

ENVIRONMENTAL SCOPING REPORT FOR THE REZONING OF ERF 517 WALVIS BAY  
FROM “GENERAL RESIDENTIAL 1” TO “GENERAL BUSINESS” WITH A BULK FACTOR OF  
2.0 FOR THE DEVELOPMENT OF A MIXED LAND USE, INITIALLY ONLY OFFICES.

# ENVIRONMENTAL SCOPING REPORT<sup>.v2</sup>

2 DECEMBER 2024





## STEWART PLANNING

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<b>Project title:</b>	Rezoning of Erf 517 Walvis Bay from "General Residential 1" (1:300m <sup>2</sup> ) to "General Business" with a maximum bulk factor of 2.0 for the development of offices.
<b>Date:</b>	2 December 2024
<b>Reference:</b>	517WB
<b>Report Status:</b>	Scoping Report 517 WB_Scoping Report.V2
<b>Proponent:</b>	Mr R Jensen and Ms S and Mr B Krauer Walvis Bay Namibia
<b>Consultant:</b>	Stewart Planning – Town & Regional Planners PO Box 2095 Walvis Bay Namibia
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<b>Competent Authority:</b>	Municipality of Walvis Bay Civic Centre Street Private Bag 5017 Walvis Bay Namibia
<b>Attachments</b>	
Annexure A:	Environmental Management Plan
Annexure B:	Locality and Zoning Plan
Annexure C:	CV of EAP
Annexure D:	Proof of Consultation
Annexure E:	Registered I&APs

## **1. Non-Technical Summary**

The owners of Erf 517 Walvis Bay – Mr Robert Jensen and Ms Svenja and Mr Bjorn Krauer (the Proponent) – intends to obtain land use rights for an office development in the existing block of flats and outbuildings. In the longer term the intention is to re-develop the property into a mixed-use development that could, in the future, comprise of business (retail/shops/offices) on the ground floor with offices/apartments on the first and second floors.

The proposed office development requires rezoning from residential to business in terms of the Urban and Regional Planning Act. This rezoning has been submitted to the Municipal Council of Walvis Bay (Town Planning Section) for a decision, before being submitted to the Urban and Regional Planning Board for a final decision/approval. An Environmental Clearance Certificate (ECC) is also required for the rezoning application (change in land use from residential to business) before it is submitted to the Urban and Regional Planning Board.

The purpose of this report is to apply to the Environmental Commissioner for an ECC and this power has been delegated to the Municipal Council of Walvis Bay.

The Proponent has appointed Stewart Planning to undertake an Environmental Scoping Report (EIA) for the proposed rezoning and to prepare an Environmental Management Plan (EMP) for consideration/evaluation by the Municipal Council of Walvis Bay.

Erf 517 Walvis Bay situated along Sixth Street East, opposite the railway line leading to/from the port and inland destinations. Sixth Street East is a busy north-south traffic route linking the Walvis Bay central business area with the industrial area and the northern residential areas. The site is not directly on Sixth Street East, but along a service road adjacent to Sixth Street East.

The site is occupied by a double storey block of flats comprising 4 dwelling units and typical outbuildings (five garages and a flat) and is currently used for residential purposes only. In the immediate short term, the owners intend to convert the existing flat building into offices with the required on-site parking.

In the long term, the existing buildings will be demolished and a three-storey building could be developed with each floor potentially comprising the following land uses:

- Ground Floor: Offices and/or Retail/Shops
- First Floor: Offices/Apartments
- Third Floor: Apartments

No site development plan has been prepared to date. Therefore, the number of offices, retail/shops and apartments and the intensity of the future development will be subject to the provisions of the Walvis Bay Zoning Scheme.

A scoping exercise was undertaken to determine all potential impacts (positive or negative) associated with the proposed rezoning and potential development using primary and secondary sources of information. For each impact, proposed mitigations were given in the Environmental Management Plan to reduce the significance of negative impacts and enhance the significance of positive impacts.

The proposed development, due to its central urban location, its limited scale and proposed land use, is not expected to create significant negative impacts on the receiving urban environment, provided that the mitigations are implemented during all phases of development. Based on the findings of the EIA and EMP, it is recommended that the Municipal Council of Walvis Bay, through the office of the Environmental Commissioner, issue an ECC for the proposed rezoning application.

## 2. Introduction

The owners of Erf 517 Walvis Bay have appointed Stewart Planning to apply to rezone the property and also to apply for an Environmental Clearance Certificate for the proposed rezoning from General Residential 1 to General Business.

The proposed rezoning has been submitted to the Municipal Council of Walvis Bay (Town Planning Section) on 13 September 2024 for a decision. The purpose of this report is to obtain an ECC for the proposed rezoning as recommended below:

- [1] That an Environmental Clearance Certificate be issued to Mr Robert Jensen and Ms Svenja and Mr Bjorn Krauer for the rezoning of erf 517 Walvis Bay from “General Residential 1” with a density of 1 dwelling unit per 300m<sup>2</sup> to “General Business” with a maximum bulk factor of 2.0 for the development of a mixed land use, initially offices only.
- [2] That the following conditions apply to the Environmental Clearance Certificate:
  - a. The proponent shall address all potential impacts resulting from the construction and operational activities and implement the mitigation measures as contained in the Environmental Management Plan.
  - b. Regular environmental monitoring and evaluation of environmental performance should be conducted and targets for improvements should be established and monitored from time to time. and
  - c. The Municipality of Walvis Bay reserves the right to attach further legislative and regulatory conditions during the operational activities of the project.

