



**DRAFT BASIC ASSESSMENT REPORT FOR THE PROPOSED INDUSTRIAL
TOWNSHIP ESTABLISHMENT ON THE REMAINDER OF THE FARM
PALMIETFONTEIN 3750, DANNHAUSER LOCAL MUNICIPALITY.**

PREPARED FOR:

Dannhauser Local Municipality
8 Church Street
Dannhauser
3080

PREPARED BY:

MANG GEO ENVIRO SERVICES
687 Silverlakes Road, Unit 11 Kingfisher Building,
Hazeldean Office Park, 0081
Tel: 012 770 4022
info@manggeoenviro.co.za
www.manggeoenviro.co.za

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DEFINITIONS

Alternatives

Alternatives are different means of meeting the general purpose and need of a proposed activity. Alternatives may include location or site, activity, process or technology, or the no-go alternative.

Contaminated

Means the presence in or under any land, site, buildings or structures of a substance or micro-organism above the concentration that is normally present in or under that land, which substance or micro-organism directly or indirectly affects or may affect the quality of soil or the environment adversely.

Cumulative Impacts

Impacts that result from the incremental impact of the proposed activity on a common resource when added to the impacts of the other past, present or reasonably foreseeable future activities. Cumulative impacts can occur from the collective impacts of individual minor actions over a period and can include both direct and indirect impacts.

Direct impacts

Impacts that are caused directly by the activity and generally occur at the same time and at the place of the activity (e.g. noise generated by blasting operations on the site of activity). These impacts are usually associated with the construction, operational or maintenance of an activity and are generally obvious and quantifiable.

Environment

The surroundings within which humans exist and that are made up of

- the land, water and atmosphere of the earth;
- micro-organisms, plant and animal life;
- any part or combination of (i) and (ii) and the interrelationships among and between them; and,
- the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and wellbeing.

Environmental Aspects

Elements of an organization's activities, products or services that can interact with the environment.

Environmental Degradation

Refers to pollution, disturbance, resource depletion, loss of biodiversity, and other kinds of environmental damage; usually refers to damage occurring accidentally or intentionally as a result of human activities.

Environmental Impacts

Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities, products or services.

Environmental Impact Assessment

A systematic process of identifying, assessing and reporting environmental impacts associated with an activity and includes basic assessment and Scoping and EIR (NEMA EIA Regulations).

Environmental Impact Report

A report assessing the potential significant impacts as identified during the environmental impact assessment.

Environmental Management Plans

This document that provides appropriate mitigation measures designed to minimize or eliminate the significant adverse impacts that may be caused as a result of the proposed project.

Interested and affected parties (I&APs)

Individual, communities or groups, other than the proponent or the authorities, whose interests may be positively or negatively affected by proposal or activity and/or who are concerned with a proposal or activity and its consequences. These may include local communities, investors, business association, trade unions, customers, consumers and environmental interest group. The principle that environmental consultants and stakeholder engagement practitioners should be independent and unbiased excludes these groups from being considered stakeholders (DEA, 1998).

Land use

The various ways in which land may be employed or occupied. Planners compile, classify, study and analyse land use data for many purposes, including the identification of trends, the forecasting of space and infrastructure requirements, the provision of adequate land area for necessary types of land use, and the development or revision of comprehensive plans and land use regulations.

Mitigate

The implementation of practical measures to reduce adverse impact (DEA).

Monitoring

Means the continuous or non-continuous measurement of a concentration, or other parameters for purpose of assessment or control of environmental quality or exposure, and the interpretation of such measurements.

Pollution

Means any change in the environment caused by—

- (i) substances;
- (ii) radioactive or other waves; or
- (iii) noise, odours, dust or heat,

emitted from any activity, including the storage or treatment of waste or substances, construction and the provision of services, whether engaged in by any person or an organ of state, where that change has an adverse effect on human health or well-being or on the composition, resilience and productivity of natural or managed ecosystems, or on materials useful to people, or will have such an effect in the future;

Pollution Prevention

Any activity that reduces or eliminates pollutants prior to recycling, treatment, control or disposal.

Public Participation Process

A process of involving the public in order to identify needs, address concerns, in order to contribute to more informed decision making relating to a proposed project, programme or development.

Remediation

Means the interim or permanent elimination through mitigation or abatement of toxic or biohazard contaminants that pose human health consequences or threats to the environment.

Topography

Topography, a term in geography, refers to the "lay of the land" or the physio-geographic characteristics of land in terms of elevation, slope and orientation.

Toxicity

Refers to the inherent property of a substance to cause injury or an adverse effect in a living organism.

Vegetation

All of the plants growing in and characterizing a specific area or region; the combination of different plant communities found there.

Waste

Any substance, whether that substance can be reduced, re-used, recycled and recovered—

- (a) that is surplus, unwanted, rejected, discarded, abandoned or disposed of;
- (b) which the generator has no further use of for the purposes of production;
- (c) that must be treated or disposed of; or
- (d) that is identified as a waste by the Minister by notice in the Gazette, and includes waste generated by the mining, medical or other sector, but—
 - (i) a by-product is not considered waste; and
 - (ii) any portion of waste, once re-used, recycled and recovered, ceases to be waste;

Township

A new area being developed for residential or industrial use

ABBREVIATIONS

BAR	– Basic Assessment Report
BID	– Background Information Document
CBD	– Central Business District
CA	– Competent Authority
CEMP	– Construction Environmental Management Plan
CLO	– Community Liaison Officer
DEA	– Department of Environmental Affairs
DoH	– Department of Health
DWS	– Department of Water and Sanitation
EAP	– Environmental Assessment Practitioner
ECO	– Environmental Control Officer
EIA	– Environmental Impact Assessment
EIS	– Ecological Importance and Sensitivity
EMP	– Environmental Management Programme
EMPr	– Environmental Management Programme report
GN	– Government Notice
Ha	– Hectares
I&AP	– Interested and Affected Party
KM	– Kilometres
MAP	– Mean Annual Precipitation
MM	– Millimetres
NEMA	– National Environmental Management Act, Act 107 of 1998 as amended
NEMAQA	– National Environmental Air Quality Act
NEMWA	– National Environmental Management Waste Act
NWA	– National Water Act
PM	– Project Manager
PPP	– Public Participation Process
R	– Regulation
SASS	– South African Scoring System
EDTEA	– Department of Economic Development, Tourism and Environmental Affairs

PURPOSE OF THE BASIC ASSESSMENT REPORT (BAR)

This Basic Assessment Report (BAR) forms part of a series of reports and information sources that are being provided during the BAR Process of the proposed industrial township establishment.

The purpose of this BAR is to:

Present the proposed industrial township establishment project and the need for the project;

- Describe the affected environment at an enough level of detail to facilitate informed decision-making;
- Provide an overview of the Basic Assessment Process being followed, including public consultation;
- Assess the predicted positive and negative impacts of the project on the environment;
- Provide recommendations to avoid or mitigate negative impacts and to enhance the positive benefits of the project;
- Provide an Environmental Management Programme (EMPr) for the proposed project. This DBAR is being made available to all Interested and Affected Parties (I&APs) and stakeholders for a 30-day review period.

All comments submitted during the review of the DBAR will be incorporated into the finalized BAR as applicable. The finalized BAR will then be submitted to the KZN Department of Economic Development, Tourism and Environmental Affairs for decision-making.

Declaration of Independence

I **Phakwago M. Kabelo** in my capacity as an Environmental Assessment Practitioner, hereby declare that I-

- Act as an independent consultant;
- Do not have any financial interest in the undertaking of the activity, other than remuneration for the work performed in terms of the National Environmental Management Act, 1998 (Act 107 of 1998);
- Undertake to disclose, to the competent authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the National Environmental Management Act, 1998 (Act 107 of 1998);
- As a registered member of the South African Council for Natural Scientific Professions, will undertake our profession in accordance with the Code of Conduct of the Council, as well as any other societies to which we are members; and
- Based on information provided to us by the project proponent, and in addition to information obtained during this study, have presented the results and conclusion within the associated document to the best of our professional judgement.

Signature _____

Date _____

EXECUTIVE SUMMARY

This draft basic assessment report concentrates on the proposed establishment of industrial township (General Industry, Truck Depot, Government Offices and Roads) on the remainder of the farm Palmietfontein 3750 and falls under the jurisdiction of the Dannhauser Local Municipality in KwaZulu Natal Province. The site is situated 2km north east of Dannhauser Local Municipality along Church Street.

The proposed industrial township establishment will occupy an area of approximately 19.53 hectares. Essential infrastructure such as potable water, sewage, electricity, roads and storm water will also be supplied to make the development more sustainable.

The proposed development is listed in terms of Government Notice R324 and R327 the National Environmental Management Act, (Act 107 of 1998) and therefore requires an Environmental Impact Assessment (EIA) to be undertaken. The aim of the EIA is to ultimately ensure that environmental impacts are taken into consideration, to ensure stakeholder engagement, and to provide decision makers with sufficient information to make an informed decision on the proposed development.

This document outlines the basic assessment process followed, describes the proposed development and the context in which it will take place, and identifies the potential environmental impacts. The purpose of the EIA process is to define the range of the impact assessment in order to proceed to the Environmental Impact Assessment Phase.

A Public Participation Process runs concurrently with the Basic Assessment Phase. The purpose of this process is to identify all Interested and Affected Parties (I&AP"s), and to allow such parties the opportunity to provide input and comment regarding the EIA process, including issues and alternatives that are to be investigated. The Basic Assessment Report is made available for the public to comment. The Public Participation Process therefore facilitates informed decision-making. The BA Report (this document) represents the initial identification of key issues as highlighted by the relevant authorities, Interested and/or Affected Parties (I&AP) and professional judgement of the Environmental Assessment Practitioner. The EIA allows for the identification of the anticipated impacts, particularly those, which require specialist investigations in order to inform decision making in terms of environmental sustainability of the site and natural resource management. The results of all the specialist studies, a full assessment of the impacts and proposed alternatives will form part of the Environmental Impact Assessment Report

SECTION A: INTRODUCTION

1.1. PURPOSE

Mang Geoenviro Services was appointed by KV Development Consultants on behalf of Dannhauser Local Municipality to submit an application for Environmental Authorisation for the proposed establishment of an industrial township (General Industry, Truck Depot, Government Offices and Roads) on the remainder of the farm Palmietfontein 3750 under the jurisdiction of the Dannhauser Local Municipality in KwaZulu Natal Province. The site is situated 2km north east of Dannhauser Local Municipality along Church Street.

The proposed industrial township establishment will occupy an area of approximately 19.53 hectares. Essential infrastructure such as potable water, sewage, electricity, roads and storm water will also be supplied to make the development more sustainable.

The proposed activity requires an Environmental Impact Assessment (EIA) to be undertaken in compliance with the regulatory requirements of the National Environmental Management Act (Act 107 of 1998) (NEMA) and the Environmental Impact Assessment (EIA) Regulations, 2010, GN R.453, R.544 and R546. The EIA consists of two phases, namely the Scoping Phase and the Environmental Impact Assessment Phase.

The purpose of this document is to identify the initial key issues or concerns as highlighted by the relevant authorities, Interested and/or Affected Parties (I&AP"s) and professional judgement of the Environmental Assessment Practitioner.

The purpose of the Environmental Impact Assessment Phase is to address the issues, potential impacts and feasible alternatives.

1.2. REGIONAL CONTEXT

The site for the proposed development is approximately 19.53 hectares and the site is situated 2km north east of Dannhauser Local Municipality along Church Street. The proposed development site is currently undeveloped and from the environmental perspective, it is not sensitive; therefore, it is suitable for the proposed industrial township since the surrounding properties are being used as industrial stands.

As a result of scarcity of suitable settlement slopes, there has been and increase significant encroachment onto relatively marginal land such as steep slopes and water resources which are highly susceptible to environmental degradation, particularly soil erosion.

The coordinates of the site are 28°01'1.52"S 30°03'55.63"E.

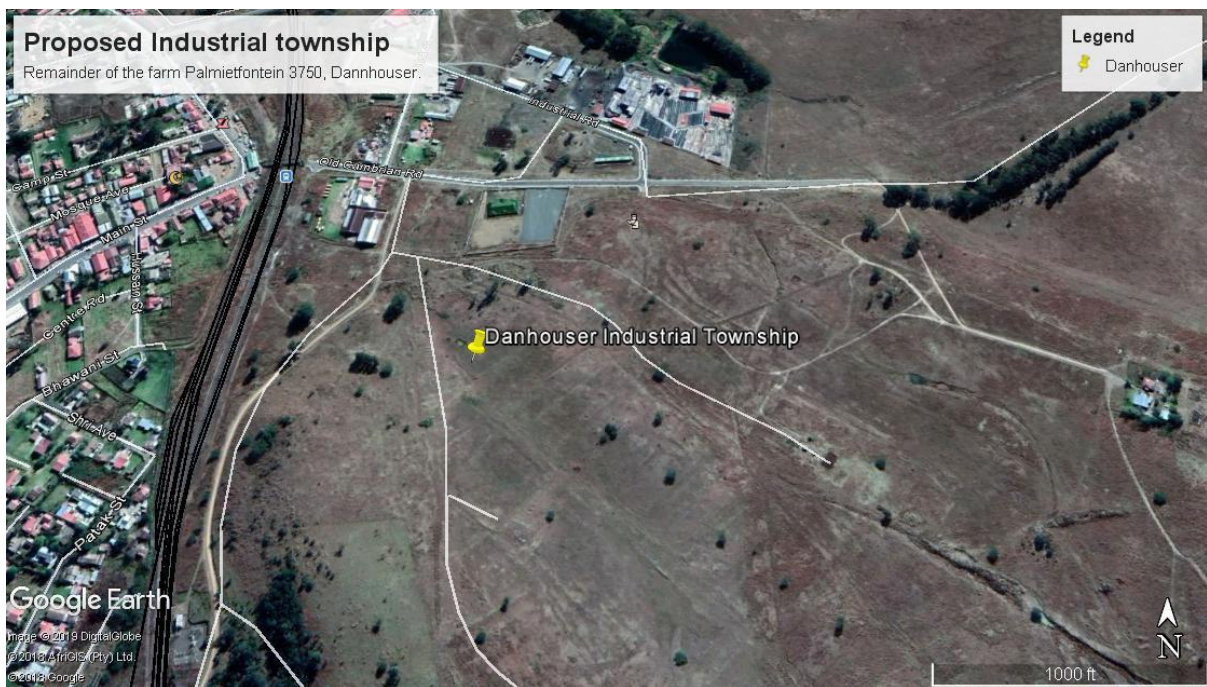


Figure 1: Aerial map showing the proposed development site.

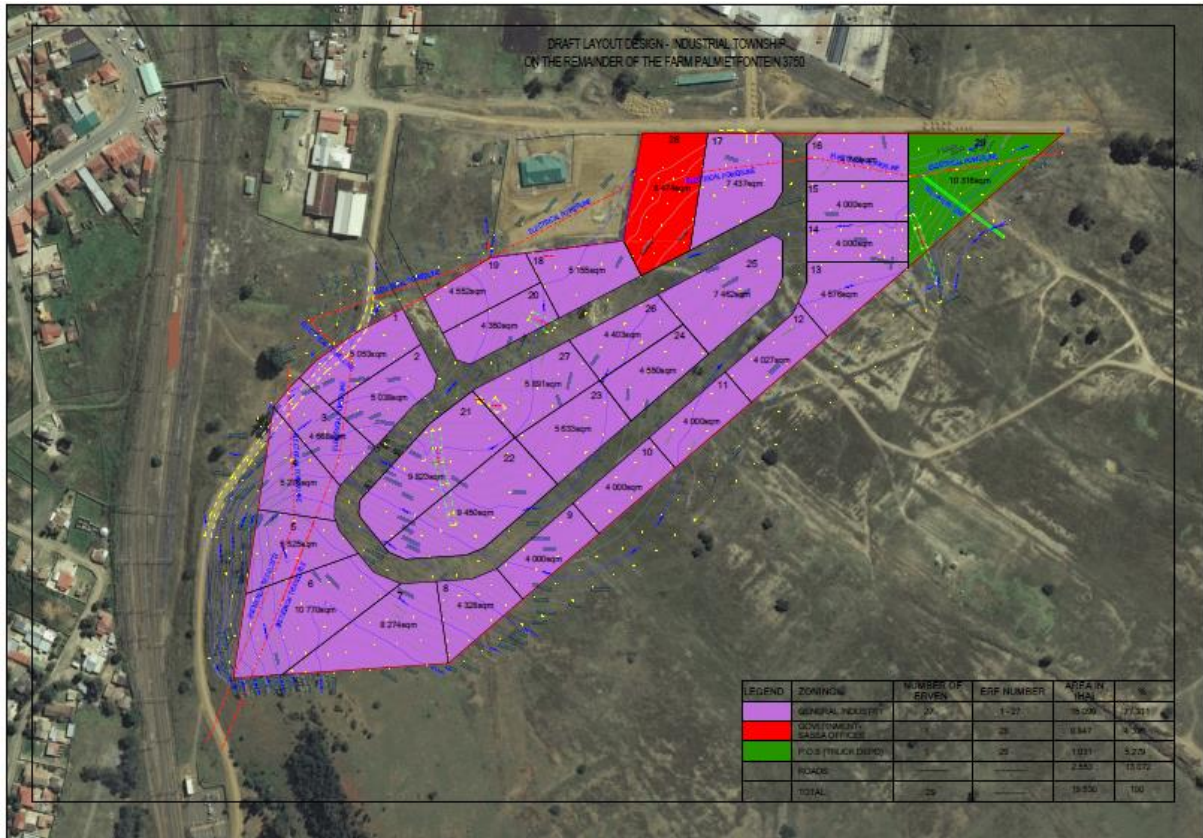


Figure 2: Layout Plan of the proposed development.

1.3. LEGISLATION AND GUIDELINES

The following environmental legislation was considered in the evaluation of activities and the development of the basic assessment report.

LEGISLATION	SECTIONS	RELATES TO
The Constitution (No 108 of 1996)	Chapter 2	Bill of rights
	Chapter 24	Environmental Rights
	Section 2	Defines the strategic environmental management goals and objectives of the government. Applies through-out the republic and to the actions of all

National Environmental Management Act (No 107 of 1998, as amended)		organs of state that may significantly affect the environment.
	Section 24	Provides for the prohibition, restriction and control of activities which are likely to have a detrimental effect on the environment.
	Section 28	The developer has a general duty to care for the environment and to institute such measures as may be needed to demonstrate such care.
National Environmental Management: Waste Act (No 59 of 2008)		Provides for specific waste management measures and the remediation of contaminated land.
Environmental Conservation Act (No 73 of 1989) and regulations.	Section 19 and 19A	Prevention of littering by employees and sub-contractors during construction and the maintenance phases of the proposed housing project.
National Heritage Resources Act (No 25 of 1999) and regulations	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.
	Section 35	No person may, without a permit issued by the responsible heritage resources authority destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site.
	Section 36	No person may, without a permit issued by the South African Heritage Resource Agency (SAHRA)

		or a provincial heritage resources authority destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority. "Grave" is widely defined in the Act to include the contents, headstone or other marker of such a place, and any other structure on or associated with such place.
	Section 38	This section provides for Heritage Impact Assessments (HIAs), which are not already covered under the ECA. Where they are covered under the ECA the provincial heritage resources authorities must be notified of a proposed project and must be consulted during the HIA process. The Heritage Impact Assessment (HIA) will be approved by the authorizing body of the provincial directorate of environmental affairs, which is required to take the provincial heritage resources authorities' comments into account prior to making a decision on the HIA.
Occupational Health and safety Act (No 85 of 1993)	Section 8	General duties of employers to their employees
	Section 9	General duties of employers and self-employed persons to persons other than their employees
National Water Act (No 36 of 1998) and regulations	Section 19	Prevention and remedying the effects of pollution
	Section 20	Control of emergency incidents

Hazardous Substances Act (No 15 of 1973) and regulations		Provides for the definition, classification, use, operation, modification, disposal or dumping of hazardous substances
National Road Traffic Act (No 93 of 1996)		Road Safety
SANS 10103 (Noise Regulations)		The measurement and rating of environmental noise with respect to annoyance and to speech communication.

Table 1: Legislations and guidelines considered

The proposed development involves the “listed activities”. These activities could impact significantly on the environment and therefore require Environmental Authorisation from the Competent Authority which is KZNEDTEA.

Listed Activities	Description of Project Activity
R 327, 07 April 2017 Listing Notice 1, Activity 27	The proposed development involves clearance and preparation of an area of 19.53 hectares.

Table 2: Listed activities triggered by the proposed activity

1.3.1. Water and Wastewater Management

The National Water Act (Act No. 36 of 1998) aims to provide management of the National water resources to achieve sustainable use of water for the benefit of all water users. This requires that the quality of water resources is protected as well as integrated management of water resources with the delegation of powers of institutions at the regional or catchments level. The purpose of the Act is to ensure that the Nation’s water resources are protected, used, developed, conserved, managed and controlled in ways, which take into account:

- Meeting the basic human needs of present and future generation;

- Promoting equitable access to water;
- Promoting the efficient, sustainable and beneficial use of water in the public interest;
- Facilitating social and economic development;
- Providing for growing demand for water use;
- Protecting aquatic and associated ecosystems and their biological diversity; and
- Reducing and preventing pollution and degradation of water resources.

Section 21(c) and (i) of the water use licence will be triggered in the construction of a crossing bridge and the licence has been applied.

1.3.2. Waste

All waste must be disposed of at appropriately licensed (in terms of Section 20 of the Environment Conservation Act, 1989 (Act No 73 of 1989) landfill sites. Waste generated during the construction as well as operational phases of the project must therefore be disposed of at sites which have received the necessary permits or exemptions.

