




ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN TO OBTAIN AN ENVIRONMENTAL CLEARANCE FOR THE REZONING OF A PORTION OF PORTION 10 OF FARM BRAKWATER No. 48 FROM 'RESIDENTIAL' TO 'INDUSTRIAL' AND FOR OPERATIONS OF BOKOMO NAMIBIA

June 2022

App - 003912



Project Name:	<p align="center">ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN TO OBTAIN AN ENVIRONMENTAL CLEARANCE FOR THE REZONING OF A PORTION OF PORTION 10 OF FARM BRAKWATER No. 48 FROM 'RESIDENTIAL' TO 'INDUSTRIAL' AND FOR OPERATIONS OF BOKOMO NAMIBIA</p>
The Proponent:	<p align="center">Bokomo Namibia (Pty) Ltd P O Box 96388 WINDHOEK</p>
Prepared by:	<div data-bbox="574 915 1455 1255" style="border: 1px solid black; padding: 10px;">  <p>Green Earth ENVIRONMENTAL CONSULTANTS</p> <p>1st floor Bridgeview Offices & Apartments, No. 4 Dr Kwame Nkrumah Avenue, Klein Windhoek, Namibia PO Box 6871, Ausspannplatz, Windhoek</p> </div>
Release Date:	<p align="center">June 2022</p>
Consultant:	<p align="center">C. Du Toit C. Van Der Walt Cell: 081 127 3145 Email: charlie@greenearthnamibia.com</p>

EXECUTIVE SUMMARY

Green Earth Environmental Consultants were appointed by the proponent, Bokomo Namibia (Pty) Ltd, **to conduct the environmental impact assessment** for the rezoning of a portion of Portion 10 of Farm Brakwater No. 48 from 'residential' to 'industrial' and to obtain an environmental clearance for their operations on the site.

An Environmental Scoping Report was conducted in April 2002 for the then activities on the site although an Environmental Clearance Certificate was not issued as it was before the promulgation of the Environmental Management Act (No. 7 of 2007).

To align the current operations of Bokomo on Portion 10 of Farm Brakwater with the stipulations of the Windhoek Town Planning Scheme and the Environmental Management Act (No. 7 of 2007) the following processes must be completed:

- The rezoning of a portion of 5,4ha of Portion 10, which accommodate the activities of Bokomo, must be rezoned from 'residential' to 'industrial'.
- An environmental clearance certificate must be obtained for the activities.

City of Windhoek, in September 2001, approved the rezoning of a portion of ±5,4ha of Portion 10 of Farm Brakwater No. 48 from 'residential' to 'industrial' with a bulk of 0.5. The rezoning was however not included in the Amendment Scheme for final approval. To align the current use with the stipulations of the Windhoek Town Planning Scheme, the rezoning of the Portion must now be submitted to the Urban and Regional Planning Board for approval by the Minister of Urban and Rural Development. To be able to get ministerial approval for the rezoning, an Environmental Clearance is required.

Bokomo Namibia started in 1998 on Portion 10 of Farm Brakwater. In August 1998 the Namibian Agronomic Board granted approval for the operation of a white maize mill and in February 2000 for a wheat mill to allow Bokomo to process maize and wheat locally. The Proponent has thus far not finalised the rezoning of the site for which an Environmental Clearance Certificate is required. This EIA and EMP are drafted for the purpose of finalising the town planning/rezoning procedures as well as to put in place an Environmental Management Plan for the current operations of the Proponent.

In accordance with the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) of the Environmental Management Act (No. 7 of 2007), the activities listed below, which forms part of the proposed operations, may not be undertaken without a renewed Environmental Clearance:

LAND USE AND DEVELOPMENT ACTIVITIES

5.1 The rezoning of land from -

(a) residential use to industrial or commercial use.

The environmental impacts during the operational phase of the proposed project:

IMPACTS DURING OPERATIONAL PHASE			
Aspect	Impact Type	Significance of impacts Unmitigated	Significance of impacts Mitigated
Ecology Impacts	-	L	M
Dust and Air Quality	-	L	M
Groundwater Contamination	-	L	M
Waste Generation	-	L	M
Failure of Reticulation Pipeline	-	L	M
Fires and Explosions	-	L	M
Safety and Security	-	L	M

IMPACT EVALUATION CRITERION (DEAT 2006):		
Criteria	Rating (Severity)	
Impact Type	+	Positive
	O	No Impact
	-	Negative
Significance of impacts	L	Low (Little or no impact)
	M	Medium (Manageable impacts)
	H	High (Adverse impact)

The type of activities that is carried out on the site does not negatively affect the amenity of the locality and the activities will not adversely affect the environmental quality of the area. None of the potential impacts identified are regarded as having a significant impact to the extent that the proposed project should not be allowed. However, the operational activities further on need to be controlled and monitored by the assigned managers and the proponent. Mitigation measures will be provided that can control the extent, intensity, and frequency of these named impacts in order not to have substantial negative effects or results. It is believed that the overall cumulative impact on the biophysical environment will be low and there will be a positive impact on the socio-economic environment.

The Environmental Impact Assessment which follows upon this paragraph was conducted in accordance with the guidelines and stipulations of the Environmental Management Act (No 7 of 2007) meaning that all possible impacts have been considered and the details are presented in the report.

Based upon the conclusions and recommendations of the renewed Environmental Impact Assessment Report and Environmental Management Plan, the Environmental Commissioner of the Ministry of Environment, Forestry and Tourism is herewith requested to:

1. Accept and approve the Environmental Impact Assessment Renewal.
2. Accept and approve the renewed Environmental Management Plan.
3. Issue an Environmental Clearance Renewal to rezone Portion 10 of Farm Brakwater No. 48 from 'residential' to 'industrial' and to continue to operate Bokomo Namibia on the site and for the following listed activities:

LAND USE AND DEVELOPMENT ACTIVITIES

5.1 The rezoning of land from -

(a) residential use to industrial or commercial use.

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LIST OF ABBREVIATIONS

EC	Environmental Clearance
ECO	Environment Control Officer
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
I&APs	Interested and Affected Parties
MAWLR	Ministry of Agriculture, Water and Land Reform
MEFT	Ministry of Environment, Forestry and Tourism

1. INTRODUCTION

Green Earth Environmental Consultants were appointed by the proponent, Bokomo Namibia (Pty) Ltd, to obtain an environmental clearance for the rezoning of Portion 10 of Farm Brakwater No. 48 from 'residential' to 'industrial' and for their current operations on the site.

In accordance with the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) of the Environmental Management Act (No. 7 of 2007), the activities listed below, which forms part of the proposed operations, may not be undertaken without an Environmental Clearance:

LAND USE AND DEVELOPMENT ACTIVITIES

5.1 The rezoning of land from -

(a) residential use to industrial or commercial use.

The following Environmental Impact Assessment contains information on the project and the surrounding areas and activities.

2. TERMS OF REFERENCE

To be able to finalise the rezoning of the Portion and to continue with the operations of the project, an Environmental Clearance is required. For this environmental impact exercise, *Green Earth Environmental Consultants* followed the terms of reference as stipulated under the Environmental Management Act.

The aim of the environmental impact assessment is:

- To ascertain existing environmental conditions on the site to determine its environmental sensitivity.
- To inform I&APs and relevant authorities of the details of the proposed activities and to provide them with an opportunity to raise issues and concerns.
- To assess the significance of issues and concerns raised.
- To compile a report detailing all identified issues and possible impacts, stipulating the way forward and identify specialist investigations required.
- To outline management guidelines in an Environmental Management Plan (EMP) to minimize and/or mitigate potentially negative impacts.
- To comply with Namibia's Environmental Management Act (2007) and its regulations (2012).

The tasks that were undertaken for the Environmental Impact Assessment Renewal included the evaluation of the following: climate, water (hydrology), vegetation, geology, soils, social, cultural heritage, groundwater, sedimentation, erosion, biodiversity, sense of place, socio-economic environment, health, safety and traffic.

The EIA and EMP from the assessment will be submitted to the Environmental Commissioner for consideration. An Environmental Clearance will only be obtained (from the DEA) once the EIA and EMP has been examined and approved for the listed activities.

The public consultation process as per the guidelines of the Act has been followed. The methods that were used to assess the environmental issues and alternatives included the collection of data on the project site and area from the proponent and identified stakeholders. All other permits, licenses or certificates that are further on required for the operation of the proposed project still needs to be applied for by the proponent.

3. PROJECT DESCRIPTION/SITE INFORMATION

3.1. INFORMATION ON THE PROJECT SITE

Locality and access

Portion 10 of Farm Brakwater No. 48 (Bokomo Namibia's operation and distribution site) is located ±15 km north of Windhoek, directly west of the B1 road between Windhoek and Okahandja. The site takes access from the District Road located directly west of the Portion which provides access to the Brakwater South Area. See below the locality and utilisation maps of the Project Site:

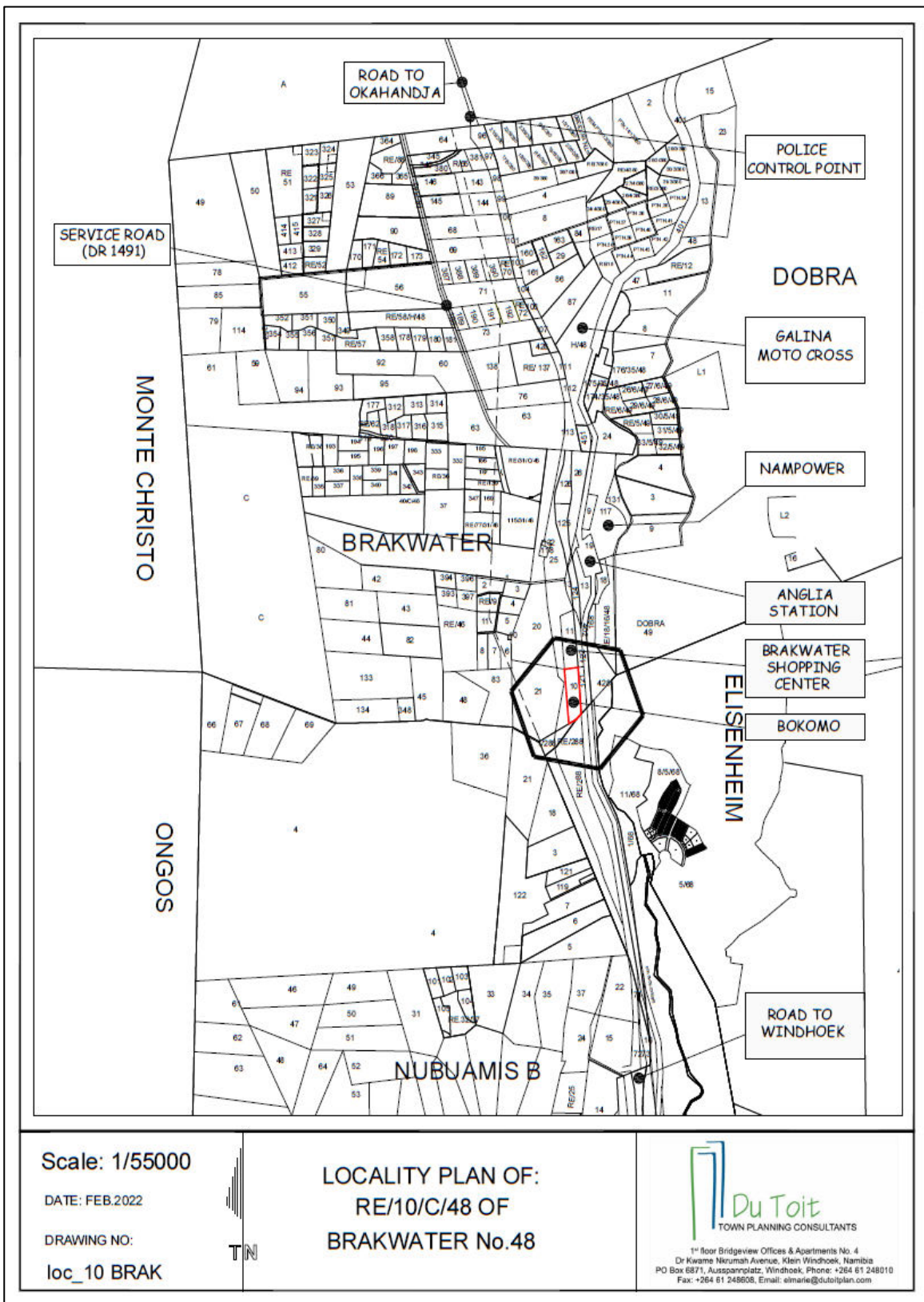


Figure 1: Locality Plan of Project Site

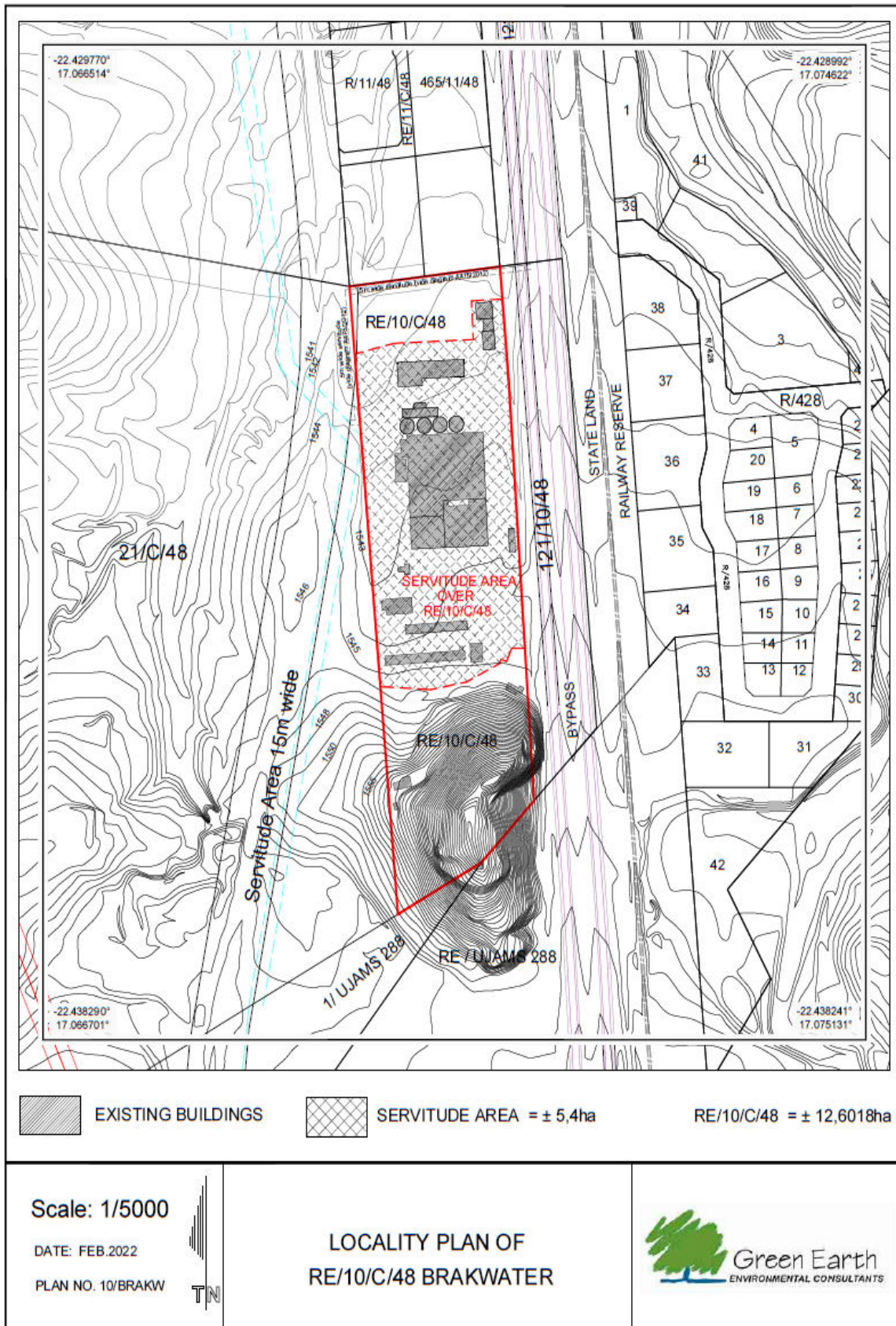


Figure 2: Locality Plan with contours

Size, zoning and topography

Diagram (Nr. A 53/56) shows that Portion 10 is 12,6018ha. See copy of diagram below:

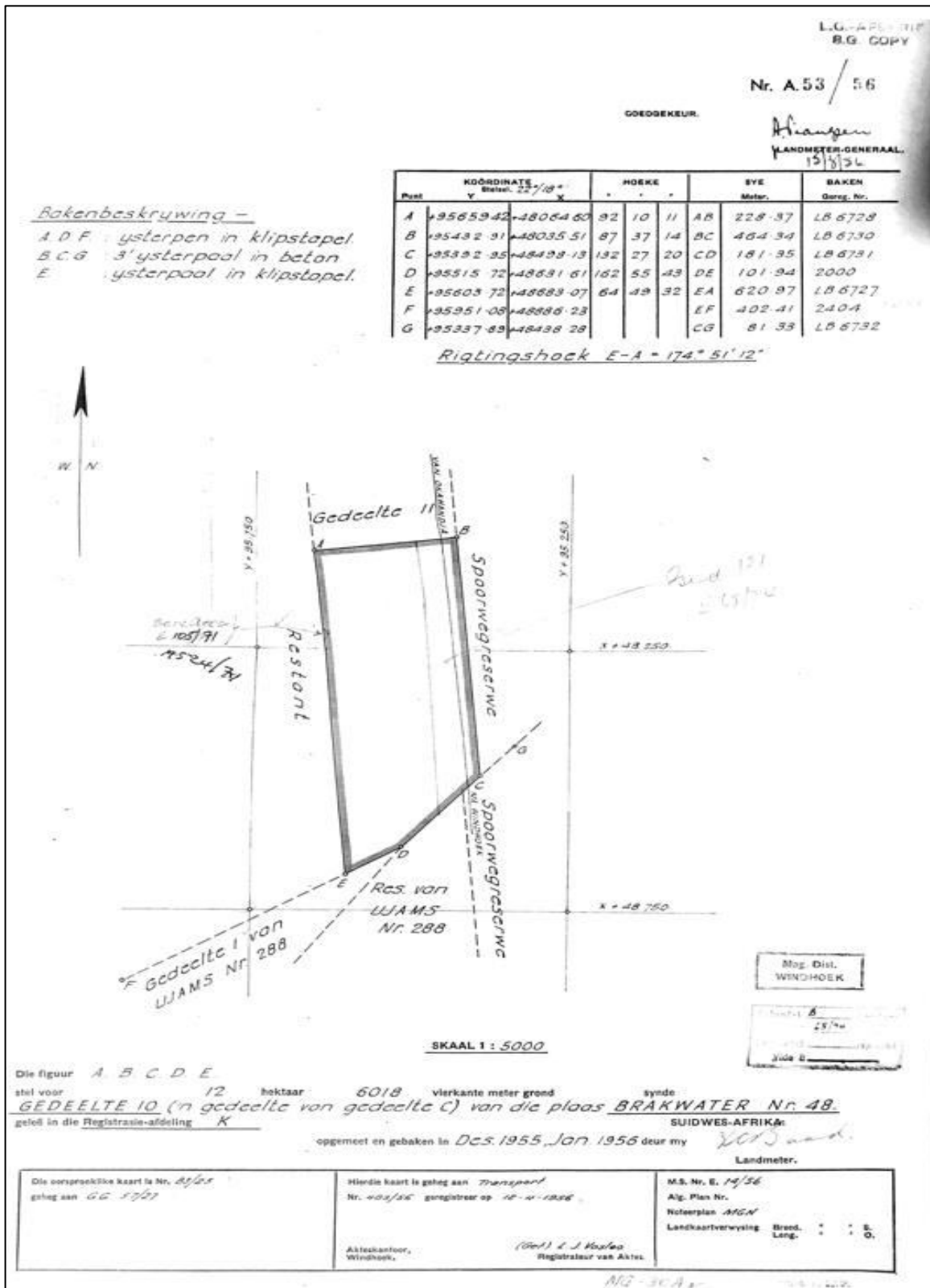


Figure 3: Diagram of Portion 10 of Farm Brakwater No. 48

The District Road encroached onto Portion 10 (Figure D.E.F) for which a servitude area is provided – no construction is allowed on or over the servitude area.

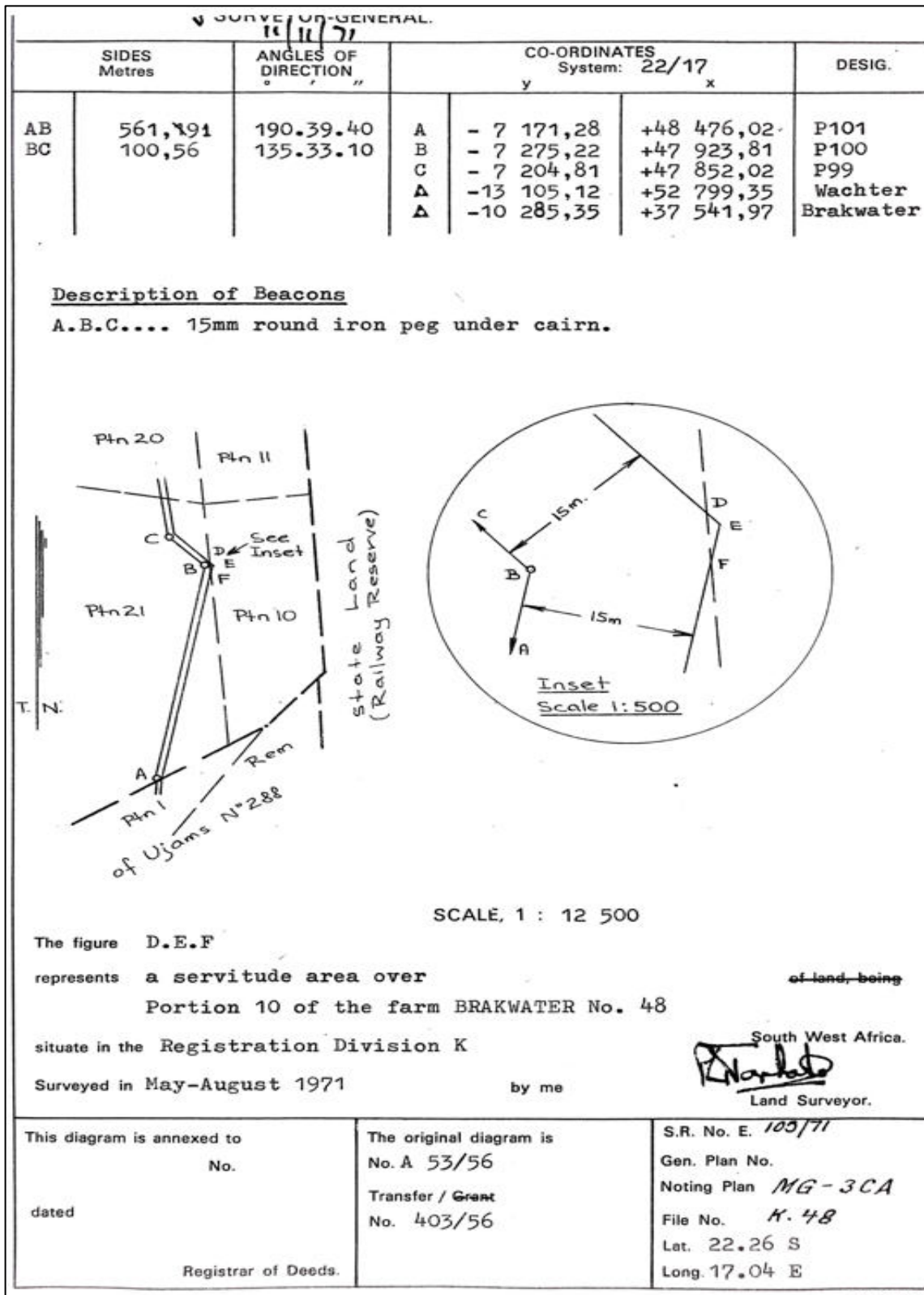


Figure 4: Servitude area of District Road over Portion 10 of Farm Brakwater No. 48

The land required for the Trunk Road (Portion 121) is 3,3873 and has been cut off from Portion 10 but is not registered. The locality of Portion 121 is indicated on Portion 10. The trunk road is aligned over Portion 121. As this Portion was never transferred to the Roads Authority, it is still registered under Portion 10. This will remain as the Roads Authority normally does not register these portions under their name but rather register servitudes over it. See below the diagram of Portion 121:

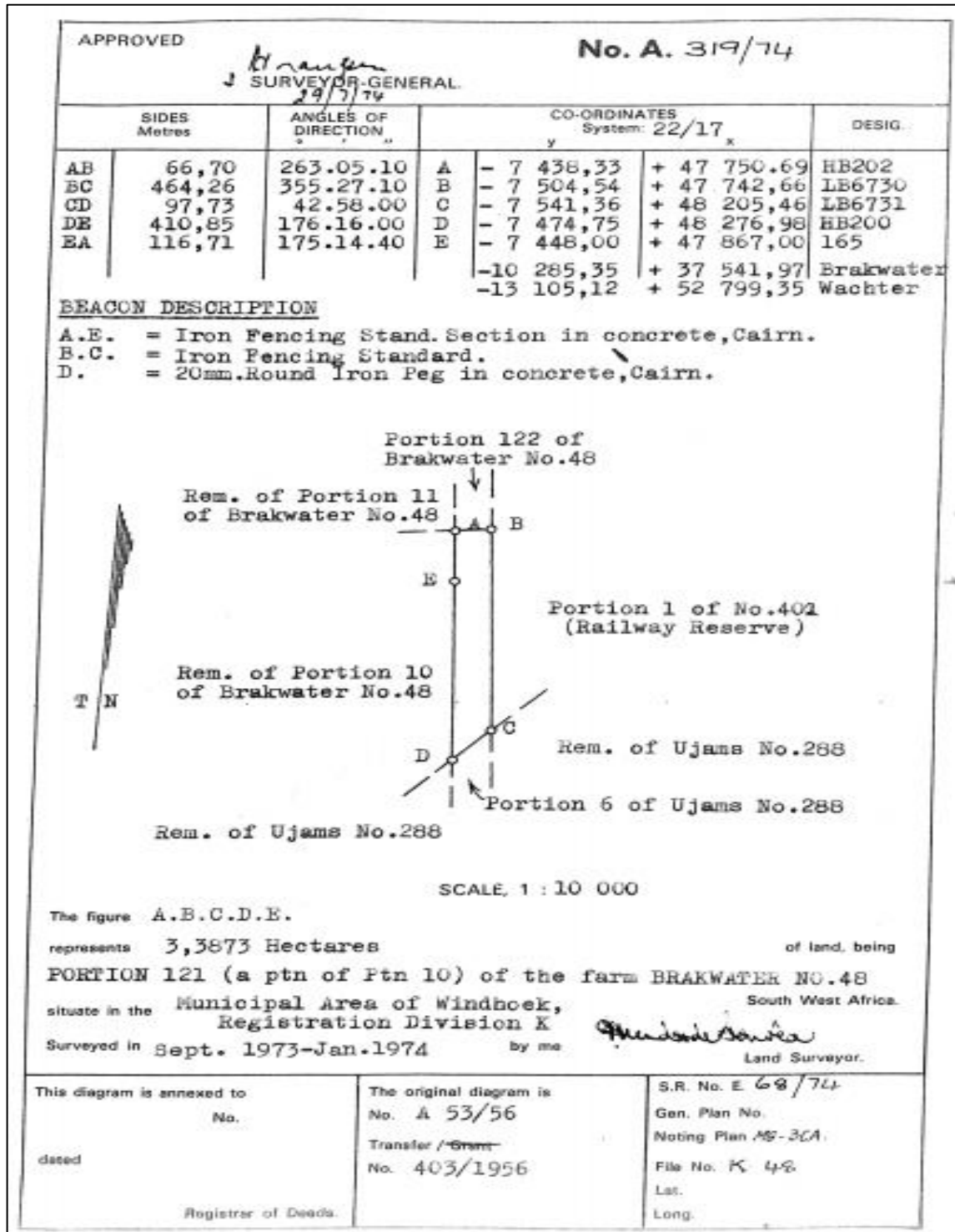


Figure 5: Diagram of Portion 121 – the land reserved for the Trunk Road

From the above, it can be concluded that the developable portion of Portion 10 (the Remainder of Portion 10) after allowing for the portions for the roads as stated above is only 9,2145ha. The site is zoned 'residential' with a density of 1 dwelling per 5ha.

