



Indwe



Environmental Consulting

PROJECT TITLE	PROPOSED CONSTRUCTION OF OAKWOOD CHICKEN BROILER HOUSES FOR THE PRODUCTION OF POULTRY WITHIN AMAHLATHI LOCAL MUNICIPALITY, AMATHOLE DISTRICT, EASTERN CAPE
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DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME

PROPOSED CONSTRUCTION OF OAKWOOD CHICKEN BROILER HOUSES FOR THE PRODUCTION OF POULTRY WITHIN AMAHLATHI LOCAL MUNICIPALITY, AMATHOLE DISTRICT, EASTERN CAPE

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1. INTRODUCTION

Background Information

Indwe Environmental Consulting has been appointed by ANCA Foods (Pty) Ltd as the Professional Service Provider (PSP) to conduct an Environmental Impact Assessment in terms of the National Environmental Management Act (NEMA) (Act 107 of 1998) for the proposed construction of the Oakwood Chicken Broiler Houses for the production of poultry occurring within the Amahlathi Local Municipality, Amathole District, Eastern Cape. The project will include two sites with the construction of eight broiler houses per site.

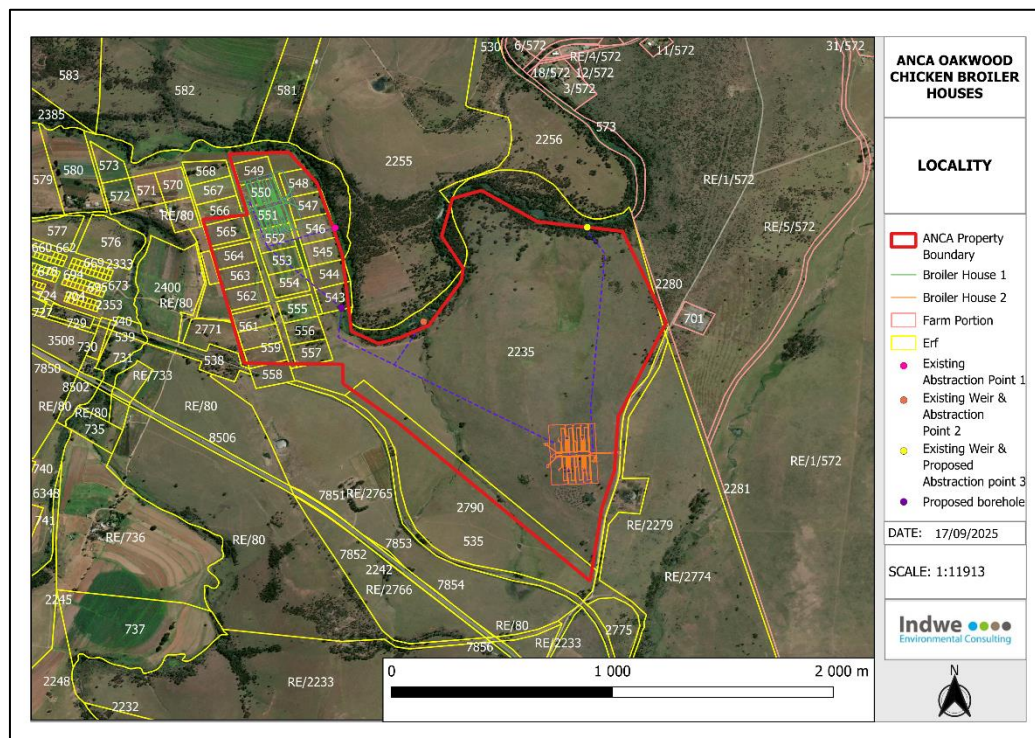


Figure 1: Aerial locality of the proposed chicken broiler houses.

Project Location

The proposed Oakwood Chicken Broiler Houses will occur 3.5 km south-east of Stutterheim in the Eastern Cape (Figure 1). The precise co-ordinates of two broiler sites are 32°35'34.79"S, 27°27'29.18"E; and 32°36'18.26"S, 27°28'22.40"E, respectively, within the Amahlathi Local Municipality. The proposed broiler houses will be constructed on erven 546, 547, 548, 549, 550, 551, 552, and 2235. In terms of access to the proposed sites, existing gravel roads are available. The main watercourse in the area, the Kubusi River (perennial watercourse), acts as the cadastral boundary of the properties that the project falls on.

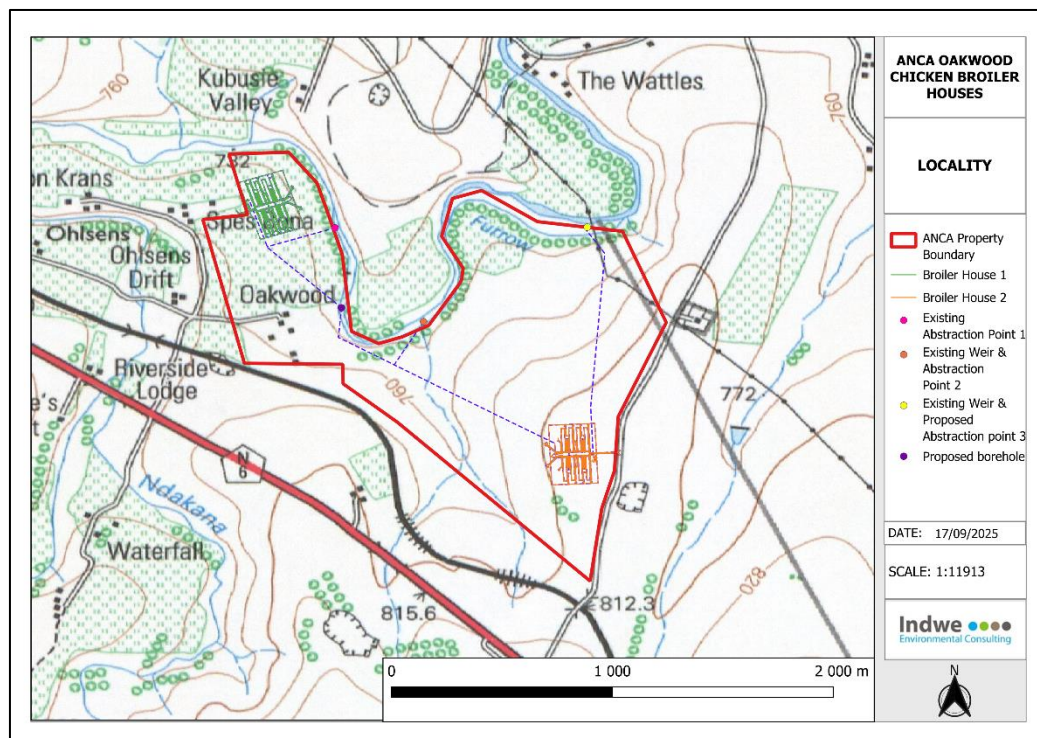


Figure 2: Topographical locality of the proposed chicken broiler houses.

Project Description

ANCA Foods (Pty) Ltd wish to increase their poultry production and thus require construction of new environmentally controlled chicken broiler house facilities. Two sites are proposed, with each site consisting of eight enclosed broiler houses within a separately fenced-in operational area that includes ancillary buildings such as a staff eating and washing area and services (e.g. stormwater, water and sewerage). Each broiler house will be 1800m² and have a maximum capacity of 42 000 chickens per house. The construction of the broiler houses will require the clearance of approximately 12 hectares of agricultural land.

In terms of access to the proposed sites, existing 4m gravel access roads will be utilised, and mitre drains will be installed where necessary. Three-phase electricity is available for the proposed development to tie into.

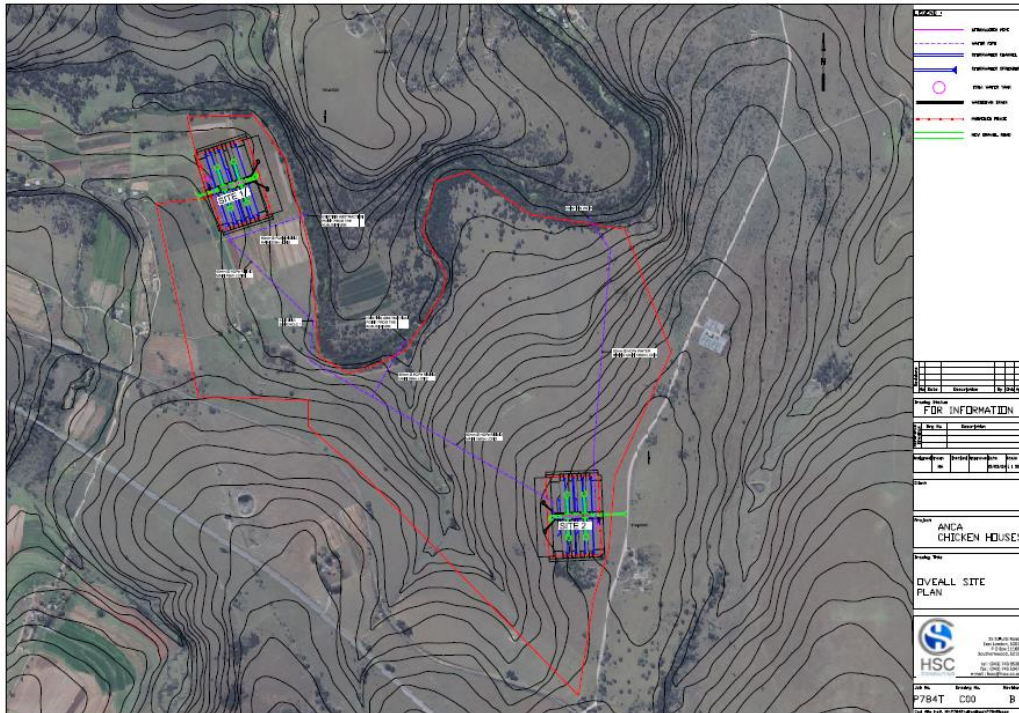


Figure 3: Design of the proposed broiler houses.

According to the Aquatic Biodiversity Assessment by GroundTruth (2025), the aquatic ecosystems that are hydrologically linked to two proposed broiler houses identified four aquatic ecosystems namely a riverine system, two hillslope seep wetlands, and a channelled valley-bottom (CVB) wetland (Figure 4).

