

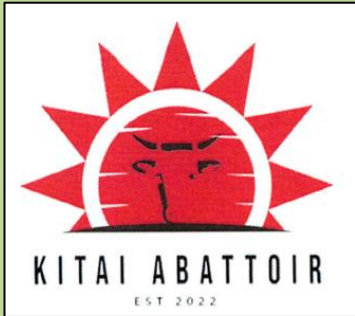

<p>Project Name:</p>	<p>BACKGROUND INFORMATION DOCUMENT FOR THE CONSTRUCTION AND OPERATION OF A CATTLE ABATTOIR ON A PORTION OF PORTION 7 OF FARM KLEIN OKAPUKA No. 51, WINDHOEK, KHOMAS</p>
<p>The Proponent:</p>	<p>Kitai Abattoir (Proprietor) Limited P.O. Box 90570 KLEIN WINDHOEK</p> 
<p>Prepared by:</p>	 <p>1st floor Bridgeview Offices & Apartments, No. 4 Dr Kwame Nkrumah Avenue, Klein Windhoek, Namibia PO Box 6871, Ausspanplatz, Windhoek</p>
<p>Release Date:</p>	<p>June 2024</p>
<p>Consultant:</p>	<p>C. Du Toit C. Van Der Walt Cell: 081 127 3145 Email: charlie@greenearthnamibia.com</p>

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THE FOLLOWING IS A BACKGROUND INFORMATION DOCUMENT FOR THE ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN TO OBTAIN AN ENVIRONMENTAL CLEARANCE FOR THE CONSTRUCTION AND OPERATION OF A CATTLE ABATTOIR ON A PORTION OF PORTION 7 OF FARM KLEIN OKAPUKA No. 51, WINDHOEK, KHOMAS REGION

1. Introduction

Green Earth Environmental Consultants have been appointed by the proponent, Kitai Abattoir (Proprietor) Limited, to attend to and complete an Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) in order to obtain an Environmental Clearance Certificate to construct and operate a cattle abattoir on a 5ha portion (Portion F) of Portion 7 of Farm Klein Okapuka No. 51, Windhoek, Khomas Region as per the requirements of the Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012).

The Background Information Document (BID) serves to convey information regarding the proposed project to Interested and Affected Parties (I&APs) to allow them the opportunity to comment on the proposed project.

This document contains the following information:

- A brief background on the proposed project.
- The approach to the environmental assessment process.
- Environmental and planning issues identified.
- How to become involved.

2. Background Information on Project

2.1 Project background

The Proponent, Kitai Abattoir (Proprietor) Limited intends to set up an abattoir to slaughter and process Wagyu Cattle. Wagyu beef is a premium beef marketed into specialist markets at a premium price to the normal beef produced in Namibia. For that reason, the Wagyu Cattle is normally slaughtered in independent, dedicated abattoirs to ensure attention to detail and preservation of the integrity of the meat.

Compared to other beef, Wagyu Beef has a higher percentage of monounsaturated fat and low cholesterol (stearic acid) content with a ratio of 2:1 to saturated fats, making it the healthiest beef available. Highly marbled beef not only has a different flavor profile, but also genetically contains higher levels of valuable omega 3 and omega 6 fatty acids. These fatty acids (conjugated linoleic acid) have highly anti carcinogenic and anti-inflammatory properties and are known to aid in protection against high blood pressure, heart disease, Alzheimer and arthritis.

The Wagyu Cattle Breeders Society of Namibian (NWS) was registered on 1 November 2017 under the Livestock Improvement, Act 25 of 1977, and the inaugural meeting of the Board was

held on 17 July 2018. NWS is also an associate member of the World Wagyu Council. There are about 277 fullblood and 2,167 Wagyu crossbreeds registered in Namibia, and these numbers are growing rapidly.

Due to the growing number of producers, the need for a Wagyu feedlot and abattoir has now been established. Initially it is expected to slaughter 20 animals/day (6200 per annum) which will eventually grow to 30 animals/day (9800/per annum).

Permanent employment for ±50 people will be created once the abattoir is in full operation.

The construction of the abattoir and start of the slaughtering operations are subject to obtaining all the statutory approvals. Once the approvals are obtained, it will take ± 18 months for the abattoir to come into operation.

2.2 Site details

The abattoir will be constructed on a 5ha portion of land (Portion F) to be created from the subdivision of Portion 7 of Farm Klein Okapuka No. 51, Windhoek, Khomas Region. The Proponent signed a purchase agreement with the owner of Portion 7 of Farm Klein Okapuka No. 51, Windhoek. The Portion is located in the Windhoek Municipal Area approximately 30 km outside Windhoek to the north of the Brakwater area, the western side of the B1 Trunk Road enroute to Okahandja.

The Namibia Poultry Industries, broiler farms, broiler abattoir, clinic and water treatment facility as well as the Namib Mills Bakery are also located on Portion 7 of Farm Klein Okapuka No. 51, Windhoek from which Portion 7 for the abattoir will be created.

The Proponent appointed Du Toit Town Planning Consultants to submit an application to City of Windhoek and the Urban and Regional Planning Board for the subdivision of Portion 7 of Farm Klein Okapuka No. 51, Windhoek to create the 5 ha portion (Portion F as indicated on the plans below) for the abattoir as well as to obtain COW's consent to use the Portion for an abattoir. The locality of the site is shown on the plans below:

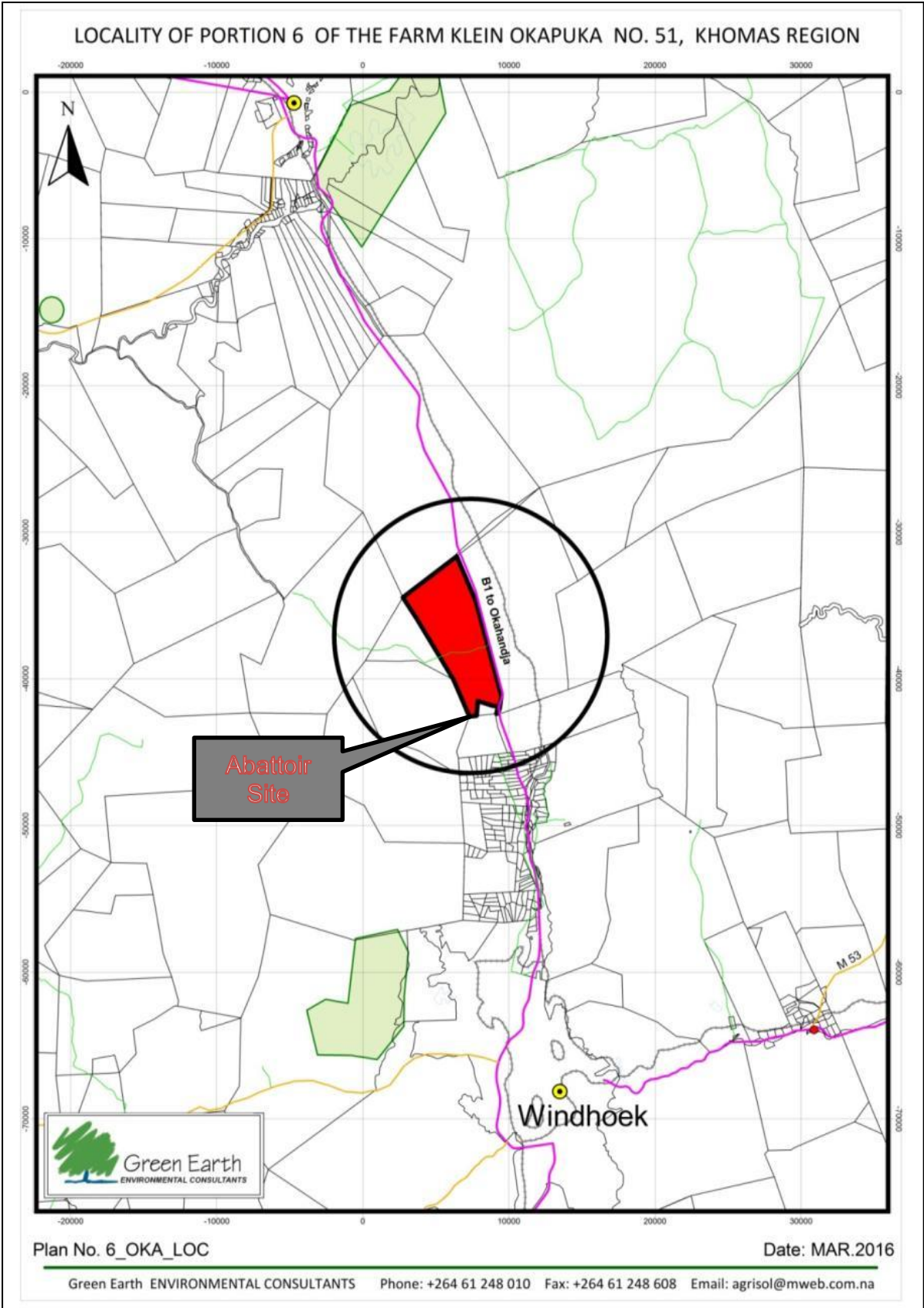


Figure 1: Project site just outside Windhoek

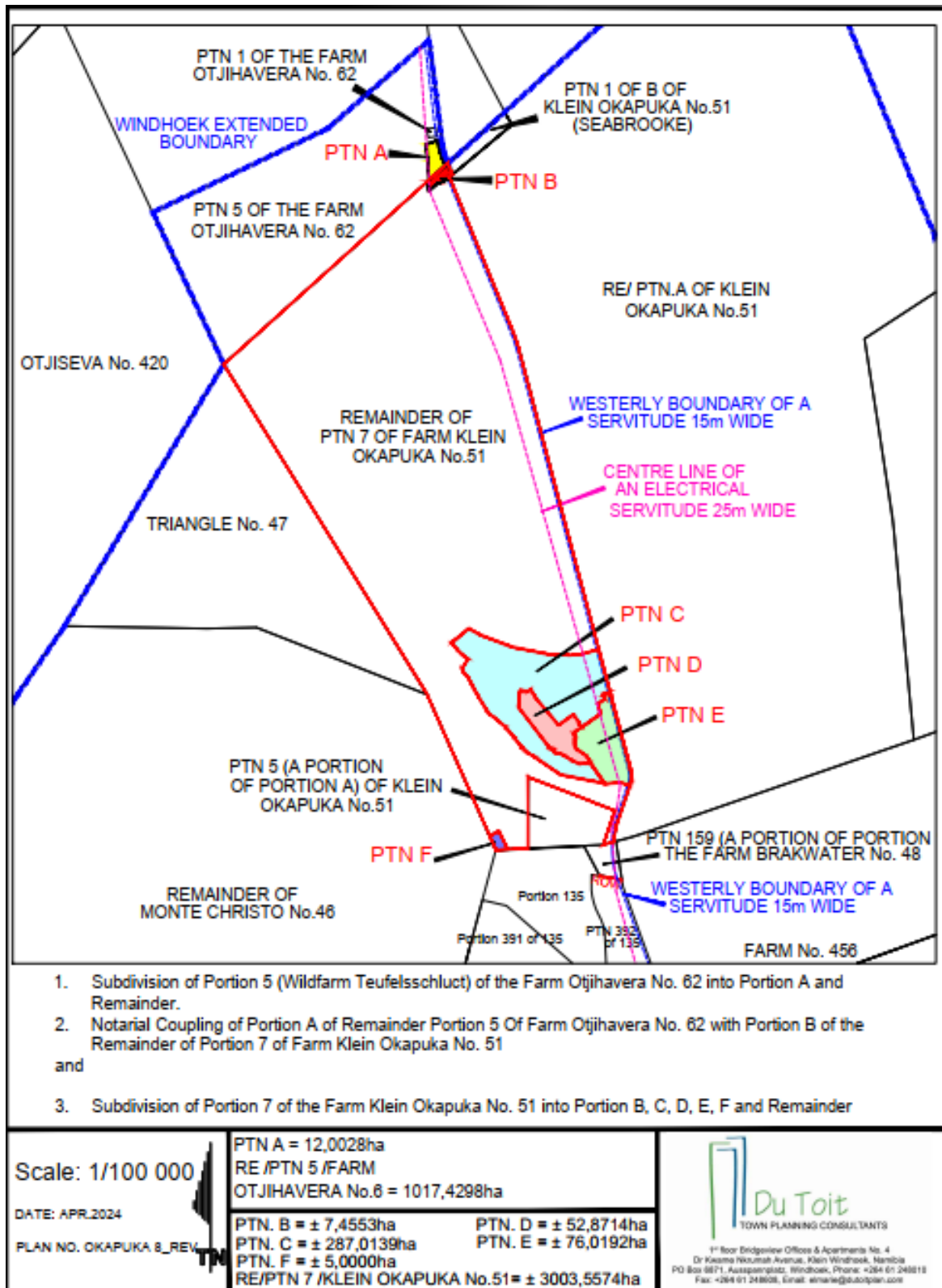


Figure 2: Portion sizes

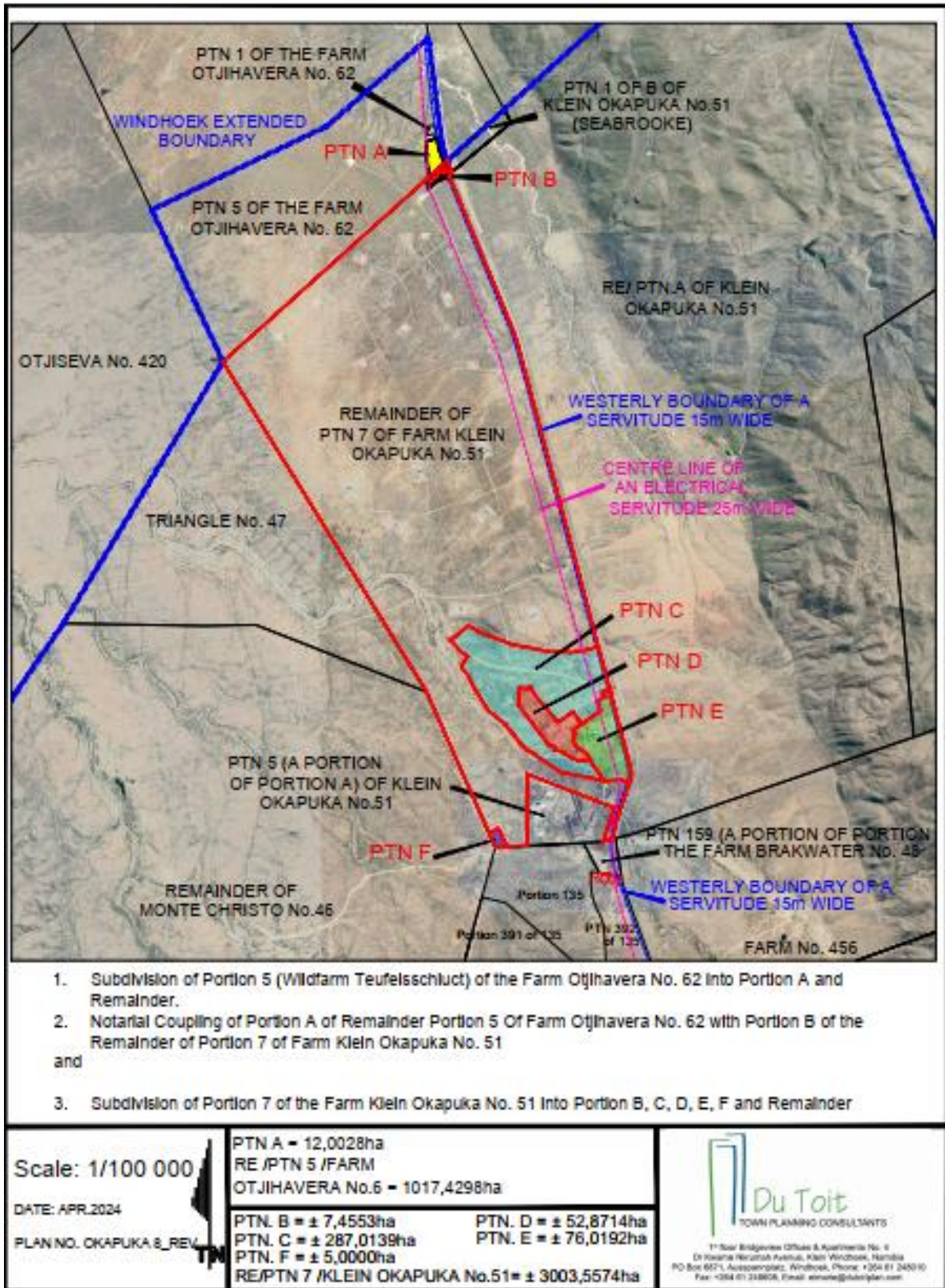


Figure 3: Proposed site for Kitai Abattoir (Zoomed in Map)

