 on which the Church's facilities are located. A submission in this regard has already been submitted to Council but the finalization of Council's approval is subject to resolving certain land claims.

As the Church are desirous to take ownership of their land, it is proposed that the subdivision to create Portion 115 for the Church be finalized.

The proposed subdivision to create Portion 115 for the Church are motivated as follows:

- The Church has occupied this land since 1945 with the approval of the then Traditional Authority.
- The Church invested heavily in the construction of infrastructure like the church, church hall and supporting buildings, schools, hostels, sport fields and housing for the staff and others which are permanent structures which cannot be relocated.
- The proposed development of the Remainder of Farm Katima Mulilo Townlands No.1328 makes provision for the creation of a site to accommodate the Church's facilities.
- The site occupied by the Church has been clearly defined and accepted by Katima Mulilo Town Council. Councils' land surveyor and the Church Elders agreed on the coordinates of the site which were used to determine the cadastral boundaries for Portion 115.
- Transferring the land to the Church will allow them to develop it further. Currently they are hesitant to upgrade the existing facilities or to build new facilities due to the uncertainty of landownership.
- The Church plays an important role in the Katima Mulilo society as well as in the urban landscape of Katima Mulilo

They appointed Du Toit Town Planning Consultants to attend to the town planning procedures to create the site (Portion 115). Katima Mulio Town Council approved the subdivision of the Townlands to create Portion 115 per Council Resolution C62/19/07/2023/5<sup>th</sup> ODCM 2023.

According to the information mentioned above, it is believed that there is a need and desirability for the project.

Determining what the impact of the operations would be are broken down into different categories and environmental aspects and dealt with in the Environmental Management Plan (EMP). As per the ISO 14001 definition: *an environmental aspect is an element of an organization's activities, products and/or services that can interact with the environment to cause an environmental impact e.g., land degradation or land deterioration among others, that will cause harm to the environment.*

All concerns and potential impacts raised during the public participation process and consultative meetings were evaluated. Predictions were made with respect to their magnitude and an assessment of their significance was made according to the following criteria:

**The Nature of the activity:** The possible impacts that may occur are that water will be used in the construction and operational phases, wastewater will be produced that will be handled either by the Municipality or by the proponent, land will be used for the proposed activities, a sewage system will be constructed, and general construction activities will take place, namely the building of infrastructure.

**The Probability of the impacts to occur:** The probability of the above-named impacts to occur and have a negative or harmful impact on the environment and the community is small since the Environmental Management Plan will also guide these activities. Water will still be used, and wastewater produced, however guidelines will be set that will ensure the impact is minimum.

**The Extent of area that the project will affect:** The specific project will most likely only have a small impact on the proposed project site itself and not on the surrounding or neighbouring land except for noise, traffic, roads, electricity and dust and there may be a visual impact because of the size of the proposed development. Therefore, the extent that the project will have a negative impact on is not extensive.

**The Duration of the project:** The duration of the project is uncertain. Water will still be used, and waste produced on a continuous basis and the structures that were constructed will remain and may be visually unpleasing to surroundings.

**The Intensity of the project:** The intensity of the project is mostly limited to the site however for the above-named items/processes where the intensity of the project will be felt outside the borders of the project site.

According to the information that was present while conducting the Environmental Impact Assessment for the construction and operation of the project, no high-risk impacts were identified and therefore it is believed that the operations will be feasible in the short and long run. Most of the impacts identified were characterized as being

of a low impact on the receiving and surrounding environment and with mitigation measures followed, the impacts will be of minimum significance or avoided.

## **4. BACKGROUND INFORMATION ON THE PROJECT**

### **4.1.HISTORY OF THE SITE**

The Roman Catholic Church (Katima Holy Family) has occupied this site (Portion 115) since 1945 when they established a mission on the site. They therefore have a vested claim and right of use to this land. The site occupied by the Church is still part of the Remainder of Farm Katima Mulilo Townlands No. 1328 which is registered in the Name of Katima Mulilo Town Council. The Church want to formalize this site by subdividing the Remainder of Farm Katima Mulilo Townlands No. 1328 to create a separate portion for their facilities which then, once created, will be transferred to the Church. They appointed Du Toit Town Planning Consultants to attend to the town planning procedures to create the site (Portion 115).

To be able to finalise the subdivision process, an Environmental Clearance must be obtained for the creation of the public roads (right of way servitudes which are used as access to Portion 115).

### **4.2.SITE INFORMATION (LOCALITY, SIZE AND ZONING)**

Locality and use: The infrastructure of the Roman Catholic Church is located on Portion 115 of the Remainder of Farm Katima Mulilo Townlands No. 1328 which is located directly adjacent and to the south of the Zambezi River and to the north of the Trunk Road 8 linking Katima Mulilo with Ngoma. These facilities include the church, church hall and supporting buildings, schools, hostels, sport fields and housing for the staff and others related to the church activities. Portion 115 is ± 42,3816ha.

The locality of the site is shown as Portion A on the plan below:

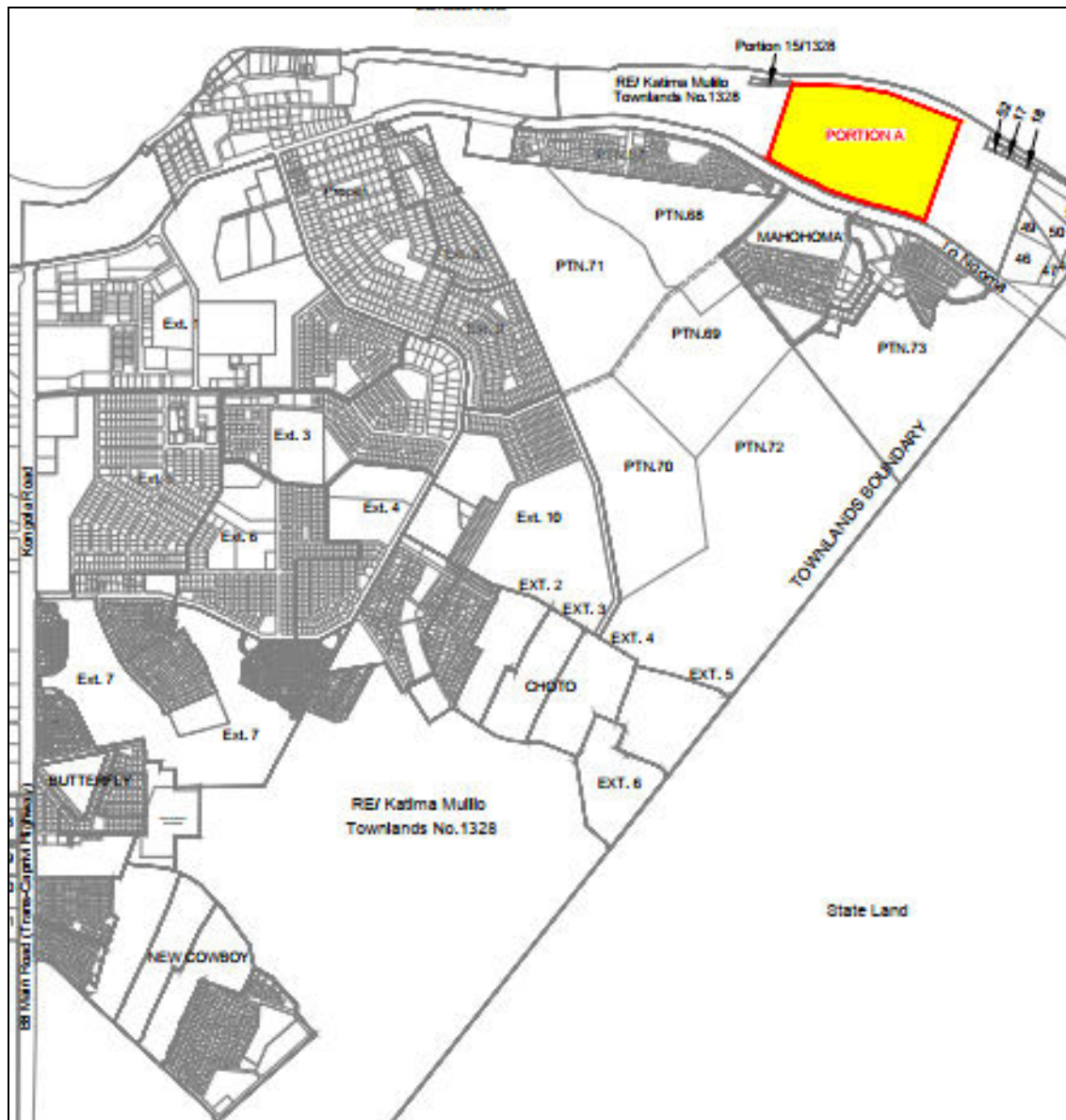


Figure 1: Locality of Portion 115 within greater Katima Mulilo

The *Photo* below shows the locality of the facilities on proposed Portion 115:

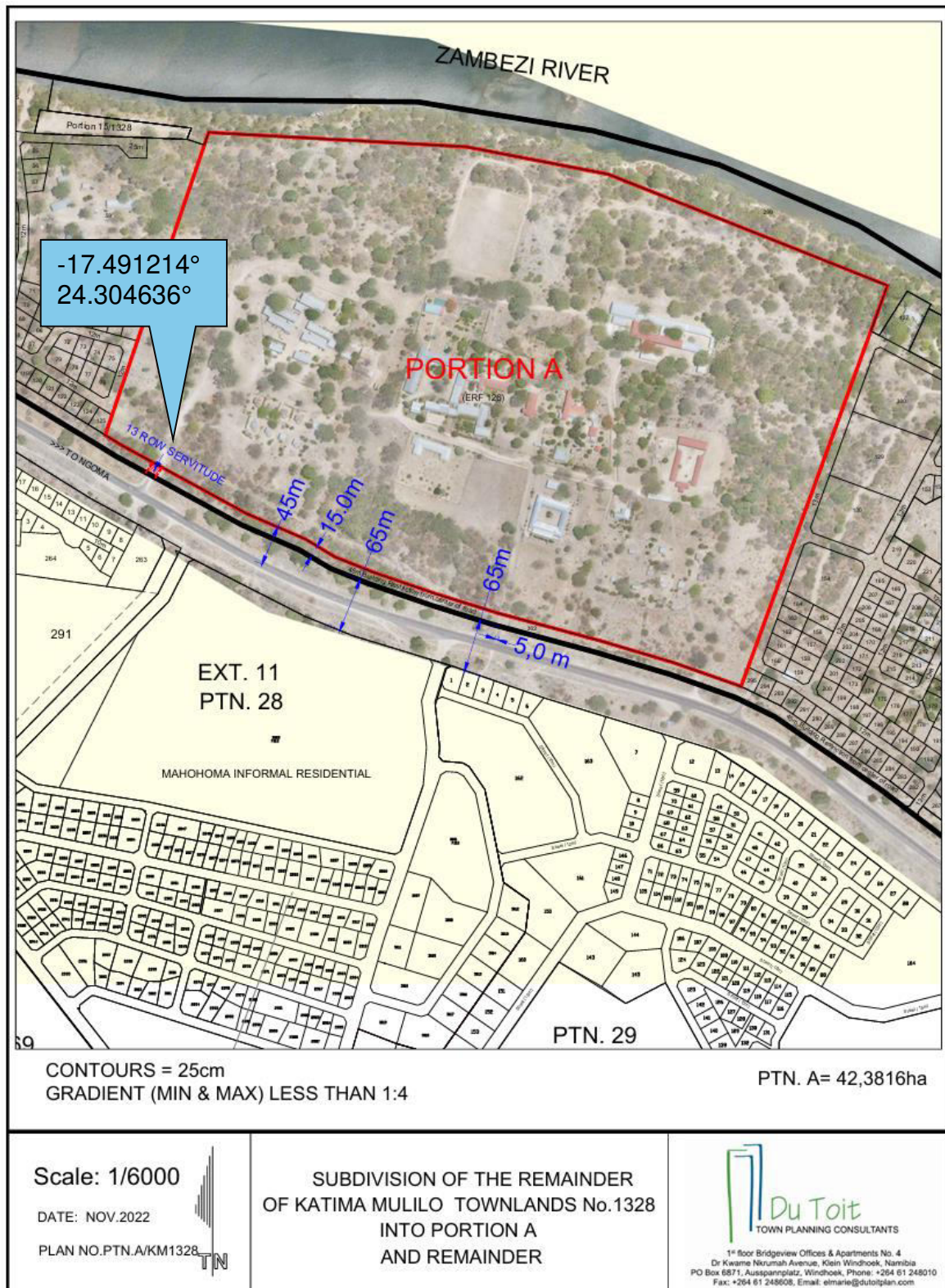


Figure 2: Locality of buildings on Portion 115

**Zoning:** The Remainder of Farm Katima Mulilo Townlands No. 1328 is zoned 'nature reserve'. The zoning of Portion 115 will remain 'nature reserve' as the existing uses on the Portion can be accommodated as consent uses for institutional purposes.

**Topography and vegetation:** The area is generally flat. The Zambezi River is located directly to the north of the development area. There are several drainage systems in

the area, draining mostly into a southwestern direction. These storm water drainage systems were already accommodated in landscaping of the Church's site and the existing buildings were positioned and constructed as such as to not interfere with the natural surface drainage of the site. See below plan showing the contours of the site:

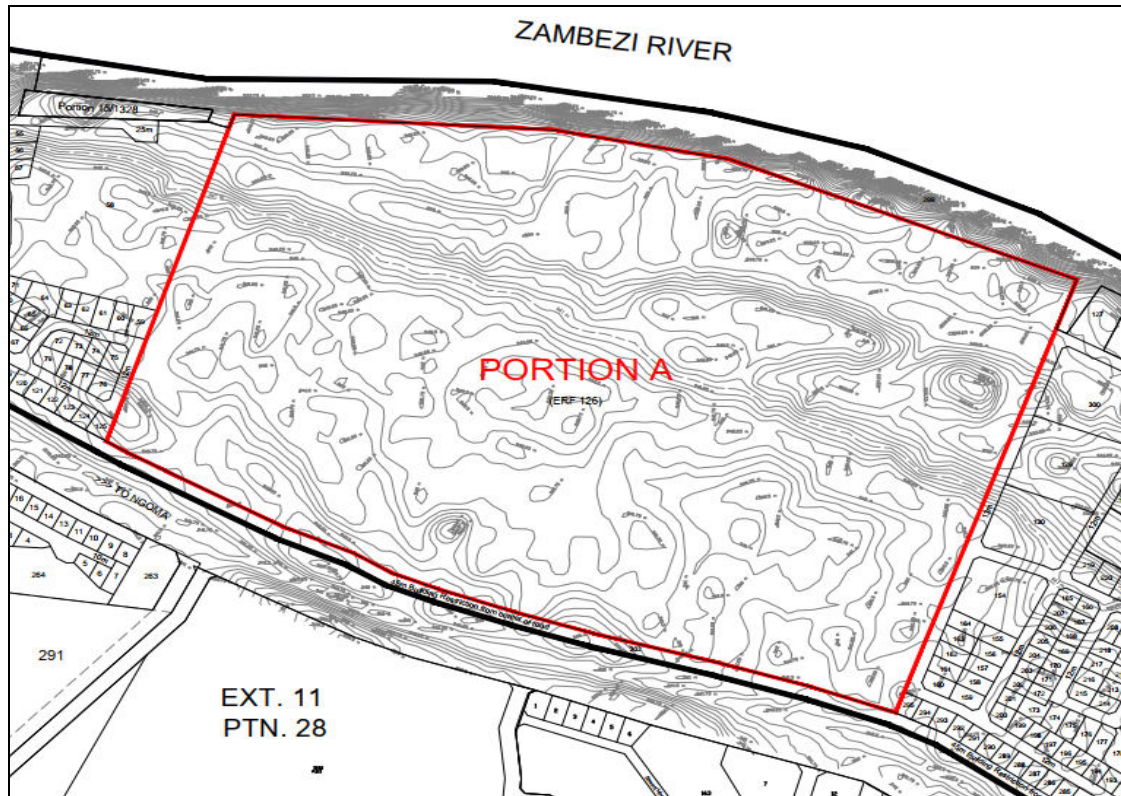


Figure 3: Contour map

The vegetation of the portion comprises mainly of bigger trees and shrubs along the floodplain/drainage line with annual and perennial grasses in the seasonally flooded area. Some of the natural vegetation on the portion has been influenced by human activity such as the construction of Roman Catholic schools, hotels and housing and sport field and other activities generally associated by a concentration of people.

## 5. BULK SERVICES AND INFRASTRUCTURE

The Project Site is connected to the following municipal infrastructure.

### 5.1.ACCESS AND PARKING

Proposed Portion 115 is accessed from Trunk Road 8 Section 7 as is shown on the *Photo* below. This access will remain. To formalise the access, a 13m right of way must be registered over the Remainder of Farm Katima Mulilo Townlands No. 1328 to link Portion 115 with the Trunk Road.

