LORNAY
ENVIRONMENTAL CONSULTING

Operational Environmental Management Plan

Portion 126 of the Farm 559, HANGKLIP

May 2025

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STATEMENT OF INDEPENDENCE

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1. INTRODUCTION

This Environmental Management Plan (EMP) serves as a guideline document for the operational phase of the newly created single residential dwelling and access road on a Portion of Portion 126 of the Farm 559, Hangklip, Caledon RD.

This EMP describes mitigation measures and is prescriptive, identifying specific individuals or organisations responsible for undertaking specific tasks during the operation and decommissioning phase of the development, with the aim to ensure that potential impacts on the environment during operation are minimised and / or avoided. The EMP is an open-ended document and may require updating from time to time and as the activities evolve on site. This EMP has been compiled as part of the Basic Assessment process and once approved by the Competent Authority, is legally binding.

2. OPERATIONAL ACTIVITIES

The operation of the newly developed residential dwelling and establishment of jeep track access road, will entail:

Operation

- General single residential activities
- Maintenance of infrastructure, gardens, paving, open spaces, transport zones etc

Decommissioning

Decommissioning is not applicable.

3. KEY TERMS AND ABBREVIATIONS

BAR	Basic Assessment Report
CARA	Conservation of Agricultural Resources Act (Act No. 43 of 1983)
DEA&DP	Department of Environmental Affairs and Development Planning (Western Cape)
EA	Environmental Authorisation
ECA	Environment Conservation Act (Act No. 73 of 1989)
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
NEMA	National Environmental Management Act (Act No. 107 of 1998)
NEM:BA	National Environmental Management Biodiversity Act (Act No. 10 of 2004)
NEM:WA	National Environmental Management Waste Act (Act No. 59 of 2008)
PPE	Personal Protective Equipment
SDS	Safety Data Sheets
SHE	Safety Health and Environmental

Basic Assessment - Process followed to receive Environmental Authorisation from the Competent Authority, necessitated by NEMA. Basic Assessment Report (BAR) is drafted in line with the legislation.

Competent authority - The Department of Environmental Affairs and Development Planning (DEA&DP).

Developer / Applicant – GF Fourie

Environmental Control Officer (ECO) - a suitably qualified person to be appointed by the Developer / Applicant, to oversee the implementation of the EMP and environmental authorisation through the operational phase and into decommissioning (if applicable)

Environmental Management Plan (EMP) - this document, approved by the competent authority, to control the implementation of the works on the site in such a way as to ensure that they do not result in undue or reasonably adverse impacts on the environment

General waste - Waste that does not pose an immediate hazard or threat to health or to the environment, and includes domestic waste, building and demolition waste, business waste and inert waste

Hazardous waste - Any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment. Infectious mortalities are also considered hazardous

Project manager - Overall responsible and accountable person for the site during the construction, operation and decommissioning of the facility. This role may fall onto the Home Owners Association

Project Management team - The responsibility of the EMP implementation resides with this team. This team includes a Project Manager and appointed contractors and consultants. This role may fall onto the Home Owners Association

Safety, Health and Environmental Officer (SHE Representative) - A representative from each contractor, appointed as a Safety Health and Environmental Officer, assisting the construction manager on Safety, Health and Environmental aspects of the project on the construction site.

Site Manager **–** the employee of the applicant responsible for the day to day control of all activities and operation on site, if applicable. In this instance the site manager is the erf owner.

4. ENVIRONMENTAL CONTROL ON SITE

4.1. Approach

The Table below illustrates the various approaches to be undertaken to manage potential scenarios as a result of the operation of the activity on site:

Table 1: Impact management

Avoidance	Avoiding activities that could result in adverse impacts and/or resources or areas considered sensitive.
Prevention	Preventing the occurrence of negative environmental impacts and/or preventing such an occurrence having negative impacts.
Preservation	Preventing any future actions that might adversely affect an environmental resource.
Minimisation	Limiting or reducing the degree, extent, magnitude or duration of adverse impacts through scaling down, relocating, redesigning and/or realigning elements of the

	project.
Mitigation	Measures taken to minimise adverse impacts on the environment.
Enhancement	Magnifying and/or improving the positive effects or benefits of a project.
Rehabilitation	Repairing affected resources, such as natural habitats or water resources.
Restoration	Restoring affected resources to an earlier (possibly more stable and productive) state, typically, 'background' or 'pristine' condition. These resources may include soils and biodiversity
Compensation	Compensating for lost resources, and where possible, the creation, enhancement or protection of the same type of resource at another suitable and acceptable location.

