

# Environmental Impact Assessment (EIA) Report

*For*

**Layout and township establishment of Oletweni proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1 and Oletweni Extension 2 in Arandis**



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**Prepared for: Arandis Town Council**

**December 2020**



Project	Environmental Impact Assessment final report for the layout and township establishment of Oletweni Proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1 and Oletweni Extension 2 in Arandis
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## CHAPTER 1: INTRODUCTION

### 1.1 Background

Arandis Town Council (the proponent) is in the process of establishing a new township surrounding the south, west and east part of Arandis. The proposed township establishment is located on the Remainder of Farm Arandis Townlands No 170 and it consists of five portions namely; Oletweni Proper; Rössing Height Propre; Anton Lubowski Proper; Oletweni extension 1 and Oletweni extension 2 (Figure 4). The proposed development is part of the Arandis Town Council's mandate to accelerate delivery of serviced urban land for housing and other infrastructures.

The site is currently vacant and the soil and terrain conditions are suitable for urban development. No endangered floral and faunal species are known to inhabit the area and the site is in very close proximity to already in habitat urban area of Arandis. The development of this new residential neighbourhood for lower and middle-income housing is combined with the development of a more diversified infrastructure to boost local economy. In coming to this initiative the Council used the concept of "Work, Live and Play" within an urban area and this is why the proposed township establishment provides a mix of residential, institutional, retail, industrial, and recreational land uses.

Layout and township establishment involves activities such as the construction of bulk pipelines, electrical cableways and roads, these are activities that may not be undertaken without an environmental clearance certificate, therefore an Environmental Impact Assessment (EIA) process is required to obtain required authorization for the activities to be implemented.

### 1.2 Purpose of this document

The Environmental Impact Assessment is being conducted in accordance 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 anticipated impacts of the proposed township development in order to protect the environment,

- To brief, the Project Proponent of the legal framework that governs the proposed activities,
- To identify the possible changes in biodiversity composition that might be as a result of Project implementation in the area,
- To come up with preventive and precautionary measures for the expected physical and biological environmental negative impacts associated with the proposed activities,
- To develop an effective environmental management plan for the proposed development and operational activities in order to minimize and prevent negative impacts and maximize the positive impacts.

### 1.3 Terms of reference

Candy Consultancy cc was appointed to undertake an Environmental Impact Assessment and develop Environmental Management Plan in order to obtain an Environmental Clearance Certificate for the proposed township establishment to go ahead in Arandis. The assessment process focused on reviewing and evaluating environmental settings (physical, biological, and socioeconomic). The following outputs were expected from the assessment:

- A complete description of the existing site proposed for development;
- Significant environmental issues of concern identified during site investigation;
- Identification of positive and negative environmental impacts (physical, biological, and socioeconomic environment)
- An assessment of the public perception on the proposed development through public participation process;
- Identification of legal framework ( policies, legislation & regulations) relevant to the proposed project;
- Prediction and identification 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 and development of mitigation actions to be taken to minimize expected adverse impacts;
- Development of an environmental monitoring plan for ensuring that the mitigation measures are implemented during and after the construction phase;



- A conclusion and recommendations remarks for the project proponent on an advisory note.

#### 1.4 The Applicant/proponent

The applicant is Arandis Town Council.

The particular details of the applicant are as follows:

Applicant: Arandis Town Council  
Contact person: Mr. Silvanus Makili  
Physical Address: Milkwood Street, Arandis  
Tel: +264 64 512440  
Email: [technical@atc.com.na](mailto:technical@atc.com.na)

#### 1.5 The development opportunity

The Arandis Town Council has a backlog of land delivery to residents. Hence, the Council proposes to undertake layout and township establishment north, west and east of the existing urban area of Arandis. The layout will include: residential erven for lower and middle income; a Techno Park for the development of clean technology and green industries and supporting facilities; retail, institutional, general residential, recreational, and government facilities for the support of the large urban area.

This development is in line with Arandis Town Council's objectives of providing affordable serviced land to its residents as well as to avail serviced land for other infrastructure development to contribute to the upliftment and improvement of livelihood of the communities in the town.

#### 1.6 Legal framework

**The Environmental Management Act 7 of 2007**, is the primary custodian of the environment with the aim to: *“promote the sustainable management of the environment and the use of natural resources by establishing principles for decision making on matters affecting the environment; to establish the Sustainable Development Advisory Council; to provide for the appointment of the Environmental Commissioner and environmental officers; to provide for a*

*process of assessment and control of activities which may have significant effects on the environment, and to provide for incidental matters”.*

Under section 56 of the Environmental Management Act, 2007 (Act No.7 of 2007), the Minister has made the regulations for Environmental Impact Assessment as set out in the Schedule of Government Notice No. 30 (2012).

In line with the Environmental Management Act (No. 7 of 2007) and its Regulation (Government Notice No. 30 of 2012), it is required for Arandis Town Council to obtain an environmental clearance certificate from the Environmental Commissioner in order to establish the proposed township in Arandis. Township establishment including associated activities such as clearing and servicing of land (construction of gravel roads, sewer system, installation of water pipes and electrical cables) and construction of other supporting infrastructures are listed activities that may not be undertaken without environmental clearance. Therefore undertaking environmental impact assessment and developing an associated environmental management plan to mitigate impacts as well as complying with legislation and other requirements for best practice will put the Arandis Town Council in a position to comply with legal legislations and as well improve its environmental performance the Council activities.

The other relevant legislation and policy frameworks applicable for township establishment were surveyed and their relevant provision considered, and are presented below.

**The Namibian Constitution,1990**, the State shall actively promote and maintain the welfare of the people by adopting policies that are aimed at maintaining ecosystems, essential ecological processes, and the biological diversity of Namibia. It further promotes the sustainable utilization of living natural resources basis for the benefit of all Namibians, both present and future.” (Article 95(I)).

**Environmental Management Act 7 of 2007**, To promote the sustainable management of the environment and the use of natural resources by establishing principles for decision making on matters affecting the environment; to establish the Sustainable Development Advisory Council; to provide for the appointment of the Environmental Commissioner and environmental officers; to provide for a process of assessment and control of activities which may have significant effects on the environment, and to provide for incidental matters.

**Environmental Assessment Policy of Namibia 1994**, The Environmental Assessment Policy of Namibia requires that all projects, policies, Programmes, and plans that have a detrimental effect on the environment must be accompanied by an environmental assessment (EA). The policy provides a definition to the term “Environment” broadly interpreted to include biophysical, social, economic, cultural, historical, and political components and provides a reference to the inclusion of alternatives in all projects, policies, programs, and plans. The policy further requires all industries, mines, and hospitality industries to prepare waste management plans and present these to the local authorities for approval.

**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 and to provide for incidental matters.

**Town planning Ordinance, Ordinance 18 of 1954**, This ordinance makes provision for the management of land uses by the creation of a town planning scheme. First proclaimed in 1998 (Government Gazette No. 1773, Notice no. 15 1998).

**Public and Environmental Health Act no. 1 of 2015**, This Act 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 Act provides with respect to, among other things: diseases communicable by an animal, or the carcass or product of an animal or to the human being; water and food supplies; infant nutrition; integrated waste management; and health nuisances. A local authority must ensure: (a) that all waste generated within its local authority area is: (a) collected; (b) disposed of; and (c) recycled, in accordance with the requirements of all laws governing the management of the different waste streams. A person who intends to conduct on a premises activities which generate special, industrial, hazardous or infectious waste must be registered for that purpose with the local authority concerned. Waste must only be disposed of at a waste disposal site, including an incinerator approved by the local authority concerned.

**General Health Regulations 121 of 1969**, These regulations lay down minimum requirements and standards and shall be deemed to be in addition to, but not in substitution for, any regulation in force within the district of the local authority, except where such regulation is in conflict or inconsistent with these regulations, or lay down requirements and standards which are lower

than those required by these regulations, in which case the provisions of these regulations shall prevail.

**National Waste Management Policy, 2010**, This policy is focusing specifically on Waste Management and the use of various technologies for waste treatment and disposal to minimize health risks. It is also geared to have a unified waste management system countrywide. The policy provides the necessary guidance on the processes related to waste management in the MOHSS, wider Namibia health and social welfare sectors, and other relevant stakeholders. It is taking into consideration the process of integrated waste management from generation to the final disposal. This practice also focuses on medical, household, mining, agricultural, and construction waste.

**Pollution control and waste management Bill**, The bill has not come into force yet. Amongst others, 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 subsection (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.”

**Soil Conservation Act (Act No. 76 of 1969)**, The Act makes provisions for the combating and prevention of soil erosion. It also aims to promote the conservation, protection, and improvement of the soil, vegetation, sources, and resources of the Republic.

**Nature Conservation Ordinance 1996**, Aim to consolidate and amend the laws relating to the conservation of nature; the establishment of game parks and nature reserves; the control of problem animals; and to provide for matters incidental thereto.

**Atmospheric Pollution Prevention Ordinance 11 of 1976**, To provide for the prevention of the pollution of the atmosphere and matters incidental thereto.

**National Heritage Act 27 of 2004**, To provide for the protection and conservation of places and objects of heritage significance and the registration of such places and objects; to establish a National Heritage Council; to establish a National Heritage Register; and to provide for incidental matters.

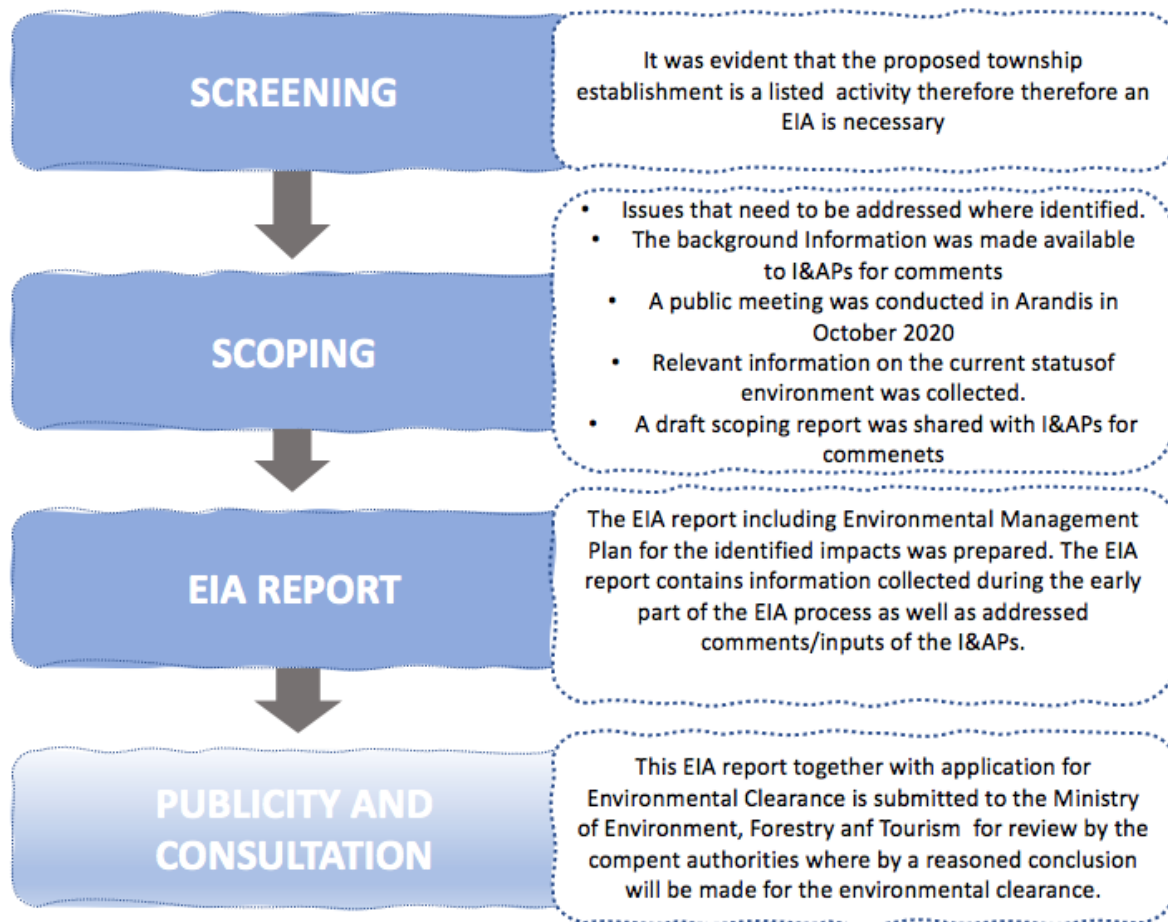
**Labour Act No 11 of 2007**, to establish a comprehensive labour law for all employers and employees; to entrench fundamental labour rights and protections; to regulate basic terms and conditions of employment; to ensure the health, safety, and welfare of employees; to protect employees from unfair labour to regulate the registration of trade unions and employers' organisations; to regulate collective labour relations; to provide for the systematic prevention and resolution of labour disputes; to establish the Labour Advisory Council, the Labour Court, the Wages Commission, and the labour inspectorate; to provide for the appointment of the Labour Commissioner and the Deputy Labour Commissioner, and to provide for incidental matters.

**COVID-19 Regulations**, any measures in place or to be put in place by the government to control the spread of coronavirus disease of 2019 which is a disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

### 1.7 The EIA Process

Up to the stage of submitting the application for environmental clearance for the proposed township development, the required EIA process was followed in undertaking the assessment and preparing the EIA report as shown in Figure 1 below. This process was adopted in order to comply with the mandatory requirement of the Environmental Management Act and the accompanying Regulation.

The Draft Scoping Report including the proposed environmental management plan has been made available for Public Review for seven days. The comments and inputs received were addressed and the scoping report was revised to produce the final EIA report that is submitted to the office of the Environmental Commissioner in the Department of Environmental Affairs for examination and taking of reasonable conclusion on the environmental clearance certificate for Arandis Town Councils' proposed township establishment.



**Figure 1:** Environmental Impact Assessment process followed up to the submission of the application for environmental clearance.

## CHAPTER 2: PROJECT DESCRIPTION

### 2.1 Project Overview

An application for environmental clearance from the Department of Environmental Affairs is being made for the township development in Arandis town, Erongo region Namibia. The Arandis Town Council like any other local authorities in the country is mandated by the Ministry of Urban and Rural Development to implement a strategic objective on accelerating the delivery of serviced urban land and housing. At the moment the Arandis Town Council has a backlog of approximately 800 erven. It is against this background that the Council proposes to undertake a layout and township establishment north, west and east of the existing urban area of Arandis. The layout is to cater for the following land uses:

1. Residential erven for lower middle income
2. Residential erven for middle income
3. A Techno Park for the development of clean technology and green industries and supporting facilities
4. Retail, institutional, general residential, recreational, and government facilities for the support of the large urban area.

