



Application for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014 (as amended)

File Reference Number:

NEAS Reference Number:

Date Received:

Responsible Official:

(For official use only)

PROJECT TITLE

Char Technology Vanadium Carbon-Nitride Project

IMPORTANT INFORMATION

1. This application form is current as of 1 May 2022. It is the responsibility of the proponent to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
2. It is the responsibility of the proponent to confirm that DARDLEA is the competent authority to which this application must be submitted (refer to NEMA section 24C).
3. The required information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Where applicable **black out** the boxes that are not applicable in the form.
4. The use of the phrase "not applicable" in the form must be done with circumspection.
5. This application form **must** be accompanied by a screening report generated through the national web-based environmental screening tool at <https://screening.environment.gov.za/screeningtool>.
6. No faxed or e-mailed applications will be accepted.
7. **Proof of payment of the applicable fee for consideration and processing of applications must accompany the submission of this form, unless an exclusion applies.** If an exclusion applies, a **written motivation** must be attached to this application form.
8. If the proponent is not the owner or person in control of the land on which the activity is to be undertaken, written consent from the landowner or person in control of the land must be obtained and must be attached to this application form, unless Regulation 39(2) applies.
9. The original signed declarations by the applicant and by the EAP and any specialist, which EAP and specialist meet all the requirements contemplated in Regulation 13, must accompany this application form. Where specialists and review EAPs/specialists are appointed after the submission of this form, the relevant declaration forms in Section 10 must be completed, and the original signed forms must accompany the draft basic assessment or the draft environmental impact assessment reports, as well as final reports to be submitted to this Department.
10. Unless protected by law, all information contained in this application will become public information on receipt by the Department. Upon request, the applicant/EAP must provide any interested and affected party with the information contained in or submitted with this application form.
11. Where exemption is intended to be applied for, such application must be made in terms of the National Exemption Regulations, 2014, and must be finalised before lodging an application for environmental authorisation.
12. If, in addition to this application, you must also apply for a Waste Management Licence in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) and/or an Atmospheric Emission Licence in terms of the National Environmental: Air Quality Act, 2004 (Act No. 39 of 2004), then separate application forms in terms of the applicable legislation must be completed and submitted to the relevant licensing authorities.
13. An application for environmental authorisation lapses if the applicant fails to meet any of the timeframes prescribed in terms of the 2014 EIA Regulations (as amended).

14. **DARDLEA has not prescribed a format for Basic Assessment, Scoping or Environmental Impact Assessment Reports, or Environmental Management Programmes.** Said reports must however contain all the information set out in Appendices 1, 2, 3 and 4 of the EIA Regulations respectively.
15. This form, and all subsequent reports, **MUST BE SUBMITTED TO THE DEPARTMENT AT THE RELEVANT DISTRICT OFFICE** given below. Should the application form not be submitted at the relevant district office, it will not be considered:

EHLANZENI DISTRICT	NKANGALA DISTRICT	GERT SIBANDE DISTRICT
Environmental Impact Management Riverside Office Park Aqua Street (opposite Audi) Building 4, East Tower Nelspruit 1200 Tel: 013 759 4000	Environmental Impact Management Corner Rosemead and Ryan Road Witbank 1035 Tel: 013 692 5843 Note: This address is expected to change in the near future.	Environmental Impact Management 13 De Jager Street Ermelo 2351 Tel: 017 811 4830
Please note that the addresses provided above are subject to change. It is the responsibility of the applicant / EAP to verify the abovementioned details with the relevant District Offices prior to submission of all application forms and reports.		

PROOF OF PAYMENT

Tick the appropriate box below to indicate that either proof of payment is attached or that, in the applicant's view, an exclusion applies. Proof and motivations for exclusions must be attached to this application form.

Proof of payment attached:



Exclusion applies:



An applicant is excluded from paying fees if:

- The activity is a community based project funded by a government grant; or
- The applicant is an organ of state

TYPE OF EXCLUSION	Tick which is applicable and attach proof / motivation
The activity is a community based project funded by a government grant	
The applicant is an organ of state	

FEE AMOUNT		
APPLICATION TYPE	FEE	Tick which is applicable
Application for an environmental authorisation for which basic assessment is required	R2000	
Application for an environmental authorisation for which S&EIR is required	R10 000	

Details for the payment of application fees

Banking Details:

Account name: Department of Agriculture, Rural Development, Land and Environmental Affairs
Bank: ABSA Bank
Account Type: Current Account
Account number: 4103095253
Branch Name: Business Bank
Branch Code: 632005

Beneficiary reference number: **EIM + ABBREVIATED PROJECT DESCRIPTION**

Proof of payment must be attached to this application form.

"Proof of payment" includes a receipt, a stamped deposit slip, electronic fund transfer copy or a payment advice.

NB: PAYMENT MUST BE MADE IN THE SAME MONTH THAT AN APPLICATION FORM IS TO BE SUBMITTED.

1. PROJECT TITLE

Char Technology Vanadium Carbon-Nitride Project

Provide a clear, accurate and detailed description of the development project and its associated infrastructure.

The Applicant proposes the Char Technology Vanadium Carbon-Nitride (VCN) Project, which entails the installation and operation of a Vanadium Carbon-Nitride (VCN) furnace at the existing Char Technology facility. The facility currently operates under a valid Atmospheric Emission Licence (AEL) issued in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), with reference number NDM/AEL/MP312/13/06.

The proposed VCN furnace will not involve greenfield development or the construction of new permanent structures. Instead, the furnace will be assembled and installed within the existing licensed industrial footprint, utilising current infrastructure and structural platforms. Minor refurbishment and upgrading of existing structures is required to accommodate the new equipment. The introduction of the VCN furnace constitutes a change to the approved operational processes and triggers a Listed Activity in terms of NEM:AQA. As such, an amendment to the existing AEL is required to authorise the proposed activity.

The VCN furnace will process briquetted raw materials supplied to Char Technology by a third-party.

Processing will take place within a hydraulic pusher furnace, which operates as a zoned, continuous thermal reactor. Briquettes are loaded into crucibles (effectively ceramic buckets) and hydraulically pushed through the furnace at a controlled rate of approximately 1.6 metres per hour, equating to one push every 15–20 minutes. The subsidiary furnace is vented, while the primary furnace operates as a closed system, with off-gases collected and routed through appropriate abatement systems prior to release via a single stack. The process is characterised by a controlled temperature and reaction profile across multiple zones, as follows:

- Preheating Phase: Briquettes are initially preheated in a subsidiary furnace at approximately 300°C to remove moisture components.
- Reduction and Carbonitridation Phase: A reducing nitrogen (N₂) gas stream is injected in excess within the reaction zone to prevent oxidation. The briquettes are then fed into the primary furnace, where temperatures range from 600°C to 1,500°C, allowing for the reduction of V₂O₅ and V₂O₃, with simultaneous carburisation and nitridation.
- Cooling Phase: The final zones comprise a natural cooling section followed by a rapid water-cooled zone, enabling the processed material to exit the furnace at approximately 80°C.

In addition to the furnace installation, the project includes associated infrastructure upgrades, notably the paving of the internal access road from the site entrance gate to the planned loading zone, as well as other minor ancillary developments required to support the operation of the VCN furnace.

The proposed development is located on Erf Nos. 43 and 44, Ferrobank Township, at 50 Van Eck Road, within the Emalahleni Local Municipality, Mpumalanga Province. The site is situated approximately 5 km north-west of the eMalahleni Central Business District and is located within an established industrial area.

2. GENERAL INFORMATION

Applicant:	Char Technology (Pty) Ltd		
Contact person:	Siphiwe Gogo		
Physical address:	50 Van Eck Road, Ferrobank, Witbank, South Africa		
Postal address:	Postnet Suite 640, Private Bag X7260, Witbank, South Africa		
Postal code:	1035	Cell:	+27 71 797 7039
Telephone:	+27 13 696 8001	Fax:	N/A
E-mail:	siphiwe.gogo@glencore.co.za		

In instances where there is more than one applicant, this section must be duplicated

Company name of EAP: Environmental Impact Management Services (Pty) Ltd - EIMS

EAP name and surname:	Qaphela Magaqa		
Postal address:	PO Box 2083, Pinetown, Durban		
Postal code:	2123	Cell:	+27 78 580 6692
Telephone:	+27 11 789 7170	Fax:	N/A
E-mail:	qaphela@eims.co.za		
Are you a Registered EAP in terms of 24H(3)(a) of NEMA (provide EAP Registration number):	2022/6016		

Landowner:	Char Technology (Pty) Ltd		
Contact person:	Henk Potgieter		
Postal address:	Postnet Suite 640, Private Bag X7260, Witbank, South Africa		
Postal code:	1035	Cell:	082 442 4581
Telephone:	+2713 696 8001	Fax:	N/A
E-mail:	henk.potgieter@glencor e.co.za		

In instances where there is more than one landowner, this section must be duplicated.

District Municipality in whose jurisdiction the proposed activity will fall (Delete which is not applicable):	Ehlanzeni	Nkangala	Gert Sibande
--	-----------	---------------------	--------------

Local authority in whose jurisdiction the proposed activity will fall:	EMalahleni Local municipality
Nearest town:	eMalahleni

In instances where there is more than one local authority involved, this section must be duplicated.

3. SITE DESCRIPTION

Property description:	Erf Nos. 43 and 44, Ferrobank Township
------------------------------	--

(Farm name, portion, number and registration division or Erf number etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

Current land-use zoning:	Industrial
---------------------------------	------------

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Property size (m²) of all proposed sites:	35 458 m ²
Development footprint size (m²):	~ 4000 m ²

Project map:	<p>A project map must be attached to this document. The map must accurately provide an indication of the project site position as well as the positions of the alternative sites, if any, and</p> <ul style="list-style-type: none"> • road names or numbers of all major roads as well as the roads that provide access to the site(s); • a north arrow; • any sensitive geographic features (eg. watercourses)
---------------------	---

Site co-ordinates:	Indicate the position of the activity using the latitude and longitude of the centre point of the preferred site alternative. The co-ordinates must be in degrees, minutes and seconds using the Hartebeesthoek94 WGS84 co-ordinate system.					
	Latitude (S):			Longitude (E):		
	25°	51'	9.38"	29°	9'	52.65"
	In the case of linear activities:					
	<ul style="list-style-type: none"> Starting point of the activity Middle point of the activity End point of the activity 			Latitude (S): Longitude (E):		

SG 21 Digit Code(s):	Indicate all the Surveyor-General 21 digit codes for all sites (including portions of sites) that are part of the application. If there are more than 4, attach a list with the rest of the codes.																				
	T	0	J	S	0	0	1	4	0	0	0	0	0	0	4	3	0	0	0	0	0
	T	0	J	S	0	0	1	4	0	0	0	0	0	0	4	4	0	0	0	0	0

4. TYPE OF APPLICATION

4.1 Application for Basic Assessment

Is this an application for conducting a basic assessment (as defined in the Regulations)?

☒ YES

Please indicate when the final basic assessment report will be submitted:

03 APRIL 2026

4.2 Application for Scoping and Environmental Impact Assessment (S&EIR)

Is this an application for Scoping and EIR (as defined in the Regulations)?

☐ NO

Please indicate when the final Scoping Report (including the Plan of Study for EIA) will be submitted:

5. ACTIVITIES APPLIED FOR TO BE AUTHORISED

For an application for authorisation that involves more than one listed or specified activity that, together, make up one development proposal, all the listed activities pertaining to this application must be indicated.

Government Notice R983 (as amended) Activity No.	Describe the relevant Basic Assessment Activity in writing as per Listing Notice 1 (GN No. R983, as amended)	Describe the extent to which the activity applied for requires authorisation (specify the threshold where applicable)
34	<i>The expansion of existing facilities or infrastructure for any process or activity where such expansion will result in the need for a permit or licence or an amended permit or licence in terms of national or provincial</i>	Char Technology (Pty) Ltd, currently holds an Atmospheric Emissions Licence (AEL) with ref: NDM/AEL/MP312/13/06 signed 05 February 2025, with a validity of 5 years (until 05 February 2030).

Government Notice R983 (as amended) Activity No.	Describe the relevant Basic Assessment Activity in writing as per Listing Notice 1 (GN No. R983, as amended)	Describe the extent to which the activity applied for requires authorisation (specify the threshold where applicable)
	<p><i>legislation governing the release of emissions, effluent or pollution, excluding-</i></p> <p><i>(i) where the facility, infrastructure, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies;</i></p> <p><i>(ii) the expansion of existing facilities or infrastructure for the treatment of effluent, wastewater, polluted water or sewage where the capacity will be increased by less than 15 000 cubic metres per day; or</i></p> <p><i>(iii) the expansion is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will be increased by 50 cubic meters or less per day.</i></p>	<p>Condition 4.1(b) of the Char Technology AEL states that: “No building, plant or site of works related to the listed activity or activities used by the licence holder shall be extended, altered, or added to the listed activity without an environmental authorisation from the competent authority. The investigation, assessment, and communication of potential impact of such an activity must follow the assessment procedure as prescribed in the Environmental Impact Assessment Regulations published in terms of Section 24(5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998)(NEMA), as amended.”</p> <p>The applicant, wishes to alter an existing operations within their existing licensed facility to add a Vanadium Carbon Nitride production requiring authorisation in terms of the NEM:AQA and as such requires an EA in accordance with this activity and Condition 4.1(b) of their AEL.</p>
Government Notice R985 (as amended) Activity No:	Describe the relevant Basic Assessment Activity in writing as per Listing Notice 3 (GN No. R985, as amended)	Describe the extent to which the activity applied for requires authorisation (specify the threshold where applicable)
N/A		
Government Notice R984 Activity No:	Describe the relevant Scoping and EIA Activity in writing as per Listing Notice 2 (GN No. R984)	Describe the extent to which the activity applied for requires authorisation (specify the threshold where applicable)
N/A		
<p>Please note:</p> <p>Only those activities listed above shall be considered for authorisation. The onus is on the applicant to ensure that all applicable listed activities are included in the application. Environmental Authorisation must be obtained prior to commencement with each applicable listed activity. If a specific listed activity is not included in an Environmental Authorisation, a new/separate application for Environmental Authorisation for such activity will have to be submitted.</p>		

6. PUBLIC PARTICIPATION

6.1 Public Participation undertaken to date

Where public participation in terms of Regulations 40, 41 and 42 was undertaken prior to submission of this application, please provide a summary of the steps followed to date. Please remember that in terms of Regulation 40(3), all potential or registered I&AP's **must** be provided with an opportunity to comment on draft reports once an application has been submitted to the CA.

