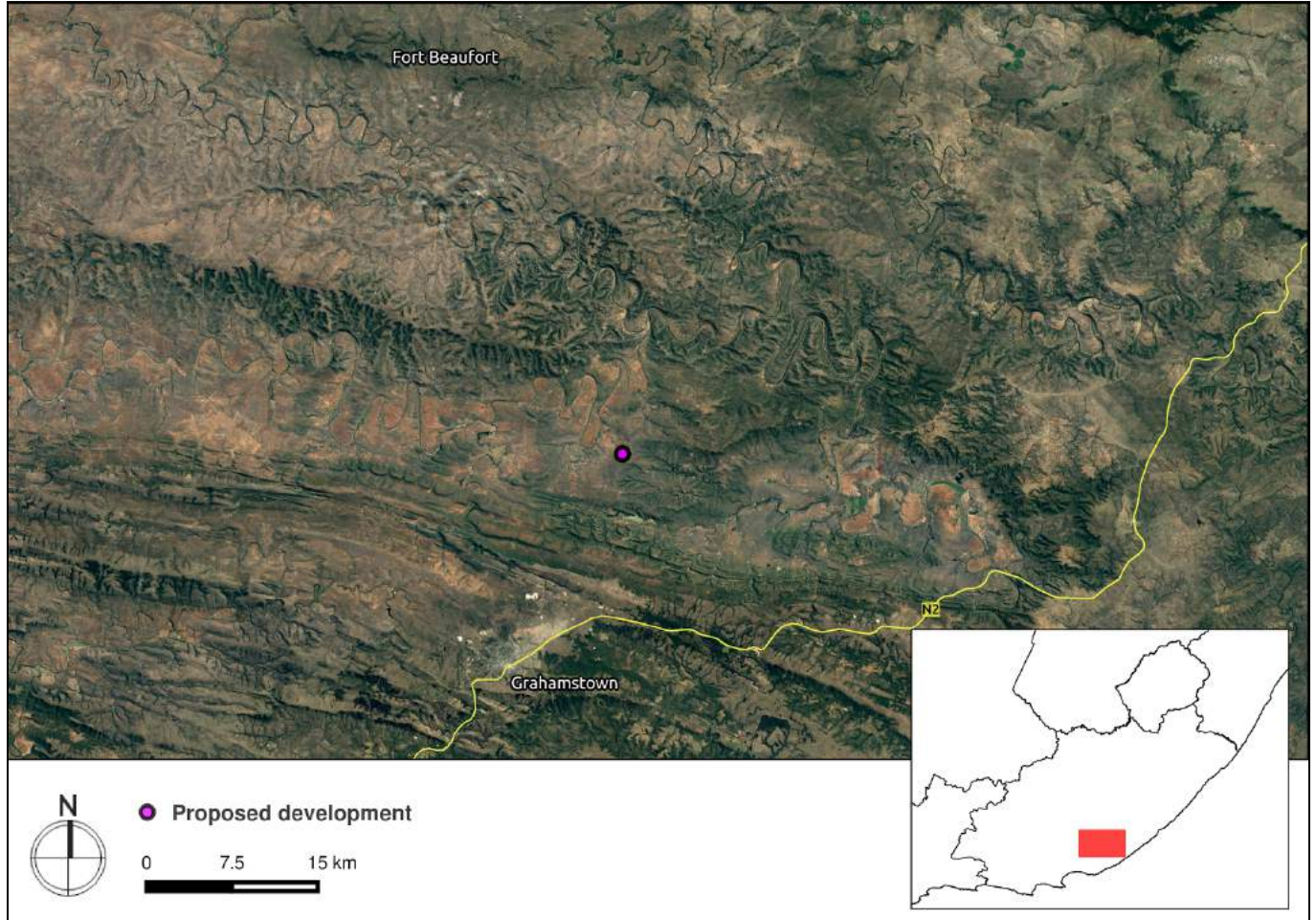




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## HERITAGE SCREENER

CTS Reference Number:	CTS17_096	
SAHRIS Case ID	11545	
Client:	CEN	
Date:	18 August 2017	
Title:	Kwandwe Staff Village, Eastern Cape	
Recommendation by CTS Heritage Specialists: (Type 1)	<p>(1) The heritage resources in the area proposed for development are sufficiently recorded. - It is recommended that:</p> <ul style="list-style-type: none"><li>- No further archaeological assessments are necessary at this proposed area of development.</li><li>- It is recommended that a palaeo Chance Finds Procedure be included in the Environmental Management Programme.</li></ul>	





