

Environmental Management Programme (EMPr)



Environmental Management Programme (EMPr) for the Proposed Whetstone Phase 3 Mixed-use Development, eThekweni Municipality., KwaZulu Natal.

A Project of Cedar Point Trading (Pty) Ltd

June 2026

ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR)

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TABLE OF CONTENTS

1. INTRODUCTION	2
2. APPLICABLE LEGISLATION, GUIDELINES AND DOCUMENTATION	10
3. ENVIRONMENTAL MANAGEMENT PROGRAMME	14
4. MANAGEMENT AND COMPLIANCE MONITORING	16
5. ENVIRONMENTAL MANAGEMENT COMPLIANCE, MONITORING AND REPORTING	19
6. SUMMARY OF ACTIVITIES AND ASPECTS CAUSING IMPACTS	21
7. DETAILED ENVIRONMENTAL MANAGEMENT PROGRAMME	21
8. CONCLUSION	62

LIST OF FIGURES

Figure 1-1: Locality Map for the Whetstone Business Park Phase 3 Mixed-Use Development.	5
Figure 1-2: Site Layout Plan for the Whetstone Business Park Phase 3 Mixed-Use Development... ..	6

LIST OF TABLES

Table 1-1: Listed and Specified Activities Triggered.....	3
Table 1-2: Details of the Project Applicant.....	8
Table 1-3: Environmental Assessment Practitioner.....	8
Table 1-4: KwaZulu-Natal EDTEA Authority Contact Details	9
Table 2-1: Applicable Environmental Legislation.....	10
Table 2-2: Current Environmental Legislation.....	12
Table 2-3: Current Municipal By-Laws.....	13

APPENDICES

- APPENDIX A:** Environmental Code of Conduct
- APPENDIX B:** Project Start up Inspection Sheet
- APPENDIX C:** Routine Site Inspection Sheet
- APPENDIX D:** Site Decommissioning Inspection Sheet
- APPENDIX E:** Site Inspection Report Structure
- APPENDIX F:** Environmental Incident Penalties

GLOSSARY OF TERMS

Activity (Operations)

An action either planned or existing that may result in environmental impacts through pollution or resource use. For the purpose of this report, the terms 'activity' and 'operations' are freely interchanged.

Audit

A verification process that is used to obtain information regarding the implementation of the EMPr. It is an objective tool used to make improvements at the workplace.

Biophysical Environment

All aspects of the natural environment including physical features such as watercourses, groundwater and soils as well as the biological features such as plants and animals.

Bunding

An impervious containment system for potential spillages from tanks / containers stored on site. The bunded area must have a capacity greater than 110% of the total tankage contained. The bunding must be constructed of a material impermeable and resistant to the stored material.

Client

Cedar Point Trading (Pty) Ltd, herein referred to as the Applicant.

Construction Activity

A construction activity is any action taken by the Client, a contractor, his sub-contractors, suppliers or personnel during a construction process.

Contractor

Persons or companies appointed on behalf of the Client to undertake construction or operational activities, as well as their sub-contractors and suppliers.

Construction camp

The area allocated for the establishment of equipment, repair area, ablution facilities, lay down and rest areas, etc. It also serves as the central point for the storage of fuel, construction material and contractor offices.

Decommissioning

In relation to the development and its associated buildings, structures and facilities, means the planning for and management and remediation of the closure/cessation of the development.

Environmental Authorisation

Environmental Authorisation obtained in terms of the National Environmental Management Act (NEMA), Act 108 of 1998, and the associated EIA Regulations.

Environmental Control Officer (ECO)

Individual appointed by the Applicant and who is responsible for monitoring compliance with the implementation of the EMPr, permits and licenses; ensuring liaison between Applicant, the contractor and Authorities; and reporting on the verified compliance with the EMPr.

Environmental Site Officer (ESO)

An environmentally knowledgeable or qualified person nominated by the appointed contractor who will ensure the day-to-day implementation of the EMPr by contractors.

Environmental Management Programme (EMPr)

A plan or programme that seeks to achieve a required end state and describes how activities, that have or could have an adverse impact on the environment, will be mitigated, controlled and monitored. The EMPr provides the environmental requirements during the planning, operation and construction phases to Whetstone Business Park Phase 3 Mixed-Use Development and any agent, consultant, contractor and sub-contractors acting on behalf of the Client to ensure that environmental aspects are addressed adequately to prevent or minimise environmental impacts (pollution or degradation) as a result of the activities or proposed activities for Whetstone Business Park Phase 3.

The EMPr also provides for general instructions that should be included in a contract document for any planning and construction phases of any of the related construction activities under the responsibility of the eThekweni Municipality. The EMPr also details the organisational structure required to ensure the effective implementation of the EMPr and measures to monitor and improve the application of the EMPr.

Environment

The environment means the surroundings within which humans exist and that could be made up of water, air, soil, sand, plants and animals.

Environmental Aspect

An environmental aspect is any component of a contractor's construction activity that is likely to interact with and on the environment.

Environmental Impact

An impact or environmental impact is the change to the environment, whether desirable or undesirable, that will result from the effect of an activity. An impact may be the direct or indirect consequence of a construction, operational or decommissioning activity.

Environmental Consultant

An independent consultant that is appointed by the Client to compile an Environmental Management Programme and to undertake environmental audits or Control Officer Functions.

Environmental Specifications

Instructions and guidelines for specific activities designed to help prevent, reduce and/or control the potential environmental implications of these activities during the operational, construction or decommissioning/closure phases of the facilities.

Emergency

An undesired event that results in a significant environmental impact and requires the notification of the relevant statutory body such as a local or provincial authority.

Fauna

Any and all animals identified within or outside of the operational or project area. Animals must not be harmed in any way.

Flora

All species of plants that are found within a specific region, habitat, or time period within or outside of the operational or project areas.

Hazardous Substance

Any substance that poses a significant risk to health and safety, property or the environment. These substances have been classified under the SABS Code 0228: *'The Identification and Classification of Dangerous Goods and Substances'*. Hazardous substances/materials are those that are potentially: poisonous, flammable, carcinogenic or toxic.

Some examples of hazardous substances / materials include:

- a. Diesel, Petroleum, Oil, Bituminous products;
- b. Cement;
- c. Chemicals such as solvent based acids, alkalines;
- d. Lubricants such as oil and greases;
- e. Pesticides, Herbicides; and
- f. LP (Liquefied Petroleum) gas.

Hazardous Waste Landfill Site

A waste disposal site that is designed, managed and permitted by DWS or DEA to allow for the disposal of hazardous waste.

Incident

Unexpected, sudden, and uncontrolled release of a hazardous substance, including those resulting from major emissions, fires, or explosions, that has caused or may cause significant harm to the environment, human life, or property.

Mitigation measures

Mitigation seeks to address poor or inadequate practices, procedures, systems and / or management measures by the implementation of preventative and corrective measures to reduce, limit, and eliminate adverse or negative environmental impacts or improve the positive aspects.

Project

This refers to any new construction activities associated with Whetstone Business Park Phase 3 Mixed-Use Development.

Principal Agent (PA)

Principal Agent or Representative of the Client, responsible for overall management of the construction phase of a project, operational phase or decommissioning/closure of the Whetstone Business Park Phase 3 Mixed-Use Development.. Duties also include the management of all Contractors.

Rehabilitation

Rehabilitation is defined as the return of a disturbed area, feature or structure to a state that approximates to the state (where possible) that it was before disruption, or to an improved state.

Remediation

The management of a contaminated site to prevent, minimise, or mitigate harm to human health or the environment.

Social Environment

Persons likely to be directly or indirectly affected by construction activities during a project, operational activities, or activities during the decommissioning phase.

Solid Waste

Means all solid waste, including domestic and office waste (food, paper, plastic), waste from operations e.g., empty chemical containers, dried sludge as well as waste from the construction and / or decommissioning phases, chemical waste, excess cement/concrete, inert building rubble, packaging, timber, tins and cans.

Sustainable development / sustainability

The integration of social, economic and environmental factors into planning, implementation and decision-making, to ensure that development serves present and future generations.

Watercourse

A river or spring; a natural channel or depression in which water flows regularly or intermittently; a wetland, lake or dam into which, or from which, water flows; and any collection of water which the Minister may, by notice in the Gazette, declare to be a watercourse.

Waste

Any substance, material or object, that is unwanted, rejected, abandoned, discarded or disposed of, or that is intended or required to be discarded or disposed of, by the holder of that substance, material or object, whether such substance, material or object can be re-used, recycled or recovered.

Workforce

The entire project team including people employed by the Client or the contractor, persons involved in activities related to a project, persons present at or visiting construction areas (including permanent contractors and casual labour), personnel in charge of- or tasked with maintenance of the Whetstone Business Park Phase 3 Mixed-Use Development.

GLOSSARY OF ACRONYMS

CA:	Competent Authority
DFFE:	Department of Forestry, Fisheries and the Environment
DWS:	Department of Water and Sanitation
EA:	Environmental Authorisation
EAP:	Environmental Assessment Practitioner
ECO:	Environmental Control Officer
EDTEA:	Department of Economic Development, Tourism and Environmental Affairs
EIA:	Environmental Impact Assessment
EMPr:	Environmental Management Programme
ESO:	Environmental Site Officer
HSE:	Health, Safety and the Environment
NEMA:	National Environmental Management Act
SEMA:	Specific Environmental Management Acts
PE:	Project Engineer

1. INTRODUCTION

An “Environmental Management Programme” (EMPr) is a plan or programme that sets out guidelines that describe how activities that have or could have an adverse impact on the environment, will be mitigated, controlled, monitored and subsequently achieve a desired operational and/or end state. The EMPr addresses the environmental impacts during the design, construction, operational and decommissioning/closure phases of a project. The purpose of an EMPr provides for preventative, corrective and best practice measures to ensure that activities related to construction, operation and/or closure of a facility and associated activities are done in an environmentally responsible way and is sustainable. This EMPr is compliant with Appendix 4 of the 2014 EIA Regulations (as amended).

Environmental Management Programme (EMPr) is required to manage the environmental impacts associated with the establishment of the Whetstone Business Park Phase 3 Mixed-Use Development. The EMPr is a dynamic document that should be continually updated, as and when required. This EMPr prepared by Wallace and Green concerns the implementation of mitigation measures related to the establishment of the Whetstone Business Park Phase 3 Mixed-Use Development. The site is located on the property described as Portion 2101 (of 250) of Cottonlands within the Verulam area and falls within ward 58 of the eThekweni Municipality, KZN, (Centre Point Coordinates: 29°36' 46.29"S; 31° 5' 11.31" E). The EMPr set out conditions for managing environmental impacts during the planning, construction and operational phases of the development.

Due consideration has been given to the development in terms of the planning, construction, operational phases whilst considering the environment and needs of interested and affected parties. Where relevant, rehabilitation and closure aspects have also been considered and addressed.

Due regard must be given to environmental management during the entire lifecycle stage of a project. Environmental specifications, conditions and/or recommendations are provided to ensure:

- Minimising the extent of environmental impact during the life of the project, commencing from planning through to closure.
- Ensuring appropriate rehabilitation of areas affected by construction and operation.
- Preventing and remediating long term degradation.

The following is the Environmental Management Programme (EMPr) to mitigate construction impacts associated with the construction of services and infrastructure for the Whetstone Business Park Phase 3 Mixed-Use Development. Principles and instructions contained in this document are to be implemented by the Applicant and all Purchasers, Consultants, Contractors and Sub-contractors.

1.1. BACKGROUND INFORMATION

The applicant, Cedar Point Trading intends on establishing a mixed-use development on the properties described as Portions 247 and 2101 of Lot 257, Cottonlands, Tongaat, eThekweni Municipality. The mixed-use development will comprise of a light industrial warehousing and/or commercial and associated facilities situated on the properties included within the site. The total size footprint is approximately xx hectares (Ha) with a development footprint of approximately 3.95 Ha.

The proposed project is located within Verulam and falls under the jurisdiction of the eThekweni Municipality. The site is geographically located at the following centre point co-ordinates (29°36' 46.29"S; 31° 5' 11.31" E).

The site earmarked for the proposed development is currently disturbed by past horse farming activities and comprises of several buildings situated centrally which includes a coffee shop and portal frame/structure shed. The site is relatively flat with gentle gradients and is characterized by Wetland Systems to the south and north of the site.

To the south of the site, the stormwater emanating from the surrounding area and southern portion discharges via an existing two-portal box culvert (Dimensions: 2 x 1.5 x 1.5m) that conveys the stormwater under the R102 and into the wetland system. However, heavy periodic rainfall events have resulted in the existing culvert unable to cope with the high flows and resulting in flooding of the R102. To address this, the applicant intends of establishing a box culvert (Dimensions: 2 x 2.5 x 1.5) on the channelled valley-bottom wetland system.

To further manage the stormwater on the site the applicant also intends on establishing a stormwater attenuation tanks (Dimensions: 460m² (area) and 3m (depth).

It is important to note that to compensate for the loss of the wetland systems (i.e., Wetland Areas HGM (2) – Depression and HGM (3) – Channeled Valley Bottom) , an Offset Management Plan was compiled by The Biodiversity Company (2025) which identified an onsite offset due to the due to the offset ratio required for the wetland lost will be met with the available area on site (KZN Wildlife was happy with this approach).

Table 1-1 outlines the listed and specific activities triggered by the Whetstone Business Park Phase 3 Mixed Use Development.

