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HERITAGE SCREENER

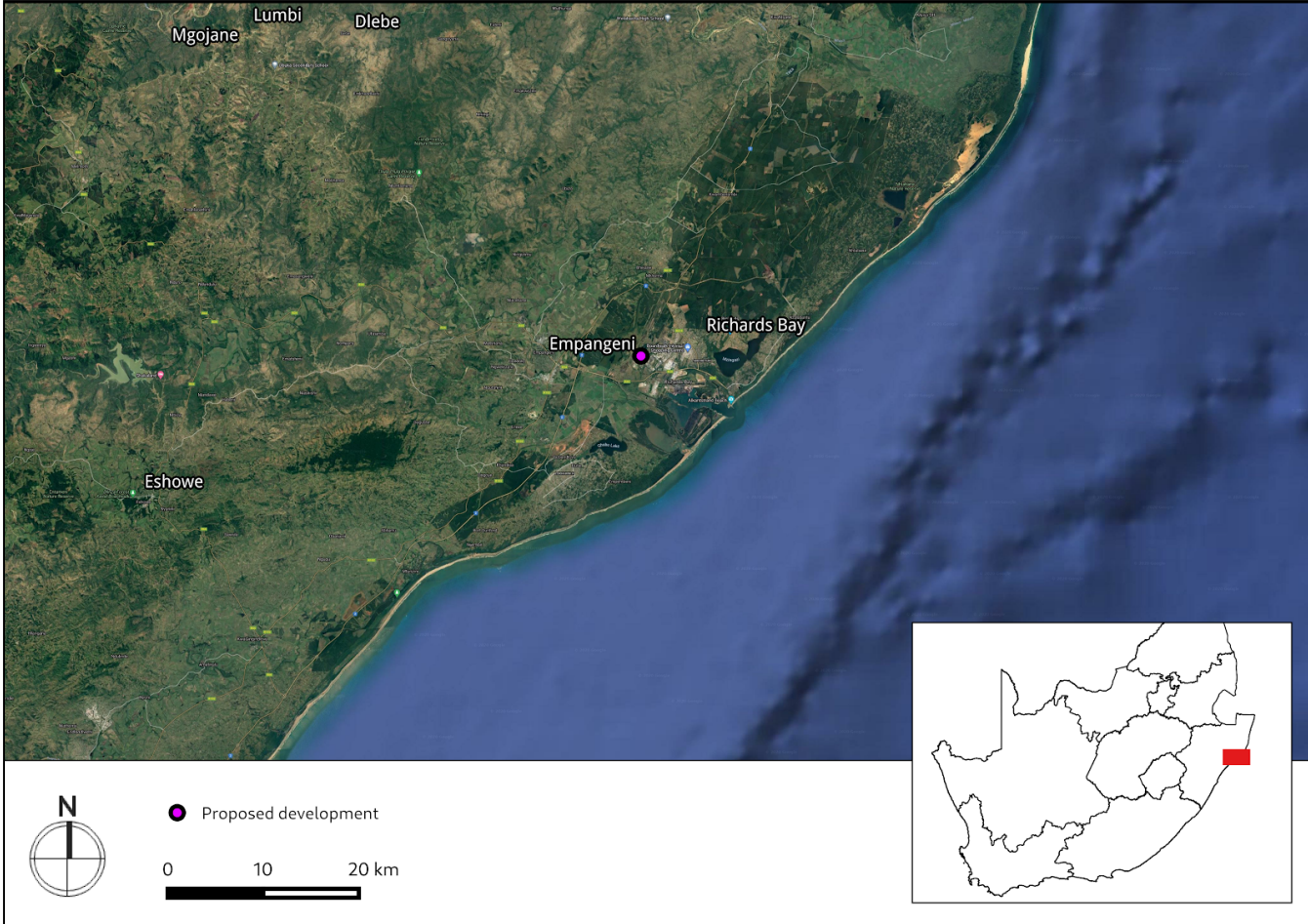
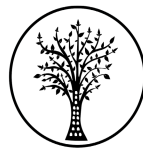
CTS Reference Number:	CT20_198	
SAHRIS Reference:		
Client:	Savannah Environmental (Pty) Ltd	
Date:	November 2020	
Title:	Proposed development of a power line to connect a 400MW gas-to-power plant in the Richards Bay area to the electricity grid, Richards Bay	
	RECOMMENDATION The surveys undertaken in the area have previously identified heritage resources in proximity to the proposed development. These resources may be impacted and as such, it is recommended that an HIA that complies with the terms of section 38(3) is completed including a specialist archaeological assessment.	

Figure 1a. Satellite map indicating the location of the proposed development in Kwazulu Natal

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1. Proposed Development Summary

This application is for the development of an overhead power line and switching station to connect the authorised RBGP2 400MW gas-to-power facility to the national grid. The power line will be construction at 132kV or 275kV (and operated at 132kV) and will connect to the Eskom substation via a 132kV switching station to a feasible connection point as determined in consultation with Eskom. Two alternative power line corridors are being considered in the EIA process, each approximately 8.5km in length. Both alternatives include an assessment corridor of 200m. Only one feasible location for the switching station has been identified. Where existing roads along the power line servitude and to the switching station sites are not available, new access roads will be required to be constructed.

2. Application References

Name of relevant heritage authority(s)	AMAFA
Name of decision making authority(s)	DARD

3. Property Information

Latitude / Longitude	28°45'25.25"S 31°59'51.27"E
Erf number / Farm number	See attached table in Appendix 6
Local Municipality	City of uMhlathuze Local Municipality
District Municipality	King Cetshwayo District Municipality
Province	Kwazulu Natal
Current Use	Richards Bay Development Zone (see Figure 5a to d)
Current Zoning	Richards Bay Development Zone (see Figure 5a to d)

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4. Nature of the Proposed Development

Total Area	Approximately 8.5km x 200m
Depth of excavation (m)	3.5m
Height of development (m)	Structure nominal height of 25m and up to 40 m at crossings

5. Category of Development

x	Triggers: Section 38(8) of the National Heritage Resources Act
	Triggers: Section 38(1) of the National Heritage Resources Act
x	1. Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length.
	2. Construction of a bridge or similar structure exceeding 50m in length.
	3. Any development or activity that will change the character of a site-
	a) exceeding 5 000m ² in extent
	b) involving three or more existing erven or subdivisions thereof
	c) involving three or more erven or divisions thereof which have been consolidated within the past five years
	4. Rezoning of a site exceeding 10 000m ²
	5. Other (state):

6. Additional Infrastructure Required for this Development

NA

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7. Mapping (please see Appendix 3 and 4 for a full description of our methodology and map legends)

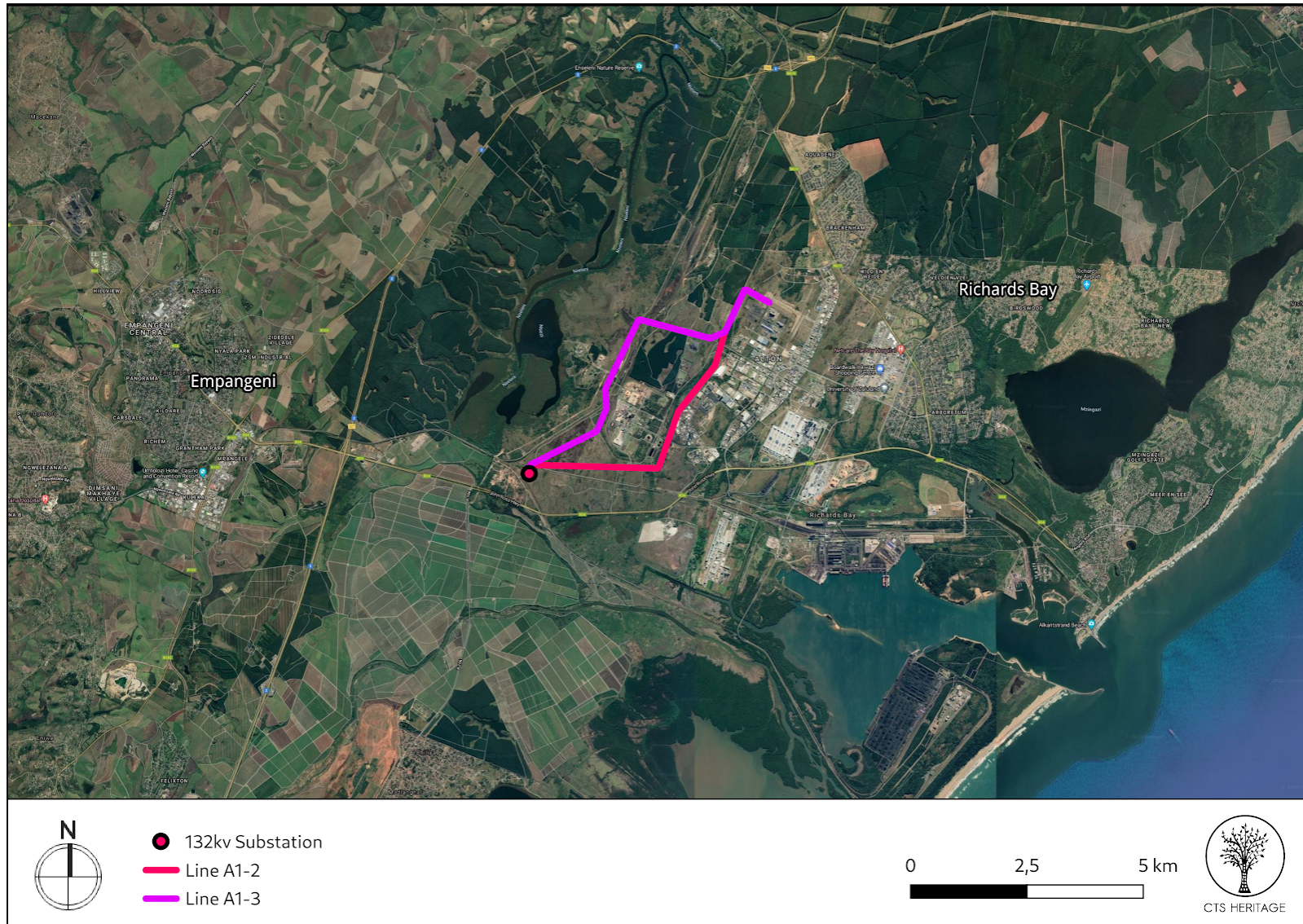
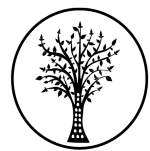


Figure 1b. Overview Map. Satellite image (2020) indicating the proposed development area relative to Richards Bay

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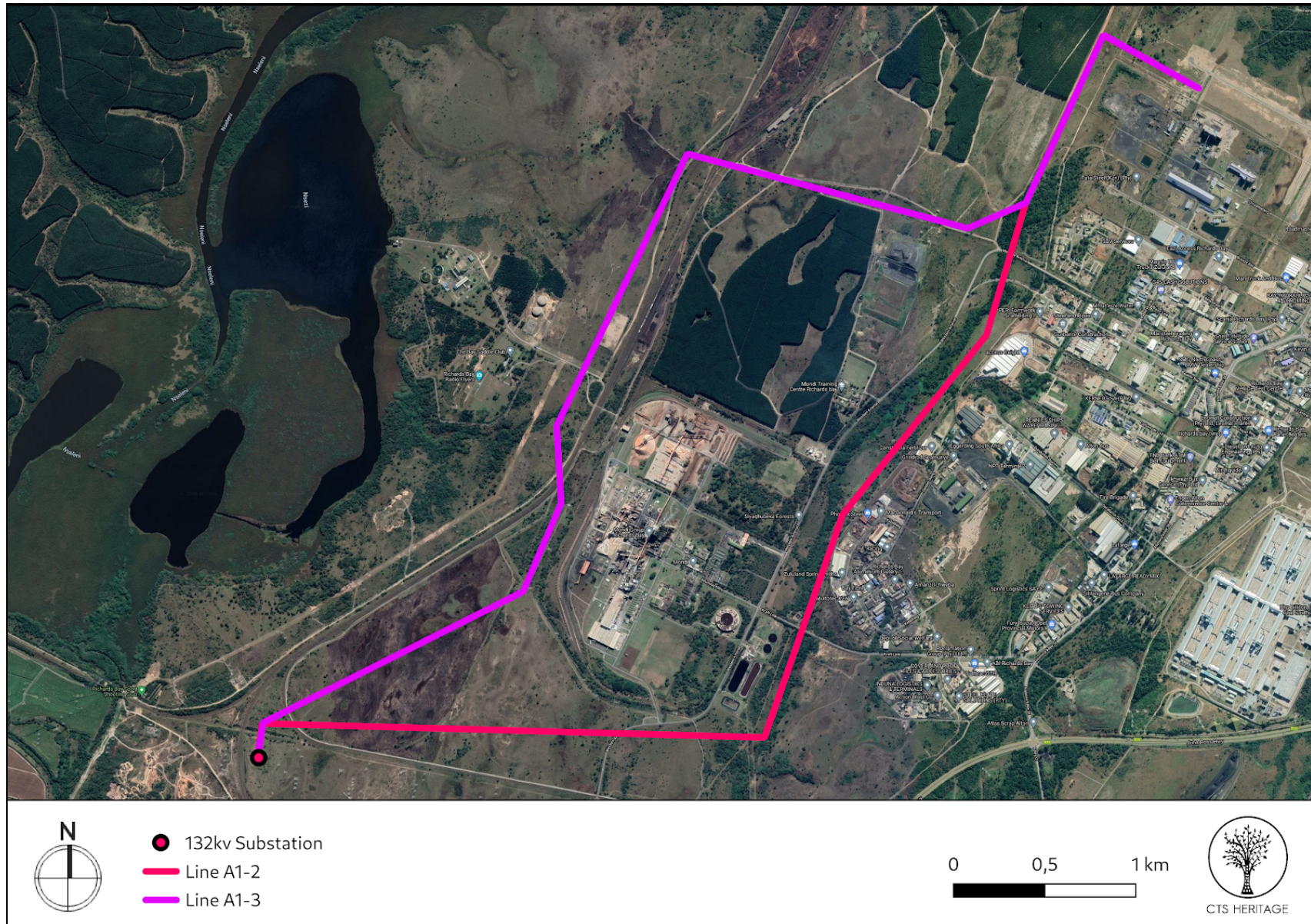


Figure 1c. Overview Map. Satellite image (2020) indicating the proposed development area

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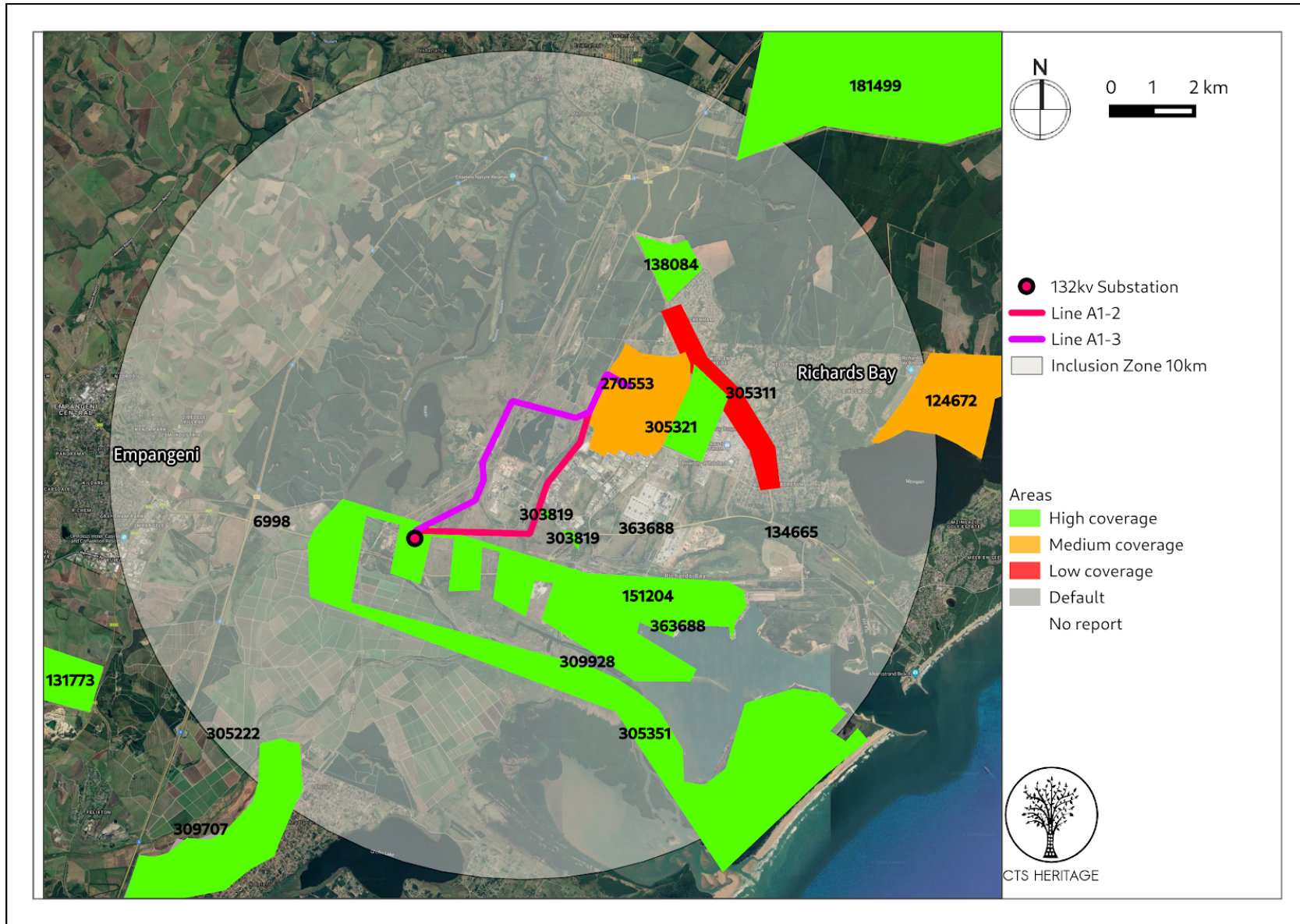


Figure 2. Previous HIAs Map. Previous Heritage Impact Assessments covering the proposed development area with SAHRIS NIDS indicated. Please see Appendix 2 for a full reference list.

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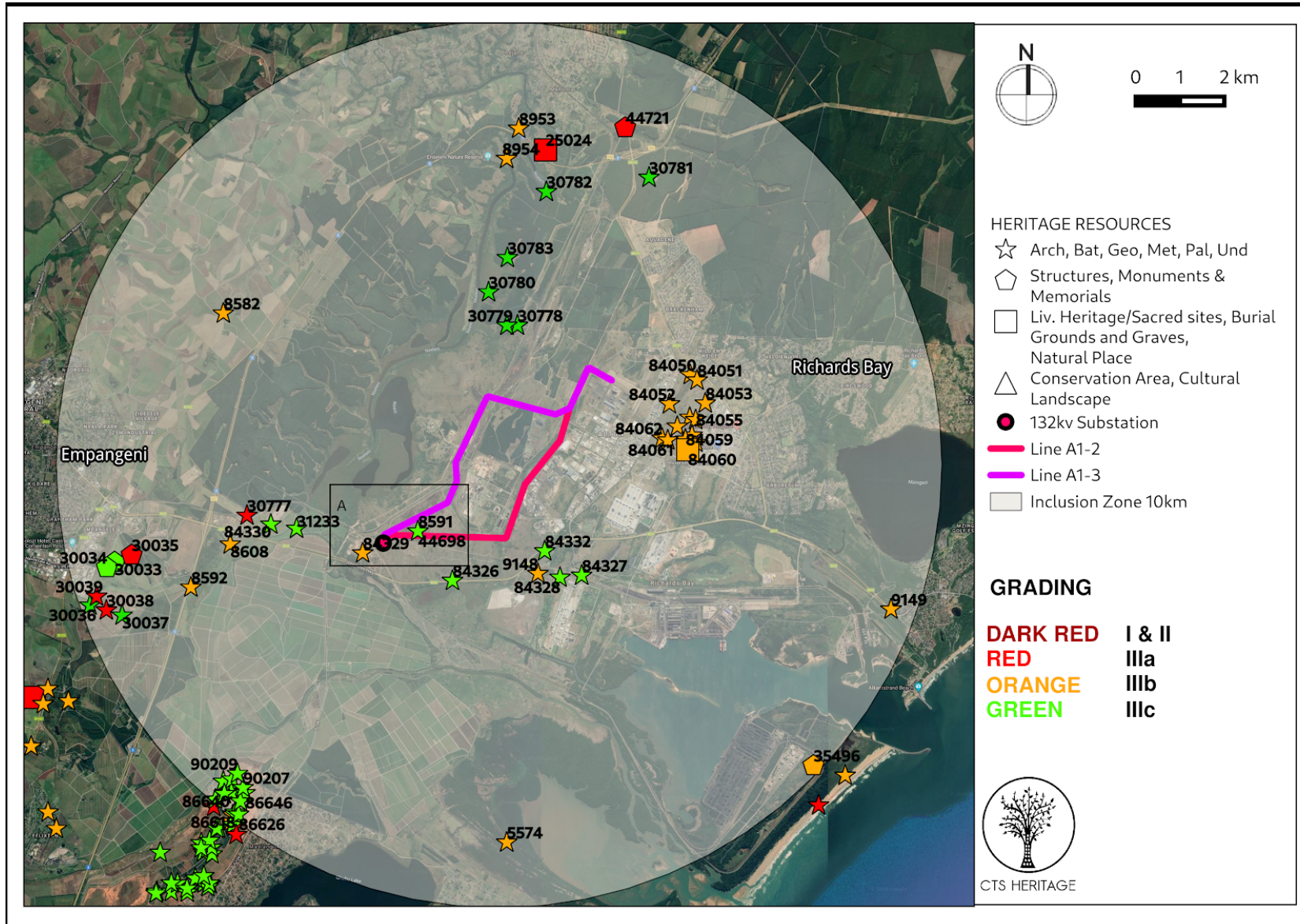


Figure 3. Heritage Resources Map. Heritage Resources previously identified within the study area, with SAHRIS Site IDs indicated in the insets below. Please See Appendix 4 for full description of heritage resource types.

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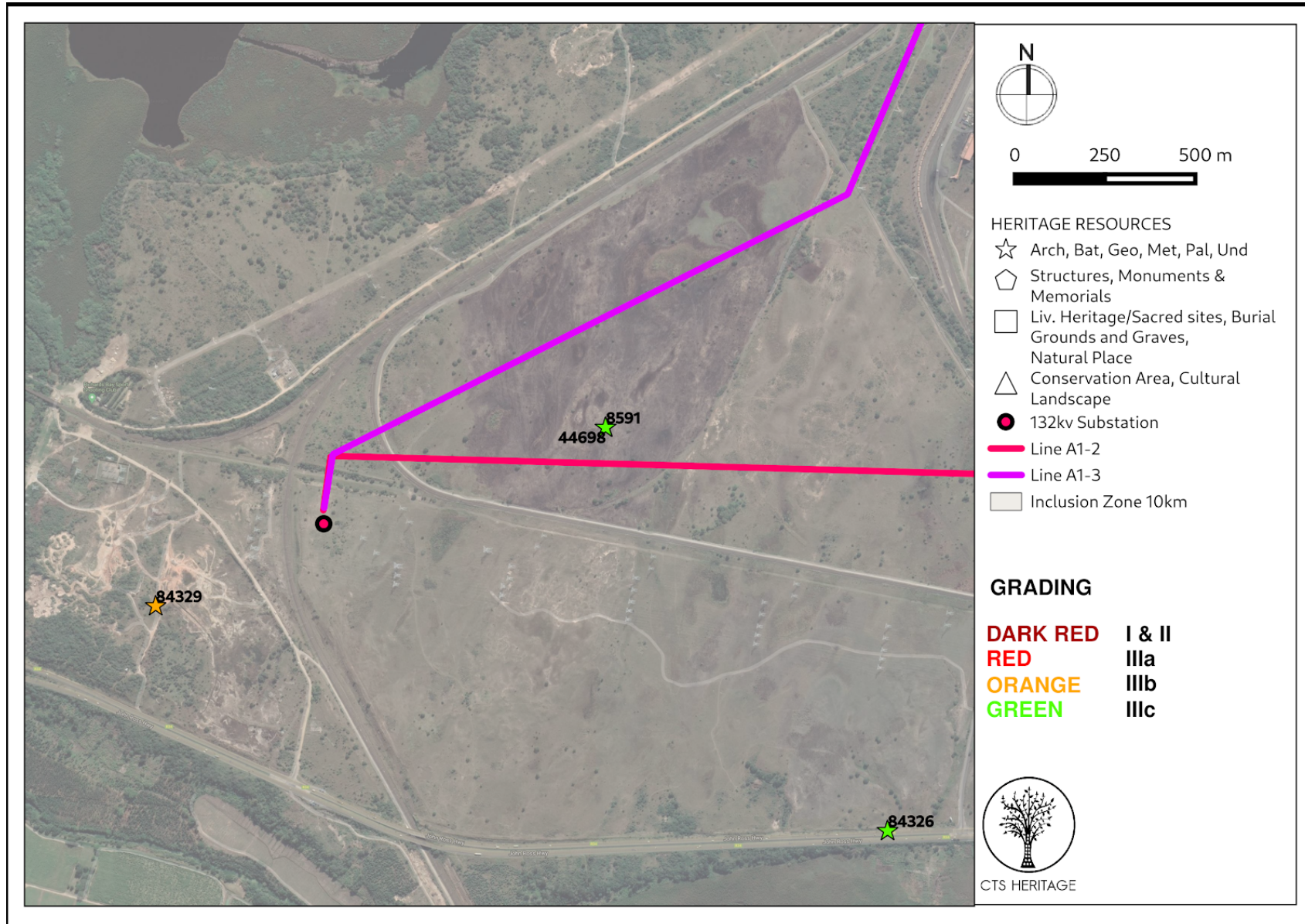


Figure 3a. Heritage Resources Map. Heritage Resources Inset Map A

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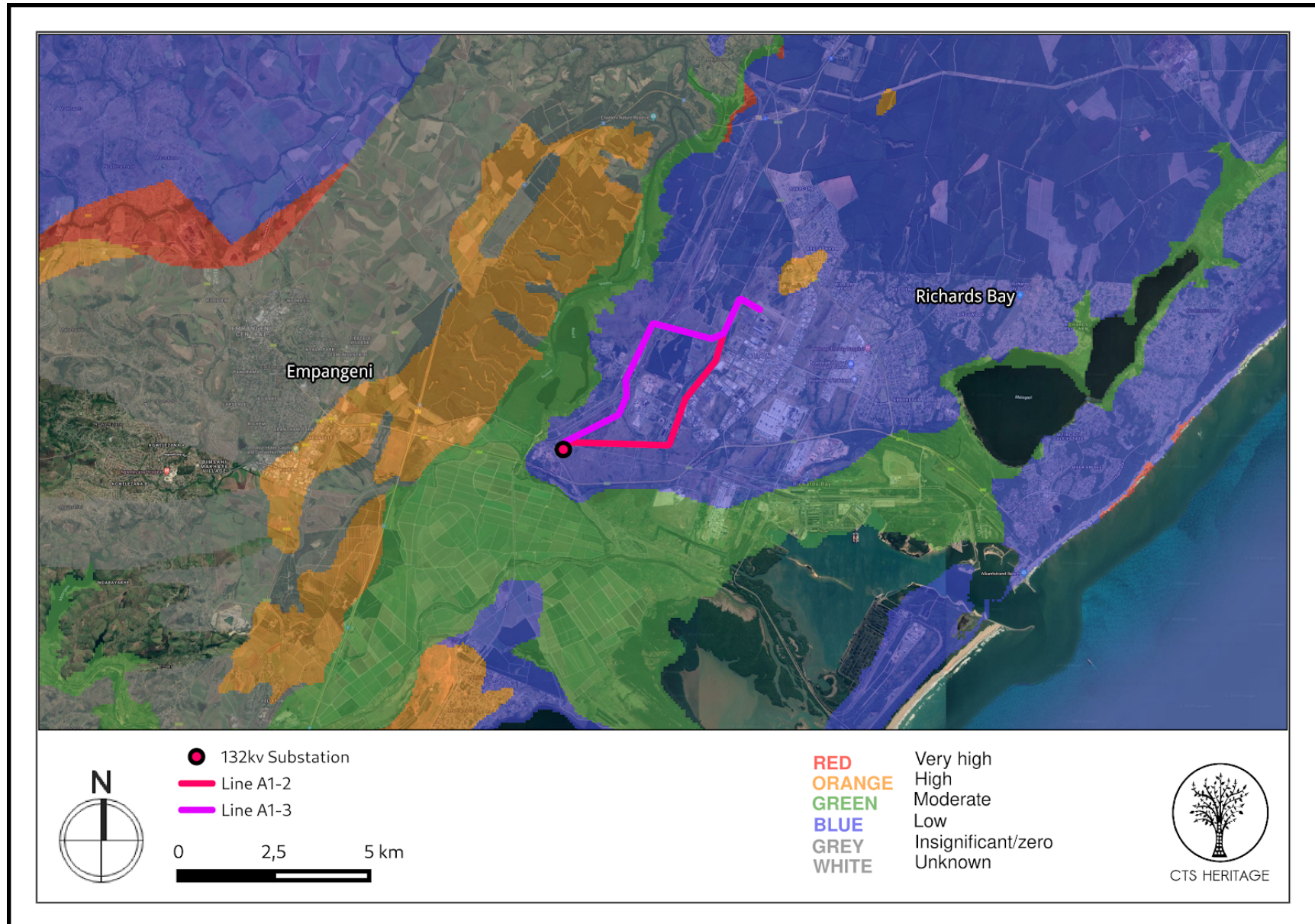


Figure 4. Palaeosensitivity Map. Indicating fossil sensitivity underlying the study area. Please See Appendix 3 for a full guide to the legend.

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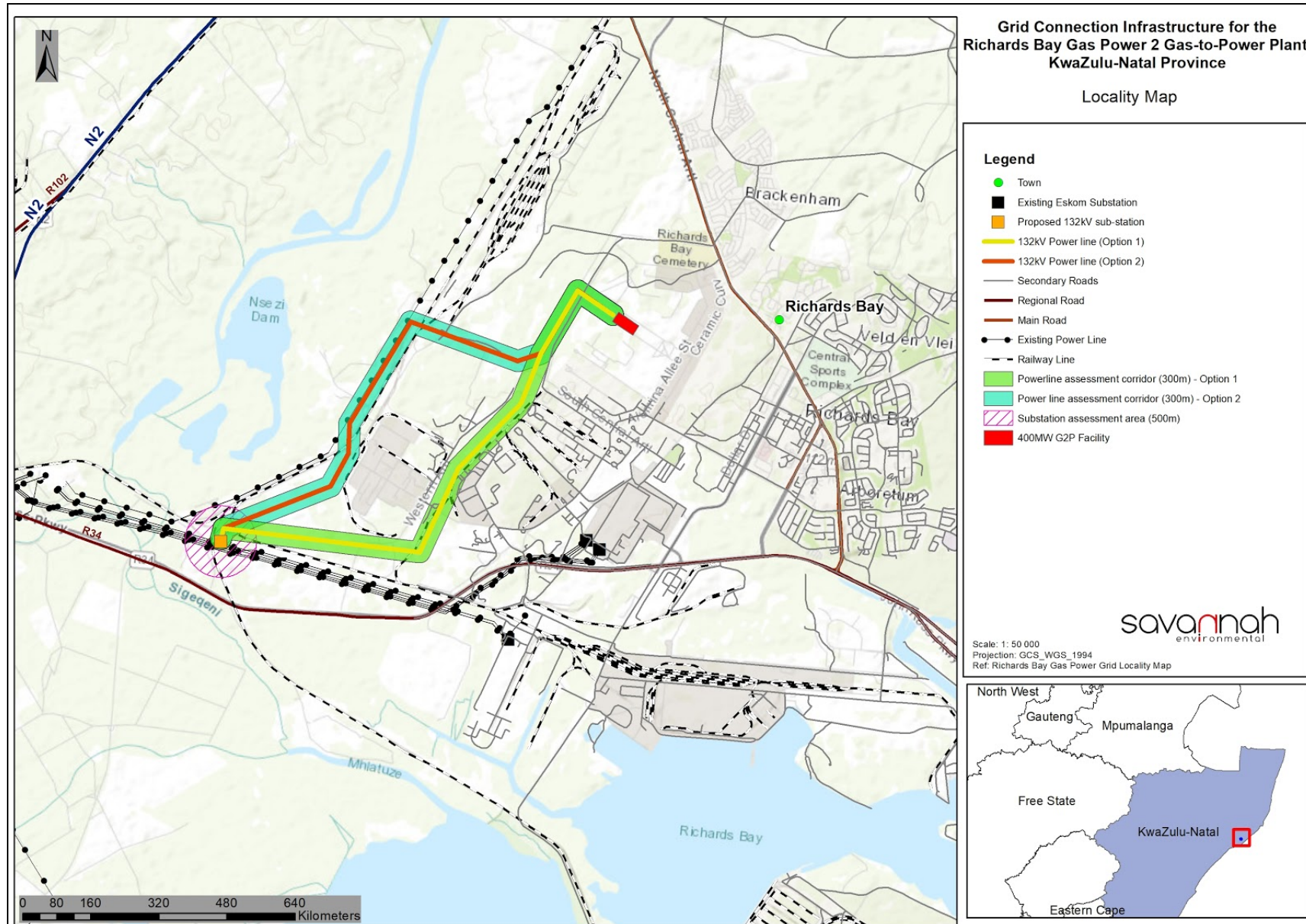


Figure 5a. Savannah Map. Indicating Locality of development area

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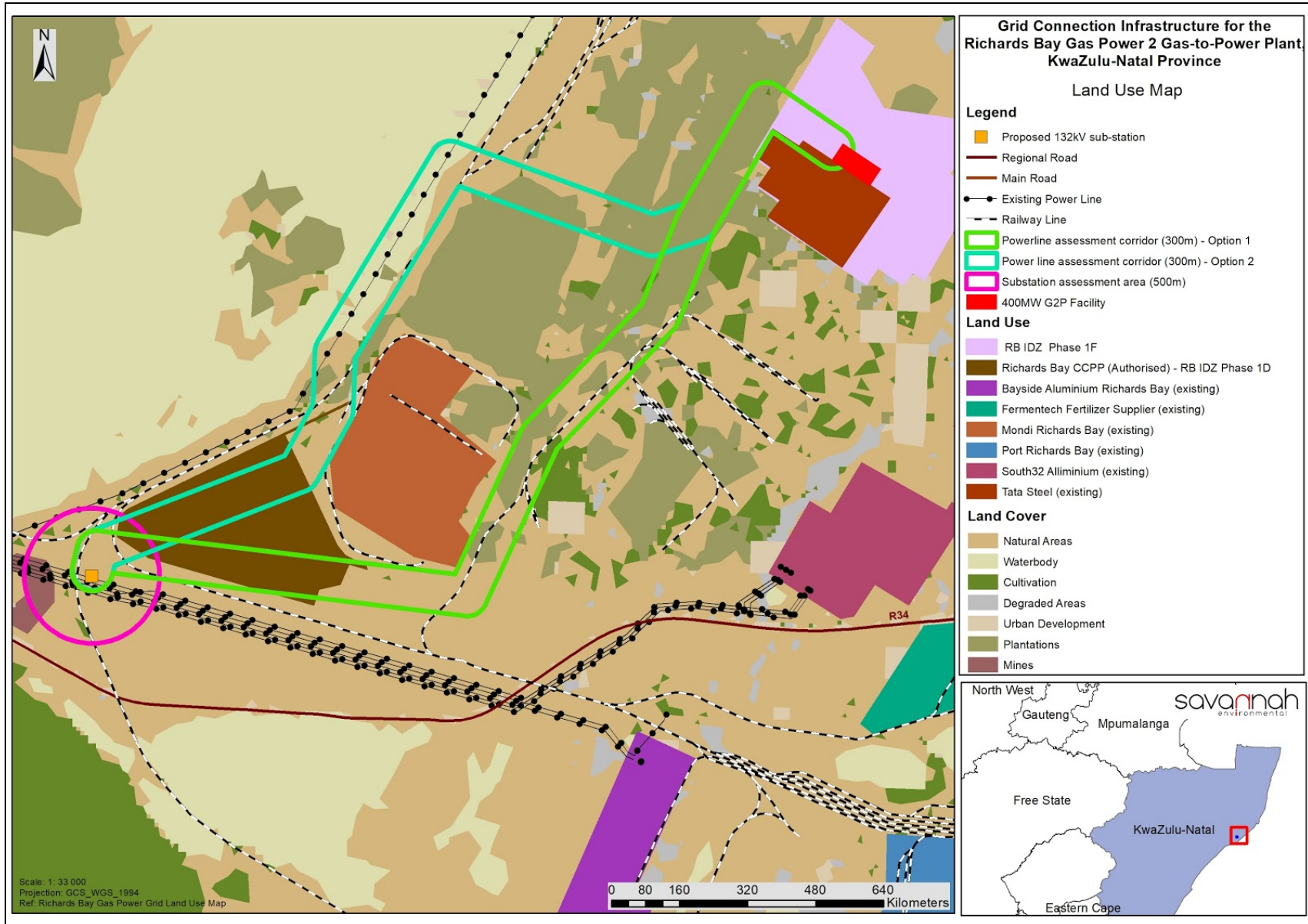


Figure 5b. Savannah Map. Indicating Land Use in development area

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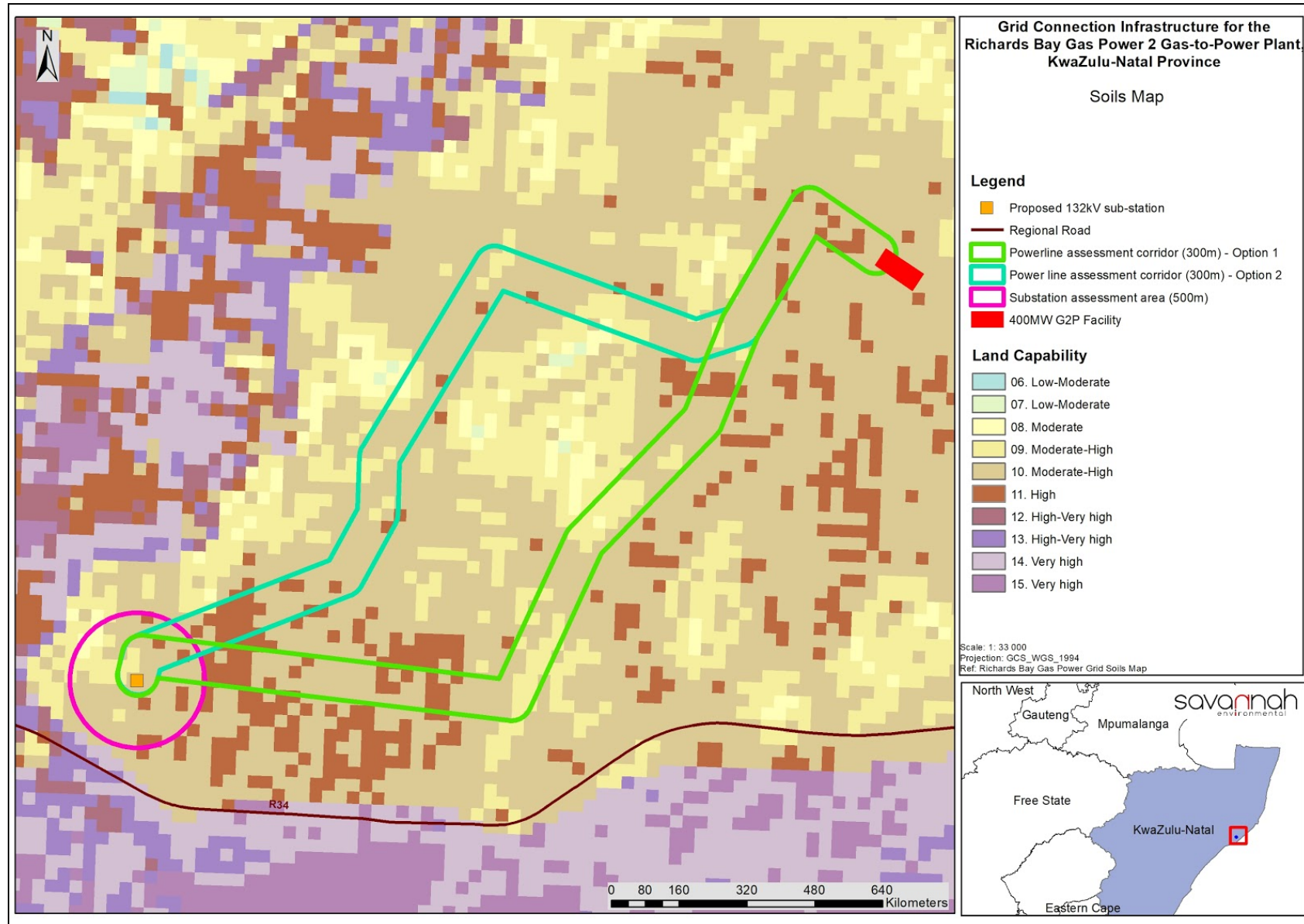


Figure 5c. Savannah Map. Indicating Soil in development area

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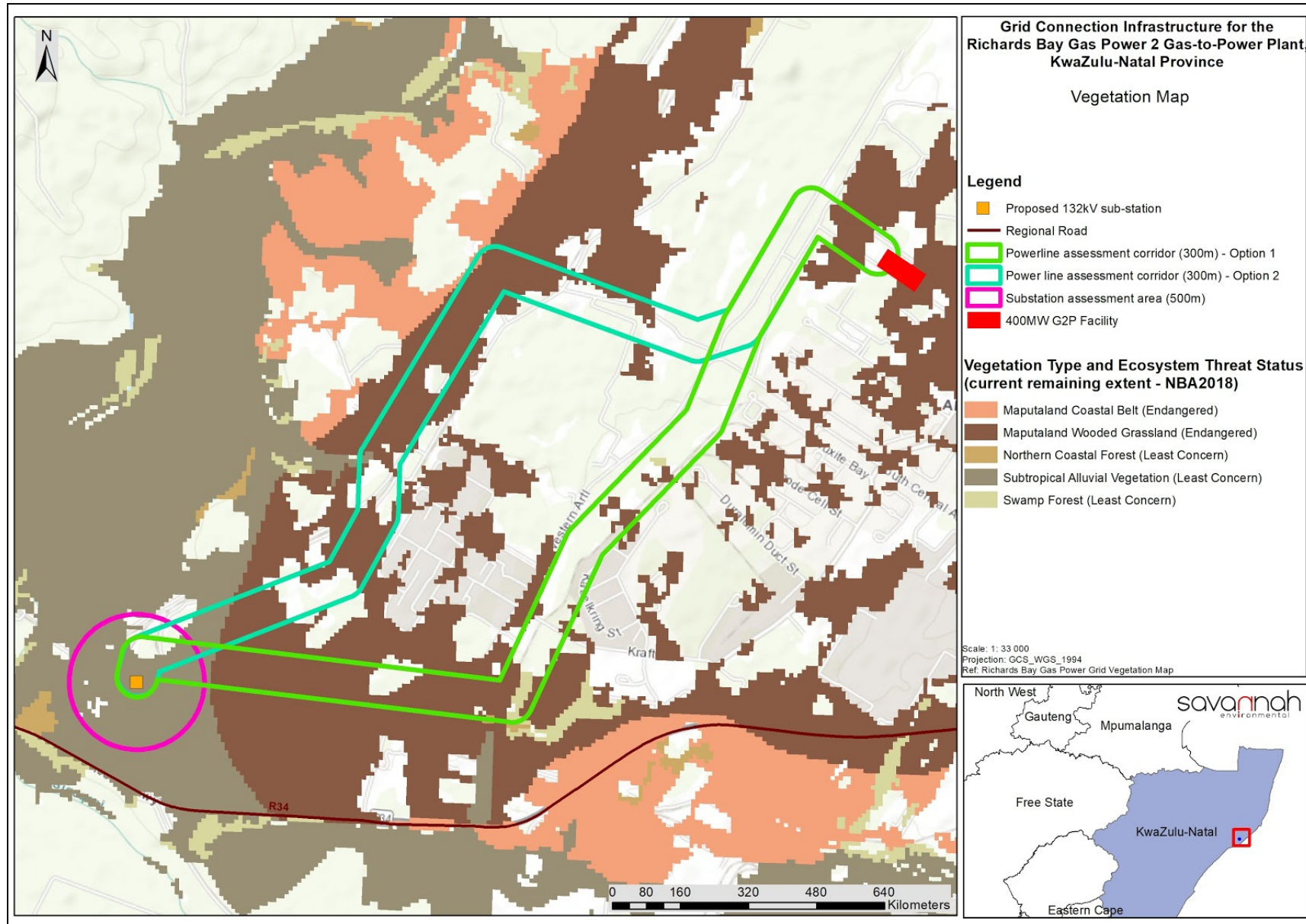


Figure 5d. Savannah Map. Indicating Vegetation in development area

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8. Heritage Assessment Summary

This application is for the development of an overhead power line and switching station to connect the authorised RBGP2 400MW gas-to-power facility to the national grid. The power line will be construction at 132kV or 275kV (and operated at 132kV) and will connect to the Eskom substation via a 132kV switching station to a feasible connection point as determined in consultation with Eskom. Two alternative power line corridors are being considered in the EIA process, each approximately 8.5km in length. Both alternatives include an assessment corridor of 200m. Only one feasible location for the switching station has been identified. Where existing roads along the power line servitude and to the switching station sites are not available, new access roads will be required to be constructed.

Richard's Bay began as a makeshift harbour established during the Anglo-Zulu War of 1879. The town was laid out on the shores of the lagoon in 1954 and proclaimed a town in 1969. In 1976 Richards Bay harbour was converted into a deep water harbour with a railway and an oil/gas pipeline linking the port to Johannesburg. In 1965 the South African Government decided to build a deep-sea harbour at Richard's Bay which was completed on 1 April 1976. According to Anderson (2009, SAHRIS NID 309928), "Port Durnford had been used since the 1870s as a regular port by the British Navy. The Richards Bay Harbour is north of this port that was originally envisaged in 1902. The environment surrounding the harbour has been heavily impacted by the original harbour construction in the early 1970s. The harbour dredged the deep Thulazihleka Lake and cleared areas to create a harbour entrance at the Mhlatuze River mouth. The lake was divided into two parts with the southern part of the lake becoming a sanctuary with its own newly created river mouth south of the harbour entrance... Subsequent to the harbour being built, the wetlands to the south of the harbour increased and large drainage canals have also been built. Some of these canals are part of the original rivers. There has also been a lot of industrial activity in the general area. The rest of the study area is under sugarcane agriculture with electrical, rail, gas pipeline, and vehicle servitudes. The general study area has been severely impacted by other activities." As such, the proposed development will not have a negative impact on any significant sense of place or cultural landscape.

As indicated in Figure 2 and Appendix 2, a number of heritage impact assessments have been conducted in the Richard's Bay area, many of them by Anderson and others. According to Anderson (2009), "Several archaeological and palaeontological sites have been recorded in the surrounding area: both inland and along the coast, and within a 10km radius of the development area. The archaeological surveys for Richards Bay Minerals clearly show that the coastal dune system is very sensitive in terms of archaeological sites (over 350 sites have been recorded in the mining lease). The construction of the Berth 306 revealed an important Cretaceous Layer in the harbour area." While the large number of known sites within the vicinity of the proposed development (Figure 3) is indicative of some archaeological sensitivity, the specific area proposed for development is located immediately adjacent to an area that was surveyed for archaeological resources by Anderson (2008, SAHRIS NID 303819) and (2009, SAHRIS NID 309928).

Anderson (2008) identified no heritage resources within the area assessed (Figure 2). Anderson (2009) identified 9 archaeological sites during his survey, only one of which was determined to have high heritage significance (RPB08, located more than 10km from the proposed development). The known heritage resources located in close proximity to the proposed development are SAHRIS Site ID 84326, 84329, 44698 and 8591 (Figure 3a). Sites 84326 (RBP01) and 84329 (RBP04) were identified by Anderson (2009). He describes Site 84326 as "located on a small hill besides the extended John Ross Parkway, overlooking the wetlands. The site consists of an ephemeral scatter of LIA pottery." Site 84329 is described as "located in the "base" of the hill and covers a wide area. The area is currently being used as a sand borrow pit and a quad-bike track. The artefacts are found at the interface of the white aeolian sand and the red sand. The artefacts consist of an ephemeral scatter of ESA and MSA stone tools over a very large area." Anderson (2009) recommends that, as Early Stone Age artefacts are rare in this area, "The area should be periodically monitored during construction activity and selected stone tools sampled." In addition, Sites 8591 and 44698 are described as sites where material dating to the Stone Age has been identified, according to information supplied by Dr Gavin Whitelaw of the Natal Museum, Pietermaritzburg. Most of this material dates to the Middle Stone Age, although some also date to the Early Stone Age. Based on the distribution of these finds, there is a possibility

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that the archaeological resources identified by Anderson (2009) and others extend into the area proposed for the substation. As such, it is likely that archaeological resources will be impacted by the proposed development of the powerline and substation.

According to the SAHRIS Palaeosensitivity Map (Figure 4), the area proposed for development is underlain by sediments of low palaeontological sensitivity consisting of redistributed yellow quaternary sands. As such, it is very unlikely that the proposed development will negatively impact on significant palaeontological heritage and as such, it is recommended that no further palaeontological studies are required.

Based on the information available, there is no preferred alternative in terms of impacts to heritage at this stage.

RECOMMENDATION

The surveys undertaken in the area have previously identified heritage resources in proximity to the proposed development. These resources may be impacted and as such, it is recommended that an HIA that complies with the terms of section 38(3) is completed including a specialist archaeological assessment.

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Table 1: Impact Assessment Table

NATURE: Significant archaeological, built environment, cultural landscape and palaeontological heritage resources may be impacted by the construction phase of the proposed development			
		Archaeology	Palaeontology
MAGNITUDE	M (3)	Significant archaeology is may be negatively impacted by the proposed development as the area is known for MSA and ESA resources	L (1) Significant palaeontological heritage is unlikely to be negatively impacted by the proposed development as the palaeontological sensitivity of the area is LOW
DURATION	H (5)	Where manifest, the impact will be permanent.	H (5) Where manifest, the impact will be permanent.
EXTENT	L (1)	Localised within the site boundary	L (1) Localised within the site boundary.
PROBABILITY	M (3)	Probability is moderate	L (1) It is possible that fossils Abrahamskraal formation would be impacted
SIGNIFICANCE	L-M	$(3+5+1) \times 3 = 27$	L $(1+5+1) \times 1 = 7$
STATUS		Neutral	Neutral
REVERSIBILITY	L	Any impacts to heritage resources that do occur are irreversible	L Any impacts to heritage resources that do occur are irreversible
IRREPLACEABLE LOSS OF RESOURCES?	L	Possible	L Possible
CAN IMPACTS BE MITIGATED		Yes	Yes
MITIGATION:			
<ul style="list-style-type: none"> Archaeological field assessment is recommended to identify the boundaries of any significant archaeological sites 			
RESIDUAL RISK:			
<ul style="list-style-type: none"> Should any heritage resources be impacted during the course of development, work must cease and AMAFA must be contacted in order to determine a way forward. This will likely require input from either an archaeological specialist or palaeontological specialist depending on the nature of the heritage resource impacted. 			

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Table 2: Cumulative Impact Table

NATURE: Significant archaeological, built environment, cultural landscape and palaeontological heritage resources may be impacted by the construction phase of the proposed development			
		Overall impact of the development considered in isolation	Cumulative impact of the development and others in the area
MAGNITUDE	L (1)	Significant heritage is unlikely to be negatively impacted by the proposed development as the area has been extensively previously disturbed.	L (1) Significant heritage is unlikely to be negatively impacted by the proposed development as the area has been extensively previously disturbed.
DURATION	H (5)	Where manifest, the impact will be permanent.	H (5) Where manifest, the impact will be permanent.
EXTENT	L (1)	Localised within the site boundary	L (1) This project is located within an existing industrialised area
PROBABILITY	L (1)	Probability is low	L (1) Probability is low
SIGNIFICANCE	L	$(1+5+1) \times 1 = 7$	L $(1+5+1) \times 1 = 7$
STATUS		Neutral	Neutral
REVERSIBILITY	L	Any impacts to heritage resources that do occur are irreversible	L Cumulative impacts are low due to the existing industrialised nature of the area
IRREPLACEABLE LOSS OF RESOURCES?	L	Possible	L Possible
CAN IMPACTS BE MITIGATED		Yes	No
MITIGATION:			
<ul style="list-style-type: none"> None required 			
RESIDUAL IMPACTS:			
<ul style="list-style-type: none"> Should any heritage resources be impacted during the course of development, work must cease and AMAFA must be contacted in order to determine a way forward. This will likely require input from either an archaeological specialist or palaeontological specialist depending on the nature of the heritage resource impacted. 			

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APPENDIX 1

List of heritage resources within 10km of the development area

Site ID	Site no	Full Site Name	Site Type	Grading
8954	2832CA 006		Artefacts	Grade IIIb
8963	2832CA 015		Artefacts	Grade IIIb
9148	2832CC 001	Bhizele Halt	Artefacts	Grade IIIb
9149	2832CC 002	Richards Bay	Artefacts	Grade IIIb
44698	SWAZIRL22	Swaziland Railway Link Ermelo to Richards Bay 22	Archaeological	Grade IIIc
30777	UMLANDO-JRH1		Settlement	Grade IIIa
84328	UMLANDO-RBPO3	RICHARDS BAY PORTS 03	Artefacts	Grade IIIc
25024	Enseleni Forest Cameroon/ 1901/Canadian grave	Enseleni Cameroon/ 1901/Canadian grave	Burial Grounds & Graves	Grade IIIa
35496	Richards Bay Terminal		Transport infrastructure	Grade IIIb
84327	UMLANDO-RBPO2	RICHARDS BAY PORTS 02	Artefacts	Grade IIIc
31233	UMLANDO-RBP10		Archaeological	Grade IIIc
31835	UMLANDO-RBPO9B		Deposit, Artefacts	Grade IIIb
30782	UMLANDO-NSE05		Artefacts	Grade IIIc
30783	UMLANDO-NSE06		Artefacts	Grade IIIc
30780	UMLANDO-NSE03		Artefacts	Grade IIIc
30781	UMLANDO-NSE04		Archaeological	Grade IIIc
30778	UMLANDO-NSE01		Artefacts	Grade IIIc
30779	UMLANDO-NSE02		Artefacts	Grade IIIc
84061	UMLANDO-RICH012	RICHARDS BAY 012	Settlement	Grade IIIb
44721	SWAZIRL43	Swaziland Railway Link Ermelo to Richards Bay 43	Structures, Building	Grade IIIa
84059	UMLANDO-RICH010	RICHARDS BAY 010	Settlement	Grade IIIb

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84060	UMLANDO-RICH011	RICHARDS BAY 011	Living Heritage/Sacred sites	Grade IIIb
84056	UMLANDO-RICH007	RICHARDS BAY 007	Settlement	Grade IIIb
84057	UMLANDO-RICH008	RICHARDS BAY 008	Settlement	Grade IIIb
84051	UMLANDO-RICH002	RICHARDS BAY 002	Settlement	Grade IIIb
84052	UMLANDO-RICH003	RICHARDS BAY 003	Settlement	Grade IIIb
84055	UMLANDO-RICH006	RICHARDS BAY 006	Settlement	Grade IIIb
84336	UMLANDO-RBPO9	RICHARDS BAY PORTS 09	Shell Midden	Grade IIIb
84053	UMLANDO-RICH004	RICHARDS BAY 004	Settlement	Grade IIIb
84054	UMLANDO-RICH005	RICHARDS BAY 005	Settlement	Grade IIIb
84331	UMLANDO-RBPO6	RICHARDS BAY PORTS 06	Artefacts	Grade IIIc
84332	UMLANDO-RBPO7	RICHARDS BAY PORTS 07	Artefacts	Grade IIIc
84326	UMLANDO-RBPO1	RICHARDS BAY PORTS 01	Artefacts	Grade IIIc
84050	UMLANDO-RICH001	RICHARDS BAY 001	Settlement	Grade IIIb
8608	2831DD 034	Empangeni Forest Station	Artefacts	Grade IIIb
8953	2832CA 005	Enseleni Nature Reserve	Artefacts	Grade IIIb
8582	2831DD 003	Drift Sands	Artefacts	Grade IIIb
8591	2831DD 013		Artefacts	Grade IIIb
84330	UMLANDO-RBPO5	RICHARDS BAY PORTS 05	Artefacts	Grade IIIc
84329	UMLANDO-RBPO4	RICHARDS BAY PORTS 04	Artefacts	Grade IIIb
84058	UMLANDO-RICH009	RICHARDS BAY 009	Settlement	Grade IIIb
84062	UMLANDO-RICH013	RICHARDS BAY 013	Settlement	Grade IIIb

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APPENDIX 2

Reference List with relevant AIAs and PIAs

Heritage Impact Assessments				
Nid	Report Type	Author/s	Date	Title
138084	Archaeological Specialist Reports	Gavin Anderson	03/07/2012	Heritage Survey of the Proposed Aquadene Housing Project, Kwa-Zulu Natal
6998	AIA Phase 1	Gavin Anderson, L Anderson	14/04/2008	ARCHAEOLOGICAL SURVEY OF THE PROPOSED JOHN ROSS INTERCHANGE DEVELOPMENT
124672	HIA Phase 1		01/03/2013	HIA Mandlazini Agric-Village Sewer Network Installation
305321	HIA Phase 1	Gavin Anderson	16/05/2010	HERITAGE SURVEY OF THE PROPOSED RICHARDS BAY CENTRAL INDUSTRIAL AREA
303819	AIA Phase 1	Gavin Anderson	09/10/2008	ARCHAEOLOGICAL SURVEY OF THE PROPOSED ALTON SEWER PIPE UPGRADE
305311	AIA Phase 1	Gavin Anderson	06/11/2008	ARCHAEOLOGICAL SURVEY OF THE PROPOSED BOUBLING OF THE NORTH CENTRAL ARTERIAL, RICHARDS BAY
305351	AIA Phase 1	Gavin Anderson	16/11/2008	ARCHAEOLOGICAL SURVEY OF THE PROPOSED NEW INFRASTRUCTURE AT THE ARRIVAL YARD AT THE RICHARDS BAY COAL TERMINAL
309928	HIA Phase 1	Gavin Anderson, Louise Anderson	01/06/2009	HERITAGE SURVEY OF THE PROPOSED EXPANSION TO THE TRANSNET NATIONAL PORTS AUTHORITY, RICHARDS BAY.
363688	HIA Letter of Exemption	Jaco van der Walt	20/05/2016	Proposed Hillside Desalination Plant to be established at the Hillside Aluminium smelter site, Richards Bay, KwaZulu-Natal.
270553	Heritage Impact Assessment Specialist Reports		24/04/2015	Heritage Screener for the Proposed 60MW Biomass Plant within the Ricahrds Bay IDZ, Umhlautze Local Munucipality, KwaZulu-Natal
303819	AIA Phase 1	Gavin Anderson	09/10/2008	ARCHAEOLOGICAL SURVEY OF THE PROPOSED ALTON SEWER PIPE UPGRADE
151204	HIA Letter of Exemption	Gavin Anderson		
181499	HIA Letter of	Len van Schalkwyk	12/11/2014	Application for Exemption from a Phase 1 Heritage Impact Assessment

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	Exemption			Proposed Richards Bay Industrial Development Zone (RBIDZ), Mbonambi Local Municipality, KwaZulu-Natal
134665	HIA Letter of Exemption	Len van Schalkwyk, Elizabeth Wahl	20/06/2013	Application for Exemption from a Phase 1 Heritage Impact Assessment of the Proposed Widening of Medway Road and Associated Interchanges within Richards Bay, KwaZulu-Natal

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APPENDIX 3 - Keys/Guides

Key/Guide to Acronyms

AIA	Archaeological Impact Assessment
DARD	Department of Agriculture and Rural Development (KwaZulu-Natal)
DEA	Department of Environmental Affairs (National)
DEADP	Department of Environmental Affairs and Development Planning (Western Cape)
DEDEAT	Department of Economic Development, Environmental Affairs and Tourism (Eastern Cape)
DEDECT	Department of Economic Development, Environment, Conservation and Tourism (North West)
DEDT	Department of Economic Development and Tourism (Mpumalanga)
DEDTEA	Department of economic Development, Tourism and Environmental Affairs (Free State)
DENC	Department of Environment and Nature Conservation (Northern Cape)
DMR	Department of Mineral Resources (National)
GDARD	Gauteng Department of Agriculture and Rural Development (Gauteng)
HIA	Heritage Impact Assessment
LEDET	Department of Economic Development, Environment and Tourism (Limpopo)
MPRDA	Mineral and Petroleum Resources Development Act, no 28 of 2002
NEMA	National Environmental Management Act, no 107 of 1998
NHRA	National Heritage Resources Act, no 25 of 1999
PIA	Palaeontological Impact Assessment
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System
VIA	Visual Impact Assessment

Full guide to Palaeosensitivity Map legend

	RED:	VERY HIGH - field assessment and protocol for finds is required
	ORANGE/YELLOW:	HIGH - desktop study is required and based on the outcome of the desktop study, a field assessment is likely
	GREEN:	MODERATE - desktop study is required
	BLUE/PURPLE:	LOW - no palaeontological studies are required however a protocol for chance finds is required
	GREY:	INSIGNIFICANT/ZERO - no palaeontological studies are required
	WHITE/CLEAR:	UNKNOWN - these areas will require a minimum of a desktop study.