One of the Arandis Town Council's objectives is to provide affordable serviced erven to its residents especially for the lower and middle-income groups as well as to avail serviced land for other infrastructure development that will contribute to the upliftment of the town and local livelihood improvement.

The proposed township establishment provides a mix of residential, institutional, retail, industrial, and recreational land uses. The township has been divided into five portions as follows:

1. Portion A - Oletweni Proper
2. Portion B- Rossing Height Proper
3. Portion C- Anton Lubowski Proper
4. Portion - Oletweni extension 1
5. Portion - Oletweni extension 2

Layout and township establishment involves activities such as the construction of bulk pipelines, electrical cableways, and roads, these are activities that may not be undertaken without an environmental clearance certificate, therefore an Environmental Impact Assessment (EIA) process was required to obtain required authorization for the activities to be carried out.

### 2.2.1 Detailed description of proposed project “Townships”

#### Oletweni Proper

Oletweni Proper is a natural extension of Arandis Extension 7 which is located to the west of Oletweni Proper. This establishment will cater to different zoning ranging from residential, general residential, institutional, business, municipal, public open space, and streets. Most of the erven in Oletweni Proper is to cater for the development of free-standing residential units ranging between 320m<sup>2</sup> and 450m<sup>2</sup>. There will be nine (9) general residential properties aimed at contributing to the development of more diversified housing stock while at the same time increasing the residential density of the areas. The business erven provide an opportunity for the development of convenient shops in the surrounding area. The municipal erf is reserved for the development of a multi-purpose hall or a closed market and town square for residents to do shopping. A four hectares institutional erf has been allocated for the development of a private school, old age home, or any other institution in the best interest of the community. These institutions may include a church or kindergarten or creche. The public open space is adequately available to be utilized by residents. Table 1 below summarized the zoning in Oletweni Proper and the area to be covered:

**Table 1:** Summary of land use and area covered by Oletweni Proper

#### OLETWENI PROPER

Zoning	No of Erven	±Total area (ha)	% of Total area
Residential	281	11.77	31.09
General Residential	9	1.64	4.33
Institutional	3	4.47	11.81
Business	2	0.36	0.96
Local authority	1	0.61	1.61
Public Open Space	6	7.33	19.36
Street	Remainder	11.68	30.85
<b>TOTAL</b>	<b>302 &amp; Rem</b>	<b>37.86</b>	<b>100.00</b>

#### Rossing Height Proper

Rossing Height Proper is to form a mixed-use high-density residential neighbourhood. The township is to be located to the east of the major distributor which dividing Oletweni Proper and Rossing Height Proper, to the west there is a major road reserve which is reserved for the



development of the private road to the Trekkopje Uranium mine. There will be a ring road to link up with the B4 national road. The Rossing Height Proper is earmarked for various zoning as well with a total area of 283 hectares, these include; residential, general residential, institutional, business, private, and public open space and streets (Table 2). Some business ervens will be strategically positioned at the intersection of the distributor and the ring road.

**Table 2:** Summary of land use and area covered by Rossing Height Proper

**ROSSING HEIGHT PROPER**

Zoning	No of Erven	± Total area (ha)	% of Total area
Residential	240	10.17	24.15
General Residential	21	4.17	9.90
Institutional	7	2.07	4.91
Business	2	0.77	1.84
Private Open Space	1	2.69	6.38
Public Open Space	12	6.34	15.05
Street	Remainder	15.91	37.77
<b>TOTAL</b>	<b>283 &amp; Rem.</b>	<b>42.13</b>	<b>100.00</b>

**Anton Lubowski Proper**

Anton Lubowski Proper will consist of 283 erven including remainders with different zoning ranging from the residential, institution, institutional, business, light industry, open spaces, and streets. This establishment will cover a total area of approximately 92 hectares (Table 3). The southern part of Anton Lubowski Proper is to be developed with a modern TechnoPark. This area is strategically located in terms of road linkages with the existing industrial area to the south, the residential area to the west, and the solar plant to the east. The Techno Park will consist a retail and an industrial area which do not complement each other in terms of accessibility and the creation of a sense of space. Therefore, the development to be permitted within the Techno-park should not be of noxious or with pollutant agents and the buildings are to be architecturally designed to create an attractive urban environment. Apart from the Techno-park, the establishment will be divided into the residential pocket and institutional site to be located at the northern part of the extension. This institution site is earmarked for a vocational Training Centre or a Technical institution. There is a natural river course that runs between the Techno-Park and the Residential and Institutional areas. This space has the potential to be developed into a desert garden space. The street reserves to serve the Techno-

park are relatively wide-ranged between 20m and 30m and as such can accommodate streets with dual traffic lanes.

**Table 3:** Summary of land use and area for Anton Lubowski Proper

**ANTON LUBOWSKI PROPER**

Zoning	No of Erven	± Total area (ha)	% of Total area
Residential	131	6.44	7.02
General Residential	2	0.57	0.62
Institutional	2	12.99	14.15
Business	42	7.66	8.35
Light industry	46	17.78	19.37
Local authority	2	1.37	1.49
Public Open Space	17	16.46	17.93
Street	1	0.67	0.73
Street	Remainder	27.85	30.34
<b>TOTAL</b>	<b>283 &amp; Rem.</b>	<b>91.79</b>	<b>100.00</b>

**Oletweni Extension 1**

Oletweni Extension 1 is located north of Oletweni Extension 2 and west of Arandis Extension 7 and Oletweni proper. The total area of this township establishment is approximately 41, 63 hectares. The Oletweni Extension 1 is comparable to the other townships, it has all the zoning areas such as residential, general residential, business, institutional, area reserved for the local authority, hospitality, open spaces and streets (Table 4). The hospitality site represents about 3% of the total area. The area is aimed at the development of hospitality establishments such as guest houses, restaurants, and tourism exhibition markets in order to boost up local tourism.

**Table 4:** Summary for land use and area covered in Oletweni Extension 1

**OLETWENI EXTENSION 1**

Zoning	No of Erven	± Total Area(ha)	% of Total Area
Residential	207	11,68	28,05
General Residential	21	3,79	9,11
Business	6	2,08	5,01
Institutional	6	3,74	8,99
Local Authority	1	0,23	0,55
Hospitality	1	1,05	2,52
Public Open Space	8	4,41	10,59
Street	Remainder	14,64	35,18
<b>TOTAL</b>	<b>250 &amp; Remainder</b>	<b>41,63</b>	<b>100,00</b>

## Oletweni Extension 2

Oletweni Extension 2 is to be comprised of all zoning as other township establishments in the new extensions of Arandis. This includes a service station which will be located next to the business park as shown in the zoning map (Figure 3). All statutory requirements for the establishment of a service station are to be considered. The number of erven provided with Oletweni Extension 2 exceeded the threshold of the policy that not more than 300 erven should be provided within a township extension. This was due to fact that all extensions were designed as a larger urban expansion initiative however the township boundary was determined after the layout designed was made.

**Table 5:** Summary for land use and area covered by Oletweni Extension 2

### OLETWENI EXTENSION 2

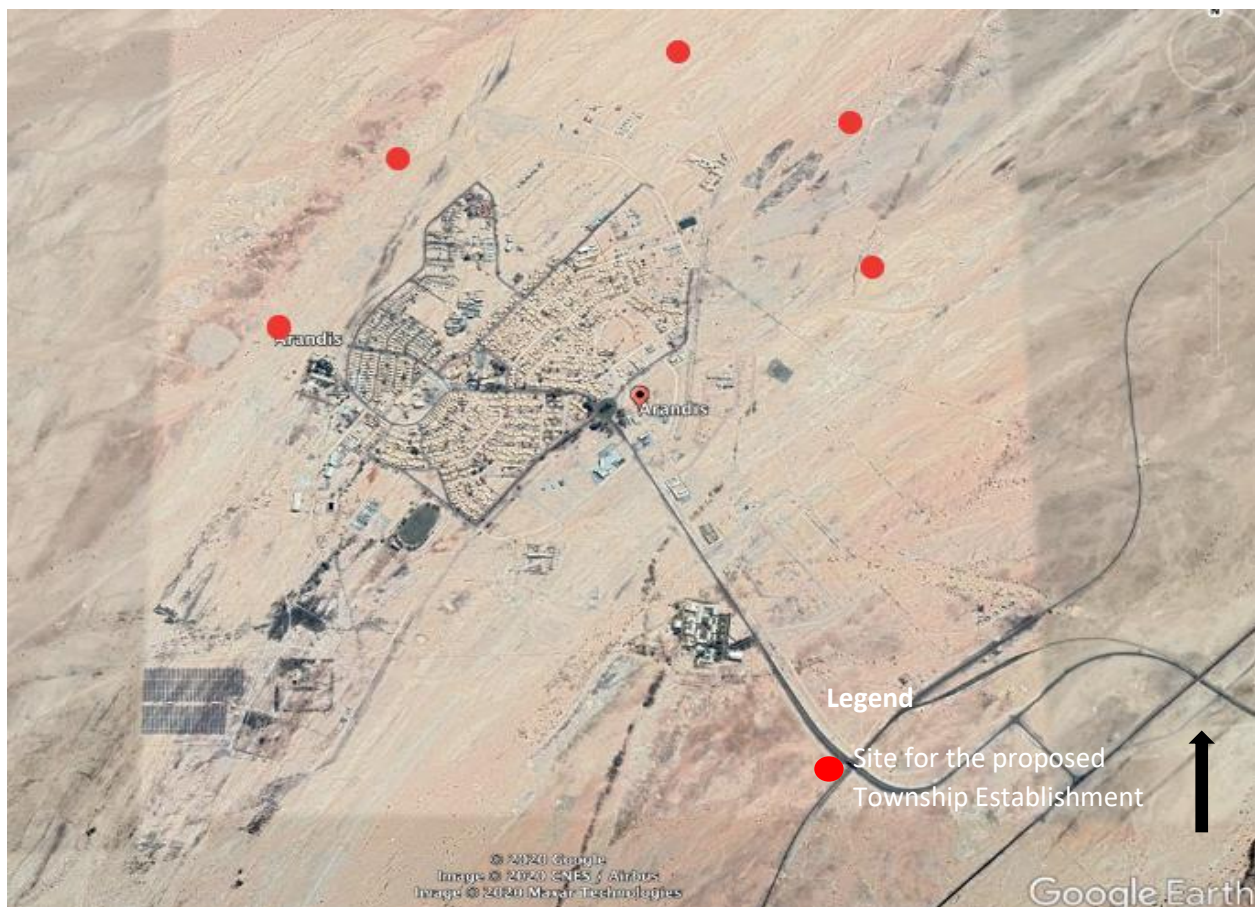
Zoning	No of Erven	± Total Area(ha)	% of Total Area
Residential	287	16,74	34,91
General Residential	21	3,57	7,44
Business	3	3,11	6,50
Institutional	1	0,35	0,72
Service Station	1	0,34	0,70
Public Open Space	12	5,98	12,47
Street	Remainder	17,86	37,25
<b>TOTAL</b>	<b>325 &amp; Remainder</b>	<b>47,94</b>	<b>100,00</b>

## 2.2 Project location

Arandis Town is located 15 km outside of the world's largest open-pit uranium mine operated and managed by the China National Nuclear Corporation, (CNNC). The town falls within the geographic coordinates of 22°25` 06.64"S and 14°58` 28.10"E in the Erongo region.

The town was established for the workers of Rössing Uranium in 1978. Arandis was granted self-administration and "town" status in 1994. Currently, it has approximately 7,600 inhabitants, most of whom are somehow connected to the mine, and owns 29 square kilometres (11 sq mi) of land. Arandis is the home of the main campus for the Namibian Institute of Mining and Technology (NIMT), a technical institute focusing on training skilled industrial workers.

The proposed site for layout and township establishment is located within the boundaries of the town of Arandis as depicted in Figure 2 with red dots, 3, and 4 below:



**Figure 2:** Google Earth map of Arandis, including the position of the sites (red dots) of the new proposed Township Establishments (Photo: Google Earth, 2020).



**Figure 4:** Zoning map for Arandis, including the new Proposed Layout and Township



**Figure 3:** The proposed site for layout and township establishment within the boundaries of the of Arandis town

## CHAPTER 3: ENVIRONMENTAL BASELINE DESCRIPTION

### 3.1 Biophysical environment

#### 3.1.1 Topography, Geology, and Hydrogeology

The town of Arandis is located approximately 581 metres above sea level within the Namib Desert, which falls within the southern Central Zone of the Neo-Proterozoic Damara Orogenic Belt (Speiser, 2012). The characteristic feature of the zone is the basement zone structures, which elongates in a northeastern direction and possesses numerous posttectonic granite plutons. A series of regional scale antiforms and synforms which trend in a northeast direction, dominate the project area. The Damara Sequence is dominated by the Swakop and Nossib groups, with the Swakop group being the dominant type within the area of the project. The Chuos and Karibib formations of the Swakop group, creating a composition of mixtite and pebbly quartzite as well as marble and quartz-biotite schist (Speiser, 2012).



**Figure 5:** Gravel plains consisting of surface quartz

Due to the desert nature of the region, the rivers within proximity to the project area are generally dry, with surface water flow provided as a result of storm water entering from upland within the catchment areas. According to Speiser (2012) the major rivers within the vicinity of the project are the Khan River, approximately 14 km from the site and Swakop River, approximately 30 km from the site, both of which are ephemeral in nature and westward flowing.

Groundwater within the area of the Erongo Region is comprised of three different aquifer systems (Speiser, 2012), being:

- Saturated alluvium associated with major rivers
- Saturated alluvium associated with the plains
- Fractured/weathered bedrock aquifers.