Environmental Control Officer

Should a body corporate or similar management structure be created, typical ECO duties can fall under them. However, in the absence of such an organisation or competent person, the role of the ECO falls on the landowner.

The following is a list of typical responsibilities of an ECO or acting ECO:

- To environmentally educate and raise the awareness for environmental education on site and to facilitate the spread of the correct environmental attitude during operation
- To review method statements and to determine the most environmentally sensitive options
- To oversee the implementation of environmental procedures set out in this document and the EA
- To attend meetings, as required and report on environmental issues
- To receive notices and minutes of all operational meetings regarding the environmental and operational activities, changes, renovations, complaints, problems etc.
- To take immediate action where infringements are recorded
- To keep an up to date record of operations, as they relate to environmental issues
- To be contactable by the public regarding matters of environmental concern during the operation

In this instance, the applicable ECO / owner, should also monitor landscaping, upkeep and maintenance, general tidiness, refuse disposal, management of the open space / remainder of the site and water use.

The Environmental Authorisation (EA) as well as a copy of the approved Environmental Management Plan (EMP) for Operation, should also be accessible.

5. ENVIRONMENTAL AWARENESS

It is important to ensure that any contractors and employees (and new owners) associated with the operation of the proposed activity receive the appropriate level of training and awareness to ensure that continual environmental due diligence and conservation is applied at all levels of operation. Employees, contractors and sub-contractors as well as the erf owner, must be made aware of their responsibilities in terms of relevant legislation, guidelines, as well as this EMP and EA. The Home Owners Association can enforce the above.

The Wetland areas which were identified to be retained into the long term, should be identified to any new contractors or employees in order to ensure that they are not accidently impacted, encroached on or disturbed.

5.1. Aim of the Environmental Awareness

- Promote environmental education and conservation on site
- Inform employees and any new contractors on the applicable environmental procedures and plans

5.2. Environmental Awareness Training and content

- Staff should be trained on the implementation of emergency procedures where applicable
- Definitions as used in this EMP should be provided
- How and why environmental protection is necessary, should be explained
- Management measures required to prevent environmental impacts should be outlined
- Awareness should be made of emergency and spills response procedures
- Awareness should be made of the content of the Architectural and Landscape Guideline document.

In this particular scenario, a general brief regarding general environmental principles such as reduce, reuse and recycle, as well as protection of flora and fauna, would be beneficial.

Environmental training should be implemented at the onset of operation and repeated at regular intervals or as required. The Home Owner Association should take ownership of the above.

6. LEGISLATIVE REQUIREMENTS

A Basic Environmental Assessment process was applicable in terms of the National Environmental Management Act (Act No. 107 of 1998) (NEMA) and the Environmental Impact Assessment (EIA) regulations (2014) (as amended). Appendix 4 of the NEMA EIA Regulations (GN. R982) sets out the minimum requirements for the drafting of an Environmental Management Plan (EMP). This EMP has been created in fulfilment of these prescribed requirements for the construction phase of the activity. The implementation of this EMP will be a condition of approval of the Environmental Authorisation (EA). Failure by the applicant, to comply with this EMP, will therefore constitute an offence, and the applicant and / or the appointed contractors can be held liable for penalties and / or legal action. It is therefore important that a copy of this EMP be issued to each contractor, preferably at the appointment stage, in order to allow for the costs of implementing the EMP, to be included in cost proposals. This will also ensure that the contractor is aware of his responsibilities prior to appointment and commencement. Each appointed contractor involved in the project, as well as the project manager (as applicable), will be required to sign for and thereby acknowledge contents of, the approved EMP and therefore abide by the specifications of the document and any amendments thereto.