## 1. Proposed Development Summary

C-SA Properties Pty Ltd proposes to develop a staff village and associated roads and infrastructure on the Remainder of Farm Hermanuskraal No. 95 in the Makana Municipality. The intention is to provide housing for staff that work and reside at the Kwandwe Private Nature Reserve. The farm is situated adjacent to and east of the Grahamstown/ Fort Brown Road (R67), south-east of the existing Fort Brown settlement and approximately 20 km north of Grahamstown.

## 2. Application References

<b>Name of relevant heritage authority(s)</b>	Eastern Cape Provincial Heritage Resources Authority
<b>Name of decision making authority(s)</b>	Eastern Cape Provincial Department of Economic Development, Environmental Affairs and Tourism

## 3. Property Information

<b>Latitude / Longitude</b>	26.636212843 E -33.1439990097 S (centroid)
<b>Erf number / Farm number</b>	Remainder of Farm Hermanuskraal No. 95
<b>Local Municipality</b>	Makana
<b>District Municipality</b>	Cacadu
<b>Previous Magisterial District</b>	Albany
<b>Province</b>	Eastern Cape
<b>Current Use</b>	Previously used for farming. Recently purchased by Kwandwe Private Nature Reserve
<b>Current Zoning</b>	Agriculture
<b>Total Extent</b>	1 075,13 ha

## 4. Nature of the Proposed Development

<b>Total Surface Area</b>	Approximately 10ha of the 719,88 ha indicated in Figure 1b
<b>Depth of excavation (m)</b>	Unknown
<b>Height of development (m)</b>	Unknown
<b>Expected years of operation before decommission</b>	NA





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## 5. Category of Development

Triggers: Section 38(8) of the National Heritage Resources Act	<b>X</b>
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 <sup>2</sup> in extent	<b>X</b>
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 <sup>2</sup>	
5. Other (state):	

## 6. Additional Infrastructure Required for this Development

Access road, water line, sewer treatment plant (package plant), electrical infrastructure.
--

