

*“Balancing Growth with Resilience”*

## **ENVIRONMENTAL MANAGEMENT & MONITORING PLAN (EMMP)**

**Closure & Rezoning of Erven 379, 402, 403, 404 and  
410 from Public Open Spaces to Private Open  
Spaces, Swakopmund Proper, Namibia**

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**APP-002040**

“Our observation of nature must be diligent, our reflection profound, and our experiments exact. We rarely see these three means combined; and for this reason, creative geniuses are not common.”

– Denis Diderot

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# 1. INTRODUCTION

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## 1.1 Background Information

The Environmental Management & Monitoring Plan (EMMP / EMP) involves risk management strategies that should be undertaken by the Project proponent and the Project manager to mitigate environmental degeneration. They are approaches to monitor, control, reclaim and restore the environment back to its appropriate state. EMPs for Project thus provide logical frameworks within which the identified issues of environmental concern can be mitigated, monitored and evaluated. Environmental monitoring involves measurement of relevant parameters, at a level of details accurate enough, to distinguish the anticipated changes.

Monitoring aims at determining the effectiveness of actions to improve environmental quality. The environmental management and monitoring plans have been developed and outlined to bring home the key findings of the Environmental Impact Assessment of the Project in mention, recommending necessary mitigation actions, defining roles, monitor able indicators and the estimated cost. The EMPs outlined in tables hereafter address the potential negative impacts and mitigation measures as well as roles, costs and monitor able indicators that can help to determine the effectiveness of actions to upgrade the quality of environment; as regards the proposed project. The EMPs have considered construction, operation and decommissioning phase.

As per the Environmental Management Act (7 of 2007), the development cannot take place without Environmental Impact Assessment having been completed and Environmental Clearance Certificate issued from the Directorate of Environmental Affairs (MET).

## 1.2 Scope of an Environmental Management Plan

Environmental Management Plan during Construction, Operation and Decommissioning phases of the project. An EMP is a site-specific plan developed to ensure that all necessary measures are identified and implemented in order to protect the environment and comply with environmental legislation (Landcom, 2014).

It provides the answers to the following important questions:

- What are the likely environmental issues for the site?
- What likely harm these issues can cause to the surrounding environment?
- How will you manage these issues to minimize harm to the environment?

An EMP is one of the most important products of an Environmental Assessment (EA) process. An EMP synthesises all recommended mitigation and monitoring measures, laid out according to the

various stages of a project life cycle, with clearly defined follow-up actions and responsibility assigned to specific actors. This EMP is a legally binding document and has been drafted in accordance with the Namibian Environmental Management Act (No. 7 of 2007) and its Environmental Impact Assessment Regulations (2012). This plan describes the mitigation and monitoring measures to be implemented during the following phases of these developments:

- **Planning and Design** – the period, prior to the drafting of construction tender documents, during which preliminary legislative and administrative arrangements, necessary before any erven are sold, are made and detailed engineering designs/drawings are carried out;
- **Construction Tender Preparation** – the period during which the proponent, having secured the necessary legislative and administrative arrangements, prepare construction tender documents for the development of services infrastructure to service the various erven as well as any other construction process(s) within the development areas;
- **Construction** – the period during which the services infrastructure will be constructed to service the various erven within the proposed townships and subdivided areas; and
- **Operation and Maintenance** – the period during which the services infrastructure will be fully functional and maintained by the local authority.

The commitments described here form part of the Environmental Clearance Certificate (ECC) between Welwetsia Investments and the state, as represented by the Ministry of Environment and Tourism (MET). Non-compliance is considered illegal and may have legal consequences. The amendment, transfer or renewal of the ECC should be communicated to the Environmental Commissioner as stipulated in the Environmental Management Act (EMA) of 2007 (S 39-42) and its EIA Regulations (S 19-20). Any changes to this EMP will require an amendment to the ECC for these developments.