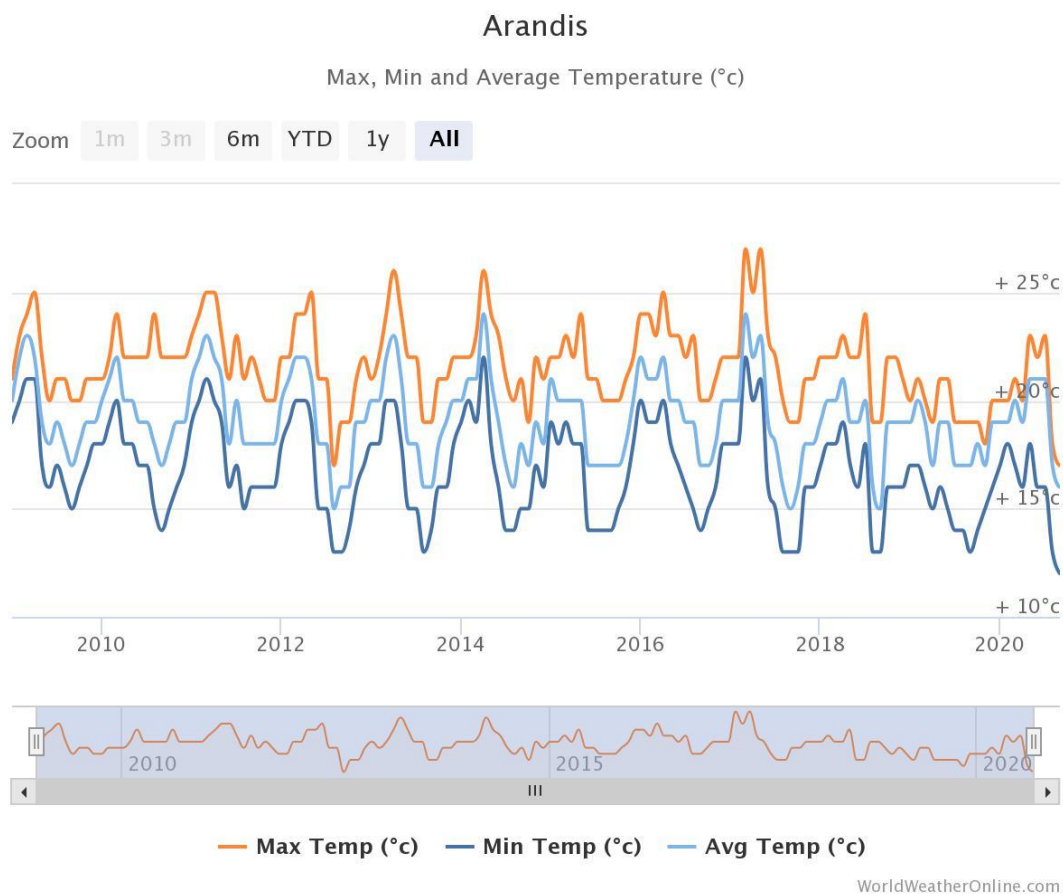
The hydrogeology of the vicinity of the project area categorises two main aquifer types, being the fractured bedrock and the saturated alluvium associated with a major river, namely the Khan River. The bedrock aquifer is considered to have low storage potential, with potential for increased localised storage within faults and fractures. The alluvial aquifer associated with the Khan River provides moderate storage potential and provides water which is considered saline in nature in the vicinity of Arandis. Water from the aquifer is considered unsuitable for human consumption and is utilised by Rössing Mine for dust suppression (Speiser, 2012).

### 3.1.2 Soil

The soils occurring around the town of Arandis are considered sensitive to both wind and water erosion. The soils are characterised by shallow to moderately deep (400 – 600 mm) silty sands, with or without the calcrete “C” horizon and/or surface crusting (Speiser, 2012). They are generally single grained to apedal in structure, with association to distinctive individual tufts of grass cover.

### 3.2 Climate

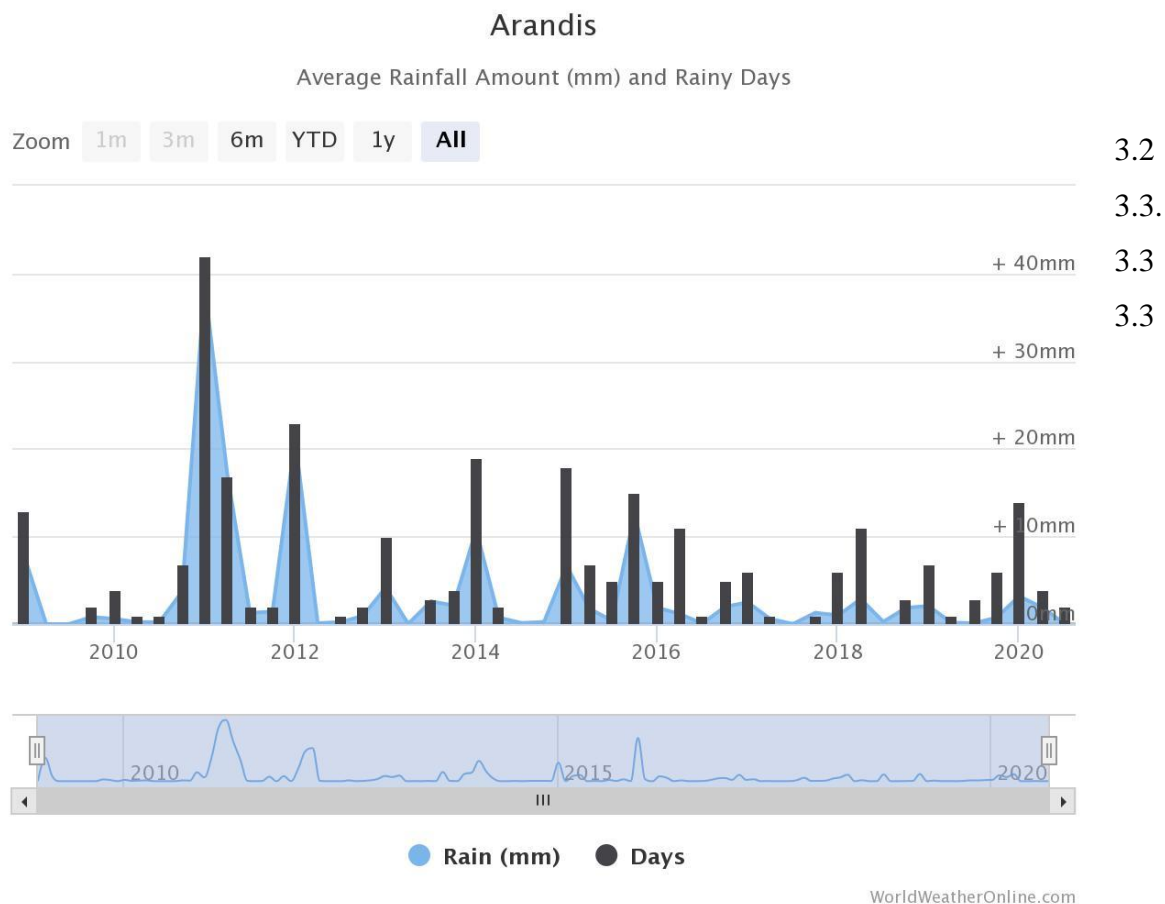
Arandis can be considered to have a desert climate that generally experiences warm days and followed by cool nights. Though not having high corrosive climatic conditions the town is often facing berg wind conditions which introduce hot air into the town. This makes Arandis an ideal place to introduce alternate building designs and renewable energy generating building practices. Maximum temperatures vary between 19 and 24°C with the average minimum temperature between 13 and 19° C (Figure 6).



**Figure 6:** Average monthly temperature for Arandis (World Weather Online, 2020)

Arandis experiences some seasonal variation in monthly rainfall. The most rain falls during the summer months (Figure 7) and on average most of this rainfall is experienced from February to April. Thus, Arandis receives an annual rainfall of approximately 44 mm. Most of the rainfall is experienced in late summer and early autumn. The average rainfall for the Erongo region over the long term is less than 100 mm per year but due to the erratic distribution, much of the area receives less than 50 mm per year (Ninham Shand Consulting Services, 2008). Moreover, occasional thunderstorms, however, do occur turning the small river courses into fast-flowing rivulets and flashflood conditions do occur.





**Figure 7:** Average monthly Rainfall for Arandis (World Weather Online, 2020)

### 3.3 Biodiversity

The proposed site is located within the Namib Desert ecoregion, which extends along the western coast of Namibia, and inland towards Namib Escarpment. The ecoregion can be further subdivided into the Southern Namib and the Central Namib, in which the proposed site location falls. The Central Namib extends from the Kuiseb River to the Uniab River, both of which ephemeral rivers which are normally are dry (Spriggs, 2019). The Namib Desert is considered the oldest desert on Earth, with an arid climate that has resulted in a unique biodiversity comprising of numerous desert adaptations and high levels of endemism.

#### 3.3.1 Flora

According to the findings of the fauna and flora study survey we conducted, the most dominant plant species in the project site are succulent plants (leave and stem). By far only one dominant grass species was recorded namely; *Stipagrostis uniplumis*. *Vachellia reficiens* commonly known as red-bark acacia or red thorn was reported to be the only tree/shrub observed in the

area, this is because this plant seems to prefer rocky soil-types and it does not grow in high-rainfall areas, but rather in semi-desert such as that of Arandis town. Interestingly, *Parkinsonia Africana* commonly known as the green-hair tree was spotted at the project site as well, it is confined to the arid area such as that of the project site. *Commiphora* sp. specifically *Commiphora saxicola* commonly known as rock corkwood was also reported occurring on site. Generally this species it's a deciduous, low growing shrub with short, swollen stem, it is confined to the rocky hill slopes and gravel plains of the Namib Desert and escarpment. All in all, the most frequently encountered plant family were: Acanthaceae, Poaceae or Gramineae, and Fabaceae.

Thus, all plant species recorded are endemic within the proposed project area and are considered to be drought-tolerant, and drought-resistant. Short-lived annuals, which occur after local rainfalls and floods, provide a vital source of food for game grazing within the Namib plains. It can be concluded that the vegetation on the study site is sparse and scattered floral community present comprised predominantly of small shrubs and desert grasses (Spriggs, 2019). The plant species in the area are not endangered however, *Commiphora saxicola* reported is protected by the Forest Act.





**Figure 8:** Floral species observed on the proposed project site

### 3.3.2 Fauna

#### 3.3.2.1 Mammals

The Namib Desert is home to a large number of small rodent species that occur among the rocky habitats in the western deserts, in the sand dunes and in the vegetation of the gravel plains. The larger ungulates found in the Namib Desert include gemsbok (*Oryx gazella*) (most widespread ungulates in the desert. habitat), springbok (*Antidorcas marsupialis*) and Hartmann's zebra (*Equus zebra hartmannae*). Klipspringers (*Oreotragus oreotragus*), steenboks (*Raphicerus campestris*), baboons and leopards occur along the courses of the Kuiseb and Swakop Rivers. The predators of the Namib Desert include cheetahs, brown hyenas, spotted hyenas, Cape foxes and bat-eared foxes (Spriggs, 2019).

A summary of animal species which may potentially occur within the vicinity of the project area is provided in Table 6 below. However, during the site visit, a single lizard was observed, and a single pile of animal scat was noted to be of dogs, indicating that the faunal presence at the proposed site is rather low.

#### 3.3.2.2 Birds

The desert does not have a very high level of avian richness, with the most prominent bird found in the desert is the ostrich (*Struthio camelus*). Six birds are considered endemic to the Namib Desert, namely, the dune lark (*Certhilauda erythrochalamys*), Benguela long-billed lark (*C. benguelensis*), Gray's lark (*Ammomanes grayi*), bank cormorant (*Phalacrocorax neglectus*), tractrac chat (*Cercomela tractrac*), and Rüppell's korhaan (*Eupodotis rueppellii*) (Spriggs, 2019). However, no bird species were observed during site investigation.

### 3.3.2.3 Reptiles and Invertebrates

Reptiles have high species richness and endemism within the Namib Desert, as they have evolved adaptations to survive in this harsh environment more efficiently than most birds and large mammals that may occur within the biome. Approximately 70 reptile species occur within the ecoregion, including several endemic reptiles including the two desert lizards, the wedge-snouted sand lizard (*Meroles cuneirostris*) and the small-scaled sand lizard (*M. micropholidotus*), the barking gecko (*Ptenopus kochi*) and the day gecko (*Rhoptropus bradfieldi*) (Spriggs, 2019). However, during site investigation, ants and two beetle species from the family of Tenebrionidae were found inhabiting the area (Figure 9).



**Figure 9:** Two beetle species encountered in the study site

## 3.4 Socioeconomic environment

### 3.4.1. Socio-economic context

The statistics shown in Table 6 below are derived from the 2011 Namibia Population and Housing Census (NSA, 2011), and presented from a local and regional perspective.

**Table 6:** Statistics of the Arandis Constituency and Erongo Region

ARANDIS	
ATTRIBUTE	INDICATOR
Population	10,093
Females	4,852
Males	5,241
Population under 5 years	10%
Population aged 5 to 14 years	19%
Population aged 15 to 59 years	64%
Population aged 60 years and above	8%
Female: male ratio	100:108

Literacy rate of 15 years old and above	98%
People above 15 years who have never attended school	4%
People above 15 years who are currently attending school	13%
People above 15 years who have left school	80%
People aged 15 years and up who belong to the labour force	71%
Population employed	72%
Homemakers	5%
Students	49%
Retired or old age income recipients	46%
Income from pension	10%
Income from business and non-farming activities	6%
Income from farming	1%
Income from cash remittance	3%
Wages and salaries	72%
Main Language	Oshiwambo-39%
<b>ERONGO REGION</b>	
<b>ATTRIBUTE</b>	<b>INDICATOR</b>
Population	150,809
Population aged 60 years and above	6%
Population aged 5 to 14 years	17%
Population aged 15 to 59 years	67%

### 3.4.2 Archaeological and Heritage Context

No archaeological and heritage sites are known to be located within the proposed development area. Should any be discovered during the construction of the proposed project, the management actions outlined in the EMP shall be implemented.

### 3.5 Surrounding land use

The proposed development area is undeveloped. The subject area has been earmarked for residential and light industrial development and the site is currently vacant and the soil and terrain conditions are suitable for urban development.

### 3.6 Engineering services

The intended logistics development in Arandis is expected to be connected to the existing municipality reticulation system consisting of water, electricity, and sewage. The existing oxidation ponds are planned to be upgraded this year (2020) by the Arandis Town Council as

well as the expansion of the bulk sewage system of the town, which is anticipated to be sufficient for the increase in demand.

## CHAPTER 4: PUBLIC PARTICIPATION AND INCLUSION

### 4.1 Process followed

As a general practice for the EIA public participation and in line with environmental impacts assessment regulation, several public notifications were made through a newspaper advertisement, face to face communication with residents and other stakeholders, and posters erection both at the proposed site for township establishment and at the notice board of the Arandis Town Council were utilized to notify public of the EIA process for the township establishment in Arandis, and inviting them to participate and share their comments/issues/concerns so that these are addressed early on in the project design and implementation. The newspaper public notice was advertised in two local newspapers (New Era and Confidente) for two consecutive weeks, this means a total of four adverts two per newspaper during October 2020, (please see copies of newspaper adverts in Appendix 4).