A database with pre-identified key I&APs was compiled, the Windeed searches that were conducted to determine affected and adjacent landowners, known I&APs, and a database that was provided by the applicant formed a crucial part of the database that contains relevant stakeholders within the Witbank and Ferrobank area.

The Public Participation Process officially commenced on the 9th of December 2025 with a call to register notification. The notification was given in the manner below:

- Six (6) Site Notices on A1 sized correx boards in English and Isizulu were placed in the vicinity of the proposed project area on the 9th of December 2025.
- Notification letters in English and Isizulu were sent on the 12th of December 2025 to all pre-identified I&APs via the methods listed below:
 - Email
 - SMS
 - Fax

- A newspaper advert in English and Isizulu was posted in the Witbank news local newspaper for circulation in the vicinity of the proposed project area on the 12th of December 2025.

The Public Participation Process has been, and will continue to be, undertaken in accordance with the NEMA process and the 2014 regulations.

6.2 State Departments identified in terms of S240

Provide a list of all State Departments / Organs of State that will be / have been consulted, and to whom draft reports will be submitted for comment. **Proof of submission / delivery of the draft report to all State Departments / Organs of State must be attached to the final BAR / S&EIR.**

Name of Department	Contact person	Address	Email Address	Phone number
Mpumalanga Department of Agriculture, Rural Development and Environmental Affairs	Charity Mthimunye	Environmental Impact Management Corner Rosemead and Ryan Road Witbank 1035	CNMthimunye@mpg.gov.za	N/A
Mpumalanga Department of Health	Denga Tshililo	N/A	HODSecretary@mpuhealth.gov.za	013 766 3298
National Department of Forestry, Fisheries and the Environment: Air Quality Management	Dr Patience Gwaze	N/A	pgwaze@dffe.gov.za	012 399 9192
National Department of Forestry, Fisheries and the Environment: Biodiversity and Conservation	Mr Seoka Lekota	N/A	BCAdmin@dffe.co.za	N/A
National Department of Forestry, Fisheries and the Environment: Compliance	Mr Victor Loate		VLOATE@dffe.gov.za	
Mpumalanga Department of Economic Development and Tourism	Mr Joe Mabuza	N/A	genviro@telkomsa.net	N/A
Mpumalanga Tourism and Parks Agency	Ms Dorothy Makaringe	N/A	dorothy.makaringe@mtpa.co.za	N/A
Emalahleni Local Municipality: Department of Environment and Waste Management	Ms N. Makua	N/A	Environmental@emalahleni.gov.za	N/A
Emalahleni Local Municipality: Ward Councillor (Ward 12)	Mr Lucky M. Tolo	N/A	N/A	064 630 3800
Nkangala District Municipality	Mr Isaac B Sindane	N/A	sindaneib@nkangaladm.gov.za	N/A
Nkangala District Municipality	Ms Nompumelelo Simelane	Nkangala District Municipality PO BOX 437 Middelburg 1050	simelaneni@nkangaladm.gov.za	N/A
National Department of Water and Sanitation (DWS) – Mpumalanga	Mr Masala Mulaudzi	Private Bag X11259 Nelspruit 1200	MulaudziM@Dws.gov.za	013 759 7300
National Department of Water and Sanitation (DWS) – Mpumalanga	Mr Abednigo Mboweni	Private Bag X1259 Nelspruit 1200	mbowenia@dws.gov.za	013 759 7637.
South African Heritage Resources Agency	Natasha Higgitt	N/A	nhiggitt@sahra.org.za	N/A
Please note: In terms of Regulation (7)2, the EAP is responsible for consulting with all relevant State Departments / Organs of State in respect of the application (unless agreement to the contrary has been reached with the Department), and such State Departments must be provided with a 30 day comment period.				

7. OTHER AUTHORISATIONS

7.1 Do you need any authorisations in terms of the following legislation ?

National Environmental Management: Waste Act (NEMWA)
National Environmental Management: Air Quality Act (NEMAQA)

YES	NO
YES	NO

Have such applications been lodged already ?

If Yes, please attach proof of submission and provide a status update below. If no, then indicate when such applications will be submitted.

The Atmospheric Emission Licence (AEL) application requires an Environmental Authorisation (EA) to be attached to the application form. Accordingly, the AEL application will be submitted concurrently with the EA application in terms of the National Environmental Management: Air Quality Act (NEMAQA).

8. NATIONAL SECTOR CLASSIFICATION

Please indicate, by marking the appropriate box below, the **ONE** sector most applicable to the main development which forms the subject of this application

Infrastructure /Transport Services/Roads - Public	Services/Waste Management Services/Disposal facilities - Hazardous
Infrastructure /Transport Services/Roads - Private	Services/Waste Management Services/Disposal facilities - Nuclear
Infrastructure /Transport Services/Rail - Public	Services/Waste Management Services/Disposal facilities - General
Infrastructure /Transport Services/Rail - Private	Services/Waste Management Services/Treatment facilities - Hazardous
Infrastructure /Transport Services/Airport/Runways/Landing Strip/Helipad - Commercial	Services/Waste Management Services/Treatment facilities - General
Infrastructure /Transport Services/Airport/Runways/Landing Strip/Helipad - Private	Services/Waste Management Services/Storage Facilities - General
Infrastructure /Transport Services/Airport/Runways/Landing Strip/Helipad - Public Services	Services/Waste Management Services/Storage Facilities - Hazardous
Infrastructure /Transport Services - Ports	Services/Waste Management Services/Storage Facilities - Nuclear
Infrastructure /Transport Services - Inland Waterways	Services/Burial and cemeteries - Cemeteries
Infrastructure /Transport Services - Marina	Services/Burial and cemeteries - Cremators
Infrastructure /Transport Services - Canal	Services/Water services/Storage - Dams
Infrastructure /Localised infrastructure - Infrastructure in the Sea/Estuary/Littoral Active Zone/Development Setback/100M Inland/or coastal public property.	Services/Water services/Storage - Reservoirs
Infrastructure /Localised infrastructure - Zip Lines & Foefie Slides	Services/Water services - Desalination
Infrastructure /Localised infrastructure - Cableway or Funiculars	Services/Water services - Treatment & Waste Water
Infrastructure /Localised infrastructure - Billboards	Services - Hospitality
Infrastructure /Localised infrastructure - Depot for dangerous goods	Mining - Prospecting rights
Infrastructure /Localised infrastructure - Filling station or Tanks for dangerous goods	Mining - Mining Permit
Utilities Infrastructure/Pipelines - Fresh/Storm Water Urban	Mining - Mining Right
Utilities Infrastructure/Pipelines - Fresh/ Storm Water Rural	Mining/Exploration Right - Gas or Oil Marine
Utilities Infrastructure/Pipelines - Waste Water	Mining/Exploration Right - Gas or Oil Terrestrial
Utilities Infrastructure/Pipelines - Dangerous Goods Urban	Mining/Production Right - Gas or Oil Marine
Utilities Infrastructure/Pipelines - Dangerous Goods Rural	Mining/Production Right - Gas or Oil Terrestrial
Utilities Infrastructure/Telecommunications/ Radio Broadcasting - Tower	Mining/Underground gasification of coal - Oil
Utilities Infrastructure/Telecommunications/ Radio Broadcasting - Mast	Mining/Beneficiation - Hydrocarbon

Utilities Infrastructure/Telecommunications/ Radio Broadcasting - Receivers	Mining/Beneficiation - Mineral	
Utilities Infrastructure - Marine Cables	Agriculture/Forestry/ Fisheries - Crop Production	
Utilities Infrastructure/Electricity /Generation/Non Renewable/Hydrocarbon - Petroleum	Agriculture/Forestry/ Fisheries - Animal Production	
Utilities Infrastructure/Electricity /Generation/Non Renewable/Hydrocarbon - Coal	Agriculture/Forestry/ Fisheries - Afforestation	
Utilities Infrastructure/Electricity /Generation/Non Renewable - Nuclear	Agriculture/Forestry/ Fisheries - Aquaculture	
Utilities Infrastructure/Electricity /Generation/Renewable - Hydro	Agriculture/Forestry/ Fisheries - Agro-Processing	
Utilities Infrastructure/Electricity /Generation/Renewable/Solar - PV	Transformation of land - Indigenous vegetation	
Utilities Infrastructure/Electricity /Generation/Renewable/Solar - CSP	Transformation of land - From open space or Conservation	
Utilities Infrastructure/Electricity /Generation/Renewable - Wind	Transformation of land - From agriculture or afforestation	
Utilities Infrastructure/Electricity /Generation/Renewable - Biomass/ biofuels	Transformation of land - From mining or heavy industrial areas	
Utilities Infrastructure/Electricity /Generation/Renewable - Wave	Any activities within or close to a watercourse	
Utilities Infrastructure/Electricity /Distribution and Transmission - Power line	Any activity in an estuary, on the seashore, in the littoral active zone, or in the sea.	
Utilities Infrastructure/Electricity /Distribution and Transmission/Substation -	Activity requiring permit or licence in terms of National or Provincial legislation governing the release or generation of emissions - Emissions	
Release of Genetically Modified Organisms	Activity requiring permit or licence - Marine Effluent	
	Activity requiring permit or licence - Fresh Water Effluent	

8. CAPITAL VALUE AND JOB CREATION ESTIMATES (if applicable)

Capital value	Job estimates
R 77,210,160.00	Five (5) skilled and ten (10) unskilled employment opportunities during construction phase. There are 9 (nine) skilled employment opportunities created and 13 (thirteen) semi skilled employment opportunity opportunities created.

9. LIST OF APPENDICES

		Submitted	
Appendix 1	Proof of payment, or	YES	
	Written motivation where exclusion of payment applies		N/A
Appendix 2	Landowner consent		N/A
Appendix 3	Project map / plan	YES	N/A
Appendix 4	Screening Report	YES	NO

10. DECLARATIONS

10.1 The Applicant

Note: Duplicate this section where there is more than one applicant.

I, Siphiwe Gogo, ~~in my personal capacity or~~ duly authorised thereto hereby declare/affirm all the information submitted or to be submitted as part of the application is true and correct, and that I:

- am fully aware of my responsibilities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment Regulations ("EIA Regulations") in terms of NEMA (Government Notice No. R. 982 refers) and any relevant specific environmental management act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- appointed the environmental assessment practitioner and/or specialists, where applicable, which EAP and/or specialists meet all the requirements in terms of regulation 13 of GN No. R 982 to act as independent environmental assessment practitioner for this application;
- will provide the EAP, specialists and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the NEMA EIA Regulations, 2014 and other environmental legislation including but not limited to –
 - o costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
 - o costs incurred in respect of independent reviews in terms of regulation 13(2) of GN No. R982;
 - o costs incurred in respect of the undertaking of any process required in terms of the regulations;
 - o costs in respect of any fee prescribed by the Minister or MEC in respect of the regulations;
 - o costs in respect of specialist reviews, if the competent authority decides to recover costs; and
 - o the provision of security to ensure compliance with applicable management and mitigation measures;
- am responsible for complying with conditions that may be attached to any decision(s) issued by the competent authority;
- will ensure that the environmental assessment practitioner is competent to comply with the requirements of the EIA Regulations, 2014;
- hereby indemnify the government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which the applicant or environmental assessment practitioner is responsible in terms of the NEMA EIA Regulations, 2014 and any specific environmental management act; and
- will not hold the competent authority responsible for any costs that may be incurred by the applicant in proceeding with an activity prior to an appeal being decided in terms of the NEMA Regulations, 2014.

Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

DocuSigned by:


Signature of the applicant

Char Technology (Pty) Ltd

Name of company

11 February 2026 | 10:32:54 SAST

Date



10.2 The Environmental Assessment Practitioner (EAP)

I Qaphela Magaga, as the appointed environmental assessment practitioner ("EAP") hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I:

- in terms of the general requirement to be independent (tick which is applicable):

<input checked="" type="checkbox"/>	other than fair remuneration for work performed/to be performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
-------------------------------------	---

<input type="checkbox"/>	am not independent, but another EAP that is independent and meets the general requirements set out in Regulation 13 has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
--------------------------	---

- have expertise in conducting environmental impact assessments, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- will ensure compliance with the EIA Regulations 2014;
- will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the application;
- will take into account, to the extent possible, the matters listed in regulation 18 of the regulations when preparing the application and any report, plan or document relating to the application;
- will disclose to the proponent or applicant, registered interested and affected parties and the competent authority all material information in my possession that reasonably has or may have the potential of influencing any decision to be taken with respect to the application by the competent authority or the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority (unless access to that information is protected by law, in which case I will indicate that such protected information exists and is only provided to the competent authority);
- will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- declare that all the particulars furnished by me in this form are true and correct;
- am aware that it is an offence in terms of Regulation 48 to provide incorrect or misleading information and that a person convicted of such an offence is liable to the penalties as contemplated in section 49B(2) of the National Environmental Management Act, 1998 (Act 107 of 1998).

Signature of the environmental assessment practitioner

Environmental Impact Management Services (Pty) Ltd - EIMS

Name of company

Date

16/02/2026



Qaphela Magaga
HALOKA WASEMAN
30 Bontang DS
Randaf
W/O



10.3 The Review Environmental Assessment Practitioner (REAP)

I, as the appointed review environmental assessment practitioner ("REAP") hereby declare/affirm the correctness of the information provided as part of the application, and that I:

- am independent, and other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity;
- am fully aware of and meet all of the requirements of Regulation 13, and that failure to comply with any the requirements may result in disqualification;
- have reviewed/will review all the work undertaken by the EAP;
- have disclosed/will disclose, to the applicant, the EAP, the specialist (if any), the Department and interested and affected parties, all material information that have or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared or to be prepared as part of the application; and
- am aware that a false declaration is an offence in terms of regulation 48 of the 2014 NEMA EIA Regulations.

Signature of the review environmental assessment practitioner

Name of company

Date

Not Applicable

10.4 The Specialist

Note: Duplicate this section where there is more than one specialist.