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

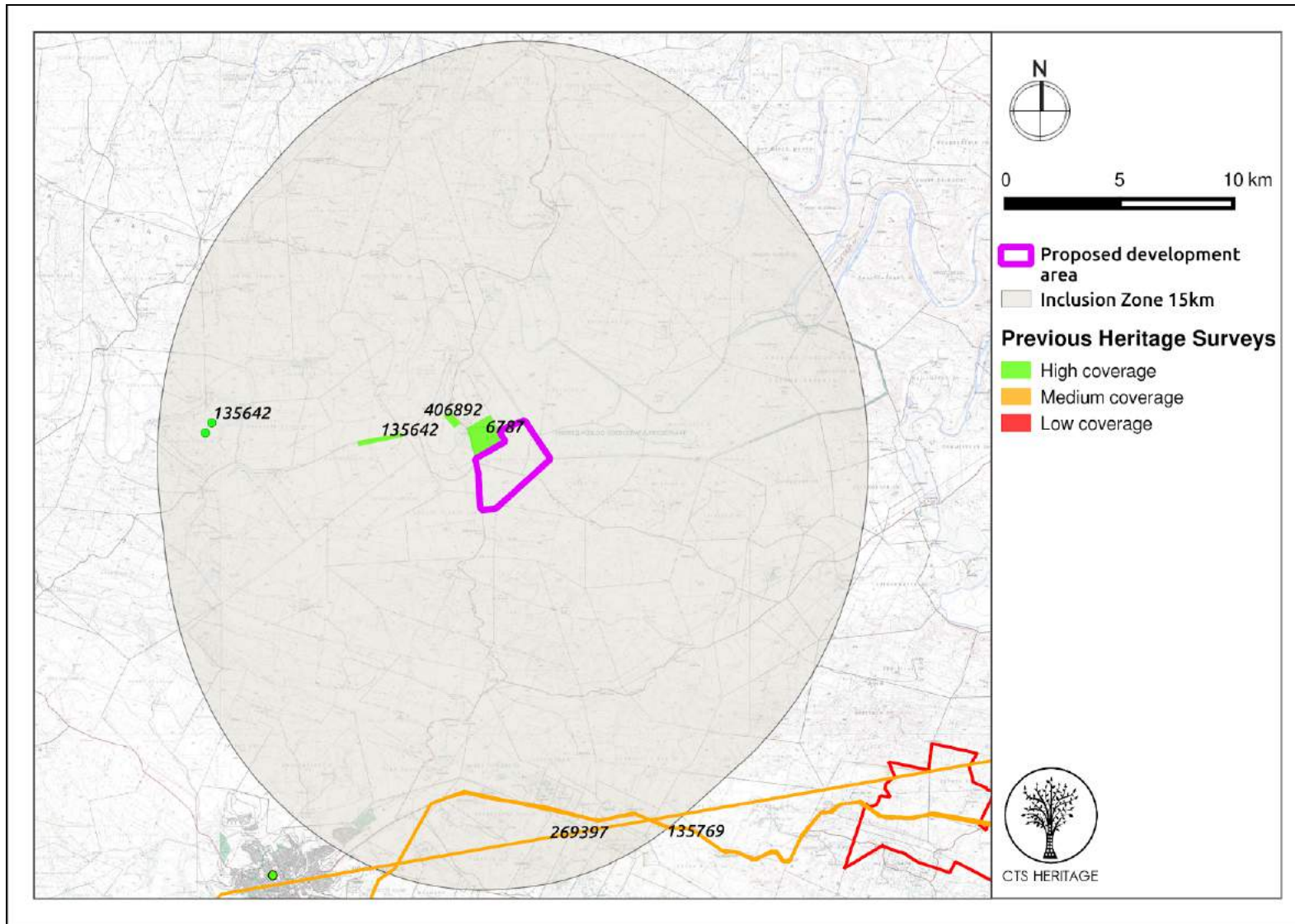


**Figure 1b. Overview Map.** Satellite image (2017) indicating the proposed development area at close range.





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**Figure 2a. Previous heritage reports map.** Previous Heritage Impact Assessments (excluding PIAs) surrounding the proposed development area within 15kms, with SAHRIS NIDS indicated (please see Appendix 2 for full reference list).