A public meeting was held on 10 October 2020 at Arandis Community Development Centre (next to the library) in Arandis. At this gathering, the Background Information Document was presented to the I&APs who were in attendance, and copies of the BID were as well distributed to the participants. Due to the current COVID-19 Pandemic and restrictions on public gathering of no more than 50 people at the time of the public meeting, provision was made for a virtual attendance of the public meeting through zoom platform for which interested parties were informed through the newspaper and poster adverts to request for the zoom link that was created by the consultant.

Finally, after the scoping report was available, poster notifications were erected at the proposed site and Arandis Town Council notice board notifying Interested and Affect Parties of the availability of the scoping report and requesting them to submit any further comments, issues, or concerns regarding the proposed township establishment. The copy of the scoping report was also shared via email to those I&APs that provided their email addresses. I&APs were given seven (7) working days to submit their comments/inputs which the consultant addressed and incorporated in the final EIA report.

#### 4.2 Public review of scoping report (comments received and concerns raised)

This scoping report was made available for public review from 23 November to 04 December 2020. The report was sent by email to all registered I&APs and hard copies were put both at Arandis Town Council and in the community library and access was granted for public review. The I&APs who do not have email were notified through mobile SMS about where to access the document for comments and further inputs. Poster notifications were placed at the Arandis Town Council noticeboard as well as at some retailer shops in Arandis, please see Appendix 2 for a copy of the notification poster informing I&APs of the availability of the scoping report for them to submit their comment, inputs, concerns or issues before a final EIA report was finalized. We received comments from one I&AP a Botanist in Windhoek. All comments were addressed and incorporated in the study as reflected in annexure 2.3.



## CHAPTER 5: IMPACTS IDENTIFICATION AND ASSESSMENT

During the assessment (scoping exercise) process several potential environmental impacts (physical, biological & socioeconomic) associated with the establishment of townships have been identified. This chapter of the report aimed to outline potential adverse and beneficial impacts of intended development and operation as well as an assessment of the different impacts in order to develop appropriate mitigation measures to control and manage risks. A brief description of these impacts are shown below:

### 5.1 Adverse and negative impacts identified

#### Adverse impacts during servicing and construction

- Physical destruction (from land clearing and construction) of the vegetation and plant species which provides essential ecosystem services and maintenance of biodiversity.
- Environmental degradation as a result of impacts associated with construction activities.
- Change in the landscape, visual and aesthetic
- Air quality and dust impacts
- Pressure on local services such as existing sewerage, water supply, traffic, solid waste management, and power supply.
- Social nuisance
- Increased traffic due to construction vehicle and equipment during construction
- Noise pollution results from future activities, currently, the noise impacts are limited to the site due to the distance to the nearest neighbours. However, this may change as the area becomes more developed.
- Potential unnecessary removal of trees and shrubs.
- Mortality of small animal species such as beetle due to habitat destruction and physical contact with construction equipment.
- Visual impacts due to construction equipment on site. This could be a nuisance to the residents in the neighbourhood.
- Dust generation from construction (excavation and levelling of land) could impact the residents
- An increase in traffic could impacts residents
- Noise generation from construction equipment could impact the biodiversity and residents

- Solid waste management impacts on the local environment (impacts on fauna and flora) as well as a nuisance due to littering.
- Potential impacts of soil erosion due to storm runoff as a result of excavated land and de-vegetation.
- The potential spread of diseases among construction workers and the general public.
- Potential health and safety hazards may occur among employees such as falling from heights, injuries due to accidents involving moving vehicles on-site (e.g. forklifts), chemical inhalation, noise, and others
- Potential impacts of stockpiles of construction material and debris on fauna and flora due to blockage.
- Potential increase in crime due to the presence of contract construction workers on site.
- Potential Impacts on the surrounding environment due to sewage spills if the system not well controlled.
- Extra pressure on resource use (water and energy) as a result of construction work could impact resource availability.
- Greenhouse emissions from construction equipment and vehicles.

#### Adverse impacts during Township operation

- Extra pressure on resource use (water and energy) as a result of consumption by residents and new development operations.
- Increased traffic due to residents, visitors, and business accessing the developed areas
- Potential for Increased solid waste impacting the waste management plan for Arandis Town Council and residents
- Loss of natural look of the environment due to the new development and man-made properties.
- Increased potential of social evils such as crime, prostitution proliferation, and abuse of the vulnerable groups (Children and women). Also potential for increased HIV infections and other communicable diseases

#### Beneficial impacts during township construction and operation

- Creation of employment opportunities for both skilled and unskilled labour.
- Improved livelihoods and income as a result of employment and provision of social benefits.
- Opportunity for capacity development and skills transfer.

- Contribution to the national economy through payment of rate and taxes.
- Increased income generation for local entrepreneurs and suppliers provide products and services to a new township.
- Environmental education and awareness opportunities that could contribute to efficient resource consumption as well as biodiversity protection.
- Potential to boost/expand serviced land delivery in Arandis Town
- The proposed development will improve the value of the land on and around the construction site.

## 5.2. Impacts assessment

The purpose of impact assessment and mitigation is to identify and evaluate the significance of potential impacts on identified receptors and resources according to defined assessment criteria and to develop and describe measures that will be taken to avoid or minimize any potential adverse effects and to enhance potential benefits.

### Description of key terms used:

**Environment** - the complex of physical, chemical, and biotic factors (such as climate, soil, and living things) that act upon individual organisms and communities, including humans, and ultimately determine their form and survival. It is also the aggregate of social and cultural conditions that influence the life of an individual or community. The environment includes natural resources and ecosystem services that comprise essential life-supporting functions for humans, including clean water, food, materials for shelter, and livelihood generation.

**Impact** - any consequence caused by a proposed activity on the environment, including effects on human health and safety, flora, fauna, soil, air, water, climate, landscape, and historical monuments, or other physical structures, or the interaction among those factors.

It also includes effects on cultural heritage or socio-economic conditions resulting from alterations to those factors.

**Project** - The features and activities that are a necessary part of the Project Proponent's development, including all associated facilities without which the Project cannot proceed. The Project is also the collection of features and activities for which authorization is being sought.

**Project Site** - The (future) primary operational area for Project activities. Private transport corridors (i.e., those dedicated for use solely by Project operational activities) are included as part of the Project Site.

**Project Footprint** - The area that may reasonably be expected to be physically touched by Project activities, across all phases. The Project Footprint includes land used on a temporary basis such as construction laydown areas or construction haul roads, as well as disturbed areas in transport corridors, both public and private.

Impacts are defined according to their nature and types as outlined below:

**Direction** - the ultimate long-term trend of the environmental effect i.e. positive or adverse.

**Magnitude** - is a measure of the degree of change in a measurement analysis (e.g. concentration of a metal in a water body) it can be classified as negligible, moderate, or high;

**Duration** - refers to the length of time over which an environmental impact may occur;

**Frequency** – the number of times during the project or specific project phase or activity that an environmental effect might occur (e.g., one time or multiple times) in a specified time period;

**Geographical extent** - the area where an environmental effect of a defined magnitude occurs, refers to the area that could be affected, could be local, regional, national or international extent;

**Probability of occurrence** – reflects the likelihood of the impact arising and could be one of the following; uncertain, improbable (low probability), probable (possibility of occurring), high probable (high likelihood), or definite (the impact will occur irrespective of mitigation measures);

**Impact 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).

By assessing each of the potential impacts to the criteria stipulated above, the EIA team established the significance of each impact before developing the mitigation measures to be implemented. Some of the mitigation measures are mentioned but detailed descriptions of management actions are contained in the accompanying EMP. The assessment process of identified impacts is outlined in Table 8 below:

**Table 7:** *Environmental impact assessment matrix for the proposed Township establishment in Arandis*

Impact	Status/nature	Extent	Duration	Intensity	Probability	Significance		
						Before mitigation	Mitigation applied	Post mitigation
Removal of vegetation and shrubs to prepare the site for serviced land and other construction facilities such as roads and other infrastructures.	Loss of biodiversity Loss of natural look.	Local	Long-term	Medium	Definite	High	Undertake site environmental assessments and consult with botanists to advise on restoration and landscaping activities. Provision of environmental awareness and briefing on plant protection	Medium/low

							during site preparation.	
Mortality of small animal species such as reptiles, beetles, and other insects due to habitat destruction and physical contact with construction equipment.	Habitat loss for animals and small insects	Local	Short	Medium	Definite	Medium	Remove species Encountered on-site and relocate them to a nearby similar environment.	Low
Visual impacts due to construction equipment on site. This could be a nuisance to people surrounding Arandis Town.	Loss of aesthetic value	Local	Short	Low	Definite	Low	Only keep the equipment needed on the construction site. All equipment and machineries to be kept in an orderly manner.	Low

Dust generation from construction (excavation and serving of land) could impact the local biodiversity and residents	Dust releases into the environment	Local	Temporary	Low	Highly probable	Low	Implement wet spraying methods on all surfaces to be excavated in order to suppress dust. Provision of personal protective equipment such as dust must be ensured for all personnel undertaking g work in dust areas.	Low
An increase in traffic could impact residents	Traffic congestion	Local	Temporary	Medium	Probable	Medium	Promoting safe driving and consideration	Low



							of other road users through regular safety briefings during operations	
Noise generation from construction equipment could impact the local biodiversity residents and employees	Negative impacts on personnel, the local public, and surrounding animal species	Local	Temporary	Medium	Definite	Medium	Limit the movement of heavy vehicles and machines to day time only. Employees should be provided with appropriate personal protective clothing and equipment	Low

							such as earplugs.	
Solid waste management impacts on the local environment (impacts on fauna and flora) as well as a nuisance due to littering.	Environmental Pollution	Local	Short	Medium	Definite	Medium	Minimise and eliminate the release of waste products into the environment. Promote waste management i.e. reduce, reuse, and recycle, and as a last resort landfill whatever cannot be reused or recycled.	Low

Potential impacts of soil erosion due to storm runoff as a result of excavated land and de-vegetation.	-Erosion -Proliferation of tracks -Negative excavation methods such as blasting.	Local	Long-term	Low	Probable	Low	Provide drainage systems. Restore vegetation removed to ensure the land remain intact. Landscape the site after construction.	Low
The potential spread of diseases among construction workers i.e. COVID-19, HIV, and other communicable diseases	Health deterioration	Regional	Long-term	Low	Probable	Low	Provide awareness about disease prevention and treatment.	Low
Increased potential of social evils such as prostitution proliferation and abuse of the	Social integration	Local	Long-term	Low	Probable	Medium	Promote public health and social awareness.	Low

vulnerable groups (Children and women).							Encouraging reporting of gender based violence and child abuse cases so that offenders are brought to justice.	
Potential impacts of stockpiles of construction material and debris on fauna and flora due to blockage.	Environmental Deterioration	Local	Short	Low	Probable	Low	Restrict construction materials to Well-defined areas. Regular inspection and maintenance of stockpiles disposal areas.	Low
Potential increase in crime due to the presence	Loss of property	Local	Temporary	Low	Probable	Low	Ensure that all crime related issues are	Low

of new employees and contract workers on site.							brought to justice by encouraging the reporting of crime incidents. Provide trained security guards on site.	
Potential Impacts on the surrounding environment due to sewage spills if the system not well controlled.	Soil contamination, environmental degradation and pollution	Local	Short	Medium	Highly probable	Medium	Ensure all hazardous substance containers are safe and clearly labelled. Ensure regular monitoring and maintenance of sewage systems.	Low

Extra pressure on resource use (water and energy) as a result of the construction of the new township.	Resource depletion	Local	Long-term	Medium	Definite	Medium	Promotion of sustainable and efficient resource use and monitoring of consumption.	Medium
Potential poaching for the meat of wildlife such as springboks, gemsbok, and other species present in the surrounding environment.	Loss of biodiversity	Local	Short	Low	Probable	Low	A security surveillance /checkpoint system should be installed for monitoring the area. Regular briefing of employees and contractors on the impacts and consequences of poaching.	Low

Potential impacts on culture due to the presence of people with different traditions, beliefs, and values.	Disorientated understanding and beliefs	Local	Short	Low	Probable	Low	Promotion of cultures through information sharing and storytelling activities.	Low
Creation of employment opportunities for both skilled and unskilled labour.	Positive impact on the community Development	Regional	Medium to Long-term	Medium	Define	Medium	Encourage the employment of local people.	Medium/High
Improved livelihoods and income as a result of employment and provision of social benefits.	Good standard of living	Regional	Long-term	Medium	Highly probable	Medium	Create job opportunities and social awareness.	Medium/high

Opportunity for capacity development and skills transfer.	Skills development and work opportunities	Regional	Long-term	High	Highly probable	Medium	Promote training opportunities to improve people's skills and capacity.	Medium
Increased income generation for local entrepreneurs and suppliers providing products and services to the new township establishment.	Good standard of living	Regional	Long-term	Medium	Highly probable	Medium	Promote local procurement of goods and services especially from small and medium enterprises.	Medium/high
Environmental education and awareness opportunities that could contribute to efficient resource consumption as	Sustainable development and resource protection	Local	Long-term	Medium	Probable	Medium	Implement environmental awareness and education activities, e.g. vegetation and shrubs	Medium/high



well as biodiversity protection.							identification, ecosystem services maintenance, etc.	
Opportunity to make serviced land available for building modern housing and economic infrastructure that will contribute to the local economy through payment of rates and to the national economy at large through the payment of taxes.	Stable economy	National	Long-term	Low	Definite	Low	Provide effective and efficient services to residents and businesses	Low

## CHAPTER 6: ENVIRONMENT MANAGEMENT PLAN

### 6.1 Environmental management plan

This section is aimed at describing The Environmental Management Plan (EMP) for the layout and township establishment of Oletweni proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1, and Oletweni Extension 2 in Arandis. The EMP stipulates the management of environmental programs in a systematic, planned, and documented manner. The EMP below includes the organizational structure, planning, and monitoring for environmental protection at the proposed development site and the surrounding environment. The aim is to ensure that Arandis Town Council maintains adequate control over the layout and township establishment in order to:

- Prevent negative impacts where possible;
- Reduce or minimise the extent of impact during the project life cycle
- Prevent long term environmental degradation.

This Environmental Management Plan (EMP) is the key document for the management of environmental issues in all works to be undertaken during the layout and township establishment. The EMP provides information and guidance on how the development and operation of the township will ensure compliance with environmental requirements in terms of adhering to environmental legislation and other requirements for good practice as well as by minimizing the adverse environmental impacts. Also, this document will serve as a blueprint towards providing an integrated management system to facilitate the incorporation of environmentally sustainable development practices throughout the construction works and township operation. Fully implementation of this EMP will ensure that the layout and township establishment's goal of ensuring environmentally friendly practice will be met.

