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HERITAGE SCREENER

CTS Reference Number:	CTS16_024
Client:	EnviroAfrica
Date:	12 May 2016
Title:	Rezoning of Plot 255, Olyvenhoutsdrift, Upington, Northern Cape
Recommendation by CTS Heritage Specialists: (Type 2)	<p>(2) The heritage resources and the area proposed for development are only partially recorded - It is recommended that:</p> <ul style="list-style-type: none">- An archaeological assessment be conducted focussing on Stone Age material- A Palaeo Chance Find Procedure should be included in the Environmental Management Plan for construction activities envisaged on the site but a Palaeontological Impact Assessment is not recommended.

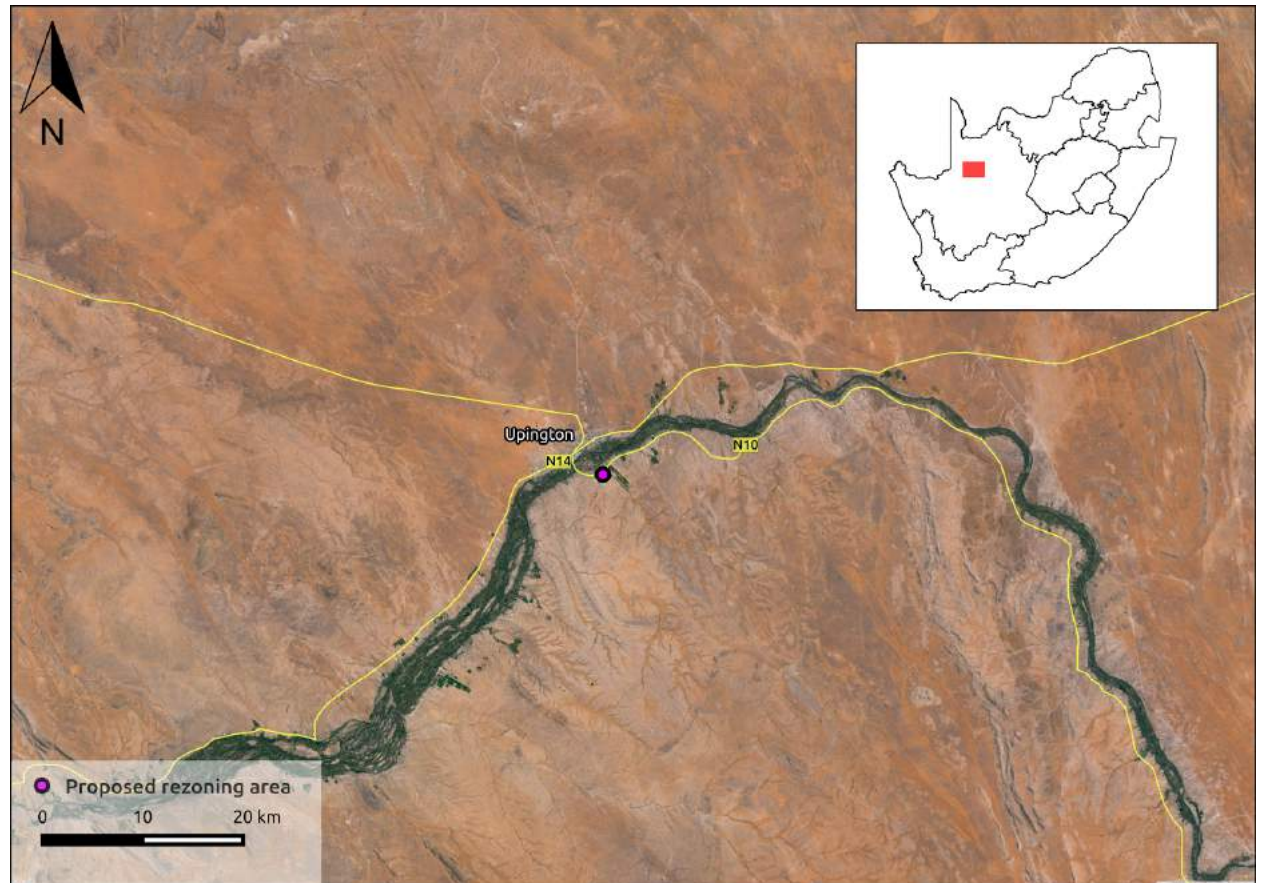


Figure 1a. Satellite image with proposed development area indicated in the Northern Cape province.