The following report will describe the site, the proposed rezoning, the need and desirability of the application and statutory/policy support for the application for further consideration.

## 3. Terms of reference

The following terms of reference set out the approach the proponent intends to follow in undertaking the assessment in accordance with the Environmental Management Act of 2007 and its Regulations:

- a) a description of the proposed project, location and receiving environment, and alternative proposals.
- b) identify relevant laws and policies for the project.
- c) advertise and consult potential I&APs to provide an opportunity to submit comments, representations and/or objections to the proposed project.
- d) identify potential impacts the project activity will have on the receiving environment and assess their significance level.
- e) provide possible mitigation measures to be included in the EMP to reduce negative impacts and/or enhance positive impacts on the receiving environment.

## 4. Project Description

### 4.1. Proposed project

The site is occupied by a double storey block of flats comprising 4 dwelling units and typical outbuildings (five garages and a flat) and is currently used for residential purposes only.

In the immediate short term, the owners intend to convert the existing flat building into offices with the required on-site parking.

In the long term, the existing buildings will be demolished and a three-storey building could be developed with each floor potentially comprising the following land uses:

- Ground Floor: Offices and/or Retail/Shops
- First Floor: Offices
- Third Floor: Apartments

No site development plan has been prepared to date. Therefore, the number of offices, retail/shops and apartments and the intensity of the future development will be subject to the provisions of the Walvis Bay Zoning Scheme.

#### **4.2. Alternative proposals**

Alternatives concerning the proposed activity imply different means of meeting the general development objectives of the project which may include alternatives to the site location, a non-rezoning alternative and alternative designs of the building itself. The following alternatives were considered for the proposed activity.

#### **4.3. Site alternatives**

The Proponent has, for a long time, looked at suitable alternative development sites without any success. The chosen site meets with the Proponent's development objectives.

#### **4.4. No rezoning alternative**

This alternative implies that the property remains zoned "General Residential 1" with a density of 1 dwelling unit per 300m<sup>2</sup>. This zoning does not permit any type of business development

Therefore, the no rezoning alternative will not be suitable for the Proponent's long term development objectives.

#### **4.5. Design alternative**

The existing residential building is suitable to be converted to a business use from an architectural and structural point of reference. Detailed alteration building and structural plans will be submitted for approval, prior to the commencement of any on-site development.

### **5. Description of receiving environment**

This section will describe the receiving environment that may be affected by the proposed activity or which could influence or impact the development proposal. The tables in this report summarise the activity, receptor (the receiving environment) and the potential impact on the receptor.

The site is located along Sixth Street East, opposite the railway line leading to/from the port and inland destinations. Sixth Street East is a busy north-south traffic route linking the Walvis Bay central business area with the industrial area and the northern residential areas. The site is not directly on Sixth Street East, but along a service road adjacent to Sixth Street East.

The site is level/flat and well above the water table. There are no on-site features of an aesthetic, historical, cultural or environmental nature that require retention. The site has been an integral part of the urban area for a very long time.

The double storey flat building, outbuildings and the site itself are in good condition/well maintained. Physically and structurally, it is possible for the flats to be converted into offices.

The block of flats is situated close to the Sixth Street East frontage and the outbuildings are at the rear of the site. There is a large open space area between the block of flats and outbuildings and which is used for open parking, garden and manoeuvring space for cars.



Opposite the site across the Sixth Street East service road is a semi-landscaped open space.

The site measures 1,250m<sup>2</sup> in extent. It is currently zoned “General Residential 1” with a density of 1 dwelling unit per 300m<sup>2</sup> with a maximum bulk factor of 2.0 in terms of the Walvis Bay Zoning Scheme.