Other applicable legislation

The Constitution of The Republic of South Africa (Act 108 of 1996)

The Constitution of the Republic of South Africa states that everyone has a right to a non-threatening environment and that reasonable measures are applied to protect the environment. This includes preventing pollution and promoting conservation and environmentally sustainable development, while promoting justifiable social and economic development.

National Environmental Management Act (Act 107 of 1998)

The National Environmental Management Act (NEMA), as amended, makes provision for the identification and assessment of activities that are potentially detrimental to the environment and which require authorisation from the relevant competent authorities. NEMA is a National Act, which is enforced by the Department of Environmental Affairs (DEA). These powers are delegated in the Western Cape to the Department of Environmental Affairs and Development Planning (DEA&DP).

National Environmental Management: Biodiversity Act (Act 10 of 2004)

Chapter 4 of the National Environmental Management: Biodiversity Act, 2004 (NEMBA) deals with threatened and protected ecosystems and species. The need to protect listed ecosystems is addressed (Section 54). Section 73 deals with Duty of Care relating to invasive species, while Section 76(2) calls for development of invasive species monitoring, control and eradication plans by all organs of state in all spheres of government, as part of environmental management plans required in terms of Section 11 of NEMA.

National Environmental Management: Waste Act (Act No. 59 of 2008)

The National Environmental Management: Waste Act (NEM:WA) provides for specific waste management measures (disposal and storage) and the remediation of contaminated land.

National Environmental Management: Air Quality Act (Act No. 39 of 2004)

Section 32 provides provision for the control of dust, section 34 provides provision for the control of noise and section 35 provides provision for the control of offensive odours, all which may be experienced during the construction or operation of an applicable development.

Environment Conservation Act (Act No. 73 of 1989)

The Environment Conservation Act (ECA), provides provision for the prevention of littering by employees and subcontractors during construction and the maintenance phases of development.

Occupational Health and Safety Act (Act No. 85 of 1993)

Section 8 outlines the general duties of employers to their employees and section 9 outlines the general duties of employers and self-employed persons, to persons other than their employees.

Hazardous Substances Act (Act No. 5 of 1973)

This Act provides for the definition, classification, use, operation, modification, disposal or dumping of hazardous substances.

7. OPERATIONAL PHASE IMPACTS AND MITIGATIONS

7.1. Activity specific impacts and mitigations

The following activity specific impacts have been identified for the operational phase of the proposed development:

- **Alteration of natural flow regime:** Flow and flood peaks would increase as a result of the increased extent of hard surfaces and reduced infiltration brought about by the proposed development which includes a roofed building and new access roads with limited to zero permeability.

- **Water quality impairment:** In the event that the proposed sewerage treatment and disposal system fails or is damaged, or the conservancy tank is not emptied timeously, then contamination of the receiving watercourses is highly likely.
- **Biota loss:** If the receiving watercourses receive contaminants, particularly in the form of raw sewage from a failed, damaged and/or poorly maintained sewerage treatment and disposal system then it is likely that biota loss will take place, owing to the high sensitivity of the aquatic ecosystems in the region to water quality changes.

Mitigation measures

→ Where the proposed access road is aligned through sloping terrain near wetland habitat (e.g. the first 60m of the access road after leaving Clarence Drive) install drainage control structures every 10m that direct road run-off away from the road and into the surrounding veld.
→ Ensure that the conservancy tank is appropriately sized (input should be obtained from a professional civils engineer and the calculation endorsed by the municipality).
→ Formalise an operational agreement between the owner/s and the Municipality/3rd party contractor that specifies the timing of tank emptying; and
→ During the operational phase, monitor the site for any odorous liquids possibly being associated with a leaking sewerage system
→ Ensure that the conservancy tank is appropriately sized (input should be obtained from a professional civil engineer and the calculation endorsed by the Municipality).
→ Formalise an operational agreement between the owner/s and the municipality that specifies the timing of tank emptying; and
→ During the operational phase, monitor the site for any odorous liquids possibly being associated with the sewerage system.