I Reneé von Gruenewaldt, as the appointed specialist hereby declare/affirm the correctness of the information provided as part of the application, and that I:

- in terms of the general requirement to be independent (tick which is applicable):

<input checked="" type="checkbox"/>	other than fair remuneration for work performed/to be performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
<input type="checkbox"/>	am not independent, but another EAP that is independent and meets the general requirements set out in Regulation 13 has been appointed to review my work (Note: a declaration by the review specialist must be submitted);

- have expertise in conducting specialist work as required, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- will ensure compliance with the EIA Regulations 2014;
- will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the application;
- will take into account, to the extent possible, the matters listed in regulation 18 of the regulations when preparing the application and any report, plan or document relating to the application;
- will disclose to the proponent or applicant, registered interested and affected parties and the competent authority all material information in my possession that reasonably has or may have the potential of influencing any decision to be taken with respect to the application by the competent authority or the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority (unless access to that information is protected by law, in which case I will indicate that such protected information exists and is only provided to the competent authority);
- declare that all the particulars furnished by me in this form are true and correct;
- am aware that it is an offence in terms of Regulation 48 to provide incorrect or misleading information and that a person convicted of such an offence is liable to the penalties as contemplated in section 49B(2) of the National Environmental Management Act, 1998 (Act 107 of 1998).



Signature of the specialist

Airshed Planning Professionals (Pty) Ltd

Name of company

04/02/2026

Date

10.5 The Review Specialist

I, as the appointed review specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I:

- am independent, and other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity;
- am fully aware of and meet all of the requirements of Regulation 13, and that failure to comply with any the requirements may result in disqualification;
- have reviewed/will review all the work undertaken by the specialist;
- have disclosed/will disclose, to the applicant, the EAP, other specialist (if any), the Department and interested and affected parties, all material information that have or may have the potential to influence the decision of the Department or the objectivity of any report, plan or document prepared or to be prepared as part of the application; and
- am aware that a false declaration is an offence in terms of regulation 48 of the 2014 NEMA EIA Regulations.

Signature of the review specialist

Name of company

Date

Not Applicable



Appendix 1: Proof of Payment



NOTIFICATION OF PAYMENT

To Whom It May Concern:

First National Bank hereby confirms that the following payment instruction has been received:

Date Actioned	: 2026/02/17
Time Actioned	: 11:31:49
Trace ID	: P8D4G9VP

Payer Details

Payment From	: *Environmental Impact M Ment Serv (pty)
Cur/Amount	: 2,000.00

Payee Details

Recipient/Account No	: . . 095253
Name	: Department of Agricu
Bank	: ABSA BANK LIMITED
Branch Code	: 632005
Reference	: EIM+CTVCN

END OF NOTIFICATION

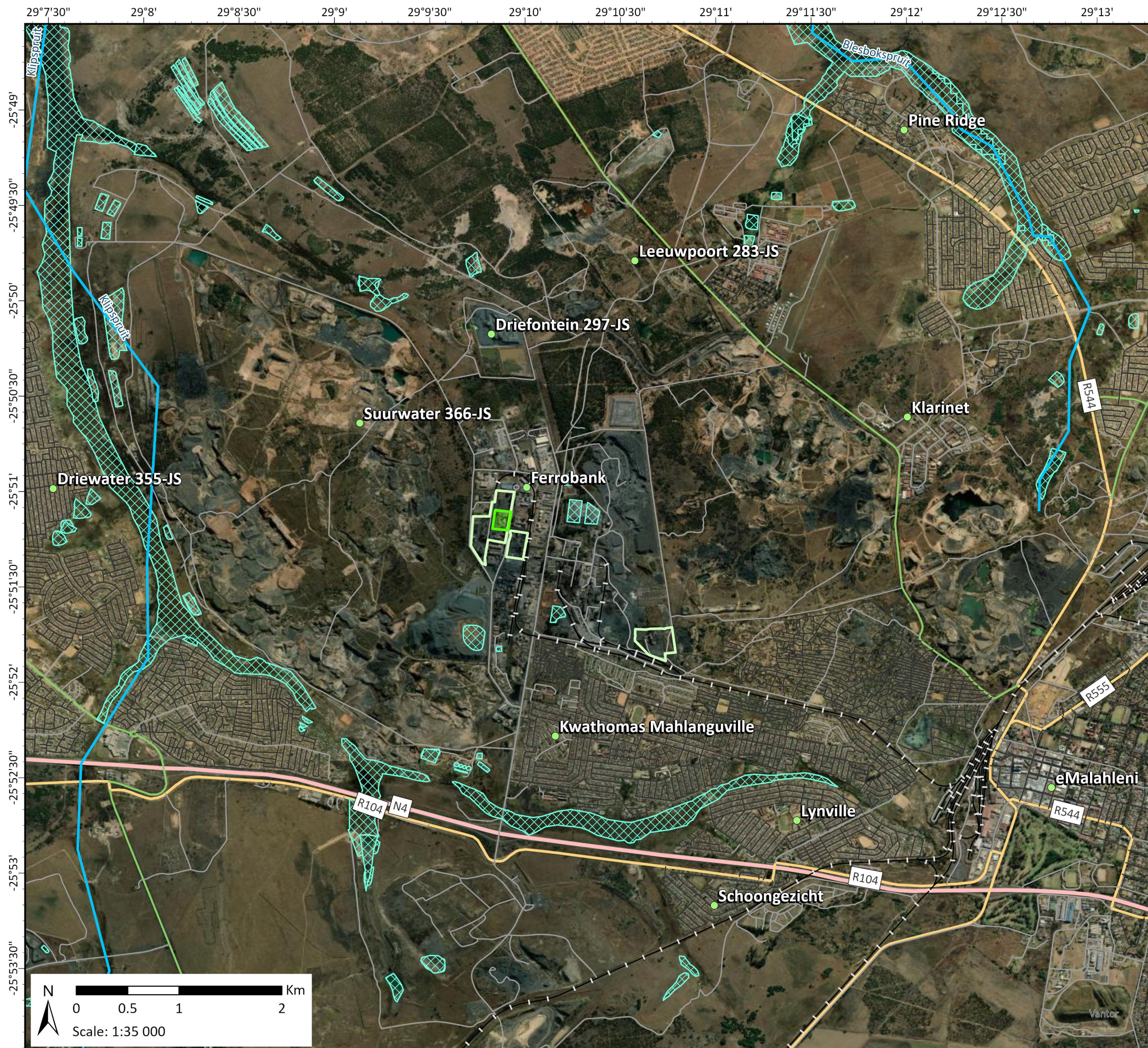
To authenticate this Payment Notification, please visit the First National Bank website at fnb.co.za, select the "Verify Payments" link and follow the on-screen instructions.

Our customer (the payer) has requested First National Bank Limited to send this notification of payment to you. Should you have any queries regarding the contents of this notice, please contact the payer. First National Bank Limited does not guarantee or warrant the accuracy and integrity of the information and data transmitted electronically and we accept no liability whatsoever for any loss, expense, claim or damage, whether direct, indirect or consequential, arising from the transmission of the information and data.



Appendix 2: Landowner Consent

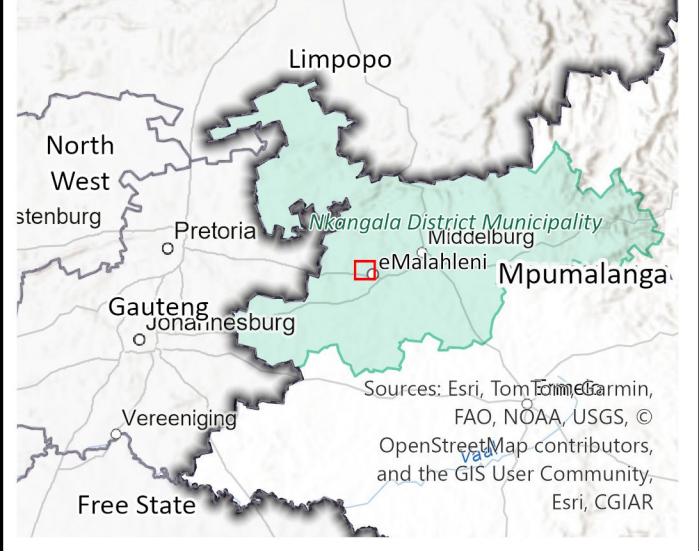
This appendix is not applicable as the properties are owned by the Applicant, Char Technology (Pty) Ltd



Locality Map

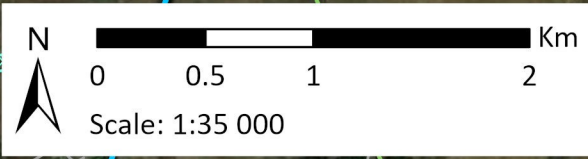
1733 Glencore Chartechn BA AEL

- Legend**
- Chartech Witbank sites disturbance up to 2020
 - Glencore Chartechn VCN Plant
 - NFEPA Wetlands
 - NFEPA Rivers
 - Railway Lines
- Roads**
- National Freeway
 - Main Road
 - Secondary Road
 - Street
 - Other Road
 - Places



Data Sources:
CSG; ESRI; CD:NGI; MDB; SANBI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1733_Locality

Date: 2025/12/02
EIMS Ref: 1733
Compiled: JW
Reviewed: QM
Approved: LW





Appendix 4: DFFE Screening Tool Report



Appendix 5: Site Sensitivity Verification Report

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS
REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE
ENVIRONMENTAL SENSITIVITY**

EIA Reference number: N/A

Project name: Glencore Char Technology VCN BA AEL Project

Project title: VCN Furnace

Date screening report generated: 01/12/2025 12:04:26

Applicant: Char Technology (Pty) Ltd

Compiler: Qaphela Magaqa

Compiler signature:

.....

Application Category: Activity requiring permit or licence in terms of National or Provincial legislation governing the release or generation of emissions | Emissions

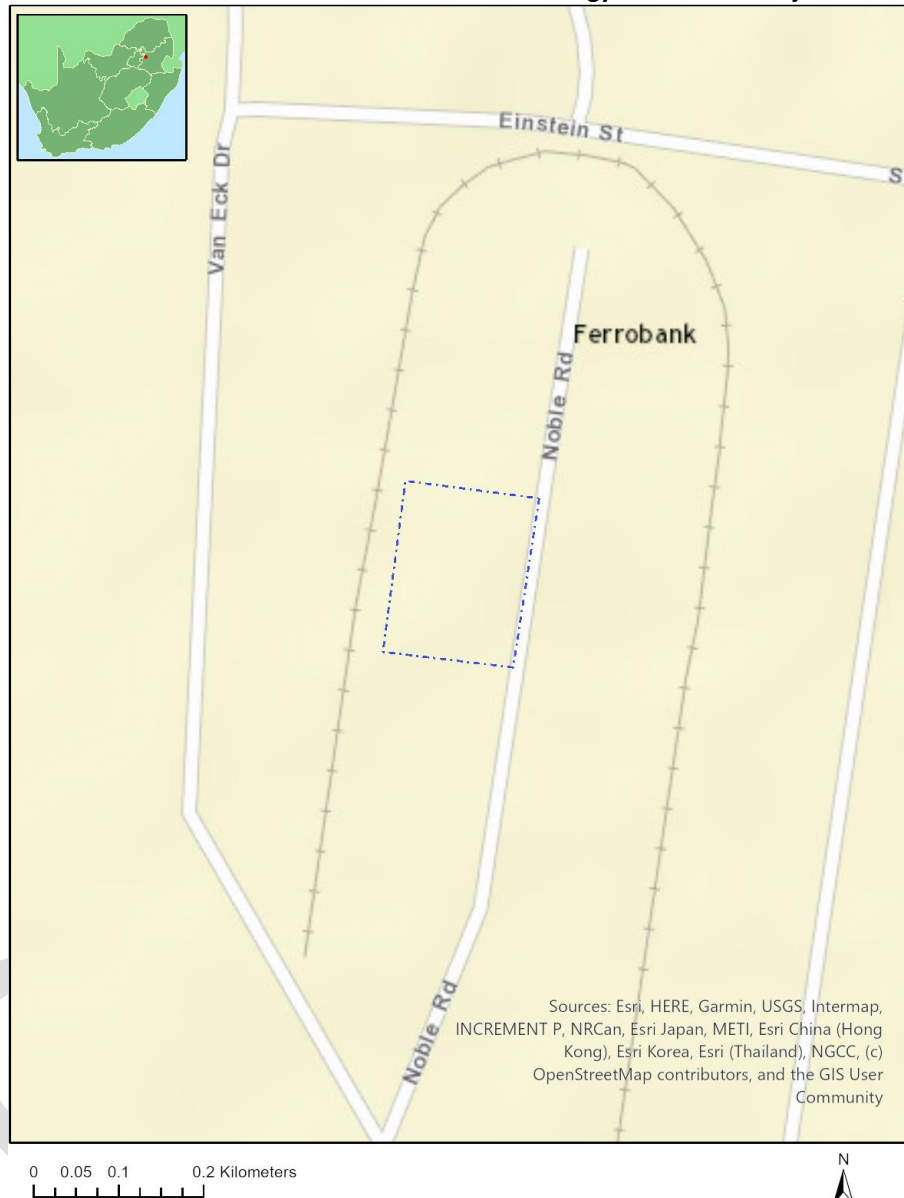
Table of Contents

Proposed Project Location	3
Orientation map 1: General location	3
Map of proposed site and relevant area(s)	4
Cadastral details of the proposed site	4
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area	4
Environmental Management Frameworks relevant to the application	5
Environmental screening results and assessment outcomes	5
Relevant development incentives, restrictions, exclusions or prohibitions	5
Proposed Development Area Environmental Sensitivity	6
Specialist assessments identified	6
Results of the environmental sensitivity of the proposed area	8
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY	8
MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY	9
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY	10
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY	11
MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY	12
MAP OF RELATIVE DEFENCE THEME SENSITIVITY	13
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY	14
MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY	15
MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY	16