The site has a steep small mountain on its southern side which restricts the development of this portion. However, the northern portion of the site (± 5.4 ha) is flat and utilised for the operations of the Proponent. The Bokomo maize and wheat mill and packaging, storage, handling, and distribution facilities are accommodated on the northern portion of ± 5.4 ha. The photo below shows how the site is utilised by Bokomo:

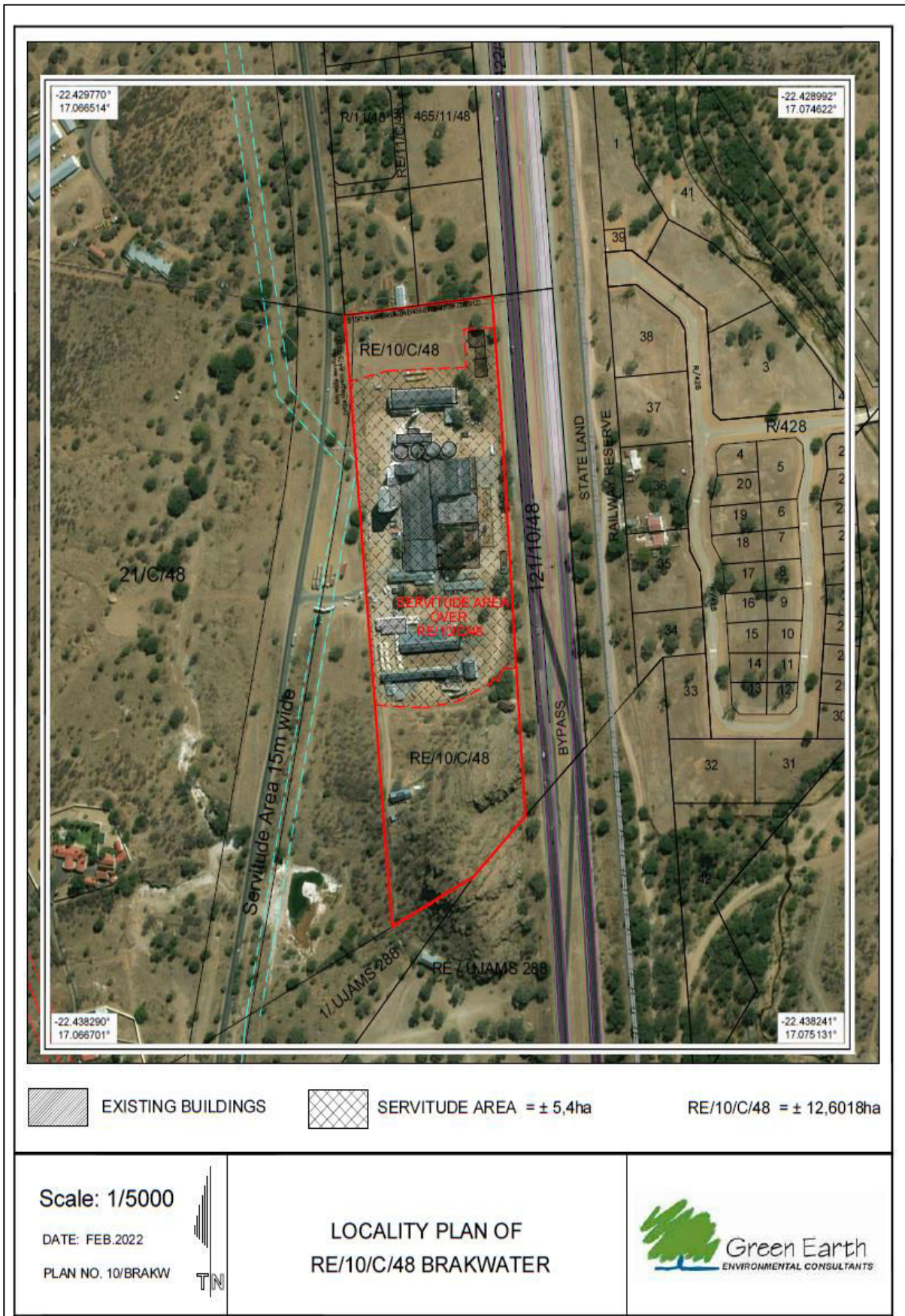


Figure 6: Project Site Plan on Photo

3.2. ACTIVITIES ON THE PROJECT SITE

Bokomo Namibia purchased Portion 10 of Farm Brakwater in 1998. Initially the portion was used for egg production which was subsequently stopped. In August 1998 the Namibian Agronomic Board granted approval for the investment in a white maize mill and in February 2000 for a wheat mill. From this small beginnings, Bokomo Namibia became a leading manufacturer and distributor of quality foods in Namibia. The Frans Indongo Group became a valued shareholder in 2007. Today the Frans Indongo Group owns 50%, with the rest belonging to South African Pioneer Foods. They supply their Namibian consumers with well-loved and trusted household brands (source: Bokomo Namibia Website). At the site on Portion 10 of Farm Brakwater, Bokomo produce the following products:

Maize Meal

Bokomo provide Namibian families with important staple foods, with nutritional benefit in the form of Bokomo Super Maize Meal, Special Maize Meal and the Unsifted Maize Meal range.



Wheat flour

Bokomo's locally milled flour is loved by home bakers and professionals alike, becoming the flour of choice for bakers across the country. Milling flour of the highest quality assures that Namibians can enjoy the freshest baked breads and cakes daily. The Bokomo flour range includes Bokomo Cake Wheat Flour, Bokomo White Bread Wheat Flour, Bokomo Brown Bread Wheat Flour and Bokomo Bakery Flour and Bokomo Bakery Complete Mix.



Pasta products

Pasta Perfecto, our wheat-based pasta made locally from the finest ingredients is distributed from the site into the rest of Namibia. It is available in Macaroni and Elbow Macaroni shapes.



Other trusted Brands distributed from the site (Bokomo Namibia Website):

- Maize Meal: Bokomo Super Maize Meal, Bokomo Special Maize Meal and Bokomo Unsifted Maize Meal
- Flour: Bokomo Cake Wheat Flour, Bokomo White Bread Wheat Flour, Bokomo Brown Bread Wheat Flour, Bokomo Bakery Flour and Bokomo Bakery Complete Mix
- Pasta: Pasta Perfecto, Just Pasta
- Rice: Spekko and Select
- Beans, Popcorn and Coconut: Imbo

- Breakfast Cereals: Bokomo Weetbix, Bokomo Cornflakes, Bokomo Oats, Bokomo Otees, Bokomo Toddlers Range, Nature's Source Muesli, ProNutro, Maltabella, Champion Instant Maize, Bokomo Rusks and Bokomo Cereal Bars
- Juice and Concentrates: Ceres, Caribbean, Jabba, Wild Island and Daly's
- Meals: Heinz, John West, Smash and Werda
- Spreads: Redro, Peck's, Marmite and Bovril Ketchup, Sauces, Marinades and Vinegar: Heinz, HP and Wellington's
- Biscuits and Baking Ingredients: Moirs, Safari and Maizena
- Desserts: Moirs
- Snacks: Safari, Moirs, Bokomo and ProNutro



Onsite Processing activities - Maize and Wheat

Maize and wheat are transported to the site in bulk by large trucks by approved and licenced bulk transporters. These products are then stored in large silos until it is processed into maize meal and flower and other by-products. The Proponent process locally produced maize and wheat into meal and flower for human consumption. Genetically Modified Organisms (GMO) wheat and maize are also imported once the local harvest has been consumed for processing. The Proponent has an approved GMO certificate for the purposes of the import and processing of the GMO products.



Figure 7: Storage

A disaster management plan for GMO products is also available on site. Limited to no noise is present on the site while operations are in progress.

- The project site has a joint connection to NamWater and the City of Windhoek's **water** reticulation system.



Figure 8: Water storage tanks

- A **Health and Safety officer** is employed on the site full time. Various safety measures are stipulated on site.



Figure 9: Safety measures (1)



Figure 10: Safety measures (2)

- **Electricity** is obtained from Solar Panels and from the NamPower. A dual 1.75-megawatt system and a 500-kW system is used on site for additional electricity needs.



Figure 11: Electricity source on site and back-up generator

- **Waste** on site is limited however the domestic waste produced on site is sorted into recyclables and collected by Kleen Tek for further sorting and processing.



Figure 12: Kleen Tek container

- **Wastewater** and **sewage** are disposed and collected in a bulk septic tank and then collected by Sanitech and/or R-A-D (Rent-A-Drum) which is disposed of in an approved City of Windhoek sewer collection point.
- The **noise** on site is lower than that of the by-pass road's traffic. With the previous EIA that was conducted in 2002, noise was a concern however over time the machinery was upgraded and improved, and a limited amount of noise is currently experienced on site. Noise levels are kept below 35dba.
- There is no **dust**, no **smell** and no **smoke**. Previously **noise** levels on the project site had been unacceptable high however the wheat mill was upgraded to address to noise levels.
- **Vehicles** are cleaned on site with specialised equipment that restricts water use and recycle the wash water. Currently enough parking is available on site and the accesses are adequate. There is also an emergency service entrance gate. The District Road of Portion 10 is located to the west and the Truck Road of Portion 10 is located to the east.



Figure 13: Parking area of Bokomo

- A **fire extinguisher** and booster facility and pump are present on site.



Figure 14: One of the fire extinguishers on site

- **Stormwater** is not a problem on site. The site is fully developed, no new construction is planned at the moment. There is a container office park on site that is used for admin.
- No **trees** will be removed, and the proponent has planted various trees on the site.
- Council Resolution 52/02/2008 confirmed the **rezoning** of a portion of ±5,4 ha from 'residential' to 'industrial' with a bulk of 0.5.