7.2. Home Owners Association

N/A – single residential dwelling owned by landowner

7.2.1 **Management of wetland (open space)**

Open space should be kept alien vegetation free at all times and in a natural state as far as possible. No permanent infrastructure should be permitted in these open spaces. No dumping or stockpiling should take place in these areas.

7.2.2. **Private gardens**

Private gardens are to be indigenous, no artificial gardens permitted other than in the internal courtyard of a erf. Gardens are to be kept alien vegetation free.

7.3. Fire Management Plan

The vegetation types occurring on site include fynbos species that require fire for optimal ecological functioning. These fire-adapted ecosystems depend on periodic burning for regeneration, seed germination, and the maintenance of biodiversity. Therefore, appropriate fire management is essential for ecological functioning and safety purposes. The landowner is the member of FBA. Site specific fire management plan is being drafted.

8. OPERATIONAL PHASE IMPACTS AND MITIGATIONS

8.1. Activity specific impacts and mitigations

The following activity specific impacts have been identified for the operational phase of the proposed development:

Table 2. Activity specific impacts and mitigations

IMPACT	DESCRIPTION	MITIGATION	MONITORING	RESPONSIBILITY
Ecological	Long term protection of the wetland, indigenous vegetation and natural fauna	-No wetland areas should be removed / impacted / disturbed -Gardens and landscaping to be indigenous vegetation only -Open space areas to be maintained and kept alien vegetation free	-Monitor operations including gardens, open spaces etc.	Owner / HOA as applicable
Alteration of natural flow regime	Long term protection of the natural flow of the wetland and maintenance of the hydrological connectivity.	- Where the proposed access road is aligned through sloping terrain near wetland habitat (e.g. the first 60m of the access road after leaving Clarence Drive) install drainage control structures every 10m that direct road run-off away from the road and into the surrounding veld.	- Monitor operations	Owner / HOA as applicable
Erosion and Sedimentation	The increase in run-off and flood peaks brought about by the development's hard surfaces increases the erosive capacity of stormwater run-off and flow in wetlands and drainage lines.	- Where the proposed access road is aligned through sloping terrain near wetland habitat (e.g. the first 60m of the access road after leaving Clarence Drive) install drainage control structures every 10m that direct road run-off away from the road and into the surrounding veld.	- Monitor operations	Owner / HOA as applicable
Water quality impairment	Domestic effluent (including sewage) generated by the proposed single residential development will be temporarily stored on-site in dedicated closed conservancy tank which will be periodically emptied by either the municipal sewage disposal tanker or by a contractor.	- Ensure that the conservancy tank is appropriately sized (input should be obtained from a professional civils engineer and the calculation endorsed by the municipality). - Formalise an operational agreement between the owner/s and the Municipality/3rd party contractor that specifies the timing of tank emptying; and - During the operational phase, monitor the site for any odorous liquids possibly being associated with a leaking sewerage system.	- Monitor operations	Owner / HOA as applicable

Loss of Biota	Any discharge of untreated effluent, whether from an overflowing conservancy tank or leakages from the sewerage reticulation system, would cause some loss of wetland biota if the contaminants reached the channelled valley bottom wetland approximately 100m downslope of the site proposed for the dwelling and conservancy tank.	- Ensure that the conservancy tank is appropriately sized (input should be obtained from a professional civil engineer and the calculation endorsed by the Municipality). - Formalise an operational agreement between the owner/s and the municipality that specifies the timing of tank emptying; and - During the operational phase, monitor the site for any odorous liquids possibly being associated with the sewerage system.	- Monitor any sewage leaks or pipe bursts.	Owner / HOA as applicable
Noise	Typical Noise impacts associated with the operation of a residential dwelling and group of residential dwellings Risk – disturbance to surrounding landowners and employees	-Ensure noisy activities take place in line with municipal bylaw -Ensure silencers are fitted to noisy machinery -Machinery to be kept in good working order	-Monitor operations	Owner / HOA as applicable
Visual	Typical Visual impacts associated with the operational phase of a residential dwelling or group of residential dwellings Risk – visual impact of operation within landscape and suburb	-Ensure infrastructure and dwellings are maintained on a regular basis (i.e gardens are tidy, lawns are cut, dwellings are painted, refuse areas are secured and tidy etc. -Ensure any on site storage is kept tidy and secured to prevent spread by wind or rain -Keep artificial lighting to a minimum -Encourage good housekeeping to ensure daily operations result in a well-kept site -Restrict operational activities to impacted areas only -Indigenous trees can be planted to screen the activities	-Monitor operations	Owner / HOA as applicable

