

DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME

IN SITU UPGRADING OF 1 500 HOUSING UNITS AT SANDLWANA LOCATED IN THE OKHAHLAMBA LOCAL MUNICIPALITY WITHIN UTHUKELA DISTRICT, KWAZULU NATAL



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Prepared for:

***YASA CONSULTING (PTY) Ltd
15 Chester Road
Parkwood 2193
(011) 800 9552***

Prepared by:

Tom Hugo (Pri.Sci.Nat. 400124/96)



TABLE OF CONTENT

1. OBJECTIVE OF THE ENVIRONMENTAL MANAGEMENT PROGRAMME..... 1

2. ENVIRONMENTAL ASSESSMENT PRACTITIONER..... 1

3. PROJECT DESCRIPTION 2

4. OBLIGATIONS AND RESPONSIBILITY..... 2

 4.1. Okhahlamba Local Municipality Obligations and Responsibility 2

 4.2. Environmental Control Officer (ECO) Responsibilities 4

 4.3. Contractor’s Designated Environmental Officer 5

5. METHOD STATEMENTS 5

6. SITE DOCUMENTATION 6

7. ENVIRONMENTAL MANAGEMENT PROGRAMME 6

8. COMPLIANCE AND MONITORING 18

9. REPORTING 18

10. ENVIRONMENTAL AWARENESS PLAN 18

11. AUDITING 19

 11.1. Internal audits 19

 11.2. External audits 19

12. AMENDMENTS OF THE EMPr 19

1. OBJECTIVE OF THE ENVIRONMENTAL MANAGEMENT PROGRAMME

Regulation 19(4) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and Environmental Impact Assessment (EIA) Amended Regulations 326 of 07 April 2017 provides the content requirements for Environmental Management Programme (EMPr). The objective of this draft Environmental Management Programme (EMPr) is to provide the Okhahlamba Local Municipality (OLM) and its contractors with practical guidance for environmentally and socially acceptable in situ upgrading and construction of a 1 500 housing units at Sandlwana Area. Guidelines and actions are listed to be implemented to achieve these environmental and socially acceptable goals. The EMPr contains relevant mitigation measures that are designed to minimise or prevent harmful impacts during the pre-construction and construction phases of the development.

The EMPr document should be seen as a dynamic plan that should be adapted and changed if and when necessary. In the event that the planned results is not achieved due to misapplication of measures applied or the inadequacy of applied measures, the situation should be assessed and analysed with the objective of amending the mitigation measures to achieve the desired results.

The specific objectives of this EMPr are as follow:

- Describe project background.
- Describe obligations and responsibility
- Describe the mitigation and management measures required to address potential impacts. It also indicates the responsible person and measures to ensure potential environmental risks are identified, reported and addressed.
- Describe the environmental monitoring and reporting activities.
- Describe the environmental awareness plan.

2. ENVIRONMENTAL ASSESSMENT PRACTITIONER

This Environmental Management Programme Report was prepared by Tom Hugo from EnviroMatrix (Pty) Ltd. The Environmental Assessment Practitioner Details are:

	EnviroMatrix (Pty) Ltd
Physical address:	Plot 34 Eden Smallholdings Bethlehem, 9701
Postal address:	P.O. Box 2580, Bethlehem, 9700
Telephone	082 070 0735
Fax	086 619 2136
Email Address	tom@emtrix.co.za
EAP Registrations/Associations	SACNASP– Pri.Sci.Nat. 400124/95 Environmental Science IAIAsa – Member No: 3781

Mr Hugo had more than 10 years experience in the environmental management field in Southern Africa. Experience include: i) The identification and assessment of negative environmental impacts and benefits through the review and manipulation of data. ii) The identification of practical and achievable

mitigation and management measures and the development of appropriate management plans. iii) The compilation of environmental reports in accordance with relevant environmental legislative requirements. iv) The formulation of environmental policies, strategies and guidelines. v) Implementation and monitoring of environmental management systems and plans according to governmental record of decisions.

3. PROJECT DESCRIPTION

The project entails the in situ upgrading and construction of 1 500 housing units at the area known as Sandlwana situated within the Okhahlamba Local Municipal area (Figure 1). The project is done under the Department of Housing.