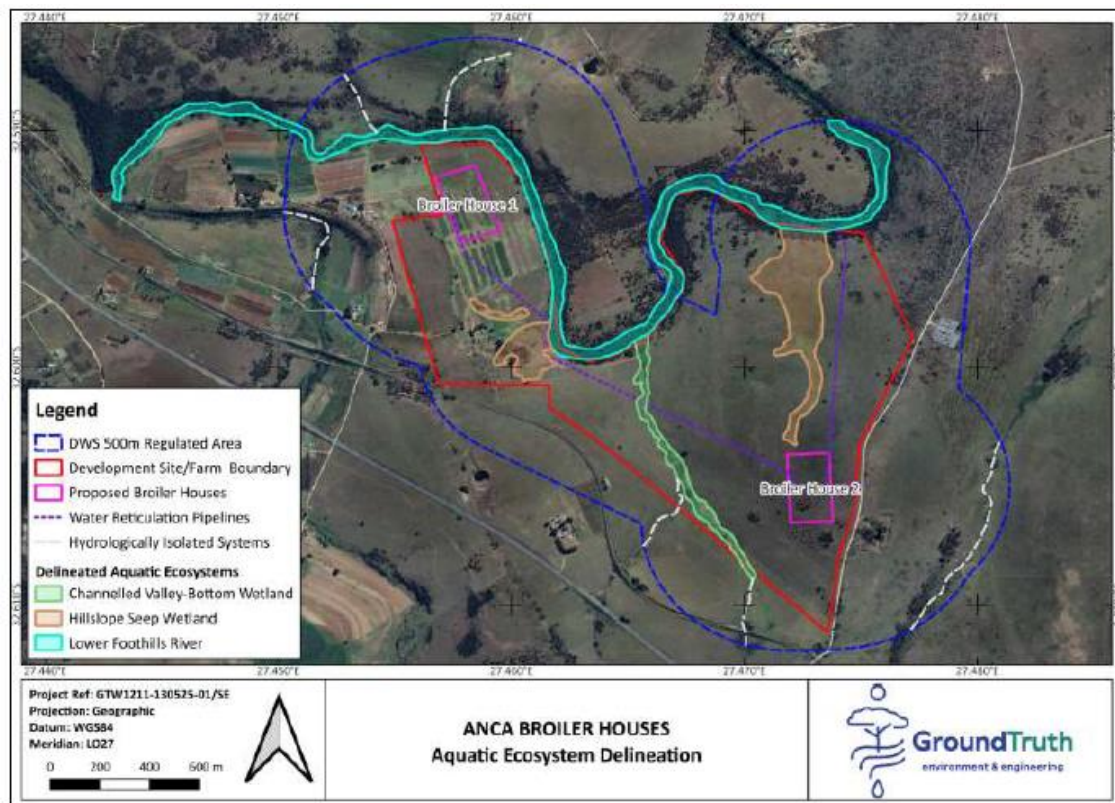


Figure 4: Aquatic ecosystems and hydrologically isolated features within 500 m of the proposed development.

It was noted that the SEEP requires a buffer of up to 21 m during the construction phase under the poor mitigation scenario, compared to 15 m under best-case mitigation. The CVB system and the Kubusi River require a consistent 15 m buffer under both scenarios for the construction phase. Refer to Figure 5 for the wetland buffer for the construction phase (mitigated) for the freshwater ecosystem habitat.

During the operational phase, SEEP requires a buffer of up to 63 m under the poor mitigation scenario, compared to 32 m under best-case mitigation, with the CVB system requiring a consistent 16 m buffer under both scenarios. The Kubusi River shows a reduction in buffer width from 44 m (poor mitigation) to 17 m (best-case mitigation) during the operational phase. Refer to Figure 6 for the wetland buffer for the operational phase (mitigated) for the freshwater ecosystem habitat.

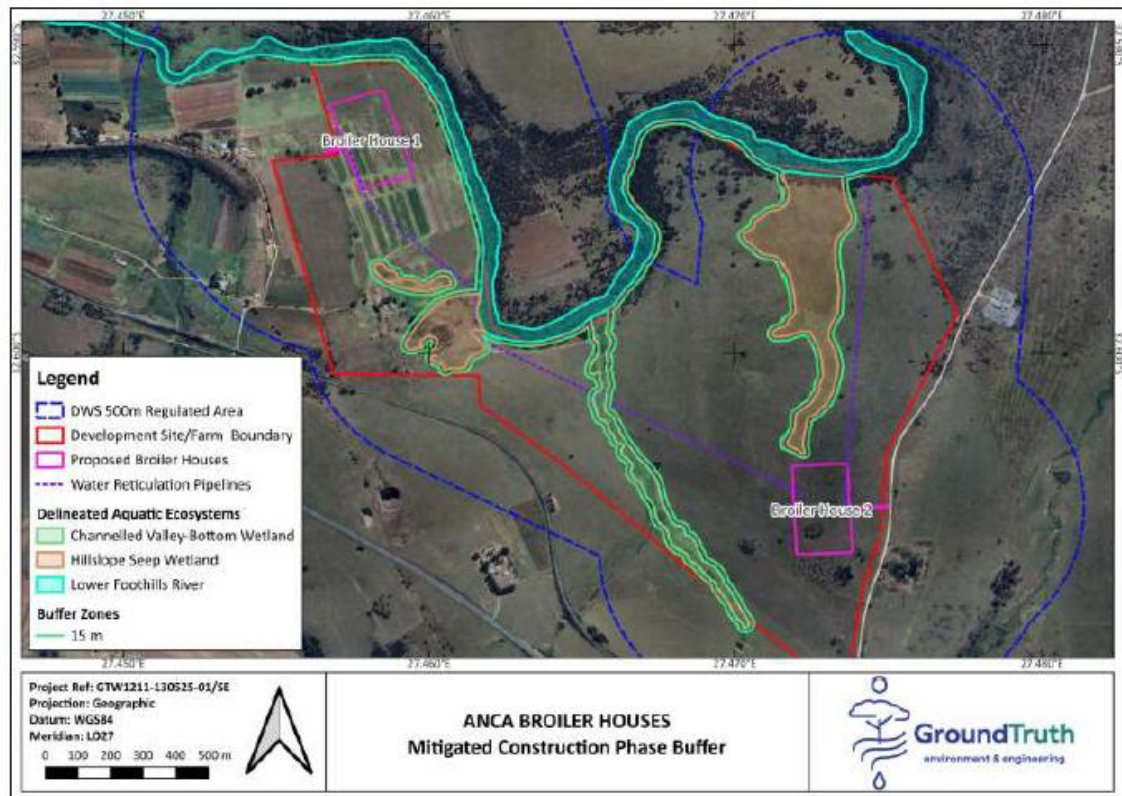


Figure 5: Wetland buffer for the construction phase (mitigated) for the freshwater ecosystem habitat.

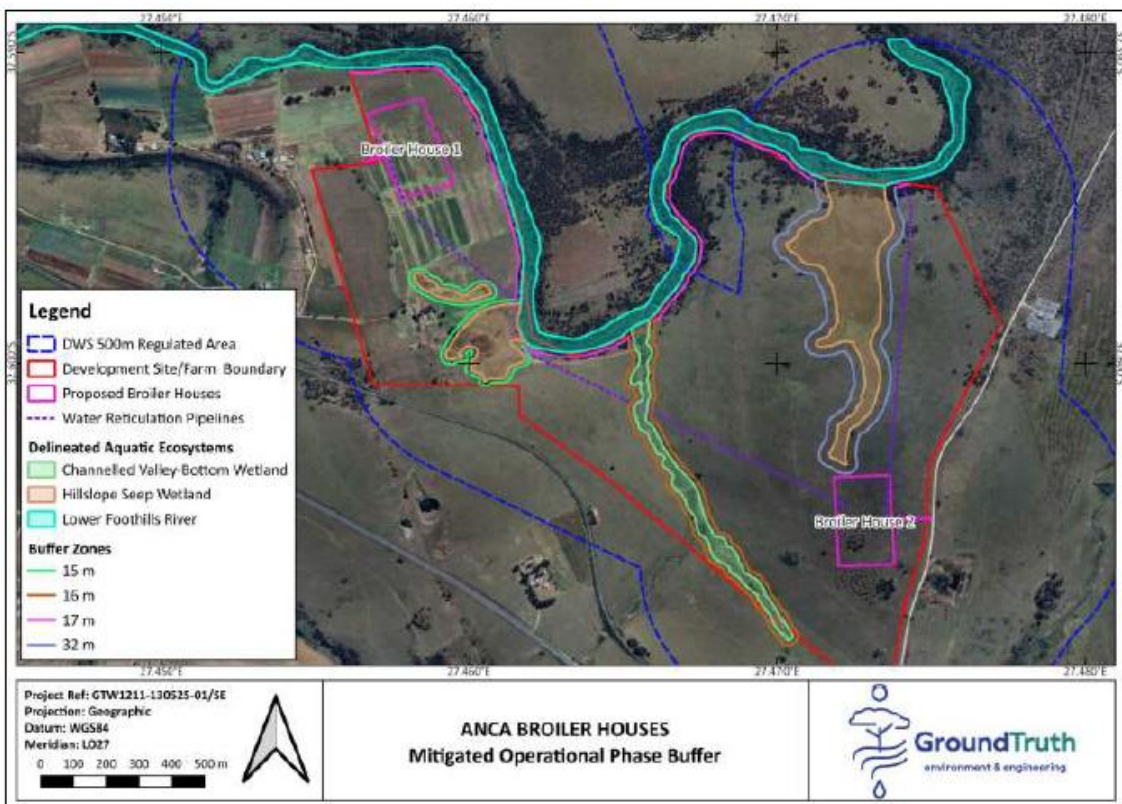


Figure 6: Wetland buffer for the operational phase (mitigated) for the freshwater ecosystem habitat.

The listed activities that are triggered in terms of the EIA Regulations, 2014, as amended are as follows:

Table 1: Listed activities triggered by the project

Listing Notice No. and Activity No.	Listed Activity	Development Activity
Listing Notice 1 – GN 327: Activity 5	<p>The development and related operation of facilities or infrastructure for the concentration of -</p> <p>(ii) more than 5 000 poultry per facility situated outside an urban area, excluding chicks younger than 20 days;</p> <p>(iv) more than 25 000 chicks younger than 20 days per facility situated outside an urban area.</p>	<p>Each broiler house will be able to house 42 000 birds of ages both younger than 20 days old and older than 20 days old, outside of an urban area. Therefore, it is anticipated that this activity will be triggered.</p> <p>The precise co-ordinates of the two broiler sites are 32°35'34.79"S, 27°27'29.18"E; and 32°36'18.26"S, 27°28'22.40"E, respectively, within the Amahlathi Local Municipality</p>
Listing Notice 1 - GN 327: Activity 19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;	The infilling or depositing of material greater than 10 cubic metres within a watercourse for the 50 mm rising main is expected, thereby triggering this activity.
Listing Notice 1 - GN 327: Activity 27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation.	Each broiler house will be 1800 m ² , and therefore the footprint of the houses alone would be 2.9 ha in extent. Additional clearing for ancillary infrastructure will create an overall footprint of 12 ha, thereby triggering this activity.
Listing Notice 3 - GN 324: Activity 4	<p>The development of a road wider than 4 metres with a reserve less than 13,5 metres.</p> <p>a. Eastern Cape</p> <p>i. Outside urban areas:</p> <p>(gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of</p>	The northern broiler house's (known as Broiler House 1) current informal gravel access road will be upgraded to a 5 m gravel access road and will occur within 5 km of a protected area, which is the Stutterheim Nature Reserve and will therefore trigger this activity.

