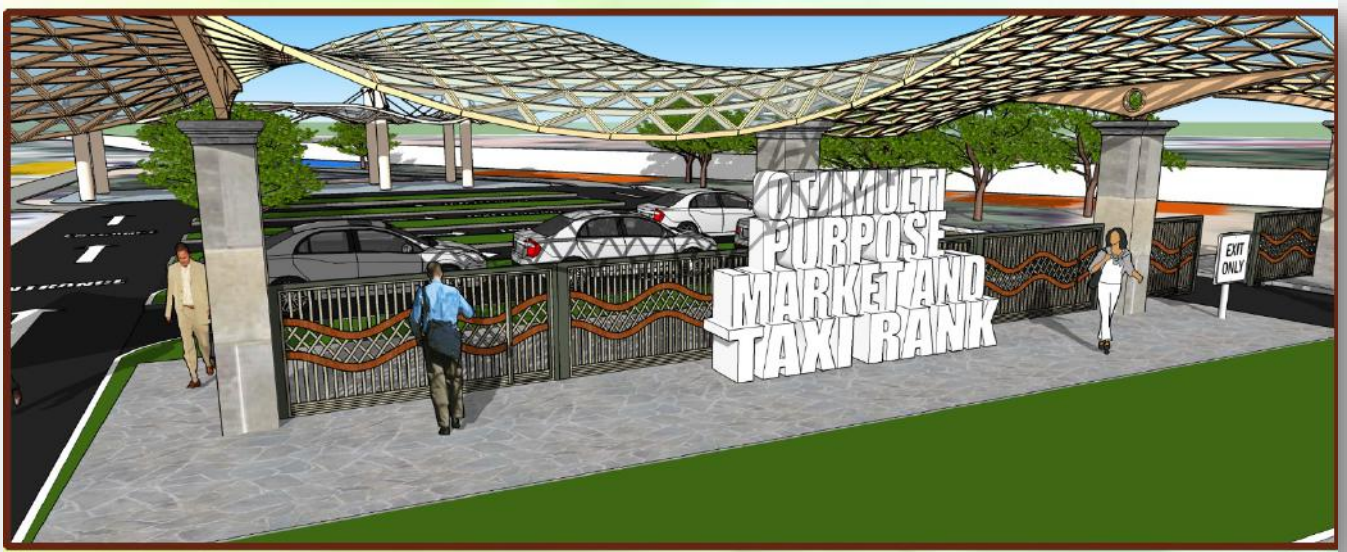


Proposed Construction of the  
Otjiwarongo Multipurpose Market and  
Taxi Rank on Erven 1756 and 1757  
Otjiwarongo, Otjozondjupa Region



# Environmental Scoping Report

January 2022

For

## TABLE OF CONTENTS

TABLE OF CONTENTS .....	1
1 PURPOSE OF THIS DOCUMENT .....	4
2 BACKGROUND INFORMATION .....	4
3 LEGAL, POLICY AND INSTITUTIONAL FRAMEWORK .....	9
4 ENVIRONMENTAL BASELINE DESCRIPTION: .....	14
5 PROJECT DESCRIPTION:.....	21
6 PUBLIC CONSULTATION PROCESS:.....	22
7 ENVIRONMENTAL ASSESSMENT PROCESS: .....	23
9 MITIGATION HIERACHY: .....	27
10 POTENTIAL IMPACTS .....	29
11 SUMMARY OF POTENTIAL IMPACTS.....	37
12 CONCLUSIONS AND RECOMMENDATIONS.....	50
13 REFERENCES .....	52

### **LIST OF FIGURES**

Figure 2: Locality map of the development site.....	6
Figure 3: EIA Flowchart for Namibia (SELH, 2012) .....	13
Figure 4: Average temperature graph for Otjiwarongo (Worldweatheronline, 2021) .....	17
Figure 5: Average monthly rainfall graph for Otjiwarongo (Worldweatheronline, 2021 a) .....	18
Figure 6: Mitigation Hierarchy .....	28

### **LIST OF TABLES**

Table 1: Contents of the Scoping / Environmental Assessment Report.....	7
Table 2: Legislation applicable to the proposed development.....	9
Table 3: Statistics of the Otjiwarongo Constituency and Otjozondjupa Region .....	14

Table 4: Table of Public Consultation Activities.....	22
Table 5: Impact Assessment Criteria.....	23
Table 6: Overview of potential impacts.....	38
Table 7: Proposed mitigation measures for the planning and design phase.....	40
Table 8: Proposed mitigation measures for the construction phase.....	42
Table 9: Proposed mitigation measures for the operational phase.....	47

**LIST OF ANNEXURES**

<b>ANNEXURE A:</b>	Proof of site notices/ posters
<b>ANNEXURE B:</b>	Proof of advertisements
<b>ANNEXURE C:</b>	Photo Plates
<b>ANNEXURE D:</b>	Public Participation process
	1) I&AP database & Registered List
	2) Notification sent of BID
	3) Public Meeting Presentation
	4) Public Meeting Attendance Register
	5) Public Meeting Minutes
	6) Comments received
<b>ANNEXURE E:</b>	Curriculum Vitae of Environmental Assessment Practitioner
<b>ANNEXURE F:</b>	Environmental Management Plan

**LIST OF ACRONYMS**

AIDS	Acquired immune deficiency syndrome
CRR	Comments and response report
dB	Decibels
DESR	Draft Environmental Scoping Report
EA	Environmental Assessment
EAP	Environmental Assessment Practitioner
EAR	Environmental Assessment Report
ECC	Environmental Clearance Certificate
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMA	Environmental Management Act

EMP	Environmental Management Plan
FESR	Final Environmental Scoping Report
GTZ	Gesellschaft für Technische Zusammenarbeit
HIV	Human immunodeficiency virus
I&AP	Interested and Affected Party
IUCN	International Union for Conservation of Nature
MAWF	Ministry of Agriculture Water and Forestry
MEFT	Ministry of Environment, Forestry and Tourism
MEFT: DEA	Ministry of Environment, Forestry and Tourism: Department of Environmental Affairs
PPP	Public participation process
p/km <sup>2</sup>	People per square kilometre
SADC	Southern African Development Community
USAID	United States Agency for International Development

# EXECUTIVE SUMMARY

## 1 INTRODUCTION AND BACKGROUND

Otjiwarongo is strategically located as a gateway to various parts of the country in all compass directions. Whether it is to from the coast on your way to the north, or from and to the north east you will find it convenient to pass or stop by in Otjiwarongo. It is an attraction in its own right to the visitors and tourists on the way to the more renowned tourist destinations in the vicinity. It is approximately 250km north of the capital city, Windhoek and is the regional capital of Otjozondjupa Region. The town also serves as a business and shopping hub for the smaller surrounding towns and farming community.

Otjiwarongo is continuously improving access to amenities in line with its growth strategy, this is always done in a sustainable manner. To this end the Municipality intends to develop a multipurpose market on Erven 1756 and 1757 Otjiwarongo (See Figure 1 below) that will augment the link between Orwetoveni residential suburb and the Town Centre. The multipurpose market will consist of the following amenities: an open market, a taxi rank, an open museum and a theatre. Elements form both areas will be combined to meet the needs of the primary end users, that is the residents of Otjiwarongo in particular, and which benefits will flow over to the visitors and tourists passing through the town. The design considerations will look into the aspects of: health and wellbeing, construction material usage, energy, and environmentally friendly design concepts.

The proponent, through the Jack Mutua Architects Inc. consortium, appointed Environam Consultants Trading cc (ECT) to undertake the Environmental Assessment (EA) in order to obtain an Environmental Clearance Certificate (ECC) for the activities from the Ministry of Environment, Forestry and Tourism: Department of Environmental Affairs (MEFT: DEA).

The process will be undertaken in terms of the gazetted Namibian Government Notice No. 30 Environmental Impact Assessment Regulations (herein referred to as EIA Regulations) of the Environmental Management Act (No 7 of 2007) (herein referred to as the EMA). The EIA process will investigate if there are any potential significant bio-physical and socio-economic impacts associated with the proposed development and related infrastructure.

The EIA process will also provide an opportunity for the public and key stakeholders to provide comments and participate in the process. Additionally, it will serve the purpose of informing the proponent's decision-making, that of the Ministry of Environment, Forestry and Tourism and other stakeholders.

### 1.1 PROJECT LOCATION

The development will take place on erven 1756 and 1757 Otjiwarongo, split in a southern and northern portion by Henk Willems Street. The sites form a link between Orwetoveni suburb to the east and the town centre to the west. The southern end is found on coordinates lat: -20.464041 lon: 16.654158, while the northern end is at lat: -20.462909 long: 16.653659. Ingress will be obtained from the Henk Willems Street. See **Figure 1** below for the locality map of development the site.



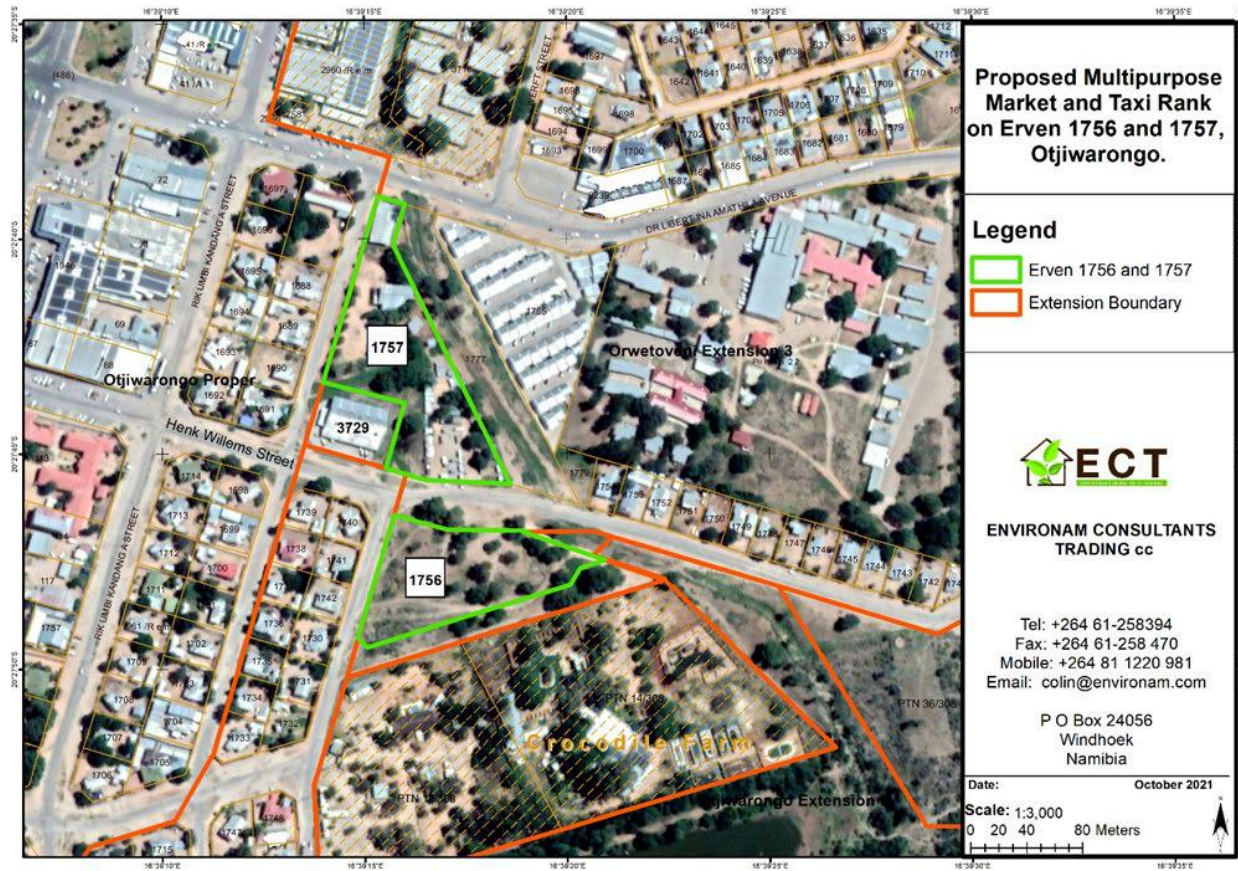


Figure 1: Locality map of the development site

## 2 LEGISLATIVE FRAMEWORK

The principle environmental regulatory agency in Namibia is the Environmental Commissioner in the Directorate of Environmental Affairs of the Ministry of Environmental and Tourism. Most of the policies and legislative instruments have their basis in two clauses of the Namibian Constitution, i.e. Article 91 (c) and Article 95 (I); however, good environmental management finds recourse in multiple legal instruments. **Table 1** below provides a summary of the legal framework considered to be relevant to this development and the environmental assessment process.

**Table 1:** Legislation applicable to the proposed development

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
The Constitution of the Republic of Namibia as Amended	Article 91 (c) provides for duty to guard against “the degradation and destruction of ecosystems and failure to protect the beauty and character of Namibia.”	Sustainable development should be at the forefront of this development.

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
	Article 95(l) deals with the “maintenance of ecosystems, essential ecological processes and biological diversity” and sustainable use of the country’s natural resources.	
Environmental Management Act No. 7 of 2007 (EMA)	Section 2 outlines the objective of the Act and the means to achieve that. Section 3 details the principle of Environmental Management.	The development should be carried out in conformity to the EMA.
EIA Regulations GN 28, 29, and 30 of EMA (2012)	GN 29 Identifies and lists certain activities that cannot be undertaken without an environmental clearance certificate. GN 30 provides the regulations governing the environmental assessment (EA) process.	<b>Activity 9.2</b> Any process or activity which requires a permit, license or other form of authorisation, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorisation or which requires a new permit, licence or authorisation in terms of a law governing the generation or release of emissions, pollution, effluent or waste. <b>Activity 11.2</b> Construction of cemeteries, camping, leisure and recreational sites.
Convention on Biological Diversity (1992)	Article 1 lists the conservation of biological diversity amongst the objectives of the convention.	The project should consider the impact it will have on the biodiversity of the area.
Draft Procedures and Guidelines for conducting EIAs and compiling EMPs (2008)	Part 1, Stage 8 of the guidelines states that if a proposal is likely to affect people, certain guidelines should be considered	The EA process should incorporate the aspects outlined in the guidelines.

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
	by the proponent in the scoping process.	
Namibia Vision 2030	Vision 2030 states that the solitude, silence and natural beauty that many areas in Namibia provide are becoming sought after commodities and must be regarded as valuable natural assets.	Care should be taken that the development does not lead to the degradation of the natural beauty of the area.
Water Act No. 54 of 1956	Section 23(1) deals with the prohibition of pollution of underground and surface water bodies.	The pollution of water resources should be avoided during construction and operation of the development.
The Ministry of Environment, Forestry and Tourism (MEFT) Policy on HIV & AIDS	MEFT has developed a policy on HIV and AIDS. In addition it has also initiated a programme aimed at mainstreaming HIV and gender issues into environmental impact assessments.	The proponent and its contractor have to adhere to the guidelines provided to manage the aspects of HIV/AIDS. Experience with construction projects has shown that a significant risk is created when construction workers interact with local communities.
Otjiwarongo Town Planning Scheme	The Otjiwarongo Town Planning Scheme is a legal document that coordinates development in the town boundaries.	The provisions of the Town Planning Scheme should be adhered to.
Labour Act no 11 of 2007	Chapter 2 details the fundamental rights and protections. Chapter 3 deals with the basic conditions of employment.	Given the employment opportunities presented by the development, compliance with the labour law is essential.
Public Health Act no 36 of 1919	Section 119 prohibits persons from causing nuisance.	Owner, contractors and employees have to comply with these legal requirements.



LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
Nature Conservation Ordinance no 4 of 1975	Chapter 6 provides for legislation regarding the protection of indigenous plants	Indigenous and protected plants have to be managed within the legal confines.
Atmospheric Pollution Prevention Ordinance (No. 11 of 1976).	The Ordinance objective is to provide for the prevention of the pollution of the atmosphere, and for matters incidental thereto.	All activities on the site will have to take due consideration of the provisions of this legislation.
Roads Ordinance 17 of 1972	This Ordinance consolidates the laws relating to roads.	The provisions of this legislation have to be taken into consideration in as far as access to the development site is concerned.

### 3 ENGINEERING SERVICES

The infrastructure needs of the proposed project can be categorised into two broad classifications namely:

- Basic infrastructure that includes electricity and roads.
- Environmental infrastructure that consist of water supply, sewage and drainage systems, solid waste management and landscaping.

The engineering services such as water pipelines, sewer reticulation, access roads, electricity supply, storm water management etc. for the development will be designed and constructed to connect to and fully integrate with the existing network of Otjiwarongo. Access to the site will be obtained from the existing Hen Willems Street.

- The following are specific requirements from CENORED:
- The proposed multipurpose market should accommodate existing electrical networks.
- In line with the provisions of the Electricity Act and its regulations, if the existing electrical networks have to be altered or moved, the cost implications will be on the developer.
- The alterations of electrical networks should be approved by CENORED prior to construction.

### 4 PUBLIC PARTICIPATION PROCESS

Regulation 21 of the EIA Regulations makes provision for conducting a public consultation process as part of the EA process. This entails participatory consultation with members of the public by providing an opportunity to comment on the proposed project. The Public Consultation process has incorporated the requirements of Namibia's legislation, and also taken account of national and international best practises. Please see **Table 2** below for the activities undertaken as part of the public participation process.

**Table 2:** Table of Public Participation Activities

ACTIVITY	REMARKS
Placement of site notice/posters at the site.	See Annexure A
Placing advertisements in two newspapers for two consecutive weeks, namely the Confidante and The Windhoek Observer	See Annexure B
Written notice to Interested and Affected Parties via Email	See Annexure D
Community meeting	26 October 2021 at Swanevelder Hall, Orwetoveni, Otjiwarongo

The second phase of the Public Consultation Process involves the lodging of the Draft Environmental Scoping Report (DESR) to all registered I&APs for comment. Registered and potential I&APs are informed of the availability of the DESR for public comment. An Executive Summary of the DESR is included in the communication to be sent out to the registered I&APs. I&APs will be given time until **7 January 2021** to submit comments or raise any issues or concerns they may have with regard to the proposed project.

## 5 POTENTIAL IMPACTS IDENTIFIED

The following planning and design phase impacts were identified:

- Surface and groundwater
- Fauna and flora;
- Infrastructure;
- Access road;
- Traffic
- Social

The following construction phase impacts were identified:

- Fauna and flora;
- Pressure on the infrastructure;
- Surface and groundwater;
- Soil erosion;
- Health, safety and security;
- Impact on air quality,
- Noise pollution,
- Traffic;
- Solid waste management;
- Hazardous substances; and
- Social impact.

The following operational phase impacts were identified:

- Air quality;
- Noise;
- Solid waste management;
- Infrastructure;
- Quality of life; and
- Visual impact.

## 6 CONCLUSION

Based on the evidence produced during the assessment process, it is very unlikely that this project will have any significant negative impacts on the environment if the recommended management actions are implemented. It is recommended that this project be authorised, as the development will serve as an important economic activity that provides jobs. This will also have a positive impact on the quality of life of the community in terms of household incomes, and will also greatly contribute to the local economic development of the town and the region at large.

It is further extremely important to include an Environmental Control Officer (ECO) on site during the construction phase of the proposed project to ensure that all the mitigation measures discussed in this report and the EMP are enforced.

## 1|PURPOSE OF THIS DOCUMENT

The purpose of this Environmental Scoping Report (DESR) is to inform the decision-making of the Environmental Commissioner when considering the application for an environmental clearance certificate for this activity. It is a supporting document to the application. It is a culmination of the environmental impact assessment process and informs the accompanying Environmental Management Plan (EMP).

## 2|BACKGROUND INFORMATION

Otjiwarongo is strategically located as a gateway to various parts of the country in all compass directions. Whether it is to or from the coast on your way to the north, or from and to the north east, you will find it convenient to pass or stop by in Otjiwarongo. It is an attraction in its own right to the visitors and tourists on the way to the more renowned tourist destinations in the vicinity. It is approximately 250km north of the capital city, Windhoek and is the regional capital of Otjozondjupa Region. The town also serves as a business and shopping hub for the smaller surrounding towns and farming community.

Otjiwarongo is continuously improving access to public amenities in line with its growth strategy, this is always done in a sustainable manner. To this end the Municipality intends to develop a multipurpose market on Erven 1756 and 1757 Otjiwarongo (See **Figure 1** below) that will augment the link between Orwetoveni residential suburb and the Town Centre. The multipurpose market will consist of the following amenities: an open market, a taxi rank, an open museum and a theatre. Elements from both areas will be combined to meet the needs of the primary end users, that is the residents of Otjiwarongo in particular, and which benefits will flow over to the visitors and tourists passing through the town. The design considerations will look into the aspects of: health and wellbeing, construction material usage, energy, and environmentally friendly design concepts.

The proponent, through the Jack Mutua Architects Inc. consortium, appointed Environam Consultants Trading cc (ECT) to undertake the Environmental

Assessment (EA) in order to obtain an Environmental Clearance Certificate (ECC) for the activities from the Ministry of Environment, Forestry and Tourism: Department of Environmental Affairs (MEFT: DEA).

The process was undertaken in terms of the gazetted Namibian Government Notice No. 30 Environmental Impact Assessment Regulations (herein referred to as EIA Regulations) of the Environmental Management Act (No 7 of 2007) (herein referred to as the EMA). The EIA process investigated if there are any potential significant bio-physical and socio-economic impacts associated with the proposed development and related infrastructure.

The EIA process provided an opportunity for the public and key stakeholders to provide comments and participate in the process. Additionally, it will serve the purpose of informing the proponent's decision-making, that of the Ministry of Environment, Forestry and Tourism and other stakeholders.

### **2.1. Project Location**

The development will take place on erven 1756 and 1757 Otjiwarongo, split in a southern and northern portion by Henk Willems Street. The sites form a link between Orwetoveni suburb to the east and the town centre to the west. The southern end is found on coordinates lat: -20.464041 long: 16.654158, while the northern end is at lat: -20.462909 long: 16.653659. Ingress will be obtained from the Henk Willems Street. See **Figure 1** below for the locality map of development the site.

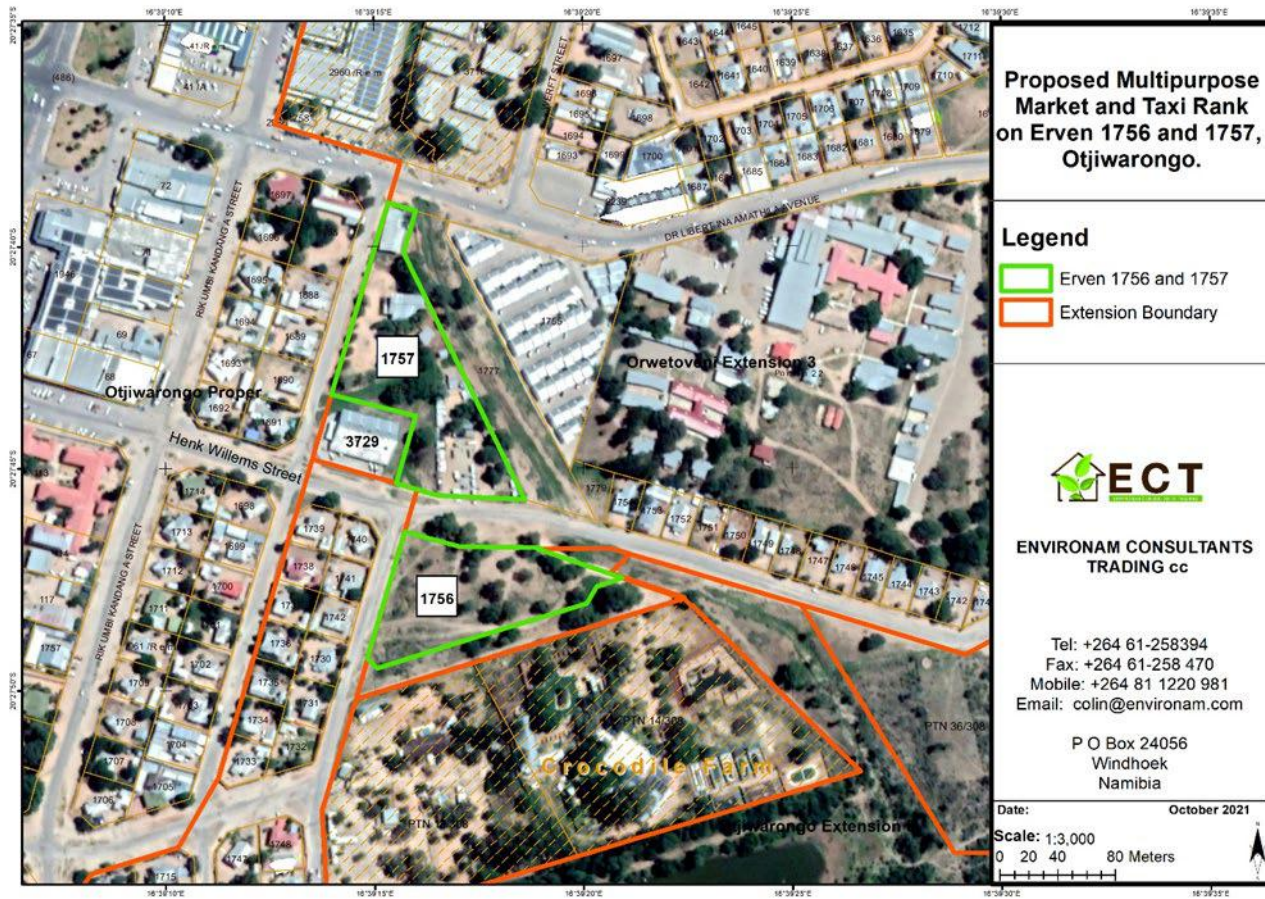


Figure 1: Locality map of the development site



## Terms of Reference and Scope of Project

The scope of this project is limited to conducting an environmental impact assessment and applying for an Environmental Clearance Certificate for the Proposed Construction of the Otjiwarongo Multipurpose Market and Taxi Rank on Erven 1756 and 1757 Otjiwarongo, Otjozondjupa Region as indicated in section 2 above. This includes consultations with client; site investigations and analysis; stakeholder consultations including a public meeting; impact analysis; mitigation formulation; report writing; and draft Environmental Management Plan.

### 2.1. Assumptions and Limitations

In undertaking this investigation and compiling the Environmental Scoping Report, the following assumptions and limitations apply:

- Assumes the information provided by the proponent is accurate and discloses all information available.
- All relevant permits will be obtained by the proponent.

### 2.2. Content of Environmental Scoping Report

In terms of Section 8 of the gazetted EIA Regulations certain aspects must be included in a Scoping Report. **Table 1** below delineate, for ease of reference, where this content is found in this Environmental Scoping Report.

**Table 1:** Contents of the Scoping / Environmental Assessment Report

Section	Description	Section of ESR/ Annexure
8 (a)	The curriculum vitae of the EAPs who prepared the report;	Refer to <b>Annexure E</b>
8 (b)	A description of the proposed activity;	Refer to Chapter 5
8 (c)	A description of the site on which the activity is to be undertaken and the location of the activity on the site;	Refer to Chapter 2
8 (d)	A description of the environment that may be affected by the proposed activity and the manner in which the geographical, physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed listed activity;	Refer to Chapter 4

<b>Section</b>	<b>Description</b>	<b>Section of ESR/ Annexure</b>
8 (e)	An identification of laws and guidelines that have been considered in the preparation of the scoping report;	Refer to Chapter 3
8 (f)	Details of the public consultation process conducted in terms of regulation 7(1) in connection with the application, including	Refer to Chapter 6
	(i) the steps that were taken to notify potentially interested and affected parties of the proposed application	Refer to Chapter 6
	(ii) proof that notice boards, advertisements and notices notifying potentially interested and affected parties of the proposed application have been displayed, placed or given;	Refer to <b>Annexures A and B</b> for site notices and advertisements respectively.
	(iii) a list of all persons, organisations and organs of state that were registered in terms of regulation 22 as interested and affected parties in relation to the application;	Refer to <b>Annexure D</b>
	(iv) a summary of the issues raised by interested and affected parties, the date of receipt of and the response of the EAP to those issues;	Refer to <b>Annexure D</b>
8 (g)	A description of the need and desirability of the proposed listed activity and any identified alternatives to the proposed activity that are feasible and reasonable, including the advantages and disadvantages that the proposed activity or alternatives have on the environment and on the community that may be affected by the activity;	Refer to Chapter 5
8 (h)	A description and assessment of the significance of any significant effects, including cumulative effects, that may occur as a result of the undertaking of the activity or identified alternatives or as a result of any	Refer to Chapter 7

Section	Description	Section of ESR/ Annexure
	construction, erection or decommissioning associated with the undertaking of the proposed listed activity;	
8 (i)	terms of reference for the detailed assessment;	Refer to Chapter 2
8 (j)	An environmental management plan	Refer to <b>Annexure F</b>

### 3|LEGAL, POLICY AND INSTITUTIONAL FRAMEWORK

The principle environmental regulatory agency in Namibia is the Office of the Environmental Commissioner within the Directorate of Environmental Affairs of the Ministry of Environment, Tourism and Tourism. Most of the policies and legislative instruments have their basis in two clauses of the Namibian Constitution, i.e., Article 91 (c) and Article 95 (I); however, good environmental management finds recourse in multiple legal instruments. **Table 2** below provides a summary of the legal framework considered to be relevant to this development and the environmental assessment process:

**Table 2:** Legislation applicable to the proposed development

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
The Constitution of the Republic of Namibia as Amended	<p>Article 91 (c) provides for duty to guard against “the degradation and destruction of ecosystems and failure to protect the beauty and character of Namibia.”</p> <p>Article 95(l) deals with the “maintenance of ecosystems, essential ecological processes and biological diversity” and sustainable use of the country’s natural resources.</p>	Sustainable development should be at the forefront of this development.

