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**ENVIRONMENTAL IMPACT ASSESSMENT
RENEWAL FOR THE OPERATIONS AND
INCREASE OF WATER ABSTRACTION OF
OSHIVELO FARMING, OSHIVELO,
OSHIKOTO REGION**

2024

App - 240404003141

<p>Project Name:</p>	<p><i>ENVIRONMENTAL IMPACT ASSESSMENT RENEWAL FOR THE OPERATIONS AND INCREASE IN WATER ABSTRACTION OF OSHIVELO FARMING, OSHIVELO, OSHIKOTO REGION</i></p>
<p>The Proponent:</p>	<p>OSHIVELO FARMING (PTY) LTD PO Box 933 Tsumeb Namibia</p>
<p>Prepared by:</p>	<div data-bbox="573 915 1451 1150" style="border: 1px solid black; padding: 10px;">  <p>Green Earth ENVIRONMENTAL CONSULTANTS</p> </div> <p>1st floor Bridgeview Offices & Apartments, No. 4 Dr Kwame Nkrumah Avenue, Klein Windhoek, Namibia PO Box 6871, Ausspannplatz, Windhoek</p>
<p>Release Date:</p>	<p>April 2024</p>
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EXECUTIVE SUMMARY

Green Earth Environmental Consultants were appointed by the Proponent, Oshivelo Farming (Pty) Ltd, Oshivelo, Oshikoto Region, to conduct an Environmental Impact Assessment Renewal to obtain an Environmental Clearance for:

- The operations of Oshivelo Farming (Pty) Ltd.
- The increase of water abstraction to be used for irrigation.

Oshivelo Farm is located directly southeast of the Oshivelo Settlement/Village, east of the Etosha National Park, Oshikoto Region. The land within the immediate vicinity of the project site is predominately characterized by residential, tourism and farming activities.

An Environmental Impact Assessment was conducted and an Environmental Clearance Certificate was obtained on the 26th of August 2019 and therefore the Environmental Clearance is due for renewal. The renewal of the ECC is also required to obtain approval to increase the abstraction of water from boreholes to 1 500 000m³/annum to upscale the irrigation activities on the farm.

An application will be submitted to the MAWLR to increase the water abstraction with 700000m³/annum. To be able to abstract the extra water two (2) additional boreholes must be drilled.

The drilling of two (2) additional boreholes is subject to the following approvals:

- The renewal of the ECC for the existing operations including the increase in abstraction of groundwater for commercial purposes.
- Obtaining formal permission from the MAWLR for the drilling of the additional boreholes.
- Registering the boreholes with the MAWLR once drilled.
- Obtaining an abstraction permit from the MAWLR to abstract groundwater for commercial use.

The activities on the farm are summarised in the *Table* below:

Farm Name	Portion 1 of Farm Onguma No. 2042	Farm size: 496, 4464ha
Objectives	Job creation and improvement of food security	Activities are labour based rather than mechanised to maximise job creation.
Date implemented	2012	Area irrigated is 10ha
Area under irrigation	2024	±70ha
Employment (permanent)	2024	200
Employment	2024	85 -120 during harvesting

(seasonal)		
Annual Production	±6500 tons	Vegetables including carrots, beetroot, butternuts, cabbages, broccoli, tomatoes, lettuce and grains like maize and fruits like papayas
Target market	Formal and informal markets in Namibia	Some products are specially packed for specific Namibian Supermarkets
Social responsibility	Work force is 80% women	Supporting the local community by donation of vegetables to schools, police, various churches and the elderly
Annual wages paid out on the farm	±N\$ 3 750 000.00	The workers reside in Oshivelo Village
Current water use	900 000m ³ /annum	Abstracted from 3 boreholes
Water required for expansion of operations	1 500 000m ³ /annum (current allocation is 800 000m ³ /annum plus new application for 700 000m ³ /annum	Additional requirement of 700 000m ³ /annum to be abstracted from two (2) additional boreholes to be developed

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':

AGRICULTURE AND AQUACULTURE ACTIVITIES

7.3 The genetic modification of any organism with the purpose of fundamentally changing the inherent characteristics of that organism.

7.4 The import, processing and transit of genetically modified organisms.

7.5 Pest control.

7.6 The release of genetically modified organisms into the environment where an environmental assessment is required by law.

7.7 The release of any organism outside its natural area of distribution that is to be used for biological pest control.

7.8 The introduction of alien species into local ecosystems.

WATER RESOURCE DEVELOPMENTS

8.1 The abstraction of ground or surface water for industrial or commercial purposes.

8.2 The abstraction of groundwater at a volume exceeding the threshold authorised in terms of a law relating to water resources.

8.5 Construction of dams, reservoirs, levees and weirs.

8.7 Irrigation schemes for agriculture excluding domestic irrigation.

The key characteristics/environmental impacts of the proposed project are as follows:

Impact on environment	Nature of impact
More efficient and intensive use of land.	Positive for the area and Namibia in general.
Creation of employment and transfer of skills.	Positive as employment will be created during construction and operation.
The creation of dust.	Negative during land preparation and the use of internal gravel roads.
There will be an impact on traffic.	Negative as the harvest is transported by trucks to the relevant end-users which means an increase in traffic on the main roads in the area.
The creation of noise.	Low and on par with the noise levels associated with the general operational activities in the area.
Possible impact on cultural/heritage aspects.	No items of archeologic value or graves were observed during the site visit which means the impact will be low. If any items or graves are found during construction, the impact will be high and irreversible.
Impact on fauna and flora.	Animals, reptiles, and birds will be disturbed during the clearing of the land to be used for the activities. Vegetation will be removed to increase the area under irrigation. Permits must be obtained to remove protected tree species.
There might be a possible visual impact.	Medium to high as land will be cleared for infrastructure to be constructed.
Impact on groundwater, surface water and soil.	More water will be abstracted for irrigation which will impact on groundwater levels. The impact will be negative in case of spilling of hazardous materials during and operation.
Impact on health and safety.	Low if mitigated during construction and operations.

The negative impacts associated with the project are the impact on the vegetation, the natural drainage systems, waste production, 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 during the alignment and construction of roads. 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 farms, portions 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 for the operations and increase in water abstraction of Oshivela Farming, Oshivelo, Oshikoto Region and for the following "listed activities":

AGRICULTURE AND AQUACULTURE ACTIVITIES

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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

Green Earth Environmental Consultants were appointed by the Proponent, Oshivelo Farming (Pty) Ltd, Oshivelo, Oshikoto Region, to conduct an Environmental Impact Assessment Renewal to obtain an Environmental Clearance for:

- The operations of Oshivelo Farming (Pty) Ltd.
- The increase of water abstraction to be used for irrigation.

An Environmental Impact Assessment was conducted and an Environmental Clearance Certificate was obtained on the 26th of August 2019 and therefore the Environmental Clearance is due for renewal. The renewal of the ECC is also required to obtain approval to increase the abstraction of water from boreholes for the irrigation activities on the farm.

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:

AGRICULTURE AND AQUACULTURE ACTIVITIES

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8.5 Construction of dams, reservoirs, levees and weirs.

8.7 Irrigation schemes for agriculture excluding domestic irrigation.

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 EIA and EMP from the assessment will be submitted to the Environmental Commissioner for consideration. The Environmental Clearance will only be obtained (from the DEA) once the EIA and EMP has been examined and approved for the listed activity.

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. NEED, DESIRABILITY AND MOTIVATION

It is believed that there is a need and desirability for the project. The need of the project is motivated as follows:

- It creates employment in the rural area where unemployment is scarce.
- It employs mainly women who are enabled to look after their families.
- It transfers skills to unskilled people.
- It adds value to Namibia's natural resources of water, soil and good climate.
- It replaces imports of products from neighbouring countries.
- It stimulates and supports the economy of its immediate environment – Oshivelo Village.
- It contributes to the food security of Namibia.

The desirability of the site for the project is substantiated as follows:

- The soils in the area are from a sandy-to-sandy loam texture which is ideal for vegetable production.
- The area has a moderate climate with mild winters which allow full year production.
- It is located in an area with a sustainable source of high-quality groundwater.
- It is located on the main road servicing the most populated areas of Namibia which supports the distribution of the products produced.
- It is located right next to Oshivelo Village (within walking distance) which has a lot of people in dire need for employment and upliftment.

The site is thus desirable 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.*

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, 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 PROJECT

4.1. SITE INFORMATION

4.1.1. LOCALITY

Oshivelo Farm is located directly southwest of the Oshivelo Settlement/Village, east of the Etosha National Park, Oshikoto Region. The B1 National Road between Tsumeb and Ondangwa forms the eastern boundary of the farm. The northern boundary is the Oshivelo Settlement's Townlands. See below the *Map* showing the locality of the Farm:



Figure 1: Area where Onguma Nature Reserve is located

Not to scale
 DATE: NOV. 2022
 PLAN NO. SCHUCK



LOCALITY PLAN OF ONGUMA
 NATURE ME RESERVE,
 OSHIKOTO REGION



OSHIVelo FARMING, ONGUMA NATURE RESERVE, OSHIKOTO REGION

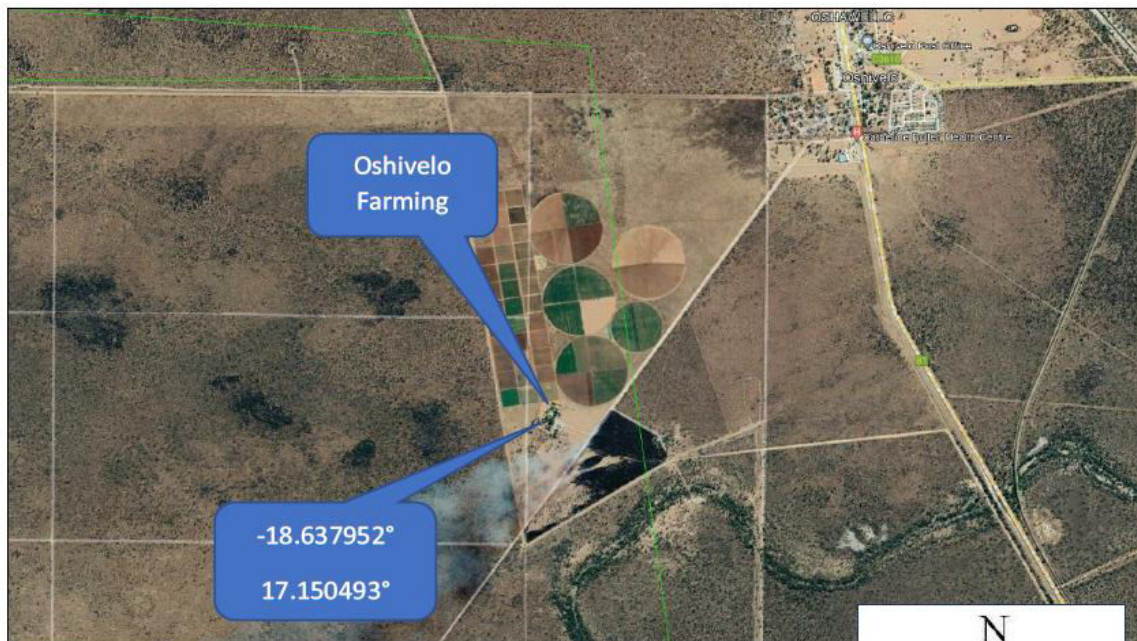
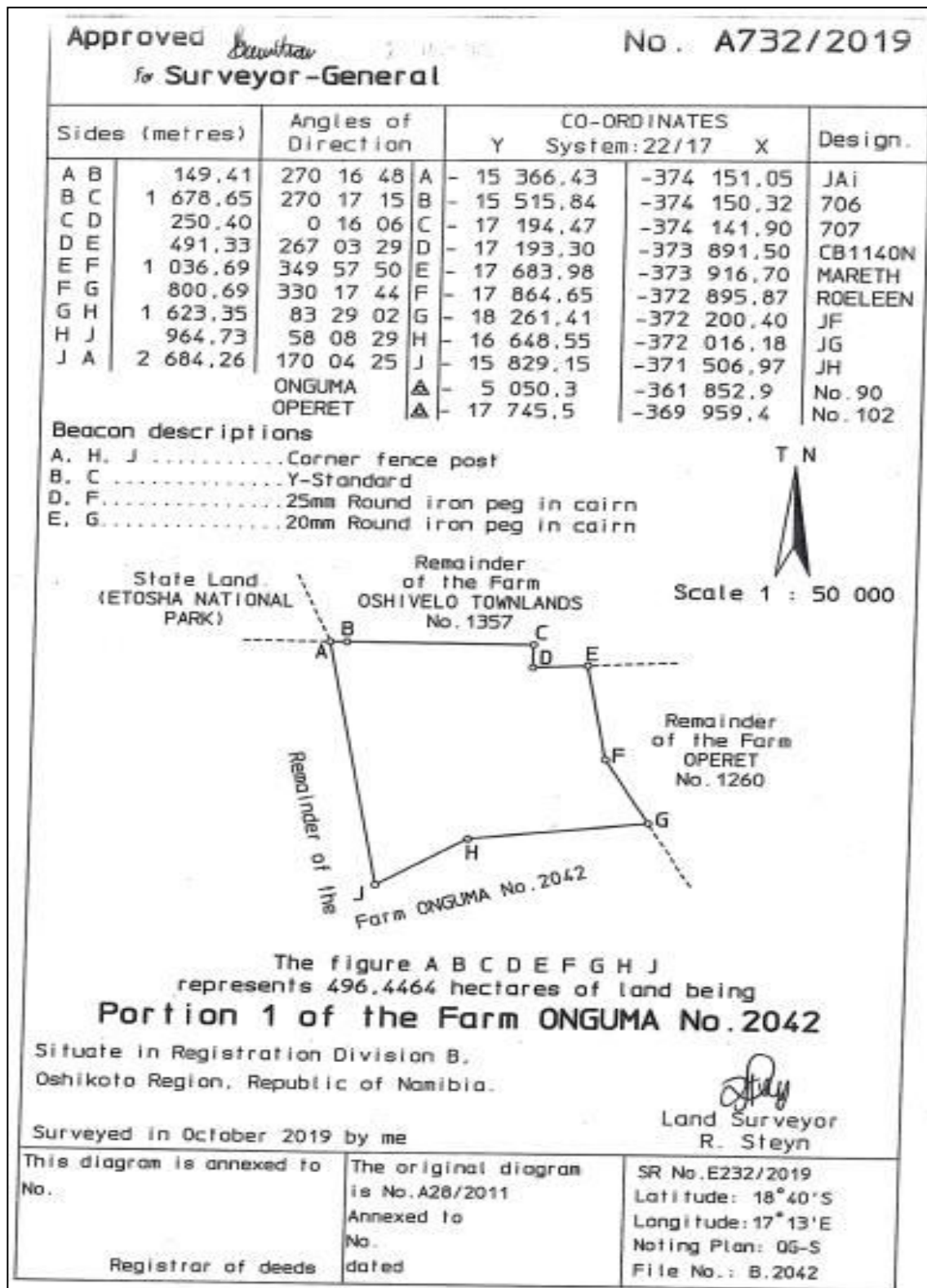


Figure 2: Area where Oshivele Farming is located

4.1.2.SIZE OF THE FARM

Oshivelo Farming is operating on Portion 1 of Farm Onguma No. 2042. The Farm is 496, 4464ha in extent. See below a copy of Diagram No. A732/2019, approved by the Surveyor General's Office confirming the size and boundaries of the Farm:



4.1.3. INFRASTRUCTURE AND ACTIVITIES ON THE FARM

The following infrastructure and activities exist on the Farm:

- The main farmhouse, office and workshop
- The sorting, grading, packaging, cooling, and storage warehouse
- Oshivelo Market who supplies local informal traders
- Housing facilities for senior management
- Five centre pivot irrigation systems
- Areas under micro, drip and sprinkler irrigation
- The farm is fenced in
- A solar plant supplementing the Nored electricity supply
- Three (3) boreholes and a water supply network and pumps
- Bunded diesel storage facility for supply of farm vehicles and backup generator

The locality of these facilities is shown on the *Photo* below:

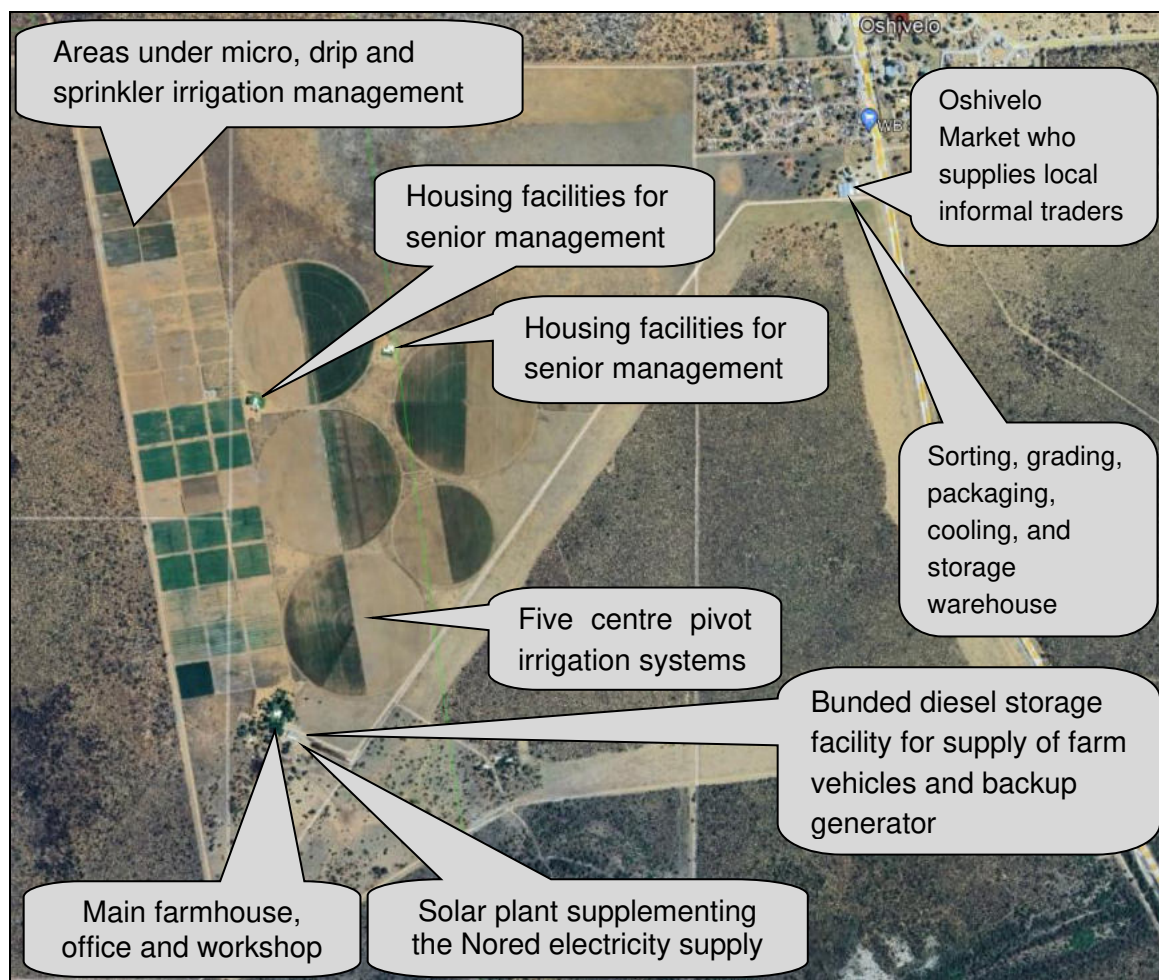


Figure 3: Lands under irrigation with infrastructure close by



Figure 4: Operations of Oshivelo



Figure 5: Produce / Crops

4.1.4. CROPS PRODUCED ON THE FARM

Oshivelo Farming produces carrots year-round, beetroot, onions, tomatoes, bell peppers, cabbage, maize, butternut, and broccoli as well as papayas. Four hundred tons of vegetable is sold monthly into the Namibia market. Clients range from major supermarket groups like Woolworths, Spar, Checkers and Food Lovers Market. Informal traders are supplied through an outlet on the Farm.

4.1.5. CURRENT BOREHOLES, WATER USE AND EXPANSION

The farm extract ground water for the irrigation via three (3) boreholes from Onguma aquifer. The current annual water consumption is $\pm 800\ 000\ m^3$ per annum. These boreholes are registered with the Department of Water of the MAWLR.

A large area of the farm is still vacant and has been cleared and it is the intention to upscale production and increase the employment on the farm. To enable the expansion of the area under irrigation, the farm requires an additional $700\ 000\ m^3$ of water per annum. If the additional allocation is approved, the Farm's total water use will be $1\ 500\ 000\ m^3$ /annum.