Associated with the upgrading and construction of the housing units are the upgrading and establishment of associated infrastructure which will include new gravel access roads with storm water drainage, water provision through the installation of new bulk water lines with a standpipe and tap at each stand and the installation of VIP toilets at each stand to fulfil the sanitation demand.

4. OBLIGATIONS AND RESPONSIBILITY

4.1. Okhahlamba Local Municipality Obligations and Responsibility

The Okhahlamba Local Municipality (OLM) has a responsibility towards their employees to provide a safe and hygienic working area, towards the environment to operate in such a manner that no environmental degradation occur and towards the community of Sandlwana to operate all developments in a socially acceptable manner not posing a threat to the environment or the health of any individual.

It is the overall responsibility of the OLM to ensure that the construction and upgrading of the 1 500 housing units are undertaken in accordance with the recommendations of the EMPr Report and that the EMPr is adapted to produce the desirable outcomes.

OLM undertakes to oversee and manage all the operations associated with the construction and upgrading of the housing units in a manner that minimises negative effects on the environment and maximises the positive aspects and protects the health and safety of all the employees, contractors, visitors and the general public.

To this end the OLM will:

- Ensure that the EMPr forms an integral part of any contract documents entered into with all consulting engineers and all contractors.
- Educate all personnel, contractors and visitors with regard to environmental, health and safety requirements applicable to the upgrading and construction of the housing units.

DENSIFICATION PLAN MAP: SANDLWANA RURAL SUBSIDISED HOUSING DEVELOPMENT WITHIN THE OKHAHLAMBA LOCAL MUNICIPALITY.