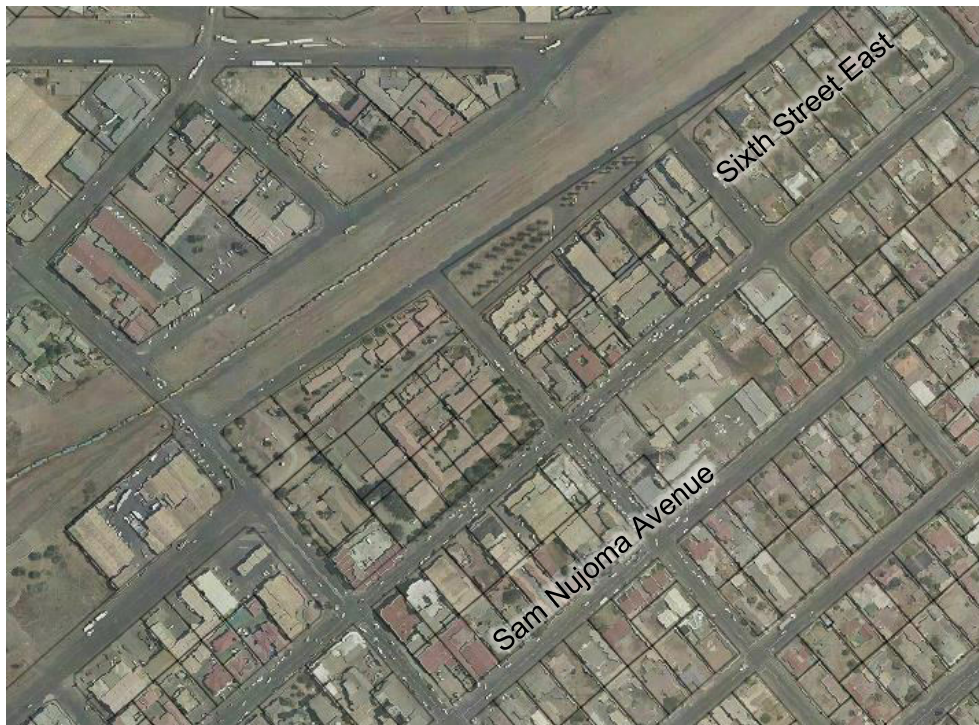


Figure 1: Location of the Erf 517 Walvis Bay (red boundary).

The site is situated in an old historically residential neighbourhood north-west of the Walvis Bay CBD. Most homes/flats are well maintained but others are in a slow state of decline. The land use of the wider area is slowly changing as houses are converted into offices and/or businesses. This is due to the proximity of the site to the existing central business district of Walvis Bay, the port/harbour and the western/northern industrial area.

From Figure 2, it can be seen that almost all nearby properties are already zoned General Business along Sixth Street East, allowing for a mix of land uses in the wider area.

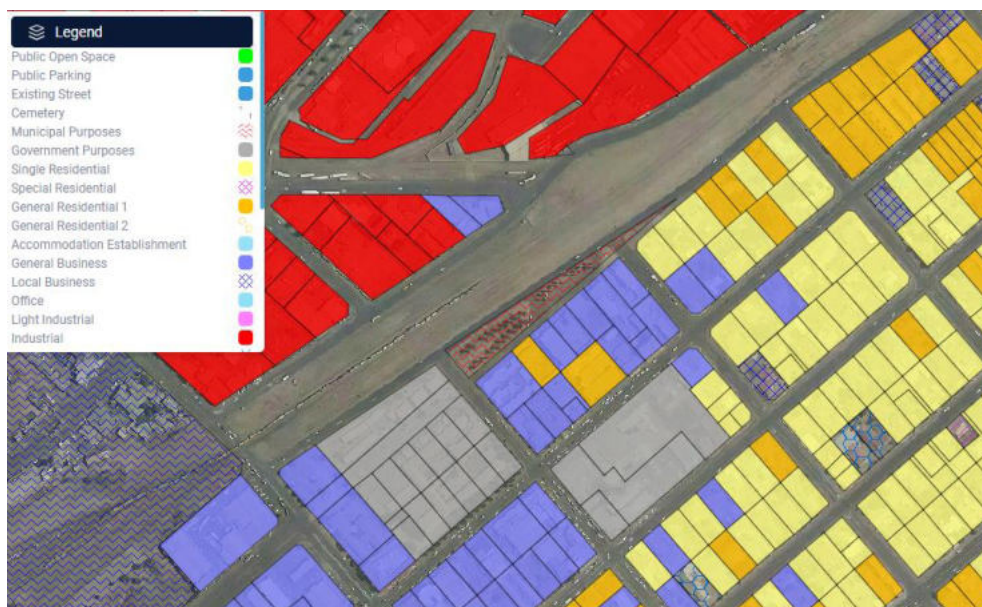


Figure 2: Current zoning of the Erf 517 Walvis Bay and surrounding properties.



Figure 3 to Figure 6 are photos of the site:





Figure 3: Site viewed close up from Sixth Street East.



Figure 4: Site viewed from Sixth Street East, from opposite "open space "





Figure 5: Rear view of open area between flats and outbuildings.



Figure 6: Rear view of open area between outbuildings and flats.

Table 1 provides a summary of the property.

Table 1: Summary of property description.

<b>Registered Name</b>	Erf No. 517, Walvis Bay
<b>Size</b>	1,250m <sup>2</sup>
<b>Street Address</b>	6 Sixth Street East
<b>Location</b>	See Locality Plan GPS Co-ordinates: <u>-22.962109, 14.493415</u>
<b>Current Zoning</b>	General Residential 1
<b>Density</b>	One dwelling unit per 300m <sup>2</sup> (1:300m <sup>2</sup> )
<b>Bulk Factor</b>	No building may exceed a bulk of 2.0 (or floor area of 2,500m <sup>2</sup> )
<b>Registered Owner</b>	Robert Jensen and Svenja and Björn Krauer
<b>Local Authority Area</b>	Municipality of Walvis Bay

## 6. Identification of laws and policies

Table 2 provides an overview of legislation and its application to the proposed project whereas Table 3 summarises relevant policies that apply to the project.

Table 2: Laws or legislation applicable to the project.