Job creation	Job creation and skills transfer during operation Risk – labour not sourced locally, therefore local benefit and skills transfer is limited	-Ensure labour and contractors are sourced locally as far as possible -Encourage educational opportunities to employees	-Ensure employees are sourced locally as far as possible by checking staff appointments -Encourage the use of local service providers as far as possible	Owner / HOA as applicable

8.2. General operational impacts and requirements

8.2.1. Health and Safety
Responsibility – Owner / HOA if applicable

Correct Personal Protective Equipment (PPE) must be worn at all times by the personnel on site. Personnel must be trained on the use of PPE. Each contractor should employ their own Safety Officer to monitor the safety conditions during the operations. Suitable warning and information signage should be erected. The handling of hazardous materials should only be done by trained personnel. Safety Data Sheets (SDSs) must be readily available for all hazardous substances on site and employees should be aware of the risks associated with any hazardous materials used. All provisions of the Occupational Health and Safety Act (Act No. 85 of 1993) must be complied with. In the event of an emergency relating to a hazardous substance, procedure details in the SDSs should be immediately implemented.

8.2.2. Fire risk management
Responsibility - Owner / HOA if applicable

A Fire Officer should be identified, who shall be responsible for ensuring immediate and appropriate actions in the event of a fire and shall ensure that employees are aware of the procedure to be followed. The Fire Officer shall ensure that there is basic fire-fighting equipment available on site at all times. Any fires should be reported to the fire officer immediately.

8.2.3. Fuels and hazardous materials
Responsibility - Owner / HOA if applicable

Fuels and flammable materials which may be required on site during operation, are to be suitably stored in a designated area. Impervious materials are to be used in these storage areas to prevent contamination of the ground in the event of spillages or leaks. Quantities of fuels and hazardous materials stored on site should be appropriate to the requirement for these substances on site.

8.2.4. Erosion Control
Responsibility - Owner / HOA if applicable

Action should be taken to prevent erosion of soils on site. Should any erosion be detected on site, the cause of such erosion should be identified, and appropriate remedial action must be immediately implemented.

8.2.5. Architecture / Design
Responsibility - Owner / HOA if applicable

Dwellings and infrastructure to comply with bylaws. Owners should aim to ensure buildings are in line with architectural norms for the area and do not have a negative contribution to the area as a whole

8.2.6. Water Use
Responsibility – Owner / HOA if applicable

The following water saving principles are recommended for the site and can be implemented over time or as and when current infrastructure requires replacing:

- Rainwater storage tanks can be installed to collect runoff rainwater. Rainwater tanks should be installed in such a way as to prevent visual or landscape intrusion

- Shower and wash basin taps should be fitted with flow reduction devices, aerators and motion sensors to maximise water conservation and reduce wastage
- All internal and external taps on site should be regularly inspected and maintained to prevent water wastage through drips and leaks
- All new toilets should be fitted with a dual flush system, reduced flow should be implemented on existing infrastructure if dual flush is not possible
- Grey water from showers, baths, basins and washing machines, should be collected or redirected for reuse (gardening, outside washing etc.)
- Endemic and indigenous plants should be used for gardens and landscaping to minimize water demand i.e. water wise landscaping
- Should irrigation be required, these should be on timed systems and active at low evaporation hours (early morning, late evening)
- Drains should be fitted with grease traps which remove oils and solids from waste water, to improve the quality of the effluent waste water for reuse
- Dry brushing and / or sweeping should be used in preference to water cleaning, where possible (cleaning pathways, machinery etc.)
- Alien invasive vegetation should be removed from the property to promote healthy and functioning rivers, ground water and wetlands, where applicable
- Efficient water use habits should be encouraged across the property
- Sewerage systems should be regularly monitored and maintained to prevent leaks and pollution of groundwater