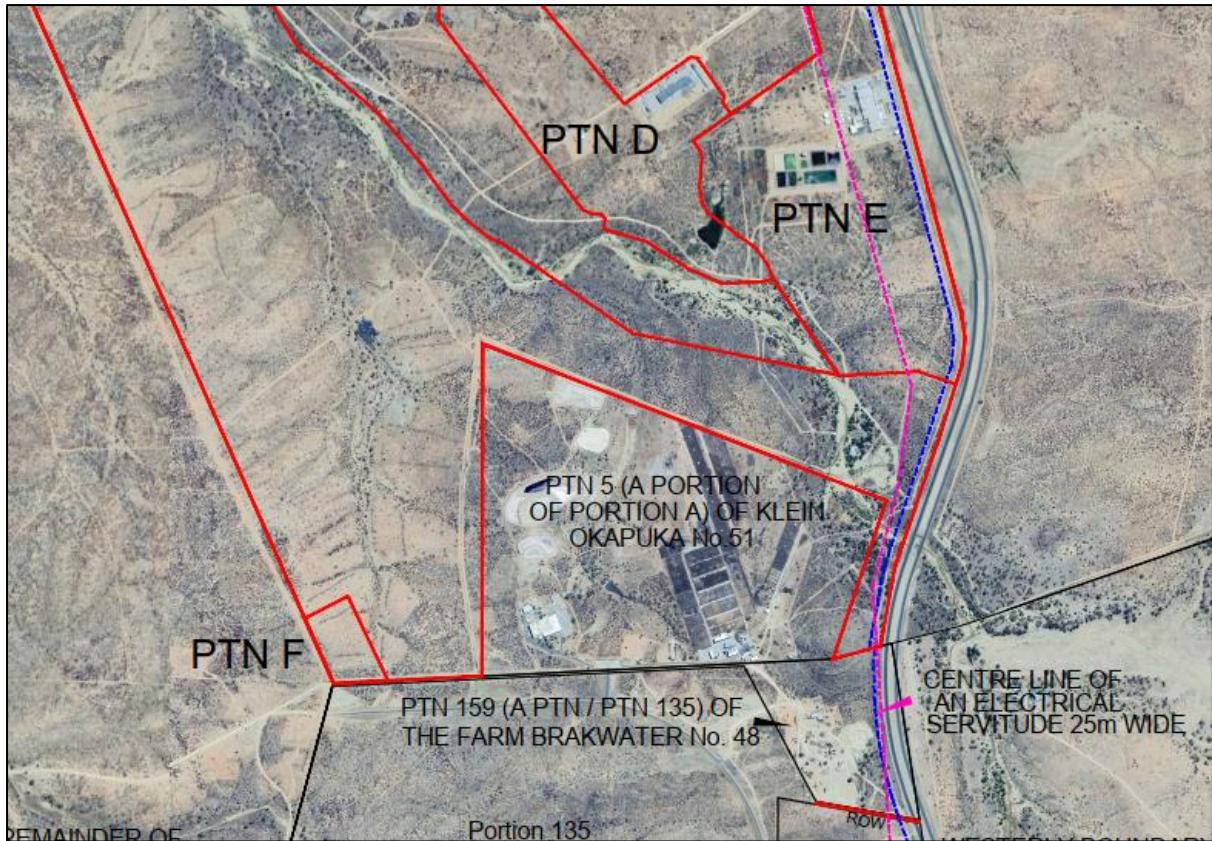


Figure 4: Site to be used for operations

2.3. Site utilization

The Proponent appointed Burmeister and Partners Consulting Engineers (Pty) Ltd as engineers for the design of the abattoir. See below the Preliminary Site Boundary and Layout Plan showing how the site will be utilized:

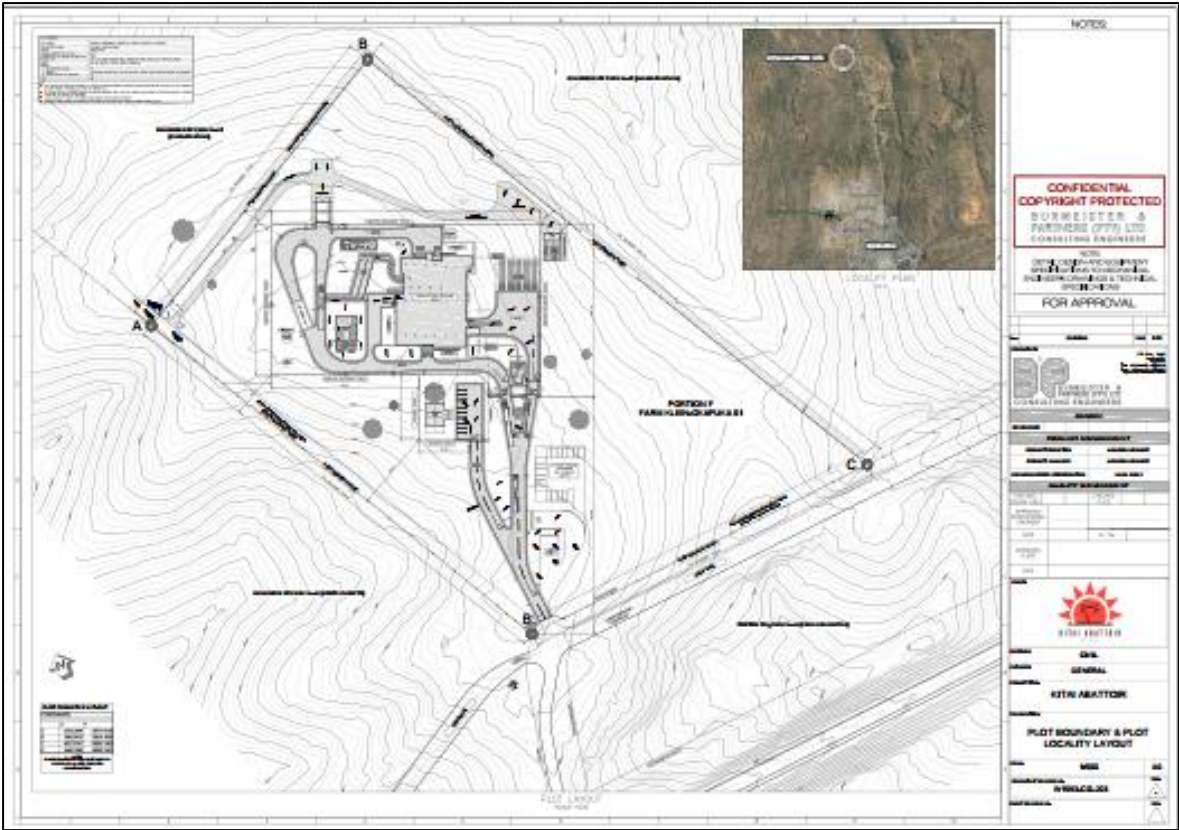


Figure 5: Site Layout and Boundary Plan

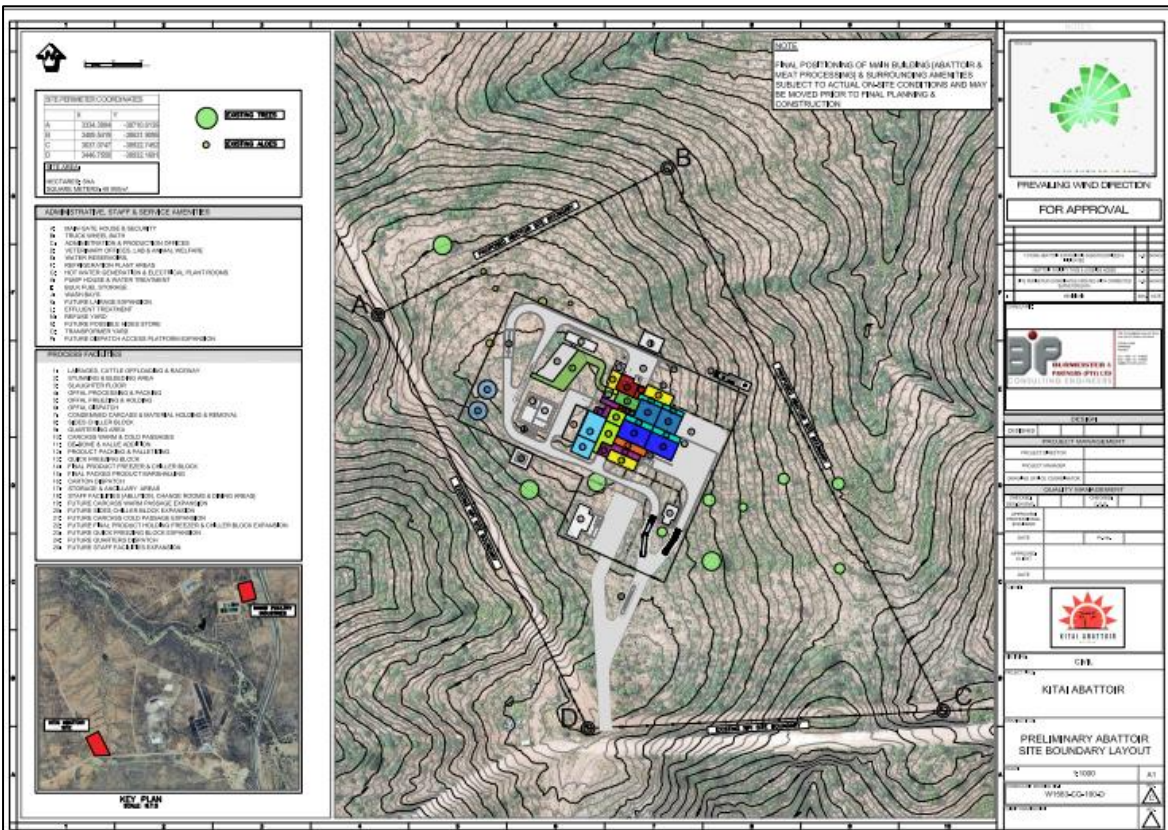


Figure 6: Site utilization Plan

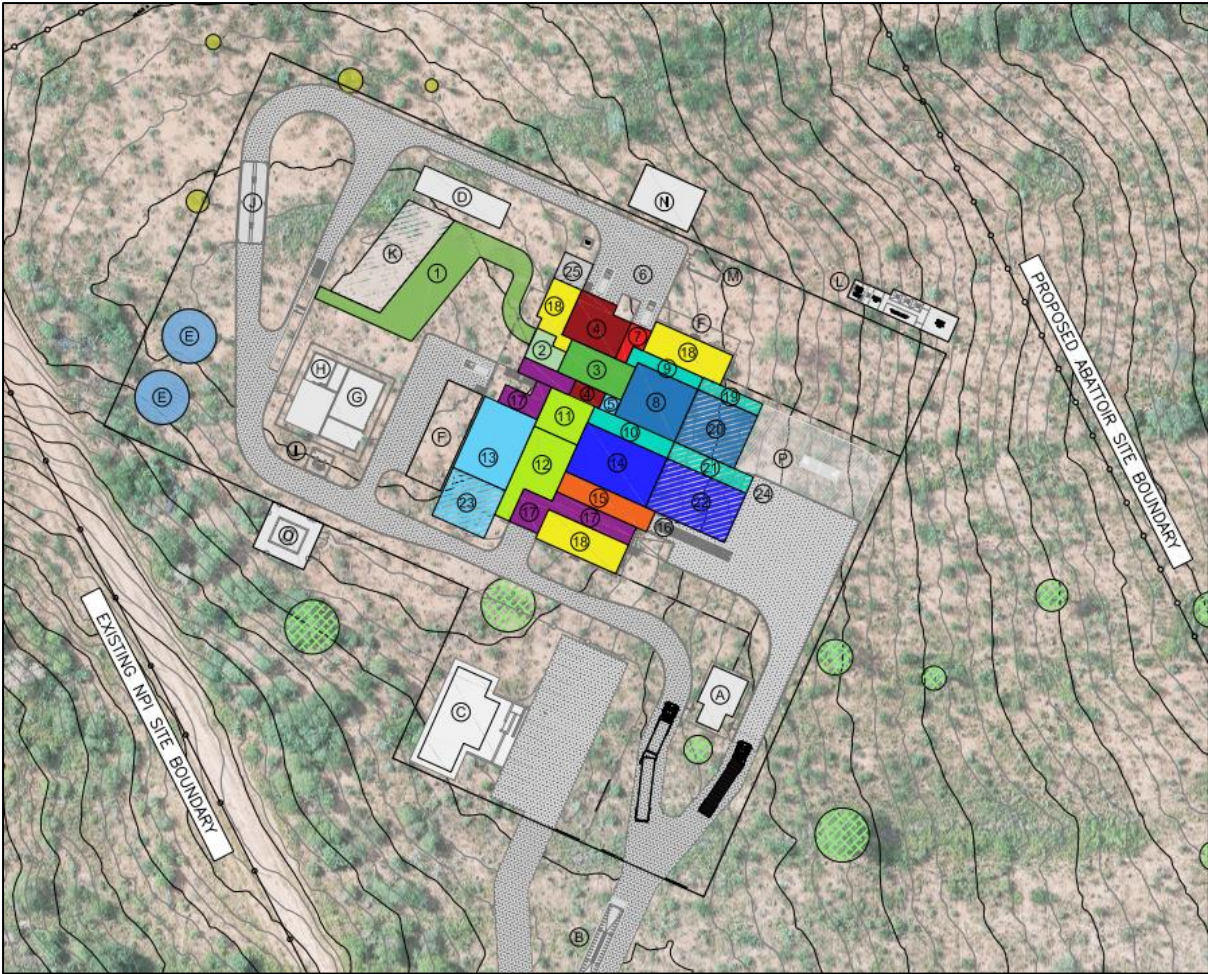


Figure 7: Placement of activities on the site

ADMINISTRATIVE, STAFF & SERVICE AMENITIES	PROCESS FACILITIES
A: MAIN GATE HOUSE & SECURITY	1: LAIRAGES, CATTLE OFFLOADING & RACEWAY
B: TRUCK WHEEL BATH	2: STUNNING & BLEEDING AREA
C: ADMINISTRATION & PRODUCTION OFFICES	3: SLAUGHTER FLOOR
D: VETERINARY OFFICES, LAB & ANIMAL WELFARE	4: OFFAL PROCESSING & PACKING
E: WATER RESERVOIRS,	5: OFFAL FREEZING & HOLDING
F: REFRIGERATION PLANT AREAS	6: OFFAL DISPATCH
G: HOT WATER GENERATION & ELECTRICAL PLANT ROOMS	7: CONDEMNED CARCASS & MATERIAL HOLDING & REMOVAL
H: PUMP HOUSE & WATER TREATMENT	8: SIDES CHILLER BLOCK
I: BULK FUEL STORAGE	9: QUARTERING AREA
J: WASH BAYS	10: CARCASS WARM & COLD PASSAGES
K: FUTURE LAIRAGE EXPANSION	11: DE-BONE & VALUE ADDITION
L: EFFLUENT TREATMENT	12: PRODUCT PACKING & PALLETIZING
M: REFUSE YARD	13: QUICK FREEZING BLOCK
N: FUTURE POSSIBLE HIDES STORE	14: FINAL PRODUCT FREEZER & CHILLER BLOCK
O: TRANSFORMER YARD	15: FINAL PACKED PRODUCT MARSHALLING
P: FUTURE DISPATCH ACCESS PLATFORM EXPANSION	16: CARTON DISPATCH
	17: STORAGE & ANCILLARY AREAS
	18: STAFF FACILITIES [ABLUTION, CHANGE ROOMS & DINING AREAS]
	19: FUTURE CARCASS WARM PASSAGE EXPANSION
	20: FUTURE SIDES CHILLER BLOCK EXPANSION
	21: FUTURE CARCASS COLD PASSAGE EXPANSION
	22: FUTURE FINAL PRODUCT HOLDING FREEZER & CHILLER BLOCK EXPANSION
	23: FUTURE QUICK FREEZING BLOCK EXPANSION
	24: FUTURE QUARTERS DISPATCH
	25: FUTURE STAFF FACILITIES EXPANSION