Table 1-1: Listed and Specified Activities Triggered

Activity Number	Activity as per legislation	Activity applicability
Activity 19 of Listing Notice 1	<p><i>The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water—</i></p> <p><i>(i) with an internal diameter of 0,36 metres or more; or</i></p> <p><i>(ii) with a peak throughput of 120 litres per second or more;</i></p> <p><i>excluding where—</i></p> <p><i>(a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or</i></p> <p><i>(b) where such development will occur within an urban area.</i></p>	<p>The proposed establishment of a 2 x 2.5 x 1.5m stormwater culvert and a 460m² attenuation tank will result in the infilling of approximately 4110m³ of Wetland Systems HGM 2 and HGM 3.</p>
Activity 27 of Listing Notice 1	<p><i>The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—</i></p> <p><i>(i) the undertaking of a linear activity; or</i></p> <p><i>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</i></p>	<p>The clearance of between 1 ha to 4 ha of indigenous vegetation (degraded grassland).</p>

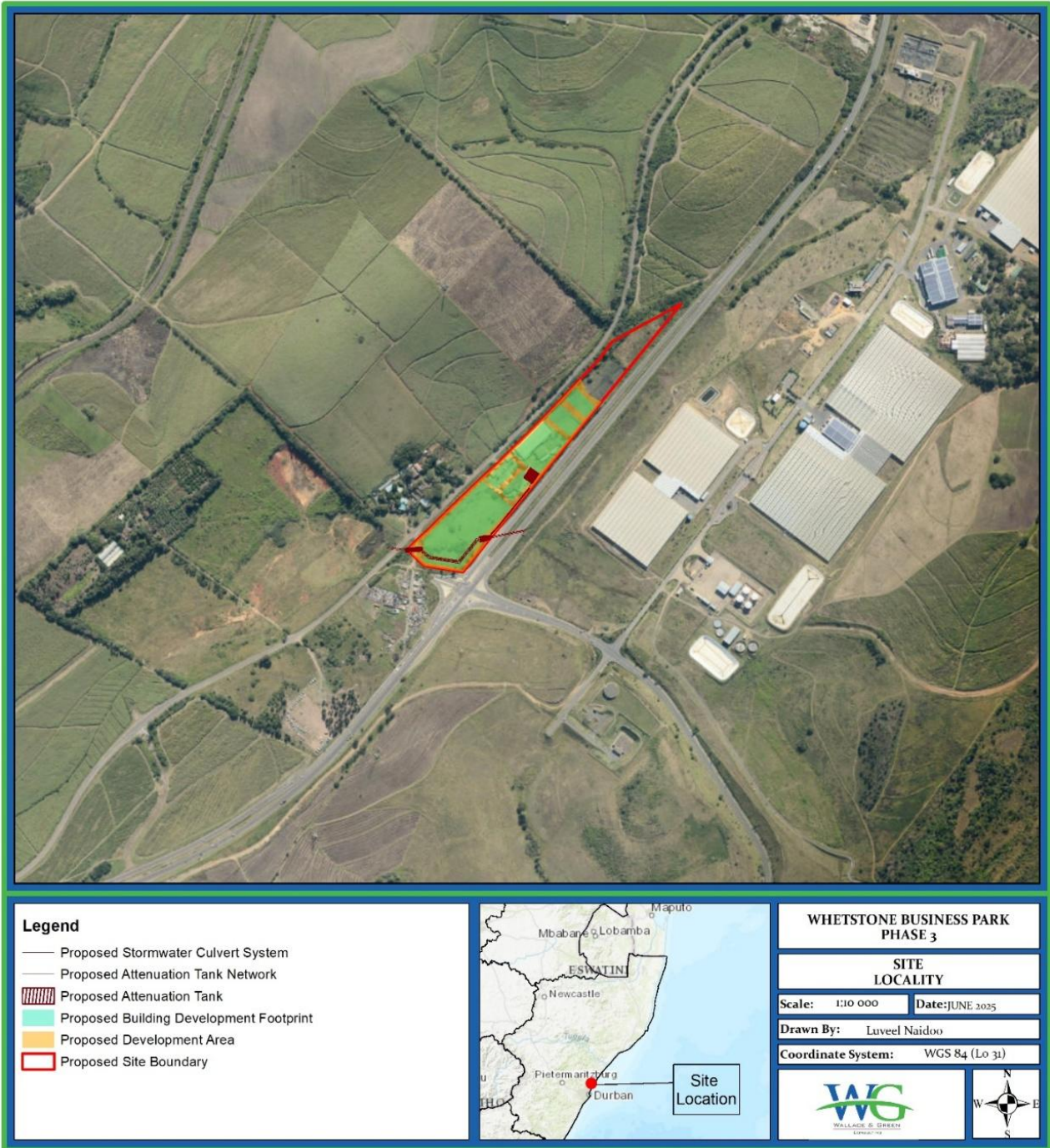


Figure 1-1: Locality Map illustrating the boundary of the Proposed Whetstone Mixed-use Development.

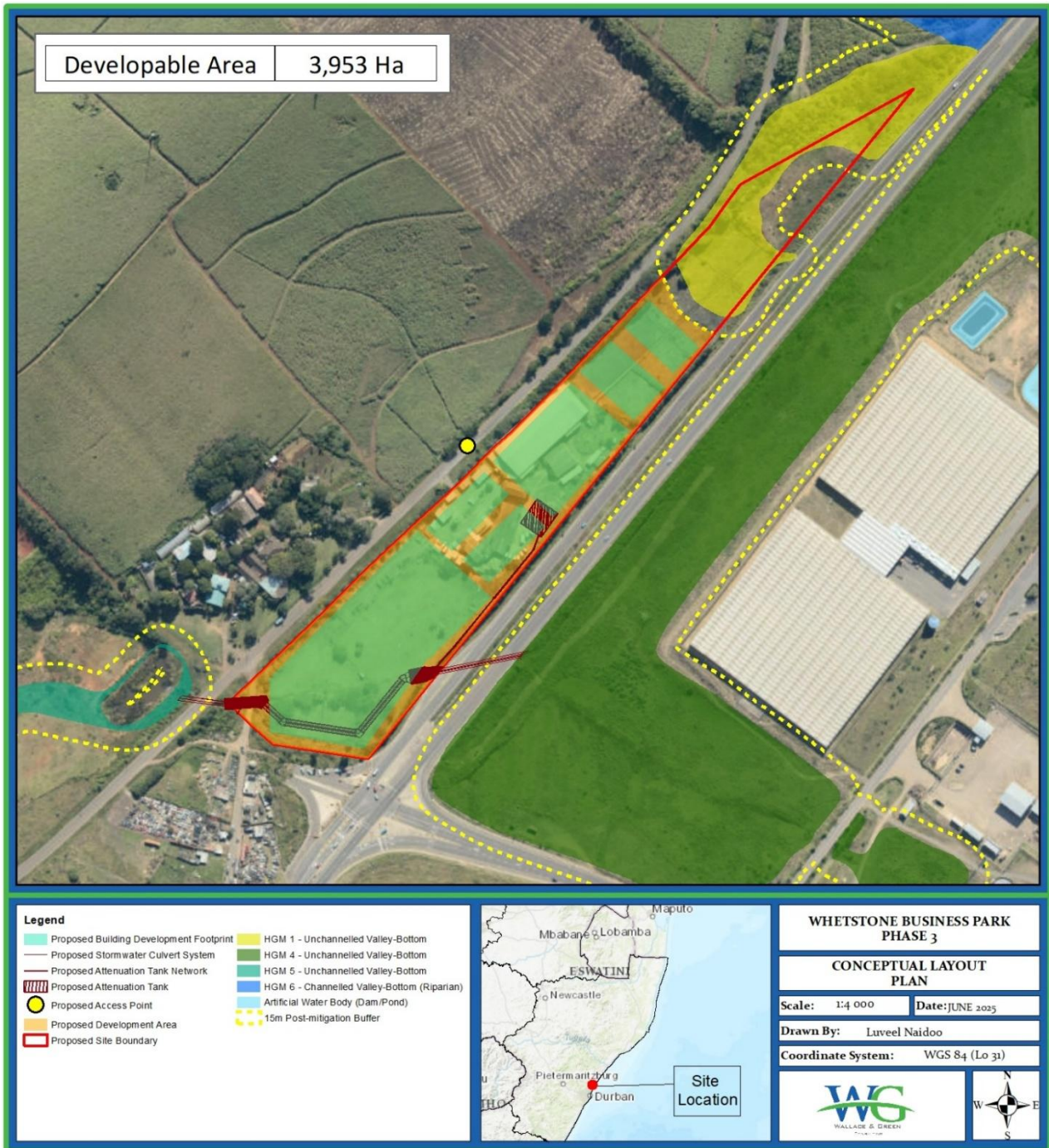


Figure 1-2: Conceptual Layout Plan for the proposed Whetstone mixed-use development.

1.2. SCOPE OF THE ENVIRONMENTAL MANAGEMENT PROGRAMME

This document describes the role of the EMPr in Environmental Impact Assessment (EIA) and planning for ecologically sustainable development within the framework of existing legislation and environmental management policies.

The EMPr will be used as a binding document between the Applicant and appointed personnel, as well as all other persons involved in the execution of activities related to the planning, construction and post-construction of the proposed fuel service station, drive thru and convenience store. These conditions must be adhered to for the duration of the planning, construction and post-construction (including rehabilitation activities).

This EMPr addresses the following phases of the development:

a) The Planning and Pre-construction Phase

The planning phase is the ideal opportunity to incorporate pro-active measures to ensure that environmental impacts arising from the Whetstone Business Park and associated services are avoided and mitigated from the outset. Proper planning during this phase can ensure that the likelihood of certain impacts taking place is minimised.

b) The Construction Phase

The majority of the impacts which may occur during the construction phase will have immediate effect (e.g., noise, traffic, pollution, interruption of surrounding business services, waste generation) If the site is monitored on a continual basis during the construction phase, it is possible to identify these impacts as they occur. These impacts will then be mitigated through the implementation of the measures described in the EMPr.

c) The Post construction and Operational Phase

Following construction, rehabilitation measures must be followed to minimise the impacts imposed during construction. This includes the removal of all material and structures that are no longer required, and restoration of areas that have been disturbed during construction. The impacts, which are anticipated during the operational phase are deemed to be the most significant and are those impacts which may result from inappropriate management of the precinct and buildings within the precinct. By taking proactive measures during the operation of the development, potential environmental impacts emanating during the operational phase will be minimised.

(d) The Decommissioning Phase

In this phase, potential impacts associated with decommissioning are assessed, and appropriate mitigatory measures are proposed to minimise potential negative impacts and enhance potential project benefits. The decommissioning of facilities/structures brings its own set of environmental impacts. The decommissioning process will involve the removal of the equipment and materials from the existing facilities/structures, and taking appropriate action to ensure that the sites are left in a suitable condition.

1.3. OBJECTIVES OF THE ENVIRONMENTAL MANAGEMENT PROGRAMME

The EMPr plays a vital role in the implementation of consistent and continued environmental management for the duration of a project life cycle.

Specifically, the EMPr:

- Ensures compliance with regulatory authority stipulations and guidelines which may be local, provincial, national and all related legislation thereof.
- Ensures that there is sufficient allocation of resources on the project budget so that the scale of EMPr-related activities is consistent with the significance of project impacts.
- Ensures compliance with legislation and regulations which may be national, provincial or local.
- Outlines the functions and responsibilities or responsible persons.

- Verifies environmental performance through information on impacts as they occur.
- Outlines mitigation measures and environmental specifications which are required to be implemented for all phases of a project in order to minimise the extent of environmental impacts, and to manage environmental impacts associated with the proposed project.
- Establishes monitoring methods for environmental management practices for construction of the development.
- Ensures that all health and safety regulations are adhered to.
- Proposes methods to monitor compliance with the EMPr and subsequent reporting.
- Specifies timeframes within which measures set out in the EMPr must be implemented.
- Encourages good management practices through planning and commitment to environmental issues;
- Defines how the management of activities and their impact on the environment is to be reported and how performance should be evaluated;
- Provides practical environmental conditions / requirements to:
 - Minimise disturbance of the natural environment;
 - Ensure water resource protection;
 - Prevent or minimise all forms of pollution;
 - Protect indigenous flora and fauna;
 - Prevent soil erosion and facilitate the re-vegetation of affected areas;
 - Ensure the maintenance of newly vegetated areas;
 - Restrict noise disturbance;
 - Ensure compliance with all applicable laws, regulations, standards and guidelines for the protection of the environment; and
 - Provide for the best practical means available to prevent or minimise adverse environmental impacts.
- Develops waste management practices based on prevention, minimisation, recycling, treatment or disposal of waste;
- Defines the arrangements that will be put in place to ensure that the mitigation measures are implemented by including recommendations of the roles and responsibilities of the project proponent, environmental management team and contractors;
- Describes all monitoring procedures required to identify impacts on the environment; and
- Trains the Owner of the project, its employees and contractors with regard to their environmental obligations.
- Provides an environmental awareness plan.
- Responds to changes in project implementation not considered in the EIA.
- Responds to unforeseen events.
- Provides feedback for continual improvement in environmental performance.

1.4. AUTHORS OF THE EMPr

Ms. Perushni Nicole Naidoo – Registered Environmental Assessment Practitioner (Reg. EAP (EAPASA)) | Senior Environmental Assessment Practitioner & Water Use License Specialist | Honours in Environmental Management

Perushni Naidoo is a Water Use License Specialist and Senior Environmental Assessment Practitioner (EAP) at Wallace and Green specializing in Water Use Licenses for a variety of development projects. She is professionally registered as a certificated EAP with the Environmental Practitioners Association of South Africa (EAPASA) and registered as a certificated professional with the South African Council for Natural Scientific Professions (SACNASP). Nicole holds a BSc (Hons) Degree, majoring in Environmental Management from the University of South Africa (UNISA). She has over 10 years' experience in the field of environmental management and has handled assignments in a range of environmental fields for corporate enterprises, private Applicants, and most spheres of government, as well as a wide variety of work for local landowners. Nicole's previous employment was with Envirocarb Consulting t/a ECA Consulting, as a Senior Environmental Assessment Practitioner where she managed a range of environmental assessments. Prior to that she was employed at Doug Jeffrey Environmental Consultants as an Environmental Intern where she

was involved in undertaking Public Participation in strict accordance with chapter 6 of NEMA EIA Regulations 2014 (as amended) and assisting with the compilation of Basic Assessment reports.

Wallace and Green (Pty) Ltd., is an enterprise of independent environmental consultants, providing a wide range of environmental consulting services to both the private and public sectors throughout South Africa. The Company is a certified Level 1 B-BBEE company with 100% black ownership of which 60% is black woman owned. Not only are we empowered from an ownership point of view, but our current staff complement also reflects our policies of empowerment and skills transfer, with more than 90% of our staff classified as historically disadvantaged.

Wallace and Green recognise that the ability to develop and implement sustainable solutions to complex environmental problems often requires the collaboration of specialists. For each project, we assemble an experienced team of professionals with local knowledge, experience and expertise in disciplines necessary to address the specific challenges of the project at hand.

Wallace and Green recognise the value of academic development and the regulation of professional associations.

Wallace and Green personnel are professionally registered & members of the following associations:

- South African Council for Natural Scientific Professions (SACNASP);
- Environmental Assessment Practitioners Association of South Africa (EAPASA);
- Water Institute of South Africa (WISA);
- Institute of Waste Management of South Africa (IWMSA);
- Green Building Council of South Africa (GBCSA)
- Project Management Institute of South Africa (PMI SA)
- International Association for Impact Assessment South Africa (IAIASA)

1.5. RESPONSIBILITY FOR ENVIRONMENTAL MANAGEMENT WITHIN ETHEKWINI MUNICIPALITY

Details of the applicant are tabulated below.