1.3.3. Heritage Resources

The protection of archaeological and paleontological sites and material is the responsibility of the Provincial Heritage Resources Authority and all archaeological objects, paleontological material and meteorites are the property of the state. Any person who discovers archaeological or paleontological objects or material or a meteorite in the course of development must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such Heritage Resources Authority.

The Act identifies various activities that require the submission of an EIA to Provincial Heritage Resource Authorities, if an evaluation of the impact of such development on heritage resources is not required in terms of any other legislation. The proposed development requires a heritage investigation as it will involve changing the character of the site >5 000 m² (Section 38 of NHRA).

Furthermore, other legislative measures which may be of relevance include the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925), the Human Tissues Act (Act no. 65 of 1983, as amended), the Ordinance on Excavations (Ordinance no. 12 of 1980) as well as any local and regional

provisions, laws and by-laws that may be in place.

The final decision for the approval of permits, or the removal or destruction of sites, structures and artefacts, rests with the South African Heritage Resources Agency (SAHRA) (or relevant PHRA).

1.3.4. Other Legislation, Regulations, Policy and Guidelines

Other relevant legislative framework, regulations, policy and guidelines which are or may become applicable during the EIA process include, amongst others, the following:

- Constitution of the Republic of South Africa, 1996: The Constitution states that 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. "
- National Environmental Management Act (Act 107 of 1998): The principles underpinning environmental management contained in the National Environmental Management Act (NEMA),
- Must be taken into account by any organ of state in the exercise of any power that may impact on the environment. NEMA provides for further regulation and guidance in terms of sustainable development other than for the EIA process.
- National Environmental Management: Biodiversity Act: The aim of this act is to provide for the management of South Africa's biodiversity with NEMA's framework.
- National Environmental Management: Protected Areas Act: The Protected Areas Act provides for the protection and conservation of ecologically viable areas, which are representative of South
- Africa's diversity, as well as natural landscapes and seascapes.
- Conservation of Agricultural Resources Act: Regulations 7 and 8 deals with the protection of wetlands and water courses, while regulations 15 and 16 deals with invasive plant species and
- bush encroachment.
- Convention of Biological Diversity: South Africa is a signatory of the Convention on Biological Diversity, and therefore has a duty to conserve and rehabilitate biological resources which are
- Considered important for the conservation of biological diversity.
- Species of Concern: The IUCN has a system in place which classifies species as threatened. Threatened species are those that are in danger of becoming extinct and the protection of these
- species is vital.
- Promotion of Access to Information Act, 2000.
- Environmental Conservation Act (Act No. 73 of 1989), also known as ECA.
- Occupational Health and Safety Act (Act No. 85 of 1993).

1.4. NEEDS AND DESIRABILITIES

The Municipality IDP state that the spatial development strategies of the DLM need to be supportive of the objectives of international and national policies, principles and initiatives to reduce poverty and inequality, the National Development Plan Vision 2030 (NDPV), Implementation Framework and Plan (IF&P), and the principles set in the Spatial Planning Land Use Management Act 2013.

The NDPV provide the following outcomes, mechanisms necessary for the outcomes and conditions necessary:

- The socio-economic outcomes include:
 - Economy and employment
 - Improving education, training and innovation
 - Social protection
 - Mechanisms necessary to achieve the outcomes include:
 - Economic Infrastructure
 - Transforming human settlements
 - Environmental sustainability and resilience
 - Inclusive rural economy
- The conditions necessary include:
 - Building a capable and developmental state
 - Fighting corruption
 - Building supportive, safe and cohesive communities

The industrial township development is part of an infrastructure development plan as this promotes social and economic growth in an area. Where possible (unless the necessary skills are not available) the local communities will be used to source training, labour and services required for the construction and maintenance of the development.

The proposed development is not expected to compromise the existing environmental management priorities for the area. According to the IDP, the 5 most negative aspects requiring environmental management, bearing high priority are:

- Sewerage spillage.
- Dumping / pollution – landfill site / inadequate refuse removal.
- Road maintenance.
- Crime.

It is not anticipated that the proposed township development project will affect or increase the negativity of any of the above-mentioned aspects.

2. SECTION B - ENVIRONMENTAL SYNOPSIS

2.1. BIOPHYSICAL ENVIRONMENT

2.1.1. Flora and Fauna

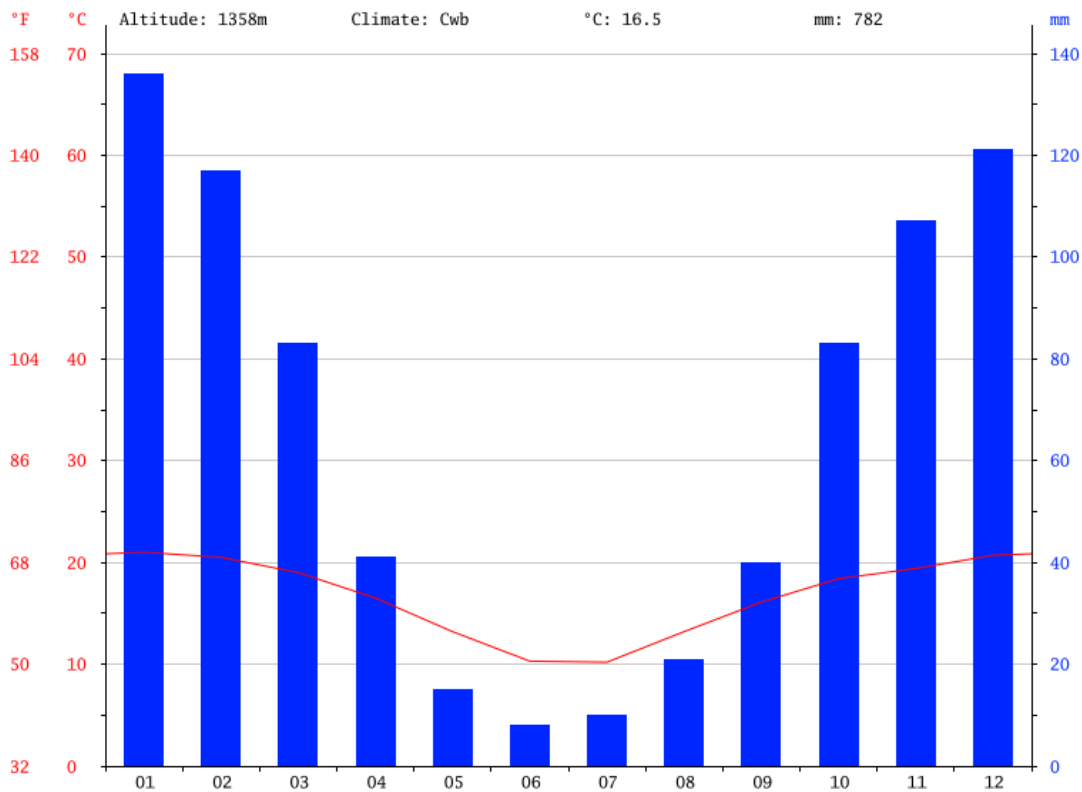
The site is currently undeveloped, Vegetation type within the boundary of the Dannhauser Municipality varies significantly but is dominated mainly by five vegetation types. These include:

- The Income Sandy Grassland located at the northeastern corner of the municipality, covering the towns of Nyanyadu through Kilgethe to Inverness;
- The Glencoe Moist Grassland, located to the eastern side of the N11 around the towns of Hattingspruit to Gedule, to Durnacol and to the southern portion of Milnerdale;
- The Northern KwaZulu-Natal Moist Grassland. This is located along the southern portions of the municipal boundary, near Glencoe to the western portions of the N11, south of the Dam and to the western portions of the municipal area;
- The KwaZulu-Natal Highland Thornville, which covers the mid northern section of the municipality, north-west of Milnerdale, and the Low Escarpment Moist Grassland, which covers the western outskirts of the municipality and a small portion along the southern border close to the N11.

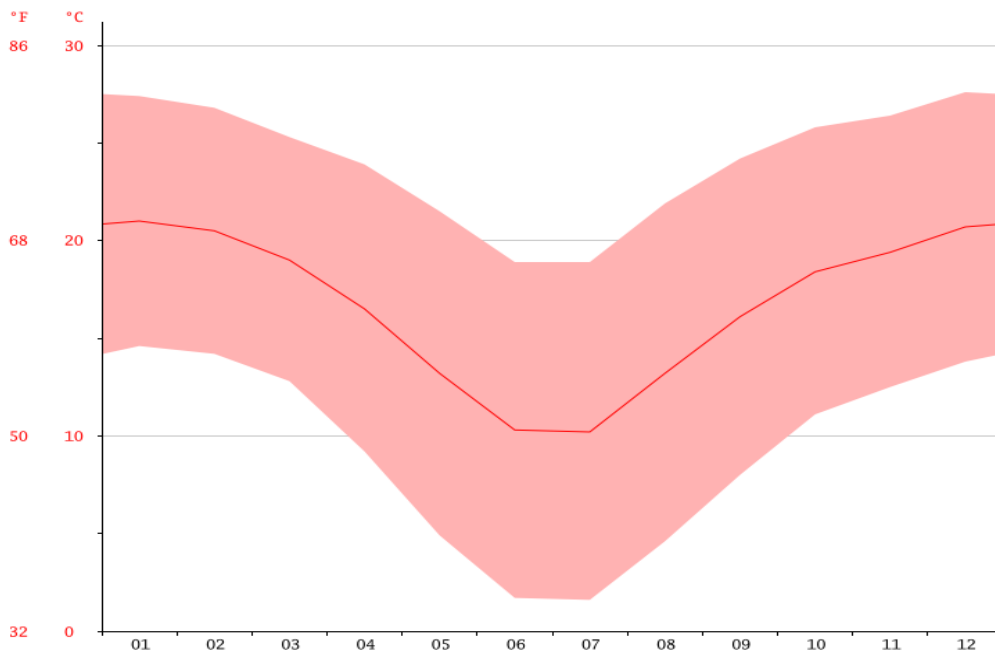
According to the KZN Wildlife Vegetation Status Database, the Northern KZN Moist Grassland is vulnerable while the Glencoe Moist and Income Sandy Grasslands are endangered and endemic to KZN. Vegetation that is endangered is one that has undergone immense transformation that its very existence in an indigenous form is threatened. Vegetation classified as endangered is thus of high conservation status. In view of this, the areas with untransformed vegetation are mostly on the eastern half of the municipality, covered by the Glencoe Moist and Income Sandy Grasslands.

2.1.2. Climate, Rainfall and Temperature

The climate of the proposed development is classified as warm and temperate. In winter there is much less rainfall than in summer. According to the Cwb by the Koppen-Geiger system, the average annual temperature is 16.5 °C and the annual precipitation is about 782 mm.



The temperatures are highest on average in January, at around 21.0 °C. July has the lowest average temperature of the year. It is 10.2 °C. Average temperature of Dannhouser is shown on the graphs below:



The variation in the precipitation between the driest and wettest months is 128 mm. During the year, the average temperatures vary by 10.8 °C.

Mean monthly maximum and minimum temperatures

Month	Temperature (°C)			Extreme Max	Extreme Min	Diurnal Range
	Mean Max	Mean Min	Average			
Jan	25,8	13,2	19,5	34,7	5,0	12,6
Feb	25,4	13,0	19,2	34,4	2,2	12,4
Mar	24,5	1,4	18,0	32,6	3,0	13,1
Apr	22,1	8,1	15,2	30,0	2,2	14,1
May	19,6	3,8	11,7	27,2	1,1	15,8
Jun	16,9	0,0	8,4	27,9	1,2	16,9
Jul	17,1	0,2	8,5	27,8	1,4	16,9
Aug	20,1	2,9	11,5	28,1	2,2	17,3
Sep	23,1	6,5	14,8	33,3	5,0	16,6
Oct	24,5	9,9	17,2	33,0	6,6	14,6
Nov	24,5	11,4	18,0	33,9	8,6	13,1
Dec	25,4	12,7	19,0	33,0	9,6	12,6
Year	22,5	7,7	15,1	34,7	12,4	14,8

2.1.3. Geology

Dannhauser is largely covered by Natural Freshwater, Grasslands and Bushlands, it consists of marginal urban settlements that surrounds the CBD in a 10km radius, while the rural areas are clustered in the north east of the municipal jurisdiction (IDP, 2019).

2.1.4. Topography and Geography

The topographical features of the subject property are ideally suitable for the proposed township, since the site is located close to an existing industrial stands. Topographical attributes of a sensitive environmental nature could not be observed that could render site incompatible for proposed the development. The general topography of the area varies significantly. The area consists of flatter grounds on the north-eastern segment.

2.1.5. Surface Water

The site is relatively flat no prominent sensitive vegetation on the site. The topography of the site will support the proposed industrial township.

2.1.6. Air Quality

The Development Bank of Southern Africa prepared a sustainability report for Dannhauser Municipality in 2010. The issue of air quality was identified as one of the challenges facing the municipality due to bad smells from the old mines or coal dumps that exist. There are currently no reporting systems in place and no equipment for testing of air quality. The substandard nature of the air quality in the area is mostly visible in the mornings and at night. The bad air quality causes a negative health impact on the communities and the animals within close proximity of the emitting elements (mines & dumps). The National Environmental Management Act No.107 of 1998, gives effect to the Air Quality Act No.39 of 2004 and provides that the quality of air must be conducive for the healthy living of people and other forms of life.

The municipality will engage with mining companies and develop a proper monitoring and reporting system that will enable decisive action to be undertaken when the quality of air is compromised. It will progress the implementation of carbon emission reduction as the country is part of the Kyoto Protocol. The Kyoto Protocol is an International treaty which extends the 1992 United Nations Framework Convention on Climate Change (UNFCCC), it intends to reduce carbon emissions that are man-made. The proposed township will not enormously contribute to pollution of the area.

2.1.7. Noise

The overall noise levels were rural and in the order of 35 dBA, no other sources of noise were identified during the site inspection, however some activities which can account to an increase in noise levels take place in the area.

2.1.8. Cultural and Heritage Importance

No features, sites, graves or artefacts of cultural significance which would be impacted on by the proposed development were found.

2.1.9. Visual Aspect

The proposed industrial township will not cause visual obstruction since the site is bordered by existing Industrial stands therefore the visual impact will not be different.

2.1.10. Current Land-Use

The proposed development site is currently a vacant land.

2.2. Project Alternatives

Describe the proposal and alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished. The determination of whether the site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment.

The no-go option must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

2.2.1. Site alternatives

The proposed site for the activity was found to be the only viable alternative preferred by the applicant and furthermore there are no alternative sites in the same locality available to the applicant for such development.

2.2.2. Activity alternatives

Activity alternatives were also considered which involves construction of a residential development however the property is more suitable for industrial stands to promote economic growth of Dannhouser.

2.2.3. No-go alternative

The no-go alternative would be not to go ahead with the industrial township development, while there is high demand for a constant supply of industrial development to improve job creation in KwaZulu Natal. The only way to counter act this problem is to go ahead with the project. The no-go alternative will only be considered as an alternative in the case that significantly negative impacts are identified which is of a magnitude that cannot be adequately reduced.

SECTION C: THE PUBLIC PARTICIPATION PROCESS

The complete description of the Public Participation Process will be included in Appendix E.

3.1. A summary of the most pertinent events will be as follows:

- An application form for EIA Authorisation will be submitted to Competent Authority.
- Notices will be pinned/ placed up on the site.
- Letters together with a Background Information Document and I&AP Registration Form will be distributed by hand, by post, and by email to adjacent landowners and residents, relevant authorities.
- A newspaper notice will also be placed in the local newspaper.

3.2. Advertisement

The proposed project was advertised in the local newspaper (Newcastle Advertiser) to inform people about the project and request them to register their names and comment on the proposed development.

3.3. Site Notices

Notices were placed in noticeable places i.e. Fence and electricity poles within the vicinity of the site.

3.4. Background Information Document

An I&AP's register was compiled in terms of Section 42 of EIA Regulations, 2014. The register included all relevant organs of state, owners and occupiers of land adjacent to the properties earmarked for development and surrounding community.

3.3. Authority Participation

The Basic Assessment report will be sent/ circulated to the stakeholders for observation and comments. No comments were received from all organizations so far.

3.4. Issues Raised by Interested and Affected Parties

No issues were raised so far that needed to be addressed.

SECTION D: SPECIALIST STUDIES

Specialist studies are undertaken to investigate issues of concern where the required specialist know-how. The need for specialist studies is identified during the EIA Phase by means of consultation with relevant stakeholders, I&AP's and professional judgement.

To isolate the salient opportunities and constraints of the environment upfront, some of the specialist studies have been undertaken at an early stage and are thus already included in the Basic Assessment Report. This approach is considered proactive as it enables informed decision making in the planning and design processes.

4.1. The Specialist Conducted:

Studies:	Specialists:
Geotechnical Study	Soil Kraft CC

Civil Engineering Services Report	MGM Ngwenya Consulting
Electrical Engineering Report	Buro Tech Consulting Engineers CC

Table 3: Specialist studies conducted.

The archaeological study is not required; however, should any archaeological artefact be observed during construction, work will be stopped immediately and an archaeological specialist be brought on site for further assessment.

4.1.1. Water and Sewer Handling and Discharge

The internal water and sewer infrastructure will be provided by the developer. All the bulk infrastructure must be installed and connected to the bulk municipal services by the developer as per Dannhauser Local Municipality requirements and master planning.

4.1.2. Roads and Stormwater

The intersections and the streets and stormwater system within the development boundaries will be privately owned and will need to be operated and maintained by the body corporate / owner of the development.

4.1.3. Solid Waste

A regional landfill situated nearest the site is to be used to dispose solid waste. The local municipality is responsible for connecting and disposing the solid waste. If the municipality is not able to provide this service, then a private company will need to be appointed by the development owners for the service.

A refuse area with bins will be done onsite and solid waste will be disposed of at the municipal dump site as per the municipal health bylaws.

4.1.4. Access and Roads

The proposed development site can be accessed via Railway street or Old Cambrian Road in the Western and Northern boundaries of the site.

4.1.5. Electricity

There is an existing Eskom network in the South West of the site which supplies 88/11 Kv and 11Kv Dannhauser network breaker feeder line transverse the site on the western perimeter.

4.1.6. Storm Water Management

According to the Engineering Services Report, the Stormwater runoff onsite will be handled through an internal stormwater system that will be provided to drain the site in a safe and efficient way. It is proposed to make use of SuDS to manage the stormwater runoff before being discharged into the natural water courses.

5. Construction

- **Timing**

Ultimately, the initiation of the construction phase of the project is dependent on the timing of the Record of Decision (RoD) issued by KZNEDTEA.

Provided this RoD is in favour of the development and other relevant authorisation processes are in place, construction for the first phase of development will commence. It is anticipated that this will include the installation of services as well as the road network.

- **Construction Camp and Associated Services**

The nature and scale of the development and the expected duration of construction requires that a construction camp be demarcated prior to the commencement of works and maintained throughout the construction period. This construction camp will be primarily a materials lay down area and offices. The scale of the development may require the establishment of satellite construction camps on the property. Construction labourers will be bussed in daily and not be housed on the site.

Services which are currently available on site will be utilised during the construction phase until such time as the new services are operational. If the need arises additional services will be brought in. This could include the site toilets as well as the disposal of refuse and construction waste.

6. SECTION F: IMPACT ASSESSMENT

6.1. Methodology for Environmental Impact Assessment

The impacts anticipated to occur as a result of the proposed development will be evaluated to determine their significance.

Significance will be determined for scenarios involving both „before“ and „after“ mitigation. The baseline scenario is ultimately evaluated, bearing in mind that the environmental planning exercise as well as the process of investigating alternatives has already excluded a number of significant impacts.

The following is the equation applied to determine the significance of the impact:

Significance (S) = [Irreplaceable (I) Extent (E) + Duration (D) + Magnitude (M) + Reversibility (R)] x Probability (P)

$$S = (I + E + D + M + R) \times P$$

Nature	Classification of whether the impact is positive or negative , direct or indirect
Extent	<p>Spatial scale of impact and classified as:</p> <p>Site: the impacted area is the whole site or a significant portion of the site</p> <p>Local: within a radius of 2 km of the construction site.</p> <p>Regional: the impacted area extends to the immediate, surrounding and neighboring properties.</p> <p>National: the impact can be considered to be of national significance.</p>
Duration	<p>Indicates the lifetime of the impact and is classified as:</p> <p>Short term: the impact will either disappear with mitigation will be mitigated through natural processes in a span shorter than the construction phase.</p> <p>Medium term: the impact will last for the period of the construction phase, where after it will be entirely negated.</p> <p>Long term: the impact will continue or last for the entire operational life of the development, but will be mitigated by direct human action or by natural processes thereafter. The only class of impact which will be non-transitory.</p> <p>Permanent: mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient.</p>
Intensity	<p>Describes whether an impact is destructive or benign</p> <p>Low: impact affects the environment in such a way that natural, cultural and social functions and processes are not affected.</p> <p>Moderate: affected environment is altered but natural, cultural and social functions and processes continue albeit in a modified way.</p> <p>High: natural, cultural and social functions and processes are altered to extent that they temporarily cease.</p> <p>Very high: natural, cultural and social functions and processes are altered to extent that they permanently cease.</p>
Probability	<p>Describes the likelihood of an impact to occur:</p> <p>Improbable: likelihood of the impact materializing is very low.</p>

	<p>Possible: the impact may occur.</p> <p>Highly probable: most likely that the impact will occur.</p> <p>Definite: the impact will occur.</p>
Significance	<p>Based on the above criteria the significance of issues was determined. The total number of points scored for each impact indicates the level of significance of the impact, and is rated as follows:</p> <p>Low: the impacts are less important.</p> <p>Medium: the impacts are important and require attention, mitigation is required to reduce the negative impacts.</p> <p>High: the impacts are of great importance. Mitigation is therefore crucial.</p>
Cumulative	<p>In relation to an activity, means the impact of an activity that in itself may not be significant but may become significant when added to the existing and potential impacts eventuating from similar or diverse activities or undertakings in the area.</p>
Mitigation	<p>Where negative impacts are identified, mitigation measures (ways of reducing impacts) have been identified. An indication of the degree of success of the potential mitigation measures is given per impact.</p>

Criteria for the rating of impacts				
Criteria	Description			
Extent	National	Regional	Local	Site
Duration	Permanent	Long-term	Medium-term	Short-term
Intensity	Very high	High	Moderate	Low
Probability	Definite	Highly probable	Possible	Improbable
Points allocation	4	3	2	1
Significance Rating of classified impacts				
Impact	Points	Description		
Low	4-6	A low impact has no permanent impact of significance. Mitigation measures are feasible and are readily instituted as part of a standing design, construction or operating procedure.		
Medium	7-9	Mitigation is possible with additional design and construction inputs.		
High	10-12	The design of the site may be affected. Mitigation and possible remediation are needed during the construction and/or operational phases. The effects of the impact may affect the broader environment.		