Figure 8: Legend to the activities on the site plan

3. Supporting Bulk Services and Infrastructure Provision

Burmeister and Partners (Pty) Ltd Consulting Engineers were appointed as the engineering consultants for the Kitai Abattoir. They investigated the bulk services to support the abattoir for which an overview is provided below. The proposed facility will require the following services:

3.1. Access

The abattoir site (Portion F) takes access from District Road D1474 which is located south of Portion F. Road D1474 links up with Main Road B1 at the intersection and provides access to the Brakwater North Road. Road D1474 is tarred except for a small ±300m section which is a gravel road. A 20 meter right of way servitude will be created over the Remainder of Portion 135 and Portion 159 of Farm Brakwater No. 48. The proposed access to the site is shown on the photo below:

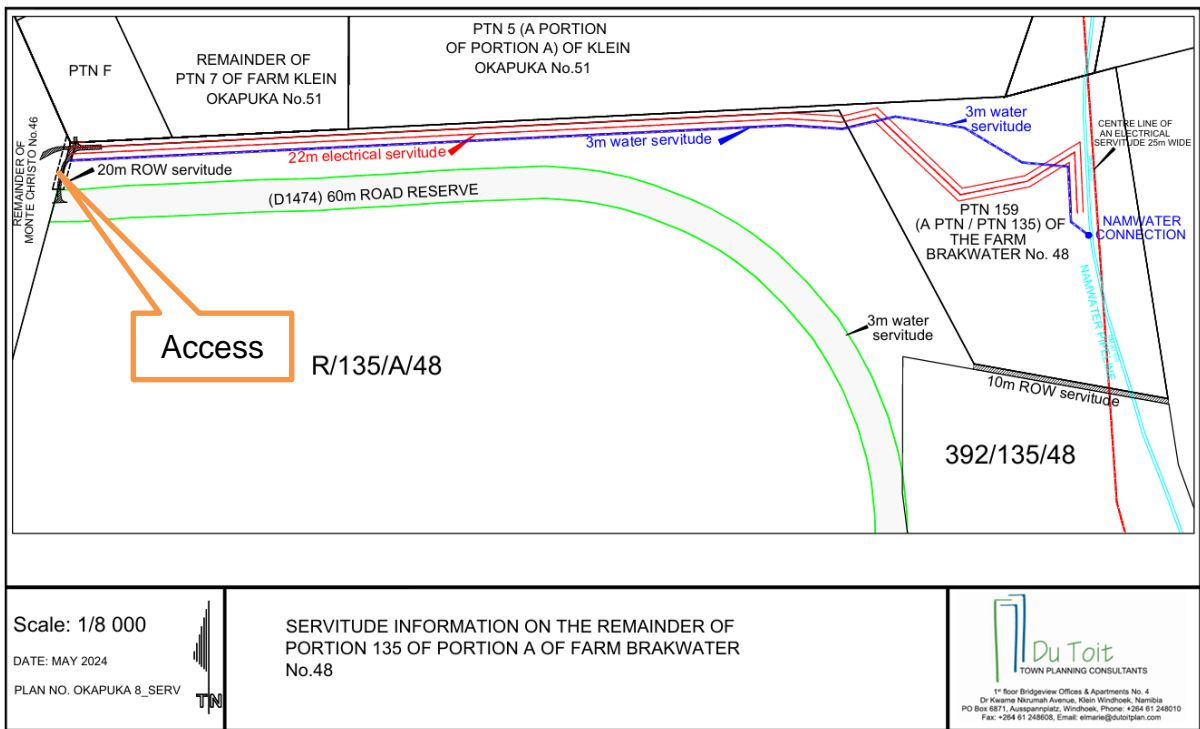


Figure 9: Servitude Information

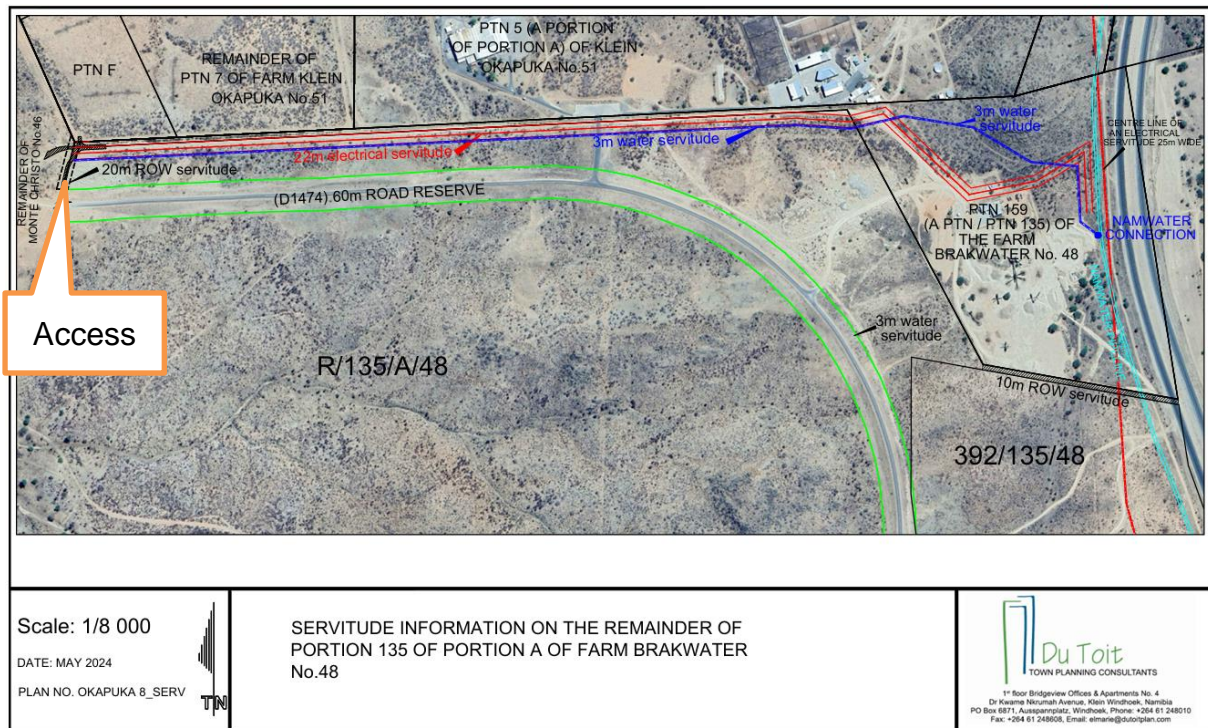


Figure 10: Servitude Information on site image

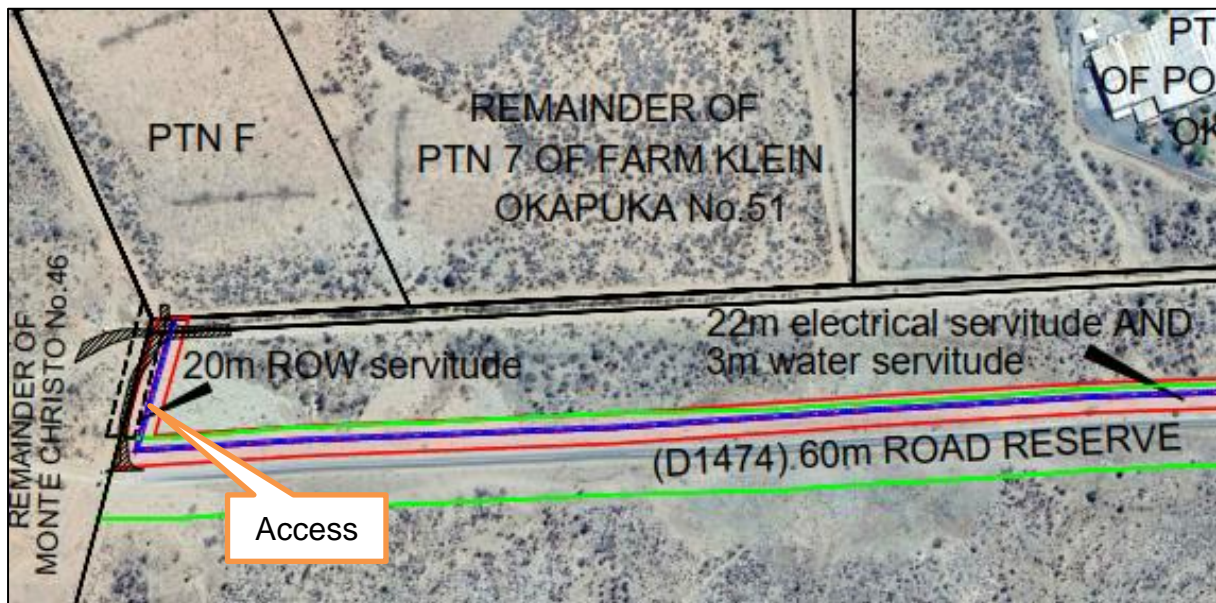


Figure 11: Proposed access road to the abattoir site

3.2. Water supply / requirements

