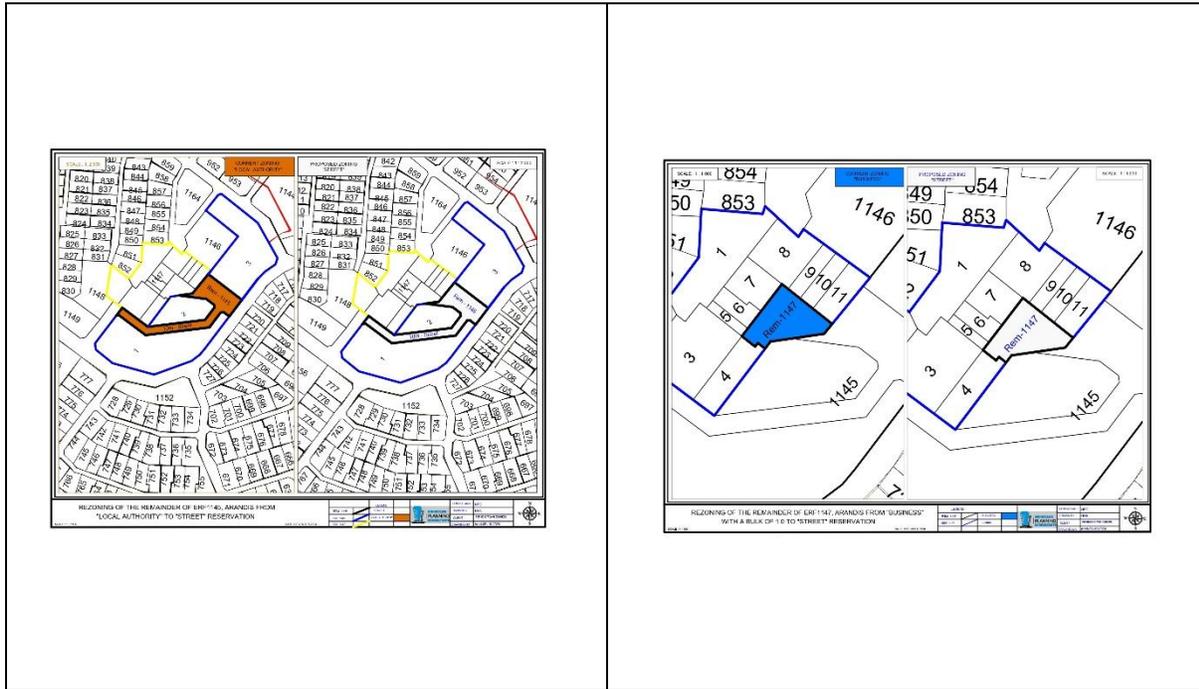


ENVIRONMENTAL MANAGEMENT PLAN

SUBDIVISION OF ERVEN 1145 AND 1147, ARANDIS, REZONING AND THE SUBSEQUENT CREATION OF STREETS.



JUNE 2025

Prepared by:	Prepared for:
NGHIVELWA PLANNING CONSULTANTS	Arandis Town Council
P. O. Box 40900, Ausspannplatz	Private Bag 7002, Arandis
CELL: +264 81 4127 359	Tel: + 264 64 512 400
E-MAIL: planning@nghivelwa.com.na	Email: technical@atc.com.na



Environmental Management Practitioners:

Name of representative of the EAP	Education qualifications	Professional affiliations
Nghivelwashisho Natangwe Ndakunda	MBA-Entrepreneurship, B-Tech Town and Regional Planning	Namibia Council of Town and Regional Planners, Namibia Institute of Town and Regional Planners

Proponet:

Name	Position/ Role	Address
Arandis Town Council	Proponent	Private Bag 7002, Arandis

LIST OF ABBREVIATIONS

TERMS	DEFINITION
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
DEA	Department of Environmental Affairs
PPPPs	Projects, Plans, Programmes and Policies
NDC	Namibia Development Consultants
SANS	South African National Standards
I&APs	Interested and Affected Parties
PM	Particulate Matter
NPC	Nghivelwa Planning Consultants
GRN	Government of the Republic of Namibia

