ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT FOR THE PROPOSED SUBDIVISION AND DEVELOPMENT OF ERF RE 1-177, REHOBOTH- HARDAP REGION, NAMIBIA

ENVIRONMENTAL SCOPING REPORT (ESR)

MAY 2021

APP: 002669

DENMARI PROPERTIES AND DEVELOPERS

HARMONIC TOWN PLANNING CONSULTANTS

DOCUMENT DATA SHEET

DOCUMENT VERSION 001

PROJECT NAME	**PROPOSED SUBDIVISION AND DEVELOPMENT OF ERF RE 1-177, REHOBOTH- HARDAP REGION, NAMIBIA**
REPORT TITLE	**ENVIRONMENTAL SCOPING REPORT: (ESR)**
PROPONENT	**DENMARI PROPERTIES AND DEVELOPERS**
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Definitions

TERMS	DEFINITION
BID	Background Information Document
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
EMP	Environmental Management Plan
GHG	Greenhouse Gasses
ISO	International Organization for Standardization
I&APs	Interested and Affected Parties
MET: DEA	Ministry of Environment and Tourism's Directorate of Environmental Affairs
NHC	National Heritage Council
NEMA	Namibia Environmental Management Act
PRP	Pit Rehabilitation Plan
ToR	Terms of Reference
UNFCCC	United Nations Framework Convention on Climate Change

EXECUTIVE SUMMARY

Harmonic Town Planning Consultants has been engaged by Denmari Properties cc to conduct the Environmental Impact Assessment (EIA) and develop an Environmental Management Plan (EMP) for the proposed Subdivision and Development of ERF 1- 177 in Rehoboth and to apply for an Environmental Clearance Certificate for the proposed project.

The development project has triggered the application for an environmental clearance certificate as the following listed activity will be triggered by:

LAND USE AND DEVELOPMENT ACTIVITIES

- 5.1d the rezoning of land from; zoned open space to any other land use

Environmental Impacts

-Low potential environmental impact.

-Relative or moderate social impact (positive)

Social Impacts

The project is set to improve the socio-economic environment of Rehoboth through a major boost in business through affordable accommodation and employment creation.

1. CHAPTER ONE: BACKGROUND

1.1. INTRODUCTION

Denmari Properties and Developers (herein refered to as the proponent) a 100% Namibian owned entity based in Rehoboth, Namibia intends to develop housing units on an portion of land in Rehoboth and as such the subdivision of the Erf Rehoboth Extension 1-177, into 17 Portions and the Remainder has to be undertaken. The project is initiated in a bid to ease accommodation pressure in Rehoboth and to utilise land to its full potential.

In this respect, Denmari Properties has appointed Harmonic Town Planning Consultants to undertake an Environmental Scoping Assessment (ESA), formulate an Environmental Management Plan (EMP) and apply for an Environmental Clearance Certificate (ECC) to the Ministry of Environment and Tourism (MET): Directorate of Environmental Affairs (DEA).

As such, this document forms part of the application to be made to the DEA's office for an Environmental Clearance certificate for the proposed subdivision according to the the guidelines and statutes of the Environmental Management Act No.7 of 2007 and the environmental impacts regulations (GN 30 in GG 4878 of 6 February 2012).

1.2. PROJECT LOCATION

Erf Rehoboth Extension 1-177 is located in a well-established neighbourhood surrounded by land uses zoned 'Single residential', 'General Residential', Institutional and Public open space. The erf is situated on the southwest of Rehoboth Extension 1. Several Informal roads and footpaths visible in the area.

The erf measures approximately ±7544 m^2 in extent and is zoned 'General Residential' with a density of 1:100. Erf Rehoboth Extension 1-177 is currently undeveloped and gets access from a 15m wide Street.

The map below (Fig 1) gives an Arial view of the project site:

Figure 1: Project Locality

1.3. PROJECT DESCRIPTION

1.3.1. THE PROPOSED DEVELOPMENT

Erf Rehoboth Extension 1-177 is subdivided into 17 Portions and the Remainder for purposes of availing it for residential development. The existing zoning and density of the erf allows for the subdivision of the erf as it is in line with the Rehoboth Town Planning Scheme. The General Residential portions measure from 350 m^2 to 433 m^2 in extent and the Remainder (to be created as Street) will measure approximately 1283 m^2 in extent. The Remainder of the subdivided Erf Rehoboth Extension 1-177 will serve as a street for the newly created erven. Below is the table that shows the proposed sizes and their corresponding zonings.

Erf Rehoboth Extension 1-177			
Erf number	Size Sq/m	Zoning	Density
1	353	G.Residential	1/100
2	364	G.Residential	1/100
3	368	G.Residential	1/100
4	363	G.Residential	1/100
5	362	G.Residential	1/100
6	362	G.Residential	1/100
7	382	G.Residential	1/100
8	433	G.Residential	1/100
9	367	G.Residential	1/100
10	403	G.Residential	1/100
11	355	G.Residential	1/100
12	369	G.Residential	1/100
13	351	G.Residential	1/100
14	360	G.Residential	1/100
15	359	G.Residential	1/100
16	360	G.Residential	1/100
17	350	G.Residential	1/100
Re/Erf 177	1283	Street	
Total	7544		

Table 1: Proposed Erven and Zonations

1.3.2. STREET ACCESS AND UTILITY SERVICES

It is proposed that Erven 1 to 10 and Erf 16 and 17 will get access from the Remainder Erf Rehoboth Extension 1-177. The Remainder Erf Rehoboth Extension 1-177 (Street) is 12 metre wide and it leads into a 25 metre cul de sac. Erven 12 to 15 will get access from the Existing 15 metre wide street and Erf 11 will get access from the 13 meter street as indicated on the subdivision plan dated 03 February 2021.

