	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  ENVIRONMENTAL MANAGEMENT PROGRAMME	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		




---


# UNIVERSITY OF MPUMALANGA

---

## ENVIRONMENTAL MANAGEMENT PROGRAMME FOR THE DEVELOPMENT OF 3000 BEDS

Date: 10 January 2021

<b>PREPARED FOR: GRANTON MERIWEL &amp; KHENKANE TRADING JV</b>		<b>PREPARED BY: Minenviro (Pty) Ltd</b> 	
<b>GRANTON MERIWEL &amp; KHENKANE TRADING JV</b>		<b>MINENVIRO CONSULTING</b>	
<b>Your Ref.:</b>		<b>Our Ref.:</b>	MIN-BAR-10/2020
<b>Address:</b>	Suite 4 Roycol Building, Elmadre Centre, Ferreira St. Nelspruit	<b>Address:</b>	31 Newquay Road, New Redruth Alberton 1450
<b>Client Contact Person:</b>	Professor Hove	<b>Consultant Contact Person:</b>	Charles Chigurah
<b>Tel No:</b>	013 744 0637	<b>Tel No:</b>	087 822 2319
<b>Mobile No:</b>	063 539 8952	<b>Mobile No:</b>	071 887 1394
<b>Fax No:</b>	013 744 0637	<b>Fax No:</b>	

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01	
		Version	000			
		Date	10 January 2021			

## DOCUMENT CONTROL

---

### Document Information


Description	Information
<b>Document ID:</b>	PS-UMP 08/2020: R0
<b>Document Name:</b>	UMP Bulk services report
<b>Document Revision:</b>	000
<b>Issue Date:</b>	Tuesday, 24 November 2020
<b>Electronic File Name:</b>	Bulk Services report.docx

### Document Revision History

Date	Rev.	Prepared by	Changes
10 January 2021	01	Charles Chigurah	Project Description

### Internal Document Approvals

	Role	Name	Signature	Date
<b>Compiled by:</b>	Snr Environmental Consultant	Charles Chigurah		18 December 2020
<b>Checked by:</b>	Snr Environmental Consultant	Charles Chigurah		10 January 2021
<b>Approved by:</b>	Project Manager			
<b>Authorized by:</b>	N/A			

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		


## ABBREVIATIONS

EMPr:	Environmental Management Programme
NEMA:	National Environmental Management Act
EIA:	Environmental Impact Assessment
I&APs:	Interested and Affected Parties
DEO:	Designated Environmental Officer
ECO:	Environmental Control Officer
SDC:	Safe Disposal Certificate
MSDS:	Material Safety Data Sheets
SAHRA:	South African Heritage Resource Agency
SANS:	South African National Standards
DWS:	Department of Water and Sanitation

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

## Table of Contents


ABBREVIATIONS.....	2
1 INTRODUCTION.....	5
1.1 Purpose of the EMPr .....	5
1.2 Project Location .....	6
1.3 Project Description.....	13
2 LEGISLATIVE FRAMEWORK .....	13
2.1 The Constitution of the Republic of South Africa, 1996 (Act no 108 of 1996) .....	13
2.2 ENVIRONMENT CONSERVATION ACT (ACT 73 OF 1989).....	13
2.3 NATIONAL HERITAGE RESOURCES ACT.....	14
2.4 NATIONAL WATER ACT (ACT 36 OF 1998).....	14
2.5 NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT (ACT NO 39 OF 2004) 15	
2.6 THE NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT (ACT 59 OF 2008). 15	
2.7 CONSERVATION OF AGRICULTURAL RESOURCES ACT (ACT NO 43 OF 1983) .....	16
2.8 Policies and guidelines consulted.....	16
3 ROLES AND RESPONSIBILITIES .....	16
3.1.1 Granton Meriwell (Pty) Ltd & Khenkane Trading JV .....	16
3.1.2 Contractor.....	17
3.1.3 Designated Environmental Officer .....	17
3.1.4 Environmental Control Officer.....	18
3.2 Emergency Preparedness .....	20
3.3 Checking and Corrective Action .....	21
3.3.1 Non-Compliance.....	21
3.3.2 Monitoring.....	22
3.4 Management Review.....	23
4 DETAILED ENVIRONMENTAL MANAGEMENT PROGRAMME .....	24

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

4.1	Pre-Construction Phase .....	24
4.1.1	Permits and Licenses .....	24
4.1.2	Appointment of Contractor .....	24
4.1.3	Preparation of Method Statements .....	25
4.2	Proposed Mitigation & Management.....	27
4.3	Operation and Maintenance Phase .....	27
5	REHABILITATION.....	28
6	CONCLUSION .....	28

**LIST OF FIGURES**

Figure 1: Study area.....	7
---------------------------	---

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

## 1 INTRODUCTION

The Bill of Rights – Chapter 2 of the Constitution Act No. 108 of 1996, includes an environmental right (Section 24) according to which, *“everyone has the right to an environment that is not harmful to their health or well-being and to have the environment protected for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation, promote conservation and the sustainable use of natural resources while promoting justifiable economic and social development”*. In addition, Section 28 of the National Environmental Management Act No 107 of 1998 (NEMA), requires, *“every person causing significant pollution or degradation of the environment, to take reasonable measures to prevent it from occurring, continuing or recurring”*. Therefore, in order to promote effective environmental management throughout the life-cycle of a project, it is important that management actions arising from Environmental Impact Assessments (EIAs) are clearly defined and translated into an Environmental Management Programme (EMPr) for the design, construction, operation and/or decommissioning phases of a project.

According to the Western Cape Department of Environmental Affairs and Development Planning (2005), an Environmental Management Programme (EMPr) can be defined as, *“an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the construction, operation and decommissioning of a project are prevented; and that the positive benefits of the project are enhanced”*.