### 1.3 The Purpose of this Environmental Management Plan

The 2012 EIA Regulations define a **'Management Plan'** as *"...a plan that describes how activities that may have significant environments effects on the environment are to be mitigated, controlled and monitored."* The EMP has been included in the part of EIA Report to provide a link between the impacts identified in the EIA Process and the required environmental management on the ground during project implementation and operation. The purpose of this document is to guide environmental management throughout the proposed project development.

The Environmental Management Act no.7 of 2007 requires each development project in Namibia to conduct an Environmental Impact Assessment after which an Environmental Management Plan is to be prepared.

The principles envisaged by the Namibian Environmental Management Act 7 of 2007 stipulate that:

- a) Environmental assessments must be conducted for developments that affect the environment;
- b) The public must be involved in decisions affecting their environment;
- c) Precaution must be taken to prevent environmental damage, and if it cannot be prevented it must be reduced, limited or controlled in a more sustainable manner.
- d) Renewable resources must be used on a sustainable basis for the benefit of current and future generations of Namibians;
- e) Reduction, re-use and recycling of waste must be promoted;

The principles above apply to all activities that have an impact on the natural environment, and these principles must be mandatorily adhered to by both Government and individuals and institutions.

In terms of the Namibian Environmental Impact Assessment (EIA) Regulations (Government Notice (GN) 28, 29, and 30 promulgated on 6 February 2012) enacted in terms of the Namibian Environmental Management Act (Act no. 7 of 2007) (EMA), the proposed project triggers Activities 1(a; b), 5.1 (c), 8.1, 8.8, 8.9 and 10.1 in terms of Regulation GN 29. As the proposed project triggers activities listed in terms of the Regulations, it is necessary to apply to the Ministry of Environment and Tourism: Directorate of Environmental Affairs (MET: DEA) for authorization by way of an Environmental Clearance Certificate (ECC).

The EIA process comprised a full Scoping process that included an assessment of all potential environmental impacts as identified through the process. Section 8 (j) of the EIA Regulations require that a draft EMP is submitted as part of the Scoping Report so that these documents can be considered simultaneously.

**Table 1:** below constitutes of an Environmental Management Plan during Public Road Construction, operation and decommissioning phases of the project.

<b>ENVIRONMENTAL /SOCIAL IMPACT</b>	<b>PROPOSED MITIGATION MEASURES</b>	<b>RESPONSIBILITY</b>	<b>MONITORING PLAN/INDICATOR</b>
<b>Air pollution</b>	<ul style="list-style-type: none"> <li>• Control speed and operation of construction vehicles.</li> <li>• Prohibit idling of vehicles.</li> <li>• Spray water on excavated areas.</li> <li>• Maintenance of construction plant and equipment.</li> <li>• Sensitize construction workers.</li> <li>• All bare areas should be landscaped after construction.</li> <li>• Workers should be provided with dust masks if working in sensitive areas.</li> </ul>	Contractor	<ul style="list-style-type: none"> <li>• Amount of dust produced.</li> <li>• Level of landscaping carried out.</li> </ul>
<b>Noise pollution</b>	<ul style="list-style-type: none"> <li>• Maintain plant equipment.</li> <li>• Construction should be carried out only during daytime i.e. 0800 – 1700 HRS.</li> <li>• Workers to wear earmuffs if working in noisy section.</li> <li>• Management to ensure that noise from the workers is kept within reasonable levels.</li> </ul>	Contractor Management	Amount of noise
<b>Traffic density</b>	<ul style="list-style-type: none"> <li>• Proper signage put in place to notify neighbours of the activity and presence of heavy vehicles and to direct traffic.</li> <li>• Presence of boards directing patrons to the site</li> <li>• Strict adherence to traffic rules</li> </ul>	Contractor Management	Clear well-maintained signboards along the roads.
<b>Ecological considerations (flora &amp; fauna)</b>	The flora and fauna should be restored after construction by landscaping and maintaining the introduced plants.	Management	Natural ecology in areas not in use
<b>Soil erosion &amp; compaction</b>	<ul style="list-style-type: none"> <li>• Provide soils conservation structures on the areas prone to soil erosion to reduce impact of erosion.</li> <li>• There should be designated pathways and driveways for movement within the compound to avoid unnecessary compaction.</li> <li>• All bare areas should be well landscaped after completion.</li> </ul>	Contractor	Paved area and landscaped areas
<b>Solid waste</b>	<ul style="list-style-type: none"> <li>• Construction debris should be collected by a licensed private</li> </ul>	Management	Presence of well Maintained