Table 1-2: Details of the Project Applicant

Name of Owner	Cedar Point Trading (Pty) Ltd		
Contact Person	Mr. Gavin Strydom		
Telephone Number	(0)31 322 7848	Fax Number	-
Mobile number	-	Email	Gavin@edstan.com

INDEPENDENT ENVIRONMENTAL ASSESSMENT PRACTITIONER

Wallace and Green was appointed by Cedar Point Trading (Pty) Ltd as the Independent Environmental Assessment Practitioner (EAP) to compile the EMP. Table 1-3 indicates the details of the EAP:

Table 1-3: Environmental Assessment Practitioner

Name of Consultancy	Wallace and Green (Pty) Ltd		
Contact Person	Ms. Perushni Nicole Naidoo		
Telephone Number	+27 (0)31 563 4466	Fax Number	086 613 8535
Mobile number	+27 83 711 5321	Email	nicolen@wallaceandgreen.co.za

The Competent Authority responsible for environmental authorisation and compliance within the eThekweni Municipality is the Department of Economic Development, Tourism and Environmental Affairs (EDTEA).

Table1-4: KwaZulu-Natal EDTEA Authority Contact Details – Compliance Monitoring and Enforcement (CME)

Name of Consultancy	Department of Economic Development, Tourism and Environmental Affairs (EDTEA)		
Contact Person	Mr. Siyabonga Sikhakhane		
Telephone Number	+27 (0)31 350 3015	Fax Number	-
Mobile number	(0)81 541 0758	Email	Siyabonga.Sikhakhane@kznedtea.gov.za

1.6. STRUCTURE OF THE ENVIRONMENTAL MANAGEMENT PROGRAMME

Section 1 is a brief introduction and background to the project and outlines the scope as well as objectives of the EMPr. Section 2 reviews the legislation, guidelines and necessary documentation relevant to achieving an environmentally sustainable project. Section 3 outlines the methodology of the EMPr. Section 4 explains management and compliance monitoring. Section 5 provides detailed descriptions of organisational structures, roles and responsibilities, monitoring, reporting procedures and non-compliance. Section 6 provides a summary of activities causing impacts. Section 7 presents a comprehensive environmental management programme. Section 8 is the concluding section of this EMPr.

2. APPLICABLE LEGISLATION, GUIDELINES AND DOCUMENTATION

This document describes the role of the EMPr to any existing environmental authorisations, permits, licenses and EMP's in environmental assessment and planning for ecologically sustainable development within the framework of existing legislation and environmental management policies.

South Africa is a constitutional democracy, which means the constitution and Bill of Rights are the supreme law. Our Constitution guarantees certain human rights and is one of the most progressive in the world. In line with a constitutional democracy everyone has responsibilities.

In terms of The Constitution of the Republic of South Africa (Act No. 108 of 1996) everyone has the right:

- to clean water;
- to an environment that is not harmful to their health or well-being and to have the environment protected, for benefit of present and future generations, through reasonable legislation and other measures that prevent pollution and ecological degradation, promote conservation and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

The overarching legislative framework that governs all environmental activities is the National Environmental Management Act (No 107 of 1998). NEMA aims to provide for co-operative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state; to provide for certain aspects of the administration and enforcement of other environmental management laws; and to provide for matters connected therewith. NEMA can help deal with problems at a municipal level and enables one to determine whether proper Integrated Environmental Management (IEM) procedures have been followed.

Accompanying NEMA is a set of Specific Environmental Management Acts (SEMA's). Known by the abbreviation of SEMA's, Specific Environmental Management Acts, all fall under the auspices of the overarching National Environmental Management Act (NEMA). To date five SEMA's have been promulgated, with the most recent one being Waste Act in 2008. The full list of SEMA's is:

1. National Environmental Management: Protected Areas Act (57 of 2003), known as the NEM:PAA
2. National Environmental Management: Biodiversity Act (10 of 2004), known as the NEM:BA
3. National Environmental Management: Air Quality Act (39 of 2004), known as the NEM:AQA
4. National Environmental Management: Integrated Coastal Management Act (24 of 2008), known as the NEM:ICM
5. National Environmental Management: Waste Act (59 of 2008), known as the NEM:WA

The Environmental Impact Assessment Regulations were published in Government Notice R982 to R985 (December 2014), and promulgated in terms of Chapter 5 of the National Environmental Management Act. The purpose of the regulations is to regulate the procedure and criteria relating to the submission, processing and consideration of, and decision on, applications for environmental authorisations for the commencement of activities in order to avoid detrimental impacts on the environment, or where it cannot be avoided, ensure mitigation and management of impacts to acceptable levels, and to optimise positive environmental impacts, and for matters pertaining thereto.

Section 28 of NEMA (Duty of care and remediation of environmental damage) states that every person who causes, has caused or may cause significant pollution or degradation to the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.

This EMPr must be read in conjunction with any Environmental Authorisation (once issued) for the proposed pipeline sites and any other relevant documentation by provincial government and national government. These could include but not be limited to: a general water use license, waste management license, conditions for establishment and health permits for sanitation from provincial health officials.

2.1. APPLICABLE ENVIRONMENTAL LEGISLATION

The following Environmental legislation was considered, in the evaluation of the activities and development of the EMPr. It must be noted that only some sections of Acts have been listed below, these were deemed pertinent and specific to the scope of this EMPr. These Acts must always be considered and adhered to in their entirety.

The list of applicable legislation and permits provided is intended to serve as a guideline only and is not exhaustive.

Table 2-1: Applicable Environmental Legislation

Legislation	Section	Relates to
The Constitution (No 108 of 1996)	Chapter 2	Bill of Rights.
	Section 24	Environmental rights.
National Environmental Management Act (No 107 of 1998 [as amended])	Section 2	Defines the strategic environmental management goals and objectives of the government. Applies through-out the Republic to the actions of all organs of state that may significantly affect the environment.
	Section 24	Provides for the prohibition, restriction and control of activities which are likely to have a detrimental effect on the environment.
	Section 28	The Applicant has a general duty to care for the environment and to institute such measures as may be needed to demonstrate such care.
	Section 30	Deals with the control of emergency incidents, including the different types of incidents, persons responsible for the incidents and reporting procedures to the relevant authority.
National Environmental Management: Waste Act (No 59 of 2008)		Provides for specific waste management measures and the remediation of contaminated land.
		Regulations for waste management licensee activities
National Environmental Management: Biodiversity Act (No 10 of 2004)		Provides for the management and conservation of biodiversity, protection of species and ecosystems, and sustainable use of indigenous biological resources – provisions re alien and invasive species?

<p>Threatened or protected species (GN 388)</p> <p>Lists of species that are threatened or protected (GN 389)</p> <p>Alien and invasive species regulations (GNR 506)</p> <p>Publication of exempted alien species (GNR 509)</p> <p>Publication of National list of invasive species (GNR 507)</p> <p>Publication of prohibited alien species (GNR 508)</p>		
<p>Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)</p>		<p>The Objectives of this Act are to provide for the conservation of the natural agricultural resources of the Republic by the maintenance of the production potential of land, by combating and preventing of erosion and weakening or destruction of the water sources, and by the protection of the vegetation and the combating of weeds and invader plants. Section 5 details measures for the prohibition of the spreading of weeds.</p>
<p>National Environmental Management: Air Quality Act (No 39 of 2004)</p>	Section 32	Control of dust
	Section 34	Control of noise
	Section 35	Control of offensive odours
<p>National Heritage Resources Act (No 25 of 1999) and regulations</p>	Section 34	No person may alter or demolish any structure or part of a structure that is older than 60 years without a permit issued by the relevant provincial heritage resources authority.
	Section 35	No person may, without a permit issued by the responsible heritage resources authority destroy, damage, excavate, alter, deface, or otherwise disturb any archaeological or paleontological site.
	Section 36	No person may, without a permit issued by the South African Heritage Resource Agency (SAHRA) or a provincial heritage resources authority destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority. "Grave" is widely defined in the Act to include the contents, headstone, or other markers of such a place, and any other structure on or associated with such place.
	Section 38	This section provides for Heritage Impact Assessments (HIAs), which are not already covered under the ECA. Where they are covered under the ECA, the provincial heritage resources authorities must be notified of a proposed project and must be consulted during the HIA process. The Heritage Impact Assessment (HIA) will be approved by the authorising body of the provincial directorate of environmental affairs, which is required to take the provincial heritage resources authorities' comments into account prior to making a decision on the HIA.
<p>Occupational Health and Safety Act (No 85 of 1993)</p>	Section 8	General duties of employers to their employees
	Section 9	General duties of employers and self-employed persons to persons other than their employees
<p>National Water Act (No 36 of 1998) and regulations</p>	Section 19	Prevention and remedying the effects of pollution
	Section 20	Control of emergency incidents

	Section 21	Licenses for water use
Hazardous Substances Act (No 15 of 1973) and regulations		Provides for the definition, classification, use, operation, modification, disposal or dumping of hazardous substances
National Veld & Forest Fire Act		Provides for a variety of institutions, methods, and practices to prevent and combat veld, forest, and mountain fires.
National Road Traffic Act (No 93 of 1996)		Provides for controlling transport of dangerous goods, hazardous substances and general road safety
Spatial Planning and Land Use Management Act (No. 16 of 2013).		Provides the framework for spatial planning and land use management in South Africa at the different spheres of government and for the establishment, functions and operations of Municipal Planning Tribunals.
Occupational Health and Safety Act (No 85 of 1993) and regulations		Addresses occupational health and safety aspects
SANS 10103 (Noise Regulations)		The measurement and rating of environmental noise with respect to annoyance and to speech communication
KwaZulu-Natal Planning and Development Act, (No. 6 of 2008)		Strategic spatial development intentions for the municipality based on the IDP and SDF, influenced by and in alignment with adjacent municipalities.
KZN Nature Conservation Ordinance (Ordinance No. 15 of 1974)		Protected indigenous plants, in general, are controlled under the relevant provincial Ordinances or Acts dealing with nature conservation. In KwaZulu-Natal, the relevant statute is the 1974 Provincial Nature Conservation Ordinance. In terms of this Ordinance, a permit must be obtained from Ezemvelo KZN Wildlife to remove or destroy any plants listed in the Ordinance.
KwaZulu Natal Heritage Act (Act 4 of 2008)		To provide for the conservation, protection, and administration of both the physical and the living or intangible heritage resources of the Province of KwaZulu-Natal; to establish a statutory Council to administer heritage conservation in the province.
Climate Change Act (Act No. 22 of 2024)		To enable the development of an effective climate change response and a long-term, just transition to a low-carbon and climate-resilient economy and society for South Africa in the context of sustainable development; and to provide for matters connected therewith.
Petroleum Products Act (Act 120 of 1977)		To provide measures for the saving of petroleum products and an economy in the cost of the distribution thereof, and for the maintenance of a price therefor; for the rendering of services of a particular kind, or services of a particular standard, in connection with motor vehicles; and to provide for matters incidental thereto.

The potential environmental impacts associated with the current project are required to be considered in compliance with the EIA Regulations (2014) as well as all the SEMA's. It must also be noted that the list of Acts and their associated regulations must be frequently updated to ensure that all activities are done according to and comply with the most current legislation.

Table 2-2: Current Environmental Legislation

Regulations and Guidelines
Environmental Impact Assessment Regulations, 2014 (as amended).
Internal Guideline: Generic Water Use Authorisation Application Process, August 2007 by DWA.

The General Policy on Environmental Conservation (January 1994).
DEA (2017), Guideline on Need and Desirability, Department of Environmental Affairs (DEA), Pretoria, South Africa.
Department of Environmental Affairs (2017), Public Participation guideline in terms of NEMA EIA Regulations, Department of Environmental Affairs, Pretoria, South Africa.
Disaster Management Act (57/2002): Directions Regarding Measures to Address, Prevent and Combat the Spread of COVID-19 Relating to National Environmental Management Permits and Licences
Mineral And Petroleum Resources Development Act 28 Of 2002: To make provision for equitable access to and sustainable development of the nation's mineral and petroleum resources; and to provide for matters connected therewith.

Table 2-3: Current Municipal By-Laws

By-Laws
eThekwini Metropolitan Municipality: Planning and Land Use Management By-Law, 2021
eThekwini Metropolitan Municipality: Water By-Law, 2021
eThekwini Metropolitan Municipality: Fire Safety By-Law, 2022
eThekwini Metropolitan Municipality: Coastal Management By-Law, 2021
eThekwini Metropolitan Municipality: Stormwater Management By-Law, 2020
eThekwini Metropolitan Municipality: Sewage Disposal By-Law, 2016
eThekwini Metropolitan Municipality: Waste Removal By-Law, 2016
eThekwini Metropolitan Municipality: Nuisance By-Law, 2016

Please note that all bylaws relevant to the construction and operational phases need to be adhered to. Any bylaws adopted by the Municipality, which come into effect during the construction stage, must be adhered to.

3. ENVIRONMENTAL MANAGEMENT PROGRAMME

3.1. EMPr METHODOLOGY

The methodology adopted is that of an Environmental Management Programme (EMPr) as described in the Integrated Environmental Management (IEM) Guidelines published by the Department of Environmental Affairs in 1992 as well as the EIA Regulations in 2014 (as amended).

The EMPr has been structured to include:

- Specific goals of the Environmental Management Programme;
- Details of management actions;
- Parties responsible for carrying out management recommendations;
- Timing and duration of management actions;
- Personnel training and financial obligations; and
- Guidelines for monitoring and auditing of compliance.

The EMPr specifies the minimum requirements to be implemented as per the scope of works and scope of the EMPr, in order to minimise and manage the potential environmental impacts and ensure sound environmental management practices.

The provisions of this EMPr are binding on the Applicant during the life of the project. It is essential that the EMPr requirements be carefully studied, understood, implemented, and always adhered to.

To simplify the EMPr requirements, each aspect related to the EMPr has been addressed below. Each action within the EMPr is supported by the priority of when the specific action will need to be implemented. Each of these aspects is briefly described below for ease of reference.

ENVIRONMENTAL ASPECT

This section highlights the various aspects associated with the project i.e., the Applicant / activities that will interact with the environment.

ENVIRONMENTAL MEASURES AND ACTION PLANS

This section indicates the actions required to either prevent and/or minimise the potential impacts on the environment that is associated with the project.

TIMEFRAMES

This section in the table indicates when the actions for that specific aspect must be implemented and/or monitor.

RESPONSIBILITY

This section indicates the party responsible for implementing the environmental measures and action plans laid out in the EMPr.

4. MANAGEMENT AND COMPLIANCE MONITORING

4.1. ORGANISATIONAL STRUCTURE, ROLES AND RESPONSIBILITIES

Formal responsibilities are necessary to ensure that key procedures are executed. Specific responsibilities of the Project Engineer, Contractor, Sub-Contractor, Environmental Site Officer (ESO) and Independent Environmental Control Officer (ECO) are as detailed below.