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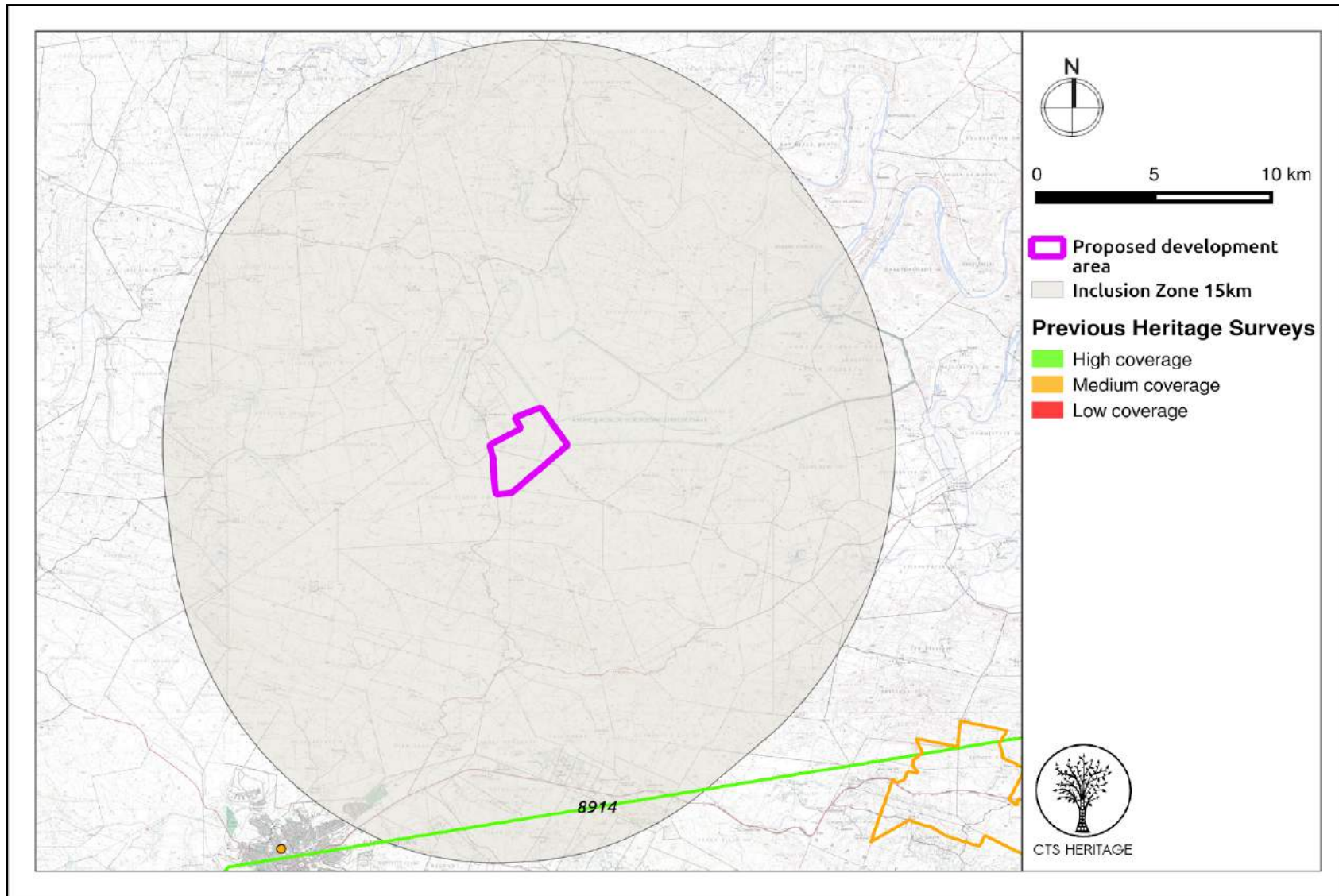
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**Figure 2b. Previous heritage reports map.** Previous Palaeontological Impact Assessments surrounding the proposed development area within 15kms, with SAHRIS NIDS indicated (please see Appendix 2 for full reference list).