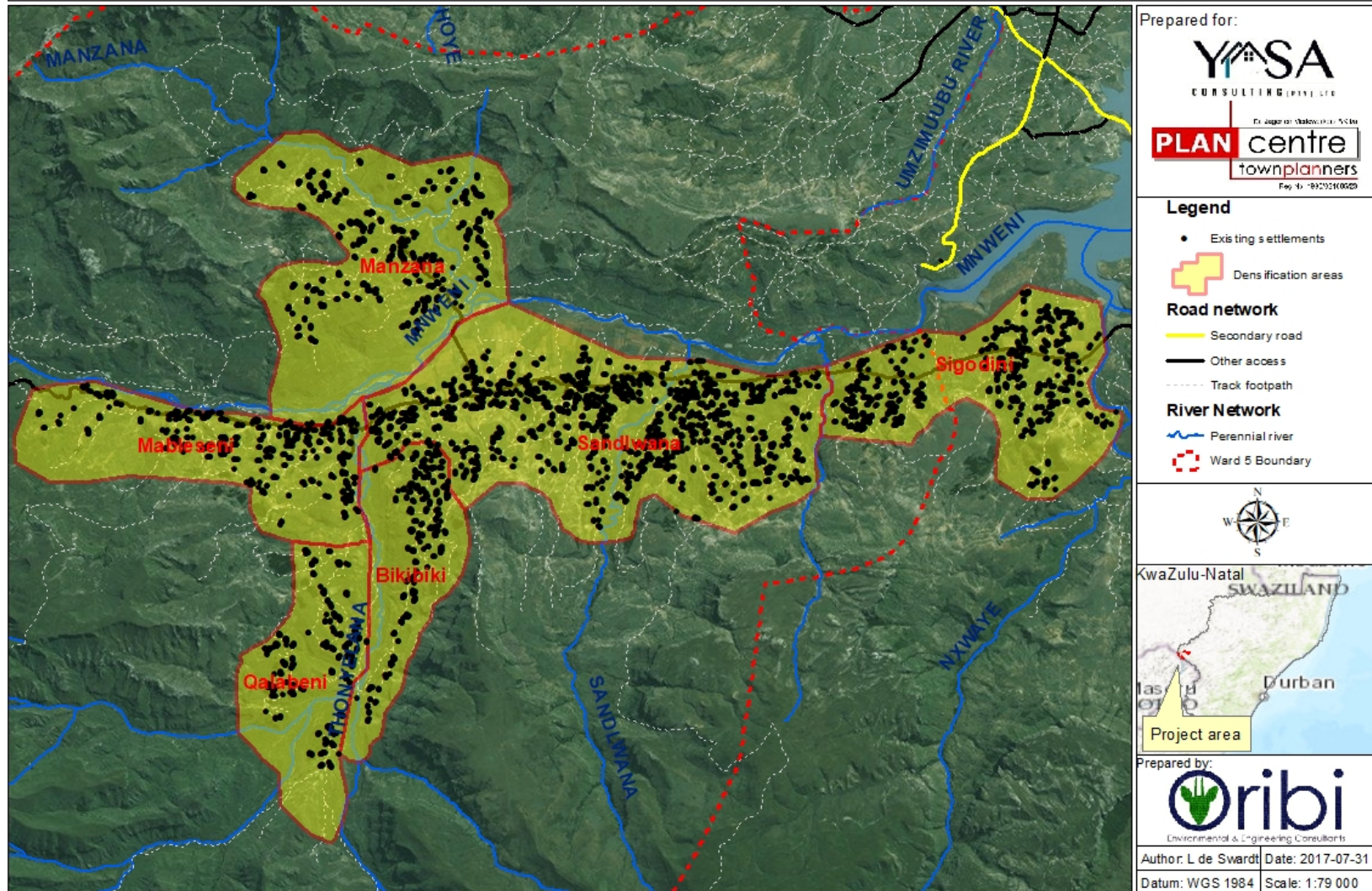


Figure 1 Sandlwana 1 500 In Situ Housing Development Layout

- Provide professional staff to give effect to its safety, health, environmental and quality management commitments.
- Undertake internal EMPr compliance inspections during the construction phase and appoint an external Environmental Auditor for annual compliance audits. These inspections and audits will include all aspects of the construction and upgrading of the housing units, including activities of the OLM contractors and agents.
- Monitor, evaluate and report performance in safety, health and environmental protection to the relevant management level of OLM.

4.2. Environmental Control Officer (ECO) Responsibilities

It is recommended that a suitable qualified Environmental Control Officer (ECO) be appointed by the OLM to audit compliance with the conditions set out in the EMPr. The role and responsibilities of the ECO include:

- The ECO should have suitable experience in both the construction and environmental fields
- The ECO will report to the resident engineer and the client
- A system should be formulated via the engineer for effectively addressing any environmental problems identified by the ECO
- The ECO should provide assistance to the contractor regarding adequate and relevant environmental awareness training for all site personnel
- The ECO should have the authority to stop the work if he/she ascertains that the construction activities pose a serious threat to the environment. However, such stoppages should be restricted to emergency situations and the engineer and client should be consulted regarding this action as soon as possible
- The Eco may recommend to the engineer to have the contractor's representative or any employer removed from the site and / or work suspended if the environmental conditions specified in the EMPr are deliberately ignored.
- The site instruction book entries should be used for issuing stop work orders, as may be necessary
- The ECO must undertake site visits at least bi-weekly and an audit inspection at least once a month to audit construction activities
- Audit reports representing the findings of each monthly audit must be compiled highlighting areas of non-conformances and rectifications. These audit reports must be made available to the contractor, engineer, OLM and the Department of Agriculture, Environmental Affairs and Rural Development before the monthly site meeting is held
- Photographs of the work site and construction camp should be taken prior to, during and immediately after construction as a visual reference. These photographs must be stored with other records related to the EMPr.
- After construction is completed a final environmental audit must be done by the ECO and a final audit report compiled.

4.3. Contractor's Designated Environmental Officer

The Contractor refers to the team appointed by OLM to undertake construction activities within the scope for the project. The appointed Contractor(s) will be required to appoint a competent individual as the Contractor's on-site Designated Environmental Officer (DEO). The DEO must be appropriately trained in environmental management and must possess the skills necessary to impart environmental management to all personnel involved in the contract. The DEO will be responsible for overseeing the Contractor's internal compliance with the EMPr requirements and ensuring that the environmental specifications are adhered to.