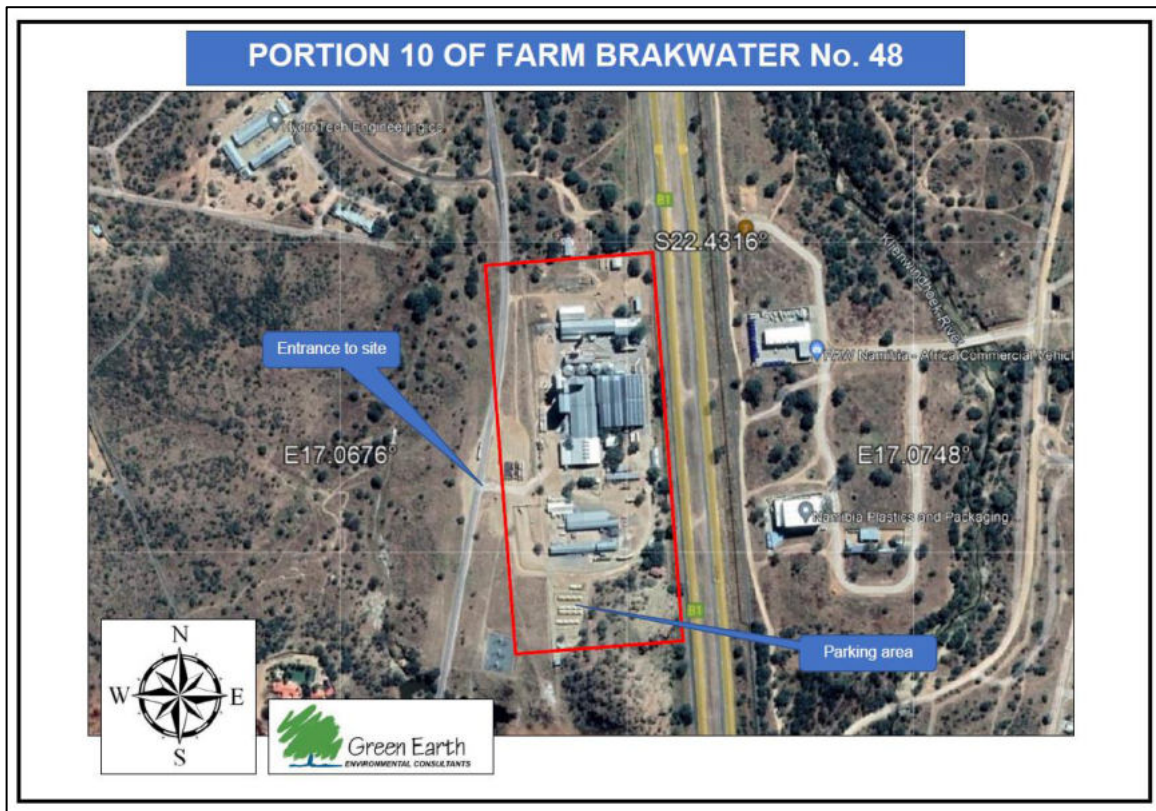


Figure 15: Project Site layout

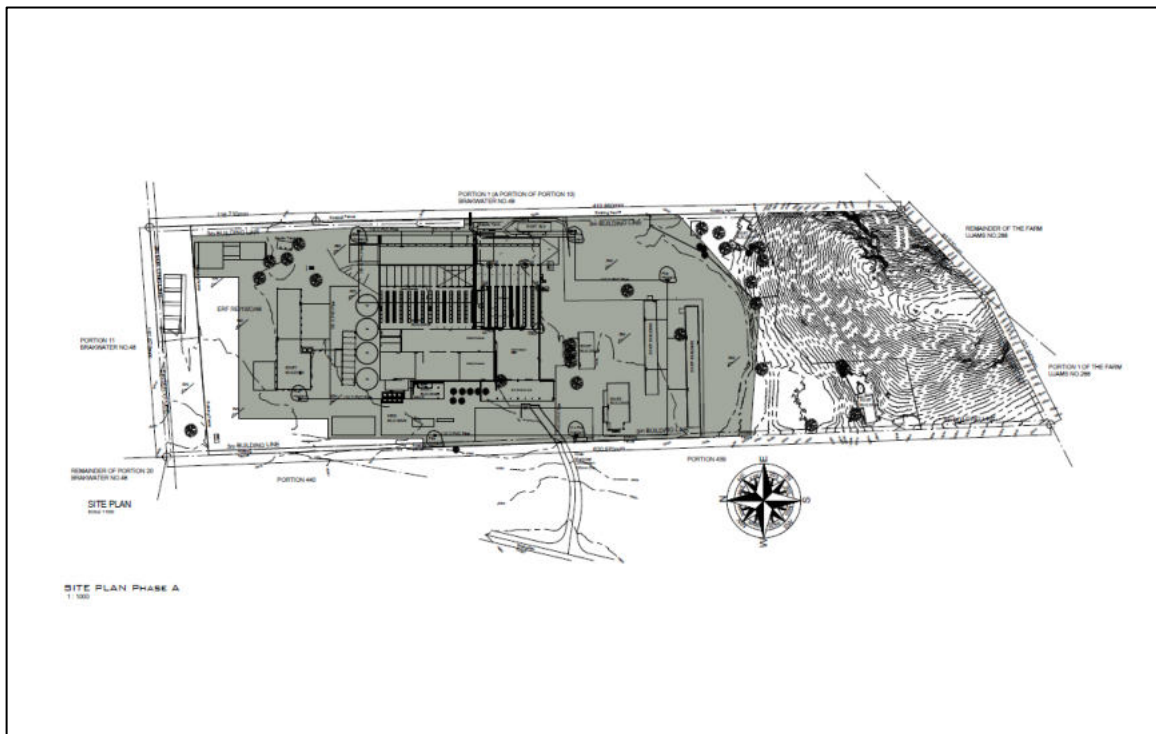


Figure 16: Site Plan

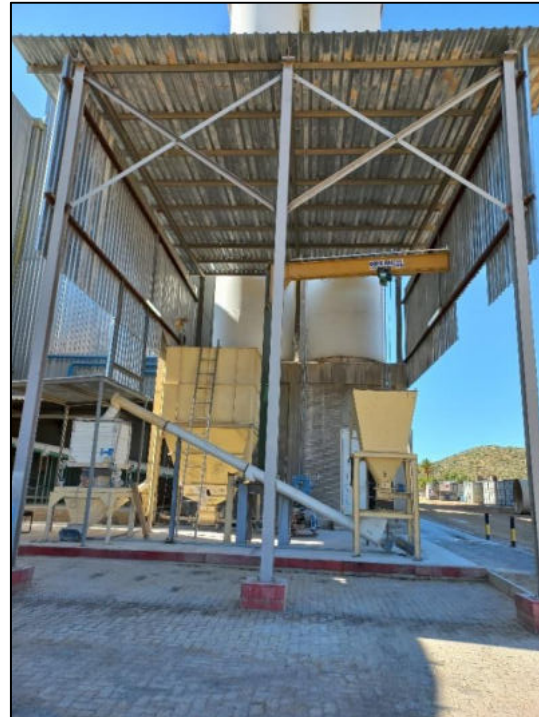


Figure 17: Operations on site

4. APPROVALS OBTAINED

City of Windhoek, at their Council Meeting of 26 September 2001 conditionally approved the rezoning of a portion $\pm 5,4$ ha of Portion 10 from 'residential' to industrial' under Council Resolution 296/09/2001. The conditions to be met were:

- That the developer (Bokomo) submits a survey diagram showing the portion of $\pm 5,4$ ha to be rezoned.
- That an EIA and EMP be prepared for the proposed activity.
- That the rezoning of the Portion will only be included in an Amendment Scheme for final approval once the EIA and EMP has been prepared and once the survey diagram is submitted.

See below a copy of Windhoek Municipal Council Resolution NO. 296/09/2001:

Municipal Council Minutes: 2001-09-26]

8.2.3

**BRB.3 [PLA] REZONING OF PORTION 10
OF THE FARM BRAKWATER NO. 48
(L/Brakwater 48/W)**

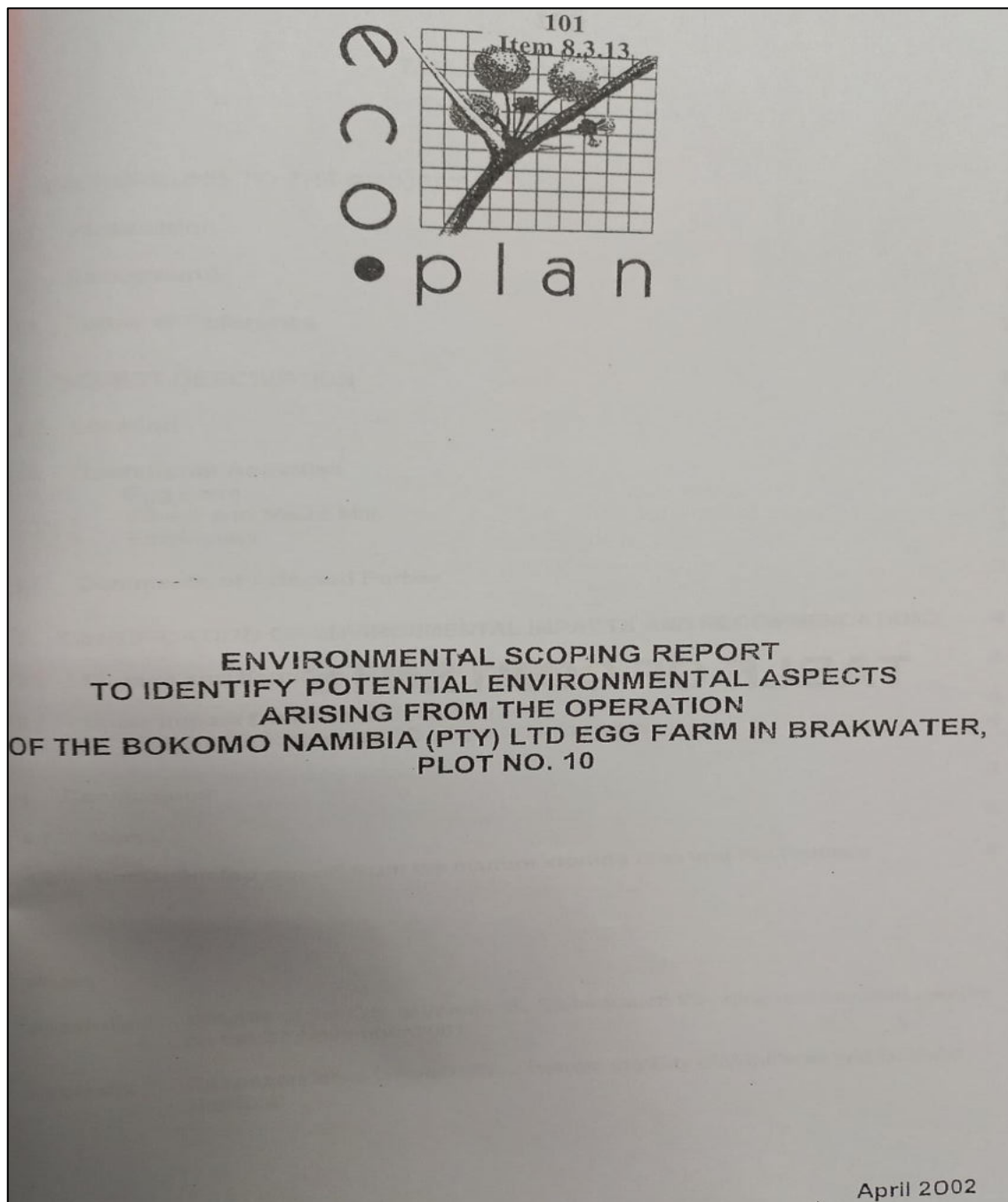
On proposal by Councillor Dr B von Fischenstein, it was

RESOLVED

- 1 That a portion of Plot 10, Brakwater as indicated on the plan, attached as page 3 to the agenda, measuring ± 5.4 hectare in extent be rezoned from 'residential' to 'industrial' with a bulk of 0.5 subject to the following:
 - 1.1 That the developer submit survey co-ordinates for the portion to be rezoned to the Department of Planning, Urbanisation and Environment.
 - 1.2 That the developer commission an Environmental Impact Assessment, followed by an Environmental Management Program to the satisfaction of the Department Planning, Urbanisation, and Environment.
 - 1.3 That the scope of the Environmental Impact Assessment and Environmental Management Program be agreed with the Strategic Executive: Planning, Urbanisation and Environment.
- 2 That the developer note that the rezoning only be included in an Amendment Scheme once he/she submit the survey co-ordinates and the Environmental Management Program for the area to be rezoned.
- 3 That the developer take note that no municipal sewerage services are available and that he/she should continue to make his/her own arrangements for treatment of industrial waste to the satisfaction of the Department of Infrastructure, Water and Technical Services.
- 4 That the developer provide the Department of Infrastructure, Water and Technical Services with a layout of the water supply and the position of the septic tank and the detail thereof.
- 5 That the developer take note that electricity be provided by NamPower.

RESOLUTION 296/09/2001

Based on the above conditions an Environmental Scoping Report was conducted in April 2002 for the then activities on the site although an Environmental Clearance Certificate was not issued as it was before the promulgation of the Environmental Management Act (No. 7 of 2007). The Environmental Practitioner who conducted the EIA was Alexandra Speiser from Eco Plan (Pty) Ltd. See below the front page of the previous EIA:



The findings of the Environmental Scoping report were submitted to City of Windhoek (COW). See below COW's response to the findings and recommendations of the Scoping Report. See also correspondence with affected neighbours below. The Key issue was that the chicken manure industry associated with the egg factory was a nuisance to neighbours as well as the natural environment and that this activity should be stopped on the site.

Based on the Scoping report, Bokomo agreed to terminate the Egg Factory and remove all the chicken manure. The processing equipment were also upgraded to reduce noise emissions.

Department of Planning, Urban
and Environment

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Item 8.3.13

☒ 59
80 Independence Avenue
WINDHOEK, NAMIBIA



Fax: (+264) 61 290 2111 • Tel.: (+264) 61 290 2911 •

Enq: GK Kozonguizi
Tel: 2902371

File: L/Brakwater
Date: 16/04/2002

Messrs. eco.plan (Pty) Ltd.
Box 90093
Windhoek

Dear Sir or Madam:

**SUBJECT: ENVIRONMENTAL SCOPING REPORT TO IDENTIFY
POTENTIAL ENVIRONMENTAL ASPECT FROM BOKOMO
EGG FARM IN BRAKWATER, PLOT NO. 10**

Reference is made to a copy of the scoping report, which you submitted on 09 April 2002 for revision. Our comments regarding the report are as follows:

1. The proposed rezoning cannot be supported until such time that Messrs. Bokomo Namibia (Pty) Ltd. has implemented appropriate measures for reducing the noise level emanating from the mill. A clear commitment needs to be made in terms of how and when the necessary measures will be implemented. This, however, shall be subject to the satisfaction of the Strategic Executive: Planning, Urbanization and Environment.
2. Although a full-fledged public meeting might not be necessary, it nevertheless is important that the immediate neighboring property owners as well as the Brakwater Advisory Committee be kept informed. The responsibility to do this lies with the project proponent.
3. Since the Noise Pollution Policy for the City of Windhoek does not cover the area of Brakwater, it is agreed in principle with your recommendation that a minimum noise level of **35 dbA** during day and night times be introduced and maintained.
4. The proposed measures to control contamination of soils and groundwater, as a result of the chicken manure, are acceptable. However, it needs to be noted that the application of any hazardous pesticides shall not be permitted.

All official correspondence must be addressed to the Chief Executive Officer

The Scoping report made the following recommendations:

Recommendations

Usually, the chicken manure is relatively dry so there is no risk of contamination of soil and water. The storage time for the manure should be minimised to control the fly problem, as poison used to control flies will kill or accumulate in insects which are eaten by birds, reptiles, etc.

To keep the chicken manure dry all year a roof should be erected over the chicken manure stockpile area. The sides should be covered with shade cloth to help keep out flies still allow air to blow through the storage area. The roof should be high enough so that the collection truck is able to drive in. Should this recommendation be followed it will not be necessary to bund the area or to install a drainage system to collect the run off from the chicken manure storage area.



ETZOLD - DUVENHAGE
Attorneys, Notaries and Conveyancers

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Item 8.3.13

City of Windhoek
Department of Planning,
Urbanisation & Environment
WINDHOEK
Namibia

Our Ref: HER4/0001/UE/ab

23rd January 2008

Attention: Barrie Watson

Dear Sir,

JOHANNES HERMA // BOKOMO NAMIBIA (PTY) LTD

Previous correspondence and discussions refer, in particular our last meeting during which you requested to once again provide you with an update as regards our client's concern regarding the noise pollution caused by the milling operations of Bokomo, and the objections against their rezoning application.

Correspondence has been exchanged on the above topic between our client, the City of Windhoek and Bokomo Namibia (Pty) Ltd since September 2001. In this correspondence our client, who is residing at one of the neighbouring plots, has many times raised his concerns with Bokomo Namibia (Pty) Ltd and the City of Windhoek regarding such noise pollution and infestation caused by Bokomo's chicken manure.

Bokomo Namibia (Pty) applied for the rezoning of Portion 10 of the Farm Brakwater No 48 during 2001. In terms of Municipal Council Minutes, dated 26th September 2001, an application for rezoning from residential to industrial was approved, however, subject to, *inter alia*, the commissioning of an environmental impact assessment report.

It is further common cause that a company with name of Eco Plan compiled an environmental scoping report during April 2002, once again with various recommendations, most of which Bokomo until to date has not complied with. Since then, it is our instructions that the whole

Philadelphia House, Suite no 1 • No 6 Newton Street • PO Box 320 • Windhoek • Namibia
Tel +264-61-229337/8 • Fax +264-61-229343 • office@edlaw.com.na

Partners: Ulrich Martin Etzold BProc, LLB (UP), LLM (Unisa), Hannalie Duvenhage BLC, LLB (UP)
Assisted by: Carli Schickerling LLB (Stell)

matter has become stale since Bokomo never really pursued the rezoning application, with the result that the zoning status remained illegal for the past few years.