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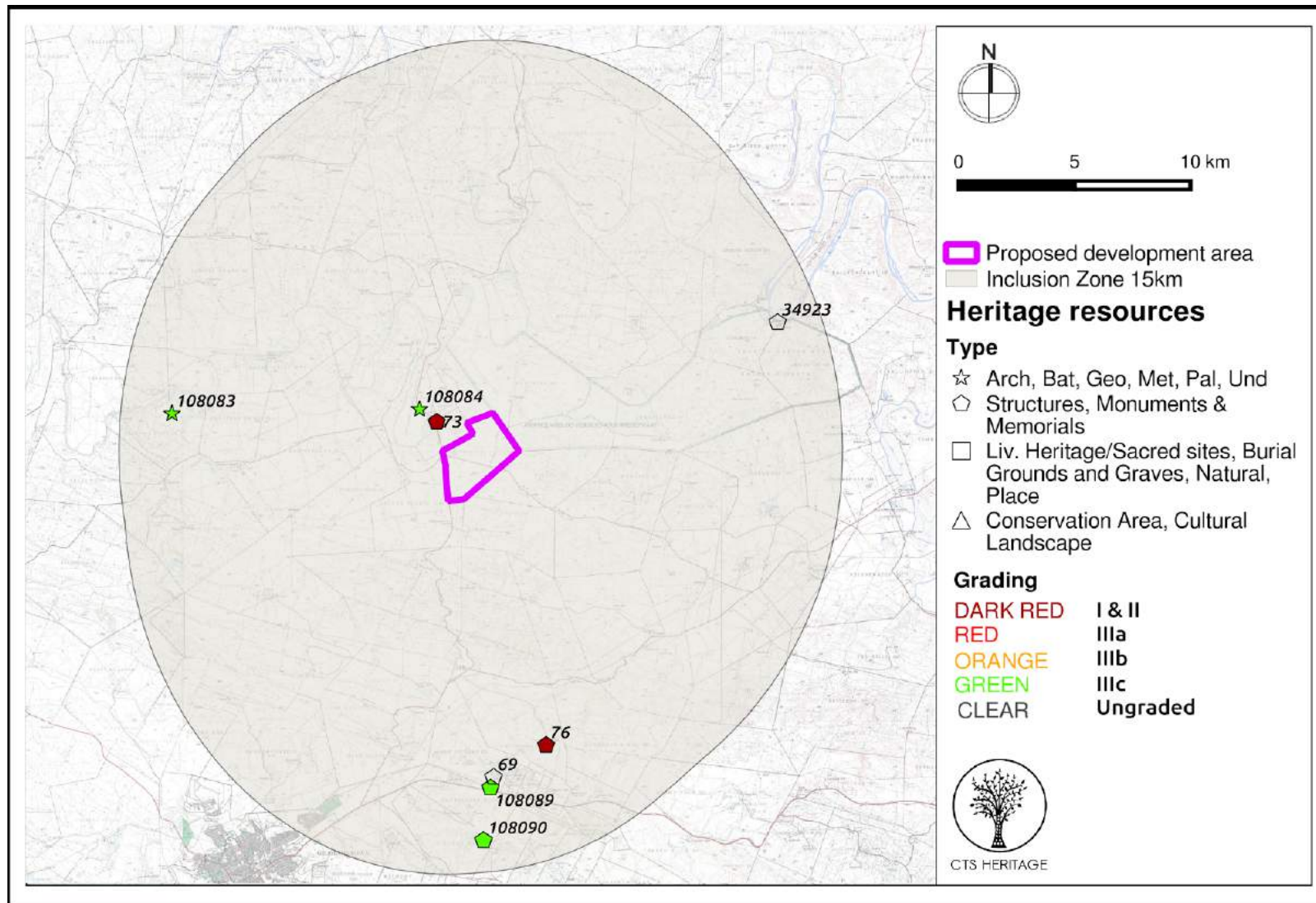
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**Figure 3. Heritage Resources Map.** Heritage resources previously identified in and near the study area, with SAHRIS Site IDs indicated. See Appendix 4 for full description of heritage resource types.