	NEMPAA or from the core areas of a biosphere reserve, excluding disturbed areas;	
Listing Notice 3 - GN 324: Activity 14	<p>The development of—</p> <p>(ii) infrastructure or structures with a physical footprint of 10 square metres or more;</p> <p>where such development occurs—</p> <p>(a) within a watercourse;</p> <p>(b) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</p> <p>a. Eastern Cape</p> <p>i. Outside urban areas:</p> <p>(hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;</p>	<p>It is anticipated that the 50 mm rising main pipeline at the northern broiler house (known as Broiler House 1) will traverse various watercourses and will have a cumulative footprint greater than 10 square metres and will occur within 5 km of the Stutterheim Nature Reserve, which is a formal protected area, thereby triggering this activity.</p>

Draft EMPr

This report is the draft EMPr and should be updated with the conditions of environmental authorisation prior to project implementation.

General Environmental Principles

The following principles should be considered at all times during the implementation of this project:

1. The Environment is considered to be composed of both biophysical and social components.
2. Minimisation of areas disturbed by construction (i.e. the footprint of construction activities) should minimise many of the related environmental impacts of the project and reduce rehabilitation requirements and costs.
3. As minimum requirements, all relevant standards relating to international, national, provincial and local legislation, as applicable, shall be adhered to. This includes the following legislation which can, inter alia, have an effect on construction activities or the

environment. This list is not necessarily complete and the onus shall remain on the Proponent and Contractor to ensure that all relevant legislation is conformed with.

- a. National Environmental Management Act (No. 107 of 1998).
 - b. National Water Act (No. 36 of 1998).
 - c. National Heritage Resources Act (No. 25 of 1999).
 - d. Conservation of Agricultural Resources Act (No. 43 of 1983).
 - e. National Environmental Management: Biodiversity Act (No. 10 of 2004).
 - f. Occupational Health & Safety Act (No.85 of 1993).
 - g. National Dust Control Regulations, 2013, in terms of section 53 (o), read with section 32 of the National Environmental Management: Air Quality Act, 2004 (Act no. 39 of 2004).
 - h. All relevant provincial legislation, Municipal by-laws and ordinances.
4. Every effort should be made to minimise, reclaim and/or recycle “waste” material.
 5. The Environment is held in public trust for the benefit of people, due care must therefore be exercised to ensure that the rights of others with respect to its use are respected. This requires that a risk averse and cautious approach to the management of activities associated with the project be adopted at all times.

2. ROLES AND RESPONSIBILITIES

2.1 Project Proponent (ANCA Foods Pty Ltd)

The Proponent will be responsible for:

1. Appointment of a Consulting Engineer (CE) to oversee the implementation of the works.
2. Appointment of an Environmental Control Officer (ECO).
3. Ensure that all permits, authorisations and associated conditions regarding site establishment and construction activities are in place.
4. Being familiar with the contents of the EMPr.
5. Making sufficient budget available for implementation of the EMPr including a provisional sum for additional environmental protection measures that may be necessary as construction and rehabilitation proceeds.
6. Supporting the Consulting Engineer in enforcing the Environmental Specifications.
7. Communicating with all role players in the interests of a co-ordinated effort to protect the environment.
8. Implement and take responsibility for those specifications relating to the operational phase of the project.
9. Where the project proponent physically undertakes construction work, then the roles and responsibilities of the Contractor apply.

2.2 Consulting Engineer (HSC Consulting)

The Consulting Engineer (CE) is required to:

1. Ensure that Contractors are aware of and familiar with the contents of the EMPr.
2. Be familiar with the contents of the EMPr.
3. Assist with monitoring the Contractor's compliance to the specifications contained within this document and enforce compliance when deemed necessary.
4. Together with the ECO, review and approve method statements received from the Contractor.
5. Issue site instructions giving effect to the ECO requirements contained in audit reports.
6. Discuss with the ECO the application of any penalties and other possible enforcement measures when necessary.
7. Facilitate communication between all role-players in the interest of effective Environmental Management.

2.3 Contractor (Main Contractor)

The Contractor is required to:

1. Be familiar and comply with the contents of this EMPr.
2. Sign a letter as commitment to implementing the EMPr.
3. Compile an environmental site file and keep accurate and detailed records of all activities on site.
4. Regularly conduct environmental awareness training amongst all site personnel.
5. Prepare method statements and obtain approval from the CE and ECO for all work that will take place in environmentally sensitive areas.
6. Undertake rehabilitation of all areas affected by construction activities to restore them to their original states, as determined by the ECO.
7. Report all incidences of non-compliance with the content of the EMPr to the ECO.
8. Timeously implement mitigation measures for non-compliances identified in previous audit reports.
9. Ensure all sub-contractors are aware of the EMPr and environmental conditions.

2.4 Environmental Control Officer

The ECO is responsible for:

1. Conducting an induction session with the Consulting Engineer and main Contractor on the content and requirements of the EMPr.
2. Confirming that all permits required in terms of the applicable legislation have been obtained by the contractor prior to construction commencing.
3. Undertaking regular site inspections to ensure that the provisions contained within this EMPr and all other permit conditions are complied with throughout the construction period.
4. Undertaking periodic audits to measure the Contractors compliance with the provisions of the EMPr and distribute these reports to the relevant parties.
5. Keeping a photographic record of progress on site from an environmental perspective.
6. Checking that the required actions are/were undertaken to mitigate the impacts resulting from non-compliance identified in previous site inspections and compliance audits.
7. Monitoring the Contractors environmental awareness training for all personnel on site.
8. Reviewing and approving construction method statements in conjunction with the Engineer prior to work commencing.
9. Undertaking a detailed close out post construction compliance audit and distribute these reports to the relevant parties.

3. REPORTING AND ADMINISTRATION

3.1 Environmental Site File

The Contractor is to maintain an environmental site file which must contain the following:

1. A copy of this EMPr.
2. All relevant authorisations, permits and licences.
3. Records of attendance and proof of on-going environmental awareness training of all personnel.
4. Copies of the approved method statements.
 - a. Hazardous and General waste control
 - b. Concrete mixing
 - c. Site camp establishment, including location, layout and rehabilitation procedures for decommissioning
 - d. Material acquisition (sand, stone, and other building materials)
5. An emergency incidence register.
6. A register of public complaints.
7. A copy of all previous site inspection and audit reports.
8. A copy of all relevant correspondence of an environmental nature (toilet cleaning receipts from supplier and waste removal receipts).
9. Any other information of environmental importance.

The environmental file must be kept on site and made available to any authority that requests to review its contents.

3.2 Environmental Induction & Awareness and Training

1. Before construction commences the ECO must coordinate an induction session with the Contractor. The ECO must brief the contractor on the specifications contained within the environmental management programme as well as all conditions of authorisation.
2. The Contractor shall be responsible for conducting regular toolbox talks with all employees in order to ensure that they have the necessary knowledge to comply with the specifications contained in this EMPr.
3. Environmental awareness training programmes shall contain the following information:
 - The names, positions and responsibilities of personnel that training will be provided.
 - The framework for appropriate training plans.
 - The summarised content of each training course.

- A schedule for the presentation of the training courses.
4. Copies of all attendance registers as proof of training must be kept in the site environmental file.
 5. The Proponent (ANCA Foods Pty Ltd) shall ensure that environmental training takes place (see **Appendix A** for an example of an environmental education and awareness guideline to use). All employees shall be given an induction presentation on environmental awareness and the content of the EMPr (to be done by the ECO). The presentation needs to be conducted in the language of the employees to ensure it is understood. The environmental training shall, as a minimum, include the following:
 - The importance of compliance with all available environmental policies.
 - The environmental impacts, actual or potential, associated with their work activities.
 - The environmental benefits of improved personal performance and liability.
 - Their roles and responsibilities in achieving compliance with the environmental policy and procedures and with the requirement of the entities environmental management systems, including emergency preparedness and response requirements.
 - The consequences of noncompliance with the relevant systems
 - The mitigation measures required to be implemented when carrying out their work activities.
 - Environmental legal requirements and obligations.
 - Details regarding archaeological and/or historical sites which may be unearthed during construction and the procedures to be followed, should these be encountered.

3.3 Method Statements

1. Work in environmentally sensitive areas (areas of indigenous bush, watercourses, etc.) will require method statements that reflect the manner in which the Contractor intends to protect the environment while conducting construction work within the area.
2. Any other aspect of environmental management may require a method statement (i.e. waste disposal, concrete batching, etc.). This especially applies where there is a deviation from the EMPr specifications.
3. These method statements are required 7 days prior to any work commencing within sensitive areas, and then the work may only start once the method statements have been approved by the CE and ECO.
4. An example of a method statement can be found in **Appendix B**.

4. PROJECT PHASES

Environmental specifications have been split according to the project phases:

a) Planning and Design Phase

The Planning and Design Phase includes all activities that are taking place up to appointment and establishment of a contractor on site. This phase does not include site clearance.

b) Construction Phase

The Construction Phase includes all activities from site establishment, site clearance, by a contractor to practical completion of construction activities and typically ends when the final payment certificate has been processed by the site agent. This phase usually terminates on completion of civil services.

c) Operation and Maintenance Phase

The Operation Phase commences once the site has been handed over by the principal contractor. Essentially the proponent will be responsible to ensure that the relevant specifications are implemented to safeguard the environment during the operational phase. It should be noted that should there be further construction activities taking place, post the Construction Phase, then the specifications of the Construction Phase will still apply.

d) Closure and Decommissioning Phase

This phase is applicable to any closure, decommissioning or rehabilitation aspects of the project.

5. ENVIRONMENTAL SPECIFICATIONS – PLANNING & DESIGN PHASE

5.1 General Legal Compliance

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. All other licenses, permits and other authorisations must be obtained prior to construction commencing on site.	Project Proponent	Before Construction

5.2 Environmental Authorisation Compliance

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. The Environmental Authorisation must be assessed to determine the requirements and to comply with all conditions outlined therein. All professionals, including architects, must familiarize themselves with the Environmental Authorisation conditions and the EMPr.	Project Proponent Consulting Engineer Contractor ECO	Before Construction

5.3 EMPr Compliance

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. This EMPr must be signed by the Main Contractor	Project Proponent	Before Construction
2. An ECO must be appointed for the construction phase.	Project Proponent	Before Construction

6. ENVIRONMENTAL SPECIFICATIONS – CONSTRUCTION PHASE

6.1 Site Camp Establishment and Management

In the event that a site camp is required for this project, the following guidelines must be adhered to for site camp establishment and operation:

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. The Contractor shall ensure that the site camp is located in a manner that does not adversely affect the environment and which is easily accessible.	Contractor	Before Construction
2. Prior to site camp establishment, the Contractor must supply the ECO with a layout plan demarcating the location and physical extent of the site camp including access road, offices, workshops, laydown areas, topsoil stockpile areas, etc.	Contractor	Before Construction
3. This plan must be approved by the ECO prior to any clearing taking place.	ECO	Before Construction
4. The Contractor must erect a fence around the site camp and install lockable gates at the entrance.	Contractor	Before Construction
5. The Contractor is to provide sufficient information and emergency signage at the entrance as well as within the site camp.	Contractor	Before Construction
6. Topsoil must be removed and stockpiled from all areas within the site camp that will be used for storage purposes (i.e. sand & stone, pipeline sections, diesel bund, containers etc.).	Contractor	During Site Establishment
7. Topsoil must be stockpiled in such a manner and in such a place that it will not cause damming of water or lead to erosion.	Contractor	During Site Establishment
8. The site camp must be maintained in a clean orderly and presentable condition at all times.	Contractor	Throughout Construction period