<b>Law or Policy</b>	<b>Provision or application</b>	<b>Authority</b>
Namibia Constitution	Article 95(l): The State shall actively promote and maintain the welfare of the people by promoting sustainable development.	National Government
Walvis Bay Zoning Scheme as underwritten by the Urban and Regional Planning Act, 2018 (Act No.5 of 2018).	The proposed rezoning requires approval from the Local Authority (LA) and Urban and Regional Planning Board (URP Board).	LA & URP Board.
Environmental Management Act, 2007 (Act No.7 of 2007) and EIA Regulations.	The rezoning of land from residential to commercial is a listed activity which requires an Environmental Clearance Certificate to be undertaken. The Ministry of Environment, Forestry and Tourism (MEFT) is the custodian of this Act with certain powers delegated to the Local Authority (LA).	LA & MEFT
Labour Act, 2007 (Act No.11 of 2007), as amended.	The proponent and Contractor need to adhere to the provisions of this law. This Act provides regulations to protect employees from unfair labour practices and prescribes labour disputes in the workplace. Employers must adhere to minimum wages and promote a healthy working environment, free from discrimination. The Ministry of Labour, Industrial Relations and Employment Creation (MLIREC) is the custodian of this Act.	MLIREC
Atmospheric Pollution Prevention Ordinance, 1976 (APPO:1976).	Provides general guidance on pollution control such as dust. This ordinance requires any construction site to adopt the best practicable method to prevent dust from spreading and causing health issues.	MEFT

Law or Policy	Provision or application	Authority
Public and Environmental Health Act, 2015 (Act No.1 of 2015).	To promote public health and well-being and to protect individuals and communities from public health risks, including the latest COVID-19 Regulations. The proposed development is subject to the provisions of the Act and inspections from the Local Authority.	LA
All relevant Local Authority Regulations	The project is subject to all relevant regulations (relating to health, building control etc) as required by the various departments of the Local Authority.	LA

Table 3: Policies or guidelines relevant to the project.

Policy	Provision or application	Authority
Walvis Bay Urban Structure Plan (IUSDF)	This plan indicates the future growth and structure plan of Walvis Bay up to 2030 with policies on land use planning. The IUSDF was reviewed to determine whether the proposed activity is broadly in line with the future planning of Walvis Bay.	LA
Walvis Bay Strategic Plan	Steering the Walvis Bay ship from the present to a progressive future through transformational leadership.	LA
Draft Procedures and Guidelines for EIA and EMP of 2008.	A procedure and guideline document and serves as a reference and supportive text only	MEFT
Walvis Bay Biodiversity Report of 2008 (WBBR:2008).	Provides a comprehensive summary and map of sensitive biodiversity areas and zoning in the local district. It was determined that the project is not located within or close to a sensitive biodiversity area.	LA
Walvis Bay Climate Strategic Action Plan.	Provides action plans on how Town Planning can help mitigate climate change. Promote redevelopments, reduce urban sprawl, and minimise land consumption.	LA
Sustainable Urban Energy Planning: A handbook for cities and towns in developing countries. (SUEP: 2004).	Provides a comprehensive list of case studies to implement energy-saving measures to conserve natural resources with city planning.	ICLEI & UN-Habitat

## 7. Public Consultation Process

### 7.1. Steps taken to notify potential interested and affected parties

Neighbours and the general public were notified on 13 September 2024 of the rezoning application and to notify potential interested and affected parties to register.

### 7.2. Proof of consultation

The application was advertised as required between 13 September 2024/18 October 2024.

Proof of consultation, with the necessary supporting documents is attached.

### 7.3. List of registered interested and affected parties

No written objections were received on/before the closing date of 18 October 2024.

One letter of support/no objection was received from the owner of erf 520 Walvis Bay.

### 7.4. Summary of issues raised by interested and affected parties

Not applicable – no issues raised by interested and affected parties.

## 8. Identification of Potential Impacts

During the scoping exercise, potential impacts were identified which are linked to the proposed activity and/or a sensitive receptor. The potential impacts have been identified among four phases namely:

1. Planning Phase
2. Construction Phase
3. Operational Phase
4. Decommissioning Phase

Table 4: Planning Phase: List of Potential Impacts Numbered P1 to P6.

IMPACT IDENTIFICATION: PLANNING PHASE			
No.	Activity	Receptor	Potential Impact
P1	Proposed building height of two to three storeys.	Surrounding single storey residential and double storey business.	<b>Land Use Compatibility</b> <b>Positive:</b> The proposed business use and height are considered compatible with nearby existing residential and business land uses and heights.
P2	Notification of proposed rezoning and land use and public participation.	General public and neighbouring properties.	<b>Public Input</b> <b>Positive:</b> to-date, general public or neighbours did not raise any objections or concerns to the proposed development.
P3	Appointment of subcontractor(s) for building alterations.	High unemployment rates in Walvis Bay.	<b>Employment Creation</b> <b>Positive:</b> Creates short-term employment opportunities for local contractors and workers.
P4	Payment of compensation fee and monthly payments.	Poor Council revenue sources for general upkeep and maintenance.	<b>Council Revenue Generation</b> <b>Positive:</b> Increase in Council revenue due to payment of compensation fees and increased business rates, taxes and service charges.
P5	Short term alteration of existing flats.	No heritage or architectural status or cultural value of building or site.	<b>Cultural Impacts</b> <b>Positive:</b> No heritage, architectural or cultural significance.
P6	Loss of dwelling units and tenant relocation.	Existing tenants will have to relocate.	<b>Reduced Housing Stock</b> <b>Negative:</b> Alteration of flats to business/offices will require tenants adequate time to relocate.