Very high	13-16	The design of the site may be affected. Mitigation and possible remediation are needed during the construction and/ or operational phases. The effects of the impact may affect the broader environment.
Status	Perceived effect of the impact	
Positive (+)	Beneficial impact	
Negative (-)	Adverse impact	
Negative impacts are shown with a (-) while positive ones are indicated as (+)		

6.2. Impacts that may result from the planning and design, construction, operational, decommissioning and closure phases as well as proposed management of identified impacts and proposed mitigation measures

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A (2) of this report.

Design/Planning Phase			
IDENTIFIED IMPACTS- PLANNING PHASE			
IMPACT	SIGNIFICANCE RATING OF IMPACT BEFORE MITIGATION	PROPOSED MITIGATION	SIGNIFICANCE RATING OF IMPACT AFTER MITIGATION
Direct Impacts			
Poor Design- Structural failures	High (Negative)	Ensure compliance with the industry standards	Low (Negative)

Indirect Impacts			
Disregard of legislative requirement	High (Negative)	Ensure compliance with relevant legislation and legal standards	Low (Negative)

Construction Phase			
IDENTIFIED IMPACTS- CONSTRUCTION PHASE			
IMPACT	SIGNIFICANCE RATING OF IMPACT BEFORE MITIGATION	PROPOSED MITIGATION	SIGNIFICANCE RATING OF IMPACT AFTER MITIGATION
Direct Impacts			
Loss of terrestrial vegetation and faunal habitat, specifically the secondary woodland areas from construction of filling stations	Medium (Negative)	<ul style="list-style-type: none"> Maintain the viability of the indigenous seed bank in excavated soil so that it can be used for subsequent re-vegetation of any disturbed areas. Prevent impact of construction activities to extend on to neighbouring land- demarcated and fenced construction camp; strict control of labourers. Avoid unnecessary loss of indigenous trees. 	Low (Negative)

<p>Increased risk of dust and erosion from clearing of vegetation and earth moving vehicles</p>	<p>Medium (Negative)</p>	<ul style="list-style-type: none"> • All vehicles must be along existing lines or tracks. • Erosion protection measures must be implemented on the site to reduce erosion and sedimentation of the receiving environment. Measures could include: <ul style="list-style-type: none"> Sediment traps Sandbags Bunding around soil stockpiles. • Adequate dust control strategies should be applied to minimise dust disposition, they can include periodic spraying of roads with water, cover trucks to prevent dust emission during transportation. 	
<p>Increased risk of spillages associated with construction activities, maintenance and repair of vehicles</p>	<p>Medium (Negative)</p>	<ul style="list-style-type: none"> • Regularly check vehicles, machineries and equipment operating on site to ensure that none have leaks or cause spills of oil, diesel, grease or hydraulic fluid. • Emergency incident reporting and remedial measures must be in place. • Small oil spills must be cleaned immediately with an oil spill kit. • Drip trays should be used during the servicing of vehicles. The content thereof must be disposed in accordance with relevant hazardous material disposal requirement. 	<p>Low (Negative)</p>

		<ul style="list-style-type: none"> Measures to contain spills must be readily available on site (Spill Kits). All hazardous substance spills must be reported to the contractor and the ECO to be recorded and investigated. 	
Waste collection services	High	<ul style="list-style-type: none"> Confirmation from the municipality must be sought to ensure the municipal waste collection service will collect the household waste generated by the proposed development. 	Low (Negative)
Increased risk for soil, groundwater pollution resulting from poor waste management	Medium (Negative)	<p>Waste on site shall be strictly controlled and monitored. Only approved waste disposal methods shall be allowed, and it includes the following:</p> <ul style="list-style-type: none"> <u>Topsoil</u>- Topsoil must be spread unto areas that are to be grassed on site. <u>Material</u>- Landfilled, spoiled in closed borrowed pit with permission from landowner or the pit owner. <u>General Construction Waste</u>- Must be removed from bins at sufficient intervals to prevent overflow. This waste must be stored in skips within a designated waste storage area in the Contractor's Camp. General waste must be transported to the local municipal General Waste Landfill Site by the Municipality, the Contractor or a private waste disposal Contractor. Service agreements in this regard must be obtained by the Applicant / 	Low (Negative)

		<p>Contractor prior to the commencement of construction activities. It is recommended that general wastes be separated on site and delivered to appropriate depots for recycling. This would be facilitated by the provision of separate and labelled bins /skips.</p> <ul style="list-style-type: none"> • <u>Hazardous construction waste</u>- Must be stored in a designated, access controlled, sign posted and bunded storage area. This waste must be collected as and when necessary by an appropriately trained Service Provider and must be transported to a Hazardous Waste Landfill Site for disposal. • Waste must not be buried on site. 	
<p>Potential noise impact from the use of construction equipment (for the construction of the proposed township establishment and associated infrastructure)</p>	<p>Medium (Negative)</p>	<ul style="list-style-type: none"> • Limit construction activities to day time hours. • Construction personnel must wear personal protective equipment where appropriate. • All machineries to be utilised on the site must be fitted with muffers and must be maintained in good working conditions in order to minimize noise. • The contractor shall warn all local community that could be affected by the noise generation from construction activities. 	<p>Low (Neutral)</p>

Increase in stormwater runoff resulting from construction activities	Medium (Negative)	<ul style="list-style-type: none"> To prevent stormwater damage, the increase stormwater runoff resulting from construction activities must be estimated and drainage patterns accessed accordingly. A drainage plan must be submitted to the Engineer for approval. Temporary cut off drains and berms may be required to capture stormwater and promote infiltration. 	Low (Negative)
Potential health injuries to construction personnel as a result of construction work (i.e. welding fumes. This impact is rated as neutral.	Medium (Neutral)	The contractor must ensure that all construction personnel are provided with adequate PPE for use where appropriate.	Low (Neutral)
Disturbance of Heritage Resources from construction activities.	Low (Neutral)	<ul style="list-style-type: none"> SAHRA must immediately be alerted in case evident or artefacts, paleontological fossils, additional graves or heritage resources are discovered during the course of development. 	Low (Neutral)
Socio-economic Impact: Employment creation and skills development opportunities during the construction phase, which is expected to give rise to approximately 10 new jobs. This impact is rated as positive.	Medium (Positive)	<ul style="list-style-type: none"> Enhance the use of local labour and local skills as far as reasonably possible. Where the required skills do not occur locally, and where appropriate and applicable, ensure that relevant local individuals are trained. Ensure that an equitable percentage allocation is provided for local labour employment as well as specify the 	High (Positive)

		<p>use of small-to-medium enterprises and training specifications in the Contractors contract.</p> <ul style="list-style-type: none"> • Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible. 	
<p>Air quality impact: Emissions from construction vehicles and generation of dust as a result of earthworks, demolition, as well as the delivery and mixing of construction materials.</p>	<p>Medium (Negative)</p>	<ul style="list-style-type: none"> • Ensure that cleared (excavated) areas and unpaved surfaces are sprayed with water (obtained from an approved source) to minimise dust generation. • Approved soil stabilisers may be utilised to limit dust generation. • Ensure that construction vehicles travelling on unpaved roads do not exceed a speed limit of 40 km/hour. • Adequate dust control strategies should be applied to minimise dust deposition, for example: Periodic spraying of the entrance road and environmentally-friendly dust control measures (e.g. mulching and wetting) where and when dust is problematic 	<p>Low (Negative)</p>
Indirect Impacts			
<p>Socio-economic impact: Secondary industries may benefit from the proposed project in the form of the provision of produce and</p>	<p>Low (Positive)</p>	<p>Ensure that local industries are utilised as suppliers, where applicable/practical.</p>	<p>Medium (Positive)</p>

pork products. This impact is rated as positive.			
No-go alternative			
Direct Impacts:			
<ul style="list-style-type: none"> • None of the impacts mentioned above will occur. • The existing site will remain uncleared which will result in no clearance of indigenous vegetation and in addition, no clearance of present alien species. • If the proposed project does not proceed, increased income and economic spin-off activities will not be realised. • If the proposed project does not proceed, motorists and community that rely on the supply of petroleum products will continue to suffer. 			
Indirect Impacts:			
There are no indirect impacts during the construction phase for the No-go Option.			
Cumulative Impacts:			
There are no cumulative impacts during the construction phase for the No-go Option.			
Operational Phase			
IDENTIFIED IMPACTS- OPERATIONAL PHASE			
IMPACT	SIGNIFICANCE RATING OF IMPACT BEFORE MITIGATION	PROPOSED MITIGATION	SIGNIFICANCE RATING OF IMPACT AFTER MITIGATION
Direct Impacts			
Ground water contamination caused by leakage	High (Negative)	<ul style="list-style-type: none"> • The oil / water separator should be regularly checked and kept clean to prevent blockages and overflow. Any material collected must be 	Low (Negative)

		<p>disposed at an appropriately registered waste disposal site.</p> <ul style="list-style-type: none"> • Follow acceptable maintenance and operational practices to ensure consistent, effective and safe performance of the infrastructure. • Leak detection facilities must be installed and monitored on an ongoing basis. • All accidental surface spills of oil or fuel must be contained on-site and diverted to the oil /water separator or similar. • Potential impacts to groundwater to be monitored at observation wells. Light non-aqueous phase liquids (LNAPL) to be monitored using an electronic interface meter and groundwater samples collected should a leak be suspected based on the results of leak detection monitoring. Monitoring and sampling of groundwater in this instance is to be carried out by a competent practitioner. • Solvents used for cleaning USTs may under no circumstances, be allowed to enter stormwater drains, septic tanks (if applicable), or any watercourse (including drainage lines). 	
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<p>Land contamination as a result of spillages that could occur during the transfer of petroleum products from road tanker to storage tanker</p>	<p>Medium (Negative)</p>	<ul style="list-style-type: none"> • Measure for emergency reporting and remedy must be provided. • There must be compliance with SABS 089-3, 1999 when the installation of underground storage tanks, pumps/dispensers and pipe work at service stations and consumer installations. • Train forecourt staff on implementation of spillage containment emergency plan, including usage of spill containment kit. 	<p>Low (Negative)</p>
<p>Spillages that could result from vehicles fuelling</p>	<p>Medium</p>	<ul style="list-style-type: none"> • Spillages must be restricted on the forecourt to greatest extent possible. Forecourt spillages are to be directed to an oil / water separator. • Small spills (less than 1 litre) are to be mopped from hardened surfaces immediately to prevent contamination of stormwater runoff. Dry sand or sawdust can be utilised to soak up the spill. Water is not to be used as it will aid in spreading the fuel or oil. 	<p>Low (Negative)</p>
<p>Potential noise impact from diesel trucks, vehicles braking and accelerating; staff of the truck depot could be disruptive</p>	<p>Low (Negative)</p>	<ul style="list-style-type: none"> • Encourage vehicle drivers to switch off their engines when parked (i.e. no idling). This will limit engine emissions. The use of appropriate signage can assist in this regard. 	<p>Low (Negative)</p>

		<ul style="list-style-type: none"> • Provide strict management rules for personnel who are working at the industry or the truck depot. 	
Visual impacts will increase during the operation phase due to development and lighting	High	<ul style="list-style-type: none"> • Lighting and layout to be maintained as per the layout plan to ensure bright street lighting is not permitted 	Low
Potential impact on the health of operating personnel resulting in potential health injuries. This impact is rated as neutral	Medium (Neutral)	<ul style="list-style-type: none"> • Operational personnel must wear basic PPE (e.g. industrial overalls.) as necessary during the operational phase. • A complete First Aid Kit must be readily available on site and regularly serviced. • Personnel must be trained in health and safety awareness and management of emergency situations. 	Low (Neutral)
Lack of road maintenance will lead to a deterioration in the internal and access roads	High	<ul style="list-style-type: none"> • Road maintenance must be done regularly by the Dannhauser Local Municipality 	Low
Risk of fire explosion	Medium (Negative)	<ul style="list-style-type: none"> • Prevent spread of fire to surrounding buildings or vegetation. • Adequate firefighting training must be given to staff. • Emergency numbers must be displayed with the correct details of the nearest firefighting station at all times. • Prevent effluent from firefighting (foam, water, fuel, chemicals) from 	Low (Negative)

		<p>entering surface/groundwater, stormwater systems, and septic tanks.</p> <ul style="list-style-type: none"> • Ensure that relevant signage e.g. no smoking, is displayed in potentially dangerous areas and is abided by. 	
The development may lead to an increase in crime	High	<ul style="list-style-type: none"> • Ensure effective measures are included in the operation of the industry to reduce the chances of crime increase 	Low
Socio-economic Impact: Skills development opportunities and economic spin off activities will also occur during the operational phase. This impact is rated as positive.	Medium (Positive)	<ul style="list-style-type: none"> • Enhance the use of local labour and local skills as far as reasonably possible. • Where the required skills do not occur locally, and where appropriate and applicable, ensure that relevant local individuals are trained. • Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible. 	High (Positive)
Indirect Impacts			
Community impact through convenience stores	Medium (Positive)	<ul style="list-style-type: none"> • Convenience store is to benefit community member who will get power to purchase at any time of the day. 	High (Positive)
Impact on the surrounding community in terms of visibility and great environment	Medium (Negative)	<ul style="list-style-type: none"> • Ensure that surrounding gardens are well maintained. The planting of indigenous vegetation is encouraged. • Use water sparingly in maintaining gardens. 	Low (Negative)

		<ul style="list-style-type: none"> • Ensure that service station lighting does not disturb surrounding residents or users of surrounding roads (e.g. direction, glare, flashing). • Institute an appropriate building and site maintenance programme. • Regularly inspect paving at filling points for impermeability. 	
No-go alternative			
<p>Direct Impacts</p> <ul style="list-style-type: none"> • None of the impacts mentioned above will occur. • If the proposed project does not proceed, increased income and economic spin-off activities will not be realised. <p>Indirect Impacts</p> <p>There are no indirect impacts during the operation phase for the No-go Option.</p> <p>Cumulative Impacts</p> <p>There are no cumulative impacts during the operational phase for the No-go Option.</p>			

Table 8: Impact Assessment

7. SECTION G: SOCIO-ECONOMIC CHARACTER

According to the socio economic specialist study report, the proposed township establishment will provide land on which the Dannhauser Local Municipality can rehouse occupants of the informal housing areas. This will subsequently allow the municipality to eradicate the informal settlement within the area. This will then have a positive impact on the economy, as there will be a decrease in land invasions.

8. SECTION H: CONCLUSION AND RECOMENDATIONS

The objective of the Basic Assessment Phase is to define the range of the impact assessment in order to proceed to the Environmental Impact Assessment Phase. It is believed that this objective has been achieved and adequately documented in the Basic Assessment Report.

The EAP recommends that the implementation and strict adherence to the EMPr forms part of the conditions of an Environmental Authorisation for the development. The EAP also recommends that all mitigation measures as described in this Basic Assessment Report be included as part of the conditions of the authorisations granted for the development. Furthermore, the developer should accept responsibility for appointing service providers that comply with the legislative requirements of the country and who have standing agreements with the necessary authorities where required.

The following measures/ plans must also be required as part of the approval:

- The Waste Management Plan must be developed approved; and implemented.
- Communication or awareness must be undertaken to the project team to ensure maximum participation and compliance to the EMPr.
- The EMP attached and the mitigation measures related to it must be adhered to at all times and the appointed ECO must ensure that the developer complies with the EMP.
- An ECO must be appointed to monitor compliance with the authorization and develop compliance reports to be submitted to the Department during the construction phase.
- It is recommended that adequate storm water management be incorporated in the design of the proposed development in order to prevent erosion and the associated sedimentation of the surrounding areas. All areas affected by construction which are to remain as open space areas should be rehabilitated upon the completion of the construction phase of the development.
- All of the recommendations in the specialist reports that are included as a part of this application should be implemented & strictly adhered to in order to counteract adverse and cumulative impacts to the biophysical & social environments.

SECTION I: APPENDIXES

The following appendixes are attached:

Appendix A: Topographical Map

Appendix B: Site Photographs

Appendix C: Layout Plan

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

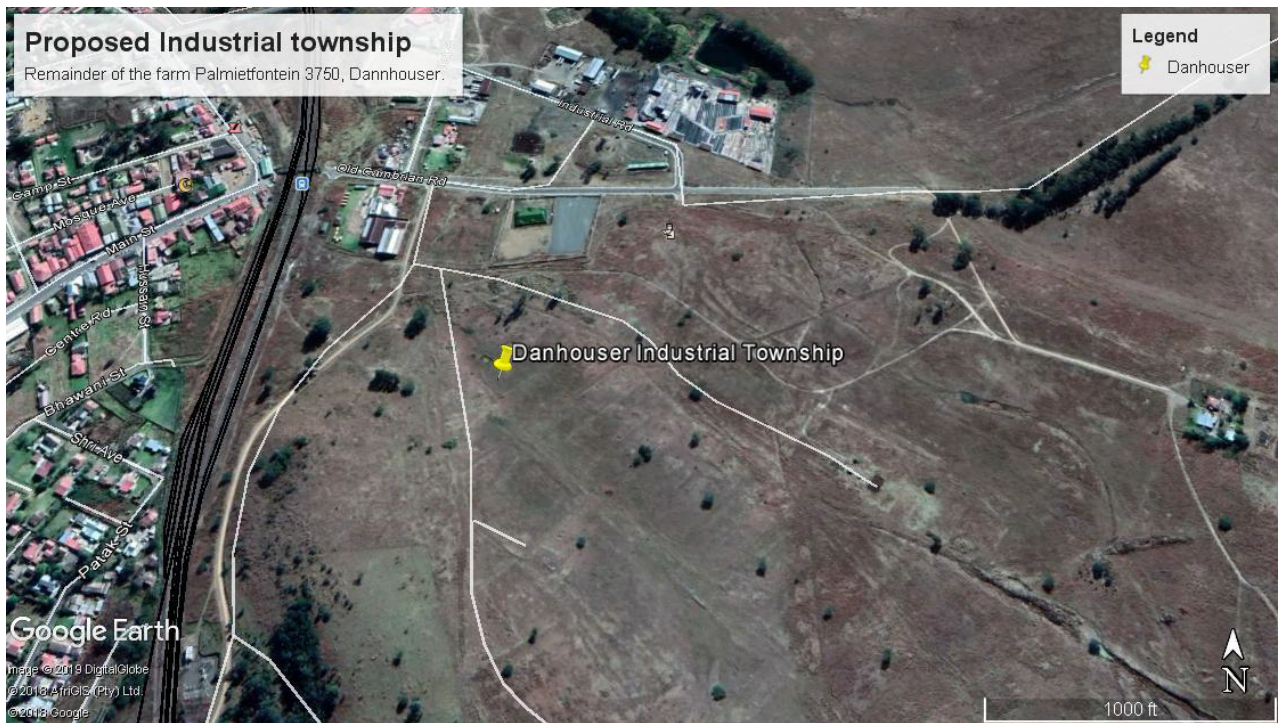
Appendix G: Environmental Management Programme (EMPr)