8.2.7. Electricity

The following electrical saving principles are recommended:

- Regular light bulbs to be replaced with energy saving bulbs in all structures
- The use of solar power should be maximised as far as possible
- Energy saving geysers should be installed
- Solar water heaters should be installed
- Proper insulation should be used on all new structures and renovations, in order to reduce the need for heating and cooling of dwellings
- Programmed lighting should be implemented to prevent lights being left on unnecessarily

8.2.8. Sewerage

Municipal infrastructure for the responsibility of the municipality

8.2.9. General waste and refuse

General waste is transferred to the municipal waste site by the municipality as scheduled. Waste minimisation strategies should be implemented through avoidance, reduction, reuse, recycling, recovery, treatment or responsible disposal. On site bins should be animal and weather proof. Refuse areas should be secure and screened to avoid visual impacts. Refuse areas should provide for waste sorting (tins, glass, paper etc.). No waste should be stored or disposed of on site.

8.2.10. Site maintenance and repairs

Renovations and maintenance should be conducted in line with a maintenance schedule to ensure that renovations are done effectively with reduced wastage. When using paints, cleaners and other solvents for maintenance, preference should be made for environmentally friendly products, water-based paints and avoidance of harsh chemicals. No building materials or products used during renovations should be disposed of on site.

8.2.11. Alien vegetation management

No alien vegetation should be used for landscaping. Alien vegetation should be removed on a continual basis.

8.2.12. Internal roads and footpaths

Access is already in place. One internal road will be extended from the access. Footpaths are to be wooden and raised and only this demarcated footpaths should be used. No new paths to be established.

8.2.13. *Fauna*

All wild fauna on site should be protected. No feeding of wild animals should be allowed, and edible refuse should be appropriately disposed of. No poisons or traps should be used as far as possible. Professional help, such as Cape Nature, should be contacted for 'problem' animals.

9. NON-COMPLIANCE

The Environmental Authorisation (EA) stipulates that, *"Non-compliance with a condition of this Environmental Authorisation and the EMPr may render the holder liable to criminal prosecution."* It is therefore important that the conditions are adhered to as outlined in the EA and EMP. A Penalties scheme can be used during construction for transgressions.

Transgressions relate to actions by the contractor whereby damage or harm is inflicted upon the environment or any feature thereof and where any of the conditions or specifications of the EMP and EA have been infringed upon. In the instance of environmental damage, the damage is to be repaired and rehabilitated using appropriate measures, as far as possible and as directed by appropriate specialists, if required. These remedial actions are for the account of the contractor or other guilty party as identified by the Project Manager, applicant or ECO. Where non-repairable damage is inflicted upon the environment or non-compliance with any of the EMP / EA obligations is registered, the Contractor may face a monetary penalty to an amount specified by the Project manager / ECO. The Project manager / ECO reserves the right to implement a first offence warning.

If excessive infringement with regard to any of the specifications is registered, the applicant / project manager, reserves the right to terminate the contractor's contract.

9. COMPLIANCE AND MONITORING

The monitoring of works on site is necessary to demonstrate compliance with the specifications of the EMP and EA and to allow for problems or issues of non-compliance to be identified and remedial actions implemented.