6.2 Construction and Development Footprint

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. Prior to work commencing, the contractor must supply the ECO with a layout plan demarcating the location and physical extent of trenching and construction works.	Contractor ECO	Before Construction
2. This plan must be approved by the ECO prior to any clearing taking place.	ECO	Before Construction
3. ECO is to assist the contractor in defining No-Go areas.	ECO	Before Construction
4. In order to avoid unnecessary disturbance, all work	Contractor	Before Construction

areas must be clearly demarcated and work is to be limited to within these work areas.		
5. Construction vehicles may only be permitted and managed within the demarcated working areas or on existing roads. No-Go areas are to be strictly avoided.	Contractor	Before Construction
5. Designated entry and exit points should be demarcated and used by all construction vehicles to gain access to the site.	Contractor	Throughout Construction Period
6. Vehicles should only utilize demarcated roads and turning areas within the construction site to limit the area of impact.	Contractor	Throughout Construction Period
7. No disturbance is to occur outside of the development footprint area during construction, and all material arising from the development must be prohibited from entering the freshwater habitats and associated buffer zones.	Contractor	Throughout Construction Period

6.3 Emergency Preparedness Plan

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. The Contractor must create an Emergency Preparedness Plan which addresses specific measures relating to the following emergency risks: <ul style="list-style-type: none"> • Fire management and response • Spill management and incident response • Waste management and incident response • Response to emergency site shutdown, including labour and protest actions. 	Contractor	Before Construction
2. The Emergency Preparedness Plan must be reviewed and approved by the ECO.	ECO	Before Construction

6.4 Soil Disturbance

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. The construction zone should be demarcated and the activities that should be implemented to minimise the area of soil disturbance and the potential for mobilisation of sediments from bare areas include: <ul style="list-style-type: none"> • Soil stabilisation practices such as sediment blankets and mulching, introduced onsite. • Earth dikes and diversions to direct all storm flows from disturbed areas into silt traps. 	Contractor	Throughout Construction Period

6.5 Water Quality Impairment Management

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
2. A method statement must be developed indicating how the contractor will minimise the passage of contaminants such as fuel and cement into the stream. This method statement must be approved by the ECO prior to the commencement of construction activities.	Contractor	Throughout Construction Period
3. Fuel, chemicals, and other hazardous substances should preferably be stored offsite, or as far away as possible from no-go areas identified by the ECO. These substances must be stored in suitable secure weather-proof containers with impermeable and bunded floors to limit pilferage, spillage into the environment, flooding, or storm damage.	Contractor	Throughout Construction Period
4. Inspect all storage facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected.	Contractor	Throughout Construction Period
5. Mixing and transferring of chemicals or hazardous substances must take place outside of the watercourses and their associated buffer areas, and must take place on drip trays, shutter boards or other impermeable surfaces.	Contractor	Throughout Construction Period
6. Drip trays must be utilised at all fuel dispensing areas.	Contractor	Throughout Construction Period
7. Dispose of used oils, wash water from cement and other pollutants at an appropriate licensed landfill site.	Contractor	Throughout Construction Period
8. Dispose of concrete and cement-related mortars in an environmental sensitive manner (can be toxic to aquatic life). Disposal of any of these waste materials into the stormwater system or the stream is strictly prohibited.	Contractor	Throughout Construction Period
9. Clean up any spillages immediately with the use of a chemical spill kit and dispose of contaminated material at an appropriately registered facility.	Contractor	Throughout Construction Period
10. Washout must not be discharged into no-go areas or the stormwater system. A washout area should be designated, and wash water should be treated on-site.	Contractor	Throughout Construction Period

6.6 Solid Waste Management

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. The Contractor shall provide sufficient weather and scavenger proof waste bins within the site camp.	Contractor	Throughout Construction Period
2. Litter within the site camp must be picked up on a daily basis.	Contractor	Throughout Construction Period
3. Recycling and waste minimisation practices must be encouraged i.e. separate skips should be available for different recyclable waste.	Contractor	Throughout Construction Period
4. All waste bins shall be regularly emptied and the accumulated waste disposed of at an appropriately permitted waste disposal site. The contractor is to keep documented proof of waste disposal.	Contractor	Throughout Construction Period
5. The burning or burying of any waste within the site camp is strictly prohibited.	Contractor	Throughout Construction Period

6.7 Hazardous Materials, Fuel and Waste Management

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. All hazardous material must be stored at a dedicated hazardous waste container/containment area.	Contractor	Throughout Construction Period
2. The hazardous waste container/containment area must be maintained in a clean, orderly state and presentable condition at all times.	Contractor	Throughout Construction Period
3. Diesel storage tanks shall be bunded with a 110% storage volume and the bund is to be fitted with a drainage control valve.	Contractor	Throughout Construction Period
4. The contractor will be required to conduct all routine servicing of machines and equipment within a designated area within the site camp, excluding emergencies.	Contractor	Throughout Construction Period
5. The Contractor shall ensure that there are adequate facilities for the handling and storage of used parts, oils, grease, cleaning fluids and fuels.	Contractor	Throughout Construction Period
6. Drip trays are to be placed under plant and vehicles that are parked overnight and must be available for use at the servicing area. The disposal of the contents of drip trays is to be in accordance with relevant hazardous materials disposal requirements.	Contractor	Throughout Construction Period
7. Hazardous material spill kits must be kept within the site camp and be accessible at all times.	Contractor	Throughout Construction Period
8. Hazardous material spills are to be avoided as far as is practically possible. Where spills occur	Contractor	Throughout Construction Period

compromised soil/vegetation should be removed and disposed of in a hazardous waste drum.		
9. No hazardous chemicals used and/or spilled during the construction process must enter the riparian zones, wetlands or groundwater. If such a spill occurs during and/or on completion of the construction, a hazardous spill protocol must be implemented and the affected area cleaned up immediately.	Contractor	Throughout Construction Period
10. The Contractor is to record all hazardous material spills in the emergency incidence register.	Contractor	Throughout Construction Period
11. All collected and stored hazardous waste must be disposed of at a registered waste handling facility for toxic/hazardous materials/chemicals.	Contractor	Throughout Construction Period
12. Receipts from such sites must be kept in the environmental file.	Contractor	Throughout Construction Period

6.8 Sanitation/Ablutions

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. Adequate toilet facilities for men and women are to be provided for at the site camp.	Contractor	Throughout Construction Period
2. These toilets are to be maintained and serviced by a reputable service provider.	Contractor	Throughout Construction Period
3. Receipts from the service provider must be kept in the environmental file.	Contractor	Throughout Construction Period
4. Any spills relating to chemical toilets are to be responded to and cleaned up with immediate effect and the contaminated soil and vegetation disposed of as hazardous waste	Contractor	Throughout Construction Period
5. No long drop toilets are permitted on site.	Contractor	Throughout Construction Period

6.9 Fire

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. The lighting of fires is strictly forbidden.	Contractor	Throughout Construction Period
2. Smoking may only take place in areas that have been cleared of their vegetation and not near any flammable substances. It is preferable for smoking to take place in a dedicated spot within the site camp.	Contractor	Throughout Construction Period
3. Care must be taken to ensure that completed cigarettes are correctly extinguished.	Contractor	Throughout Construction Period
4. There must be an emergency preparedness plan in	Contractor	Throughout

place in order to fight accidental fires or veld fires. The adjacent landowners/ users/ managers should also be informed or otherwise involved.		Construction Period
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6.10 Cultural and Heritage Areas

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1 In the event of a grave being disturbed, or artefacts being uncovered, work is to stop immediately and the area must be secured, under no circumstances is the site to be covered over or efforts made to remove or relocate the remains or the artefacts	Contractor	Throughout Construction Period
2 Work at the point of the discovery is to cease, and may not recommence until such time as guidance from the ECO has been received. The point of discovery is to be clearly demarcated and no unauthorised entry should be permitted.	ECO Contractor	Throughout Construction Period
3 The ECO is to contact the national/provincial heritage agency or a suitably qualified and recognised specialist for guidance on the way forward.	ECO	Throughout Construction Period
4 Construction managers/ foremen and/or the Environmental Control Officer (ECO) should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.	ECO Contractor	Throughout Construction Period

6.11 Palaeontological Features

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. If fossil remains are discovered during any phase of construction, either on the surface or exposed by excavations, the Chance Find Protocol must be implemented by the ECO/site manager in charge of these developments. These discoveries ought to be protected (if possible, in situ). The ECO/site manager must report to ECPHRA (Contact details: 16 Commissioner Street, East London, EC Lungiswa Mzazi - lungiswam@ecphra.org.za / (043) 492 1942 / 081 434 3544 or Ayanda Mncwabe-Mama - ayanda.mncwabe-mama@ecsrac.gov.za / (043) 492 1370) so that a palaeontologist can carry out mitigation (collection and recording).	Project Proponent Contractor ECO	Throughout Construction Period
2. Construction managers and supervisory personnel	Contractor	Throughout

involved in the project should also be informed about the potential discovery of significant fossils on-site.		Construction Period
3. Before any fossil material can be collected from the development site, the specialist involved would need to apply for a collection permit from SAHRA. Fossil material must be housed in an official collection (museum or university), while all reports and fieldwork should meet the minimum standards for Paleontological impact studies proposed by SAHRA (2012).	Contractor	Throughout Construction Period
4. During the excavation process, it is critical to conduct thorough inspections of any geological exposures encountered to identify the presence of fossil remains. If any fossils of significance, including plant and vertebrate fossils are discovered, the ECO should promptly notify the appropriate authorities for further investigation.	Contractor	Throughout Construction Period
5. Any vertebrate or well-preserved plant fossils found within the excavation area should be considered of palaeontological interest. The responsibility for recording and sampling these fossils lies with the palaeontologist. The associated costs for this activity should be covered by the developer, as part of their obligation to preserve and manage paleontological resources.	Contractor	Throughout Construction Period