To be able to provide for the additional water required, two (2) additional boreholes must be drilled. The information on the three (3) current boreholes in use is summarised in the *Table* below:

Date borehole, well or spring made:	Yield (cubic metres per hour)		Depth (metres)	Water table(metres)		Maximum daily usage (Cubic metres)	Purpose for which water is used
	Original	Current		Original	Current		
(a) 26 Oct 2012	90M ³	90M ³	85M	7M	7M	800M ³	Irriagation
(b) 08 Sept 2015	90M ³	90M ³	120M	1M	1M	800M ³	Irriagation
(c) 08 Jan 2018	90M ³	90M ³	120M	2M	2M	800M ³	Irriagation
(d)							
(e)							

The locality of the three (3) current boreholes as well as the proposed sites (coordinates) for the two (2) additional boreholes to be drilled is shown on the *Map* below:

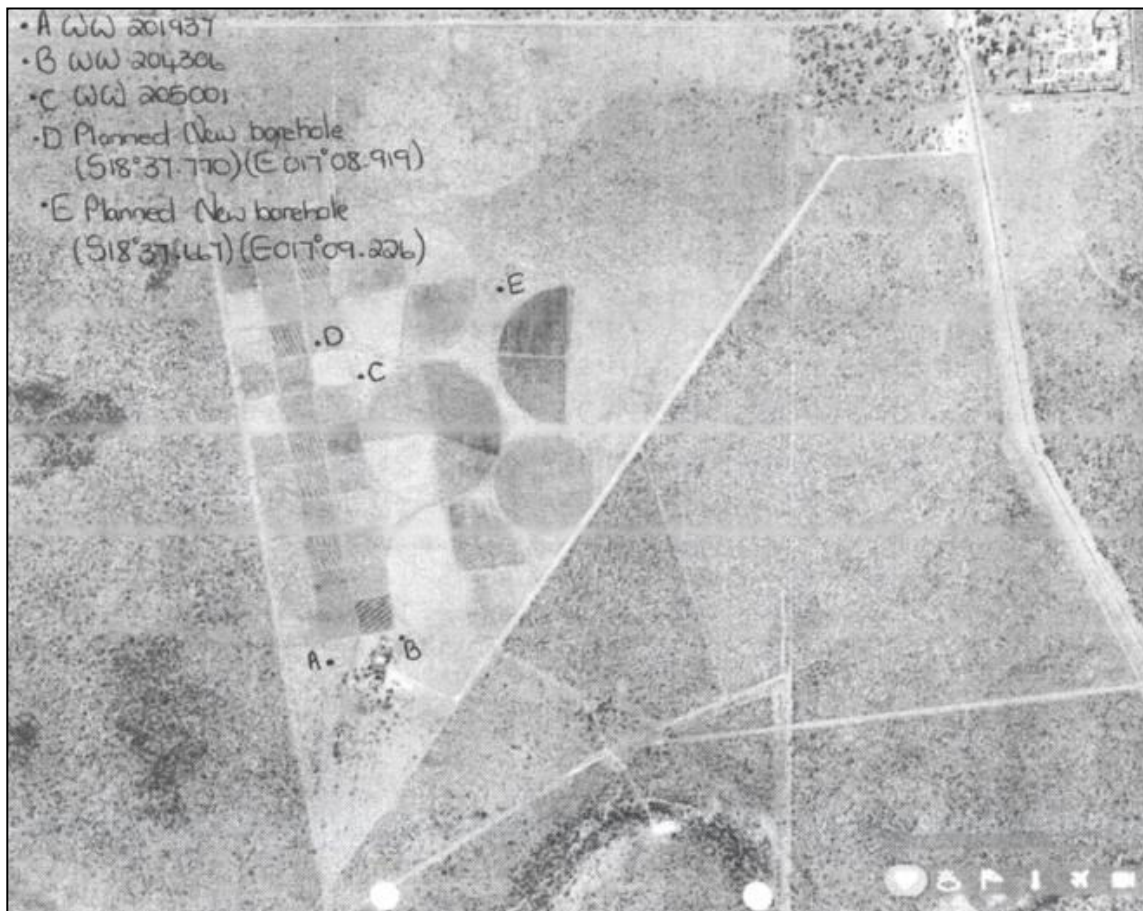


Figure 6: Current and proposed boreholes

The drilling of two (2) additional boreholes is subject to the following approvals:

- The renewal of the ECC for the existing operations including the increase in abstraction of groundwater for commercial purposes.

- Obtaining formal permission from the MAWLR for the drilling of the additional boreholes.
- Registering the boreholes with the MAWLR once drilled.
- Obtaining an abstraction permit from the MAWLR to abstract groundwater for commercial use.

4. APPROVALS OBTAINED

An Environmental Impact Assessment was conducted and an Environmental Clearance Certificate was obtained on the 26th of August 2019 and therefore the Environmental Clearance is due for renewal. See below copy of the previous clearance:

ECC – ECC0092 Serial No: c1sps692



REPUBLIC OF NAMIBIA
MINISTRY OF ENVIRONMENT AND TOURISM
 OFFICE OF THE ENVIRONMENTAL COMMISSIONER

ENVIRONMENTAL CLEARANCE CERTIFICATE

ISSUED

In accordance with Section 37(2) of the Environmental Management Act (Act No. 7 of 2007)

TO

Oshivelo Farming cc
 P.O.Box 933, Tsumeb, Oshivelo.

TO UNDERTAKE THE FOLLOWING LISTED ACTIVITY

The upscaling of irrigation activities and increment of the water abstraction permit, Oshivelo Farming cc, Oshivelo, Guinas Constituency, Oshikoto Region



[Signature]
 DEPUTY ENVIRONMENTAL COMMISSIONER

Issued on the date: 2019-08-26
 Expires on this date: 2022-08-26

(See conditions printed over leaf)

This certificate is printed without erasures or alterations



5. BULK SERVICES AND INFRASTRUCTURE

The following bulk services are already on site:

5.1.ACCESS

Oshivelo Farm takes access from the Main Road B1. The internal roads on the farm are all gravel roads which are maintained by the Farm. See below *Image* of the roads that lead to the Project Site:



Figure 7: Gravel road leading up to the Project Site

5.2.WATER SUPPLY/ REQUIREMENTS

The farm extracts ground water for the irrigation and other requirements from three (3) boreholes from Onguma aquifer. The water is pumped to sealed storage dams and elevated tanks from where it is distributed to the various irrigation systems, residences, warehouses, offices and packing shed.

5.3.ELECTRICITY

Electricity to the Project Site is provided by Cenored from their distribution grid. The Cenored supply is backed up by various silent diesel generators which becomes operational in case of power failure. See below *Image* of electricity boxes on site:



Figure 8: Electricity facilities on site

5.4.SEWAGE DISPOSAL

Sewage is dealt with by means of French drains with soak aways. Each house and work area has its own facility.

5.5.SOLID WASTE

The solid waste generated on Oshivelo Farm is collected and managed at a central area where it is sorted into glass, metal, paper, plastic and others. Glass is crushed and used to make bricks, paper and plastic is burned in a large hole and metal and other waste products are transported to Tsumeb landfill site. Once the paper and plastic are burned, the ash is covered with soil to prevent it from been blown into the surrounding areas.

5.6.FIRE PROTECTION

The infrastructure of Oshivelo Farm is protected from fire damage by a network of firebreaks with firefighting equipment stationed and installed at the sheds, houses and offices. An independent professional firefighting consultant (Rubicon Fire Services) is responsible for inspections, auditing, and maintenance of the equipment and for certification requirements as well as the training of staff.

6. 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

The public was invited to give input, comments and opinions regarding the proposed project. Notices were placed in the Republikein and New Era Newspapers (11 and 18 November 2022) on two consecutive weeks inviting public participation and comments on the proposed project. The final date for receiving comments was 30 November 2022.

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.

7. ASSUMPTIONS AND LIMITATIONS

It is assumed that the information provided by the proponent is accurate. No alternative portions/farms for the proposed project were examined. 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.

8. ADMINISTRATIVE, 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 for the proposed project are the following:

- The Namibian Constitution
- The Environmental Management Act (No. 7 of 2007)
- 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:

AGRICULTURE AND AQUACULTURE ACTIVITIES

7.3 The genetic modification of any organism with the purpose of fundamentally changing the inherent characteristics of that organism.

7.4 The import, processing and transit of genetically modified organisms.

7.5 Pest control.

7.6 The release of genetically modified organisms into the environment where an environmental assessment is required by law.

7.7 The release of any organism outside its natural area of distribution that is to be used for biological pest control.

7.8 The introduction of alien species into local ecosystems.

WATER RESOURCE DEVELOPMENTS

8.1 The abstraction of ground or surface water for industrial or commercial purposes.

8.2 The abstraction of groundwater at a volume exceeding the threshold authorised in terms of a law relating to water resources.

8.5 Construction of dams, reservoirs, levees and weirs.

8.7 Irrigation schemes for agriculture excluding domestic irrigation.

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.

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:		
Electricity Act (No. 4 of 2007)	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 licenses; and to provide for incidental matters: the necessary permits and licenses will be obtained.	The Proponent must abide to the Electricity Act.
Pollution Control and Waste Management	The Pollution Control and Waste Management Bill is currently in preparation and is therefore included as a guideline only. Of	The Proponent must adhere to the Pollution Control and Waste Management Bill.

Bill (guideline only)	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 subsection (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.	
Water Resources Management Act	The Water Resources Management Act (No. 11 of 2013) stipulates conditions that ensure effluent that is produced to be of a certain standard. There should also be controls on the disposal of sewage, the purification of effluent, measures should be taken to ensure the prevention of surface and groundwater pollution and water resources should be used in a sustainable manner.	The Act must be consulted. Fresh water abstraction and waste-water discharge permits should be obtained when required.
Solid and Hazardous Waste	Provides for management and handling of industrial, business and domestic waste.	The Proponent must abide to the solid waste management provisions.