Appendix H: Curriculum Vitae of EAP

Appendix I: Additional Information

APPENDICES

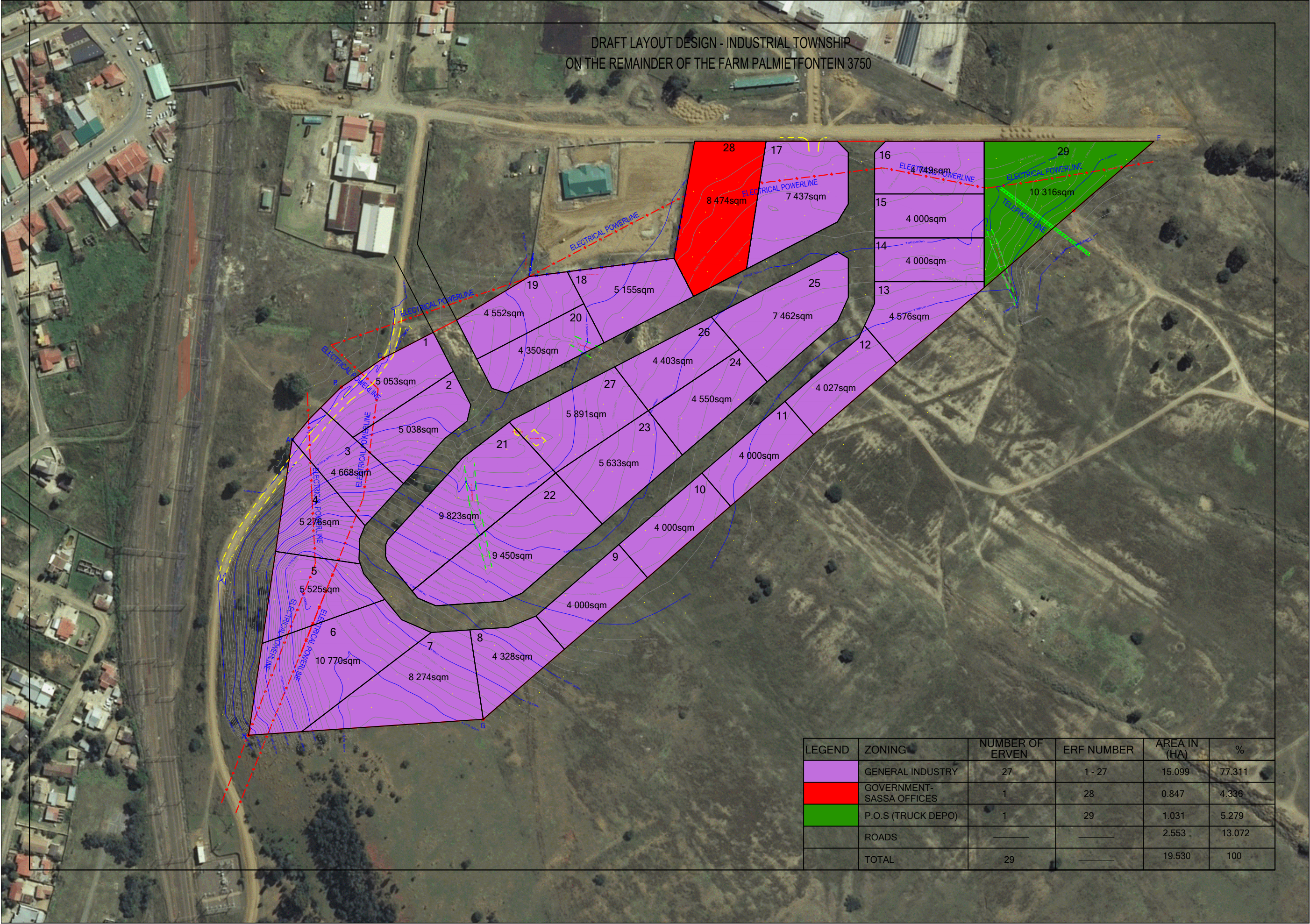
APPENDIX A: Locality Map



APPENDIX B: Site Photographs

APPENDIX C: Layout Plan

DRAFT LAYOUT DESIGN - INDUSTRIAL TOWNSHIP
ON THE REMAINDER OF THE FARM PALMIETFONTEIN 3750



LEGEND	ZONING	NUMBER OF ERVEN	ERF NUMBER	AREA IN (HA)	%
	GENERAL INDUSTRY	27	1 - 27	15.099	77.311
	GOVERNMENT-SASSA OFFICES	1	28	0.847	4.336
	P.O.S (TRUCK DEPO)	1	29	1.031	5.279
	ROADS			2.553	13.072
	TOTAL	29		19.530	100

APPENDIX D: Specialist Reports

Geotechnical Report

Civil Engineering Services Report

PROPOSED INDUSTRIAL TOWNSHIP
SITUATED ON THE REMAINDER OF THE FARM
PALMIETFONTEIN 3750

CIVIL ENGINEERING SERVICES REPORT

FEBRUARY 2019

PREPARED FOR:



Samuel Chauke
Tell 012 809 0838
Cell 083 277 7347
info@kvdgroup.co.za

PREPARED BY:



MGM NGWENYA CONSULTING
Engineers

Mpumelelo G M Ngwenya, Pr tech Eng
Tell 013 752 3093
Cell 082 579 9313
Email mgmngwenya@gmail.com

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1 **INTRODUCTION**

1.1 **Background**

MG Ngwenya Consulting Engineers were requested by KV Development Group to compile an e Services Reports for the proposed industrial development on the remainder of the farm Palmfontein 3750.

Table 1.1: Land Zoning

Zoning	Number of Erven	Area (Ha)	% of development area
General Industry	16	15.061	82.192%
P.O.S(Truck Depo)	1	1.087	5.932
Roads		2.176	11.875

This report addresses the provisional planning regarding civil engineering services including all assumptions and references to standards and guidelines. Note that this report is not based on a preliminary design as such a design contains more detail. The basic planning of services addressed in the report include the following:

- Bulk water supply
- Bulk water purification
- Bulk water storage
- Internal sewer reticulation and purification
- Internal streets
- Bulk external roads – access road towards the township and possible external upgrading of intersections.
- Cost associated with the provision of the services

1.2 Locality

The proposed development will be located in Dannhauser Towns along the rail way line and the old Gambrian road. Access to the proposed development can be gain from the Railway St.

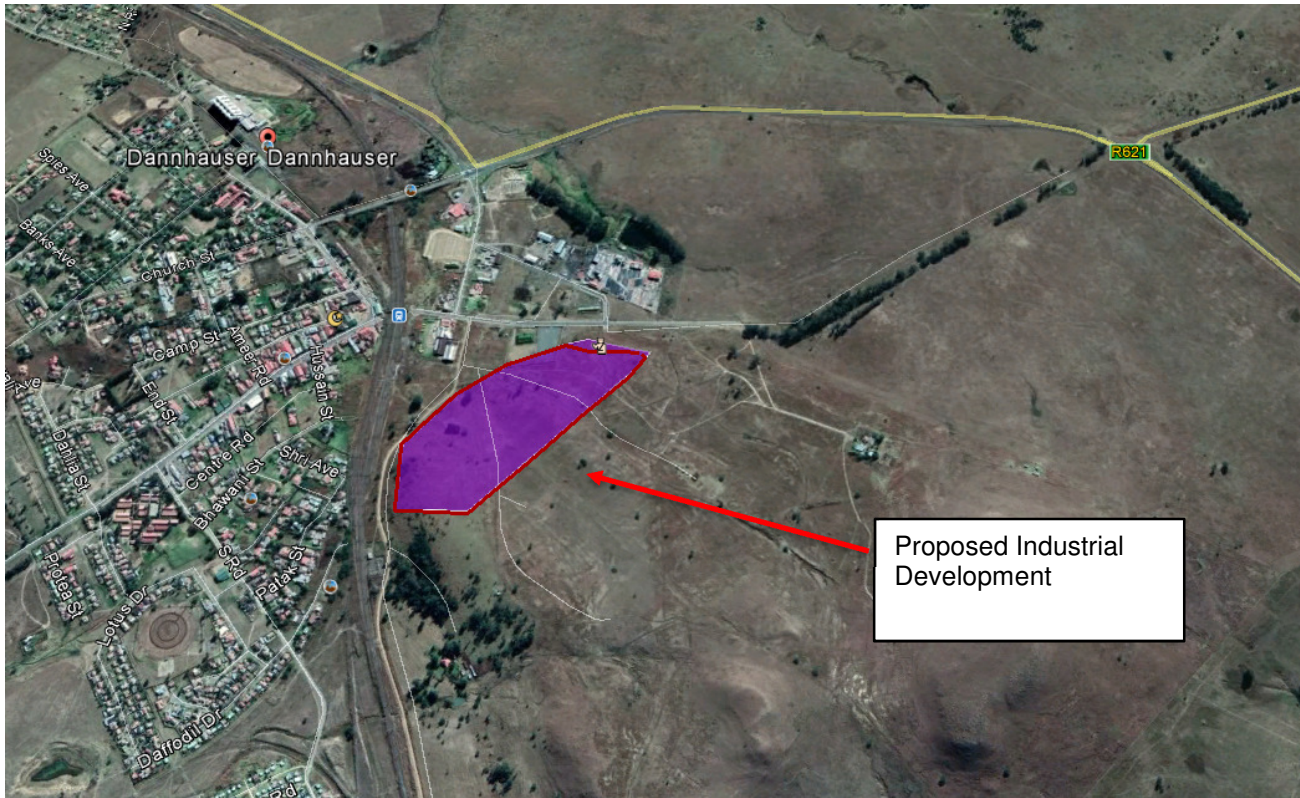


Figure 1: Locality map

2 DESIGN CRITERIA

The design criteria used as a guideline in the design of the services as mentioned above is the publication “*Guidelines for Human Settlement Planning and Design*”. This criteria is widely accepted as the guideline for the design of municipal services.

3 BULK INFRASTRUCTURES

The bulk infrastructure pertaining to civil engineering services consist of:

- Bulk water supply to the development (water source, reservoirs, pump stations, pipe lines (pump & gravity feed, etcetera);
- Bulk sewer drainage from the development (pump stations, treatment works,

pipe lines, etcetera);

- Bulk roads infrastructure

The provision of these services is discussed in detail in the following paragraphs.

3.1 Bulk Water Services

3.1.1 Water Demand

The water demand for the portion is based on the development zoning. The current land use, as per Table 3.1 will generate an Annual Average Daily Demand as indicated in Table 3.1 below.

Table 3.1: Annual Average Daily Demand

Zooning	Area	Water Demand Unit Rate	AADD (kl/d)
General Industry	150 610 m ²	0.6 kl/100m ² /d	903.66
Truck Depo	10 870 m ²	0.4 kl/100m ² /d	43.48
Total AADD			974.14

Domestic water demand:

Annual average daily demand (AADD) 974.14 m³/day

Annual average daily demand (AADDg) 1089.211 m³/day

Seasonal Peak Factor 1.5

Seasonal Peak (AASD) 1633.81 m³/day

Instantaneous Peak Factor 3.5

Instantaneous Peak 5718.4 m³/day

With a 24-hour day withdrawal period 66l/s (Design Flow)

3.1.2 Capacity of Bulk Infrastructure

The development is located inside the Dannhauser Local Municipality and falls inside the spatial development framework (SDF) of the municipality. It must be noted the bulk water master planning does consider developments inside the SDF and as such the proposed development is within the Dannhauser Local Municipality urban edge.

3.1.3 Bulk Service Contribution

It will be required by the municipality that a services agreement be entered into with Dannhauser Local Municipality for the provision and installation of link and internal services. All the costs of the installation of the internal and link services to the existing infrastructure have to be funded by the development owner.

3.2 Bulk Sewerage Services

The location and topographical lay of the development will enable the sewer network to drain to one side of the development, as such the development will have two sewer connection point as shown in the layout of annexure A.

3.2.1 Sewerage volume generated

The sewerage generated by the proposed development is estimated as per the Table 3.2 below:

Table 3.2: Average Daily Sewerage Flow

Building	AADD (kl/d)	% Sewer	Average Dry Weather Flow (kl/d)
General Industry	903.66	69%	623.5254
Truck Depo	43.48	77%	33.4796
		Total	657.005
		AWWF	

The following sewerage outflow is anticipated for the development:

Average Dry Weather Flow (ADWF):	657.01 Kl/day
Storm water infiltration (15%) AWWF	755.6 Kl/day
Peak Wet Weather Flow (2.5) PWWF	1888.9 Kl/day

The average sewage volume generated is in the order of 657Kl per day or 7.6l/s. The peak design discharge for the design of sewers is expected to be in the order of 22 l/s.

3.2.2 Capacity of Bulk Infrastructure

The development will be able to connect onto the existing municipal sewer system as shown in annexure A of this report

3.3 Bulk Roads Infrastructure

3.3.1 General

The development needs to be serviced with public access into the area. Currently the municipal road along the Old Cambrian road borders the development on its northern boundary. And also provide access to the proposed development site

3.3.2 Accesses

The proposed development is located in the vicinity of the R621 which is in the jurisdiction of SANRAL. The current access position leading to the site is gained off the R621 which is on the northern side of the development via the Old Cambrian road. Therefore, all the relevant authorities namely SANRAL, Province, and Dannhauser Municipality would need to be consulted for approvals of access proposals and the Traffic Impact Study will be needed in order to understand the traffic flow along the development and to plan for alternative access

This report proposes a new access along the R621 road on the North Eastern side of the proposed development, the proposed new access is located approximately 2km from the proposed development.

However, as the access proposals are for the long-term future, given the size of the development and the subsequent trips generated, it is proposed that access be provided in the form of a T-Junction with a dedicated right turn lane from the western approach of the R621 to cater for vehicles wishing to turn into the development. The access would however need to be tested when conducting the Traffic Impact Study and is subject to approvals from the relevant authorities. The intersection of the R621 and West St would also need to be tested when conducting the Traffic Impact Study to determine if it will adequately accommodate the additional trips as a result of the development.

Considering the above, it should be noted that the access will be determined in accordance with the Traffic Impact Study (TIS) findings conducted separately from this report. The final approval of the access by Dannhauser Municipality is dependent on:

- The traffic to be generated by the development;
- The sight distances on the public road) towards the intersection position (for safe vehicle movement in and out of the development);
- The distance to other intersections or entrances already approved by the authority,
- General pavement structure and geometric standards to be complied with.

The intersection could involve upgrading (to a surfaced condition) and widening of the existing road or possible dedicated turning/stacking lanes to the entrance side of the access. Care should be taken to ensure no stacking from the development extends out onto the external road network and enough stacking space is to be provided off-street into the development (at the access gates) to ensure compliance with this requirement.

3.3.3 Site Traffic Assessment

The zoning application for the proposed development entails a change in existing land uses therefore a Traffic Impact Study according to the COTO guidelines and requirements should be conducted for approvals by the relevant authorities.

4 INTERNAL SERVICES AND INFRASTRUCTURE

4.1 Water Reticulation

A layout of the proposed development reticulation system will have to be undertaken and submitted to Dannhauser for approval for installation of the services.

4.1.1 Design parameters

The distribution of water to the buildings via an internal water reticulation in the development will be based on the following design criteria:

Loss Factor	15% (1.15)
AASD Factor	1.5
Instantaneous peak factor	3.5
Maximum velocity in pipes (m/s)	1.5

Maximum static head (m)	120
Minimum head under instantaneous peak demand (m)	24
Maximum head under instantaneous peak demand (m)	90

The sizing of reticulation pipelines will be based on two approaches namely:

1. the instantaneous peak demand generated by domestic water use and
2. the demand generated by the risk of fire.

The higher figure will be taken as the governing water demand.

4.1.2 Domestic water demand

The domestic water demand is a function of the peak daily demand and the summer peak factors as indicated in the above design parameter table (4.4.1). The peak domestic water demand figure calculated by applying the design parameters to the demand calculations (3.1.1) is 66.11/s.

4.1.3 Fire water demand

The Rational Fire Design is a function performed by a specialist Fire Consultant. Our calculation is therefore considered indicative and must be confirmed. The distribution of water to the fire hydrants in the development is based on the following criteria:

Fire risk category	High Risk
Minimum design flow	20 l/s
Maximum number of hydrants discharging simultaneously	Fire Hydrants Should be located at 120m apart
Duration of fire flow (hour)	2

4.1.4 Design demand

Domestic water demand: 12.6 l/s

Fire water demand: 20 l/s

The design flow will be based on the combination **fire water demand and Domestic** generated by the development.

4.2 Sewer reticulation system

a) Minimum slopes

The following minimum slopes of shall apply for sewer lines:

Table 4.1: Minimum sewerage gradients

MINIMUM SEWER GRADIENTS	
Sewer diameter (mm)	Minimum gradients (mm)
100	1 : 120
150	1 : 200
200	1 : 300
225	1 : 350
250	1 : 400
300	1 : 500

b) Manholes

- Position: At all junctions
 At all changes of grade
 At all changes of direction
- Maximum interval: 65m
- Minimum interval: Determined by natural slope

Minimum manhole sizes:

Table 4.2: Sewer manhole dimensions

MINIMUM INTERNAL DIMENSIONS OF MANHOLE CHAMBERS AND SHAFTS		
SHAPE	CHAMBER	SHAFT
Circular	1000mm	750mm
Rectangular	910mm	610mm

The following slopes of benching in manholes shall be applied at design stage:

- Maximum 1 : 5
- Minimum 1 : 25
- Design requirements: **SABS 1200LD**
- Steep drops: Drop Manholes to be constructed.

4.3 Internal roads Infrastructure

a) Introduction

The development will involve the rezoning from agricultural to special for the purposes of general industry and Truck depo. Therefore, an internal road network will be developed.

Sections hereafter therefore refer mainly to any new envisaged internal roads infrastructure, should it be required.

b) Design standards

In addition to the “Guidelines for Human Settlement Planning and Design”, the following design standards shall be used:

- TRH 4: Structural Design of Flexible Pavements for Interurban and Rural Roads.
- TRH 17: Geometric Design of Rural Roads; and
- Draft UTG 2: Structural Design of Segmental Block Pavements for Southern Africa.

In order to determine the structural requirements of the pavement layers, the “South African Trip Generation Rates” document will be used. For this document the number of vehicles using a particular roadway is determined from the type of stands (industrial, commercial, Res 1, Res 2, etc) that would be serviced by the specific road/street.

Other factors influencing the road structure and geometrics are:

- Available road building materials;
- Natural slopes/gradient;
- Maintenance after construction;
- In-situ soil conditions (clay/sand/rock/perched water table);

- Natural water courses;
- Aesthetics; and
- Level of service (road width).

The internal roads will be classified as follow:

- Local streets (Class 5a), traversing within the development area, connecting stands in the first place with the D957 via a single access intersection onto the D957 (as discussed previously), that eventually extends on to intersect with the R37.

The following geometric design standards are proposed:

Geometric Design Standards		
Design Element	Design Parameter	Design Value
Min turning radius: <ul style="list-style-type: none"> • Collector roads (Link Road) • Local streets 	Single unit + trailer Single unit + trailer	14m
Design speed: <ul style="list-style-type: none"> • Collector roads • Local streets 		60km/h 30km/h
Stopping sight distance: <ul style="list-style-type: none"> • Collector roads • Local streets 		80m 30m
Super elevation: <ul style="list-style-type: none"> • Collector roads • Local streets 		2 – 4 % None
Min k-values (sags & crests): <ul style="list-style-type: none"> • Collector roads • Local streets 	With street lighting With street lighting	8 4
Cross fall	To one side only	2%

The following structural design standards are proposed:

Structural Design Standards	
Design Element	Design Parameter
Street / Road category:	
<ul style="list-style-type: none"> • Collector roads • Local streets 	UB: Industrial Roads UB: Industrial Roads
Pavement class:	
<ul style="list-style-type: none"> • Collector roads • Local streets 	ES 3 ES 3
Design bearing capacity:	
<ul style="list-style-type: none"> • Collector roads • Local streets 	$1.0 - 3.0 \times 10^6$ $1.0 - 3.0 \times 10^6$
Surfaced width:	
<ul style="list-style-type: none"> • Collector roads • Local streets 	7m 8m
Kerbing	Semi-mountable and mountable kerbs

The structural design shall be done according to the document “*Guidelines for Human Settlement Planning and Design*” as compiled under the National Department of Housing by the CSIR. The structural design of the pavement foundation is dependent on the insitu soil conditions in the development. A Geotechnical Report will indicate possible problematic areas (collapsible soils, perched water table close to natural ground level, or rock), which are to be considered at the detail design stage.

c) Public Transport Facilities

In terms of public transport facilities there are informal stops along the R37 however, the drop-off / pick-up points are quite a distance from the proposed development. It is therefore proposed that pick up and drop off facilities be provided on site e.g. taxi drop off and pick up facilities.

d) Borrow Pit Area

It is important to identify a borrow area for the base, subbase and selected pavement layer materials (if the in-situ soil properties are not sufficient). Soils should ideally be sourced from areas within the development in order to keep transport and procuring costs low. Due to the relative small size of the development this could however not be possible. The availability of sufficient road building materials will be determined with the geotechnical investigation during the preliminary design stage. The base material would either be a G1/G2 crushed stone or a natural material stabilized to a type C3 or C4 (to be established at a detail design stage).

e) Cable Ducts

Cable Ducts will be provided at designated road crossings to provide for electrical and communication cables.

5 **STORMWATER**

5.1 **Stormwater infrastructure**

a) Design philosophy

The removal of stormwater from the road surface and the entire development for that matter will be via a combination of surface channels and a sub-soil storm water pipe network. The discharge of stormwater will be into the natural water ways from where the water will be naturally channelled towards the nearest water course.

b) Design Flood Calculations

The management of stormwater for the development will be based on a typical 1:20 year rain storm for the area. The generation of a maximum point rainfall in order to determine a design run-off will be based on the guidelines as set in the planning and design manual for residential development.

The following table indicate some of the typical guidelines to be used for run-off calculations:

Table 5.1: Design flood frequencies for major storms

DESIGN FLOOD FREQUENCIES FOR MAJOR SYSTEMS	
Land use	Design flood recurrence interval
Residential	50 years
Institutional	50 years
General commercial	50 years
CBD	50 – 100 years

Table 5.2: Design flood frequencies for minor storms

DESIGN FLOOD FREQUENCIES FOR MINOR SYSTEMS	
Land use	Design flood recurrence interval
Residential	1 - 5 years
Institutional	2-5 years
General commercial	5 years
CBD	5 – 10 years

5.3 Stormwater Pipe Information

The following typical design parameters will be applied to the stormwater system:

Table 5.3: Minimum grades for stormwater pipes

SUGGESTED MINIMUM GRADES FOR PIPES		
PIPE DIAMETER (mm)	DESIRABLE MINIMUM GRADIENT (1 in ...)	ABSOLUTE MINIMUM GRADIENT (1 in)
300	80	230
375	110	300
450	140	400
525	170	500
600	200	600
675	240	700

750	280	800
825	320	900
900	350	1 000
1 050	440	1 250
1 200	520	1 500

6 SERVICE PROVISION

6.1 Water and Sewerage

The internal water and sewer infrastructure will be provided by the developer. All the bulk infrastructure must be installed and connected to the bulk municipal services by the developer as per Mbombela Local Municipality requirements and master planning.

A services agreement will be entered into between the developer and the municipality in lieu of the rendering of services to the development.

6.2 Roads and stormwater

The intersections and the streets and stormwater system within the development boundaries will be privately owned and will need to be operated and maintained by the Body Corporate / owner of the development.