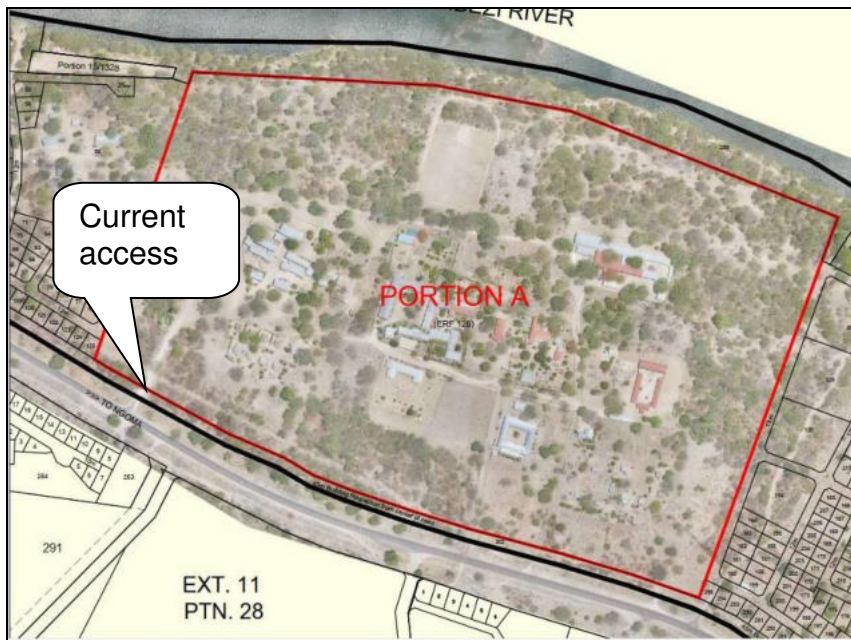


Figure 4: Current access to Portion 115

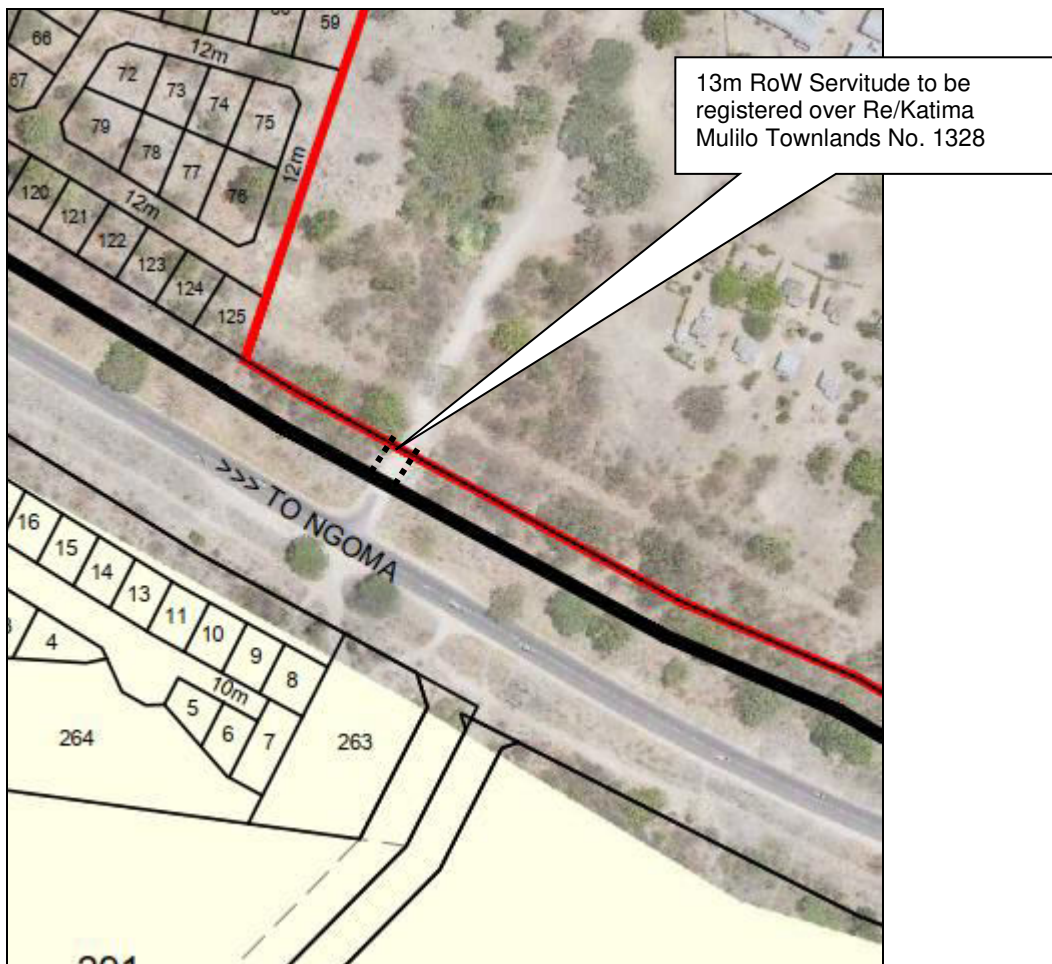


Figure 5: Right of way servitude to be registered



The accesses are supported by the Roads Authority as can be seen from their letter below:



Safe Roads to Prosperity

Our Ref :  
Your Ref :  
Date : 23 November 2022

DIVISION NETWORK MAINTENANCE  
CHIEF ENGINEERING TECHNICIAN  
ROADS AUTHORITY  
P.O. BOX 2594  
NGWEZE

Enquiries : D.S. Maswahu  
Telephone No : (066) – 254 703  
Facsimile No : (066) – 254 701  
Email Address : [maswahud@ra.org.na](mailto:maswahud@ra.org.na)

DU TOIT PLANNING CONSULTANT  
P.O.BOX 6871  
AUSSPANPLATTZ  
WINDHOEK



Dear Sir / Madam

**RE: APPLICATION FOR TWO ACCESS POINTS REQUIRED SUBDIVISION OF THE REMAINDER OF KATIMA MULILO TOWN LAND NUMBER 1326 INTO PORTION (A) FOR THE ROMAN CATHOLIC CHURCH AND KIZITO SENIOR SECONDARY SCHOOL**

The above subject matters bears reference;

Please be informed that the areas in which Du Toit Consultant applied for two access points based on the northern side of Trunk Road 8 Section 7, there is already two existing surfaced access points being **Type B** access. First access point on the western side according to the drawing is to Kizito Senior secondary school where there is a hostel, second access point is on the eastern side for Roman Catholic Church (Holly family mission) and Mulumba primary school with the housing facilities for the church and these access points were already being approved during the construction of Trunk Road 8 Section 7.

Roads Authority have no any objection to you for using both two access points to the School and Roman Catholic Church as long the boundary of the premises is not within the road reserve. According to the road Ordinance 17 of 1972 the road reserve of Trunk Roads, Main Roads and District roads is sixty metres which is thirty metres from the centre line of the road. According the investigation the boundary they want to fence and build is outside the road reserve which belongs to Katima Mulilo Town Council.

Please be informed that during the construction period Roads Authority may conduct an inspection at any time to ensure that the road reserve is not infringed at any time.

Regards

Derrick Maswahu (Acting Chief Engineering Technician: Katima Mulilo District)

Established in terms of the Roads Authority Act, 1999 (Act 17 of 1999)  
Board of Directors: Ms L Brandt (Chairperson), Mr P. Muluti (Deputy Chairperson), Ms H. Amupolo, Mr G. Kadhikwa,  
Mr P. Greef, Mr T. Hamata, Ms G Tshoopara

## **5.2.WATER SUPPLY**

Proposed Portion 115 is connected to the NamWater network.

## **5.3.ELECTRICITY**

Electricity to the site is obtained from Nored. The site is already connected to the Nored electricity supply network.

## **5.4.SEWAGE DISPOSAL**

Only normal household sewer is generated on site. Currently the site is not connected to the Municipal sewer network as no facilities are available in this area. Sewer is handled on site through French drains and percolation ditches. It is recommended that proposed Portion 115 is connected to the municipal sewer network once it becomes available in this area.

## **5.5.SOLID WASTE**

Building waste generated during future site preparation and construction must be removed by the contractor and disposed of at an approved building rubble site. Other waste generated during the normal operations of the site is sorted and stored on site to be collected under the normal waste collection and management program of Katima Mulilo Town Council.

## **5.6.FIRE PROTECTION**




The Proponent will put in the necessary fire protection infrastructure / extinguishers as per requirements. It is advised that a specialist Fire Protection Specialist is contracted to introduce a proper fire protection plan with the required infrastructure and to oversee the annual auditing and maintenance of the infrastructure.

## **5.7.STORMWATER**

A section of the site is subject to seasonal flooding as can be seen from the contour map. No infrastructure has been developed on this section of the site which is currently being used as an open space for recreational purposes. The natural flow of storm water and drainage must be minimally disturbed, and the natural flow accommodated where possible. Any new structures or developments on the site must be planned to accommodate surface water/stormwater and ensure that it does not endanger neighbouring structures.


## 6. APPROVAL ALREADY OBTAINED

Katima Mulilo Town Council approved the subdivision of the Townlands to create Portion 115 per Council Resolution C62/19/07/2023/5<sup>th</sup> ODCM 2023 of which a copy is below:

 <b>KATIMA MULILO TOWN COUNCIL</b> OFFICE OF THE CHIEF EXECUTIVE OFFICER		<b>Annexure B2</b>														
<hr/> <b>KATIMA MULILO TOWN COUNCIL</b> OFFICE OF THE CHIEF EXECUTIVE OFFICER <hr/>																
Tel: +264 66 261 500 Fax: +264 66 253 220	www.kmtc.org.na Email: <a href="mailto:info@kmtc.org.na">info@kmtc.org.na</a> Ref No: 1363, Lifasi Street	Private Bag 5009 Ngwewe, Namibia														
<hr/>																
<b>DU TOIT PLANNING CONSULTANTS</b>	<table border="1"><tr><td>Enquiries :</td><td>Riana Kadimba</td></tr><tr><td>Physical address :</td><td>Lifasi Street</td></tr><tr><td>Phone :</td><td>+264 66 261500</td></tr><tr><td>Fax :</td><td>+264 66 253 220</td></tr><tr><td>Cell :</td><td>+264 814773576</td></tr><tr><td>E-mail :</td><td><a href="mailto:rianakadimba@gmail.com">rianakadimba@gmail.com</a></td></tr><tr><td>Date :</td><td>9 August 2023</td></tr></table>	Enquiries :	Riana Kadimba	Physical address :	Lifasi Street	Phone :	+264 66 261500	Fax :	+264 66 253 220	Cell :	+264 814773576	E-mail :	<a href="mailto:rianakadimba@gmail.com">rianakadimba@gmail.com</a>	Date :	9 August 2023	
Enquiries :	Riana Kadimba															
Physical address :	Lifasi Street															
Phone :	+264 66 261500															
Fax :	+264 66 253 220															
Cell :	+264 814773576															
E-mail :	<a href="mailto:rianakadimba@gmail.com">rianakadimba@gmail.com</a>															
Date :	9 August 2023															
<p><b>SUBJECT: PROPOSED APPROVAL FOR SUBDIVISION OF THE REMAINDER OF KATIMA MULILO TOWNLANDS NO. 1328 INTO PORTION A AND THE REMAINDER TO CREATE A PORTION FOR THE ROMAN CATHOLIC CHURCH (KATIMA HOLY FAMILY).</b></p>																
<p>Reference is made to your application on the above, the content of which have been noted.</p>																
<p>The Katima Mulilo Town Council at its meeting held on 19<sup>th</sup> July 2023, resolved with Council Resolution No. C62/19/07/2023/5<sup>th</sup> ODCM 2023) to approve the above application.</p>																
<p>Attached, are the Council Minutes and Council Resolutions on the subject matter.</p>																
<p>We trust the above is in order, and should you have any questions please do not hesitate to contact the Manager: Town Planning and Land Management.</p>																
<p>Sincerely, Yours</p>																
 <b>SIR RAPHAEL S. LISWANISO</b> CHIEF EXECUTIVE OFFICER																
<p>Cc: Chairperson of Council Chairperson of Management Committee All Councillors</p>																
<hr/> <small>CC: Mr. Peter Shomviswe (Mayor), Cllr. Christine C. Simenaga (Deputy Mayor), Cllr. John N. Ntemwa (Chairperson of Mgt), Cllr. Namangolwa B. Sitali-Magere (Member of Mgt), Cllr. Lesani M. Sika (Member of Mgt), Cllr. Charles K. Mutalika (Council Member), Cllr. Watson K. Kasiyuka (Council Member), Mr. Raphael S. Liswaniso (Chief Executive Officer)</small>																
<small>ALL OFFICIAL CORRESPONDENCE MUST BE ADDRESSED TO THE OFFICE OF THE CHIEF EXECUTIVE OFFICER</small>																

The council also recommended the subdivision for approval to the Urban and Regional Planning Board as per their letter below:

**Annexure**

**KATIMA MULILO**  
  
**TOWN COUNCIL**

**KATIMA MULILO TOWN COUNCIL**  
**OFFICE OF THE CHIEF EXECUTIVE OFFICER**

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Tel: +264 66 261 500	www.kmtc.org.na	Private Bag 5009
Fax: +264 66 253 220	Email: <a href="mailto:info@kmtc.org.na">info@kmtc.org.na</a>	Ngweze, Namibia
	Erf No: 1383, Lifasi Street	