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
Environmental Management Act No. 7 of 2007 (EMA)	Section 2 outlines the objective of the Act and the means to achieve that. Section 3 details the principle of Environmental Management.	The development should be carried out in conformity to the EMA.
EIA Regulations GN 28, 29, and 30 of EMA (2012)	GN 29 Identifies and lists certain activities that cannot be undertaken without an environmental clearance certificate. GN 30 provides the regulations governing the environmental assessment (EA) process.	<b>Activity 9.2</b> Any process or activity which requires a permit, license or other form of authorisation, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorisation or which requires a new permit, licence or authorisation in terms of a law governing the generation or release of emissions, pollution, effluent or waste. <b>Activity 11.2</b> Construction of cemeteries, camping, leisure and recreational sites.
Convention on Biological Diversity (1992)	Article 1 lists the conservation of biological diversity amongst the objectives of the convention.	The project should consider the impact it will have on the biodiversity of the area.
Draft Procedures and Guidelines for conducting EIAs and compiling EMPs (2008)	Part 1, Stage 8 of the guidelines states that if a proposal is likely to affect people, certain guidelines should be considered by the proponent in the scoping process.	The EA process should incorporate the aspects outlined in the guidelines.
Namibia Vision 2030	Vision 2030 states that the solitude, silence and natural beauty that many areas in	Care should be taken that the development does not lead to the

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
	Namibia provide are becoming sought after commodities and must be regarded as valuable natural assets.	degradation of the natural beauty of the area.
Water Act No. 54 of 1956	Section 23(1) deals with the prohibition of pollution of underground and surface water bodies.	The pollution of water resources should be avoided during construction and operation of the development.
The Ministry of Environment, Forestry and Tourism (MEFT) Policy on HIV & AIDS	MEFT has developed a policy on HIV and AIDS. In addition, it has also initiated a programme aimed at mainstreaming HIV and gender issues into environmental impact assessments.	The proponent and its contractor have to adhere to the guidelines provided to manage the aspects of HIV/AIDS. Experience with construction projects has shown that a significant risk is created when construction workers interact with local communities.
Otjiwarongo Town Planning Scheme	The Otjiwarongo Town Planning Scheme is a legal document that coordinates development in the town boundaries.	The provisions of the Town Planning Scheme should be adhered to.
Labour Act no 11 of 2007	Chapter 2 details the fundamental rights and protections. Chapter 3 deals with the basic conditions of employment.	Given the employment opportunities presented by the development, compliance with the labour law is essential.
Public Health Act no 36 of 1919	Section 119 prohibits persons from causing nuisance.	Owner, contractors and employees have to comply with these legal requirements.
Nature Conservation Ordinance no 4 of 1975	Chapter 6 provides for legislation regarding the protection of indigenous plants	Indigenous and protected plants have to be managed within the legal confines.

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
Atmospheric Pollution Prevention Ordinance (No. 11 of 1976).	The Ordinance objective is to provide for the prevention of the pollution of the atmosphere, and for matters incidental thereto.	All activities on the site will have to take due consideration of the provisions of this legislation.
Roads Ordinance 17 of 1972	This Ordinance consolidates the laws relating to roads.	The provisions of this legislation have to be taken into consideration in as far as access to the development site is concerned.





## 4|ENVIRONMENTAL BASELINE DESCRIPTION:

### 4.1. SOCIAL ENVIRONMENT

#### 4.1.1. Socio-Economic Context

Otjiwarongo is found in the Otjozondjupa Region, the greater Otjozondjupa Region consists of 7 constituencies, namely Grootfontein, Okakarara, Otavi, Otjiwarongo, Tsumkwe, Okahandja and Omatako. The project site is found in the Otjiwarongo Constituency, which also includes the town of Kalkfeld. The statistics shown in **Table 3** below are derived from the 2011 Namibia Population and Housing Census (NSA, 2011) and are delineated at Constituency and Regional level.

**Table 3:** Statistics of the Otjiwarongo Constituency and Otjozondjupa Region

OTJIWARONGO CONSTITUENCY	
ATTRIBUTE	INDICATOR
Population	31,813 (Constituency) 28,163 (Otjiwarongo Town)
Females	16,275,001
Males	15,538
Population under 5 years	13%
Population aged 5 to 14 years	21%
Population aged 15 to 59 years	61%
Population aged 60 years and above	5%
Female: male ratio	100:95
Literacy rate of 15 years old and above	90%
People above 15 years who have never attended school	11%
People above 15 years who are currently attending school	28%
People above 15 years who have left school	58%
People aged 15 years and up who belong to the labour force	72%

OTJIWARONGO CONSTITUENCY	
Population employed	60%
Homemakers	20%
Students	46%
Retired or old age income recipients	33%
Income from pension	8%
Income from business and non-farming activities	13%
Income from farming	2%
Income from cash remittance	8%
Wages and salaries	66%
OTJOZONDJUPA REGION	
ATTRIBUTE	INDICATOR
Population	143/903
Population under 5 years	14%
Population aged 5 to 14 years	22%
Population aged 15 to 59 years	58%

#### 4.1.2. Archaeological and Heritage Context

Otjozondjupa Region like the rest of Namibia is home to many different cultural groups. There are a few heritage sites found within the confines and surrounds of Otjozondjupa Region, more so in the Grootfontein Constituency as opposed to the rest of the constituencies in the region. The **Hoba Meteorite** was discovered by Jacobus Hermanus Brits in the 1920's on the farm Hoba, 19 km from Grootfontein. It is the world largest meteorite and weighs 60 tonnes. It was declared a national monument in March 1955.

The **Das Alte Fort Museum** is situated in a prominent position atop a hill in Grootfontein. The 'Old Fort' was originally a Schutztruppe fortress built in 1896, while the tower was added in 1904. With its splendid view of the surrounding countryside, this tower was used to great advantage by the troops. The Fort, housing the museum, was declared a national monument in 1975 (Grootfontein, 2017).

The **Baobab Tree**, romantically called 'Tree 1063', is located on the Farm Keibeb, which is about 60km north of Grootfontein on the "Maanlig" road, (Road number

2848). The tree's trunk circumference is 18,5 meters and has branches up to 12 meters. Baobab Trees play an important role in African legend and daily life. The **Gaub Cave** located on the historical Farm Ghaub. Local tradition accredits the discoverer of the Gaub Cave as being Dr. H. Vedder. The first known written report of the cave appeared in the German *Deutsche Kolonialzeitung* in 1914 (Grootfontein, 2017). No known heritage sites are however located within the proposed development area. If any heritage or culturally significant artefacts are found during the construction, construction must stop and the National Heritage Council of Namibia immediately notified.

Other places of interest within the Otjiwarongo area specifically, include:

**Cheetah Conservation Fund.** Otjiwarongo area is also known as the cheetah capital of the world. The Cheetah Conservation Fund is committed to the long-term conservation of Namibia's large carnivores, notably cheetah and leopards.

**Crocodile Ranch.** A relatively new attraction in Otjiwarongo is the crocodile farm near the eastern border of town and adjacent to Erf 1756, where one can observe and photograph crocodiles at close range and learn about the breeding habits of these reptiles.

**Old Henschel steam locomotive** at Otjiwarongo station. The old steam engine No. 41, built in 1912 by the Henschel Company in Kassel, Germany can be seen in front of the railway station at Otjiwarongo. It used to run on the railway line from Swakopmund to Otavi.

**Dinosaur Track Mount Etjo.** The tracks of several dinosaurs' footprints can be clearly seen in the rock nearby Etjo Table Mountain (Otjozondjupa, 2021).

## 4.2. BIO-PHYSICAL ENVIRONMENT

### 4.1.1 Climate

The average annual temperature at Otjiwarongo is between 20 to 22°C. The mean maximum temperature for the summer months and the mean minimum temperature for the winter months are 30 to 32°C and 4 to 6°C respectively (OSP, 2015). See Figure 3 for an average temperature graph of Otjiwarongo. See Figure 4 for average rainfall data for the settlement.

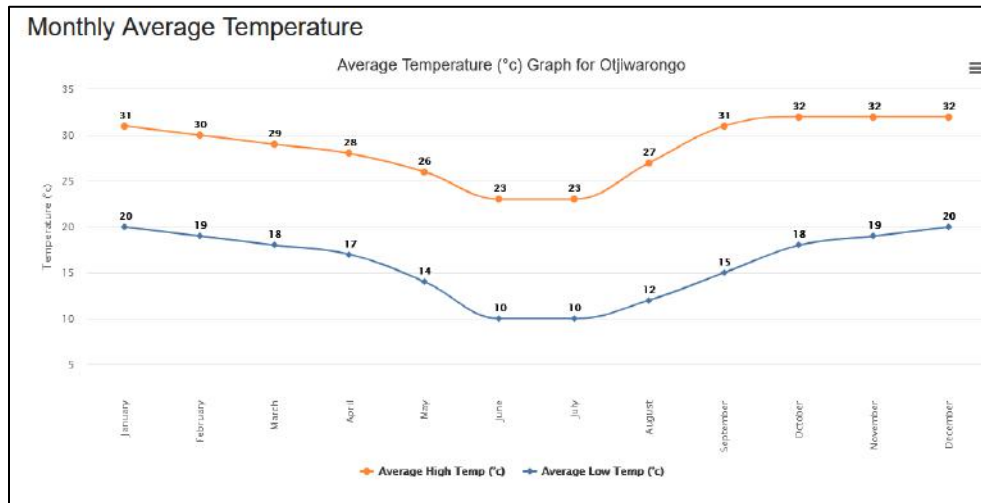
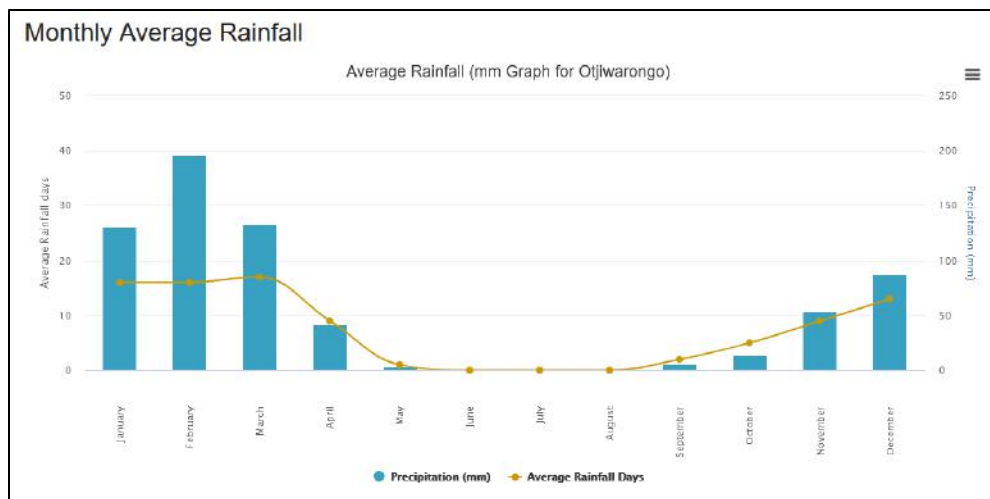


Figure 3: Average temperature graph for Otjiwarongo (Worldweatheronline, 2021)



**Figure 4:** Average monthly rainfall graph for Otjiwarongo (Worldweatheronline, 2021 a)

#### 4.2.2. Topography, Geology and Hydrogeology

##### Geology

The area is situated in the centre of the Damara trough. Classical geosynclines sedimentation produced a thick pile of ill-sorted sediments, which form the Ugab and Khomas subgroups of the Swakop Group (Damara Sequence). On the platform edges of the trough chiefly calcareous sediments were deposited. Both rock suites were subsequently folded and metamorphosed, and granitic intrusion took place. Bands of marble and quartzite in these otherwise phyllitic metamorphic rocks are of hydrogeological significance. The youngest intrusive rocks in the area are complexes of post-Karoo age like the Brandberg, Messum Crater in the Goboboseb Mountains, Paresis Mountain and scattered smaller outcrops (OSP, 2015).

Major north-east striking faults and thrusts, and north-striking faults form the present outcrop boundary of younger rocks mainly represented by aeolian sandstones of the Etjo Formation at the Waterberg and Mount Etjo. These sandstones overlie the argillaceous sediments of the Omingonde Formation, which dominate the geology between the farms Ohakaue in the north and Vrede in the south. To the west of the Otjiwarongo-Omaruru tar road, these young sedimentary rocks are absent, except for some outcrop of Karoo west of the Brandberg. Two



bodies of older lavas and associated pyroclastics occur south-east of Khorixas, while basalt flows of Karoo age form the Goboboseb Mountains (OSP, 2015).

### **Hydrology**

Otjiwarongo is supplied with water from two schemes:

- Omarassa-Otjiwarongo Groundwater Scheme providing water from the Otjiwarongo Marble Aquifer with 13 production boreholes.
- Omatjenne-Otjiwarongo scheme with 10 boreholes

Otjiwarongo is situated in an area characterised by modestly productive aquifers. The Brandberg, Erongo and Waterberg groundwater area includes the Waterberg in the north-east and stretches down to the Atlantic coast in the south-west. It covers most of the western part of the Otjozondjupa Region and the northern Erongo Region (OSP, 2015)

### **Soils**

Soils are of the Eutric Regosols type, i.e., fertile soils with high base saturation, which renders the areas medium to highly suitable for crop production (OSP, 2015)

### **Topography**

Otjiwarongo is located at an altitude of 1,475 meters above sea level. Otjiwarongo is situated at the north-eastern part of the Central-Western Plain that stretches from Walvis Bay in the south, some 450km inland to Okahandja in the central-east and Outjo in the central-north. The plains were largely formed by erosion that carved out the catchment areas of rivers such as the Khan, Omaruru, Swakop and Ugab. Much of the area lies between 500 and 1,000 m above sea level (OSP, 2015)

### **4.2.3. Terrestrial Ecology**

#### **4.2..3.1. Fauna and Flora**

As Otjiwarongo lies on the Central-Western Plains, the dominant vegetation is of the Thornbush Shrubland Type. It is characterised by dense shrubland, and the area is known to be affected heavily by bush encroachment of between 4,000 and 12,000 plants per ha. (OSP, 2015).

The area around Otjiwarongo is characterised by bush encroachment, mainly by the *Acacia mellifera*, the levels of plant production is generally high. Both the general availability of fodder for grazing and for browsing is good within the Namibian agricultural context.

### **4.2. SURROUNDING LAND USE**

The surrounding land use consists of a combination of various uses, with a complex of residential units adjacently east of Erf 1757 in Orwetoveni Extension 3 and single residential properties to the west in Otjiwarongo Proper. Immediately south of Erf 1576 the Crocodile Farm can be found.

### **4.5. PHYSICAL ENVIRONMENT**

The infrastructure needs of the proposed project can be categorised into two broad classifications namely:

- Basic infrastructure that includes electricity and roads.
- Environmental infrastructure that consists of water supply, sewage and drainage systems, solid waste management and landscaping.

The engineering services such as water pipelines, sewer reticulation, access roads, electricity supply, storm water management etc. for the development will be designed and constructed to connect to and fully integrate with the existing network of Otjiwarongo. Access to the site will be obtained from the existing Henk Willems Street.

The following are specific requirements from CENORED:

- The proposed multipurpose market should accommodate existing electrical networks.
- In line with the provisions of the Electricity Act and its regulations, if the existing electrical networks have to be altered or moved, the cost implications will be on the developer.
- The alterations of electrical networks should be approved by CENORED prior to construction.

## 5|PROJECT DESCRIPTION:

Otjiwarongo is continuously improving access to amenities in line with its growth strategy in a sustainable manner. To this end the Municipality intends to develop a multipurpose market on Erven 1756 and 1757 Otjiwarongo that will augment the link between Orwetoveni residential suburb and the Town Centre.

- The multipurpose market will consist of the following amenities:
  - an open market
  - a taxi rank
  - an open museum and
  - a theatre

Below is an expanded breakdown of the amenities:

<b>10 X Crafts and Curio Shops</b>	<b>2 x Meat Traders</b>
<b>6 x Hair Salons</b>	2 x Shoe Repair Shops
<b>6 x Food Stalls</b>	2 x Motor Spare Shop
<b>6 x Barber Shops</b>	4 x Ablutions
<b>6 x Tailor/ Dress Maker Shops</b>	4 x Cold Rooms
<b>2 x Radio Repair Shops</b>	10 x Small Vendors
<b>2 x Cellphone Repair Shops</b>	2 x Shoe Boutiques
<b>4 x Areas for Kapana Vendors</b>	2 x Photocopy and printing Shops
<b>2 x Areas for Fruit and Vegetable Vendors</b>	Accounts and Billing Office

<b>2 x Butchery</b>	Existing Fire Station
<b>1 x Bakery</b>	

The fire station will be relocated and the building will be converted into a museum. The current taxi rank on site will be demolished as it is considered unsuitable for the intended purposes in terms of design and safety.

### 5.1. PERSONNEL

In total at least 142 direct employment will be created by this development. During the construction phase at least 50 people will be employed. The recreational center will be operated 24 hours per day, 7 days per week.

## 6|PUBLIC CONSULTATION PROCESS:

### 6.1. PUBLIC CONSULTATION PROCESS PHASE 1

In terms of Section 21 of the EIA Regulations a call for public consultation with all I&APs during the EIA process is required. This entails consultation with members of the public and providing them an opportunity to comment on the proposed project. The Public Consultation Process does not only incorporate the requirements of Namibia's legislation, but also takes account of national and international best practises. Please see **Table 4** below for the activities undertaken as part of the public participation process.

**Table 4:** Table of Public Consultation Activities

ACTIVITY	REMARKS
Placement of site notice/posters at the site.	See <b>Annexure A</b>
Placing advertisements in two newspapers for two consecutive weeks, namely the Confidante and The Windhoek Observer	See <b>Annexure B</b>
Written notice to Interested and Affected Parties via Email	See <b>Annexure D</b>
Community meeting	26 October 2021 at Swanevelder Hall, Orwetoveni, Otjiwarongo

## 6.2. PUBLIC CONSULTATION PROCESS PHASE 2

The second phase of the Public Consultation Process involved the lodging of the Draft Environmental Scoping Report (DESR) to all registered I&APs for comment. Registered and potential I&APs were informed of the availability of the DESR for public comment. An Executive Summary of the DESR was included in the communication sent out to the registered I&APs. I&APs were given time until **07 January 2022** to submit comments or raise any issues or concerns they may have with regard to the proposed project.

### 7|ENVIRONMENTAL ASSESSMENT PROCESS:

The Environmental Impact assessment process depend on the nature and magnitude of the proposed activity, as well as the type of environmental control envisaged for the particular project. Given the nature of the proposed activity, the identification and assessment of the potential impacts will be based on the type and scale of the various activities associated with the project.

Assessment of the predicted significance of impacts for a proposed development is by its nature, inherently uncertain. To deal with such uncertainty in a uniform manner, standardised and internationally recognised methodologies have been developed. One such accepted methodology is applied in this study to assess the significance of the potential environmental impacts of the proposed development, outlined as follows in **Table 5**.

**Table 5:** Impact Assessment Criteria

CRITERIA	CATEGORY
Impact	Description of the expected impact
<b>Nature</b> Describe type of effect	<b>Positive:</b> The activity will have a social / economical / environmental benefit. <b>Neutral:</b> The activity will have no effect <b>Negative:</b> The activity will have a social / economical / environmental harmful effect
<b>Extent</b>	<b>Site Specific:</b> Expanding only as far as the activity itself (onsite)

CRITERIA	CATEGORY
Describe the scale of the impact	<p><b>Small:</b> restricted to the site's immediate environment within 1 km of the site (limited)</p> <p><b>Medium:</b> Within 5 km of the site (local)</p> <p><b>Large:</b> Beyond 5 km of the site (regional)</p>
<p><b>Duration</b></p> <p>Predicts the lifetime of the impact.</p>	<p><b>Temporary:</b> &lt; 1 year (not including construction)</p> <p><b>Short-term:</b> 1 – 5 years</p> <p><b>Medium term:</b> 5 – 15 years</p> <p><b>Long-term:</b> &gt;15 years (Impact will stop after the operational or running life of the activity, either due to natural course or by human interference)</p> <p><b>Permanent:</b> Impact will be where mitigation or moderation by natural course or by human interference will not occur in a particular means or in a particular time period that the impact can be considered temporary</p>
<p><b>Intensity</b></p> <p>Describe the magnitude (scale/size) of the Impact</p>	<p><b>Zero:</b> Social and/or natural functions and/ or processes remain unaltered</p> <p><b>Very low:</b> Affects the environment in such a way that natural and/or social functions/processes are not affected</p> <p><b>Low:</b> Natural and/or social functions/processes are slightly altered</p> <p><b>Medium:</b> Natural and/or social functions/processes are notably altered in a modified way</p> <p><b>High:</b> Natural and/or social functions/processes are severely altered and may temporarily or permanently cease</p>
<p><b>Probability of occurrence</b></p> <p>Describe the probability of the Impact actually occurring</p>	<p><b>Improbable:</b> Not at all likely</p> <p><b>Probable:</b> Distinctive possibility</p> <p><b>Highly probable:</b> Most likely to happen</p> <p><b>Definite:</b> Impact will occur regardless of any prevention measures</p>
<p><b>Degree of Confidence in predictions</b></p> <p>State the degree of confidence in predictions based on availability of</p>	<p><b>Unsure/Low:</b> Little confidence regarding information available (&lt;40%)</p> <p><b>Probable/Med:</b> Moderate confidence regarding information available (40-80%)</p>

CRITERIA	CATEGORY
information and specialist knowledge	<b>Definite/High:</b> Great confidence regarding information available (>80%)
<p><b>Significance Rating</b></p> <p>The impact on each component is determined by a combination of the above criteria.</p>	<p><b>Neutral:</b> A potential concern which was found to have no impact when evaluated</p> <p><b>Very low:</b> Impacts will be site specific and temporary with no mitigation necessary.</p> <p><b>Low:</b> The impacts will have a minor influence on the proposed development and/or environment. These impacts require some thought to adjustment of the project design where achievable, or alternative mitigation measures</p> <p><b>Medium:</b> Impacts will be experienced in the local and surrounding areas for the life span of the development and may result in long term changes. The impact can be lessened or improved by an amendment in the project design or implementation of effective mitigation measures.</p> <p><b>High:</b> Impacts have a high magnitude and will be experienced regionally for at least the life span of the development, or will be irreversible. The impacts could have the no-go proposition on portions of the development in spite of any mitigation measures that could be implemented.</p>

\*NOTE: Where applicable, the magnitude of the impact has to be related to the relevant standard (threshold value specified and source referenced). The magnitude of impact is based on specialist knowledge of that particular field. For each impact, the EXTENT (spatial scale), MAGNITUDE (size or degree scale) and DURATION (time scale) are described. These criteria are used to ascertain the SIGNIFICANCE of the impact. The decision as to which combination of alternatives and mitigation measures to apply lies with the proponent, and their acceptance and approval ultimately with the relevant environmental authority.

The SIGNIFICANCE of an impact is derived by taking into account the temporal and spatial scales and magnitude. Such significance is also informed by the context of the impact, i.e., the character and identity of the receptor of the impact.



---

#### 9|MITIGATION HIERACHY:

The mitigation hierarchy is a tool aimed at helping to manage biodiversity risk, and is commonly applied in Environmental Impact Assessments. The most common reference point for banks providing project finance is mitigation measures; this provides the financial institutions with information on how environmental and social risks will be managed (See **Figure 5** below). These cover avoidance, minimization, restoration and compensation amongst other things. It is possible and considered sought after to enhance the environment by ensuring that positive gains are included in the proposed activity or project. If negative impacts occur then the hierarchy indicates further steps.



**Impact avoidance:** This step is most effective when applied at an early stage of project planning. It can be achieved by:

- not undertaking certain projects or elements that could result in adverse impacts;
- avoiding areas that are environmentally sensitive; and
- putting in place preventative measures to stop adverse impacts from occurring.

**Impact minimization:** This step is usually taken during impact identification and prediction to limit or reduce the degree, extent, magnitude, or duration of adverse impacts. It can be achieved by:

- scaling down or relocating the proposal;
- redesigning elements of the project; and
- taking supplementary measures to manage the impacts

**Restoration:** This step is taken to improve degraded or removed ecosystems following exposure to impacts that cannot be completely avoided or minimised. Restoration tries to return an area to the original ecosystem that occurred before impacts. Restoration is frequently needed towards the end of a project's life-cycle, but may be possible in some areas during operation.

**Impact compensation:** This step is usually applied to remedy unavoidable residual adverse impacts. It can be achieved by:

- rehabilitation of the affected site or environment, for example, by habitat enhancement;
- restoration of the affected site or environment to its previous state or better; and
- replacement of the same resource values at another location (off-set), for example, by wetland engineering to provide an equivalent area to that lost to drainage or infill. Offsets are often complex and expensive; it is therefore preferable to pay attention to earlier steps in the mitigation hierarchy.

**Figure 5:** Mitigation Hierarchy

---

## 10|POTENTIAL IMPACTS

This Chapter describes the potential impacts on the biophysical and socio-economic environments, which may occur due to the proposed activities. These include potential impacts which may arise during the planning and design phase, potential construction related impacts (i.e., short to medium term) as well as the operational impacts of the proposed development (i.e., long-term impacts).

The assessment of potential impacts will help to inform and confirm the selection of the preferred project plan and design to be submitted to MEFT for consideration. Their decision on the environmental acceptability of the proposed project and the setting of conditions of authorisation, should the project be authorised, will be informed by this chapter amongst other information contained in this EA Report.

The baseline and potential impacts that could result from the proposed development are described and assessed with potential mitigation measures recommended. Finally, comment is provided on the potential cumulative impacts which could result should this development, and others like it in the area, be approved.

### **10.1. PLANNING AND DESIGN PHASE**

During the planning and design phase consideration is given to aspects such as surface and groundwater; fauna and flora; infrastructure; access road and traffic, social.

#### **10.1.1 Surface and Groundwater**

There are currently no visible surface water bodies to be considered with regard to the proposed site as there are no perennial water sources in the area, however Otjiwarongo is reliant on its underground water resource which is at risk of contamination from the activities envisaged to take place on site.

The provision of professionally designed and constructed municipal services to the development will minimise the potential pollution of water sources because they will be linked to the existing water and sewer reticulation. It is imperative that

preventative maintenance of the infrastructure is carried out on a regular basis to ensure early detection of leaks that can contaminate the groundwater resource. The businesses operating from the new development will not be allowed to discharge waste and waste water directly into the environment. The Water Act, 1956 makes provision for requirements in terms of water supplies for drinking water and for waste water treatment and discharge into the environment (See **Appendix B** of the EMP). These guidelines should be adhered to.

### **10.1.2 Fauna and Flora**

Change in land use for development purposes leads to habitat destruction, which is detrimental to the maintenance of biodiversity (Haddad et al, 2015). The general area has been influenced by anthropogenic activities for residential and commercial purposes.

While no obvious large animals could be observed on the development site, it could however be expected that the surrounding areas which support natural vegetation will also support species of smaller vertebrates such as reptiles, amphibians, mammals and birds. Natural aquatic communities are largely absent from the region as a result of the absence of surface water flow due to the high infiltration rates. Pollution could have an impact on vegetation structure in terms of canopy cover, understory and ground cover.