7 SERVICES COST ESTIMATE

INTERNAL SERVICES CONSTRUCTION AND ACCESS ROAD COST		
NO	DESCRIPTION	Feb-19
		Total cost
1	Preliminary and General	R 1 500 000.00
2	Internal water network and link to connect into existing municipal	R 2 520 000.00
3	Internal sewer network and link to connect into existing municipal system	R 2 295 000.00
4	Internal Roads Class 4	R 7 500 000.00
5	Stormwater for Roads	R 1 500 000.00
6	Proposed Access Road Class 3	R 6 160 000.00
7	ESTIMATED CONSTRUCTION COSTS	R 21 475 000.00
PROFESSIONAL FEES, SITE SUPERVISION AND DISBURSEMENTS		
8	Pre-project approval, services report, EIA assistance, Traffic Impact Study, Stormwater Management Plan.	R 300 000.00
9	Professional fees	R 3 006 500.00
10	Site supervision	R 780 000.00
11	Sub Total	R 4 086 500.00
12	Total	R 25 561 500.00
13	ADD 15% VAT	R 3 834 225.00
14	TOTAL CONSTRUCTION COST	R 29 395 725.00

ANNEXURE A: WATER, SEWER & ROADS LAYOUT PLAN

Electrical Engineering Services Report



Buro Tech Consulting Engineers CC

141 Main Street, Heatherdale, Akasia, 0182
PO Box 59887, Karenpark, 0118

Tel: 00 27 (0)12) 542 1010
Fax: 086 516 4024

E-mail: burotech@burotech.co.za
Website: www.burotech.co.za

To:	KV Development Group	From:	Nico van Wyk
Tel No:	083 277 7347	Cell No:	082 600 8328
For Att:	Mr. Samuel Chauke	Email	nicovw@burotech.co.za
Email:	info@kvdgroup.co.za	Page:	1 of 8
Date:	26 June 2019	Ref:	PH97 /DSN

**RE: PROPOSED INDUSTRIAL TOWNSHIP DEVELOPMENT – REMAINDER OF THE FARM
PALMIETFONTEIN NO. 3750
ELECTRICAL SERVICES – BASIC OUTLINE SERVICES REPORT – Version 02**

Dear Samuel,

Enclosed please find for your information and attention the basic outline services report for the electrical services as requested.

Version 02 - Update Notes:

This report has been updated to address capacity availability on the Eskom Dannhauser Substation.

Kindly contact us should any additional information be required.

Yours Faithfully

Nico van Wyk (Pr. Eng)

Cc: Nil

Enclosed: Report Version 2

Members: NJS van Wyk Pr Eng B Sc (Ing) (Elek) MSAACE MSAIEE MIESSA
CK 92/05979/23



Registered Firm: CESA
Soli Deo Gloria



ELECTRICAL SERVICES

BASIC OUTLINE SERVICES REPORT

PROPOSED TOWNSHIP DEVELOPMENT REMAINDER OF THE FARM PALMIETFONTein NO. 3750



PREPARED BY:

BURO TECH CONSULTING ENGINEERS CC
PO Box 59887
KAREN PARK
0118

Tel: 012 542 1010
Email: burotech@burotech.co.za



PREPARED FOR:

KV DEVELOPMENT GROUP
PO Box 11948
SILVERLAKES
0054

Tel: 012 809 0838
Email: info@kvdgroup.co.za

DATE: 26 JUNE 2019
Version 02

PROJECT: PH97/DSN

Contents

1. INTRODUCTION	2
2. BRIEF ON EXISTING NETWORKS	3
3. ESTIMATED ELECTRICITY DEMAND	4
4. AVAILABLE CAPACITY	5
5. FUTURE DEVELOPMENT	5
6. PRELIMINARY COST ESTIMATE	5
7. CONCLUSION	6
8. ANNEXURES	6

**PROPOSED TOWNSHIP DEVELOPMENT – REMAINDER OF THE FARM
PALMIETFONTEIN NO. 3750
ELECTRICAL SERVICES– BASIC OUTLINE SERVICES REPORT**

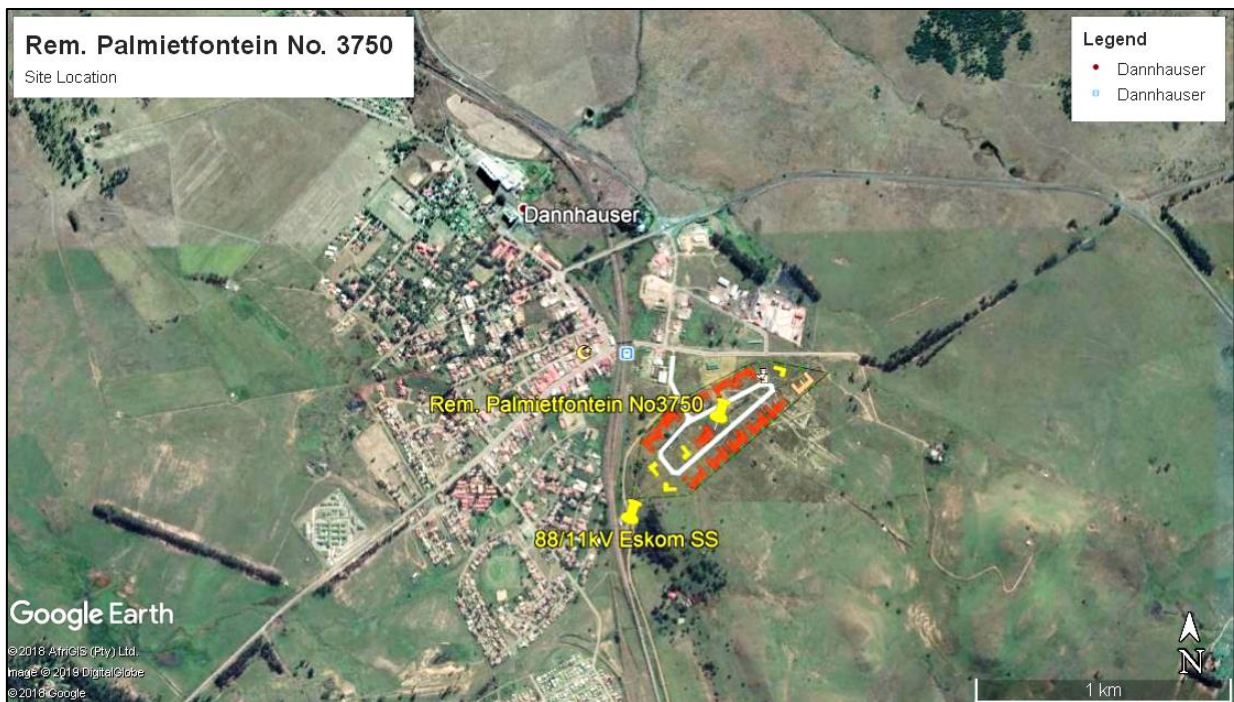
Date: 26 June 2019
Version 02

1. Introduction

Mr. Samuel Chauke representing KV Development Group for the proposed industrial development on the Remainder of the Farm Palmietfontein No 3750, appointed Buro Tech Consulting Engineers on 20 May 2019 as the Electrical Engineers.

This report is based on the following information received from:

- Mr Samuel Chauke on 15 February 2019
- Site visit on 03 June 2019
- Information received from Eskom in May/June 2019

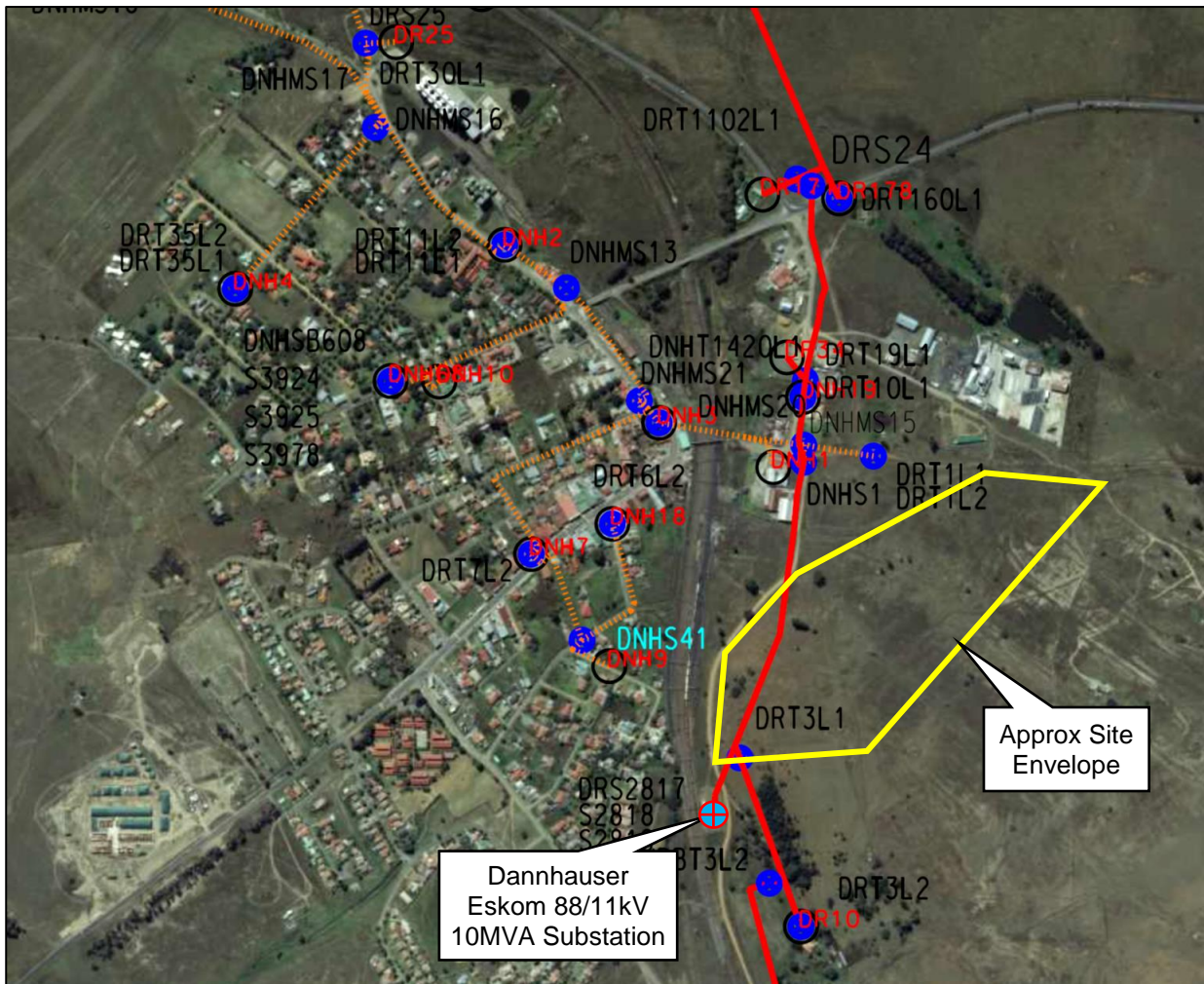


**Image 1: Locality Map
Proposed Industrial Township, Remainder of the Farm Palmietfontein No. 3750**

2. Brief on Existing Networks

Overview of the site with relation to existing surrounding Eskom infrastructure:

- The Eskom Dannhauser 88/11kV 10MVA substation is located directly to the South West of the site.
- The 11kV Dannhauser Network Breaker feeder line transverse the site on the western perimeter.



Images 2: Overview of the Eskom NB1, 11kV Feeder & Dannhauser Substation Position



Images 3: Dannhauser 88/11kV, 10MVA Substation



Images 4: Eskom NB1 11kV overhead feeder

No additional electrical networks are present on the site.



Images 5: Site from the North Eastern Side

3. Estimated Electricity Demand

The bulk load requirements are calculated to be as follows:

PALMIETFONTEIN R/3750 - Industrial Site							Rev 00	2019-05-30	
Erf #	AREA OF ERF		PROPOSED ZONING	Units	FAR	DEVELOPABLE FLOOR AREA (m ²)	kVA/unit or VA/m ²	Unit	Total Load (kVA)
	Hectare	m ²							
R/3750	18.0000 Ha	180 000.00 m ²	Industrial	16	0.60	108 000.00 m ²	25	VA/m ²	2 700 kVA

TOTAL ESTIMATED ELECTRICAL NOTIFIED MAXIMUM DEMAND

2 700 kVA

4. Available capacity

Eskom planning indicated that the most recent NMD on the Dannhauser Substation is 7.5MVA.

As part of the Eskom longer term planning, the substation will have to be upgraded from a 1x 10MVA to a 2x 10MVA substation to cater for load growth of Dannhauser Town. The substation have sufficient space available for the establishment of an additional transformer bay. This will be factored into the Eskom **Network Development Plan (NDP)**.

Refer extract below for Eskom Feedback.

From:	Arushen Govender <GovendAh@eskom.co.za>
Sent:	26 June 2019 09:25
To:	Sanje Ramkillawan; Ralph Gordon
Cc:	Nondumiso Mahlaba; Avinash Ramdhin
Subject:	FW: Palmietfontein Industrial - Site Visit
Sensitivity:	Confidential
Hi Ralph	
The substation has a seasonal load profile and peaks in Winter with the highest peak being at approximately 7.5MVA. The peak load has been increasing year after year so capacity at the substation is regularly changing and there is no guarantee of how much of load will be able to be accommodated when the application is submitted.	
Regards Arushen	

Eskom require a formal application to be submitted in order to comment on available capacity. The application should contain a clear project roll-out plan, milestone dates (for supply) & related information. Taking into account the planning details as envisaged by the **Network Development Plan (NDP, which serve as network augmentation master-plan for a supply area)**, Eskom will prepare a project specific **Network Planning Report (NPR)**.

Where a development project is planned for implementation in phases, a NPR for each phase will be required.

5. Future Development

The proposed development will comprise of the setting out of Industrial Development in accordance with town-planning best practices.

The reticulation of the proposed industrial development will be done in compliance with the standards and specifications as prescribed by Eskom.

6. Preliminary Cost Estimate

Provision of Bulk:

A cost estimate can only be done, once the formal Eskom application process has been followed and a NPR developed (*by Eskom*) for this project.

7. Conclusion

Taking into account the typical load profile of an Industrial development, the diversity of demand between different consumer classes, and the fact that the industrial development is only expected to reach the final demand after a number of years as it matures, the substation will have sufficient capacity available for the proposed Industrial development to proceed.

Eskom requires a formal application to be submitted for the development of a project specific NPR which will address the requirements to unlock bulk capacity for the project.

8. Annexures

None

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APPENDIX E: Public Participation

Proof of Communication with IAPS

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 09:28
To: 'kunenemxolisi89@gmail.com'
Cc: 'mxolisi.kunene27@gmail.com'
Subject: RE: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY
Attachments: Dannhauser BAR.pdf

Good day

Kindly see the attached draft **Basic Assessment Report for the proposed industrial township establishment in Dannhauser.**

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 28 July 2021 15:01
To: 'mxolisi.kunene27@gmail.com' <mxolisi.kunene27@gmail.com>
Cc: 'kunenemxolisi89@gmail.com' <kunenemxolisi89@gmail.com>
Subject: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Good day

I hope this email finds you well.

We (Mang GeoEnviro Services) kindly invite you (the Ward Councilor) to register as an Interested and Affected Party for the proposed industrial township on the remainder of the farm Palmietfontein 3750 in Dannhauser under the jurisdiction of the Dannhauser Local Municipality, KwaZulu Natal Province.

Kindly see the attached BID Documents with the comment sheet.

Hope to hear from you soon.

Kind Regards,
Phakwago M. Kabelo
Environmental Assessment Practitioner (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 09:51
To: 'nqobile.zondo@kzntransport.gov.za'
Subject: RE: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY
Attachments: Dannhauser BAR.pdf

Good day

Kindly see the attached draft **Basic Assessment Report** for the proposed industrial township establishment in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 28 July 2021 15:03
To: 'nqobile.zondo@kzntransport.gov.za' <nqobile.zondo@kzntransport.gov.za>
Subject: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Good day

I hope this email finds you well.

We (Mang GeoEnviro Services) kindly invite you (the Department of Transport) to register as an Interested and Affected Party for the proposed industrial township on the remainder of the farm Palmietfontein 3750 in Dannhauser under the jurisdiction of the Dannhauser Local Municipality, KwaZulu Natal Province.

Kindly see the attached BID Documents with the comment sheet.

Hope to hear from you soon.

Kind Regards,
Phakwago M. Kabelo
Environmental Assessment Practitioner (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 09:51
To: 'buthelezi@kzndhs.gov.za'
Subject: RE: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY
Attachments: Dannhauser BAR.pdf

Good day

Kindly see the attached draft **Basic Assessment Report for the proposed industrial township establishment in Dannhauser.**

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 28 July 2021 15:06
To: 'buthelezi@kzndhs.gov.za' <buthelezi@kzndhs.gov.za>
Subject: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Good day

I hope this email finds you well.

We (Mang GeoEnviro Services) kindly invite you (Department of Human Settlement) to register as an Interested and Affected Party for the proposed industrial township on the remainder of the farm Palmietfontein 3750 in Dannhauser under the jurisdiction of the Dannhauser Local Municipality, KwaZulu Natal Province.

Kindly see the attached BID Documents with the comment sheet.

Hope to hear from you soon.

Kind Regards,
Phakwago M. Kabelo
Environmental Assessment Practitioner (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 09:51
To: 'bernadetp@amafapmb.co.za'
Subject: RE: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY
Attachments: Dannhauser BAR.pdf

Good day

Kindly see the attached draft Basic Assessment Report for the proposed industrial township establishment in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 28 July 2021 15:08
To: 'bernadetp@amafapmb.co.za' <bernadetp@amafapmb.co.za>
Subject: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Good day

I hope this email finds you well.

We (Mang GeoEnviro Services) kindly invite you (Amafa Akwazulu-Natali) to register as an Interested and Affected Party for the proposed industrial township on the remainder of the farm Palmietfontein 3750 in Dannhauser under the jurisdiction of the Dannhauser Local Municipality, KwaZulu Natal Province.

Kindly see the attached BID Documents with the comment sheet.

Hope to hear from you soon.

Kind Regards,
Phakwago M. Kabelo
Environmental Assessment Practitioner (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 09:51
To: 'nicolm@eskom.co.za'
Subject: RE: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY
Attachments: Dannhauser BAR.pdf

Good day

Kindly see the attached draft **Basic Assessment Report** for the proposed industrial township establishment in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 28 July 2021 15:09
To: 'nicolm@eskom.co.za' <nicolm@eskom.co.za>
Subject: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Good day

I hope this email finds you well.

We (Mang GeoEnviro Services) kindly invite you (Eskom) to register as an Interested and Affected Party for the proposed industrial township on the remainder of the farm Palmietfontein 3750 in Dannhauser under the jurisdiction of the Dannhauser Local Municipality, KwaZulu Natal Province.

Kindly see the attached BID Documents with the comment sheet.

Hope to hear from you soon.

Kind Regards,
Phakwago M. Kabelo
Environmental Assessment Practitioner (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 09:51
To: 'makwabasan@dws.gov.za'
Subject: RE: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY
Attachments: Dannhauser BAR.pdf

Good day

Kindly see the attached draft **Basic Assessment Report for the proposed industrial township establishment in Dannhauser.**

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 28 July 2021 15:11
To: 'makwabasan@dws.gov.za' <makwabasan@dws.gov.za>
Subject: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Good day

I hope this email finds you well.

We (Mang GeoEnviro Services) kindly invite you (Department of Water and Sanitation) to register as an Interested and Affected Party for the proposed industrial township on the remainder of the farm Palmietfontein 3750 in Dannhauser under the jurisdiction of the Dannhauser Local Municipality, KwaZulu Natal Province.

Kindly see the attached BID Documents with the comment sheet.

Hope to hear from you soon.

Kind Regards,
Phakwago M. Kabelo
Environmental Assessment Practitioner (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 09:51
To: 'mbali.buthelezi@kzndhs.gov.za'
Subject: RE: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY
Attachments: Dannhauser BAR.pdf

Good day

Kindly see the attached draft Basic Assessment Report for the proposed industrial township establishment in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 28 July 2021 16:01
To: 'mbali.buthelezi@kzndhs.gov.za' <mbali.buthelezi@kzndhs.gov.za>
Subject: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Good day

I hope this email finds you well.

We (Mang GeoEnviro Services) kindly invite you (Department of Human Settlement) to register as an Interested and Affected Party for the proposed industrial township on the remainder of the farm Palmietfontein 3750 in Dannhauser under the jurisdiction of the Dannhauser Local Municipality, KwaZulu Natal Province.

Kindly see the attached BID Documents with the comment sheet.

Hope to hear from you soon.

Kind Regards,
Phakwago M. Kabelo
Environmental Assessment Practitioner (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 09:51
To: 'nontobekok@amajuba.gov.za'
Cc: 'mpumes@amajuba.gov.za'
Subject: RE: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY
Attachments: Dannhauser BAR.pdf

Good day

Kindly see the attached draft **Basic Assessment Report** for the proposed industrial township establishment in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Monday, 02 August 2021 11:24
To: 'nontobekok@amajuba.gov.za' <nontobekok@amajuba.gov.za>
Cc: 'mpumes@amajuba.gov.za' <mpumes@amajuba.gov.za>
Subject: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Good day

I hope this email finds you well.

We (Mang GeoEnviro Services) kindly invite you (Amajuba District Municipality) to register as an Interested and Affected Party for the proposed industrial township on the remainder of the farm Palmietfontein 3750 in Dannhauser under the jurisdiction of the Dannhauser Local Municipality, KwaZulu Natal Province.

Kindly see the attached Background Information Document with the comment sheet.

Hope to hear from you soon.