Contents

LIST OF ABBREVIATIONS 2

1. INTRODUCTION AND BACKGROUND 4

2. PROJECT DESCRIPTION 5

3. SCOPE..... 6

4. POLICY AND OTHER RELEVANT LEGISLATIONS..... 7

5. MANAGEMENT PRINCIPLES 9

a) Environmental Issues to be managed 9

i) Operational Phase..... 9

b) Consultation with Interested and Affected parties (IAPs)..... 9

6. ROLES AND RESPONSIBILITIES 10

Competent Authority..... 10

The Arandis Town Council (Applicant)..... 10

The Arandis Town Council (Project Manager)..... 10

The Arandis Town Council (Environmental Control Officer)..... 11

7. PHASES OF THE PROJECT 11

The Operational Phase 11

8. ENVIRONMENTAL MONITORING PLAN..... 16

List of tables

Table 1: Relevant legislation 9

List of figures

Figure 1: Locality Plan..... 5

1. INTRODUCTION AND BACKGROUND

The Arandis Town Council intends to Subdivide Erf 1145, Arandis into 3 Erven and Remainder and subsequently rezone the proposed Remainder of Erf 1145, Arandis from “Local Authority” with a bulk of 1.0 to “Street” reservation. Consequently, the Arandis Town Council further intends to Subdivide Erf 1147, Arandis into 11 Erven and Remainder and subsequently rezone the Remainder of Erf 1147, Arandis from “Business” to “Street” reservation.

Erven 1145 and 1147 are in Arandis town and are currently zoned for “Local Authority” and “Business” respectively. The current occupants of the property have been operating several businesses on the property and are keen on formalizing the land use. The change in land use from local authority and business to the creation of a street is a listed activity and a statutory town planning and environmental management procedure for the subdivision and subsequent rezoning must be carried out.

Nghivelwa Planning Consultants, a Town and Regional Planning and Environmental Management Consultancy firm has been appointed to conduct an Environmental Impact Assessment and Environmental Management Plan (EMP) for the Subdivision of Erven 1145 and 1147, Arandis, Rezone and subsequent creation of streets. The Environmental Impact Assessment has been conducted to meet the requirements of the Namibia’s Environmental Management Act (No. 7 of 2007).

Erven 1145 and 1147, Arandis are currently owned by the Arandis Town Council and currently measure $\pm 17\,449\text{m}^2$ and $\pm 6\,920\text{m}^2$ in extent, respectively. They are situated in Arandis Town, Erongo Region as shown in Figure 1 below. There are currently business buildings constructed and operating on the subject properties. The subject properties are in Arandis town and their GPS coordinates Latitude: -22.419094° , Longitude: 14.971560°