1. Proposed Development Summary

It is proposed that a portion (approximately 3.2ha) of Erf 755, Olyvenhoutsdrift Settlement be rezoned for the development of a light industrial park. The rest of the property (6.7ha) will remain zoned for agricultural use. The site is located south-east of Upington, and north of Louisvale Rd, approximately 4km outside of Upington along the N10.

2. Application References

Name of relevant heritage authority(s)	South African Heritage Resources Agency (SAHRA)
Name of decision making authority(s)	Department of Environment and Nature Conservation (DENC)

3. Property Information

GPS Coordinates	28°28'25.074"S, 21°16'30.304"E
Farm Name/Number	Plot 755, Olyvenhoutsdrift
Local Municipality	//Khara Hais
District Municipality	ZF Mgcawu
Previous Magisterial District	Gordonia
Province	Northern Cape
Current Use	Commercial Agriculture
Current Zoning	Agricultural
Total Extent	9.9 ha



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4. Nature of the Proposed Development

Surface area to be affected/destroyed	3.2 ha
Depth of excavation (m)	NA
Height of development (m)	NA
Expected years of operation before decommission	NA

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	
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	X
5. Other (state):	

6. Additional Infrastructure Required for this Development

NA



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7. Mapping - Please see Appendices 3 and 4 for legend keys and methodology.



Figure 1b. Overview Map. Satellite image (2016) with proposed rezoning area indicated.



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Figure 1c. Overview Map. Close up satellite image (2016) for the area (3.2ha) proposed for rezoning from agricultural to light industrial.