The owner as the developer will be responsible for the provision of reticulation services to each erf. The services are to be provided in accordance with Town Council's standards. All newly created erven will be linked to the municipal bulk reticulation network (water, sewer and electricity).

1.4. NEED AND DESIRABILITY

The proponent wishes to subdivide the Erf into 17 Portions and the Remainder (Street) to develop separate dwellings on each erf. The proposed subdivision of the erf will be in harmony with its surroundings as it creates residential erven that are more in line with the scale, development and use of the neighbouring developments in Rehoboth Extension 1. The proposed subdivision will allow for the optimal utilization of the erf, and the efficient utilization of the existing capacity of municipal bulk infrastructure. Thus, increasing the revenue generated by the town council through rates and taxes.

There is a general shortage of land in Rehoboth and the proposed subdivision will further add to the range of housing opportunities in Rehoboth as the demand for residential land has reached critical proportions. Unfortunately, land delivery for residential development is not keeping pace with the fast population growth and the only alternative for meeting the housing need of Rehoboth residents is to intensify development within the existing town by redeveloping existing underutilised residential land.

The proposed subdivision will be in line with the current character of the neighbourhood setting and will therefore not negatively impact the area.

1.5. OBJECTIVE OF THIS STUDY

This Environmental Impact Assessment is being undertaken in compliance with the Environmental Management Act No.7 of 2007 and the Environmental Impacts Assessments Regulations (GN 30 in GG 4878 of 6 February 2012). It is a prerequisite by the law to have an Environmental Impact Assessment carried out before the implementation of the prescribed projects as elaborated in the Environmental Impacts Regulations (GN 30 in GG 4878 of 6 February 2012). The main objectives of this study are as follows:

- To identify and provide mitigation measures of the expected impacts of the proposed land development project to protect the environment;
- To brief the Project Proponent of the legal and policy framework govern the proposed activity;
- To identify the possible changes in bio-diversity index that might be because of Project implementation in the area;
- To reflect on the various public concerns which will help the National Environmental Action Planners, economist and concerned stakeholders to make decisions;
- To come up with preventive and precautionary measures for the expected physical and biological environmental negative impacts associated with the proposed activities;
- To structure an effective environmental management plan for the sub division and servicing of the land facet to minimise and prevent negative impacts and maximise the positive impacts.

1.6. TERMS OF REFERENCE

The Environmental Impact Assessment conducted by Plan Africa Consulting cc provides a comprehensive evaluation of the proposed project producing both EIA and EMP report documenting the following:

- A complete description of the existing site proposed for development;
- Significant environmental issues of concern that were based on the baseline data compiled by the EIA Team, which took into consideration social, cultural and heritage information;
- An assessment of the public perception on the proposed development.
- Identification of Policies, Legislation and Regulations relevant to the project;
- Prediction of the likely short, medium and long-term impact of the development on the environment, including direct, indirect and cumulative impacts, and their relative importance to the design of the development's facilities;
- Identification of any mitigation action to be taken to minimize predicted adverse impacts and provide associated costs where applicable and practical;
- Development of an environmental monitoring plan which will ensure that the mitigation measures are adhered to during the implementation phase;
- A conclusion and recommendations remarks for the project proponent on an advisory note.

2. CHAPTER TWO: POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

2.1. INTRODUCTION

An important part of the EIA is identifying and reviewing the administrative, policy and legislative situation concerning the proposed activity, to inform the proponent about the requirements to be fulfilled in undertaking the construction and land servicing activities. This section looks at the legislative framework within which the proposed development will be serviced and operate under.

The focus is on the compliance with the legislation during the planning, construction and operational phases. All relevant legislations, policies and international statutes applying to the project are highlighted in table 2. below as specified in the Environmental Management Act, 2007 (Act No.7 of 2007) and the regulations for Environmental Impact Assessment as set out in the Schedule of Government Notice No. 30 (2012).