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<p><b>THE SECRETARY</b> <b>URBAN AND REGIONAL PLANNING BOARD</b> <b>MINISTRY OF URBAN AND RURAL DEVELOPMENT</b> <b>PRIVATE BAG 13289</b> <b>WINDHOEK</b></p>	<table border="0"><tr><td>Enquiries :</td><td>Riana Kadimba</td></tr><tr><td>Physical address:</td><td>Lifasi Street</td></tr><tr><td>Phone :</td><td>+264 66 261500</td></tr><tr><td>Fax :</td><td>+264 66 253 220</td></tr><tr><td>Cell :</td><td>+264 814773576</td></tr><tr><td>E-mail :</td><td><a href="mailto:rianakadimba@gmail.com">rianakadimba@gmail.com</a></td></tr><tr><td>Date :</td><td>9 August 2023</td></tr></table>	Enquiries :	Riana Kadimba	Physical address:	Lifasi Street	Phone :	+264 66 261500	Fax :	+264 66 253 220	Cell :	+264 814773576	E-mail :	<a href="mailto:rianakadimba@gmail.com">rianakadimba@gmail.com</a>	Date :	9 August 2023
Enquiries :	Riana Kadimba														
Physical address:	Lifasi Street														
Phone :	+264 66 261500														
Fax :	+264 66 253 220														
Cell :	+264 814773576														
E-mail :	<a href="mailto:rianakadimba@gmail.com">rianakadimba@gmail.com</a>														
Date :	9 August 2023														

Attention: Mr. Tobias Newaya

**SUBJECT: SUBDIVISION OF THE REMAINDER OF KATIMA MULILO TOWNLANDS NO.1328 INTO PORTION A AND THE REMAINDER TO CREATE A PORTION FOR THE ROMAN CATHOLIC CHURCH (KATIMA HOLY FAMILY).**


The Council has considered the above application and recommended it to the Urban and Regional Planning Board in terms of Sections 109(2) (a) for consideration by the Board and approval by the Minister.


Attached please find:

- i. The application and its accompanying documents (maps, etc.)
- ii. Proof of notice referred to in Section 107(1);
- iii. Objection (if any, decision taken);
- iv. Council's recommendations (supported by a Full Council Resolution)

We count on your assistance and prompt action.

Sincerely, Yours

  
**SIR RAPHAEL S. LISWANISO**  
**CHIEF EXECUTIVE OFFICER**



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CL:R: Cllr. Lister Shaomalisa (Mayor), Cllr. Christina C. Simanoga (Deputy Mayor), Cllr. John N. Ntemwa (Chairperson of Mgt), Cllr. Namangolwa B. Sitoli Mapenzi (Member of Mgt), Cllr. Lascan M. Sikosi (Member of Mgt) Cllr. Charles K. Musisike (Council Member), Cllr. Watson X. Kaliluka (Council Member), Mr. Raphael S. Liswaniso (Chief Executive Officer)

ALL OFFICIAL CORRESPONDENCE MUST BE ADDRESSED TO THE OFFICE OF THE CHIEF EXECUTIVE OFFICER

The access to the site has also been approved by the Roads Authority as per the letter inserted above.

To be able to finalise the subdivision process, an Environmental Clearance must be obtained for the creation of the public roads (right of way servitudes which are used as access to Portion 115).

## **7. APPROACH TO THE STUDY**

The assessment included the following activities:

### a) Desktop sensitivity assessment

Literature, legislation, and guidance documents related to the natural environment and land use activities available on the portion and area in general were reviewed to determine potential environmental issues and concerns.

### b) Site assessment (site visit)

The proposed project site and the immediate neighbourhood and surrounding area were assessed through several site visits to investigate the environmental parameters on site to enable further understanding of the potential impacts on site.

### c) Public participation

As this site is used since 1945 and the access has been approved and constructed by the Roads Authority, no public participation was undertaken. The affected parties are the Katima Mulilo Town Council, as the road is aligned and constructed over their land, the Roads Authority who has the jurisdiction over roads taking access from Trunk Road 8 as well as the Katima Holy Family to whom the road gives access, which are in support of the road.

### d) Scoping

Based on the desk top study, site visit and public participation, the environmental impacts were determined in five categories: nature of project, expected duration of impact, geographical extent of the event, probability of occurring and the expected intensity. The findings of the scoping have been incorporated in the environmental impact assessment report below.

### e) Environmental Management Plan (EMP)

To minimize the impact on the environment, mitigation measures have been identified to be implemented during planning, construction, and implementation. These measures have been included in the Environmental Management Plan to guide the planning, construction and operation of the development which can also be used by the relevant authorities to ensure that the project is planned, developed, and operated with the minimum impact on the environment.

## **8. ASSUMPTIONS AND LIMITATIONS**

It is assumed that the information provided by the proponent (Roman Catholic Church (Katima Holy Family)), Katima Mulilo Town Council, the Roads Authority and Du Toit Town Planning is accurate. No alternative site for the proposed project were

examined as this road was approved by the Roads Authority and is in use since the establishment of the Church and supporting infrastructure on the site. The site was visited several times and any happenings after this are not mentioned in this report. (The assessment was based on the prevailing environmental conditions and not on future happenings on the site.) However, it is assumed that there will be no significant changes to the proposed project, and the environment will not adversely be affected between the compilation of the assessment and the implementation of the proposed activities.

## **9. LEGAL AND POLICY REQUIREMENTS**

To protect the environment and achieve sustainable development, all projects, plans, programs and policies deemed to have adverse impacts on the environment require an EIA according to Namibian legislation. The administrative, legal and policy requirements to be considered during the Environmental Assessment are the following:

- The Namibian Constitution
- The Environmental Management Act (No. 7 of 2007)
- The Katima Mulilo Town Planning Scheme
- Other Laws, Acts, Regulations and Policies

### **THE NAMIBIAN CONSTITUTION**

Article 95 of Namibia's constitution provides that:

"The State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at the following:

Management of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future; in particular, the Government shall provide measures against the dumping or recycling of foreign nuclear and toxic waste on Namibian territory." This article recommends that a relatively high level of environmental protection is called for in respect of pollution control and waste management.

Article 144 of the Namibian Constitution deals with environmental law and it states:

"Unless otherwise provided by this Constitution or Act of Parliament, the general rules of public international agreements binding upon Namibia under this Constitution shall form part of the law of Namibia". This article incorporates international law, if it conforms to the Constitution, automatically as "law of the land". These include international agreements, conventions, protocols, covenants, charters, statutes, acts, declarations, concords, exchanges of notes, agreed minutes, memoranda of understanding, and agreements (*Ruppel & Ruppel-Schlichting, 2013*). It is therefore important that the international agreements and conventions are considered (see section 4.9).

In considering these environmental rights, the Proponent, should consider the following in devising an action plan in response to these articles:

- Implement a “zero-harm” policy at that would guide decisions.
- Ensure that no management practice or decision result in the degradation of future natural resources.
- Take a decision on how this part of the Constitution will be implemented as part of the Proponent’s Environmental Control System (ECS).

## **ENVIRONMENTAL MANAGEMENT ACT (NO. 7 OF 2007)**

The Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) of the Environmental Management Act (No. 7 of 2007) that came into effect in 2012 requires/recommends that an Environmental Impact Assessment and an Environmental Management Plan (EMP) be conducted for the following listed activities to obtain an Environmental Clearance Certificate:

### ***INFRASTRUCTURE***

*The construction of:*

- *Public roads.*

*The route determination of roads and design of associated physical infrastructure where:*

- *It is a public road;*
- *The road reserve is wider than 30 meters;*
- *The road caters for more than one lane of traffic in both directions.*

Cumulative impacts associated with the development must be included as well as public consultation. The Act further requires all major industries and mines to prepare waste management plans and present these to the local authorities for approval.

The Act, Regulations, Procedures and Guidelines have integrated the following sustainability principles. These need to be given due consideration, particularly to achieve proper waste management and pollution control:

### **Cradle to Grave Responsibility**

This principle provides that those who handle or manufacture potentially harmful products must be liable for their safe production, use and disposal and that those who initiate potentially polluting activities must be liable for their commissioning, operation and decommissioning.

### **Precautionary Principle**

It provides that if there is any doubt about the effects of a potentially polluting activity, a cautious approach must be adopted.

## **The Polluter Pays Principle**

A person who generates waste or causes pollution must, in theory, pay the full costs of its treatment or of the harm, which it causes to the environment.

## **Public Participation and Access to Information**

In the context of environmental management, citizens must have access to information and the right to participate in decisions making.

### **CONCLUSION AND IMPACT**

The proposed activity will fit in with the surrounding activities and not have a negative impact on the prevailing environment. It will be ensured that all protected trees and plant species will be retained where possible.

## **THE KATIMA MULILO TOWN PLANNING SCHEME AND THE LOCAL AUTHORITIES ACT (No. 23 OF 1992)**

The Katima Mulilo Town Planning Scheme (approved 15/12/2006) applies to the area as indicated on the scheme maps and corresponds with the Townlands Diagram for Katima Mulilo Town and Townlands. Portion 115, Katima Mulilo falls within the area of the Scheme.

The general purpose of this Scheme is to create an environment to better the socio-economic standard of residents and promote the coordinated and harmonious development of the area of Katima Mulilo including, where necessary, the reconstruction and redevelopment of any part which has already been subdivided whether there are buildings on it or not in such a way as will most effectively tend to promote health, safety, order, amenity, convenience and general welfare as well as efficiency and economy and conservation of the existing character of the town, in the process of such development.

The erf is zoned 'general industrial' as per the stipulations of the Katima Mulilo Town Planning Scheme.

The Katima Mulilo Zoning Scheme provides for the subdivision of land to create land portions for residential, business, office, institutional and other purposes. Council is thus requested to consider the creation of Portion 115 as per the stipulations of the Zoning Scheme.

The Katima Mulilo Zoning Scheme were drafted in 2005 and promulgated in 2006. The zoning of 'Nature Reserve' allocated to the river area of the Katima Mulilo Townlands were done to protect it against ad hoc development.