Table 5: Construction Phase: List of Potential Impacts Numbered C1 to C7.

IMPACT IDENTIFICATION: CONSTRUCTION PHASE			
No.	Activity	Receptor	Potential Impact
C1	Loud noise is generated from vehicles, machinery and compactors.	Adjacent residents and construction workers without PPE.	<b>Construction Noise Impacts</b> <b>Negative:</b> Construction activity will generate noise and potentially disturb local residents and businesses and can be harmful to persons working with heavy machinery and equipment without PPE.
C2	Improper disposal of building waste and rubble.	Site, street and neighbourhood.	<b>Solid Waste Management</b> <b>Negative:</b> Generation of construction waste (cement, plastics, ceramics, bricks, and wood) can pollute the urban environment.
C3	Accidental spillage of hazardous waste such as oil, paint or wet cement.	Site, street and neighbourhood.	<b>Hazardous Waste Management</b> <b>Negative:</b> Water paint, oil leakages, from heavy vehicles or equipment, and spillage of wet cement can pollute the environment and be a health risk to construction workers and residents.
C4	Lack of ablution facilities, potable water, warning signs and safety training.	Construction workers and visitors from the public.	<b>Health and Safety Impacts</b> <b>Negative:</b> Lack of sanitation and potable water can create a health risk. Lack of first aid training/ awareness of injuries can create a safety risk.
C5	Generation of dust particles from compaction or release of dry cement.	Construction workers without PPE.	<b>Dust Impacts</b> <b>Negative:</b> Generation of dust during compaction and/or particles from cement or other related construction activity can negatively impact the health and safety of workers.



IMPACT IDENTIFICATION: CONSTRUCTION PHASE			
No.	Activity	Receptor	Potential Impact
C6	Labour disputes, proper wages, gender discrimination, and unsafe working environments.	Construction workers especially female workers.	<b>Socio-economic Impacts</b> <b>Negative:</b> Lack of proper compensation and/or unsafe working sites, and unfair gender recruitment, can be harmful to the well-being and health of employees.
C7	Movement of heavy vehicles to and from the site. Delivery of building material.	Busy central located urban environment.	<b>Construction Traffic Impacts</b> <b>Positive:</b> All heavy vehicles will use Sixth Street East to reach the site and thus traffic is unlikely to disturb the neighbourhood who already experience higher levels of traffic and noise. No diversion of traffic or street closures are required.

Table 6: Operational Phase: List of Potential Impacts Numbered O1 to O7.

IMPACT IDENTIFICATION: OPERATIONAL PHASE			
No.	Activity	Receptor	Potential Impact
O1	Operation of a business premises.	Adjacent residents.	<b>Operational Noise Impacts</b> <b>Positive:</b> The office/business land use is not expected to create a disturbance for neighbours or other businesses.
O2	Appointment of permanent employees to operate and work in the business.	High unemployment rates in Walvis Bay.	<b>Employment Creation</b> <b>Positive:</b> Creates long-term employment opportunities in the local area. Employment indirectly reduces poverty and crime in general.
O3	Increase in water and electrical consumption.	Scarce water and energy resources.	<b>Water and Energy Management</b> <b>Negative:</b> The proposed development will marginally increase electrical and water consumption which are scarce resources in Namibia.
O4	Lack of proper toilet facilities or lack of cleaning/maintenance.	General public health and convenience.	<b>Public Sanitation Impact</b> <b>Negative:</b> A potential lack of clean toilets within the proposed building can create a public health risk for visitors and occupants.
O5	Increase in traffic due to office use generating more vehicle trips.	Capacity of local streets to accommodate additional traffic.	<b>Increased Traffic Impacts</b> <b>Positive:</b> Local roads can cope with additional load without any problems or upgrading.
O6	Property access and sight lines.	Busy Sixth Street East and associated traffic risks.	<b>Access and Traffic Impacts</b> <b>Positive:</b> Access is from Sixth Street East service road is safer than taking access from Sixth Street East itself.
O7	Employee and client parking requirements.	Large erf size and road reserves	<b>Parking Impacts</b> <b>Positive:</b> All parking can be provided on-site. In addition, there is sufficient space within the service road reserve for on-street parking as well.

Table 7: Decommissioning Phase: List of Potential Impacts Numbered D1 and D2.

IMPACT IDENTIFICATION: DECOMMISSIONING PHASE			
No	Activity	Receptor	Potential Impact
D1	Potential long term demolition of the flat/office building.	No architectural, heritage status or cultural value of building or site.	<b>Cultural Impacts</b> <b>Positive:</b> No architectural, heritage or cultural significance will be destroyed.
D2	Future decommissioning of the building by the proponent or new owner.	Neighbouring properties and residents.	<b>Decommission Impacts</b> <b>Negative:</b> Similar construction-related impacts have been identified in Table 5.

For impact assessment before any mitigation, please refer to Table , Table , Table 12 and Table 7.  
For proposed mitigations, please refer to the Environmental Management Plan.