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Table 2: Applying Policies, legal and Administrative regulations

Legislation/Policy/Guiding document	Provision	Project implication
The Constitution of the Republic of Namibia (1990)	The articles 91(c) and 95(i) commits the state to actively promote and sustain environmental welfare of the nation by formulating and institutionalizing policies to accomplish the sustainable objectives which include: - Guarding against overutilization of biological natural resources, - Limiting over-exploitation of non-renewable resources, - Ensuring ecosystem functionality, - Maintain biological diversity.	Through implementation of the environmental management plan the proposed development will be in conformant to the constitution in terms of environmental management and sustainability.
Vision 2030 and National Development Plans	Namibia's overall Development ambitions are articulated in the Nations 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 5th NDP that pursues three overarching goals for the Namibian nation: high and sustained	The proposed project will increase availability of accommodation in Rehoboth as well as creating employment in construction, which will be in fulfilment to the NDP and Vision 2030.

	economic growth; increased income equality; and employment creation.	
Environmental Assessment Policy of Namibia 1994	The Environmental Assessment Policy of Namibia requires that all projects, policies, Programmes, and plans that have detrimental effect on the environment must be accompanied by an EIA. The policy provides a definition to the term "Environment" broadly interpreted to include biophysical, social, economic, cultural, historical and political components and provides reference to the inclusion of alternatives in all projects, policies, programmes and plans.	The development establishment will only commence after being awarded an environmental clearance certificate, thus by abiding to the requirements of the Environmental Assessment Policy of Namibia. The EIA and EMP will cater for the sustainable management of bio-physical environment.
Environmental Management Act No. 07 of 2007	The Act aims at ✓ Promoting the sustainable management of the environment and the use of natural resources by establishing principles for decision-making on matters affecting the environment; ✓ To provide for a process of assessment and control of projects which may have significant effects on the environment; ✓ To provide for incidental matters.	This document is compiled in a nature that project implementation is in line with the objectives of the EMA Act. Guiding procedures were also drawn from the act to facilitate for the carrying out of the EIA and drafting the EMP for the proposed development.

	The Act gives legislative effect to the Environmental Impact Assessment Policy. Moreover, the act also provides procedure for adequate public participation during the environmental assessment process.	
Public Health Act (No. 36 of 1919)	Under this act, in section 119: "No person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health."	The project 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. -Personal protective equipment shall be provided for employees in construction. -The development shall follow requirements and specification in relation to water supply and sewerage handling so as not to threaten public health of future residents on this piece of land.
Soil Conservation Act 76 of 1969	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.	The project will have a rather localized impact on soils and on the soil through construction and access roads construction hence soil protection measures will be employed and preservation of trees as much as possible.
Nature Conservation Ordinance 1996	To consolidate and amend the laws relating to the conservation of nature; the establishment of game	The proposed project implementation is not located in any known or demarcated conservation area, national park or unique environments. The

	Parks and nature reserves; the control of problem animals; and to provide for matters incidental thereto.	project site was selected with this ordinance in mind to ensure that Namibian nature is conserved.
Protected Areas and Wildlife Management Bill	This bill, when it comes into force, will replace the Nature Conservation Ordinance 4 of 1975. The bill recognizes that biological diversity must be maintained, and where necessary, rehabilitated and that essential ecological processes and life support systems be maintained. It protects all indigenous species and control the exploitation of all plants and wildlife.	The project has ensured that their activities do not fall within the boundaries of any protected area and that the project will not affect heavily endangered vegetation and animals on its site.
Forest Act, 2001 (Act No. 12 of 2001)	The Act gives provision for the protection of various plant species through the Ministry of Agriculture, Water and Forestry (MAWF), Directorate of Forestry).	- The proponent will also have to ensure that there is no indiscriminate cutting down of trees. -The proposed site is sparsely vegetated with white thorn tree species, which are not threatened or protected.
National Biodiversity Strategy and Action Plan (NBSAP2)	The action plan was operationalised in a bid to make aware the critical importance of biodiversity conservation in Namibia putting together management of matters to do with ecosystems protection, biosafety, biosystematics protection on both terrestrial and aquatic systems.	The proponent has been advised by the EIA Team and recognises the need for ecosystems protection to manage the changing climatic environment. -Through this project, there will be reforestation and fostering of green development, which will be promoting the protection and conservation of the biophysical environment, and with this EIA, it will

		be ensure that almost 40% of grown tree species on site will not be removed but rather will be part of the development, to promote Greed development.
National Policy on Climate Change for Namibia, 2010	In harmony with the findings of the IPCC over time and the Earth Summits being held annually the policy seeks to outline a coherent, transparent and inclusive framework on climate risk management in accordance with Namibia's national development agenda, legal framework, and in recognition of environmental constraints and vulnerability. Furthermore, the policy pursues the strengthening of national capacities to reduce climate change risk and build resilience for any climate change shocks.	The proposed project will ensure that there will be limited release of greenhouse gasses such as methane, carbon dioxide, nitrous oxides. Methods such as wet surface operations to reduce dust emissions will be utilised to remove aerosols emitted into the near-surface atmosphere.
Wetland Policy, 2004	The policy provides a platform for the conservation and wise use of wetlands, thus promoting inter-generational equity regarding wetland resource utilization. Furthermore, it facilitates the Nation's efforts to meet its commitments as a signatory to the International Convention on Wetlands (Ramsar) and other Multinational Environmental Agreements (MEA's).	In compliance to this policy the development will ensure a standard environmental planning such that it does not affect any wetlands within its locale through recognition of wetlands to promote the conservation and wise utilization of wetlands resources.