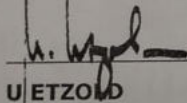
The main reason of objecting to the rezoning is the simple fact that the operation of the mill causes unbearable noise pollution which seriously affects the health of our client and the surrounding neighbours. It is worthwhile mentioning that the initial rezoning application was not opposed by the surrounding residents, as they were informed that only egg farming will be conducted there. According to many measurements taken by our client during the past year, the noise pollution exceeds the permitted decibel for that area. Needless to say, the terrible smell originating from Bokomo's business operations in respect of the chicken manure has a serious impact on our client's wellbeing and lifestyle on the plot.

Finally, we would like to formally request a copy of the report compiled by Dr Paul Ludick.

Yours faithfully

ETZOLD-DUVENHAGE

Per:



U ETZOLD

Based on the findings and recommendations of the EIA Scoping exercise, a further submission was made to Windhoek City Council to approve the rezoning of a Portion of $\pm 5,4$ ha to be used by Bokomo for industrial purposes. This application served at Windhoek City Council's meeting on 27 February 2008. At this meeting, Council approved the rezoning of a Portion of $\pm 5,4$ ha of Portion 10 of Farm Brakwater No. 48 from 'residential' to 'industrial' with a bulk of 0.5 per Council Resolution 52/02/2008. See extract of Council Resolution below:

[Municipal Council Minutes: 2008-02-27]

8.3.13

**BRB.10 [PLA] PROPOSED REZONING
OF PORTION 10 OF THE FARM
BRAKWATER NO. 48
(L/10/BW)**

On proposal by Councillor Ms AM Kafula, it was

RESOLVED

That Council Resolution 296/09/2001 be upheld and that a portion of Plot 10, Brakwater as indicated on the plan measuring ± 5.4 hectare in extent be rezoned from 'residential' to 'industrial' with a bulk of 0.5 subject to the following conditions:

- 1 That the owner take note that any subsequent rezoning be subject to the City's Betterment Policy.
- 2 That the noxious industrial activities, namely the chicken manure industry associated with the egg factory be removed as a matter of urgency and no later than the 31 May 2008.
- 3 That the developer take note that no municipal sewerage services are available and that the latter should continue to make own arrangements for treatment of industrial waste to the satisfaction of the Strategic Executive: Infrastructure, Water and Waste Management.
- 4 That the developer provide the Strategic Executive: Infrastructure, Water and Waste Management with a layout of the water supply and anticipated water requirements.
- 5 That the developer submit an engineering report on the water and wastewater treatment providing details on effluent generation and loading, and that the developer must indicate how the solids and effluent from the waste water treatment facility will be dealt with for the approval of the Strategic Executive: Infrastructure Water and Waste Management, prior to the inclusion of the rezoning in an Amendment Scheme.
- 6 That the developer note that final effluent disposal permit will be applicable to industrial effluent such as generated by a food factory.
- 7 That the developer provide full detail, for the approval of the Strategic Executive: Infrastructure, Water and Waste Management, prior to inclusion in an Amendment Scheme, of its solid waste disposal plan.
- 8 That the Strategic Executive: Planning, Urbanisation and Environment investigate the maximum noise level of 35 dbA during day and night, in light of new developments in respect of noise pollution.

RESOLUTION 52/02/2008

To conclude, City of Windhoek approved the rezoning of the site from 'residential' to 'industrial'.

**Department of Planning, Urbanisation
and Environment**

☒ 59, 80 Independence Avenue

Windhoek/NAMIBIA

Fax: (+264) 61 290 2111 . Tel. (+264) 61 290 2911.



Enq : Mr H Rust
Tel : 290 – 2378

Ref : L/Ptn 10/BW
Date : 7 March 2008

Messrs ETZOLD - DUVENHAGE
Feld Street
WINDHOEK

Attn: Mr Etzold

Sir

**REZONING OF PORTION 10 OF THE FARM BRAKWATER NO. 48
BOKOMO NAMIBIA**

This serves to inform you that the City Council, at its meeting on 27 February 2008, resolved as follows:

That Council Resolution 296/09/2001 be upheld and that a portion of Plot 10, Brakwater as indicated on the plan measuring ± 5.4 hectare in extent be rezoned from 'residential' to 'industrial' with a bulk of 0.5 subject to the following conditions:

- 1 That the owner take note that any subsequent rezoning be subject to the City's Betterment Policy.
- 2 That the noxious industrial activities, namely the chicken manure industry associated with the egg factory be removed as a matter of urgency and no later than the 31 May 2008.
- 3 That the developer take note that no municipal sewerage services are available and that the latter should continue to make own arrangements for treatment of industrial waste to the satisfaction of the Strategic Executive: Infrastructure, Water and Waste Management.
- 4 That the developer provide the Strategic Executive: Infrastructure, Water and Waste Management with a layout of the water supply and anticipated water requirements.
- 5 That the developer submit an engineering report on the water and wastewater treatment providing details on effluent generation and loading, and that the developer must indicate how the solids and effluent from the waste water treatment facility will be dealt with for the approval of the Strategic Executive: Infrastructure Water and Waste Management, prior to the inclusion of the rezoning in an Amendment Scheme.
- 6 That the developer note that final effluent disposal permit will be applicable to industrial effluent such as generated by a food factory.

All official correspond must be addressed to the Chief Executive Officer

- 7 That the developer provide full detail, for the approval of the Strategic Executive: Infrastructure, Water and Waste Management, prior to inclusion in an Amendment Scheme, of its solid waste disposal plan.
- 8 That the Strategic Executive: Planning, Urbanisation and Environment investigate the maximum noise level of 35 dbA during day and night, in light of new developments in respect of noise pollution.

RESOLUTION 52/02/2008

The next step is to include the rezoning in an Amendment Scheme to the Minister of Regional and Local Government, Housing and Rural Development. Should he wish so, your client may lodge an appeal to the Minister against the Council Resolution.

In cases where the City Council has the discretion to take a decision in terms of the Town Planning Scheme, provision has been made in Section 51 of the Scheme for an appeal against that decision:

- (1) Any person who is aggrieved by a decision of the Council in terms of an application made under this Scheme, may appeal to the Competent Authority (namely the Minister of Regional and Local Government & Housing, Private Bag 13289, Windhoek).
- (2) If the decision is one which the Council is required to give upon the application of any person or upon the submission by any person of plans or proposals, an appeal shall, in addition, lie against a refusal of the Council to give, or unreasonable delay on its part in giving a decision, as if it were an appeal against a decision of the Council.
- (3) Written notice of an appeal shall be given to the Competent Authority and to the Council. If the appeal is against a decision of the Council, the notice shall be given within twenty-eight (28) days from the date of the service on the appellants of the notice of the Council's decision.

We request you therefore to inform us in writing should your client decide to lodge an appeal against the rezoning and Council Resolution. The City will inform you on the number of the Amendment Scheme in which the rezoning will appear in due course.

Yours faithfully



H Rust
Town Planner
URBAN PLANNING

To obtain the final approval from the Urban and Regional Planning Board, an Environmental Clearance for the activity is required. The URPB will not process the rezoning application without a valid ECC supporting the rezoning.

5. APPROACH TO THE STUDY

The assessment included the following activities:

a) Desktop sensitivity assessment

Literature, legislation, and guidance documents related to the natural environment and land use activities available on the area in general were reviewed in order to determine potential environmental issues and concerns.

b) Site assessment (site visit)

A site visit was conducted in the immediate neighbourhood and the surrounding area was assessed. Previous site visits to investigate the environmental parameters on site to enable further understanding of the potential impacts on site also took place.

c) Public participation

The current operations of Bokomo on the site is a lawful and existing use which is in operation since 1998. The surrounding uses are also industrial. The neighbours were informed during the initial rezoning application. Concerns were raised on the nuisance of the chicken manure storage and processing from the egg factory as well as noise from the operations. These issues were pointed out during the initial Environmental Scoping Exercise. The egg factory was closed, and the chicken manure were removed from the site. The noise levels are also kept below 35dbA during the night and day operations.

The City of Windhoek contacted the affected neighbours in this regard and no further objections were received.

Bocomo Egg Farm - Brakwater

MINUTES – environmental concerns: 27 November 2001

At City of Windhoek



PO Box 90093
Windhoek
Namibia

Tel: 061 236 434
Fax: 061 252 157
Email:
eco-plan@iafrica.com.na

Present: Mr Aribeb, Environmental Division, City of Windhoek
Mr. G Kozonguizi, Environmental Division, City of Windhoek
Mrs. Alexandra Speiser, Environmental Scientist, eco. plan (Pty) Ltd)
Mr. A Cloete, Townplanner, SPC

Introduction

This meeting was held to discuss the way forward regarding the rezoning of the existing Bokomo Egg Farm in Brakwater. The City of Windhoek requested that Bokomo Egg Farm has to be rezoned into an industrial area.

A number of complaints have reached the Environmental Division at the City of Windhoek, namely:

- Noise. Recently Bocomo started to mill the fodder on side. Neighbours are complaining about the increase in noise.
- Possible contamination of soil, surface- and groundwater by the chicken manure.
- The smell resulting from the chicken manure.

However, these are only some complaints as no full investigation to identify all possible issues has been conducted yet. The City of Windhoek decided that an Environmental Assessment has to be carried out before the portion of Plot No 10 can be rezoned. However, it was agreed that no full Environmental Assessment has to be conducted and all represented parties agreed to continue as follows:

1. Scoping Phase To identify key environmental impacts. To conduct interviews with I&APs.
2. Scoping Report Presenting findings of the scoping phase to all stakeholders. Identify issues which should be assessed in more detail.
3. Environmental Assessment of the identified issues.
4. Management Plan for the operation of the Egg farm.

eco.plan will submit a proposal to the client. The proposal will include the steps discussed above.

Alexandra Speiser

6 December 2001

J. A. HERMA
P.O. BOX 537
TEL./FAX: + 264-61-264558
WINDHOEK
NAMIBIA

26 February 2002

Re.: Noise Pollution from Bokomo Mill in Brakwater

Dear Mr Egumbo,

after several complaints from my side to representatives of the Municipality and to Bokomo Namibia about the continuous and unacceptable level of noise emanating from the Bokomo Mill in Brakwater, your CEO Mr Shipanga placed this matter into your hands (refer to Fk/Herma20020131).

I am obviously interested in the nature of Bokomo's Environmental Impact Assessment and Program and its outcome and request you to keep me informed of its results as well as any action the Municipality is going to take.

As stated previously, I am not opposed to Bokomo's operations *during normal work hours*, but to their operations during night-hours and week-ends, since the continuous noise severely affects my quality of life.

Yours very truly,

Johannes Herma

cc Bokomo Namibia

c) Scoping

Based on the desk top study, site visit and public participation, the environmental impacts were determined in five categories: nature of project, expected duration of impact, geographical extent of the event, probability of occurring and the expected intensity. The findings of the scoping have been incorporated in the environmental impact assessment report below.

6. ASSUMPTIONS AND LIMITATIONS

It is assumed that the information provided by the proponent (Bokomo Namibia (Pty) Ltd), Du Toit Town Planning Consultants, the Engineers and City of Windhoek is accurate. No alternative portions/erven/land for the proposed operations were considered. The site was visited several times and any happenings after this are not mentioned in this report. (The assessment was based on the prevailing environmental conditions and not on future happenings on the site.) However, it is assumed that there will be no significant changes to the proposed project, and the environment will not adversely be affected between the compilation of the assessment and the implementation of the proposed activities.

7. ADMINISTRATIVE, LEGAL AND POLICY REQUIREMENTS

To protect the environment and achieve sustainable development, all projects, plans, programs and policies deemed to have adverse impacts on the environment require an EIA according to Namibian legislation. The administrative, legal and policy requirements to be considered during the Environmental Assessment for the proposed project are the following:

- The Namibian Constitution
- The Environmental Management Act (No. 7 of 2007)
- The Local Authorities Act (No. 23 of 1992)
- The Windhoek Town Planning Scheme and Council's Policies
- Other Laws, Acts, Regulations and Policies

THE NAMIBIAN CONSTITUTION

Article 95 of Namibia's constitution provides that:

"The State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at the following:

Management of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future; in particular, the Government shall provide measures against the dumping or recycling of foreign nuclear and toxic waste on Namibian territory." This article recommends that a relatively high level of environmental protection is called for in respect of pollution control and waste management.

Article 144 of the Namibian Constitution deals with environmental law and it states:

"Unless otherwise provided by this Constitution or Act of Parliament, the general rules of public international agreements binding upon Namibia under this Constitution shall form part of the law of Namibia". This article incorporates international law, if it conforms to the Constitution, automatically as "law of the land". These include international agreements, conventions, protocols, covenants, charters, statutes, acts, declarations, concords, exchanges of notes, agreed minutes, memoranda of understanding, and agreements (*Ruppel & Ruppel-Schlichting, 2013*).

CONCLUSION AND IMPACT

In considering the environmental rights, Bokomo Namibia (Pty) Ltd should consider the following in devising an action plan in response to the articles:

- Implement a “zero-harm” policy that would guide decisions.
- Ensure that no management practice or decision result in the degradation of future natural resources.
- Take a decision on how this part of the Constitution will be implemented as part of Bokomo Namibia (Pty) Ltd’s Environmental Control System (ECS).

ENVIRONMENTAL MANAGEMENT ACT (NO. 7 OF 2007)

The Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) of the Environmental Management Act (No. 7 of 2007) that came into effect in 2012 requires/recommends that an Environmental Impact Assessment Renewal and an Environmental Management Plan (EMP) be conducted for the following listed activities in order to obtain an Environmental Clearance Certificate:

LAND USE AND DEVELOPMENT ACTIVITIES

5.1 The rezoning of land from -

(a) residential use to industrial or commercial use.

Cumulative impacts associated with the project must be included as well as public consultation. The Act further requires all major industries to prepare waste management plans and present these to the local authorities for approval.

The Act, Regulations, Procedures and Guidelines have integrated the following sustainability principles. They need to be given due consideration, particularly to achieve proper waste management and pollution control:

Cradle to Grave Responsibility

This principle provides that those who handle or manufacture potentially harmful products must be liable for their safe production, use and disposal and that those who initiate potentially polluting activities must be liable for their commissioning, operation and decommissioning.

Precautionary Principle

If there is any doubt about the effects of a potentially polluting activity, a cautious approach must be adopted.