6.12 Alien Vegetation Management

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
<p>1. In terms of the Conservation of Agricultural Resources Act (CARA, Act No. 43 of 1984), all declared aliens must be effectively controlled. Landowners and operators are legally responsible for the control of invasive alien plants on their properties or the properties of which they manage. In terms of the this Act, 198 were listed as declared weeds and invaders and ascribed to one of the following categories:</p> <ul style="list-style-type: none"> • Category 1: Prohibited and must be controlled. • Category 2 (commercially used plants): May be grown in demarcated areas provided that there is a permit and steps are taken to prevent their spread. • Category 3 (ornamentally used plants): May no longer be planted. Existing plants may be retained as long as all reasonable steps are taken to prevent 	Contractor	Throughout Construction Period

the spreading thereof, except within the flood line of watercourses and wetlands.		
<p>2. The National Environmental Management: Biodiversity Act (NEM:BA) regulates all invasive organisms in South Africa, including a wide range of fauns and flora. Regulations have been published in Government Notices R. 506, R. 507, R. 508 and R. 509 of 2013, under NEMBA. According to this Act, any species designated under Section 70 cannot be propagated, grown, bought, or sold without a permit. Below is an explanation of the three categories:</p> <ul style="list-style-type: none"> • Category 1a (Prohibited): Listed Invasive Species: A person in control of a Category 1a Listed Invasive Species must comply with the provisions of section 73(2) of the Act; immediately take steps to combat or eradicate listed invasive species in compliance with sections 75(1), (2) and (3) of the Act; and allow an authorised official from the Department to enter onto land to monitor, assist with or implement the combatting or eradication of the listed invasive species. • Category 1b (Prohibited / Exempted if in Possession or Under control): Listed Invasive Species: A person in control of a Category 1 b Listed Invasive Species must control the listed invasive species in compliance with sections 75(1), (2) and (3) of the Act. A person contemplated in sub-regulation (2) must allow an authorised official from the Department to enter onto the land to monitor, assist with or implement the control of the listed invasive species, or compliance with the Invasive Species Management Programme contemplated in section 75(4) of the Act. • Category 2 (Permit Required): Listed Invasive Species: Category 2 Listed Invasive Species are those species listed by notice in terms of section 70(1)(a) of the Act as species which require a permit to carry out a restricted activity within an area specified in the Notice or an area specified in the permit, as the case may be. A landowner on whose land a Category 2 Listed Invasive Species occurs or person in possession of a permit, must ensure that the specimens of the species do not spread outside of the land or the area specified in the Notice or permit. Unless otherwise specified in the Notice, any species listed as a Category 2 Listed Invasive Species that occurs outside the specified area contemplated in sub-regulation (1), must, for purposes of these regulations, be considered to be a 	Contractor	Throughout Construction Period

<p>Category 1 b Listed Invasive Species and must be managed according to Regulation 3. Notwithstanding the specific exemptions relating to existing plantations in respect of Listed Invasive Plant Species published in Government Gazette No. 37886, Notice 599 of 1 August 2014 (as amended), any person or organ of state must ensure that the specimens of such Listed Invasive Plant Species do not spread outside of the land over which they have control.</p> <ul style="list-style-type: none"> Category 3 (Prohibited): Listed Invasive Species: Category 3 Listed Invasive Species are species that are listed by notice in terms of section 70(1)(a) of the Act, as species which are subject to exemptions in terms of section 71(3) and prohibitions in terms of section 71A of the Act, as specified in the Notice. Any plant species identified as a Category 3 Listed Invasive Species that occurs in riparian areas, must, for the purposes of these regulations, be considered to be a Category 1b Listed Invasive Species and must be managed according to regulation 3. 		
<p>3. A clearing plan for invasive plant species should take place to effectively deal with establishment, re-establishment and complete infestation of invasive alien plants. This includes the following:</p> <ul style="list-style-type: none"> The lighter infested areas should be cleared first to prevent the build of seed banks. Pre-existing dense mature stands ideally should be left for last, as they probably won't increase in density or pose a greater threat than they are currently. Collective management and planning with neighbours may be required in the case of large woody invaders as seeds of aliens are easily dispersed across boundaries by wind or water courses. All clearing actions should be monitored and documented to keep records of which areas are due for follow up clearing. 	Contractor	Throughout Construction Period
<p>4. Different species required different clearing methods such as manual, chemical or biological methods or a combination of both. Care should however be taken that the clearing methods used do not encourage further invasion. As such, regardless of the methods used, disturbance to the soil should be kept to a minimum.</p>	Contractor	Throughout Construction Period
<p>5. Fire shall not be used for alien control or vegetation management at the site.</p>	Contractor	Throughout Construction Period
<p>6. Mechanical control of invasive alien plants includes</p>	Contractor	Throughout

<p>the following:</p> <ul style="list-style-type: none"> • Techniques for mechanical control involve uprooting, felling, slashing, mowing, ringbarking or bark stripping. • This control option is only really feasible in sparse infestations or on small scale, and for controlling species that do not coppice after cutting. • Species that tend to coppice, need to have the stumps cut, namely <i>Acacia clyclops</i>, <i>Acacia saligna</i>, and Eucalyptus sp. or coppice growth treated with herbicides following the mechanical treatment. • All stems must be cut as close to ground level as possible, using loppers or chainsaws (depending on size), and stumps must be immediately hand painted with a suitable Tricolpyr herbicide (e.g. Garlon, Timbrel, with colour dye) to prevent resprouting. • Mechanical control is labour intensive and could cause soil disturbance if not done correctly or unsupervised. 		Construction Period
<p>7. Chemical control of invasive alien plants includes the following:</p> <ul style="list-style-type: none"> • Reference to “Working for Water: Policy on the Use of Herbicides for the Control of Alien Vegetation” to be made for all proposed herbicide applications. • Reference to “Pesticide Management Policy for South Africa published in terms of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947” to be made for all proposed herbicide applications. • Area contamination must be minimised by careful, accurate application with a minimum amount of herbicide to achieve good control. • All care must be taken to prevent contamination of any water bodies. This includes die care in storage application, cleaning equipment and disposal of containers, product and spray mixtures. • Equipment should be washed where there is no danger of contaminating water sources and washings carefully disposed of at a suitable site. • To avoid damage to indigenous or other desirable vegetation, products should be selected that will have the least effect on non-target vegetation. • Coarse droplet nozzles should be fitted to avoid drift 	Contractor	Throughout Construction Period

<p>onto neighbouring vegetation.</p> <ul style="list-style-type: none"> • The appropriate health and safety procedures should also be followed regarding the storage, handling and disposal of herbicides. • No herbicide spraying should be undertaken anywhere within natural vegetation, due to the extensive collateral damage. • Any Contractor or subcontractor using herbicides must have a valid Pest Control Operators License. This is regulated by DAFF. 		
<p>8. Biological control of invasive alien plants includes the following:</p> <ul style="list-style-type: none"> • This control method consists of the use of natural enemies to reduce the vigour or reproductive potential of an invasive alien plant. • Biological control agents include insects, mites, and micro-organisms such as fungi or bacterial. • Biological control agents attack specific parts of the plant, either the reproductive organs directly (flower buds, flowers, fruits) or the seeds after they have dropped. • The stress caused by the biological control agent may kill a plant outright or it might impact on the plants reproductive capacity. In many instances the reproductive capacity is reduced to zero and the populations is effectively sterilised. • To obtain biocontrol agents, provincial representatives for the Working for Water Programme or the Directorate: Land Use and Soil Management (LUSM), DAFF may be contacted. 	Contractor	Throughout Construction Period
<p>9. An alien invasive plant management and control plan should be put in place for duration of the project.</p>	Contractor	Throughout Construction Period
<p>10. The Contractor, during the various construction phases, should ensure that immediate removal of alien invasive species (seedlings) is implemented as these species establish themselves rapidly within disturbed areas. Mechanical removal is preferred and should follow the guidelines above.</p>	Contractor	Throughout Construction Period
<p>11. The effectiveness of vegetation control varies seasonally and this is also likely to impact alien species. Control early in the wet season will allow species to re-grow and follow up control is likely to be required. Therefore, vegetation control should be aimed at the middle of the wet season, with a follow up event towards at the end of the wet</p>	Contractor	Throughout Construction Period

season. There are no exact dates that can be specified here as each season is unique and management must therefore respond according to the state and progression of the vegetation.		
12. Alien management is an iterative process and it may require repeated control efforts to significantly reduce the abundance of species. Repeated control usually results in rapid decline once seed banks become depleted.	Contractor	Throughout Construction Period
13. Soil stockpiles should not stand for extended periods as these will allow for alien species establishment i.e. pipelines should be trenched, laid and rehabilitated in stages.	Contractor	Throughout Construction Period
14. Areas heavily infested with IAPs will need to be revegetated with indigenous plant species that are suited to the type and composition of the surrounding vegetation (e.g. thicket, forest or grassland).	Contractor	Throughout Construction Period

6.13 Vegetation Clearance

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. Vegetation should remain intact where possible during the construction phase to limit high surface flows and mobilisation of sediment.	Contractor	Throughout Construction Period
2. Delineated footprints must be checked to ensure over clearance does not occur.	Contractor	Throughout Construction Period

6.14 Faunal Species

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. No animals are to be harmed or killed during the course of construction operations.	Contractor	Throughout Construction Period
2. Workers may not snare any faunal species.	Contractor	Throughout Construction Period
3. When trenching activities occur, open trenches must be inspected daily for trapped animals.	Contractor	Throughout Construction Period

6.15 Works within Watercourses

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. The alignment of the linear infrastructure, together with the adjacent working area, should be clearly	Contractor	Throughout Construction Period

demarcated prior to the commencement of the excavations.		
1. The width of the working area within freshwater ecosystems should be kept to a minimum of 12 m to ensure that impacts on these systems are minimised.	Contractor	Throughout Construction Period
2. The following measures must be implemented when excavating in the Seep 2 and Channelled Valley Bottom wetland systems: <ul style="list-style-type: none"> • The topsoil should be removed and stockpiled separately from the underlying sub-soil on either side of the trench. • The vegetation should be carefully removed, and suitably stored for replanting upon the completion of the backfilling process (if possible). • The excavation should be carried out immediately prior to the laying of the pipeline feature foundations in order to minimise the time during which the trench remains open. • The excavated material should be protected from erosion if it is anticipated that it will remain exposed for any length of time. Stockpiles of this material should be positioned on either side of the trenches, keeping the topsoil and the subsoil separate. • The following mitigation measures should be put in place for the largescale earthworks associated with the gabion discharge structure: <ul style="list-style-type: none"> ○ Ensure that the correct sediment control measures are put in place such as earth dikes and diversions to direct all storm flows from disturbed areas into silt traps and soil stabilisation practices, such as sediment blankets and mulching, introduced onsite. 	Contractor	Throughout Construction Period
3. Vegetation must be established immediately after all major earthworks. An approved local indigenous grass seed mixture should be applied to the exposed areas.	Contractor	Throughout Construction Period

6.16 Topsoil Management

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
4. All removed topsoil must be stockpiled in such a manner and in such a place that it will not cause damming of water.	Contractor	Throughout Construction Period
5. All topsoil stockpiles must be protected against wind/soil erosion as well as weeds.	Contractor	Throughout Construction Period
6. Non-woody vegetation such as grasses and forbs should not be removed prior to stripping topsoil from work areas in order to assist in maintaining viability of the soil during storage.	Contractor	Throughout Construction Period