## 9. Need and desirability of the project

The proposed rezoning can be supported from a town planning point of view due to the following reasons:

- [1] Most properties along Sixth Street East have already been rezoned and/or have been redeveloped/converted into businesses.
- [2] The site is large enough (1,250m<sup>2</sup>) to support offices and/or a mixed land-use development with on-site parking as required by the Walvis Bay Zoning Scheme.
- [3] Offices and/or mixed land uses of higher intensity/density contribute to compact city development, promote walkable neighbourhoods and are more environmentally friendly.

In conclusion, the proposed land use and rezoning are considered needed and desirable and can be supported in principle.

The development proposal will comprise “Retail” and/or “Offices Premises” and/or “Business Premises” which are defined in terms of the Walvis Bay Zoning Scheme. All of these land uses are not permitted in the current “General Residential 1” zone hence the need to rezone the property. To permit the above land uses, the “General Business” zone is considered most appropriate.

The proposed bulk is 2.0 as this is the generic bulk permitted in the “General Business” zone.

In conclusion, the proposed “General Business” zoning is considered a suitable zoning to permit a mixed land use development.

## 10. Impact assessment

The following section will contain a description and assessment of the significance of any effects, including cumulative effects, that may occur as a result of undertaking the activity.

### 10.1. Methodology

The assessment of impacts is based on methods published in Namibia and South Africa (Directorate of Environmental Affairs, 2008: 42; DEAT, 2002). Each identified impact is evaluated systematically in terms of its magnitude and extent in area, the duration and frequency of occurrence, the reversibility on the environment, and the acceptability from interested and affected parties. The average grading is then multiplied by the probability of and direction to determine a final numerical value.

This value determines the significance which ranges from highly negative (-3) to highly positive (+3) as indicated on the following scale:



Table 8 provides a definition and overview of each significance level and Table 9 is a summary of the criteria used, their definition and the grading scale.

Table 8: Definition of each significance level.

SIGNIFICANCE LEVEL	DEFINITION	GRADE
<b>-VERY LOW</b> or <b>+VERY LOW</b>	Impacts that affect a tiny area or population, and hardly modify the environment. Biological and socio-economic aspects continue to function normally. Positive or negative effects are trivial and non-existent, and no mitigation is required.	±0
<b>-LOW</b> or <b>+LOW</b>	Impacts that affect a small area or population, and slightly modify the environment. Biological and socio-economic aspects continue to function sustainably without mitigation. Positive and negative effects are minor and almost unnoticeable. Mitigation is cost-efficient and easy to implement.	±1
<b>-MEDIUM</b> or <b>+MEDIUM</b>	Impacts affect a larger area or population and modify the environment to some extent. Biological and socio-economic aspects continue to function sustainably with mitigation. Positive and negative effects are noticeable and important. Mitigation is costly but can be implemented.	±2
<b>-HIGH</b> or <b>+HIGH</b>	Impacts that affect a wide area or population and heavily modify the environment. Biological and socio-economic aspects continue to function on an unsustainable basis for negative impacts. Both positive and negative impacts are major and apparent. Mitigation is expensive and sometimes impossible to implement.	±3

Table 9: Summary of criteria, definition and grading.

CRITERION	DEFINITION	GRADE
<b>MAGNITUDE</b>	Magnitude defines the scale and ability of an impact to cause a change in the environment which is measured from a very low (0) to a very high (5) scale of change.	
Very Low	The impact has little to no change in the size or value of an environmental feature.	1
Low	The impact has a small change in the size or value of an environmental feature.	2
Moderate	The impact has a moderate and noticeable change on the environment.	3
High	The impact has a large and noteworthy change in the size or value of an environmental feature.	4
Very High	The impact has a major and significant change in the size or value of an environmental feature.	5
<b>EXTENT</b>	Extent defines the ability of an impact to affect a certain geographic area which can range from on-site (1) to an international (5) level.	
On-site	The impact is limited to the boundaries of the project site within a 50-meter radius.	1
Local	The impact affects the local surrounding environment within a 500-meter radius.	2
Urban	The impact affects the wide urban area within a 5 km radius	3
Regional	The impact is extensive and felt on a regional or national scale within the borders of the country.	4
International	The impact is widespread, cross-border cutting, and felt on an international level.	5
<b>DURATION</b>	Duration specifies how long an impact and effect will endure which can last from very short (1) to very long (5) duration.	
Very Short	The impact can last less than a day or week.	1
Short	The impact can last a few months or less than a year or during the construction phase only.	2
Medium	The impact can last between 1 to 10 years or during the operational phase only.	3
Long	The impact can last more than 10 years and close to the end of the operational phase.	4
Very Long	The impact can last from up to 100 years or more and beyond the decommissioning phase.	5
<b>FREQUENCY</b>	Frequency defines how many times an impact will occur over time which can range from a very low (1) to a very high (5) rate of occurrence.	
Very Low	The impact occurs only once or has a very low number of occurrences over the project life cycle.	1
Low	The impact occurs infrequently or has a low number of occurrences in a year.	2
Medium	The impact occurs occasionally or has a medium number of occurrences in a month.	3
High	The impact occurs often or has a high number of occurrences in a few days or a week.	4
Very High	The impact occurs frequently with a very high number of occurrences in an hour or day.	5
<b>REVERSIBILITY</b>	Reversibility is the ability of the receiving environment to restore itself with or without human intervention and is measured from a low (1) to high cost (5).	
Low Cost	The impact has a high rate of reversibility or the environmental health will restore itself to its natural state at a fast rate with little to no cost.	1
Medium Cost	The impact has a medium rate of reversibility or the environmental health can be restored to its natural state but with human intervention at a reasonable rate and cost.	3
High Cost	The impact has a low rate of reversibility (if not irreversible) or the environmental health can be restored to its natural state at a slow rate but it will be difficult or expensive to rehabilitate.	5
<b>ACCEPTABILITY</b>	Acceptability shows the level of tolerance from the public which can range from being acceptable (1) to unacceptable (5) depending on the response received from interested and affected parties.	
Acceptable	The impact is acceptable when no objections or concerns have been noted during public participation and/or the impact does not pose a potential risk to public health and safety.	1
Manageable	The impact is manageable when a small number of objections or concerns have been noted during public participation and/or the impact has a small potential risk to public health and safety.	3