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APPENDIX 4 - Methodology

The Heritage Screener summarises the heritage impact assessments and studies previously undertaken within the area of the proposed development and its surroundings. Heritage resources identified in these reports are assessed by our team during the screening process.

The heritage resources will be described both in terms of **type**:

- Group 1: Archaeological, Underwater, Palaeontological and Geological sites, Meteorites, and Battlefields
- Group 2: Structures, Monuments and Memorials
- Group 3: Burial Grounds and Graves, Living Heritage, Sacred and Natural sites
- Group 4: Cultural Landscapes, Conservation Areas and Scenic routes

and **significance** (Grade I, II, IIIa, b or c, ungraded), as determined by the author of the original heritage impact assessment report or by formal grading and/or protection by the heritage authorities.

Sites identified and mapped during research projects will also be considered.

DETERMINATION OF THE EXTENT OF THE INCLUSION ZONE TO BE TAKEN INTO CONSIDERATION

The extent of the inclusion zone to be considered for the Heritage Screener will be determined by CTS based on:

- the size of the development,
- the number and outcome of previous surveys existing in the area
- the potential cumulative impact of the application.

The inclusion zone will be considered as the region within a maximum distance of 50 km from the boundary of the proposed development.

DETERMINATION OF THE PALAEONTOLOGICAL SENSITIVITY

The possible impact of the proposed development on palaeontological resources is gauged by:

- reviewing the fossil sensitivity maps available on the South African Heritage Resources Information System (SAHRIS)
- considering the nature of the proposed development
- when available, taking information provided by the applicant related to the geological background of the area into account

DETERMINATION OF THE COVERAGE RATING ASCRIBED TO A REPORT POLYGON

Each report assessed for the compilation of the Heritage Screener is colour-coded according to the level of coverage accomplished. The extent of the surveyed coverage is labeled in three categories, namely low, medium and high. In most instances the extent of the map corresponds to the extent of the development for which the specific report was undertaken.

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Low coverage will be used for:

- desktop studies where no field assessment of the area was undertaken;
- reports where the sites are listed and described but no GPS coordinates were provided.
- older reports with GPS coordinates with low accuracy ratings;
- reports where the entire property was mapped, but only a small/limited area was surveyed.
- uploads on the National Inventory which are not properly mapped.

Medium coverage will be used for

- reports for which a field survey was undertaken but the area was not extensively covered. This may apply to instances where some impediments did not allow for full coverage such as thick vegetation, etc.
- reports for which the entire property was mapped, but only a specific area was surveyed thoroughly. This is differentiated from low ratings listed above when these surveys cover up to around 50% of the property.

High coverage will be used for

- reports where the area highlighted in the map was extensively surveyed as shown by the GPS track coordinates. This category will also apply to permit reports.

RECOMMENDATION GUIDE

The Heritage Screener includes a set of recommendations to the applicant based on whether an impact on heritage resources is anticipated. One of three possible recommendations is formulated:

(1) The heritage resources in the area proposed for development are sufficiently recorded - The surveys undertaken in the area adequately captured the heritage resources. There are no known sites which require mitigation or management plans. No further heritage work is recommended for the proposed development.

This recommendation is made when:

- enough work has been undertaken in the area
- it is the professional opinion of CTS that the area has already been assessed adequately from a heritage perspective for the type of development proposed

(2) The heritage resources and the area proposed for development are only partially recorded - The surveys undertaken in the area have not adequately captured the heritage resources and/or there are sites which require mitigation or management plans. Further specific heritage work is recommended for the proposed development.

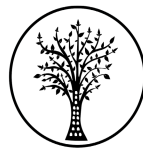
This recommendation is made in instances in which there are already some studies undertaken in the area and/or in the adjacent area for the proposed development. Further studies in a limited HIA may include:

- improvement on some components of the heritage assessments already undertaken, for instance with a renewed field survey and/or with a specific specialist for the type of heritage resources expected in the area
- compilation of a report for a component of a heritage impact assessment not already undertaken in the area

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- undertaking mitigation measures requested in previous assessments/records of decision.

(3) The heritage resources within the area proposed for the development have not been adequately surveyed yet - Few or no surveys have been undertaken in the area proposed for development. A full Heritage Impact Assessment with a detailed field component is recommended for the proposed development.

Note:

The responsibility for generating a response detailing the requirements for the development lies with the heritage authority. However, since the methodology utilised for the compilation of the Heritage Screeners is thorough and consistent, contradictory outcomes to the recommendations made by CTS should rarely occur. Should a discrepancy arise, CTS will immediately take up the matter with the heritage authority to clarify the dispute.

APPENDIX 5 -Summary of Specialist Expertise

Jenna Lavin, an archaeologist with an MSc in Archaeology and Palaeoenvironments (2010), and currently completing an MPhil in Conservation Management , heads up the heritage division of the organisation, and has a wealth of experience in the heritage management sector. Jenna's previous position as the Assistant Director for Policy, Research and Planning at Heritage Western Cape has provided her with an in-depth understanding of national and international heritage legislation. Her 6 years of experience at various heritage authorities in South Africa means that she has dealt extensively with permitting, policy formulation, compliance and heritage management at national and provincial level and has also been heavily involved in rolling out training on SAHRIS to the Provincial Heritage Resources Authorities and local authorities.

Jenna is on the Executive Committee of the Association of Professional Heritage Practitioners (APHP), and is also an active member of the International Committee on Monuments and Sites (ICOMOS) as well as the International Committee on Archaeological Heritage Management (ICAHM). In addition, Jenna has been a member of the Association of Southern African Professional Archaeologists (ASAPA) since 2009. Recently, Jenna has been responsible for conducting training in how to write Wikipedia articles for the Africa Centre's WikiAfrica project.

Since 2016, Jenna has drafted over 60 Heritage Impact Assessments throughout South Africa.

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APPENDIX 6 - Farm names and numbers of farms affected

Erf / Farm	Portion & Farm No.	Registered Owner
Erf 1860		Briardale Trading Pty Ltd
Erf 1906		Foskor Pty Ltd
Erf RE/1855		Gayatri Peper Mills Gauteng Pty Ltd
Erf 6724 Portion 6		Mhlathuze Water Board
Erf 1818		Night Breeze Inv. 79 cc
Erf 1858		NPT Terminals Proprietary Limited
Erf RE/1819		Pilisanani Trading Enterprize 50 cc
Erf 1813		Pilltech Engineering cc
Erf 16671		Richards Bay Alloys Pty Ltd
Erf 1814		Siyazama Computer & Consulting Services cc
Erf 6720		Siyazama Computer & Consulting Services cc
Erf 1856		TWK Investments Limited
Farm Reserve No.6	RE/15825	Umhlathuze Municipality
Farm Reserve No.6	RE/15825	Umhlathuze Municipality
Farm Reserve No.6	RE/15825	Umhlathuze Municipality
Farm Reserve No.6	RE/1/15825	Umhlathuze Municipality
Farm Reserve No.6	51/15825	Umhlathuze Municipality
Farm Reserve No.6	65/15825	Umhlathuze Municipality
Farm Reserve No.6	66/15825	Umhlathuze Municipality

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Farm Reserve No.6	70/15825	Umhlathuze Municipality
Erf 1859		Umhlathuze Municipality
Erf 1902		Umhlathuze Municipality
Erf 1903		Umhlathuze Municipality
Erf 1904		Umhlathuze Municipality
Erf 6724 Portion 1		Umhlathuze Municipality
Erf 6724 Portion 4		Umhlathuze Municipality
Erf 8817		Umhlathuze Municipality
Erf 8818		Umhlathuze Municipality
Erf 8825		Umhlathuze Municipality
Erf 9033		Umhlathuze Municipality
Erf 9074		Umhlathuze Municipality
Erf 11376 Portion 1		Umhlathuze Municipality
Erf 11376 Portion 2		Umhlathuze Municipality
Erf 11376 Portion 3		Umhlathuze Municipality
Erf 11376 Portion 4		Umhlathuze Municipality
Erf 11376 Portion 5		Umhlathuze Municipality
Erf 15406		Umhlathuze Municipality
Erf 15410		Umhlathuze Municipality
Erf 1667		Umhlathuze Municipality
Erf 16672		Umhlathuze Municipality

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Erf 16875		Umhlathuze Municipality
Erf 16876		Umhlathuze Municipality
Erf 17455		Umhlathuze Municipality
Erf 17456		Umhlathuze Municipality
Erf 1817		Waco SA Proprietary Limited
Erf 1819 Portion 3		Freddie Macdonald Eiendomme Trust - Trustees
Farm Reserve No.6	RE/12/15825	Transnet Ltd
Erf RE/1794		Unknown
Erf 6724 Portion 7		No Information on Windeed
Erf 16785		No Information on Windeed
Erf 17457		No Information on Windeed
Erf 17458		No Information on Windeed
Erf 1819 Portion 1		Unknown
Erf 1819 Portion 2		Unknown
Erf 11375		Unknown

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