Monitoring should include visual checks by the owner / operator / ECO, as applicable, on a regular basis. The implementation of regular monitoring will ensure that environmental impacts can be detected early and remedial action implemented. The following activities need regular monitoring:

- Actions which impact negatively on the wetland
- Landscaping is limited to allow natural vegetation to thrive
- Water saving principles are being implemented and adhered to
- Refuse areas are tidy and no refuse is visible on or around the property
- Stockpiles are screened and kept for bare minimum
- Buildings are maintained on a regular basis and in line with architectural character of the area
- Riverbanks and watercourses are not negatively impacted by daily activities on site

9.1. Environmental control sheets

Environmental Control Sheets to be used by the ECO on a weekly basis to monitor activities to ensure compliance with recommendations. The ECO should familiarise themselves with the full set of recommendations for the site

and reasons for these recommendations, as well as understand the site and constraints analysis and be able to identify the constraints / No Go areas.

Table 3. Environmental Control Sheets for operation

					RECORD OF PERFORMANCE		
TASK	**ACTION REQUIRED / MITIGATION & METHOD FOR IMPLEMENTATION**	**FREQUENCY**	**TARGET / OUTCOME**	**RESPONSIBILITY**	**COMPLETED YES/ NO**	**DATE**	**COMMENT**
OPERATION							
Water use	- Ensure irrigation is done in a waterwise manner -	As required	Waterwise	Management / ECO			
Noise	- Ensure noisy activities take place in line with municipal bylaw - Ensure silencers are fitted to noisy machinery - Machinery to be kept in good working order - Generators to be located in generator rooms to dampen the sound METHOD: Check the implementation of mitigation measures	As required	No impacts to adjacent landowners	Management / ECO			
Job creation, skills transfer, invest on the area	- Ensure labour and contractors are sourced locally as far as possible - Encourage educational opportunities to employees - Encourage patrons to visit other local and surrounding tourism offerings METHOD: Include in contract documents and business model	As required	Maximise jobs for local communities Investment in the local economy	Management / ECO			
Health & Safety	- Appoint officer as required METHOD: Appoint H&S steward	As required	Avoid / prevent H&S incidents	Management / ECO			
Fire	- Implement fire management requirements as outlined in the EMP and Conservation Management Plan	As required	Avoid / prevent fire incidents	Management / ECO			

	METHOD: Appoint Fire Officer / chief, implement recommendations of management plan						
Fuels and hazardous material	- To be suitably stored - Bulk deposits to be bunded METHOD: Inspect on a regular basis	As required	Avoid / prevent spills and leaks	Management / ECO			
Erosion	- Monitor construction and rehabilitated areas METHOD: Inspect on a regular basis	As required	Prevent erosion	Management / ECO			
Water	- Monitor for water wastage (dripping taps, leaking pipes etc) METHOD: Implement water saving measures	As required	Reduce water usage and introduce water saving principles	Management / ECO			
Electricity	- Monitor electricity usage METHOD: Implement electrical saving measures	As required	Reduce electrical consumption	Management / ECO			
Sewage and sewerage infrastructure	- Check areas surrounding sewage tanks for signs of eutrophication and leaking tanks - Install 75 % float level alarm to indicate when provision needs to be made to empty tanks METHOD: Monitor for spills and leaks from conservancy tank, install and monitor float level alarms	As required	Avoid sewerage spills and contamination	Management / ECO			
General waste and refuse	- Implement recycling and reuse as far as possible - Ensure waste storage areas are in line with requirements to prevent adverse impacts on people, the environment and animals METHOD: -Monitor waste disposal areas	As required	A clean site, with reuse and recycling encouraged	Management / ECO			
Site management and renovations	- Renovations and maintenance should be conducted in line with a maintenance schedule to ensure that renovations are done effectively with reduced wastage. When using paints, cleaners and other solvents for maintenance, preference should be made for environmentally friendly products, water-based paints and avoidance of harsh chemicals. No building materials or products	As required	A aesthetically pleasing site with schedule maintenance as required	Management / ECO			