Existing uses such as the church' activities were largely accommodated as consent uses under the Nature Reserve zoning – see extract from the Scheme below:



	ZONE	MAP REFERENCE	PRIMARY USE (purposes for which land may be used)	CONSENT USE (purpose for which land may be used and building may be erected and use with the special consent of the council only)
M	Nature Reserve	Light green fill with dark green cross hatch	Nature Reserve	Dwelling unit, Tourist facilities, Holiday accommodation, Private Open Space, Waterfront, Institutional.

8.11.1 Within an area zoned Nature Reserve, the protection of fauna and flora in their natural habitat are priority.

The Zoning Scheme defines an “institutional building” as follows:

**“INSTITUTIONAL BUILDING”** A building or portion of a building used or intended to be used as an old age home, crèche, public or private school, community hall, religious or charitable institution and/or the administration thereof, and includes a HIV/AIDS centre hospital, clinic or dispensary, whether private or public, use in connection therewith, but does not include:

- (a) a hospital, sanatorium, dispensary or clinic for the treatment of infectious or contagious diseases; or
- (b) premises for the detention of mentally disordered persons; or a mental hospital; or
- (c) a reform- or rehabilitation center.

It is thus not necessary to formally change the zoning at this stage, it might be necessary to formally rezone to ‘institutional’ should the Church expand their activities or wish to build more buildings.

### CONCLUSION AND IMPACT

The intended uses are allowed under the Town Planning Scheme provisions subject to obtaining the ECC. Katima Mulilo Town Council approved the creation of Portion 115 which accommodates the facilities of the Church as well as the accesses road.

### OTHER LAWS, ACTS, REGULATIONS AND POLICIES

The laws, acts, regulations, and policies listed below have also been considered during the Environmental Assessment.

Table 1: Laws, Acts, Regulations and Policies

Laws, Acts, Regulations & Policies consulted:		
<b>Electricity Act (No. 4 of 2007)</b>	In accordance with the Electricity Act (No. 4 of 2007) which provides for the establishment of the Electricity Control Board and provide for its powers and functions; to provide for the requirements and conditions for obtaining licenses for the provision of electricity; to provide for the powers and obligations of	The Proponent must abide to the Electricity Act.

	licenses; and to provide for incidental matters: the necessary permits and licenses will be obtained.	
<b>Pollution Control and Waste Management Bill (guideline only)</b>	The <b>Pollution Control and Waste Management Bill</b> is currently in preparation and is therefore included as a guideline only. Of reference to the mining, Parts 2, 7 and 8 apply. Part 2 provides that no person shall discharge or cause to be discharged, any pollutant to the air from a process except under and in accordance with the provisions of an air pollution license issued under section 23. Part 2 also further provides for procedures to be followed in license application, fees to be paid and required terms of conditions for air pollution licenses. Part 7 states that any person who sells, stores, transports or uses any hazardous substances or products containing hazardous substances shall notify the competent authority, in accordance with sub-section (2), of the presence and quantity of those substances. The competent authority for the purposes of section 74 shall maintain a register of substances notified in accordance with that section and the register shall be maintained in accordance with the provisions. Part 8 provides for emergency preparedness by the person handling hazardous substances, through emergency response plans.	The Proponent must adhere to the Pollution Control and Waste Management Bill.
<b>Water Resources Management Act</b>	The <b>Water Resources Management Act (No. 11 of 2013)</b> stipulates conditions that ensure effluent that is produced to be of a certain standard. There should also be controls on the disposal of sewage, the purification of effluent, measures should be taken to ensure the prevention of surface and groundwater pollution and water	The Act must be consulted. Fresh water abstraction and waste-water discharge permits should be obtained when required.

	resources should be used in a sustainable manner.	
<b>Solid and Hazardous Waste Management Regulations: Local Authorities 1992</b>	Provides for management and handling of industrial, business and domestic waste.	The Proponent must abide to the solid waste management provisions.
<b>Hazardous Substances Ordinance (No. 14 of 1974)</b>	The <b>Ordinance</b> applies to the manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social Welfare. Its primary purpose is to prevent hazardous substances from causing injury, ill-health or the death of human beings.	The Proponent must abide to the Ordinance's provisions.
<b>Atmospheric Pollution Prevention Ordinance of Namibia (No. 11 of 1976)</b>	Part 2 of the <b>Ordinance</b> governs the control of noxious or offensive gases. The Ordinance prohibits anyone from carrying on a scheduled process without a registration certificate in a controlled area. The registration certificate must be issued if it can be demonstrated that the best practical means are being adopted for preventing or reducing the escape into the atmosphere of noxious or offensive gases produced by the scheduled process.	The proponent should adhere to the stipulations of the Atmospheric Pollution Prevention Ordinance.
<b>Nature Conservation Ordinance</b>	The <b>Nature Conservation Ordinance (No. 4 of 1975)</b> covers game parks and nature reserves, the hunting and protection of wild animals, problem animals, fish and indigenous plant species. The Ministry of Environment, Forestry and Tourism (MEFT) administer it and provides for the establishment of the Nature Conservation Board.	The proposed project implementation is not located in a demarcated conservation area, national park or unique environments.
<b>Forestry Act</b>	The <b>Forestry Act (No. 12 of 2001)</b> specifies that there be a general protection of the receiving and surrounding environment. The protection of natural vegetation is of great importance, the Forestry Act especially	No removal of protected tree species or removal of mature trees should happen. The Ministry of Environment, Forestry and Tourism should be consulted when required.

	stipulates that no living tree, bush, shrub or indigenous plants within 100m from any river, stream or watercourse, may be removed without the necessary license.	
<b>EU Timber Regulation: FSC (2013)</b>	Forest Stewardship Council (FSC) came into effect in March 2013, with the aim of preventing sales of illegal timber and timber products in the EU market. Now, any actor who places timber or timber products on the market for the first time must ensure that the timber used has been legally harvested and, where applicable, exported legally from the country of harvest.	The Proponent is advised to adhere to the regulation.
<b>Labour Act</b>	The <b>Labour Act (No. 11 of 2007)</b> contains regulations relating to the Health, Safety and Welfare of employees at work. These regulations are prescribed for among others safety relating to hazardous substances, exposure limits and physical hazards. Regulations relating to the Health and Safety of Employees at Work are promulgated in terms of the Labour Act 6 of 1992 (GN156, GG1617 of 1 August 1997).	The proponent and contractor should adhere to the Labour Act.
<b>Communal Land Rights</b>	Communal land is land that belongs to the State and is held in trust for the benefit of the traditional communities living in those areas. Communal land cannot be bought or sold, but one can be given a customary land right or right of leasehold to a part of communal land in accordance with the provisions of the <b>Communal Land Reform Act (No. 5 of 2002)</b> and <b>Communal Land Reform Amendment Act (No. 13 of 2013)</b> . The Communal Land Reform Act provide for the allocation of rights in respect of communal land to establish Communal Land Boards to provide for the powers of Chiefs and Traditional Authorities and boards in relation to communal land and to make provision for incidental matters. Consent and	Consent should be obtained from Traditional Authorities, Communal Boards, Chiefs, Kings, Queens etc. if required.

	access to land for the proposed project should be requested from the relevant traditional authority through the Regional Council and Regional Communal Land Boards.	
<b>Traditional Authorities Act (No. 17 of 1995)</b>	The <b>Traditional Authorities Act (No. 17 of 1995)</b> provide for the establishment of traditional authorities, the designation and recognition of traditional leaders; to define their functions, duties and powers; and to provide for matters incidental thereto.	Traditional Authorities should be consulted when required.
<b>Public and Environmental Health Act</b>	The Public and Environmental Health Act (No. 1 of 2015) provides with respect to matters of public health in Namibia. The objects of this Act are to: (a) promote public health and wellbeing; (b) prevent injuries, diseases and disabilities; (c) protect individuals and communities from public health risks; (d) encourage community participation in order to create a healthy environment; and (e) provide for early detection of diseases and public health risks.	The proponent and contractor should adhere to the Public and Environmental Health Act.
<b>National Heritage Act (No. 27 of 2004)</b>	All protected heritage resources discovered need to be reported immediately to the National Heritage Council (NHC) and require a permit from the NHC before it may be relocated. This should be applied from the NHC.	The National Heritage Council should be consulted when required.
<b>National Monuments Act of Namibia (No. 28 of 1969) as amended until 1979</b>	No person shall destroy, damage, excavate, alter, remove from its original site or export from Namibia: (a) any meteorite or fossil; or (b) any drawing or painting on stone or a petroglyph known or commonly believed to have been executed by any people who inhabited or visited Namibia before the year 1900 AD; or (c) any implement, ornament or structure known or commonly believed to have been used as a mace, used or erected by people referred to in paragraph; or (d) the anthropological or	The proposed site for development is not within any known monument site both movable or immovable as specified in the Act, however in such an instance that any material or sites or archeologic importance are identified, it will be the responsibility of the developer to take the required route and notify the relevant commission.

	archaeological contents of graves, caves, rock shelters, middens, shell mounds or other sites used by such people; or (e) any other archaeological or palaeontological finds, material or object; except under the authority of and in accordance with a permit issued under this section.	
<b>Public Health Act (No. 36 of 1919)</b>	Under this act, in section 119: “No person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.”	The proponent will ensure that all legal requirements of the project in relation to protection of the health of their employees and surrounding residents is protected and will be included in the EMP. Relevant protective equipment shall be provided for employees in construction. The development shall follow requirements and specifications in relation to water supply and sewerage handling and solid waste management so as not to threaten public health of future residents on this piece of land.
<b>Soil Conservation Act (No. 76 of 1969)</b>	The objectives of this Act are to: Make provisions for the combating and prevention of soil erosion; Promote the conservation, protection and improvement of the soil, vegetation, sources and resources of the Republic;	Only the area required for the operations should be cleared from vegetation to ensure the minimum impact on the soil through clearance for construction.
<b>Air Quality Act (NO. 39 of 2004)</b>	The <b>Air Quality Act (No. 39 of 2004)</b> intends to provide for national norms and standards regulating air quality monitoring, management and control by all spheres of government; for specific air quality measures; and for matters incidental thereto.	The proponent and contractor should adhere to the Air Quality Act.
<b>Vision 2030 and National Development Plans</b>	Namibia’s overall development ambitions are articulated in the Nation’s Vision 2030. At the operational level, five-yearly national development plans (NDP’s) are prepared in extensive consultations led by the National Planning Commission in the Office	The proposed project is an important element in employment creation.

	of the President. Currently the Government has so far launched a 4th NDP which pursues three overarching goals for the Namibian nation: high and sustained economic growth; increased income equality; and employment creation.	
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#### **CONCLUSION AND IMPACT**

It is believed the above administrative, legal and policy requirements which specifically guide and governs development will be followed and complied with in the planning, implementation and operations of the activity.