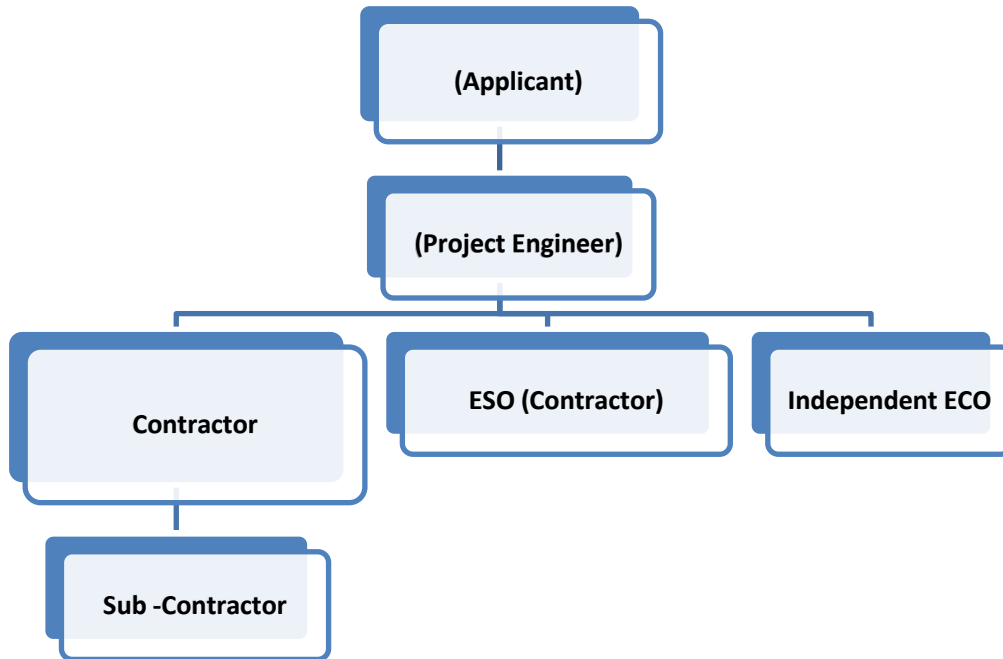


Figure 4-1: Organogram of formal responsibilities and reporting structure for the development implementation

FORMAL RESPONSIBILITIES

Formal responsibilities are necessary to ensure that key procedures are executed. Specific responsibilities of the Project Engineer, Contractor/s, Environmental Site Officer are as detailed below.

PROJECT ENGINEER
<p><i>The Engineer must:</i></p> <ul style="list-style-type: none"> • Ensure designs are in accordance with the mitigation measures identified in this EMPr • Enforce the environmental specification on site; • Monitor and ensure compliance with the requirements of the specification; • Assess the Contractor’s environmental performance in consultation with the Environmental Site Officer from which a brief monthly statement of environmental performance is drawn up for record purposes and to be reported to project meetings; • Liaise with the Contractor/Operator on matters concerning the environment; • Prevent actions that will harm or may cause harm to the environment, and take steps to prevent pollution of the site; • Implement remedial measures in the event of pollution incidents or environmental impacts. • Ensure the documentation, in conjunction with the Contractor, the state of the site prior to construction activities commencing. This documentation will be in the form of photographs or video record.
ENVIRONMENTAL SITE OFFICER (CONTRACTOR)
<p><i>The Environmental Site Officer must:</i></p> <ul style="list-style-type: none"> • Be familiar with the recommendations and mitigation measures of this EMPr.

- Ensure safety measures are implemented for site personnel and are enforced throughout the project.
- Ensure that the Contractor, sub-contractors and construction teams are in compliance with the EMPr at all times during the project.
- Monitor all site activities weekly for compliance.
- Recommend corrective action for any environmental non-compliance at the site.
- Conduct weekly training with the Contractor on the EMPr and general environmental awareness. It must be noted that the responsibility of the ESO/ECO is to monitor compliance and give advice on the implementation of the EMPr and not to enforce compliance.

CONTRACTOR

The Contractor must:

- Be fully conversant with the EMPr;
- Be conversant with the requirements of this environmental specification/ EMPr. Brief all his/her staff about the requirements of the environmental specification;
- Comply with requirements of the EMPr in terms of the project specification, as applicable, within the time period specified.
- Ensure any Sub-Contractors/Suppliers who are utilised within the context of the contract comply with the environmental requirements of the project, in terms of the specifications. The Contractor will be held responsible for non-compliance on their behalf.
- Bear the cost of any delays, with no extension of time granted, should he or his Sub-Contractors / Suppliers contravene the said specifications such that the ESO/ECO orders a suspension of work. The suspension will be enforced until such time as the offending party(ies), procedure, or equipment is corrected.
- Bear the costs of any damages/compensation resulting from non-adherence to the said specifications or written site instructions.
- Bear the costs of fines/directives levied against the Applicant by the Department of Environmental Affairs, the Department of Water and Sanitation, or eThekweni Municipality for any incidents occurring on site, e.g., major spills.
- Comply with all applicable legislation.
- Ensure that he informs the PA timeously of any foreseeable activities which will require input from the ECO/ESO.
- The Contractor will conduct all activities in a manner that minimizes disturbance to the natural environment as well as directly affected residents and the public in general.

4.2. TRAINING AND ENVIRONMENTAL AWARENESS

It is important to ensure that the Project Engineer and ESO have the appropriate level of environmental awareness and competence to ensure continued environmental due diligence and ongoing minimisation of environmental harm. Training needs should be identified based on the available and existing capacity of site personnel to implement the requirements detailed in this EMPr. It is vital that all personnel are adequately trained to perform their designated tasks to an acceptable standard.

The environmental training is aimed at:

- Promoting environmental awareness;
- Informing the Contractor of all environmental procedures, policies and programmes applicable;
- Providing generic training on the implementation of environmental management specifications; and
- Providing job-specific environmental training in order to understand the key environmental features of the construction site and the surrounding environment.

Training must be done in a verbal format. In addition to training, general environmental awareness must be fostered among the project's workforce to encourage the implementation of environmentally sound practices throughout its duration. This ensures that environmental accidents are minimised, and environmental compliance maximised.

Such training topics may be focused around the incidents that are typically frequently reported including the following:

- Solid Waste management;
- Hazardous Waste Management;
- Management of alien invasive species;
- Protection of sensitive areas (wetlands);
- Spillages;
- Dust Management;
- Fire incidents;
- Hazardous Equipment and Storage Areas;
- Noise;
- Personal Protective Equipment (PPE);
- Pollution of Groundwater and Surface water Resources.

4.3. EMERGENCY PREPAREDNESS AND RESPONSE

It must be ensured that Environmental Incidents, Emergency and Response Procedures are integrated into Whetstone Business Park Phase 3 procedures. Provision must be made to ensure that environmental incidents and/or accidents are managed in such a way that impacts are minimised through implementing the necessary procedures to respond, report, and take corrective action against the incident. The key purposes of environmental emergency response should include:

- Accident and incident reporting including environmental incidents that could cause significant environmental impacts (e.g., spills, fires, accidental discharges, accidental damage, explosions, non-compliance events) to existing facilities and the surrounding environment;
- Accidental toxic emissions into the air;
- Specific environmental effects from accidental releases or incidents;
- Adoption of Emergency Response Procedures; and
- Maintenance of records detailing non-conformity, corrective action and preventative action.

It is the responsibility of the Applicant to induct and train their respective employees and personnel onsite on the emergency procedures that are documented in this EMPr.

Spill Contingency measures

In the event of a spill, the discharge must be stopped at its source with the spilled material contained. Hand tools such as oil spill kits obtained from service providers such as Drizit/SpillTech must be used to contain and collect the material together, immediately containing the spilled material into the containment area.

In the event of a spill, the following actions are recommended to be undertaken in the listed order:

- Locate the source of the spill and to stop the spill where it originated;
- Contain the spilled material;
- Clean-up;
- Safe Disposal;
- Determination of soil, groundwater or other environmental impact; and
- Undertake remedial action if required (in consultation with KZN EDTEA and DWS).

The authorities must be notified (within 48 hours) by the Applicant if the spill cannot be contained or poses a serious and immediate threat to the local environment. A safe disposal certificate must be obtained for any contaminated material taken off-site. Different procedures for minor and major spills must be followed with relevant response procedures including spill containment, removal and disposal of hazardous substances (i.e., transportation) and spill kit replenishment.

5. ENVIRONMENTAL MANAGEMENT COMPLIANCE, MONITORING AND REPORTING

5.1. EMPr COMPLIANCE MONITORING AND AUDITING WITH TIMEFRAMES

Cognisance must be taken in line with Section 28 (Duty of Care) of the National Environmental Management Act, (No. 107 of 1998). In terms of these acts those responsible for environmental damage must pay the repair costs, both to the environment and human health, and implement preventative measures, to reduce or prevent further pollution and or environmental damage. Compliance with all other applicable legislation is required.

Environmental monitoring is the continual evaluation of the status of the environment and the condition of environmental elements. Its purpose is to detect activities that may have a negative impact on the environment as well as changes that take place in the environment over time. It involves the checking and correcting of onsite activities during the operational phase and measuring physical, social, and economic variables associated with development impacts. Monitoring will be ensured in terms of the EMPr conditions, eThekweni Metropolitan Municipality Bylaws and any other binding documents.

In this regard, monitoring measures stipulated in this document for the various phases pertain to, but are not restricted to:

- Noise;
- Hazardous Waste management;
- Maintenance of storage facilities and infrastructure;
- Handling of Hazardous equipment and material;
- Emergency and Safety equipment; and
- Compliance with the eThekweni Municipality Bylaws and EMPr conditions.

5.2. COMPLAINTS AND ENVIRONMENTAL INCIDENTS

Identifying, recording and reporting complaints and environmental incidents further ensures the monitoring and auditing of environmental compliance and assessment of performance against the actual and perceived environmental aspects and impacts on site.

DOCUMENTATION

The following documentation must be kept on site in order to record compliance with the EMPr:

- Record of Complaints
- Non-conformance Reports
- Written Corrective Action Instructions
- Notification of Emergencies and Incidents.

The following inspection sheet and report templates are recommended and included in **Appendices B-E** respectively.

- Project Start Up Inspection Sheet
- Routine Site Inspection Sheet
- Site Decommissioning Sheet
- Site Inspection Report Structure

COMPLAINT RECORDS

The lodged complaint must be brought to the attention of the ESO who will respond accordingly. The following information will be recorded:

- *Details of the complainant;*

- *Time, date and nature of the complaint;*
- *Response and investigation undertaken; and*
- *Actions taken and by whom*

All environmental incidents occurring on the site will be recorded. The following information will be documented:

- *Time, date, location and nature of the incident*
- *Actions taken and by whom*
- *Response to complainant*
- *Close Out.*

The following additional information may be added to the complaints and incident records:

- *Party/parties responsible for causing complaint/incident*
- *Additional corrective or remedial action taken and/or to be taken to address and to prevent reoccurrence of the complaint/incident*
- *Timeframes and the parties responsible for the implementation of the corrective or remedial actions*
- *Procedures to be undertaken and/or penalties to be applied if corrective or remedial actions are not implemented*
- *Copies of all correspondence received regarding complaints/incidents.*

5.3. LIMITATIONS AND ASSUMPTIONS REGARDING ASSESSMENT AND MITIGATING OF IMPACTS

All significant issues and impacts were identified and addressed in the original EIA process. All relevant issues and impacts have been addressed in this EMPr.

Environmental issues, concerns and development constraints were identified using professional judgement, project information, experience of similar projects, a review of available literature, site visits and consultation with the authorities.

The significance of environmental issues was evaluated, and mitigation and management measures were identified as part of the EMPr development.

The effectiveness of the EMPr is limited by the level of adherence to the conditions set forth in this report by the Client and the various contractors and agents acting on behalf of the Client.

It is further assumed that compliance with the EMPr will be monitored and audited on a regular basis as set out in the EMPr. It must also be noted that this EMPr is a dynamic document that must be continually updated, as and when required. Also, all other documents from the Client must be referred to in addition to this EMPr.

6. SUMMARY OF ACTIVITIES AND ASPECTS CAUSING IMPACTS

The proposed construction and operation of the Whetstone Business Park Phase 3 Mixed-Use Development can potentially result in negative impacts on the receiving environment. These potentially significant negative impacts have been identified and summarised by the Environmental Assessment Practitioner (EAP).

- Stormwater contamination
- Safety and security
- Waste management
- Noise, dust and odours
- Contamination of the watercourses
- Indigenous vegetation clearance
- General waste
- Hazardous waste
- Fire incidents

The above-mentioned aspects can potentially cause negative impacts that may occur during the planning, construction, operational or decommissioning phases of the proposed project. Activities and aspects causing impacts are detailed in Section 7 of this EMPr.

In order to prevent and/or minimise these impacts, care must be taken with, *inter alia*, the disposal of waste, spillage, storage, noise, dust control, sediment management, the demarcation of sensitive areas and management of the different phases of construction and operation. This can be achieved by effective implementation of the necessary mitigation measures as stipulated in this EMPr. With adequate management, the associated risks and significant negative impacts of the proposed project can be minimised and/or entirely negated. These will all be dealt with in this EMPr.

7. DETAILED ENVIRONMENTAL MANAGEMENT PROGRAMME

This Section provides environmental specifications that must be adhered to during the planning, construction and post construction/rehabilitation phases of the Whetstone Business Park Phase 3 Mixed-Use Development. It is essential that all listed specifications are considered and appropriately incorporated into the planning, design and/or contract documentation, and adhered to during the respective phases of the project.

The listed environmental specifications should be regarded as the minimum range of environmental constraints, controls, procedures and/or standards. They should not be regarded as exhaustive and therefore improvements and/or amendments should be made where reasonable and required.

Such requirements may be identified by stakeholders and/or other interested and affected parties, upon which the EMPr and the relevant environmental specifications may require revision. Environmental specifications have been listed in tables in the sub-sections as per the following phases:

- Planning, Design, Pre-Construction
- Construction phase
- Post-Construction Phase

For each timeframe and specification, the responsible monitoring party/parties and frequency, where relevant, is indicated.