CRITERION	DEFINITION	GRADE
Unacceptable	The impact is unacceptable when many objections or concerns have been noted during public participation and/or the impact poses a major potential risk to public health and safety.	5
PROBABILITY	Probability is the likelihood of a potential impact happening as predicted which can range from a very low (0%) to a very high (100%) chance of occurring. The probability is multiplied by the average grading.	
Very Low	The impact will not occur with a probability of 0%.	0%
Low	The impact is unlikely to occur with a low probability of say $\pm 25\%$ .	25%
Medium	The impact is expected to occur with a medium probability of say $\pm 50\%$ .	50%
High	The impact is likely to occur with a high probability of say $\pm 75\%$ .	75%
Very High	The impact will occur with a probability of 100%.	100%
DIRECTION	Direction determines whether an impact will have a positive (+) or a negative (-) impact on the environment and is multiplied by the average grading to determine whether the impact is beneficial or not.	
Positive	Positive impacts have beneficial, useful, and desirable effects on the receiving environment.	(+)
Negative	Negative impacts have adverse, costly and undesirable effects on the receiving environment.	(-)



## 10.2. Assessment of potential impacts

The identified impacts are evaluated according to their magnitude, extent, duration, frequency, reversibility and acceptability to obtain an average grading. This grading is multiplied by the probability and direction to calculate the final grading and significance level before mitigation measures are implemented.

Table 10 lists the planning impacts numbered P1 to P6 and their associated evaluation and significance level.

Table 10: Planning phase and assessment of potential impacts before mitigation.

IMPACT ASSESSMENT BEFORE MITIGATION: PLANNING PHASE											
Impact No.	Magnitude	Extent	Duration	Frequency	Reversibility	Acceptability	Average grading	Probability	Direction	Final grading before mitigation	Significance level before mitigation
P1	Moderate 3	Local 2	Long 4	High 4	Medium Cost 3	Acceptable 1	2.83	High 75%	Positive (+)	<b>+2.1</b>	<b>+MEDIUM</b>
P2	Low 2	On-site 1	Short 2	Very Low 1	Low Cost 1	Acceptable 1	1.33	Very High 100%	Positive (+)	<b>+1.3</b>	<b>+LOW</b>
P3	Low 2	Urban 3	Short 2	Very Low 1	Medium Cost 3	Manageable 3	2.33	High 75%	Positive (+)	<b>+1.7</b>	<b>+MEDIUM</b>
P4	Low 2	Urban 3	Short 2	Medium 3	Low Cost 1	Acceptable 1	2.00	Very High 100%	Positive (+)	<b>+2.0</b>	<b>+MEDIUM</b>
P5	Very Low 1	On-site 1	Long 4	Very Low 1	High Cost 5	Acceptable 1	2.16	High 75%	Positive (+)	<b>+1.6</b>	<b>+MEDIUM</b>
P6	Moderate 3	Local 2	Short 2	Very Low 1	Low Cost 1	Manageable 3	2.00	High 75%	Negative (-)	<b>-1.5</b>	<b>-LOW</b>

Table lists construction-related impacts numbered C1 to C7 and their associated evaluation and significance level.

Table 11: Construction phase and assessment of potential impacts before mitigation.

IMPACT ASSESSMENT BEFORE MITIGATION: CONSTRUCTION PHASE											
Impact No.	Magnitude	Extent	Duration	Frequency	Reversibility	Acceptability	Average grading	Probability	Direction	Final grading before mitigation	Significance level before mitigation
C1	High 4	Local 2	Short 2	Very High 5	High Cost 5	Manageable 3	3.50	High 75%	Negative (-)	<b>-2.6</b>	<b>-HIGH</b>
C2	High 4	Local 1	Short 2	Very High 5	Medium Cost 3	Manageable 3	3.00	Very High 100%	Negative (-)	<b>-3.0</b>	<b>-HIGH</b>
C3	Very High 5	On-site 1	Short 2	Medium 3	Medium Cost 3	Unacceptable 5	3.17	Very High 100%	Negative (-)	<b>-3.2</b>	<b>-HIGH</b>
C4	High 4	On Site 1	Short 2	Very High 5	Medium Cost 3	Manageable 3	3.00	Very High 100%	Negative (-)	<b>-3.0</b>	<b>-HIGH</b>
C5	Moderate 3	On-site 1	Short 2	High 4	High Cost 5	Manageable 3	3.00	Very High 100%	Negative (-)	<b>-3.0</b>	<b>-HIGH</b>
C6	Very High 5	On Site 3	Short 2	Very Low 1	Medium Cost 3	Unacceptable 5	3.17	Very High 100%	Negative (-)	<b>-3.2</b>	<b>-HIGH</b>
C7	Low 2	Urban 3	Short 2	Very High 5	Medium Cost 3	Manageable 3	3.00	High 75%	Positive (+)	<b>+2.25</b>	<b>+MEDIUM</b>