The facility will obtain bulk water from a NamWater connection that is situated adjacent to the A1/B1 route to Okahandja. The maximum daily water requirement for the operations of the abattoir and supporting infrastructure once operating at full capacity is 75 m³/day. NamWater completed an assessment report based on the projected water demands for Windhoek and offtake agreements along the route from Von Bach treatment plant to Windhoek and approved

a bulk water allocation of 75m³/day to the abattoir operations. The proposed pipeline route is indicated on the map below:

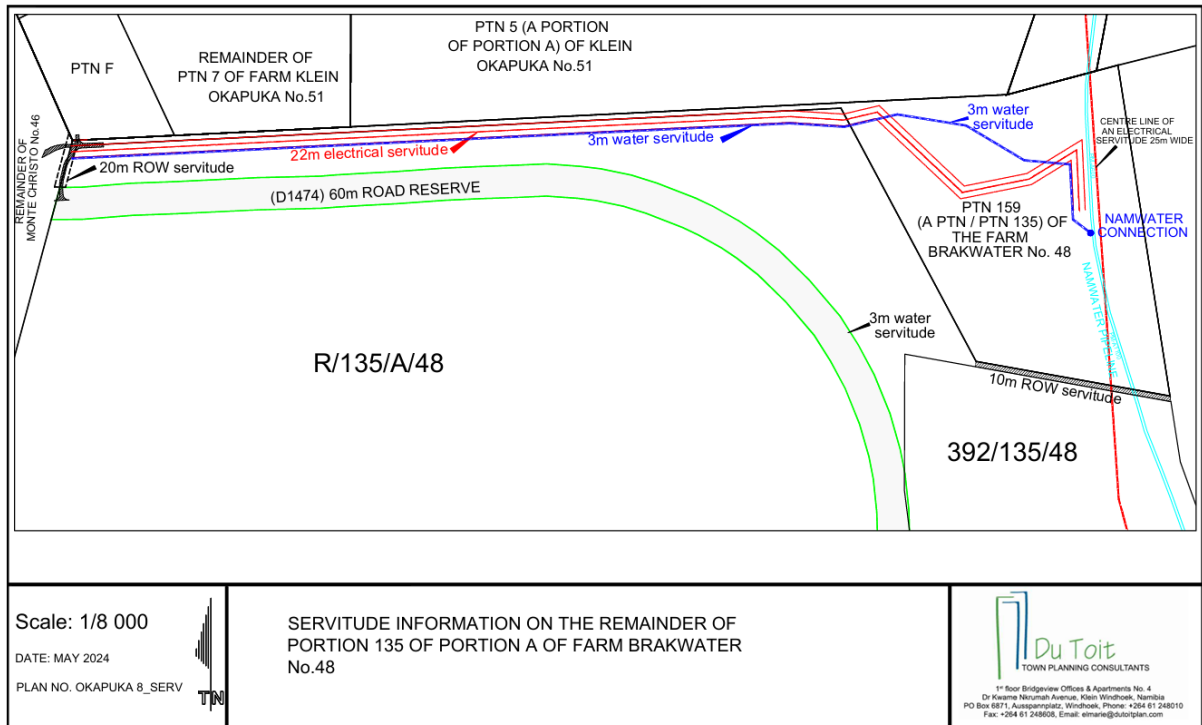


Figure 12: Proposed pipeline route

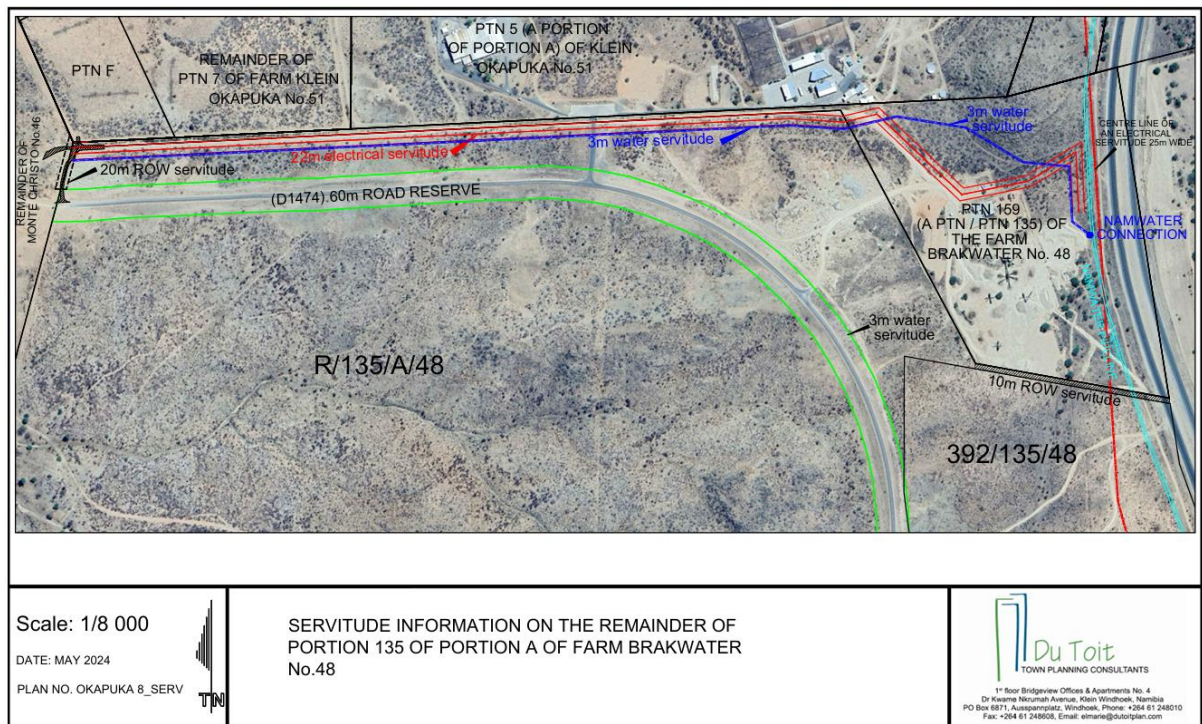


Figure 13: Photo of Proposed pipeline route

3.3. Onsite bulk water storage and treatment

The site and supply conditions are described as an isolated bulk system with a high level of dependency on one source of supply. Ground-level reservoirs and tanks will be used for onsite water storage, meeting a minimum 48-hour backup supply.

Water quality will be monitored, and on-site chlorine dosing will be applied to conform to international export quality abattoir standards.