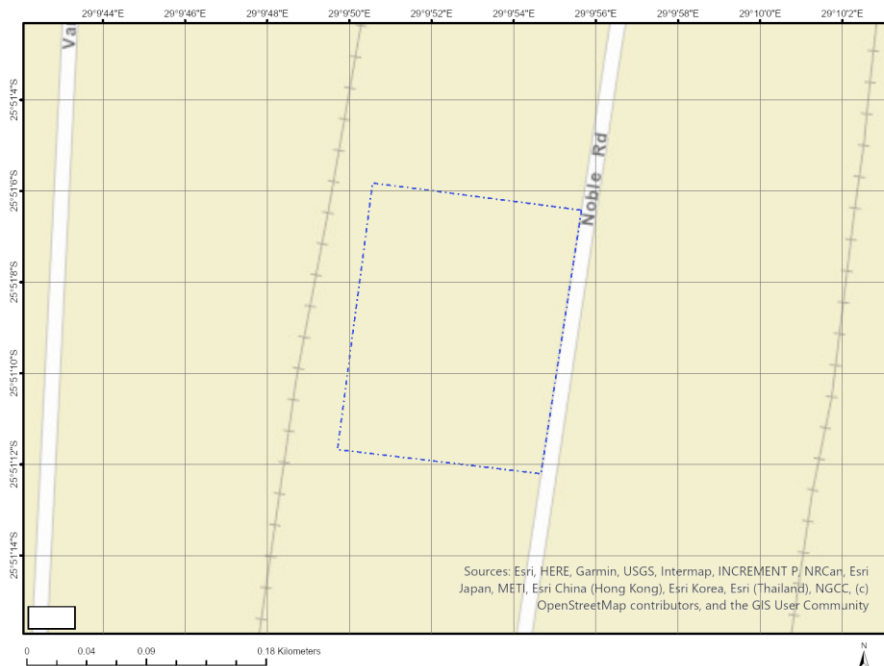
Proposed Project Location

Orientation map 1: General location

General Orientation: Glencore Char Technology VCN BA AEL Project



Map of proposed site and relevant area(s)



Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	FERROBANK	43	0	25°51'10.19S	29°9'52.11E	Erven
2	FERROBANK	44	0	25°51'6.28S	29°9'52.84E	Erven
3		297	0	25°50'25.96S	29°8'15.64E	Farm
4	DRIEFONTEIN	297	25	25°51'27.38S	29°9'55.68E	Farm Portion

Development footprint¹ vertices:

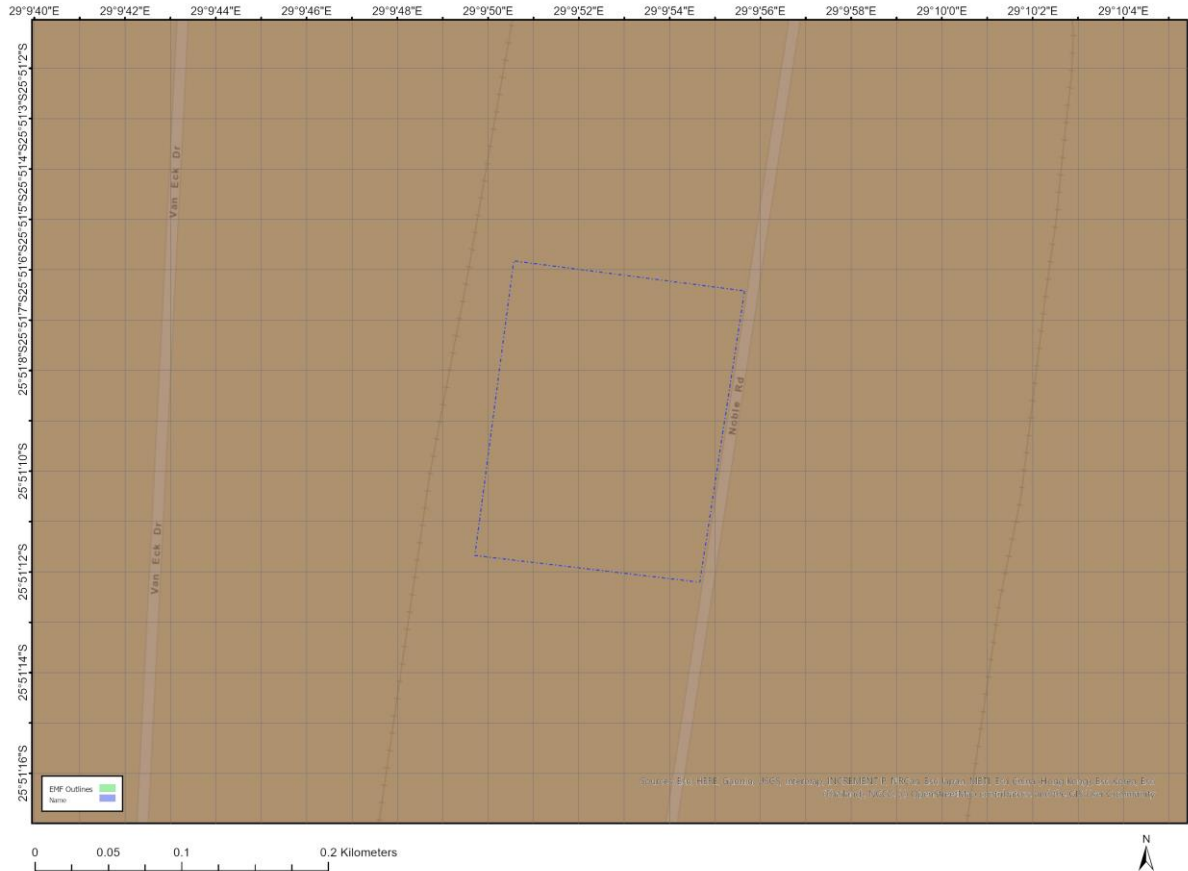
No development footprint(s) specified.

Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	14/12/16/3/3/97	Wind	Approved	5.2
2	14/12/16/3/3/1/2974	Solar PV	Approved	4.7
3	14/12/16/3/3/2/759	Solar PV	Approved	20.3

¹ "development footprint", means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

Environmental Management Frameworks relevant to the application



Environmental Management Framework	LINK
Olifants EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/Zone_4_6_67_78_80_92_103_122_129.pdf

Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is: **Activity requiring permit or licence in terms of National or Provincial legislation governing the release or generation of emissions| Emissions.**

Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Incentive, restriction	Implication
------------------------	-------------

or prohibition	
Strategic Transmission Corridor-International corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Air Quality-Highveld Priority Area	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/HIGHVELD_PRIORITY_AREA_AQMP.pdf
Renewable energy development zones 9-Emalahleni	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_REDZ.pdf

Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme		X		
Animal Species Theme			X	
Aquatic Biodiversity Theme				X
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme		X		
Defence Theme				X
Paleontology Theme	X			
Plant Species Theme				X
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

No	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/GuidanceforHIA.pdf
4	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/GuidanceforPIA.pdf
5	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/GuidanceforTBA.pdf

		ssmentProtocols/Gazetted Terrestrial Biodiversity Assessment Protocols.pdf
6	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Aquatic Biodiversity Assessment Protocols.pdf
7	Hydrology Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
8	Noise Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Noise Impacts Assessment Protocol.pdf
9	Traffic Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
10	Health Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
11	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
12	Ambient Air Quality Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
13	Air Quality Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
14	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf
15	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Animal Species Assessment Protocols.pdf

Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

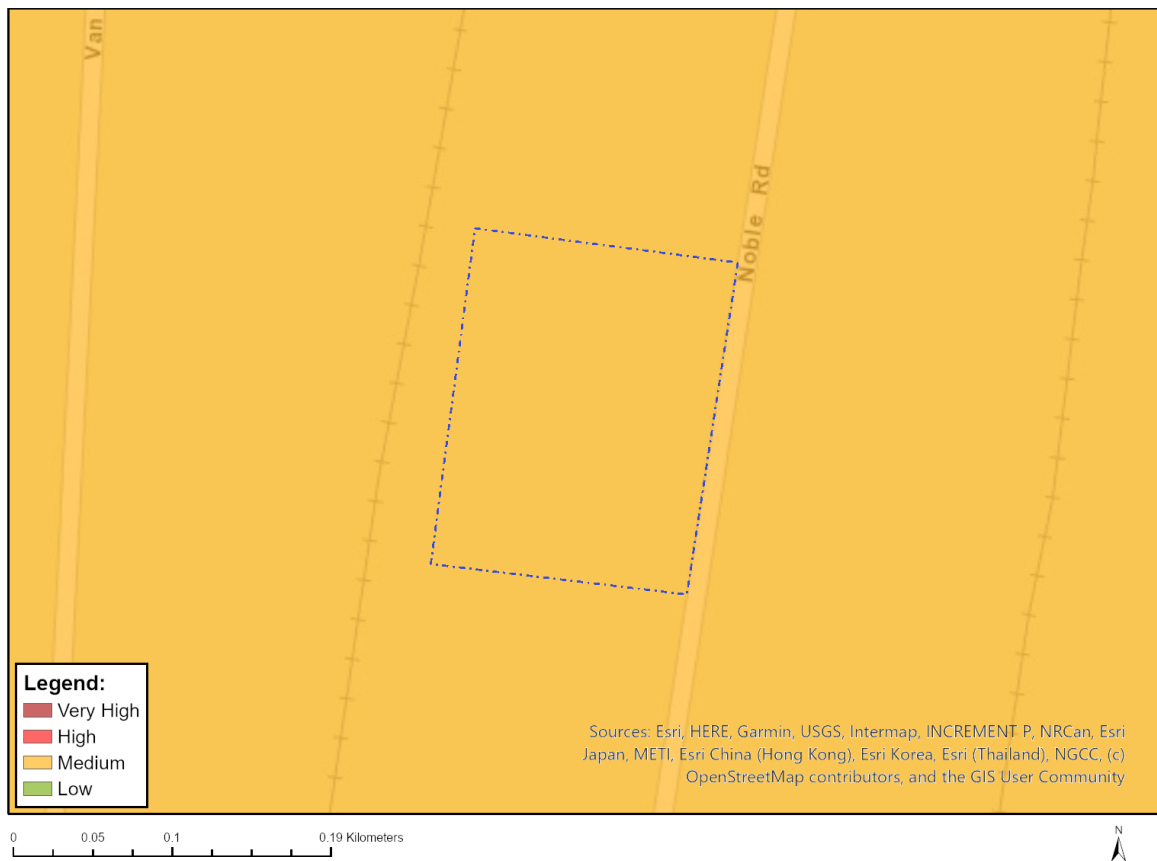


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	10. Moderate-High
High	09. Moderate-High

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



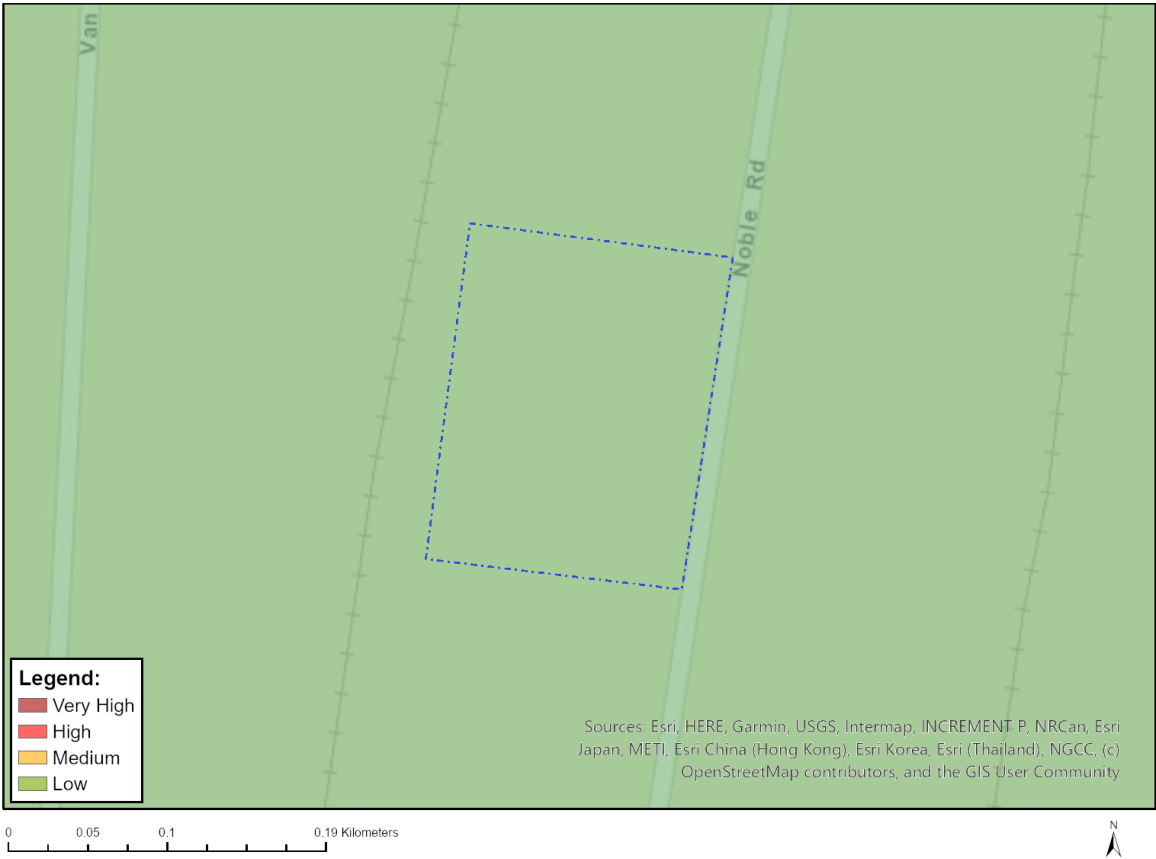
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Mammalia-Chrysospalax villosus
Medium	Mammalia-Crocidura maquassiensis
Medium	Mammalia-Dasymys robertsii