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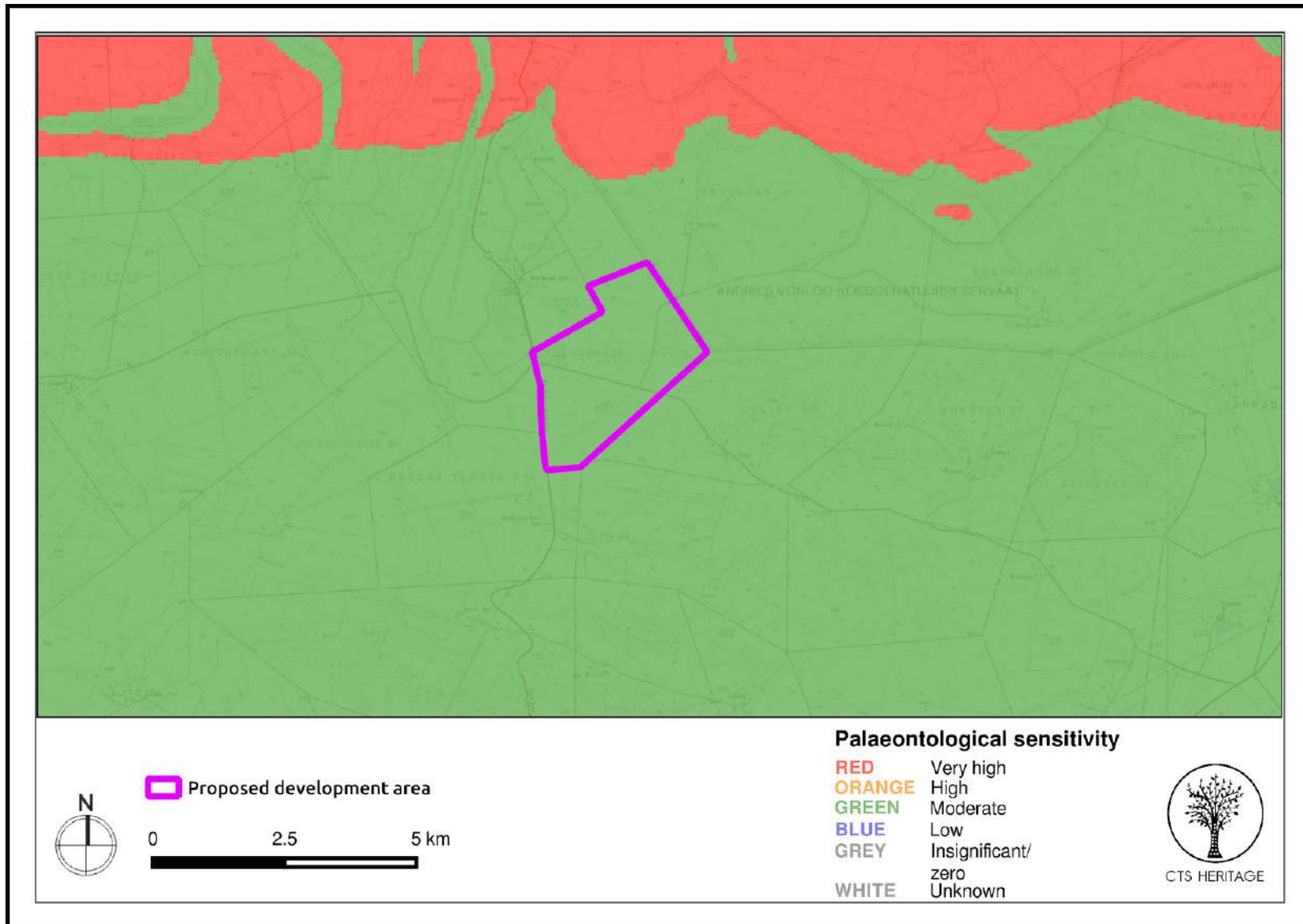
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**Figure 4. Palaeosensitivity Map**, indicating moderate fossil sensitivity underlying the study area. See Appendix 3 for full guide to the legend.

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## 8. Heritage statement and character of the area

C-SA Properties Pty Ltd proposes to develop a staff village and associated roads and infrastructure on the Remainder of Farm Hermanuskraal No. 95 in the Makana Municipality, Eastern Cape (Figures 1a-b). The intention is to provide housing for staff that work and reside at the Kwandwe Private Nature Reserve.