	<ul style="list-style-type: none"> <li>contracted waste collection company</li> <li>Excavation waste should be re-used or backfilled.</li> <li>Waste generated should be collected by a privately contracted waste collection company and the contractor should ensure the construction of a central waste collection point with bulk storage facilities</li> <li>The site should have waste receptacles with bulk storage facilities at convenient points to prevent littering during occupation</li> </ul>		receptacles and central collection point.
<b>Oil leaks and spills</b>	<ul style="list-style-type: none"> <li>Machinery should be well maintained to prevent oil leaks.</li> <li>Contractor should have a designated area where maintenance is carried out and that is protected from rainwater.</li> <li>All oil products should be stored in a site store and handled carefully.</li> <li>An oil interceptor (API Style) should be provided at drainage channels</li> </ul>	Contractor	No oil spills and leaks on the site
<b>Security</b>	<ul style="list-style-type: none"> <li>Control of secondary businesses.</li> <li>Round the clock security for the facility.</li> <li>Adequate lighting and an alarm system installed at strategic points.</li> <li>Bushes around and within the site cleared to avoid hiding areas for thieves.</li> </ul>	Contractor and Management	Number of businesses around the site. Level of crime in the area
<b>First aid</b>	<ul style="list-style-type: none"> <li>A well-stocked first aid kit shall be maintained by a qualified personnel</li> </ul>	Management.	Contents of t the first aid kit
<b>Occupational Health and Safety</b>	<ul style="list-style-type: none"> <li>Provide Personal Protective Equipment</li> <li>Train workers on personal safety and how to handle equipment and machines</li> <li>A well-stocked first aid kit shall be maintained by a qualified personnel</li> <li>Report any accidents / incidences and treat and compensate</li> </ul>	Contractor  Management	Workers using Protective Equipment  Presence of Well stocked First Aid Box  Separate and clean washrooms

	<ul style="list-style-type: none"> <li>affected workers</li> <li>Provide sufficient and suitable sanitary conveniences which should be kept clean</li> </ul>		(Gents & Ladies)
<b>Loss of vegetation (SCOPED OUT BUT CONSIDERED)</b>	<ul style="list-style-type: none"> <li>Designate access pedestrian routes and parking zones that are paved</li> <li>Provide signs marked do not Walk/ Park on the grass</li> <li>The flora and fauna should be restored after construction by landscaping and maintaining the introduced plants.</li> </ul>	<p>Contractor</p> <p>Management</p>	<p>Warning signs on site</p> <p>Landscaped lawns</p>
<b>OPERATION PHASE</b>			
<b>ENVIRONMENTAL /SOCIAL IMPACT</b>	<b>PROPOSED MITIGATION MEASURES</b>	<b>RESPONSIBILITY</b>	<b>MONITORING PLAN/INDICATOR</b>
<b>Noise pollution</b>	<ul style="list-style-type: none"> <li>Maintain plant equipment.</li> <li>Construction should be carried out only during daytime.</li> <li>Workers to wear ear muffs if working in noisy section</li> <li>Management to ensure that noise from the facility's occupants is kept within reasonable levels.</li> </ul>	<p>Contractor</p> <p>Management</p>	Amount of noise
<b>Ecological considerations</b>	<ul style="list-style-type: none"> <li>The flora and fauna should be restored after construction by landscaping and maintaining the introduced plants</li> </ul>	Management	Natural ecology in areas not in use
<b>Traffic density</b>	<ul style="list-style-type: none"> <li>Proper signage put in place to notify neighbours of the activity and presence of heavy vehicles and to direct traffic.</li> <li>Presence of boards directing patrons to the site</li> <li>Strict adherence to traffic rules</li> </ul>	<p>Contractor</p> <p>Management</p>	Clear well-maintained signboards along the roads.
<b>Solid waste</b>	<ul style="list-style-type: none"> <li>Minimize solid waste generated on site</li> <li>Recycle waste especially office paper</li> <li>Construction debris should be collected by a licensed private contracted waste collection company</li> <li>Excavation waste should be re-used or backfilled.</li> <li>Waste generated should be collected by a privately contracted waste collection company and the contractor should ensure the construction of a central waste collection point with bulk</li> </ul>	<p>Contractor</p> <p>Management</p>	<p>Amount of waste on site</p> <p>Presence of well-maintained receptacles and central collection point.</p>