## 6.2 Objectives of the environmental management plan

The EMP provides the environmental measures to be implemented covering all construction works and activities to be carried during the township establishment. It has been developed based on on-site assessment information collected during site visits and on information obtained from interviews conducted with the Arandis Town Council as well as environmental requirements associated with infrastructure layout and establishment.

The general objectives include the following:

- To formulate methods and procedures necessary to meet environmental objectives and targets for the township establishment;
- Minimise or eliminate the release of waste products on the environment;
- To enable township management and contractors to identify and record environmental aspects, safety hazards, and risk during township construction and operation;
- Develop a user-friendly document that ensures environmental commitment, management, and mitigation measures are implemented, monitored, audited, and improved;
- Promote environmental training and awareness among all employees and contractors;
- Promote environmental protection through upholding environmental standards;
- Minimise impacts on the surrounding community during construction work and operation;
- Promote sustainable development;
- Meet the requirements of all relevant legislation pertaining to the layout and township establishment.

### 6.3 Environmental management program

**Table 8:** Environmental management plan for the construction and operational phases

Topic/Potential Impact	Mitigation management and enhancement measures	Means of verification	Responsibility	Monitoring procedure
Occupational Health and Safety	Provide health and safety training to the construction and renovations workforce (including sub-contractors, temporary workers, and drivers)	Training performed and recorded	Arandis Town Council Management, Contractor Site Managers	Check Training records
	Ensure site premises are provided with appropriate fencing (where applicable) and lighting. Use hazard notices/signs/barriers to prevent access to dangerous areas.	H&S planning of construction site done, items installed	Arandis Town Council Management, Contractor Site Managers	Random site inspection
	Ensure speed limits on-site and on transporting routes.	Speed signs installed	Arandis Town Council Management,	Random site inspection

<b>Topic/Potential Impact</b>	<b>Mitigation management and enhancement measures</b>	<b>Means of verification</b>	<b>Responsibility</b>	<b>Monitoring procedure</b>
			Contractor Site Managers	
	Ensure the use of Personal Protective Equipment (PPE) for workers.	PPE used on-site by workers	Arandis Town Council Management, Contractor Site Managers	Random site inspection
Fire Prevention	Provide necessary fire prevention equipment on site in line with applicable regulations.  Train employees on fire prevention and fire suppression techniques and equipment	Fire prevention equipment in place	Arandis Town Council Management, Contractor Site Managers	Regular site inspection
Ambient air -Dust pollution from construction	Ensure spraying with water on dusty surfaces during construction work.	Water spraying,  PPE in place	Arandis Town Council Management,	Random site inspection, an inspection of surface and material

<b>Topic/Potential Impact</b>	<b>Mitigation management and enhancement measures</b>	<b>Means of verification</b>	<b>Responsibility</b>	<b>Monitoring procedure</b>
(excavation and serving of land)	Generally, keep dust-generating surfaces in damp conditions.		Contractor Site Managers	
	Cover truck sand and gravel loads with canvas to avoid dust blows.	Truck covered	Arandis Town Council Management, Contractor Site Managers	Random site inspection
	Ensure optimal traffic routes. Enforce vehicle speed limits on unpaved roads.	Speed limit signs, driver training records	Arandis Town Council Management, Contractor Site Managers	Random site in section
	Ensure appropriate stockpile management (friable materials) to minimise dust blow. Minimise drop heights for material transfer activities such as unloading of friable materials.	No extensive dust blow	Arandis Town Council Management, Contractor Site Managers	Random site inspection

<b>Topic/Potential Impact</b>	<b>Mitigation management and enhancement measures</b>	<b>Means of verification</b>	<b>Responsibility</b>	<b>Monitoring procedure</b>
Noise and vibration at the Township establishment site	Limit the hours of operation for specific pieces of equipment or operations, especially high noise generating equipment (typically between 8 am to 5 pm)	Minimal noise work conducted between 8 am and 5 pm/ Grievance Mechanism	Arandis Town Council Management, Contractor Site Managers	Random site inspection, Review of filed grievances, review of timesheets of workers
	Use protective hearing equipment for workers conducting noisy activities.	Protective hearing equipment used.	Arandis Town Council Management, Contractor Site Managers	Random site inspection
Sewage management	Sewage treatment facility to be maintained regularly to ensure efficient function at all times. -Employees working closer to the sewage treatment area to be provided with personal protective equipment.	No sewage spill was observed on site. Record of sewage maintenance and cleaning work.	Arandis Town Council Management, Contractor Site Managers	Random site inspection

Topic/Potential Impact	Mitigation management and enhancement measures	Means of verification	Responsibility	Monitoring procedure
	<p>-Ensure good housekeeping to prevent unnecessary odours.</p> <p>-Waste disposal example sewage sludge to be done appropriately and by qualified waste handlers.</p>			
General waste management	Collect and segregate wastes and ensure safe storage and in line with legal requirements.	Waste collection areas existent, waste inventories	Arandis Town Council	Random site inspection, Review of waste inventories
	Ensure disposal through waste contractors licensed for treatment/removal/recycling of each of the waste types.	Disposal through licensed contractors	Arandis Town Council	Random site inspection, Inspect offsite waste disposal facilities if feasible



<b>Topic/Potential Impact</b>	<b>Mitigation management and enhancement measures</b>	<b>Means of verification</b>	<b>Responsibility</b>	<b>Monitoring procedure</b>
	Ensure appropriate and safe storage of contaminants such as fuels, construction materials, and wastes. Provide absorbent and intervention materials in sufficient quantities and at relevant locations for intervention in case of leakages/spills.	Safe storage of hazardous materials, Spill remediation equipment in place.	Arandis Town Council	Random site inspection
	Ensure immediate cleaning of any spills and remediation of contaminated areas during the renovations	Workers trained.	Arandis Town Council Management, Contractor Site Managers	Random site inspection
Traffic and transport -	Ensure safe driving by Project personnel (e.g. through training/induction).	Driver Training Records as part of Induction training	Arandis Town Council Management, Contractor Site Managers	Review of training records

<b>Topic/Potential Impact</b>	<b>Mitigation management and enhancement measures</b>	<b>Means of verification</b>	<b>Responsibility</b>	<b>Monitoring procedure</b>
Disruption, noise, and increased air pollution	Ensure use of the roadworthy vehicle for personnel and material transportation	Records of vehicle daily checks	Arandis Town Council Management, Contractor Site Managers	Random inspection
Biodiversity, conservation, i.e. fauna and flora	Give strict warnings to employees Not obeying conservation rules and regulations. Seek advice /guidance of botanists before removing vegetation in the case that large vegetation-covered areas are to be excavated. Monitor wildlife and other species in the area.	A vegetation survey was done. Written communication with a botanist. Records of wildlife and other species monitoring.	Arandis Town Council	Ongoing monitoring
Heritage and Culture	Artefacts, objects, and new findings should remain in place all the time until a heritage specialist	No presence of destructed heritage object/objects.	Arandis Town Council Management,	Ongoing monitoring during construction

Topic/Potential Impact	Mitigation management and enhancement measures	Means of verification	Responsibility	Monitoring procedure
	<p>/archaeologist is contacted and brought in to advice on further action.</p> <p>Employees and contractors to be briefed regularly on how to deal with discovered heritage objects. Briefing to include explanation using visual objects to show people what is regarded as heritage objects.</p>		Contractor Site Managers	
Social issues	<ul style="list-style-type: none"> <li>- Regular briefing on awareness and prevention of substance abuse should be promoted and conducted to create awareness on the danger of alcohol, drugs, and other substances.</li> <li>-Ensure that emergency numbers are always displayed on sites and shared with all employees and contractors.</li> <li>-Avoiding driving at night, to minimise robberies.</li> </ul>	No evidence of substance abuse, robbery, and theft.	Arandis Town Council Management, Contractor Site Managers	Ongoing monitoring.

<b>Topic/Potential Impact</b>	<b>Mitigation management and enhancement measures</b>	<b>Means of verification</b>	<b>Responsibility</b>	<b>Monitoring procedure</b>
HIV/AIDS COVID-19 Other communicable diseases	<ul style="list-style-type: none"> <li>- Regular conduct of communicable diseases awareness programs for employees including teaching on preventative measures and counselling of affected individuals.</li> <li>-Distribute condoms for employees to ensure protection for those involved in sexual activities.</li> <li>Ensure distribution of face masks and hand sanitizers.</li> <li>-Ensure there is no discrimination nor stigma against affected employees.</li> </ul>	Record of awareness program conducted Training manuals Poster information	Arandis Town Council Management, Contractor Site Managers	Ongoing monitoring.

## 6.4 Roles and responsibilities

All the personnel involved in the construction and operation of the proposed Arandis Township including the Arandis Town Council employees, township management, contractors, and subcontractors are responsible for contributing to good environmental performance for their respective activities and for fulfilling the overall environmental obligations.

### Management Responsibility

The top management of Arandis Town Council shall provide leadership and commitment with regards to environmental protection and will ensure that the environmental policies and objectives are drawn up and are continually reviewed to assess their effectiveness with an eye for continuous improvement. The Arandis Town Council and Arandis Township management are responsible for compliance with legal legislations and other requirements pertaining to environmental protection and shall provide the necessary resources and environmental training to ensure effective implementation of the environmental management plan. They have the overall accountability for ensuring full implementation of the environmental policy objectives that will give effect to the execution and monitoring of the environmental management plan. In fulfilling its obligation, Arandis Town Council and Arandis Township management shall appoint environmental representatives and provide them with competence training to carry out environmental management and compliance work.

### Employees

All employees have the obligation to ensure the protection of the environment through adhering to work procedures, carrying out inspections, identification, monitoring, and reporting of activities or aspects that may cause environmental impacts. Employees appointed as environmental representatives/officers for the Township establishment shall facilitate direct contact with other employees, contractors, and management regarding carrying out of respective environmental requirement obligations and shall report performance and propose measures and advice for environmental performance improvement on the Township establishment.

## Contractors and subcontractors

All contractors appointed by Arandis Town Council are responsible to ensure that they adhere to policies and procedures, and environmental management plans to ensure environmental protection during construction and maintenance work.

All contractors are required to have environmental representatives and shall ensure that they receive the required environmental competence training on-site supported by the Arandis Town Council and facilitated through the Township establishment environmental representatives/officers.

### 6.5 Environmental training and awareness

Training is one of the key elements in ensuring environmental compliance in any workplace. Arandis Town Council and Arandis Township management will ensure that all employees and contractors involved in the construction and operation receive environmental awareness and training. All employees and contractors will be made aware of their specific obligations and responsibilities in relation to the environmental management plan implementation and protecting the environment.

### 6.6 Monitoring

Monitoring is a continuous and systematic process that is important for informing decision making and policy design. Monitoring includes observing the implementation of the proposed mitigation measures to assess their efficiencies and the development of alternative or supplementary mitigations measures when the expected results are not reached. In the case that the Arandis Town Council lack sufficient technical capacity in environmental and social management aspects, this EIA recommends that the environmental monitoring of the EMP should be monitored by a competent environmental representative to be appointed if the Town Council does not already have one or appointing an existing employee, and providing him/her with necessary environmental training to carry out monitoring work. The environmental representative will compile weekly environmental and social monitoring reports regarding EMP implementation and preventive and corrective actions required.

Recommended monitoring activities proposed for the construction activities for the township establishment are listed in the table on the next page.

**Table 9:** Recommended monitoring activities during the Construction of the Township establishment

<b>Monitoring Parameters</b>	<b>Monitoring Location</b>	<b>Measurement unit/Method</b>	<b>Target Level/Standard</b>	<b>Monitoring Frequency</b>	<b>Responsibility for monitoring</b>
Dust pollution	Township establishment site and surrounding areas	Visual inspection	No complaints from employees, contractors, and the public.	Daily	Environmental representative
Noise	Township establishment site and surrounding areas	Noise recorder	Standard noise level not exceeded. No complaints from employees, contractors, and the public.	Daily	Environmental representative
Waste generation	Township establishment site	Visual inspection	No complaints from employees, contractors, and the public.	Daily	Environmental representative

Fire management	Township establishment site	Visual inspection	<p>All personnel trained in fire management and control measures.</p> <p>Minimum or a sufficient number of firefighting equipment kept on the site.</p> <p>Good housekeeping maintained.</p> <p>Schedule for inspection and testing of firefighting equipment documented and communicated</p>	Daily	Environmental representative, all employees, and contractors
Health, Safety, and security	Township establishment site, Arandis Town, public roads	Visual inspection, Record of health, safety, and security incidences/deviations	Number of incidences/deviations recorded	Daily	Environmental representative, Arandis Town Council Management, all employees and contractors



Water and energy consumption	Township establishment site	Recording of water in litres and electricity in kWh	Daily readings for water and energy (e.g. Diesel/petrol) consumption recorded	Daily	Environmental representative
Socio-economic upliftment	Local population and businesses	A number of unskilled jobs were contracted to local people.	Local people contracted. Local procurement of construction material and consumable goods	Ad hoc	Arandis Town Council Management, Contractor Site Managers
Grievances and complaints	Township establishment site and surrounding areas	Receive and register all grievances and complaints from employees and contractors, and the general public.	Minimal grievance and complaints received	Project phase	Environmental representative, Arandis Town Council Management, Contractor Site Managers
COVID-19	Township establishment site and surrounding areas	Visual inspection to detect anyone with the signs of COVID19. Daily checking of body temperatures of everyone coming in contact with the construction work.	No unnecessary movement and gathering. Monitoring of personnel body temperature and everyone that comes in contact with the project work. Anyone with a body temperature reading of more than 37 degree Celsius or showing	Daily	Environmental representative, all employees, and contractors are required to report any COVID19 suspected incidents

			COVID-19 related symptoms are to be isolated with immediate effect, and the situation reported to medical officers/health authority.		
General Housekeeping	Township establishment site	General cleanliness and housekeeping maintained	Maintain a conducive environment that promotes health and wellbeing. On a regular base update, emergency response plans, standard operating procedures, and monitor their implementation effectiveness. Monitor cleanliness of the site and housekeeping.	Daily	Environmental representative, Arandis Town Council Management, Contractors

## CHAPTER 7: CONCLUSION

The proposed layout and township establishment of Oletweni proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1, and Oletweni Extension 2 in Arandis will lead to a number of negative environmental impacts, however, if the proposed environmental management plans are effectively implemented the impacts will be reduced to negligible levels. Measures will be implemented to monitor and evaluate the implementation and effectiveness of the management plans and improvement recommended where necessary. It is required of Arandis Town Council to be accountable for the socio-economic and environmental consequences caused as a result of Arandis township development and operation, and to harmonize its project activities with policies, legal frameworks as well local inhabitants' recommendations.