The area has been inhabited since the Early Stone Age, as evidenced by the presence of handaxes and cleavers in the region, Middle Stone Age (MSA) material is prevalent, though usually in the form of isolated, *ex situ* artefacts, with much Howiesons Poort material occurring, while open air Later Stone Age (LSA) sites are common, and several very significant cave and shelter sites occur locally, particularly to the south in the mountains (Binneman 2015, NID 406892). Further LSA material can be found along the river banks where middens of freshwater shellfish have been recorded (Ibid). No Early Iron Age sites occur in the area, although Bantu agro-pastoralists were farming in the area from approximately 600 AD, and Late Iron Age (LIA) and LIA/historical sites have been identified and excavated (Binneman 2013, NID 135642). The more recent history of this region relates to the armed conflicts between the established Bantu farmers and the incoming Afrikaans and British settlers. The conflict over land and resources led to the eruption of consecutive clashes over the course of a century, with nine Frontier Wars being fought between 1779 and 1878 (Van Ryneveld 2009, NID 6787).

There are two Provincial Heritage Sites (PHS) in the area, and both of these relate to the region's more recent past (Figure 3). The first of these is Fort Brown (SID 73), a stone-built military post established in 1817 along the Fish River to protect the Cape Colony from the Xhosa, and later transformed into one of the largest fortifications in the area. The second PHS is Governor's Kop Signal Tower (SID 76), built in 1843 as part of a series of signal towers that relayed messages via semaphore from Fort Selwyn in Grahamstown via Governor's Kop, as the highest point in the region, and on to Fraser's Camp, Fort Peddie and Fort Beaufort. Further graded sites in the area include two ruined historical structures that have been accorded Grade IIIc status (SIDs 108089 and 10890).

Five Archaeological Impact Assessments (AIAs) have been conducted within 15kms of the proposed development area (Figure 2a), and these studies identified only four sites within this area. Two of these (SIDs 108083 and 108084) represent findings of ESA handaxes, MSA cores and LSA flakes, while the other two are the historical ruins described above (SIDs 108089 and 10890). The AIA conducted in the adjacent property reported high coverage of the area and good visibility, but recorded no archaeological material (Van Ryneveld 2009, NID 6787). Further AIAs report good visibility, but only found artefacts in disturbed locations such as vehicle tracks (Binneman 2015, NID 406892), while a third found archaeological visibility impaired by dense Albany Thicket vegetation (Booth 2013, NID 135769). It is therefore not likely that the proposed development will impact on sensitive archaeological heritage resources, given that none have been found in surveys of the adjacent property and other areas nearby. As such, no further archaeological specialist studies are recommended.

The Palaeontological Impact Assessments (PIAs) conducted within 15kms of the proposed site (Figure 2b) reports that the underlying geology of the region is composed of Ecca Group Formations, specifically the Fort Brown Formation (Gess 2011, NID 8914). According to the SAHRIS Fossil Browser, this formation is of moderate fossil sensitivity (Figure 4). Fort Brown Formation deposits can contain plant fossils, specifically of early *Glossopteris*, the possible ancestors of flowering plants, as well as fossil fish (Gess 2011, NID 8914). These deposits have, however, been found to be unfossiliferous during field assessments conducted in the wider Eastern Cape region (Gess 2014). Based on this evidence, it is unlikely that significant fossils will be uncovered during this development. Nonetheless, it is recommended that a Chance Fossil Finds Procedure should be included in the Environmental Management Programme to limit the possibility of significant fossils being adversely impacted by activities on site during construction. The Environmental Control Officer should be alerted to the presence of sensitive fossil bearing substrates, and all work on site should cease immediately should any fossil material be uncovered, ECPHRA should be notified and a suitably qualified palaeontologist should be contacted to assess the finds.





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**RECOMMENDATION:**

**(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.**

- No further archaeological assessments are necessary at this proposed area of development.
- No further palaeontological studies are required, but a Chance Fossil Finds Protocol should be included in the EMP.