Management Regulations: Local Authorities 1992		
Hazardous Substances Ordinance (No. 14 of 1974)	The Ordinance 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.
Atmospheric Pollution Prevention Ordinance of Namibia (No. 11 of 1976)	Part 2 of the Ordinance 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.
Nature Conservation Ordinance	The Nature Conservation Ordinance (No. 4 of 1975) 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.
Forestry Act	The Forestry Act (No. 12 of 2001) 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 stipulates that no	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.

	living tree, bush, shrub or indigenous plants within 100m from any river, stream or watercourse, may be removed without the necessary license.	
EU Timber Regulation: FSC (2013)	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.
Labour Act	The Labour Act (No. 11 of 2007) 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.
Communal Land Rights	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 Communal Land Reform Act (No. 5 of 2002) and Communal Land Reform Amendment Act (No. 13 of 2013) . The Communal Land Reform Act provide for the allocation of rights in respect of communal land to establish Communal Land Boards to provide	Consent should be obtained from Traditional Authorities, Communal Boards, Chiefs, Kings, Queens etc. if required.

	for the powers of Chiefs and Traditional Authorities and boards in relation to communal land and to make provision for incidental matters. Consent and access to land for the proposed project should be requested from the relevant traditional authority through the Regional Council and Regional Communal Land Boards.	
Traditional Authorities Act (No. 17 of 1995)	The Traditional Authorities Act (No. 17 of 1995) 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.
Public and Environmental Health Act	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.
National Heritage Act (No. 27 of 2004)	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.
National Monuments Act of Namibia (No. 28 of 1969) as amended until 1979	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	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

	<p>executed by any people who inhabited or visited Namibia before the year 1900 AD; or</p> <p>(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</p> <p>(d) the anthropological or archaeological contents of graves, caves, rock shelters, middens, shell mounds or other sites used by such people; or</p> <p>(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.</p>	<p>will be the responsibility of the developer to take the required route and notify the relevant commission.</p>
Public Health Act (No. 36 of 1919)	<p>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.”</p>	<p>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.</p> <p>Relevant protective equipment shall be provided for employees in construction.</p> <p>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.</p>
Soil Conservation Act (No. 76 of 1969)	<p>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;</p>	<p>Only the area required for the operations should be cleared from vegetation to ensure the minimum impact on the soil through clearance for construction.</p>
Air Quality Act (NO. 39 of 2004)	<p>The Air Quality Act (No. 39 of 2004) intends to provide for national norms and standards regulating air quality monitoring,</p>	<p>The proponent and contractor should adhere to the Air Quality Act.</p>

	management and control by all spheres of government; for specific air quality measures; and for matters incidental thereto.	
Vision 2030 and National Development Plans	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 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.	The proposed project is an important element in employment creation.

CONCLUSION AND IMPACT

It is believed the above administrative, legal and policy requirements which 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.

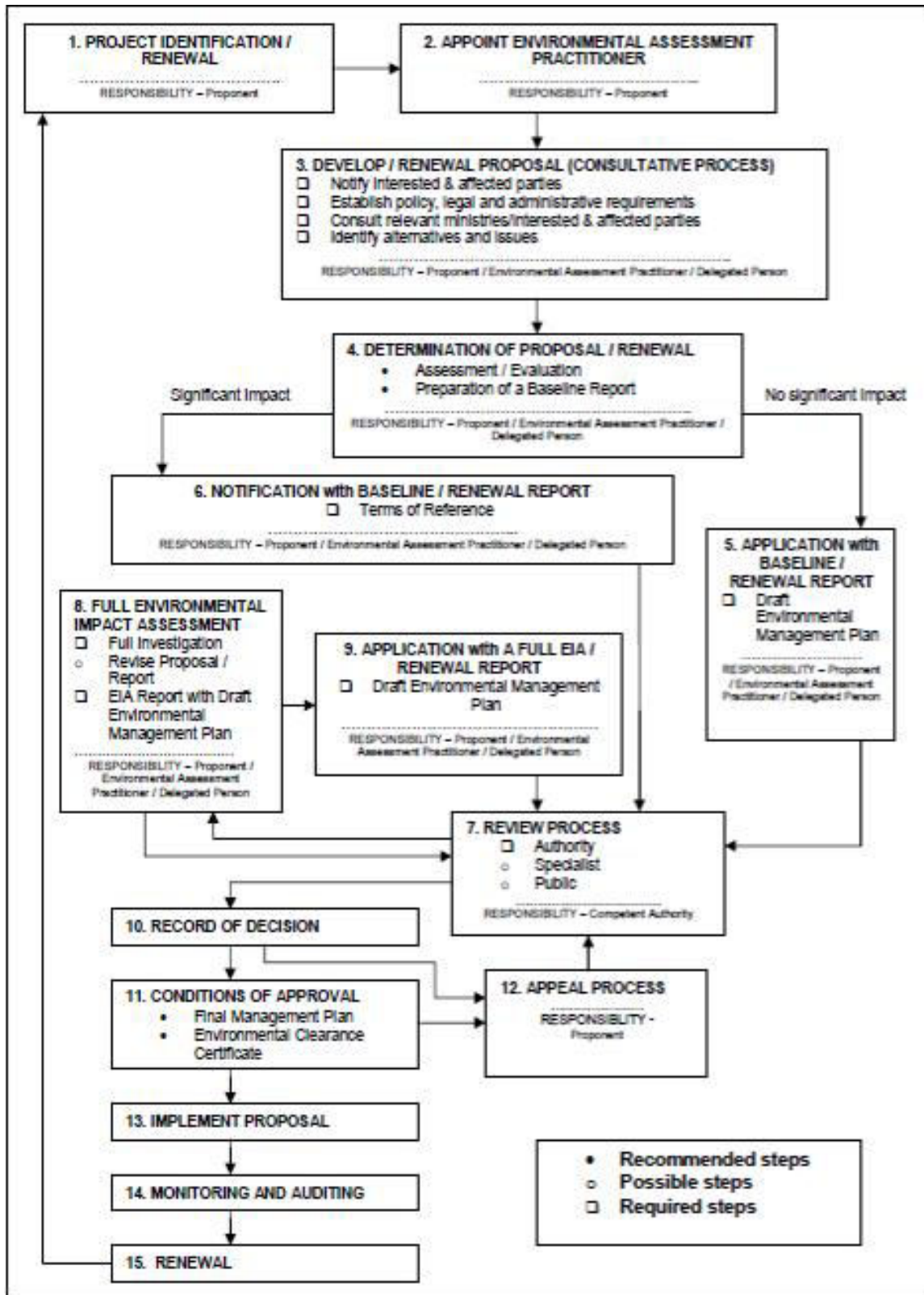


Figure 9: Flowchart of the Impact Process

9. AFFECTED RECEIVING ENVIRONMENT

9.1. BIODIVERSITY AND VEGETATION

Oshivelo Farm is located in the Tree and Shrub Savannah Biome (specifically the Highland Savannah). The project site is showing evidence of some human interference namely informal tracks are present and vegetation was cleared to make space for the irrigation fields on some areas of the farm and a few gravel roads are present on the site.

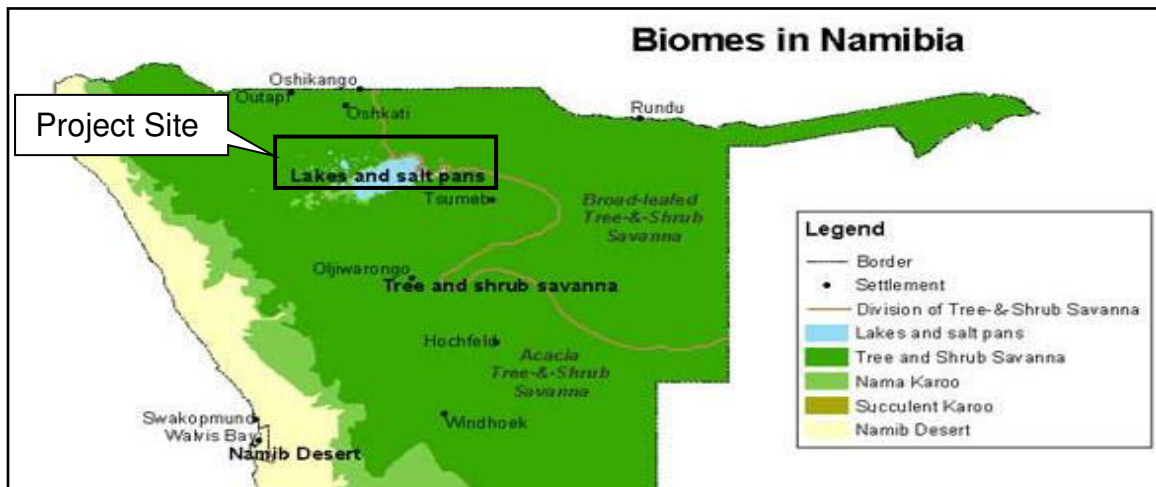


Figure 10: Biomes in Namibia (Atlas of Namibia, 2002)

The following information was obtained from Manuel Weber (2022): "At this stage, 204 plant species have been recorded on Oshivelo Farm. A full survey was conducted in late summer 2022, during which 196 species were recorded within the samples, including 64 graminoids (grasses), 27 trees, 39 shrubs, 62 forbs (wild flowers), 5 climbers and 1 succulent. Using the Chao1 index, a non-parametric species richness estimator based on abundance data (Gotelli and Colwell, 2011), the total species richness of the plant community on Onguma can be estimated at 231 species, with a 95% probability that the actual number is between 220 and 274. Species recorded during the survey are highlighted as such, together with the number of plots in which the species was found (out of 58 vegetation plots). Six alien invasive plant species have been recorded on the reserve, of which *Blepharis edulis* and *Poa annua* are of most significant concern as they are relatively widespread in the reserve (respectively recorded in 8 and 9 out of 58 vegetation plots). The prickly pear (*Opuntia ficus-indica*), although the best known invasive alien, is much less of concern as it is much more localized within the reserve and has not been recorded in any of the 58 vegetation plots".



Figure 11: Type of vegetation on Project Site

Only the necessary plants/vegetation will be removed for the expansion of the area under irrigation. The natural characteristics of the project site namely the vegetation clearance and the destruction of habitats is expected to further on have a low impact on the environment before the mitigation measures are taken and after the mitigation measures are taken, the impact will be very low.