	used during renovations should be disposed of on site						
Alien vegetation management	- Remove alien vegetation from the property to allow for the regeneration of indigenous species in line with an Alien Management Plan METHOD: Implement Alien Management Plan	As required	A quality site and remainder, reduce alien vegetation seedbank	Management / ECO			
Fauna	- No feeding of wild animals - No killing of wild animals METHOD: Seek professional assistance for 'problem' animals	As required	Functional ecological corridors and remainder which does not harm fauna	Management / ECO			
Ecology	- The post-construction activities must not migrate or cause any disturbances to natural vegetation outside the approved development footprint.	As required.	Functional ecological connectivity.	Owner/Management/ECO			
Wetland	-Monitor health and extent of the wetland - Where the proposed access road is aligned through sloping terrain near wetland habitat (e.g. the first 60m of the access road after leaving Clarence Drive) install drainage control structures every 10m that direct road run-off away from the road and into the surrounding veld. - Ensure that the conservancy tank is appropriately sized (input should be obtained from a professional civils engineer and the calculation endorsed by the municipality). - Formalise an operational agreement between the owner/s and the Municipality/3rd party contractor that specifies the timing of tank emptying; and	As required.	Functional wetland which contributes to the broader wetland systems	Management / ECO			

	- During the operational phase, monitor the site for any odorous liquids possibly being associated with a leaking sewerage system - Ensure that the conservancy tank is appropriately sized (input should be obtained from a professional civil engineer and the calculation endorsed by the Municipality). - Formalise an operational agreement between the owner/s and the municipality that specifies the timing of tank emptying; and - During the operational phase, monitor the site for any odorous liquids possibly being associated with the sewerage system. -						

10. ENVIRONMENTAL AUDITS

The purpose of auditing is to determine and monitor compliance with the EMP and EA and measure its effectiveness in mitigating environmental impacts. In terms of Regulation 34 of the NEMA EIA Regulations, 2014, the holder of the EA must conduct environmental audits in order to determine compliance with the conditions of the EA and EMP. Environmental Audit Reports should be submitted to the Competent Authority or as stipulated in the EA. The audit reports should be prepared by an independent person. The audit report should also provide recommendations regarding the need to amend the EMP.

The objective of the environmental audit report is to:

- Report on the level of compliance with the conditions of the EA and the EMP
- Report on the extent to which the avoidance, management and mitigation measures outlined in the EMP, achieve the objectives and outcomes of the EMP
- Identify and assess any new impacts and risks as a result of the activity
- Evaluate the effectiveness of the EMP
- Identify shortcomings in the EMP
- Identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMP

An environmental audit report should contain the following:

- Details and expertise of the independent person who prepared the environmental audit report
- A declaration that the auditor is independent
- An indication of the scope of, and the purpose for which, the environmental audit report was prepared
- A description of the methodology adopted in preparing the environmental audit report
- An indication of the ability of the EMP to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity as well as to ensure compliance with the provisions of environmental authorisation and EMP.
- A description of any assumptions made, and any uncertainties or gaps in knowledge
- A description of any consultation process that was undertaken during the course of carrying out the environmental audit report, if required
- A summary and copies of any comments that were received during any consultation process
- Any other information requested by the competent authority.

Environmental audits are not likely to be undertaken for the current operational activities due to the nature of the activity.

11. CONCLUSION

An EMP has been developed as part of the Basic Assessment process to ensure that mitigation and management measures are enforced during the operational phase of the activity, and that the conditions of the EA are upheld. The EMP should guide all phases of the project to minimize possible negative impacts and assign responsibility for environmental controls. The EMP provides a tool to recognise the needs of the environment and is intended to be utilised in conjunction with the Environmental Authorisation.

12. DECLARATION OF ACCEPTANCE

I, _____ (name), representing _____ (company name), have read and understood the above Environmental Management Plan and hereby acknowledge its contents and requirements as a framework for the environmental performance during the operational phase of the development.

Signed: _____ Date: _____

APPENDIX A : PREFERRED LAYOUT PLAN

Watercourse Delineation Map

Legend

Map Center: Lon: 18°58'51.8"E
Lat: 34°20'22.2"S

Scale: 1:9,028

Date created: 2025/05/02

Western Cape Government
FOR YOU