	<p>storage facilities</p> <ul style="list-style-type: none"> <li>The site should have waste receptacles with bulk storage facilities at convenient points to prevent littering during occupation</li> </ul>		
<b>Oil leaks and spills</b>	<ul style="list-style-type: none"> <li>Machinery should be well maintained to prevent oil leaks.</li> <li>Contractor should have a designated area where maintenance is carried out and that is protected from rainwater.</li> <li>All oil products should be stored in a site store and handled carefully.</li> </ul>	Contractor	No oil spills and leaks on the site
<b>First aid</b>	<ul style="list-style-type: none"> <li>A well-stocked first aid kit shall be maintained by a qualified personnel</li> </ul>	Management	Contents of the first aid kit.
<b>Security</b>	<ul style="list-style-type: none"> <li>Control of secondary businesses.</li> <li>Round the clock security for the facility.</li> <li>Adequate lighting and an alarm system installed at strategic points.</li> <li>Bushes around and within the site cleared to avoid hiding areas for thieves</li> </ul>	Management	<p>Number of businesses around the site.</p> <p>Level of crime in the area</p>
<b>Production of compressed Air</b>	<ul style="list-style-type: none"> <li>Provide powder fire extinguisher</li> <li>Regular inspection of safety valves by qualified personnel</li> </ul>	Management	Explosions Fire Outbreak
<b>Fire preparedness</b>	<ul style="list-style-type: none"> <li>Firefighting drills carried out regularly.</li> <li>Firefighting emergency response plan.</li> <li>Ensure all firefighting equipment are regularly maintained, serviced and inspected.</li> <li>Fire hazard signs and directions to emergency exit, route to follow and assembly point in case of any fire incidence.</li> </ul>	Management	<p>Number of fire drills carried.</p> <p>Proof of inspection on firefighting equipment. Fire</p> <p>Signs put up in strategic places.</p> <p>Availability of firefighting equipment.</p>
<b>Environment Health and Safety</b>	<ul style="list-style-type: none"> <li>Train workers on personal safety and disaster preparedness</li> <li>A well-stocked first aid kit shall be maintained by a qualified</li> </ul>	Management	Separate washrooms (Gents & Ladies)