Water Resources Management Act, 2013 (Act No. 11 of 2013)	This Act provides for the management, protection, development, use and conservation of water resources and the regulation and monitoring of water services and to provide for incidental matters. (Department of Water Affairs).	Water usage during construction will be supplied by Rehoboth Town Council.
National Heritage Act 27 of 2004	Heritage resources to be conserved in development. (National Heritage	During the project implementation as soon as objects of cultural and heritage interests are observed such as graves, artefacts and any other object believed to be order than 50 years, all measures will be taken protect these objects until the National Heritage Council of Namibia have been informed, and approval to proceed with the operations granted accordingly by the Council.
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 executed by any people who inhabited or visited Namibia before the year 1900 AD; or (c) any implement, ornament or structure known or commonly believed to have been used as a mace, used or erected by people referred to in paragraph (b); or	The proposed site of development is not within any known monument site both movable or immovable as specified in the Act, however in such an instance that any material or sites or archeologic importance are identified, it will be the responsibility of the developer to take the required route and notify the relevant commission.

	(d) the anthropological or archaeological contents of graves, caves, rock shelters, middens, shell mounds or other sites used by such people; or (e) any other archaeological or palaeontological finds, material or object; except under the authority of and in accordance with a permit issued under this section.	
Pollution Control and Waste Management Bill	This bill has not come into force. Amongst other the bill aims to "prevent and regulate the discharge of pollutants to the air, water and land" Of particular reference to the Project is: Section 21 "(1) Subject to sub-section (4) and section 22, no person shall cause or permit the discharge of pollutants or waste into any water or watercourse." Section 55 "(1) No person may produce, collect, transport, sort, recover, treat, store, dispose of or otherwise manage waste in a manner that results in or creates a significant risk of harm to human health or the environment."	To control air, water and land pollution as agitated by the Act the project proponent will ensure that erven will have approved drainage on site and that sanitation facilities do not threaten public health, adding on an integrated pollution management strategy following the EMP and will be operationalised on site. Adequate stormwater drainage systems will be designed for the project area.
Convection on Biological Diversity (CBD)	Namibia is a signatory of the Convention on Biological Diversity and thus is obliged to conserve its biodiversity.	The project will preserve tree species on as part of their plans for green and sustainable development.
United Nations Convection to combat Desertification	Namibia is bound to prevent excessive land degradation that may threaten livelihoods.	It will be the responsibility of the developer and future land owners at to conserve vegetation on

		and around the area, to avoid encroachment of the desert environs in the area.

3. CHAPTER THREE: RECEIVING ENVIRONMENT

3.1. SOCIO-ECONOMIC

The proposed project site, is within Rehoboth townlands, located just close to the town centre. Rehoboth Urban East constituency of Hardap Region has a population of approximately 30 000 inhabitants according to the Namibian Population and Housing Census of 2011. The area has predominantly Damara and Afrikaans speaking population, which is composed of mainly Damaras and Basters whose history of settlement in the area can be traced to 1885 (Shampapa, 2011). Rehoboth is Located 90 km south of the capital Windhoek with approximately 40 000 inhabitants (this include the immediate surrounding, rural community). The town enjoys central strategic location and makes the town a perfect gateway to all major focal points of Namibia; Windhoek, Sossusvlei, Swakopmund, Fish River Canyon, Etosha, great stop over en-route to Cape Town.

Rehoboth boasts of untapped natural resources, including tourism and eco-tourism potential, low cost for land and business properties and a potential market. There are more than 300 registered businesses and two financial institutions (Rehoboth Town Council, 2010). The majority of the residents in Rehoboth rely more on agriculture mostly under animal ranching and paddocking. The most popular animals they keep includes horses, sheep, dairy cattle, pigs and goats. These play a vital role in the social economic status of the people since horses are mostly used as a form of transport from point A to point B. Dairy cows supplements Namibia's dairy needs since there are a lot of dairy cattle. More over the town is a source of beef, mutton, pork, chicken and eggs available for both export and local consumption.

Rehoboth is now emerging as one of Namibia's most vibrant and prominent destinations for leisure. and eco-tourism. The Town's museum is recognized as having designated national collections, often of international importance, and attracts thousands of visitors every year.

3.2. CLIMATE

Classification of climate: Rehoboth has a semi-arid- shrub Savannah type of climate, lying to the North of the Kalahari Desert, with hot summers and relatively cold winters (with warm days and cool nights).

Average rainfall: Rehoboth receives more rainfall as compared to other places in the Hardap region, receiving a mean annual rainfall of 240-300 millimetres, although in the 2010/2011 a record of 731 mm (28.8 in) was measured..

Temperature: Rehoboth has records of extremely high maximum temperatures above 36 degrees Celsius during summer as well as the rest of the region, with the coldest average minimum temperatures below 2 degrees Celsius, except for areas around the Oanob dam which can get to a negative during winter.

3.3. TERRESTRIAL ECOLOGY

3.3.1. FAUNA

Rehoboth area has been growing expanding into the the peri-urban environments, this results in movement of wild animals away from the area. However because most on the land near the project site is privately owned, and poised for development. The proposed project area has already experienced some form of human encroachment and disturbances.

3.3.2. MAMMALS

The EIA team researched and established that around the proposed project has no wildlife as the project area is already disturbed by illegal occupants on the project area. Some form of deforestation observed in the area may also have contributed to low number of wildlife due to lost and fragmented habitats. Species deemed to be prevalent in the area, but not exactly on and around the project site includes:Black rhino Endangered, Kudu,Gemsbok, Hartmann's mountain zebra,springbok, red hartebeest Endangered, Springhare, Lynx Endemic, Mongoose and Oryx.