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## APPENDIX 1

### List of heritage resources within the 15km Inclusion Zone

Site ID	Site no	Full Site Name	Site Type	Grading	Declaration
73	9/2/003/0067	Fort Brown, Albany District	Building	Grade II	Provincial Heritage Site
76	9/2/003/0070	Governor's Kop Signal Tower, Albany District	Building	Grade II	Provincial Heritage Site
108083	KWAN 01	Kwandwe Private Game Reserve 01	Artefacts	Grade IIIc	NA
108084	KWAN02	Kwandwe Private Game Reserve 02	Artefacts	Grade IIIc	NA
108089	SCNM 05	Schoenmakerskop05	Building	Grade IIIc	NA
108090	SCNM 06	Schoenmakerskop06	Structures	Grade IIIc	NA
34923	9/2/003/0024	FORT DOUBLE DRIFT, ANDRIES VOSLOO KUDU RESERVE, ALBANY DISTRICT	Building	Ungraded	NA
69	9/2/003/0062	Old Methodist Church, Collingham, Albany District	Building	Ungraded	Provisional Protection

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## APPENDIX 2

### Reference List

Heritage Impact Assessments				
Nid	Report Type	Author/s	Date	Title
135769	AIA	Celeste Booth	17/10/2013	Heritage Assessment N2 Upgrade
269397	AIA	Celeste Booth	02/03/2015	FibreCo Repeater Sites Routes 3 and 4_Heritage_2015 AIA report
6787	AIA	Karen Van Ryneveld	21/09/2009	Fort Brown Housing Project, (portion of) Fletchers Outspan 104, Albany District, Eastern Cape, South Africa
135642	AIA	Johan Binneman	01/08/2013	A Phase 1 Archaeological Impact Assessment Of The Proposed Construction Of An Airstrip And Family Lodge On Portion 3 (koodoos Run) (a Portion Of Portion 2) Of The Farm Nooitgedagt No. 92 And Portion 2 (the Fort) Of The Farm Koesters Drift No. 129, Kwandwe Game Reserve, Eastern Cape Province
406892	AIA	Johan Binneman	01/03/2015	A Phase 1 Archaeological Impact Assessment Of The Proposed Development Of A Staff Village And Associated Infrastructure On Portion 1 Of The Farm Fort Brown No. 98, Kwandwe Private Game Reserve In The Albany District, Eastern Cape Province
Palaeontological Impact Assessments				
8914	PIA	Robert Gess	30/03/2011	Palaeontological heritage component of FibreCo Telecommunications, basic assessment for the proposed fibre optic data cable project: Route 5: PE to Durban
Other reports				
	PIA	Robert Gess	01/11/2014	Palaeontological Heritage component of Basic assessment for the proposed upgrade of the R335 (Zuurberg Road)

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## APPENDIX 3: Keys/Guides

### Key/Guide to Acronyms

<b>AIA</b>	Archaeological Impact Assessment
<b>DARD</b>	Department of Agriculture and Rural Development (KwaZulu-Natal)
<b>DEA</b>	Department of Environmental Affairs
<b>DEADP</b>	Department of Environmental Affairs and Development Planning (Western Cape)
<b>DEDEAT</b>	Department of Economic Development, Environmental Affairs and Tourism (Eastern Cape)
<b>DEDECT</b>	Department of Economic Development, Environment, Conservation and Tourism (North West)
<b>DEDT</b>	Department of Economic Development and Tourism (Mpumalanga)
<b>DEDEA</b>	Department Of economic Development, Tourism And Environmental Affairs (free State)
<b>Denc</b>	Department Of Environment And Nature Conservation (northern Cape)
<b>DMR</b>	Department of Mineral Resources
<b>Gdard</b>	Gauteng Department Of Agriculture And Rural Development (gauteng)
<b>HIA</b>	Heritage Impact Assessment
<b>Ledet</b>	Department Of Economic Development, Environment and Tourism (Limpopo)
<b>MPRDA</b>	Mineral and Petroleum Resources Development Act, no 28 of 2002
<b>NEMA</b>	National Environmental Management Act, no 107 of 1998
<b>NHRA</b>	National Heritage Resources Act, no 25 of 1999
<b>PIA</b>	Palaeontological Impact Assessment
<b>SAHRA</b>	South African Heritage Resources Agency
<b>SAHRIS</b>	South African Heritage Resources Information System
<b>VIA</b>	Visual Impact Assessment

### Full guide to Palaeosensitivity Map legend

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

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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.**

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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.

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