9.2.GEOLOGY AND SOILS

Oshivelo Farm is located in the Kalahari Group. See *Map* below:

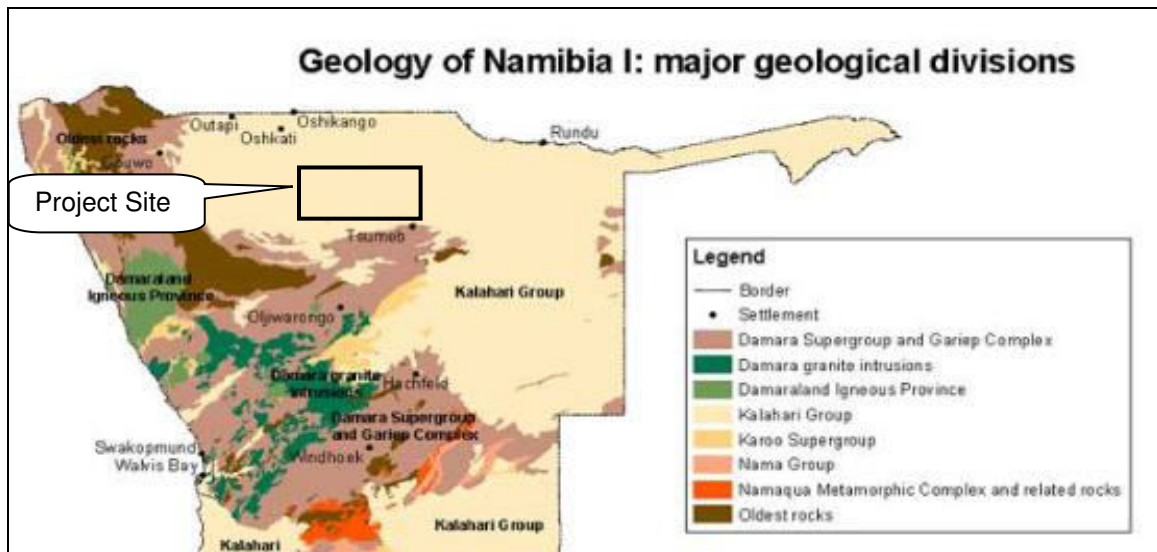


Figure 12: *Geology of Namibia (Atlas of Namibia Project, 2002)*

The following information was obtained from Manuel Weber (2022): Onguma is situated in the Ovambo basin, which is geologically part of the Kalahari. This basin served as sediment catchment during the Damara mountain building period about 650 million years ago, of which the Otavi mountains around Tsumeb to the south are the only remnants. About 200 million years ago, the Gondwana ice age led to the formation of a massive glacier that covered the region. Due to the weight, a depression began to form, in which sand from dunes that appeared following the aridification of the region about 200 million years ago lithified to form Etjo sandstone. Etjo sandstone can still be found about 200 meters below today's Etosha pan. The Waterberg plateau is a formation where it can be seen at the surface. About 120 million years ago during the Kalahari group, due to an uplifting of the Earth's crust to the west of the region, a 500-meter thick layer of aeolian sediments deposited itself into the Ovambo basin. Between 7 million and 35 000 years ago, the Etosha lake extended from today's Etosha pan all the way into Angola and included the catchment of the Kunene river which drained through it. However evaporation predominated, and as the lake disappeared, a salt crust deposited to form today's Etosha pan. The pan is mainly fed by rainwater reaching the pan from the north, as well as through the Omuramba-Ovambo from the east, a seasonal stream that flows through Onguma (Weber, 2022).

Today's Oshivelo Farms complex geology is shaped by the various processes of the past. Due to the long tectonic stability of the region, Onguma is almost flat and lies between 1000 and 1200 meters above sea-level. The mother rock is mostly calcrete, a permeable rock that originates through precipitation of lime saturated springwater which flows along the slight topographic gradient underground from the carbonate Otavi mountains to the south east. The result is a mostly karstified landscape with abundant groundwater movement. In some places, the calcrete is visible from the surface,

especially on shallow leptosol in the southern part of the reserve. Locally, weathering processes lead to accumulation of calcrete debris on the surface, often at proximity of an artesian fountain where the ground water pressure has split the rocks and where the high concentration of game has worked the rock over the centuries. This landscape is called Hamada and is typical for arid areas. The second mother rock present on the reserve is Andoni sandstone, the result of compacted aeolian sediments from the past and present in certain sections in the northern part of the reserve. It is noteworthy that termite activity on the reserve concentrates on calcrete areas and are almost absent from sandstone areas. The main geomorphological driver is the wind, with aeolian deflation being the main process. Irregular flooding events of the Omuramba-Ovambo can however lead to significant sediment displacement, which has shaped the edaphic profile of the central sector of the reserve considerably (*Weber, 2022*).

9.3. TOPOGRAPHY AND DRAINAGE

The Oshivelo area where the Farm is located is relative flat. It is on an elevation of 1200m above sea level. The topography declines toward Etosha Pan, which is the lowest point sitting at 1080 above sea level.

The Cuvelai drainage system is influenced by this topography as it is made up of networks of shallow watercourses locally known as "*lishanas*". These *lishanas* are recharged by floodwater from Angola during times of high rainfall or filled by rain that occur in the region. Drainage is mainly from North to West and South to East towards Etosha pan. Unlike river channels which are narrow and deeper, the *lishanas* channels are broad and shallow whereby elevation between the bottom and high ridges (*Omitunda*) are less than 10m. The high ground slopes from west to east basically defines the flow/drainage of the Cuvelai basin Mendelsohn *et al* 2000.

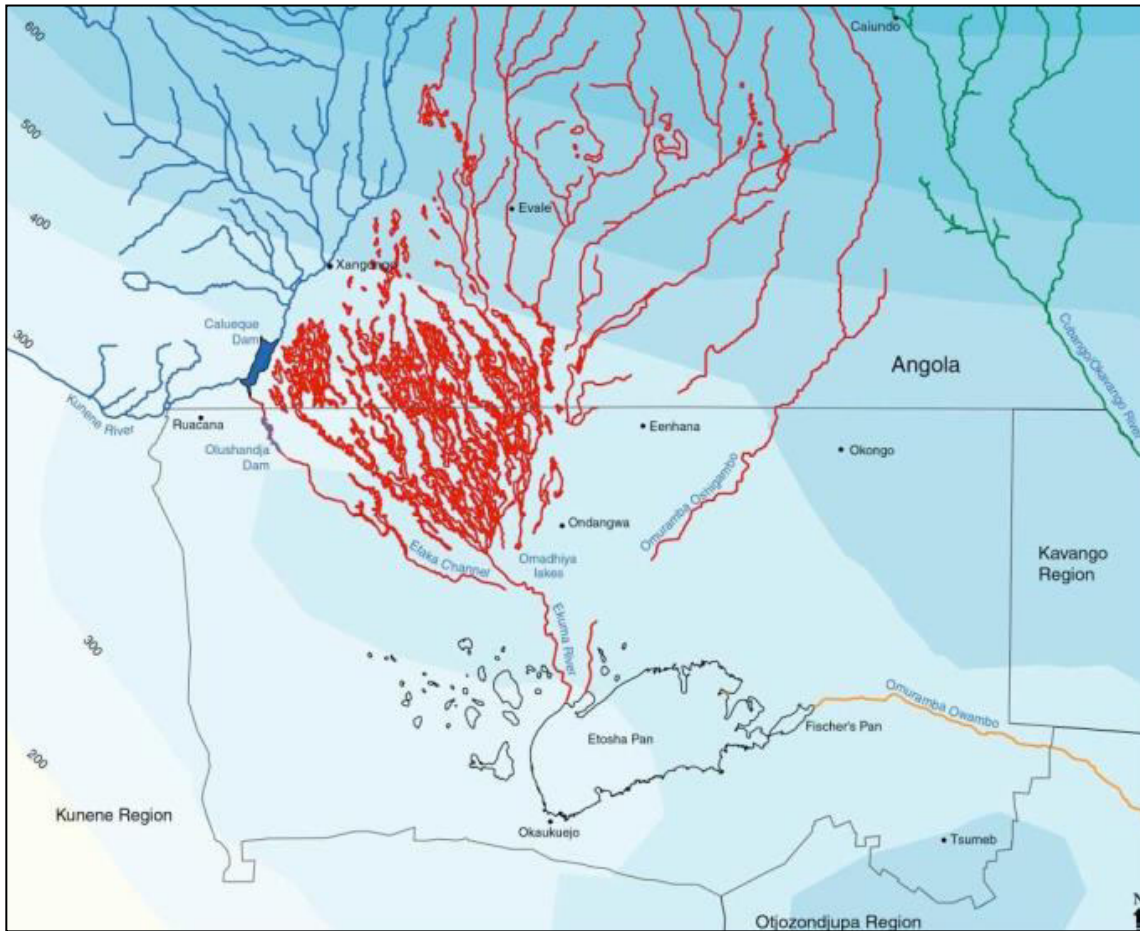


Figure 13: Drainage of the Cuvelai Basin (Mendelsohn et al., 2000)

9.4. HYDROLOGY

9.4.1. GROUNDWATER

The following information was obtained from the *Evaluation of Oshivelo Geology, Hydrogeology, and surface water study for the Purpose of Irrigation at Onguma Farm* (2018) undertaken by *Augere Trading cc Groundwater Exploration Consultants - A Elago*:

Farm Oshivelo falls within the Cuvelai Etosha Basin Hydrogeological Region, which is an inland drainage system where runoff flows into the Etosha Pan. According to the Cuvelai-Etosha Groundwater Investigation Study, there are three groundwater flows of the Cuvelai-Etosha Basin;

- a) "Groundwater recharged in the fractured dolomites of the Damara Sequence, which form the southern and western rim of the basin, flows north- and eastwards and feeds the aquifer system of the Karoo and Kalahari sequences. However, a major part of this north/eastbound groundwater flow is shallow, and discharges through numerous springs along the southern margin of the Etosha Pan, where it rapidly evaporates.

- b) *A deep-seated multi-layered Kalahari Aquifer is recharged in Angola and groundwater flows in a southern direction towards the Etosha Pan and the Okavango River.*
- c) *A shallow Kalahari Aquifer (formerly described as the brine lake area) superimposes both previously described aquifer systems in the central part of the CEB. The mainly saline groundwater originates from regular floods in the Cuvelai drainage, which has its headwaters in central Angola”.*

The water quality in the Cuvelai basin decrease toward to the centre of the basin due to high concentration of chloride, sodium, fluoride and sulphate and water quality increases away from the basin centre. Further, the Etosha Cuvelai Basin is made up of Six (6) aquifers; Otavi Dolomite Aquifer (**DO**) Etosha Limestone Aquifer (**KEL**), Oshivelo Multi-layered Aquifer (**KOV**) Ohangwena Multi-layered Aquifer (**KOH**) Oshana Multi-layered Aquifer (**KOS**) Omusati Multi-zoned Aquifer (**KOM**). The hydrogeology of the aquifer is shown in table below.

The Otavi Dolomite Aquifer (**DO**) forms part of the main Damara Sequence Aquifer. It is formed of thick fractured and partly karstified aquifer system which is the main hardrock aquifer in the southern Cuvelai Etosha Basin. Some dolomite formation in this aquifer has an average transmissivity values of 300 and 1700m²/day. This aquifer has a high water quality. The Otavi Dolomite Aquifer is known to feed overlying unconfined and confined Kalahari aquifers via faults and hydrogeological “window”.