3.3.3. BIRDS

The EIA team established that the region has a little over 280 bird species according to Gamsberg Nature reserve and Hardap Conservancy information fact sheets. Consultation around Rehoboth and Gramsberg nature reserve gave a list of commonly occurring bed species around Rehoboth area and these includes mainly the following: Starks Lark, Bradfield's Swift, Osprey, Yellow billed Stork Red billed and the Francolins hartlaubi endemic. However the project proposed, pose no threat to these bird species or any bird species.

3.3.4. AMPHIBIANS, REPTILES AND INVERTEBRATES

With information gathered from NWCT, 2015, Rehoboth area is known to have a great variety of snake species. With the Kalahari Desert encroaching closer by, the cobra and the sand puff adder are common in the area in the grassland ecosystems. The area is also known to have different types of lizard s and other dry Savannah reptiles depended on terrain, vegetation cover and soils. The baseline studies also discovered existence of species of snails, centipedes, spiders, scorpions and several types species associated with of the savannah environment.

3.4. TERRESTRIAL LANDSCAPE

Denmari properties project site lies on an elevation of 1440m above sea level. The area characterised by an easterly slope, implying the importance of a well-drained development to avoid flash flooding on the area.

3.4.1. GEOLOGY

Rehoboth area has a wide range of granitic related geologic formations and soils that are as a result of its geological make up. Hoffmann, 1987 notes that the granitic formations in the north of Rehoboth comprises a thick sequence of mixed clastic sediments and minor carbonates and meta-evaporites exposed in a large tectonic half-window below allochthonous nappes of the internal, metamorphic zones of the Southern Damara Thrust Belt. The thickness of the sequence is estimated to be at least 6700 m. The kalaharic sands in the area especially around Acacia Park and most parts of Rehoboth are as a result of then dispersed red dunes as well as weathering overtime. The EIS, 2014 inventory reveals that the area has alberta, elim and granite rocks and Acacia park sits on an area of deep namib sands related to the Kalahari sands.

3.5. FLORA

Trees / Shrubs and Grasses

The most important larger trees/shrubs expected to occur in the general area are Acacia erioloba Protected, Acacia hebeclada, Acacia mellifera, Acacia nilotica , Acacia karroo and Alban Albizia anthelmintica.Most important grass expected in the area is the endemic Eragrostis Hardapnsis associated with disturbed areas . However, none of these larger tree and shrub species (>1m in height) are exclusively associated with the project site and since the area is sparsely vegetated with white thorn tree species scattered all over the site as illustrated below, the development will have minimal impacts on flora species:

Figure 2: Current state of the project area.

ERF 1/ 177 Rehoboth is currently accessed by a gravel road and several informal roads cutting through the erven. The tree count on site returned 7 trees which will all be preserved during development. As illustrates on the bottom images, the area is occupied by illegally and the occupants will be resettled to another locality by Rehoboth Town Council.

3.6. HYDROLOGY

A reconnaissance field assessment was conducted to confirm the current conditions in the area and to identify potential hydrologic risks associated with establishment of the proposed project. The area is generally flat with very few evidence of surface erosion. The surrounding area is relatively flat giving limited chance for surface drainage, however the EIS Inventory, 2014 using GIS data revealed that there is Usib river running from the South East of the site the North West of the project site, to the Northern part of the project site is the Oanob river which runs through Rehoboth town towards the western side of Rehoboth. These rivers are underlain by a deep water table related to the South Eastern Kalahari Basin. The development does not have interference with any river or streams within its 3km buffer area.

4. CHAPTER FOUR: PUBLIC CONSULTATION

Public Consultation forms an important component of the Environmental Assessment process. It is agitated for in the EIA Regulations (2012), Section 21 of the Regulations details steps to be taken during a given public consultation process and these have been used in guiding our process.

Formal public involvement has taken place via newspaper adverts, site notice and registering I&APs. The public consultation process has been guided by the requirements of Environmental Management Act (EMA) No. 7 of 2007 and the process has been conducted in terms of regulation 7(1) as well as in terms of the EMA Regulations of GN 30 of 6 February 2012 .

4.1. PUBLIC CONSULTATION ACTIVITIES

The following tasks have been undertaken during public consultation process which started March 2019.

Identification of Interested and Affected Parties (I&APs)

After the scoping process, the EIA team identified I&APs and key stakeholders of the proposed project. The public participation activities to be undertaken for this EIA process were incorporated into the overall approach of the EIA background information. Among key stakeholders identified were Rehoboth Town Council and neighbours. Other I&APs could register to the EIA team and a special database created capturing all their names and correspondence details.

Distribution of BID

A Background Information Document (BID) was distributed on request by I&A Parties and it was distributed to key stakeholders identified during the scoping process. The Background Information Document (BID) provided a description summary of the proposed project, and the project proponent and the whole procedure of the EIA to be followed.

Public Announcement.