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

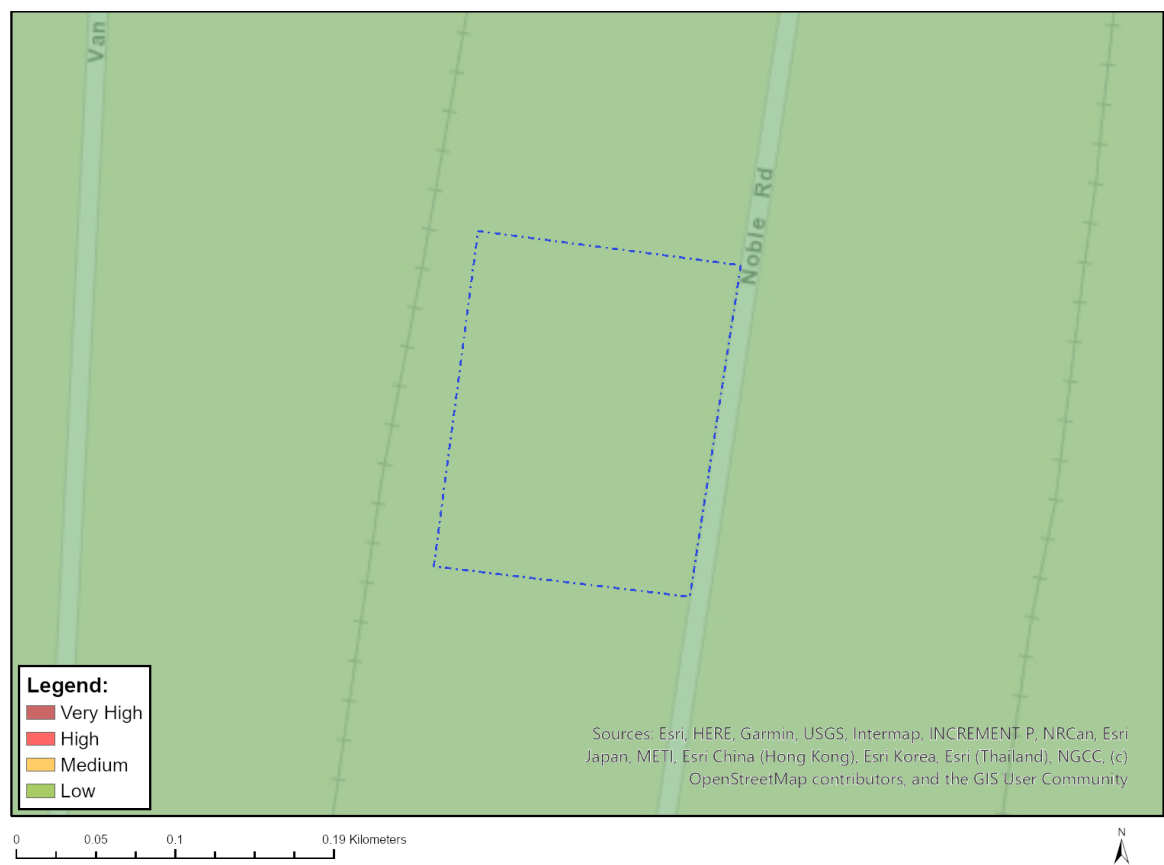


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome
Medium	Within 5 km of an air traffic control or navigation site

MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

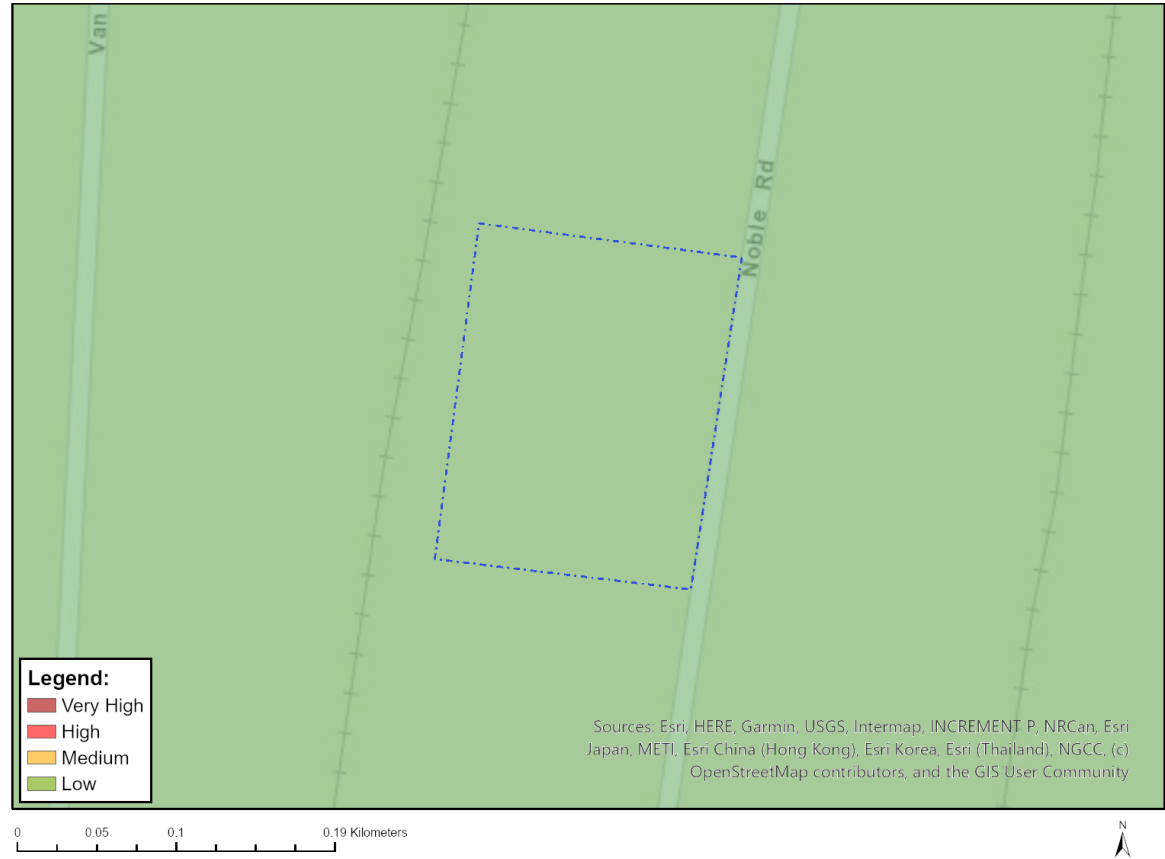


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Features with a Medium paleontological sensitivity
Very High	Features with a Very High paleontological sensitivity

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	EN_Eastern Highveld Grassland



Appendix 3: Project Map / Plan

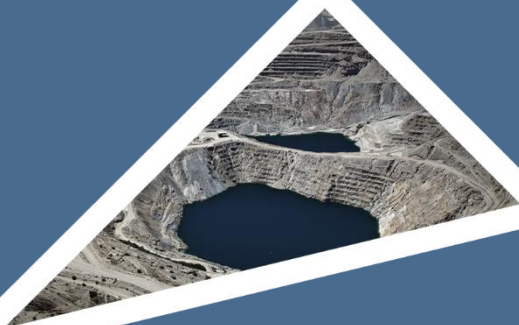


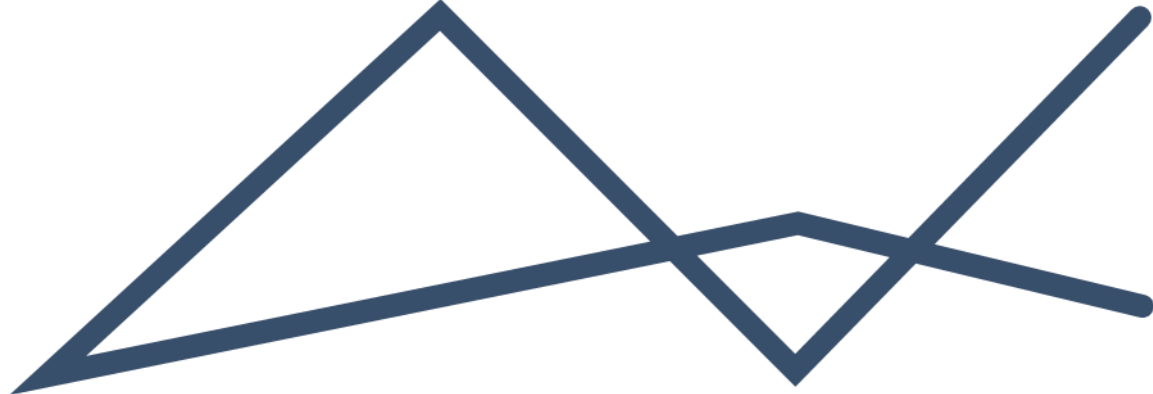
ENVIRONMENTAL
IMPACT
MANAGEMENT
SERVICES

T 011 789 7170 E info@eims.co.za W www.eims.co.za

SITE SENSITIVITY AND VERIFICATION REPORT

CHAR TECHNOLOGY VCN BA AEL PROJECT



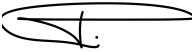



DOCUMENT DETAILS

EIMS REFERENCE: 1733

DOCUMENT TITLE: SITE SENSITIVITY AND VERIFICATION REPORT

DOCUMENT CONTROL

	NAME	SIGNATURE	DATE
COMPILED:	Qaphela Magaqa		2026/01/30
CHECKED:	Liam Whitlow		2026/02/03
AUTHORIZED:	Liam Whitlow		2026/02/03

REVISION AND AMENDMENTS

REVISION DATE:	REV #	DESCRIPTION
2026/02/04	ORIGINAL DOCUMENT	SITE SENSITIVITY AND VERIFICATION REPORT – Applicant Review
2026/02/17	REVISION 1	SITE SENSITIVITY AND VERIFICATION REPORT – BAR Public Review



Table of Contents

1	Scope and Purpose	1
2	Project Background.....	2
2.1	Project Aspects.....	2
2.2	Site Locality and layout	2
2.3	DFFE Screening Tool Assessment	2
3	Site Assessment	2
3.1	Gradient	3
3.2	Sensitive Areas	3
3.3	Vegetation.....	4
3.4	Land Cover / Use Description.....	4
4	Verification Findings and Motivation.....	12
5	Conclusion.....	19
6	Appendices.....	20

List of Figures

Figure 1: Site locality /Listing Notice 3 map.	1
Figure 2: Western view of the proposed structure into which the VCN furnace will be installed with compacted gravel access roads	6
Figure 3: Northward view of the exiting structure onto which the VCN furnace will be installed (Furnace to be installed on the west wing with stack and baghouse, Nitrogen generator and compressor in the north wing of the building, and Labs, material storage on east wing	6
Figure 4: View of east wing/laboratory and material storage area	6
Figure 5: Southward view towards proposed loading bay area	6
Figure 6: View of existing laboratory infrastructure.....	7
Figure 7: View towards eastern site boundary (Noble Road).....	7
Figure 8: View of existing gravel site access road (towards noble road, to be paved).....	7
Figure 9: Inside view of north wing where nitrogen generator and compressor is to be installed.....	7
Figure 10: Inside view of existing laboratory	8
Figure 11: Inside view of existing laboratory and equipment	8
Figure 12: Inside view of west wing where VCN furnace will be installed and operated	8
Figure 13: Inside view of west wing where VCN furnace will be installed and operated	8
Figure 14: View of existing laboratory facilities.....	9
Figure 15: View of building containing transformer through which electricity will be supplied	9
Figure 16: View of existing bathroom facilities	9
Figure 17: View along the northern boundary of the existing building	9



Figure 18: View of grass patch on site/minimal vegetation around the building/concrete slabs	10
Figure 19: General view of the site, with concrete slabs cover	10
Figure 20: General view of recent alien vegetation control measures implemented on site	10
Figure 21: Ornamental tree species noted Albizia amara (Bitter false thorn)	10
Figure 22: View of access to Char Techon Van Eck Drive	11
Figure 23: View of Noble Road to be used to access the VCN site	11

List of Tables

Table 1: Screening Tool Report- Proposed development area environmental sensitivity.	2
Table 2: Site photographs.....	6
Table 3: Assessment for specialist studies and motivation.	13

Appendices

Appendix 1: Locality/Listing Notice 3 Map

Appendix 2: Land Use/ Land Cover Map

Appendix 3: Engineering Design/Site Layout



1 SCOPE AND PURPOSE

Regulation 16(1)(b)(v) of the Environmental Impact Assessment Regulations (GNR 982 promulgated under the National Environmental Management Act (Act 107 of 1998-NEMA)), requires that a Screening Report to be generated by the national web-based environmental screening tool for the specific site and activity must accompany any application for Environmental Authorization.

The Screening Report identifies preliminary development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmentally sensitive features on the site based on the site sensitivity screening. On the basis of the sensitivities identified in the site sensitivity screening, a list of preliminary specialist studies required to be considered in the Impact Assessment process are provided. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

Prior to commencing with a specialist assessment identified in the Screening Report, the current use of the land and the environmental sensitivity of the site, must be confirmed by undertaking a site sensitivity verification. The site sensitivity verification must be undertaken by an environmental assessment practitioner or a specialist. The site sensitivity verification must be undertaken through the use of:

- a) a desk top analysis, using satellite imagery;*
- b) a preliminary on-site inspection; and*
- c) any other available and relevant information.*

This Site Sensitivity and Verification Report (SSVR) is a record of the outcome of the site sensitivity verification in compliance with the requirements of the procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of Sections 24(5)(a) and (h) and 44 of the NEMA. The SSVR aims to:

- a) confirm or disputes the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.;*
- b) contain motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity; and*
- c) be submitted together with the relevant assessment report prepared in accordance with the requirements of the Environmental Impact Assessment Regulations (EIA Regulations).*



2 PROJECT BACKGROUND

2.1 PROJECT ASPECTS

The Applicant proposes the addition of a Vanadium Carbonitride (VCN) furnace onto the existing licensed facility. The facility currently operates under an approved Atmospheric Emissions Licence (AEL) with reference number NDM/AEL/MP312/13/06. The proposed VCN furnace will not be newly constructed on site, but assembled and installed on the existing structural footprint with minor refurbishments required; these include refurbishing current structures and paving of a short internal road section between the gate and loading area. The introduction of the new furnace/process constitutes a Listed Activity and presents a change to the approved operational processes; accordingly, an amendment to the existing AEL will be required to authorise the proposed activity.

The applicant wishes to install and operate a continuous, zoned hydraulic pusher furnace to produce VCN at a design capacity of up to 6 t/day. Briquetted raw Vanadium-bearing materials (V_2O_5 flakes and V_2O_3), carbon powder, and a small amount of iron powder will be supplied to Char Technology from a licensed facility in the form of mixed and pressed briquettes of ~45mm in size. These will be preheated to remove moisture/volatiles, then processed through the primary furnace under a controlled high-temperature profile (~600–1,500°C) in an excess nitrogen atmosphere to enable reduction and carbonitriding. The product will then be cooled through rapid water-assisted cooling, packaged to customer specifications, and dispatched.

The proposed project is located on Erf No 43 and 44, Ferrobank Township, on 9 Noble Road, Ferrobank, Emalahleni Local Municipality, Mpumalanga. The site is approximately 5km North West of eMalahleni Central Business District. The centre point of the site is 25°51'09.01"S; 29° 09'52.59"E, please refer to Section 2.2 for further locality details and map.

2.2 SITE LOCALITY AND LAYOUT

The proposed project is located on Erf No 43 and 44, Ferrobank Township, on 9 Noble Road, Ferrobank, Emalahleni Local Municipality, Mpumalanga. The site is approximately 5km North West of eMalahleni Central Business District. Figure 1 illustrates the site location in relation to the Terrestrial and Aquatic Mpumalanga Biodiversity Sector Plans (MBSP). According to the MBSP, the site is situated within areas classified as *Heavily Modified*. The centre point of the site is 25°51'09.01"S; 29° 09'52.59"E, please refer to Figure 1 for further locality details and Appendix 3 for the proposed layout of the proposed development.