The Polluter Pays Principle

A person who generates waste or causes pollution must, in theory, pay the full costs of its treatment or of the harm, which it causes to the environment.

Public Participation and Access to Information

In the context of environmental management, citizens must have access to information and the right to participate in decisions making.

CONCLUSION AND IMPACT

The proposed activities have been assessed in terms of the Environmental Management Act (No. 7 of 2007) and the Regulations (2012). From the assessment, it can be concluded that the activities will have impacts on the prevailing environment but that the negative impacts can be sufficiently mitigated and managed by the Environmental Management Plan which is part of this document.

THE LOCAL AUTHORITIES ACT (NO. 23 OF 1992)

The purpose of the Local Authorities Act is to provide for the determination, for purposes of local government, of local authority councils; the establishment of such local authority councils; and to define the powers, duties and functions of local authority councils; and to provide for incidental matters.

The Local Authorities Act defines a 'street' or as follows:

"street" means any road, thoroughfare, pavement, sidewalk, lane or other right of way set apart for the use and benefit of residents in a local authority area.

Part IX of the Local Authorities Act deals with streets and public places. Article 48 and 49 of the Act deals with the '*construction of streets and public places*' and '*construction of culvert crossings*'

In accordance with Article 48:

Construction of streets and public places

48. (1) For purposes of the provisions of section 30(1)(e), a local authority council may -

- (a) construct or lay drains, culverts, bridges, sewers, water-mains, underground drains, electric mains, cables, lines, poles and pipes in streets and public places constructed in terms of that section.
- (b) construct in any public place swimming baths, public baths, zoological or botanical gardens, aquariums, pavilions, dressing rooms, public con-

veniences and other public facilities, and, with the approval of the Minister and subject to such terms and conditions as may be determined by him or her, let or grant the right to use any such public place.

- (c) provide and carry on refreshment rooms, cafes and restaurants in any public place, and, with the approval of the Minister and subject to such terms and conditions as may be determined by him or her, let any such refreshment room, cafe or restaurant.
- (d) provide such apparatus or equipment as may be necessary for use in any game, sport or other recreation in any public place.
- (e) alter in any manner whatsoever any street or public place.
- (f) light streets and public places.
- (g) erect road traffic signs.
- (h) adorn any public place by any architectural or other scheme of ornamentation, including statues, monuments, fountains or any other structures; and
- (i) generally, perform or carry out any other function which is necessary for or conducive to its powers in relation to the construction of streets and public places in its area.

(2) A local authority council shall not construct any street or public place in or on any townlands situated within its area without the prior approval in writing of the Minister.

(3) Notwithstanding the provisions of section 33, the owner of any immovable property who has suffered any damage or loss in consequence of the alteration of any street by way of the lowering or raising of the level, or the narrowing or widening, of any street in which such immovable property is situated shall be entitled to such compensation as may be determined by mutual agreement between such owner and the local authority council in question or, in the absence of any such agreement, by arbitration.

In accordance with Article 49:

Construction of culvert crossings

49. A local authority council may, at the request of the owner or occupier of any immovable property fronting a street -

- (a) construct and maintain culvert crossings from such immovable property to the street, and recover the costs of the construction of such crossings from such owner or occupier.
- (b) construct, pave and maintain the sidewalk or pavement in front of such immovable property or any part of its width in a special manner approved by the local authority council and desired by such owner or occupier, and recover

the costs from such owner or occupier in so far as such costs exceed the costs of its construction in the ordinary manner.

CONCLUSION AND IMPACT

The operations have been done in accordance with the stipulations of Article 48 and 49 of the Act. Public notices have been displayed on the site, the municipal notice board and two daily newspapers. No objections/comments were received.

THE WINDHOEK TOWN PLANNING SCHEME AND COUNCIL'S POLICIES

The Windhoek Town Planning Scheme (as amended in Windhoek Amendment Scheme No. 96 – promulgated 30 January 2018) applies to the area as indicated on the scheme maps and corresponds with the Townlands Diagram for Windhoek Town and Townlands.

The general purpose of this Scheme is the coordinated and harmonious development of the area of Windhoek (including, where necessary, the reconstruction and redevelopment of any part which has already been subdivided whether there are buildings on it or not) in such a way as will most effectively tend to promote health, safety, order, amenity, convenience and general welfare as well as efficiency and economy in the process of development and improvement of communications, and where it is expedient in order to promote proper planning or development, may provide for the suspending the operation of any provision of law or any bylaw or regulation made under such law, in so far as such provision is similar to or inconsistent with any of the provisions so the Scheme.

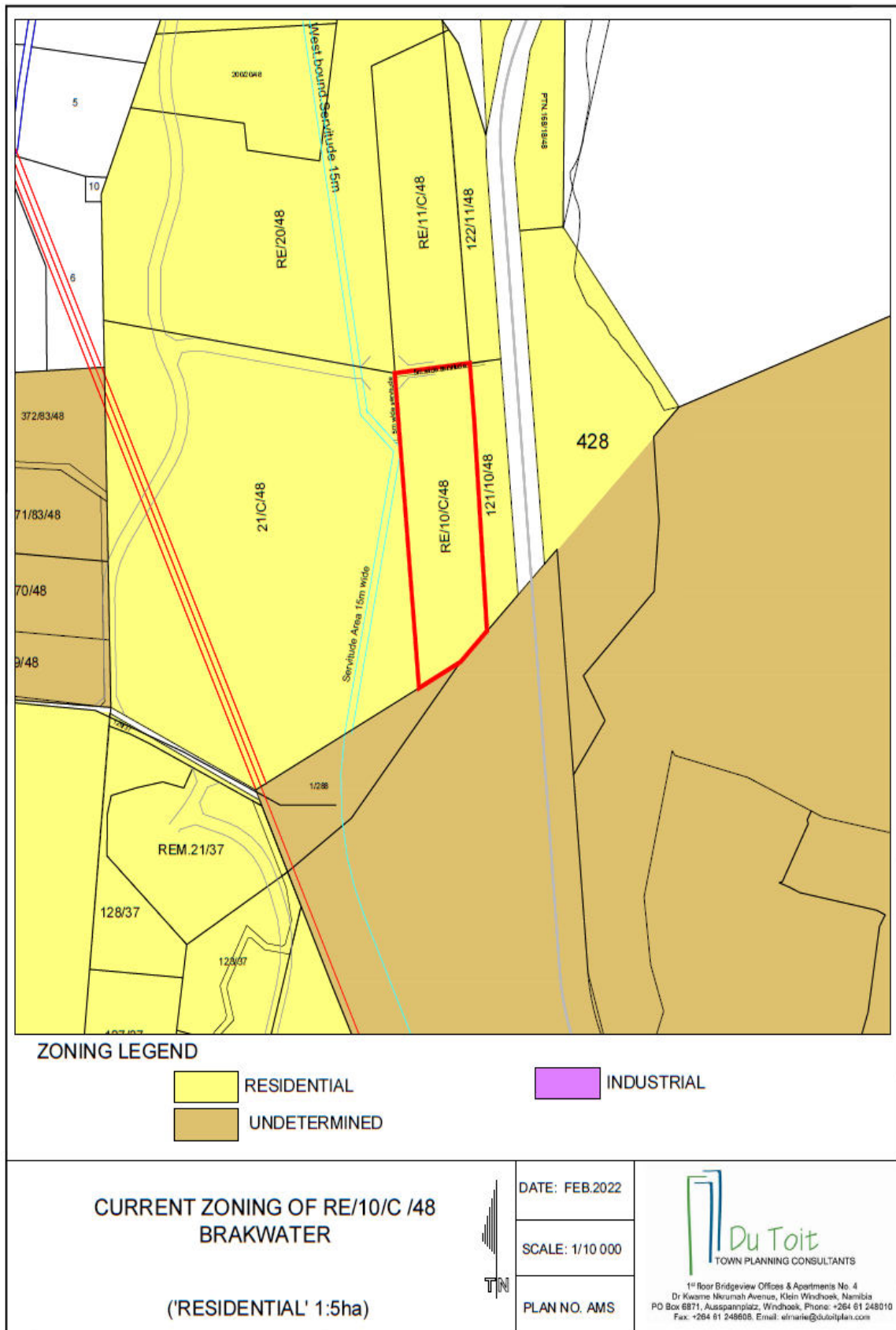


Figure 18: Current Zoning

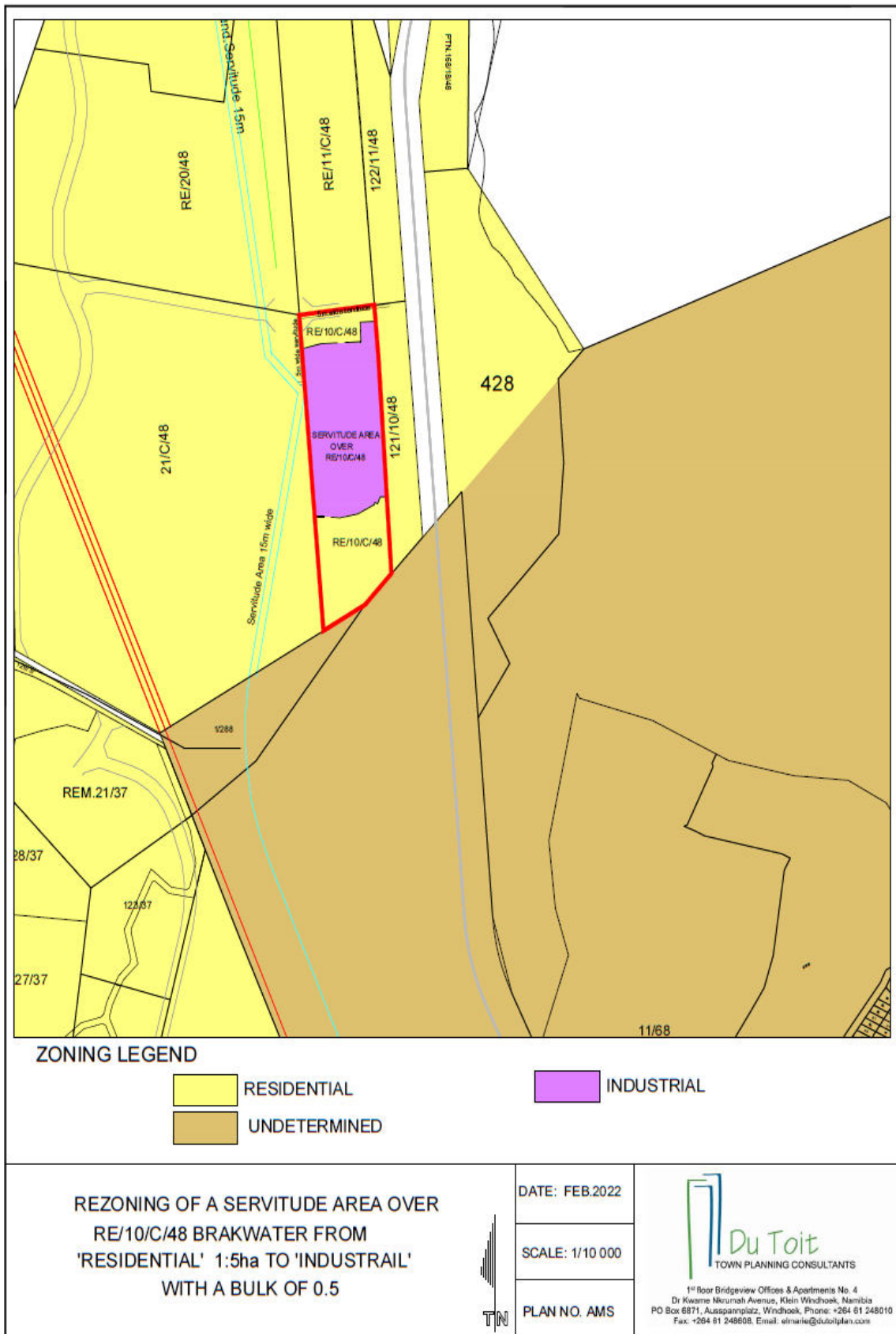


Figure 19: New Zoning

CONCLUSION AND IMPACT

The operations will not have a negative impact on the environment.

Table 1: Other laws, acts, regulations and policies

Laws, Acts, Regulations & Policies consulted:		
Electricity Act (No. 4 of 2007)	In accordance with the Electricity Act (No. 4 of 2007) which provides for the establishment of the Electricity Control Board and provide for its powers and functions; to provide for the requirements and conditions for obtaining licenses for the provision of electricity; to provide for the powers and obligations of licenses; and to provide for incidental matters: the necessary permits and licenses will be obtained.	The Proponent must abide to the Electricity Act.
Pollution Control and Waste Management Bill (guideline only)	The Pollution Control and Waste Management Bill is currently in preparation and is therefore included as a guideline only. Of reference to the mining, Parts 2, 7 and 8 apply. Part 2 provides that no person shall discharge or cause to be discharged, any pollutant to the air from a process except under and in accordance with the provisions of an air pollution license issued under section 23. Part 2 also further provides for procedures to be followed in license application, fees to be paid and required terms of conditions for air pollution licenses. Part 7 states that any person who sells, stores, transports or uses any hazardous substances or products containing hazardous substances shall notify the competent authority, in accordance with subsection (2), of the presence and quantity of those substances. The competent authority for the	The Proponent must adhere to the Pollution Control and Waste Management Bill.