PLANNING AND DESIGN PHASE & PRE-CONSTRUCTION ACTIVITIES

7.1. PLANNING AND DESIGN PHASE & PRE-CONSTRUCTION ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
7.1.1. Administrative and Legal Requirements			
Impact Management Outcome: <ul style="list-style-type: none"> To ensure administrative and legal requirements such as licenses and approvals are in place prior to construction of the Whetstone Business Park. Determine the roles and responsibilities of staff, contractors etc. Ensure all site staff are aware of the EMPr and its conditions. 			
Planning Requirements	1. All necessary building plan approvals, authorisations, permits and licences and any associated amendments must be obtained by the applicant prior to the commencement of construction related activities.	Applicant	During Planning and Design
	2. The applicant must adhere to the Water Use License, Environmental Authorisation and associated amendments applicable to the development.	Applicant	During Planning and Design
	3. The identified environmental buffers associated with the site must be strictly adhered to and clearly pegged out prior to the commencement of construction	Contractor	During Planning and Design
	4. The approved stormwater management plan must be implemented on site.	Contractor	During Planning and Design
Appointment of the ECO	1. The applicant must appoint a person with the Qualification in Environmental Management or Science as the ECO. The ECO must be the responsible person for monitoring and reporting on compliance in respect of the implementation of the EMPr and EA.	Applicant	Prior to construction
	2. Upon appointment of the ECO, his/her details must be communicated to the KZN EDTEA Control Environmental Officer: CME Component within 14 calendar days.	ECO	Prior to construction

PLANNING AND DESIGN PHASE & PRE-CONSTRUCTION ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	3. A written notice must be given to the KZN EDTEA at least seven (7) days prior to the commencement of construction. Commencement for this purpose includes site preparation. The notice must include a date on which it is anticipated that the activity will commence and the reference number for the Environmental Authorisation.	ECO	Prior to construction
	4. A Layout Plan and Precinct Plan must be approved by the Municipality prior to construction and implementation	Applicant/Engineer	Prior to construction
	5. The approved layout plans must be submitted to KZN EDTEA prior to the commencement of construction.	ECO/Applicant	Prior to construction
	6. The ECO must conduct monthly visits for the duration of the construction phase.	ECO	Prior to construction
	7. The ECO must ensure the Implementation of preventative and corrective actions in accordance with the requirements of the EMPr and outcomes of environmental monitoring / auditing;	ECO	Ongoing
	8. The ECO must report environmental incidents in accordance with the requirements of the EMPr and environmental legislation to the applicant.	ECO	Ongoing
	9. Monthly audit reports must be submitted within 5 days from the date of the site visit to the KZN EDTEA CME unit and the applicant.	ECO	Ongoing
7.1.2. Appointment of Contractor			
Appointment of Contractor	1. The Applicants must ensure that this EMPr, the EA and WUL forms part of any contractual agreements with the Contractor(s) and sub-contractor(s) for the execution of the proposed project. The Contractor must make adequate provision in their budgets for the implementation of the EMPr, EA and WUL.	Applicant	Prior to construction

PLANNING AND DESIGN PHASE & PRE-CONSTRUCTION ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
7.1.3. Preparation of Method Statements			
Preparation of Method Statements	1. Method Statements applicable to the development must be submitted by the Contractor to the ECO Applicant and must be adhered to by the Contractor and the Project Engineer.	Contractor	Prior to construction
	2. The following Method statements must be submitted to the ECO for comment. These method statements are applicable to the site sensitivity and the development activity: <ul style="list-style-type: none"> • Solid waste management; • Storage of hazardous materials; • On site refuelling of construction vehicles. 	Contractor	Prior to construction

CONSTRUCTION PHASE ACTIVITIES

7.2. CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
7.2.1. Site Establishment			
<i>Impact Management Outcome: Minimise impact on the environment when establishing site camp. Ensure the development foot print of the site camp is minimal and kept to demarcated areas.</i>			
Construction Camp Site	1. Prior to the establishment of the site camp / office, the Contractor must produce a site layout plan showing the positions of all equipment storage, waste stockpiling, fuel storage areas, and other infrastructure for approval of the ECO.	Contractor	During construction
	2. The laydown area must be placed in an area where erven will be developed and not in an area that will be utilised in future as an open space or within any sensitive environmental areas and the associated construction and operational buffers. This must be done in consultation with the ECO.	Contractor	During construction
	3. This EMPr must be retained onsite in hard copy format for reference purposes with the Complaints and Non-Conformance and Incident Registers	ESO	During construction
	4. Adequate signage must be placed in the area where construction will take place informing the public of the activities taking place.	Contractor / ESO / Project Engineer	During construction
	5. The site camp must be secured and manned on a 24-hour basis.	Contractor	During construction
	6. The Contractor must take responsibility for the site to conform to all contractual aspects and environmental standards applicable.	Contractor	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	7. The Contractor must provide adequate refuse bins that must be cleaned / emptied and the waste removed from site on a regular basis.	Project Engineer/Contractor/ESO	During construction
	8. The construction camp must be kept in an orderly state at all times.	ESO/ECO	During the life cycle of the project
	9. Vegetation removed for the site establishment is to be kept to a minimum. No protected / indigenous trees are to be removed, unless specific authorisation / permits have been obtained.	ECO	During construction
	10. The construction camp is to be located away from any delineated watercourse and associated construction and operational buffers. This must be done in consultation with the ECO.	Contractor/ESO	During construction
	11. All laydown, chemical toilets etc. should be restricted to already modified areas. Any materials may not be stored for extended periods of time and must be removed from the project area once the construction/closure phase has been concluded (Terrestrial assessment, 2024).	Contractor	During construction
	12. The Contractor must ensure that stormwater management is conducted on site to prevent standing water and/or sheet erosion.	Contractor	During construction
7.2.2. Ablution / Sanitation			
Ablution / Sanitation	1. On-site minimum of one chemical toilet must be provided per 15 persons. The construction of "long drop" toilets is prohibited. Under no circumstances may open areas or the surrounding bush be used as toilet facilities.	Contractor	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	2. The chemical toilets must be strategically placed with a maximum distance of not greater than 300m from the working area.	Contractor/ESO	During construction
	3. Chemical toilets must be secure, clean and functional throughout the construction period.	Contractor/ HSE	During construction
	4. All ablution activities must take place in these facilities, and the Facilities must be serviced weekly by a registered service provider.	Contractor/HSE	During construction
	5. Safe disposal certificate for cleaning of the ablution facilities must be provided to the ECO and retained within the Environmental File.	Contractor/HSE	During construction
	6. All temporary / portable toilets must be secured to the ground to prevent them from toppling due to wind or any other cause.	Contractor/ HSE	During construction
	7. Unauthorised dumping / spilling of waste from toilets into the environment and burying of waste are strictly prohibited.	Contractor	During construction
	8. Ablution facilities must not cause any pollution to any water resource and it must not be a health hazard to the general public.	Contractor	During construction
7.2.3. Access to Construction Site			
Maintenance of the site access road	1. The construction site must have strict access control to reduce the risks associated with vehicular transportation and pedestrian access on the site.	Contractor	During construction
	2. Existing access roads as planned in the overall development layout must be utilised for access purposes.	Contractor	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	3. Sensitive areas including the construction and operational buffers must be clearly pegged and marked as “No-Go” areas.	Contractor	During construction
	4. Adequate drainage and erosion protection in the form of cut-off berms or trenches must be provided around where necessary.	Contractor	During construction
8.2.4. Environmental Training and Awareness			
Environmental Training and Awareness	1. The contractors team including all sub-contractors must be adequately educated by the ESO to the provisions included in the EMPr, EA and WUL. Proof of training must be attached to the ECO’s audit reports.	Contractor / ESO	During construction
	2. Consideration of the implications of the EA, EMPr and WUL must form part of the formal site induction for all contractors, sub-contractors and casual labourers, preferably in their native language. The induction training will, as a minimum, include the following: <ul style="list-style-type: none"> ○ The importance of conformance with all environmental policies; ○ The environmental impacts, actual or potential, of their work activities; ○ The environmental benefits of improved personal performance; ○ Their roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirement of the Consultant’s environmental management systems, including emergency preparedness and response requirements; and ○ The mitigation measures required to be implemented when carrying out their work activities. 	ECO	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	3. The Contractor is required to conduct “tool box” talks. These talks must be in accordance with the risks and trends associated with the project. Proof of these talks must be kept on site within the Site Environmental File.	Contractor/ ESO	During construction
8.2.5. Fire Management			
<i>Impact Management Outcome: Ensure Prevention of uncontrollable fires.</i>			
Fire prevention and control	1. No open fires or uncontrolled fires will be permitted on site.	Contractor	During construction
	2. Firefighting measures such as fire extinguishers must be located on site.	Contractor	During construction
	3. The workforce must be made aware of fire prevention and firefighting measures.	Project Engineer / Contractor	During construction
8.2.6. No-Go' Areas			
<i>Impact Management Outcome: Prevent access to No – Go areas minimising impacts to private properties not associated with the project/outside the project boundary.</i>			
7.2.7. No-Go' Areas	1. All remaining wetland units not authorised to be infilled in the EA and water use licence. will be considered 'no-go' areas.	Contractor /Project Engineer	During construction
	2. Note that additional 'no-go' areas may be identified by the ECO as needed, and will be confirmed with the Engineer. Once approved, the additional 'no-go' areas will be considered to be an extension of the already approved controls.	Contractor /Project Engineer	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	3. No unauthorised entry, stockpiling, dumping or storage will be allowed in these areas. The ECO must ensure that all 'no-go' areas are demarcated prior to construction. The contractor must ensure that all employees on site are aware of these areas.	Contractor /Project Engineer	During construction
	4. Restrict unauthorised and unnecessary activities within the wetlands and their respective buffers (Wetland Impact Assessment, TBC 2024).	Contractor /Project Engineer	During construction
8.2.7. General and Hazardous Substances and Materials			
Impact Management Outcome: To ensure that equipment and materials are appropriately stored and handled.			
General and Hazardous Substances and Materials	1. Storage areas must not be within any watercourses and 15m post mitigation buffer associated with HGM1.	Contractor	During construction
	2. Storage areas must be designated, demarcated and fenced.	Contractor	During construction
	3. Fire prevention facilities must be present at all storage facilities.	Contractor	During construction
	4. Proper storage facilities for the hazardous substances to be used, must be provided to prevent the migration of spillage into the ground and/or groundwater around the storage area(s). These pollution prevention measures for storage should include a bund wall high enough to contain at least 110% of any stored volume.	Contractor / ESO	During construction
	5. A daily procedure of inspection and emptying of dip trays must be conducted. Servicing of dip trays must be undertaken when necessary. Drip trays must be monitored closely during rainy weather and preventative measures must be implemented to ensure prevention of overflowing and/or spillage.	Contractor / ESO	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	6. The bunded area for storage of hazardous substances must have a smooth impermeable surface and the floor of the bunded area must slope towards oil traps. Any water that collects in the bund must not be allowed to stand and must be removed immediately.	Contractor/ESO/ECO	During construction
	7. Symbolic safety signs depicting “No Smoking”, “No Naked Flames” and “Danger” are to be prominently displayed in and around the fuel storage area.	Contractor	During construction
	8. All waste fuel and chemical contaminated rags must be stored in leak-proof containers and disposed of at an approved hazardous waste site.	Contractor / ESO	During construction
	9. Material Safety Data Sheets (MSDSs) must be readily available on site for all chemicals and hazardous substances to be used on site. Where possible, the available MSDSs should additionally include information on ecological impacts and measures to minimise negative environmental impacts during accidental releases or spillages.	Contractor / ESO	During construction
	10. Staff dealing with these materials / substances must be aware of their potential impacts and follow the appropriate safety measures.	Contractor / ESO	During construction
	11. A suitable Waste Disposal Contractor must be employed to remove waste oil. These wastes must only be disposed of at licensed landfill sites designed to handle hazardous waste. Appropriate weigh bills must be provided for all hazardous waste being disposed of.	Contractor / ESO	During construction
	12. Cement / concrete must not be mixed directly on the ground. Cement mixing must be done on hardened surfaces or ‘dagga’ boards, or mixing trays and impermeable sumps must be used at all mixing and supply points. Cement mixing must be done at least 50 m away from any watercourse.	Contractor / ESO	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	13. The washing of concrete trucks on site is prohibited.	Contractor / ESO	During construction
	14. Unused cement bags are to be stored so as not to be affected by rain or run-off events.	Contractor / ESO	During construction
	15. Used cement bags must be stored in weather-proof containers to prevent windblown cement dust and water contamination. The bags should also be secured suitably so that they themselves do not become windborne litter. Used cement bags must be disposed of on a regular basis via the solid waste management system, and must not be used for any other purpose.	Contractor / ESO	During construction
	16. All visible remains of excess concrete must be physically removed on completion of the plaster or concrete pour section and disposed of. Washing the remains into the ground is not acceptable (i.e. dilution), as groundwater contamination could occur.	Contractor	During construction
8.2.8. Spills, Incidents and Pollution Control			
Spills, Incidents and Pollution Control	<p>1. In the event of a significant spillage that cannot be contained and which poses a serious threat to the environment, the following Departments must be informed within forty-eight (48) hours of the incident and in accordance with Section 30 of the NEMA:</p> <ul style="list-style-type: none"> ○ The eThekweni Municipality ○ Department of Water and Sanitation; ○ KZN EDTEA Pollution and Waste Management; ○ The Local Fire Department; and ○ Any other affected Department. 	Applicant/ECO	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	2. Any spillage, which may occur, must be investigated and immediate action must be taken according to the requirements of the Spill Contingency Plan (SOP). This must also be reported to the ECO.	Contractor	During construction
	3. A hydrocarbon spill management plan must be put in place to ensure that should there be any chemical spill out or over that it does not run into the surrounding areas.	ESO/Contractor	Ongoing
	4. Contractors must have emergency spill kits that must always be complete and available on site.	Contractor	Ongoing
	5. The Contractor must ensure that all personnel/workers during the construction phase are appropriately trained to deal with spills/leaks or an emergency situation on site.	Contractor	During construction
	6. The material, together with any contaminated soil, must be collected in skips or drums (dependent on quantity) and disposed of as hazardous waste to minimise pollution risk and reduce bunding capacity. The incident report must be submitted to the KZN EDTEA within fourteen (14) days of its issue to the KZN EDTEA Control Environmental Officer: Compliance Monitoring and Enforcement.	Contractor	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	<p>7. Should a pollution incident occur on site the Contractor must:</p> <ul style="list-style-type: none"> ○ Implement reasonable measures immediately to contain and minimise the impacts of the incident; ○ Notify all persons whose health may be affected by the incident; ○ Undertake clean up procedures immediately; ○ Notify the Contractor of the incident immediately who will advise the employee as to the measures that should be implemented; ○ Record the incident in the Environmental Incident Register; and ○ Implement measures to prevent similar incidents from occurring in the future. 	Contractor/ESO	During construction
	<p>8. Concrete mixing must be confined to as few areas as possible. Areas where concrete was mixed must be cleaned up after use. Concrete mixing is to be undertaken on an impervious surface.</p>	Contractor	During construction
7.2.11. Vegetation Clearing and Protection of Fauna and Flora			
Impact Management Outcome: Minimise disturbance and negative impacts to fauna and flora.			
Clearing and Protection Flora	<p>1. Protected trees may not be removed, pruned or cut without a permit from the Department of Forestry & Fisheries (DFFE). In the event that a permit is not required from DFFE, the ECO and/or an Ecologist must approve the removal of indigenous vegetation.</p>	Contractor	During construction
	<p>2. Areas to be developed must be specifically demarcated so that during the construction phase, only the demarcated areas be impacted upon (Terrestrial assessment, TBC 2026)</p>	Contractor	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	3. All construction/operational and access must make use of the existing roads as much as possible, the creation of new roads should be limited (Terrestrial assessment, TBC, 2026).	Contractor	During construction
	4. No natural vegetation on surrounding land is to be collected for use as firewood.	Contractor	During construction
	5. No animals are to be disturbed unnecessarily and no animals are allowed to be shot, trapped or caught for any reason.	Contractor	During construction
	6. Care must be taken to avoid the introduction of alien plant species to the site and surrounding areas.	Contractor	During Construction
	7. All Invader species and weeds must be removed and disposed of in accordance with existing legislation on a regular basis.	Contractor	During construction
	8. Areas that are denuded during construction need to be re-vegetated with indigenous vegetation to prevent erosion (Terrestrial assessment, TBC, 2026).	Contractor	During construction
	9. An Alien Invasive Plant (AIP) Management Plan must be compiled and implemented. This should regularly be updated to reflect the annual changed in AIP composition (Terrestrial Assessment, TBC, 2026).	Contractor	During construction
	10. It should be made an offence for any staff to /take bring any plant species into/out of any portion of the project area. No plant species whether indigenous or exotic should be brought into/taken from the project area, to prevent the spread of exotic or invasive species or the illegal collection of plants (Terrestrial assessment, 2026).	Contractor	During construction

7.2.12. Geotechnical Stability and Earth-works

Impact Management Outcome: Ensure earthworks are undertaken in a manner which has minimal impact on the environment.