The DEO will be responsible for keeping detailed records of all site activities that may pertain to the environment. This includes:

- Daily site inspections.
- Supervision of work where environmental management is a key aspect (e.g. in sensitive areas, with high environmental risk, etc.).
- Informing the ECO.
- Reporting to the Project Team regarding implementation of the EMPr.
- Completing start-up, weekly, monthly and site-closure checklists.
- Keeping a photographic record of progress on site from an environmental perspective.
- Keeping a register of complaints in the site office and recording and dealing with any community comments or issues.
- Keeping a record of on-site incidents and accidents registers and how these were dealt with.

5. METHOD STATEMENTS

Method statements are written submissions by the Contractor to the OLM in response to the requirements of this EMPr or to a request by the OLM. The Contractor shall be required to prepare method statements for several specific construction activities and/or environmental management aspects.

The Contractor shall not commence the activity for which a method statement is required until the OLM has approved the relevant method statement. Method statements must be submitted at least five (5) days prior to the date on which approval is required (start of the activity). Failure to submit a method statement may result in suspension of the activity concerned until such time as a method statement has been submitted and approved.

An approved method statement shall not absolve the Contractor from any of his obligations or responsibilities in terms of the contract. However, any damage caused to the environment through activities undertaken without an approved method statement shall be rehabilitated at the contractor's cost. The method statements shall cover relevant details with regard to:

- Construction procedures and location of the construction site.
- Start date and duration of the procedure.
- Materials, equipment and labour to be used.

- How materials, equipment and labour would be moved to and from the site as well as on site during construction.
- Storage, removal and subsequent handling of all materials, excess materials and waste materials of the procedure.
- Emergency procedures in case of any reasonably potential accident / incident which could occur during the procedure.
- Compliance / non-compliance with the EMPr Specification and motivation if non-compliant.

6. SITE DOCUMENTATION

The following documentation must be available at the site office at all times:

- A copy of the Environmental Impact Assessment (EIA) Report.
- A copy of this Environmental Management Programme (EMPr).
- A copy of the Environmental Authorisation.
- A copy of Approved Method Statements as required.

7. ENVIRONMENTAL MANAGEMENT PROGRAMME

For this specific development, the in situ upgrading of a 1 500 housing units at Sandlwana, an EMPr is required for the construction phase. The impacts, with associated mitigation measures, for the pre-construction and construction phases of the development are discussed below.

The EMPr is presented in a tabular format in order to facilitate inspections and audits.

Impact	Management/Mitigation	Responsible Person	Reporting, Control and Budget
Pre-Construction Phase			
Contractors Camp Site Selection	The site selected for the contractors camp must be approved by the ECO. A site layout plan must be submitted to the ECO	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	The size of the camp must be minimised where possible.	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	A dedicated material storage area must be identified within the camp boundaries	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	An adequate and dedicated parking area for staff and visitors must be provided for	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Roads and Access	The contractors camp must be fenced off to prevent access by animals or unauthorised persons	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Access to the camp must be controlled to prevent un-lawful access	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Roads within the camp must be kept to a minimum and where possible align with permanent roads	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Roads within the camp must have adequate drainage as to not impede the flow of storm water causing ponding of water	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Fauna and Flora	Clearing of vegetation for the development of the contractors camp must be kept to a minimum	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	No animal may be hunt, trapped or killed on or adjacent to the camp site. No domesticated animal may be kept on site.	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	No firewood or any plant material, dead or alive, may be collected on adjacent private land.		

Impact	Management/Mitigation	Responsible Person	Reporting, Control and Budget
Pre-Construction Phase			
Storm Water	Storm water channels and diversion measures must be in place to divert fresh water away from the contractors camp area	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Drainage within the camp must be maintained to prevent ponding of water or erosion occurring	Contractor	ECO and OLM Officials to confirm and evaluate conformance
General items storage	An dedicated area for the storage of general items and construction tools must be developed within the contractors camp area	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Hazardous items storage	A dedicated area for the storage of hazardous items and / or chemicals must be developed within the contractors camp area	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	The area must be bunded and lined to prevent any pollution leaching into the soil.	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Hazardous materials and / or chemicals must be locked to prevent theft or unauthorised usage	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Clear signage indicating hazardous material areas must be erected, warning staff and visitors of potential dangers	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Material Safety Data Sheets (MSDS) for all stored hazardous materials must be available on site	Contractor	ECO and OLM Officials to confirm and evaluate conformance