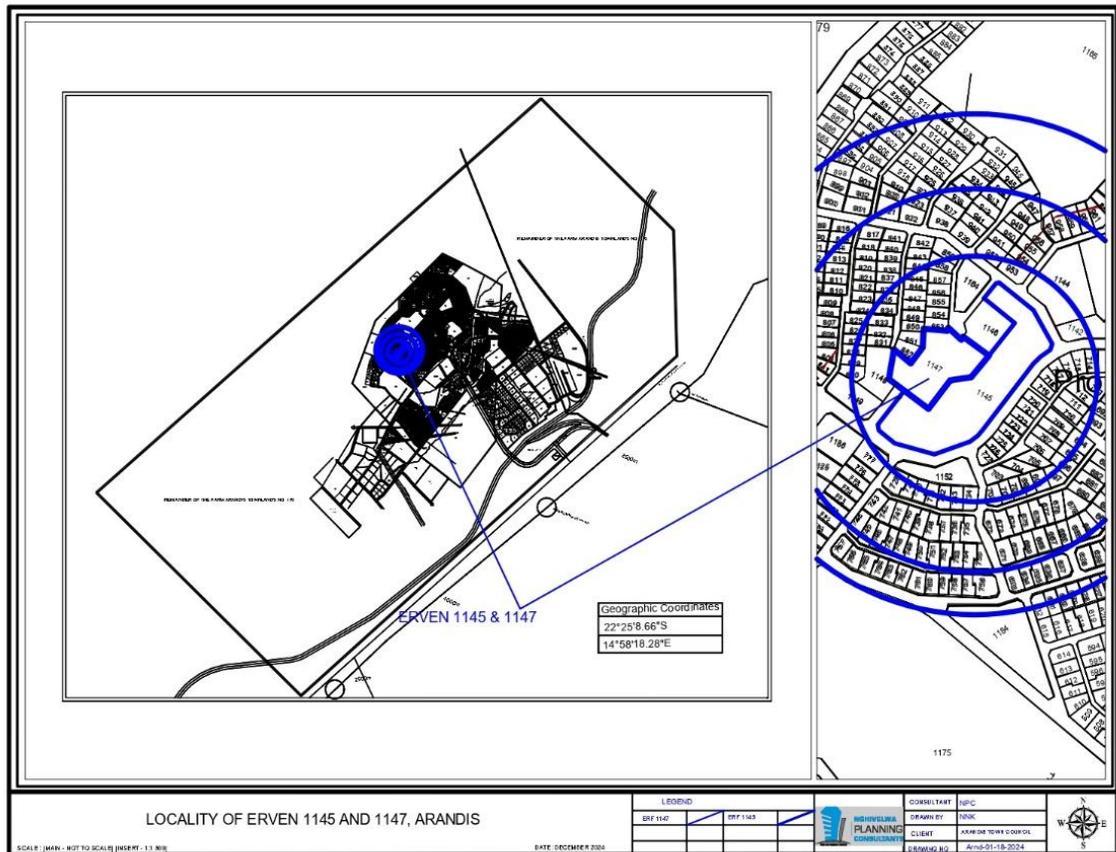


Figure 1: Locality Plan

The purpose of the EMP report is to proactively address potential problems before they occur. This will ensure that unnecessary damage to the environment during the construction phase is avoided. Moreover, mitigation measures will be implemented to minimize environmental degradation.

2. PROJECT DESCRIPTION

The proposed activity is for the Subdivision of Erf 1145, Arandis into 3 Erven and Remainder, Rezoning of the proposed Remainder of Erf 1145, Arandis from “Local Authority” to “Street” reservation, Subdivision of Erf 1147 into 11 Erven and Remainder, Rezoning of the proposed Erven 1,2 and 5 of Erf 1147, Arandis from “Business” with a bulk of 1.0 to “Local Authority” and subsequent Rezoning of the proposed Remainder of Erf 1147, Arandis from “Business” with a bulk of 1.0 to “Street” reservation.. The activity involves the change of land use of the subject properties from local authority to street reservations and does not include the construction of additional buildings.

It also includes the maintenance of the site during the operational phase such as waste disposal and noise pollution as well as maintenance of the afore-mentioned municipal services. The Erven are already connected to the municipal services of Arandis, and they will obtain access from the adjacent street that is already constructed. The subsequent creation of streets is thus to offer access to the new erven to be created after the subdivision. There will be no construction of bulk municipal services for this development.

The existing erven are already connected to the existing bulk services, and the water-borne sewage is connected to the sewerage reticulation system of Arandis, the harmful affluent that will be created will be channeled to the Arandis sewer water storage and treatment plant provided by Arandis Town Council. The land is currently developed. Thus, the proposed street reservations will not have any negative impacts on the natural environment.

3. SCOPE

The framework within which this Environmental Management Plan Report (EMP) is developed includes identifying various activities and their likely impacts that are associated with those activities. Since this activity involves the formalization of already constructed businesses and streets it does not focus on the Pre-Construction and Construction activities. Thus, the report covers the post-construction activities only.

The only category of the EMP addresses the rehabilitation measures that will need to be implemented once the construction is completed, to ensure that the impact of the proposed rehabilitation on the environment is minimized. Furthermore, it will discuss activities that need to be undertaken to ensure that no environmental degradation does not occur because of the project.

The construction and operational phases of the proposed commercial formalization of businesses and a street will involve.

- Supply of bulk services such as water, electricity, waste disposal and waste management
- Maintenance of bulk services by Arandis Town Council.