7. Compaction of the topsoil by, inter alia, driving over it is not permitted.	Contractor	Throughout Construction Period
8. Topsoil stockpiles should not exceed 1.5m in height.	Contractor	Throughout Construction Period
9. Topsoil stockpiles should not be located within any of the No-Go areas. The ECO is to approve all stockpile areas prior to stockpiling.	Contractor	Throughout Construction Period
10. Under no circumstances is stockpiled topsoil to be mixed with any other material (e.g. spoil and building rubble).	Contractor	Throughout Construction Period
11. All topsoil stockpiles should be dampened during dry conditions in order to prevent excessive dust.	Contractor	Throughout Construction Period
12. Once construction activities have been completed in areas in which topsoil was removed. The stockpiled soil should be immediately replaced and used for the rehabilitation of the site.	Contractor	Throughout Construction Period

6.17 Erosion Management

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. The Contractor is responsible for monitoring all areas at which construction related activities have occurred for evidence of rill/sheet erosion.	Contractor	Throughout Construction Period
2. Suitable measures must be implemented in areas that are susceptible to erosion. Areas must be rehabilitated, and a suitable cover crop planted once construction is completed.	Contractor	Throughout Construction Period
3. Topsoil must be stripped and stockpiled separately and replaced on completion.	Contractor	Throughout Construction Period
4. If natural vegetation re-establishment does not occur, a suitable grass must be applied. Possible grasses include <i>Cynodon dactylon</i> , <i>Eragrostis curvula</i> & <i>Digitaria eriantha</i> .	Contractor	Throughout Construction Period
5. Installation of retaining walls and other slope stabilising techniques such as reno mattress where slopes are steeper than 1 in 2 must occur.	Contractor	Throughout Construction Period
6. Energy dissipation structures at the discharge point of stormwater channels must be included to prevent scouring.	Contractor	Throughout Construction Period
7. In the event that soil erosion does occur, each case should be managed in as practicable way as possible.	Contractor	Throughout Construction Period
8. All areas along streams and drainage lines that could be impacted upon through trenching and construction activities should be protected against soil erosion.	Contractor	Throughout Construction Period

9. Re-vegetation of disturbed surfaces should occur immediately after the construction activities are completed.	Contractor	Throughout Construction Period
10. In the event of failure to implement timeous erosion control measures the contractor shall be held financially responsible for the necessary rehabilitation.	Contractor	Throughout Construction Period

6.18 Wet Works/Concrete Mixing

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. All gravel, sand and stone used during construction must be obtained from a bona fide source.	Contractor	Throughout Construction Period
2. Cement/concrete mixing must take place on an appropriately lined or impermeable surface within the construction footprint. The area shall be bunded and sloped towards a sump to contain any spillages of substances.	Contractor	Throughout Construction Period
3. Water contaminated with cement shall not be allowed to enter any natural watercourse or drainage line.	Contractor	Throughout Construction Period
4. Any concrete spilled out of the demarcated area should be removed immediately to avoid impacting on the freshwater ecosystems.	Contractor	Throughout Construction Period
5. Construction waste (i.e. cement bags, litter) must be cleaned up on a daily basis and appropriately disposed of via the solid waste management system.	Contractor	Throughout Construction Period
6. All remaining construction rubble (i.e. concrete spoil, bricks, gravel, sand and stone) must be neatly stockpiled, collected and appropriately disposed of at a spoil site or permitted waste disposal site.	Contractor	Throughout Construction Period
7. Sand, aggregate, cement, or additives used during the mixing process shall be contained and covered to prevent contamination of watercourses, the surrounding vegetation and natural rock through wind or water dispersion.	Contractor	Throughout Construction Period
8. All visible remains of excess concrete shall be physically removed on completion of the plaster or concrete pour section and disposed of. Washing the remains into the ground is not acceptable. All excess aggregate shall also be removed and disposed of in an approved landfill site.	Contractor	Throughout Construction Period
9. No concrete mixing machinery may be washed onsite.	Contractor	Throughout Construction Period

6.19 Public Protection

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. The Contractor shall be responsible for protecting the public from anything dangerous to persons or property and for the safe and easy passage of pedestrians and vehicular traffic in those areas affected by the Works.	Contractor	Throughout Construction Period
2. Any excavation, material dumps, spoil dumps or other obstructions likely to cause injury to any persons or thing shall be suitably barricaded.	Contractor	Throughout Construction Period
3. The Contractor's staff shall in no way be a nuisance to residents in the vicinity of construction activities. Any work in public places shall be adequately barricaded and steps shall be taken to minimise the disruptive effects of construction.	Contractor	Throughout Construction Period
4. Any complaints received by the Engineer will be addressed and the relevant persons will face suspension from the project.	Contractor	Throughout Construction Period

6.20 Existing Services

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. The Contractor shall ensure that existing services, (i.e. road, pipelines, power lines and telephone services) are not damaged or disrupted unless required by the Contractor and then they shall only take place with the permission of the Engineer.	Contractor	Throughout Construction Period
2. The Contractor will be responsible for the repair and reinstatement of any existing infrastructure that is damaged or services which are interrupted.	Contractor	Throughout Construction Period
3. Such repair or reinstatement will be to the Contractor's cost, and shall receive top priority over all other activities. A time limit may be stipulated by the Consulting Engineer.	Contractor	Throughout Construction Period

6.21 Dust Control

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. The Contractor is responsible for controlling nuisance dust that is created through construction and installation activities.	Contractor	Throughout Construction Period
2. Control of dust may involve spraying with water. The quantities of water used should not be large	Contractor	Throughout Construction Period

enough or applied with sufficient force to generate run off which could result in soil erosion.		
3. Excavated soil that is not being utilised for rehabilitation must be removed from site or covered. Unused soil must be removed from site once construction is complete.	Contractor	Throughout Construction Period
4. Reference must be made to the National Dust Control Regulations, 2013, in terms of section 53 (o), read with section 32 of the National Environmental Management: Air Quality Act, 2004 (Act no. 39 of 2004) with regards to acceptable dust fall standards, applicable monitoring requirements deliverables should this be required.	Contractor	Throughout Construction Period

6.22 Noise Control

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. Noise levels are to be kept within reasonable norms as determined by the CE, taking into account the context of the site location.	Contractor	Throughout Construction Period
2. Silencers on all machinery and vehicles shall be well maintained.	Contractor	Throughout Construction Period
3. The Contractor shall inform residents of any excessive noise that is anticipated due to construction activities, for example blasting for excavation. This notice shall be given at least 3 days before the event generating higher noise levels.	Contractor	Throughout Construction Period
4. All work that needs to be undertaken in the vicinity of private residences or public places should be carried out at between 07:00 and 17:00.	Contractor	Throughout Construction Period

6.23 Rehabilitation & Landscaping

The overall objective of the rehabilitation plan is to minimize adverse environmental impacts associated with the activity whilst maximizing the future utilization of the site. Significant aspects to be borne in mind in this regard is visibility of the disturbance footprint, revegetation of the footprint, erosion, stability and environmental risk. The immediate area of the workings must also be free of alien vegetation.

Additional broad rehabilitation strategies / objectives include the following:

- Rehabilitating the worked-out areas to take place concurrently within prescribed framework established in the EMP.
- All infrastructure, equipment, plant and other items used during the construction period will be removed from the site.

- Waste material of any description, including scrap, rubble and tyres, will be removed entirely from the site and disposed of at a recognised landfill facility. It will not be permitted to be buried or burned on site.
- Final rehabilitation shall be completed within a period specified by the Engineer.
- A suitable after care period may be required for a period specified by the Engineer.

Topsoil and Subsoil Replacement

Topsoil and subsoil will be stripped separately from the work area. The topsoil and subsoil removed from the initial cut will be stockpiled separately and only used in rehabilitation work towards the end of the operation. This is in contrast to the gravel activity where rehabilitation and topsoil replacement was earmarked at the completion of each phase.

Stripped overburden will be backfilled into the worked out areas where needed. Stripped topsoil will be spread over the re-profiled areas to an adequate depth to encourage plant regrowth. The vegetative cover will be stripped with the thin topsoil layer to provide organic matter to the relayed material and to ensure that the seed store contained in the topsoil is not diminished. Reseeding may be required should the stockpiles stand for too long and be considered barren from a seed bank point of view. Stockpiles should ideally be stored for no longer than a year.

The topsoil and overburden will be keyed into the reprofiled surfaces to ensure that they are not eroded or washed away. The top-soiled surface will be left fairly rough to enhance seedling establishment, reduce water runoff and increase infiltration.

Revegetation

All prepared surfaces will be seeded with suitable grass species to provide an initial ground cover and stabilize the soil surface. The following grass seed mix, that is commonly available and suitable is recommended:

Botanical name	Common name	Approx seed mixture /Ha
<i>Cynodon dactylon</i>	Kweek	12 kg/ Ha
<i>Eragrostis curvula</i>	Weeping Love Grass	6 kg/ Ha
<i>Eragrostis tef</i>	Teff	2 kg/ Ha
<i>Digitaria eriantha</i>	Smuts Grass	4 kg/ Ha
Other indigenous veld grasses can be added to the seed mix		± 4 kg/Ha

The overall revegetation plan will, therefore, be as follows:

- Ameliorate the aesthetic impact of the site
- Stabilise disturbed soil and rock faces
- Minimize surface erosion and consequent siltation of natural water course located on site
- Control wind-blown dust problems
- Enhance the physical properties of the soil
- Re-establish nutrient cycling
- Re-establish a stable ecological system

Every effort must be made to avoid unnecessary disturbance of the natural vegetation during operations.

Drainage and Erosion Control

To control the drainage and erosion at site the following procedures will be adopted:

- Areas where construction is completed should be rehabilitated immediately.
- Areas to be disturbed in future activities will be kept as small as possible (i.e. conducting the operations in phases), thereby limiting the scale of erosion.
- Slopes will be profiled to ensure that they are not subjected to excessive erosion but capable of drainage runoff with minimum risk of scour (maximum 1:3 gradient).
- All existing disturbed areas will be re-vegetated to control erosion and sedimentation
- Existing vegetation will be retained as far as possible to minimize erosion problems.