Any type of development has potential negative environmental consequences, but identifying the most important fauna and flora species including high risk habitats beforehand, coupled with environmentally acceptable mitigating factors, lessens the overall impact of such development. Both Erven 1756 and 1757 host a significant number of large *Acacia* trees, these trees should be preserved at all cost and incorporated into the designs of the development.

### **10.1.3 Infrastructure**

The engineering services such as water pipelines, sewer reticulation, access roads, electricity supply, storm water management etc. for the development will be designed and constructed to connect to and fully integrate with the existing network of Otjiwarongo town. The proponent should appoint a professional engineer that will design and supervise the installation of the engineering services.

Storm water management systems should be incorporated in the infrastructure designs to address the potential impacts during flood events. This is of utmost importance to ensure that the risk of infrastructure failure and contamination is minimised.

There is an increased risk of flooding when engineering services including stormwater management systems are not designed and supervised by a suitably qualified registered engineer and constructed by competent contractors, and could result in the contamination of surface and groundwater. There is a natural drainage that runs across the centre of Erf 1757 in a south-westerly direction where it joins a larger one running on the eastern boundary of Erven 1757 and 1756 in a northerly direction. These drainage channels protect the neighbouring properties in Otjiwarongo Proper and Orwetoveni Extension 3 from flooding. The designs should take these features into consideration and ensure that no structures are to be sited such that they impede the natural flow of water. Regular maintenance should also be carried out to ensure that the pathways are not clogged up by vegetation growth and solid waste.

#### **10.1.4 Access Road**

Access to the site will be obtained from the existing Henk Willems Street.

#### **10.1.5 Traffic**

Traffic is expected to increase during the operational phase of the project. Due to the nature of the development and the land use a number of various types of vehicles will be frequenting the area, these would mostly consist of vehicles used by clients, staff and delivery vehicles. Provision of adequate parking is essential to avoid uncontrolled parking of vehicles that may impede the movement of traffic in the vicinity.

#### **10.1.6 Social Impacts**

Pressure on public transport culminates in the need for taxi services which in turn motivates the need for taxi ranks. These leads to concern about pollutants discharged by motor traffic such as carbon monoxide, hydrocarbons (un-burnt petrol fumes), nitrous oxides and lead deposits. Lead is the most dangerous of the

elements that are discharged. The situation is exacerbated when roads are not bituminised leading to a cloud of dust created by taxis transporting passengers. Air pollution such as dust, fly ash and smoke are annoying but lead fumes cause serious health problems. Dust could enter the nearby houses. Residents may encounter problems with their washing on the line and will be forced to determine the direction of wind before doing any washing on any day (Noah, M, 2002).

Littering by drivers and passengers is another area of concern. Cleanliness, fresh air, purity of water, greenness of landscape, quietness of surroundings is greatly valued, however in the more densely occupied parts of the world these are becoming scarce (Contrell, 1978) and can be considered luxury.

The impact of large numbers of human and taxi populations at taxi ranks can also be felt on man-made features as fences and water drainage systems. Passengers, their companions and fruit vendors lean against the wire fences. Minibus taxi cleaners hang wet and heavy car floor rubber mats on the fence. Fruit vendors and passengers throw fruit and vegetable remnants into the water drainage system. House owners next to the taxi ranks may have their private motorways blocked. Additional job opportunities such as taxi cleaning could be created, and cleaners make use of detergents to wash their vehicles and aerosol cans to clean dashboards. The contaminated water from these activities could potentially pollute the water resources in the area (Noah, M, 2002).

Concerns have been raised by stakeholders i.e., taxi unions, about the local involvement in the development of the taxi rank. They also questioned whether the identified site is strategically positioned to ensure availability of clients travelling to outside towns such as Windhoek or the north.

## **10.2. CONSTRUCTION PHASE**

During the construction phase the following potential impacts have been identified: fauna and flora; pressure on the infrastructure; surface and ground water; soil erosion impacts; health, safety and security impacts; air quality; noise, traffic; solid waste management; hazardous substances; and social impact.

### **10.2.1 Fauna and Flora**

The site will be cleared substantially to make way for the development and the installation of service infrastructure and buildings. While limited vegetation exists on the site, there is a significant number of large *Acacia* trees on both erven. These plants are at risk of being cleared in favour of the new developments.

### **10.2.2 Pressure on Infrastructure**

During the construction phase there will be an additional demand for basic services such as water, electricity and sewer. The services will be used for both human consumption and for construction purposes. These impacts will however only be limited to the construction phase and will thus have minimal short-term impact. The risk of wastage and pollution may occur if no proper management actions are implemented.

### **10.2.3 Surface and Ground Water**

Surface and ground water impacts may be encountered during the construction phase, especially if construction takes place during the rainy season. The risk of contaminating such water sources can be increased by accidental spillage of oils and fuels and any other equipment used during construction; chemical contamination from construction materials such as cement, paint and mechanical fluids. This risk is minimised by the fact that the construction period will be a short-term activity.

### **10.2.4 Soil Erosion Impacts**

Considering the characteristics of the proposed site, soil erosion is likely to be encountered at the area especially if construction will take place during the rainy season and since the site will be cleared of vegetation to allow for the development there will be no shrubs or trees to hold the soil together.

### **10.2.4 Health, Safety and Security**

Due to a high demand of construction workers during this phase of the project, the deployment of a temporary construction workforce may be necessary. These types of projects, where construction workers have the opportunity to interact with the local community, create a significant risk for the development of social conditions

and behaviours that contribute to the spread of conditions such as HIV and AIDS. The Ministry of Environment, Forestry and Tourism has thus initiated a programme aimed at mainstreaming HIV and gender issues into environmental impact assessments. The same concerns relate to the Covid-19 pandemic if there is no adherence to protocols as they become applicable from time to time.

### **10.2.5 Air Quality**

During the construction phase fugitive dust and exhaust gases generated have a potential impact on the air quality of the area and its surroundings. Dust is a major component of air pollution and could negatively affect the health of nearby communities if not mitigated. Dust is generated mainly from the following activities:

- Excavations and stockpiles during site clearance;
- Use of heavy vehicles, machinery and equipment;
- Procurement and transport of construction materials to the site.

These are however short-term impacts limited to the construction phase of the development.

### **10.2.6 Noise**

Noise is perceived as one of the most undesirable consequences of a construction activity. The most common reported impacts are interference in oral communication and sleep disturbance. The construction of the infrastructure will result in associated noise impacts. These noise impacts will mainly be associated with construction machinery and vehicles, concrete and mixing; and excavation for foundations. Given that the surrounding areas are already developed, the residents and property owners will be impacted. The impact is however limited to the construction period only.

### **10.2.7 Traffic**

Traffic is expected to increase during the construction phase of the project. A number of trucks and other heavy machinery will be required to deliver, handle and position construction materials as well as to remove spoil material. Not only will the increase in traffic result in associated noise impacts, it will also impact on



the vehicular traffic in the area. The use of slow-moving heavy trucks has the potential to cause traffic jams. The safety of road users needs to be considered.

#### **10.2.8 Solid Waste Management**

The construction activities will lead to the generation of significant amounts of solid waste mainly in the form of construction building rubble and soft refuse from the construction workforce. This could have a negative environmental impact if not managed well. Therefore, enough waste bins and skip containers should be availed to manage the solid waste. All solid waste should be disposed of at a designated landfill site in Otjiwarongo.

#### **10.2.9 Storage and Utilisation of Hazardous Substances**

Hazardous substances are regarded by the Hazardous Substance Ordinance (No. 14 of 1974) as those substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or flammable nature or the generation of pressure in certain circumstances. It covers manufacture, sale, use, disposal and dumping as well as import and export. During the construction period, the on-site use and storage of these types of hazardous substances, such as oils, lubricants, curing compounds, types of solvents, primers, adhesives and diesel, could have a negative impact on the surrounding environment, if these substances spill and enter the environment.

#### **10.2.10 Social Impacts**

Theft, alcohol and drug smuggling are some of the risks posed by the deployment of construction workforce. Control of the movement of these workers is imperative to avoid a negative impact in the local community. The project will also result in short-term positive impacts as far as the social welfare of the affected community is concerned. There is potential of an influx of migrant workers to the town which would boost the local economic development of the town as a result of an increase in the purchase of consumer goods. The local community will benefit through preferential recruitment of local labour as far as possible.

### **10.3. OPERATIONAL PHASE IMPACTS**

The operational phase impacts that have been identified are: air quality; noise; waste management; infrastructure development; quality of life; and visual impact.

#### **10.3.2 Air Quality**

The air quality in the area is considered to be fairly good. Various types of activities within the development area may result in increased dust and emission impacts if not managed correctly. Dust and emissions associated with the proposed development will mostly be generated by vehicle movement; as well as from any other operational activity that generates emissions.

#### **10.3.3 Noise**

Operational noise associated with the proposed development is likely to be limited to general operational noise levels from a typical open market facility. The impact is likely to be localised at site given the locality of the development. It is however important that mitigation measures are applied to bring noise levels to acceptable limits and ensure that workers and patrons are protected against excessive noise levels at all time.

#### **10.3.4 Waste Management**

The operational activities will likely generate a reasonable amount of solid waste. An adequate number of refuse receptacles should be placed at strategic locations on the site which should be emptied frequently and taken to the designated landfill site. These receptacles should be of a type that can be closed to prevent scavenging by birds and animals. Solid waste such as such as cans, glass, paper and plastic can be segregated at source and be transported for recycling.

#### **10.3.5 Infrastructure Development**

It is recommended that alternative and renewable source of energy be explored and introduced into the proposed development to reduce dependency on the grid. Solar geysers and panels should be considered to provide for general lighting and heating of water and buildings. Designs and building materials should be as such to reduce dependency on artificial heating and cooling in order to limit the overall energy consumption. Water saving mechanisms and education should be incorporated

within the culture of the facilities' operations and employees in order to further reduce water demand.

### **10.3.6 Quality of Life**

The development will serve as an important economic activity that provides jobs. This will have a positive impact on the local economic development, quality of life of the end-users and employees in terms of household incomes, and also contribute to the Gross Domestic Product of the region and country in general. It will also increase access to amenities for the Otjiwarongo community and visitors.

### **10.3.7 Visual and Sense of Place**

The new development may be visually prominent from some angles and could thus have an impact on the sense of place of the local community. Lighting at night could be disturbing to the local community. Therefore, the aesthetic quality of the new structures has to be pleasing and designed to blend in with the natural surrounds.

---

## **11 | SUMMARY OF POTENTIAL IMPACTS**

A summary of the significance of the potential impacts from the proposed project assessed above is included in **Table 6**. The **Tables 7 – 9** provide a summary of the mitigation measures proposed for the impacts.

**Table 6:** Overview of potential impacts

Impacts	Negative		Positive		No Impact	Cumulative Impact
	Short Term	Long Term	Short Term	Long Term		
<b>Planning and Design Phase</b>						
1. Surface and ground water	X					Medium
2. Fauna and flora	X					Low (-ve)
3. Infrastructure	X					Low (-ve)
4. Access road	X					Medium
5. Social	X					Low (-ve)
<b>Construction Phase</b>						
7. Fauna and flora	X					Low (-ve)
8. Pressure on infrastructure	X					Low (-ve)
9. Surface and groundwater	X					Low (-ve)
10. Soil erosion impacts	X					
10. Health, safety and security	X					Low (-ve)
11. Air quality	X					Medium
12. Noise	X					Low (-ve)
13. Traffic	X					Medium
14. Waste management	X					Medium

Impacts	Negative		Positive		No Impact	Cumulative Impact
	Short Term	Long Term	Short Term	Long Term		
15. Hazardous substances	X					Low (-ve)
16. Social				X		Medium
<b>Operational Phase</b>						
17. Air quality	X					Medium
18. Noise		X				Low (-ve)
19. Waste management		X				Medium
20. Infrastructure development	X					Low (-ve)
21. Quality of life				X		High (+ve)
22. Visual		X				Low (-ve)

**Table 7:** Proposed mitigation measures for the planning and design phase

PLANNING AND DESIGN PHASE IMPACTS	
Impact	Mitigation Measures
Surface and ground water	<ul style="list-style-type: none"> <li>• Ensure that the infrastructure (water, sewer, stormwater) is regularly inspected and maintained to ensure it doesn't fail.</li> <li>• No dumping of waste products of any kind in or in close proximity to surface water bodies.</li> <li>• Ensure that the sewerage system is properly functional at all times and no waste flows into the environment.</li> <li>• A regular and planned maintenance program for the bulk infrastructure services should be put in place.</li> <li>• Re-use of treated waste water should be considered wherever possible.</li> <li>• Disposal of waste from the site should be properly managed and taken to the Otjiwarongo landfill site.</li> <li>• Washing of vehicles and equipment should not be allowed on site. Should it be necessary to wash vehicles and equipment this should be done at an area properly suited and prepared to receive and contain polluted waters.</li> </ul>
Fauna and flora	<ul style="list-style-type: none"> <li>• Adapt the proposed development to the local environment – e.g., small adjustments to the site layout to avoid potential features such as existing vegetation, etc.</li> <li>• Preserve the large <i>Acacia</i> trees found on site. Incorporate them in the design of the infrastructure.</li> <li>• Plant local indigenous species of flora as part of the landscaping as these species would require less maintenance than exotic species.</li> <li>• Prevent the introduction of potentially invasive alien ornamental plant species such as; Lantana, Opuntia, Prosopis, Tecoma, etc.; as part of the landscaping as these species could infestate the area further over time.</li> <li>• Maintain control on movement of personnel.</li> <li>• Provide training to personnel on importance of protecting fauna and flora.</li> <li>• Prevent the collecting of wood, veld food, hunting etc.</li> </ul>

**PLANNING AND DESIGN PHASE IMPACTS**

Impact	Mitigation Measures
Infrastructure	<ul style="list-style-type: none"> <li>• Appoint professional engineers to design a detailed stormwater management system and supervise the construction thereof as part of the infrastructure service provision of the development.</li> <li>• Adapt the designs of the structures to avoid inundated sections.</li> <li>• The designs should take the natural drainage features that runs across the centre of Erf 1757 in a south-westerly direction where it joins a larger one running on the eastern boundary of Erven 1757 and 1756 in a northerly direction into consideration and ensure that no structures are to be sited such that they impede the natural flow of water.</li> <li>• Regular maintenance should also be carried out to ensure that the pathways are not clogged up by vegetation growth and solid waste.</li> <li>• It is recommended that alternative and renewable source of energy be explored and introduced into the proposed development to reduce dependency on the grid.</li> <li>• Solar geysers and panels should be introduced to provide for general lighting and heating of water and buildings.</li> <li>• Other ‘green’ technologies to reduce the proposed development’s dependency on fossil fuel should be explored where possible.</li> <li>• Designs and building materials should be as such to reduce dependency on artificial heating and cooling in order to limit the overall energy necessities.</li> <li>• Water saving mechanisms should be incorporated within the proposed development’s design and plans in order to further reduce water demand.</li> <li>• Re-use of treated waste water should be considered wherever possible to reduce the consumption of potable water.</li> <li>• Adhere to water quality guidelines in terms of The Water Act, 1956.</li> </ul>
Access Road	<ul style="list-style-type: none"> <li>• Ensure access to the site does not obstruct normal traffic flow along Henk Willems Street and surrounds.</li> </ul>
Traffic	<ul style="list-style-type: none"> <li>• Provide adequate parking space on site.</li> <li>• Ensure that road junctions have good sightlines.</li> <li>• Adhere to the speed limit.</li> <li>• Implement traffic control measures where necessary.</li> </ul>

PLANNING AND DESIGN PHASE IMPACTS	
Impact	Mitigation Measures
Social	<ul style="list-style-type: none"> <li>• Ensure surface used by vehicles in and around the development area are paved.</li> <li>• Provide adequate refuse bins for disposal of waste by users.</li> <li>• Stringent control measures should be put in place to manage and control additional service providers such as vendors and car cleaners.</li> <li>• No detergents or waste water from these activities should be allowed to go into the drainage system.</li> <li>• Control the usage of fences as objects for hanging wet and heavy car floor rubbers or any unwanted materials.</li> <li>• Users should take care not to obstruct entrances to the neighbouring properties.</li> <li>• The proponent should consider hiring an official or security company to ensure order at all times at these facilities.</li> </ul>

**Table 8:** Proposed mitigation measures for the construction phase

CONSTRUCTION PHASE IMPACTS	
Impact	Mitigation Measures
Fauna and flora	<ul style="list-style-type: none"> <li>• Adapt the proposed developments to the local environment – e.g., small adjustments to the site layout could avoid potential features such as water bodies, vegetation, etc. all of which may serve as habitat to a myriad of vertebrate fauna.</li> <li>• Prevent the destruction of important tree species, particularly the large <i>Acacia</i> trees found on the sites.</li> <li>• Do not clear cut the entire development site, but rather keep the few individuals and/or clumps of trees/shrubs not directly affecting the developments as part of the landscaping especially important for shade in the hot climate.</li> <li>• The trees that are to be kept should be clearly marked with “danger tape” to prevent accidental removal.</li> <li>• Regular inspection of the “danger” tape should be carried out.</li> <li>• The very important trees should be “camped off” to prevent the unintended removal or damage to these trees.</li> </ul>



## CONSTRUCTION PHASE IMPACTS

Impact	Mitigation Measures
	<ul style="list-style-type: none"> <li>• Recommend the planting of local indigenous species of flora as part of the landscaping as these species would require less maintenance than exotic species.</li> <li>• Transplant removed trees where possible, or plant new trees in lieu of those that have been removed.</li> <li>• Prevent the introduction of potentially invasive alien ornamental plant species such as; Lantana, Opuntia, Prosopis, Tecoma, etc.; as part of the landscaping as these species could infest the area further over time.</li> <li>• Prevent contractors from collecting wood and veld food such as amphibians, migrating birds, etc. during the construction phase.</li> </ul>
Pressure on infrastructure	<ul style="list-style-type: none"> <li>• Ensure that the workforce is provided with temporary toilets during the construction phase.</li> <li>• These toilets should be emptied and maintained regularly.</li> <li>• Waste from the toilets should be disposed of at the waterworks of Otjiwarongo.</li> <li>• No open urination and defecation are allowed in the development area.</li> <li>• A sufficient number of waste bins should be placed around the site for the soft refuse.</li> <li>• A sufficient number of skip containers for the heavy waste and rubble should be provided for around the site.</li> <li>• Solid waste will be collected and disposed of at an appropriate local land fill in Otjiwarongo.</li> <li>• Train workers on saving mechanisms for water and electricity.</li> <li>• Ensure water and electricity use is metered and properly recorded.</li> </ul>
Surface and ground water impacts	<ul style="list-style-type: none"> <li>• It is recommended that construction takes place outside of the rainy season in order to limit flooding on site and surface water pollution.</li> <li>• No dumping of waste products of any kind in or in close proximity to water bodies.</li> </ul>

## CONSTRUCTION PHASE IMPACTS

Impact	Mitigation Measures
	<ul style="list-style-type: none"> <li>• Heavy construction vehicles should be kept out of any surface water bodies and the movement of construction vehicles should be limited where possible to the existing roads and tracks.</li> <li>• Ensure that oil, fuel and lubricants spills from construction vehicles and machinery are prevented and that where these occur, that they are appropriately dealt with.</li> <li>• Drip trays must be placed underneath construction vehicles when not in use to contain all oil that might be leaking from these vehicles.</li> <li>• Contaminated runoff from the construction site should be prevented from entering the surface and ground water bodies.</li> <li>• All materials on the construction site should be properly stored.</li> <li>• Disposal of waste from the site should be properly managed and taken to a local landfill in Otjiwarongo.</li> <li>• Ablution facilities at the construction sites should be located at least 30 m away from any surface water.</li> <li>• Washing of personnel or any equipment should not be allowed on site. Should it be necessary to wash construction equipment these should be done at an area properly suited and prepared to receive and contain polluted waters.</li> </ul>
Soil erosion impacts	<ul style="list-style-type: none"> <li>• Clear the vegetation of the project area in phases during the construction period in order to keep the soil more compacted as well as to limit overall disturbance to the area over time.</li> <li>• Do not clear cut the entire development site, but rather keep the few individuals and/or clumps of trees/shrubs not directly affecting the developments.</li> <li>• It is recommended that construction takes place outside of the rainy season in order to limit potential flooding and the run off of loose soil causing further erosion.</li> <li>• Appropriate erosion control structures must be put in place where soil may be prone to erosion.</li> <li>• Checks must be carried out at regular intervals to identify areas where erosion is occurring.</li> <li>• Appropriate remedial actions are to be undertaken wherever erosion is evident.</li> </ul>

## CONSTRUCTION PHASE IMPACTS

Impact	Mitigation Measures
Health, safety and security	<ul style="list-style-type: none"> <li>• Ensure that all construction personnel are properly trained depending on the nature of their work.</li> <li>• Provide for a first aid kit and a properly trained person to apply first aid when necessary.</li> <li>• A wellness program should be initiated to raise awareness on health issues, especially the impact of sexually transmitted diseases.</li> <li>• Provide access to free condoms in the workplace throughout the construction phase.</li> <li>• Facilitate access to Antiretroviral medication for construction personnel.</li> <li>• Restrict unauthorised access to the site and implement access control measures.</li> <li>• Clearly demarcate the construction site boundaries along with signage of no unauthorised access.</li> <li>• Clearly demarcate dangerous areas and no-go areas on site.</li> <li>• Staff and visitors to the site must be fully aware of all health and safety measures and emergency procedures.</li> <li>• Contractors must comply with all applicable occupational health and safety requirements.</li> <li>• The workforce should be provided with all necessary Personal Protective Equipment where appropriate.</li> <li>• Adhere to the Covid-19 protocols as they are applicable from time to time.</li> </ul>
Air quality	<ul style="list-style-type: none"> <li>• All loose material should be kept on site for the shortest possible time.</li> <li>• It is recommended that dust suppressants such as Dustex be applied to all the construction clearing activities to minimise dust.</li> <li>• Construction vehicles to use only designated roads.</li> <li>• During high wind conditions the contractor must make the decision to cease works until the wind has calmed down.</li> <li>• Cover any stockpiles with plastic to minimise windblown dust.</li> <li>• Provide workers with dust masks.</li> </ul>

## CONSTRUCTION PHASE IMPACTS

Impact	Mitigation Measures
	<ul style="list-style-type: none"> <li>• Ensure construction vehicles are well maintained to prevent excessive emission of smoke.</li> </ul>
Noise	<ul style="list-style-type: none"> <li>• No amplified music should be allowed on site.</li> <li>• Inform immediate neighbours of construction activities to commence and provide for continuous communication between the neighbours and contractor/s.</li> <li>• Limit construction times to acceptable daylight hours.</li> <li>• Install technology such as silencers on construction machinery.</li> <li>• Do not allow the use of horns as a general communication tool, but use it only where necessary as a safety measure.</li> <li>• Provide protective equipment such as ear muffs and ear plugs to workers.</li> </ul>
Traffic	<ul style="list-style-type: none"> <li>• Limit and control the number of access points to the site.</li> <li>• Ensure that road junctions have good sightlines.</li> <li>• Construction vehicles need to be in a road worthy condition and maintained throughout the construction phase.</li> <li>• Transport the materials in the least number of trips as possible.</li> <li>• Adhere to the speed limit.</li> <li>• Implement traffic control measures where necessary.</li> <li>• Minimise the movement of heavy vehicles during peak time.</li> </ul>
Waste management	<ul style="list-style-type: none"> <li>• It is recommended that waste from the temporary toilets be disposed of at the Wastewater Treatment Works in Otjiwarongo.</li> <li>• A sufficient number of waste bins should be placed around the site for the soft refuse.</li> <li>• A sufficient number of skip containers for the heavy waste and rubble should be provided for around the site.</li> <li>• The waste containers should be able to be closed to prevent birds and other animals from scavenging.</li> <li>• Solid waste will be collected and disposed of at a designated local landfill in Otjiwarongo.</li> </ul>

<b>CONSTRUCTION PHASE IMPACTS</b>	
<b>Impact</b>	<b>Mitigation Measures</b>
Hazardous substances	<ul style="list-style-type: none"> <li>• All chemicals and other hazardous substances must be stored and maintained in accordance with the Hazardous Substances Ordinance (No. 14 of 1974), with all relevant licences and permits to be obtained where applicable.</li> <li>• Given the potential harm to human health during handling and use of any of hazardous substances it is essential that all staff be trained with regards to the proper handling of these substances as well as First Aid in the case of spillage or intoxication.</li> <li>• Bulk storage areas for substances should be bunded and capable to hold 120% of the total volume of a given substance stored on site.</li> </ul>
Social	<ul style="list-style-type: none"> <li>• Control movement of construction workforce.</li> <li>• Ensure local procurement where commodities are available locally.</li> </ul>

**Table 9:** Proposed mitigation measures for the operational phase

<b>OPERATIONAL PHASE IMPACTS</b>	
<b>Impact</b>	<b>Mitigation Measures</b>
Air quality	<ul style="list-style-type: none"> <li>• Manage activities that generate emissions or dust.</li> <li>• Minimise the movement of vehicles in the area.</li> <li>• The development needs to be controlled and managed as required by the Public Health Act (Act No. 36 of 1919) and Atmospheric Pollution Prevention Ordinance (No. 11 of 1976).</li> </ul>

### OPERATIONAL PHASE IMPACTS

Impact	Mitigation Measures
Noise	<ul style="list-style-type: none"> <li>• Limit the types of activities that generate excessive noise.</li> <li>• No activity having a potential noise impact should be allowed after 18:00 if possible.</li> <li>• Continuous monitoring of noise levels should be conducted to make sure the noise levels do not exceed acceptable limits.</li> </ul>
Waste management	<ul style="list-style-type: none"> <li>• A sufficient number of waste bins should be placed on the properties for the soft refuse.</li> <li>• A sufficient number of skip containers for the heavy waste and rubble should be provided for at appropriate sites.</li> <li>• The waste containers should be able to be closed to prevent birds and other animals from scavenging.</li> <li>• Solid waste will be collected and disposed of at a designated local landfill in Otjiwarongo.</li> <li>• Normal refuse such as cans, glass, paper and plastic should be segregated at source and be transported for recycling.</li> <li>• Oils, lubricants etc. will be collected and reused where feasible.</li> <li>• Metal waste will be accumulated and sent for recycling.</li> </ul>
Infrastructure development	<ul style="list-style-type: none"> <li>• It is recommended that alternative and renewable sources of energy be explored and introduced into the proposed development to reduce dependency on the grid.</li> <li>• Solar geysers and panels should be considered to provide for general lighting and heating of water and buildings.</li> <li>• Designs and building materials should be as such to reduce dependency on artificial heating and cooling in order to limit the overall energy consumption.</li> <li>• Water and electricity saving mechanisms and education should be incorporated within the culture of the development's operations and employees in order to further reduce water and electricity demand.</li> </ul>
Quality of life	<ul style="list-style-type: none"> <li>• The development will serve as an important economic activity that provides jobs. This will have a positive impact on the quality of life of the workers in terms of household incomes, but also the contribution to the Gross Domestic Product of the region and country.</li> </ul>

### OPERATIONAL PHASE IMPACTS

Impact	Mitigation Measures
Visual and Sense of Place	<ul style="list-style-type: none"><li>• It is recommended that more ‘green’ technologies be implemented within the designs and building materials of the development where possible in order to minimise the visual prominence of such a development within the more natural surrounding landscape.</li><li>• Natural colours and building materials such as wood and stone should be incorporated.</li><li>• Visual pollutants can further be prevented through mitigations such as keeping existing vegetation, introducing indigenous trees; keeping structures unpainted and minimising large advertising billboards.</li></ul>

### **12.1. CONSTRUCTION PHASE IMPACTS**

With reference to **Table 8**, most of the construction phase impacts were deemed to have a negative impact without mitigation. However, these were mostly short-term and can be significantly reduced with the mitigation measures proposed.

### **12.2. OPERATIONAL PHASE**

During the operational phase the impacts of surface and ground water; air quality; noise; and waste management were assessed to have a low long-term negative effect without mitigation. The impacts will however be significantly reduced when the recommended mitigation measures in the scoping report and environmental management plan (EMP) are implemented.

### **12.3. LEVEL OF CONFIDENCE IN ASSESSMENT**

With reference to the information available at this stage, the confidence in the environmental assessment undertaken is regarded as being acceptable for the decision-making, in terms of the environmental impacts and risks. The Environmental Assessment Practitioner believes that the information contained within this ESR is adequate to allow MEFT: DEA to determine the environmental viability of the proposed project.