An extensive public announcement was done to make sure the public is aware of proposed development by Plan Africa Consulting cc. The EIA study was announced publicly through the following means:

Table 3: Details on public notifications of the EIA study

Method	Area of Distribution	Language	Date Placed
Republikein	Country Wide	English	22February 2021 01 March 2021
Namibian Sun	Country Wide	English	22February 2021 01 March 2021
Site notices	Rehoboth Town Council	English	25 February 2021
	Project Site	English	25 February 2021

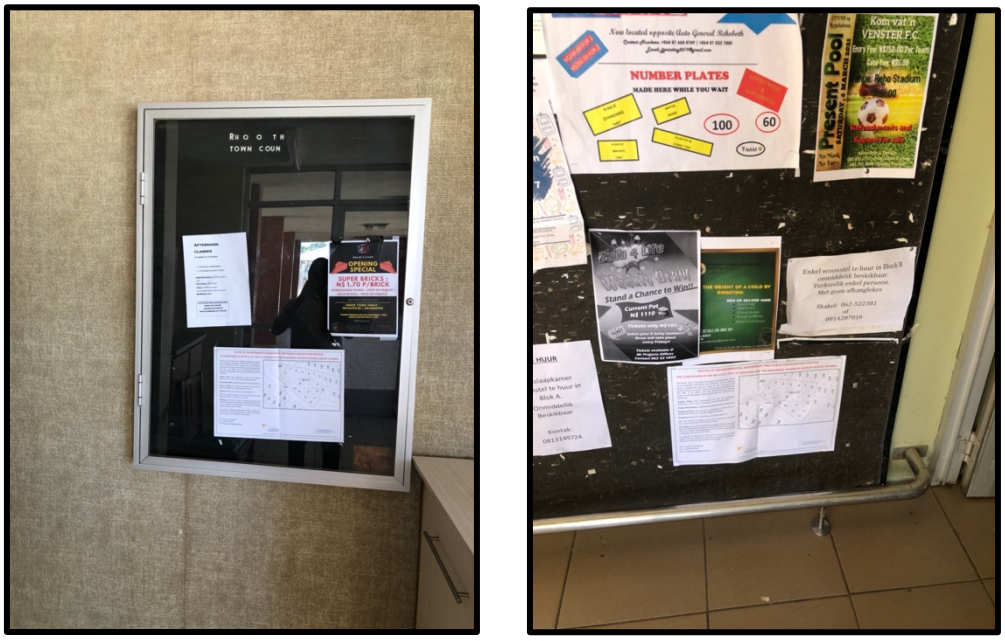

Figure 3: Site Notices placed at Rehoboth Town Council (left) and OK Supermarket Rehoboth (right)

4.2. KEY STAKEHOLDER ENGAGEMENT MEETING

A public meeting was organised on 08 march 2021 at Rehoboth Town Halll and the meeting was well attended. Surrounding properties were consulted and informed of the development. Proof of public consultation is given in Appendix A of this document as well the attendance register explaining the project and the EIA study. Given below are the details of the meeting which was held:

4.2.1. IDENTIFICATION OF INTERESTED AND AFFECTED PARTIES (I&APS)

The EIA team identified and consulted the following I&APs & key stakeholders for the proposed project:

- Communinity members
- Rehoboth Town Council

Other I&APs were allowed to register to the EIA team and compiled a database containing their names and correspondence details. The registration was accomplished over a period of 14 days.

Figure 4: Public meeting proceedings at Rehoboth Town Hall

4.2.2. KEY FINDINGS

The consultant informed all affected parties about the proposed mdevelopment and a public meeting was conducted on 08 March 2021. All attendees were goiven project information and an opportunity to comment on the project development . No objections were raised by I&AP in relation to the project and the major issues are highlighted below.

Table 4: Key findings of the public consultation process:

SUMMARY OF ISSUES	
THEME	**ISSUE**

Relocation	▪ The current informal occupants on the protion will be givenalternative land as this is private land that was purchased.
Employment Creation	▪ Local residents were concerned about local employment, and how companies are not employing locally. It is recommended that the proponent recruit locally in Lüderitz and in the Kharas Region, except for expert positions.

5. CHAPTER FIVE: ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS

5.1. OVERVIEW

The project proponent is committed to sustainability and environmental compliance through coming up with a corrective action plan for all the anticipated environmental impacts associated with the project. This is also in line with the Namibian Environmental Management legislation and International best practices on township establishment and associated activities.

The proponent shall implement the hereto attached Environmental Management Plan (EMP) in order to prevent, minimise and mitigate negative impacts. The EMP developed by HTPC to address all the identified expected impacts, the plan will be monitored and updated on a continuous basis, with aim for continuous improvement to addressing impacts.

5.2. IMPACT ASSESSMENT METHODOLOGY

An impact assessment matrix was used to assess all possible impacts of the project on the environment. In line with Namibia Environmental Management Act No. 7 of 2007 and the Environmental Impacts Regulations (GN 30 in GG 4878 of 6 February 2012) with the direction on impacts analysis the following impact assessment criteria was identified by the team and deemed suitable.