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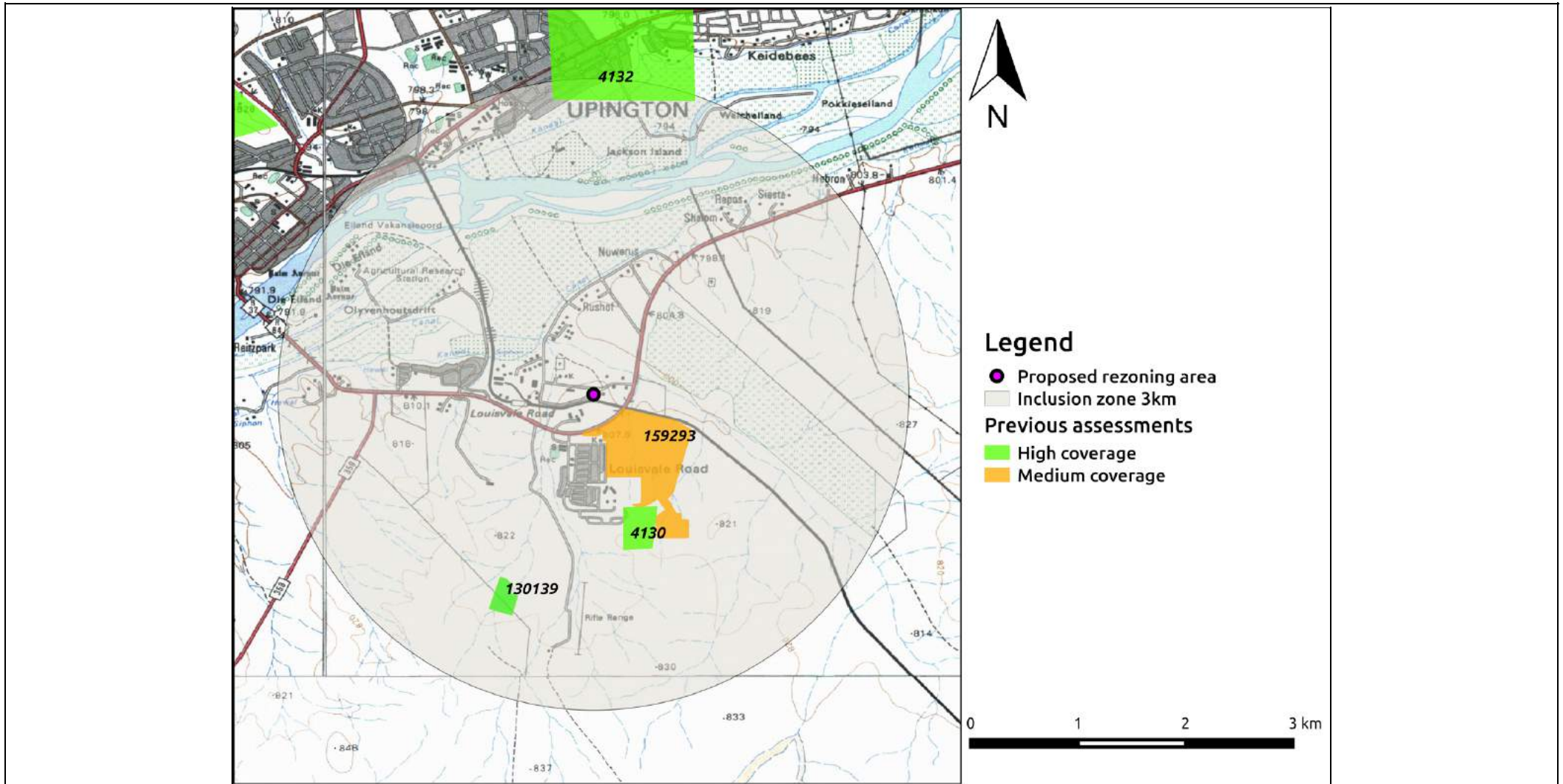


Figure 2a. HIAs Map. Previous Heritage Impact Assessments conducted within 3km of the proposed development area with SAHRIS NID labels indicated (excluding PIAs). A full reference list is in Appendix 2.