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	1. The detailed Geotechnical Investigations must be adhered to for all earth work activities.	Contractor	During construction
	2. It is recommended that earth-works be carried out along the guidelines given in SANS 1200	Contractor	During construction
	3. Where new fills are to be placed over natural ground/undisturbed areas, boxing out of the clayey subsoils by 0.5 to 1.0m is recommended (Geotechnical Investigations, 2024).	Contractor	During Construction
	4. All site disturbances must be limited to the areas where structures will be constructed.	Contractor / ESO	During construction
	5. Foundations should be founded within competent engineered fill and should avoid weak clayey horizons and areas affected by groundwater, where practicable (Geotechnical Investigation, 2024).	Contractor	During construction
	6. Where engineered fills are to be placed within seepage zones/areas with shallow groundwater, consideration should be given to the use of suitable quality free-draining granular material towards the base of the fill (Geotechnical Investigation, 2024).	Contractor / ESO	During construction
	7. Where Ground preparation in areas which are presently underlain by dolerite derived fill should comprise general grubbing and the boxing out zones which exhibit noticeable rutting or localised depressions. Undercutting by 0.5m is recommended in such areas, with replacement materials being of a G10 or better (Geotechnical Investigation, 2024)	Contractor / ESO	During construction
	8. It is recommended that bulk earthworks be undertaken during drier climatic periods (i.e. winter) and that seepage be dealt with symptomatically where encountered (Geotechnical Investigation, 2024).	Contractor / ESO	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	9. The removal of oversized rock fragments (i.e. two thirds of layer thickness) is recommended to ensure the desired compactive effort is achieved and subsequently reduce the likelihood of obstructions being encountered during foundation construction (Geotechnical Investigation, 2024).	Contractor	During Construction
	10. It is recommended that piles be designed as being 'end-bearing'. Pile lengths are estimated to be in the order of 10 to 15m, however, actual lengths will be governed by depth to bedrock and achievable socket lengths (Geotechnical Investigation, 2024).	Contractor	During Construction
	11. Should piling be considered, it is recommended the appointed piling contractor drills a number of test pile holes prior to formal foundation construction, so as to confirm bedrock levels and obtain an indication of achievable socket lengths (Geotechnical Investigation, 2024).	Contractor	During Construction
	12. Suitable drainage measures should be implemented in areas affected by seepage or shallow groundwater to facilitate stable fill placement and minimise moisture-related geotechnical risks (Geotechnical Investigation, 2024).	Contractor	During Construction
	13. Accumulated stormwater and river flows should be diverted and deposited into appropriately sized attenuation tanks prior to controlled release into the municipal stormwater network/natural drainage lines (Geotechnical Investigation, 2024).	Contractor	During construction

7.2.14 Air Quality

Impact Management Outcome: Minimise the generation of noise.

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
Pollution Management and Odour Control	1. Any oil containing equipment or containers must be managed in a suitable manner so as to avoid oil exposure to atmosphere – the aim being to limit evaporation of volatiles to atmosphere.	Contractor	During construction
	2. Odours from chemical toilets and waste must be managed. Toilets must be serviced regularly to ensure no Daily spillages from overflowing, and to ensure minimal odour generation. Chemical toilets must be cleared and cleaned at least weekly	Contractor	During construction
	3. Removal and disposal of litter and debris must be undertaken during periods of high ventilation	Contractor	During construction
	4. No fires (for cooking or heating) are to be allowed on site. Cooking and heating alternatives for staff must be organised.	Contractor / ESO	During construction
	5. Leak detection or any similar monitoring tool must be incorporated to try identifying leaks.	Contractor/ Environmental Officer	Ongoing
	6. Vehicles must be maintained to avoid excessive emissions and smoke. Similarly, equipment must be serviced on a regular basis to ensure acceptable emission levels and no leakages of hazardous substances. It is reiterated that all plant equipment when parked must use drip trays if any leakages are found to occur.	Contractor	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
Dust Control	1. Dust track-on from disturbed areas to paved road surfaces must be avoided by making use of one of the following measures to: <ul style="list-style-type: none"> ○ Road sweeping. ○ The suitable use of chemical dust suppression or a biodegradable soil stabilising agent should be investigated for use on disturbed areas to reduce the amount of dust where water suppression is inadequate. ○ Wet suppression to the roads using a light spray of water with / without a dust suppressant. ○ The quantities of dust suppressant / water used must not result in run-off, erosion and/or muddied areas. ○ Any usage of water must be efficient and must ensure minimal usage. 	Contractor / ESO	During construction
	2. Vehicles transporting sand or finer grained materials must be covered to prevent dangers/nuisance to other road users.	Contractor / ESO	During construction
	3. If water is abstracted from a water resource for dust suppression, a Water Use Licence/ General Authorisation must be obtained from the Department of Water and Sanitation prior to first abstraction.	Contractor / ESO	During construction
	4. Dust liberated to atmosphere must not reduce the visibility for private vehicles making use of the road passing by the site.	Contractor / ESO	During construction
	5. All construction vehicles and equipment are to be kept in good repair.	Contractor / ESO	During construction
	6. Speed limits of a maximum of 40 km/hr are to be implemented on site and enforced by the Contractor.	Contractor / ESO	During construction
	7. Dust liberated to atmosphere must not reduce the visibility for vehicles making use of the road passing by the site.	Contractor / ESO	During construction
	8. Shade cloth fencing is to be used to reduce dust aggravation.	Contractor / ESO	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	9. Construction activities are to be contained to reasonable hours during the day avoiding periods of sunrise and sunset.	Contractor / ESO	During construction
	10. In areas where there is a large potential for dust liberation (high wind days) wet suppression using a light spray should be applied to the areas in question. Surplus fill material sites and stockpiles must be positioned such that they are not vulnerable to wind erosion.	Contractor / ESO	During construction
	11. A dust suppression register as well as a complaints register needs to be kept in the environmental file.	Contractor / ESO	During construction
	12. All complaints received need to be investigated with remedial action taken communicated to the affected party within 14 days.	Contractor / ESO	During construction
7.2.15 Waste Management			
Impact Management Outcome: To ensure the provisions for the proper management of waste and to reduce its impacts to the environment.			
General Waste	1. An adequate number of general waste receptacles, including bins must be arranged around the Construction Camp, on site to collect all domestic refuse, and to minimise littering.	Contractor	During construction
	2. Bins must be clearly marked and lined for efficient control and safe disposal of waste.	Contractor	During construction
	3. Different waste bins, for different waste streams must be provided to ensure correct waste separation.	Contractor / ESO	During construction
	4. fenced area must be allocated for waste sorting and storage on the site prior to disposal. All waste material generated on site, prior to being collected for safe disposal, must be stored undercover and within a designated and fenced waste storage area which must be bunded and hard surfaced. Access control to this area must be properly managed.	Contractor / ESO	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	5. General waste produced on site is to be collected in skips for disposal at a registered landfill site. Hazardous waste is not to be mixed or combined with general waste earmarked for disposal at the municipal landfill site.	Contractor / ESO	During construction
	6. No general waste is to be disposed of at the spoil area.	Contractor / ESO	During construction
	7. Under no circumstances is waste to be burnt or buried on site. The excavation and use of rubbish pits on site is forbidden.	Contractor / ESO	During construction
	8. Waste bins must be cleaned out on a regular basis to prevent any windblown waste and/or visual disturbance.	Contractor / ESO	During construction
	9. All general waste must be removed from the construction areas on a daily basis and disposed of in suitable waste receptacles at the Construction Camp.	Contractor / ESO	During construction
	10. The Contractor must ensure that all general waste is disposed of at an appropriately licensed waste disposal facility. Through exploring practical means for reducing, reusing and recycling waste generated in undertaking the activity, the Contractor must dispose of the minimum amount of waste possible.	Contractor / ESO	During construction
	11. Any form of waste material and rubble generated during construction must be removed from the site and disposed of at a facility registered in terms of section 20(b) of the NEM: WA (Act No. 59 of 2008), if it cannot be responsibly reused or recycled on site. No waste material may be buried (for the sole purpose of final disposal) or burnt. The contractor responsible for the removal of the rubble and waste must supply the ECO with a certificate indicating safe disposal	Contractor / ESO	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
7.2.16 Watercourse Management			
<i>Impact Management Outcome: To ensure the provisions for the proper management of watercourses and to reduce its impacts to the environment.</i>			
Watercourse Management	1. The stockpiling of soil or any other material must not be allowed near a watercourse or water body in order to prevent pollution or impede surface run-off.	Contractor	During construction
	2. Educate staff and relevant contractors on the location and importance of the identified wetlands through toolbox talks and by including them in site inductions as well as the making them aware of the overall site plan which should indicate sensitive areas, waste disposal areas and any other relevant project specifics (Wetland Impact Assessment. TBC 2026).	Contractor	During construction
	3. Implement measures to remove any dense stands of alien vegetation thereby preventing further colonisation of these species in disturbed areas. Mechanical removal is suggested as herbicides (unless proved to be unharmed) should not be used a control measure within the delineated wetland areas (Wetland Functional and Impact Assessment, TBC 2026).	Contractor	During construction
	4. Minimise environmental impacts by protecting the perennial drainage system and downstream wetlands from unnecessary vegetation loss and fragmentation, while restricting construction activities to the defined project footprint (Wetland Functional and Impact Assessment, TBC, 2026).	Contractor	During construction
	5. Every effort must be made to ensure that any chemicals or hazardous substances do not contaminate the soil or ground water on site. (Wetland Functional and Impact Assessment, TBC, 2026).	Contractor	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	6. Dirty water originating from maintenance activities is to be contained and disposed of correctly, to prevent the contamination of soil and/or any watercourses.	Contractor / ESO	During construction
	7. Bathing or washing of clothes, equipment, or machinery (i.e. plant) within any watercourse is prohibited.	Contractor / ESO	During construction
	8. Erosion and loss of soil must be prevented by minimising the construction areas exposed to surface water runoff.	Contractor / ESO	During construction
	9. Bare areas are to be rehabilitated as soon as the areas become available or after use.	Contractor / ESO	During construction
	10. All water consumption on site must be recorded on a daily basis.	Contractor / ESO	During construction
	11. All removed soil and material must not be stockpiled within the watercourse and buffers. Stockpiles must be protected from erosion, stored on flat areas where run-off will be minimised, and be surrounded by bunds (Wetland Functional and Impact Assessment, TBC, 2026).	Contractor/ESO	During construction
	12. The abstraction of water from any water resource for construction purposes and/ or dust suppression must not be permitted without a water use licence/general authorisation from the Department of Water and Sanitation.	Contractor / ESO	During construction
	13. Erosion prevention and sediment control measures (wetland and instream) are imperative and need to be implemented throughout the entire project footprint area of the proposed development, access roads and temporary laydown / storage sites. Temporary erosion control methods may include silt fences, interceptor ditches, seeding and sodding, riprap of exposed embankments, erosion mats, and mulching (Wetland Functional and Impact Assessment, TBC, 2026)..	Contractor	During construction
	14. A wetland offset plan must be compiled and implemented for the complete loss of HGM 2 and 3 (Wetland Functional and Impact Assessment, TBC, 2026).	Contractor	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
7.2.17 Stormwater Management			
<i>Impact Management Outcome: To ensure the provisions for the proper management of stormwater and to reduce its impacts to the environment.</i>			
Stormwater Management	1. The site specific SMP compiled by Sivist dated 9 th of December 2024 must be implemented to ensure proper management of stormwater on the site during and after construction to ensure that pollutants and sediment are not released into any water resources.	Contractor	During construction
	2. The developer/owner shall ensure that the flow path of the stormwater on his site is adequately protected against erosion (Stormwater Management Plan, 2024).	Contractor	During construction
	3. Lined and unlined channels may be constructed to convey stormwater to the major reticulation system where deemed necessary and unavoidable. The velocity in these channels must be checked for scour potential and suitable linings specified where required (Stormwater Management Plan, 2024).	Contractor	During construction
	4. DEEWF Minimise the extent of ground compaction or hardened surfaces by designating routes for the vehicles and machinery used on site (Wetland Impact Assessment, TBC 2024).	Contractor	During construction
	5. Regularly clear drains to prevent uncalled for accumulation of surface water and the establishment of concentrated flow paths out of the accumulation areas (Wetland Functional and Impact Assessment, TBC 2026).	Contractor	During construction
	6. Removal of vegetation cover must be carried out with care and attention to the effect, whether temporary or long-term, that this removal will have an erosion potential.	Contractor	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	7. Landscaping and re-vegetation of areas not occupied by buildings or paving must be programmed to proceed immediately after building works have been completed, or have reached a stage where newly established ground cover is not at risk from the construction works.	Contractor	During construction
	8. Any external parking area, yard or other paved area should, where possible, be designed to attenuate stormwater run-off. The overland flow routes must be protected from erosion and scour damage in the event of an excessive storm event (Stormwater Management Plan, 2024).	Contractor	During construction
	9. Earth-works on sites are to be kept to a minimum. Where embankments have to be formed, stabilization and erosion control measures must be implemented immediately.	Contractor	During construction
	10. Any construction, structure or area providing attenuation function should be designed to ensure that such disposal does not cause slope instability, or areas of concentrated saturation or inundation. As such NO infiltration into the surrounding soil of bulk earthwork platforms is permissible (Stormwater Management Plan, 2024).	Contractor	During construction
	11. No Driveways/access roads must not concentrate run-off onto the main road and care must be taken not to obstruct the flow in side drains found along road edges when tying into the main road system.	Contractor	During construction
	12. No substances that could have a detrimental effect on the environment may be allowed to enter the stormwater system.	Contractor	During construction
	13. Where appropriate, inlets to the stormwater system should have grates/grids that trap rubbish and prevent it from entering the system.	Contractor	During Construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	14. No percolation into the sub-soils is permitted. The proposed attenuation measures must be acceptable to both the Municipality and the Estate Management Association and comply with their respective guideline documents.	Contractor	During Construction
	15. The sands encountered on site are generally erodible and thus adequate controls to reduce stormwater run-off velocities and potential erosion damage are to be implemented and kept in place throughout the construction phase and the contractor must ensure that all control measures are continually maintained in good effective working order.	Contractor	During Construction
	16. The contractor is to install all downslope sandbagging and other controls (i.e. silt fencing, strip sodding, earth deflection berms, etc.) required before earthworks operations and building works are commenced.	Contractor	During Construction
	17. All areas that incur damage during rain storms are to be rehabilitated as soon as the area in question has dried out sufficiently to allow work to take place (within 24 hours). All remedial fill is to be adequately benched into the existing competent soil mass and compacted to 95% Mod AASHTO (Geotechnical Investigation, 2024).	Contractor	During Construction
	18. All stormwater temporarily channelled off the site must be directed in such a manner as not to cause damage to common / neighbouring grounds and must have controls in place to trap any sediment from getting into the major stormwater system. Where applicable, this can be achieved by forcing run-off through a succession of silt catches e.g. Silt fences.	Contractor	During Construction
	19. Accumulated stormwater and river flows should be diverted and deposited into appropriately sized attenuation tanks prior to controlled release into the municipal stormwater network/natural drainage lines (Geotechnical Investigation, 2024).	Contractor	During Construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	20. The permanent stormwater control reticulation should be installed as early as possible in the construction phase. All precautions must be taken to ensure sediment / run-off does not end up in common ground and neighbouring properties or the main reticulation system.	Contractor	During Construction
	21. It is essential that all completed embankments and large open areas are topsoiled and planted with vegetation as soon as practical on completion.	Contractor	During Construction
	22. Stormwater must not be allowed to pond in close proximity to building foundations.	Contractor	During Construction
	23. At the end of each working day the access route onto the site must be protected by sandbagging, to prevent the flow of stormwater and silt onto or off the site.	Contractor	During Construction
	24. Any significant stormwater ponding during the construction phase should be pumped to minimize the ingress into the subgrade, and temporary cut-offs should be provided along the shoulder of new pavement layer works during the construction phase.	Contractor	During Construction
7.2.18 Traffic and Safety			
Erosion control	1. Signs of erosion must be addressed immediately to prevent further erosion of the area to prevent head cut and gully erosion from forming.	Contractor	During Construction
	2. Any exposed earth or cleared sites (includes the areas adjacent to the proposed infrastructure) must be rehabilitated promptly by relandscaping to gentler gradients and planting suitable vegetation (vigorous indigenous grasses) to protect the exposed soil (Wetland Functional and Impact Assessment, TBC 2026).	Contractor	During Construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	3. Signs of erosion must be addressed immediately to prevent further erosion of the area to prevent head cut and gully erosion from forming. This can be addressed as it occurs by bulldozing, filling, re-contouring to gentler gradients and re-vegetating (Wetland Functional and Impact Assessment, TBC, 2026).	Contractor	During Construction
	4. Compacted soils must be lightly tilled to promote vegetation reestablishment and reduce the potential for preferential flow paths and subsequent erosion and sedimentation from occurring (Wetland Functional and Impact Assessment, TBC 2026).	Contractor	During Construction
	5. Where required, the rehabilitation of watercourse banks must take place following closure. Key areas where erosion has occurred must be rehabilitated through reshaping and the revegetation of the wetland periphery areas (Wetland Functional and Impact Assessment, TBC, 2026).	Contractor	During Construction
7.2.19 Traffic and Safety			
Impact Management Outcome: To ensure the provisions for the proper management of traffic and to reduce its impacts to the environment.			
Lane Closures	1. Temporary loading and off-loading areas and holding of construction vehicles must be designed prior to construction activities to ensure that the most preferable access and haulage routes has been identified	Contractor	During construction
	2. Road signs for all lane closures to be done in accordance to the South African Road Traffic Signs Manual.	Contractor	Prior to and during construction
	3. Construction routes must be clearly defined.	Contractor	Prior to and during construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	4. Disruption to the peak traffic periods (i.e.: 06h00 – 9h00 and 15h00 – 18h00) to be minimised or if possible avoided.	Contractor	Prior to and during construction
Pedestrian Protection	1. Pedestrians to be protected from construction activities at all times,	Contractor	Prior to and during construction
	2. The 2m wide sidewalks must be constructed along at least one side of P79 between the Link Rd intersection and the site access point (Traffic Impact Assessment, 24 December 2025).	Contractor	During construction
Construction Vehicles	1. Access of all construction and material delivery vehicles must be strictly controlled.	Contractor	Prior to and during construction
	2. Holding of all construction vehicles to be controlled to ensure that through traffic is not unnecessarily impeded.	Contractor	Prior to and during construction
	3. Vehicles and equipment must be serviced regularly to avoid the contamination of the area from oil and hydraulic fluid leaks etc. Any emergency services that need to be done on site must be done under the supervision of the site agent. If there are significant issues with any vehicles that require major servicing – this must be carried out off-site.	Contractor	Prior to and during construction
	4. Servicing of vehicles must be done off-site.	Contractor	Prior to and during construction
	5. All speed limits must be adhered to.	Contractor	Prior to and during construction
	6. Machinery or equipment used on site must not constitute a pollution hazard in respect of the above substances. The Contractor must order such equipment to be repaired or withdrawn from use if they consider the equipment or machinery to be polluting and irreparable	Contractor	Prior to and during construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	7. Drip trays or any form of oil absorbent material must be placed underneath vehicles/machinery and equipment when not in use.	Contractor	Prior to and during construction
	8. Suitably covered receptacles must be available at all times and conveniently placed for the disposal of waste. All used oils, grease or hydraulic fluids must be placed therein and these receptacles will be removed from the site on a regular basis for disposal at a registered or licensed disposal facility.	Contractor	Prior to and during construction
Road Maintenance	1. Contractors must ensure that any damage to the pedestrian walkway or holding areas are maintained in good condition by attending to any damages (e.g. road signs or stormwater damage, etc.) as soon as these develop	Contractor	Prior to and during construction
	2. If necessary, staff must be employed to clean surfaced roads adjacent to construction sites where materials have spilt.	Contractor	Prior to and during construction
	3. All temporary road signs to be removed and pavement reinstated at completion of works.	Contractor	Prior to and during construction
	4. All covered road signs to be reinstated.	Contractor	Prior to and during construction
7.2.19 Noise			
Impact Management Outcome: Minimise the generation of noise.			
Noise	1. Neighbouring landowners (in any occupied buildings) must be notified about construction activities at least 48 hours prior to commencement of the activity.	ESO/ECO	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	2. All construction vehicles and equipment are to be kept in good repair and must be fitted with standard silencers prior to construction.	Contractor/ESO	During construction
	3. Where possible, stationary noisy equipment (e.g. compressors, generators etc.) must be encapsulated in acoustic covers, screens or sheds. Portable acoustic shields must be used in the case where noisy equipment is not stationary (e.g. drills, angle grinders, chipping hammers).	Contractor	During construction
	4. Complaints Construction activities, and particularly the noisy ones, are to be contained to reasonable hours during the day and early evening	Contractor/ESO	During construction
	5. Machines in intermittent use must be shut down in the intervening periods between work or throttled down to a minimum.	ESO / Contractor	During construction
	6. In general, operations must meet the noise standard requirements of the Occupational Health and Safety Act (Act No 85 of 1993).	Contractor	Prior to and during construction
	7. Construction staff working in areas where the 8-hour ambient noise levels exceed 85 dBA must wear ear protection equipment.	Contractor	Prior to and during construction
	8. Noise levels must be kept within acceptable limits. All noise and sounds generated must adhere to SANS 10103 specifications for maximum allowable noise levels for central business districts. No pure tone sirens or hooters may be utilised except where required in terms of SANS standards or in emergencies.	Contractor/ESO	During construction
	9. Noisy operations must be combined so that they occur where possible at the same time	Contractor/ESO	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	10. Noise from labourers must be controlled. Workers must be educated regarding the minimisation of noise levels on site.	Contractor/ESO	During construction
	11. Noise suppression measures must be applied to all construction equipment. Construction equipment must be kept in good working order and where appropriate fitted with silencers which are kept in good working order. Should the vehicles or equipment not be in good working order, the Contractor may be instructed to remove the offending vehicle or machinery from site.	Contractor/ESO	During construction
	12. The Contractor must take measures to discourage labourers from loitering in the area and causing noise disturbance. Where possible labour must be transported to and from the site by the Contractor or his subcontractors by the contractor's own transport.	Contractor/ESO	During construction
	13. Construction activities are to be contained to reasonable hours during normal working hours.	Contractor/ESO	During construction
	14. Neighbours are to be given at least three (3) days warning prior to any blasting, piling or other 'noisy' activities.	Contractor/ESO	During construction
	15. In the event of any blasting being required, the Contractor shall prepare a Method Statement for approval by the ECO prior to such blasting taking place. Such Method Statement must include details around communication to the public and surrounding landowners.	Contractor	During Construction