It is acknowledged that the project details may evolve during the detailed design and construction phases. However, these are unlikely to change the overall environmental acceptability of the proposed project and any significant deviation from what was assessed in this ESR should be subject to further assessment. If this was to occur, an amendment to the Environmental Authorisation may be required in which case the prescribed process would be followed.

### **12.4. MITIGATION MEASURES**

With the implementation of the recommended mitigation measures in this report as well as in the EMP, the significance of the impacts of the various phases is likely to be reduced to a **Low (negative)**.

It is further extremely important to include an Environmental Control Officer (ECO) on site during the construction phase of the proposed project to ensure that



all the mitigation measures discussed in this report and the EMP are enforced. It is also recommended that the Proponent appoints an Environmental Practitioner to carry out environmental monitoring and evaluation for the duration of the Environmental Clearance Certificate, to include the submission of biannual reports to the Environmental Commissioner.

It is noted that where appropriate, these mitigation measures and any others identified by MEFT: DEA could be enforced as Conditions of Approval in the Environmental Authorisation, should MEFT: DEA issue a positive Environmental Authorisation.

#### **12.5. OPINION WITH RESPECT TO THE ENVIRONMENTAL AUTHORISATION**

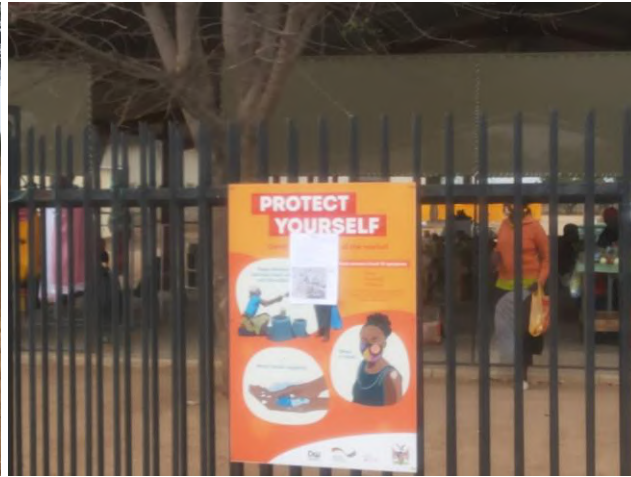
Regulation 15(j) of the EMA, requires *that the EAP include an opinion as to whether the listed activity must be authorised and if the opinion is that it must be authorised, any condition that must be made in respect of that authorisation.*

It is recommended that this project be authorised, as the development will serve as an important economic activity that provides jobs. This will also have a positive impact on the quality of life of the community in terms of household incomes, and will also greatly contribute to the local economic development of the town and the region at large.

The significance of negative impacts can be reduced with effective and appropriate mitigation provided in this report and the EMP attached. If authorised, the implementation of an EMP should be included as a condition of approval.

1. Mannheimer, C. and Curtis, B., 2009. Trees & Shrubs of Namibia. Macmillan Education. Windhoek.
2. Mendelsohn, j. el Obeid, S. and Roberts, C., 2000. A profile of North-central Namibia. Gamsberg Macmillan. Windhoek
3. Namibia Statistics Agency (NSA), 2011. Namibia 2011 Population and Housing Census Main Report. Available at: <http://nsa.org.na/page/publications>.
4. Noah, M, 2002. AN INVESTIGATION INTO THE ENVIRONMENTAL IMPACT OF THE TAXI INDUSTRY IN BUTTERWORTH.
5. Otjiwarongo Structure Plan (OSP), 2015. Otjiwarongo Structure Plan Volume 1. Climate data, 2021. <https://en.climate-data.org/africa/namibia/otjozondjupa-region/otjiwarongo-2768/>
6. Otjozondjupa, 2021. Otjozondjupa Regional Council Website. <https://otjozondjuparc.gov.na/otjiwarongo-constituency-profile>.
7. SADC Environmental Legislation Handbook (SELH), 2012. Environmental Legislation. EIA process flowchart for Namibia. Available at: [www.saiea.com/dbsa\\_handbook\\_update2012/pdf/chapter11.pdf](http://www.saiea.com/dbsa_handbook_update2012/pdf/chapter11.pdf).
8. Tamayo et al., 2011. Flood Risk Management Plan <http://www.theeis.com/data/literature/Flood%20Risk%20Management%20Plan.pdf>.
9. Worldweatheronline, 2021 a. Average Rainfall of Otjiwarongo. Available at: <http://www.worldweatheronline.com>.
10. Worldweatheronline, 2021. Average Temperature Graph of Otjiwarongo. Available at: <http://www.worldweatheronline.com>.

**ANNEXURE A:** Proof of site notices/ posters








**ANNEXURE B:** Proof of advertisements

**SPORTS**



**NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT AND PUBLIC PARTICIPATION PROCESS FOR THE PROPOSED QUIVER TREE INDUSTRIAL PARK IN KEETMANSHOOP, KHARAS REGION: NAMIBIA.**

EnviroPlan Consulting cc hereby gives notice to all potential Interested and Affected Parties (I&APs), that an application for Environmental Clearance certificate will be made to the Environmental Commissioner in terms of the Environmental Management Act (No. 7 of 2007) as follows;

**Proponent:** Keetmanshoop Municipality  
**Environmental Assessment Practitioner:** EnviroPlan Consulting cc.

**Project Description and Location:**

a.) Township Establishment & Layout Approval On Consolidated Portion X (Comprising Of Portions 84 And 85) Of Keetmanshoop Town And Townlands No.150, Consisting Of 93 Erven & Remainder To Be Known As Quiver Tree Industrial Park Proper.  
**Location:** -26.604034°, 18.132575°


b.) Township Establishment & Layout Approval On Portion 83 Of Keetmanshoop Extension 1 Town And Townlands No.150, Consisting Of 31 Erven & Remainder to be known as Quiver Tree Ext 1.  
**Location:** 26.610397°, 18.124971°

The proposed development is located to the South-West of Keetmanshoop Municipality proper, parallel to the B4 Keetmanshoop-Luderitz road.

**Public participation process:** Interested and affected parties are hereby notified that a public participation meeting will be held on Saturday 06 November 2021 at Moth Hall in Westdane. Time: 10:30 AM. **The participation and commenting period is effective until 20 November 2021.**

To register or request for documents submit your details in writing to the Environmental Consultant or alternatively fill the online form, link and contact details given; <https://forms.gle/wdrs7mc4unbk2wFH6>

**EnviroPlan Consulting cc**  
**Environmental Consultant:** Tendai E. Kasinganeti  
**Phone:** +264813634904  
**Fax:** +264 61 255 207  
**Email:** [tendai@enviroplanconsult.com](mailto:tendai@enviroplanconsult.com)



**NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT AND PUBLIC PARTICIPATION PROCESS FOR THE PROPOSED WINDHOEK INTERNATIONAL CONVENTION CENTRE IN PROSPERITA, WINDHOEK-KHOMAS REGION: NAMIBIA.**

EnviroPlan Consulting cc hereby gives notice to all potential Interested and Affected Parties (I&APs), that an application for Environmental Clearance certificate will be made to the Environmental Commissioner in terms of the Environmental Management Act (No. 7 of 2007) as follows;

**Proponent:** SA & B Global Resources Incorporated.  
**Environmental Assessment Practitioner:** EnviroPlan Consulting cc.


**Project Description:** The proposed planning and construction of the Windhoek International Convention Centre.

**Project Location:** The proposed development is located on an open piece of land to the West of Prosperita Industrial area, bordered by the Western Bypass on the northern boundary and the railway line to the eastern boundary.  
**Location:** Lat -22.624972°, Long 17.067602°

**Public participation process:** Interested and affected parties are hereby notified that a public participation meeting will be held on Saturday 23 October 2021 at Namibia Scientific Society Time: 09:30 AM. **The participation and commenting period is effective until 20 November 2021.**

To register or request for documents submit your details in writing to the Environmental Consultant or alternatively fill the online form, link and contact details given; <https://forms.gle/wdrs7mc4unbk2wFH6>

**EnviroPlan Consulting cc**  
**Environmental Consultant:** Tendai E. Kasinganeti  
**Phone:** +264813634904  
**Fax:** +264 61 255 207  
**Email:** [tendai@enviroplanconsult.com](mailto:tendai@enviroplanconsult.com)



**NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT (EIA) AND PUBLIC PARTICIPATION PROCESS FOR THE ERECTION OF A TELECOMMUNICATION BASE TRANSCIVER STATION (BTS) AT OMATANDO IN ONGWEDIVA, OSHANA REGION-NAMIBIA.**

D & P Engineers and Environmental Consultants hereby gives notice to all potential Interested and Affected Parties (I&APs), that an application for Environmental Clearance certificate will be made to the Environmental Commissioner in terms of the Environmental Management Act (No. 7 of 2007) as follows;

**Proponent:** PowerCom (PTY) LTD.  
**Environmental Assessment Practitioner:** D&P Engineers and Environmental Consultants.



**Project Description:** The proponent intends to construct a BTS with a height of 30m, covering approximately 150m².

**Project Location:** The proposed telecommunication tower is to be erected at Omatando location (opposite the Ongwediva sub-station) in Ongwediva. The site coordinates are as follows: S 17.75083, E 15.7475.

**Public participation process:** Interested and affected parties are hereby invited to register and receive further information on the EIA process. A public meeting will be held in Ongwediva on Saturday 09 October 2021, Time: 10:00 AM, Venue; **TBC**. **The participation and commenting period is effective until 21 October 2021.**

To register or request for documents submit your details in writing to the Environmental Consultant or alternatively fill the online form, link and contact details given; <https://forms.gle/wdrs7mc4unbk2wFH6>

**D&P Engineers and environmental consultants Environmental Consultant:** Tendai E. Kasinganeti  
**Phone:** +264813634904  
**Fax:** +264 61 255 207  
**Email:** [tkasinganeti@dpe.com.na](mailto:tkasinganeti@dpe.com.na)

**NOTICE FOR PUBLIC PARTICIPATION ENVIRONMENTAL IMPACT ASSESSMENT**

Environam Consultants Trading cc (ECT) hereby gives notice to all potentially Interested and Affected Parties (I&APs) that an application will be made to the 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:

**PROJECT NAME:** Construction of a Multipurpose Market  
**PROJECT LOCATION:** Erven 1756 and 1757, Otjiwarongo, Otjozondjupa Region  
**PROJECT DESCRIPTION:** The project is composed of the following amenities:  
 • An Open Market, Taxi Rank, Open Museum, and Theatre.  
**PROPONENT:** Otjiwarongo Municipality

**REGISTRATION OF I&APs AND SUBMISSION OF COMMENTS:** All Interested and Affected Parties (I&APs) are hereby invited to register and submit their comments, concerns or questions in writing, kindly contact:  
 Email: [colin@environam.com](mailto:colin@environam.com)  
 Fax: 061 258 470 or  
 Mobile: 0814584297 on or before **02 November 2021**.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni on 26 October 2021 at 17H00** in line with the prevailing Covid-19 protocols.

**NOW HIRING FOR UK/USA/CANADA**

**ENGINEERS MINERS SAFETY OFFICES**

**REGISTRATION FEE \$ 180 OR R2500-00**

**WEB**  
[www.careermarketingint.com](http://www.careermarketingint.com)


**CALL**  
**+27119726054/ +27 784917253**

**CALL FOR PUBLIC PARTICIPATION ENVIRONMENTAL IMPACT ASSESSMENT FOR PROPOSED ESTABLISHMENT OF A FUEL STATION IN KEETMANSHOOP**

This notice serves to inform all interested and affected parties that an application for the environmental clearance certificate will be launched with the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) and the Environmental Regulations (GN 30 of 2012). The project will comprise of an establishment of a fuel station.  
**Location:** The proposed fuel station will be located on ervens 18, 19 and 20 of remainder of 2292 in Keetmanshoop.  
**Proponent:** Albida Development Trust

All interested and affected parties are hereby invited to register and submit their comments regarding the proposed project on or before **17/10/2021**. Contact details for registration and further information:

**Mr. N Amutenya.**  
**Email:** [eia@impalac.com](mailto:eia@impalac.com), **Tel:** 0856630598



# Agnes Tirop: Husband arrested in Kenya after athlete's death

**P**olice in Kenya have arrested the husband of record-breaking long-distance runner Agnes Tirop who was stabbed to death at her home.

Emmanuel Rotich, who was detained in the coastal city of Mombasa, will face charges once investigations are completed, an official said.

Ms Tirop, 25, was found dead on Wednesday in the western town of Iten, a training centre for top athletes.

Last month, she broke the women-only 10km road race world record.

Mr Rotich, described as the prime suspect in her killing, was caught on Thursday as he was trying to go "to a neighbouring country to evade justice", the police said.

Earlier in the day, he "rammed his getaway vehicle into a lorry... as he desperately escaped our dragnet", a statement on Twitter added.

Mr Rotich is now being questioned.

On Thursday, Athletics Kenya - the sport's governing body in the country - suspended all athletics competitions for two weeks as a mark of respect for Ms Tirop.

"We just lost a great talent. She was such a strong woman and committed to what she was doing," Julius Yego, Kenya's former athletics captain, told the BBC World Service's Newsday programme.

During her career, Ms Tirop had success as both a junior - winning 5,000m bronze at world championships in 2012 and 2014 - and as a senior, winning the World Cross Country championships in 2015.

In August, she finished fourth in the 5,000m final at the Tokyo Olympics and in 2017 and 2019 she won the 10,000m bronze at the World Athletics Championships.

In September, she broke the women-only 10km road-race record by 28 seconds in Germany, setting a new time of 30 minutes and one second.



Ibrahim Rotich, who was in a relationship with the athlete



## CLASSIFIEDS


**NOTICE FOR PUBLIC PARTICIPATION  
ENVIRONMENTAL IMPACT ASSESSMENT**

Environam Consultants Trading cc (ECT) hereby gives notice to all potentially Interested and Affected Parties (I&APs) that an application will be made to the 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:

**PROJECT NAME:** Construction of a Multipurpose Market

**PROJECT LOCATION:** Erven 1756 and 1757, Otjiwarongo, Otjozondjupa Region

**PROJECT DESCRIPTION:** The project is composed of the following amenities:

- An Open Market, Taxi Rank, Open Museum, and Theatre.

**PROPONENT:** Otjiwarongo Municipality

**REGISTRATION OF I&APs AND SUBMISSION OF COMMENTS:** All Interested and Affected Parties (I&APs) are hereby invited to register and submit their comments, concerns or questions in writing, kindly contact:

Email: colin@environam.com

Fax: 061 258 470 or

Mobile: 0814584297 on or before **02 November 2021**.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni** on **26 October 2021** at **17H00** in line with the prevailing Covid-19 protocols.


**NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT AND PUBLIC PARTICIPATION PROCESS FOR THE PROPOSED QUIVER TREE INDUSTRIAL PARK IN KEETMANSHOOP, KHARAS REGION: NAMIBIA.**

EnviroPlan Consulting cc hereby gives notice to all potential Interested and Affected Parties (I&APs), that an application for Environmental Clearance certificate will be made to the Environmental Commissioner in terms of the Environmental Management Act (No. 7 of 2007) as follows;

**Proponent:** Keetmanshoop Municipality

**Environmental Assessment Practitioner:** EnviroPlan Consulting cc.

**Project Description and Location:**

- Township Establishment & Layout Approval On Consolidated Portion X (Comprising Of Portions 84 And 85) Of Keetmanshoop Town And Townlands No.150, Consisting Of 93 Erven & Remainder To Be Known As Quiver Tree Industrial Park Proper.  
**Location:** -26.604034°, 18.132575°
- Township Establishment & Layout Approval On Portion 83 Of Keetmanshoop Extension 1 Town And Townlands No.150, Consisting Of 31 Erven & Remainder to be known as Quiver Tree Ext 1.  
**Location:** 26.610397°, 18.124971°

The proposed development is located to the South-West of Keetmanshoop Municipality proper, parallel to the B4 Keetmanshoop-Luderitz road.

**Public participation process:** Interested and affected parties are hereby notified that a public participation meeting will be held on Saturday 06 November 2021 at Moth Hall in Westdane. Time: 10:30 AM. **The participation and commenting period is effective until 20 November 2021.**

To register or request for documents submit your details in writing to the Environmental Consultant or alternatively fill the online form, link and contact details given;  
<https://forms.gle/wdrs7mc4unbk2wFH6>

EnviroPlan Consulting cc  
**Environmental Consultant:** Tendai E. Kasinganeti  
**Phone:** +264813634904  
**Fax:** +264 61 255 207  
**Email:** [tendai@enviroplanconsult.com](mailto:tendai@enviroplanconsult.com)


**NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT AND PUBLIC PARTICIPATION PROCESS FOR THE PROPOSED WINDHOEK INTERNATIONAL CONVENTION CENTRE IN PROSPERITA, WINDHOEK-KHOMAS REGION: NAMIBIA.**

EnviroPlan Consulting cc hereby gives notice to all potential Interested and Affected Parties (I&APs), that an application for Environmental Clearance certificate will be made to the Environmental Commissioner in terms of the Environmental Management Act (No. 7 of 2007) as follows;

**Proponent:** SA & B Global Resources Incorporated.

**Environmental Assessment Practitioner:** EnviroPlan Consulting cc.

**Project Description:** The proposed planning and construction of the Windhoek International Convention Centre.

**Project Location:** The proposed development is located on an open piece of land to the West of Prosperita Industrial area, bordered by the Western Bypass on the northern boundary and the railway line to the eastern boundary.  
**Location:** Lat -22.624972°, Long 17.067602°

**Public participation process:** Interested and affected parties are hereby notified that a public participation meeting will be held on Saturday 23 October 2021 at Namibia Scientific Society Time: 09:30 AM. **The participation and commenting period is effective until 20 November 2021.**

To register or request for documents submit your details in writing to the Environmental Consultant or alternatively fill the online form, link and contact details given;  
<https://forms.gle/wdrs7mc4unbk2wFH6>

EnviroPlan Consulting cc  
**Environmental Consultant:** Tendai E. Kasinganeti  
**Phone:** +264813634904  
**Fax:** +264 61 255 207  
**Email:** [tendai@enviroplanconsult.com](mailto:tendai@enviroplanconsult.com)

# NOW HIRING FOR UK/USA/CANADA

## ENGINEERS MINERS SAFETY OFFICES

REGISTRATION  
FEE  
**\$ 180 OR  
R2500-00**

**WEB**

[www.careermarketingint.com](http://www.careermarketingint.com)

**CALL**

**+27119726054/  
+27 784917253**

## CALL FOR PUBLIC PARTICIPATION

### ENVIRONMENTAL IMPACT ASSESSMENT FOR PROPOSED ESTABLISHMENT OF A FUEL STATION IN KEETMANSHOOP

This notice serves to inform all interested and affected parties that an application for the environmental clearance certificate will be launched with the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) and the Environmental Regulations (GN 30 of 2012). The project will comprise of an establishment of a fuel station.

**Location:** The proposed fuel station will be located on ervens 18, 19 and 20 of remainder of 2292 in Keetmanshoop.

**Proponent:** Albida Development Trust

All interested and affected parties are hereby invited to register and submit their comments regarding the proposed project on or before **17/10/2021**. Contact details for registration and further information:

**Mr. N Amutenya.**

**Email:** [eia@impalac.com](mailto:eia@impalac.com), **Tel:** 0856630598





# Swapo think tank induction too little too late

• BY JEREMIAH NDJOZE

*...as analysts bash 'mercenary' members*

AS Swapo inducts a new think tank which will guide the ruling party in policy formulation in the running to next year's elective congress, political commentators have it that the team of so-called thought leaders may not yield the desired results – in time for the mammoth event.

Analysts Frederico Links and Dr Ndumba Kamwanyah further have it that, since the inception of the think tank concept Swapo is yet to benefit from its activities.

According to Kamwanyah, the think tank initiative has by and large been a 'mere name for cosmetic rather than concrete and practical purposes'.

"The whole arrangement of having individual party members as think tank members is problematic because of the risk of self-bias. Do you expect those individual think tank members to be critical in assessing the party, especially if many of them are mercenaries or fortune seekers?" Kamwanyah

queried.

"They are mercenary members because their primary motives are the desire to be appointed in higher positions or closer to power, than the real desire to help the party thrive," he elucidated.

According to Kamwanyah, under normal circumstances, a think tank should be an organisation rather than individuals.

Kamwanyah's utterances were corroborated by Links, who maintained that in his view the ruling party think tank – since its inception – does not appear to have contributed much in refining and presenting viable policy choices and positions, that have translated into credible public policies.

"I say this because the role of a think tank, any think tank, is to articulate and explain policy positions towards influencing and growing public support for particular policy positions in public.

I have not seen the Swapo party think tank publicly or transparently articulating or explaining coherent policy positions since it's been in inception," Links said.

Queried on whether the Swapo TT has had any impact on the growth trajectory of the party's popularity or lack thereof in recent times Kamwanyah did not mince his words.

"None so far and I don't expect any impact from the new TT either. What impactful outcomes can they produce within this shortest period of time to the party's congress next year? Their launch is just an appearance politics show that the party is doing something to address the difficulty predicament of disunity and non-delivery.

"The party has lost direction. It must go back to the drawing board and reassess its mass-based role," he added.

## NO TO PAPER STATEMENTS

Last week, the party held an induction workshop for the newly appointed Swapo Party Think Tank 2021-2022. This group was officially inaugurated on September 30, by Swapo secretary general Sophia Shaningwa, on behalf of the party's leadership.

Speaking at the workshop last week, Shaningwa, for the first time, admitted that the party is in dire straits as a result of tribal disunity and petty shenanigans.

"This led to some of our supporters and sympathisers simply punishing the party in the 2019 presidential and national assembly elections and subsequently in the 2020 regional and local authority elections by abstaining from participation in the elections," Shaningwa said, adding that this trend cannot be left unattended to.

While Shaningwa's admission

is a first step, according to Links, admitting something does not mean much if the admission is not followed by meaningful attempts to heal the rifts.

"It might be too late to stop the rot and draw back the party's decline, which at the moment seems unstoppable. The problem is that the leadership do not see themselves as the problem, but consider others as enemies and undermines them. This lack of self-reflection among the leadership ranks and the disconnection from the membership and support at grassroots level probably means there will be no self-correcting within the party," Links stressed.

On his part, Kamwanyah maintained that the Swapo problem is no longer that of disunity but runs deeper.

"It is no longer a disunity problem for the party but low morale, apathy and disinterest. That is dangerous for the future of the party. That is rock bottom for any party or organisation," he concluded.

# Nampol heroes demand disability grant increment

• BY TRACY TAFIRENYIKA

A group of disabled members of the Namibian Police Force who were injured on duty during the Mandume Ndemufayo Operation in then Okavango and Caprivi regions, during a turbulent time in the country's history in 2001, are demanding for an increment on the current N\$500 disability grant they receive from government saying it is too little to sustain their needs.

According to the police officers -whose names are J.M Hashoongo, R. Ndumba, H. Povanhu, J. Tjihove, P. Haiyambo, B. Hophini and N. Mateus- they have been receiving a disability grant for 20 years which is unable to sustain their families.

Speaking on behalf of the group Warrant Officer and spokesperson of the members Hesekeel Povanhu stated that since the tragic incident they have become forgotten heroes.

"We were on patrol when we got injured ... we heard of a unit that killed a civilian and also took some cattle.

We were there talking to the people on the scene, when we walked out from the people that is when the incident happened," the officer recalled the day he lost his leg to a landmine.

"We were 30 law enforcement officials from the defence force and the Namibian police that were injured. Some lost their legs, eyes, hands and so forth due to the incident.

"During the same operation, NDF members were also injured but they have all been compensated. We sustained permanent disablement which entitled us a monthly pension payment of N\$489.86 per month to continue until the day of death. We have been getting this payment for 20 years now. This is not enough to sustain our needs, we still don't have houses and we have families to take care of, how will we survive?" he queried.

The group went on to demand answers from social security on why they have been abandoned and forgotten them regarding their grant increment.

"We want Social Security to explain



A group of amputees showing their artificial legs



After 30 years of independence and we are still struggling. I am paying for my medical treatment but how will the money be enough? Others get increments yearly, what about us?



why our grant has not been increased yet. We want them to explain why we are only getting N\$500 for more than 20 years now. The government has neglected us. We are really suffering and most of us still stay in kambashus which is very bad. We were injured while working for the same government that is now giving us peanuts, this must be reversed," Povanhu stated.

"After 30 years of independence and we are still struggling. I am paying for my medical treatment but how will

the money be enough? Others get increments yearly, what about us?"

Contacted for a comment, Social Security Commission communication manager Unomengi Kauapirura stated that, there must be a reason why the grant was not increased.

"If a person was injured on duty the government provides for that through Social Security Commission. If the government hasn't made any increase in that provision then the social security cannot pay or increase

any grant. Each company makes provision for social security... the government decides that if you get injured on duty this is how much you should be paid, based on the contribution you make on a monthly basis.

"If social security increases the grant before government itself who is the one to pay them? We are just working on behalf of the government we are not the ones who should increase this grant," she stated.

In a letter seen by *Confidante* addressed to the amputated members from Nampol in 2014, it states that Nampol considered assisting the group with clothing allowances, promoting them and purchasing of artificial limbs.

"The Office of the Prime Minister received the following information regarding the Nampol amputee members injured during the Mandume Ndemufayo Operation in then Okavango and Caprivi regions after forwarding their concerns to the Inspector General of the Namibian Police. Nampol would consider the issue of promotion to the rank of Warrant Officer during the 2014/15 financial year. Nampol wrote a letter to the Social Security Commission to look into the issue of social benefits.

"Lastly, regarding the outstanding monetary compensation, Nampol has drafted a policy on compensation for injury and death while on official duty. The policy is proposed to include members injured during the abovementioned operation. A review committee has been established to finalise this policy. Nampol further assured the Office of the Prime Minister that they are doing everything in their power to address the plight of the group, and that these matters are given the urgent attention they require," the letter stated.



## NOTICE FOR PUBLIC PARTICIPATION ENVIRONMENTAL IMPACT ASSESSMENT

Environam Consultants Trading cc (ECT) hereby gives notice to all potentially Interested and Affected Parties (I&APs) that an application will be made to the 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:

**PROJECT NAME:** Construction of a Multipurpose Market

**PROJECT LOCATION:** Erven 1756 and 1757, Otjiwarongo, Otjozondjupa Region

**PROJECT DESCRIPTION:** The project is composed of the following amenities:

- An Open Market, Taxi Rank, Open Museum, and Theatre.

**PROPONENT:** Otjiwarongo Municipality

**REGISTRATION OF I&APs AND SUBMISSION OF COMMENTS:** All Interested and Affected Parties (I&APs) are hereby invited to register and submit their comments, concerns or questions in writing, kindly contact:

Email: colin@environam.com

Fax: 061 258 470 or

Mobile: 0814584297 on or before **02 November 2021**.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni** on **26 October 2021** at **17H00** in line with the prevailing Covid-19 protocols.



# Classifieds

Contact: Mandy

• T: 061 24 6136 • C: 081 895 8296 • E: mandy@confidentenamibia.com

**NOTICE FOR ENVIRONMENTAL IMPACT ASSESSMENT**

Healthy Earth Environmental Consultants CC (HEEC) hereby gives notice to all potentially Interested and Affected Parties (I&APs) that an application will be made to the Environmental Commissioner in terms of the Environmental Management Act (No 7 of 2007) and Environmental Impact Assessment Regulations (GN 30 of 6 February 2012) for the following:

**PROJECT NAMES:**

- (a) Environmental Impact Assessment (EIA) for the establishment and mining of lithium ore on mining claims; 69875 – 69877, Uis District, Dâures Constituency, Erongo Region, Namibia.
- (b) Environmental Impact Assessment (EIA) for the establishment and mining of lithium ore on mining claims; 70299-70302, Uis District, Dâures Constituency, Erongo Region, Namibia.
- (c) Environmental Impact Assessment (EIA) for the establishment of exploration activities for base and rare metals, industrial minerals, precious stones and dimension stones on EPL 7248, Uis District, Dâures Constituency, Erongo Region, Namibia.

**PROJECTS LOCATION:**

- (a) The mining claims 69875 – 69877 are located approximately 30 Km west of Uis, Dâures Constituency, Erongo Region, Namibia.
- (b) The mining claims 70299 – 70302 are located approximately 30 Km west of Uis, Dâures Constituency, Erongo Region, Namibia.
- (c) The EPL 7248 is located approximately 30 Km west of Uis, Dâures Constituency, Erongo Region, Namibia.