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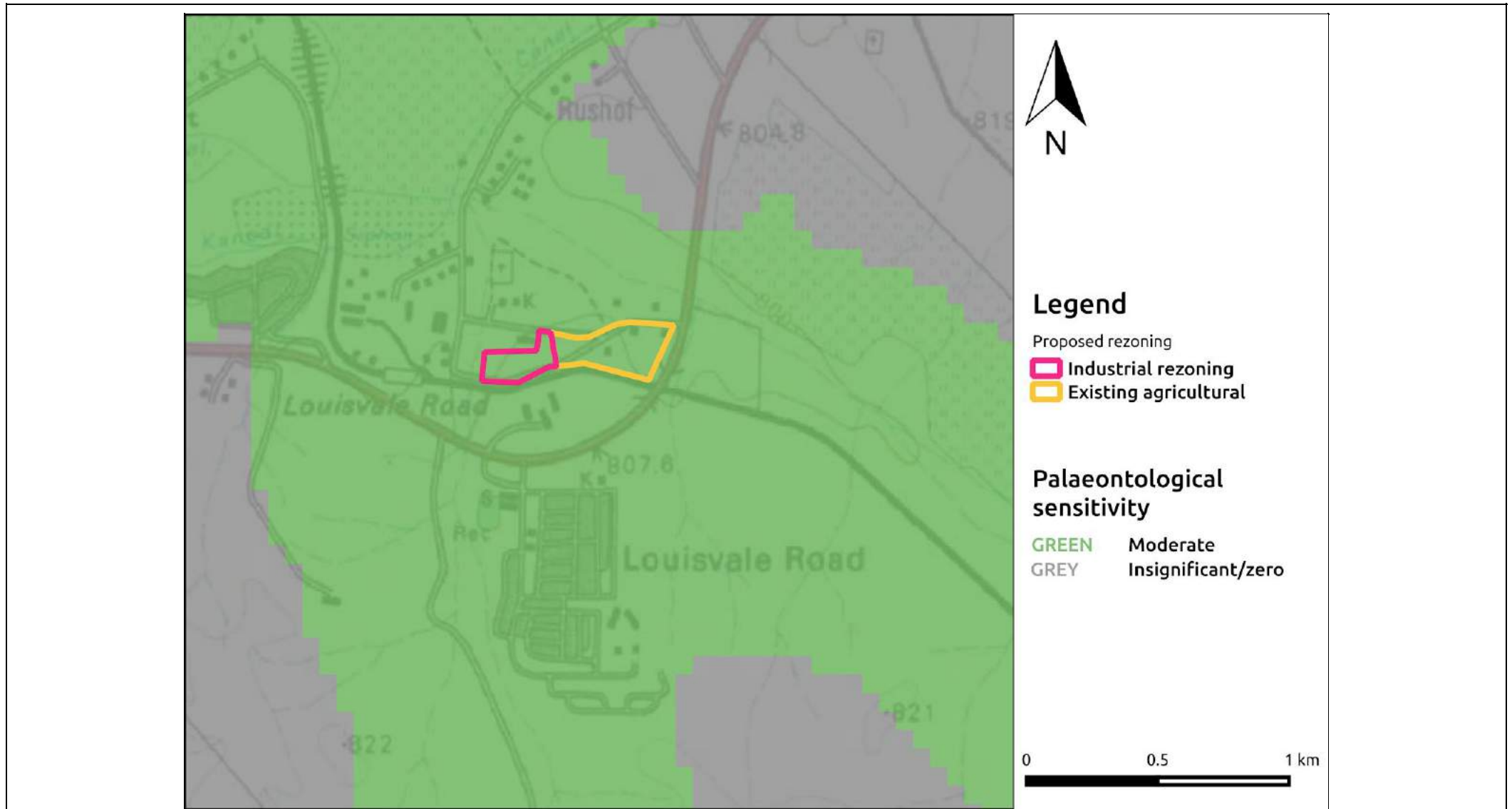


Figure 3. Palaeo Map. Palaeosensitivity of the study area. See Appendix 3 for full guide to the legend.