Impact	Management/Mitigation	Responsible Person	Reporting, Control and Budget
Pre-Construction Phase			
Fuel Storage and Re-fuelling	A dedicated fuel storage area must be developed within the contractor camp boundary	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	All fuel tanks must be bunded with a catch pit that can contain 110% of the volume of the fuel tank	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	All bunds must have a controlled storm water outlet with a filter	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	A dedicated re-fuelling area must be developed close to the fuel storage area	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	The re-fuelling area must be lined with an impermeable liner to prevent any accidental spillages from seeping into the soil	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Machinery Maintenance	A dedicated vehicle service / maintenance area must be developed within the contractor camp boundary	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	The area must be lined to prevent pollution from entering the soil profile	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	All used oil's drained from vehicles must be collected in appropriate drums / bins and be removed by a registered / recognised contractor	Contractor	ECO and OLM Officials to confirm and evaluate conformance

Impact	Management/Mitigation	Responsible Person	Reporting, Control and Budget
Pre-Construction Phase			
Waste Management	A waste management strategy must be developed for the contractor indicating how general and hazardous waste will be handled, collected and disposed off.	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	A bulk waste handling area must be developed for the contractor camp	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Bulk waste bins / skips must be available within the bulk handling area for both general and hazardous waste	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Rubbish bins must be available within the camp at strategic points for the discarding of general waste	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Bins and skips must be cleaned on a regular basis and disposed off at a registered and licensed waste disposal site for general and / or hazardous waste respectively	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Dust Control	Adequate dust control measures must be employed (for e.g. wetting of working areas) to minimise dust pollution	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Fires	No open fires may be allowed within the camp. Fires must be limited to the designated areas where adequate fire protection measures are in place	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Adequate and proper fire fighting equipment must be available within the camp at strategic points to effectively fight any fires that may occur in the camp	Contractor	ECO and OLM Officials to confirm and evaluate conformance

Impact	Management/Mitigation	Responsible Person	Reporting, Control and Budget
Pre-Construction Phase			
	Contractor staff must have basic fire fighting training.	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Sanitation	Toilets must be provided to construction staff at a rate of 1:15 (toilet to worker ratio).	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Toilets must be cleaned regularly to avoid odour nuisance	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Toilets must be placed out of sight, if possible, and adequately screened.	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Toilets on the construction site must be placed strategically across the site.	Contractor	ECO and OLM Officials to confirm and evaluate conformance
General Housekeeping	The contractor must ensure that the contractor's camp area is kept neat and tidy at all times. Construction materials must be stored in an orderly manner. The site must be kept clean from litter	Contractor	ECO and OLM Officials to confirm and evaluate conformance

Impact	Management/Mitigation	Responsible Person	Reporting, Control and Budget
Construction Phase			
General Construction site principles	All construction activities must be limited to the demarcated construction site	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Access to the construction site must be controlled e.g. an entrance gate	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	A visitors register must be available at the entrance gate where all visitors to the site must sign in	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	All vehicles entering the construction site must adhere to the speed limit	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	All vehicles must keep to designated roads and may not drive loosely through the veld	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Signage must be erected at the entrance gate informing visitors that they are entering a construction site and indicate potential hazards	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Construction activities should be limited to normal working hours to avoid creating a nuisance	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	A complaints register must be kept on site wherein all complaints from interested and / or affected parties are captured in	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	A list of emergency contact numbers must be displayed throughout the construction site	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	All contractors and staff must be trained or informed of the requirements of the EMP and the need to conduct activities in an environmentally friendly manner	Contractor	ECO and OLM Officials to confirm and evaluate conformance

Impact	Management/Mitigation	Responsible Person	Reporting, Control and Budget
Construction Phase			
	The construction site must be kept clean and neat to improve the visual appearance of the site	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Flora and Fauna	The construction activities must be limited to the demarcated construction site	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	No plant material, alive or dead, may be removed from properties adjacent to the construction site	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	It must be the aim of the construction to disturb as little as possible vegetation during the construction phase	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	No animals may be hunt, trapped or killed on or adjacent to the construction site	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	No domesticated animals may be kept on the construction site	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	If a wild animal is encountered on the construction site it must be caught and released, unharmed, outside the construction site	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Soils and Geology	No hazardous products may be placed directly on bare soil or rocks, a impermeable layer, such as plastic sheet, must first be laid over the exposed soil	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	No hazardous products be placed directly on exposed rock, a impermeable layer, such as plastic sheet, must first be laid over the exposed rock	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	All topsoil stripped during the construction process must be stockpiled for later use	Contractor	ECO and OLM Officials to confirm and evaluate conformance

Impact	Management/Mitigation	Responsible Person	Reporting, Control and Budget
Construction Phase			
	All stockpiles of topsoil must be protected against erosion and may not be placed within drainage channels	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Storm Water	Storm water drainage channels must be installed / maintained to prevent storm water pooling or causing erosion	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Natural drainage channels may not be filled in and must form part of the storm water management of the construction site, where possible and if in line with the construction plans	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Access and Construction Roads	Access and construction roads should, where possible, follow the alignment of permanent roads	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	All construction roads should follow the natural contours to prevent erosion of the roads	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Construction roads must be equipped with adequate drainage to manage potential storm water	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Access and construction roads must be dampened to prevent dust pollution occurring from the movement of construction vehicles	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Contractor must ensure that the access and construction roads be maintained in a good condition through the timely repairing of potholes, corrugations, storm water damage.	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Fires	No open fires may be allowed on the construction site	Contractor	ECO and OLM Officials to confirm and evaluate conformance

Impact	Management/Mitigation	Responsible Person	Reporting, Control and Budget
Construction Phase			
	Proper and adequate fire fighting equipment must be available at strategic points within the construction site to combat accidental fires	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Staff must be trained in basic fire fighting techniques.	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Accidental Spillages	All accidental spillages of hazardous materials such as oils, lubricants fuel or other hazardous materials must be cleaned immediately and disposed off in a responsible manner	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Spill cleaning kits containing absorbent material must be available on the construction site for rapid utilisation preventing pollution spreading into the environment	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Vehicle Maintenance and Re-fuelling	Vehicles must be serviced at the designated vehicle maintenance area within the contractor camp.	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	If emergency repairs need to be done adequate preventative measures must be taken to prevent pollution of the environment such as laying a plastic liner under the vehicle to prevent pollution entering the soil and making use of drip trays	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Vehicles should be refuelled at the designated fuel storage and re-fuelling area at the contractor camp.	Contractor	ECO and OLM Officials to confirm and evaluate conformance

Impact	Management/Mitigation	Responsible Person	Reporting, Control and Budget
Construction Phase			
	If a mobile fuel bowser is to be used for re-fuelling adequate preventative measures need to be implemented such as using a drip tray under the nozzle of the bowser to prevent pollution	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Drip trays must be used under all parked vehicles	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Cement and Concrete	Mixing of cement and concrete may not be done directly on the ground but on mortar boards or cement mixing machinery	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Where machinery is used for mixing cement the machines must be placed on an impermeable layer such as plastic liner to prevent concrete or cement spilling on bare soil or rock	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Water used to clean cement mixing equipment must be contained and disposed off in a responsible manner	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Where cement or concrete is spilled the spillage must be cleaned and the material can be used as backfill material or be disposed off at a registered landfill site.	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Storage of hazardous and general materials	If hazardous materials is stored on the construction site adequate preventative measures must be taken to prevent pollution spreading into the environment	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Hazardous material storage area's must be lined and banded to prevent pollution spreading into the environment	Contractor	ECO and OLM Officials to confirm and evaluate conformance