	<p>purposes of section 74 shall maintain a register of substances notified in accordance with that section and the register shall be maintained in accordance with the provisions. Part 8 provides for emergency preparedness by the person handling hazardous substances, through emergency response plans.</p>	
<p>Water Resources Management Act</p>	<p>The Water Resources Management Act (No. 11 of 2013) stipulates conditions that ensure effluent that is produced to be of a certain standard. There should also be controls on the disposal of sewage, the purification of effluent, measures should be taken to ensure the prevention of surface and groundwater pollution and water resources should be used in a sustainable manner.</p>	<p>The Act must be consulted. Fresh water abstraction and waste-water discharge permits should be obtained when required.</p>
<p>Solid and Hazardous Waste Management Regulations: Local Authorities 1992</p>	<p>Provides for management and handling of industrial, business and domestic waste.</p>	<p>The Proponent must abide to the solid waste management provisions.</p>
<p>Hazardous Substances Ordinance (No. 14 of 1974)</p>	<p>The Ordinance applies to the manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social Welfare. Its primary purpose is to prevent hazardous substances from causing injury, ill-health or the death of human beings.</p>	<p>The Proponent must abide to the Ordinance's provisions.</p>
<p>Atmospheric Pollution Prevention Ordinance of Namibia (No. 11 of 1976)</p>	<p>Part 2 of the Ordinance governs the control of noxious or offensive gases. The Ordinance prohibits anyone from carrying on a scheduled process without a registration certificate in a controlled area. The registration certificate must be issued if it can</p>	<p>The proponent should adhere to the stipulations of the Atmospheric Pollution Prevention Ordinance.</p>

	be demonstrated that the best practical means are being adopted for preventing or reducing the escape into the atmosphere of noxious or offensive gases produced by the scheduled process.	
Nature Conservation Ordinance	The Nature Conservation Ordinance (No. 4 of 1975) covers game parks and nature reserves, the hunting and protection of wild animals, problem animals, fish and indigenous plant species. The Ministry of Environment, Forestry and Tourism (MEFT) administer it and provides for the establishment of the Nature Conservation Board.	The proposed project implementation is not located in a demarcated conservation area, national park or unique environments.
Forestry Act	The Forestry Act (No. 12 of 2001) specifies that there be a general protection of the receiving and surrounding environment. The protection of natural vegetation is of great importance, the Forestry Act especially stipulates that no living tree, bush, shrub or indigenous plants within 100m from any river, stream or watercourse, may be removed without the necessary license.	No removal of protected tree species or removal of mature trees should happen. The Ministry of Environment, Forestry and Tourism should be consulted when required.
EU Timber Regulation: FSC (2013)	Forest Stewardship Council (FSC) came into effect in March 2013, with the aim of preventing sales of illegal timber and timber products in the EU market. Now, any actor who places timber or timber products on the market for the first time must ensure that the timber used has been legally harvested and, where applicable, exported legally from the country of harvest.	The Proponent is advised to adhere to the regulation.
Labour Act	The Labour Act (No. 11 of 2007) contains regulations relating to the Health, Safety and Welfare of employees at work. These regulations are prescribed for among others safety relating to hazardous substances, exposure limits and physical hazards.	The proponent and contractor should adhere to the Labour Act.

	Regulations relating to the Health and Safety of Employees at Work are promulgated in terms of the Labour Act 6 of 1992 (GN156, GG1617 of 1 August 1997).	
Communal Land Rights	Communal land is land that belongs to the State and is held in trust for the benefit of the traditional communities living in those areas. Communal land cannot be bought or sold, but one can be given a customary land right or right of leasehold to a part of communal land in accordance with the provisions of the Communal Land Reform Act (No. 5 of 2002) and Communal Land Reform Amendment Act (No. 13 of 2013) . The Communal Land Reform Act provide for the allocation of rights in respect of communal land to establish Communal Land Boards to provide for the powers of Chiefs and Traditional Authorities and boards in relation to communal land and to make provision for incidental matters. Consent and access to land for the proposed project should be requested from the relevant traditional authority through the Regional Council and Regional Communal Land Boards.	Consent should be obtained from Traditional Authorities, Communal Boards, Chiefs, Kings, Queens etc. if required.
Traditional Authorities Act (No. 17 of 1995)	The Traditional Authorities Act (No. 17 of 1995) provide for the establishment of traditional authorities, the designation and recognition of traditional leaders; to define their functions, duties and powers; and to provide for matters incidental thereto.	Traditional Authorities should be consulted when required.
Public and Environmental Health Act	The Public and Environmental Health Act (No. 1 of 2015) provides with respect to matters of public health in Namibia. The objects of this Act are to: (a) promote public health and wellbeing; (b) prevent injuries, diseases and disabilities;	The proponent and contractor should adhere to the Public and Environmental Health Act.

	(c) protect individuals and communities from public health risks; (d) encourage community participation in order to create a healthy environment; and (e) provide for early detection of diseases and public health risks.	
Coronavirus (Covid-19) Pandemic	The current global Coronavirus (Covid-19) pandemic and the associated State of Emergency and health restrictions globally may result in some delays and logistic disruptions. The pandemic might have an impact on obtaining equipment, specialist workforce mobilisation and implementation of the project. The health restrictions may have an impact on campsite set-up, traveling of personal/workers and building of the infrastructure. The proponent, contractor and subcontractors should adhere to all the international, regional and local Covid-19 health restrictions and protocols.	The proponent, contractor and workforce should adhere to the restrictions and regulations.
National Heritage Act (No. 27 of 2004)	All protected heritage resources discovered need to be reported immediately to the National Heritage Council (NHC) and require a permit from the NHC before it may be relocated. This should be applied from the NHC.	The National Heritage Council should be consulted when required.
National Monuments Act of Namibia (No. 28 of 1969) as amended until 1979	No person shall destroy, damage, excavate, alter, remove from its original site or export from Namibia: (a) any meteorite or fossil; or (b) any drawing or painting on stone or a petroglyph known or commonly believed to have been executed by any people who inhabited or visited Namibia before the year 1900 AD; or (c) any implement, ornament or structure known or commonly believed to have been used as a	The proposed site for development is not within any known monument site both movable or immovable as specified in the Act, however in such an instance that any material or sites or archeologic importance are identified, it will be the responsibility of the developer to take the required route and notify the relevant commission.

	<p>mace, used or erected by people referred to in paragraph; or</p> <p>(d) the anthropological or archaeological contents of graves, caves, rock shelters, middens, shell mounds or other sites used by such people; or</p> <p>(e) any other archaeological or palaeontological finds, material or object; except under the authority of and in accordance with a permit issued under this section.</p>	
Public Health Act (No. 36 of 1919)	<p>Under this act, in section 119: “No person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.”</p>	<p>The proponent will ensure that all legal requirements of the project in relation to protection of the health of their employees and surrounding residents is protected and will be included in the EMP.</p> <p>Relevant protective equipment shall be provided for employees in construction.</p> <p>The development shall follow requirements and specifications in relation to water supply and sewerage handling and solid waste management so as not to threaten public health of future residents on this piece of land.</p>
Soil Conservation Act (No. 76 of 1969)	<p>The objectives of this Act are to:</p> <p>Make provisions for the combating and prevention of soil erosion;</p> <p>Promote the conservation, protection and improvement of the soil, vegetation, sources and resources of the Republic;</p>	<p>Only the area required for the operations should be cleared from vegetation to ensure the minimum impact on the soil through clearance for construction.</p>
Air Quality Act (NO. 39 of 2004)	<p>The Air Quality Act (No. 39 of 2004) intends to provide for national norms and standards regulating air quality monitoring, management and control by all spheres of government; for specific air quality measures; and for matters incidental thereto.</p>	<p>The proponent and contractor should adhere to the Air Quality Act.</p>
Vision 2030 and National	<p>Namibia’s overall development ambitions are articulated in the Nation’s Vision 2030. At the</p>	<p>The proposed project is an important element in employment creation.</p>

Development Plans	operational level, five-yearly national development plans (NDP's) are prepared in extensive consultations led by the National Planning Commission in the Office of the President. Currently the Government has so far launched a 4th NDP which pursues three overarching goals for the Namibian nation: high and sustained economic growth; increased income equality; and employment creation.	
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CONCLUSION AND IMPACT

It is believed the above administrative, legal and policy requirements which specifically guide and governs the activity will be followed and complied with in the planning, implementation and operations process.

A flowchart indicating the entire EIA process is shown in the *Figure* below:

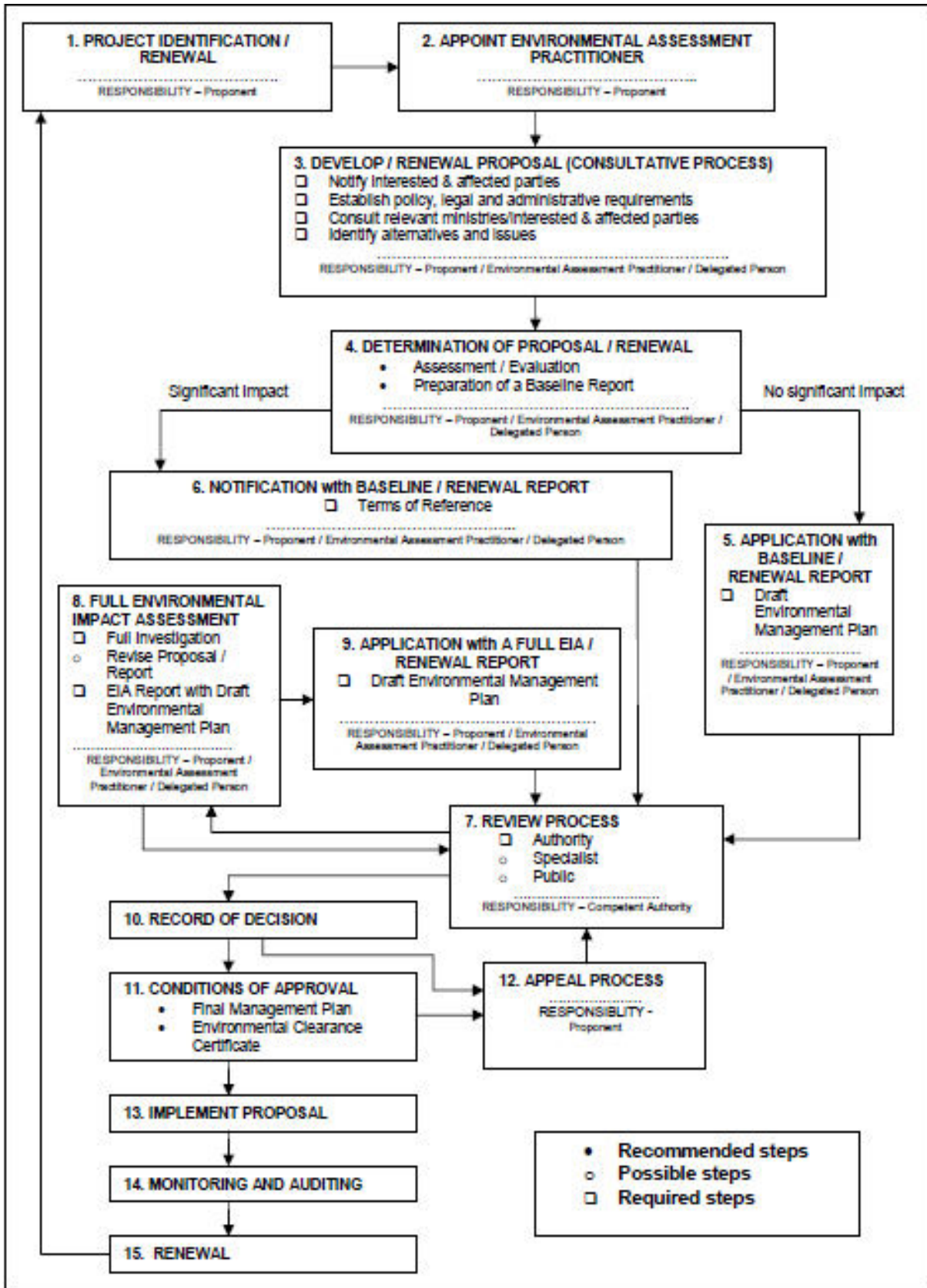


Figure 20: Flowchart of the assessment Process

8. AFFECTED NATURAL AND SOCIAL ENVIRONMENT

8.1. CLIMATE

In broad terms the climate can be described as semi-arid, with summer rainfalls and highest temperatures occurring during October and February. Maximum temperatures recorded in the area vary just under 40 degrees Celsius with an average annual temperature of more than 22 degrees Celsius (*Weather - the Climate in Namibia, 1998 – 2012*).

Rainfall in the form of thunderstorms is experienced in the area during the summer months between October and April. The annual average rainfall for Windhoek and surroundings is 350mm to 400mm however the average evaporation rate is 3 400mm a year (*Weather - the Climate in Namibia, 1998 – 2012*). Over 70% of the rainfall occurs in the in the summer months' period between November and March. Rainfall in the area is typically sporadic and unpredictable however the average highest rainfall months are January to March.

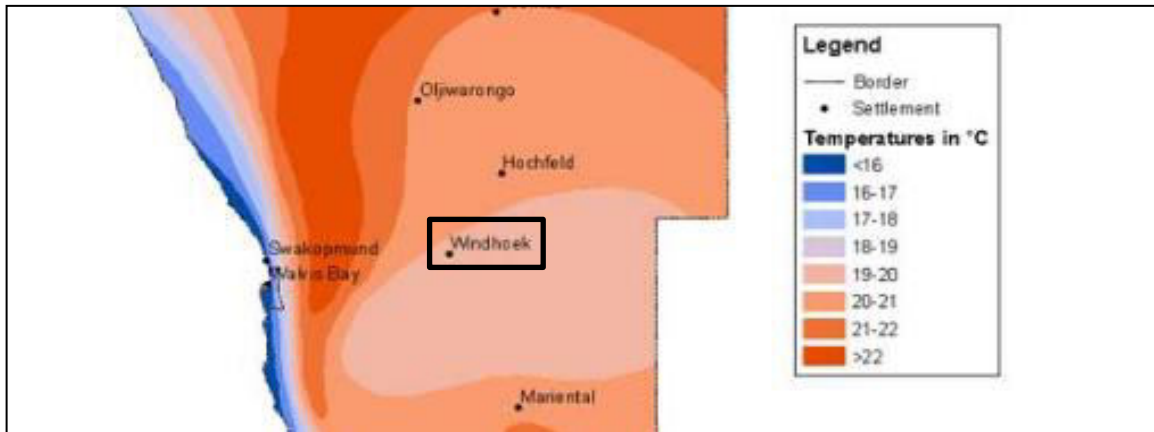


Figure 21: Average temperatures (*Atlas of Namibia Project, 2002*)

CONCLUSION AND IMPACT

The activities will not have an impact on the climate.

8.2. GEOLOGY, SOILS AND GEOHYDROLOGY

The project site is in the Khomas Trough on a geological area classified as Damara Supergroup and Gariep Complex. See *Map* below.