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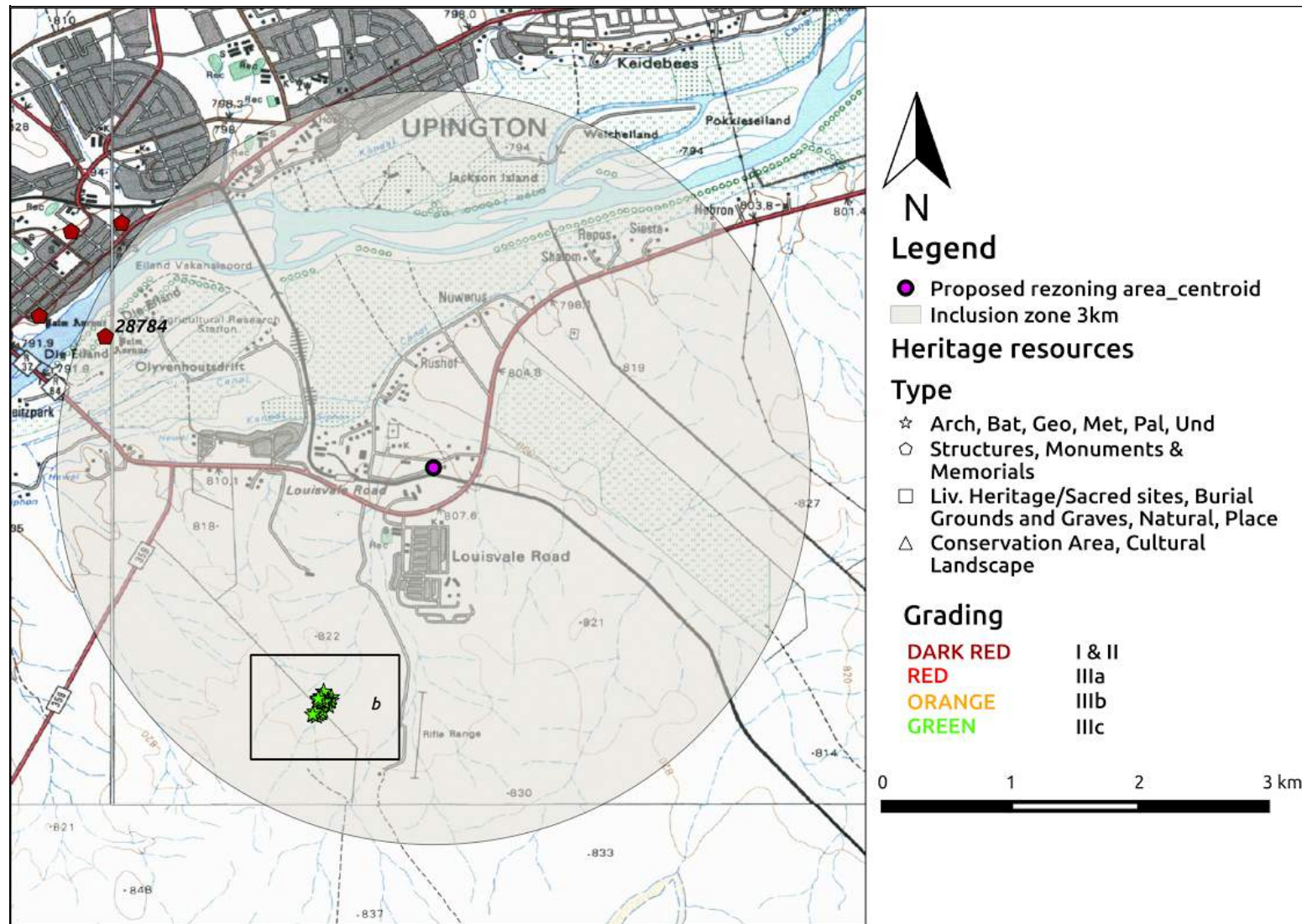


Figure 4a. Heritage Resources Map. Heritage resources previously identified in and near the study area, with SAHRIS Site IDs indicated (see Figure 4b for inset).