Key environmental impacts of the construction and operation of the layout and township development are listed below:

- Physical destruction (from land clearing and construction) of the vegetation and plant species which provides essential ecosystem services and maintenance of biodiversity.
- Environmental degradation as a result of impacts associated with construction activities.
- Change in the landscape, visual and aesthetic
- Air quality and dust impacts
- Pressure on local services such as existing sewerage, water supply, traffic, solid waste management, and power supply.
- Social nuisance
- Increased traffic due to construction vehicle and equipment during construction

To achieve the best environmental management practice that promotes continuous improvement, effort should be taken by Arandis Town Council to employ and support an environmental management office/expert to ensure full implementation and monitoring and evaluation of the proposed environmental management plans.

The following recommendations are further suggested:

- Protect, restore and enhance the environment by operating in a way that maintains the eco-balance;
- Employ an operational or ongoing restoration program on cleared land;
- Engage with relevant stakeholders pertaining to environmental and socio-economic issues.
- Promote and support environmental stewardship.

It is hereby praised that the proposed layout and township establishment of Oletweni proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1 and Oletweni Extension 2 in Arandis be approved for Environmental Clearance as it will subject to meeting the following conditions:

- The proponent will comply with the environmental clearance conditions;
- The proponent will ensure full commitment in implementing the proposed environmental management plans and adherence to applicable legislation and other requirements.
- The proponent will report regularly to the Ministry of Environment and Tourism results of environmental audits undertaken, reportable incidents (major environmental deviation /incidents), and preventive and corrective actions taken thereof.

## 9. REFERENCE

- Climate-Data.org*. (n.d.). Retrieved October 23, 2020, from Climate Arandis:  
<https://en.climatedata.org/africa/namibia/erongo-region/arandis-1326/>
- Namibia Statistics Agency (NSA), 2011. *Namibia 2011 Population and Housing Census Preliminary Results*.
- Ninham Shand Consulting Services. (2008). *Social and Environmental Impact Assessment: Proposed Expansion Project for Rossing Uranium Mine in Namibia*.
- Sipunga, E. 2019. *RE:Queries*. Received by Lloyd Lynch, 23 August 2019.
- Speiser, A. and Mulder, S. 2012. *Scoping Report for the proposed Arandis Thermal Power Generation and Waste Oil Recycling Plants*.
- World Weather Online. 2020. *World Weather Online*. Retrieved October 23, 2020, from Arandis Monthly Climate Averages: <https://www.worldweatheronline.com/arandis-weatheraverages/erongo/na.aspx>.

## APPENDIX 1: BACKGROUND INFORMATION DOCUMENT

### BACKGROUND INFORMATION DOCUMENT

LAYOUT AND TOWNSHIP ESTABLISHMENT OF OLETWENI PROPER, RÖSSING HEIGHTS PROPER, ANTON LUBOWSKI PROPER, OLETWENI EXTENSION 1 AND OLETWENI EXTENSION 2 IN ARANDIS

<b>Project Information</b>	
<b>Project title</b>	Layout and township establishment of Oletweni Proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1, and Oletweni Extension 2 in Arandis
<b>Proponent</b>	Arandis Town Council
<b>Contact Person</b>	Silvanus Makili +264615125400, <a href="mailto:technical@atc.com.na">technical@atc.com.na</a>
<b>Consultant:</b>	Candy Consultancy cc
<b>Consultant contact person</b>	Gabriel Joseph +264813796358
<b>Postal Address</b>	P.O.Box 55226 Rocky Crest <b>Windhoek</b>
<b>Email</b>	<a href="mailto:liliankondigo@gmail.com">liliankondigo@gmail.com</a> or <a href="mailto:candyconsultancy@gmail.com">candyconsultancy@gmail.com</a>

05<sup>th</sup> October 2020

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## 1. Project description and background

The Arandis Town Council like any other local authorities in the country is mandated by the Ministry of Urban and Rural Development to implement a strategic objective on accelerating the delivery of serviced urban land and housing. At the moment the Arandis Town Council has a backlog of approximately 800 erven. It is against this background the Council proposes to undertake layout and township establishment north and east of the existing urban area of Arandis. The layout is to cater to the following land uses:

- Residential erven for lower middle income
- Residential erven for middle income
- A Techno Park for the development of clean technology and green industries and supporting facilities
- Retail, institutional, general residential, recreational, and government facilities for the support of the large urban area.

One of the Arandis Town Council's objectives is to provide affordable serviced erven to its residents especially for the lower and middle-income groups as well as to avail serviced land for other infrastructure development that will contribute to the upliftment of the town and local livelihood improvement.

The proposed township establishment is located on the Remainder of Farm Arandis Townlands No 170, termed "Undetermined" and as such township establishment can be permitted. The site is currently vacant and the soil and terrain conditions are suitable for urban development. No endangered floral and faunal species are known to inhabit the area and the site is in very close proximity to already in habitat urban area of Arandis. The development of this new residential neighborhood for lower and middle-income housing is combined with the development of a more diversified local economy. In coming to this initiative the Council used the concept of "Work, Live and Play" within an urban area and this is why the proposed township establishment provides a mix of residential, institutional, retail, industrial, and recreational land uses.

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The remainder of the farm Arandis Townlands has been divided into five portions as follows:

6. Portion A (approx. 37.88ha) for Arandis Extension 8 - Oletweni Proper
7. Portion B (approx. 42.13ha) for Arandis Extension 9 - Rössing Heights Proper  
Portion C (approx. 91.89) for Arandis Extension 10 - Anton Lubowski Proper
8. Portion D (approx. 41.63ha) for Arandis Extension 11 - Oletweni extension 1
9. Portion E (approx. 47.94ha) for Arandis Extension 12 - Oletweni extension 2

Layout and township establishment involves activities such as the construction of bulk pipelines, electrical cableways, and roads, these are activities that may not be undertaken without an environmental clearance certificate, therefore an Environmental Impact Assessment (EIA) process is required to obtain required authorization for the activities to be carried out.

## 2. Legal requirements

Candy Consultancy cc has been appointed by the Arandis Town Council as an independent Environmental Assessment Practitioner based in Windhoek Namibia to undertake the EIA process. The EIA process for this assessment will be conducted in accordance with the Government Gazette No. 3966 in terms of the Environmental Management Act (Act 7 of 2007) Environmental Impact Assessment regulations.

The Environmental Management Act (EMA) and EIA regulations list activities that may have a significant impact on the environment and which may not be undertaken without an environmental clearance certificate. Activity 5, listed under the EMA and EIA regulation is the main activity associated with the proposed township establishments or extensions, calling for an EIA process to be followed.

GN No. 3966 (Item 5, 5.3) – Land Use and Development Activities, (5.3) Establishment of land resettlement schemes. This project proposes to alter an undeveloped land at Oletweni Proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1, and Oletweni Extension 2 (which totals approximately 261 hectares) to provide formal housing and other infrastructure development.



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### 3. Purpose of this document

The purpose of this Background Information Document (BID) is to provide a brief description of the project and EIA process that will be followed and to obtain comments and contributions from Interested and Affected Parties (I&APs) on the issues relating to the proposed development that will be undertaken in Arandis, Erongo Region, Namibia.

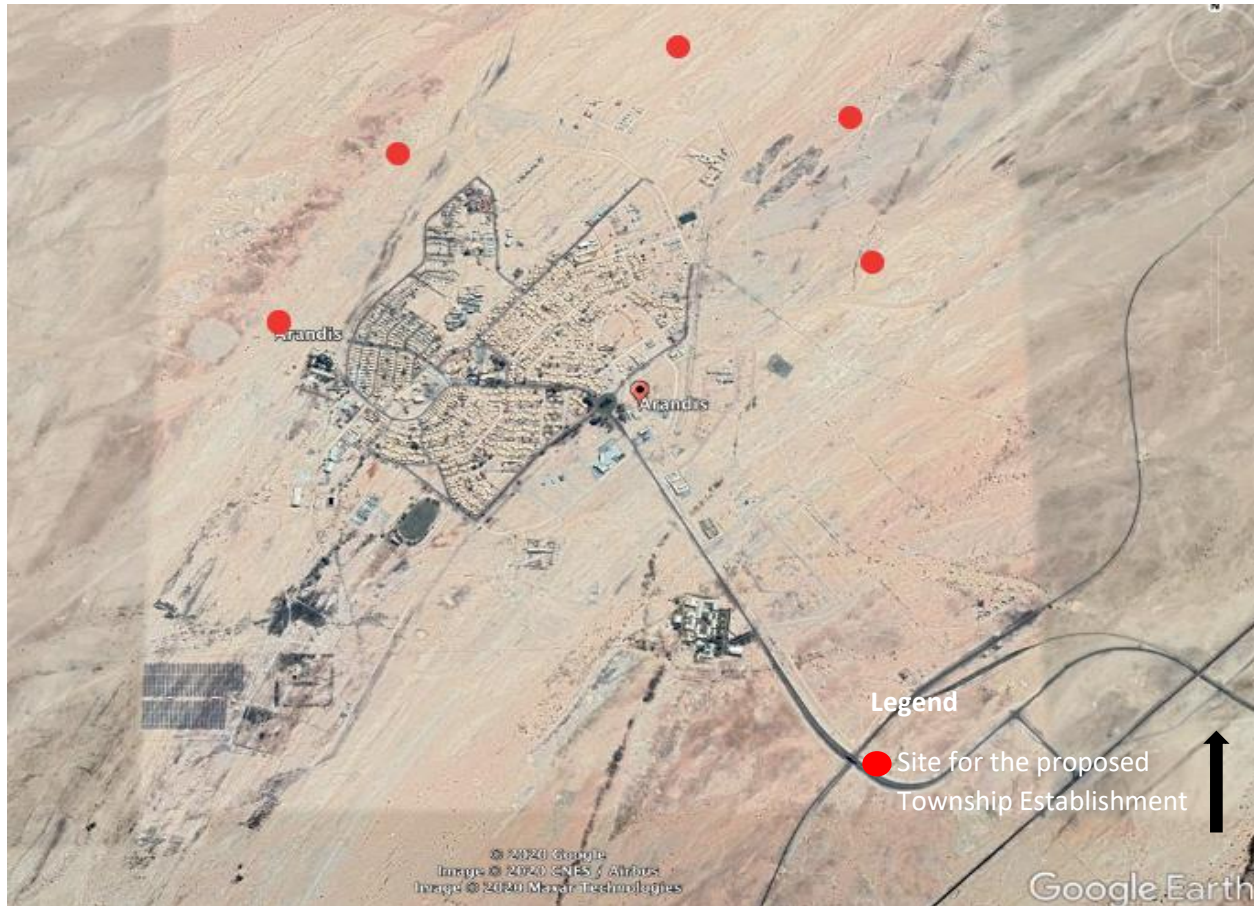
This document further indicates how you can become involved in the project, receive information, or raise issues that may concern and/or interest you. The sharing of information forms the basis of the Public Participation Process and offers you the opportunity to become actively involved in the project from the outset. The BID also provides an opportunity for I&APs to register for the EIA process and to submit any initial comments, concerns, or issues regarding the proposed project.

### 4. Location of the proposed layout and township establishment

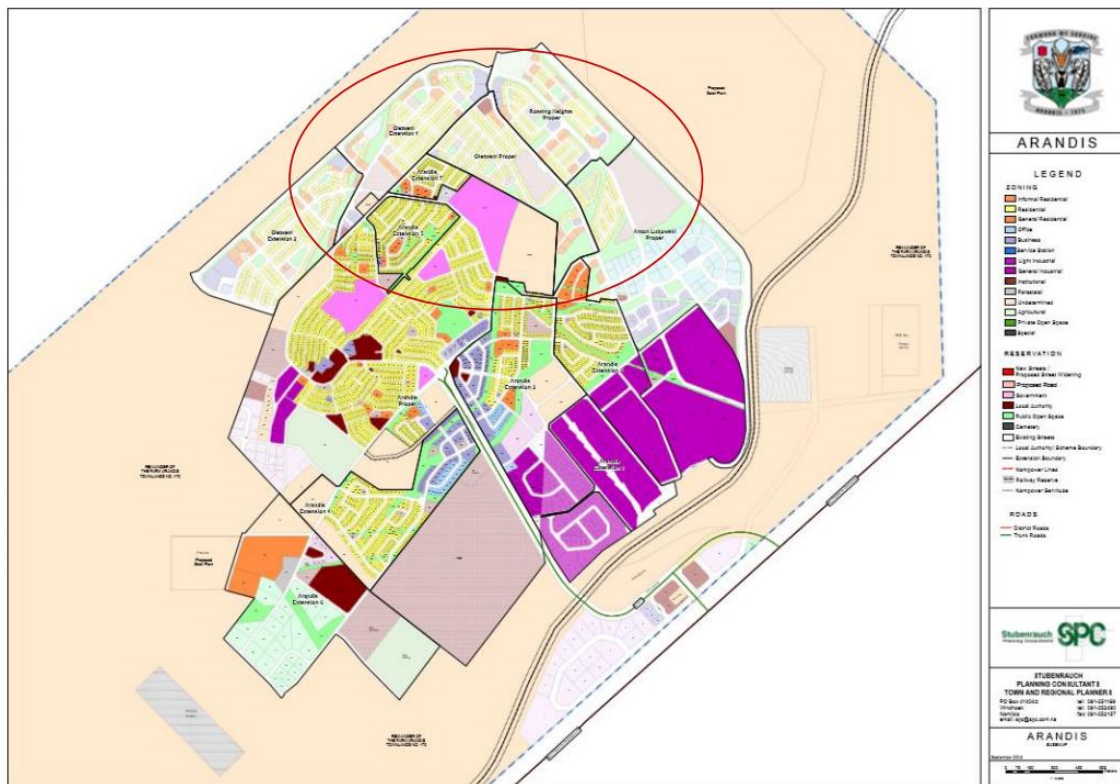
Arandis Town is located 15 km outside of the world`s largest open-pit uranium mine operated and managed by the China National Nuclear Corporation, (CNNC). The town falls within the geographic coordinates of 22°25` 06.64"S and 14°58`28.10"E in the Erongo region.