A flowchart indicating the entire EIA process is shown in the *Figure* below.

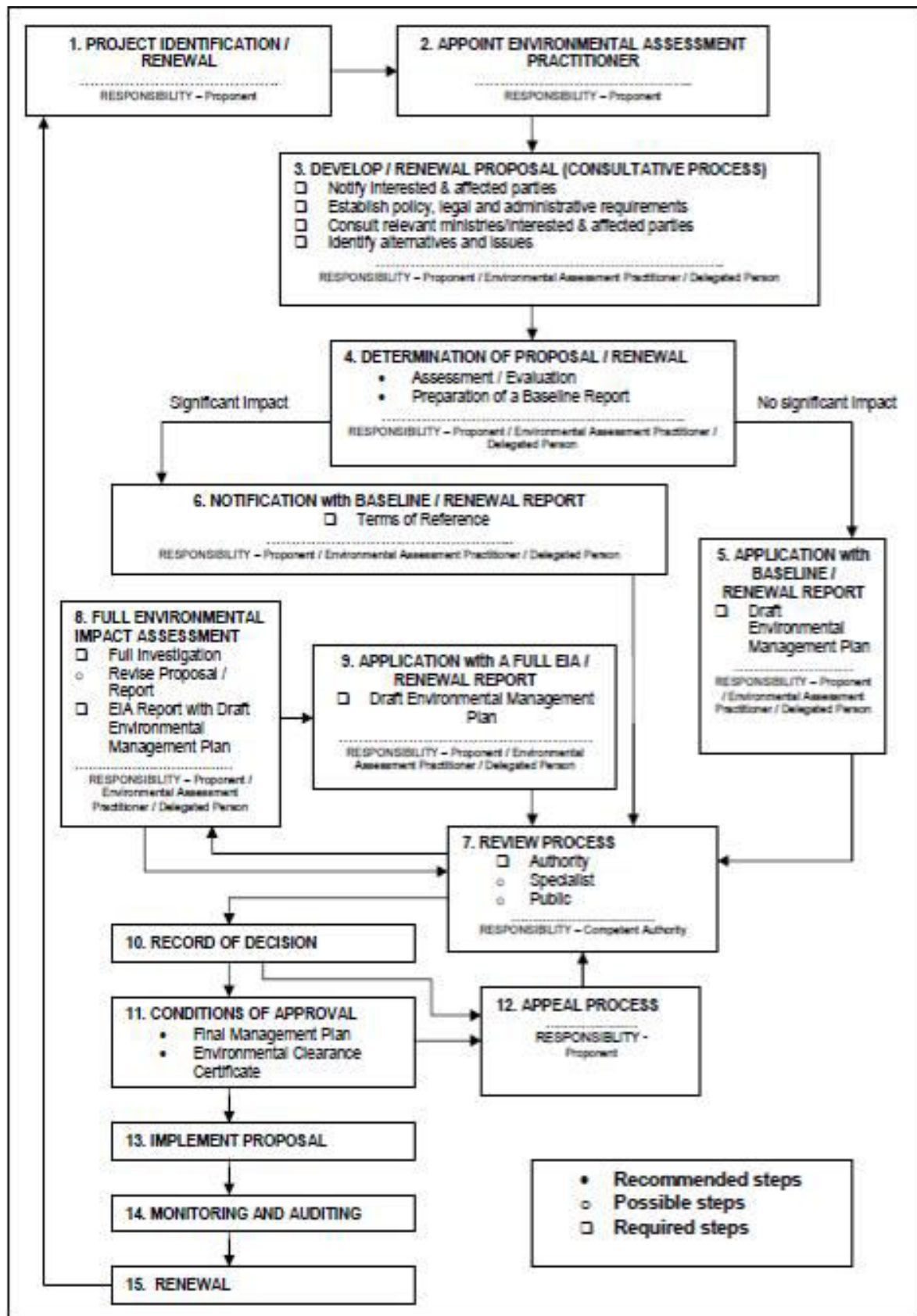


Figure 6: Flowchart of the Impact Process



## 10. AFFECTED RECEIVING ENVIRONMENT

### 10.1. BIODIVERSITY AND VEGETATION

Katima Mulilo is located in the Tree and Scrub Savannah Biome which is characterized by woodland vegetation structure type with extremely high green vegetation biomass. However, the project site is located in the build-up area which means that it has been cleared of some vegetation and is thus showing evidence of human inference namely informal tracks, lacking vegetation and gravel roads.

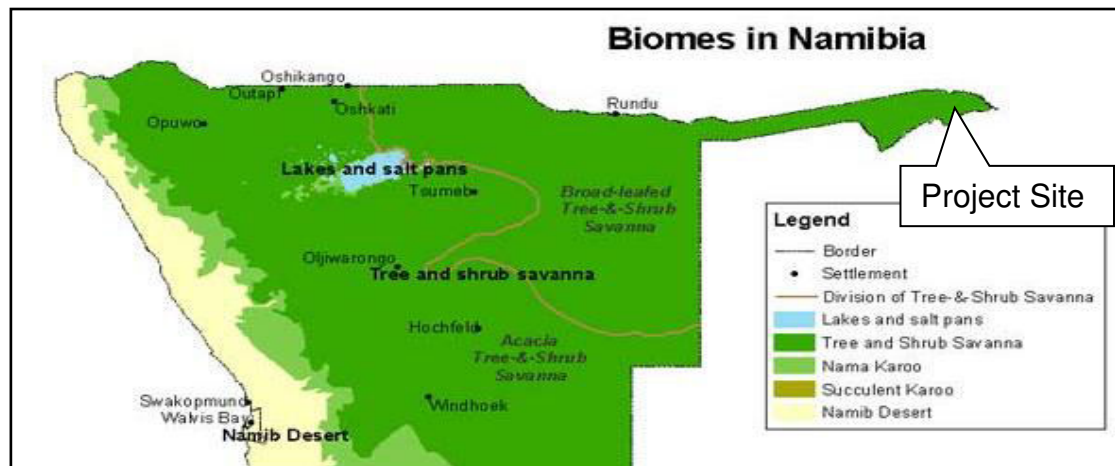


Figure 7: Biomes in Namibia (Atlas of Namibia, 2002)

The road has already been constructed and is in use. It is already 13m wide and will not be widened any further and the use of the road is expected to have a low impact on the natural environment. There are a few large trees along the road that has been retained.

#### CONCLUSION AND IMPACT

The activities will have a low impact on vegetation, shrubs and trees.

### 10.2. GEOLOGY AND SOILS

The surface geology of the area consists of formations of the Kalahari Group which has a thickness of up to 30m in the study area. Within the Kalahari Group the following six lithological classifications are recognized: Duricrusts, Kalahari sand, Alluvium and lacustrine deposits, Sandstone, Marl, Basal conglomerate and gravel.

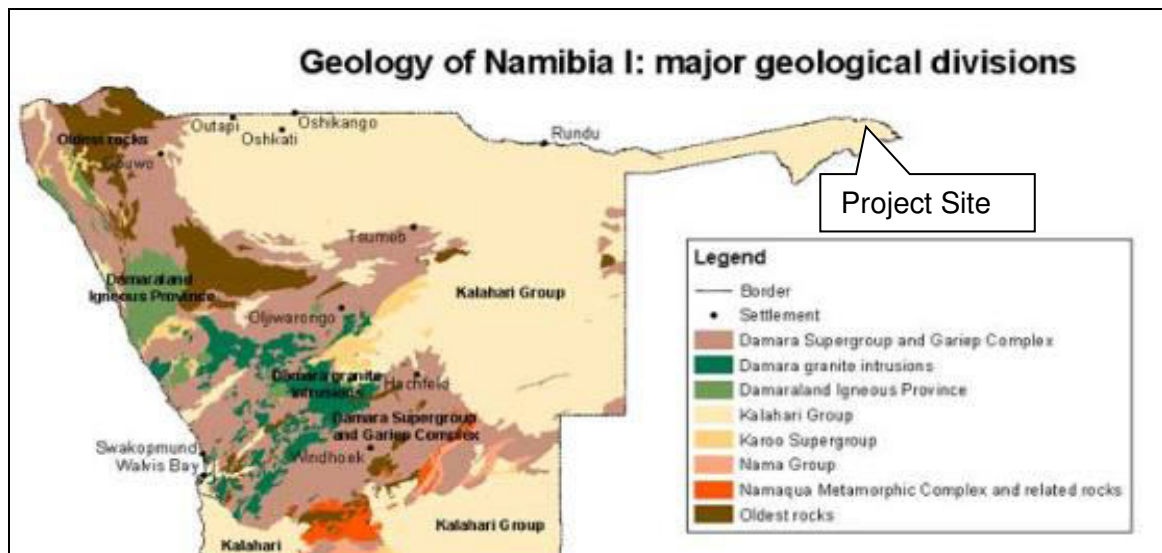


Figure 8: Geology of Namibia (Atlas of Namibia Project, 2002)

### CONCLUSION AND IMPACT

The activities will not impact on the geology, soils and geohydrology of the area. The surface drainage canals have been kept open in order that water can flow through.

### 10.3. SOCIO ECONOMIC ENVIRONMENT

A large section of the town's economy relies on the service industry providing services to long distance transporters, tourists traveling through the Town to destinations outside and inside Namibia, the farming community (crop, cattle, sheep and goat farming), over border trading from neighbouring countries like Zambia, Botswana and Angola which includes grocery stores, banks, schools, hospitals and other service industries. Katima Mulilo will benefit from more employment opportunities, skills and technology transfer during construction and operations of the development. The spending power of locals is likely to increase because of employment during the construction and operational phase.