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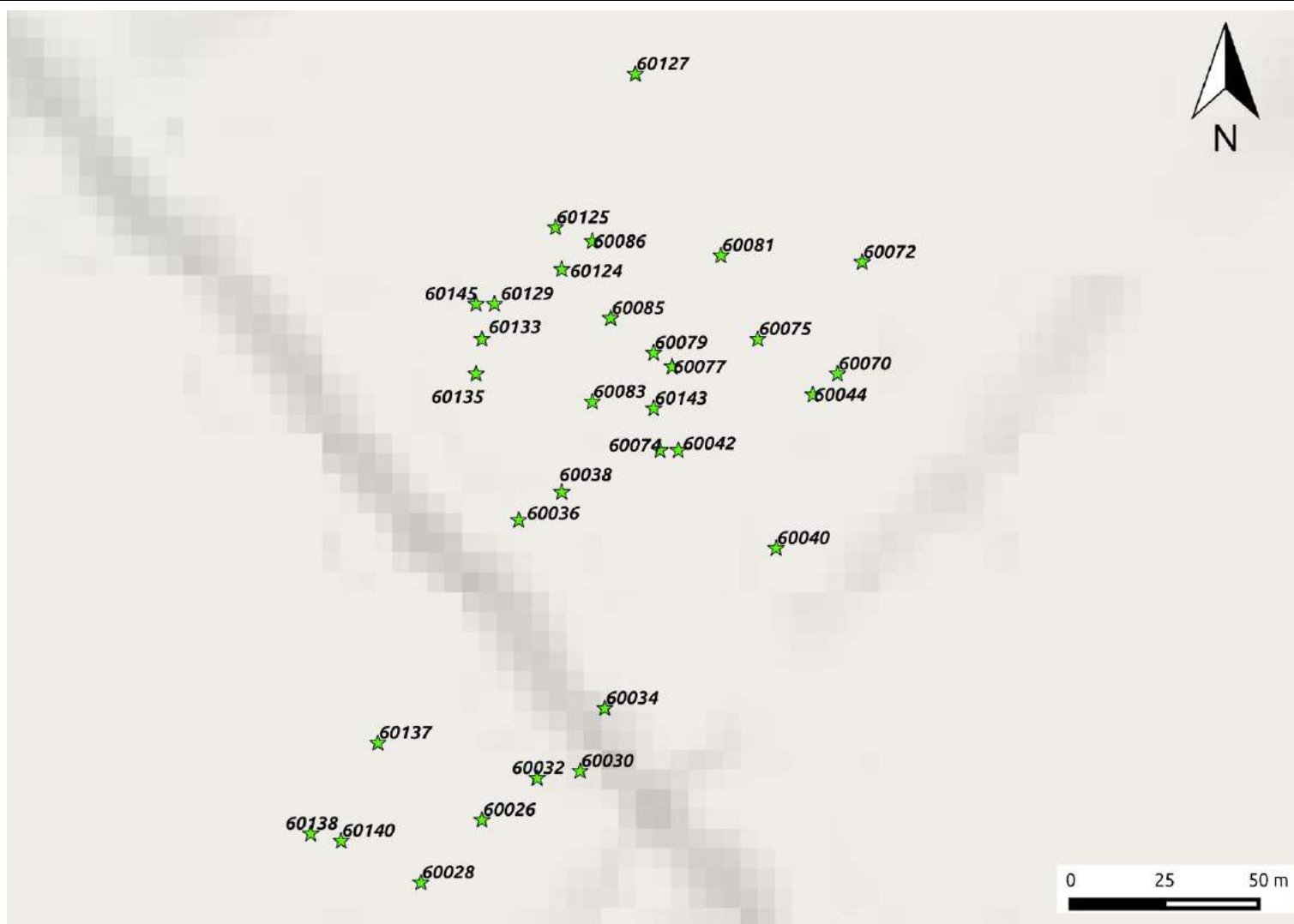


Figure 4b. Inset Map. Sites identified during the assessment for the upgrade of the Louisevale Road Wastewater Treatment Works in Louisevale (Kaplan 2013)



8. Heritage statement and character of the area

EnviroAfrica is undertaking the assessment for the proposed rezoning of a portion (approximately 3.2ha) of Erf 755, Olyvenhoutsdrift Settlement, for the development of a light industrial park. The rest of the property (6.7 ha) will remain zoned for agricultural use. The site is located south-east of Upington, and north of Louisvale Rd, approximately 4 km outside of Upington along the N10.

An inclusion zone of 3 km was considered around the proposed rezoning area. A total of 4 Heritage Impact Assessments had been conducted within the inclusion zone between 2006 and 2014 and several heritage resources were recorded. An avenue of palm trees (1 km in length) in Upington (Palm Tree Avenue, The Island, Upington" - SAHRIS ID: 28784) is a Provincial Heritage Site located nearly 3 km to the north west of the proposed rezoning site. The remaining 31 heritage sites are Stone Age artefact sites of low archaeological significance identified during the archaeological survey for the upgrading of the Louisevale Road Wastewater Treatment Works (Kaplan 2013). Although it is unlikely that heritage sites of high significance are present on the proposed erf for rezoning, the concentration of Grade IIIc archaeological sites around Louisevale is in a similar context and suggests that similar sites may be identified over the 3.2 ha proposed for rezoning. It is therefore recommended that an **Archaeological Impact Assessment be undertaken.**