**PROJECT DESCRIPTION:**

- (a) The project involves conducting Environmental Impact Assessment (EIA) for the establishment and mining of lithium ore on mining claims; 69875 – 69877, Uis District, Dâures Constituency, Erongo Region, Namibia;
- (b) Environmental Impact Assessment (EIA) for the establishment and mining of lithium ore on mining claims; 70299-70302, Uis District, Dâures Constituency, Erongo Region, Namibia.
- (c) Environmental Impact Assessment (EIA) for the establishment of exploration activities for base and rare metals, industrial minerals, precious stones and dimension stones on EPL 7248, Uis District, Dâures Constituency, Erongo Region, Namibia


**PROJECT INVOLVEMENT:**

**Proponent (a) & (b):** Otjisepa Farming and Trading CC  
**Proponent (c):** Ms. Tjinouhona Batseba Kavita

**Environmental Assessment Practitioner (EAP):** Healthy Earth Environmental Consultants CC (HEEC)

**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 in writing via: Email: [askheec@gmail.com](mailto:askheec@gmail.com) on or before Friday 19<sup>th</sup> November 2021.

**Public meeting will be held as follows:**  
**Date:** Saturday, 30 October 2021  
**Meeting venue:** Community Hall - Uis, Erongo Region  
**Time:** 10h00 a.m.  
**Mobile:** 0815720258



**NOTICE FOR ENVIRONMENTAL IMPACT ASSESSMENT**

Healthy Earth Environmental Consultants CC (HEEC) hereby gives notice to all potentially Interested and Affected Parties (I&APs) that an application will be made to the Environmental Commissioner in terms of the Environmental Management Act (No 7 of 2007) and Environmental Impact Assessment Regulations (GN 30 of 6 February 2012) for the following:

**PROJECT NAMES:**

Environmental Impact Assessment (EIA) for the establishment and mining of dimension stones on mining claim; 72121, Karibib District, Erongo Region.

**PROJECTS LOCATION:**

The mining claim; 72121 is located approximately 8 Km South of Karibib, in Erongo Region.

**PROJECT DESCRIPTION:**

The project involves conducting an Environmental Impact Assessments (EIAs) for the establishment and mining of dimension stones on mining claim; 72121 Karibib District, Erongo Region.



**PROJECT INVOLVEMENT:**

**Proponent:** Ms. Laina Silvanus

**Environmental Assessment Practitioner (EAP):** Healthy Earth Environmental Consultants CC (HEEC)

**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 in writing via: Email: [askheec@gmail.com](mailto:askheec@gmail.com) on or before Monday 22<sup>nd</sup> November 2021.

**Public meeting will be held as follows:**  
**Date:** Saturday, 06 November 2021  
**Meeting venue:** Community Hall - Karibib, Erongo Region  
**Time:** 10h00 a.m.  
**Mobile:** 0815720258

**NOTICE FOR PUBLIC PARTICIPATION ENVIRONMENTAL IMPACT ASSESSMENT**

Environam Consultants Trading cc (ECT) hereby gives notice to all potentially Interested and Affected Parties (I&APs) that an application will be made to the 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:

**PROJECT NAME:** Construction of a Multipurpose Market

**PROJECT LOCATION:** Erven 1756 and 1757, Otjiwarongo, Otjozondjupa Region

**PROJECT DESCRIPTION:** The project is composed of the following amenities:

- An Open Market, Taxi Rank, Open Museum, and Theatre.

**PROPONENT:** Otjiwarongo Municipality

**REGISTRATION OF I&APs AND SUBMISSION OF COMMENTS:** All Interested and Affected Parties (I&APs) are hereby invited to register and submit their comments, concerns or questions in writing, kindly contact:

Email: [colin@environam.com](mailto:colin@environam.com)

Fax: 061 258 470 or

Mobile: 0814584297 on or before **02 November 2021**.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni** on **26 October 2021** at **17H00** in line with the prevailing Covid-19 protocols.

**ADVERTISE YOUR**

**VACANCIES, TENDERS, LEGAL NOTICES, DEATH & FUNERAL NOTICES**



**CONFIDENTE**

**ADVERTISE YOUR**

**Vacancies, Tenders, Legal notices, Death & funeral Notices**



Your self-drive dream starts right here

GET GOING IN ONE OF OUR RENTAL CARS



<p><b>OND</b></p> <p>Ondangwa +26481 165 4031/2 Ondangwa Airport lodge</p>	<p><b>NDU</b></p> <p>Rundu +264 85 148 0856 Hotel Rundu</p>	<p><b>WDH</b></p> <p>Windhoek +26485 148 0858 Mobile office</p>
<p>Info@ondangwa-carhire.com</p> <p><b>www.ondangwa-carhire.com</b></p>		

**DRESSED-IN-TIME LAUNDRY & DRY CLEANERS**

**SPRING SPECIAL**

Valid until 31 October 2021

**PROFESSIONAL LAUNDRY AND DRY CLEANING SERVICES**



✓ Duvelts



✓ Blankets



✓ Comforters

**We also clean Curtains**

- We Wash
- Iron and fold
- And much more

**ONLY N\$110 FOR 1 OR N\$180 FOR 2**

**+264 81 6559 225**

Visit us, We are located in Dorado Valley Shopping Mall

**ANNEXURE C:** Photo Plates









**ANNEXURE D:** Public Participation process

- 1) I&AP database & Registered List
- 2) Notification sent of BID
- 3) Public Meeting Presentation
- 4) Public Meeting Attendance Register
- 5) Public Meeting Minutes
- 6) Comments received

INTERESTED AND AFFECTED PARTIES LIST - MULTIPURPOSE MARKET OTJIWARONGO				
	Name	Organisation	E-Mail	Telephone/mobile
1	Moses Matyayi	Otjiwarongo Municipality	<a href="mailto:secretary@otjimun.org.na">secretary@otjimun.org.na</a>	067-302231
2	Timothy Ggita	Deputy Town Engineer - Otjiwarongo Municipality	<a href="mailto:timothy@otjimun.org.na">timothy@otjimun.org.na</a>	067-302 231
3	Nkosinesisa Mashila	Jack Mutua Architects	<a href="mailto:nkosi.jma@gmail.com">nkosi.jma@gmail.com</a>	061-302 323/ 0811223056
4	Jack Mutua	Jack Mutua Architects	<a href="mailto:mutuajack@yahoo.co.uk">mutuajack@yahoo.co.uk</a>	061-302 323
5	James Uerikua	Otjzondjupa Region - Governor	<a href="mailto:emuraranganda@otjzondjupaog.gov.na">emuraranganda@otjzondjupaog.gov.na</a> ; <a href="mailto:emuraranganda@yahoo.com">emuraranganda@yahoo.com</a>	067-303 702
6	Agatha Mweti	Otjzondjupa Regional Council - CRO	<a href="mailto:amweti@otjzondjuparc.gov.na">amweti@otjzondjuparc.gov.na</a>	067-303 702
7	Malayn Mbakera	Otjiwarongo Urban Constituency Councillor	<a href="mailto:kkomomungondo@otjzondjuparc.gov.na">kkomomungondo@otjzondjuparc.gov.na</a> a	067 - 303 749
8	Robert Kahimise	CENORED - CEO	<a href="mailto:rkahimise@cenored.com">rkahimise@cenored.com</a>	067-314100
9	Devin Sikwana	CENORED - Geomatics – Network Engineering &	<a href="mailto:DSikwana@Cenored.com.na">DSikwana@Cenored.com.na</a>	+264 67 314 184
10	Joe Chimbango	NPPTA (Taxi Association)	<a href="mailto:Chimbangojohn@gmail.com">Chimbangojohn@gmail.com</a>	0813227494
11	Kapikara Petrus	NPPTA (Taxi Association)	<a href="mailto:kpethu@gmail.com">kpethu@gmail.com</a>	0812964813
12	Metusalem Hangula	NABTA	<a href="mailto:simsonpex@gmail.com">simsonpex@gmail.com</a>	0814770015
13	Tobias Ndakwenongwe	Local Taxis	<a href="mailto:LeshleyErastus@gmail.com">LeshleyErastus@gmail.com</a>	0816324695
14	Teofilus Nghitila	MEFT - Executive Director	<a href="mailto:teofilus.nghitila@met.gov.na">teofilus.nghitila@met.gov.na</a>	061-284 2751

15	Timoteus Mufeti	MEFT - Environmental Commissioner	<a href="mailto:Timoteus.Mufeti@meft.gov.na">Timoteus.Mufeti@meft.gov.na</a>	061-284 2715
16	Nghidinua Daniel	MURD - Executive Director	<a href="mailto:ndaniel@murd.gov.na">ndaniel@murd.gov.na</a>	061-297 5180
17	Percy W. Misika	MAWF - Executive Director	<a href="mailto:nehemiaa@mawf.gov.na">nehemiaa@mawf.gov.na</a>	061 20807111
18	M. Amakali	MAWF - Director of Water Resource Management	<a href="mailto:Maria.Amakali@mawf.gov.na">Maria.Amakali@mawf.gov.na</a> ; <a href="mailto:gwamakali@gmail.com">gwamakali@gmail.com</a>	061 208 7266
19	Cynthia Orthman	MAWF - Deputy Director of Water Environment	<a href="mailto:Cynthia.Ortmann@mawf.gov.na">Cynthia.Ortmann@mawf.gov.na</a>	061 208 7158
20	P. Mufeti	MAWF - Deputy Director of Hydrology	<a href="mailto:Paulina.Mufeti@mawf.gov.na">Paulina.Mufeti@mawf.gov.na</a>	061 205 7191
21	A Nehemia	CEO - Namwater	<a href="mailto:NehemiaA@namwater.com.na">NehemiaA@namwater.com.na</a>	061 71 0000
22	Willem Venter	NamWater - Senior Manager: Fixed Asset Management	<a href="mailto:venterw@namwater.com.na">venterw@namwater.com.na</a>	061 712 039
23	S Haulofu	MD - Nampower	<a href="mailto:simson.haulofu@nampower.com.na">simson.haulofu@nampower.com.na</a>	061 205 4111
24	Gert Fourie	Nampower - Engineering, Planning and Design	<a href="mailto:gert.fourie@nampower.com.na">gert.fourie@nampower.com.na</a>	061 205 4111
25	Fillemon Aupokolo	Namwater - Environmentalist	<a href="mailto:AupokoloF@namwater.com.na">AupokoloF@namwater.com.na</a>	061 712 095
26	Dr Grant Muller	Nampower - Head: Generation Capital Projects	<a href="mailto:Grant.Muller@nampower.com">Grant.Muller@nampower.com</a>	061 205 2393
<b>ADJACENT PROPERTY OWNERS</b>				
	<b>NAME OF OWNER</b>	<b>SURNAME OF OWNER</b>	<b>EMAIL ADDRESS/ POSTAL ADDRESS</b>	<b>Telephone/mobile</b>
27	Maria	Kaluhoni	<a href="mailto:mariakaluhoni@gmail.com">mariakaluhoni@gmail.com</a>	813040355
28	F	Elungu	<a href="mailto:efillimine@yahoo.com">efillimine@yahoo.com</a>	811244945
29	Wilka	Haikali	<a href="mailto:wilkahaikali@gmail.com">wilkahaikali@gmail.com</a>	812269256
30	Barman	Kaangundue	<a href="mailto:diergaardtmelanie92@gmail.com">diergaardtmelanie92@gmail.com</a>	812447149
31	Katjihingua	Katjihingua	P O Box 1507 Ott	0814321022
32	N	Kakuenje	<a href="mailto:Jupiter@afol.com.na">Jupiter@afol.com.na</a>	
33	A	Karamata	P/Bag 2612 Ott	0812593439
34	Rudolf	Haufiku	<a href="mailto:Rudolf.haufiku@neft.gov.na">Rudolf.haufiku@neft.gov.na</a>	813892617
35				



36	Namibia Industrial Development		Renee.Larrett@ndc.org.na	813558968
37	Vision Africa Investment		accounts@safInd.com	811464200
38	Simon	Khauwareb		815634205
39	B A	Henock	<a href="mailto:bhenock6111@gmail.com">bhenock6111@gmail.com</a>	
40	Puye-Ipawa	Kambongarea	P O Box 1370 Ott	0813987293
41	Johanenes	Kalipi	P O Box 98705 Ott	813968206
42	P & NJ	Cloete	P O Box 1347 Ott	0818306869
43	Johnson	Ngozu	<a href="mailto:Jngozu@gmail.com">Jngozu@gmail.com</a>	
44	Rina	Nakurua		0814951186
45	Erica	Matti	<a href="mailto:Ericamatti@gmail.com">Ericamatti@gmail.com</a>	
46	R	Gawanas	<a href="mailto:mjawaras@live.com">mjawaras@live.com</a>	0812613830
47	R	Narubeb		
48	Oscar	Shikulo		0812926749
49	(Crocodile Farm)D	Noelle	<a href="mailto:dnoelle@iafrica.com.na">dnoelle@iafrica.com.na</a>	0811282543
50	Oshikombo Investment (pty ltd)		tiaan@africonline.com.na	811441505

PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION. - Message (HTML)

File Message Help Acrobat Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward Meeting Move to: ? To Manager Team Email Reply & Delete Create New Move Actions Mark Unread Follow Up Translate Find Related Select Read Aloud Immersive Reader Zoom

CP Colin P Namene <colin@environam.com> 'rkahimise@cenored.com.na' 1 10:46 PM

**PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION.**

Otjiwarongo Multipurpose BID.pdf 1 MB Open PDFs in Adobe Acrobat

Dear Potential Interested and Affected party

Environam Consultants Trading is a wholly Namibian owned environmental management consultancy providing an array of environmental services to our clients including: Strategic Environmental Assessments; Environmental Assessments; Strategic Environmental Management Plans; Environmental Management Plans; Environmental Management Systems; Environmental Auditing, Monitoring and Evaluation; Solid Waste Management; and Project Management. Our daily activities are underpinned by excellent environmental outcomes aimed at achieving a symbiotic relationship between development and the environment.

We have been appointed to undertake the environmental assessment and apply for an environmental clearance certificate from the Environmental Commissioner for the project below:

**Proposed Construction of a Multipurpose Market on Erven 1756 And 1757, Otjiwarongo, Otjozondjupa Region.**

Any process or activity which requires a permit, licence or other form of authorization, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorization in terms of a law governing the generation or release of emissions, pollution, effluent or waste; and Construction of cemeteries, camping, leisure and recreation sites are listed activities as per the List of Activities requiring Environmental Clearance (Government Notice 29 of 6 February 2012) and accordingly require an Environmental Impact Assessment (EIA) to be conducted.

In line with Regulation 21(2) of the mentioned EIA Regulations, a Background Information Document (BID) is distributed to pre-identified Interested and Affected Parties as part of the public consultation process for this Environmental Impact Assessment.

An Environmental assessment will be undertaken to determine the potential impact of the development on the environment and to determine all safety, health and social impacts associated with the proposed development activities.

Kindly provide us with any input by contacting us at Mobile: +264 81 458 4297, Fax: +264 61 258 470 or E-Mail: [colin@environam.com](mailto:colin@environam.com); P.O. Box 24056, Windhoek, on or before **02 November 2021**.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni on 26 October 2021 at 17H00** in line with the prevailing Covid-19 protocols.

We look forward to hear from you soon. Please do not hesitate to contact us for any further information.

ENG 10:46 PM  
INTL 20/10/2021

File Message Help Acrobat Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward More Meeting Move to: ? To Manager Team Email Reply & Delete Create New Move Actions Mark Unread Follow Up Translate Find Related Select Read Aloud Immersive Reader Zoom

CP Colin P Namene <colin@environam.com> 'rkahimise@cenored.com.na' 1 10:46 PM

**PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION.**

Otjiwarongo Multipurpose BID.pdf 1 MB

Open PDFs in Adobe Acrobat

Kindly provide us with any input by contacting us at mobile: +264 61 458 4297, fax: +264 61 258 394 or E-mail: [colin@environam.com](mailto:colin@environam.com), P.O. BOX 27030, Windhoek, ON or before 02 November 2021.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni on 26 October 2021 at 17H00** in line with the prevailing Covid-19 protocols.

We look forward to hear from you soon. Please do not hesitate to contact us for any further information.

**Regards,**

**Colin P Namene**  
Managing Director: Environam Consultants Trading  
Phone +264 61 258 394 Mobile +264 81 458 4297  
Email [colin@environam.com](mailto:colin@environam.com)  
14 Barleo Park, Kudugas Street, Northern Industry, Windhoek



File Message Help Acrobat Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward More Meeting Move to: ? To Manager Team Email Reply & Delete Create New Move Actions Mark Unread Follow Up Translate Find Related Select Read Aloud Immersive Reader Zoom

CP Colin P Namene <colin@environam.com> 'simsonpex@gmail.com' 1 10:10 AM  
**FW: PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION.**



Dear Potential Interested and Affected party

Environam Consultants Trading is a wholly Namibian owned environmental management consultancy providing an array of environmental services to our clients including: Strategic Environmental Assessments; Environmental Assessments; Strategic Environmental Management Plans; Environmental Management Plans; Environmental Management Systems; Environmental Auditing, Monitoring and Evaluation; Solid Waste Management; and Project Management. Our daily activities are underpinned by excellent environmental outcomes aimed at achieving a symbiotic relationship between development and the environment.

We have been appointed to undertake the environmental assessment and apply for an environmental clearance certificate from the Environmental Commissioner for the project below:

**Proposed Construction of a Multipurpose Market on Erven 1756 And 1757, Otjiwarongo, Otjozondjupa Region.**

Any process or activity which requires a permit, licence or other form of authorization, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorization in terms of a law governing the generation or release of emissions, pollution, effluent or waste; and Construction of cemeteries, camping, leisure and recreation sites are listed activities as per the List of Activities requiring Environmental Clearance (Government Notice 29 of 6 February 2012) and accordingly require an Environmental Impact Assessment (EIA) to be conducted.

In line with Regulation 21(2) of the mentioned EIA Regulations, a Background Information Document (BID) is distributed to pre-identified Interested and Affected Parties as part of the public consultation process for this Environmental Impact Assessment.

An Environmental assessment will be undertaken to determine the potential impact of the development on the environment and to determine all safety, health and social impacts associated with the proposed development activities.

Kindly provide us with any input by contacting us at Mobile: +264 81 458 4297, Fax: +264 61 258 470 or E-Mail: [colin@environam.com](mailto:colin@environam.com); P.O. Box 24056, Windhoek, on or before **02 November 2021**.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni on 26 October 2021 at 17H00** in line with the prevailing Covid-19 protocols.

We look forward to hear from you soon. Please do not hesitate to contact us for any further information.

File Message Help Acrobat Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward Meeting Move to: ? To Manager Team Email Reply & Delete Create New Move Actions Mark Unread Follow Up Translate Find Related Select Read Aloud Immersive Reader Zoom

CP Colin P Namene <colin@environam.com> 'simsonpex@gmail.com' 10:10 AM  
FW: PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION.



An Environmental assessment will be undertaken to determine the potential impact of the development on the environment and to determine all safety, health and social impacts associated with the proposed development activities.

Kindly provide us with any input by contacting us at Mobile: +264 81 458 4297, Fax: +264 61 258 470 or E-Mail: [colin@environam.com](mailto:colin@environam.com); P.O. Box 24056, Windhoek, on or before **02 November 2021**.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni on 26 October 2021 at 17H00** in line with the prevailing Covid-19 protocols.

We look forward to hear from you soon. Please do not hesitate to contact us for any further information.

**Regards,**

**Colin P Namene**  
Managing Director: Environam Consultants Trading  
Phone +264 61 258 394 Mobile +264 81 458 4297  
Email [colin@environam.com](mailto:colin@environam.com)  
14 Barleo Park, Kudugas Street, Northern Industry, Windhoek



File Message Help Acrobat Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward More Meeting Move to: ? To Manager Team Email Reply & Delete Create New Move Actions Mark Unread Follow Up Translate Find Related Select Read Aloud Immersive Reader Zoom

CP Colin P Namene <colin@environam.com> 'Chimbangojohn@gmail.com' 1 9:04 AM

**FW: PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION.**

You forwarded this message on 23/10/2021 10:10 AM.



Dear Potential Interested and Affected party

Environam Consultants Trading is a wholly Namibian owned environmental management consultancy providing an array of environmental services to our clients including: Strategic Environmental Assessments; Environmental Assessments; Strategic Environmental Management Plans; Environmental Management Plans; Environmental Management Systems; Environmental Auditing, Monitoring and Evaluation; Solid Waste Management; and Project Management. Our daily activities are underpinned by excellent environmental outcomes aimed at achieving a symbiotic relationship between development and the environment.

We have been appointed to undertake the environmental assessment and apply for an environmental clearance certificate from the Environmental Commissioner for the project below:

**Proposed Construction of a Multipurpose Market on Erven 1756 And 1757, Otjiwarongo, Otjozondjupa Region.**

Any process or activity which requires a permit, licence or other form of authorization, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorization in terms of a law governing the generation or release of emissions, pollution, effluent or waste; and Construction of cemeteries, camping, leisure and recreation sites are listed activities as per the List of Activities requiring Environmental Clearance (Government Notice 29 of 6 February 2012) and accordingly require an Environmental Impact Assessment (EIA) to be conducted.

In line with Regulation 21(2) of the mentioned EIA Regulations, a Background Information Document (BID) is distributed to pre-identified Interested and Affected Parties as part of the public consultation process for this Environmental Impact Assessment.

An Environmental assessment will be undertaken to determine the potential impact of the development on the environment and to determine all safety, health and social impacts associated with the proposed development activities.

Kindly provide us with any input by contacting us at Mobile: +264 81 458 4297, Fax: +264 61 258 470 or E-Mail: [colin@environam.com](mailto:colin@environam.com); P.O. Box 24056, Windhoek, on or before **02 November 2021**.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni on 26 October 2021 at 17H00** in line with the prevailing Covid-19 protocols.



File Message Help Acrobat Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward Meeting Move to: ? To Manager Team Email Reply & Delete Move Actions Mark Unread Follow Up Translate Find Related Select Read Aloud Immersive Reader Zoom

Delete Respond Quick Steps Move Tags Editing Immersive Zoom

CP Colin P Namene <colin@environam.com> 'Chimbangojohn@gmail.com' 1 9:04 AM

**FW: PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION.**

You forwarded this message on 23/10/2021 10:10 AM.



Kindly provide us with any input by contacting us at Mobile: +264 81 458 4297, Fax: +264 61 258 470 or E-Mail: [colin@environam.com](mailto:colin@environam.com); P. O. Box 24056, Windhoek, on or before **02 November 2021**.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni** on **26 October 2021 at 17H00** in line with the prevailing Covid-19 protocols.

We look forward to hear from you soon. Please do not hesitate to contact us for any further information.

**Regards,**

**Colin P Namene**  
Managing Director: Environam Consultants Trading  
Phone +264 61 258 394 Mobile +264 81 458 4297  
Email [colin@environam.com](mailto:colin@environam.com)  
14 Barleo Park, Kudugas Street, Northern Industry, Windhoek

FW: PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION. - Message (HTML)

File Message Help Acrobat Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward Meeting Move to: ? To Manager Team Email Reply & Delete Create New Move Actions Mark Unread Follow Up Translate Find Related Select Read Aloud Immersive Reader Zoom

CP Colin P Namene <colin@environam.com> 'kpethu@gmail.com' 1 4:20 PM

**FW: PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION.**

Otjiwarongo Multipurpose BID.pdf 1 MB

Dear Potential Interested and Affected party

Environam Consultants Trading is a wholly Namibian owned environmental management consultancy providing an array of environmental services to our clients including: Strategic Environmental Assessments; Environmental Assessments; Strategic Environmental Management Plans; Environmental Management Plans; Environmental Management Systems; Environmental Auditing, Monitoring and Evaluation; Solid Waste Management; and Project Management. Our daily activities are underpinned by excellent environmental outcomes aimed at achieving a symbiotic relationship between development and the environment.

We have been appointed to undertake the environmental assessment and apply for an environmental clearance certificate from the Environmental Commissioner for the project below:

**Proposed Construction of a Multipurpose Market on Erven 1756 And 1757, Otjiwarongo, Otjozondjupa Region.**

Any process or activity which requires a permit, licence or other form of authorization, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorization in terms of a law governing the generation or release of emissions, pollution, effluent or waste; and Construction of cemeteries, camping, leisure and recreation sites are listed activities as per the List of Activities requiring Environmental Clearance (Government Notice 29 of 6 February 2012) and accordingly require an Environmental Impact Assessment (EIA) to be conducted.

In line with Regulation 21(2) of the mentioned EIA Regulations, a Background Information Document (BID) is distributed to pre-identified Interested and Affected Parties as part of the public consultation process for this Environmental Impact Assessment.

An Environmental assessment will be undertaken to determine the potential impact of the development on the environment and to determine all safety, health and social impacts associated with the proposed development activities.

Kindly provide us with any input by contacting us at Mobile: +264 81 458 4297, Fax: +264 61 258 470 or E-Mail: [colin@environam.com](mailto:colin@environam.com); P.O. Box 24056, Windhoek, on or before **02 November 2021**.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni on 26 October 2021 at 17H00** in line with the prevailing Covid-19 protocols.

We look forward to hear from you soon. Please do not hesitate to contact us for any further information.

Windows taskbar: ENG 4:21 PM INTL 21/10/2021



File Message Help Acrobat Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward More Meeting Move to: ? To Manager Team Email Reply & Delete Create New Move Actions Mark Unread Follow Up Translate Find Related Select Read Aloud Immersive Reader Zoom

Delete Respond Quick Steps Move Tags Editing Immersive Zoom

CP Colin P Namene <colin@environam.com> 'kpethu@gmail.com' 1 4:20 PM  
FW: PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION.



Kindly provide us with any input by contacting us at mobile: +264 61 458 4297, fax: +264 61 258 394 or E-mail: [colin@environam.com](mailto:colin@environam.com), P.O. BOX 27030, Windhoek, ON or before 02 NOVEMBER 2021.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni on 26 October 2021 at 17H00** in line with the prevailing Covid-19 protocols.

We look forward to hear from you soon. Please do not hesitate to contact us for any further information.

Regards,

**Colin P Namene**  
Managing Director: Environam Consultants Trading  
Phone +264 61 258 394 Mobile +264 81 458 4297  
Email [colin@environam.com](mailto:colin@environam.com)  
14 Barleo Park, Kudugas Street, Northern Industry, Windhoek



PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION. - Message (HTML)

File Message Help Acrobat Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward Meeting Move to: ? To Manager Team Email Reply & Delete Create New Move Actions Mark Unread Follow Up Translate Find Related Select Read Aloud Immersive Reader Zoom

CP Colin P Namene <colin@environam.com> 'secretary@otjimun.org.na'; 'timothy@otjimun.org.na'; 'nkosi.jma@gmail.com'; 'mutuajack@yahoo.co.uk'; 'amweti@otjozondjuparc.gov.na'; + 24 1 9:19 PM

**PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION.**

Otjiwarongo Multipurpose BID.pdf 1 MB Open PDFs in Adobe Acrobat

Dear Potential Interested and Affected party

Environam Consultants Trading is a wholly Namibian owned environmental management consultancy providing an array of environmental services to our clients including: Strategic Environmental Assessments; Environmental Assessments; Strategic Environmental Management Plans; Environmental Management Plans; Environmental Management Systems; Environmental Auditing, Monitoring and Evaluation; Solid Waste Management; and Project Management. Our daily activities are underpinned by excellent environmental outcomes aimed at achieving a symbiotic relationship between development and the environment.

We have been appointed to undertake the environmental assessment and apply for an environmental clearance certificate from the Environmental Commissioner for the project below:

**Proposed Construction of a Multipurpose Market on Erven 1756 And 1757, Otjiwarongo, Otjozondjupa Region.**

Any process or activity which requires a permit, licence or other form of authorization, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorization in terms of a law governing the generation or release of emissions, pollution, effluent or waste; and Construction of cemeteries, camping, leisure and recreation sites are listed activities as per the List of Activities requiring Environmental Clearance (Government Notice 29 of 6 February 2012) and accordingly require an Environmental Impact Assessment (EIA) to be conducted.

In line with Regulation 21(2) of the mentioned EIA Regulations, a Background Information Document (BID) is distributed to pre-identified Interested and Affected Parties as part of the public consultation process for this Environmental Impact Assessment.

An Environmental assessment will be undertaken to determine the potential impact of the development on the environment and to determine all safety, health and social impacts associated with the proposed development activities.