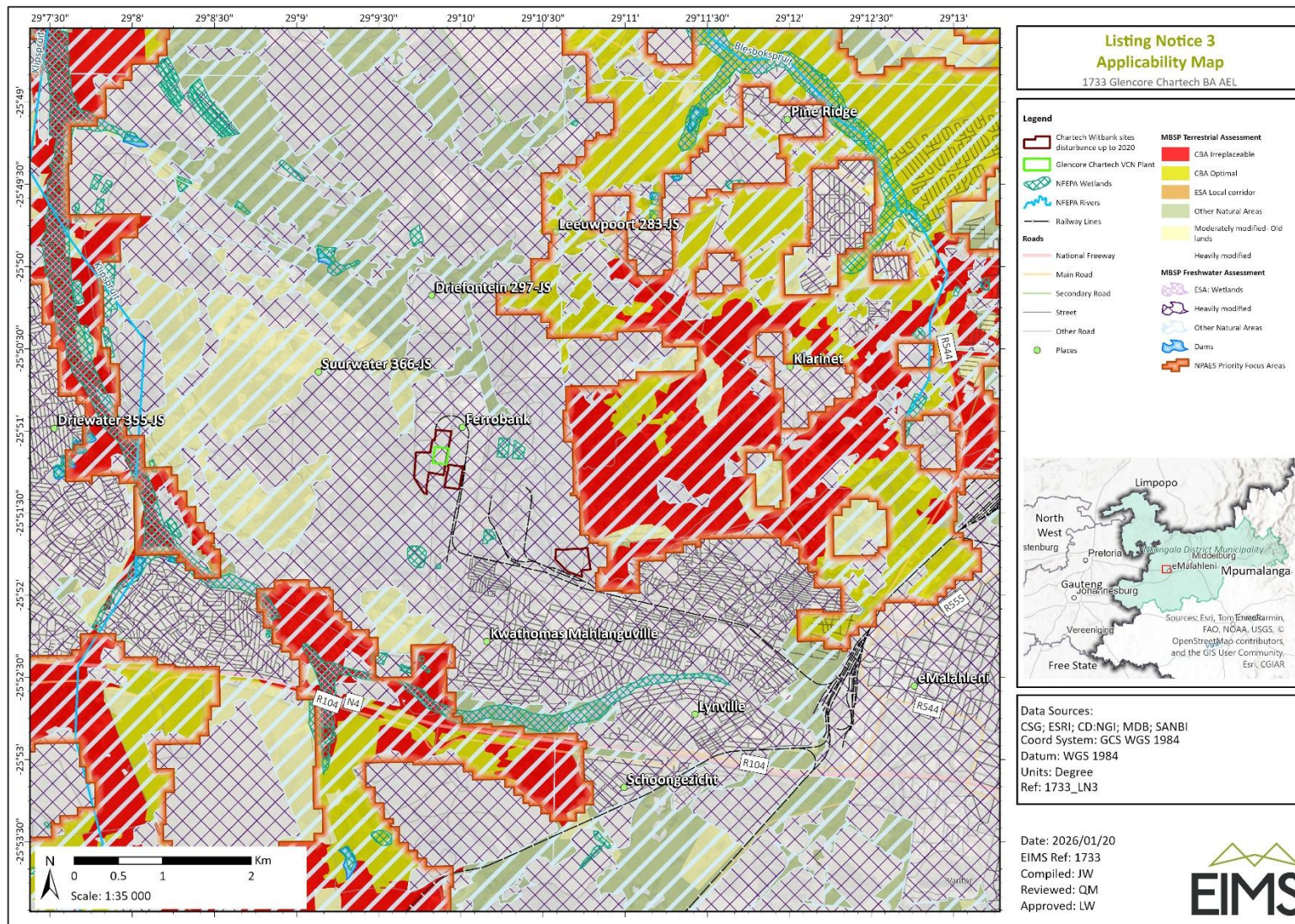


Figure 1: Site locality /Listing Notice 3 map.



2.3 DFFE SCREENING TOOL ASSESSMENT

Regulation 16(1)(b)(v) of the Environmental Impact Assessment Regulations (GNR 982 promulgated under the National Environmental Management Act (Act 107 of 1998-NEMA)), requires that a Screening Report generated by the national web-based environmental screening tool for the specific site and activity must accompany any application for Environmental Authorization.

The Screening Report identifies preliminary development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmentally sensitive features on the site based on the site sensitivity screening. On the basis of the sensitivities identified in the site sensitivity screening, a list of preliminary specialist studies required to be considered in the Impact Assessment process are provided. Table 1 provides the proposed development area environmental sensitivity as provided by the national web-based environmental screening tool.

As noted in the Screening Tool Report, *'it is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation'*.

Table 1: Screening Tool Report- Proposed development area environmental sensitivity.

Aspect	Very High	High	Medium	Low
Agriculture Theme	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Animal species Theme	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Aquatic Biodiversity Theme	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Archaeological and Cultural Heritage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Civil Aviation Theme	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Defence Theme	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Palaeontology Theme	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plant Species Theme	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Terrestrial Biodiversity Theme	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3 SITE ASSESSMENT

Prior to confirming the list of specialists and commencing with a specialist assessments identified in the Screening Report, the current use of the land and the environmental sensitivity of the site, must be confirmed by undertaking a site sensitivity verification. The site sensitivity verification must be undertaken by an EAP or a specialist. The site sensitivity verification must be undertaken through the use of:

- a desk top analysis, using satellite imagery;
- a preliminary on-site inspection; and
- any other available and relevant information.

The sub-sections below aim to provide context of the existing site conditions to support the site sensitivity and verification.



3.1 GRADIENT

The general gradient characteristics of the site:

<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

3.2 SENSITIVE AREAS

<i>Is the site located in the immediate vicinity of the following:</i>	Yes	No	Comment
Erosion Channels or areas of severe erosion/ destabilized soils	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The site is located within an Industrial Park. No signs of erosion were noted in and around the site. The existing facility has a formal stormwater management system that separates dirty and clear stormwater. Dirty water is contained on site.
Wetlands (within 32m)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No wetlands occur within and around the proposed project area. Desktop assessments and site sensitivity verification inspection did not identify any wetlands. Within 32 m of the site. The site is located within an Industrial Park and will entail the installation of a furnace into an existing structure/building, paving of existing road and minor refurbishments of the building structures. The planned works are located at least 1.6 km from the closest non-perennial tributary of the Brugspruit.
Unstable slopes or geological features (rocky outcrops)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The site is located within a brownfield site in an Industrial Park. No unstable slopes/geological features were



<i>Is the site located in the immediate vicinity of the following:</i>	Yes	No	Comment
			identified. However, at least 300m west of the site surface mining works have been noted, however will not affect the site located within the Ferrobank Industrial Park.
Bare areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The site is mainly covered by existing structures, buildings, concrete open areas and some lawn grass. Some sections of the site consist of unpaved roads.
Other Sensitive or risk areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None
Are any existing servitudes and structures directly or indirectly affected by the proposed sites and routes (e.g. Eskom, public road servitudes and restrictions-60m from National Road, farmer's water/irrigation supplies, etc.)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The site is accessed from an existing local road. However, the project will not affect any existing servitudes.

3.3 VEGETATION

<i>Which of the listed descriptions best describes the general groundcover on and around the site?</i>				
<input type="checkbox"/> Natural veld - good condition	<input type="checkbox"/> Natural veld with scattered aliens	<input type="checkbox"/> Natural veld with heavy alien infestation	<input type="checkbox"/> Veld dominated by alien species	<input type="checkbox"/> Gardens
<input type="checkbox"/> Sport field	<input type="checkbox"/> Cultivated land	<input type="checkbox"/> Paved surface	<input checked="" type="checkbox"/> Building or other structure	<input type="checkbox"/> Bare soil
Comments on vegetation composition:		The site is located within the Ferrobank industrial park and exists as a heavily modified environment. The proposed project will mainly be within the existing building, with concrete and already disturbed areas. However, desktop assessment and a site sensitivity verification noted limited grass cover on the site mainly purposed for landscaping and trees along the site boundary. The tree species noted <i>Albizia amara</i> (Bitter false thorn).		
Comments on weed species/type		The site is in a heavily modified state with minimal vegetation, as such, there is a minimal risk of weeds. However, it was noted that weed species do occur on site and where identified are eliminated/controlled in line with CharTech's alien vegetation control plan.		

3.4 LAND COVER / USE DESCRIPTION

The SSVR aims to:



- confirm or dispute the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.; and
- contain motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity.

The Char Tech site is located within an established industrial area and is currently developed and operational under an approved AEL. The dominant land use is industrial, with existing infrastructure including processing facilities, furnaces, associated plant equipment, internal access roads, hard-stand areas, and utility connections. The proposed VCN furnace will be installed within the existing buildings, within the existing developed footprint, with no expansion into undeveloped land.

In terms of land cover, the site is transformed, consisting primarily of impervious surfaces such as buildings, concrete slabs, and compacted gravel areas. Natural vegetation has been removed as a result of historical industrial development, and any remaining vegetation is limited to disturbed or ornamental/landscaping occurring along site margins or unused areas. No intact natural habitats, wetlands, or watercourses occur within the project footprint or within close proximity.

Surrounding land uses are also predominantly industrial, reinforcing the highly transformed character of the area. It is noteworthy that at least 300m west of the proposed project area, there are existing surface mine workings. The proposed activity does not result in a change to the existing land use or land cover, nor does it encroach on sensitive ecological features. The development represents an intensification of existing industrial land use rather than a change in land cover type. Refer to Appendix 2 for the Land Use Land Cover map.



Table 2: Site photographs.



Figure 2: Western view of the proposed structure into which the VCN furnace will be installed with compacted gravel access roads

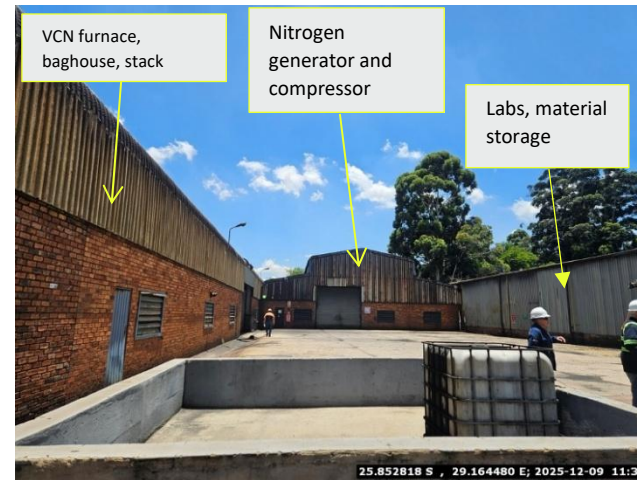


Figure 3: Northward view of the existing structure onto which the VCN furnace will be installed (Furnace to be installed on the west wing with stack and baghouse, Nitrogen generator and compressor in the north wing of the building, and Labs on east wing)



Figure 4: View of east wing/laboratory and material storage area



Figure 5: Southward view towards proposed loading bay area



Figure 6: View of existing laboratory infrastructure



Figure 7: View towards eastern site boundary (Noble Road)



Figure 8: View of existing gravel site access road (towards noble road, to be paved)



Figure 9: Inside view of north wing where nitrogen generator and compressor is to be installed



Figure 10: Inside view of existing laboratory



Figure 11: Inside view of existing laboratory and equipment



Figure 12: Inside view of west wing where VCN furnace will be installed and operated



Figure 13: Inside view of west wing where VCN furnace will be installed and operated



Figure 14: View of existing laboratory facilities



Figure 15: View of building containing transformer through which electricity will be supplied



Figure 16: View of existing bathroom facilities



Figure 17: View along the northern boundary of the existing building



Figure 18: View of grass patch on site/minimal vegetation around the building/concrete slabs



Figure 19: General view of the site, with concrete slabs cover



Figure 20: General view of recent alien vegetation control measures implemented on site



Figure 21: Ornamental tree species noted Albizia amara (Bitter false thorn)



Figure 22: View of access to Char Techon Van Eck Drive



Figure 23: View of Noble Road to be used to access the VCN site



4 VERIFICATION FINDINGS AND MOTIVATION

The Screening Report identifies preliminary development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmentally sensitive features on the site based on the site sensitivity screening (Section 2.3). On the basis of the sensitivities identified in the site sensitivity screening, a list of preliminary specialist studies required to be considered in the Impact Assessment/ Basic Assessment process are provided. Table 3 below lists the screening tool identified specialist studies and associated screening tool sensitivity. Based on the findings of the site verification process (Section 3) a verified, or suggested revised sensitivity is provided together with an associated motivation.

Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.



Table 3: Assessment for specialist studies and motivation.