	<ul style="list-style-type: none"> <li>personnel</li> <li>Report any accidents / incidences and treat and compensate affected workers</li> <li>Provide sufficient and suitable sanitary conveniences which should be kept clean</li> <li>Conduct Annual Health and Safety Audits</li> </ul>		Copies of Annual Audit
<b>Water Consumption</b>	<ul style="list-style-type: none"> <li>Avoid unnecessary toilet flushing</li> <li>Promptly detect leaking taps and repair them</li> <li>Turn off taps when not in use</li> <li>Install water conserving taps that turn off immediately when water is not in use</li> <li>Install a discharge water meter in the premises to check on total water use and for billing purposes</li> </ul>	<p>Management</p> <p>Contractor</p>	<p>Presence of water meter</p> <p>Presence of automatic water taps</p> <p>Water bills</p>
<b>Electricity usage</b>	<ul style="list-style-type: none"> <li>Erect a meter in the premises to check on total kilowatts used and for billing purposes</li> <li>Apply for connection from Erongo RED</li> <li>Switch off light that are not in use</li> <li>Use of energy conserving bulbs/ tubes</li> <li>Use of natural light for lighting purposes</li> <li>Use natural ventilation from windows and doors and avoid using Air Con that use electricity</li> <li>Provide a standby generator in the premises in case of power blackouts</li> <li>Switch off lights in the offices at night</li> </ul>	<p>Management</p> <p>Contractor</p>	<p>Presence of a REDs Meter</p> <p>Electricity bills</p>
<b>Washrooms</b>	<ul style="list-style-type: none"> <li>Provide sufficient and suitable sanitary conveniences</li> <li>The washrooms should be kept clean and in good working conditions</li> <li>Provide a water tank for the washrooms in case the piped water supply is not available</li> </ul>	Management	Separate washrooms (Gents & Ladies)
<b>Wastewater disposal</b>	<ul style="list-style-type: none"> <li>Wastewater should empty to the septic tank via well laid</li> </ul>	Management	Effluent presence on open drains

	sewage pipes <ul style="list-style-type: none"> <li>• Conduct inspections for sewer pipe blockages or damages and fix them</li> <li>• Empty septic tank whenever its full by a licensed exhauster services damages and fix them</li> </ul>	Contractor	
<b>DECOMMISSIONING PHASE</b>			
<b>ENVIRONMENTAL / SOCIAL IMPACT</b>	<b>PROPOSED MITIGATION MEASURES</b>	<b>RESPONSIBILITY</b>	<b>MONITORING PLAN/INDICATOR</b>
<b>Noise &amp; Air pollution</b>	<ul style="list-style-type: none"> <li>• Maintain plant equipment.</li> <li>• Demolition works to be carried out only during daytime.</li> <li>• Workers working in noisy section to wear earmuffs</li> <li>• Workers should be provided with dust masks</li> <li>• Sprinkle water on open dusty areas Install dust trappers around the site</li> </ul>	Contractor Management	Amount of noise
<b>Disturbed Physical environment</b>	<ul style="list-style-type: none"> <li>• Undertake a complete environmental restoration programme</li> <li>• Landscaping and introducing appropriate vegetation</li> </ul>		
<b>Solid waste</b>	<ul style="list-style-type: none"> <li>• Construction debris should be collected by a licensed private contracted waste collection company</li> <li>• Excavation waste should be re-used or backfilled.</li> <li>• Waste generated should be collected by a privately contracted waste collection company and the contractor should ensure the construction of a central waste collection point with bulk storage facilities</li> </ul>	Contractor Management	Amount of waste on Site  Presence of well  Maintained receptacles and central collection point.
<b>Occupational Health and Safety</b>	<ul style="list-style-type: none"> <li>• Provide Personal Protective Equipment</li> <li>• Train workers on personal safety and how to handle equipment and machines</li> <li>• A well-stocked first aid kit shall be maintained by qualified personnel</li> <li>• Demarcate area under demolition with Danger Tapes to control access</li> </ul>	Contractor	Workers using Protective Equipment  Presence of a First Aid Box

**Table 2: EMERGENCY RESPONSE PLAN**

ASPECT OF DANGER	RESPONSE PLAN	RESPONSIBILITY
<ul style="list-style-type: none"> <li>• <b>Fire</b></li> </ul>	<ul style="list-style-type: none"> <li>• Use available fire extinguishers to fight the fire</li> <li>• Call the Nampol 999</li> <li>• Call Swakopmund Council Fire Brigade</li> <li>• Call Station operator / Proprietor</li> <li>• Workers to assemble at the Fire Assembly Point</li> </ul>	<p><b>Station Manager on Duty</b></p>
<ul style="list-style-type: none"> <li>• <b>Serious Injury/ Loss of life</b></li> </ul>	<ul style="list-style-type: none"> <li>• Apply first Aid</li> <li>• Call the NamPol on 999</li> <li>• Call for Ambulance Services (Ministry of Health)</li> <li>• Call Station operator / Proprietor</li> </ul>	<p><b>Station Manager on Duty</b></p>
<ul style="list-style-type: none"> <li>• <b>Theft/ Robbery</b></li> </ul>	<ul style="list-style-type: none"> <li>• Call the Nampol 999</li> <li>• Contact Private Security</li> <li>• Provider concerned Call Station operator / Proprietor</li> </ul>	<p><b>Station Manager on Duty</b></p>