Kindly provide us with any input by contacting us at Mobile: +264 81 458 4297, Fax: +264 61 258 470 or E-Mail: [colin@environam.com](mailto:colin@environam.com); P.O. Box 24056, Windhoek, on or before **02 November 2021**.

A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni on 26 October 2021 at 17H00** in line with the prevailing Covid-19 protocols.

We look forward to hear from you soon. Please do not hesitate to contact us for any further information.

Windows taskbar: ENG 9:28 PM 20/10/2021

PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION. - Message (HTML)

File Message Help Acrobat Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward Meeting Move to: ? To Manager Team Email Reply & Delete Create New Rules Move Actions Mark Unread Follow Up Translate Find Related Select Read Aloud Immersive Reader Zoom

CP Colin P Namene <colin@environam.com> 'secretary@otjimun.org.na'; 'timothy@otjimun.org.na'; 'nkosi.jma@gmail.com'; 'mutuajack@yahoo.co.uk'; 'amweti@otjozondjuparc.gov.na'; + 24 1 9:19 PM

PROPOSED CONSTRUCTION OF A MULTIPURPOSE MARKET ON ERVEN 1756 AND 1757, OTJIWARONGO, OTJOZONDJUPA REGION.

Otjiwarongo Multipurpose BID.pdf 1 MB Open PDFs in Adobe Acrobat

Assessment.

An Environmental assessment will be undertaken to determine the potential impact of the development on the environment and to determine all safety, health and social impacts associated with the proposed development activities.


Kindly provide us with any input by contacting us at Mobile: +264 81 458 4297, Fax: +264 61 258 470 or E-Mail: [colin@environam.com](mailto:colin@environam.com); P.O. Box 24056, Windhoek, on or before **02 November 2021**.


A public consultation meeting will be held in **Swanevelder Hall, Orwetoveni on 26 October 2021 at 17H00** in line with the prevailing Covid-19 protocols.

We look forward to hear from you soon. Please do not hesitate to contact us for any further information.

Regards,

**Colin P Namene**  
Managing Director: Environam Consultants Trading  
Phone +264 61 258 394 Mobile +264 81 458 4297  
Email [colin@environam.com](mailto:colin@environam.com)  
14 Barleo Park, Kudugas Street, Northern Industry, Windhoek





Windows taskbar: ENG 9:29 PM 20/10/2021



**Public Meeting:**

**Environmental Assessment for the  
Construction of a Multipurpose Market on  
Erven 1756 and 1757 Otjiwarongo,  
Otjozondjupa Region.**

**26 October 2021**

**Presented by Colin P Namene**  
Environam Consultants Trading (ECT)

# Background

- Otjiwarongo is continuously improving access to amenities in line with its growth strategy in a sustainable manner.
- To this end the Municipality intends to develop a multipurpose market on Erven 1756 and 1757 Otjiwarongo that will augment the link between Orwetoveni residential suburb and the Town Centre.
- The multipurpose market will consist of the following amenities:
  - an open market
  - a taxi rank
  - an open museum and
  - a theatre



# Background

## ➤ Market Stalls

10 X Crafts and Curio Shops	2 x Meat Traders
6 x Hair Salons	2 x Shoe Repair Shops
6 x Food Stalls	2 x Motor Spare Shop
6 x Barber Shops	4 x Ablutions
6 x Tailor/ Dress Maker Shops	4 x Cold Rooms
2 x Radio Repair Shops	10 x Small Vendors
2 x Cellphone Repair Shops	2 x Shoe Boutiques
4 x Areas for Kapana Vendors	2 x Photocopy and printing Shops
2 x Areas for Fruit and Vegetable Vendors	Accounts and Billing Office
2 x Butchery	Exisiting Fire Station
1 x Bakery	

# Background

---

- Amphitheatre and Museum
  - Amphitheatre for approximately 300 people
  - Open Walk-Thru Museum for Artefact Display
  - Community Hall
  - Palisade Panel Fence Around the Development for Security Purposes
- Existing Fire Station

# Purpose of Meeting

---

- To explain the Environmental Assessment Process
- To provide information on the proposed development
- To identify potential issues and concerns from the public
  - Social
  - Economic
  - Environmental



# Reason for Environmental Assessment

- Environmental Management Act (EMA) (No. 7, 2007) and regulations require clearance for certain activities:
  - **Activity 9.2**
    - Any process or activity which requires a permit, licence or other form of authorization, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorization in terms of a law governing the generation or release of emissions, pollution, effluent or waste
  - **Activity 11.2**
    - Construction of cemeteries, camping, leisure and recreation sites.

**ECT was appointed to facilitate the process of obtaining environmental clearance**

# Reason for Environmental Assessment (Ctd...)

---

- To identify potential environmental impacts (social & biophysical) and to determine their likely significance
- To recommend mitigation measures to minimise negative impacts and to enhance positive impacts
- To allow for public involvement
- To inform the proponent's (Otjiwarongo Muni) decision-making
- To inform the Environmental Authority's decision-making (Ministry of Environment, Forestry and Tourism/  
Environmental Commissioner)

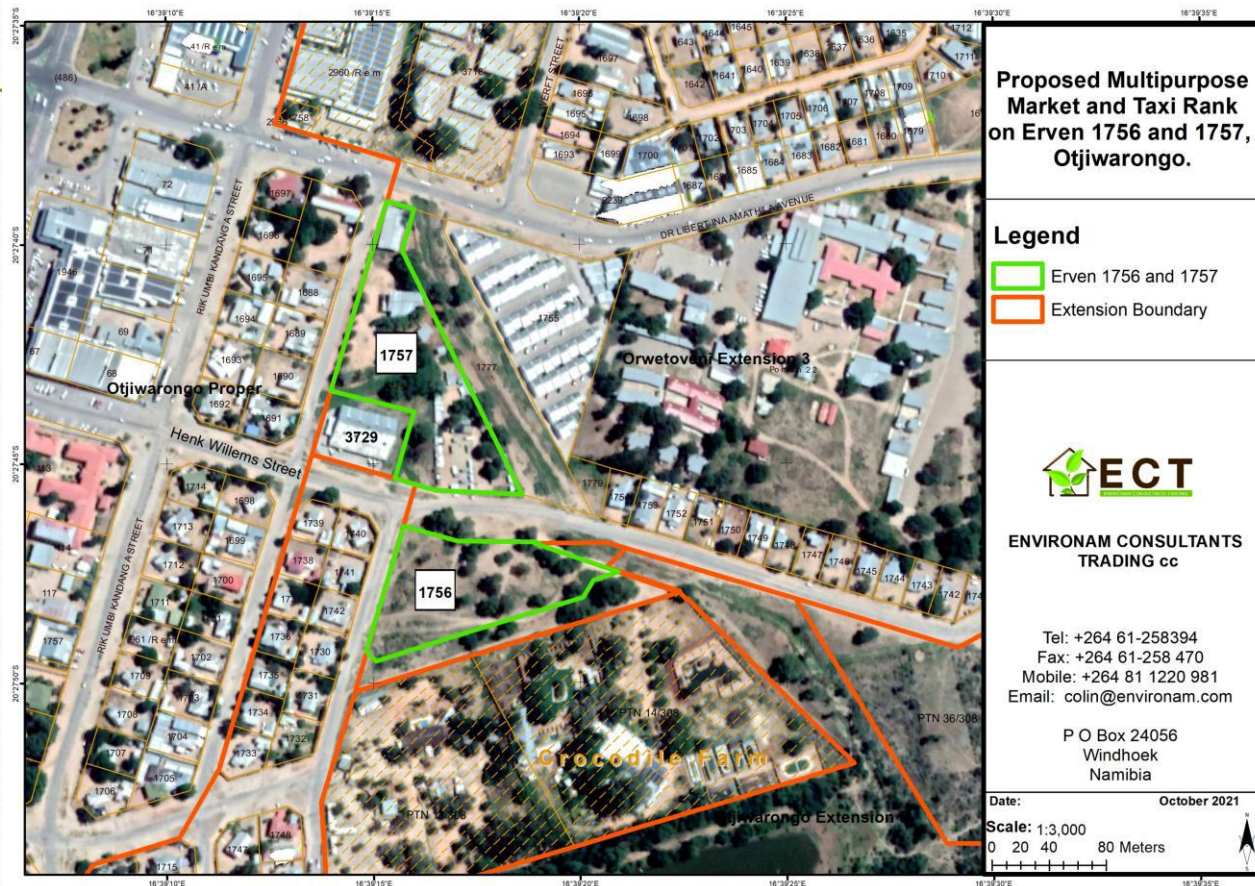


# Public Participation Process to Date

- Advertised in two newspapers (The Windhoek Observer and Confidante dated 15 October 2021, 21 October 2021 and 22 October 2021)
  - Next - Confidante 29 October 2021
- Public notices around Otjiwarongo town
- Site Notices
- Providing written notice and Background Information Document (BID) to pre-identified potential I&AP)



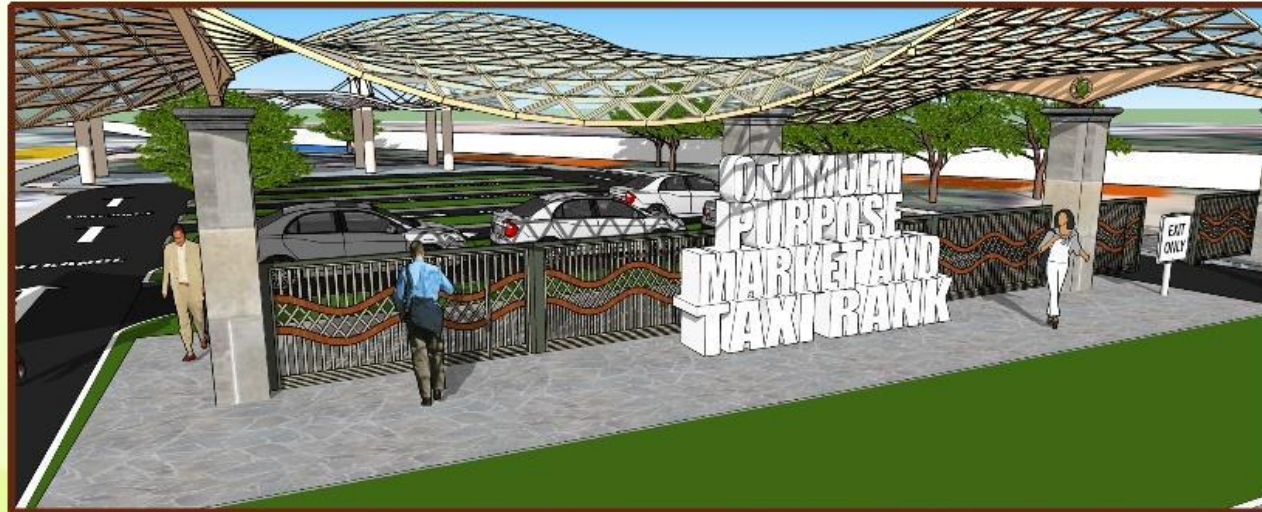
# Locality of the proposed development





# Draft Design Concepts

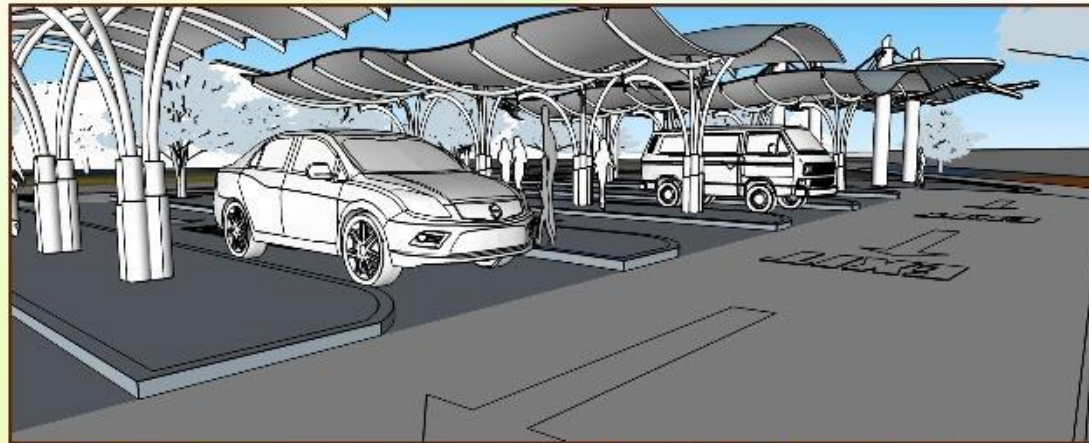
## THE ENTRANCE DESIGN CONCEPT





# Draft Design Concepts

## THE TAXI RANK DESIGN CONCEPT



 Otjiwarongo

# Draft Design Concepts

THE TAXI RANK SHADING BASED UPON THE TREE TRUNKS



 Otjiwarongo



MUNICIPALITY OF OTJIWARONGO



# Engineering services

- The bulk service infrastructure as far as water, sewer, roads, electricity etc. are concerned will be designed by registered professional engineers to integrate with the existing infrastructure in Otjiwarongo.
- The electricity design and connections will be carried out in consultation with CENORED as the relevant regional electricity distributor.
- Access to the site will be designed to ensure limited traffic congestion.

# Pre-identified Potential Concerns

---

- Impacts on biodiversity
  - Fauna and Flora;
- Potential drainage problems if storm water systems are not well designed, constructed and managed;
- Water use;
- Surface and ground water impacts;

# Pre-identified Potential Concerns

---

- Soil erosion and sedimentation;
- Potential litter and waste pollution from construction and operational phases;
- Dust and noise impacts during construction and operation;
- Visual impacts of new structures.



# Way Forward

---

## ASSESSMENT PHASE

- Opportunity to Provide comments Public Meeting & BID
- 1<sup>st</sup> Comment phase from: **15 October 2021 – 02 November 2021**
- 2<sup>nd</sup> Comment phase: Draft Environmental Assessment Report to be available in **November 2021** for public comments
- Final Report to incl. phase 2 comments and submitted to MEFT for approval

# Comments can be sent to:

---

- **Environam Consultants Trading (ECT)**
- Attention: Colin P Namene
- P.O. Box 24056, Windhoek, Namibia
- Cell: 081 458 4297
- Tel: 061 258 394
- Fax: 061 258 470
- E-mail: [colin@environam.com](mailto:colin@environam.com)

**THANK YOU.....**

**DO YOU HAVE ANY QUESTIONS ?**





---

Thank You!!





## Public Meeting Attendance Register

### Construction of Multipurpose Market, Otjiwarongo

Date: 26 October 2021

Venue: Swanevelder Hall, Orwetoveni

Time: 17H00

	Name:	Organization:	Tell or Cell phone:	Email Address:	Postal Address:
1	Colin P. Namere	ECT	0814584297	colin@environmental.com	P.O. Box 24056 Windhoek
2	CHRIS ITA	EXPRESS SOLUTIONS	0812553299	expressfurn@icloud.com	Box 24214 WHK.
4	D Noelle	OTI CROCFAN	0811292347	dnoelle@icloud.com	PO Box 1122, Otjiwar.
5	L. Develau	JMPA1	0812645568	lydia.teckamp@icloud.com	PO Box 32160 WHK
6	N. Mashila	JMPA1	061 302323	nkosi.jmb@icloud.com	"
7	C. Midzi	JMPA1	061 302323	cherme@icloud.com	"
8	CHIMBANGO JOHN	NPPTA	0813227494	chimbangojohn@gmail.com	P.O. Box 7345, Otjiwarongo
9	KAPIKARA PETRUS	NPPTA	0812964813	kpethu@gmail.com	P.O. Box 7345, Otjiwarongo
10	Tobias NS		0816324695		
11					
12					
13					
14					
15					
16					
17					

**MINUTES OF THE PUBLIC MEETING HELD ON TUESDAY, 26 OCTOBER 2021 REGARDING THE ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED CONSTRUCTION OF OTJIWARONGO MULTIPURPOSE MARKET AND TAXI RANK ON ERVEN 1756 AND 1757 OTJIWARONGO, OTJOZONDJUPA REGION.**

**VENUE: SWANEVELDER HALL, ORWETOVENI, OTJIWARONGO**

**TIME: 17H00**

**PRESENT:**

C.P. Namene – Environam Consultants Trading (ECT)

C. Ita – Environam Consultants Trading

D. Noelle – Otji Croc Farm

L. Develias – JMAI

N. Mashila – JMAI

C. Midzi – JMAI

J. Chimbango – NPPTA

P. Kapikara – NPPTA

Tobias -

**INTRODUCTION**

In terms of Section 21 of the EIA Regulations a call for open consultation with all I&APs at defined stages of the EIA process is required. This entails participatory consultation with members of the public by providing an opportunity to comment on the proposed project. A public meeting was convened for this purpose and was attended by representatives of the local taxi association in addition to the proponent's and consultant's team.

**WELCOMING**

Mr. Namene welcomed everyone to the meeting and introduced the ECT team and that of the proponent.

**ENVIRONMENTAL ASSESSMENT**

Mr. Namene provided a background on the proposed construction of the Otjiwarongo multipurpose market and taxi rank on erven 1756 and 1757, and that an environmental clearance is required before such a development can proceed. He further explained the environmental assessment (EA) process and the reasons why EAs are carried out.

The public was also informed about the public participation process that has taken place so far, including newspaper advertisements, public notices on site, and individual communication to adjacent property owners and other pre-identified Interested and Affected Parties. Information was given on the components of the development touching on aspects such as the locality, design, engineering services and access.

Potential environmental concerns were provided to the community, while urging them to contribute any other impacts that they foresee this development will have on the environment. After the presentation the floor was opened for questions and input from the community. The issues raised are recorded in the flowing table:

**Public Meeting: Swanevelder Hall, Orwetoveni, Otjiwarongo, 26 October 2021, 17:00**

COMMENT/ QUESTION BY	QUESTION/ COMMENT	RESPONDENT	RESPONSE
D Noelle	Has provision been made for parking?	N Mashila	Provision has been made in the designs for approximately 50 parking spaces.
J Chimbango	Are locals involved in the development of the new Taxi Rank?	N Mashila	This consultation process is part of stakeholder involvement. Before the detailed design phase focused consultation will be conducted with taxi associations and other relevant stakeholders. The taxi rank will accommodate both local and outside transporters including sedans and larger buses.
Tobias	The identified taxi rank is not strategically located in terms of clients. Will the municipality recruit staff to ensure the availability of clients?	N Mashila	At the moment the market amenities are limited. Extending the market facilities will attract the traders and clients back to the town centre. This will also address the issue of service station owners preventing transporter from loading clients at their premises.

## **CONCLUSION**

After the interactive session information on the way forward was shared with the public, in terms of the timeframe left for additional input before the comment period ends. The contact details of Environam Consultants Trading (ECT) was shared with the public.

The meeting was closed off and officially adjourned at 18:20.

Ignore Delete Archive Reply Reply All Forward Meeting Move to: ? To Manager Team Email Reply & Delete Create New Move Actions Mark Unread Follow Up Translate Find Related Select Read Aloud Immersive Reader Zoom

Wed 03/11/2021 6:38 PM  
Colin P Namene <colin@environam.com>  
RE: Comments\_Proposed Multipurpose Market\_Otjiwarongo  
To 'Devin Sikwana'



Dear Devin

Its all in order, please find the attached form. We look forward to hear from you.

Regards,

Colin

---

**From:** Devin Sikwana <DSikwana@Censored.com.na>  
**Sent:** Wednesday, 3 November 2021 6:25 PM  
**To:** colin@environam.com  
**Subject:** Comments\_Proposed Multipurpose Market\_Otjiwarongo  
**Importance:** High

Dear Mr Namene

Pardon our delayed response for comments on subject above.  
Kindly share with me the Comments/Registration Form. I don't see it in the BID.  
Then I promptly submit CENORED comments tomorrow.

File Message Help Acrobat Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward Meeting Move to: ? To Manager Team Email Reply & Delete Create New Move Actions Mark Unread Follow Up Translate Find Related Select Read Aloud Immersive Reader Zoom

Wed 03/11/2021 6:38 PM  
Colin P Namene <colin@environam.com>  
RE: Comments\_Proposed Multipurpose Market\_Otjiwarongo  
To 'Devin Sikwana'



**Importance: High**

Dear Mr Namene

Pardon our delayed response for comments on subject above.  
Kindly share with me the Comments/Registration Form. I don't see it in the BID.  
Then I promptly submit CENORED comments tomorrow.

Thank you,

Devin Chali Sikwana  
Geomatics – Network Engineering & Expansion (NEE)

Direct Tel.: +264 67 314 184



**Confidentiality Notice:** The information in this message is confidential and may be legally privileged. It is intended solely for the addressee. If you are not the intended recipient, any disclosure, copying, or distribution of this message, or any action or omission taken by you in reliance on it, is prohibited and may be unlawful. Please immediately contact the sender if you have received this message in error and permanently delete this message and any attachments.

Join us on Follow us on



## Registration and Comments Form

<b>Participant Name: CENORED</b>	<b>Organization/Affiliations: CENORED</b>
<b>Position: Executive - Network Engineering &amp; Expansion</b>	<b>Telephone: +264 67 314100/180/184</b>
<b>Fax: +264 67 304701</b>	<b>E-Mail: SWayiti@Cenored.com.na</b>
<b>Postal Address: P.O Box 560, Otjiwarongo</b>	
<b>Comments/Suggestions and Questions:</b>  <ol style="list-style-type: none"><li>1. The proposed multipurpose market should accommodate existing electrical networks,</li><li>2. If the existing electrical networks have to be altered or moved, the cost implications should be on the developer. This provision is in line with the Electricity Act and its regulations,</li><li>3. The alterations of electrical networks should be approved by CENORED prior to construction.</li></ol> 	

**Please complete the form and return document to be registered as an Interested & Affected Parties (I&AP) to:**

**Colin P Namene**  
**Environam Consultants Trading**  
Mobile: +264 81 458 4297  
Tel: +264 61- 258 394  
Fax: +264 61 - 258 470  
E-Mail: colin@environam.com

**ANNEXURE E:**

Curriculum Vitae of Environmental Assessment Practitioner

## CURRICULUM VITAE (CV)

<b>Position Title:</b>	<b>Independent Environmental Assessment Practitioner (EAP)</b>
<b>Name:</b>	Colin Pendapala Namene
<b>Name of Firm:</b>	Environam Consultants Trading CC
<b>Date of Birth:</b>	07 March 1972
<b>Country of Citizenship/Residence</b>	Namibia

**Education:**

- **2013 – 2014 University of Reading**  
**MSc in Environmental Management**  
Modules include: Energy, Climate Change and Development; Resilience for Sustainable Development; Climate Change Policy and Governance; Environmental Management Principles and Practise; Resource and Environmental Economics
- **2009 – 2012 University of South Africa**  
**BA in Environmental Management**  
Modules include: Environmental Evaluation and Impact Assessment; Environmental Affairs; Development of Urban Space; Research in Social Sciences, and Environmental Politics
- **2007 Human Settlement Management Institute (New Delhi, India)**  
Urban Infrastructure Planning and Management (3 Month Short Course)
- **2000 - 2003 Polytechnic of Namibia**  
National Diploma: Business Computing

**Professional Achievements :**

**2013 - Member** - Board of Trustees: Green Building Council of Namibia  
**2006 - Chairman** - Coastal Bulk Water Users Forum

**Countries of Work Experience:** Namibia

**Summary:**

- Postgraduate environmental management studies
- Experience in environmental management
- Experience in environmental assessments
- Experience in sustainability projects
- Experience in energy efficiency projects
- Long-term experience working in and leading teams
- Experience in project management
- Good presentation and writing skills

**Skills and Achievements:**

- Urban Infrastructure Planning and Management, HSMI, Delhi, India
- ISO 45001 – Occupational Health and Safety Management Implementation, Windhoek, Namibia

- ISO 14001 – Environmental Management Implementation, Windhoek, Namibia
- ISO 9001 – Quality Management Implementation, Windhoek, Namibia

### **Project and Environmental Management**

- Conduct environmental impact assessments for various projects, including energy, township establishments, mining, oil and gas, commercial developments, medical etc.
- Participated in the Global Environmental Facility (GEF) funded Namibia Energy Efficiency in Buildings project.
- Initiated the participation of Arandis Town Council, as the only local authority, in the establishment of Green Building Council Namibia. Have been appointed a member of the Board of Trustees.
- Served as Chairman of Coastal Bulk Water Users' Forum, that deals with water management issues of the Namibian coastal region. It subsequently motivated me to implement the Arandis Water Management Project to address water losses of over 65% in Arandis town and managed to bring that down to a lower level of 15%. Members included Namport, Rossing mine, Langer Heinrich mine, Arandis Town Council, Walvis Bay Municipality.
- Managing of all infrastructure projects on behalf of Arandis Town Council, this include amongst others:
  - bulk infrastructure services (water, sewer, electricity) for various areas in Arandis Town;
  - construction of the Arandis Puma Service Station;
  - construction of Arandis Open Market

### **Teamwork**

- Maintaining excellent liaison with various role players during environmental assessment projects, such as clients, town planners, GIS specialists, etc.
- At Arandis Town Council demonstrated excellent teamwork skills as part of the management team. This was also cascaded down to the team within the division that I managed as evidenced in the outstanding relations I maintained with my peers and subordinates, as well as the elected Councillors.
- High level participation in the establishment and implementation of the Arandis Sustainable Development Project (ASDP), a partnership between the Town Council, Rossing Mine and Rossing Foundation, which crafted the Strategic Plan for the Council. This has managed to draw attention to Arandis Town as a growth centre.

### **Additional activities**

- Participated in an Environmental Auditors Training offered by Green Impact, which included practical audits of Reading University buildings. It provided me with valuable skills in implementing green projects from the UK perspective.
- In 2007 attended a 3 month short course in Urban Infrastructure Planning and Management in New Delhi India. Incorporating various themes in urban planning and governance, such as solid waste management; town planning; water; and sanitation.

**Employment record relevant to the assignment:**

Period	Employing organization and your title/position. Contact info for references	Country	Summary of activities performed relevant to the Assignment
2016- Current	<p><b>Name of Employer:</b> Environam Consultants Trading</p> <p><b>Position:</b> Managing Director</p> <p><b>Contact information for references:</b></p> <p><b>Name:</b> Colin P Namene</p> <p><b>Designation: Managing Director</b></p> <p><b>Tel No.:</b> +264 811 22 0981</p> <p><b>Email:</b> colin@environam.com</p>	Namibia	<ul style="list-style-type: none"> <li>• Environmental Impact Assessments</li> <li>• Environmental Management Plans</li> <li>• Environmental Management Systems</li> <li>• Environmental Monitoring</li> <li>• Environmental Auditing</li> <li>• Solid Waste Management</li> </ul>
2015- 2016	<p><b>Name of Employer:</b> Africa Planning Forum</p> <p><b>Position:</b> Environmentalist</p> <p><b>Contact information for references:</b></p> <p><b>Name:</b> Bronwynn Basson</p> <p><b>Designation: Project Manager</b></p> <p><b>Tel No.:</b> +264 81 303 4747</p> <p><b>Email:</b> bronwynn@spc.com.na</p>	Namibia	<ul style="list-style-type: none"> <li>• Provision of environmental consulting services</li> <li>• Conducting Environmental Impact Assessments</li> </ul>
2004- 2013	<p><b>Name of Employer:</b> Arandis Town Council</p> <p><b>Position:</b> Manager – Technical Services</p> <p><b>Contact information for references:</b></p> <p><b>Name:</b> Florida Husselmann</p> <p><b>Designation: Chief Executive Officer</b></p> <p><b>Tel No.:</b> +264 81 337 6099</p> <p><b>Email:</b> ceo.atc.com.na</p>	Namibia	<p>Overall management of all aspects of Arandis town's</p> <ul style="list-style-type: none"> <li>• environmental management</li> <li>• infrastructure and</li> <li>• town planning</li> </ul>

**Membership in Professional Associations and Publications:** Environmental Assessment Professionals of Namibia (EAPAN)



**Language Skills:**

Language	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Oshiwambo	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent
Otjiherero	Good	Good	Fair

**SELECTED ASSIGNMENTS**

**Project Name** Environmental Impact Assessment and Environmental Management Plan (EMP) for the Township Establishment of Tsandi Extensions 2, 4, 5 and 6.