The town was established for the workers of Rössing Uranium in 1978, Arandis was granted self-administration and “town” status in 1994. Currently, it has approximately 7,600 inhabitants, most of whom are somehow connected to the mine, and owns 29 square kilometres (11 sq mi) of land. Arandis is the home of the main campus for the Namibian Institute of Mining and Technology (NIMT), a technical institute focusing on training skilled industrial workers.

The proposed site for layout and township establishment is located within the boundaries of the town of Arandis as depicted in figure 1, 2, and 3 below:



**Figure 1:** Earth map for Arandis, including the site of the new proposed Township Establishments (source google earth, 2020).



**Figure 2:** Zoning map for Arandis, including the new Proposed Layout and Township Establishments “(source ATC, 2018).



**Figure 3:** The proposed site for layout and township establishment within the boundaries of the of Arandis town.

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## 5. The EIA Process

### 5.1 Public Participation

The public participation process aims to inform a wide range of I & Aps/stakeholders about the proposed development and the environmental process to be followed. It is a way to allow the public to exchange information and to express their views and concerns on the proposed development for which the EIA is being conducted. The public participation process assists in identifying potential issues and concerns that need to be addressed in the assessment process and the formulation of an environmental management plan.

The public and relevant Authorities will be notified of the proposed development through newspaper adverts, site notice, and direct consultation especially the neighbours to the proposed site for township establishment and relevant stakeholders of Arandis Town Council. In light of the current situation of the COVID-19 pandemic, online communications and public engagements will be utilized to prevent overcrowding as well as to provide an opportunity for inclusive public participation. Candy Consultancy cc has made some consideration to conduct the EIA public meeting following the restriction measure put in place by the government i.e. not more than 50 people physically gathering. As such, to ensure the inclusion of all I&APs, the public meeting will be also online for which the online platform link will be made available in time to I&AP and other stakeholders.

### 5.2 Identification of Impacts

Environmental issues, concerns, issues, layout, and township establishment constraints will be identified using expert and professional judgment, project information, the experience of similar projects, site investigation, and consultation with authorities and stakeholders/ I&APs. Impact Evaluation

The significance of environmental issues will be evaluated in terms of their expected extent, intensity, duration, and probability of occurrence.

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### 5.3 Mitigation, Management Measures and monitoring

Mitigation measures will be formulated to prevent, manage, and minimize negative impacts to acceptable levels. Measures will be developed to maximize the positive impacts of the development. A monitoring plan will be developed to ensure the monitoring of mitigation measures implemented during the construction phase of the township establishment.

### 5.4 Environmental Reporting

The draft scoping report will be made available online to all registered stakeholders/I&APs and relevant authorities for review and comments. After receiving the reviews and comments, a final environmental assessment report will be compiled in which the comments received will be incorporated and addressed.

### 5.5 Environmental Commissioner Decision

The final environmental assessment report together with the completed application form for environmental clearance certificate will be submitted to the office of the Environmental Commissioner who will then make a decision whether the new township establishment should go ahead or not based on the assessment presented and associated mitigation measures.

## **3. Anticipated preliminary impacts identified**

The following provides a list of preliminary positive and negative impacts of the proposed township establishment for all the dimensions of sustainable development i.e. economic, social, and environmental, these will be investigated and addressed during the environmental impact assessment to lessen negative impacts and enhance the positive ones. Identified impacts will be managed through a developed Environmental Management Plan (EMP) which will be made available for public review together with the EIA report.

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## 6.1 Positive impacts

- Job creation during the construction phase
- Availability of affordable serviced erven for housing and other infrastructure development
- Increased property values
- Investment in Arandis local area.

## 6.2 Negative impacts

- Physical destruction (from land clearing and construction) of the vegetation and plant species which provides essential ecosystem services and maintenance of biodiversity.
- Environmental degradation as a result of impacts associated with construction activities.
- Change in the landscape, visual and aesthetic
- Air quality and dust impacts
- Pressure on local services such as existing sewerage, water supply, traffic, solid waste management, and power supply.
- Social nuisance
- Increased traffic due to construction vehicle and equipment during construction

## **4. Your role as an interested and affected party**

As an I & AP you are expected to do the following:

Register as an I&AP and provide your comments, concerns, or issues if there are any. Comments, concerns, or issues can be submitted in writing by completing the comments form or can raise in person during the public consultation meeting . Attend a public meeting (physical attendance or virtually) regarding this proposed development and obtain and contribute information about the project. Announcement for the date and venue of the public meeting will be advertised in the local newspaper and site poster which will be displayed on the site and other public spaces. Review and provide comments if there are any on the draft scoping report.

Please complete the enclosed registration or comment form or contact Candy Consultancy cc to register as an I&AP.

### 5. Comment Form

<b>COMMENT FORM</b>			
<b>Layout and township establishment of Oletweni Proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1, and Oletweni Extension 2 in Arandis REGISTRATION</b>			
NAME			
ORGANISATION			
POSTAL ADDRESS			
POSTAL CODE		FAX NUMBER	
TELEPHONE NUMBER		CELL NUMBER	
EMAIL			
DATE		SIGNATURE	
I WOULD LIKE TO ATTEND PUBLIC MEETING		YES	NO
PLEASE IDENTIFY YOUR INTEREST IN THE PROPOSED PROJECT:			
PLEASE WRITE YOUR COMMENTS, CONCERNS/SUGGESTIONS HERE:			
<p><b>Kindly return this completed document (with all requested details) to:</b>  <b>Candy Consultancy cc</b>  <b>Attention Mr. Gabriel Joseph</b>  <b>2295, Hannover street Windhoek</b>  <b>Telephone: +264 81 379 6358</b>  <b>Email: <a href="mailto:candyconsultancy@gmail.com">candyconsultancy@gmail.com</a> or <a href="mailto:liliankondigo@gmail.com">liliankondigo@gmail.com</a></b></p>			

## APPENDIX 2: PUBLIC CONSULTATION/ENGAGEMENT

### 2.1 EIA and public meeting announcement at Arandis Town Council notice board and site notice at the development site.





## 2.2 EIA and public meeting announcement in the *Confidante* and New Era newspapers.

**PUBLIC NOTICE**

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED LAYOUT AND TOWNSHIP ESTABLISHMENT IN ARANDIS  
Candy Consultancy cc hereby give notice to all potentially interested and Affected Parties (I&APs) that an application will be made to Environmental Commissioner in terms of the Environmental Management Act (No 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 of 6 February 2012) for the following activity:

**PROJECT NAME:** Layout and township establishment of Oletweni Proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1 and Oletweni Extension 2 in Arandis  
**PROJECT LOCATION:** Arandis, Erongo Region  
**PROponent:** Arandis Town Council  
**ENVIRONMENTAL CONSULTANT:** Candy Consultancy cc

**PROJECT DESCRIPTION:**  
The project will comprise the following activities:  
Clearing of land, servicing of land (sewerage system, water pipes and electricity infrastructures), and construction of roads to make serviced land available for housing development and other infrastructure in the extensions of Oletweni Proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1 and Oletweni Extension 2 in Arandis.

**Public Meeting:**  
Date: 10 October 2020  
Time: 11h00  
Venue: Arandis Town Hall

**REGISTRATION OF I&APs AND SUBMISSION OF COMMENTS:**  
In line with Namibia's Environmental Management Act (No. 7 of 2007) and EIA regulations (GN 30 of 6 February 2012), all I&APs are hereby invited to register and submit their comments, concerns or questions. All I&APs will be provided with a Background Information Document (BID) consisting of descriptive information about the development activity. Should you wish to register as an I&AP, kindly contact Candy Consultancy cc on the contact details below. In light of the current COVID-19 pandemic the meeting can also be followed online at the link that will be provided on request.

**Lilian Ondigo, Tel: +264 (0) 81 826 8996**  
Email: lilianondigo@gmail.com or candyconsultancy@gmail.com  
**CLOSING DATE FOR COMMENTS:**  
**23 October 2020**




Confidante Newspaper, 1<sup>st</sup> Oct 2020

**PUBLIC NOTICE**

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED LAYOUT AND TOWNSHIP ESTABLISHMENT IN ARANDIS  
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**ENVIRONMENTAL CONSULTANT:** Candy Consultancy cc

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**Lilian Ondigo, Tel: +264 (0) 81 826 8996**  
Email: lilianondigo@gmail.com or candyconsultancy@gmail.com  
**CLOSING DATE FOR COMMENTS:**  
**23 October 2020**




Confidante Newspaper, 8<sup>th</sup> Oct 2020

## PUBLIC NOTICE

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED LAYOUT AND TOWNSHIP ESTABLISHMENT IN ARANDIS  
Candy Consultancy cc hereby give notice to all potentially Interested and Affected Parties (I&APs) that an application will be made to Environmental Commissioner in terms of the Environmental Management Act (No 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 of 6 February 2012) for the following activity:

**PROJECT NAME:** Layout and township establishment of Oletweni Proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1 and Oletweni Extension 2 in Arandis  
**PROJECT LOCATION:** Arandis, Erongo Region  
**PROPOSER:** Arandis Town Council  
**ENVIRONMENTAL CONSULTANT:** Candy Consultancy cc

### PROJECT DESCRIPTION:

The project will comprise the following activities:  
Clearing of land, servicing of land (sewerage system, water pipes and electricity infrastructures), and construction of roads to make serviced land available for housing development and other infrastructure in the extensions of Oletweni Proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1 and Oletweni Extension 2 in Arandis.

### Public Meeting:

Date: 10 October 2020  
Time: 11h00  
Venue: Arandis Town Hall

### REGISTRATION OF I&APs AND SUBMISSION OF COMMENTS:

In line with Namibia's Environmental Management Act (No. 7 of 2007) and EIA regulations (GN 30 of 6 February 2012), all I&APs are hereby invited to register and submit their comments, concerns or questions. All I&APs will be provided with a Background Information Document (BID) consisting of descriptive information about the development activity. Should you wish to register as an I&AP, kindly contact Candy Consultancy cc on the contact details below. In light of the current COVID-19 pandemic the meeting can also be followed online at the link that will be provided on request.

Lilian Ondigo, Tel: +264 (0) 81 826 8996  
Email: liliankondigo@gmail.com or  
candyconsultancy@gmail.com  
**CLOSING DATE FOR COMMENTS:**  
23 October 2020



Page 24 | CONFIDENTE | April 06, 2021

# Classifieds

Contact: Mandy  
Tel: 061 243530 C: 081 895 8296  
E: mandy@confidentenepc.com

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ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED LAYOUT AND TOWNSHIP ESTABLISHMENT IN ARANDIS  
Candy Consultancy cc hereby give notice to all potentially Interested and Affected Parties (I&APs) that an application will be made to Environmental Commissioner in terms of the Environmental Management Act (No 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 of 6 February 2012) for the following activity:

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and more

061 243 5330  
061 243 5331

### Ekwak Consulting

**PUBLIC NOTICE**  
ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED LAYOUT AND TOWNSHIP ESTABLISHMENT IN ARANDIS  
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Nails  
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061 243 5331

Confidente Newspaper, 8<sup>th</sup> Oct 2020

## PUBLIC NOTICE

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED LAYOUT AND TOWNSHIP ESTABLISHMENT IN ARANDIS

Candy Consultancy cc hereby give notice to all potentially Interested and Affected Parties (I&APs) that an application will be made to Environmental Commissioner in terms of the Environmental Management Act (No 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 of 6 February 2012) for the following activity:

**PROJECT NAME:** Layout and township establishment of Oletweni Proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1 and Oletweni Extension 2 in Arandis

**PROJECT LOCATION:** Arandis, Erongo Region

**PROPOSER:** Arandis Town Council

**ENVIRONMENTAL CONSULTANT:** Candy Consultancy cc

### PROJECT DESCRIPTION:

The project will comprise the following activities:

Clearing of land, servicing of land (sewerage system, water pipes and electricity infrastructures), and construction of roads to make serviced land available for housing development and other infrastructure in the extensions of Oletweni Proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1 and Oletweni Extension 2 in Arandis.

### Public Meeting:

Date: 10 October 2020  
Time: 11h00  
Venue: Arandis Town Hall

### REGISTRATION OF I&APs AND SUBMISSION OF COMMENTS:

In line with Namibia's Environmental Management Act (No. 7 of 2007) and EIA regulations (GN 30 of 6 February 2012), all I&APs are hereby invited to register and submit their comments, concerns or questions. All I&APs will be provided with a Background Information Document (BID) consisting of descriptive information about the development activity. Should you wish to register as an I&AP, kindly contact Candy Consultancy cc on the contact details below. In light of the current COVID-19 pandemic the meeting can also be followed online at the link that will be provided on request.

Lilian Ondigo, Tel: +264 (0) 81 826 8996  
Email: liliankondigo@gmail.com or  
candyconsultancy@gmail.com

**CLOSING DATE FOR COMMENTS:** 23 October 2020



Wednesday 7 October 2020 NEW ERA

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Candy Consultancy cc hereby give notice to all potentially Interested and Affected Parties (I&APs) that an application will be made to Environmental Commissioner in terms of the Environmental Management Act (No 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 of 6 February 2012) for the following activity:

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Job openings and recruitment notices

### EMPLOYMENT

Job openings and recruitment notices

### EMPLOYMENT

Job openings and recruitment notices

### NOTICES

Legal notices and public notices

### NOTICES

Legal notices and public notices

### NOTICES

Legal notices and public notices

New Era Newspaper, 7<sup>th</sup> Oct 2020

---

## 2.3. Emails communication

Registration Inbox x

**Mannheimer** <manfam@iafrica.com.na>

to me ▾

Dar Ms Ondigo,

Please register me as an I/AP for the Arandis township EIA.

I look forward to receiving the BID, and would appreciate a kml (Google Earth) file of the project outline if possible.

Kind regards,

Coleen Mannheimer  
Botanist  
P.O. Box 193  
Windhoek  
Namibia  
Landline +264 61 233614  
Mobile +264 (0) 811272820



**candy consultancy** <candyconsultancy@gmail.com>

to lillian, Mannheimer ▾

Dear Ms Mennheimer

Thank you for registering as an I/AP for the project. Attached, kindly find the BID for your information.

Best regards

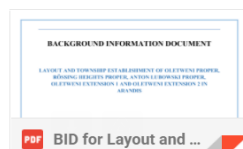
...

--

Candy Consultancy cc

-Serving the Environment-

*Please consider the environment before printing this e-mail!*





**Mannheimer** <manfam@iafrica.com.na>  
to me ▾

🔒 M...

Good day,

Attached please find my comments on the Arandis EIA. I will follow the process, and would appreciate it if you would send me the final report.