Table 5: Impact Screening Criteria

Aspect	Description
Nature	Focuses on the type of effect that the proposed project will have on environmental components. Addresses questions related to “what will be affected and how?”
Extent	Spatial extend of the project and anticipated spatial extend of impacts indicating whether the impact will be within a limited area (on site where construction is to take place); local (limited to within 15km of the area); regional (limited to ~100km radius); national (extending beyond Namibia’s boarders).
Duration	This looks at the temporal issues pertaining to time frames e.g. whether the impact will be temporary (during construction only), short term (1-5 years), medium term (5-10 years), long term (longer than 10 years, but will cease after operation) or permanent.

Intensity	Establishes whether the magnitude of the impact is destructive or innocuous and whether it exceeds set standards, and is described as none (no impact); low (where natural/ social environmental functions and processes are negligibly affected); medium (where the environment continues to function but in a noticeably modified manner); or high (where environmental functions and processes are altered such that they temporarily or permanently cease and/or exceed legal standards/requirements).
Probability	Considers the likelihood of the impact occurring and is described as uncertain, improbable (low likelihood), probable (distinct possibility), highly probable (most likely) or definite (impact will occur regardless of prevention measures).
Significance	Significance is given before and after mitigation. Low if the impact will not have an influence on the decision or require to be significantly accommodated in the project design, Medium if the impact could have an influence on the environment which will require modification of the project design or alternative mitigation (the route can be used, but with deviations or mitigation) High where it could have a "no-go" implication regardless of any possible mitigation (an alternative route should be used).

The application of the above criteria will be used to determine the significance of potential impacts using a combination of duration, extent, and intensity/magnitude, augmented by probability, cumulative effects, and confidence. Significance is described as follows:

Table 6: Impact Rating Criteria

Significance Rating	Criteria
Low	Where the impact will have a negligible influence on the environment and no modifications or mitigations are necessary for the given development description. This would be allocated to impacts of any severity/ magnitude, if at a local scale/ extent and of temporary duration/time.
Medium	Where the impact could have an influence on the environment, which will require modification of the development design and/or alternative mitigation. This would be allocated to impacts of moderate severity/magnitude, locally to regionally, and in the short term.

High	Where the impact could have a significant influence on the environment and, in the event of a negative impact the activity(ies) causing it, should not be permitted (i.e. there could be a 'no-go' implication for the development, regardless of any possible mitigation). This would be allocated to impacts of high magnitude, locally for longer than a month, and/or of high magnitude regionally and beyond.

5.3. IMPACT ASSESSMENT

By subjecting each of the potential impacts to the matrix above, the EIA team established the significance of each impact prior to implementing mitigation measures and then after mitigation measures have been implemented. Some of the mitigation measures are mentioned but detailed descriptions of management actions are contained in the accompanying EMP.

Table 7: Environmental impact Assessment Matrix

Impact	Status/nature	Extent	Duration	Intensity	Probability	Significance		
						Before Mitigation	Mitigation applied	Post Mitigation
Servicing and Construction Phase								
-Soil physical disturbance during servicing of the land and construction activities	-Erosion -Proliferation of tracks -Negative excavation methods such as blasting.	Local	Short	Medium	Definite	High	-Restrict construction activities on defined areas. -Proper management of stockpiles. Excavated material must be covered in stockpiles until reuse. -Restrict movement to defined areas. Use existing roads until access require limited new roads. -Use surface anchored foundations with very limited rock breaking.	Low

Urbanization/ urban growth	Physical expansion of the town	Regional	Long	Medium	Definite	Low	-All built structures should be constructed according to the local Authority bylaws to guarantee strength and longevity of structures built.	Low
Noise from land servicing activities and construction vehicles and equipment	-Nuisance and disturbance. -Noise and vibrations will also have an impact on animals such as birds and reptiles. -Birds are known to abandon their nests if subjected to continuous noise. Noise to the nearby locals and to construction workers.	Local	Short	Medium	Definite	High	- All workers on site must be equipped with ear plugs to be used when the noise becomes unbearable. - Switch off machines that are not used. - All locals must be notified about the noise construction activities on time during excavations and ground preparation, servicing of the land and any constructions beyond. - All noisy construction activities must not be carried during night time, early morning and evenings, they must be done during daytime to ensure	Low

							minimum disturbance of the nearby residents.	
-Physical destruction of vegetation through land servicing, construction activities and the upgrading and opening of new roads	-these activities may result in the removal and destruction of few trees species on site.	Local	Long Term	High	Definite	High	-Limit activity footprint and limit movement to designated areas only. Implement and monitor the Vegetation Management Plan if there is a significant destruction of the on-site and surrounding areas.	Medium/ Low
Disturbance and killing of reptiles and small animal's activities	-reptiles and small animals in the locality are bound and likely to be affected	Local	Tempor ary term	Low	probable	medium	-Forbid indiscriminate killing of animals and reptiles.	Low
Disturbance through noise, movement and temporary occupation of an otherwise less disturbed habitat	-negatively affect local animals and birds if any	Regional	Tempor ary	medium	Highly probable	High	-Minimum disturbance of local environment by ensuring operations does not produce extreme noise that negatively affect nearby animals and birds. - Switch off machines that are not used.	Medium