Impact	Management/Mitigation	Responsible Person	Reporting, Control and Budget
Construction Phase			
	Hazardous materials must be locked to prevent theft or un-authorized use which may lead to spillages	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	Signage indicating hazardous material storage areas must be erected	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	The Material Safety Data Sheets (MSDS) for all stored hazardous material must be available on site	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	An area on the construction site must be identified for the storage of general materials where minimal environmental disturbance will occur.	Contractor	ECO and OLM Officials to confirm and evaluate conformance
Cultural and Heritage Resources	If a potential cultural or heritage artefact is found during construction, construction activities should cease within the area of the find and the contractor, ECO and responsible Engineer must be informed of the find	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	The contractor, ECO and engineer must examine the find together and determine the course of actions to be taken	Contractor	ECO and OLM Officials to confirm and evaluate conformance
	If the find is deemed to be of cultural or heritage value the South African Heritage Resource Agency (SAHRA) must be notified and a Heritage expert be appointed to investigate the find and recommend further actions to be taken	Contractor	ECO and OLM Officials to confirm and evaluate conformance

8. COMPLIANCE AND MONITORING

Daily Activity Monitoring

- The monitoring of works on site is necessary to demonstrate compliance with the specifications of the EMPr and to allow for problems or issues of non-conformance to be identified and appropriate
- Monitoring should include visual checks by the Site Manager on a daily basis, checks on particular requirements for site activities by the Site Supervisor, as well as a review of site documentation.
- The Site Manager shall complete the performance record at the end of each table above, as a record of transgressions or problems experienced on site, and how they were dealt with.
- Monitoring of activities on site by the Site Supervisor should be done on a monthly basis.

9. REPORTING

Incident / Environmental Changes Reporting:

- OLM must, within 24 hours, notify the EDTEA of the occurrence or detection of any incident on the site which has the potential to cause or has caused pollution of the environment, health risk, nuisance conditions or water pollution.
- OLM must within 14 days submit an action plan, including a time schedule and resource allocation signed off by management to:
 - Correct the impact resulting from the incident
 - Prevent the incident from causing any further impacts
 - Prevent a recurrence of a similar incident
- OLM must keep an incident and complaints register.

10. ENVIRONMENTAL AWARENESS PLAN

The following Environmental Awareness Plan must be implemented by the Municipality in order to inform their employees and contractors of the environmental risk that may result from their work. The plan must be conducted as part of the induction process for all new employees (including contractors) that will perform work in terms of the proposed activities. Proof of all training provided must be kept on-site.

The Environmental Awareness Plan is referred to as the “SHE match” training programme. The training programme focuses on the following aspects:

- Explaining clearly what the environment is and what the environment consist of namely: air, water, soil, fauna, flora and people.
- Once participants have grasped the description of what the environment entails, the training focuses on the potential impacts that the construction and operational activities may have on each one of these environmental components. This is done by making use of the aspect register, where each one of the environmental aspects and associated impacts has been identified.
- To ensure that the training is effective, visual aids are used. Photos are taken of actual and potential impacts occurring on site and in some cases role-play is used to illustrate a potential impact.

- The participants are then exposed to a poster that reflects the various environmental components. The various photos taken are posted on the poster on a rotational basis and the participants indicate (based on the visual component) what environmental component was or could have been affected by the activities portrayed on the photo.
- By doing this the participants visualise the action as well as the potential consequence (environmental impact) of their action.
- This general awareness training must be done before construction commences and also when new employees start work. The training should be done every two years during the Operational Phase. The poster is posted in the communal area where the impacts are visualised and the photos rotated on a regular basis, for example, once a month.

11. AUDITING

11.1. Internal audits

Internal audits of the activity to verify compliance with the conditions of the design specifications will be conducted quarterly by the Municipality by the duly appointed staff member. The audit must include a check against the design conditions, the EMPr as well as the reporting requirements outlined.

11.2. External audits

External audits of the activity will be conducted annually by an external auditor appointed by the Municipality. The purpose of this audit is to determine compliance with the design conditions and other relevant legislation, industry best practice, the monitoring plan and EMPr.

12. AMENDMENTS OF THE EMPr

Any major issues not covered in the EMPr as submitted shall be addressed as an addendum to the EMPr, submitted for approval by the Department of Economic Development, Tourism and Environmental Affairs KwaZulu-Natal, prior to implementation.