Screening Tool Specialist Study Required	Screening Tool Level of Sensitivity	Suggested Sensitivity	Required level of Assessment	Motivation
Agriculture Impact Assessment	High	None	None	The proposed development is to be located within a heavily modified industrial site. The proposed development entails the assembly and installation of a VCN furnace into an existing building. The building floors are on concrete foundations. Around The site is mostly covered by concrete and compacted gravel and is surrounded by such similar land uses, and mining activities at least 300 m located to the west. Apart from the indirect atmospheric pathways through the facility air emissions, there are no other foreseeable impact pathway to the soil receptors. The air emissions from the facility and alignment with National Emissions Standards will be assessed in detail in the Specialist Air Quality Impact Assessment Report. No agricultural and/or soil impacts are anticipated to emanate from the proposed VCN furnace project, and consequently it is the EAPs opinion that neither a dedicated Agricultural Impact Assessment or even a compliance statement is required for this activity.
Landscape/Visual Impact Assessment	-	Low	None	The Char TechVCN Project is located within an established brownfield industrial site surrounded by similar industrial land uses, where the visual environment is already highly modified. The proposed furnace installation will occur within existing industrial structures, with the addition of a baghouse and an approximately 35 m stack that is consistent in form and scale with surrounding infrastructure and is anticipated to be equal to or smaller than existing industrial elements in the area. As such, the proposed development will not alter the existing visual character of the site or its surroundings, and the site is therefore considered to have low landscape and visual sensitivity, with no significant visual impacts anticipated. It is the EAPs opinion that a dedicated Visual Impact Assessment is not warranted for this activity.
Archaeological and Cultural Heritage Impact Assessment	Low	None	None	The proposed project is located within an industrial site, on an existing industrial building and will not change the character of the site. Minor refurbishments of an existing industrial building, including installation of a stack and baghouse. The building on which the furnace



Screening Tool Specialist Study Required	Screening Tool Level of Sensitivity	Suggested Sensitivity	Required level of Assessment	Motivation
				<p>will be installed was constructed after 1974 and is therefore approximately 50 years old. As such, it does not qualify as a heritage resource and is not considered a heritage feature.</p> <p>All works will be confined to the existing building footprint, and no deep excavations or ground disturbances are planned. The project is therefore excluded from the Chance Finds Protocol. Given that the project will not alter the character of the site and no heritage resources are present or expected to be impacted, a Heritage Impact Assessment is not required, and no heritage-related impacts are anticipated.</p>
Palaeontology Impact Assessment	Very High	None	None	The proposed project is located within an industrial site, on an existing industrial building and mainly on concrete. Although the proposed project also includes the paving of an existing gravel access road, no excavations will be undertaken for this project and as such, no palaeontology related impacts are anticipated. It is the EAPs opinion that a dedicated Palaeontology Impact Assessment is not warranted for this activity.
Terrestrial Biodiversity Impact Assessment	Very High	None	None	The screening tool has identified the sensitivity of the site as very high due to the Endangered (EN) Eastern Highveld Grassland Ecosystem. This ecosystem is listed in the Department of Forestry, Fisheries and Environment's (DFFE) Revised National List of Ecosystems that are Threatened and, in Need of Protection published in 2022 under the National Environmental Act: Biodiversity Act (Act 10 of 2004). The site sensitivity verification undertaken confirmed that the site exists in a heavily modified environment within an existing industrial park. The proposed project is within an existing building, mainly with concrete floors, existing access roads and will not require any clearance of vegetation/ecosystem disturbance. Apart from the indirect atmospheric pathways through the facility air emissions, there are no other foreseeable impact pathway to the terrestrial biodiversity receptors. The air emissions from the facility and alignment with National Emissions Standards will be assessed in detail in the



Screening Tool Specialist Study Required	Screening Tool Level of Sensitivity	Suggested Sensitivity	Required level of Assessment	Motivation
				Specialist Air Quality Impact Assessment Report. It is the EAPs opinion that a dedicated Terrestrial Ecological Impact Assessment is not warranted for this activity.
Aquatic Biodiversity Impact Assessment	Low	Low	None	The proposed Char Tech Project is located within an established brownfield industrial site, with no wetlands or watercourses located within 500 m of the site, being the regulated area of a watercourse. As a result, no aquatic features occur within or adjacent to the site that could be affected by the proposed installation of the VCN furnace and associated infrastructure. The operation of the VCN furnace will not result in the release of effluent or contaminated runoff, and therefore no interaction with aquatic systems is anticipated. The site is accordingly considered to have no aquatic biodiversity sensitivity, and no aquatic biodiversity impacts are expected to result from the proposed development. It is the EAPs opinion that a dedicated Aquatic and/or Wetland Impact Assessment is not warranted for this activity.
Hydrology Assessment	-	None	None	<p>The proposed Char Tech Project is located within an established industrial park and involves the installation of a furnace within an existing building, along with paving of existing internal roads and minor refurbishment of current structures. The site is situated approximately 1.6 km from the nearest non-perennial tributary of the Brugspruit, and no surface water features occur within or adjacent to the site.</p> <p>The Char Techsite is serviced by an existing formal stormwater management system, which captures and conveys runoff from roofed areas and paved surfaces via kerbing/channelisation and/or stormwater inlets and pipes to designated discharge points. The primary project activities (installation of the furnace and associated infrastructure) will occur within the existing building footprint (under roof), and will therefore not be directly exposed to rainfall-driven hydrological pathways.</p> <p>External works are limited to paving/upgrade of existing internal roads and a loading bay, which will comprise additional or improved hardstanding within an already transformed (brownfield) industrial environment. These works are not expected to significantly alter</p>



Screening Tool Specialist Study Required	Screening Tool Level of Sensitivity	Suggested Sensitivity	Required level of Assessment	Motivation
				<p>catchment-scale runoff patterns, nor create pathways to watercourses, given the absence of nearby surface water features and the presence of established stormwater infrastructure.</p> <p>Given the brownfield nature of the site, the absence of nearby watercourses, and the limited extent of additional hard infrastructure, the site is considered to have low hydrological sensitivity, and no significant hydrological impacts are anticipated as a result of the proposed development.</p>
Noise Impact Assessment	-	Low	None	<p>The proposed activities do not involve any significant noise-generating processes. Anticipated noise sources are limited to standard construction activity, light-industrial equipment, and occasional vehicle movement, all of which fall within typical operational parameters for the area.</p> <p>Furthermore, the site is located away from noise-sensitive receptors such as residences, schools, or medical facilities, and the project is expected to operate within the existing acoustic character of the already transformed environment. No material change to the ambient noise climate is anticipated; therefore, a Noise Impact Assessment is not required for the Char TechVCN project.</p>
Traffic Impact Assessment	-	Low	None	<p>The proposed Char TechVCN project will generate negligible traffic volumes during both construction and operation. Construction activities will involve limited vehicle movements associated with material delivery and contractor access, all of which fall within normal thresholds for small-scale industrial developments. During operation, the facility will have a low staff complement and minimal logistics requirements, resulting in no meaningful increase in daily traffic on the surrounding road network. It is anticipated that during operation the site will receive 3 trucks per week, each delivering 30 tons of briquettes and 2 trucks will be dispatched with 30 tons of product per week (total 5 trucks per week). The project is located within an existing industrial/previously transformed area that is already serviced by adequate road infrastructure, and no congestion or capacity constraints have been identified in proximity to the site.</p>



Screening Tool Specialist Study Required	Screening Tool Level of Sensitivity	Suggested Sensitivity	Required level of Assessment	Motivation
Health Impact Assessment	-	Unknown	Undertaken as part of the AQIA	A full DFFE compliant Air Quality Impact Assessment (AQIA) will be undertaken and will cover the health risks/aspects associated with the development of the Char Tech VCN project human health risk and nuisance impact screening assessment based on NAAQS and dispersion simulation results will form part of the AQIA.
Socio-Economic Assessment	-	Low	None	The proposed VCN project is an addition to the existing Char Tech facilities within the Ferrobank Industrial Park. This project is anticipated to maintain existing employment, whilst also providing limited new opportunities during the construction phase. Char Tech has an existing stakeholder engagement and communication. As such, a socio-economic study was not deemed necessary for this project. It is the EAPs opinion that a dedicated Socio-economic Impact Assessment is not warranted for this activity.
Ambient Air Quality Impact Assessment	-	Unknown	Undertaken as part of the AQIA	An Air Quality Impact Assessment will be undertaken by a suitably qualified specialist. The ambient air quality will be assessed as part of the Air Quality Impact Assessment/study.
Air Quality Impact Assessment	-	Unknown	Full Assessment	An Air Quality Impact Assessment will be undertaken by a suitably qualified specialist.
Plant Species Assessment	Low	None	None	The site sensitivity verification undertaken confirmed that the site exists in a heavily modified environment within an existing industrial park. The proposed project is within an existing building, mainly with concrete floors, existing access roads and will not require any clearance of vegetation/ecosystem disturbance. It is the EAP's opinion that there is no sensitivity on the development site. Apart from the indirect atmospheric pathways through the facility air emissions, there are no other foreseeable impact pathway to the terrestrial biodiversity receptors (including flora). The air emissions from the facility and alignment with National Emissions Standards will be assessed in detail in the Specialist Air Quality Impact Assessment Report. It is the EAPs opinion that a dedicated Plant Species Impact Assessment is not warranted for this activity.



Screening Tool Specialist Study Required	Screening Tool Level of Sensitivity	Suggested Sensitivity	Required level of Assessment	Motivation
Animal Species Assessment	Low	None	None	The site sensitivity verification undertaken confirmed that the site exists in a heavily modified environment within an existing industrial park. The proposed project is within an existing building, mainly with concrete floors, existing access roads and will not require any clearance of vegetation/ecosystem disturbance. It is the EAP's opinion that there is no sensitivity on the development site. Apart from the indirect atmospheric pathways through the facility air emissions, there are no other foreseeable impact pathway to the terrestrial biodiversity receptors (including fauna). The air emissions from the facility and alignment with National Emissions Standards will be assessed in detail in the Specialist Air Quality Impact Assessment Report. It is the EAPs opinion that a dedicated Animal Species Impact Assessment is not warranted for this activity.



5 CONCLUSION

A Screening Tool Report for the proposed Char Technology VCN Project was generated on the DFFE Screening Tool on 01 December 2025. Following this, a desktop sensitivity analysis and site sensitivity verification were undertaken by the EAP on 9 December 2025.

The site sensitivity verification confirmed that the proposed development area is situated entirely within an existing, established industrial site and is predominantly underlain by hardened, previously transformed surfaces. No deep excavations are planned, and only limited civil works are required to facilitate the installation of the VCN Furnace and associated machinery. Based on the verified ground conditions and the brownfield nature of the site, the sensitivities identified by the Screening Tool were reviewed and, where applicable, disputed with supporting motivation in accordance with the requirements of the EIA Regulations and associated protocols.

The EAP has confirmed that, among the specialist studies originally flagged, only a DFFE- AQIA, including both an Ambient Air Quality Impact Assessment and a Health Impact Assessment, is required to support the Basic Assessment process for the project.

Accordingly, this Site Sensitivity Verification Report provides sufficient justification for the amended list of specialist requirements and confirms that the environmental sensitivities associated with the proposed development are accurately reflected and appropriately addressed.