**Date:** September 2015

**Location:** Tsandi, Omusati Region,

**Client:** Omusati Regional Council

**Main Project Features:** Tsandi is a settlement located in north-central Namibia within the Omusati Region. It is one of the settlements in the region that serves as local administrative centres. As a result Tsandi is experiencing an increase in its population, which come with the associated increased demand for residential, commercial, and institutional erven. In order to address this challenge, the Omusati Regional Council has made budgetary provision to establish new townships for the Tsandi settlement.

It is thus the Regional Council's intention to formalise existing informal settlements and provide additional erven and infrastructure services. Major components involved are the improvement of and additional water supply, sewerage and waste management services for the residents.

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).

**Project Name** Environmental Impact Assessment and Environmental Management Plan (EMP) for the

**SELECTED ASSIGNMENTS**

	<b>Township Establishment of Engela Omafo Extensions 1, 2, 3, 4, 5, 6, 7, 8 And 9.</b>
<b>Date:</b>	November 2015
<b>Location:</b>	Helao Nafidi, Ohangwena Region,
<b>Client:</b>	Helao Nafidi Town Council
<b>Main Project Features:</b>	<p>Helao Nafidi is a town located in north-central Namibia within the Ohangwena Region. It was created as a merger of several villages and settlements along the B1 road between Oshikango and Ohangwena including Engela-Omafo. Slow and hampered planning has meant that the town does not have readily available erven for residential and commercial use.</p> <p>This scarcity of planned and serviced erven has created several challenges to the town of Helao Nafidi such as the residents having taken it upon themselves to create informal settlements, usually close to the areas with employment and economic opportunities. This has resulted in the proliferation of informal settlements in or near Oshikango without proper urban infrastructure services such as water supply, sewerage, electricity, waste management.</p> <p>The major components involved in this project are the improvement of and additional water supply, sewerage, electricity and waste management services for the residents.</p>
<b>Position Held:</b>	Lead Environmental Assessment Practitioner
<b>Activities Performed:</b>	Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).
<b>Project Name</b>	<b>Environmental Impact Assessment and Environmental Management Plan (EMP) for the Township Establishment of Ohangwena Extensions 4 and 5</b>
<b>Date:</b>	March 2016
<b>Location:</b>	Helao Nafidi, Ohangwena Region,
<b>Client:</b>	Helao Nafidi Town Council
<b>Main Project Features:</b>	Helao Nafidi is a town located in north-central Namibia within the Ohangwena Region. It was created as a merger of several villages and settlements along the B1

**SELECTED ASSIGNMENTS**

road between Oshikango and Ohangwena including Engela-Omafo. Slow and hampered planning has meant that the town does not have readily available erven for residential and commercial use.

Due to the concentration of business activities in the already overloaded Oshikango, and population increases amongst other challenges, the Town Council recognized the need to establish a new commercial heart, which will strengthen and realign the business activities of Helao Nafidi towards the centre of the town, thereby relieving the Oshikango area and giving the whole town new sustainable development opportunities. The major components involved in this project are the improvement of and additional water supply, sewerage, electricity and waste management services for the residents.

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).

**Project Name** **Environmental Impact Assessment and Environmental Management Plan (EMP) for the Township Establishment of Kaisosi Extensions 12 and 13; Ndama Extensions 14-18; Sauyemwa Extensions 10 and 11.**

**Date:** February 2017

**Location:** Rundu, Kavango-east Region,

**Client:** Rundu Town Council

**Main Project Features:** Rundu is located in the northeast of Namibia, it is the capital and largest town in the Kavango-east region. It is the town with the second largest population in the country. The town is strategically located and is a gateway that links the port of Walvis Bay with a number of important countries in SADC namely Angola, Zambia, Zimbabwe and Botswana. Slow and hampered town planning has resulted in the inadequate supply of readily available serviced erven for residential and commercial use.

**SELECTED ASSIGNMENTS**

This situation has presented a serious challenge to the leadership of the town of Rundu as the residents have taken it upon themselves to set up informal settlements. The informal nature of these settlements has meant that these areas are not provided with the basic service infrastructure in terms of water, sewer, electricity and roads. In an effort to address this situation and to restore dignity to its residents the Rundu Town Council has resolved to formalise a number of informal settlements within the town of Rundu.

The major components involved in this project are the improvement of and additional water supply, sewerage, electricity, roads and waste management services for the residents.

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).

**Project Name** **Environmental Impact Assessment and Environmental Management Plan (EMP) for the Township Establishment of Omdel Extension 7 and Hentiesbaai Extension 9.**

**Date:** August 2015

**Location:** Henties Bay, Erongo Region,

**Client:** Municipality of Henties Bay

**Main Project Features:** Henties Bay is located on the west coast of Namibia. The town of Henties Bay is experiencing a major backlog in the provision of decent low-income housing with relevant urban infrastructure services for the poor. It has therefore become high priority for the municipal council to subdivide the Remainder of the Hentiesbaai Townlands into Portion A and Remainder to be able to provide additional erven on Proposed Portion A.

This will assist the Municipality in addressing the increasing influx and immigration of residents and households falling within the lower income population sector and to provide them with services such as water, sewerage, electricity, roads and waste management. Major components involved are the improvement of and

**SELECTED ASSIGNMENTS**

additional water supply, sewerage and waste management services for the residents

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).

**Project Name** **Environmental Impact Assessment and Environmental Management Plan (EMP) for the Construction of the Helao Nafidi Private Hospital.**

**Date:** April 2016

**Location:** Helao Nafidi, Ohangwena Region,

**Client:** Chloe Investments (Dr Linda Nangombe)

**Main Project Features:** As one of the major centres of the Ohangwena Region linked to the imminent growth, both at regional and local level, and also recognising the strategic location of the Helao Nafidi Town a need was identified to expand access to health facilities especially private ones to augment the state facilities and cope with the growing demand.

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).

**Project Name** **Environmental Impact Assessment and Environmental Management Plan (EMP) for the Township Establishment of Omulunga Extension 9.**

**Date:** February 2017

**Location:** Grootfontein, Otjozondjupa Region,

**Client:** NCCS Investments Holdings

**Main Project Features:** Being a large centre and growth point in the region, there is pressure on the Grootfontein local authority to provide basic services such as housing, water, sanitation and energy. In order to speed up the delivery of land under its control, the municipality has resolved to conclude a development agreement with private



**SELECTED ASSIGNMENTS**

developers in terms of which funding is sourced and bulk infrastructure services is installed, this allows for a joint marketing and sales of properties to the general populace

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).

**Project Name** **Environmental Management Plan (EMP) for the Proposed New Fuel Retail Facility in Otjinene.**

**Date:** May 2018

**Location:** Otjinene, Omaheke Region,

**Client:** Putwavanga Investments cc

**Main Project Features:** Putwavanga Investments cc intends to develop and operate a fuel service station at the village of Otjinene in the Omaheke Region, the development will be known as Okarokape Service Station

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Site Investigation and Analysis, Impact Analysis. Mitigation Formulation, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).

**Project Name** **Environmental Impact Assessment and Environmental Management Plan (EMP) for the Day Hospital on Erf 53, Mariental.**

**Date:** November 2018

**Location:** Mariental, Hardap Region,

**Client:** Mariental Medical Practise

**Main Project Features:** Mariental Medical Practice, the proponent, currently operates a medical practice in the town. They have identified an opportunity to extend the medical services available to the Mariental community and surrounds by developing a 12 bed day hospital on Erf 53 Mariental

**Position Held:** Lead Environmental Assessment Practitioner

**SELECTED ASSIGNMENTS**

**Activities Performed:** Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).

**Project Name** **Environmental Impact Assessment and Environmental Management Plan (EMP) for the Proposed Etaka Recreational Centre.**

**Date:** January 2019

**Location:** Etaka, Omusati Region,

**Client:** Office of the Vice President: Veteran Affairs

**Main Project Features:** The Office of the Vice-President: Veterans Affairs, has identified an opportunity to construct a recreational facility and tourism resort at Etaka, in the Omusati Region of Namibia. The project site is located next to the Etaka Dam in the Epalela section of Onesi Constituency. The proceeds from the facilities will mainly benefit the war veterans through the Veterans Fund, however they will not be for the exclusive use of veterans but will attract and be open for use to the general public.

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).

**Project Name** **Environmental Impact Assessment and Environmental Management Plan (EMP) for Bachmus Oil and Fuel Supplies, Walvis Bay.**

**Date:** April 2019

**Location:** Walvis Bay, Erongo Region,

**Client:** Engen Namibia (Pty) Ltd

**Main Project Features:** Bachmus Oil and Fuel Supplies is a supplier of a variety of oil and fuel products for marine and industrial uses. The site is located along Circumferential Road in the Walvis Bay industrial area. Their product categories include: automotive lubricants, industrial lubricants, marine lubricants, and wholesale diesel. Diesel is sourced from Engen Namibia (Pty) Ltd and stored in tanks of various sizes i.e. 23m<sup>3</sup>, 83m<sup>3</sup>, and 44.5m<sup>3</sup> with a combined capacity of approximately 150,500 litres.

**SELECTED ASSIGNMENTS**

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).

**Project Name** **Environmental Impact Assessment and Environmental Management Plan (EMP) for the Township Establishment on Portion 143 of Gobabis Town and Townlands No. 114, Nossobville, Gobabis.**

**Date:** September 2020

**Location:** Gobabis, Omaheke Region,

**Client:** Kanduu Designing and Construction

**Main Project Features:** Gobabis is the capital of the Omaheke Region, and is situated approximately 200 kilometers from the capital city Windhoek. As the gateway to Botswana and Namibia's major trading partner South Africa, Gobabis' location along the Trans-Kalahari Corridor serves it well, as goods transported from the mines in Botswana to the port of Walvis Bay and those transiting through Botswana from South Africa contribute greatly to the growth of the town. The town lies approximately 110 kilometers from the Buitepos border post. Agriculture is one of the main sources of income in the Omaheke Region.

The above has led to Gobabis becoming a growth point in the region, and resultantly putting pressure on the local authority to provide basic services such as housing, water, sanitation and energy. The Municipality has resolved to allocate Portion 143 of Gobabis Townlands No. 114 to Kanduu Designing and Construction CC for the establishment of a township

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).

**Project Name** **Environmental Impact Assessment and Environmental Management Plan (EMP) for an**

**SELECTED ASSIGNMENTS****18MW Solar Power Plant on Lease 16 of Farm 38, Walvis Bay.**

**Date:** December 2020  
**Location:** Walvis Bay, Erongo Region,  
**Client:** Euarestos Asset Management

**Main Project Features:** Namibia is regarded as a net exporter of electricity, local electricity generation is derived from hydropower, coal and diesel burning power stations; however this is not enough to meet local demand necessitating the country to source the balance, amounting to more than 60%, from other countries within the Southern African region such as Zambia, South Africa, Zimbabwe and Mozambique; of which South Africa's contribution is dominant at 53%.

Despite the current situation, the energy consumption in Namibia follows an upward trajectory because of the unavoidable dependency of national development on the availability, supply, demand and use of energy. Namibia will thus have to develop, as a matter of urgency, its own capacity to generate electricity.

It is against this background that Euarestos Asset Management, the proponent, has embarked on this opportunity to contribute towards energy self-sufficiency and efficiency by constructing an 18MW Solar Power Plant at Farm 38 in town of Walvis Bay in the Erongo Region.

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).

**Project Name Environmental Monitoring and Evaluation for Whale Rock Cement, Otjiwarongo.**

**Date:** June 2020 - Present  
**Location:** Otjiwarongo, Otjozondjupa Region,  
**Client:** Whale Rock Cement (Pty) Ltd

**Main Project Features:** Whale Rock Cement (Pty) Ltd (WRC) owns and operates a cement production facility on Farm Cleveland situated approximately 3.3 km north of the town of Otjiwarongo. For its clinker production, the cement plant

**SELECTED ASSIGNMENTS**

is supported with raw material from a limestone quarry and a clay quarry, about 1.2 km away under the Mining License (ML) No. 146. In compliance with the legal requirements WRC has obtained an Environmental Clearance Certificate (ECC) for their operations.

The ECC contains conditions that have to be adhered to during the period of its validity; in particular it calls for regular environmental monitoring and evaluations on environmental performance to be conducted, as well as the setting and monitoring of targets for improvement. We are under contract to provide these services to WRC on a continuous basis.

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Monitoring and Evaluations; Mitigation Formulation, Monitoring Reports, Submission of Biannual Reports to Ministry of Environment, Forestry and Tourism.

**Project Name** **Environmental Impact Assessment and Environmental Management Plan (EMP) for the Karibib Aggregate Processing Plant, Karibib.**

**Date:** May 2021

**Location:** Karibib, Erongo Region,

**Client:** Southern Africa Railways

**Main Project Features:** Southern Africa Railway (Pty) Ltd (SAR) owns and operates an aggregate processing plant situated on ERF 1501, Extension 6, Karibib. SAR has a contract to supply railway ballasts for the Upgrading of the Railway line between Walvis Bay and Krantzberg. The production of the railway ballast takes place at the SAR plant located in Karibib. The raw material consists of crushed stone which is obtained from the Navachab gold mine that is located approximately 6 km from the plant.

**Position Held:** Lead Environmental Assessment Practitioner

**Activities Performed:** Site Investigation and Analysis, Public Consultation, Impact Analysis. Mitigation Formulation, Scoping Report, Environmental Management Plan, Application for Environmental Clearance Certificate (ECC).



**E-mail:** [colin@environam.com](mailto:colin@environam.com), **Tel No.:** +264 (0) 61 258 470, **Cell:** +264 (0) 814 584 297

**Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available to undertake the assignment in case of an award.



---

Signature

**ANNEXURE F:** Environmental Management Plan

# Environmental Management Plan

**PROPOSED CONSTRUCTION OF OTJIWARONGO  
MULTIPURPOSE MARKET AND TAXI RANK ON ERVEN 1756  
AND 1757 OTJIWARONGO, OTJOZONDJUPA REGION**

## **PROJECT DETAILS**

### **PROPONENT:**

Otjiwarongo Municipality

Private Bag 2209

Otjiwarongo

Tel: +264 67 302 231

Email: [secretary@otjimun.org.na](mailto:secretary@otjimun.org.na)

### **REPORT DATE:**

17 January 2022

### **AUTHOR:**

Colin P Namene

P.O. Box 24056

Windhoek

Tel: 061 – 258 394

Fax: 061 – 258 470

Email: [colin@environam.com](mailto:colin@environam.com)



Signature

## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION .....</b>	<b>4</b>
<b>2</b>	<b>ROLES AND RESPONSIBILITIES .....</b>	<b>5</b>
2.1	DEVELOPER’S REPRESENTATIVE.....	5
2.2	ENVIRONMENTAL CONTROL OFFICER.....	6
2.3	CONTRACTOR.....	7
<b>3</b>	<b>ASSUMPTIONS AND LIMITATIONS .....</b>	<b>7</b>
<b>4</b>	<b>APPLICABLE LEGISLATION.....</b>	<b>7</b>
<b>5</b>	<b>MANAGEMENT ACTIONS.....</b>	<b>11</b>
5.1	PLANNING AND DESIGN PHASE.....	12
5.2	CONSTRUCTION PHASE .....	14
5.3	OPERATION AND MAINTENANCE PHASE.....	19
5.4	DECOMMISSIONING PHASE.....	21

## LIST OF TABLES

Table 2-1:	DR’s responsibilities.....	6
Table 4-1:	Legal provisions relevant to this development .....	7
Table 5-1:	Planning and design management actions.....	12
Table 5-2:	Construction phase management actions.....	14
Table 5-3:	Operation and maintenance management actions.....	19

## ABBREVIATIONS

AIDS	Acquired Immuno-Deficiency Syndrome
DR	Developer’s Representative
EA	Environmental Assessment
ECC	Environmental Clearance Certificate
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
GG	Government Gazette
GIS	Geographic Information System
GN	Government Notice
GPS	Global Positioning System
HIV	Human Immuno-deficiency Virus
I&APs	Interested and Affected Parties

NHC	National Heritage Council
Reg.	Regulation
S	Section
TB	Tuberculosis



## 1 INTRODUCTION

Otjiwarongo is strategically located as a gateway to various parts of the country in all compass directions. Whether it is to from the coast on your way to the north, or from and to the north east you will find it convenient to pass or stop by in Otjiwarongo. It is an attraction in its own right to the visitors and tourists on the way to the more renowned tourist destinations in the vicinity. It is approximately 250km north of the capital city, Windhoek and is the regional capital of Otjozondjupa Region. The town also serves as a business and shopping hub for the smaller surrounding towns and farming community.

Otjiwarongo is continuously improving access to amenities in line with its growth strategy, this is always done in a sustainable manner. To this end the Municipality intends to develop a multipurpose market on Erven 1756 and 1757 Otjiwarongo (See Figure 1 below) that will augment the link between Orwetoveni residential suburb and the Town Centre. The multipurpose market will consist of the following amenities: an open market, a taxi rank, an open museum and a theatre. Elements form both areas will be combined to meet the needs of the primary end users, that is the residents of Otjiwarongo in particular, and which benefits will flow over to the visitors and tourists passing through the town. The design considerations will look into the aspects of: health and wellbeing, construction material usage, energy, and environmentally friendly design concepts.

The proponent, through the Jack Mutua Architects Inc. consortium, appointed Environam Consultants Trading cc (ECT) to undertake the Environmental Assessment (EA) in order to obtain an Environmental Clearance Certificate (ECC) for the activities from the Ministry of Environment, Forestry and Tourism: Department of Environmental Affairs (MEFT: DEA).

The process will be undertaken in terms of the gazetted Namibian Government Notice No. 30 Environmental Impact Assessment Regulations (herein referred to as EIA Regulations) of the Environmental Management Act (No 7 of 2007) (herein referred to as the EMA). The EA process will investigate if there are any potential significant bio-physical and socio-economic impacts associated with the proposed development and related infrastructure and services.

The EIA process also provides an opportunity for the public and key stakeholders to submit comments and participate in the process, it will also serve the purpose of informing the proponent's decision-making as well as that of the Ministry of Environment, Forestry and Tourism.

An EMP is one of the most important outputs of the EIA process as it synthesises all of the proposed mitigation and monitoring actions, set to a timeline and with specific assigned responsibilities. This EMP details the mitigation and monitoring actions to be implemented during the following phases of this development:

- Planning and Design - the period, prior to construction, during which preliminary legislative and administrative arrangements, necessary for the preparation of the land, are made and engineering designs are carried out. The preparation of construction tender documents forms part of this phase;
- Construction - the period during which the proponent, having dealt with the necessary legislative and administrative arrangements, appoints a contractor for the construction of services infrastructure, buildings as well as any other construction process(s) within the development areas;
- Operation and Maintenance - the period during which the development will be fully functional, operational and maintained.

## 2 ROLES AND RESPONSIBILITIES

The Municipality of Otjiwarongo, (the Developer) is ultimately responsible for the implementation of the EMP, from the planning and design phase to the decommissioning phase of this development, if the development is in future decommissioned. The developer will delegate this responsibility as the project progresses through its life cycle. The delegated responsibility for the effective implementation of this EMP will rest on the following key individuals:

- Developer's Representative;
- Environmental Control Officer; and
- Contractor (Construction and Operations and Maintenance).

### 2.1 DEVELOPER'S REPRESENTATIVE

The Developer should assign the responsibility of managing all aspects of this development for all development phases (including all contracts for work outsourced) to a designated member of staff, referred to in this EMP as the Developer's Representative (DR). The Developer may decide to assign this role to one person for the full duration of the development, or may assign a different DR to each of the development phases - i.e., one for the planning and design phase, one for the construction phase and one for the operation and maintenance phase. The DR's responsibilities are depicted in **Table 2-1** as follows:

**Table 2-1: DR's responsibilities**

Responsibility	Project Phase
Making sure that the necessary approvals and permissions laid out in <b>Table 4-1</b> are obtained/adhered to.	Throughout the lifecycle of this development
Making sure that the relevant provisions detailed in <b>Table 5-1</b> are addressed during planning and design phase.	Planning and design phase
Suspending/evicting individuals and/or equipment not complying with the EMP	<ul style="list-style-type: none"> <li>• Construction</li> <li>• Operation and maintenance</li> </ul>
Issuing fines for contravening EMP provisions	<ul style="list-style-type: none"> <li>• Construction</li> <li>• Operation and maintenance</li> </ul>

## 2.2 ENVIRONMENTAL CONTROL OFFICER

The DR should assign the responsibility of overseeing the implementation of the whole EMP on the ground during the construction and operation and maintenance phases to a designated member of staff, referred to in this EMP as the Environmental Control Officer (ECO). The DR/Developer may decide to assign this role to one person for both phases, or may assign a different ECO for each phase. During the operation phase the Developer may outsource the monitoring and evaluation of the EMP to an independent Environmental Consultancy. The ECO will have the following responsibilities during the construction and operation and maintenance phases of this development:

- Management and facilitation of communication between the Developer, DR, the contractors, and Interested and Affected Parties (I&APs) with regard to this EMP;
- Conducting site inspections (recommended minimum frequency is bi-monthly) of all construction and/or infrastructure maintenance areas with respect to the implementation of this EMP (monitor and audit the implementation of the EMP);
- Assisting the Contractor in finding solutions with respect to matters pertaining to the implementation of this EMP;
- Advising the DR on the removal of person(s) and/or equipment not complying with the provisions of this EMP;
- Making recommendations to the DR with respect to the issuing of fines for contraventions of the EMP; and

- Undertaking an annual review of the EMP and recommending additions and/or changes to this document.

### 2.3 CONTRACTOR

Contractors appointed by the Developer are automatically responsible for implementing all provisions contained within the relevant chapters of this EMP. Contractors will be responsible for the implementation of this EMP applicable to any work outsourced to subcontractors. **Table 5-2** applies to contractors appointed during the construction phase and **Table 5-3** to those appointed during the operation and maintenance phase. In order to ensure effective environmental management, the aforementioned chapters should be included in the applicable contracts for outsourced construction, operation and maintenance work.

The tables in **Chapter 5** detail the management measures associated with the roles and responsibilities that have been laid out in this chapter.

## 3 ASSUMPTIONS AND LIMITATIONS

This EMP has been drafted based on the scoping-level Environmental Assessment (EA) conducted for the proposed multipurpose market as represented by the developer. ECT will not be held responsible for the potential consequences that may result from any alterations to the initial layout.

It is assumed that construction labourers will be sourced mostly from the Otjiwarongo Constituency area and that migrant labourers (if applicable) will be housed within the Otjiwarongo Constituency area.

## 4 APPLICABLE LEGISLATION

Legal provisions that have relevance to various aspects of this development are listed in **Table 4-1** below. The legal instrument and applicable corresponding provisions are provided.

**Table 4-1:** Legal provisions relevant to this development

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
The Constitution of the Republic of Namibia as Amended	Article 91 (c) provides for duty to guard against “the degradation and destruction of ecosystems and failure to protect the beauty and	Sustainable development should be at the forefront of this development.

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
	<p>character of Namibia.”</p> <p>Article 95(l) deals with the “maintenance of ecosystems, essential ecological processes and biological diversity” and sustainable use of the country’s natural resources.</p>	
<p>Environmental Management Act No. 7 of 2007 (EMA)</p>	<p>Section 2 outlines the objective of the Act and the means to achieve that.</p> <p>Section 3 details the principle of Environmental Management.</p>	<p>The development should be carried out in conformity to the EMA.</p>
<p>EIA Regulations GN 28, 29, and 30 of EMA (2012)</p>	<p>GN 29 Identifies and lists certain activities that cannot be undertaken without an environmental clearance certificate.</p> <p>GN 30 provides the regulations governing the environmental assessment (EA) process.</p>	<p><b>Activity 9.2</b> Any process or activity which requires a permit, licence or other form of authorisation, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorisation or which requires a new permit, licence or authorisation in terms of a law governing the generation or release of emissions, pollution, effluent or waste.</p> <p><b>Activity 11.2</b> Construction</p>

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
		of cemeteries, camping, leisure and recreational sites.
Convention on Biological Diversity (1992)	Article 1 lists the conservation of biological diversity amongst the objectives of the convention.	The project should consider the impact it will have on the biodiversity of the area.
Draft Procedures and Guidelines for conducting EIAs and compiling EMPs (2008)	Part 1, Stage 8 of the guidelines states that if a proposal is likely to affect people, certain guidelines should be considered by the proponent in the scoping process.	The EA process should incorporate the aspects outlined in the guidelines.
Namibia Vision 2030	Vision 2030 states that the solitude, silence and natural beauty that many areas in Namibia provide are becoming sought after commodities and must be regarded as valuable natural assets.	Care should be taken that the development does not lead to the degradation of the natural beauty of the area.
Water Act No. 54 of 1956	Section 23(1) deals with the prohibition of pollution of underground and surface water bodies.	The pollution of water resources should be avoided during construction and operation of the development.



LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
<p>The Ministry of Environment, Forestry and Tourism (MEFT) Policy on HIV &amp; AIDS</p>	<p>MEFT has developed a policy on HIV and AIDS. In addition, it has also initiated a programme aimed at mainstreaming HIV and gender issues into environmental impact assessments.</p>	<p>The proponent and its contractor have to adhere to the guidelines provided to manage the aspects of HIV/AIDS. Experience with construction projects has shown that a significant risk is created when construction workers interact with local communities.</p>
<p>Otjiwarongo Town Planning Scheme</p>	<p>The Otjiwarongo Town Planning Scheme is a legal document that coordinates development in the town boundaries.</p>	<p>The provisions of the Town Planning Scheme should be adhered to.</p>
<p>Labour Act no 11 of 2007</p>	<p>Chapter 2 details the fundamental rights and protections.</p> <p>Chapter 3 deals with the basic conditions of employment.</p>	<p>Given the employment opportunities presented by the development, compliance with the labour law is essential.</p>
<p>Public Health Act no 36 of 1919</p>	<p>Section 119 prohibits persons from causing nuisance.</p>	<p>Owner, contractors and employees have to comply with these legal requirements.</p>
<p>Nature Conservation Ordinance no 4 of 1975</p>	<p>Chapter 6 provides for legislation regarding the protection of indigenous plants</p>	<p>Indigenous and protected plants have to be managed within the legal confines.</p>

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
Atmospheric Pollution Prevention Ordinance (No. 11 of 1976).	The Ordinance objective is to provide for the prevention of the pollution of the atmosphere, and for matters incidental thereto.	All activities on the site will have to take due consideration of the provisions of this legislation.
Roads Ordinance 17 of 1972	This Ordinance consolidates the laws relating to roads.	The provisions of this legislation have to be taken into consideration in as far as access to the development site is concerned.

## 5 MANAGEMENT ACTIONS

The aim of the management actions in this chapter of the EMP is to avoid potential impacts where possible. Where impacts cannot be avoided, measures are provided to reduce them.

The following tables provide the management actions recommended to manage the potential impacts rated in the scoping-level EA conducted for this development. These management actions have been organised temporally according to project phase:

- Planning and design phase management actions (**Table 5-1**);
- Construction phase management actions (**Table 5-2**);
- Operation and maintenance phase management actions (**Table 5-3**);

The responsible persons at the Developer’s team have assessed these commitments in detail and have committed to the specific management actions where indicated in the tables below.

### 5.1 PLANNING AND DESIGN PHASE

The DR should ensure that the management actions detailed below in **Table 5-1** should be adhered to during the period before the construction of the infrastructure starts.