3.4. Electricity Supply

Electricity will be obtained from NamPower with a backup diesel generator to be used during power failures. The closest adequate bulk supply connection point to NamPower's medium voltage network, for provision of mains power to the site, is an 11kV overhead line that runs west of the site and south of the MeatCo feeding pens along the D1474 road. The application for a large power user connection (800kVA) has already been submitted and the position of the tee-off point is being coordinated with NamPower's rural electrification team. One 800kVA 11/0.4-0.23kV transformer shall be installed to cater for the abattoir demand with the bulk metering being done by NamPower. The proposed overhead powerline route is indicated on the map below:

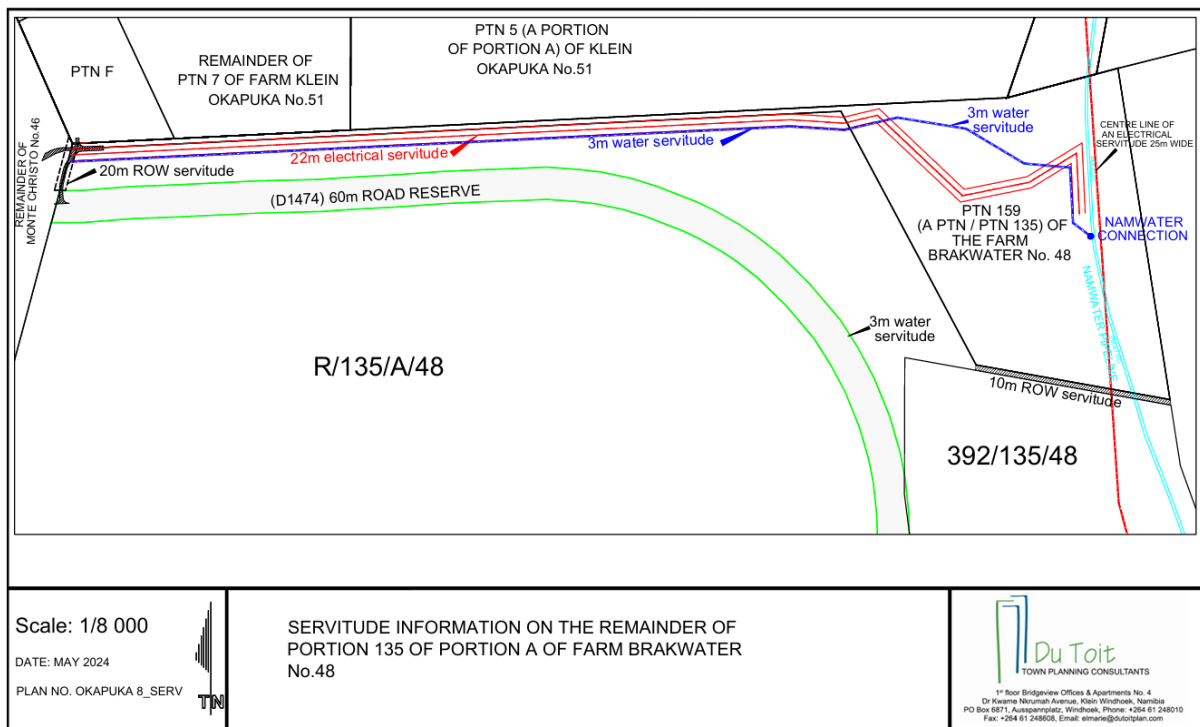


Figure 14: Proposed overhead powerline route

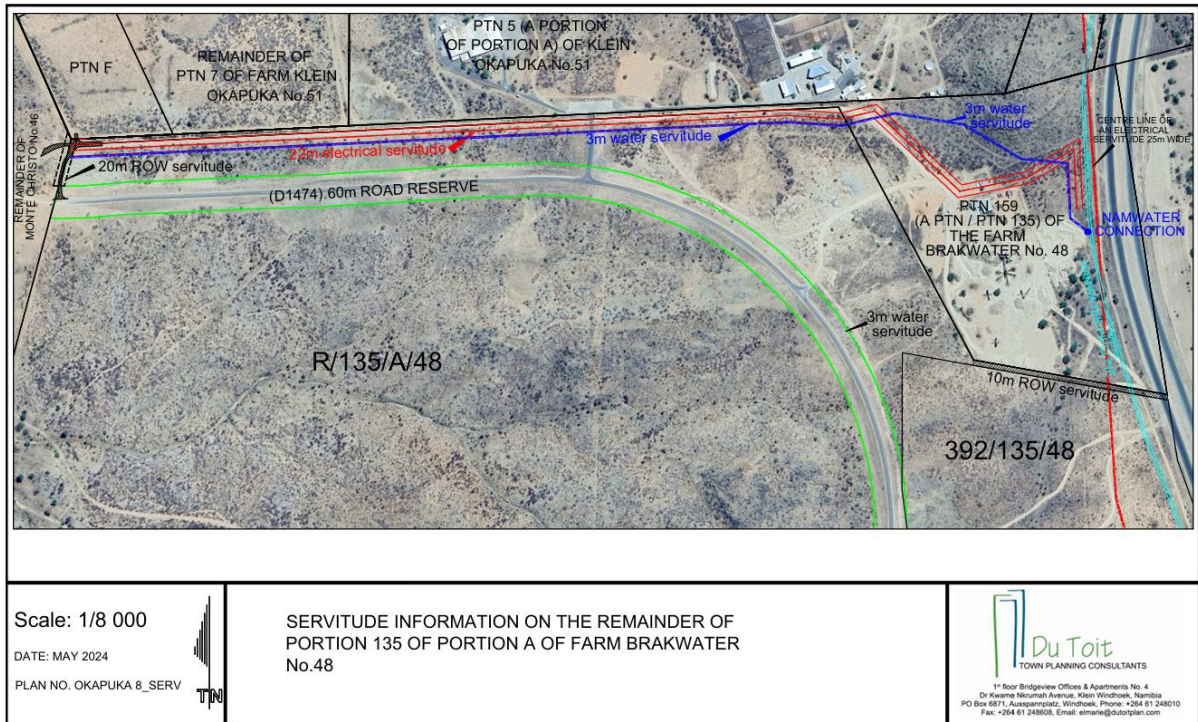


Figure 15: Photo of Proposed overhead powerline route

3.5. Treatment of abattoir waste

Three waste streams will be applicable to the abattoir: Process effluent and domestic effluent and solid waste. The process effluent and domestic effluent streams will be kept separate until primary screening has been done, from where the two streams will converge at the screened effluent collection sump.

Solid waste will be handled and treated separately as per the paragraph below:

3.5.1. Process Effluent

The Process Effluent includes the following.

- Blood
- Lairages and wash bay effluent
- Paunch and stomach contents
- Condemns and special risk materials
- Fats, oils and grease

General

Pre-treatment in the form of solids and fat removal from the effluent will be done on site – this is standard acceptable practice for abattoirs situated in municipal areas. A specially designated tanker will transport screened effluent off-site for treatment. On-site emergency storage will allow for at least one day's storage.

The effluent will be transported to the NPI effluent treatment facility, to the northeast of the site for processing and treatment. From meetings with NPI representatives, it has been confirmed that the NPI effluent treatment facility has adequate capacity to accommodate the projected effluent volumes and characteristics originating from the abattoir.

Blood Handling: As much blood as possible will be captured and be kept entirely separate from any other waste streams. Blood from the bleeding area in the abattoir slaughter process will be directed to a dedicated blood sump and be kept separate from the effluent stream. It will then be collected by a specialist, registered waste manager and transported off-site for proper disposal, adhering to biosecurity and environmental standards at an approved landfill site.

Lairages and wash bay effluent: Solid waste in Lairages will be cleaned manually by means of dry-scraping and cleaning before washing; minimising the solids entering the effluent conveyance system. The lairages and wash bay areas will then be cleaned by hosing down the concrete areas. The effluent will be screened to remove remaining coarse solids by means of a grid over collection channels and inlet manhole. A sand trap will be constructed for wastewater from both the lairages and the wash bay areas in addition to a grease/oil trap to remove oil and grease from the wastewater generated on the wash bay. The pre-treated wastewater from both the lairages and the wash bay will then be directed to the domestic sewer line. It must be ensured that strict operational control is exercised in terms of dry-scraping and cleaning of trucks before actual washing commences.

The collection and effluent drainage system will be designed as such that a connection to the required grit/oil/grease trap and the municipal sewer is possible as soon as these areas are covered and this becomes necessary due to larger volumes of wastewater being generated.

Paunch and stomach contents: The paunch content from the offal area will be removed in the form of solid organic waste and disposed of into a skip container. The wastewater from the washing of the stomach and other intestines shall be screened as part of the process effluent. Strict operational control will be needed to ensure that all edible offal is removed, and minimal fat enters the system. The skip container will be collected and removed by a specialist, registered waste handler for disposal at an approved landfill site.