The Environmental Impact Assessment study report includes an impact assessment and their mitigation measures of the phases of the proposed project after the following was conducted:

- Field investigations (site assessment),
- Identifying and involving all stakeholders in the Environmental Impact Assessment process by expressing their views and concerns on the proposed project.
- Identify all potential significant adverse environmental and social impacts of the project and recommend mitigation measures to be well described in the Environmental Monitoring Plan (EMP).

- Coordination with the proponent, regarding the requirements of law of Namibia's Environmental Management Act (No. 7 of 2007) and other relevant policies and administrative framework.
- Consultation of the Terms of Reference for the Environmental Impact Assessment study.
- A review of the policy, and relevant legislation.
- Provision of overall assessment information of the social and biophysical environments of the affected areas by the proposed development.

The Environmental Management Plan (EMP) aims to take a pro-active route by addressing potential problems before they occur. This should limit the corrective measures needed, although additional mitigating measures might be included if necessary.

4. POLICY AND OTHER RELEVANT LEGISLATIONS

The following legislation is used to guide the change of land use creation of streets in Namibia.

SUBJECT	INSTRUMENTS AND CONTENT	APPLICATION TO THE PROJECT
The Constitution of the Republic of Namibia	General human rights – eliminates discrimination of any kind. The right to a safe and healthy environment affords protection to biodiversity	Ensure these principles are enshrined in the documentation of the project.
Environmental Management Act EMA (No 7 of 2007)	Requires that projects with significant environmental impact are subject to an environmental assessment process (Section 27). Details principles which are to guide all EAs.	Ensure that the change in land use is carried out within the parameters of the Act.
Environmental Impact Assessment (EIA) Regulations GN 28-30 (GG 487)	Details requirements for public consultation within a given environmental assessment process (GN 30 S21). Details the requirements for what should be included in a Scoping Report (GN 30 S8) and an Assessment Report (GN 30 S15).	Ensure that the change in land use aligns with the EIA regulations.
Forestry Act No 27 of 2004	Provision for the protection of various plant species	Some species that occur in the area are protected under the Forestry Act and a permit is therefore required to remove the species of plants.
Hazardous Substances Ordinance 14 of 1974:	Control of substances which may cause injury or ill-health or death of human beings because their toxic, corrosive, irritant, strongly sensitizing or flammable nature.	The waste generated on site should be suitably categorised/classified and disposed of properly and in

		accordance with the measures outlined in the Ordinance.
The Nature Conservation Ordinance (No. 4 of 1975)	Prohibits disturbance or destruction of protected birds without a permit. Requires a permit for picking (the definition of “picking” includes damage or destroy) protected plants without a permit.	Protected plants will have to be identified during the planning phase of the project. In case there is an intention to remove protected species, then permits will be required.
Forestry Act 12 of 2001 Nature Conservation Ordinance 4 of 1975	Prohibits the removal of any vegetation within 100 m from a watercourse (Forestry Act S22 (1)). Prohibits the removal of and transport of various protected plant species.	Even though the Directorate of Forestry has no jurisdiction within townlands, these provisions will be used as a guideline for conservation of vegetation.
Convention on Biological Diversity, 1992	Protection of biodiversity of Namibia	Conservation-worthy species not to be removed if not necessary.
Water Resources Management Act 11 of 2013	The Act provides for the management, protection, development, use and conservation of water resources; to provide for the regulation and monitoring of water services.	Obligation not to pollute surface water bodies.
National Heritage Act 27 of 2004	Section 48(1) states that “A person may apply to the [National Heritage] Council [NHC] for a permit to carry out works or activities in relation to a protected place or protected object	Any heritage resources (e.g. human remains etc.) discovered during construction requires a permit from the National Heritage Council for relocation
Labour Act 11 of 2007	Details requirements regarding minimum wage and working conditions (S39-47).	Employment and work relations
Health and Safety Regulations GN 156/1997 (GG 1617	Details various requirements regarding health and safety of labourers.	Protection of human health, avoid township establishment at areas that can impact on human health.
Public Health Act 36 of 1919	Section 119 states that “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.”	Ensure that all contractors involved during the construction, operation and maintenance of the proposed project comply with the provisions of these legal instrument
Water Resources Management Act 11 of 2013	Prohibits the pollution of underground and surface water bodies (S23 (1)).	The protection of ground and surface water resources should be a priority. The main threats will most likely be concrete and