7.2.20 Heritage

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
Heritage	1. Contractors and workers shall be advised of the penalties associated with the unlawful removal of cultural, historical, archaeological or paleontological artefacts, as set out in the National Heritage Resources Act (Act No. 25 of 1999), Section 51 (1).	Contractor/ESO	During construction
	2. If an artefact on site is uncovered, work in the immediate vicinity must be stopped immediately. The point of discovery must be demarcated and the matter must be reported to the local police station and Amafa aKwaZulu-Natali for investigation.	Contractor/ESO	During construction
	3. The “Chance Find Protocol” must form part of the Environmental Management Programme (EMPr) for the site (Heritage Impact Assessment, UMLANDO, 2026).	Contractor/ESO	During construction
	4. The contractor must take reasonable precautions to prevent any person from removing or damaging any such article and must immediately, upon discovery thereof, inform the Construction Engineer.	Contractor/ESO	During construction
7.2.21 Social Consideration			
<i>Impact Management Outcome: Ensure community inclusion, participation and awareness.</i>			
Social Consideration	1. Working hours are restricted to daylight hours. Should work be required after these hours, the ECO must be notified and any person who resides in close proximity to the site and who may be impacted upon by the disturbance should also be notified.	Contractor/ESO	During construction
	2. All neighbouring landowners and those that are disturbed due to construction activities are to be notified of construction activities and provided with regular feedback on the status of construction.	Contractor/ESO	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	3. The Contractor is to arrange for a suitable candidate to assist with the appointment of local labour and assist with labour disputes.	Contractor/ESO	During construction
7.2.22 Climate Change			
Climate Change	1. Minimise the extent and duration of vegetation clearing to reduce the loss of carbon-sequestering vegetation and maintain ecosystem functions.	Applicant/Contractor	During construction
	2. Protect biodiversity offset areas and no-go areas from construction-related disturbance to preserve their climate regulation, carbon storage, and flood attenuation functions.	Applicant/Contractor	During construction
	3. Implement erosion and sediment control measures to reduce soil degradation and maintain soil carbon stocks.	Applicant/Contractor	During construction
	4. Ensure disturbed areas are rehabilitated as soon as practicable following construction to restore vegetation cover and ecosystem resilience.	Applicant/Contractor	During construction
	5. Manage construction activities to minimise greenhouse gas emissions through efficient use of machinery, reduction of unnecessary vehicle idling, and regular maintenance of equipment.	Applicant/Contractor	During construction
	6. Prevent pollution and degradation of wetlands, watercourses, and offset areas, as these ecosystems contribute to climate change adaptation through water regulation and flood attenuation.	Applicant/Contractor	During construction
	7. Implement stormwater management measures capable of accommodating extreme rainfall events to reduce climate-related risks during construction.	Applicant/Contractor	During construction
	8. Monitor offset and rehabilitation areas for signs of climate-related impacts, such as erosion, drought stress, or excessive runoff, and implement corrective actions where necessary.	Applicant/Contractor	During construction

CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
7.2.23 Reporting & Record Keeping			
<i>Impact Management Outcome: Ensure compliance with authorisation and record keeping.</i>			
Complaints Register	1. Complaints received must be registered and recorded by the contractor and also brought to the attention of the contractor. Both parties will respond accordingly. The following information must be recorded in the case of any complaint/incident: <ul style="list-style-type: none"> ○ Time, date and nature of complaint; ○ Response and investigation undertaken; and ○ Corrective and preventative actions taken and by whom. 	ESO/ECO	During construction
	2. All complaints received will be investigated and a response is to be given to the complainant within 7 days.	ESO/ECO	During construction
Environmental Incidents Register	3. All environmental incidents occurring on the site will need to be recorded in an Environmental Incident Book and brought to the attention of the ECO. The following information must be provided: <ul style="list-style-type: none"> ○ Time, date and nature of complaint; ○ Response and investigation undertaken; and ○ Corrective and preventative actions taken and by whom. 	ESO	During construction

POST - CONSTRUCTION PHASE ACTIVITIES

7.3. POST-CONSTRUCTION PHASE – REHABILITATION /MAINTENANCE

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
7.3.1. Construction Camp			
<i>Impact Management Outcome: Ensure the site camp is removed appropriately.</i>			
Construction Areas	1. All structures comprising the construction camp are to be removed from the site and surrounding areas, including all chemical toilets and ablution facilities.	Contractor	After construction
	2. The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, diesel, etc. and these must be cleaned up.	Contractor	After construction
	3. All hardened surfaces within the construction camp area must be ripped, all imported materials removed, and the area shall be topsoiled and re-grassed.	Contractor	After construction
	4. The Contractor must arrange the cancellation of any temporary services timeously.	Contractor	After construction
7.3.2. Materials and Infrastructure			
Materials and Infrastructure	1. All residual stockpiles must be removed to spoil (at an approved dumpsite with proof of disposal) or spread on site as directed by the Applicant's Engineer or ECO.	Contractor	After construction
	2. All leftover building materials must be returned to the depot or removed from the site.	Contractor	After construction
	3. The Contractor must repair any damage that the construction works has caused to neighbouring properties.	Contractor	After construction