Kind Regards,
Phakwago M. Kabelo
Environmental Assessment Practitioner (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 09:51
To: 'Nerissa.Pillay@kznwildlife.com'
Subject: RE: INVITATION TO REGISTER AS AN INTERESTED AND PARTY
Attachments: Dannhauser BAR.pdf

Good day

Kindly see the attached draft Basic Assessment Report for the proposed industrial township establishment in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Monday, 02 August 2021 11:37
To: 'Nerissa.Pillay@kznwildlife.com' <Nerissa.Pillay@kznwildlife.com>
Subject: INVITATION TO REGISTER AS AN INTERESTED AND PARTY

Good day

I hope this email finds you well.

We (Mang GeoEnviro Services) kindly invite you (Ezemvelo KZN Wildlife) to register as an Interested and Affected Party for the proposed industrial township on the remainder of the farm Palmietfontein 3750 in Dannhauser under the jurisdiction of the Dannhauser Local Municipality, KwaZulu Natal Province.

Kindly see the attached Background Information Document with the comment sheet.

Hope to hear from you soon.

Kind Regards,
Phakwago M. Kabelo
Environmental Assessment Practitioner (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 09:37
To: 'Lynn Boucher'
Cc: 'ndoda.mdluli@dalrrd.gov.za'
Subject: RE: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY
Attachments: Dannhauser BAR.pdf

Good day

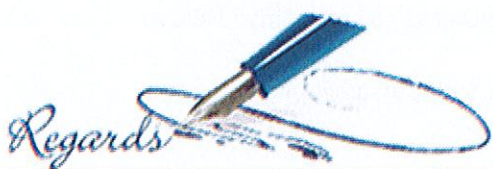
Kindly see the attached draft Basic Assessment Report for the proposed industrial township establishment in Dannhauser.


Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

From: Lynn Boucher [mailto:Lynn.Boucher@dalrrd.gov.za]
Sent: Thursday, 12 August 2021 11:22
To: kabelo@manggeoenviro.co.za
Cc: Ndoda Mdluli <Ndoda.Mdluli@dalrrd.gov.za>
Subject: RE: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Good day

Please find attached letter in response to your enquiry.



 <p>COMMISSION ON RESTITUTION OF LAND RIGHTS</p>	<p>Mrs Lynn Boucher Senior Admin Officer: Information Management & Lodgement 139 Langalibalele Street Pietermaritzburg 3201 Private Bag X9120 Pietermaritzburg 3200 +27 33 341 2600 Lynn.Boucher@dalrrd.gov.za</p> <p><i>For I know the plans I have for you." declares the LORD, "plans to prosper you and not to harm you, plans to give you hope and a future. Jeremiah 29:11</i></p>
--	--

From: Ndoda Mdluli <Ndoda.Mdluli@dalrrd.gov.za>
Sent: Tuesday, 03 August 2021 11:19
To: Mnyamezeli Dlamini <Mnyamezeli.Dlamini@Dalrrd.gov.za>; Walter Silaule <Walter.Silaule@Dalrrd.gov.za>; Sifiso Ndlovu <Sifiso.Ndlovu@dalrrd.gov.za>; Bheki Mbili <Bheki.Mbili@Dalrrd.gov.za>
Subject: FW: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Dear Baphathi

Kindly receive the attached document that I received from Mang GeoEnviro Services and please advice.

Kind Regards

Mdluli

From: kabelo@manggeoenviro.co.za <kabelo@manggeoenviro.co.za>
Sent: Monday, 02 August 2021 11:26
To: Ndoda Mdluli <Ndoda.Mdluli@dalrrd.gov.za>
Subject: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

EXTERNAL EMAIL: This email originated outside of "DALRRD Environment". CAUTION: Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Good day

I hope this email finds you well.

We (Mang GeoEnviro Services) kindly invite you (Office of Regional Land Claims Commissioner) to register as an Interested and Affected Party for the proposed industrial township on the remainder of the farm Palmietfontein 3750 in Dannhauser under the jurisdiction of the Dannhauser Local Municipality, KwaZulu Natal Province.

Kindly see the attached Background Information Document with the comment sheet.

Hope to hear from you soon.

Kind Regards,
Phakwago M. Kabelo
Environmental Assessment Practitioner (*Cand. Sci. Nat*)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 10:14
To: 'KZNOU-L&R@ESKOM.CO.ZA'
Subject: DANNHAUSER DRAFT BAR
Attachments: Dannhauser BAR.pdf

Good day

Kindly see the attached draft Basic Assessment Report for the proposed industrial township establishment in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 11:09
To: 'buthlezi@kzndhs.gov.za'
Subject: DANNHAUSER DRAFT BAR
Attachments: Civil Engineering Services Report - Dannhauser.pdf; Electrical Engineering Services Report @ 20190626 - Dannhauser.pdf; Dannhauser EMPPr.pdf; Dannhauser - BAR.pdf

Good day

Kindly see the attached draft [Basic Assessment Report](#) for the proposed industrial township establishment in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: Nqobile Zondo <Nqobile.Zondo@Kzntransport.gov.za>
Sent: Tuesday, 17 August 2021 11:11
To: Chris DuPlessis; Michele Schmid
Cc: kabelo@manggeoenviro.co.za
Subject: Fw: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY
Attachments: Dannhauser BAR.pdf

FYI. Please action.

Kind Regards
Nqobile Zondo
Engineering Service

From: kabelo@manggeoenviro.co.za <kabelo@manggeoenviro.co.za>
Sent: Tuesday, August 17, 2021 9:51 AM
To: Nqobile Zondo <Nqobile.Zondo@Kzntransport.gov.za>
Subject: RE: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Good day

Kindly see the attached draft Basic Assessment Report for the proposed industrial township establishment in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 28 July 2021 15:03
To: 'nqobile.zondo@kzntransport.gov.za' <nqobile.zondo@kzntransport.gov.za>
Subject: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY

Good day

I hope this email finds you well.

We (Mang GeoEnviro Services) kindly invite you (the Department of Transport) to register as an Interested and Affected Party for the proposed industrial township on the remainder of the farm Palmietfontein 3750 in Dannhauser under the jurisdiction of the Dannhauser Local Municipality, KwaZulu Natal Province.

Kindly see the attached BID Documents with the comment sheet.

Hope to hear from you soon.

Kind Regards,
Phakwago M. Kabelo

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 17 August 2021 11:29
To: 'mbali.buthlezi@kzndhs.gov.za'
Subject: FW: DANNHAUSER DRAFT BAR
Attachments: Civil Engineering Services Report - Dannhauser.pdf; Electrical Engineering Services Report @ 20190626 - Dannhauser.pdf; Dannhause EMPr.pdf; Dannhauser - BAR.pdf

Good day

Please see the attached for your attention.

Kind regards,

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Tuesday, 17 August 2021 11:09
To: 'buthlezi@kzndhs.gov.za' <buthlezi@kzndhs.gov.za>
Subject: DANNHAUSER DRAFT BAR

Good day

Kindly see the attached draft **Basic Assessment Report** for the proposed industrial township establishment in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Wednesday, 18 August 2021 11:10
To: 'mdungem@amajuba.gov.za'
Subject: INVITATION TO REGISTER AS AN INTERESTED AND AFFECTED PARTY
Attachments: BID Document.pdf; IAP REGISTRATION FORM.docx

Good day

Please see the attached BID and comment sheet for the proposed industrial development in Dannhauser.

Your comment on the proposed development will be appreciated.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Wednesday, 18 August 2021 11:12
To: 'mdungem@amajuba.gov.za'
Subject: DANNHAUSER DRAFT BAR
Attachments: Locality Map.png; Dannhauser Layout Plan.pdf; Dannhauser - BAR.pdf

Good day

Please see the attached Draft Basic Assessment Report for the proposed industrial development in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Wednesday, 18 August 2021 11:13
To: 'mdungem@amajuba.gov.za'
Subject: RE: DANNHAUSER DRAFT BAR
Attachments: Civil Engineering Services Report - Dannhauser.pdf; Electrical Engineering Services Report @ 20190626 - Dannhauser.pdf; Geotechnical Report - Dannhauser.pdf

Kindly see attached specialist reports for the BAR.

Kind regards,

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 18 August 2021 11:12
To: 'mdungem@amajuba.gov.za' <mdungem@amajuba.gov.za>
Subject: DANNHAUSER DRAFT BAR

Good day

Please see the attached Draft Basic Assessment Report for the proposed industrial development in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: Mfundo Mdunge <mdungem@amajuba.gov.za>
Sent: Tuesday, 07 September 2021 11:10
To: kabelo@manggeoenviro.co.za
Cc: Sibusiso Nkabinde
Subject: RE: DANNHAUSER DRAFT BAR

Good Day

Hope this mail finds you well,

Please be acknowledged that Amajuba District has received the above mentioned document and is busy with the assessment of the application should the office require further information we will contact you.

Regards,
Mfundo Mdunge
ADM:Planning and Development services

Sent from [Mail](#) for Windows

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 07 September 2021 11:05
To: [Mfundo Mdunge](#)
Cc: [Sibusiso Nkabinde](#)
Subject: RE: DANNHAUSER DRAFT BAR

Good day

Kindly acknowledge the receipt of the draft Basic Assessment Report for the Dannhauser project.

The below is the link to the full report for the Dannhauser Project.

https://1drv.ms/b/s!Ajglb1cwSkXAg7MwVsb-Zu_9YpaMsw?e=gcliYs

Kind regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 18 August 2021 11:13
To: 'mdungem@amajuba.gov.za' <mdungem@amajuba.gov.za>
Subject: RE: DANNHAUSER DRAFT BAR

Kindly see attached specialist reports for the BAR.

Kind regards,

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 07 September 2021 11:07
To: 'mdungem@amajuba.gov.za'
Cc: 'sibusison@dannhauser.gov.za'
Subject: RE: DANNHAUSER DRAFT BAR

Good day

Kindly acknowledge the receipt of the draft Basic Assessment Report for the Dannhauser project.

The below is the link to the full report for the Dannhauser Project.

https://1drv.ms/b/s!Aiglb1cwSkXAg7MwVsb-Zu_9YpaMsw?e=qcliYs

Kind regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 18 August 2021 11:12
To: 'mdungem@amajuba.gov.za' <mdungem@amajuba.gov.za>
Subject: DANNHAUSER DRAFT BAR

Good day

Please see the attached Draft Basic Assessment Report for the proposed industrial development in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 07 September 2021 11:05
To: 'mdungem@amajuba.gov.za'
Cc: 'sibusison@dannhauser.gov.za'
Subject: RE: DANNHAUSER DRAFT BAR

Good day

Kindly acknowledge the receipt of the draft Basic Assessment Report for the Dannhauser project.

The below is the link to the full report for the Dannhauser Project.

https://1drv.ms/b/s!Ajglb1cwSkXAg7MwVsb-Zu_9YpaMsw?e=qcliYs

Kind regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 18 August 2021 11:13
To: 'mdungem@amajuba.gov.za' <mdungem@amajuba.gov.za>
Subject: RE: DANNHAUSER DRAFT BAR

Kindly see attached specialist reports for the BAR.

Kind regards,

From: kabelo@manggeoenviro.co.za [mailto:kabelo@manggeoenviro.co.za]
Sent: Wednesday, 18 August 2021 11:12
To: 'mdungem@amajuba.gov.za' <mdungem@amajuba.gov.za>
Subject: DANNHAUSER DRAFT BAR

Good day

Please see the attached Draft Basic Assessment Report for the proposed industrial development in Dannhauser.

Kind Regards,
Phakwago M. Kabelo
EAP (Cand. Sci. Nat)
079 054 7652

kabelo@manggeoenviro.co.za

From: kabelo@manggeoenviro.co.za
Sent: Tuesday, 07 September 2021 11:02
To: 'richardf@amajuba.gov.za'; 'mthembenij@amajuba.gov.za'
Cc: 'sibusison@dannhauser.gov.za'
Subject: DANNHAUSER DRAFT BASIC ASSESSMENT REPORT

Good day

Kindly find the Draft Basic Assessment Report for the proposed industrial establishment in Dannhauser in the link below:

https://1drv.ms/b/s!Ajglb1cwSkXAg7MwVsb-Zu_9YpaMsw?e=qcliYs

Your comments on the report will highly be appreciated. Thank you.

Kind Regards,
Phakwago M. Kbaelo
EAP (Cand. Sci. Nat)
079 054 7652

Newspaper Advert

VACANCIES

0824 EMPLOYMENT WANTED

Fikile is looking for domestic work. 6 Days, sleep out, has exp. Call 0735841541. NP0452069

Martha is looking for domestic work. 5Days, sleep in/out, has exp & ref. Call 0763548821. NP045287

Muhle is looking for domestic work. 5 Days, sleep out, has exp. Call 0657083903. NP045287

Buyi is looking for domestic work. 5 Days, sleep out, has exp. Call 0798441250. NP045287

Eunice is looking for domestic work. 5 Days, sleep out, has exp. Call 0657083903. NP045287

Eunice is looking for domestic work. 5 Days, sleep out, has exp. Call 0657083903. NP045287

Eunice is looking for domestic work. 5 Days, sleep out, has exp. Call 0657083903. NP045287



Trade Call Investments Apparel (Pty) Ltd based in Ladysmith KwaZulu Natal is seeking to fill the following positions:

- 1 x Industrial Engineer
- 1 x Quality Manager Cutting Room and Laboratory
- 2 x Production Managers
- 1 x Cutting Room Manager

Successful candidates who meet the required criteria will be given an opportunity to attend an interview at the factory.

Interested applicants are to send their CV's to RaviM@tcipapparel.co.za by no later than Friday 04th June 2021.

Closing date: 04th June 2021.

If you have not been contacted within two weeks of the closing date, please consider your application unsuccessful.

We are an Equal Opportunity Employer; preference will be given to previously disadvantaged applicants.

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YOUR LOCAL COMMUNITY

WWW.NEWCASTLEADVERTISER.CO.ZA

BOEDELKENNISGEWING
 Kennisgewing in die Boedel van Wyle GEORGE DIEDERICK FERREIRA (ID NR: 450827 5087 086) Gebore op 27 Augustus 1945. Oorlede op 26 April 2021. Laaste adres te Kristal Avenue, Sunnyridge, Newcastle Wewenaar
 BOEDELNOMMER:005008/2021
 Krediteure en debiteure in bogemelde boedel word hiermee versoek om hul eise in te dien by en hul skulde te betaal aan die ondergenoemde binne 'n periode van 30 dae vanaf 28 Mei 2021.
 NEL PRENZLER MOOLMAN INGELYF
 Agent vir Eksekuteurs
 Posbus 382
 STANDERTON
 2430
 Tel: (017) 7121301/2 CM002579SE

LIQUIDATION AND DISTRIBUTION ACCOUNTS IN DECEASED ESTATES LYING FOR INSPECTION
 In terms of section 35 (5) of the Administration of Estates Act, No. 66 of 1965, notice is hereby given that copies of the liquidation and distribution accounts (first and final, unless otherwise stated) in the estates specified below will be open for the inspection of all persons with an interest therein for a period of 21 days (or shorter or longer if specially stated) from the date specified or from the date of publication hereof, whichever may be the later, and at the offices of the Masters of the High Court and Magistrates as stated. Should no objection thereto be lodged with the Masters concerned during the specified period, the executors will proceed to make payments in accordance with the accounts. Province: KwaZulu-Natal. Estate number: 008635/2019. Surname: MABASO. First Names: LUNGANI ZITHA AMON. ID Number: 6105185317089. Last Address: 4103 Thusi Stand, Nelly Farm, Dannhauser, 3080. First names of Surviving spouse: EUNICE THOKO MABASO. ID Number of surviving spouse: 6607080494087. Description of account: FIRST AND FINAL. Magistrates office: Dannhauser Magistrate's Court, Masters office, Pietermaritzburg. Advertiser Name: Renette Joubert. Advertiser Address: 354 ONTDEKKERS ROAD, FLORIDA PARK, ROODEPOORT 1709 CM002584SE

dbm attorneys
 prokureurs • abameli
NOTICE TO CREDITORS IN DECEASED ESTATES
 In the Estate of the Late: MUNNIAL PREMATH. Estate Number: 002214/2021. Identity Number: 5808265201088. Date of death: 23/07/2020. Last address: 38B HATHORN STREET, LENNOXTON, NEWCASTLE, 2940.
 All persons having claims against the above - mentioned estate are required to lodge their claims with the undersigned within 30 days after the date of publication hereof.
 In case of a marriage in community of property. First Names and Surname of Surviving Spouse: THILADEVI MUNNIAL. Identity/Passport Number: 6004140079087.
Name and address of Executor or Authorised Agent:
DBM ATTORNEYS
 DBM OFFICE PARK, CORNER MEMEL ROAD & ALLEN STREET, PO BOX 117, NEWCASTLE 2940, Tel (034) 328 1303.
 Reference: EST/THUSHEN/H08023. CM002586SE

dbm attorneys
 prokureurs • abameli
AUCTION
 In the Magistrate's Court for the District of NEWCASTLE Held at NEWCASTLE Case No: 1271/20
DRAKENSBURG PRIMARY SCHOOL
 (Judgment Creditor)
 and
MR EDMUND MTHOKOZISI KHUMALO (Judgment Debtor)
 (IDENTITY NUMBER : 730920 5419 08 6)
KINDLY TAKE NOTICE THAT a sale in execution of the undermentioned goods will be held on **10 June 2021** at **SHERIFF MADADENI'S OFFICES AT 15 VANDERBIJL STREET, UNIT 7, RIVERSIDE, NEWCASTLE** at **10:00 AM**.
GOODS 2 X WINGBACK CHAIRS, BLACK/BROWN 2 X 2 SEATER BROWN COUCHES, 1 X TV UNIT 1 X LG FLAT SCREEN TV, 1 X DINING ROOM TABLE & CHAIRS, 1 X BROWN LEATHER CORNER LOUNGE SUIT, 1 X WHIRLPOOL BAR FRIDGE, 1 X CHEST FREEZER -NO NAME, 1 X DEFY CHEST FREEZER, 1 X DOUBLE HEADBOARD WITH SIDE TABLES, 1 X BROWN CABINET, 1 X BLACK COFFEE TABLE, 1 X SEATER COUCH,, 2 X SINGLE HEADBOARDS.
 Dated at NEWCASTLE on this 7 April 2021.
 Attorney for Judgment Creditor:
DBM ATTORNEYS
 DBM Building, Corner Memel Road & Allen Street, PO BOX 117, Newcastle 2940, Tel (034) 328 1300, Fax: (034) 3281349
 Reference: SHANIE/NKJZS2421/DP.418 CM002587SE

LEGALS / NOTICES
NOTICE TO CREDITORS IN DECEASED ESTATE
DECEASED ESTATE NO: 005003/2021/PMB
 In the Estate of the Late: **THULI ANGEL NKALA** Identity Number: **710319 0377 080 of 11 FYFE STREET, PIONEER PARK, NEWCASTLE, KWA-ZULU NATAL** born **19 MARCH 1971** and who died on **14 APRIL 2021**.
 Pursuant to Section 29(1) of the Administration of Estate Act No: 66 of 1965, all persons having claims against the above Estate are hereby called upon to lodge their claims with the undersigned within 30 days from date of Publication hereof **28 MAY 2021**.
DATED AT NEWCASTLE ON THE 19TH MAY 2021.
D.S. GUMBI ATTORNEYS INCORPORATED
79 HARDING STREET, UTHUKELA WATER BUILDING, BLOCK B, 1ST FLOOR NEWCASTLE 2940
REF: GUMBI/TAL05/EL/2021 CM002585SE

dbm attorneys
 prokureurs • abameli
AUCTION
 In the Magistrate's Court for the District of NEWCASTLE Held at NEWCASTLE Case No: 1177/20 In the matter between: **DRAKENSBURG PRIMARY SCHOOL** (Judgment Creditor)
AND
MR BUHLEBEMVELO SBUSISO PHAKATHI (IDENTITY NUMBER: 810907 5335 08 4) (Judgment Debtor)
KINDLY TAKE NOTICE THAT a sale in execution of the undermentioned goods will be held on **10 June 2021** at **Madadeni's Offices at 15 Vanderbijl Street, unit 7, Riverside, Newcastle** at **10:00 am**.
GOODS: 1 X 3 PIECE CINEMA TYPE LOUNGE SUITE (BROWN LEATHER), 1 X GLASS COFFEE TABLE, 1 X 4 PIECE BEIGE LEATHER LOUNGE SUITE, 1 X SAMSUNG FLAT SCREEN TV, 1 X TV STAND, 1 X IGNIS 2 DOOR FRIDGE/FREEZER, 1 X 4 DRAWER CHEST OF DRAWERS
 Dated at NEWCASTLE on this 18 May 2021.
 Judgment Creditor / Attorney for Judgment Creditor
DBM ATTORNEYS
 DBM Building, Corner Memel Road & Allen Street, PO BOX 117, Newcastle 2940, Tel (034) 328 1300, Fax: (034) 3281349
 Email: shanie@dbmlaw.com
Reference: SHANIE CHETRAM/ZS1364/DP.302/AS CM002583SE

ISAZISO NGENQUBO YOKUHLOLA KWEZEMVELO MAYELANA NOKWAKHIWA KWENDAWO YEZIMBONI OKUHLONGOZWAYO E PALMIEFONTEIN NO. 3750, EDANNHAUSER ESIFUNDAZWENI SAKWAZULU-NATAL
 Isaziso sikhishwa ngokweMithethonqubo yokuhlola umthelela kwezeMvelo ye-EIA (Environmental Impact Assessment) eshicilelwe kuSaziso sikaHulumeni R. 326 somhlaka 07 April 2017, Isahluko 5 soMithetho Kazwelonke Wokuphathwa Kwezemvelo (Umthetho 107 ka-1998) ngenhloso yokwendza lo msebenzi olandelayo:
 • Ukuthuthukiswa kwelokishi lezimboni eihlongozwayo engxenyeni eseleyo yepulazi iPalmietfontein 3750 (Ulu Lwesaziso 1 – Inombolo 27).
Umfakisicelo: Dannhauser Local Municipality
Umxhumanisi: UNjabulo we-ESIMZWA Environmental Services (Pty) Ltd
 Iseli: (072) 814 5409
 Ifekisi: (017) 634 7382
 I-imeyili: esimzwa@gmail.com noma njabulomagagula77@gmail.com
 Ukuze uqiniseke ukuthi uyaziwa futhi ubhalisiwe njengomuntu onentshisekelo kanye / noma othintekayo sicela uthumele igama lakho, iminingwane yokuxhumana kanye nentshisekelo kulolo daba, ngokubhala, kumuntu oxhumana naye onikezwe ngenhla zingakapheli izinsuku ezingama – 30 kushicilelwe lesi sikhangiso.