	Liability of clean-up costs after closure/ abandonment of an activity (S23 (2)).	hydrocarbon spills during construction and hydrocarbon spills during operation and maintenance.
Urban and Regional Planning Act no 5 of 2018	Details the functions of the Urban and Regional Planning Board including their consideration when assessing an application for the rezoning from residential to commercial land uses (S3).	The proposed subdivision plan and land uses should be informed by environmental factors such as water supply, soil etc. as laid out in Section 3 of the act.
Local Authorities Act no 23 of 1992	Details the procedures to be followed for the provision of bulk municipal services in Local Authority Areas.	The Local Authority must ensure that adequate municipal services are provided after change in land use.

Table 1: Relevant legislation

5. MANAGEMENT PRINCIPLES

These guideline principles will form the basis for environmental management on site. Should these principles require modification or additions during the project this should be done at the discretion of the responsible person, who will ensure that any modifications are communicated, explained to and discussed with all affected parties (i.e. the Arandis Town Council, Nghivelwa Planning Consultant, service providers, and any affected party who requests this information).

The environmental operational procedures and environmental issues are identified and managed, under different phases of the project. The different phases are:

- Operational Phase; and
- Decommissioning Phase

a) Environmental Issues to be managed

i) Operational Phase

During the operational phase, the Arandis Town Council will ensure that the following actions are implemented by establishing accountability and responsibility between the different role players.

b) Consultation with Interested and Affected parties (IAPs)

During Operational Phase, An open communication channel between Arandis Town Council and IAPs must be opened to handle any queries, complaints or suggestions.

6. ROLES AND RESPONSIBILITIES

This section describes the roles and responsibilities of the key stakeholders involved in the development, implementation and review of the EMP.

Competent Authority

The Department of Environmental Affairs: Ministry of Environment, Forestry and Tourism is responsible for the review of the EMP documents it is the competent authority.

The Arandis Town Council (Applicant)

The role of the applicant is as follows:

- The Arandis Twon Council as the applicant, should hire suitably qualified person(s) and assign them with the responsibility to ensure implementation of the EMP, and should:
- Know the contents and implications of the EIA and monitor the implementation of EIA findings using the EMP.
- Revise the EMP as required and inform the relevant parties of the changes.
- The applicant should review reports regarding the implementation of the EMP.
- Protect the environment and rehabilitate the environment as prescribed in the EIA.

The Arandis Town Council (Project Manager)

The Applicant will appoint the Project Manager. The role of the project manager will be:

- Liaising directly with the relevant authorities with respect to the preparation and implementation of the EMP and meeting the conditions documented in the environmental clearance certificate.
- Bear the overall responsibility and ensuring that the environmental management requirements are met.
- Approve all decisions regarding environmental procedures and protocols that must be followed.
- Have the authority to stop any construction in contravention with the EMP and RoD.
- In consultation with the Environmental Control Officer (ECO) has the authority to issue fines for transgressions of basic conduct rules and/or contravention of the EMP.
- Maintain open and direct lines of communication between the proponent and Interested and Affected Parties (I&APs) with regards to environmental matters.
- Attend regular site meetings and inspections where required.

The Arandis Town Council (Environmental Control Officer)

An Environmental Control Officer (ECO) should be employed by the Proponent. The (ECO) should have appropriate training and experience in the implementation of the. The ECO will implement EMP at all levels and sections. The responsibilities of the ECO include the following:

- Conduct environmental monitoring as per EMP requirements.
- Maintenance, update and review of the EMP.
- Liaison between the authorities and other key stakeholders on all environmental concerns.
- Communicate all amendments of the EMP to the relevant stakeholders.
- Conduct monthly audits to ensure that the system for implementing the EMP is effective.