The Etosha Limestone Aquifer (**KEL**) forms part of the main Kalahari Sequence Aquifer. **KEL** is situated on southern and western margin of the CED formed by calcrete sedimentaryevaporitic genesis. It has good water quality and high yield particularly from areas southeast of Oshivelo along the Muramba Owambo. It is recharged by the throughflow from Otavi Dolomite Aquifer (**DO**); however studies have shown that, local recharge constitutes about 70%.

Further, Oshivelo Multi-Layered Aquifer (**KOV**), where farm Oshivelo is located also forms part of the Kalahari Sequence Aquifer. This aquifer stretches from Oshivelo and extends in the north-western and eastern direction of Tsintabis and to the border of Kavango region. Part of this aquifer is confined, made up of clay, calcrete and clayey sand. At Oshivelo toward the Etosha Pan, the aquifer is artesian with free-flowing yield of 200m³/h. The transmissivity values of 100 and 10 00m²/day are known to be reported. Studies indicated that, recharge of this aquifer is through the Etosha Limestone Aquifer (**KEL**) and Otavi Dolomite Aquifer (**DO**). Further, various studies (BIWAC, 1999, MARGANE et al., 2005) have indicated that the potential groundwater throughflow from **KEL** to the freshwater of Oshivelo Aquifer is estimated to be 8 Mm³/annum and a safe yield of 4Mm³/annum. It is important to note that, the Oshivelo farm currently abstract 800 000m³/annum from this aquifer and proposed to increase abstraction with 700 000 m³/annum which shall be bring the total annual abstraction to 1.5Mm³/annum against the safe yield of 4Mm/annum.

The Ohangwena Aquifer (KOH) also forms part of the Kalahari Sequence Aquifer. It is a multi-layered continuous porous aquifer located on the eastern Ohangwena and northern Oshikoto region. Studies has indicated that the aquifer contains about 10 billion m³ of good quality groundwater. Yield between 3-50m³/h and transmissivity values of between 30 and 760m²/day are report. It is recharged by a throughflow from unconfined Kalahari aquifers in the southern Angola.

The Oshana Aquifer (**KOS**) is an unconfined shallow aquifer made up of think sequence of alluvia deposit. This aquifer is recharged by regular flooding of *iishana* drainage of the Cuvelai System. Yields of 30 m³/h are reported.

Omusati Multi-Zoned Aquifer (KOM) is also part of the Kalahari Aquifers which is made unconsolidated to semi-consolidated sediments of sand, clay and calcrete. The aquifer is recharged through lateral throughflow from the **KEL** and **DO** aquifer in the west.

Table 2: Aquifer surrounding the project Basin (Bräumle, 2005)

NAME OF AQUIFER/AQUITARD	NEW ABBREVIATION	FORMER ABBREVIATION	SEQUENCE	GROUP (SUBGROUP)	FORMATION
Kalahari Sequence Aquifer (undifferentiated)	K	N/A	Kalahari		Ombalantu, Beiseb, Olukonda, Andoni, Etosha Limestone M., Recent
Discontinuous Perched Aquifer	KDP	DPA			Recent
Etosha Limestone Aquifer	KEL	UKA _{EL}			Andoni (Etosha Limestone Member)
Oshivelo Multi-layered Aquifer (undifferentiated)	KOV	N/A			Ombalantu, Beiseb, Olukonda, Andoni
• Aquifer 1	KOV1	UKA _{AV1}			Andoni
• Aquifer 2	KOV2	OAA _{AV1}			Andoni, Olukonda
Oshana Multi-layered Aquifer (undifferentiated)	KOS	N/A			Ombalantu, Beiseb, Olukonda, Andoni
• Aquifer 1	KOS1	MSA _{AV1}			Andoni
Ohangwena Multi-layered Aquifer (undifferentiated)	KOH	N/A			Andoni, Olukonda
• Aquifer 1 (Andoni Fm)	KOH1	MDA _{AV1}			Andoni, Olukonda
• Aquifer 2 (Olukonda Fm)	KOH2	VDA _{OL}			Olukonda
Omusati Multi-zoned Aquifer (undifferentiated)	KOM	N/A			Ombalantu, Beiseb, Olukonda, Andoni
Karoo Sequence Aquifer/Aquitard (undifferentiated)	KR	KSA			Karoo
Damara Sequence Aquifer (undifferentiated)	D	N/A	Damara	Mulden-, Otavi-, Nosib-	Owambo, Kombal, Tschudi, Huettenberg, Elandshoek, Maieberg, Ghaub, Auros, Gauss, Berg Aukas, Varianto, Nabis
Mulden Group Aquifer/Aquitard (undifferentiated)	DM	MGA		Mulden	Owambo, Kombal, Tschudi
Otavi Dolomite Aquifer (undifferentiated)	DO	ODA		Otavi	Huettenberg, Elandshoek, Maieberg, Ghaub, Auros, Gauss, Berg Aukas, Varianto, Nabis
Otavi Dolomite Aquifer	DOT	ODA		Otavi (Tsumeb Subgroup)	Tsumeb Subgroup
	DOT1	ODA			Huettenberg
	DOT2	ODA			Elandshoek
	DOT3	ODA			Maieberg
	DOT4	ODA		Ghaub	
	DOA	ODA		Otavi (Abenab Subgroup)	Abenab Subgroup
	DOA1	ODA			Auros
	DOA2	ODA			Gauss
DOA3	ODA	Berg Aukas			
Nosib Group Aquifer/Aquitard (undifferentiated)	DN	N/A		Nosib	Varianto, Nabis
Pre-Damara Basement (undifferentiated)	B	B		Basement	

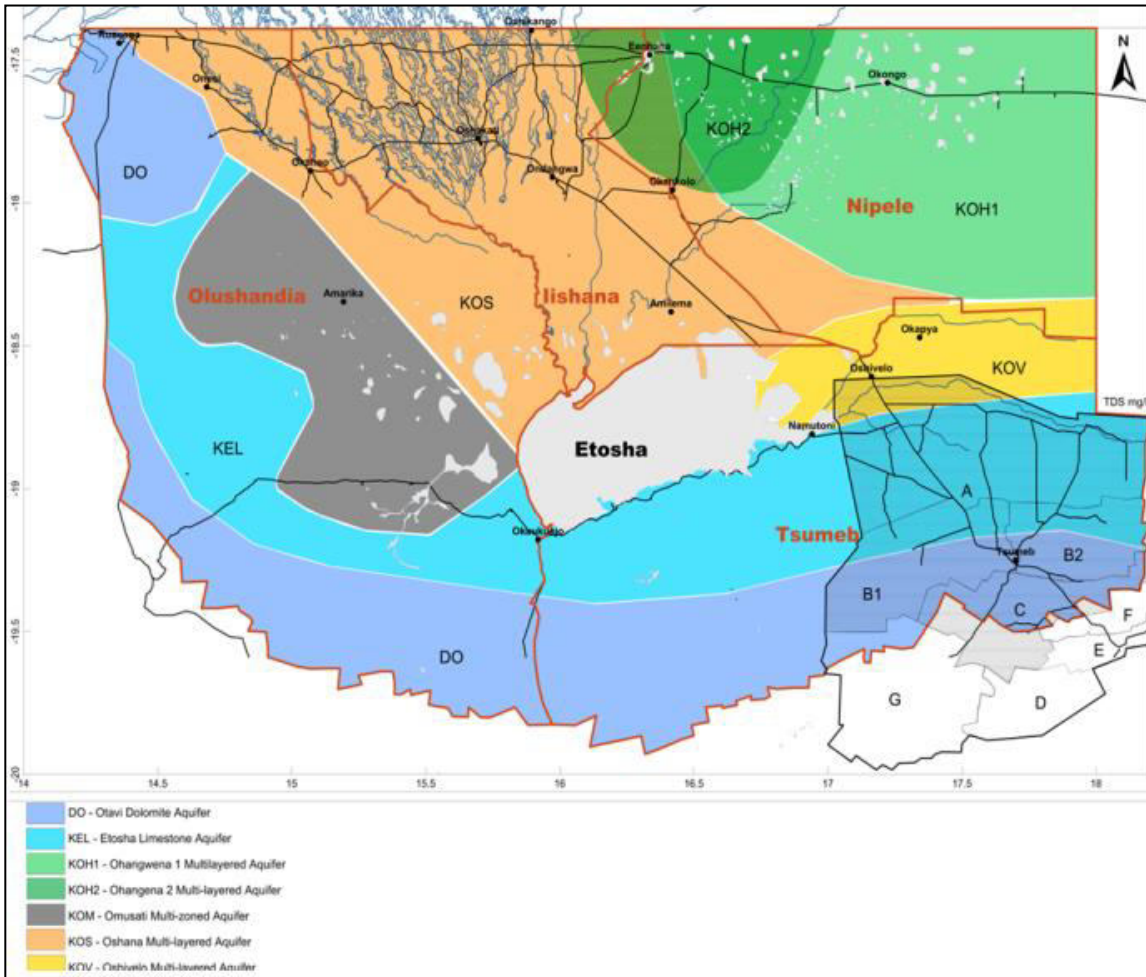


Figure 14: Map showing Aquifer

9.4.2.WATER AVAILABILITY

The availability of water from the Oshivelo Aquifer, based on a study conducted in 1999 by Federal Institute of Natural Resources and Geosciences (BGR) in collaboration with the Ministry of Agriculture, Water and Land Reform (MAWLR), is estimated to have a through flow of 8000000m³/annum and the recommended sustainable yield is 4000000m³/annum. The same study also indicates that by 2017/18, the water demand by the Oshivelo Community will be about 1,344,295m³/annum.

The water uses and availability is summarised in the *Table* below:

Description	Volume m ³ /annum
Annual through flow	8 000 000
Current Demand of the village	1 650 000
Current usage by Oshivelo Farm	800 000
Planned use by Oshivelo Farm	1 500 000
Total use	3 150 000
Recommended sustainable yield	4 000 000
Balance available for future use	850 000

The above *Table* shows that granting an additional 700 000m³/annum (1500 000m³/annum in total) to Oshivelo Farm to expand the area under irrigation can be accommodated by the aquafer as 850 000m³/annum will still be available for other uses.

9.5. SOCIO ECONOMIC ENVIRONMENT

The majority of land uses around the project site/farm are characterized by tourism, residential, commercial and farming activities; therefore, the activities will not have a negative impact on the social environment.