### 1.1 Purpose of the EMPr

The purpose of an EMPr is therefore to:-

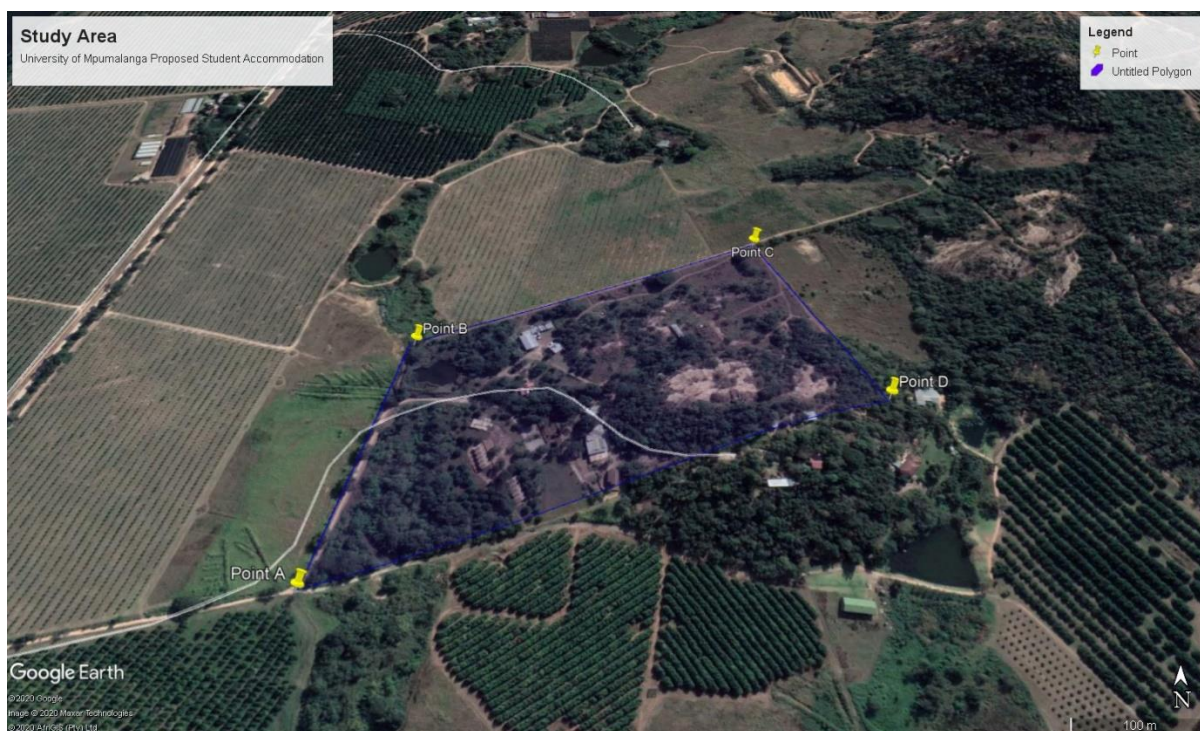
- Encourage good management practices through planning and commitment to environmental issues;
- Define how the management of the environment is reported and performance evaluated;
- Provide rational and practical environmental guidelines to:
  - Minimise the extent of environmental impacts and to manage environmental impacts and where possible, to improve the condition of the environment;
  - Prevent long-term or permanent environmental degradation.
  - Comply with all applicable laws, regulations, standards and guidelines for the protection of the environment;
  - Provide guidance regarding method statements which are required to be implemented to achieve environmental specifications;

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

- Define the corrective actions which must be taken in the event of non-compliance with the specifications of the EMPr;
- Describe all monitoring procedures required to identify impacts on the environment, and;
- Train employees and contractors with regard to environmental obligations.

## 1.2 Project Location

The project area is located in the properties listed in Table 1 in Mbombela within the jurisdiction of Mbombela Local Municipality in Mpumalanga Province.