Table 7 lists operational-related impacts numbered O1 to O7 and their associated evaluation and significance level.

Table 7: Operational phase and assessment of potential impacts before mitigation.

IMPACT ASSESSMENT BEFORE MITIGATION: OPERATIONAL PHASE											
Impact No.	Magnitude	Extent	Duration	Frequency	Reversibility	Acceptability	Average grading	Probability	Direction	Final grading before mitigation	Significance level before mitigation
O1	Low 2	Local 2	Long 4	High 4	Low Cost 1	Acceptable 1	2.33	High 75%	Positive (+)	+1.8	+MEDIUM
O2	High 4	Urban 3	Medium 3	Medium 3	Medium Cost 3	Acceptable 1	2.83	Very High 100%	Positive (+)	+2.8	+HIGH
O3	Low 2	Regional 4	Medium 3	Low 2	Medium Cost 3	Manageable 3	2.83	High 75%	Negative (-)	-2.1	-MEDIUM
O4	Low 2	On-site 1	Medium 4	Low 2	Low Cost 1	Manageable 3	2.17	Medium 50%	Negative (-)	-1.1	-LOW
O5	Low 2	Local 2	Long 4	High 4	Low Cost 1	Manageable 3	2.66	High 75%	Positive (+)	+2.4	+MEDIUM
O6	High 4	Local 2	Medium 4	Very High 5	Low Cost 1	Acceptable 1	2.83	High 75%	Positive (+)	+2.1	+MEDIUM
O7	Moderate 3	Local 2	Medium 4	Low 2	Low Cost 1	Manageable 3	2.50	Medium 50%	Positive (+)	+1.25	+MEDIUM

Table 13 lists decommissioning related impacts numbered D1 and D2 and their associated evaluation and significance level.

Table 13: Decommissioning phase and assessment of potential impacts before mitigation.

IMPACT ASSESSMENT BEFORE MITIGATION: DECOMMISSIONING PHASE											
Impact No.	Magnitude	Extent	Duration	Frequency	Reversibility	Acceptability	Average grading	Probability	Direction	Final grading before mitigation	Significance level before mitigation
D1	Low 2	Local 2	Long 4	Low 2	Low Cost 1	Acceptable 1	2.00	High 75%	Positive (+)	<b>+1.5</b>	<b>+MEDIUM</b>
D2	High 4	Local 2	Short 2	Low 2	High Cost 5	Manageable 3	3.00	High 75%	Negative (-)	<b>-2.2</b>	<b>-HIGH</b>

In conclusion, there are more positive than negative impacts during the planning, operational and decommissioning phases. Most negative impacts have been identified during the construction phase and will need standard construction-related mitigation measures.

Overall, the development proposal will not create a major or unacceptable negative impact on the receiving environment.



## 11. Environmental Management Plan

Please refer to Annexure A for the Environmental Management Plan (EMP) and recommended mitigations for each potential impact.

## 12. Conclusion

Given the proposed land use activity and the limited size of the development, the proposed development is not expected to generate a significant negative impact on the receiving urban environment. The proposed activity can be supported from an environmental point of view. as no negative comments or objections were received during the public consultation exercise.

If all mitigation measures are implemented as provided in the EMP, it is expected that all of the negative impacts can be reduced and, in some cases, the positive impacts can be enhanced.

The EMP document should be provided to all responsible stakeholders and be used as an on-site reference document during all phases of the proposed development.

## 13. Recommendation

Based on the findings of this report, the following is recommended:

- [1] That an Environmental Clearance Certificate be issued to Mr Robert Jensen and Ms Svenja and Mr Bjorn Krauer for the rezoning of Erf 517 Walvis Bay from “General Residential 1” with a density of 1 dwelling unit per 300m<sup>2</sup> to “General Business” with a maximum bulk factor of 2.0 for the development of a mixed land use, initially offices only.
- [2] That the following conditions apply to the Environmental Clearance Certificate:
  - a. The proponent shall address all potential impacts resulting from the construction and operational activities and implement the mitigation measures as contained in the Environmental Management Plan.
  - b. Regular environmental monitoring and evaluation of environmental performance should be conducted and targets for improvements should be established and monitored from time to time. and
  - c. The Municipality of Walvis Bay reserves the right to attach further legislative and regulatory conditions during the operational activities of the project.

Yours sincerely,

Bruce Stewart  
**STEWART PLANNING**