Table 5-1: Planning and design management actions

PLANNING AND DESIGN PHASE IMPACTS	
Impact	Mitigation Measures
Surface and ground water	<ul style="list-style-type: none"> <li>• Ensure that the infrastructure (water, sewer, stormwater) is regularly inspected and maintained to ensure it doesn't fail.</li> <li>• No dumping of waste products of any kind in or in close proximity to surface water bodies.</li> <li>• Ensure that the sewerage system is properly functional at all times and no waste flows into the environment.</li> <li>• A regular and planned maintenance program for the bulk infrastructure services should be put in place.</li> <li>• Re-use of treated waste water should be considered wherever possible.</li> <li>• Disposal of waste from the site should be properly managed and taken to the Otjiwarongo landfill site.</li> <li>• Washing of vehicles and equipment should not be allowed on site. Should it be necessary to wash vehicles and equipment this should be done at an area properly suited and prepared to receive and contain polluted waters.</li> </ul>
Fauna and flora	<ul style="list-style-type: none"> <li>• Adapt the proposed development to the local environment - e.g., small adjustments to the site layout to avoid potential features such as existing vegetation, etc.</li> <li>• Preserve the large <i>Acacia</i> trees found on site. Incorporate them in the design of the infrastructure.</li> <li>• Plant local indigenous species of flora as part of the landscaping as these species would require less maintenance than exotic species.</li> <li>• Prevent the introduction of potentially invasive alien ornamental plant species such as; Lantana, Opuntia, Prosopis, Tecoma, etc.; as part of the landscaping as these species could infest the area further over time.</li> <li>• Maintain control on movement of personnel.</li> <li>• Provide training to personnel on importance of protecting fauna and flora.</li> <li>• Prevent the collecting of wood, veld food, hunting etc.</li> </ul>

PLANNING AND DESIGN PHASE IMPACTS	
Impact	Mitigation Measures
Infrastructure	<ul style="list-style-type: none"> <li>• Appoint professional engineers to design a detailed stormwater management system and supervise the construction thereof as part of the infrastructure service provision of the development.</li> <li>• Adapt the designs of the structures to avoid inundated sections.</li> <li>• The designs should take the natural drainage features that runs across the centre of Erf 1757 in a south-westerly direction where it joins a larger one running on the eastern boundary of Erven 1757 and 1756 in a northerly direction into consideration and ensure that no structures are to be sited such that they impede the natural flow of water.</li> <li>• Regular maintenance should also be carried out to ensure that the pathways are not clogged up by vegetation growth and solid waste.</li> <li>• It is recommended that alternative and renewable source of energy be explored and introduced into the proposed development to reduce dependency on the grid.</li> <li>• Solar geysers and panels should be introduced to provide for general lighting and heating of water and buildings.</li> <li>• Other ‘green’ technologies to reduce the proposed development’s dependency on fossil fuel should be explored where possible.</li> <li>• Designs and building materials should be as such to reduce dependency on artificial heating and cooling in order to limit the overall energy necessities.</li> <li>• Water saving mechanisms should be incorporated within the proposed development’s design and plans in order to further reduce water demand.</li> <li>• Re-use of treated waste water should be considered wherever possible to reduce the consumption of potable water.</li> <li>• Adhere to water quality guidelines in terms of The Water Act, 1956.</li> </ul>
Access Road	<ul style="list-style-type: none"> <li>• Ensure access to the site does not impede normal traffic flow along Henk Willems Street and surrounds.</li> </ul>
Traffic	<ul style="list-style-type: none"> <li>• Provide adequate parking space on site.</li> <li>• Ensure that road junctions have good sightlines.</li> <li>• Adhere to the speed limit.</li> <li>• Implement traffic control measures where necessary.</li> </ul>

PLANNING AND DESIGN PHASE IMPACTS	
Impact	Mitigation Measures
Social	<ul style="list-style-type: none"> <li>• Ensure surface used by vehicles in and around the development area are paved.</li> <li>• Provide adequate refuse bins for disposal of waste by users.</li> <li>• Stringent control measures should be put in place to manage and control additional service providers such as vendors and car cleaners.</li> <li>• No detergents or waste water from these activities should be allowed to go into the drainage system.</li> <li>• Control the usage of fences as objects for hanging wet and heavy car floor rubbers or any unwanted materials.</li> <li>• Users should take care not to obstruct entrances to the neighbouring properties.</li> <li>• The proponent should consider hiring and official or security company to ensure order at all times at these facilities.</li> </ul>

## 5.2 CONSTRUCTION PHASE

The management actions listed in **Table 5-2** apply during the construction phase. This table may be used as a guide when developing EMPs for other construction activities within this development area.

**Table 5-2:** Construction phase management actions

CONSTRUCTION PHASE IMPACTS	
Impact	Mitigation Measures
Fauna and flora	<ul style="list-style-type: none"> <li>• Adapt the proposed developments to the local environment - e.g., small adjustments to the site layout could avoid potential features such as water bodies, vegetation, etc. all of which may serve as habitat to a myriad of vertebrate fauna.</li> <li>• Prevent the destruction of important tree species, particularly the large <i>Acacia</i> trees found on the sites.</li> <li>• Do not clear cut the entire development site, but rather keep the few individuals and/or clumps of trees/shrubs not directly affecting the developments as part of the landscaping especially important for shade in the hot climate.</li> <li>• The trees that are to be kept should be clearly marked with “danger tape” to prevent accidental removal.</li> <li>• Regular inspection of the “danger” tape should be carried out.</li> </ul>

CONSTRUCTION PHASE IMPACTS	
Impact	Mitigation Measures
	<ul style="list-style-type: none"> <li>• The very important trees should be “camped off” to prevent the unintended removal or damage to these trees.</li> <li>• Recommend the planting of local indigenous species of flora as part of the landscaping as these species would require less maintenance than exotic species.</li> <li>• Transplant removed trees where possible, or plant new trees in lieu of those that have been removed.</li> <li>• Prevent the introduction of potentially invasive alien ornamental plant species such as; Lantana, Opuntia, Prosopis, Tecoma, etc.; as part of the landscaping as these species could infestate the area further over time.</li> <li>• Prevent contractors from collecting wood and veld food such as amphibians, migrating birds, etc. during the construction phase.</li> </ul>
Pressure on infrastructure	<ul style="list-style-type: none"> <li>• Ensure that the workforce is provided with temporary toilets during the construction phase.</li> <li>• These toilets should be emptied and maintained regularly.</li> <li>• Waste from the toilets should be disposed of at the waterworks of Otjiwarongo.</li> <li>• No open urination and defecation are allowed in the development area.</li> <li>• A sufficient number of waste bins should be placed around the site for the soft refuse.</li> <li>• A sufficient number of skip containers for the heavy waste and rubble should be provided for around the site.</li> <li>• Solid waste will be collected and disposed of at a designated local landfill in Otjiwarongo.</li> <li>• Train workers on saving mechanisms for water and electricity.</li> <li>• Ensure water and electricity use is metered and properly recorded.</li> </ul>
Surface and ground water impacts	<ul style="list-style-type: none"> <li>• It is recommended that construction takes place outside of the rainy season in order to limit flooding on site and surface water pollution.</li> <li>• No dumping of waste products of any kind in or in close proximity to water bodies.</li> <li>• Heavy construction vehicles should be kept out of any surface water bodies and the movement of construction vehicles should be limited where possible to the existing roads and tracks.</li> <li>• Ensure that oil, fuel and lubricants spills from construction vehicles and machinery are prevented and that where these occur, that they are appropriately dealt with.</li> </ul>



CONSTRUCTION PHASE IMPACTS	
Impact	Mitigation Measures
	<ul style="list-style-type: none"> <li>• Drip trays must be placed underneath construction vehicles when not in use to contain all oil that might be leaking from these vehicles.</li> <li>• Contaminated runoff from the construction site should be prevented from entering the surface and ground water bodies.</li> <li>• All materials on the construction site should be properly stored.</li> <li>• Disposal of waste from the site should be properly managed and taken to a local landfill in Otjiwarongo.</li> <li>• Ablution facilities at the construction sites should be located at least 30 m away from any surface water.</li> <li>• Washing of personnel or any equipment should not be allowed on site. Should it be necessary to wash construction equipment these should be done at an area properly suited and prepared to receive and contain polluted waters.</li> </ul>
Soil erosion impacts	<ul style="list-style-type: none"> <li>• Clear the vegetation of the project area in phases during the construction period in order to keep the soil more compacted as well as to limit overall disturbance to the area over time.</li> <li>• Do not clear cut the entire development site, but rather keep the few individuals and/or clumps of trees/shrubs not directly affecting the developments, important for mitigating erosion.</li> <li>• It is recommended that construction takes place outside of the rainy season in order to limit potential flooding and the run off of loose soil causing further erosion.</li> <li>• Appropriate erosion control structures must be put in place where soil may be prone to erosion.</li> <li>• Checks must be carried out at regular intervals to identify areas where erosion is occurring.</li> <li>• Appropriate remedial actions are to be undertaken wherever erosion is evident.</li> </ul>
Health, safety and security	<ul style="list-style-type: none"> <li>• Ensure that all construction personnel are properly trained depending on the nature of their work.</li> <li>• Provide for a first aid kit and a properly trained person to apply first aid when necessary.</li> <li>• A wellness program should be initiated to raise awareness on health issues, especially the impact of sexually transmitted diseases.</li> <li>• Provide access to free condoms in the workplace throughout the construction phase.</li> <li>• Facilitate access to Antiretroviral medication for construction personnel.</li> <li>• Restrict unauthorised access to the site and implement access control measures.</li> </ul>

CONSTRUCTION PHASE IMPACTS	
Impact	Mitigation Measures
	<ul style="list-style-type: none"> <li>• Clearly demarcate the construction site boundaries along with signage of no unauthorised access.</li> <li>• Clearly demarcate dangerous areas and no-go areas on site.</li> <li>• Staff and visitors to the site must be fully aware of all health and safety measures and emergency procedures.</li> <li>• Contractors must comply with all applicable occupational health and safety requirements.</li> <li>• The workforce should be provided with all necessary Personal Protective Equipment where appropriate.</li> <li>• Adhere to the Covid-19 protocols as they are applicable from time to time.</li> </ul>
Air quality	<ul style="list-style-type: none"> <li>• All loose material should be kept on site for the shortest possible time.</li> <li>• It is recommended that dust suppressants such as Dustex be applied to all the construction clearing activities to minimise dust.</li> <li>• Construction vehicles to use only designated roads.</li> <li>• During high wind conditions the contractor must make the decision to cease works until the wind has calmed down.</li> <li>• Cover any stockpiles with plastic to minimise windblown dust.</li> <li>• Provide workers with dust masks.</li> <li>• Ensure construction vehicles are well maintained to prevent excessive emission of smoke.</li> </ul>
Noise	<ul style="list-style-type: none"> <li>• No amplified music should be allowed on site.</li> <li>• Inform immediate neighbours of construction activities to commence and provide for continuous communication between the neighbours and contractor/s.</li> <li>• Limit construction times to acceptable daylight hours.</li> <li>• Install technology such as silencers on construction machinery.</li> <li>• Do not allow the use of horns as a general communication tool, but use it only where necessary as a safety measure.</li> <li>• Provide protective equipment such as ear muffs and ear plugs to workers.</li> </ul>
Traffic	<ul style="list-style-type: none"> <li>• Limit and control the number of access points to the site.</li> <li>• Ensure that road junctions have good sightlines.</li> </ul>

CONSTRUCTION PHASE IMPACTS	
Impact	Mitigation Measures
	<ul style="list-style-type: none"> <li>• Construction vehicles need to be in a road worthy condition and maintained throughout the construction phase.</li> <li>• Transport the materials in the least number of trips as possible.</li> <li>• Adhere to the speed limit.</li> <li>• Implement traffic control measures where necessary.</li> <li>• Minimise the movement of heavy vehicles during peak time.</li> </ul>
Waste management	<ul style="list-style-type: none"> <li>• It is recommended that waste from the temporary toilets be disposed of at the Wastewater Treatment Works in Otjiwarongo.</li> <li>• A sufficient number of waste bins should be placed around the site for the soft refuse.</li> <li>• A sufficient number of skip containers for the heavy waste and rubble should be provided for around the site.</li> <li>• The waste containers should be able to be closed to prevent birds and other animals from scavenging.</li> <li>• Solid waste will be collected and disposed of at a designated local landfill in Otjiwarongo.</li> </ul>
Hazardous substances	<ul style="list-style-type: none"> <li>• All chemicals and other hazardous substances must be stored and maintained in accordance with the Hazardous Substances Ordinance (No. 14 of 1974), with all relevant licences and permits to be obtained where applicable.</li> <li>• Given the potential harm to human health during handling and use of any of hazardous substances it is essential that all staff be trained with regards to the proper handling of these substances as well as First Aid in the case of spillage or intoxication.</li> <li>• Bulk storage areas for substances should be bunded and capable to hold 120% of the total volume of a given substance stored on site.</li> </ul>
Social	<ul style="list-style-type: none"> <li>• Control movement of construction workforce.</li> <li>• Ensure local procurement where commodities are available locally.</li> </ul>

### 5.3 OPERATION AND MAINTENANCE PHASE

The management actions included in **Table 5-3** below apply during the operation and maintenance phase of this development.

**Table 5-3:** Operation and maintenance management actions

OPERATIONAL PHASE IMPACTS	
Impact	Mitigation Measures
Air quality	<ul style="list-style-type: none"> <li>• Manage activities that generate emissions or dust.</li> <li>• Minimise the movement of vehicles in the area.</li> <li>• The development needs to be controlled and managed as required by the Public Health Act (Act No. 36 of 1919) and Atmospheric Pollution Prevention Ordinance (No. 11 of 1976).</li> </ul>
Noise	<ul style="list-style-type: none"> <li>• Limit the types of activities that generate excessive noise.</li> <li>• No activity having a potential noise impact should be allowed after 18:00 if possible.</li> <li>• Continuous monitoring of noise levels should be conducted to make sure the noise levels do not exceed acceptable limits.</li> </ul>
Waste management	<ul style="list-style-type: none"> <li>• A sufficient number of waste bins should be placed on the properties for the soft refuse.</li> <li>• A sufficient number of skip containers for the heavy waste and rubble should be provided for at appropriate sites.</li> <li>• The waste containers should be able to be closed to prevent birds and other animals from scavenging.</li> <li>• Solid waste will be collected and disposed of at a designated local landfill in Otjiwarongo.</li> <li>• Normal refuse such as cans, glass, paper and plastic should be segregated at source and be transported for recycling.</li> <li>• Oils, lubricants etc. will be collected and reused where feasible.</li> <li>• Metal waste will be accumulated and sent for recycling.</li> </ul>

<b>OPERATIONAL PHASE IMPACTS</b>	
Impact	Mitigation Measures
Infrastructure development	<ul style="list-style-type: none"> <li>• It is recommended that alternative and renewable sources of energy be explored and introduced into the proposed development to reduce dependency on the grid.</li> <li>• Solar geysers and panels should be considered to provide for general lighting and heating of water and buildings.</li> <li>• Designs and building materials should be as such to reduce dependency on artificial heating and cooling in order to limit the overall energy consumption.</li> <li>• Water and electricity saving mechanisms and education should be incorporated within the culture of the development’s operations and employees in order to further reduce water and electricity demand.</li> </ul>
Quality of life	<ul style="list-style-type: none"> <li>• The development will serve as an important economic activity that provides jobs. This will have a positive impact on the quality of life of the workers in terms of household incomes, but also the contribution to the Gross Domestic Product of the region and country.</li> </ul>
Visual and Sense of Place	<ul style="list-style-type: none"> <li>• It is recommended that more ‘green’ technologies be implemented within the designs and building materials of the development where possible in order to minimise the visual prominence of such a development within the more natural surrounding landscape.</li> <li>• Natural colours and building materials such as wood and stone should be incorporated.</li> <li>• Visual pollutants can further be prevented through mitigations such as keeping existing vegetation, introducing indigenous trees; keeping structures unpainted and minimising large advertising billboards.</li> </ul>

#### 5.4 DECOMMISSIONING PHASE

The decommissioning of this development is not foreseen. In the event that this development is decommissioned a dedicated decommissioning plan has to be developed and implemented.



## **Appendix B - Water Quality Guidelines**

# **THE WATER ACT, 1956 (ACT 54 OF 1956 ) AND ITS REQUIREMENTS IN TERMS OF WATER SUPPLIES FOR DRINKING WATER AND FOR WASTE WATER TREATMENT AND DISCHARGE INTO THE ENVIRONMENT**

## **1. INTRODUCTION**

The provisions of the Water Act are intended, amongst other things, to promote the maximum beneficial use of the country's water supplies and to safeguard water supplies from avoidable pollution.

The drinking water guidelines are not standards as no publication in the Government Gazette of Namibia exists to that effect. However the Cabinet of the Transitional Government for National Unity adopted the existing South African Guidelines (461/85) and the guidelines took effect from 1 April 1988 under the signature of the then Secretary for Water Affairs.

The sections of the Water Act that relate to the discharge of industrial effluents are:

- Section 21(1) which states that
  - The purification of waste water shall form an integral part of water usage and
  - that purified effluents shall comply with the General Standard Quality restrictions as laid out in Government Gazette R553 of 5 April 1962 and
- Section 21(2) which further stipulate that this purified effluent be returned as close as possible to the point of abstraction of the original water.

Where a local authority has undertaken the duty of disposing of all effluents from an industrial process the provisions of Section 21(1) and 21(2) apply to the local authority and not the producer of the effluents. If there is difficulty in complying with these provisions then the applicant may apply for an exemption from the conditions in terms of Section 21(5) and 22(2) of the Water Act. The Permanent Secretary after consultation with the Minister may grant the issuance of a Waste Water Discharge Permit under Sections 21(5) and 22(2) subject to such conditions as he may deem fit to impose.

After independence, the Government of the Republic of Namibia decided that for the interim the existing guidelines will continue to be valid and to remain in use until a proper study has been conducted and new standards have been formulated (Article 140 of Act 1 of 1990).

## **2. GUIDELINES FOR THE EVALUATION OF DRINKING-WATER QUALITY FOR HUMAN CONSUMPTION WITH REGARD TO CHEMICAL, PHYSICAL AND BACTERIOLOGICAL QUALITY**

Water supplied for human consumption must comply with the officially approved guidelines for drinking-water quality. For practical reasons the approved guidelines have been divided into three basic groups of determinants, namely:

- Determinants with aesthetic / physical implications: TABLE 1.
- Inorganic determinants: TABLE 2.
- Bacteriological determinants: TABLE 3.

### **2.1 CLASSIFICATION OF WATER QUALITY**

The concentration of and limits for the aesthetic, physical and inorganic determinants define the group into which water will be classified. See TABLES 1 and 2 for these limits. The water quality has been grouped into 4 quality classes:

- Group A: Water with an excellent quality
- Group B: Water with acceptable quality
- Group C: Water with low health risk
- Group D: Water with a high health risk, or water unsuitable for human consumption.

Water should ideally be of excellent quality (Group A) or acceptable quality (Group B), however in practice many of the determinants may fall outside the limits for these groups.

If water is classified as having a low health risk (Group C), attention should be given to this problem, although the situation is often not critical as yet.

If water is classified as having a higher health risk (Group D), urgent and immediate attention should be given to this matter.

Since the limits are defined on the basis of average lifelong consumption, short-term exposure to determinants exceeding their limits is not necessarily critical, but in the case of toxic substances, such as cyanide, remedial measures should immediately be taken.

The overall quality group, into which water is classified, is determined by the determinant that complies the least with the guidelines for the quality of drinking water.

**TABLE 1: DETERMINANTS WITH AESTHETIC / PHYSICAL IMPLICATIONS**

DETERMINANTS	UNITS*	LIMITS FOR GROUPS			
		A	B	C	D**
Colour	mg/l Pt***	20			
Conductivity	mS/m !at 25 °C	150	300	400	400
Total hardness	mg/l CaCO <sub>3</sub>	300	650	1300	1300
Turbidity	N.T.U****	1	5	10	10
Chloride	mg/l Cl	250	600	1200	1200
Chlorine (free)	mg/l Cl	0,1- 5,0	0,1 – 5,0	0,1 – 5,0	5,0
Fluoride	mg/l F	1,5	2,0	3,0	3,0
Sulphate	mg/l SO <sub>4</sub>	200	600	1200	1200
Copper	µg/l Cu	500	1000	2000	2000
Nitrate	mg/l N	10	20	40	40
Hydrogen Sulphide	µg/l H <sub>2</sub> S	100	300	600	600
Iron	µg/l Fe	100	1000	2000	2000
Manganese	µg/l Mn	50	1000	2000	2000
Zink	mg/l Zn	1	5	10	10
pH****	pH-unit	6,0 – 9,0	5,5 – 9,5	4,0 – 11,0	4,0 – 11,0

\* In this and all following tables "l" (lower case L in ARIAL) is used to denote dm<sup>3</sup> or litre

\*\* All values greater than the figure indicated.

\*\*\* Pt = Platinum Units

\*\*\*\* Nephelometric Turbidity Units

\*\*\*\*\* The pH limits of each group exclude the limits of the previous group

**TABLE 2: INORGANIC DETERMINANTS**

DETERMINANTS	UNITS	LIMITS FOR GROUPS			
		A	B	C	D*
Aluminium	µg/l Al	150	500	1000	1000
Ammonia	mg/l N	1	2	4	4
Antimonia	µg/l Sb	50	100	200	200
Arsenic	µg/l As	100	300	600	600
Barium	µg/l Ba	500	1000	2000	2000
Beryllium	µg/l Be	2	5	10	10
Bismuth	µg/l Bi	250	500	1000	1000
Boron	µg/l B	500	2000	4000	4000
Bromine	µg/l Br	1000	3000	6000	6000
Cadmium	µg/l Cd	10	20	40	40
Calcium	mg/l Ca	150	200	400	400
Calcium	mg/l CaCO <sub>3</sub>	375	500	1000	1000
Cerium	µg/l Ce	1000	2000	4000	4000
Chromium	µg/l Cr	100	200	400	400
Cobalt	µg/l Co	250	500	1000	1000
Cyanide (free)	µg/l CN	200	300	600	600
Gold	µg/l Au	2	5	10	10
Iodine	µg/l I	500	1000	2000	2000
Lead	µg/l Pb	50	100	200	200
Lithium	µg/l Li	2500	5000	10000	10000
Magnesium	mg/l Mg	70	100	200	200
Magnesium	mg/l CaCO <sub>3</sub>	290	420	840	840
Mercury	µg/l Hg	5	10	20	20
Molybdenum	µg/l Mo	50	100	200	200
Nickel	µg/l Ni	250	500	1000	1000
Phosphate	mg/l P	1	See note below	See note below	See note below
Potassium	mg/l K	200	400	800	800
Selenium	µg/l Se	20	50	100	100
Silver	µg/l Ag	20	50	100	100
Sodium	mg/l Na	100	400	800	800
Tellurium	µg/l Te	2	5	10	10
Thallium	µg/l Tl	5	10	20	20
Tin	µg/l Sn	100	200	400	400
Titanium	µg/l Ti	100	500	1000	1000
Tungsten	µg/l W	100	500	1000	1000
Uranium	µg/l U	1000	4000	8000	8000
Vanadium	µg/l V	250	500	1000	1000

\* All values greater than the figure indicated.

**Note FOR Table 2 on phosphate:** Phosphates are not toxic and essential for all life-forms. Natural water will, however, seldom contain phosphate; it is generally seen as an indicator of pollution and is usually accompanied by other pollutants. Wherever drinking water is combined with or consists wholly of reclaimed or recycled water, it may be expected to contain phosphate. The general guideline for a concentration level to be aimed at is 1 mg/l as P. But in many cases this may be difficult to achieve technically. For this reason the Department will allow a phosphate concentration level of up to 5 mg/l as P in water intended for human consumption. Please refer also to the “Note on Phosphate” under Section 3: General Standards for Waste/Effluent.

## 2.2 BACTERIOLOGICAL DETERMINANTS

The bacteriological quality of drinking water is also divided into four groups, namely:

- Group A: Water which is bacteriological very safe;
- Group B: Water which is bacteriological still suitable for human consumption;
- Group C: Water which is bacteriological risk for human consumption, which requires immediate action for rectification;
- Group D: Water, which is bacteriological unsuitable for human consumption.

**TABLE 3: BACTERIOLOGICAL DETERMINANTS**

DETERMINANTS	LIMITS FOR GROUPS			
	A**	B**	C	D*
Standard plate counts per 1 ml	100	1000	10000	10000
Total coliform counts per 100 ml	0	10	100	100
Faecal coliform counts per 100 ml	0	5	50	50
<i>E. coli</i> counts per 100 ml	0	0	10	10

\* All values greater than the figure indicated.

\*\* In 95% of the samples.

NB If the guidelines in group A are exceeded, a follow-up sample should be analysed as soon as possible.

## 2.3 FREQUENCY FOR BACTERIOLOGICAL ANALYSIS OF DRINKING-WATER SUPPLIES

The recommended frequency for bacteriological analysis of drinking water is given in Table 4.

**TABLE 4: FREQUENCY FOR BACTERIOLOGICAL ANALYSIS**

POPULATION SERVED	MINIMUM FREQUENCY OF SAMPLING
More than 100 000	Twice a week
50 000 – 100 000	Once a week
10 000 – 50 000	Once a month
Minimum analysis	Once every three months



### 3 GENERAL STANDARDS FOR WASTE / EFFLUENT WATER DISCHARGE INTO THE ENVIRONMENT

All applications in terms of Section 21(5) and 22(2), for compliance with the requirements of Section 21(1) and 21(2) of the Water Act (Act 54 of 1956) that purified water shall comply with the General Standard as laid out in Government Gazette Regulation R553 of 5 April 1962.

**TABLE 5 GENERAL STANDARDS FOR ARTICLE 21 PERMITS (EFFLUENTS)**

DETERMINANTS	MAXIMUM ALLOWABLE LEVELS
Arsenic	0,5 mg/l as As
Biological Oxygen Demand (BOD)	no value given
Boron	1,0 mg/l as B
Chemical Oxygen Demand (COD)	75 mg / l as O
Chlorine, residual	0,1 mg/l as Cl <sub>2</sub>
Chromium, hexavalent	50 µg/l as Cr(VI)
Chromium, total	500 µg/l as Cr
Copper	1,0 mg/l as Cu
Cyanide	500 µg/l as CN
Oxygen, Dissolved (DO)	at least 75% saturation**
Detergents, Surfactants, Tensides	0,5 mg/l as MBAS – See also Note 2
Fats, Oil & Grease (FOG)	2,5 mg/l (!gravimetric method)
Fluoride	1,0 mg/l as F
Free & Saline Ammonia	10 mg/l as N
Lead	1,0 mg/l as Pb
Oxygen, Absorbed (OA)	10 mg / l as O*
pH	5,5 – 9,5
Phenolic Compounds	100 µg/l as phenol
Phosphate	1,0 mg/l as P - See also Note 1
Sodium	not more than 90 mg/l Na more than influent
Sulphide	1,0 mg/l as S
Temperature	35°C
Total Dissolved Solids (TDS)	not more than 500 mg / l more than influent
Total Suspended Solids (TSS)	25 mg/l
Typical faecal Coli.	no typical coli should be counted per 100 ml
Zinc	5,0 mg/l as Zn

\* Also known as *Permanganate Value* (or *PV*).

\*\* In Windhoek the saturation level is at approx. 9 mg/l O<sub>2</sub>.

**Note (1) on phosphate:** Phosphates are not toxic and essential for all life forms. Natural water will seldom contain phosphate; it is generally seen as an indicator of pollution and is usually accompanied by other pollutants. Wherever drinking water is combined with or consists wholly of reclaimed or recycled water, it may be expected to contain phosphate. There is no general guideline for phosphate contained in the Regulation 553. But generally it is assumed that eutrophication or algal bloom in dams is promoted by nutrient concentrations as low as 0,01 mg/l as P; generally a phosphate concentration limit for dams of 0,1 mg/l is recommended. All water that is consumed and subsequently discharged, will eventually end up in rivers, dams or

groundwater – that is why for potable water, a concentration level of 1 mg/l as P is aimed at.

But, again, in many cases of waste and effluent treatment, this may be difficult to achieve technically, or the required waste and effluent treatment infrastructure is not available; as the required infrastructure is sophisticated and expensive. The current situation calls for a compromise and for this reason, this Department will judge each application individually on its merits and allow, in certain cases, a phosphate concentration level of up to 15 mg/l as P in any effluent or waste stream to be discharged into the environment. This regulation is subject to be reviewed every two years, calculated from the date of approval of this document.

**Note (2) on detergents, surfactants and ten sides:** The MBAS (or methylene blue active substances) – test does not encompass all surface active compounds currently, commercially available. The limit given is therefore only a guideline. Many of the cleaning agents are toxic to biological life-forms in rivers and dams.

It should be taken into consideration that some commercial products interfere with the effective removal of oil, fat and grease by grease and fat traps, by breaking up such long-chain molecules into shorter ones. These cleaning agents thus effectively allow such components to pass through the traps and land into sections of a treatment plant further down the line and interfere with the process there.

Many cleaning agents contain very powerful disinfectants, and/or biocides. Such substances may interact with biological treatment processes. They may reduce the effectiveness of such treatment or 'kill' it completely, if they land in septic tanks, biofilters or even activate-sludge plants. Their activity may be attenuated by dilution.

#### **4. AUTHORIZATION**

Herewith, the Guidelines for the Evaluation of Drinking Water for Human Consumption with regard to Chemical, Physical and Bacteriological Quality, as well as the General Standards for Article 21\* Permits, amended for detergents, surfactants, ten sides, as well as phosphates, are confirmed and remain in force until further notice.

Issued under my hand with the authority vested in my office, within the Ministry for Agriculture, Water and Rural Development,

**PERMANENT SECRETARY**  
**Dr V Shivute**

**WINDHOEK,**

**DATE STAMP**