No Palaeontological Impact Assessments (PIAs) have been conducted in this area before. According to the SAHRIS palaeosensitivity map, the proposed rezoning site is underlain by the Gordonia Formation of moderate fossil sensitivity. However, according to the Northern Cape Palaeotechnical report (Almond & Pether 2009), this formation is of low fossil significance. A **Palaeo Chance Find Procedure should therefore be included in the Environmental Management Plan** for construction activities envisaged on the site but a Palaeontological Impact Assessment is **not recommended.**

APPENDIX 1 - Site Lists

List of sites within 3km inclusion zone and outside proposed development area

Site ID	Site no	Full Site Name	Site Type	Grading	Declaration
28784	9/2/032/0015	Palm Tree Avenue, The Island, Upington	Building	Grade II	Provincial Heritage Site
60026	LOUI01	Louisevale 01	Artefacts	Grade IIIc	NA
60028	LOUI02	Louisevale 02	Artefacts	Grade IIIc	NA
60030	LOUI03	Louisevale 03	Artefacts	Grade IIIc	NA
60032	LOUI04	Louisevale 04	Artefacts	Grade IIIc	NA
60034	LOUI05	Louisevale 05	Artefacts	Grade IIIc	NA
60036	LOUI06	Louisevale 06	Artefacts	Grade IIIc	NA
60038	LOUI07	Louisevale 07	Artefacts	Grade IIIc	NA
60040	LOUI08	Louisevale 08	Artefacts	Grade IIIc	NA
60044	LOUI10	Louisevale 10	Artefacts	Grade IIIc	NA
60042	LOUI09	Louisevale 09	Artefacts	Grade IIIc	NA
60070	LOUI11	Louisevale 11	Artefacts	Grade IIIc	NA
60072	LOUI12	Louisevale 12	Artefacts	Grade IIIc	NA
60074	LOUI13	Louisevale 13	Artefacts	Grade IIIc	NA
60075	LOUI14	Louisevale 14	Artefacts	Grade IIIc	NA
60077	LOUI15	Louisevale 15	Artefacts	Grade IIIc	NA
60079	LOUI16	Louisevale 16	Artefacts	Grade IIIc	NA
60081	LOUI17	Louisevale 17	Artefacts	Grade IIIc	NA
60083	LOUI18	Louisevale 18	Artefacts	Grade IIIc	NA
60085	LOUI19	Louisevale 19	Artefacts	Grade IIIc	NA
60086	LOUI20	Louisevale 20	Artefacts	Grade IIIc	NA
60125	LOUI22	Louisevale 22	Artefacts	Grade IIIc	NA



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60127	LOUI23	Louisevale 23	Artefacts	Grade IIIc	NA
60129	LOUI24	Louisevale 24	Artefacts	Grade IIIc	NA
60137	LOUI27	Louisevale 27	Artefacts	Grade IIIc	NA
60143	LOUI31	Louisevale 31	Artefacts	Grade IIIc	NA
60140	LOUI29	Louisevale 29	Artefacts	Grade IIIc	NA
60133	LOUI25	Louisevale 25	Artefacts	Grade IIIc	NA
60124	LOUI21	Louisevale 21	Artefacts	Grade IIIc	NA
60135	LOUI26	Louisevale 26	Artefacts	Grade IIIc	NA
60138	LOUI28	Louisevale 28	Artefacts	Grade IIIc	NA
60145	LOUI30	Louisevale 30	Artefacts	Grade IIIc	NA