The area where the Project Site is located has already been partially developed. The buildings erected in this area are mainly used for warehousing, business, retail and residential purposes. The proposed activities will not have a negative impact on the social environment as it is in line with the current uses in this area. The socio-economic characteristics of the area are continuously changing as more economic activities are established within the area.

### CONCLUSION AND IMPACT

It is expected that the creation of Portion 115 and the transfer of the Portion to the Roman Catholic Church will allow them to further develop and improve the site. The activities will have a positive impact on the community since new amenities and employment will be created.

## 10.4. CLIMATE

The Caprivi belongs to the tropical climate zone and receives high rainfalls during the rainy season (December to March). High humidity is most often experienced in this region. The Caprivi is the wettest region in Namibia with its high annual rainfall of  $\pm 700$  mm. Rainfall however can also be variable and drought years are common. The majority of rain appears in summer especially between January and February. The hottest months in Katima Mulilo are September, October and November with temperatures of 30°C. The prevailing wind in the area is southeast and eastern winds. The prevailing wind direction is expected to prevent the spread of any nuisance namely noise and smell. Strong winds during certain times of the year may aggravate dust impacts during the construction phase.

### CONCLUSION AND IMPACT

The activities will not have an impact on the climate.

## 10.5. CULTURAL HERITAGE

The proposed project site on which the road was aligned and constructed is not known to have any historical significance prior to or after Independence in 1990. The specific area does not have any National Monuments and the specific site has no record of any cultural or historical importance or on-site resemblance of any nature. No graveyard or related article was found on the site.

### CONCLUSION AND IMPACT

No heritage resources or graveyards were observed on the site or in the area.

## 10.6. SENSE OF PLACE

The Project Site is located inside the already established area of the town. The site is also situated in reaching distance to bulk infrastructural networks consisting of roads and electricity. The proposed activities will not have a negative impact on the sense of place in the area. An untidy or badly managed site can detract from the ecological well-being and individuality of the area. Unnecessary disturbance to the surroundings could be caused by poorly planned or poorly managed operational activities. The project site should be kept neat and clean where possible. Vegetation should not be removed or harmed if not necessary since it covers topsoil which prevents erosion. Noise and dust should be limited in the construction phase because of the neighbouring activities.

### CONCLUSION AND IMPACT

The impact on the sense of place will be low.

## 10.7. HEALTH

The safety, security and health of the labour force, employees and neighbours are of great importance, workers should be orientated with the maintenance of safety and health procedures and they should be provided with PPE (Personal Protective Equipment). A health and safety officer are employed to manage, coordinate and monitor risk and hazard and report all health and safety related issues in the workplace. The introduction of external workers into the area is sometimes accompanied with criminal activities posing security risks for neighbours. However, the proponent will take certain measures to prevent any activity of this sort. The welfare and quality of life of the neighbours and workforce needs to be considered for the project to be a success on its environmental performance. Conversely, the process should not affect the overall health of persons related to the project including the neighbours.

### CONCLUSION AND IMPACT

The proposed activities will have a low impact on the health of the community.

## 11. IMPACT ASSESSMENT AND EVALUATION

The Environmental Impact Assessment sets out potential positive and negative environmental impacts associated with the proposed project site. The following assessment methodology will be used to examine each impact identified, see *Table* below:

*Table 2: Impact Evaluation Criterion (DEAT 2006)*

Criteria	Rating (Severity)	
Impact Type	+	Positive
	O	No Impact
	-	Negative
Significance of impact being either	L	Low (Little or no impact)
	M	Medium (Manageable impacts)
	H	High (Adverse impact)

Probability:	Duration:
5 – Definite/don't know	5 - Permanent
4 – Highly probable	4 – Long-term (impact ceases)
3 – Medium probability	3 – Medium term (5 – 15 years)

2 – Low probability	2 – Short-term (0 – 5 years)
1 – Improbable	1 - Immediate
0 - None	
<b>Scale:</b>	<b>Magnitude:</b>
5 – International	10 – Very high/don't know
4 – National	8 - High
3 – Regional	6 - Moderate
2 – Local	4 - Low
1 – Site only	2 - Minor
	0 - None

The impacts on the receiving environment are discussed in the paragraphs below:

## 11.1. IMPACTS DURING THE CONSTRUCTION ACTIVITY

Some of the impacts that the project will have on the environment includes water will be used for the construction and operation activities, electricity will be used, a sewer system will be constructed and wastewater will be produced on the site that will have to be handled.

### 11.1.1. WATER USAGE

Water is a scarce resource in Namibia and therefore water usage should be monitored and limited in order to prevent unnecessary wastage. The proposed project might make use of water in its construction phase and operations.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Water	-	2	2	4	2	M	L

### 11.1.2. ECOLOGICAL IMPACTS

The proposed infrastructure will be constructed in a semi disturbed natural area which is partly covered with vegetation. Special care should be taken to limit the destruction or damage of the vegetation. However, impacts on fauna and flora are expected to be minimal. Disturbance of areas outside the designated working zone is not allowed.

## Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Ecology	-	1	2	4	2	M	L

### 11.1.3. DUST POLLUTION AND AIR QUALITY

Dust generated during the transportation of building materials; construction and installation of bulk services, and problems thereof are expected to be low and site specific. Dust is expected to be worse during the winter months when strong winds occur. Release of various particulates from the site during the construction phase and exhaust fumes from vehicles and machinery related to the construction of bulk services are also expected to take place. Dust is regarded as a nuisance as it reduces visibility, affects the human health and retards plant growth. It is recommended that regular dust suppression be included in the construction activities, when dust becomes an issue.

#### Impact evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Dust & Air Quality	-	2	2	2	2	M	L

### 11.1.4. NOISE IMPACT

An increase of ambient noise levels at the proposed site is expected due to the construction activities. Noise pollution due to heavy-duty equipment and machinery might be generated. It is not expected that the noise generated during construction will impact any third parties due to the distance of the neighbouring activities. Ensure all mufflers on vehicles are in full operational order; and any audio equipment should not be played at levels considered intrusive by others. The construction staff should be equipped with ear protection equipment.

#### Impact evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Noise	-	2	1	4	2	M	L

### 11.1.5. HEALTH, SAFETY AND SECURITY

The safety, security and health of the labour force, employees and general public are of great importance. Workers should be orientated with the maintenance of safety and health procedures and they should be provided with PPE (Personal Protective Equipment). A health and safety officer should be employed to manage, coordinate and monitor risk and hazard and report all health and safety related issues in the workplace.

Safety issues could arise from the earthmoving equipment and tools that will be used on site during the construction phase. This increases the possibility of injuries and the contractor must ensure that all staff members are made aware of the potential risks of injuries on site. The presence of equipment lying around on site may also encourage criminal activities (theft).

Sensitize operators of earthmoving equipment and tools to switch off engines of vehicles or machinery not being used. The contractor is advised to ensure that the team is equipped with first aid kits and that these are available on site, at all times. Workers should be equipped with adequate personal protective gear and properly trained in first aid and safety awareness.

No open flames, smoking or any potential sources of ignition should be allowed at the project location. Signs such as 'NO SMOKING' must be prominently displayed in parts where inflammable materials are stored on the premises. Proper barricading and/or fencing around the site especially trenches for pipes and drains should be erected to avoid entrance of animals and/or unauthorized persons. Safety regulatory signs should be placed at strategic locations to ensure awareness. Adequate lighting within and around the construction locations should be erected, when visibility becomes an issue.

#### Impact evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Safety & Security	-	1	2	4	2	M	L

### 11.1.6. CONTAMINATION OF GROUNDWATER

Care must be taken to avoid contamination of soil and groundwater. Use drip trays when doing maintenance on machinery. Maintenance should be done on dedicated areas with linings or concrete flooring. The risk can be lowered further through proper training of staff. All spills must be cleaned up immediately. Excavations should be backfilled and sealed with appropriate material, if it is not to be used further.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Groundwater	-	2	2	2	2	M	L

## 11.1.7. SEDIMENTATION AND EROSION

Vegetation is stabilizing the area against wind and water erosion. Vegetation clearance and creation of impermeable surfaces could result in erosion in areas across the proposed area. The clearance of vegetation will further reduce the capacity of the land surface to slow down the flow of surface water, thus decreasing infiltration, and increasing both the quantity and velocity of surface water runoff. The proposed construction activities will increase the number of impermeable surfaces and therefore decrease the amount of groundwater infiltration. As a result, the amount of storm water during rainfall events could increase. If proper storm water management measures are not implemented this will impact negatively on the water courses close to the site.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Erosion and Sedimentation	-	1	2	4	2	M	L

## 11.1.8. GENERATION OF WASTE

This can be in a form of rubble, cement bags, pipe and electrical wire cuttings. The waste should be gathered and stored in enclosed containers to prevent it from being blown away by the wind. Contaminated soil due to oil leakages, lubricants and grease from the construction equipment and machinery may also be generated during the construction phase.

The oil leakages, lubricants and grease must be addressed. Contaminated soil must be removed and disposed of at a hazardous waste landfill. The contractor must provide containers on-site, to store any hazardous waste produced. Regular inspection and housekeeping procedure monitoring should be maintained by the contractor.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Waste	-	1	2	4	2	M	L



### 11.1.9. CONTAMINATION OF SURFACE WATER

Contamination of surface water might occur through oil leakages, lubricants and grease from the equipment and machinery during the installation, construction and maintenance of bulk services at the site. Oil spills may form a film on water surfaces in the nearby streams causing physical damage to water-borne organisms.