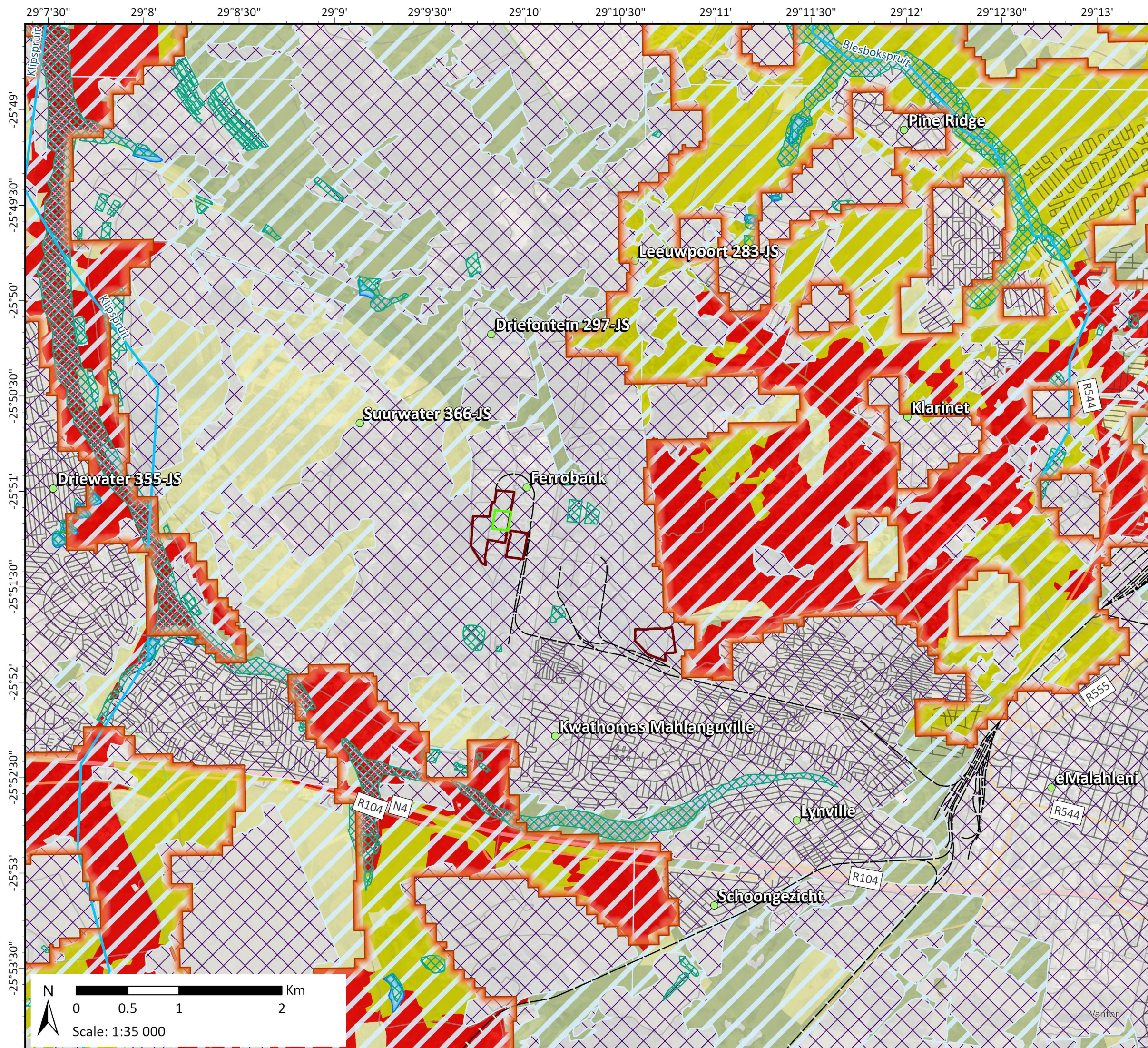


6 APPENDICES

Appendix 1: Locality/Listing Notice 3 Map

Appendix 2: Land Use/ Land Cover Map

Appendix 3: Engineering Design/Site Layout



Listing Notice 3 Applicability Map

1733 Glencore Chartech BA AEL

Legend

Chartech Witbank sites disturbance up to 2020

Glencore Chartech VCN Plant

NFEPA Wetlands

NFEPA Rivers

Railway Lines

Roads

National Freeway

Main Road

Secondary Road

Street

Other Road

Places

MBSP Terrestrial Assessment

CBA Irreplaceable

CBA Optimal

ESA Local corridor

Other Natural Areas

Moderately modified- Old lands

Heavily modified

MBSP Freshwater Assessment

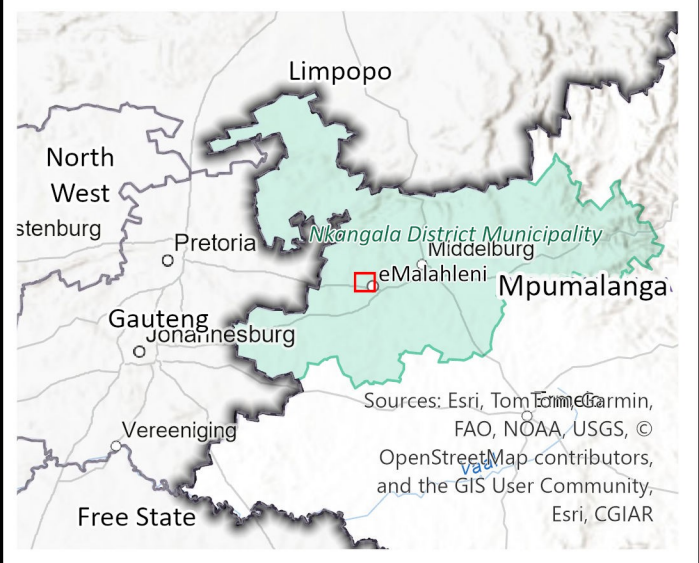
ESA: Wetlands

Heavily modified

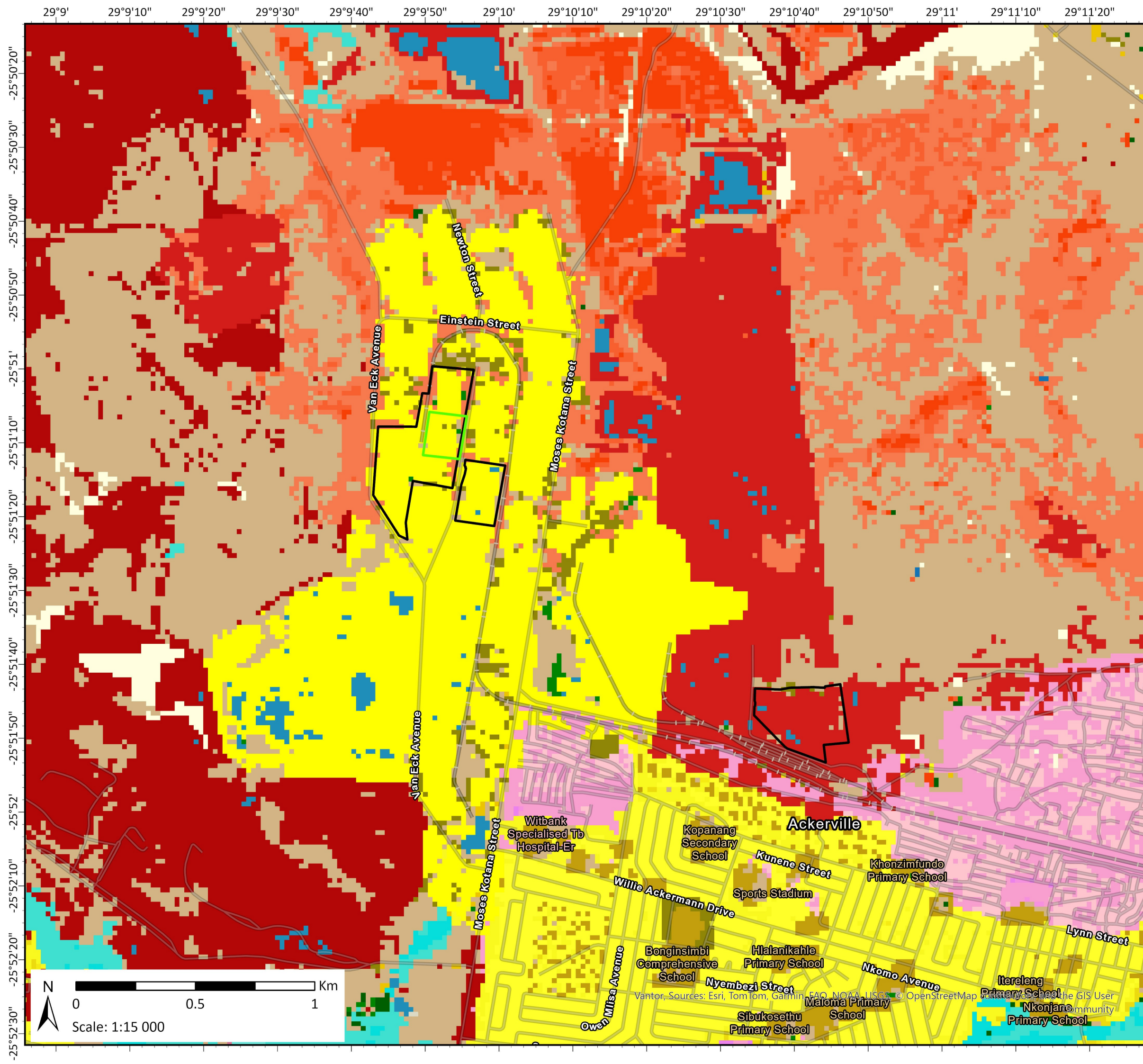
Other Natural Areas

Dams

NPAES Priority Focus Areas



Data Sources:
CSG; ESRI; CD:NGI; MDB; SANBI
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1733_LN3



Land Cover Map

1733 Glencore Chartech BA AEL

Legend

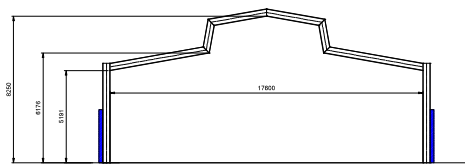
- Chartech Witbank sites disturbance up to 2020
- Glencore Chartech VCN Plant
- Land Cover**
 - dense forest & woodland
 - open woodland
 - contiguous & dense plantation forest
 - open & sparse plantation forest
 - temporary unplanted (clear-felled) plantation forest
 - natural grassland
 - artificial dams (including canals)
 - artificial flooded mine pits
 - herbaceous wetlands (currently mapped)
 - herbaceous wetlands (previously mapped)
 - dry pans
 - other bare
 - fallow land & old fields (grass)
 - residential formal (tree)
 - residential formal (bush)
 - residential formal (low veg / grass)
 - residential formal (bare)
 - residential informal (tree)
 - residential informal (bush)
 - residential informal (low veg / grass)
 - residential informal (bare)
 - village scattered (bare & low veg/ grass combo)
 - commercial
 - industrial
 - roads & rails (major linear)
 - mines: surface infrastructure
 - mines: extraction pits, quarries
 - mine: tailings and resource dumps
 - fallow land & old fields (wetlands)



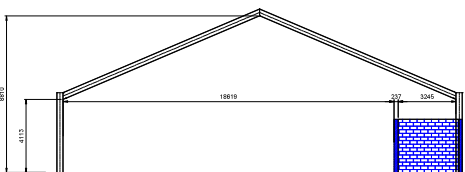
Data Sources:
CSG; ESRI; CD:NGI; MDB; SANBI; DFFE
Coord System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Ref: 1733_LandCover

Date: 2026/02/04
EIMS Ref: 1733
Compiled: JW
Reviewed: QM
Approved: LW

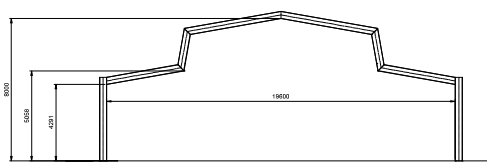




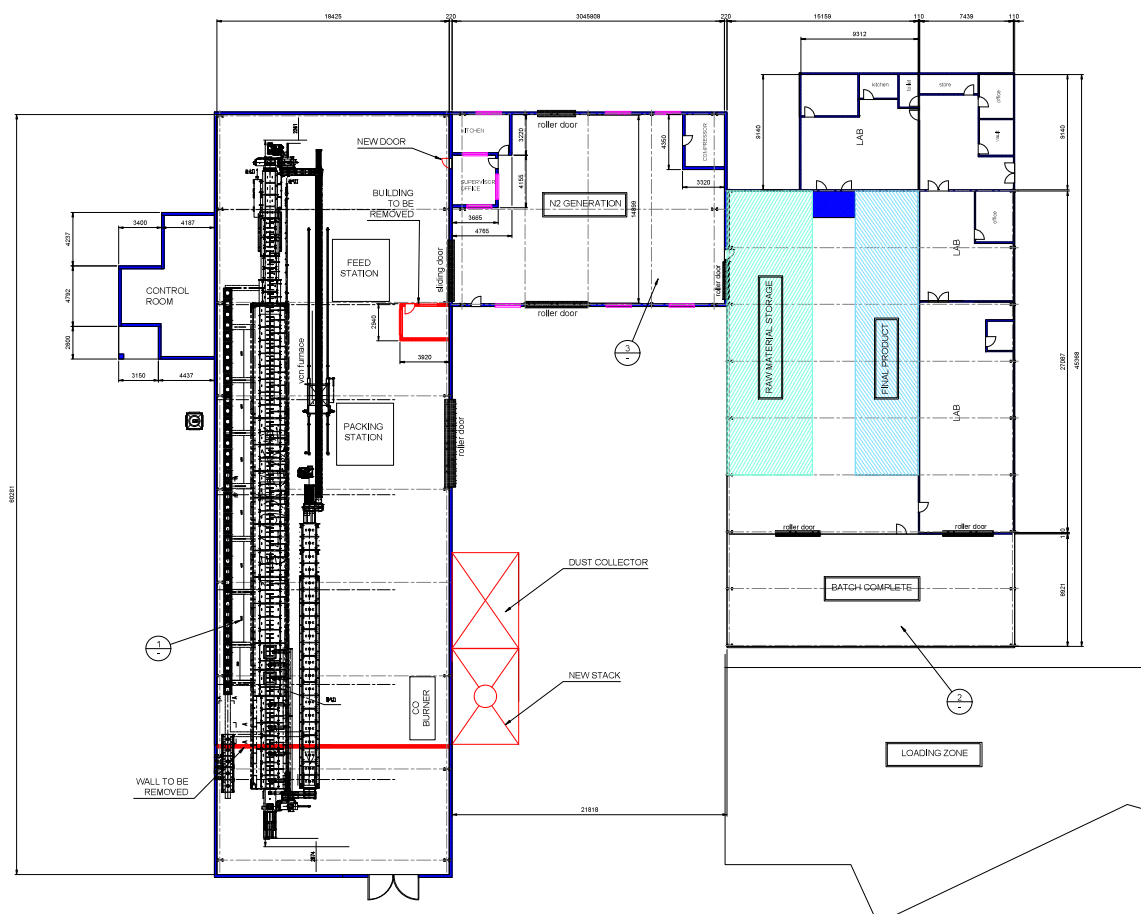
BUILDING 1
SIDE VIEW
SCALE 1:100



BUILDING 2
SIDE VIEW
SCALE 1:100



BUILDING 3
SIDE VIEW
SCALE 1:100




VCN CHARTECH PLANT
PLAN VIEW



VCN CHARTECH PLANT
PLANT PHOTO

ITEM		QTY	DESCRIPTION	MAT'L	MASS	REMARKS
AREA 1300		FEV	VCN CHARTECH	SCALE	AS SHOWN	
			ENVIRONMENTAL LAYOUT	COMPANY	XXXXXX	
				PROJECT N°	PROJ-150A	
				DRAWN	S.BASSON	27/03/2025
				CHECKED	XXX	
				APPROVED	XXX	05/04/19
				REVISION	00	
				DRAWING N°	1300-000-0019	
				SHEET	1	
				OF	1	

THIS DRAWING IS CONFIDENTIAL AND THE PROPERTY OF RHOVAN OPERATION. IT IS SUBJECT TO RETURN UPON DEMAND. NO COPIES MAY BE MADE OF THE WHOLE OR PART THEREOF AND IT MAY NOT BE SHOWN OR PASSED ON TO ANY THIRD PARTY OR USED DIRECTLY OR INDIRECTLY FOR ANY OTHER PURPOSE THAN THE MANUFACTURE OR CONSTRUCTION OF EQUIPMENT OR IN THE DESIGN AND INSTALLATION OF THE PLANT TO THE ORDER OF RHOVAN OPERATION.	
	
RHOVAN OPERATION PO Box 3429 8146 ESSO South Africa Tel: +27(0) 10 318 8760 Fax: +27(0) 10 318 8765 DRAWING OFFICE TEL: +27(0) 10 318 8775	

CONTROLLED COPY	
Issued for:	
Approval	Information <input type="checkbox"/>
Tender	Manufacture <input type="checkbox"/>
Construction	Revision: 00
Effective Date:	XX/XX/XX

REV.	DATE	DESCRIPTION	BY
10			
11			
12			
13			
14			
15			
16			

QTY	DESCRIPTION	MAT'L	MASS	REMARKS
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX	XXXX			
XXXX				

THIS DRAWING IS AMENDED. ALL PRINTS NOT CARRYING THIS AMENDMENT ARE CANCELLED.

NOTE: THIS DRAWING CAN ONLY BE USED FOR WHAT IT HAS BEEN ISSUED FOR. RHOVAN PROJECT DRAWING DEPARTMENT WILL NOT TAKE ANY RESPONSIBILITY FOR THIS DRAWING IF IT HASN'T BEEN APPROVED BY ENGINEER.

CONTROLLED COPY
Issued for:
Approval ☐ Information ☐
Tender ☐ Manufacture ☐
Construction ☐ Revision: 00
Effective Date: XX/XX/XX

REV.	DATE	DESCRIPTION	BY

REF.	DESCRIPTION



Appendix 6: Power of Attorney (applicant)

Char Technology (Pty) Ltd

A GLENCORE Company


09 February 2026

To whom it may concern

AUTHORISATION

This serves to confirm that Mr Sipiwe Gogo, in his capacity as Engineering Manager, is authorised to act on behalf of the Company for purposes of an application for authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended and the Environmental Impact Assessment Regulations, 2014 (as amended) relating to the Company's Vanadium Carbon-Nitride project. The authorisation includes, but is not limited to, the taking of all actions relating thereto and signing of all the necessary documentation.

Yours faithfully

DocuSigned by:

F5B9AC1D93354BA...
NP Pretorius
Director

Signed by:

D5A5F4E5D24542D...
HS Potgieter
Director

50 Van Eck Road • Ferrobank • Witbank • 1035 • South Africa
Mailing Address: Postnet Suite 640 • Private Bag X7260 • Witbank • 1035 • South Africa
Telephone +27 (0) 13 696 8001 Telefax +27 (0) 13 696 8029

Reg No 1994/008678/07 VAT Reg No 4820153783
Directors: HS Potgieter, NDV Pretorius, MJ Moloto, JM Johnson