The proposed project will have a positive impact on the socio-economic environment. Positive impacts associated with the project will be in the form of additional job opportunities during construction as well as in operation. The community will also benefit from skills and technology transfer. The spending power of locals is likely to increase because of employment during the construction and operational phase.

9.6. CLIMATE

The following information was obtained from Manuel Weber (2022): “The climate of Onguma is hot semi-arid (*BSh in the Köppen climate classification*). The average annual precipitation equals 547.5 mm (*Meteoblue data for Oshivelo, 2022*). Rainfall occurs during the summer months with the vegetation period stretching from November to April (months during which the monthly precipitation in mm is more than twice the temperature in degrees Celsius). The winters are extremely dry. The annual average temperature is 25.64°C, the average temperature of the warmest month is 36.61°C (October), the average temperature of the coldest month is 11.56°C (July) (*Weber, 2022*)”.

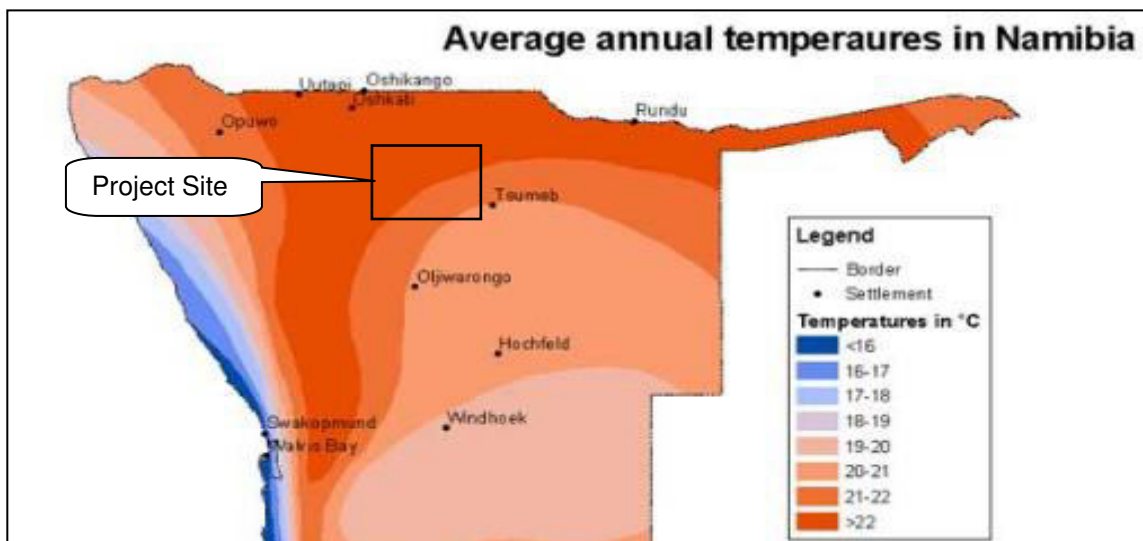


Figure 15: Average temperatures (*Atlas of Namibia Project, 2002*)

9.7. CULTURAL HERITAGE

The proposed project site 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.

10. THE KEY ENVIRONMENTAL IMPACTS

The Key Environmental considerations associated with the increase of the abstraction of water from the aquifer to increase area under irrigation are the following:

- Ensuring sustainable utilisation of the Oshivelo aquifer
- The socio-economic benefits from increasing the area under irrigation
- Groundwater pollution
- Heritage and archaeological concerns

10.1. SUSTAINABLE UTILISATION OF OSHIVELO AQUIFER

The safe sustainable abstraction from the Oshivelo Aquifer is estimated at 4 000 000m³/annum. It must be ensured that the abstraction of water to be used for residents and businesses of the Oshivelo Village and the surrounding villages, the watering of animals and for irrigation remains within this safe abstraction yield of the aquifer. The continuous monitoring of the abstraction volumes to prevent over abstraction is therefore very important.

10.2. SOCIO-ECONOMIC BENEFITS OF IRRIGATION

Oshivelo Farm have a permanently employed workforce of ±200 and will take on an additional 80 - 100 temporary workers during harvesting season. Thus, the Farm is the biggest employer at the Oshivelo Settlement. Annual wages paid out to the workers amounts to ±N\$ 3 600 000.00. On average 6000 tons of vegetables are produced and marketed annually. The Farm also supports the elderly, schools, churches etc. in the Oshivelo Settlement through their social responsibility program.

Increasing the water allocation/abstraction to the Farm will allow to increase production to about 8000 tons per annum which will result in more employment to be created and more wages to be paid out into supporting the Oshivelo Settlement social and business community.

It will result in import substitution as well as upstream value addition. Thus, supporting the additional abstraction of water will result in significant socio-economic benefits for Oshivelo Settlement and Namibia in general.

10.3. GROUNDWATER POLLUTION

The water of the Oshivelo Aquifer is of very high quality. Special care must be taken to prevent any spills of fuel and lubricants into the groundwater during the drilling and installation of the borehole.

10.4. HERITAGE AND ARCHAEOLOGICAL CONCERNS

It could not be confirmed through the site visit and from interviewing the farm management if any graves or heritage sites are present on the area to be used to expand the irrigation fields or where the additional boreholes will be drilled. In case any heritage or archaeological material is discovered/unearth during the preparation of the additional area for irrigation, digging the trenches for the water distribution network or in drilling the boreholes, the Natural Heritage Council must be notified.

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:

Table 3: 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	
Scale:	Magnitude:
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 has 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	L	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	L	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

The area is covered by vegetation. The 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 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	M	L

11.1.12. SENSE OF PLACE

The placement, design and construction of the proposed project 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 farms / portions and it will not be visually displeasing.

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. No firewood may be collected on the site. 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	L	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 or 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	L	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 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/farm identified namely Oshivelo Farm, Oshikoto 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 Clearance for the operations and increase in water abstraction of Oshivela Farming, Oshivelo, Oshikoto Region and to issue an Environmental Clearance for the following 'Listed Activities':

AGRICULTURE AND AQUACULTURE ACTIVITIES

7.3 The genetic modification of any organism with the purpose of fundamentally changing the inherent characteristics of that organism.

- 7.4 The import, processing and transit of genetically modified organisms.*
- 7.5 Pest control.*
- 7.6 The release of genetically modified organisms into the environment where an environmental assessment is required by law.*
- 7.7 The release of any organism outside its natural area of distribution that is to be used for biological pest control.*
- 7.8 The introduction of alien species into local ecosystems.*

WATER RESOURCE DEVELOPMENTS

- 8.1 The abstraction of ground or surface water for industrial or commercial purposes.*
- 8.2 The abstraction of groundwater at a volume exceeding the threshold authorised in terms of a law relating to water resources.*
- 8.5 Construction of dams, reservoirs, levees and weirs.*
- 8.7 Irrigation schemes for agriculture excluding domestic irrigation.*

LIST OF REFERENCES

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APPENDIX A: NEWSPAPER NOTICES

CLASSIFIEDS

Tel: (061) 208 0800/44

Fax: (061) 220 584

Email: classifieds@nepc.com.na

Legal Notice

REPUBLIC OF NAMIBIA MINISTRY OF INDUSTRIALISATION AND TRADE, LIQUOR ACT, 1998 NOTICE OF APPLICATION TO A COMMITTEE IN TERMS OF THE LIQUOR ACT, 1998

Legal Notice

IN THE MAGISTRATE COURT FOR THE DISTRICT OF ONDANGWA HELD AT ONDANGWA

Legal Notice

NOTICE TO CREDITORS All persons having claims against the estate specified below, are called upon to lodge their claims with the executor concerned within a period of 30 days

Legal Notice

CHANGE OF SURNAME - THE ALIENS ACT, 1937 NOTICE OF INTENTION OF CHANGE OF SURNAME

Legal Notice

CHANGE OF SURNAME - THE ALIENS ACT, 1937 NOTICE OF INTENTION OF CHANGE OF SURNAME

Legal Notice

NOTICE OF AN ENVIRONMENTAL IMPACT ASSESSMENT Notice is hereby given that an application for an Environmental Clearance Certificate (ECC) will be made to the Environmental Commissioner in the Ministry of Environment, Forestry and Tourism (MEFT)

Legal Notice

NOTICE OF AN ENVIRONMENTAL IMPACT ASSESSMENT (Continued) The public is hereby notified that an application for an Environmental Clearance Certificate (ECC) will be submitted to the Environmental Commissioner

Legal Notice

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Legal Notice

NOTICE TO CREDITORS AND DEBTORS IN DECEASED ESTATES

Legal Notice

REPUBLIC OF NAMIBIA MINISTRY OF INDUSTRIALISATION AND TRADE, LIQUOR ACT, 1998 NOTICE OF APPLICATION TO A COMMITTEE IN TERMS OF THE LIQUOR ACT, 1998

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Legal Notice

NOTICE OF AN ENVIRONMENTAL IMPACT ASSESSMENT (Continued) The public is hereby notified that an application for an Environmental Clearance Certificate (ECC) will be submitted to the Environmental Commissioner

Legal Notice

NOTICE OF AN ENVIRONMENTAL IMPACT ASSESSMENT (Continued) The public is hereby notified that an application for an Environmental Clearance Certificate (ECC) will be submitted to the Environmental Commissioner



ADVERTISE HERE CONTACT 061-20 80844

REGKONNINGSWINGS Legal Notices

REZONING NOTICE DUNAMIS CONSULTING TOWN, REGIONAL PLANNERS AND DEVELOPERS on behalf of the owner of Erf 223 Heidoor Street, Enspark intends to apply to the Municipal Council of Windhoek for the following:
Consent to use the approved Free Residential Bulk represented by a total floor area of 240m² on the existing 'Office' zoning with a bulk of 0.4 and Erf 223 Heidoor Street, Enspark for a Medical Suites Guesthouse comprising 6 Leaseable Rooms.

Erf 223 Enspark is located in Heidoor Street. The property is currently zoned 'Office' with a bulk of 0.4 and measures 248m². The proposed consent use for a 6 Leaseable Rooms Guesthouse on the Free Residential Bulk representing a total floor area of 240m², will allow the owner to obtain a Free Certificate for the Medical Suites Guesthouse. Enough on-site parking as required in terms of the Windhoek Zoning Scheme is provided.