Kind regards,

Coleen Mannheimer  
Botanist  
P.O. Box 193  
Windhoek  
Namibia  
Landline +264 61 233614  
Mobile +264 (0) 811272820



**RE: BID Layout and township establishment of Oletweni Proper, Rössing Heights Proper, Anton Lubowski Proper, Oletweni Extension 1, and Oletweni Extension 2 in Arandis** Inbox x



**Lilian Ondigo**  
Dear Sir Kindly find the BID document attached for your attention. Kind regards, Lilian K Ondigo

Wed, Oct 7, 12:36 AM



**Frank Lohnert** <flohner@iway.na>  
to me

Mon, Oct 12, 9:37 PM

Dear Alex, Werner,

Please receive my registration as I&AP for subject project.

Please send the BID.

Hereunder a summary of the I&AP and pertinent concerns:



No  
Sta

DATE / STATUS	2020
NAME	Namib Botanical Gardens, represented by Frank Lohnert
POSTAL ADDRESS	P.O. Box 4494, Vineta, Swakopmund



TEL / FAX No.	064 – 400 304
CELL PHONE No.	081 – 129 4770
E-MAIL ADDRESS	<a href="mailto:flohner@iway.na">flohner@iway.na</a>

**I&AP's INTEREST IN THE PROPOSED PROJECT**

**Objectives of the Namib Botanical Garden(NBG) project:**

- To develop a botanical garden, on its site near Swakopmund;
- To preserve indigenous plant species of the Namib and other desert areas;
- To create themed horticultural exhibits and displays;
- To raise environmental awareness and sensitization of residents and visitors, about the sensitive Namib and dryland flora.

**The subject EIA area is typically rich in a variety of species of indigenous, protected flora.**

**NBG would therefore be interested to rescue indigenous, protected plant material requiring relocation from your EIA site, when the site is cleared for the proposed project.**

**NBG would thus be interested to access such plant material for purpose of rescue, relocation and display at he NBG project, and as stock for propagation.**

**COMMENTS / QUESTIONS:**

Please register Namib Botanical Gardens project as I&AP.

Please register NBG as a prospective partner and destination site in the rescue and relocation of indigenous and protected flora.

NBG has recently participated in a number of plant rescue & relocation exercises with Husab mine and also at Rössing Uranium mine. Namib Botanical Gardens may be able to assist the proponent in relocation exercises from subject site.



No  
Sta

Who will conduct the Biodiversity study on the subject area?

Thanks, kind regards,

Frank Löhnert  
Namib Botanical Gardens CC  
+264 (0) 81 – 129 4770  
\* P.O.Box 4494, Vineta, Swakopmund, NAMIBIA  
: flohert@tway.na

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**Lillian Ondigo** <lillianondigo@gmail.com>  
to Frank

Fri, Oct 16, 4:41 AM

No  
Spam

Dear Mr Frank  
Thank you for your response. Your comments have been noted down. For the biodiversity study, Candy Consultancy will be doing the assessment.  
Kind regards



**Mannheimer**  
to me

Dec 2, 2020, 11:12 AM (6 days ago) ☆ ↶ ⋮

Good day,

Thank you for sending me this scoping report. I feel that I should point out that you will not find any plants in the Cactaceae family around Arandis, unless they are planted in gardens. Anything that looks like a cactus is likely Acanthaceae or protected *Hoodia* species.

On the other hand, you include a picture of a protected *Commiphora*, which is not mentioned, and I would not be surprised to find other protected plant species in the area.

Kind regards,

Coleen Mannheimer  
Botanist  
P.O. Box 193  
Windhoek  
Namibia  
Landline +264 61 233614  
Mobile +264 (0) 811272820



**candy consultancy** <candyconsultancy@gmail.com>  
to Mannheimer, Lillian

Dec 3, 2020, 7:03 PM (5 days ago) ☆ ↶ ⋮

Dear Ms Mannheimer

Thank you for taking time to go through the scoping report and pointing out what needs to be revised. We have identified the low-growing shrub with a short swollen stem as a *Commiphora saxicola* commonly known as rock corkwood which is endemic and protected by the Forest Act. Unfortunately no *hoodia* species was observed, however we have re-identified the cactus species reported in this study as *Acanthopsis* sp. from the family of *Acadentaceae*.

Thank you

Best regards



**Mannheimer**  
to me

Dec 7, 2020, 4:35 PM (1 day ago) ☆ ↶ ⋮

Thank you for addressing my comments. I would like to mention that *Acanthopsis* is generally only found in the south, and you are probably seeing the remains of *Blepharis grossa*, which is a near-endemic.



**candy consultancy** <candyconsultancy@gmail.com>  
to Mannheim

10:12 PM (1 hour ago) ☆ ↶ ⋮

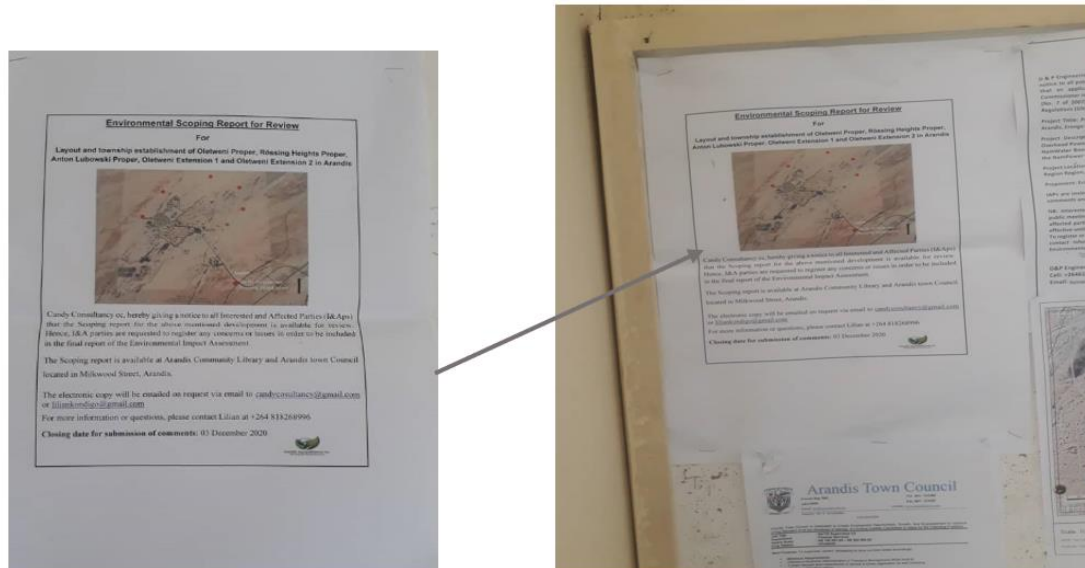
Dear Mannheim

Thank you so much for your response, well noted with appreciation.

Best Regards

G

**2.4 A poster placed at the notice board of the Arandis Town Council notifying stakeholders about the availability of the scoping report for review and comments.**



**APPENDIX 3: MINUTES FOR A COMMUNITY PARTICIPATION MEETING  
AND REGISTER**

**ENVIRONMENTAL IMPACT ASSESSMENT (EIA) AND ENVIRONMENTAL  
MANAGEMENT PLAN (EMP) FOR THE PROPOSED LAYOUT AND  
TOWNSHIP ESTABLISHMENT OF OLETWENI PROPER, RÖSSING  
HEIGHTS PROPER, ANTON LUBOWSKI PROPER, OLETWENI  
EXTENSION 1, AND OLETWENI EXTENSION 2 IN ARANDIS, ERONGO  
REGION NAMIBIA.**

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**UNDERTAKING OF PUBLIC MEETING –**

**PROJECT:** LAYOUT AND TOWNSHIP ESTABLISHMENT IN ARANDIS.

**VENUE:** ARANDIS COMMUNITY DEVELOPMENT CENTRE (NEXT TO THE LIBRARY)

**DATE:** 10/10/2020

**TIME:** 11:30-12:35

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**Facilitator:**

Mr. Silvanus Makili - Project Proponent Representatives

**EAP:**

Mr. Gabriel Joseph and Ms. Lilian K. Ondigo - Candy Consulting CC

**Attendees:**

Please refer to the attendance register in this document

**Proceedings:**

<b>ITEM</b>	<b>DESCRIPTION</b>	<b>PERSON</b>
<b>1</b>	<b>Welcome, Introductions &amp; Project Background</b>	
	-All present were welcomed on behalf of the proponent and the Environmental Consultant and the agenda confirmed. -The proposed project was explained to all members present in terms of scope and scale.	Mr. Gabriel Joseph

	-The proponent highlighted the stage of the project and why the EIA was needed as part of the development	
<b>2</b>	<b>Purpose of Meeting</b>	
	<p>-The Environmental Impact Assessment process in Namibia was explained to the members in attendance.</p> <p>-Possible environmental impacts both negative and positive were alluded to the public in attendance as per environmental scoping conducted for the site.</p> <p>-Reasons for assessment were given</p> <p>-Legislations and regulations followed as part of the process were alluded to.</p> <p>-The EAP explained the important role played by public and community members and how it has helped other developments in Namibia.</p>	Mr. Gabriel Joseph
<b>4</b>	<b>Q &amp; A Session</b>	
	-All members on the panel were introduced	



<b>COMMENTATOR /I &amp; A P:</b>	<b>COMMENT, QUESTION, QUERY, CONCERN RAISED:</b>	<b>Answers prepared</b>
Mr Ananias	-When exactly will the project resume?	-It was explained that it includes various stages of which: stage 1 the EIA process need to be finalized in order to obtain the clearance certificate; stage 2 involves servicing of the land; stage 3 the area will be registered to the town council and then ervens will be then allocated to the people.
Arandis resident	-Are they going to build only houses and also other infrastructures such as schools and industries?	-It was answered that there will be different zones, which will include a lot of activities that are essential in our daily lives
Arandis resident	-The project is very good because it will provide a roof over our heads especially for those people without houses. Also at least the town of Arandis will develop and become bigger.	
Ms Coleen Mannheimer ( Botanical Consultant)	-Presence of endemic and range-restricted plant species already impacted by Rössing, Husab, and Arandis. -A survey of the new areas should be undertaken to rescue and relocate plants of conservation concern.	-It was noted -The recommendation was taken into consideration. Thus a biodiversity assessment for the proposed project site was conducted and a checklist of plant species was recorded.
Mr. Frank Lohnert ( Namib Botanical Gardens)	-Please register the Namib Botanical Gardens project as I&AP. -Please register NBG as a prospective partner and destination site in the rescue	-It was noted -It was noted -The biodiversity assessment for the proposed project site was

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	<p>and relocation of indigenous and protected flora.</p> <p>-NBG has recently participated in a number of plant rescue &amp; relocation exercises with Husab mine and also at Rössing Uranium mine. Namib Botanical Gardens may be able to assist the proponent in relocation exercises from the subject site.</p> <p>-Who will conduct the Biodiversity study on the subject area?</p>	<p>conducted by Candy Consultancy CC.</p>
--	---	---

### **Conclusions and Recommendations**

- When the EIA scoping is ready it will be available to the proponent, the Arandis town council, and any members who are interested in receiving the document should send an email to the consultant.
- The EAP gave concluding remarks.
- The meeting was closed at 12:35 PM

ATTENDANCE REGISTER

Candy Consultancy Cc  
- Serving the Environment -



Candy Consultancy cc  
P.O.Box 55226  
Rocky Crest, Windhoek  
Gabriel Joseph  
Cell: +264813796358  
Email: [liliankondigo@gmail.com](mailto:liliankondigo@gmail.com)  
or  
[candyconsultancy@gmail.com](mailto:candyconsultancy@gmail.com)

PUBLIC CONSULTATION REGISTER: ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED LAYOUT AND TOWNSHIP ESTABLISHMENT OF OLETWENI PROPER, RÖSSING HEIGHTS PROPER, ANTON LUBOWSKI PROPER, OLETWENI EXTENSION 1, AND OLETWENI EXTENSION 2 IN ARANDIS TOWN, ERONGO REGION.

VENUE: Arandis Community Development Centre TIME: 11:30 DATE: 10 Oct 2020

NAME	Designation	Organization/Location	Phone n#	Email	Signature
① Amadhila Arandis	Plumber	Arandis	0818268444	amadhilana@arandis.com	A. Amadhila
② Nanyemba Fog	Plumber	Arandis	0814069413	Geoff.com@yase.com.na	GA
③ Lucky Mwanas	Plumber	Arandis	0816431584		M. Mwanas
④ K/K K/L	Arandis	Arandis	08151458	kel@kubog.com.na	
⑤ Cienoroge Sibel	General	Arandis	08133589306	gsibel@18@gmail.com	C. Sibel
⑥ Shaheen Adams P.A	P.A	Arandis	0818955953	shahneem@k.com.na	
⑦ Penna	Mary	Arandis	0818219321		M. Penna
⑧ Grace	Thomas	Arandis	0813442207		Thomas



**Candy Consultancy Cc**  
-Serving the Environment-

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Email: [hilankondigo@gmail.com](mailto:hilankondigo@gmail.com)  
or  
[candyconsultancy@gmail.com](mailto:candyconsultancy@gmail.com)

PUBLIC CONSULTATION REGISTER: ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED LAYOUT AND TOWNSHIP ESTABLISHMENT OF OLETWENI PROPER, RÖSSING HEIGHTS PROPER, ANTON LUBOWSKI PROPER, OLETWENI EXTENSION 1, AND OLETWENI EXTENSION 2 IN ARANDIS TOWN, ERONGO REGION.

VENUE: Arandis Community Development Centre TIME: 11:30 DATE: 10-10-2020

NAME	Designation	Organization/Location	Phone n#	Email	Signature
⑨ HENOK	RESIDENT	ARANDIS	0812385705	<a href="mailto:henok.ateagom@gmail.com">henok.ateagom@gmail.com</a>	
⑩ KLEOPAS	RESIDENT	ARANDIS	0814225964	<a href="mailto:kleonborg@gmail.com">kleonborg@gmail.com</a>	
⑪ SILVANUS	Tech. Manager	Arandis Town C	0812017934	<a href="mailto:technical@getsk.com">technical@getsk.com</a>	
⑫ MARTIN	Residence	Arandis	0813066980	<a href="mailto:Martin.mucenene@gmail.com">Martin.mucenene@gmail.com</a>	
⑬ TOBIAS	TH	Arandis	0813066980	—	
⑭ NEVILLE	HEAD OF CATTLE	Aims VTC	0816768164	<a href="mailto:nevmet@kta@gmail.com">nevmet@kta@gmail.com</a>	