Fats, oil and grease removal: Fats, oils and grease removal will be done after screening has been done of the process effluent stream. This will be done by means of a 3-chamber interceptor. The screenings collected from all the different screening processes together with the sludge generated by the fat and grit traps must be land filled according to the correct prescribed procedures for the land filling of hazardous and/or organic waste or disposed of at a designated appropriate landfill facility. Where relevant all solid waste material should be appropriately dewatered to facilitate transport.

The fats, oil and grease will be stored in a separate container for collection by a specialist registered waste handler to be disposed of at an approved landfill site.

3.5.2. Domestic effluent

The domestic wastewater stream will be kept separate from the factory wastewater until pretreatment has been applied to both effluent streams. The domestic wastewater will enter the screened effluent collection sump after passing through a bar screen or screenings basket to remove any foreign objects such as hair nets and the like. A grit collection basin is included as part of the primary treatment before the collection chamber and subsequent conveyance to the NPI effluent treatment plant.

Odour treatment: Due to the remote location of the site, it is not foreseen that odour treatment is required. All processes will minimise the impact of odour as efficiently as possible by means of ventilation pipes and positioning in relation to the facility buildings. The prevailing wind conditions on site were considered for the site layout and facilities.

Vector attraction: The screening and collection area surrounding the screens will be covered to avoid vector attraction in the form of rodents, house flies, mosquitoes, etc. and associated breeding.

Solids dewatering: No provision is currently made for the dewatering of solids. No additional desludging of pump sumps should be required. Screenings and other wastewater associated solid waste should be dry enough and will not, at this point in time, justify the additional cost of on-site dewatering.

3.6. Solid waste handling

Construction waste will be disposed of at an approved landfill site. Household waste generated at the abattoir will be sorted into the different recyclables and stored on site and then collected on site by an approved private waste management company (Rent-A-Drum) from where it is taken to their recycling facility for processing and the remainder of the waste will be disposed of at an approved waste disposal/landfill site in the close by area.

3.7. Stormwater Management

Stormwater from the site will predominantly be accommodated by means of surface flow. There are no major water courses intersecting the property that would warrant detailed flood line studies to be conducted. The Klein Windhoek River is situated to the northeast of the site; however, the site does not infringe on the associated flood lines of the Klein Windhoek River (P036 Flood Study-NPI -2008_Final, *Chris Muir*, dated 2020, Annexure 3). Minor stormwater drainage pipes may be incorporated into the detail design to facilitate drainage for isolated areas on site. All stormwater drainage to be included as part of the submission of municipal drawings for approval.

3.8. Fire management

The Proponent will have the necessary fire protection infrastructure / extinguishers as per the requirements. A Fire Protection Specialist is contracted to introduce a proper fire protection plan with the required infrastructure and to oversee the annual auditing and maintenance of

the infrastructure. A rational fire design report will be submitted separately to the CoW Fire Department.

4. Listed activities triggered by the proposed project

In terms of the Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) an environmental impact assessment (EIA) report and management plan is required as the following listed activities are involved:

WASTE MANAGEMENT, TREATMENT, HANDLING AND DISPOSAL ACTIVITIES

- *The construction of facilities for waste sites, treatment of waste and disposal of waste.*
- *Any activity entailing a scheduled process referred to in the Atmospheric Pollution Prevention Ordinance, 1976.*
- *The import, processing, use and recycling, temporary storage, transit or export of waste.*

FORESTRY ACTIVITIES

The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorisation in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.

ENERGY GENERATION, TRANSMISSION AND STORAGE ACTIVITIES

The construction of facilities for –

- *The generation of electricity.*
- *The transmission and supply of electricity.*

INFRASTRUCTURE

10.1 The construction of

- (a) oil, water, gas and petrochemical and other bulk supply pipelines;*
- (b) public roads;*

10.2 The route determination of roads and design of associated physical infrastructure where:

- (a) it is a public road;*
- (b) the road reserve is wider than 30 meters;*
- (c) the road caters for more than one lane of traffic in both directions.*

HAZARDOUS SUBSTANCE TREATMENT, HANDLING AND STORAGE

- *The storage and handling of dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters at any one location.*
- *Construction of filling stations or any other facility for the underground and aboveground storage of dangerous goods, including petrol, diesel, liquid, petroleum, gas or paraffin.*

The proposed project is thus subject to obtaining an Environmental Clearance.

5. Approach to the Environmental Assessment of the Project

The purpose of the Environmental Impact Assessment is to consider social, ecological, legal and institutional issues related to the intended use of the land, guided by the principles and stipulations of the Namibian Environmental Assessment Policy (1995) and Namibia's Environmental Management Act (2007), to determine the desirability of the proposed activities on the suggested area and to develop an Environmental Management Plan (EMP) to mitigate and manage environmental issues identified in the process.

To accomplish the above, the impact study will be undertaken and based on the outcome of the findings; further specialists' investigation might be required to fully assess all impacts.

5.5. Aims of the Assessment Process

- 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 an impact 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).

5.6. Methodology

a) Desktop sensitivity assessment

Literature available on the area will be reviewed to determine potential environmental issues and concerns.

b) Site assessment (site visit)

This involves investigating the environmental parameters on site in order to enable further understanding of the potential impacts on site.

c) Involvement of Interested and Affected Parties

Stakeholders will be given the opportunity to comment on the proposed activities and engage in the planning process. The findings of the assessment process will be incorporated in the environmental impact assessment report.

6. Expected Impacts on receiving environment

From previous experience with developments of this nature and comments received from Affected Parties, the following key impacts on the receiving environment can be expected:

6.5. Socio-economic environment

- Community health issues - transmission of diseases from the construction team and support staff to the local community.
- Increase in criminal activities during construction.
- Cultural/heritage impacts.
- Employment will be created during construction and operation.
- Value addition to locally produced products

6.6. Bio-physical environment

- Effect on natural and general ambiance of the area and surroundings.
- The clearing of some vegetation for the construction of structures.
- Animals and birds habituating on the site will be disturbed.
- Bad odours from a poorly managed site.
- The use of water during construction and operations.
- The generation of dust during construction and operations.
- Material wastage (packing, building waste) polluting the site and neighbouring environment.
- Health and safety of construction and operational staff if not attended to satisfactorily.
- Impact on surface and groundwater.
- Noise during construction of bulk services as well as from the operations once constructed and in operation.
- Surface drainage systems (flow of surface draining systems).

These impacts and others which will be identified during the environmental scoping procedures and the engagement of the interested and affected parties will be evaluated to determine the significance of impact and if and how these impacts can be mitigated.

The above-named aspects will be covered in the Environmental Management Plan to be mitigated.

7. Public Involvement Program

During the public consultation process, Green Earth Environmental Consultants do the following:

- Identify and inform key stakeholders, authorities, the local authority (municipality), and interested or affected members of the public (I&APs).
- Give notice of the proposed activity as per the requirement of the Regulations through national newspapers, site notices and letters.
- Provide I&APs with additional information on the proposed activity by sending them this Background Information Document (BID).
- Schedule a public meeting if there is enough public interest to which all registered and identified I&APs will be invited, facilitate stakeholder participation and engagement and provide details of issues raised during the public involvement program and scoping exercise.

- Record all comments of I&APs, supported by responses provided by Green Earth, in a report to be included in the EIA.
- Inform the Proponent of comments relevant to the project's planning, implementation and operations and for inclusion in the EMP and consideration.

As an important part of the Environmental Impact Assessment process, you as stakeholder or interested member of the public are invited to find out more about what is being proposed, the implications thereof on the environment and/or to raise any issues or concerns.

Should you have any questions regarding the project, please contact **GREEN EARTH Environmental Consultants** at the contact details (*Charlie du Toit: 081 127 3145 or carien@greenearthnamibia.com*) provided on *Page 1* of this document. **The closing date for any questions, comments, inputs or information is 7 June 2024.**

COMMENTS FROM INTERESTED AND AFFECTED PARTIES

PERSONAL PARTICULARS			
Name and Surname:			
Organization:			
Postal Address:			
Telephone Number:	Email Address:		
Fax Number:	Cellphone Number.:		
INTEREST IN PROJECT			
COMMENTS ON PROJECT			
Signature:		Date:	

Kindly take note that comments should reach our office by 7 June 2024.