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APPENDIX 2 - Reference List

Nid	Report Type	Author/s	Date	Title
Archaeological/Heritage Impact Assessments				
4130	AIA	Peter Beaumont	16/08/2006	Phase 1 Heritage Impact Assessment Report on a Planned Extension of the Louisvaleweg Township, //Khara Hais Municipality, Northern Cape Province
4132	AIA	Peter Beaumont	18/08/2006	Phase 1 Heritage Impact Assessment Report on a Planned Extension Flanking Rondonstraat, //Khara Hais Municipality, Northern Cape Province
130139	AIA	Jonathan Kaplan	01/02/2013	Archaeological Impact Assessment The Proposed Upgrading Of The Louisevale Road Wastewater Treatment Works In Louisvale
159293	HIA	Johnny Van Schalkwyk	12/03/2014	Cultural Heritage Impact Assessment for proposed township development, Louisvaleweg, UPINGTON
Other references				
108755	Non Impact Assessment Related Reports	John Almond and John Pether	01/03/2009	Palaeontological Heritage of the Northern Cape



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APPENDIX 3 - Keys/Guides

Key/Guide to Acronyms

AIA	Archaeological Impact Assessment
DEA	Department of Environmental Affairs
DEADP	Department of Environmental Affairs and Development Planning
DMR	Department of Mineral Resources
HIA	Heritage Impact Assessment
HWC	Heritage Western Cape
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.



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.

Grading of heritage sites which form part of the national estate is defined in s. 7 of the National Heritage Resources Act (NHRA) as:

*(a) **Grade I:** Heritage resources with qualities so exceptional that they are of special national significance; Examples of these sites are Mapungubwe Cultural Landscape, The Parliament of South Africa, Sarah Baartman Burial Site, Robert Sobukwe's grave, Lake Fundudzi, Voortrekker Monument, Union Buildings.*

*(b) **Grade II:** Heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of a province or a region; they are normally declared Provincial Heritage Sites under s. 27 of the NHRA after the competent Provincial Heritage Resources Authority has established their significance. Many of the current Provincial Heritage Sites were declared National Monument under the previous heritage legislation and their status was changed to Provincial Heritage Sites when the National Heritage Resources Act was proclaimed in 1999. Amongst these sites, Mapoch's Caves in Limpopo, Umhlatuzana Rock Shelter in KwaZulu Natal, Van der Stel's Copper Mine in the Northern Cape, the old Cemetery in Grahamstown, Eastern Cape and Baboon Point, in the Western Cape.*

*(c) **Grade III:** Other heritage resources worthy of conservation, and which prescribes heritage resources assessment criteria, consistent with the criteria set out in section 3(3), which must be used by a heritage resources authority or a local authority to assess the intrinsic, comparative and contextual significance of a heritage resource and the relative benefits and costs of its protection, so that the appropriate level of grading of the resource and the consequent responsibility for its management may be allocated (...).*

The following sub-categories are currently in use for Grade III::

Grade IIIa sites are sites of such a high local significance that should be protected and retained. These sites should be included in the heritage register of each province as defined in s. 30 of the NHRA and should not be impacted upon. In the instance of buildings, any alteration must be regulated. Because of their nature, all human remains are considered of high significance. While relocation of graves is common practice, this should always be considered as the last option. Examples of these sites are all graves and burial grounds which have not been graded I or II, Peers Cave in Western Cape,



Grade IIIb sites are resources of medium local significance. They should preferably be retained where possible, but where not possible the site must be fully investigated and/or mitigated. After mitigation they may be impacted upon.

Grade IIIc sites are of low local significance. These resources must be satisfactorily studied before destruction. In many instances the recording and description of the site undertaken at the heritage impact assessment level is sufficient and further recording or mitigation may not be required. These sites include for instance small knapping sites which have been sufficiently recorded at the archaeological impact assessment level, palaeontological fossils of low significance which do not require recovery. In the case of the built environment, IIIc structures will only require protection and regulation if the significance of the environs in which they are located is sufficient to warrant protective measures.

The heritage specialist in the field should suggest a grading for the site, but it will then need to be ratified and accepted by the competent heritage authority.

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 PALAEOLOGICAL 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.

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
- 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.

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.**