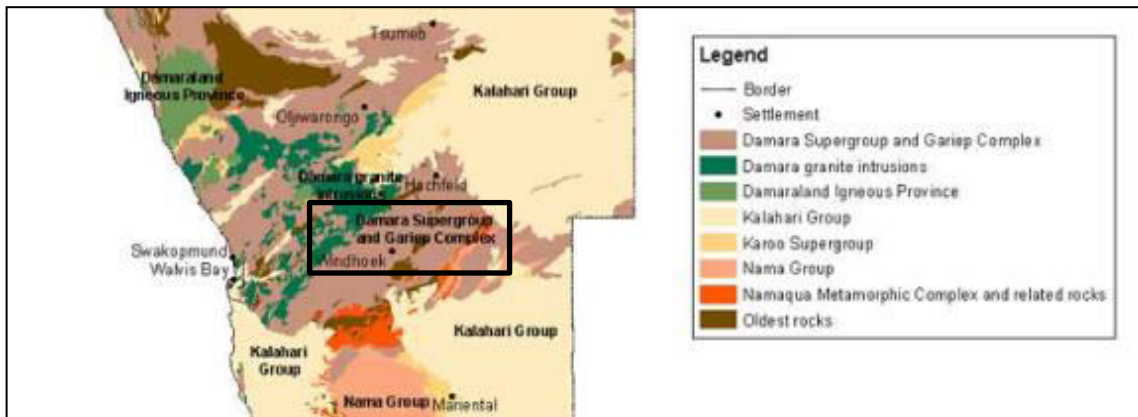


Figure 22: Geology of Namibia (Atlas of Namibia Project, 2002)



Figure 23: General landscape of the site

The project site is generally even with some slightly higher areas at places. Natural slopes are seen near natural drainage courses on the project site. The soil is suitable for development however the soil is also erodible and should not be cleared unnecessarily from vegetation if not required for the placement of buildings or roads. Unnecessary clearing of soil will lead to erosion.

CONCLUSION AND IMPACT

The activities will not impact on the geology, soils and geohydrology of the area. The surface drainage canals will be kept open in order that water can flow through.

8.3. BIODIVERSITY AND VEGETATION

The project site forms part of the Tree and Shrub Savannah Biome (specifically the Highland Savannah). There are little to no vegetation/shrubs on the project site however some trees are present on the site. Human interference is largely visible. Vegetation was cleared on the majority of the project site and surrounding areas.



Figure 24: Biomes of Namibia (Atlas of Namibia, 2002)



Figure 25: Trees present on site

The natural characteristics of the project site namely the vegetation clearance and the destruction of habitats is expected to further on have a low impact on the environment before the mitigation measures are taken and after the mitigation measures are taken, the impact will be very low.

CONCLUSION AND IMPACT

The activities will have a low impact on vegetation, shrubs and trees.

8.4. SOCIAL-ECONOMIC COMPONENT

The Project Site is mainly surrounded by offices, business buildings, industrial activities and some residential uses. The proposed/current utilisation will have a positive impact on

the socio-economic environment because of additional employment and the supply of food products. The operations will be conducted with little disturbance to the environment and towards the individuals that are residing or working in the area.

CONCLUSION AND IMPACT

The activities will have a positive impact on the community since employment will be created and food products will be available.

8.5. CULTURAL HERITAGE

The proposed project site is not known to have any historical significance prior to or after Independence in 1990. The specific area does not have any National Monuments and the specific site has no record of any cultural or historical importance or on-site resemblance of any nature. No graveyard or related article was found in the area. However, the Namibian National Heritage Act (No. 27 of 2004) provides for the protection and conservation of places and objects of heritage significance and the registration of such places and objects and to provide for incidental matters.

CONCLUSION AND IMPACT

No heritage resources or graveyards were observed on the site or in the area.

8.6. SENSE OF PLACE

The proposed activities do not have a large/negative impact on the sense of place in the area. An untidy or badly managed site can detract from the ecological well-being and individuality of the area. Unnecessary disturbance to the surroundings could be caused by poorly planned or poorly managed operational activities. The project site should be kept neat and clean where possible. Vegetation should not be removed or harmed if not necessary since it covers topsoil which prevents erosion. Noise and dust should be limited because of the neighbouring activities.

CONCLUSION AND IMPACT

The impact on the sense of place will be low.

8.7. HEALTH

The safety, security and health of the labour force, employees and neighbours are of great importance, workers should be orientated with the maintenance of safety and health procedures and they should be provided with PPE (Personal Protective Equipment). A

health and safety officer are employed to manage, coordinate and monitor risk and hazard and report all health and safety related issues in the workplace. The introduction of external workers into the area is sometimes accompanied with criminal activities posing security risks for neighbours. However, the proponent will take certain measures to prevent any activity of this sort. The welfare and quality of life of the neighbours and workforce needs to be considered for the project to be a success on its environmental performance. Conversely, the process should not affect the overall health of persons related to the project including the neighbours.

CONCLUSION AND IMPACT

The proposed activities will have a low impact on the health of the community.

9. INCOMPLETE OR UNAVAILABLE INFORMATION

The number of people that will be employed on the site will depend on the type and scope of the activities.

10. IMPACT ASSESSMENT AND EVALUATION

The Environmental Impact Assessment sets out potential positive and negative environmental impacts associated with the project site. The following assessment methodology will be used to examine each impact identified, see *Table* below:

Table 2: Impact Evaluation Criterion (DEAT 2006)

Criteria	Rating (Severity)	
Impact Type	+	Positive
	O	No Impact
	-	Negative
Significance of impact being either	L	Low (Little or no impact)
	M	Medium (Manageable impacts)
	H	High (Adverse impact)

Probability:	Duration:
5 – Definite/do not know	5 - Permanent
4 – Highly probable	4 – Long-term (impact ceases)
3 – Medium probability	3 – Medium term (5 – 15 years)
2 – Low probability	2 – Short-term (0 – 5 years)

1 – Improbable	1 - Immediate
0 - None	
Scale:	Magnitude:
5 – International	10 – Very high/do not know
4 – National	8 - High
3 – Regional	6 - Moderate
2 – Local	4 - Low
1 – Site only	2 - Minor
	0 - None

The impacts on the receiving environment are discussed in the paragraphs below:

10.1. IMPACTS DURING THE OPERATIONAL PHASE

10.1.1. ECOLOGICAL IMPACTS

Staff, workers and visitors should only make use of walkways and existing roads to minimise the impact on the environment. Minimise the area of disturbance by restricting movement to the designated working areas during maintenance.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Ecology Impacts	-	2	2	4	2	L	M

10.1.2. DUST POLLUTION AND AIR QUALITY

Vehicles transporting goods and staff will contribute to the release of hydrocarbon vapours, carbon monoxide and sulphur oxides into the air. Possible release of sewer odour, due to sewer system failure of maintenance might also occur. All maintenance of bulk services and infrastructure at the project site has to be designed to enable environmental protection.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Dust & Air Quality	-	2	2	4	3	L	M

10.1.3. CONTAMINATION OF GROUNDWATER

Spillages might also occur during maintenance. This could have impacts on groundwater especially in cases of large sewer spills. Proper containment should be used in cases of sewerage system maintenance. Oil and chemical spillages may have a health impact on groundwater users. Potential impact on the natural environment from possible polluted groundwater also exists.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Groundwater contamination	-	2	2	4	2	L	M

10.1.4. GENERATION OF WASTE

Household waste from the activities at the site and from the staff working at the site will be generated. The waste will be collected, sorted to be recycled and stored in on site for transportation and disposal at an approved landfill site.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Waste Generation	-	1	2	2	2	L	M

10.1.5. FAILURE IN RETICULATION PIPELINES

There may be a potential release of sewage, stormwater or water into the environment due to pipeline/system failure. As a result, the spillage could be released into the environment and could potentially be a health hazard to surface and groundwater. Proper reticulation pipelines and drainage systems should be installed. Regular bulk services infrastructure and system inspection should be conducted.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Failure of Reticulation Pipeline	-	2	2	4	2	L	M

10.1.6. FIRES AND EXPLOSIONS

There should be sufficient water available for firefighting purposes. Ensure that all fire-fighting devices are in good working order and are serviced. All personnel have to be trained about responsible fire protection measures and good housekeeping such as the removal of flammable materials on site. Regular inspections should be carried out to inspect and test firefighting equipment by the contractor.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Fires and Explosions	-	2	2	4	2	L	M

10.1.7. HEALTH, SAFETY AND SECURITY

The safety, security and health of the labour force, employees and neighbours are of great importance, workers should be orientated with the maintenance of safety and health procedures and they should be provided with PPE (Personal Protective Equipment). No open flames, smoking or any potential sources of ignition should be allowed at the project location. Signs such as 'NO SMOKING' must be prominently displayed in parts where inflammable materials are stored on the premises.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Safety & Security	-	1	2	4	2	L	M

10.2. CUMULATIVE IMPACTS

These are impacts on the environment, which results from the incremental impacts when added to other past, present, and reasonably foreseeable future actions regardless of which person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. In relation to an activity, it means the impact of an activity that in it may not become significant when added to the existing and potential impacts resulting from similar or diverse activities or undertakings in the area.

Possible cumulative impacts associated with the proposed project include sewer damages/maintenance, uncontrolled traffic and destruction of the vegetation or the environment. These impacts could become significant especially if it is not properly supervised and controlled. This could collectively impact on the environmental conditions in the area.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Cumulative Impacts	-	2	3	4	2	L	M

11. CONCLUSION

In line with the Environmental Management Act (No 7 of 2007), *Green Earth Environmental Consultants* have been appointed to conduct an Environmental Impact Assessment for the rezoning of Portion 10 of Farm Brakwater No. 48 from 'residential' to 'industrial' and for the renewal of the Environmental Clearance for the operation of Bokomo Namibia. It is believed that the proposed activities can largely benefit the employment and food products need.

The negative environmental impacts that may be visible in the operational phase of the project include: increases in solid waste generation for example food and plastics, etc., increased stress on waste disposal facilities, increase in water consumption and waste water generation, can result in an increase in traffic on the nearby roads and there can be an impact on the occupational health and safety of workers. However, this project is believed to be an asset to this area.

After assessing all information available on this project, *Green Earth Environmental Consultants* believe that the activities will not have a large negative effect on the environment if operations are conducted in accordance with the Environmental Management Plan.

12. RECOMMENDATION

It is therefore recommended that the Ministry of Environment, Forestry and Tourism through the Environmental Commissioner support and approve the Environmental Clearance for the rezoning of Portion 10 of Farm Brakwater No. 48 from 'residential' to 'industrial' and for the renewal of the Environmental Clearance for the operation of Bokomo Namibia and for the following listed activities:

LAND USE AND DEVELOPMENT ACTIVITIES

5.1 The rezoning of land from -

(a) residential use to industrial or commercial use.

LIST OF REFERENCES

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Constitution of the Republic of Namibia, 1990. National Legislative Bodies. Namibia, pp. 6 – 63.

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Mannheimer, C. & Curtis, B. 2009. *Le Roux and Muller's Guide to the Trees & Shrubs of Namibia*. Windhoek: Macmillan Education Namibia, pp. 249 – 439.

Namibian Environmental Assessment Policy, 1995. *Ministry of Environment, Forestry and Tourism*. Windhoek. Namibia, pp. 3 – 7.

Nature Conservation Ordinance, 1975. Windhoek. Namibia, pp. 4 – 47.

Soil Conservation Act, 1969. *Office of the Prime Minister*. Windhoek. Namibia, pp. 1 – 14.

Water Resource Management Act, 2004. *Office of the Prime Minister*. Windhoek. Namibia, pp. 6 – 67.

APPENDIX A: CURRICULUM VITAE OF CHARLIE DU TOIT

1. **Position:** Environmental Practitioner
2. **Name/Surname:** Charl du Toit
3. **Date of Birth:** 29 October 1960
4. **Nationality:** Namibian

5. **Education:**

Name of Institution	University of Stellenbosch, South Africa		
Degree/Qualification	Hons B (B + A) in Business Administration and Management		
Date Obtained	1985-1987		
Name of Institution	University of Stellenbosch, South Africa		
Degree/Qualification	BSc Agric Hons (Chemistry, Agronomy and Soil Science)		
Date Obtained	1979-1982		
Name of Institution	Boland Agricultural High School, Paarl, South Africa		
Degree/Qualification	Grade 12		
Date Obtained	1974-1978		

6. **Membership of Professional Association:** EAPAN Member (Membership Number: 112)

7. **Languages:**

	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>
English	Good	Good	Good
Afrikaans	Good	Good	Good

8. **Employment Record:**

<u>From</u>	<u>To</u>	<u>Employer</u>	<u>Position(s) held</u>
2009	Present	Green Earth Environmental Consultants	Environmental Practitioner
2005	2008	Elmarie Du Toit Town Planning Consultants	Manager
2003	2005	Pupkewitz Megabuild	General Manager
1995	2003	Agra Cooperative Limited	Manager Trade
1989	1995		Chief Agricultural Consultant

		Namibia	
		Development	Agricultural
1985	1988	Corporation	Researcher
		Ministry of	
		Agriculture	

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.



Charl du Toit

APPENDIX B: CURRICULUM VITAE OF CARIEN VAN DER WALT

1. **Position:** Environmental Consultant
2. **Name/Surname:** Carien van der Walt
3. **Date of Birth:** 6 August 1990
4. **Nationality:** Namibian

5. **Education:**

Institution	Degree/Diploma	Years
University of Stellenbosch	B.A. (Degree) Environment and Development	2009 to 2011
University of South Africa	B.A. (Honours) Environmental Management	2012 to 2013

6. **Membership of Professional Associations:**

EAPAN Member (Membership Number: 113)

7. **Languages:**

Language	Speaking	Reading	Writing
English	Good	Good	Good
Afrikaans	Good	Good	Good

8. **Employment Record:**

From	To	Employer	Positions Held
07/2013	Present	Green Earth Environmental Consultants	Environmental Consultant
06/2012	03/2013	Enviro Management Consultants Namibia	Environmental Consultant
12/2011	05/2012	Green Earth Environmental Consultants	Environmental Consultant

9. **Detailed Tasks Assigned:**

Conducting the Environmental Impact Assessment, Environmental Management Plan, Public Participation, Environmental Compliance and Environmental Control Officer

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engage.

Carien van der Walt

APPENDIX C: ENVIRONMENTAL MANAGEMENT PLAN