NOTICE OF A BASIC ASSESSMENT PROCESS FOR THE PROPOSED INDUSTRIAL TOWNSHIP ESTABLISHMENT ON THE REMAINDER OF THE FARM PALMIETFONTEIN NO. 3750 WITHIN THE JURISDICTION OF THE DANNHAUSER LOCAL MUNICIPALITY IN THE KWAZULU-NATAL PROVINCE
 Notice is hereby given in terms of the EIA regulations published in Government Notice R. 326 of 07 April 2017, Chapter 5 of the National Environmental Management Act (Act 107 of 1998) with the intent to carry out the following listed activity:
 • Proposed industrial township development on the remainder of the farm Palmietfontein 3750 (Listing Notice 1- Activity 27).
Applicant: Dannhauser Local Municipality
Address: P. O. Box 6450, Secunda, 2302
Consultant: Njabulo for ESIMZWA Environmental Services (Pty) Ltd
Cell: (072) 814 5409
Fax: (017) 634 7382
Email: esimzwa@gmail.com or njabulomagagula77@gmail.com
 In order to ensure that you are identified and registered as an interested and/or affected party please submits your name, contact information and interest in the matter, in writing, to the contact person given above within 30 days of publication of this advertisement.

APPLICATION IN TERMS OF THE SPATIAL PLANNING AND LAND USE MANAGEMENT ACT, NO. 16 OF 2013 (SPLUMA):

 Notice is hereby given that an application has been lodged with the Newcastle Municipality for the following:
 • CONSENT TO ERECT A TELECOMMUNICATION MAST AND BASE STATION ON ERF 281 CHARLESTOWN
 The property is located at Stand 281, Charlestown.
 A copy of the application and its accompanying documents will be lying for inspection at Newcastle Municipality Tower Block, Development Planning and Human Settlements (Town Planning, 4th Floor) no. 37 Murchison Street, Newcastle, 2940 between 07:30 am to 16:00 p.m. weekdays. Any person having sufficient interest therein may lodge or post written objections or representations relating thereto with the Municipal Manager, 37 Murchison Street, Private Bag X 6621, Newcastle, 2940 by no later than 28 June 2021.
 Any person who fails to lodge written objections or representations in response to this notice by the aforementioned date shall be precluded from further participating in the process with regard to the application.
 Contact Person: Siyabonga Sithole
 Tel: 034 328 7600
 Fax: 034 312 1570
 Email: siyabonga.sithole@newcastle.gov.za townplanning@newcastle.gov.za CM002595SE

APPLICATION IN TERMS OF THE SPATIAL PLANNING AND LAND USE MANAGEMENT ACT NO 16 OF 2013 REGULATIONS AND BY-LAWS
 Notice is hereby given in terms of the Spatial Planning and Land Use Management Act, No. 16 of 2013 Regulations and By-laws that the Newcastle Municipality is considering a combined planning application for the following:
 1. Rezoning of Erf 11138 Newcastle, 20 Mountford Road, Pioneer Park from "Detached Residential" to "Medium Density Residential".
 Documentation relating to the above is available for inspection between 07:30 to 16:00, Monday-Friday at the Newcastle Municipality Tower Block, 4th floor, Development Planning and Human Settlements Offices (Town Planning Directorate), located on Murchison Street, Newcastle, for a period not less than 30 days from **27 May 2021 to 28 June 2021**.
 Any person having sufficient interest herein may lodge written objections or representations relating hereto with the undersigned within **30 days** commencing from **27 May 2021**. Such can be directed to: Ms X. Madela, 034 328 7600.
 Newcastle Municipality: Town Planning Private Bag X 6621 Newcastle 2940
 xoliswa.madela@newcastle.gov.za sandra.tshabalala@newcastle.gov.za
 Any person who fails to respond to this notice by either submitting comments or representations during the advertising period as specified above will be disqualified to participate further in the application process.



Site Notices



NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF SECTION 24 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998)

Notice is hereby given in terms of Regulations No. R326 published under sections 24(5) and 44 of the National Environment Management Act, 1998 (Act 107 of 1998) that **Dannhauser Local Municipality** is preparing an application for Environmental Authorisation to the Kwazulu-Natal Department of Economic Development, Tourism and Environmental Affairs for the proposed industrial township on the remainder of the farm Palmietfontein 3750, Dannhauser Local Municipality in Kwazulu-Natal Province.

Project Name: Industrial township establishment in Dannhauser

Listed Activity Applied for: GN R327; Activity 27

Property Description and Location: Remainder of the farm Palmietfontein 3750

Current Zoning of the Property: Agricultural

Proposed Development: Industrial township development for General Industry, Truck Depot, Government Offices and Roads.

Date of Notice: 03 August 2021

To be identified as an interested and/or affected party, (I&AP), please submit your name, contact information, interest in the matter and any comments in writing within 30 days of this notice.

Queries regarding this matter should be referred to:

Mang Geoenviro Services
697 Silverlakes Road
Unit 11 King Fisher Building
Hazeldean Office Park
0691

Public Participation Registration and Enquiries:
Phakwago Kabelo
kabelo@mangeenviro.co.za/ 079 054 7652
or
info@mangeenviro.co.za/ 012 770 4022



NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF SECTION 24 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998)

Notice is hereby given in terms of Regulations No. R326 published under sections 24(5) and 44 of the National Environment Management Act, 1998 (Act 107 of 1998) that **Dannhauser Local Municipality** is preparing an application for Environmental Authorisation to the Kwazulu-Natal Department of Economic Development, Tourism and Environmental Affairs for the proposed industrial township on the remainder of the farm Palmietfontein 3750, Dannhauser Local Municipality in Kwazulu-Natal Province.

Project Name: Industrial township establishment in Dannhauser

Listed Activity Applied for: GN R327, Activity 27

Property Description and Location: Remainder of the farm Palmietfontein 3750

Current Zoning of the Property: Agricultural

Proposed Development: Industrial township development for General Industry, Truck Depot, Government Offices and Roads.

Date of Notice: 03 August 2021

To be identified as an interested and/or affected party, (I&AP), please submit your name, contact information, interest in the matter and any comments in writing within 30 days of this notice.

Concern regarding this matter should be referred to:

Mang Geosurvico Services 18C Gieseler Road Lot 11 F&B Power Building Dannhauser Office Park 2581	Public Participation Registration and Enquiries Phawaga Kabela kubisa@manggeosurvico.co.za/079 054 7852 or info@manggeosurvico.co.za/012 770 4022
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APPENDIX F: Environmental Management Plan

**ENVIRONMENTAL MANAGEMENT PLAN FOR THE PROPOSED INDUSTRIAL
TOWNSHIP ESTABLISHMENT ON THE REMAINDER OF THE FARM
PALMIETFONTEIN 3750, DANNHAUSER LOCAL MUNICIPALITY, KWAZULU-
NATAL PROVINCE.**

PREPARED BY:

Mang Geo-Enviro Services
687 Silverlakes Road, Unit 11 King Fisher Building
Hazeldean Office Park
0081

PREPARED FOR:

Dannhauser Local Municipality
8 Church Street
Dannhauser
3080

AUGUST 2021

**ENVIRONMENTAL MANAGEMENT PLAN FOR THE PROPOSED INDUSTRIAL TOWNSHIP
ESTABLISHMENT ON THE REMAINDER OF THE FARM PALMIETFONTEIN 3750, DANNHAUSER
LOCAL MUNICIPALITY, KWAZULU-NATAL PROVINCE.**

MANG GEO-ENVIRO SERVICES

687 Silverlakes Road, Unit 11 King Fisher Building

Hazeldean Office Park

0081

Cell: +27 (0) 79 054 7652

Tel: (012) 770 4022

Website: www.manggeoenviro.co.za

Email: kabelo@manggeoenviro.co.za

August 2021

Author(s):

Phakwago M. Kabelo

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Environmental Assessment Practitioner Declaration

I **Phakwago M. Kabelo** in my capacity as an Environmental Assessment Practitioner, hereby declare that I-

- Act as an independent consultant;
 - Do not have any financial interest in the undertaking of the activity, other than remuneration for the work performed in terms of the National Environmental Management Act, 1998 (Act 107 of 1998);
 - As a registered member of the South African Council for Natural Scientific Professions, will undertake our profession in accordance with the Code of Conduct of the Council, as well as any other societies to which we are members; and
 - Based on information provided to us by the project proponent, and in addition to information obtained during this study, have presented the results and conclusion within the associated document to the best of our professional judgement
-

Appendices:

Appendix A – Environmental Code of Conduct

Appendix B – Environmental Complaints Registers

Appendix C – Environmental Incidents Registers

Appendix D – Environmental Training Register

Annexure E – EA / ROD

Appendix F – Details and Expertise of the EAP

Abbreviations

Department of Economic Development, Tourism and Environmental affairs	(EDTEA)
Department of Energy	(DE)
Environmental Management Programme/ Plan	(EMPR)
Independent Environmental Auditor	(IEA)
Environmental Control Officer	(ECO)
Environmental Consultant	(EC)
Environmental Assessment Practitioner	(EAP)

Definitions

Construction:

Construction means the building, erection or establishment of a facility, structure or infrastructure that is necessary for the undertaking of a listed or specified activity but excludes any modification, alteration or expansion of such a facility, structure or infrastructure and excluding the reconstruction of the same facility in the same location, with the same capacity and footprint.

Disturbance:

Any event or series of events that disrupts ecosystem, community, or population structure and changes resources, substrate availability, or the physical environment.

Earth Works:

This involves construction machinery, dampening and general preparation of the site for construction purposes.

Environmental Incident:

- Any action undertaken (or omitted) by the proponent or his duly appointed representatives (e.g. contractors) that results in overly/unnecessary disturbance or damage to the environment.
- Any action undertaken (or omitted) by the proponent or his duly appointed representatives (e.g. contractors) that could lead to (has potential for) overly/unnecessary disturbance or damage to the environment.
- Non-adherence to environmental legal requirements/laws (including the stipulations of authorisations issued in respect of a proposed activity e.g. those contained in a Record of Decision).

Environmental Management Plan:

A guideline document/directive outlining the Plan (EMP) for mitigation, monitoring and institutional measures to be taken during project implementation and operation to avoid or control adverse environmental impacts, as well as the actions needed to implement these measures (World Bank, 1999:1).

Environmental Officer:

Person/party appointed to monitor compliance with the Environmental Management Plan.

Interested & Affected party:

A person, group of people, an organisation (public or private), a business, or other party that has an interest or is affected in terms of their health, property rights, or economy by a proposed activity.

Impact:

A description of the potential effect or consequence of an aspect of the development on a specified component of the biophysical, social or economic environment within a defined time and space.

Mitigation Measures:

Mitigation measures encompass all actions taken to eliminate, offset or reduce potentially adverse environmental impacts to acceptable levels (World Bank, 1999:1).

1 Introduction

1.1. Project background

Mang Geo-Enviro Services has been appointed by Dannhauser Local Municipality as an independent Environmental Assessment Practitioner (EAP) to undertake a Basic Assessment Process for the proposed industrial Township establishment on the remainder of the farm palmietfontein 3750, under the jurisdiction of Dannhauser Local Municipality, Kwazulu-Natal Province.

1.2. Project Description and Locality

The site for the proposed development is approximately 19.53 hectares and the site is situated 2km north east of Dannhauser Local Municipality along Church Street. The proposed development site is currently undeveloped and from the environmental perspective, it is not sensitive; therefore, it is suitable for the proposed industrial township since the surrounding properties are being used as industrial stands. The coordinates of the site are 28°01'1.52"S 30°03'55.63"E.

As a result of scarcity of suitable settlement slopes, there has been and increase significant encroachment onto relatively marginal land such as steep slopes and water resources which are highly susceptible to environmental degradation, particularly soil erosion.

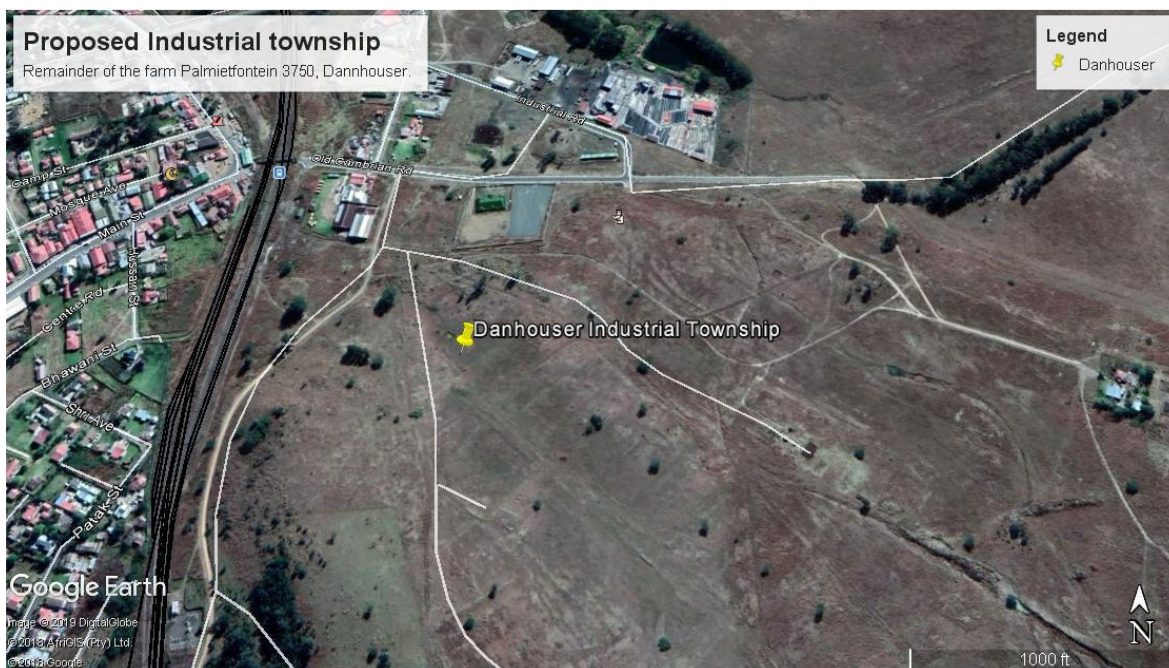


Figure 1: Locality map of the proposed development site.

1.3. The proposed establishment of industrial township incorporates the following:

- General industry
- P.O.S (Truck depot)
- Government- SASSA offices
- Roads

1.4. Aim of This Document

The purpose of this EMPr is to ensure that all environmental impacts from the various phases of development (i.e. planning, construction and operation) of the site are kept to a minimum. This includes detailing the roles and responsibilities of all parties with respect to environmental management during development, via the implementation and monitoring of this EMPr.

1.5. Status of The Document

The provisions of this EMPr are binding on the Contractor (and his subcontractors, where applicable) during the Construction Period and Defects Liability Period of the contract. This specification must therefore be read in conjunction with all the documents that comprise the contract documents for this contract. In the event that any conflict occurs between the terms of the EMPr and the Project Specification, the terms of the EMPr shall stand.

On appointment of the Contractor, the Acknowledgement Form attached to the back of this EMPr (Appendix A) is to be signed by the project Applicant, Employer's Representative (ER) and all Contractors and Subcontractors, including the Contractors Designated Environmental Officer (DEO). A copy of the signed form is to be kept by the Applicant and forwarded to the independent Environmental Control Officer (ECO).

Responsibility for environmental management on the site, as stipulated in the EMPr will be handed over from the Contractor to the Applicant upon issuing of a Completion Certificate at site handover.

2. Statutory and other legal requirements

2.1. Environmental Impact Assessment (EIA) Regulations (2014)

On review of the Environmental Impact Assessment (EIA) Regulations (2014), the proposed activity/ development triggers the following Listed Activities;

- (1) Listing Notice 1 (GN R 327):
- Activity 27

Based on the above, the Applicant has applied for Environmental Authorisation from the Competent Authority, Kwazulu-Natal Department of Economic Development, Tourism and Environmental Affairs (EDTEA) for the purpose of the commencement of the above-mentioned activity.

The Applicant, however, is reminded of Section 28 of the National Environmental Management Act (Act No. 107 of 1998) (NEMA), Duty of Care and Remediation of Environmental Damage, which states the following:

"(1) Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot be reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment. (2) the persons on whom subsection (1) imposes an obligation to take reasonable measures, including and owner or land, a person in control of land or premises, or a person who has a right to use the land or premises on which or in which – (a) any activity or process is or was performed or undertaken; or (b) any other situation exists, which causes or has caused or is likely to cause significant pollution or degradation of the environment. (3) The measures required in terms of subsection (1) may include measures to – (a) investigate, assess and evaluate the impact on the environment; (b) inform and educate Employees about the environmental risks of their work and the manner in which their tasks must be performed in order to avoid causing significant pollution or degradation of the environment; (c) cease, modify or control any act, activity or process causing pollution or degradation; (d) contain or prevent the movement of pollutants or the causing of degradation; (e) eliminate the source of the pollution or degradation; or (f) remedy the effects of the pollution or degradation..."

2.2. Other applicable legislations

Legislations/Act	Purpose/Application of the Act/Legislation
South African Constitution (No 108 of 1996)	Chapter 2 of the Constitution comprises the Bill of Rights which makes provision for Environmental Rights. This notes that everyone has the right: <ul style="list-style-type: none"> • 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:

	<ul style="list-style-type: none"> ✓ Prevent pollution and ecological degradation; ✓ Promote conservation; and ✓ Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.
National Water Act, 1998 (Act No. 36 of 1998) (NWA)	<p>The primary purpose of this Act is to manage and control South Africa's water resources by:</p> <ul style="list-style-type: none"> • Meeting the basic human needs of present and future generations; • Promoting the efficient, sustainable and beneficial use of water in the public interest; • Providing for growing demands for water use; • Protecting aquatic and associated ecosystems and their biological diversity; • Reducing and preventing pollution and degradation of water resources and meeting international obligations.
National Environmental Management: Air Quality Act, 2004 (Act No 39 of 2004) (NEMAQA)	This Act provides for the control of dust, noise and offensive odors.
Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) (OHSA)	This Act makes provision in its Regulations for the general duties of employers to their employees. The Regulations make provisions for general duties of employers and self-employed persons to persons other than their employees.
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEMWA)	This Act reformed the laws regulating waste management in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development; to provide for institutional arrangements and planning matters; by providing for national norms and standards for regulating the management of waste by all spheres of government; by providing for specific waste management measures; by providing for licensing and control of waste management activities; by providing for the remediation of contaminated land; by providing for the national waste information system; and by providing for compliance and enforcement and for matters connected therewith.

3. Implementation of the EMPr

3.1. The Applicant

Dannhauser Local Municipality
8 Church Street
Dannhauser
3080

Cell: 076 471 3393

Email: sibusison@dannhauser.gov.za

- 3.1.1. The overall responsibility for ensuring compliance lies with Dannhauser Local Municipality.
- 3.1.2. Dannhauser Local Municipality shall ensure that the contract all staff members, sub-contractors (if any) and suppliers understand and adhere to the EMPR.
- 3.1.3. Dannhauser Local Municipality shall ensure that all sub-contractors (if any) and suppliers are contractually bound to adhere to the EMPR and Environmental Code of Conduct.

3.2. Environmental Control Officer

- 3.2.1. The Applicant shall nominate a suitably qualified staff member or consultant as Environmental Control Officer (ECO) to supervise the implementation of the EMPR.
- 3.2.2. The ECO must be notified of this appointment and furnished with the contact details of the ECO.
- 3.2.3. The ECO shall be responsible for:
 - Day to day implementation of the EMPR and coordination of all environmental matters on site.
 - Ensuring that all staff members are adequately trained and aware of the EMPR and its Environmental Code of Conduct.
 - Liaison with the project manager, client and public.

4. GENERAL REQUIREMENTS OF EMPr

4.1. EMPr Administration.

i. Operational Phase

During the Operational Phase, a copy of this EMPr must be maintained. All senior operational and maintenance staff will be required to familiarise themselves with the contents of the document and will have to sign a register to the effect that they have read and understood the contents of the

document. If necessary, the ECO can conduct a training session with senior personnel regarding the implementation of the EMPr during the Operational Phase. Senior staff will be required to educate their operational staff as to the contents of this document and how to remain compliant.

ii. Decommissioning Phase

The same principles as noted in the Construction Phase will apply.

No decommission is envisaged for this development. Further, decommissioning is likely to trigger listed activities in terms of the National Environmental Management: Waste Act, 59 of 2008 which will require detailed assessment and authorization.

4.2. Roles and Responsibilities

i. EDTEA

EDTEA is the designated authority responsible for authorising the EMPr related to the development. EDTEA has overall responsibility for ensuring that the proposed township complies with the conditions of this EMPr.

Dannhauser Local Municipality under the South African environmental legislation is accountable for the potential impacts of the activities that are undertaken and is responsible for managing these impacts. The License/ authorization holder therefore has overall environmental responsibility to ensure that the implementation of this EMPr complies with the relevant legislation and the conditions of this EMPr. The Licence / Environmental Authorisation Holder will appoint a Contractor to undertake the construction and operation of the proposed development but will still ultimately be responsible for any environmental impacts.

ii. Employer's Representative (ER)

The appointed Civil and Consulting Engineers as the Employer's Representative (ER), would act as the Employer's on-site implementing agent, together with the appointed Contractors during the Construction and Operational Phases. The ER will have the responsibility to ensure that the Employer's responsibilities are executed in compliance with the relevant legislation and this EMPr.