7. PHASES OF THE PROJECT

The Operational Phase

Potential environmental impacts emanating during the operational phase will be minimised because the proponent took pro-active measures during the planning and construction phases. This, in turn, will minimise the risk and reduce the monitoring effort, but it does not make monitoring obsolete.

Impacts	Description	Mitigation	Monitoring	Responsible Body
Storm water contamination	Storm water usually runs off the area and flow into the water bodies without the need for treatment. This can pollute the water bodies like creeks, lakes and rivers and have adverse effects on their chemical as well as biological nature. Existing storm water drainage and collection must accommodate the storm water during the rainy season.	Existing storm water drains along the adjacent streets should channel the storm water to natural water courses while excess storm water is to be collected for consumption and recreational use. Storm water will be collected through network of storm drains from gardens, parking areas, paved and unpaved areas, and roadways. The storm water drainage system should have the capacity to prevent flooding of the site and surrounding areas.	Strict operational times. Regular inspection. By Engineer (Technical team) and ECO	The Arandis Town Council
Improved aesthetic look of the area	The formalization of the commercial area on the proposed site is essential to improve the aesthetics of the area while turning it into an environmentally friendly area with improved infrastructure services	The formalization of the area will standardize the land use in the area. This will improve the aesthetics of the area and make it attractive for Arandis residents. Create awareness among the residents about energy conservation and other resources as well as	Regular visual inspection by EO	The Arandis Town Council

		<p>implement measures to prevent or minimize any adverse effects on the environment.</p> <p>Ensure proper and regular maintenance of the area.</p> <p>No illegal dumping of waste should be allowed</p>		
Increased employment opportunities	<p>The formalization of the area has the potential to create employment opportunities for the local population.</p>	<p>The principles of gender equality, maximizing local employment, should be implemented in the provision of jobs.</p> <p>It is recommended to prioritize local people during the recruitment process.</p> <p>Jobs for maintenance of infrastructure and services will be maintained following the completion of the formalization process. These jobs might be made available to existing labour thereby creating long term employment.</p> <p>Equity and transparency, should be considered when hiring and recruiting.</p>	<p>Monitored once off by the ELO</p>	<p>Appointed Contractor/ ELO or The Arandis Town Council</p>

Traffic	Potential impact caused by the increase in traffic caused by the increase in business activities in the area.	Sidewalks for pedestrians should be provided along the businesses. Appropriate road signs and markings should be provided along the adjacent street. Signs should be provided at intersections particularly at higher order intersections.	Regular inspection By Engineer and EO	The Arandis Town Council
Waste management	The waste generated by the formalization of the area should be the responsibility of Arandis Town Council.	During the operations phase, the Arandis Town Council waste management team will service the proposed commercial development. Arandis Town Council to integrate the development into their formal waste collection strategy and that the waste is to be collected regularly and to be disposed of at an authorized disposal site. Illegal dumping of waste in any form is prohibited.	Regular inspection By EO	Arandis Town Council
Land use	The proposed development will result in a change in land use from Local Authority and Business to Street reservation.	The change in land use will contribute to the efficient use of land in Arandis by formalizing the current form of land use with Council statutory plans and policies.	Monitored by the Project Manager	Arandis Town Council

8. ENVIRONMENTAL MONITORING PLAN

Environmental monitoring plan is part of the EMP performance assessment and will need to be compiled and submitted as determined by the Environmental Commissioner. The process of monitoring performances against the objectives and documenting all environmental activities is part of internal and external auditing. This will be coordinated by the Environmental Control Officer (ECO) / External Consultant / Suitable qualified in-house resource person. The table below outline the type of information that shall need to be recorded on a regular basis by the Environmental Control Officer (ECO) as part of the monitoring process of the activities and the effects.

Mitigation	Compliance	Follow-up action required	By whom	By When	Completed
Is there an Environmental awareness training programme?					
How many people have been given environmental awareness training?					
Is a copy of the EMP on site?					
How effective is the awareness training?					
Do people understand the contents of the EMP?					
If not, where are the weaknesses?					
Ask 3 people at random					

various questions about the EMP.					
---	--	--	--	--	--