Visual Impacts Amelioration

The overall visual impact of the proposed activities will be minimised by the following mitigating measures:

- Confining the footprint to an area as small as possible
- Re-topsoiling and vegetating all disturbed area

6.24 Close Out of Site Camp

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. All structures comprising the construction camp are to be removed from site.	Contractor	Post Construction
2. The area that previously housed the construction camp is to be checked for spills of substances such as oil, paint, etc., and these shall be cleaned up and contaminants disposed of appropriately.	Contractor	Post Construction
3. All hardened surfaces within the construction camp area should be ripped, all imported materials removed, and the area shall be top soiled and re-grassed.	Contractor	Post Construction

7. ENVIRONMENTAL SPECIFICATIONS – OPERATION PHASE

7.1 Erosion and Sedimentation of Watercourses Management

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. A SWMP must be designed in order to control stormwater runoff from hardened surfaces and prevent the erosion and sedimentation of the stream. Runoff from the proposed development must not increase from the pre-development to the post-development scenario. Clean and dirty water must be separated and controlled via systems that do not result in erosion features developing.	Project Proponent	Continuous
2. Discharge stormwater from rooftops into rain harvesting tanks. This will limit the volumes of stormwater runoff that will reach the river and wetlands.	Project Proponent	Continuous
3. Energy dissipaters / erosion protection measures (such as lining with stones, grass, reno-mattresses, or gabions) must be constructed where stormwater is released in order to reduce the runoff velocity and therefore erosion.	Project Proponent	Continuous
4. Sediment traps should be incorporated into stormwater drains / swales upstream of discharge points.	Project Proponent	Continuous
5. Monitor the proposed development and watercourses for erosion and sedimentation after heavy rainfall events. Any erosion noted must be immediately addressed. Rehabilitation measures may include the removal of accumulated sediment by hand, filling of erosion gullies and rills, the stabilisation of gullies with silt fences, riprap, and the revegetation of stabilised areas.	Project Proponent	Continuous
6. Stormwater systems will require ongoing maintenance. Any build-up of silt or debris within stormwater drains or swales will need to be cleared to ensure the continued functioning of the systems.	Project Proponent	Continuous
7. Any damage to stormwater infrastructure, and any flaws identified in the functionality of stormwater infrastructure, must be rectified immediately.	Project Proponent	Continuous

7.2 Water Quality Management

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. All adopted buffer zones must be rehabilitated, including the removal of invasive alien vegetation to	Project Proponent	Continuous

ensure an undisturbed vegetation community.		
2. Management of the buffer should include the prevention of overgrazing, trampling by livestock, invasive alien plant encroachment and undesirable burning regimes. In addition, routine vegetation monitoring and maintenance should be implemented within buffer zones to ensure adequate ground cover, prevent erosion, and ensure sediment trapping efficiency. Any bare patches should be rehabilitated immediately using indigenous grass species.	Project Proponent	Continuous
3. In addition to the buffer zone, a series of filter strips should be constructed and maintained between the broiler houses and the CVB and Kubusi River. A filter strip is generally defined as a gently sloping area of grass that water flows onto and across in order to trap and remove sediment and silt. The filter strip should comprise of a mix of grass species that can grow to a height of at least 150 mm to ensure maximum sediment and toxicant trapping.	Project Proponent	Continuous
4. The filter strips should be maintained on ANCA's property to filter off unwanted material in the event that either a stormwater pipe should burst or one of the wash-water channels should overflow.	Project Proponent	Continuous
5. In addition to the filter strips, an infiltration trench should be constructed to catch stormwater flows once they have passed through the filter strips, before they leave the ANCA property. A decant point should be constructed away from the freshwater ecosystems and into a vegetated area to offer similar functionality to the vegetated strips.	Project Proponent	Continuous
6. A clearly defined contingency plan should be compiled and adhered to in the case of failures or spills from the waste treatment systems or other point sources of pollution.	Project Proponent	Continuous
7. Any sewage pump stations and/or wastewater treatment works must have appropriate mitigation measures in place in case of power failures and/or operational failures. As a minimum, this should include backup generators, sumps and/or bunds and an emergency protocol to manage failures and spills/leaks with immediate effect.	Project Proponent	Regularly Continuous
8. In the case of the SEEP 1 system, sufficient bunding and filters should be constructed on the downslope side of Broiler House 2 to prevent any pollutants from entering the wetland system.	Project Proponent	Continuous
9. A monitoring programme should be developed and implemented to assess the effectiveness of the mitigation measures over time. This should include seasonal inspections of buffer zones, filter strips, stormwater infrastructure, and the evaporation	Project Proponent	Regularly Continuous

ponds. Particular attention should be given to the accumulation of sediment, vegetation cover in buffers, and the quality of water discharged from the ponds to ensure ongoing protection of the SEEP, CVB, and Kubusi River systems.		
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7.3 Stormwater Management

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. The evaporation pond used for wash-water storage should be appropriately lined with a geosynthetic liner to prevent infiltration into groundwater and should be designed to accommodate potential high rainfall events that produce excess storm flows. The pond should be fenced to prevent access by livestock or wildlife, and any overflows must be directed away from the freshwater ecosystems. It must also be designed to accommodate extreme rainfall events, especially in light of increasing climatic variability and associated storm intensities.	Project Proponent	Regularly Continuous
2. The existing and proposed access road upgrades that runs through the proposed development site must be appropriately drained to prevent the concentration and direct discharge of surface water into the wetland and river systems. A series of mitre drains and surface-cross drains should be installed along the road gradient to divert stormwater into adjacent vegetated areas or infiltration trenches, thereby reducing erosion and sediment transport. Drains must be regularly inspected and maintained to prevent blockage and ensure functionality.	Project Proponent	Regularly Continuous
3. An appropriate maintenance regime should be drawn up and adopted for all stormwater and wash-water related infrastructure to ensure its continued functionality. Maintenance is not limited to, but should include: <ul style="list-style-type: none"> • Dredging and cleaning of all pipes and dams associated with stormwater management to prevent build-up of sludge and sedimentation. • Clearing of inlets, outlets and emergency spillways associated with stormwater dams. • Regular cutting of any vegetation associated with wash-water management to maximise nutrient removal efficiency. • Regular water samples should be taken from a point below the two wash-water evaporation ponds to ensure the desired water quality is being maintained. 	Project Proponent	Regularly Continuous

<ul style="list-style-type: none"> • Ensure all septic tanks are operating effectively with routine annual checks. 		
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7.4 Invasive Alien Species Management

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
4. Regular invasive species control is required, as per section 5.10 above.	Project Proponent	Regularly Continuous

7.5 Waste Management

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. All waste storage areas must be made scavenger and wind proof.	Project Proponent	Continuous
2. A proper waste management is to be implemented whereby operational general waste and maintenance activity waste such as spoil are stored, separated and made ready for collection for disposal.	Project Proponent	Continuous
3. Ensure waste receptacles are available during operation and maintenance activities.	Project Proponent	Continuous
4. Waste is to be collected weekly and taken to a registered transfer site.	Proponent	Weekly Continuous
5. No littering is allowed on site and waste receptacles are to be provided for.	Project Proponent	Continuous
6. Ensure routine litter collection takes place.	Project Proponent	Continuous
7. By-products from poultry farming (i.e. chicken manure) must be collected from site by a suitable supplier and taken to a registered organic composting facility on a regular basis.	Project Proponent	Continuous

8. ENVIRONMENTAL SPECIFICATIONS – DECOMMISSIONING PHASE

8.1 Rehabilitation

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. Should at any time, any aspect of the activity be closed or decommissioned, all building rubble must be removed off-site and the disturbed site must be rehabilitated to a condition with suitable vegetation cover that is the same or better than the surrounding natural environment.	Project Proponent	Decommissioning of any facet of the development
2. After construction is completed, rehabilitate all areas no longer required for operational phase to a state like the local indigenous character of the area and ensure animals can move through and around new infrastructure areas unencumbered.	Project Proponent	Decommissioning of any facet of the development
3. No additional activity/development is allowed outside that approved in the EMPr.	Project Proponent	Decommissioning of any facet of the development
4. Area must be regularly monitored and rehabilitated as needed and ecological connectivity always maintained.	Project Proponent	Decommissioning of any facet of the development

8.2 Alien Vegetation

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. All aliens on the site must be removed and put a plan in place to regularly remove seedlings in the undeveloped open spaces until natural vegetation has been re-established.	Project Proponent	Decommissioning of any facet of the development

8.3 Planting of Vegetation

MANAGEMENT MEASURES	RESPONSIBILITY	TIME FRAMES
1. Only plant species that are indigenous to the area and are sourced locally to maintain genetic similarity are to be used in rehabilitation/landscaping activities.	Project Proponent	Decommissioning of any facet of the development
2. A separate rehabilitation plan must be formulated for the decommissioning phase, if applicable at all.	Project Proponent	Decommissioning of any facet of the development

9. COMPLIANCE

9.1 Work Stoppage

1. The ECO shall have the right to order work to be stopped in the event of significant infringements of the Project Environmental Specifications, until the situation is rectified in compliance with the specifications. In the event of this happening the Contractor shall not be entitled to claim for delays.

9.2 Monitoring and Auditing

1. A monitoring programme should be implemented for the duration of the construction.
2. The project proponent must appoint a suitably qualified (Environmental Qualification) individual to be assigned as the Environmental Control Officer.
3. The monitoring programme, undertaken by the Environmental Control Officer, will include the following:
 - The ECO must visit the construction site in order to monitor the project's performance in relation to the Environmental Specifications on at least a **monthly basis** during construction period.
 - After each inspection a report will be prepared for the Proponent and incorporated into the monthly site meeting minutes. The ECO must record any issues of non-compliance, and recommend corrective actions and action on these recommendations. These are to be submitted to the Project Proponent, Consulting Engineer and main Contractor.
 - The ECO is to make recommendations in order for the contractor to achieve compliance (corrective actions).
 - During site visits the ECO is to look out for any other incidental environmental issues not covered by this EMPr.
 - From time to time throughout the construction phase, the ECO will conduct audits of the project and compile an audit report which will be submitted to the Competent Authority.
 - The ECO must undertake a detailed post construction phase compliance audit after completion of the relevant phase. This audit report should be submitted to the Competent Authority.

9.3 Non-Compliance

1. Any non-compliance items issued to the Contractor shall be rectified immediately.
2. Any complaints received regarding activities on the construction site relating to the environment shall be recorded in a specific register and the response noted with the date and action taken.
3. The ECO is to monitor these complaints and follow up if a response/ action has not yet been provided.
4. The Contractor is deemed not to have complied with the EMPr if, inter alia:

- There is evidence of contravention of the EMPr specifications within the boundaries of the construction site, site extensions and roads- i.e. construction footprint;
- There is contravention of the EMPr specifications which relate to activities outside the boundaries of the construction site.
- Environmental damage as a result of negligence;
- Construction activities that take place outside of the demarcated development footprint;
- The Contractor fails to comply with corrective or other instructions issued by the Engineer within a specific time period.

9.4 Penalties

1. Should failure to comply with any of the environmental specification contained and a result, environmental damage occurs, the project proponent and/or the Contractor shall be liable.
2. Examples of violations that warrant the need for penalties are the following:
 - Hazardous chemical/oil spill and/or dumping in non-approved sites.
 - Damage to sensitive environments.
 - Damage to cultural and historical sites.
 - Unauthorised removal/damage to indigenous trees and other vegetation, particularly in identified sensitive areas.
 - Uncontrolled/unmanaged erosion.
 - Unauthorised blasting activities (if applicable).
 - Pollution of water sources.

The table below provides a guideline for penalties and fines for transgressions or resultant environmental damage.