In addition to general project management, the ER, together with the License/ Authorisation Holder, has the responsibility to appoint the Environmental Control Officer (ECO). Any on-site decisions regarding environmental management, however, are ultimately the responsibility of the ER.

iii. Operations Manager

During the Operational Phase, the Operations Manager will have the responsibility to ensure that the Licence Holder's responsibilities are executed in compliance with the relevant legislation and this EMPr. Any on-site decisions regarding environmental management are ultimately the responsibility of the Operational Manager.

The Operations Manager is to fully familiarise him / herself with the contents of this EMPr in terms of the Operational Phase. He / she will be required to sign the register confirming his / her familiarity with the document (see Appendix A). The Operations Manager must furthermore possess the necessary skills to action environmental management to all personnel under the employment of the Licence Holder and must ensure compliance with the requirements of the EMPr on a daily basis.

iii. Environmental Awareness Training

The Operations Manager shall ensure that adequate Environmental Awareness Training of senior site personnel takes place and that all Construction and Operational Phase workers receive an Induction Presentation on the importance and implications of the EMPr.

The presentation shall be conducted, as far as possible, in the employees' language of choice.

As a minimum, training shall include:

- Explanation of the importance of complying with the EMPr;
- Discussion of the potential environmental impacts of construction / operational activities;
- The benefits of improved personal performance;
- Employees' roles and responsibilities, including emergency preparedness;
- Explanation of the mitigation measures that must be implemented when carrying out their activities;
- Explanation of the specifics of this EMPr and its implementation; and
- Explanation of the management structure of individuals responsible for matters pertaining to the EMPr.
- The Operations Manager shall keep records of all Environmental Training Sessions, including names, dates and the information presented. These records will be presented to the ECO on request during his / her audits.

5. ENFORCING THE EMPr

The Applicant, or their designated representatives, has an overall responsibility to ensure that all those people involved / appointed to the project are aware of and familiar with its environmental requirements. The EMPr shall be part of the terms of reference for all contractors, sub-contractors and suppliers. All contractors, sub-contractors and suppliers have to give some assurance that they understand the EMPr and that they will undertake to comply with the conditions therein.

All senior and supervisory staff members shall familiarise themselves with the full contents of the EMPr. They shall know and understand the specifications of the EMPr and shall be able to assist other staff members in matters relating to the implementation of the EMPr.

All parties involved in the project must sign an acknowledgement that they are familiar with the requirements of the EMPr. These records must be kept on file by the Applicant.

6. PHASES OF THE PROJECT

The following abbreviations will be applicable in all phases of the project:

ER = Employer's Representative / Implementing Agent

DEO = Designated Environmental Officer

C = Contractor

OM = Operations Manager

6.1. Planning/ Designing Phase

Planning/ Designing Phase	Responsibility	Monitoring	Timeframe
Obtaining an environmental authorization from EDTEA prior to the demarcation of sites.	ER	Applicant	Once off
Signing of service agreement between the applicant and the relevant service providers	Applicant	Applicant	Once off
Appointment of the contractor	Applicant	Applicant	Once off

6.2. Construction Phase

Construction Phase	Responsibility	Monitoring	Timeframe
Layout			
The Contractor is to adhere to the following with regards to the Materials Storage Area and Contractors Camp: <ul style="list-style-type: none"> ✓ All servitudes and existing services must be verified prior to construction; ✓ The camp site must be fenced before construction commences; and ✓ Site establishment shall not take place on steep slopes, within 50m of wetland areas and watercourses (including drainage lines), or sites declared as no-go areas. 	C	ER & DEO	Before construction
Adequate parking must be provided for site staff and visitors. This must be demarcated so not as to encroach into the surrounding environment	C	ER & DEO	Duration of Construction Phase
Temporary Fencing			
Areas where construction activities (including temporary access tracks) are prohibited are referred to as no-go areas. Entry into these areas by any person, vehicle or equipment without the ER's written permission will result in a penalty.	C	ER & DEO	Duration of Construction Phase

The Contractor shall erect temporary fencing along the perimeter of the contractor's site camp and designated no-go areas.	C	ER & DEO	Duration of Construction Phase
The Contractor shall maintain in good order all demarcation fencing and barriers for the duration of construction activities, or as otherwise instructed.	C	ER & DEO	Duration of Construction Phase
Topsoil removal and stock piling			
The Contractor shall remove topsoil from all areas where topsoil will be impacted on by construction activities, including temporary activities such as storage and stockpiling areas.	C	ER & DEO	Ongoing
Stripped topsoil shall be stockpiled in areas agreed with by the ER for later use in rehabilitation and shall be adequately protected. Topsoil is considered to be the natural soil covering, including all the vegetation and organic matter. The depth of the soil may vary and due to this reason the top 300mm of soil must be removed and preserved as topsoil.	C	ER & DEO	Ongoing
Topsoil stockpiles shall be convex in shape and no more than 2m high. Stockpiles shall be shaped so that no surface water ponding can take place.	C	ER & DEO	Ongoing
Topsoil stockpiles shall be protected from erosion by wind and rain by providing suitable stormwater and cut-off drains (approved by the ER) and / or the establishment of temporary indigenous vegetation.	C	ER & DEO	Ongoing
Any topsoil contaminated by hazardous substances shall not be used but shall be disposed of at a registered landfill site. Proof of appropriate disposal must be filed in the Environmental File in the Contractor's Camp.	C	ER & DEO	Ongoing
The Contractor shall be held responsible for the replacement, at his expense, of any unnecessary loss of topsoil due to his failure to work according to the requirements of this EMPr.	C	ER & DEO	Ongoing
Workshop, Equipment Maintenance and Storage			
All vehicles and equipment shall be kept in good working order to maximize efficiency and minimise	C	ER & DEO	Ongoing

pollution.			
Stockpiling			
The Contractor shall plan his activities so that materials can be transported directly to and placed at the point where it is to be used.	C	ER & DEO	Ongoing
Should temporary stockpiling become necessary, the areas for the stockpiling of excavated / imported material shall be indicated and demarcated on the site plan submitted in writing to the ER for his approval, together with the Contractor's proposed measures for prevention, containment and rehabilitation against environmental damage?	C	ER & DEO	Ongoing
Should temporary stockpiling become necessary, the areas for the stockpiling of excavated / imported material shall be indicated and demarcated on the site plan submitted in writing to the ER for his approval, together with the Contractor's proposed measures for prevention, containment and rehabilitation against environmental damage?	C	ER & DEO	Ongoing
Stockpiles shall be positioned and sloped to create the least visual impact.	C	ER & DEO	Ongoing
Stormwater Control			
Temporary stormwater control measures must be installed as and when necessary, to prevent and minimise the erosion of exposed soils.	C	ER & DEO	Ongoing
If deemed necessary to prevent erosion and environmental degradation, cut-off drains must be installed to facilitate the control of surface water runoff velocities.	C	ER & DEO	Ongoing
Stormwater control barriers must be used to divert surface water runoff into vegetative buffers and not directly into the exposed workings or onto adjacent roads.	C	ER & DEO	Ongoing
Hazardous Substances			
Should any hazardous material/substances (e.g. petrochemicals, paints, etc.) need to be stored on the	C	ER & DEO	Ongoing

site, this shall be under controlled conditions. All hazardous materials/substances shall be stored in a secured, appointed area that is fenced and has restricted entry. All storage shall take place using suitable, sealable containers to the approval of the ER. These containers must be placed within a bunded area which has the capacity to contain 110% of the total volume it stores. The floor and wall of the bund area shall be impervious to prevent infiltration of any spilled / leaked material into the soil.			
Material Safety Data Sheets (MSDS's) must be readily available for all chemicals / hazardous substances to be used on site. Where possible and available, MSDS's should include additional information on ecological impacts and measures to minimise and mitigate against any negative environmental impacts in the result of an accidental spill.	C/E R	ER & DEO	Ongoing
Ensure that any hydrocarbon/chemical/hazardous substance spills are cleaned up as soon as possible.	C	ER & DEO	Ongoing
Noise Control			
It must be ensured that noise levels are kept to a minimum during the Construction Phase. All machinery and equipment to be utilised on the site should be fitted with mufflers and must be maintained in good working order to minimise noise levels. It is recommended further that the Contractor encourage construction workers to minimise shouting and hooting on the site. Construction work should be completed in as short a time frame as possible in order to limit the longevity of these impacts.	C	ER & DEO	Ongoing
The Contractor shall restrict all operations that result in undue noise disturbance to local communities and / or dwellings to daylight hours on workdays (Monday to Friday) or as otherwise agreed with the ER.	C	ER & DEO	Ongoing
The Contractor shall warn any local communities and / or residents that could be disturbed by noise	C	ER & DEO	Ongoing

generating activities well in advance and shall keep such activities to a minimum.			
The Contractor shall be responsible for compliance with the relevant legislation with the respect to noise.	C	ER & DEO	Ongoing
The entire Contractors' equipment shall be fitted with effective exhaust silencers and shall comply with the SANS recommended code of practice Code 0103:1983, for construction plant noise generation.	C	ER & DEO	Ongoing
Waste Management			
General construction waste: Must be removed from bins at enough intervals to prevent overflow. This waste must be stored in skips within a designated waste storage area in the Contractor's Camp. General waste must be transported to the local municipal General Waste Landfill Site by the Municipality, the Contractor or a private waste disposal Contractor. Service agreements in this regard must be obtained by the Applicant / Contractor prior to the commencement of construction activities. It is recommended that general wastes be separated on site and delivered to appropriate depots for recycling. This would be facilitated by the provision of separate and labelled bins / skips.	C	ER	Ongoing
The Contractor shall ensure that all site personnel are instructed in the proper disposal of all waste.	C	ER	Ongoing
Demarcated and fenced areas where waste can be safely contained and stored on a temporary basis within the Contractors Camp must be established. General waste storage areas must be separate from hazardous waste storage areas. When adequate volumes (not more than 1 month) have accumulated, waste is to be removed from site and disposed of at a licensed facility.	C	ER	Ongoing
Waste is not to be buried or burned on site.	C	ER	Ongoing
Ablution Facilities: approved temporary chemical toilets must be provided to all staff and must not be	C	ER	Ongoing

<p>closer than 50 m from any water course.</p> <p>One chemical toilet per 10 workers must be stationed on site within adequate accessible site. The provided toilets should be serviced at least once a week by a registered service provider. The contractor should ensure that the toilet paper is provided and the toilets are kept hygienically clean at all times.</p> <p>The chemical toilets need to be placed on an impermeable surface to prevent ground surface/ soil contamination. Care must be taken to avoid contamination of soil and water, pollution and nuisance to adjoining areas. Therefore, the contractor should ensure that long drop toilets are not used.</p>			
Dust Control			
Construction vehicles shall comply with speed limits and haul distances shall be minimised. Material loads shall be suitably covered and secured during transportation.	C	ER & DEO	Ongoing
Exposed soils and material stockpiles shall be protected against wind erosion. The location of stockpiles shall take into consideration the prevailing wind directions and locations of sensitive receptors.	C	ER & DEO	Ongoing
The Contractor shall implement dust suppression measures (e.g. Water spray vehicles, covering material stockpiles, etc.) if and when required.	C	ER & DEO	Ongoing
Environmentally friendly soil stabilisers may be used as additional measures to control dust on gravel roads and construction areas if complaints are received regarding dust generation. This is especially pertinent as excessive dust could disturb moving vehicles on adjacent roads, creating a potential traffic hazard.	C	ER & DEO	Ongoing
The Contractor shall ensure that the generation of dust is minimised and shall implement a dust control	C	ER & DEO	Ongoing

programme, as necessary, to maintain a safe working environment and minimise nuisance for surrounding residential areas/dwellings.			
Protection of Fauna and Flora			
The Contractor shall ensure his employees do not undertake any hunting, trapping, shooting, poisoning or other disturbance of any fauna on-site or in the areas surrounding the site.	C	ER & DEO	Ongoing
The feeding of any wild animals is prohibited.	C	ER & DEO	Ongoing
The use of pesticides is prohibited unless approved by the ER	C	ER & DEO	Ongoing
Fire Control			
The Contractor shall ensure that basic fire-fighting equipment is available at all construction activities on site.	C	ER & DEO	Ongoing
The Contractor shall appoint a Fire Officer who shall be responsible for ensuring immediate and appropriate action in the event of a fire.	C	ER & DEO	Ongoing
The Contractor shall ensure that all site personnel are aware of the procedure to be followed in the event of a fire.	C	ER & DEO	Ongoing
Protection of Heritage and Cultural Feature			
If any archaeological or paleontological artefacts or remains / graves are uncovered during earthmoving activities, work in the vicinity of the find shall cease immediately. The Contractor shall immediately notify the ER, who shall contact the relevant Competent Authority (SAHRA) who will take appropriate steps.	C	ER & DEO	Ongoing
The Contractor will be required to abide by the specifications as set out by the Competent Authority or the Heritage Specialist appointed to investigate the find.	C	ER & DEO	Ongoing
The Contractor may not, without a permit issued by the relevant heritage resources authority, destroy	C	ER & DEO	Ongoing

damage, excavate, alter, deface or otherwise disturb archaeological material.			
Environmental Education & Awareness			
It is the Contractors' responsibility to provide the site foreman with no less than 1 hour's environmental training and to ensure that the foreman has enough understanding to pass this information onto the construction staff.	C	ER & DEO	Ongoing
The Contractor / ECO must be on hand to explain any technical issues and to answer questions.	C/ ECO	ER & DEO	Ongoing

6.3. OPERATIONAL PHASE

Operational Phase	Responsibility	Occurrence	Method
Water Quality Management			
The Dannhauser Local Municipality must be contacted with regard to any discharge to sewer.	OM	Ongoing	Site inspection
Management of Contaminated Land			
Contaminated land investigations, including soils, groundwater and surface water monitoring and sampling to be implemented should impact is observed. This will take into account the source-pathway-receptor (S-P-R) linkages and should serve to determine the nature and extent of any impacts to the receiving environment as a result of site activities. These investigations are to be carried out with consideration of the relevant legal processes. Risk assessment to be undertaken if considered necessary.	OM to outsource as appropriate	Ongoing	Site investigation
Risk based corrective action (RBCA) to be implemented based on the findings of the site investigations. Remedial plans will be developed based on conceptual site model (CSM) and	OM to outsource as	Ongoing	Site remediation

should consider S-P-R linkages. Remedial actions may include physical, chemical and/or microbiological intervention.	appropriate		
Post-remediation monitoring plan to be implemented to determine effectiveness of remedial actions and serve as an early-warning system for potential re-occurrence.	OM to outsource as Appropriate	Ongoing	Ongoing monitoring
Drainage Systems			
Stormwater culverts and drains must be covered with metal grids to prevent blockages.	OM	Ongoing	Site inspection
Control of Littering			
Adequate waste disposal bins are to be provided around the township. These are to be regularly emptied and the contents thereof collected by an approved Waste Service Provider.	OM	Ongoing	Site inspection
The recycling of waste is encouraged. As such, the provision of separate recycling bins for the disposal of paper, tins and plastic should be erected and displayed in a suitable and visual location on site. A reputable Recycling Waste Company must be appointed to collect recyclable waste (if applicable).	OM	Ongoing	Site inspection
Waste Storage and Removal			
Burning of waste is not permitted, under any conditions.	OM	Ongoing	Site inspection
Ablution facilities serviced by septic tanks (if applicable) are to be sign posted informing the public not to deposit foreign substances or objects into the system.	OM	Ongoing	Site inspection
Health and Safety			
Ensure that all staff is trained in what to do in the case of an emergency such as an on-site fire.	OM	Ongoing	Site inspection
Staff personnel are to be trained in first aid.	OM	Ongoing	Site inspection

Fire Control			
Emergency numbers must be displayed with the correct details of the nearest firefighting station at all times.	OM	Ongoing	Site inspection
Ensure that relevant signage e.g. no smoking, is displayed in potentially dangerous areas and is abided by.	OM	Ongoing	Site inspection

6.4. DECOMMISSIONING PHASE

At this stage decommissioning is not foreseen in the near future. At the time it might become applicable, an Environmental Impact Assessment must be undertaken in terms of Listed Activity Nr 31 (i) of R326 of the National Environmental Management Act, 1998 (Act No 107 of 1998), as amended; or else compliance with the environmental legislation requirements applicable at that time must take place.

7. NON-COMPLIANCE

7.1. Procedures

The Contractor shall comply with the environmental specifications and requirements on an on-going basis and any failure on his / her part to do so will entitle the ER to impose a penalty.

In the event of non-compliance, the following recommended process can be followed:

- The ER shall issue a Notice of Non-compliance to the Contractor, stating the nature and magnitude of the contravention. A copy shall be provided to the ECO during his / her site audit;
- The Contractor shall act to correct the non-conformance within 24 hours of receipt of the notice, or within a period that may be specified within the notice;
- The Contractor shall provide the ER with a written statement describing the actions to be taken to discontinue the non-conformance, the actions taken to mitigate its effects and the expected results of the actions. A copy shall be provided to the ECO;
- In the case of the Contractor failing to remedy the situation within the predetermined timeframe, the ER shall impose a monetary penalty based on the conditions of contract;
- In the case of non-compliance giving rise to physical environmental damage or destruction, the ER shall be entitled to undertake or to cause to be undertaken such remedial works as may be required to make good such damage and to recover from the Contractor the full costs incurred in doing so; and
- In the event of a dispute or difference of opinion between any parties arising out of the interpretation of the conditions of the EMPr, or a disagreement regarding the implementation or method of implementation of conditions of the EMPr, any party shall be entitled to require that the issue be referred to specialists for arbitration.

The ER shall at all times have the right to stop work and/or certain activities on site in the case of noncompliance or failure to implement remediation measures.

7.2 Offences and Penalties

Any avoidable non-compliance with the conditions of the EMPr shall be considered sufficient ground for the imposition of a penalty. Possible offences, which must result in the issuing of a contractual penalty, include, but are not limited to:

- Unauthorised entrance into no-go areas;
- Unauthorised damage to natural vegetation;
- Unauthorised camp establishment (including stockpiling, storage etc.);
- Hydrocarbons/hazardous material: Negligent spills/leaks and insufficient storage;
- Ablution facilities: Non-use, insufficient facilities and insufficient maintenance;
- Late Method Statements or failure to submit Method Statements;
- Insufficient solid waste management (including clean-up of litter, unauthorised dumping and absence of weigh bills as proof of disposal at a DWS registered landfill site);
- Erosion due to negligence/non-performance;
- Excessive cement / concrete spillage / contamination;
- Insufficient fire control and unauthorised fires;
- Preventable damage to water courses or pollution of water bodies; and
- Non-induction of staff.

8. CONCLUSION

In terms of NEMA, everyone is required to take reasonable measures to ensure that they do not pollute the environment. Reasonable measures include informing and educating employees about the environmental risks of their work and training them to operate in an environmentally responsible manner. Furthermore, in terms of NEMA, the cost to repair any environmental damage shall be borne by the person responsible for the damage.

If the above-mentioned management recommendations are adopted, it is anticipated that most of the negative environmental impacts associated with the operation of the industrial township in Palmietfontein within the Dannhauser Local Municipality, in Kwazulu-Natal Province can be mitigated against. The appointed ECO will need to regularly monitor the site to ensure that the required environmental controls are in place and working effectively.

ANNEXURE A
Environmental Code of Conduct

The applicant is committed to ensuring that the operation of the development is done according to the highest environmental standards so that the ecological footprint of the development is minimised where possible.

The applicant requires that all personnel involved in the operation process accept their responsibilities towards the EMP and the environment. This includes all permanent, contract or temporary workers as well as any other person involved with the project or visiting the site. Ignorance, negligence, recklessness or a general lack of commitment will not be tolerated.

If you do not understand the rules you must seek assistance to ensure compliance. The following people can assist you in ensuring compliance with the EMP.

Your Supervisor:

Environmental Control Officer:

Project Manager:

ANNEXURE B

Environmental Complaints Register						
	Name of Complainant	Contact Details	Nature of Complaint	Responsible Person	Date Action Taken	Details of Action Taken

ANNEXURE C

Environmental Incidents Register					
Date	Incident	Action Required	Responsible Person	Action Implemented	Date Action Implemented

ANNEXURE D

Environmental Training Register					
	Company	Employee	Employee Signature	Supervisor	Supervisor Signature

ANNEXURE E
ENVIRONMENTAL AUTHORISATION / ROD

PALMIETFONTEIN INDUSTRIAL TOWNSHIP DEVELOPMENT

ANNEXURE F
EAP CV

ENVIRONMENTAL MANAGEMENT PLAN FOR THE PROPOSED INDUSTRIAL TOWNSHIP ESTABLISHMENT ON THE REMAINDER OF THE FARM PALMIETFONTEIN 3750, DANNHAUSER LOCAL MUNICIPALITY, KWAZULU-NATAL PROVINCE.

ENVIRONMENTAL MANAGEMENT PROGRAMME

MANG GEO-ENVIRO SERVICES

687 Silverlakes Road,

Unit 11 King Fisher Building

Hazeldean Office Park

0081

Cell: +27 (0) 79 054 7652

Tel: (012) 770 4022

Website: www.manggeoenviro.co.za

Email: kabelo@manggeoenviro.co.za

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Compiled by:

Phakwago Kabelo (N. Dip: Environmental Sciences)

EAP (*Candi. Sci. Nat*)

Email: kabelo@manggeoenviro.co.za

EAP Signature _____

Date _____

APPENDIX H: Curriculum Vitae of EAP