

## **Updated Environmental Management Plan (EMP)**

**FOR**

**THE OPERATION OF GROSS BARMEN RESORT LOCATED SOUTHWEST  
OF OKAHANDJA IN THE OTJOZONDJUPA REGION NAMIBIA**



**ECC Application Reference No.: APP NO. 005529**

**Document Version: Draft**

<p>Author(s): <b>Ms. Aili lipinge</b></p> <p>Company: <b>Excel Dynamic Solutions (Pty) Ltd</b></p> <p>Telephone: <b>+264 (0) 61 259 530</b></p> <p>Fax2email: <b>+264 (0) 886 560 836</b></p> <p>Email: <a href="mailto:info@edsnamibia.com">info@edsnamibia.com</a></p>	<p>Prepared for: Namibia Wildlife Resorts</p>
--	---

**March 2025**

## TABLE OF CONTENTS

### Content

LIST OF FIGURES AND TABLES .....	<b>Error! Bookmark not defined.</b>
1 INTRODUCTION .....	2
Project Background.....	2
Aim of the Draft Environmental Management (EMP) .....	5
Appointed Environmental Assessment Practitioner .....	7
Environmental Assessment Legal Requirements .....	7
Draft EMP Limitations .....	9
EMP ROLES AND RESPONSIBILITIES .....	10
Competent Monitoring Authority: .....	11
Department of Environmental Affairs and Forestry (DEAF, MEFT)) .....	11
The Proponent or Proponent's Representative (PR).....	11
Site Manager (as appropriate).....	11
Environmental Control Officer (ECO) .....	12
Archaeology: Chance Finds Procedure (CFP) Implementation Roles .....	12
ENVIRONMENTAL MANAGEMENT & MITIGATION MEASURES .....	13
Management of Key Potential Adverse Environmental Impacts.....	13
Aim of the Environmental Management Plan Actions .....	13
1.1 Operational Phase Management Action Plans (Mitigation Plan) .....	14
1.2 Monitoring Action Plans (Monitoring Plan) .....	17
ENVIRONMENTAL MONITORING AND REPORTING .....	<b>Error! Bookmark not defined.</b>
CONCLUSIONS AND RECOMMENDATIONS.....	22
APPENDIX 1: CHANCE FINDS PROCEDURE (AFTER KINAHAN, 2020) .....	23
Responsibility: .....	23
Procedure:.....	23

# **1 INTRODUCTION**

## **1.1 Project Background**

Namibia Wildlife Resorts (NWR) manages and operates camping sites, resorts and accommodation facility throughout Namibia. Their sites are within the best locations for access to these natural wonders in Namibia such as in national parks and other sites.

This document, Environmental Management Plan (EMP) is prepared for the operation of NWR, Gross Barmen Resort. This resort is located approximately 100 km from the capital city of Windhoek, on the banks of a tributary of the Swakop River, set between rows of palm trees, green lawns and many pleasant walks.

The Gross Barmen Resort was issued an Environmental Clearance Certificate (ECC) No.002093 to permit the operational activities on the site as from 30 March 2022 until the 30 March 2025. This is to ensure that the operation of the resort operates in sustainable and in compliance with the environmental legislation.

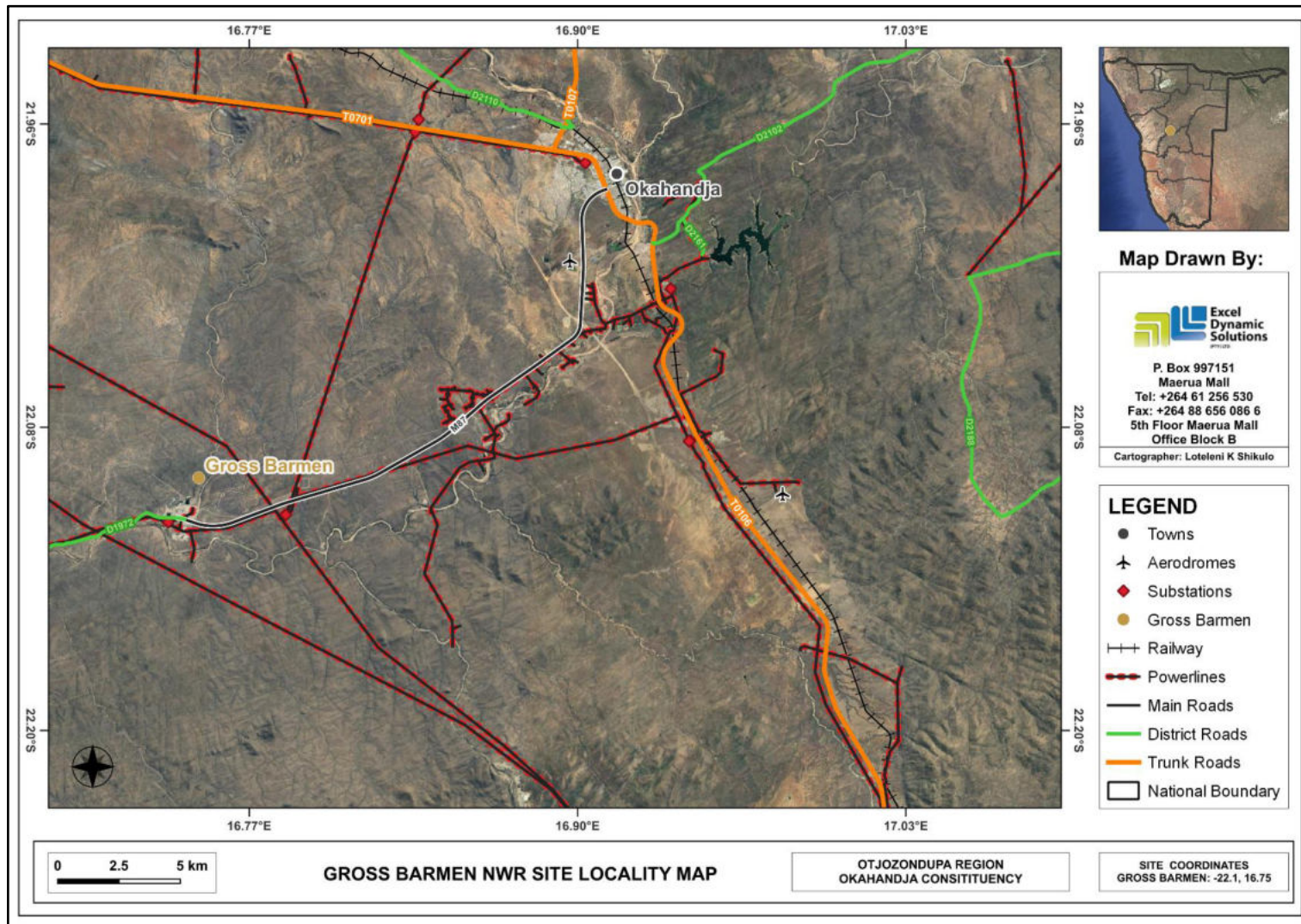


Figure 1: The locality map of Gross Barmen resort

In terms of the Namibian Environmental Management Act (EMA) No. 07 of 2007, Section 27 (2j), Government Notice No. 29, Section 6 and Government Notice No. 30, the operation project constitutes a number of listed activities that require an ECC from the Department of Environmental Affairs (DEAF) of MEFT. The relevant activities listed as per EIA regulations are:

- *Tourism Development Activities- The construction of resorts, lodges, hotels or other tourism and hospitality facilities.*
- *Other activities- Construction of cemeteries, camping, leisure and recreation sites.*
- *The clearance of forest areas, deforestation, aforestation, timber harvesting or any other related activity that requires authorisation in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.*

This statutory document has been prepared as per requirement in accordance with Section 8 of the EMA (No. 7 of 2007). The compilation of this EMP is one of the requirements (scope of work) presented to Excel Dynamic Solutions (Pty) Ltd by The Proponent. It is required of the Environmental Consultant to comply with the EMA and provide for the following:

- Prepare an explicit Environmental Management Plan to be used as a guideline to monitor compliance with the recommendations stipulated in the EIA and to assist in managing and monitoring activities throughout the operational activities onsite.
- The Environmental Consultant must clearly elucidate in the EMP the roles and responsibilities of the Proponent, the contractors, and any other identified stakeholders.

## **1.2 Aim of the Draft Environmental Management (EMP)**

Regulation 8(j) of the EIA Regulations (2012) requires that a draft Environmental Management Plan (EMP) shall be included as part of the Environmental Assessment (EA). A '**Management Plan**' is defined as:

*"...a plan that describes how activities that may have significant environments effects on the environment are to be mitigated, controlled and monitored."*

An EMP is one of the most important outputs of the EA process as it synthesizes all the management & mitigation and monitoring actions, set to a timeline and with specific assigned responsibilities. It provides a link between the impacts identified in the EA process and the required mitigation measures to be implemented during the operational phase onsite . It is important to note that an EMP is a statutory document and a person who contravenes the provisions of this EMP may face imprisonment and/or a fine. This EMP is a living

document and can be amended to adapt to address project changes and/or environmental conditions and feedback from compliance monitoring.

The purpose of this document is, therefore, to guide environmental management throughout the operational and maintenance phase on site.

**1.3 Environmental Monitoring Requirements:** To support and ensure that the mitigation measures are achieving the desired results, a monitoring plan must be implemented alongside the mitigation plan.

This draft EMP will be used by The Proponent, employees and/or contractors to provide management measures to be undertaken during operational related activities, to address the environmental impacts identified in the scoping report and ensure that the impacts on the environment are avoided or limited if they cannot be avoided completely.

## 1.4 Appointed Environmental Assessment Practitioner

To fulfil the requirements of the EMA and its 2012 EIA Regulations, The Proponent appointed Excel Dynamic Solutions (Pty) Ltd (EDS), an independent consulting company to apply for the ECC renewals on their behalf. This draft EMP will be submitted as part of the renewals ~~and~~ for the operation of the resort to the Environmental Commissioner at the Department of Environmental Affairs and Forestry (DEAF), at the Ministry of Environment, Forestry and Tourism (MEFT).

## 1.5 Environmental Assessment Legal Requirements

The content of the EMP must meet the requirements of Section 8 (j) of the EIA Regulations. The EMP must address the potential environmental impacts of the operational activities on the environment throughout the development life cycle. It must also include a system for assessment of the effectiveness of monitoring and management arrangements after project implementation.

The Proponent, therefore, has the responsibility to ensure that the operational activities as well as the EA process conform to the principles of the EMA and must ensure that employees act in accordance with such principles. **Table 1** below lists the requirements of an EMP as stipulated by Section 8(e) of the EIA Regulations, primarily on specific approvals and permits that may be required for the activities required of the operational activities of the resort.

*Table 1:: Applicable legal requirements and permits to the activities of the operation of Gross barmen resort and associated infrastructure*

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
Environmental Management Act EMA (No 7 of 2007)	Requires that projects with significant environmental impacts are subject to an environmental assessment process (Section 27).  Details principles which are to guide all EIAs.	The EMA and its regulations should inform and guide this EA process.  Should the ECC be issued to the Proponent, it should be renewed every 3 years, counting from the date of issue.  Contact details at the Department of Environmental Affairs and Forestry (DEAF),
Environmental Impact Assessment (EIA) Regulations GN 28-30 (GG 4878)	Details requirements for public consultation within a given environmental assessment process (GN 30 S21).	Ministry of Environment, Forestry and Tourism (MEFT), Office of the Environmental Commissioner.



Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
	Details the requirements for what should be included in a Scoping Report (GN 30 S8) and an Assessment Report (GN 30 S15).	Tel: +264 61 284 2701
Petroleum Products and Energy Act (No. 13 of 1990) Regulations (2001)	Regulation 3(2)(b) states that “No person shall possess or store any fuel except under authority of a license or a certificate, excluding a person who possesses or stores such fuel in a quantity of 600 litres or less in any container kept at a place outside a local authority area”	The Proponent should obtain the necessary authorisation from the MME for the storage of fuel on-site.  Ministry of Mines and Energy: Acting Director – Petroleum Affairs)  Tel: +264 61 284 8291
Forestry Act 12 of 2001, Amended Act 13 of 2005	Prohibits the removal of any vegetation within 100 m from a watercourse (Forestry Act S22 (1)). The Act prohibits the removal of and transport of various protected plant species.	Should there be protected plant species, which are known to occur within the project site, these are required to be removed and a permit should be obtained from the nearest Forestry office (Ministry of Environment, Forestry and Tourism (MEFT)) prior to removing them.  <b>Director of Forestry Division</b>  Tel: +264 61 208 7320
National Heritage Act No. 76 of 1969	Call for the protection and conservation of heritage resources and artefacts.	Should any archaeological material, such as bones, old weapons/equipment etc be found on the site, work should stop immediately, and the National Heritage Council of Namibia must be informed as soon as possible. The Heritage Council will then decide to clear the area or decide to conserve the site or material.  Contact Details at National Heritage Council of Namibia



Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
		<p><b>Regional Heritage Officer – National Heritage Council of Namibia</b></p> <p>Tel: (06) 301 903</p>

## 1.6 Draft EMP Limitations

This EMP has been drafted with the acknowledgment of the following limitations:

- This EMP has been drafted based on the Environmental Assessment (EA) conducted for operational activities at the resort.
- The mitigation measures recommended in this EMP document are based on the risks/impacts in the ESA Report which were identified based on the project description as provided by the Proponent, site investigation and public input. Should the scope of the operational activities onsite change, the risks/impacts will have to be reassessed, and mitigation measures provided accordingly.

## **2. EMP ROLES AND RESPONSIBILITIES**

The Proponent is ultimately responsible for the implementation of the EMP. However, the Proponent may delegate this responsibility at any time, as they deem necessary during the project phases. The roles and responsibilities of all delegates/parties involved in the effective implementation of this EMP are set out below:

## **2.1 Competent Monitoring Authority:**

### **2.1.1 Department of Environmental Affairs and Forestry (DEAF, MEFT))**

The DEAF is responsible for enforcing compliance with the EMA, its regulations and full implementation of this EMP. The competent authority also reviews biannual reports and grant ECC renewal after 3 years.

### **2.1.2 The Proponent or Proponent's Representative (PR)**

If the Proponent does not personally manage all aspects and phases' activities referred to in this EMP, they should assign this responsibility to a suitably qualified individual referred to in this plan as the Proponent's Representative (PR). The PR may be appointed to manage all phases of the project, or to manage only the EMP aspects for the project. The PR's responsibilities may include:

- Managing the implementation of this EMP and updating and maintaining it when necessary.
- Management and monitoring of individuals and/ or equipment on-site in terms of compliance with this EMP.
- Issuing fines for contravening EMP provisions.

### **2.1.3 Site/ technical Manager (as appropriate)**

This individual will be responsible to ensure that the activities of the project are completed on time.

The site Manager's duties and responsibilities will include:

- Ensure that relevant commitments contained in the EMP Action Plans are adhered to.
- Ensure relevant staff is trained in procedures entailed in their duties.
- Maintain records of all relevant environmental documentation for the project.
- Reviewing the EMP annually and amending the document when necessary.
- Issuing fines to individuals who may be in breach of the EMP provision and if necessary, removing such individuals from the site.
- Cooperate with all relevant interested and affected parties/stakeholders.
- Development and management of schedules for daily activities.

### 2.1.4 Environmental Officer (EO)

The Proponent may assign the responsibility of ensuring EMP compliance throughout the project life cycle to a designated member of staff or external qualified and experienced person, referred to in this EMP as the Environmental Officer (EO). The EO will have the following responsibilities:

- Management and facilitation of communication between the Proponent, PR and Interested and Affected Parties (I&APs) regarding this EMP.
- Conducting site inspections (recommended frequency is monthly or weekly as recommended – please refer to Table 3) of all areas with respect to the implementation of this EMP (monitor and audit the implementation of the EMP).
- Advising the PR on the removal of person(s) and/or equipment not complying with the provisions of this EMP.
- Making recommendations to the PR with respect to the issuing of fines for contraventions of the EMP.
- Undertaking an annual review of the EMP and recommending additions and/or changes to this document.

### 2.1.5 Archaeology: Chance Finds Procedure (CFP) Implementation Roles

The following personnel have been assigned responsibilities as per the Chance Finds procedure (Appendix 1):

- **Operator:** To exercise due caution if archaeology remains are found.
- **Foreman:** To secure site and advise management timeously.
- **Superintendent:** To determine safe working boundary and request inspection.
- **Archaeologist:** To inspect, identify, advice management, and recover remains.

The Proponent should assess these commitments in detail and should acknowledge their obligation to the specific management actions detailed in the Tables under the following sections.

### 3. ENVIRONMENTAL MANAGEMENT & MITIGATION MEASURES

#### 3.1 Management of Key Potential Adverse Environmental Impacts

From the assessment conducted, the following key potential negative impacts have been identified and are summarized below:

- Physical land / soil disturbance resulting in compaction and erosion (during maintenance)
- Potential environmental pollution (littering)
- Health and safety: improper handling of materials and equipment may cause occupational health hazards.
- Potential Damage to Landscape: Litter, erosion, fires,
- Air pollution owing to dust generation and fumes/emissions from vehicles
- Impact on archaeological and cultural heritage resources, in the case of any archaeological and heritage finds onsite (inadvertent unearthing during site preparation/excavations).

#### 3.2 Aim of the Environmental Management Plan Actions

The aim of the management actions of the EMP is to avoid the above-listed potential negative impacts, where possible. Where impacts cannot be avoided, measures are provided to reduce the significance of these impacts.

Management actions recommended for the potential impacts rated in the ESA carried out for the development activities were based on the following project stages (phases):

- Operation and maintenance phases (**Table 2**)
- Monitoring (**Table 3**)

### 3.3 Operational and maintenance Phase Management Action Plans (Mitigation Plan)

The management action plans recommended for this phase are presented in **Table 2** below.

**Table 2: Management and mitigation action plans during operational and maintenance phase**

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
EMP implementation and training	Lack of EMP awareness and implications thereof	<ul style="list-style-type: none"> <li>-EMP trainings should be provided to workers onsite.</li> <li>-All site personnel should be aware of necessary health, safety, and environmental considerations applicable to their respective work.</li> <li>-The implementation of this EMP should be monitored.</li> </ul> <p>The site should be inspected, and a compliance audit <b><u>bi-annually for overall EMP implementation.</u></b></p> <ul style="list-style-type: none"> <li>-EMP non-compliance penalty system should be implemented.</li> </ul>	<ul style="list-style-type: none"> <li>-Records of EMP compliance/monitoring conducted bi-annually</li> <li>-The ECC is renewed every 3 years</li> <li>-Records of EMP training conducted.</li> </ul>	<ul style="list-style-type: none"> <li>-Site / Maintenance Manager</li> <li>EO Officer</li> </ul>	Throughout the maintenance phase, and when deemed necessary (for certain activities such as ECC renewal)
Communication between the Proponent and community	Lack of communication between community and Proponent	<ul style="list-style-type: none"> <li>The land custodians should be notified on time of the commencement of the project activities and any expected delays in the progress.</li> <li>-Continual engagement where necessary, with neighbours should be maintained.</li> </ul>	<ul style="list-style-type: none"> <li>-Ongoing Consultation throughout the project, when and as required.</li> </ul>	-Proponent	Throughout the project life cycle (as needed)
Vehicular traffic safety	Presence of heavy vehicles onsite renovation or maintenance	<ul style="list-style-type: none"> <li>-Vehicles drivers and equipment operators should be in possession of valid and appropriate driving licenses and adhere to the road safety rules.</li> <li>-Drivers should drive slowly (40km/hour or less) while onsite.</li> <li>-Vehicle drivers should not be allowed to operate vehicles while under the influence of alcohol.</li> <li>-Project vehicles should be parked inside the site premises and not in the street (public road).</li> <li>-Deliveries from and to site should be done optimally during weekdays and between the hours of 8am and 5pm.</li> </ul>	<ul style="list-style-type: none"> <li>-No complaints from members of the public regarding vehicular traffic issues related to the project activities.</li> <li>-All personnel operating the project vehicles and machinery are appropriately licensed and possession of valid driving licenses.</li> </ul>	-Site / Maintenance Manager	Throughout the operational and maintenance phase

**Draft EMP**

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
Occupational and locals health and safety	General health and safety associated with project activities	<p>-Projected loads should be securely fastened to vehicles to avoid falling and injuring people.</p> <p>-Heavy vehicle and equipment should be properly secured to prevent any harm or injury to project personnel and community members moving near the site.</p> <p>-Personnel should be properly equipped with personal protective equipment (PPE) such as coveralls, masks, gloves, safety boots, earplugs, safety glasses, and hard hats in case there is maintenance occurring onsite.</p> <p>-Personnel should not be allowed to consume alcohol or other intoxicants prior to and during working hours as this may lead to mishandling of equipment resulting in health and safety risks.</p>	<p>-Comprehensive health and safety plan for the activities is compiled.</p> <p>-Availability of fully furnished first aid kit in the maintenance vehicle</p> <p>-Trained worker to administer first aid</p>	<p>-Site / Maintenance Manager</p> <p>-EO officer</p>	Throughout the operational and maintenance phase
	Accidental fire outbreak	<p>-Portable and serviced fire extinguishers should be availed onsite and availed for every building within the resort</p> <p>-No open fires should be created by project personnel onsite.</p>	<p>-Fire extinguishers (1 per vehicle) and minimum of 3 per building / section</p>	<p>-Site / Maintenance Manager</p>	Throughout the operational and maintenance phase
Littering and waste management	Environmental Pollution	<p>-Dispose of waste in a responsible manner and not to litter.</p> <p>-After each daily works, ensure that there are no wastes left onsite or scattered within site premises.</p> <p>-All domestic and general operational waste produced daily should be contained onsite until such that time it will be transported to designated waste sites.</p> <p>-No waste may be buried or burned on site or anywhere else.</p> <p>-The site should be equipped with separate waste bins for solid and general/domestic waste.</p> <p>-A penalty system for irresponsible disposal of waste onsite and anywhere in the area should be implemented.</p>	<p>-No visible litter around the project area</p> <p>-Provision of sufficient waste storage containers</p> <p>-Waste management awareness</p> <p>-Waste disposal permits to the nearest local authority</p> <p>-Environmental, Health and Safety Statements and Policy</p>	<p>-Site / Maintenance Manager</p> <p>-Environmental officer</p> <p>-Workers involved</p>	Throughout the operation maintenance phase
	Sewage generated onsite	<p>-Provide sufficient toilet facilities for workers (mobile/portable chemical toilet if possible).</p> <p>-No open defecation is allowed on and around the site.</p> <p>-Make use of constructed flushing toilets.</p>	<p>-there are sufficient toilets within the resort premises</p>	<p>-Site / Maintenance Manager</p>	Throughout the operational and maintenance phase



**Draft EMP**

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
Archaeology and heritage	Accidental disturbance of archaeological or heritage objects	<p>-If any archaeological materials or human burials or skeletal remains are uncovered during construction / maintenance / renovation earthworks, the work in the immediate area should be halted, the finds would need to be reported to the NHC may require inspection by an Archaeologist. The ECO should have the area fenced off and contact NHC (Tel: +264 61 244 375), National Forensic Laboratory (+264 61 240 461) immediately.</p> <p>-Avoid direct damaging of archaeological or heritage such that may be encountered during excavations.</p> <p>-All accidental discoveries shall be reported immediately to an archaeologist/heritage practitioner so that an investigation and evaluation of the finds can be made, acting upon advice the HSE Officer will advise the necessary actions to be taken.</p>	<p>-Preservation of all artefacts and objects that are discovered onsite</p> <p>-Salvage equipment</p> <p>-Flag tapes</p> <p>-GPS (site marking)</p>	<p>-Site Manager</p> <p>-Workers involved</p>	As and when required throughout the operational and maintenance phase,
Biodiversity	Loss of Fauna and Flora	<p>-Avoid unnecessary removal and or disturbance of site vegetation.</p> <p>-Plants (vegetation) found on the site, but not in the actual footprint should not be disturbed, and therefore, should be avoided.</p> <p>-Avoid leaving equipment or machinery leaning on vegetation.</p> <p>-Environmental awareness on biodiversity preservation (both plants and even small animals encountered onsite) should be provided to the workers and contractors during EMP induction.</p>	<p>-No complaints of unauthorised vegetation removal associated with project personnel.</p> <p>-No intentional disturbance and destruction of site vegetation</p> <p>-Barricading tape (to indicate working areas)</p>	<p>-Site Manager</p> <p>-Environmental officer</p> <p>-Workers involved</p>	Throughout the operation and maintenance phase

### 3.5 Monitoring Action Plans (Monitoring Plan)

To support and ensure that the mitigation measures are achieving the desired results, a monitoring plan must be implemented. The monitoring action plans recommended for the operational activity are presented in **Table 3** below.

Table 3: Management action plans for Monitoring

Environmental Feature	Impact	Monitoring Actions	Implementation responsibility	Frequent	Threshold	Action if threshold is exceeded
Archaeology and Heritage	Presence or unearthing of archaeological or cultural Heritage Resources	To prevent destruction of artefacts and sites. Preservation of all artefacts and sites that are discovered within the site boundary or around the project site area.  Inspection of records of findings.	Site manager and Archaeologist	Incase there is renovation or construction occurring onsite	Unearthing of archaeological or cultural heritage resources	Cease all activities on site and wait for NHC to inspect site and give further instructions / actions
Soils	Loss of topsoil	All measures should be considered to prevent the loss of topsoil	site Manager	Weekly	Proliferation of new vehicle tracks	Rehabilitation of affected areas
Monitoring	EMP non-compliance	The EO or the Proponent/Contractor should monitor the implementation of this EMP to ensure compliance.	Site manager / environmental officer	Daily	Increase in health, safety and environmental damage incidence	Daily safety talks, Remedy the consequences
Biodiversity	Loss of biodiversity	Comply with marked no-go areas and avoid areas sensitive to any type of disturbance.  Clear only footprint areas to maintain as much of the remaining natural vegetation on site and to prevent loss of habitat (if so, advised by MEFT).	Workers involved in this phase	Weekly	Vegetation clearance outside of marked areas.	Rehabilitation of affected areas to the satisfaction of the EO

**Draft EMP**

<b>Environmental Feature</b>	<b>Impact</b>	<b>Monitoring Actions</b>	<b>Implementation responsibility</b>	<b>Frequent</b>	<b>Threshold</b>	<b>Action if threshold is exceeded</b>
Health and Safety	Health and safety of the workers	<p>-Workers should be trained on how to handle materials and equipment on site (if they do not already know how to) to avoid injuries.</p> <p>-Construction / maintenance equipment and materials transported to site should be securely fastened to the vehicles (trucks and cars). This is to ensure that the materials and equipment do not fall off the vehicles and cause injuries to anyone while transporting them, in case there is renovation or maintenance occurring on site</p> <p>- All personnel should be provided with appropriate personal protective equipment (PPE), such as gloves, masks, safety boots, safety glasses and hard hats always during renovation or construction hours on site to prevent serious injuries or loss of life. in case there is renovation or maintenance occurring on site</p> <p>-No employee should be allowed to drink alcohol prior to and during working hours as this may lead to mishandling of equipment which results into injuries and other health and safety risks.</p>	Worker Involved in this phase	Daily/Weekly	Health and safety incident	Remedy the consequences

**Draft EMP**

<b>Environmental Feature</b>	<b>Impact</b>	<b>Monitoring Actions</b>	<b>Implementation responsibility</b>	<b>Frequent</b>	<b>Threshold</b>	<b>Action if threshold is exceeded</b>
Neighbouring land users to the site	Disturbance	Visitors car schedule should belimited to normal working hours, between 07h00 and 20h00. This is to ensure generated noise does not become nuisance to the neighbours.	Site Manager	Weekly	A logged complaint about excessive noise	Revision of site activities
Waste	Environmental Pollution	<p>-The site should be always kept tidy. All domestic waste produced daily should becleaned and contained daily to prevent environmental pollution.</p> <p>-Separate waste containers (bins) for hazardous and domestic / generalwaste must be provided on site to avoid mixing of waste.</p>	All workers involved in this phase.	Daily	Visible litter around project site A logged complaint	Clean-up of the affected areas
Transport	Transportation of workers to and from site	<p>-Project workers will be transported, in an SUV, bus (or similar suitable passenger vehicle) to and from site to ensure workers safety.</p> <p>-No off-road driving</p>	Driver	Daily	A logged complaint about bad form of transport affecting occupational safety and health of workers	
Vehicular traffic safety	Increase in local traffic flow.	-All drivers of the project vehicles should be in possession of valid and appropriate driving licenses to operate such vehicles.	Site manager	Weekly	A logged complaint about traffic increase or damage to roads	Find alternative access roads for the team. Rehabilitation of affected roads

**Draft EMP**

<b>Environmental Feature</b>	<b>Impact</b>	<b>Monitoring Actions</b>	<b>Implementation responsibility</b>	<b>Frequent</b>	<b>Threshold</b>	<b>Action if threshold is exceeded</b>
		<p>-Project vehicles should be in a road worthy condition and serviced regularly to avoid accidents because of mechanical faults of vehicles.</p> <p>-Vehicle drivers should not be allowed to operate vehicles while under the influence of alcohol.</p> <p>-No heavy trucks or project related vehicles should be parked on biologically sensitive areas.</p>				

## 5. CONCLUSIONS AND RECOMMENDATIONS

In the event that the Environmental Commissioner considers ECC renewal for the operational activities at the resort, it is recommended that an ECC renewals for this project be granted, subject to the following recommendations:

- 3.5.1 All mitigations and management action plans in the EMP should be implemented and monitoring conducted as recommended.
- 3.5.2 All the necessary environmental and social (occupational health and safety) precautions provided should be adhered to.
- 3.5.3 The monitoring of the implementation of mitigation measures should be conducted, applicable impact's actions taken, reporting done and recorded as recommended in the Draft EMP.

The operational activities at Gross Barmen Resort may pose potential negative impacts stemming from these activities, they were acknowledged, assessed and mitigation measures made thereof.

The mitigation measures and management action plans provided in the draft Environmental Management Plan can be considered adequate to elude and/or reduce the risks to acceptable levels. Therefore, Excel Dynamic Solutions (Pty) Ltd assures that these measures are sufficient to enable environmentally sustainable and safe for operational activities works on the site. Therefore, it is recommended that written approval for the ECC renewals may be issued on the condition that the provided management measures and action plans are effectively implemented on site and monitored. Predominantly, monitoring of the environmental components described in the ESA should be conducted by the Proponent and applicable Competent Authorities. This is to ensure that all potential impacts identified in this study and other impacts that might arise during the operational activities properly identified in time and addressed.



## APPENDIX 1: CHANCE FINDS PROCEDURE (AFTER KINAHAN, 2020)

Areas of operational activity are subject to heritage survey and assessment at the planning stage. These surveys are based on surface indications alone, and it is therefore possible that sites or items of heritage significance will be found during development work. The procedure set out here covers the reporting and management of such finds.

**Scope:** The “*chance finds*” procedure covers the actions to be taken from the discovery of a heritage site or item to its investigation and assessment by a trained archaeologist or other appropriately qualified person.

**Compliance:** The “chance finds” procedure is intended to ensure compliance with relevant provisions of the National Heritage Act (27 of 2004), especially Section 55 (4): “*a person who discovers any archaeological .... object ..... must as soon as practicable report the discovery to the Council*”. The procedure of reporting set out below must be observed so that heritage remains reported to the NHC are correctly identified in the field.

The Manager/Supervisor must report the finding to the following competent authorities:

3.5.4 National Heritage Council of Namibia (061 244 375)

3.5.5 National Museum (061 276800),

3.5.6 National Forensic Laboratory (061 240461).

Archaeological material must NOT be touched. Tempering with the materials is an offence under the heritage act and punishable upon conviction by the law.

### Responsibility:

**Operator:** To exercise due caution if archaeological remains are found

**Foreman:** To secure site and advise management timeously

**Superintendent:** To determine safe working boundary and request inspection

**Archaeologist:** To inspect, identify, advice management, and recover remains

### Procedure:

Action by person identifying archaeological or heritage material:

- a) If operating machinery or equipment stop work
- b) Identify the site with flag tape
- c) Determine GPS position if possible
- d) Report findings to foreman

#### Action by foreman

- a) Report findings, site location and actions taken to superintendent
- b) Cease any works in immediate vicinity

#### Action by superintendent

- a) Visit site and determine whether work can proceed without damage to findings
- b) Determine and mark exclusion boundary
- c) Site location and details to be added to project GIS for field confirmation by archaeologist

#### Action by Archaeologist

- a) Inspect site and confirm addition to project GIS
- b) Advise NHC and request written permission to remove findings from work area
- c) Recovery, packaging and labelling of findings for transfer to National Museum

#### In the event of discovering human remains

- a) Actions as above
- b) Field inspection by archaeologist to confirm that remains are human
- c) Advise and liaise with NHC and Police
- d) Recovery of remains and removal to National Museum or National Forensic Laboratory, as directed.