Archaeological Landscape	-Visual degradation	Local	Long term	Medium	Improbable	Medium	-Demarcate, protect and avoid development near sites. If removal is inevitable, apply at Heritage Council via an archaeologist.	Low
Change in topography/ landscape character	-Use of caterpillars for servicing (roads construction and paving of the site)	Local	Long term	Medium	Probable	High	-Refill all the pits dug to ensure that there are no pits left open on site and creating a new paved landscape (use of cement interlocks)	Low
Environmental contamination by hydrocarbons release into the environment (grease, oils, fuel spills and leakages from machinery and fugitive wastes.)	There will be no storage of oils and fuel on site according to the engaged contractors, however there is risk of spillage of hydrocarbons from vehicles and machinery operations, maintenance	local	Short Term	Medium	Probable	Medium	-Implement a maintenance programme to ensure all vehicles, machinery and equipment are and remain in proper working order -Vehicle maintenance should be Conducted in designated areas only, preferably off-site. If maintenance is to be conducted on site, these areas should be designed to contain spillages i.e. maintenance site must be bundled and paved and the use	-Low

	through leakages and spillages which may result in: -Washing away of contaminated soils by rains into nearby rivers -Pollution of soil and affecting small living organisms habituating the soil -Result in possible groundwater pollution. -Possible fire risk on and around the site						of chemicals must be controlled. -Waste oil, fuels and other chemicals from drip trays on stationery vehicles and machinery will be disposed of as hazardous waste at a licensed facility by a specialist hazardous waste handler. -Oil residue will be treated with oil absorbent material such as Drizit or bio-remediation and removed to an approved waste disposal site -Spill kits will be easily accessible and workers will be trained in the use thereof. -Staff and contractors will be trained in the handling and storage of oils, fuels, chemicals and other hazardous substances -No bins containing organic solvents such as paint and thinners shall be cleaned on	

							site, unless containers for liquid waste disposal are provided on site.	
Land Pollution	-Negative effect on the ecosystem when waste emanating from construction activities is not managed properly.	Local	Temporary	Medium	Probable	Medium	- Ensure that all waste (stockpiles) from construction activities must be stored and contained in designated containers and transported to Rehoboth Waste Disposal Site for proper disposal. - Adequate mobile toilets must be provided at the construction camps for the use of the workers.	Low
Dust from the general servicing of the land and construction activities	-Respiratory sicknesses can result from prolonged exposure to dust -Dust can negative affect the ecosystem in general and the nearby residents	Local	Temporary	High	Probable	Medium	-Equip all the workers exposed to dust with dust masks -Water spray all the areas that are sources of dust to minimize dust. - Minimize activities that can generate dust during windy days. - Limit the speed within the whole construction area to a	Low

	-it also causes general pollution of the air						maximum of 10 km/h to avoid excessive generation of dust - Dust will significantly be reduced if excavation and land clearing is carried out after it has rained and the soil is wet or dust suppression can be done	
Employment opportunities during the servicing and construction phases of the development	-The general servicing and al construction activities create job opportunities both to the locals, regional and national, this will have a positive economic impact on surrounding Communities and technical companies involved	Regional	Tempor ary	Low	Highly probable	high	-The Project Manager should make it mandatory to contractors that all unskilled work should be given to the locals.	high

The spread of HIV/AIDS and others STDs throughout the construction phase of the project.	-The huge inflow of employees and other people can result in the spread of HIV/AIDS, other STDs	Local	Long term	Medium	Highly probable	Low	-Awareness at workplace and provision of condoms -Massive education of the employees and the general public on the importance of having protective sex	Low
Operational Phase								
Pollution from solid waste and sewerage	-Failure to manage waste properly result in general pollution of the environment and this might have a detrimental impact on the people's well-being and the quality of the environment	Local	Long term	Low	Highly probable	Medium	-The erven must be serviced and connected to Rehoboth Town Council Sewer reticulation system whose manhole for connection is less that 10m from the Erven. -Regular collection of solid waste by the municipal -Provisions of domestic solid waste collection bins to the residents	Low
Population influx	-Results in social tensions and an increase	-Local	-long term	Medium	Definite	High	-Educate employees on social integration and sexual behaviour	Medium

	infections of sexually transmitted diseases particularly HIV and AIDS, and other STDs.							
Social integration	Potential for conflict between people of different backgrounds and cultural beliefs.	Local	Short Term	Medium	Probable	Medium	-Public relations should adequately address the integrated societal values and morals	Low
Community development	Employment creation	Regional	Long term	High	Definite	High	-Promote local businesses and employ locals	High

5.4. RISK ANALYSIS

Based on the impacts identified by this study during site visit, process analysis, desk study and stakeholder consultations conducted, an integrated environmental risk analysis was carried out using the DEFRA Guidelines for Environmental Risk Assessment and Management 'Green Leaves III' (latest edition) as well as the international Procedures for best practices. The risk analysis shows that the project will have some negative impacts on the environment (Biophysical, economic, social and political), it has been also noted that the project will deliver some positive impacts on the receiving environment, as well as on social and economic aspects. However, it is imperative to note that the project is being undertaken within an already disturbed locale. In order to prevent or mitigate negative impacts and to increase positive impacts a coordinated project management strategy according to an Environmental Management Plan, developed specific to this development.

Appendix A: References

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