TRANSGRESSION OR ENVIRONMENTAL DAMAGE	<u>MIN</u> <u>FINE</u>	<u>MAX</u> <u>FINE</u>
Failure to comply with prescriptions regarding ECO appointment and monitoring of EMPr/ Environmental Specifications	R1 000	R2 000
Failure to comply with prescriptions regarding environmental awareness training	R2 000	R10 000
Failure to rectify ongoing non-compliances addressed by the ECO in prior audit reports	R 2 500	R 10 000
Failure to comply with prescriptions regarding method statements	R1 000	R2 000
Failure to report environmental damage or EMPr/ Environmental Specifications transgressions to the ECO or Project Manager/ Agent/ Resident Engineer	R1 000	R2 000
Failure to carry out instructions of the ECO regarding the environment of the EMPr/ Environmental Specifications	R1 000	R2 000
Failure to comply with prescriptions regarding a complaints register	R1 000	R2 000
Failure to comply with prescriptions regarding site demarcation and enforcement of “no go” areas	R2 000	R10 000

Failure to comply with prescriptions regarding site clearing	R2 000	R10 000
Failure to comply with prescribed administration, storage or handling of hazardous substances	R1 000	R2 000
Failure to comply with prescriptions regarding equipment maintenance and storage	R1 000	R2 000
Failure to comply with fuel storage, refuelling, or clean-up prescriptions	R1 000	R2 000
Failure to comply with prescriptions regarding procedures for emergencies (spillages and fires)	R2 000	R10 000
Failure to comply with prescriptions regarding construction camp	R2 000	R10 000
Failure to comply with prescriptions for the use of ablution facilities	R1 000	R2 000
Failure to comply with prescriptions regarding water provision	R1 000	R2 000
Failure to comply with prescriptions for the use of designated eating areas, heating source for cooking or presence of fire extinguishers	R1 000	R2 000
Failure to comply with prescriptions regarding fire control	R2 000	R10 000
Failure to comply with prescriptions for solid waste management	R2 000	R10 000
Failure to comply with prescriptions to prevent water pollution and sedimentation	R2 000	R10 000
Failure to comply with prescriptions to the protection of natural features, flora, fauna and archaeology	R2 000	R10 000
Failure to comply with prescriptions regarding speed limits	R1 000	R2 000
Failure to comply with prescriptions regarding noise levels of construction activity	R2 000	R10 000
Failure to comply with prescriptions regarding working hours	R2 000	R10 000
Failure to comply with prescriptions regarding aesthetics	R1 000	R2 000
Failure to comply with prescriptions regarding dust control	R1 000	R2 000
Failure to comply with prescriptions regarding security and access onto private property	R1 000	R2 000

9.5 Incident Reporting and Remedial Measures

1. Should a major incident event, such as a major leakage or spillage of hazardous substances occurs on site, the local emergency services must be immediately notified of the incident.
2. The following information must be provided to the relevant emergency services and documented in an incident report for rectification and follow up:
 - the location;
 - the nature of the load;
 - the extent of the impact; and
 - the status at the site of the accident itself (i.e. whether further leakage is still taking place, whether the vehicle or the load is on fire)
 - Written records must be kept on the corrective and remedial measures decided upon and the progress achieved therewith over time.
 - Such progress reporting is important for monitoring and auditing purposes. The written reports may be used for training purposes in an effort to prevent similar future occurrences.

10. DETAILS OF AUTHORS

10.1 Indwe Environmental Consulting

Indwe Environmental Consulting CC is a registered environmental consultancy that specialises in all facets of environmental management. Our focus is on project based environmental studies. Broadly, the services offered are Basic Assessments, full Scoping and Environmental Impact Assessments; Strategic Environmental studies (State of the Environment Reporting, Strategic Environmental Assessments, and Environmental Management Frameworks) and integrated waste management planning. Through strategic partnerships with other emerging consultancies we offer specialist environmental services throughout the Eastern Cape and abroad.

The Indwe Environmental team is headed up and overseen by Brendon Steytler and Megan Hugo. Together they have a vast amount of experience in the environmental consulting industry of South Africa. Brendon Steytler was the founding member of Indwe Environmental Consulting in 2010 and has been instrumental in growing the company into the trusted and quality driven organisation that it is today.

10.2 Expertise

Project Team

Megan Hugo - Megan started working as an Environmental Consultant in February 2015 following the completion of her Honours degree in Environmental Science at Rhodes University in Makhanda (formerly Grahamstown). Prior to this she completed a Bachelor of Science degree, also at Rhodes University, with Zoology and Environmental Science as her majors. Megan has completed accredited courses in environmental impact assessments and ISO 14001.







Megan joined Indwe Environmental Consulting in September 2017 and was made a main member of the company in April 2018. Megan is a Registered Environmental Assessment Practitioner with the Environmental Assessment Practitioners Association of South Africa (EAPASA) (Reg. No 2019/1530). She is also registered with the South African Council for Natural Scientific Professions (Reg. No. 118810) and an active paid-up member of the International Association of Impact Assessment (IAIA) South Africa.








Megan is responsible for all company related operations and financial management as well as acquiring new projects at Indwe Environmental Consulting. Megan has gained experience in all aspects of Integrated Environmental Management (Full Scoping and Environmental Impact Assessments, Basic Assessments, Mining Permitting, Auditing, Strategic Environmental Planning), Ecological Reporting, Water Use related approvals through DWS, and General Project Management. Additionally, Megan is well versed in permitting requirements relating to ToPS, PNCO and NFA legislation. Example of fields in which Megan was the project manager and lead report writer include large public infrastructure projects (e.g. Regional Water Supply Schemes, Overhead Powerlines, National Road upgrades), private commercial and residential developments, small and large agricultural projects, mixed use developments, renewable energy projects, large scale public and private in stream and off stream storage dams and rehabilitation of coastal and terrestrial related environments.

Megan's key skills include her knowledge and experience in South African policy and legislation relating to development, particularly in the Eastern Cape province. Her 10-year presence in the industry has provided much insight and experience into project, technical and financial management. **Megan held the position of Registered EAP.**

Michaela Manthe - Michaela joined Indwe Environmental Consulting in February 2024 and holds the position of Junior Environmental Assessment Practitioner at the company. Michaela has completed her Honours degree in Life Sciences through UNISA in 2023. Prior to this she completed her Bachelor of Science degree in Life Sciences majoring in Zoology and Botany in 2022. Michaela is registered as a Candidate Natural Scientist with the South African Council for Natural Scientific Professions (Cand. Sci. Nat 161580) and as a Candidate EAP (Reg. No. 2022/5666) with EAPASA. Michaela is also an active paid-up member of the International Association of Impact Assessment (IAIA) South Africa. To date, Michaela has assisted in environmental impact assessment processes relating to public infrastructure, retail and agricultural projects as well as acted as the Environmental Control Officer for bulk water and sewerage construction projects. In addition, she has undertaken compliance auditing on a range of operational activities within the manufacturing and mining industries. **Michaela acted as part of the project team.**

11. APPENDIX A – PROPOSED ENVIRONMENTAL AWARENESS EDUCATION COURSE GUIDELINE

SYMBOL	SITE ASPECT	SYMBOL	SITE ASPECT
	<p><u>WORKING AREAS</u></p> <p>Workers and equipment must stay inside the site boundaries at all times</p> <p>Do not enter the ‘no-go’ areas</p> <p>Respect the privacy of all residents</p>		<p><u>PLANTS & ANIMALS</u></p> <p>Do not kill or injure animals</p> <p>Ask the site agent / foreman to remove nuisance animals</p> <p>Alert the site agent / foreman of DANGEROUS animals</p>
	<p><u>FIRE</u></p> <p>No fires without permission</p> <p>Do not burn rubbish</p> <p>Know procedures and locations of fire-fighting equipment</p>		<p><u>NOISE</u></p> <p>Do not make loud noises around site</p> <p>Know site working hours</p> <p>Report noisy equipment</p>
	<p><u>SMOKING</u></p> <p>Put cigarette butts in dustbin</p>		<p><u>TRANSPORT</u></p> <p>Always keep to the speed limit</p> <p>Use approved entry and exit points</p>

	<p>No smoking near paint, petrol or gas</p> <p>No smoking outside the site camp</p>		<p>Report leaks, spills</p> <p>No overloading</p>
	<p><u>HAZARDOUS SUBSTANCES</u></p> <p>Work with petrol, diesel and oil in marked areas</p> <p>Use drip trays and protective clothing</p> <p>Report any spills</p>		<p><u>RUBBISH</u></p> <p>Do not litter</p> <p>Use dustbins with sealable lids</p> <p>Report full bins</p>
	<p><u>PLANTS</u></p> <p>Do not damage trees, grass or plants</p> <p>Do not pick flowers</p>		<p><u>TOILETS</u></p> <p>Use toilets provided</p> <p>Report damage leaks</p>
	<p><u>EATING</u></p> <p>No cooking of food on site</p> <p>Only eat in demarcated areas</p> <p>Use dustbins with sealable lids close to eating area</p>		<p><u>FINES AND PENALTIES</u></p> <p>Spot fines will apply</p> <p>Removal from site</p> <p>Construction stopped</p>

	<p><u>EMERGENCY NUMBERS</u></p> <p>Know all emergency numbers</p> <p>Report all emergencies to site agent / foreman / ECO</p>		<p><u>DUST CONTROL</u></p> <p>Apply dust suppression measures</p> <p>Report complaints from public to site agent / foreman / ECO</p>
	<p><u>SAFETY</u></p> <p>No public access to site</p> <p>Wear PPE</p> <p>Ensure roadworthiness of all vehicles</p>		<p><u>HEALTH</u></p> <p>HIV/AIDs and STD awareness</p> <p>Sick staff must report to the site agent / foreman</p> <p>All staff in contact with stormwater runoff to regularly wash their hands and arms, especially before meals</p>
	<p><u>ACCIDENTS</u></p> <p>Inform the site and safety manager immediately</p> <p>Open excavation / dangerous areas must be demarcated with hazard tape</p>		<p><u>DISTURBED AREAS</u></p> <p>Must be restored to pre-activity state</p> <p>No burying of material</p>
	<p><u>CEMENT OPERATIONS</u></p> <p>Take place in designated area</p> <p>No batching directly on the soil</p>		<p><u>STOCKPILE SITES AND SURPLUS MATERIAL</u></p> <p>Stockpiles must have stabilized sloped</p>

	<p>All dirty water contained and reused</p> <p>Solid residue disposed as waste</p>		<p>No burning of surplus plant material</p>
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12. APPENDIX B – METHOD STATEMENT EXAMPLE

METHOD STATEMENT

Organisation:

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Date:

Contract:

Author:

Reviewer:

PROPOSED ACTIVITY

Provide the title of activity that and reference number from the EMPr.

.....

WHAT WORKS ARE TO BE UNDERTAKEN

Provide a brief description of the works to be undertaken.

.....

.....

.....

WHERE IS THE ACTIVITY GOING TO BE UNDERTAKEN

Provide a full description of the extent of works, and if possible, an annotated plan.

.....

.....

.....

START DATE:

END DATE:

HOW ARE WORKS GOING TO BE UNDERTAKEN

Space available below for an annotated sketch of the process.

METHOD STATEMENT REVIEW AND APPROVALS

Environmental Control Officer (ECO)

The information provided in the Method Statement is deemed satisfactory, provided the methodology is followed effectively.

Signed:

ECO Name:

Date:

PERSON UNDERTAKING THE WORKS (I.E. FOREMAN, MAIN CONTRACTOR, SUB-CONTRACTOR)

The contents of the Method Statement are duly noted and the activity will be carried out according the specifications outlined above.

Signed:

Name:

Date: