



Cedar Tower Services

HERITAGE SCREENER

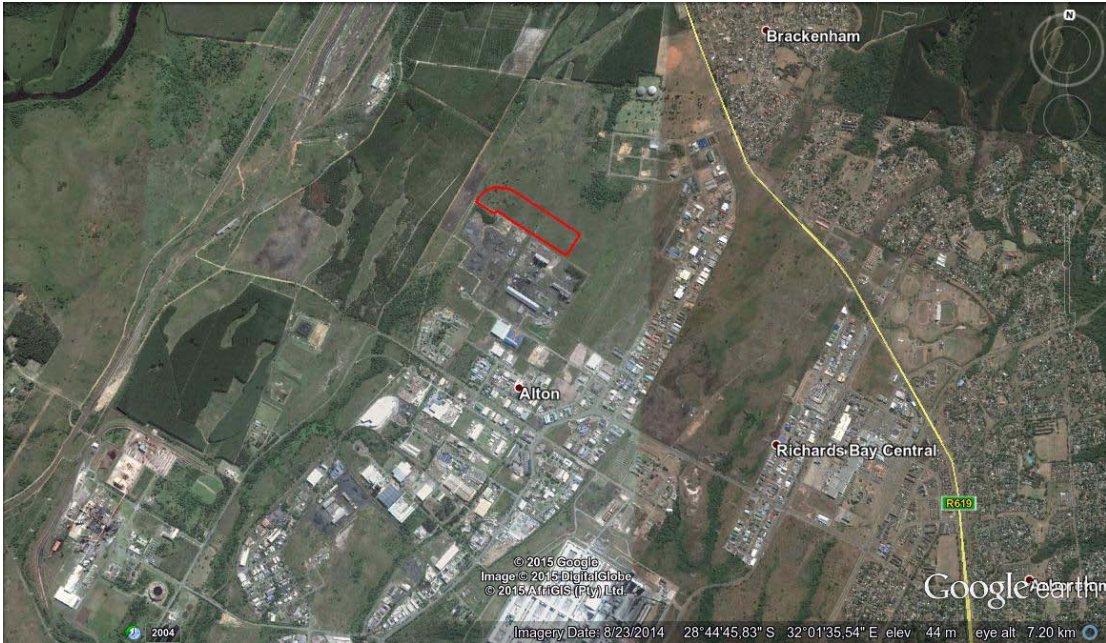
CTS Reference Number:	CTS15_003	
Client:	Savannah Environmental for Byromate (Pty) Ltd	
Date:	24.04.2015	
Development:	Proposed 60MW biomass plant within the Richards Bay IDZ, Umhlautze Local Municipality, KwaZulu-Natal	
Recommendation by Heritage Specialists at CTS: (TYPE 1)	(1) The heritage resources 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.	

Figure 1. Satellite overview of the proposed development in Richard's Bay.



Cedar Tower Services

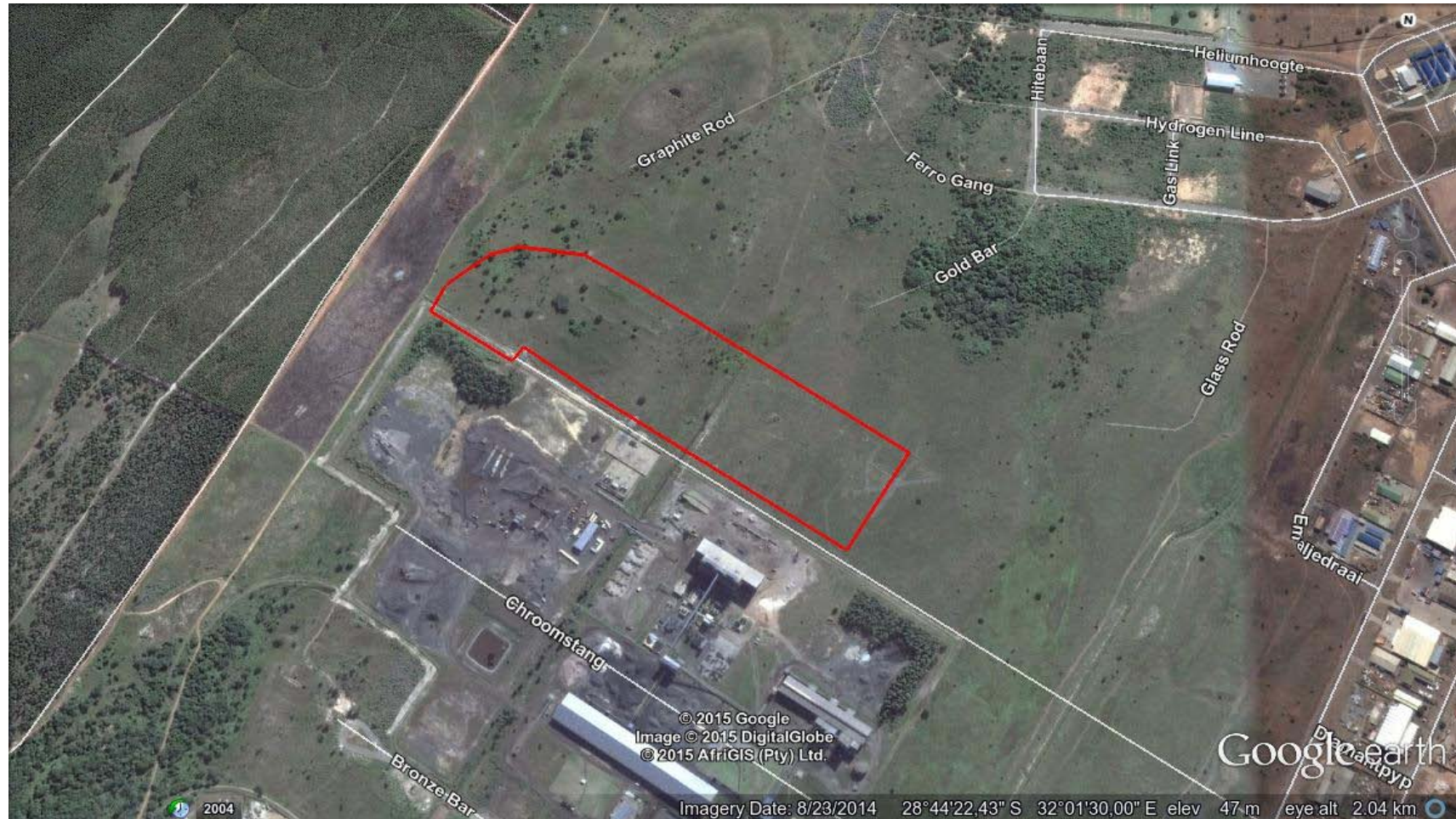


Figure 2. Polygon showing the area affected by the proposed development.



Cedar Tower Services

1. Proposed Development Summary

Proposed establishment of a 60MW biomass plant located within Phase 1F of the IDZ in Richards Bay, KwaZulu-Natal

2. Application References

Name of relevant heritage authority(s)	Amafa
Name of decision making authority(s)	Department of Environmental Affairs (National), 14/12/16/3/3/21776

3. Property Information

Farm Name and Number	RB IDZ Zone1F, parcels 16672, 17456, 17455 and 17433
Local Municipality	uMhlatuze
District Municipality	Uthungulu
Previous Magisterial District	Lower Umfulozi
Province	KwaZulu-Natal
Extent of property	30ha

4. Nature of the Proposed Development

Surface area to be affected/destroyed	15ha
Depth of excavation	n/a
Height of development	n/a
Expected years of operation before decommission	25-30



Cedar Tower Services

5. Category of Development

Triggers: Section 38(8) of the National Heritage Resources Act	x
Triggers: Section 38(1) of the National Heritage Resources Act	n/a
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	x
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

- 2x30MW units
- Grid connection to existing Tata Steel substation adjacent to site
- Biomass will be transported to an existing biomass storage facility adjacent to the site
- Biomass will be conveyed by overhead conveyor to power station site.
- No ash storage on site.



Cedar Tower Services

7. Mapping

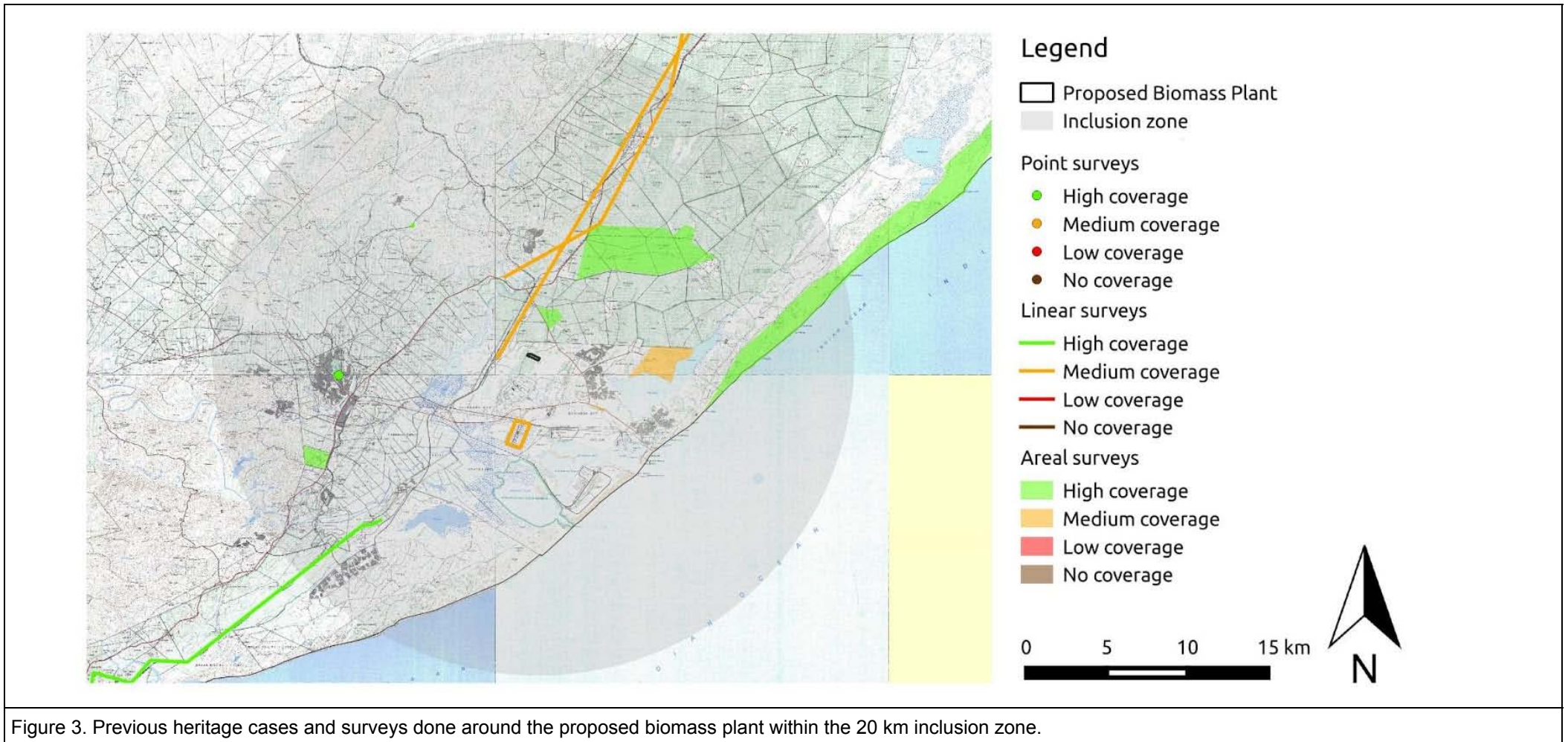
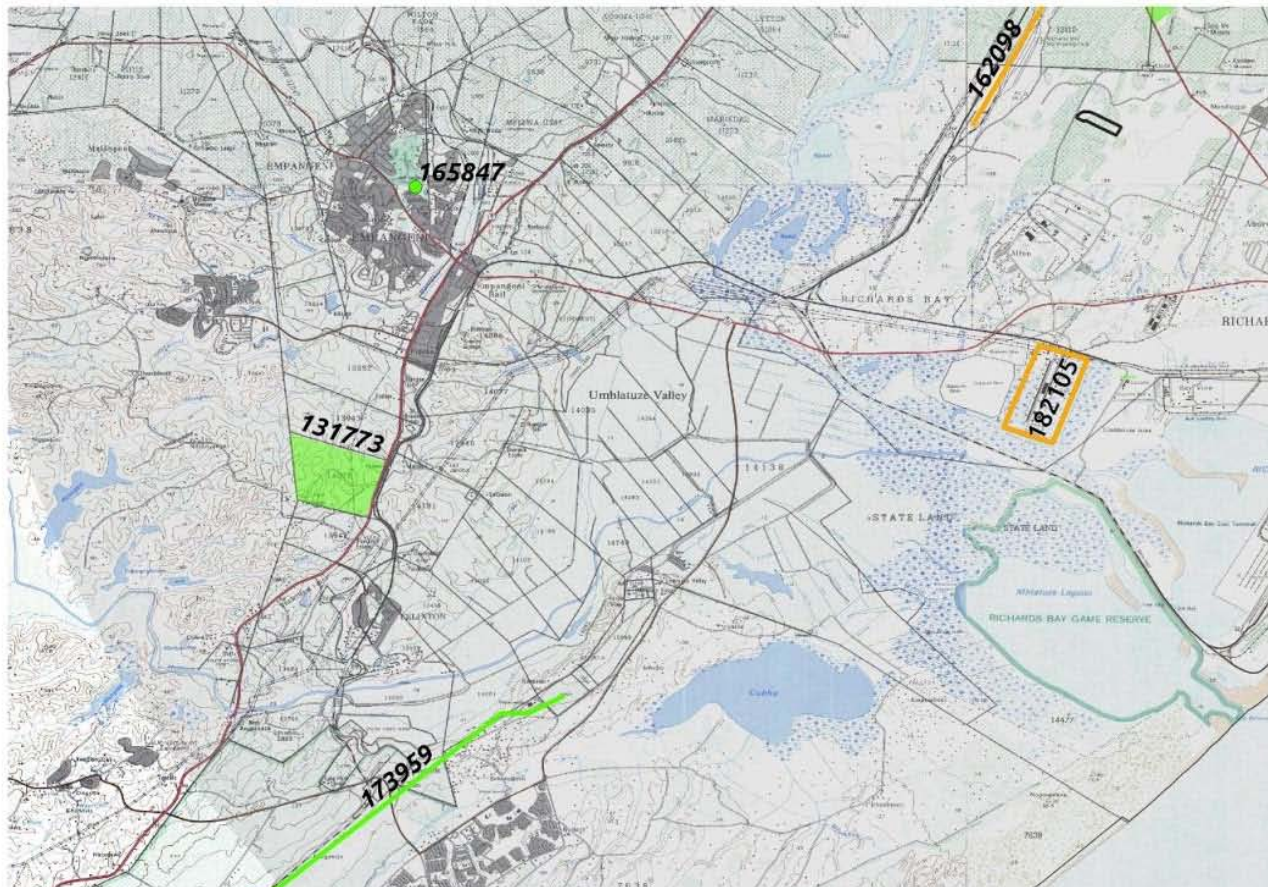


Figure 3. Previous heritage cases and surveys done around the proposed biomass plant within the 20 km inclusion zone.



Cedar Tower Services



Legend

- Proposed Biomass Plant
- Inclusion zone

Point surveys

- High coverage
- Medium coverage
- Low coverage
- No coverage

Linear surveys

- High coverage
- Medium coverage
- Low coverage
- No coverage

Areal surveys

- High coverage
- Medium coverage
- Low coverage
- No coverage

0 1 2 3 4 5 km



Figure 4. SAHRIS NID labeled map of previous heritage cases and surveys done in the southwestern part of the the 20 km inclusion zone.



Cedar Tower Services

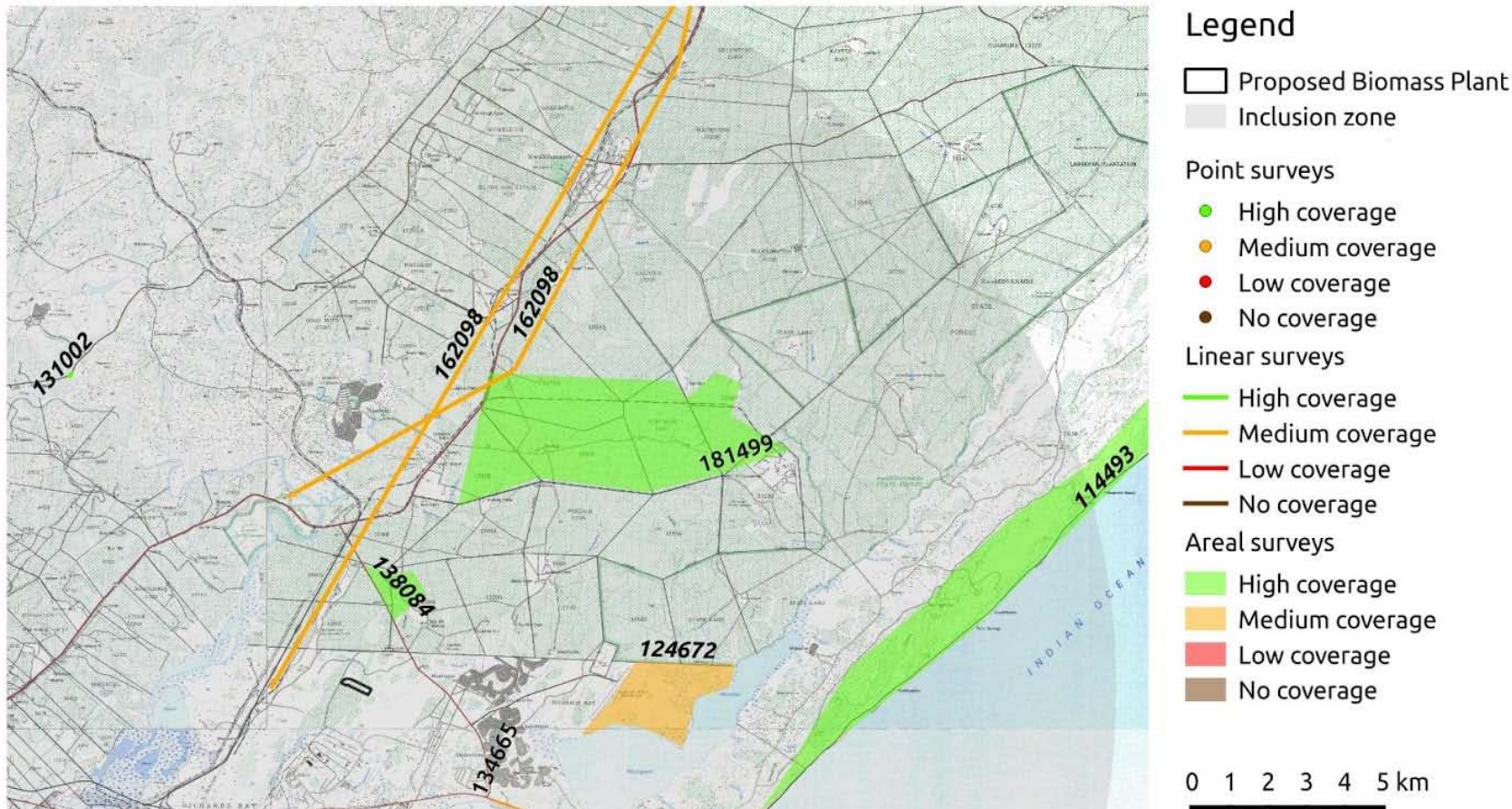


Figure 5. SAHRIS NID labeled map of previous heritage cases and surveys done in the northeastern part of the the 20 km inclusion zone.



Cedar Tower Services

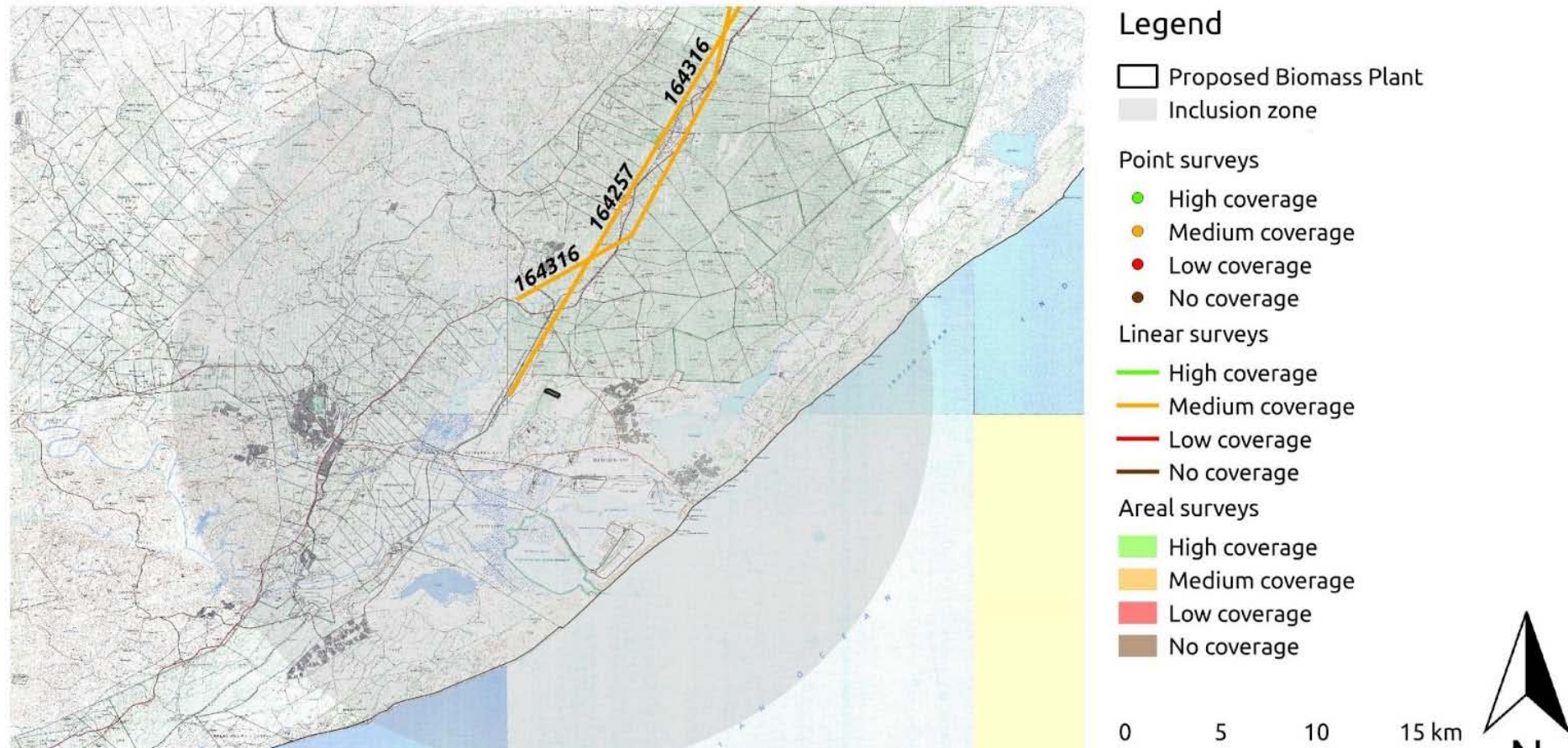


Figure 6. SAHRIS NID labeled map of previous palaeontological cases and surveys done around the proposed biomass plant within the 20 km inclusion zone.



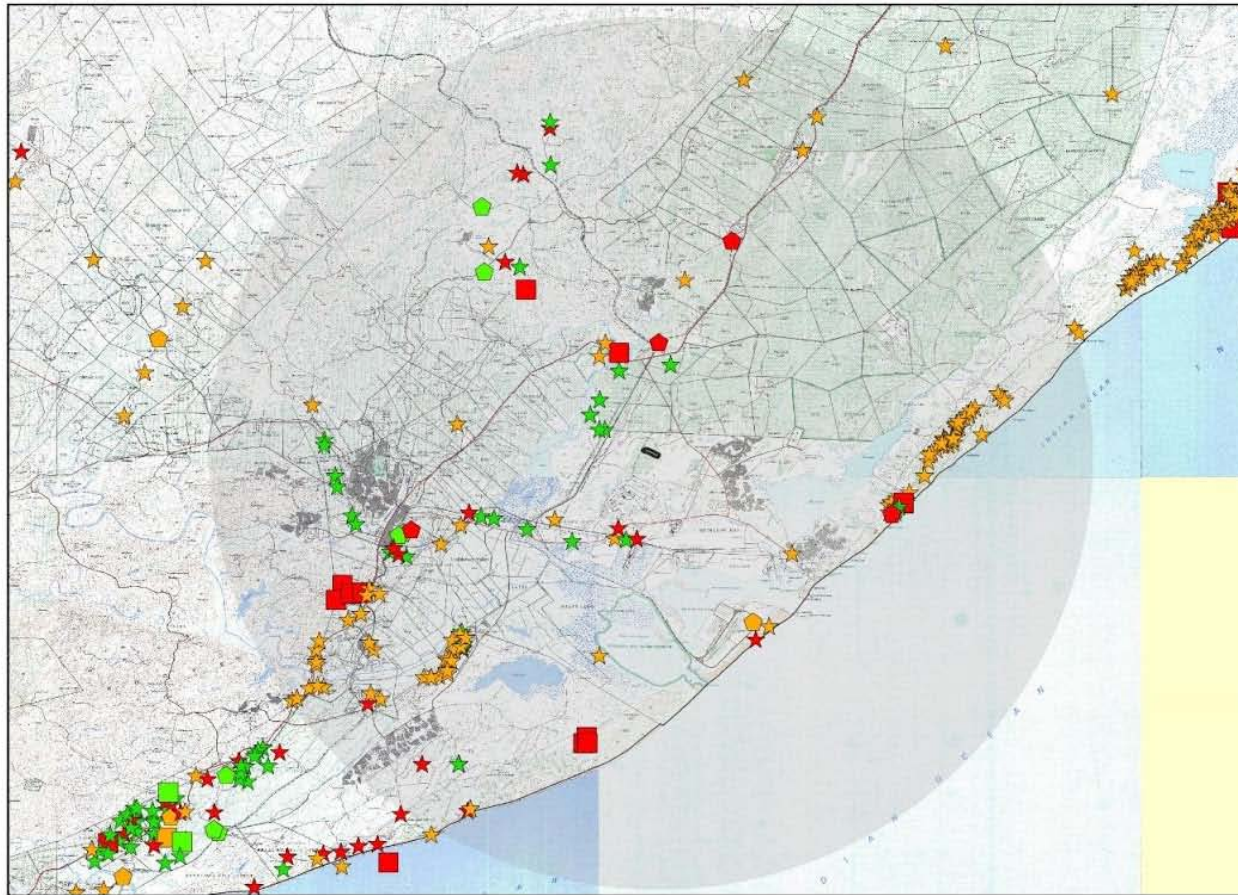
Cedar Tower Services



Figure 7. Palaeosensitivity map of the study area. See Appendix 3 for full guide to the legend.



Cedar Tower Services



Legend

- Proposed Biomass Plant
- Inclusion zone

Heritage resources

- ☆ Arch, Bat, Geo, Met, Pal, Und
- ◇ Structures, Monuments & Memorials
- Liv. Heritage/Sacred sites, Burial Grounds & Graves, Natural, Place
- △ Conservation Area, Cultural Landscape

Grading

- | | |
|----------|----------|
| BLACK | I |
| DARK RED | II |
| RED | IIIa |
| ORANGE | IIIb |
| GREEN | IIIc |
| CLEAR | Ungraded |

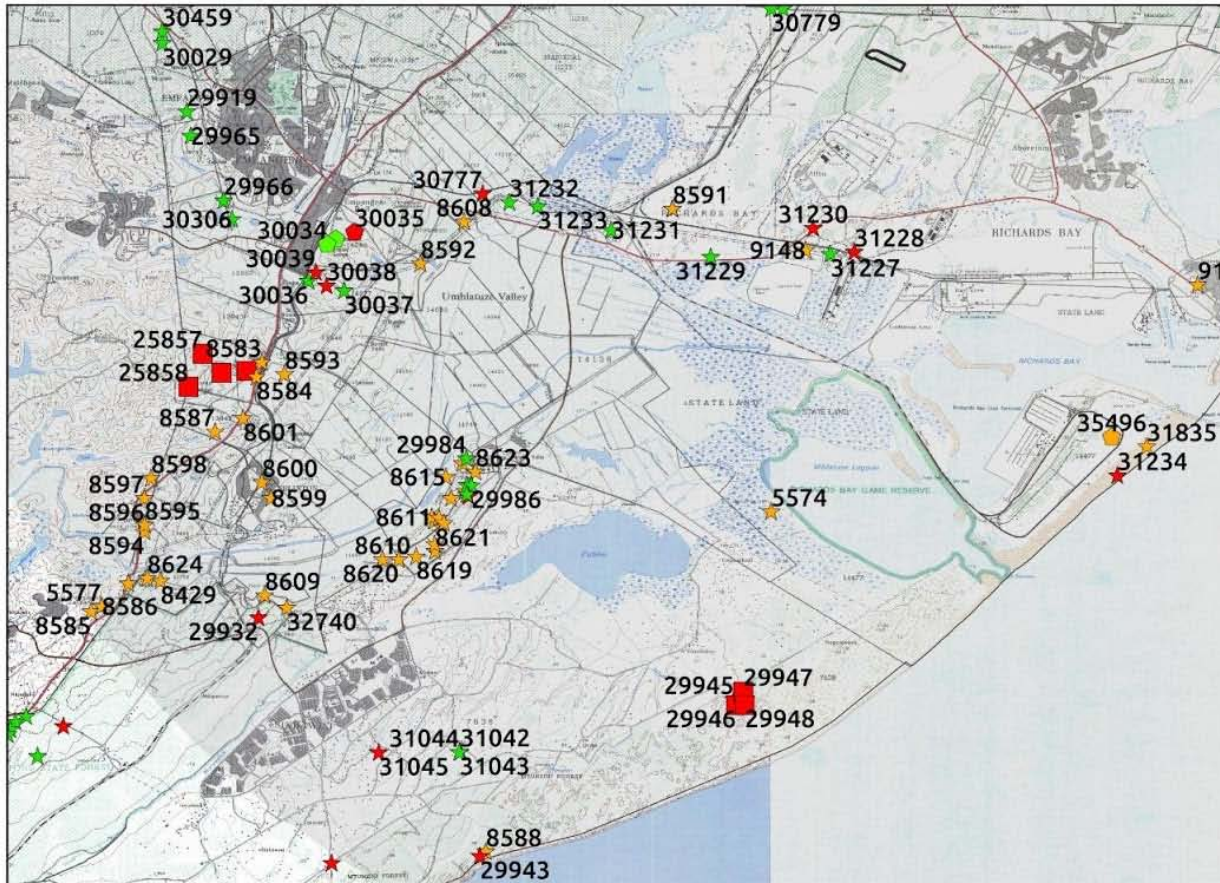
0 5 10 15 km



Figure 8. Overview map of heritage resources previously identified in the area surrounding the proposed biomass plant.



Cedar Tower Services



Legend

□ Proposed Biomass Plant

■ Inclusion zone

Heritage resources

- ☆ Arch, Bat, Geo, Met, Pal, Und
- ◇ Structures, Monuments & Memorials
- Liv. Heritage/Sacred sites, Burial Grounds & Graves, Natural, Place
- △ Conservation Area, Cultural Landscape

Grading

BLACK	I
DARK RED	II
RED	IIIa
ORANGE	IIIb
GREEN	IIIc
CLEAR	Ungraded

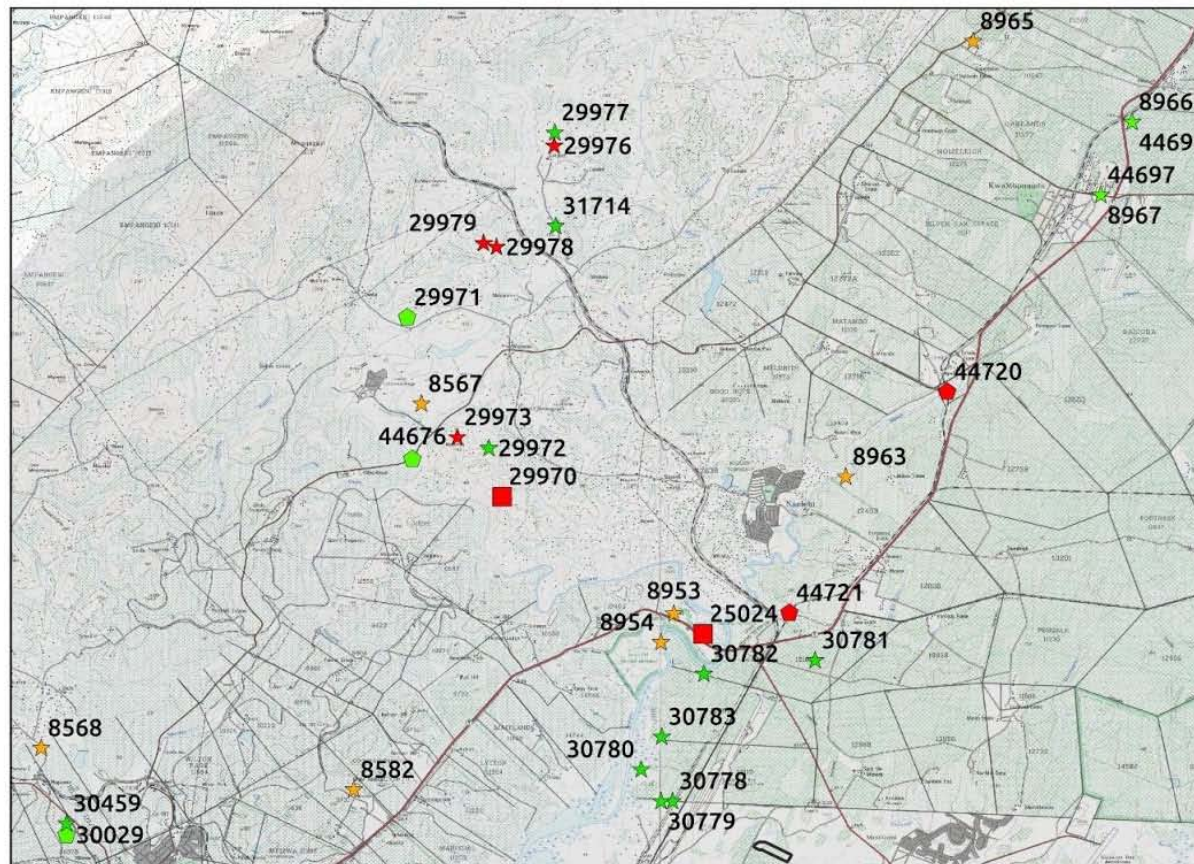
0 1 2 3 4 5 km



Figure 9. SAHRIS SiteID labeled map of heritage resources previously identified to the south and southwest of the proposed biomass plant.



Cedar Tower Services



Legend

- Proposed Biomass Plant
- Inclusion zone

Heritage resources

- ☆ Arch, Bat, Geo, Met, Pal, Und
- ⬡ Structures, Monuments & Memorials
- Liv. Heritage/Sacred sites, Burial Grounds & Graves, Natural, Place
- △ Conservation Area, Cultural Landscape

Grading

BLACK	I
DARK RED	II
RED	IIIa
ORANGE	IIIb
GREEN	IIIc
CLEAR	Ungraded

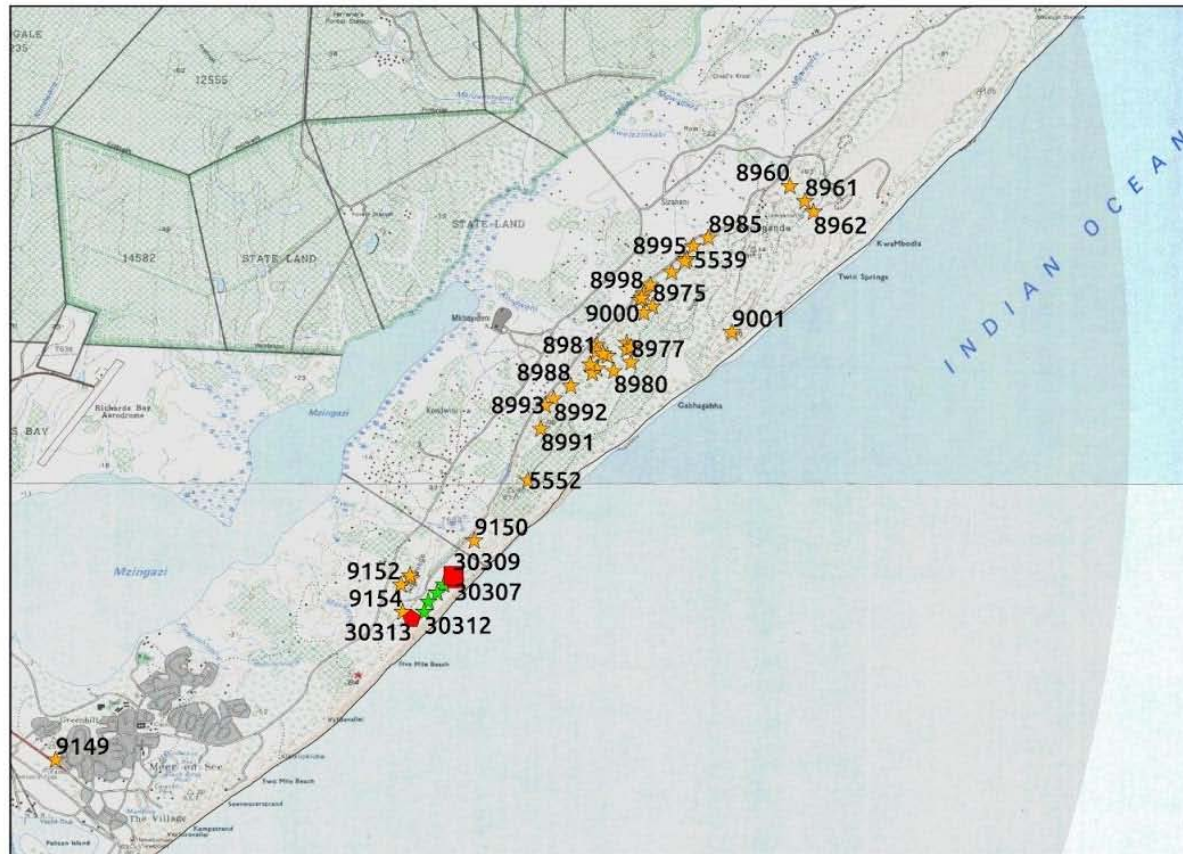
0 1 2 3 4 5 km



Figure 10. SAHRIS SiteID labeled map of heritage resources previously identified to the north of the proposed biomass plant.



Cedar Tower Services



Legend

- Proposed Biomass Plant
- Inclusion zone

Heritage resources

- ☆ Arch, Bat, Geo, Met, Pal, Und
- ⬠ Structures, Monuments & Memorials
- Liv. Heritage/Sacred sites, Burial Grounds & Graves, Natural, Place
- △ Conservation Area, Cultural Landscape

Grading

- | | |
|----------|----------|
| BLACK | I |
| DARK RED | II |
| RED | IIIa |
| ORANGE | IIIb |
| GREEN | IIIc |
| CLEAR | Ungraded |

0 1 2 3 4 km



Figure 11. SAHRIS SiteID labeled map of heritage resources previously identified to the east and southeast of the proposed biomass plant.



Cedar Tower Services

8. Heritage statement/character of the area

The proposed site is in the Richard's Bay Industrial Development Zone (IDZ). It is immediately adjacent to an existing industrial development and the ground has clearly been disturbed by earthmoving activities and vehicles, apparent in Figure 2. No impacts are anticipated on any defined cultural landscapes and we do not foresee any visual impacts from this proposed development.

The area is underlain by yellowish redistributed sand which is rated as having **low** fossil sensitivity. A palaeontological assessment is therefore **not** necessary for this development.

The heritage resources identified thus far, depicted in Figures 5 and 6, have low (IIIc) to medium (IIIc) local significance ratings. Almost all of the sites are archaeological and have previously been identified during heritage impact assessments conducted by Gavin Anderson. Sites #31230 and #31228 consist of scatters of artefacts with high local significance (IIla) but this development will have no impact on these heritage resources.

The only built environment heritage resource worth mentioning is Site # 44721, 5.5km to the north of the proposed development area. The buildings at this site are associated with the railway infrastructure and are well away from the development.

This proposed development should therefore require no further heritage studies and the nature of the new proposal is consistent with previous developments in the area.

Cedar Tower Services (Pty) Ltd

No. 73, 69 on Main, Mowbray, Cape Town, 7700

+27 21 685 1824 - info@cedartower.co.za - <http://www.cedartower.co.za>



Cedar Tower Services

APPENDIX 1 - Site List

Site ID	Full Site Name	Site Reference	Site Type	Grading
25024	Enseleni Cameroon/ 1901/Canadian grave	Enseleni Forest Cameroon/ 1901/Canadian grave	Burial Grounds & Graves	Grade IIIa
25857	Pentlands quarry NTAB01	NTAB01	Burial Grounds & Graves	Grade IIIa
25858	Erf 16453	NTAB02	Burial Grounds & Graves	Grade IIIa
25859	Erf 16453	NTAB03	Burial Grounds & Graves	Grade IIIa
25861	Erf 16453	NTAB03	Burial Grounds & Graves	Grade IIIa
25860	Erf 16453	NTAB04	Burial Grounds & Graves	Grade IIIa
44720	Swaziland Railway Link Ermelo to Richards Bay 42	SWAZIRL42	Structures, Building	Grade IIIa
44721	Swaziland Railway Link Ermelo to Richards Bay 43	SWAZIRL43	Structures, Building	Grade IIIa
29970		UMLANDO-ENS 1	Artefacts, Settlement, Burial Grounds & Graves	Grade IIIa
29973		UMLANDO-ENS 3	Artefacts, Stone walling	Grade IIIa
29976		UMLANDO-ENS 6	Artefacts	Grade IIIa
29978		UMLANDO-ENS 8	Artefacts	Grade IIIa
29979		UMLANDO-ENS 9	Artefacts	Grade IIIa
30035	House 1	UMLANDO-H1	Archaeological, Structures	Grade IIIa
29987		UMLANDO-HIL 20	Archaeological	Grade IIIa
30777		UMLANDO-JRH1	Archaeological	Grade IIIa
30038		UMLANDO-LOG02	Archaeological	Grade IIIa
30039		UMLANDO-LOG03	Archaeological	Grade IIIa
31045		UMLANDO-NTL04	Archaeological	Grade IIIa
29932		UMLANDO-PD39	Settlement	Grade IIIa
31228		UMLANDO-RBPO3	Artefacts	Grade IIIa
31230		UMLANDO-RBPO5	Artefacts	Grade IIIa
31234		UMLANDO-RBPO9	Palaeontological, Artefacts, Shell Midden	Grade IIIa
30307		UMLANDO-TB 01	Burial Grounds/Graves, Artefacts	Grade IIIa
30309		UMLANDO-TB 03	Shell Midden, Burial Grounds & Graves	Grade IIIa
30313		UMLANDO-TB 07	Living Heritage	Grade IIIa
29943		UMLANDO-ZS 08	Artefacts	Grade IIIa
29945		UMLANDO-ZS 10	Artefacts	Grade IIIa
29946		UMLANDO-ZS 11	Burial Grounds & Graves	Grade IIIa



Cedar Tower Services

29947		UMLANDO-ZS 12	Artefacts, Shell Midden, Burial Grounds & Graves	Grade IIIa
29948		UMLANDO-ZS 13	Artefacts, Shell Midden, Burial Grounds & Graves	Grade IIIa
8429	Dengezi	2831BD 028	Artefacts	Grade IIIb
8567		2831DB 007	Artefacts	Grade IIIb
8568		2831DB 008	Artefacts	Grade IIIb
8580		2831DD 001	Artefacts	Grade IIIb
8582	Drift Sands	2831DD 003	Artefacts	Grade IIIb
8583	Ninian's Station	2831DD 004	Artefacts	Grade IIIb
8584	Ninian's Station	2831DD 005	Artefacts	Grade IIIb
8585	KwaDlangezwa	2831DD 006	Artefacts	Grade IIIb
8586	KwaDlangezwa	2831DD 007	Artefacts	Grade IIIb
5577	KwaDlangezwa	2831DD 008	Artefacts	Grade IIIb
8587	St Osyths	2831DD 009	Artefacts	Grade IIIb
8588		2831DD 010	Artefacts	Grade IIIb
8591		2831DD 013	Artefacts	Grade IIIb
8592	Empangeni Forest Reserve	2831DD 014	Artefacts	Grade IIIb
8593		2831DD 015	Artefacts	Grade IIIb
8594	Umhlatuzi Terraces	2831DD 016	Artefacts	Grade IIIb
8595	Umhlatuzi Terraces	2831DD 017	Artefacts	Grade IIIb
8596	Umhlatuzi Terraces	2831DD 018	Artefacts	Grade IIIb
8597	Umhlatuzi Terraces	2831DD 019	Artefacts	Grade IIIb
8598	Umhlatuzi Terraces	2831DD 020	Artefacts	Grade IIIb
8599	Umhlatuzi Terraces	2831DD 021	Artefacts	Grade IIIb
8600		2831DD 022	Artefacts	Grade IIIb
8601	Umzimbete station	2831DD 023	Artefacts	Grade IIIb
5574	Uqupu dunes	2831DD 033	Artefacts	Grade IIIb
8608	Empangeni Forest Station	2831DD 034	Artefacts	Grade IIIb
8609	Hillendale	2831DD 035	Artefacts	Grade IIIb
8610	Hillendale	2831DD 036	Artefacts	Grade IIIb
8611	Hillendale	2831DD 037	Artefacts	Grade IIIb
8612	Hillendale	2831DD 038	Artefacts	Grade IIIb
8613	Hillendale	2831DD 039	Artefacts	Grade IIIb
8614	Hillendale	2831DD 040	Artefacts	Grade IIIb
8615	Hillendale	2831DD 042	Artefacts	Grade IIIb
8616	Hillendale	2831DD 043	Artefacts	Grade IIIb
8617		2831DD 044	Artefacts	Grade IIIb



Cedar Tower Services

8618		2831DD 045	Artefacts	Grade IIIb
8619	Umhlatuze Valley Sugar	2831DD 046	Artefacts	Grade IIIb
8620	Umhlatuze Valley Sugar	2831DD 047	Artefacts	Grade IIIb
8621	Umhlatuze Valley Sugar	2831DD 048	Artefacts	Grade IIIb
8622	Umhlatuze Valley Sugar	2831DD 049	Artefacts	Grade IIIb
8623	Umhlatuze Valley Sugar	2831DD 050	Artefacts	Grade IIIb
8624	Hillendale	2831DD 052	Artefacts	Grade IIIb
8953	Enseleni Nature Reserve	2832CA 005	Artefacts	Grade IIIb
8954		2832CA 006	Artefacts	Grade IIIb
8960		2832CA 012	Artefacts	Grade IIIb
8961		2832CA 013	Artefacts	Grade IIIb
8962		2832CA 014	Artefacts	Grade IIIb
8963		2832CA 015	Artefacts	Grade IIIb
8965	Expectation	2832CA 017	Artefacts	Grade IIIb
8966	Penicuik [Siding]	2832CA 018	Artefacts	Grade IIIb
8967	Kwambonambi Sandpit	2832CA 019	Artefacts	Grade IIIb
8975		2832CA 027	Artefacts	Grade IIIb
8976	Mananga	2832CA 028	Artefacts	Grade IIIb
5543	Ntangande	2832CA 033	Artefacts	Grade IIIb
5545	Ntangande	2832CA 034	Artefacts	Grade IIIb
5544	Ntangande	2832CA 035	Artefacts	Grade IIIb
8977	Ntangande	2832CA 036	Artefacts	Grade IIIb
8978	Ntangande	2832CA 037	Artefacts	Grade IIIb
8980		2832CA 039	Artefacts	Grade IIIb
8981		2832CA 040	Artefacts	Grade IIIb
8982		2832CA 041	Artefacts	Grade IIIb
8983		2832CA 042	Artefacts	Grade IIIb
5540		2832CA 043	Artefacts	Grade IIIb
8984		2832CA 044	Artefacts	Grade IIIb
5539		2832CA 045	Artefacts	Grade IIIb
8985		2832CA 046	Artefacts	Grade IIIb
8986		2832CA 047	Artefacts	Grade IIIb
8988		2832CA 049	Artefacts	Grade IIIb
8990		2832CA 051	Artefacts	Grade IIIb
8991		2832CA 052	Artefacts	Grade IIIb
8992		2832CA 053	Artefacts	Grade IIIb



Cedar Tower Services

8993		2832CA 054	Artefacts	Grade IIIb
8995	Mananga	2832CA 056	Shell Midden	Grade IIIb
8996	Mananga	2832CA 057	Shell Midden	Grade IIIb
8997	Mananga	2832CA 058	Shell Midden	Grade IIIb
8998	Mananga	2832CA 059	Shell Midden	Grade IIIb
8999	Mananga	2832CA 060	Shell Midden	Grade IIIb
9000	Mananga	2832CA 061	Shell Midden	Grade IIIb
9001	Ntogande	2832CA 062	Artefacts	Grade IIIb
9148	Bhizele Halt	2832CC 001	Artefacts	Grade IIIb
9149	Richards Bay	2832CC 002	Artefacts	Grade IIIb
5552	Richards Bay	2832CC 004	Shell Midden	Grade IIIb
9150		2832CC 005	Artefacts	Grade IIIb
9151	Nontshingo	2832CC 006	Archaeological	Grade IIIb
9152	Nontshingo	2832CC 007	Archaeological	Grade IIIb
9153	Nontshingo	2832CC 008	Archaeological	Grade IIIb
9154		2832CC 009	Archaeological	Grade IIIb
35496		Richards Bay Terminal	Transport infrastructure	Grade IIIb
32740	PD41	Tronox Pipeline	Archaeological	Grade IIIb
31835		UMLANDO-RBPO9B	Deposit, Artefacts	Grade IIIb
44676	HIA Report- Replacement of Nseleni Bridge	NSB	Bridge	Grade IIIc
44696	Swaziland Railway Link Ermelo to Richards Bay 20	SWAZIRL20	Archaeological	Grade IIIc
44697	Swaziland Railway Link Ermelo to Richards Bay 21	SWAZIRL21	Archaeological	Grade IIIc
44698	Swaziland Railway Link Ermelo to Richards Bay 22	SWAZIRL22	Archaeological	Grade IIIc
30029		UMLANDO- HVW001	Archaeological, Structures	Grade IIIc
30033	Braeburn	UMLANDO-BRB1	Archaeological, Structures	Grade IIIc
30034	Brierley Grange	UMLANDO-BRG1	Archaeological, Structures	Grade IIIc
29919		UMLANDO-EMP01	Artefacts	Grade IIIc
29965		UMLANDO-EMP02	Artefacts	Grade IIIc
29966		UMLANDO-EMP03	Artefacts	Grade IIIc
30306		UMLANDO-EMP04	Artefacts	Grade IIIc
29971		UMLANDO-ENS 10	Artefacts, Settlement, Burial Grounds & Graves	Grade IIIc
29972		UMLANDO-ENS 2	Artefacts, Settlement, Burial Grounds & Graves	Grade IIIc
31714		UMLANDO-ENS 4	Artefacts	Grade IIIc
29977		UMLANDO-ENS 7	Artefacts	Grade IIIc



Cedar Tower Services

29984		UMLANDO-EXX02	Artefacts	Grade IIIc
29985		UMLANDO-EXX1A	Archaeological	Grade IIIc
29986		UMLANDO-EXX1B	Archaeological	Grade IIIc
30036		UMLANDO-HOUSE 2	Archaeological, Structures	Grade IIIc
30459		UMLANDO-HVW001	Artefacts	Grade IIIc
30037		UMLANDO-LOG01	Archaeological	Grade IIIc
30778		UMLANDO-NSE01	Artefacts	Grade IIIc
30779		UMLANDO-NSE02	Artefacts	Grade IIIc
30780		UMLANDO-NSE03	Artefacts	Grade IIIc
30781		UMLANDO-NSE04	Archaeological	Grade IIIc
30782		UMLANDO-NSE05	Artefacts	Grade IIIc
30783		UMLANDO-NSE06	Artefacts	Grade IIIc
31042		UMLANDO-NTL01	Archaeological	Grade IIIc
31043		UMLANDO-NTL02	Archaeological	Grade IIIc
31044		UMLANDO-NTL03	Archaeological	Grade IIIc
31227		UMLANDO-RBPO2	Artefacts	Grade IIIc
31229		UMLANDO-RBPO4	Artefacts	Grade IIIc
31231		UMLANDO-RBPO6	Artefacts	Grade IIIc
31232		UMLANDO-RBPO7	Artefacts	Grade IIIc
31233		UMLANDO-RBPO8	Artefacts	Grade IIIc
30308		UMLANDO-TB 02	Artefacts	Grade IIIc
30310		UMLANDO-TB 04	Archaeological	Grade IIIc
30311		UMLANDO-TB 05	Archaeological	Grade IIIc
30312		UMLANDO-TB 06	Artefacts	Grade IIIc
30027		UMLANDO-TIC238	Archaeological	Grade IIIc

APPENDIX 2 - Reference List

Nid	Authors	Report Date	Report Title
173959	Anderson, G.	August 2014	Permit Application For The Tronox Pipeline At The Fairbreeze Mine, Mtunzini, Kwazulu-natal
138084	Anderson, G.	July 2012	Heritage Survey Of The Proposed Aquadene Housing Project, Kwa-zulu Natal
131773	Anderson, G.	September 2013	Heritage Survey Of The Proposed Pentlands Quarry, Empangeni, Kwazulu-natal



Cedar Tower Services

114493	Anderson, G.	January 2013	The Archaeological Survey Of The Zulti North Mining Lease For Richards Bay Minerals, 2012 Annual Report
151204	Anderson, G.	November 2013	Bayvue Gate Transnet National Ports Authority, Richards Bay
164316	Groenewald, G	February 2014	Palaeontological Desktop Assessment For The Proposed Upgrade Of The Golela To Nsezi Line In Kwazulu - Natal Pro
164257	Groenewald, G	February 2014	Paleontological Desktop Assessment For The Proposed Upgrade Of The Davel To Nerston Rail Line In The Mpumalanga Province
165847	Murimbika, M.	April 2014	Heritage Management Plan For Proposed Eskom Soc 765kv Umfolozi-thetha Transmission Powerline From Umfolozi Substation To The New Empangeni Substation In Kwazulu Natal Province
124672	van Jaarsveld, A	March 2013	Phase 1 Heritage Impact Assessment: Mandlazini Agri-village Sewer Network Installation
131002	van Jaarsveld, A.	September 2013	Phase 1 Heritage Impact Assessment: Nseleni River Bridge (dc28/0013/2013)
162098	van Schalkwyk, J.	September 2013	Cultural Heritage Resources Impact Assessment For The Proposed Swaziland Rail Link, Southern Section, Kwazulu-natal Region
162098	van Schalkwyk, J.	September 2013	Cultural Heritage Impact Assessment For The Proposed Swaziland Rail Link, Western Section, Kwazulu-natal Region
181499	van Schalkwyk, L.	November 2014	Application for Exemption from a Phase 1 Heritage Impact Assessment Proposed Richards Bay Industrial Development Zone (RBIDZ), Mbonambi Local Municipality, KwaZulu-Natal
182102	Wahl, E., van Schalkwyk, L.	November 2014	Application for Exemption from a Phase 1 Heritage Impact Assessment of Proposed Decommissioning of the Legacy Landfills at The Bayside Aluminium Smelter, Richards Bay, KwaZulu-Natal, South Africa



Cedar Tower Services

APPENDIX 3 - Keys/Guides

Key/Guide to Acronyms

AIA	Archaeological Impact Assessment
DMR	Department of Mineral Resources
DEA	Department of Environmental Affairs
DMR	Department of Mineral Resources
DEADP	Department of Environmental Affairs and Development Planning (Western Cape)
DEDEAT	Department of Economic Development, Environmental Affairs and Tourism (Eastern Cape)
DENC	Department of Environment and Nature Conservation (Northern Cape)
DARD	Department of Agriculture and Rural Development (Kwa-Zulu Natal)
LEDET	Department of Economic Development, Environment & Tourism (Limpopo)
DEDT	Department of Economic Development and Tourism (Mpumalanga)
DEDECT	Department of Economic Development, Environment, Conservation and Tourism (North West)
DEDETA	Department of Economic Development, Tourism and Environmental Affairs (Free State)
GDARD	Gauteng Department of Agriculture and Rural Development (Gauteng)
HIA	Heritage Impact Assessment
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

Key/Guide to Palaeosensitivity Map

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 finds is required
GREY:	INSIGNIFICANT/ZERO - no palaeontological studies are required
WHITE/CLEAR:	UNKNOWN - these areas will require a minimum of a desktop study.



APPENDIX 4 - Methodology

The Heritage Screener summarises the heritage impact assessments previously undertaken within the area of the proposed development and its surroundings. All heritage resources identified in these reports are extracted and mapped 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 SURROUNDING AREA TO BE TAKEN INTO CONSIDERATION (SCREENING RADIUS)

The extent of the area surrounding the proposed development 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.

Generally, the surroundings will be considered as the area included in a circle with a maximum radius of 50km from the center of the development.

DETERMINATION OF THE PALAEONTOLOGICAL SENSITIVITY

Furthermore, the Heritage Screener will gauge the possible impact of the development on palaeontological resources by using the fossil sensitivity maps available on the South African Heritage Resources Information System (SAHRIS), the nature of the proposed development and, when available, the information on the geological background of the area provided by the applicant.



DETERMINATION OF THE COVERAGE RATING ASCRIBED TO A REPORT POLYGON

Each report that is assessed for the compilation of the heritage screener is mapped on the screener according to the available mapping in the report. 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. If this is not the case in certain polygons it will be taken into consideration in the attribution of the coverage category.

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



Cedar Tower Services

- 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
- 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.

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.

The compilation of the Heritage Screener will not include any field assessment. The Heritage Screener will be submitted to the applicant within 24 hours from receipt of full payment. **If the 24-hour deadline is not met by CTS, the applicant will be refunded in full.**