Machinery should not be serviced at the construction site to avoid spills. All spills should be cleaned up as soon as possible. Hydrocarbon contaminated clothing or equipment should not be washed within 25m of any surface water body.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Surface water	-	2	2	4	3	M	L

### 11.1.10. TRAFFIC AND ROAD SAFETY

All drivers of delivery vehicles and construction machinery should have the necessary driver's licenses and documents to operate these machines. Speed limit warning signs must be erected to minimise accidents. Heavy-duty vehicles and machinery must be tagged with reflective signs or tapes to maximize visibility and avoid accidents.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Traffic	-	2	2	4	3	M	L

### 11.1.11. FIRES AND EXPLOSIONS

There should be sufficient water available for firefighting purposes. Ensure that all fire-fighting devices are in good working order and they are serviced. All personnel have to be trained about responsible fire protection measures and good housekeeping such as the removal of flammable materials on site. Regular inspections should be carried out to inspect and test firefighting equipment by the contractor.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Fires and Explosions	-	2	2	4	2	L	L

## 11.1.12. SENSE OF PLACE

The placement, design and construction of the proposed infrastructure should be as such as to have the least possible impact on the natural environment. The proposed activities will not have a large/negative impact on the sense of place in the area since it will be constructed in a manner that will not affect the neighbouring erven / portions and it will not be visually unpleasing.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Nuisance Pollution	-	1	1	2	2	L	L

## 11.2. IMPACTS DURING THE OPERATIONAL PHASE

### 11.2.1. ECOLOGICAL IMPACTS

Staff and visitors should only make use of walkways and existing roads to minimise the impact on vegetation. Minimise the area of disturbance by restricting movement to the designated working areas during maintenance and drives.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Ecology Impacts	-	1	2	4	2	M	L

### 11.2.2. DUST POLLUTION AND AIR QUALITY

Vehicles transporting goods and staff will contribute to the release of hydrocarbon vapours, carbon monoxide and sulphur oxides into the air. Possible release of sewer odour, due to sewer system failure of maintenance might also occur. All maintenance of bulk services and infrastructure at the project site has to be designed to enable environmental protection.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Dust & Air Quality	-	2	2	4	4	M	L

### 11.2.3. CONTAMINATION OF GROUNDWATER

Spillages might also occur during maintenance of the sewer system. This could have impacts on groundwater especially in cases of large sewer spills. Proper containment should be used in cases of sewerage system maintenance to avoid any possible leakages. Oil and chemical spillages may have a health impact on groundwater users. Potential impact on the natural environment from possible polluted groundwater also exists.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Groundwater contamination	-	2	2	4	2	M	L

### 11.2.4. GENERATION OF WASTE

Household waste from the activities at the site and from the staff working at the site will be generated. This waste will be collected, sorted to be recycled and stored in on site for transportation and disposal at an approved landfill site.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Waste Generation	-	1	2	2	2	M	L

### 11.2.5. FAILURE IN RETICULATION PIPELINES

There may be a potential release of sewage, stormwater or water into the environment due to pipeline/system failure. As a result, the spillage could be released into the environment and could potentially be health hazard to surface and groundwater. Proper reticulation pipelines and drainage systems should be installed. Regular bulk services infrastructure and system inspection should be conducted.

#### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Failure of Reticulation Pipeline	-	1	1	4	2	M	L

## 11.2.6. FIRES AND EXPLOSIONS

Food will be prepared on gas fired stoves. There should be sufficient water available for firefighting purposes. Ensure that all fire-fighting devices are in good working order and are serviced. All personnel have to be trained about responsible fire protection measures and good housekeeping such as the removal of flammable materials on site. Regular inspections should be carried out to inspect and test firefighting equipment by the contractor.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Fires and Explosions	-	2	1	4	2	M	L

## 11.2.7. HEALTH, SAFETY AND SECURITY

The safety, security and health of the labour force, employees and neighbours are of great importance, workers should be orientated with the maintenance of safety and health procedures and they should be provided with PPE (Personal Protective Equipment). Workers should be warned not to approach or chase any wild animals occurring on the site. No open flames, smoking or any potential sources of ignition should be allowed at the project location. Signs such as 'NO SMOKING' must be prominently displayed in parts where inflammable materials are stored on the premises.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Safety & Security	-	1	2	4	2	M	L

## 11.3. CUMULATIVE IMPACTS

These are impacts on the environment, which results from the incremental impacts of the construction and operation of the proposed project when added to other past, present, and reasonably foreseeable future actions regardless of what person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. In relation to an activity, it means the impact of an activity that in it may not become significant when added to the existing and potential impacts resulting from similar or diverse activities or undertakings in the area.

Possible cumulative impacts associated with the proposed project include sewer damages/maintenance, vegetation and animal disturbance, uncontrolled traffic and

destruction of the natural environment. These impacts could become significant especially if it is not properly supervised and controlled. This could collectively impact on the environmental conditions in the area. Cumulative impacts could occur in both the operational and the construction phase.

### Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Cumulative Impacts	-	1	3	4	3	L	L

## 12. ENVIRONMENTAL MANAGEMENT PLAN

The Environmental Management Plan (EMP) provides management options to ensure impacts of the proposed construction are minimised. An EMP is an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the operations are prevented, and the positive benefits of the projects are enhanced.

The objectives of the EMP are:

- ✓ to include all components of the proposed project.
- ✓ to prescribe the best practicable control methods to lessen the environmental impacts associated with the project.
- ✓ to monitor and audit the performance of the project personnel in applying such controls.
- ✓ to ensure that appropriate environmental training is provided to responsible project personnel.

The EMP acts as a document that can be used during the various phases of the proposed project. The contractor as well as the management and staff should be made aware of the contents of the EMP. See Appendix for EMP.

## 13. CONCLUSION

The subdivision of the Remainder of Farm Katima Mulilo into Portion 115 and the Remainder is required to create a site for the Roman Catholic Church (Katima Holy Family), so that it can be transferred to them. As the Church already settled on this site in 1945, and has an important role in the town, it is reasonable that a land portion is created for them which can be transferred to the Church.

The proposed creation of a “right of way” over the Remainder of Farm Katima Mulilo (Zambezi Region) Townlands No. 1328 for the Roman Catholic Church (Katima Holy Family) to access the land currently occupied by their buildings will not have a negative impact on the neighbourhood as the use will still remain institutional and because the neighbours are used to having the Church on this site.

The EIA has been completed in line with the requirements of the Environmental Management Act, 2007 and Regulations and it is concluded and recommended that

the specific site identified namely the Remainder of the Farm Katima Mulilo Townlands No. 1328, Zambezi Region has the full potential to be used for the proposed activities. The identified environmental and social impacts can be minimized and managed through implementing preventative measures and sound management systems. It is recommended that the environmental performance be monitored regularly to ensure compliance and that corrective measures be taken if necessary.

In general, the construction and operation of the proposed project would pose limited environmental risks, provided that the EMP for the activity is used properly. The EMP should be used as an onsite tool during the construction and operation of the project. Parties responsible for non-conformances of the EMP should be held responsible for any rehabilitation that has to be undertaken. After assessing all information available on this project, Green Earth Environmental Consultants are of the opinion that the proposed project site is suitable for the proposed activities. The accompanying EMP will focus on mitigation measures that will remediate or eradicate the negative or adverse impacts.

## **14. RECOMMENDATION**

It is therefore recommended that the Ministry of Environment, Forestry and Tourism through the Environmental Commissioner support and approve the Environmental to create public roads in the form of “right of way servitudes” over the Remainder of Farm Katima Mulilo (Zambezi Region) Townlands No. 1328 to provide access to Portion 115 on which the Roman Catholic Church (Katima Holy Family) and supporting infrastructure is located and to issue an Environmental Clearance for the following ‘Listed Activities’:

### ***INFRASTRUCTURE***

*The construction of:*

- *Public roads.*

*The route determination of roads and design of associated physical infrastructure where:*

- *It is a public road;*
- *The road reserve is wider than 30 meters;*
- *The road caters for more than one lane of traffic in both directions.*

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## APPENDIX A: CURRICULUM VITAE OF CHARLIE DU TOIT

1. **Position:** Environmental Practitioner
2. **Name/Surname:** Charl du Toit
3. **Date of Birth:** 29 October 1960
4. **Nationality:** Namibian
  
5. **Education:**

Name of Institution	University of Stellenbosch, South Africa		
Degree/Qualification	Hons B (B + A) in Business Administration and Management		
Date Obtained	1985-1987		
Name of Institution	University of Stellenbosch, South Africa		
Degree/Qualification	BSc Agric Hons (Chemistry, Agronomy and Soil Science)		
Date Obtained	1979-1982		
Name of Institution	Boland Agricultural High School, Paarl, South Africa		
Degree/Qualification	Grade 12		
Date Obtained	1974-1978		
  
6. **Membership of Professional Association:** EAPAN Member (Membership Number: 112)
  
7. **Languages:**

	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>
English	Good	Good	Good
Afrikaans	Good	Good	Good
  
8. **Employment Record:**

<u>From</u>	<u>To</u>	<u>Employer</u>	<u>Position(s) held</u>
2009	Present	Green Earth Environmental Consultants	Environmental Practitioner
2005	2008	Elmarie Du Toit Town Planning Consultants	Manager
2003	2005	Pupkewitz Megabuild	General Manager
1995	2003	Agra Cooperative Limited	Manager Trade
1989	1995	Namibia Development Corporation	Chief Agricultural Consultant
		Ministry of	Agricultural



**Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.



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**Charl du Toit**

## APPENDIX B: CURRICULUM VITAE OF CARIEN VAN DER WALT

1. **Position:** Environmental Consultant
2. **Name/Surname:** Carien van der Walt
3. **Date of Birth:** 6 August 1990
4. **Nationality:** Namibian

5. **Education:**

Institution	Degree/Diploma	Years
University of Stellenbosch	B.A. (Degree) Environment and Development	2009 to 2011
University of South Africa	B.A. (Honours) Environmental Management	2012 to 2013

6. **Membership of Professional Associations:**

EAPAN Member (Membership Number: 113)

7. **Languages:**

Language	Speaking	Reading	Writing
English	Good	Good	Good
Afrikaans	Good	Good	Good

8. **Employment Record:**

From	To	Employer	Positions Held
07/2013	Present	Green Earth Environmental Consultants	Environmental Consultant
06/2012	03/2013	Enviro Management Consultants Namibia	Environmental Consultant
12/2011	05/2012	Green Earth Environmental Consultants	Environmental Consultant

9. **Detailed Tasks Assigned:**

Conducting the Environmental Impact Assessment, Environmental Management Plan, Public Participation, Environmental Compliance and Environmental Control Officer

**Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engage.

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Carien van der Walt

## APPENDIX C: ENVIRONMENTAL MANAGEMENT PLAN