## **2. ENVIRONMENT, HEALTH AND SAFETY (EHS)**

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### **2.1 EHS MANAGEMENT AND ADMINISTRATION**

The EHS is a broader and holistic aspect of protecting the worker, the workplace, the tools / equipment and the biotic environment. It is an essential tool in determining the EIA Project. The objective of the EHS on the proposed project is to develop rules that will regulate environmentally instigated diseases and occupational safety measures during construction and the operation phases of the proposed project by:

- Avoidance of injuries.
- Provision of safe and healthy working environment for workers comfort to enhance maximum output.
- Control of losses and damages to plants, machines, equipment and other products.
- Enhance environmental sustainability through developing sound conservation measures.

### **2.2 THE GUIDING PRINCIPLES TO BE ADOPTED BY THE CONTRACTOR**

The company will be guided by the following principle: -

- It will be a conscious organization committed to the promotion and maintenance of high standards of health and safety for its employees, the neighbouring population and the public at large.
- Ensuring that EHS activities are implemented to protect the environment and prevent pollution.
- Management shall demonstrate commitment and exercise constant vigilance in order to provide employees, neighbours of the project and the environment, with the greatest safeguards relating to EHS.
- Employees will be expected to take personal responsibility for their safety, safety of colleagues and of the public as it relates to the EHS management plan.

### **2.3 EHS MANAGEMENT STRATEGY TO BE ADOPTED BY THE CONTRACTOR**

The following strategies will be adopted to achieve the above objectives:

- Create an Environment Health and Safety Management committee and incorporate EHS as an effective structure at various levels and units to manage and oversee EHS programs in all construction and operation phases of the project
- Maintain an effective reporting procedure for all accidents.
- Provide appropriate tools and protective devices for the success of the project.
- Encourage, motivate, reward and support employees to take personal initiatives and commitment on EHS.

## 2.4 SAFETY REQUIREMENT AT THE PROJECT SITE

The following safety requirements are both for Construction and Operation Period

### (a) The Contractor The contractor will ensure that:

- Safe means of entry and exit exist at the proposed project site.
- Ensure adequate briefing of job at hand on the safe system of work before commencement of work
- The EHS coordinator must attend at all times throughout the duration of the project.
- The EHS consultant must maintain constant assessment of the risk involved as the work progresses
- A safety harness must be worn before entry into all confined spaces
- An EHS consultant must be posted at the entrance of the project site to monitor progress and safety of the persons working at the construction site.

### (b) The Traffic / Drivers

Within the construction premises, the following traffic rules will be observed: -

- Observe speed limits and all other signs and obey traffic rules.
- Use the vehicle for the purpose to which it is intended only.

### c) Fire Hazard at the Construction Site The proponent shall provide:

- Co2/water fire extinguishers next to each hose reel
- Emergency light within the premise
- Automatic alarm to cover the project site
- 5000gallons water reserve tank for hose reel
- Smoke and heat detectors in all the floors
- All car parking floors to be provided with sprinkler system engineers details
- Fire resistant doors to fire escape staircases to be one hour fire resistant with automatic door closers
- Electric fire alarms system with secondary power supply from stand by generator
- All internal partitioning materials to be half hour fire rating
- 100mm. wet riser with one landing valve on each appropriate point
- 9kg. dry powder fire extinguishers
- Fire instructions and fire exit signs