POST - CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	4. Fences, barriers and demarcations associated with the construction phase are to be removed from the site unless stipulated otherwise by the Applicant.	Contractor	After construction
7.3.3. Rehabilitation			
<i>Impact Management Outcome: Ensure all working areas are rehabilitated.</i>			
Rehabilitation	1. The Applicant is responsible for compliance with the provisions for Duty of Care and Remediation of Damage in accordance with Section 28 of National Environmental Management Act (NEMA), Act No. 107 of 1998.	Contractor	After construction
	2. Rehabilitation must be conducted in line with the Wetland Rehabilitation Plan compiled by The Biodiversity Company, dated May 2026.	Contractor	After construction
	3. All remaining construction materials, building rubble and waste are to be removed from the site.	Contractor	After construction
	4. Rehabilitation must include the utilisation of top soil and any disturbed area must be re-vegetated with plant and grass species which are endemic to the vegetation type. (Terrestrial assessment, 2026).	Applicant & Contractor	After construction
	5. Locally appropriate indigenous vegetation must be included in the landscape for the site.	Contractor	After construction
	6. The wetland buffer area is to be planted with indigenous plant species and maintained.	Applicant	After construction
	7. All fill banks must be planted with indigenous vegetation to ensure that erosion is controlled and minimised.	Contractor	After construction
	8. The site and surrounding areas are to be cleared of all litter.	Contractor	After construction
	9. Surfaces are to be checked for waste products from activities such as concreting or asphaltting.	Contractor	After construction

POST - CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	10. All embankments are to be trimmed, shaped and replanted to the satisfaction of the ECO.	Contractor	After construction
	11. The Contractor is to check that all watercourses are free from building rubble, spoil materials and waste materials.	Contractor	After construction
	12. Re-vegetation using whole plants must be undertaken just before or at the start of the wet season. Plants must be carefully harvested with roots and surrounding soil kept intact, stored in damp conditions and shaded until planting. Planting holes must be approximately 300–500 mm deep, with excavated soil stockpiled by horizon and backfilled in the original order. Following planting, the surrounding soil must be manually compacted to ensure successful establishment (Wetland Rehabilitation Plan, 2026).	Contractor	After construction
	13. The buffer areas must be re-vegetated with an indigenous grass species by means of seed application. The establishment of this ground cover will minimise erosion of the cleared areas, stabilising soils for the establishment of vegetation (Wetland Rehabilitation Plan, 2026).	Contractor	After construction
	14. All areas that have been disturbed by construction activities (including the construction camp area) must be cleared of alien vegetation.	Contractor	After construction
7.3.4 Wetland Offset			
	1. Where possible, roads and parking areas should be paved with permeable brick to allow the infiltration of water into the soil (Wetland Offset Strategy Report, 2026).	Contractor	After construction
	2. The areas around the development area should be hydroseeded with vigorous growing indigenous grasses that are drought tolerant to lower erosion of these key areas (Wetland Offset Strategy Report, 2026).	Contractor	After construction

POST - CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	3. Prior to the commencement of construction, implement sediment and erosion control measures throughout the site. This should include installing multiple rows of sandbags, silt traps, and silt fences particularly along access roads leading to drainage channels, around active construction zones, and near areas where foundations for buildings, service yards, or utility infrastructure are being established (Wetland Offset Strategy Report, 2026).	Contractor	After construction
	4. To prevent erosion and protect both road margins and adjacent infrastructure within the mixed-use retail and industrial development, energy dissipation measures such as strategically placed stone berms, concrete blocks, or engineered check dams must be installed along the edges of all internal roads and access routes (Wetland Offset Strategy Report, 2026).	Contractor	After construction
	5. On steeper road sections, energy dissipators should be spaced more frequently, with intervals as close as one meter apart where slopes are particularly steep or where high volumes of runoff are expected. Placement should prioritize areas near loading bays, parking lots, delivery zones, and entrances/exits to minimize erosion risks and protect both the built and natural environment (Wetland Offset Strategy Report, 2026).	Contractor	After construction
7.3.5 Site Closure			
Site closure	1. A meeting is to be held on site between the Contractor and the ECO to approve all remediation activities and ensure that the site has been restored to a condition acceptable to the ECO.	Contractor	After construction
	2. A site close-out audit is to be undertaken by the ECO prior to handover of the site by the Contractor.	Contractor	After construction
	3. The post-construction audit report must be submitted the KZN EDTEA Control Environmental Officer: Compliance Monitoring and Enforcement, within sixty (60) days of the completion of construction.	ECO	After construction

POST - CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
7.3.6 Monitoring and Maintenance			
Monitoring and Maintenance	1. The Applicant must notify EDTEA 14 days prior to the commencement of the operational phase of the development.	Applicant	After Construction
	2. An 'as-built' layout plan must be submitted to the KZN EDTEA within sixty (60) days of completion of construction.	Applicant	After construction
	3. Stormwater will be divided into two catchment, northern and southern. All stormwater must be directed as follows: the northern catchment must be attenuated correctly and must be directed into HGM 1; the southern catchment must be attenuated and directed into the channel feeding into HGM 4. The discharge points must be monitored through the stormwater monitoring plan (Wetland Impact Assessment, TBC 2026).	Applicant	After construction
	4. Rehabilitated areas must be monitored seasonally during the first two years and annually thereafter to assess vegetation establishment and identify maintenance requirements. Maintenance must include the control of alien invasive plants, weeds, and encroaching vegetation, with priority given to weed management to reduce competition and support successful revegetation (Wetland Rehabilitation Plan, 2026).	Applicant	After construction
	5. The monitoring monitoring and removal of solid waste must be continuous for the life of the development and enforced (Wetland Rehabilitation Plan, 2026).	Applicant	After construction
	6. A wetland monitoring plan should be implemented for HGM 1 and HGM 4, both located directly downstream of the project area (Wetland Impact Assessment, TBC 2024).	Applicant	After construction

POST - CONSTRUCTION PHASE ACTIVITIES

ENVIRONMENTAL ASPECT	ENVIRONMENTAL MEASURES AND ACTION PLANS	RESPONSIBILITY	TIMEFRAMES
	<p>7. The conditions of the development must be monitored for a period of three years after the development is complete to ensure that:</p> <ul style="list-style-type: none"> ○ Erosion is controlled; ○ The stormwater run-off measures are working; ○ An Environmental Complaints Register should be kept detailing complaints received, date, response and action taken; ○ Any maintenance where intrusive works are necessary should adhere to the mitigation measures put in place in the EMP; and ○ Where such measures are impractical due to the nature, duration and extent of maintenance works, a maintenance method statement should be developed prior to maintenance works being undertaken. 	<p>Applicant</p>	<p>After construction</p>

8. CONCLUSION

In order to ensure compliance, all parties undertaking the construction for Whetstone Business Park Phase 3 Mixed-Use Development must be fully acquainted with the contents of this EMPr. Penalties to be imposed for the transgression of environmental specifications are also noted along with the roles and responsibilities of all stakeholders. This will ensure that potential adverse impacts are identified, avoided or mitigated, ensuring compliance with the environmental specification and upholding the environmental commitment to compliance, the conditions of the eThekweni Metropolitan Municipality Bylaws and other related binding documentation related to the management of the environment.

APPENDIX A

ENVIRONMENTAL CODE OF CONDUCT

One of the objectives of the EMPr is to ensure that all the workforce, contractors, sub-contractors and construction staff understand environmental issues and potential impacts on site activities. This environmental code of conduct provides the basic rules that should be strictly adhered to. It is the responsibility of the Environmental Site Officer and ECO to ensure that each contractor, sub-contractor and workforce understand and adhere to the Code of Conduct.

ALL PERSONS ARE OBLIGED TO KEEP TO THE RULES OF THIS CODE OF CONDUCT

- Do not waste electricity, water or consumables;
- Only use authorised accesses;
- Do not litter;
- Dispose of solid waste to the correct waste containers provided;
- Prevent pollution;
- Use the toilet facilities provided;
- Do not dispose contaminated wastewater to the storm water or the environment;
- Immediately report any spillage from containers, plant or vehicles;
- Do not burn or bury any waste;
- Do not trespass onto private properties;
- Strictly leave all animals alone. Never tease, catch or set devices to trap or kill any animal;
- Never damage or remove any trees, shrubs or branches unless it forms part of working instructions;
- Do not deface, draw or cut lettering or any other markings on trees, rocks or buildings in the area;
- Know the firefighting procedure and locations of firefighting equipment; and
- Know the environmental incident procedures.

APPENDIX B

PROJECT START UP INSPECTION SHEET

PROJECT START UP INSPECTION SHEET

PROJECT: _____
 CONTRACT NO.: _____
 CONTRACTOR: _____

DATE: _____
 COMPLETED BY: _____

ES	ENVIRONMENTAL ASPECT	YES NO N/A	COMMENTS	ACTION
PLANNING				
ESTABLISHMENT				
CLEARANCE				

APPENDIX C

ROUTINE SITE INSPECTION SHEET

ROUTINE SITE INSPECTION SHEET

PROJECT: _____
 CONTRACT NO.: _____
 CONTRACTOR: _____

DATE: _____
 COMPLETED BY: _____

ES	ENVIRONMENTAL ASPECT	YES NO N/A	COMMENTS	ACTION
HOUSEKEEPING				
CONSTRUCTION ACTIVITIES				
REINSTATEMENT AND REHABILITATION				

APPENDIX D

SITE DECOMMISSIONING INSPECTION SHEET

APPENDIX E

SITE INSPECTION REPORT STRUCTURE

Purpose of the Site Inspection Report

The purpose of the Site Inspection Report is to describe the results of the site inspections undertaken by the Environmental Control Officer (ECO) or delegated responsible person so that the level of compliance with the Environmental Management Programme (EMPr) can be monitored throughout the contract.

It will be expected to summarise the following:

- The key results
- Trends observed
- Key issues observed
- Problems encountered
- Actions required and response taken or to be taken
- Recommendations.

The Site Inspection Report should conclude with a commentary on the overall performance of the Contractor in terms of meeting the requirements of individual/groups of Environmental Specifications and/or EMPr.

Preparation of the Site Inspection Reports

Site Inspection Reports are expected to be prepared regularly throughout a given construction contract, including (but not limited to) the following:

- Prior to the handover of the site to the Contractor
- At regular stages throughout the construction works, and particularly with the commencement of particularly significant activities
- At the decommissioning of the site and prior to the handover of the site to the Employer/Operator.

Recommended Structure for the Site Inspection Reports

The following report structure is suggested for the Site Inspection Report:

Introduction

By way of setting the context for the Site Inspection Report, this section should outline the following:

- The need for the Site Inspections, and reporting.
- Purpose of the Site Inspection Report.
- The scope of coverage of the Site Inspection

Environmental Management Requirements

This section should summarise the environmental requirements for the contract and for the construction works, and against which environmental performance is assessed.

Methodology

This should describe the activities undertaken during the site inspection, such as:

- A site walkabout with the Principal Agent (PM).
- A review of documents and records, such as complaints records and/or incidents reports maintained by the Contractor and/or ECO.
- Consultations with pertinent parties on site.

Findings of the Site Inspection

This should contain reference to the following:

-
- A commentary on the level of compliance with key aspects of the Environmental Specifications, as listed in the checklist(s).
 - Details of issues, infringements, problems and non-compliances encountered.
 - Recommendations on actions to be undertaken to address any issues, infringements and/or non-compliances.

Conclusions

This should include an overall statement on the level of compliance observed during the site inspection.

Annexures

Annexures should be used to store supporting information to the main document, such as:

- Photographs.
- A quick reference, summary table of issues of concern and the necessary corrective measures required to address these issues.

APPENDIX F

ENVIRONMENTAL INCIDENTS PENALTIES

INCIDENTS INCURRING PENALTIES	VALUE
Failure to secure construction site from public access.	R5,000.00
Failure to stockpile topsoil correctly.	R1000.00
Failure to stockpile materials in designated areas.	R500.00
Pollution of water bodies – including increased suspended solid loads.	R2,000.00
Discharging effluent and/or storm water onto the ground or into surface water	R1,000.00
Failure to provide adequate sanitation, waste disposal facilities or services.	R1,000.00
Failure to demarcate construction area boundaries before commencing construction clearance and other activities	R1,000.00
Insufficient education of employees regarding environmental matters and site housekeeping practices	R500.00
Use of soil in an unspecified manner	R500.00
Inappropriate mixing of cement/concrete and poor management of slurry	R1,000.00
Unauthorised removal of indigenous trees, medicinal or other plants.	R1,000.00
Damaging/killing animals/birds.	R1,500.00
Failure to reinstate disturbed areas within the specified timeframe.	R1,000.00
Fire – costs of runaway fires will be borne by the Contractor, should he/she be proven responsible for such fires.	R5,000.00
Failure to provide equipment for emergency situations	R1,000.00
Defacing, painting or damaging natural or heritage features and private property	R1,000.00
Damaging cultural, historical and/or archaeological sites of importance	R5,000.00
Failure to maintain basic safety measures on site	R1,000.00
Failure to obey site protection measures specified by the Project Manager	R1,000.00
Failure to carry out required community liaison, damage to property etc., without prior negotiation and/or compensation and other social infringements	R500.00
Persistent and un-repaired oil leaks from machinery. The use of inappropriate methods of refuelling.	R500.00
Failure to provide drip trays and/or empty them frequently.	R500.00
Inappropriate use of bins and poor waste management on site.	R200.00
Inappropriate off-site disposal of waste from site.	R1,000.00
Deliberate lighting of illegal fires on site.	R500.00
Eating of meals on site outside the defined eating area. Individual not making use of the site ablution facilities.	R100.00
Dust or excess noise on or emanating from the site.	R500.00
Inappropriate use of watercourses and water bodies – such as for unapproved water abstraction, washing of vehicles, wastewater disposal and use by employees for washing.	R2,000.00
Failure to comply with specifications for working within a wetland and stream.	R 10,000.00
Any person, vehicle, item of plant, or anything related to the Contractor's operations causing a public nuisance.	R1,000.00
Improper use of plant or equipment.	R500.00
Construction vehicles not adhering to speed limits.	R250.00
Failure to maintain a register of incidents on site.	R1,000.00
Failure to remove all temporary features and leftovers from the construction site and works areas upon completion of the works.	R20,000.00
Repeated contravention of the specifications or failure to comply with instructions	R5,000.00