Further, take note that the locality plan of the Erf can be inspected at the Windhoek Town Council Customer Care Centre Town Planning Notice Board, 80 Independence Avenue, Windhoek.
Further take note that any person objecting to the proposed land use as set out above may lodge such objection together with the grounds thereof in Writing at the Windhoek Urban Planning Offices Room 518, 5th Floor, Town House Main Building within 14 days of the last publication of this notice (final date for objections is 02 December 2022).

Call: +264 855 512 173
Tel: +264 833 302 241
Email: ndimuhona@dunamis-plan.com

NOTICE TO DEBTORS AND CREDITORS: Estate late JOHN HAMUKOTO AKWENYE, NO. E. 2700/2022. Identity number: 5103200224. He is ordinarily resident at 25 BARUG STREET, KATUTURA, WINDHOEK, NAMIBIA and who died at WINDHOEK, KHOMAS on 22 May 2022.

All persons having claims against the above estate are hereby called upon to file their claims, with the underwritten within 30 (Thirty) days from the date of the publication hereof.
Dated at Windhoek on this 18th day of November 2022.

IN THE Magistrate's Court For The District of Rundu
Heid at Rundu
Case No. 55/2021
In the matter between:
SOUTH WESTERN EXPRESS CC, Execution Creditor
and
MANGALANGANDIA TRADING ENTERPRISES CC, First Execution Debtor

NOTICE OF SALE IN EXECUTION
KINDLY TAKE NOTICE THAT the undermentioned assets, in execution of a Judgment granted on 16 August 2021 against the Defendants, will be sold in execution by the Messenger of the Court for the district of Rundu, on THURSDAY, 1 DECEMBER 2022 at 11:00 in front of the Magistrate's Court, Rundu.

REGKONNINGSWINGS Legal Notices

NOTICE TO CREDITORS IN DECEASED ESTATES: All persons having claims against the undermentioned estate must lodge with the Executor concerned within 30 days (or as indicated from date of publication hereof).

Estate No: E2559/2022
Master's Office: WINDHOEK
Surname: DANIEL
Christian Names: VELUS
Date of Birth: 4 JANUARY 1960
Identity No: 600104100574
Last Address: ERF NO. 10361 KATUTURA
Date of Death: 5TH AUGUST 2005

CALL FOR PUBLIC PARTICIPATION COMMENTS: ENVIROMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN TO OBTAIN AN ENVIRONMENTAL CLEARANCE FOR THE OPERATIONS OF THE VARIOUS TOURISM ESTABLISHMENTS AND OTHER ACTIVITIES ON GINAMBA NATURE RESERVE, OSHKOTO REGION.

NOTICE TO DEBTORS AND CREDITORS: Estate late JOHN HAMUKOTO AKWENYE, NO. E. 2700/2022. Identity number: 5103200224.

IN THE Magistrate's Court For The District of Rundu
Heid at Rundu
Case No. 55/2021
In the matter between:
SOUTH WESTERN EXPRESS CC, Execution Creditor
and
MANGALANGANDIA TRADING ENTERPRISES CC, First Execution Debtor

NOTICE OF SALE IN EXECUTION
KINDLY TAKE NOTICE THAT the undermentioned assets, in execution of a Judgment granted on 16 August 2021 against the Defendants, will be sold in execution by the Messenger of the Court for the district of Rundu, on THURSDAY, 1 DECEMBER 2022 at 11:00 in front of the Magistrate's Court, Rundu.

REGKONNINGSWINGS Legal Notices
NOTICE ESTATE LATE IRM-GARD DE KLERK
MASTER'S REF. NO. 1185/2022
IDENTITY NO: 6001032200071
BORN: 22 October 1946
MARRIED IN COMMUNITY OF PROPERTY TO
GERHARDUS ALBERTUS DE KLERK
ID: 480314 0016 4
LAST ADDRESS: REHOBOTH
NOTICE is hereby given that the FIRST AND FINAL Liquidation IN the above matter will be lying for inspection of creditors at the offices of the Master of the High Court, Windhoek and the Magistrate's Office at Rehoboth for a period of 21 days from 18 November 2022.

REGKONNINGSWINGS Legal Notices

IN THE High Court of Namibia Case No. HC-MD-CIV-ACCT-CO-2017/00589
IN THE MATTER BETWEEN:
THE ESTATE OF NAMIBIA LIMITED, Plaintiff and
BOWKER INVESTMENTS CLOSE CORPORATION, 2nd Defendant
TUYE BUCCO GEORGE, 2nd Defendant
NOTICE OF SALE IN EXECUTION
In execution of a judgment of the above Honourable Court dated 30 November 2021, a sale will be held by the Deputy Sheriff WINDHOEK, at the premises in Erf No. 1788 (A Portion of Portion 1 of Portion B of Erf No. 114) Klein Windhoek, Windhoek, on 29 November 2022 at 09:00h. The undermentioned property:

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Registries Legal Notices



Oshakati Private Primary School VACANCIES Qualified and experienced teachers...

Requirements A recognized 34 years teaching Diploma in Education...

Office Administration qualification 1 year general office experience Typewrite (50 wpm)...

Due date 18 November 2022 P.O. Box 15114, Oshakati Oshakati, Circuit Oshana Region...

Registries Legal Notices

KENNISGWING INSCIVENTE BOEDEL... KENNIS gebruid hiermee dat die ERSTE EN FINALE Likwidator...

ESTATE OF THE LATE ANDREAS KAFFER... NOTICE is hereby given that the First and Final Liquidation Account...

CHRIS JOHANNES COETZEE... SURVIVORS SPOUSE: MARIA MELINA COETZEE...

ESTATE OF THE LATE CHARLES WINSTON SAMUELSON... Notice is hereby given that the First and Final Liquidation and Distribution Account...

Registries Legal Notices

ESTATE OF THE LATE GERNOT PETER ZANDER... a Married resident of the Farm MONTEITH No. 98...

ESTATE OF THE LATE MARTHA MAGDALENA JACOBA BRECHER... a resident of Keetmanshoop, Namibia.

ESTATE OF THE LATE CLAIRE KATHRIN BLATT... a Widowed presencor and resident of WINDHOEK...

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01520...

Market Watch

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/02645...

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01404...

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01357...

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01444...

Registries Legal Notices

CONSENT FOR PROPOSED TIMBER FRAMED DWELLING UNIT ON ERF 1633, GAMSBERG STREET HENTIES BAY...

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01958...

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01444...

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01357...

Registries Legal Notices

CALL FOR PUBLIC PARTICIPATION/COMMENTS ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN TO OBTAIN AN ENVIRONMENTAL CLEARANCE FOR THE OPERATIONS OF THE VARIOUS TOURISM ESTABLISHMENTS AND OTHER ACTIVITIES ON OSHAKATI NATURE RESERVE, OSHAKATI REGION...

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01370...

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01444...

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01357...

Registries Legal Notices

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01370...

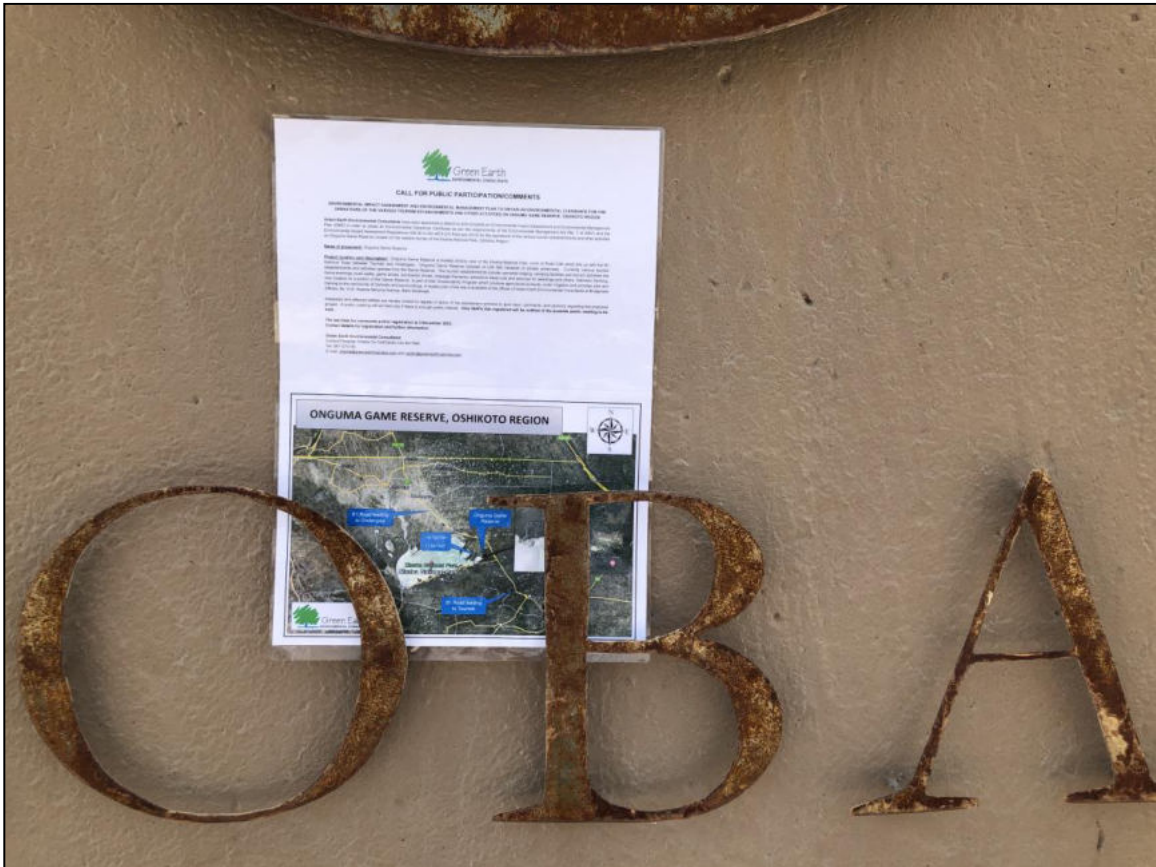
IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01444...

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01357...

IN THE High Court of Namibia (Main Division) Case Number: HC-MD-CIV-ACT-CON-2022/01444...

GREEN EARTH Environmental Consultants 62 New and exciting way of letting your advertisement stand out above the rest, now at an additional N\$5.00 per page...

APPENDIX B: NOTICE AT PROJECT SITE



APPENDIX C: 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 Namibia	Manager Trade Chief Agricultural

1989	1995	Development Corporation	Consultant
1985	1988	Ministry of Agriculture	Agricultural Researcher

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.



Charl du Toit

APPENDIX D: 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.

Carien van der Walt

APPENDIX E: ENVIRONMENTAL MANAGEMENT PLAN