## **2.5 WELDING AT THE CONSTRUCTION SITE**

It is the responsibility of the contractor during construction to: -

- Ensure that welding clamp is fixed such that no current passes through any moving parts of any machine.
- Ensure that all welding clamps are in good operating condition and conduct current without arcing at the point of contact.
- Ensure that welding clamps are free from any contact with explosive vapour i.e. Oil spillage, Coal dusts and miscellaneous combustible material (e.g. Cotton rags, filter bags, rubber belting, and wood shavings).
- Ensure that any slag or molten metal arising from welding activities does not start up fires by:
  - ✓ Clearing combustible material to a distance of at least 3 meters away from the working area or covering area with metal or asbestos sheet.
  - ✓ Appropriate fire extinguisher is to be kept available for immediate use at all times

## **2.6 EMERGENCY PROCEDURES DURING CONSTRUCTION AND OPERATION**

In the event of an emergency during construction, the workers shall:

- Alert other persons exposed to danger.
- Inform the EHS coordinator.
- Do a quick assessment on the nature of emergency.
- Call for ambulance on standby.
- When emergency is over the EHS coordinator shall notify the workers by putting a message: "ALL CLEAR"
- Provision of emergency power (Generator)

In the event of such an emergency during operation, the workers shall -

- Alert other persons exposed to danger.
- Ring the nearest police station
- Call for ambulance on standby.

## 3.0 RECOMMENDATIONS AND CONCLUSION

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### 3.1 RECOMMENDATIONS

Recommendations for the prevention and mitigation of adverse impacts are as follows:

- The proponent should therefore follow the guidelines as set by the relevant departments to safeguard and envisage environmental management principles during construction and operation/occupation phases of the proposed project.
- It is important that warning/ informative sign (bill boards) be erected at the site. These should indicate the operation hours and when works are likely to be started and completed.
- The signs should be positioned in a way to be easily viewed by the public and mostly motorists.
- All solid waste materials and debris resulting from construction activities should be disposed off at approved dumpsites.
- All construction materials e.g. pipes, pipefittings, sand just to mention a few should be sourced/procured from legalized dealers.
- During construction all loose soils should be compacted to prevent any erosion. Other appropriate soil erosion control measures can be adapted.
- Any stockpiles of earth should be enclosed, covered or sprinkled with water during dry or windy conditions to minimize generation of dust particles into the air.
- Once earthworks have been done, restoration of the worked areas should be carried out immediately by backfilling, landscaping/ levelling and planting of suitable tree species and flowers.
- Proper and regular maintenance of construction machinery and equipment will reduce emission of hazardous fumes and noise resulting from friction of metal bodies.
- Maintenance should be conducted in a designated area and in a manner not to interfere with the environment.
- A fully equipped first aid kit should be provided within the site.
- Workers should get food that is hygienically prepared. The source of such food should be legalized or closely controlled.
- The contractor should have workmen's compensation cover and is required to comply with Namibia's Labour Act as well as other relevant ordinances, regulations. The contractor should provide adequate security during the construction period and operation phase of the project.



### 3.2 CONCLUSION

The proposed project design has integrated mitigation measures with a view to ensuring compliance with all the applicable laws and procedures. The proposed project will be implemented to the approvals by among others, the local Town Council, Regional Council, and Department of Environmental Assessment (MET).

During project implementation and occupation, Sustainable Environmental Management (SEM) will be ensured through avoiding inadequate/inappropriate use of natural resources, conserving nature sensitively and guaranteeing a respectful and fair treatment of all people working on the project, general public at the vicinity and inhabitants of the project area. In relation to the proposed mitigation measures that will be incorporated during the renovation phase, the development's input to the society; and cognition that the project is economically and environmentally sound, establishments are considered beneficial and important.

It is our considered opinion that the proposed development is a timely venture that will subscribe to proponent's timely investment. It is thus our recommendation that the project be allowed to go ahead with the implementation provided the outlined mitigation measures are adhered to. Major concerns should nevertheless be focused towards minimizing the occurrence of impacts that would degrade the general environment. This will however be overcome through close follow-up and implementation of the recommended Environmental Management and Monitoring Plans (EMPs).