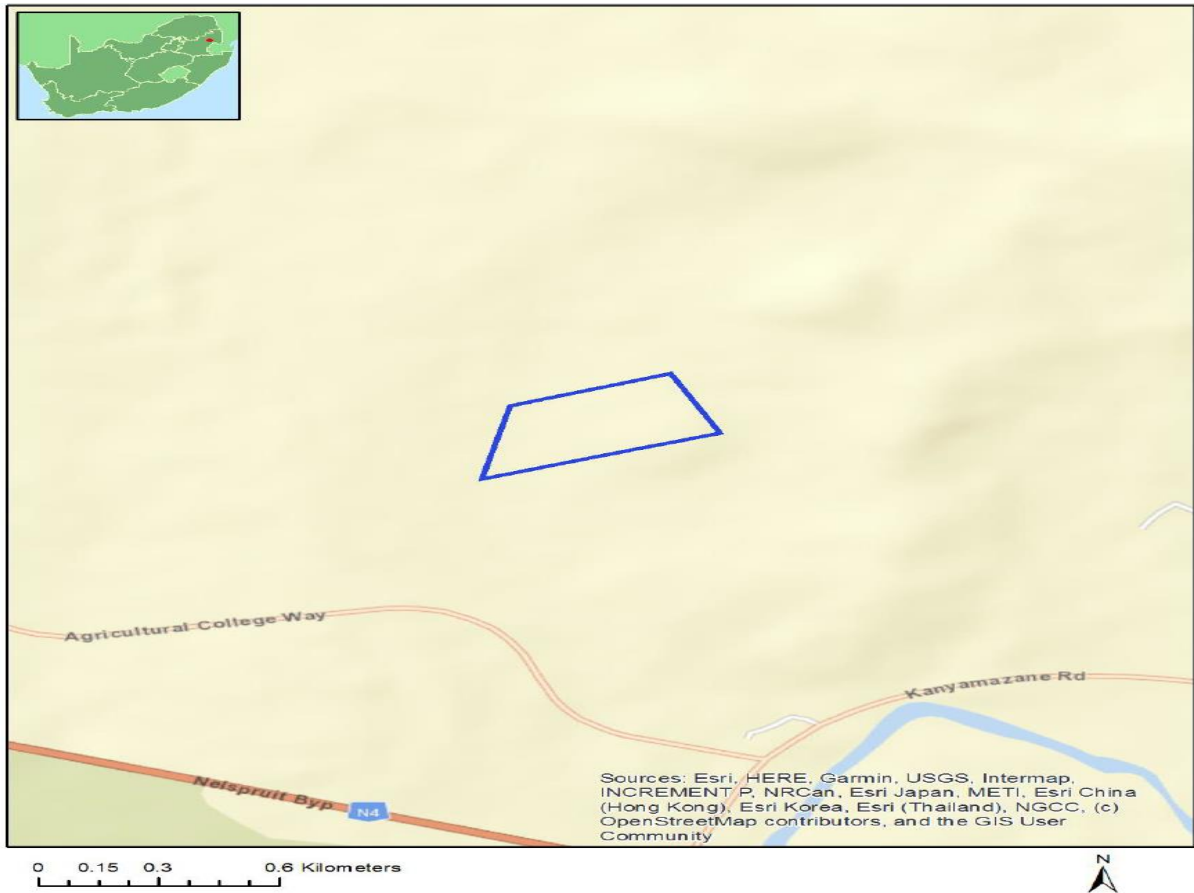



Figure 1: Study area

Table 1: Property details

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	FRIEDENHEIM	282	0	25°25'50.23S	31°0'6.04E	Farm
2	FRIEDENHEIM	282	33	25°26'2.34S	31°0'57.96E	Farm Portion
3	FRIEDENHEIM	282	34	25°25'51.13S	31°0'56.02E	Farm Portion
4	FRIEDENHEIM	282	29	25°26'12.9S	31°1'0.36E	Farm Portion
5	FRIEDENHEIM	282	32	25°26'3.96S	31°0'35.09E	Farm Portion



	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

### 1.3 Project Description

The development will comprise of the construction of 3000 beds for the University of Mpumalanga, which will be developed in three (3) phases. The first phase will involve the construction of fifteen (15) U-shaped blocks with each block comprising of three (3) floors. An access road from Koedoe Street and Rietbok Street will be surfaced.

## 2 EGISLATIVE FRAMEWORK

### 2.1 The Constitution of the Republic of South Africa, 1996 (Act no 108 of 1996)


With reference to the Bill of rights, Chapter 2 of the Constitution of the Republic of South Africa Act (108) includes the environmental right, section 24 to which everyone has the right to:

- a) To an environment which is not harmful to their health or wellbeing
- b) To have the environment protected for the benefit of present and future generations, through reasonable legislative and other measures that:
  - Prevent pollution and ecological degradation.
  - Promote conservation and.
  - Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

### 2.2 ENVIRONMENT CONSERVATION ACT (ACT 73 OF 1989)

The National Environmental Management: Biodiversity Act (NEMBA) provides for the management and conservation of South Africa's biodiversity within the framework of the National Environmental Management Act, 1998; and provides for and includes:

- The protection of species and ecosystems that warrant national protection.
- The sustainable use of indigenous biological resources.
- The fair and equitable sharing of benefits arising from bioprospecting involving indigenous biological resources;
- The establishment and functions of a South African National Biodiversity Institute; and for matters connected therewith.

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

### 2.3 NATIONAL HERITAGE RESOURCES ACT

In terms of Section 38 (1) (c) i, ii, iii, iv (d) (e) of the Heritage Resources Act (Act No 25 of 1999), a Heritage Impact Assessment has to be undertaken for the following developments:

- a) Any development or other activity which will change the character of a site
  - o Exceeding 5 000 m<sup>2</sup> in extent; or
  - o Involving three or more existing erven or subdivisions thereof; or
  - o Involving three or more erven or divisions thereof which have been consolidated within the past five years; or
  - o The costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resource authority.
- b) The re-zoning of a site exceeding 10 000 m<sup>2</sup> in extent; or
- c) Any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Section 34, no person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant provincial heritage resources authority (SAHRA).


### 2.4 NATIONAL WATER ACT (ACT 36 OF 1998)

The National Water Act ([NWA] Act 36, 1998) identifies 11 consumptive and non-consumptive water uses which must be authorised under a tiered authorisation system. Section 27 of the NWA specifies that the following factors regarding water use authorisation must be taken into consideration:

- a) The efficient and beneficial use of water in the public interest;
- b) The socio-economic impact of the decision whether or not to issue a licence;
- c) Alignment with the catchment management strategy;
- d) The impact of the water use, resource directed measures; and
- e) Investments made by the applicant in respect of the water use in question.

Section 21 of the National Water Act identifies listed activities for which a Water use License should be obtained. The Section 21 listed activities include:

- a) Taking water from a water resource;

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

- b) Storing water;
- c) Impeding or diverting the flow of water in a water course;
- d) Engaging in a stream flow reduction activity contemplated in Section 36;
- e) Engaging in a controlled activity identified as such in section 37(1) or declared under Section 38(1);
- f) Discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit;
- g) Disposing of waste in a manner which may detrimentally impact on a water resource;
- h) Disposing in any manner which contains waste from, or which has been heated in any industrial or power generation process;
- i) Altering the bed, banks, course or characteristics of a watercourse;
- j) Removing, discharging, or disposing of waste found underground if it is necessary for the efficient continuation of an activity or for the safety of people; and
- k) Using waste for recreational purposes.

## **2.5 NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT (ACT NO 39 OF 2004)**


The National Air Quality Act 39 of 2004 was promulgated but only enacted in September 2005. However, some sections of the Atmospheric Pollution Prevention Act (APPA) of 1965 are still valid and implemented and enforced by DEA and more specifically, the Chief Air Pollution Control Officer or CAPCO.

## **2.6 THE NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT (ACT 59 OF 2008)**

The National Environmental Management: Waste Act, 2008 (Act No. 58 of 2008) (the Waste Act), came into operation on the 1st of July 2009. The Waste Act repealed Section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) (ECA) and introduced new provisions regarding the licensing of waste management activities. In terms of the Waste Act the Minister may publish a list of waste management activities that have, or are likely to have, a detrimental effect on the environment.

In terms of the Waste Act no person may commence, undertake or conduct a waste management activity except in accordance with:

- a) The requirements or standards determined in terms of the Waste Act for that activity; and
- b) A waste management license issued in respect of that activity, if a license is required.

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

A list of waste management activities was published on the 3rd of July 2009. This list of activities identifies activities that may not be commenced, undertaken or conducted by any person unless a waste management licence is issued in respect of that activity. The list of activities is divided into two Categories.

A person who wished to commence, undertake or conduct, an activity listed under Category A, must conduct a Basic Assessment process, and a person who wished to commence, undertake or conduct an activity listed under Category B, must conduct a Scoping and EIA process, as stipulated in the EIA Regulations made under NEMA, as part of a waste management licence application in terms of the Waste Act.

## **2.7 CONSERVATION OF AGRICULTURAL RESOURCES ACT (ACT NO 43 OF 1983)**

To provide for the conservation of the natural agricultural resources of the Republic of South Africa by the preservation of the production potential of land, by the combating and prevention of erosion and weakening or destruction of the water sources, and by the protection of the vegetation and the combating of weeds and invader plants

## **2.8 Policies and guidelines consulted**


From the NEMA Environmental Impact Assessment Regulations Guideline and Information Document Series the following guidelines were used:

- a) Guideline on Public Participation in the Environmental Impact Assessment Process (October 2012)
- b) Draft Guideline on Need and Desirability in Terms of the Environmental Impact Assessment (EIA) Regulations, 2010 (October 2012)
- c) Guideline on Alternatives (August 2010)

## **3 ROLES AND RESPONSIBILITIES**

### **3.1.1 Granton Meriwell (Pty) Ltd & Khenkane Trading JV**

Granton Meriwell (Pty) Ltd & Khenkane Trading JV is the client and will therefore be the entity monitoring the implementation of the EMPr. However, if Granton Meriwell (Pty) Ltd & Khenkane Trading JV appoints a Contractor to implement the project and hence implement the proposed mitigation measures documented in this EMPr on their behalf.

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

### 3.1.2 Contractor

The successful Contractor shall:

- Be responsible for the overall implementation of the EMPr in accordance with the requirements of Granton Meriwell (Pty) Ltd & Khenkane Trading JV;
- Ensure that all third parties who carry out all or part of the Contractor's obligations under the Contract comply with the requirements of this EMPr

### 3.1.3 Designated Environmental Officer

The Contractor shall appoint a nominated representative of the contractor as the Designated Environmental Officer (DEO) for the contract. The DEO will be site-based and shall be the responsible person for implementing the environmental provisions of the construction contract. There shall be an approved DEO on the site at all times.


The DEO's duties will include, *inter alia*, the following:

- Ensuring that all the permits required in terms of the applicable legislation have been obtained prior to construction commencing.
- Reviewing and approving construction method statements with input from the ECO and Engineer, where necessary, in order to ensure that the environmental specifications contained within the construction contract are adhered to.
- Assisting the Contractor in finding environmentally responsible solutions to problems.
- Keeping accurate and detailed records of all activities on site.
- Keeping a register of complaints on site and recording community comments and issues, and the actions taken in response to these complaints.
- Ensuring that the required actions are undertaken to mitigate the impacts resulting from non-compliance.
- Reporting all incidences of non-compliance to the ECO and Contractor.

The DEO shall submit regular written reports to the ECO, but not less frequently than once a month.

The DEO must have:

- The ability to manage public communication and complaints;
- The ability to think holistically about the structure, functioning and performance of environmental systems; and

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		


- The DEO must be fully conversant with the Environmental Management Programme and all relevant environmental legislation.

The ECO shall have the authority to instruct the contractor to replace the DEO if, in the ECO's opinion, the appointed officer is not fulfilling his/her duties in terms of the requirements of the construction contract. Such instruction will be in writing and shall clearly set out the reasons why a replacement is required and within what timeframe.

### 3.1.4 Environmental Control Officer

For the purposes of implementing the conditions contained herein, Granton Meriwell (Pty) Ltd & Khenkane Trading JV shall appoint an Environmental Control Officer (ECO) for the contract. The ECO shall be the responsible person for ensuring that the provisions of the EMPr are complied with. The ECO will be responsible for issuing instructions to the contractor and where environmental considerations call for action to be taken. The ECO shall submit regular written reports to Granton Meriwell (Pty) Ltd & Khenkane Trading JV, but not less frequently than once a month. The ECO will be responsible for the monitoring, reviewing and verifying of compliance with the EMPr by the Contractor. The ECO's duties in this regard will include, *inter alia*, the following:

- Confirming that all the environmental permits required in terms of the applicable legislation have been obtained prior to construction commencing.
- Monitoring and verifying that the EMPr and Contract are adhered to at all times and taking action if specifications are not followed.
- Monitoring and verifying that environmental impacts are kept to a minimum.
- Reviewing and approving construction method statements with input from the DEO and Engineer, where necessary, in order to ensure that the environmental specifications contained within this EMPr are adhered to.
- Inspecting the site and surrounding areas on a regular basis regarding compliance with the EMPr and Contract.
- Monitoring the undertaking by the Contractor of environmental awareness training for all new personnel on site.
- Ensuring that activities on site comply with all relevant environmental legislation.


	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

- Ordering the removal of, or issuing spot fines for person/s and/or equipment not complying with the specifications of the EMPr.
- Undertaking a continual internal review of the EMPr and submitting any changes to Granton Meriwell (Pty) Ltd & Khenkane Trading JV for review and approval.
- Checking the register of complaints kept on site and maintained by the DEO and ensuring that the correct actions are/were taken in response to these complaints.
- Checking that the required actions are/were undertaken to mitigate the impacts resulting from non-compliance.
- Reporting all incidences of non-compliance to the Granton Meriwell (Pty) Ltd & Khenkane Trading JV.
- Keeping a photographic record of progress on site from an environmental perspective.
- Recommending additional environmental protection measures, should this be necessary.
- Providing report back on any environmental issues at site meetings

The ECO must have:

- A good working knowledge of all relevant environmental policies, legislation, guidelines and standards;
- The ability to conduct inspections and audits and to produce thorough, readable and informative reports;
- The ability to manage public communication and complaints;
- The ability to think holistically about the structure, functioning and performance of environmental systems; and
- Proven competence in the application of the following integrated environmental management tools:
  - Environmental Impact Assessment.
  - Environmental management plans/programmes.
  - Environmental auditing.
  - Mitigation and optimisation of impacts.
  - Monitoring and evaluation of impacts.
  - Environmental Management Systems.



	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

The ECO must be fully conversant with the Environmental Management Programme and all relevant environmental legislation. Granton Meriwell (Pty) Ltd & Khenkane Trading JV shall have the authority to replace the ECO if, in their opinion, the appointed officer is not fulfilling his/her duties in terms of the requirements of the EMPR or this specification. Such instruction will be in writing and shall clearly set out the reasons why a replacement is required and within what timeframe.


### 3.2 Emergency Preparedness

The Contractor shall compile and maintain environmental emergency procedures to ensure that there will be an appropriate response to unexpected or accidental actions or incidents that will cause environmental impacts, throughout the life cycle of the project. Such activities may include, *inter alia*:

- Accidental discharges to water and land.
- Accidental exposure of employees to hazardous substances.
- Accidental veld or forest fires.
- Accidental spillage of hazardous substances.
- Accidental toxic emissions into the air (e.g. at asphalt plants if there will be any).
- Specific environmental and ecosystem effects from accidental releases or incidents.

These plans should include:

- Emergency organisation (manpower) and responsibilities, accountability and liability.
- A list of key personnel.
- Details of emergency services applicable to the various areas along the route (e.g. the fire department, spill clean-up services, etc.).
- Internal and external communication plans, including prescribed reporting procedures where required by legislation.
- Actions to be taken in the event of different types of emergencies.
- Incident recording, progress reporting and remediation measures required to be implemented.
- Information on hazardous materials, including the potential impact associated with each, and measures to be taken in the event of accidental release.

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

- Training plans, testing exercises and schedules for effectiveness.

The Contractor shall comply with the emergency preparedness and incident and accident-reporting requirements, as required by the Occupational Health and Safety Act, 1993 (Act No 85 of 1993), the National Environmental Management Act, 1998 (Act No 107 of 1998), the National Water Act, 1998 (Act No 36 of 1998) and the National Veld and Forest Fire Act, 1998 (Act No 101 of 1998) as amended and/or any other relevant legislation.

### 3.3 Checking and Corrective Action

#### 3.3.1 Non-Compliance


Non-compliance with the specifications of the EMPr and/or conditions of any environmental permits, both of which will be present on-site at all times, constitutes a breach of Contract for which the Contractor may be liable to pay penalties. The Contractor is deemed not to have complied with the EMPr if:

- There is evidence of contravention of the EMPr specifications within the boundaries of the construction site, site extensions and haul/access roads;
- There is contravention of the EMPr specifications which relate to activities outside the boundaries of the construction site.
- Environmental damage ensues due to negligence;
- Construction activities take place outside the defined boundaries of the site; and/or
- The Contractor fails to comply with corrective or other instructions issued by the Engineer and/or ECO within a specific time period.

The contractor shall act immediately when a notice of non-compliance is received and correct whatever was the cause for the issuing of the notice.

Any non-compliance with the agreed procedures of the EMPr is a transgression of the various statutes and laws that define the manner by which the environment is managed therefore any avoidable non-compliance, dependant on severity, shall be considered sufficient grounds for contact to be made with relevant provincial or national authorities.

The engineer's decision with regard to what is considered a violation, its seriousness and the action to be taken against the contractor shall be final. Failure to redress the cause shall be

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

reported to the relevant authority. The responsible provincial or national authorities shall ensure compliance and impose penalties relevant to the transgression as allowed for within its statutory powers.

### 3.3.2 Monitoring

A monitoring programme will be implemented for the duration of the construction phase of the project. This programme will include:

- **Performance Audits:** Monthly inspection reports which are performance based compiled by the ECO. This must also incorporate monitoring of compliance issues as well as permits, licenses, the EMPr and all contract documentation's conditions. These audits can be conducted randomly and do not require prior arrangement with the project manager.
- **Compliance Audits:** The auditor will initially undertake compliance audits every month. Compilation of an audit report with a rating of the compliance with the EMPr. This report will be submitted to the relevant authorities as and when required.

The following will also assist with monitoring:-


#### Complaints Register

The Contractor will ensure that a dedicated Complaints Register is kept on site at all times. The register will contain the details of the person who made the complaint, the nature of the complaint received, the date on which the complaint was made and the response noted with the date and action taken. The Complaints register will be kept in accordance with the requirements of the ECO.

#### Inspections

On-going visual inspections will be conducted daily by the DEO. The DEO will spend the bulk of his/her time on site on the lookout for any unsafe acts and activities that transgress the requirements as specified in the EMP. The DEO compiles the site register and the ECO maintains the complaints register and any other records required (the DEO would also have input into this as well, as he/she would be site-based).

#### Incident Reporting and Remedy

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

If a leakage or spillage of hazardous substances occurs on site, the local emergency services must be immediately notified of the incident (within 24 hours). The following information must be provided:

- The location;
- The nature of the load; 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.

#### **Public Communication and Liaison with Interested and Affected Parties**

The Contractor shall comply with the requirements for public consultation as required by the Constitution Act, 1996 (Act No 108 of 1996) and the National Environmental Management Act, 1998 (Act No 107 of 1998). During the construction phase of the project, the Contractor shall be responsible for erecting information boards, in the position, quantity, design and dimensions approved by the Engineer.


The information boards shall contain relevant information regarding the construction activity and the relevant contact details to assist persons who wish to submit complaints regarding construction activities.

#### **Information distribution**

Copies of the EMPr will be made available to I&APs at appropriate locations. Copies will also be distributed to all senior contract personnel. All senior personnel on the construction site will be required to familiarize themselves with the contents of the document.

#### **3.4 Management Review**

A formal management review needs to be conducted on a regular basis in which the monthly internal audit reports written by the ECO and based on frequent inspections and interactions with the DEO based on the latter's daily reports, audit reports by the independent external auditor will be reviewed. The purpose of the review is to critically examine the effectiveness of the EMPr and its implementation and to decide on potential modifications to the EMPr as and when necessary.

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

The process of management review is in keeping with the principle of continual improvement. Management review will take place monthly for the duration of the project.

#### **4 DETAILED ENVIRONMENTAL MANAGEMENT PROGRAMME**

The EMPr forms part of the Contract Documentation and is thus a legally binding document. It is also necessary for the Contractor to make provisions as part of their budgets for the implementation of the EMPr. In terms of the NEMA an individual responsible for environmental damage must pay costs both to the environment and human health and the preventative measures to reduce or prevent additional pollution and/or environmental damage from occurring. This is referred to as the Polluter Pays Principle. Section 28 of the NEMA embodies the Polluter Pays Principle. The Contractor is deemed not to have complied with the Environmental Specifications/EMPr if:

- There is evidence of contravention of clauses within the boundaries of the site, site extensions and haul /access roads;
- Environmental damage ensues due to negligence;
- The Contractor ignores or fails to comply with corrective or other instructions issued by Granton Meriwell (Pty) Ltd & Khenkane Trading JV, the Engineer or ECO within a specified time; and
- The Contractor fails to respond adequately to complaints from the public.


#### **4.1 Pre-Construction Phase**

##### **4.1.1 Permits and Licenses**

All necessary permits and licences must be obtained by Granton Meriwell (Pty) Ltd & Khenkane Trading JV prior to the commencement of construction

##### **4.1.2 Appointment of Contractor**

- Granton Meriwell (Pty) Ltd & Khenkane Trading JV must ensure that this EMPr forms part of any Contractual agreements with the Contractor(s) and sub-Contractors for the execution of the proposed project. The Contractor must make adequate provision in their budgets for the implementation of the EMPr.

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

- The Principal Contractor (including sub-Contractors and suppliers) must comply with the relevant provisions of the EMPr, applicable environmental legislation, by-laws and associated regulations promulgated in terms of these laws.
- Tender documents should include statements to include the use of local communities or local community organisation where possible in supplying services and labour to the construction activities.
- Local labourers should be used for such methods

#### **4.1.3 Preparation of Method Statements**

- Method Statements must be submitted by the Contractor to the ECO and must be adhered to by the Contractor and Project Engineer for the duration of the Project. These relate to water and storm water management requirements, traffic requirements, solid waste management requirements, fuel storage and filling and dispensing of fuel (diesel and petrol), hydrocarbon spills, contaminated water treatment, the storage of hazardous materials, standard emergency procedures, and biohazard control, and any further activities which the ECO and Project Engineer deem necessary.
- The ECO will monitor the implementation of the Method Statements. All copies of the statements and plans must be submitted to the appointed ECO.

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDR0	1020	01
		Version	000		
		Date	10 January 2021		

#### 4.2 Proposed Mitigation & Management

The table below is an illustration of the criteria utilised to identify proposed mitigation and the management of the mitigation

Impact	Mitigation	Responsibility	Time Frame	Comment on Overall Assessment and Conclusion
Noise	<ul style="list-style-type: none"> <li>Construction and other noise generating activities should be restricted to between 06h00 and 18h00 Monday to Friday, unless otherwise approved by the appropriate competent person in consultation with adjacent landowners/affected persons and ECO.</li> <li>During the operational phase all activities must take place in a manner that will allow as little noise as possible.</li> <li>Activities, which are deemed to generate high levels of noise, will be restricted to normal working hours</li> </ul>	Contractor	During Construction	If construction vehicles are serviced and properly maintained the level of noise should be less.



Internal Doc #	PDRO	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
Dust	<ul style="list-style-type: none"> <li>The liberation of dust into the surrounding environment shall be effectively controlled by the use of, water spraying</li> <li>The speed of haul trucks and other vehicles must be strictly being controlled to avoid dangerous conditions, excessive dust or deterioration of the road being used.</li> <li>Site clearance to be done only as needed in phases</li> </ul>	Contractor	During Construction	The level of dust should be reduced to minimal as the result of water spraying during working hours and pilling of soil should be avoided wherever possible
Soil	<ul style="list-style-type: none"> <li>Stockpiled topsoil should not be compacted and should be replaced as final soil layer.</li> <li>Soil should be exposed for the minimum time possible once cleared of vegetation,</li> </ul>	Contractor	During Construction	The design lay out plan should address all issues relating to storm water management and soil erosion. This could be a

Internal Doc #	PDR0	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
	<p>i.e. the timing of clearing and grubbing should be co-ordinate as much as possible to avoid prolonged exposure of soils to wind and water erosion.</p> <ul style="list-style-type: none"> <li>The A-horizon will be removed and used for rehabilitation purposes. The lower soil horizons will be used for construction activities. The A-horizon will be stockpiled in a responsible manner and replaced during rehabilitation</li> </ul>			complete mitigation of this soil erosion
Disposal of sewage	The contractor to install adequate portable chemical toilets to meet the sanitation needs on the construction site (14 people per toilet).	Contractor	During Construction	Ablution facility should be made available during construction phase for employees to able to use this facility. All type of waste should be classified and disposed

Internal Doc #	PDR0	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
				in an appropriate registered waste disposal site
Mixing of concrete	Where concrete has been mixed, especially in the natural environment, all residues must be removed and disposed of in an environmentally responsible manner approved by the ECO	Contractor	During Construction	Unused cement should not be left to dry on the ground. If proper housekeeping rules are complied with, most impacts should not affect the environment
Storage of equipment and materials	<ul style="list-style-type: none"> <li>Choice of location for storage areas must take into account prevailing winds, exposure sun, distance to water bodies and general onsite topology.</li> <li>All equipment and materials must be stored in a designated area in an appropriate manner as to prevent pollution.</li> </ul>	Contractor	Through-out the life cycle of a project	If employees on site shall practice good housekeeping behaviour, the work condition will be free of injuries and everything would be in its place and there will be space for everything

Internal Doc #	PDR0	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
	<ul style="list-style-type: none"> <li>Storage areas must be designated, demarcated and fenced as effective as possible.</li> <li>Fire prevention facilities must be present and accessible at all times.</li> </ul>			
Waste generation and disposal	<ul style="list-style-type: none"> <li>A waste management plan to be developed for the construction site.</li> <li>Plan to ensure that all waste is contained in suitable containers to prevent waste being washed into water bodies.</li> <li>Containers for waste to ensure that any fluids generated by waste are trapped and can be disposed of in a suitable</li> </ul>	Contractor	During construction	Waste removal should be done regularly and that could make the environment free from any hazards.
Hazardous substances	Hazardous materials to be stored correctly, marked, labelled, without the	ECO & Contractor	During Construction	Employees dealing with hazardous substances should be

Internal Doc #	PDR0	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
	<p>risk of contamination and hazardous waste to be disposed of correctly with the necessary certificates issued.</p> <ul style="list-style-type: none"> <li>• All oils, hydraulic fluids and other hazardous materials will be stored in suitable containers in a structure or facility designated for this purpose.</li> <li>• Material Safety Data Sheets (MSDSs) shall be readily available on site for all chemicals and hazardous substances to be used on site.</li> <li>• Storage areas containing hazardous substances must be clearly signed and the designated person contact, and names should be displayed.</li> </ul>			<p>trained and be competent to do so. This could completely mitigate reduce the risk posed by this impact.</p>

Internal Doc #	PDR0	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
	<ul style="list-style-type: none"> <li>Residents living adjacent to the construction site must be notified of the existence of the hazardous storage area.</li> <li>Staff dealing with these materials/substances must be aware of their potential impacts and follow the appropriate safety measures</li> </ul>			
Vehicle maintenance and refuelling	<ul style="list-style-type: none"> <li>Vehicle maintenance and equipment handling to be carried out in areas especially equipped for this purpose to prevent spillage and contamination.</li> <li>All oil changes, lubrication and maintenance will take place only at the designated areas.</li> <li>Refuelling of vehicles will and must take place at the designated refuelling area.</li> </ul>	Contractor	During Construction	The impact should be completely mitigated or reduced form posing danger to the environment.

Internal Doc #	PDR0	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
	This area will have a sufficiently impermeable surface to prevent seepage into ground water. The refuelling area will be bounded to prevent any surface water from running over this area			
Visual impacts	<ul style="list-style-type: none"> <li>• Waste (construction and domestic) must be disposed of in a proper manner and not allowed to be strewn around on site and surrounding areas.</li> <li>• Storage facilities elevated tanks and other temporary structures on site should be located such that they have as little visual impact on residents as possible.</li> </ul>	Contractor	During Construction	The current existing area will be moderately impacted visually



Internal Doc #	PDR0	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
	<ul style="list-style-type: none"> <li>• Special attention should be given to the screening of highly reflective materials on site.</li> <li>• The soil extracted from the furrows should be dumped in a designated area</li> </ul>			
Endemic flora and fauna	<ul style="list-style-type: none"> <li>• No endemic flora and fauna species will be deliberately destroyed or permanent alienated from their natural habitat during construction.</li> <li>• Excavations left open during construction should be checked periodically such that animals falling in can be safely removed and released away from construction activities. All</li> </ul>	ECO & Contractor	During Construction	Identified indigenous plants and species existing in the area will be protected by all means

Internal Doc #	PDR0	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
	<p>excavations should be filled as soon as possible.</p> <ul style="list-style-type: none"> <li>• Construction staff should be advised not to chase, kill or catch animals found or encountered during construction.</li> <li>• Only vegetation falling in directly in demarcated in operational area should be removed where necessary.</li> <li>• No exotic/invasive plants are to be planted on common ground of the site.</li> <li>• No vegetation will be removed without prior permission from ECO.</li> </ul>			
Labour force	<ul style="list-style-type: none"> <li>• Laborers to be restricted to construction area.</li> <li>• Access to the site should be restricted to employees of the contractor.</li> </ul>	Contractor	During Construction	Skills and knowledge should be gained by these employees who assist in building local communities

Internal Doc #	PDR0	1020	01
Version	000		
Date	10 January 2021		

Impact	Mitigation	Responsibility	Time Frame	Comment on Overall Assessment and Conclusion
	<ul style="list-style-type: none"> <li>• Temporary ablution facilities to be provided at appropriate sites (one toilet for 14 laborers).</li> <li>• Such ablution facilities to be kept away from natural water bodies.</li> <li>• All informal traders to be discouraged.</li> <li>• All labour will undergo basic induction, where safety, health and environmentally issues will be discussed.</li> <li>• Construction staff should be educated, prior to commencement of construction, as to the need to refrain from destruction or killing of animals and plants, as well as from indiscriminate defecation, waste</li> </ul>			

Internal Doc #	PDR0	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
	<p>disposal and / or pollution of local soil and water sources.</p> <ul style="list-style-type: none"> <li>• The contractor should always ensure proper supervision of employees</li> </ul>			
Temporary jobs	<ul style="list-style-type: none"> <li>• Local labour and contractors must be used wherever possible. Basic skills development and capacity development must be incorporated with this. It will be a specific condition in the contractors' agreements that local labour be used wherever possible. All reasonable attempts will be made to appoint people from the local communities as temporary laborers for non- specialize tasks and they will be subject to the necessary basic skills training.</li> </ul>	Contractor	During Construction	Local laborers should be given priorities.

Internal Doc #	PDRO	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
Fire protection	<ul style="list-style-type: none"> <li>• Contractor must make sure that there is supervision for all fires that are used in the construction camp.</li> <li>• Smoking should be prohibited in the vicinity of flammable substances.</li> <li>• The contractor should ensure that fire-fighting equipment is available on site, in particular where flammable substances are stored.</li> <li>• Fires started for comfort(warmth) should be discouraged by the contractor, due to the risk of vegetation fires and risk to adjacent property</li> <li>• Fire-fighting equipment and emergency plans must be in place prior to the construction phase.</li> </ul>	Contractor	During Construction	Every public structure has to have fire prevention measures in place the presence of this facility is a necessity

Internal Doc #	PDR0	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
	<ul style="list-style-type: none"> <li>• The contractor will plan and implement a fire prevention programs and develop a contingency plan in the event of any fire.</li> <li>• No refuse or waste may be burn.</li> <li>• The contractor will be responsible for all damages caused by the outbreak of a fire originating from a site where work is undertaken. Damage to adjacent properties will be to his account.</li> <li>• The contractor is to provide cooking areas where fire risks will be minimized and controllable</li> </ul>			
Stormwater runoff	• To prevent storm water damage, the increase in storm water run-off resulting from construction activities must be	Contractor	During Construction	This should be able to address soil erosion as well as the design of the site should have


Internal Doc #	PDRO	1020	01
Version	000		
Date	10 January 2021		

<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
	<p>estimated and the drainage systems assessed accordingly.</p> <ul style="list-style-type: none"> <li>• A drainage plan must be submitted to the Engineer for approval and must include the location and design criteria of any temporary stream crossing.</li> <li>• All storm water runoff from compacted materials must be monitored if signs of erosion become apparent</li> </ul>			appropriate storm water management as well as drainage system that should have oil trap/filters if necessary.
Construction camp	<ul style="list-style-type: none"> <li>• The choice of the site for the contractors' camp requires the Engineers permission and must consider location of villagers and or ecological sensitive areas, including flood zones and unstable zones.</li> </ul>	Contractor	During Construction	The site will be accessible and pose less impact on the environment if chosen in a correct place. The engineers should be responsible to ensure that the chosen place has less or no environmental impact



Internal Doc #	PDR0	1020	01
Version	000		
Date	10 January 2021		


<b>Impact</b>	<b>Mitigation</b>	<b>Responsibility</b>	<b>Time Frame</b>	<b>Comment on Overall Assessment and Conclusion</b>
	<ul style="list-style-type: none"> <li>• The size of the construction camp should be kept to a minimum.</li> <li>• The contractor must attend to the drainage of the camp to avoid standing water and or sheet erosion.</li> </ul>			

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01	
		Version	000			
		Date	10 January 2021			

### 4.3 Operation and Maintenance Phase

The below identified impacts and mitigation that could occur during operational phase are similar to the identified during construction therefore the information below is a summary of these impacts and the mitigation.

<b>Impact and proposed mitigation and management actions</b>	<b>Responsibility</b>	<b>Timeframe</b>
<b>Storm water management:</b> <ul style="list-style-type: none"> <li>• It is recommended that proper storm water drainage system be ensured during operation and maintenance phase.</li> <li>• Storm water should not be allowed to discharge onto bare soil but must be diverted to the surrounding grasslands or to the landscaped gardens during the operational phase.</li> </ul>	Developer	During operation and maintenance
<b>Waste generation and disposal:</b> <ul style="list-style-type: none"> <li>• Solid waste generated during operation and maintenance phase must be removed in a continuous and efficient manner to the satisfaction of the local municipality.</li> <li>• A waste management plan to be developed and maintained for the construction site.</li> <li>• No solid waste should be dumped on the site.</li> <li>• All domestic waste generated on the site should be disposed of in a proper manner off site i.e., no burial on site.</li> </ul>	Developer	During operation and maintenance
<b>Maintenance of access roads:</b> <ul style="list-style-type: none"> <li>• Access/ alternate roads to be maintained with an acceptable free of erosion, and no surface water ponding</li> </ul>	Developer	During operation and maintenance

	<b>DEVELOPMENT OF 3000 BEDS FOR THE UNIVERSITY OF MPUMALANGA</b>  <b>ENVIRONMENTAL MANAGEMENT PROGRAMME</b>	Internal Doc #	PDRO	1020	01
		Version	000		
		Date	10 January 2021		

## 5 REHABILITATION

- Once construction is completed, all redundant infrastructure, waste and construction materials should be removed immediately from site by the contractor and disposed of in an appropriate manner, i.e., at a registered site. This includes any wastes that may have been left at the site from previous activities on the site.
- Disturbed areas, which are to remain free of development, should be rehabilitated to a comparable state to the surroundings area. A need for this will be identified by the Environmental Control Officer.
- Stockpiled topsoil should be used as the final cover for all disturbed areas where revegetation is required. This is to take place as soon as possible after the civil work is complete.
- Stockpiles of material and waste will be removed after construction with the area fully rehabilitated.
- Rehabilitation and re-vegetation only to make use of indigenous and endemic species.

## 6 CONCLUSION

This EMPr will be accepted by the applicant and its appointed representatives such as engineers, contractors, architects and project managers will be represented by their signatures herein under. All conditions and recommendations will be implemented and the necessary records kept for referral