

CTS HERITAGE

HERITAGE SCREENER

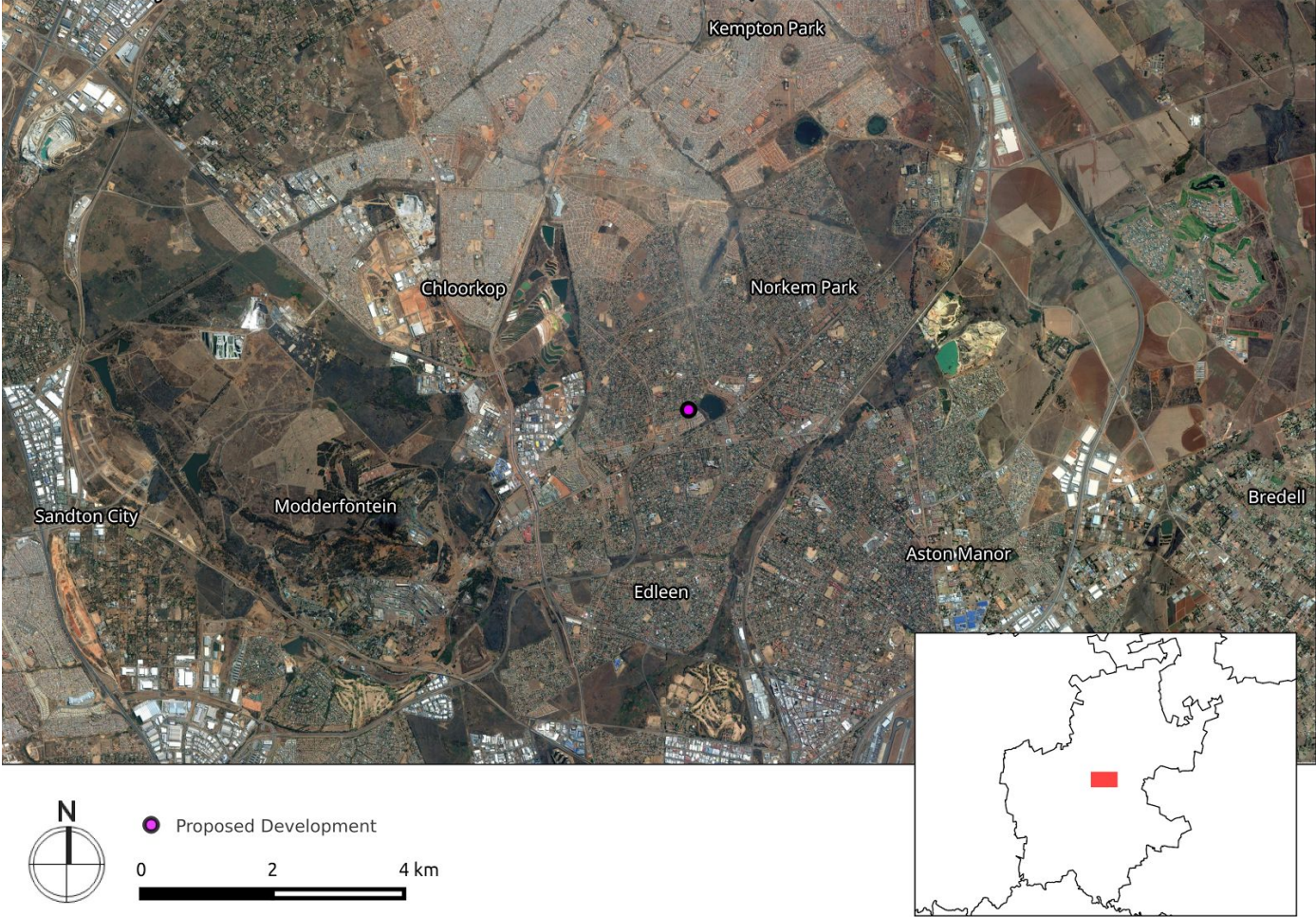
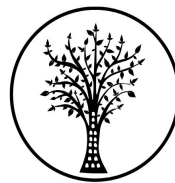
CTS Reference Number:	CTS17_166	
SAHRIS Case ID:		
Client:	GKM Enviromental Services	
Date:	14 November 2017	
Title:	Norkem Park Development	
Recommendation by CTS Heritage Specialists: (Type 1)	RECOMMENDATION: The heritage resources in the area proposed for development are sufficiently recorded See Section 8 for full recommendations.	

Figure 1a. Satellite Map indicating the location of the proposed development in the Gauteng Province



CTS HERITAGE

1. Proposed Development Summary

The applicant has proposed the construction of two storey buildings with a capacity of 40 units per hectare on Mooifontein Farm No 14IR portion 22 in Kempton Park, Gauteng Province.

2. Application References

Name of relevant heritage authority(s)	SAHRA, PHRAG
Name of decision making authority(s)	GDARD

3. Property Information

Latitude / Longitude	-26.065899° / 28.212940°
Erf number / Farm number	Mooifontein 22/14IR
Local Municipality	Ekurhuleni
District Municipality	Ekurhuleni Metropolitan Municipality
Previous Magisterial District	Kempton Park
Province	Gauteng
Current Use	Vacant
Current Zoning	Residential
Total Extent	2.417 ha

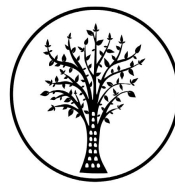
4. Nature of the Proposed Development

Total Surface Area	N/A
Depth of excavation (m)	2-3m
Height of development (m)	<8m (double storey building)
Expected years of operation before decommission	N/A

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

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	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	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):	

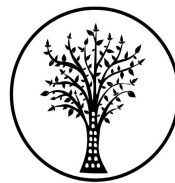
6. Additional Infrastructure Required for this Development

NA

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

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

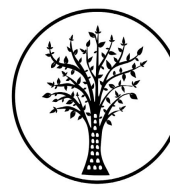


Figure 1b. Overview Map. Satellite image (2017) indicating the proposed development area at closer range.

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

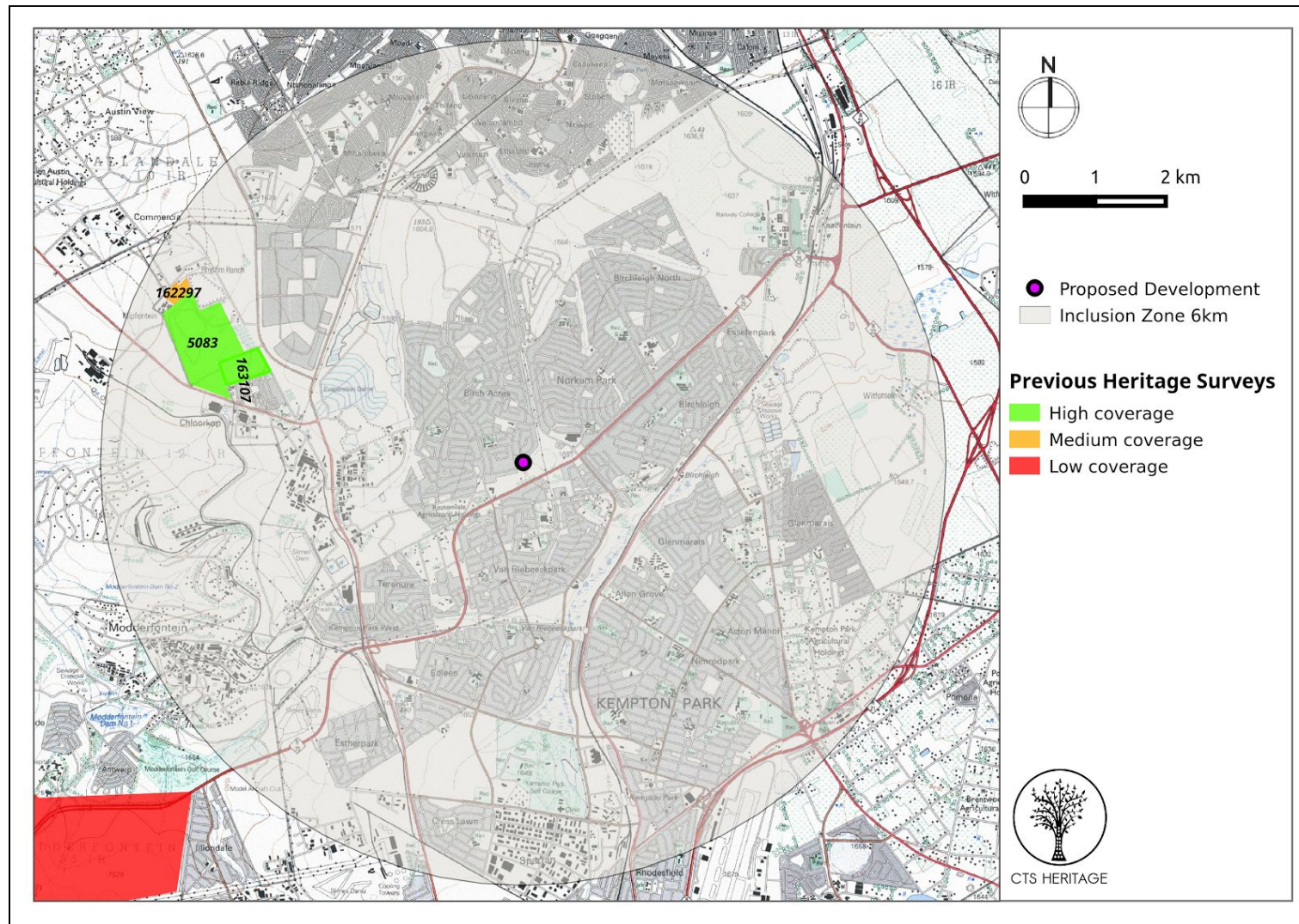
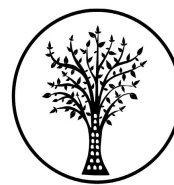


Figure 2a. Previous HIAs Map. Previous Heritage Impact Assessments surrounding the proposed development area within 4kms, with SAHRIS NIDS indicated (please see Appendix 2 for full reference list).

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

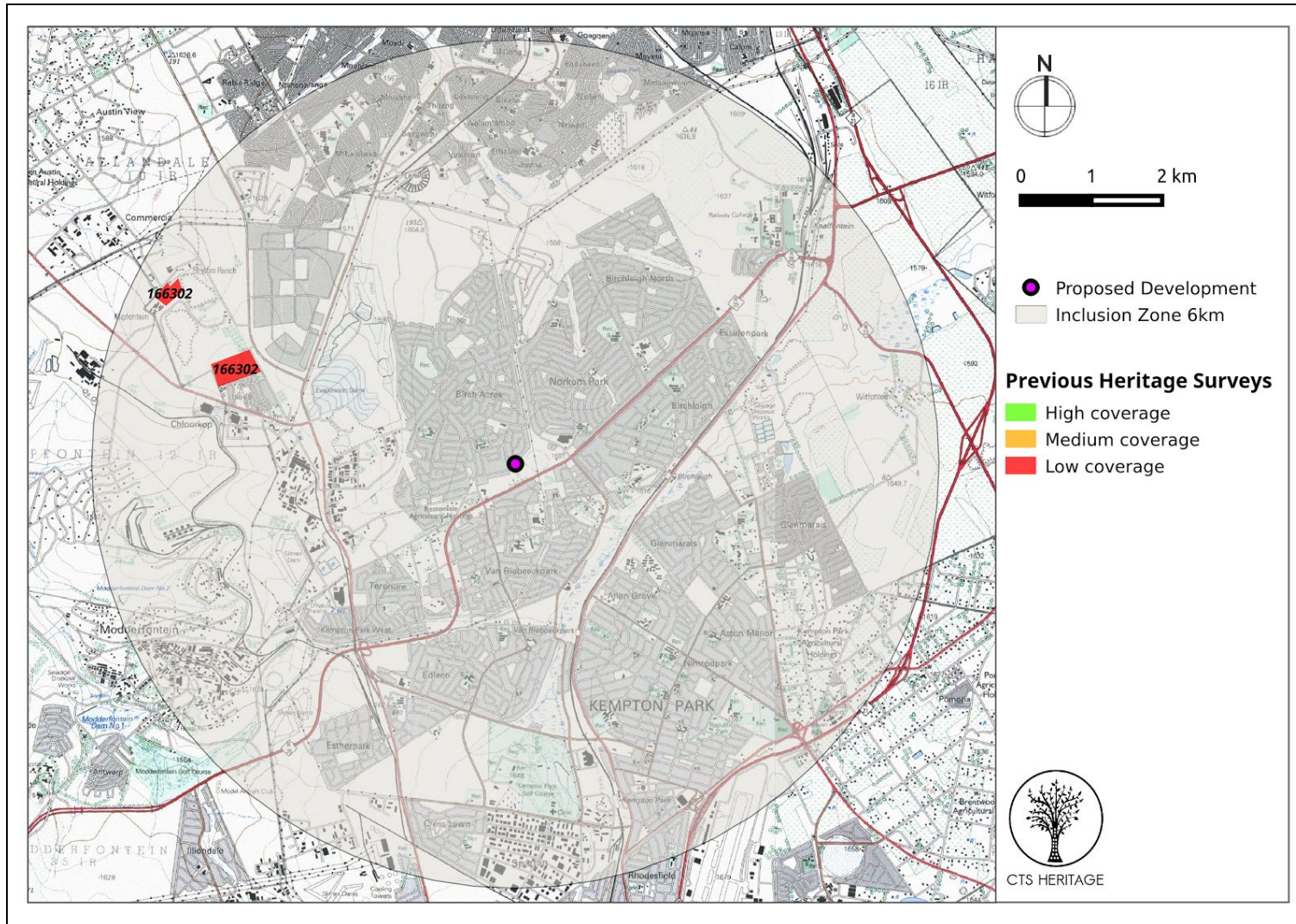
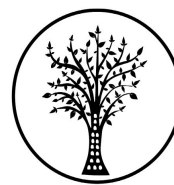


Figure 2b. Previous PIAs Map. Previous Palaeontological Impact Assessments surrounding the proposed development area within 6km, with SAHRIS NIDS indicated (please see Appendix 2 for full reference list).

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

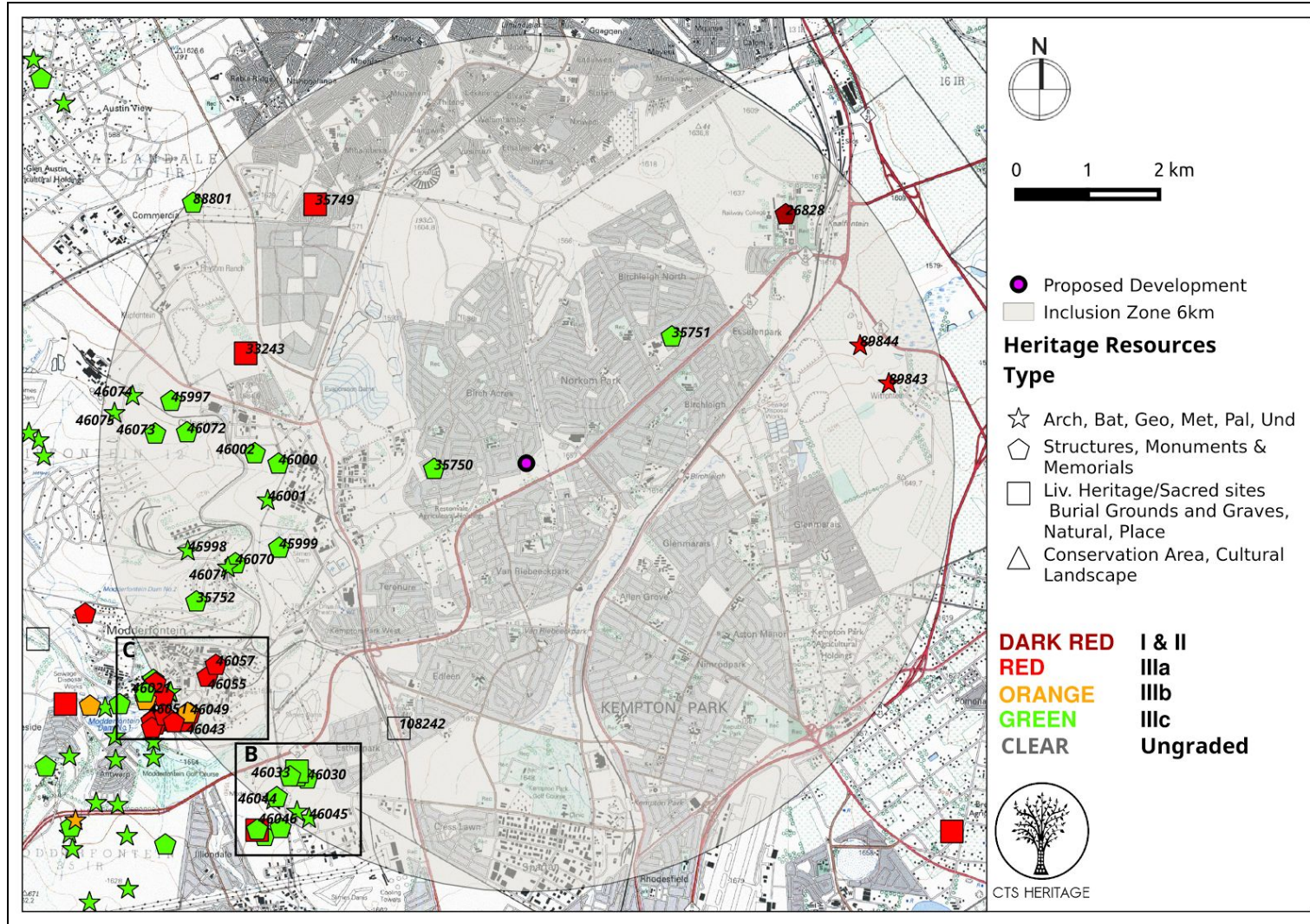
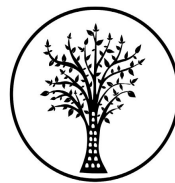


Figure 3a. Heritage Resources Map. Heritage resources previously identified in and near the study area, with SAHRIS Site IDs indicated (see Figures 3b-3c for insets). See Appendix 4 for full description of heritage resource types.

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

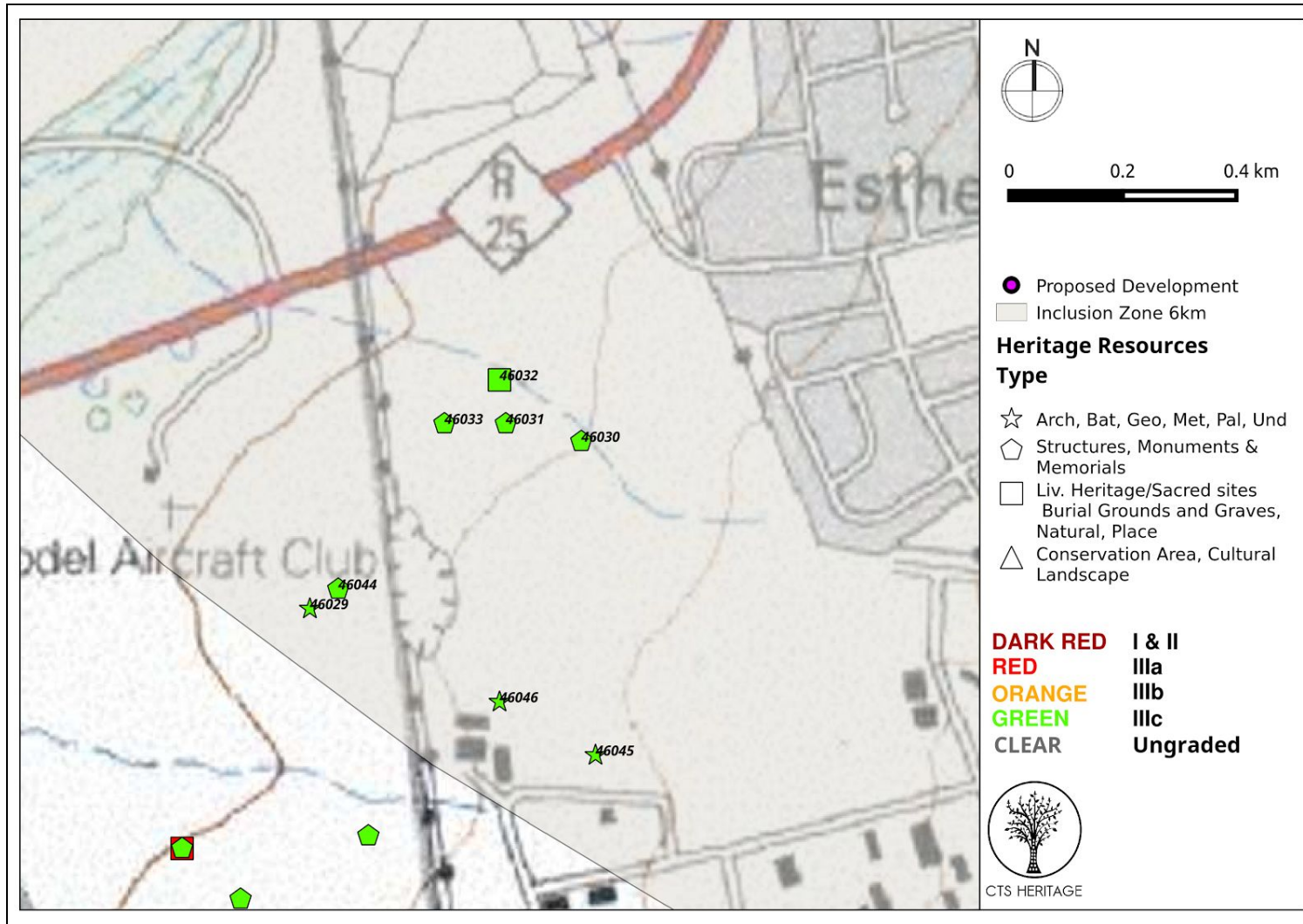
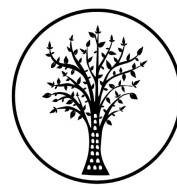


Figure 3b. Inset Map.

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

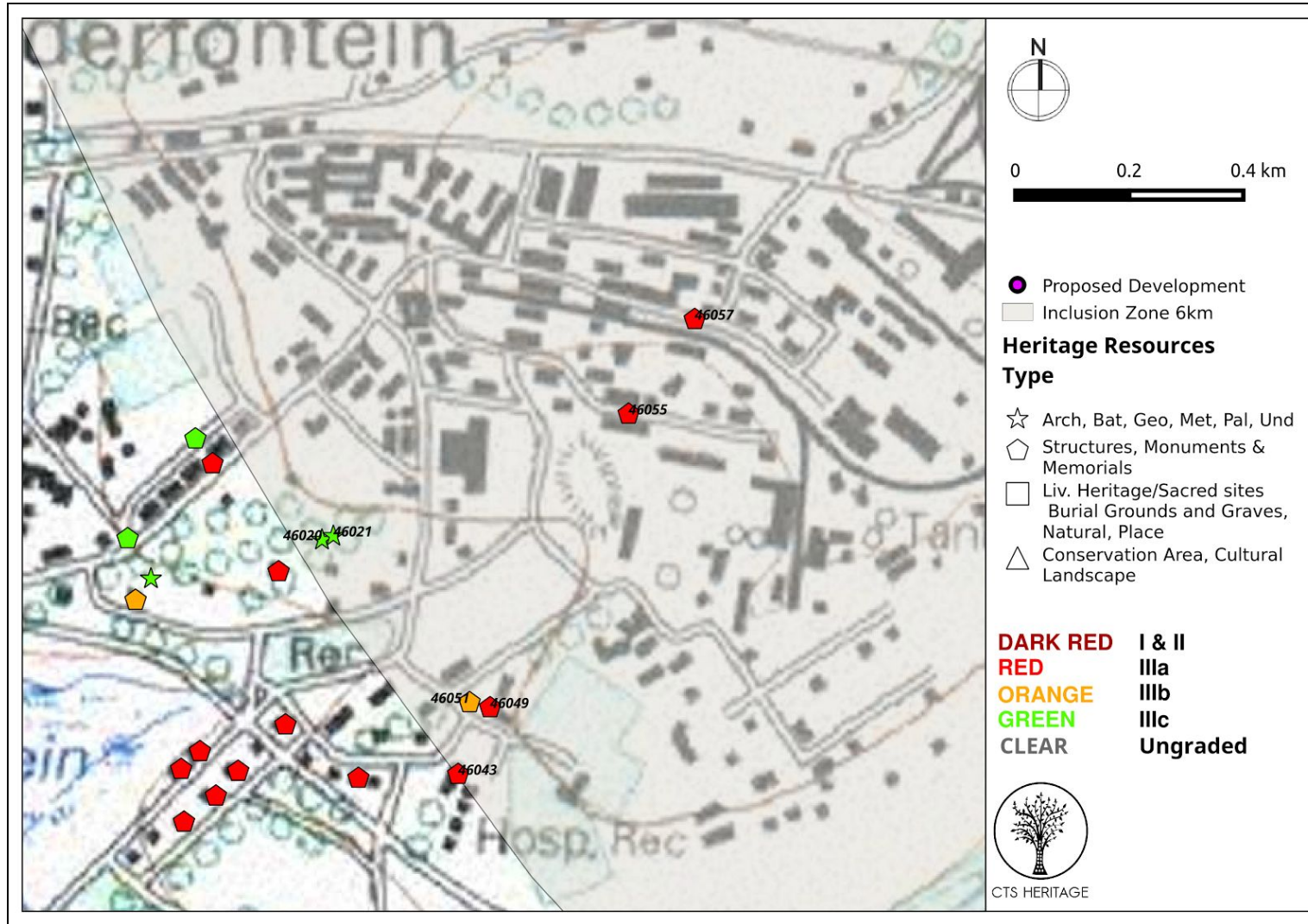
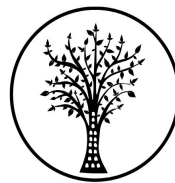


Figure 3c. Inset Map. Please see Appendix 1 for all Site IDs.

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

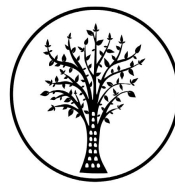
Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE



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



CTS HERITAGE

8. Heritage statement and character of the area

The applicant has proposed the construction of two storey buildings with a capacity of 40 units per hectare on Mooifontein Farm No 141R portion 22 in Kempton Park, Gauteng Province (Figures 1a and 1b). Kempton Park was developed on property that had originally been two early farms that had been granted in 1859 and 1865. After the discovery of gold in Johannesburg in 1886, the railway line linking the then Transvaal to the Cape was laid on the two farms, with the station built on one of them. The town was established in 1903. The property itself is located on the western banks of a small dam with an existing housing development to the south and single residential structures to the west and north. The area has been inhabited since the Early Stone Age, with human occupation right through Middle and Later Stone Ages, to the Iron Age, and was historically linked both to the gold rush and the Boer War, but most evidence of this past utilisation has been obliterated by subsequent development and urbanisation. Evidence for some site clearing is visible in the western extent of the development area, while the remainder of the site is crossed in places with footpaths (Figure 1b).

Three heritage studies have been undertaken within a 6km radius of the proposed development area (Figure 2a). Due to the built up nature of the area, none of these surveys identified any heritage resources, although one (van der Walt 2014, SAHRIS NID 163107) included testimony from informants that several unmarked graves were present in the area, although these were not identified in the course of fieldwork. A further survey records that graves that had occurred within the surveyed area had been exhumed and moved in the 1980s (van der Walt 2014, SAHRIS NID 162297).

A single Provincial Heritage Site, an historic building in Kempton Park (SAHRIS SID 26828), is located within 6kms of the development area (Figure 3a). In addition to this declared site, there are four historic structures graded IIIa, including an early C20th hospital (SAHRIS SID 46043) and other historic industrial buildings (Figures 3a and 3c). Further Grade IIIa sites include a burial ground (SAHRIS SID 35749) and two examples of stone walling related to Boer War activities in the area (SAHRIS SIDs 89843 and 89844) (Figure 3a). Remaining known sites in the area include archaeological sites, structures, transport infrastructure, a monument and a battlefield (Figures 3a-c).

The SAHRIS Palaeosensitivity Map (SAHRA 2014) indicates that the entire area is underlain by geological deposits of insignificant or zero fossil sensitivity. The affected deposits comprise gneisses and granites, which are described on the SAHRIS Fossil Sensitivity Browser (SAHRA 2014) as containing no fossils. These deposits are Early to Late Archaean in age (c. 3.6 –2.4 Ga) and represent highly metamorphosed blocks of continental crust. A Palaeontological Impact Assessment conducted within 6km of the development area (Figure 2b) indicates that the area is “completely underlain by unfossiliferous rocks of the Achaean Halfway House Granite” and that “[t]he potential for any fossil materials occurring within this rock unit is nil” (Millstead 2014, SAHRIS NID 166302).

Due to the transformed nature of the development site, and relative paucity of heritage resources identified in recent surveys in the area, as well as the unfossiliferous nature of the underlying geology, it is not anticipated that the proposed development will negatively impact any significant heritage resources.

RECOMMENDATION:

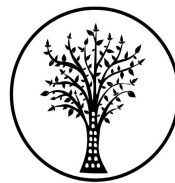
The heritage resources in the area proposed for development are sufficiently recorded - The surveys undertaken in the area adequately captured the heritage resources. There are no known sites which require mitigation or management plans. No further heritage work is recommended for the proposed development.

APPENDIX 1

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

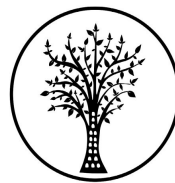
List of heritage resources within the 6km Inclusion Zone

Site ID	Site no	Full Site Name	Site Type	Grading	Declaration
26828	9/2/230/0004	Esselen Park, Training College Campus, Kempton Park	Building	Grade II	Provincial Heritage Site
33243	Chlookop South Graves	Chlookop South Graves	Burial Grounds & Graves	NA	NA
35749	KEMP001	Kempton 001	Burial Grounds & Graves	Grade IIIa	NA
35750	KEMP002	Kempton 002	Transport infrastructure	Grade IIIc	NA
35751	KEMP003	Kempton 003	Structures	Grade IIIc	NA
35752	KEMP004	Kempton 004	Structures	Grade IIIc	NA
45997	MOD/040	Modderfontein 040	Structures	Grade IIIc	NA
45998	MOD/041	Modderfontein 041	Archaeological	Grade IIIc	NA
45999	MOD/042	Modderfontein 042	Structures	Grade IIIc	NA
46000	MOD/043	Modderfontein 043	Structures	Grade IIIc	NA
46001	MOD/044	Modderfontein 044	Battlefield	Grade IIIc	NA
46002	MOD/045	Modderfontein 045	Structures	Grade IIIc	NA
46020	MOD/054	Modderfontein 054	Deposit	Grade IIIc	NA
46021	MOD/055	Modderfontein 055	Deposit	Grade IIIc	NA
46029	MOD/13	Modderfontein 13	Artefacts	Grade IIIc	NA
46030	MOD/14	Modderfontein 14	Structures	Grade IIIc	NA
46031	MOD/15	Modderfontein 15	Structures	Grade IIIc	NA
46032	MOD/16	Modderfontein 16	Place	Grade IIIc	NA
46033	MOD/17	Modderfontein 17	Transport infrastructure	Grade IIIc	NA

CTS Heritage

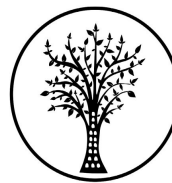
34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

46043	MOD/069	Modderfontein 069	Building	Grade IIIa	NA
46044	MOD/18	Modderfontein 18	Transport infrastructure	Grade IIIc	NA
46045	MOD/19	Modderfontein 19	Deposit	Grade IIIc	NA
46046	MOD/20	Modderfontein 20	Deposit	Grade IIIc	NA
46049	MOD/070	Modderfontein 070	Building	Grade IIIa	NA
46051	MOD/071	Modderfontein 071	Monuments & Memorials	Grade IIIb	NA
46055	MOD/073	Modderfontein 073	Building	Grade IIIa	NA
46057	MOD/074	Modderfontein 074	Building	Grade IIIa	NA
46070	MOD/34	Modderfontein 34	Structures	Grade IIIc	NA
46071	MOD/35	Modderfontein 35	Deposit	Grade IIIc	NA
46072	MOD/36	Modderfontein 36	Structures	Grade IIIc	NA
46073	MOD/37	Modderfontein 37	Structures	Grade IIIc	NA
46074	MOD/38	Modderfontein 38	Archaeological	Grade IIIc	NA
46075	MOD/39	Modderfontein 39	Archaeological	Grade IIIc	NA
88801	MIDR048	Midrand 048	Building	Grade IIIc	NA
89843	GEE002	Glen Erasmia Extensions 002	Stone walling	Grade IIIa	NA
89844	GEE003	Glen Erasmia Extensions 003	Stone walling	Grade IIIa	NA
108242	Esther Park Extension 38 Phase 2	Grave Site on Portion 221 of Zuurfontein 33IR	Burial Grounds & Graves	NA	NA



CTS HERITAGE

APPENDIX 2 Reference List

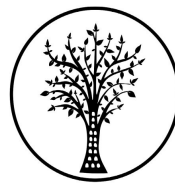
Heritage Impact Assessments				
Nid	Report Type	Author/s	Date	Title
5083	AIA	Jaco van der Walt	21/02/2008	Heritage Scoping: Proposed Development on Part of Portion 23, Portion 69 and the Remainder of Portion 22 and 36 of the Farm Klipfontein 12 IR, Ekurhuleni, Gauteng Province
162297	AIA	Jaco van der Walt	29/03/2014	Archaeological Impact Assessment Industrial Park known as Chloorkop North, Gauteng.
163107	AIA	Jaco van der Walt	15/05/2014	Archaeological Impact Assessment Of the Proposed Industrial Park known as Chloorkop South, Gauteng

Palaeontological Impact Assessments				
Nid	Report Type	Author/s	Date	Title
166302	PIA	Barry Millstead	10/06/2014	Desktop Palaeontological Heritage Impact Assessment Report On The Site Of Two Proposed Industrial Parks Known As Chloorkop North (located On The Remainder Portion 57 And Portion 58 Of The Farm Klipfontein 12 Ir) And Chloorkop South (to Be Located On Por

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

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)
DEDETEA	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

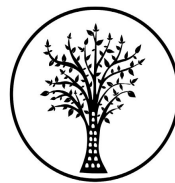
Full guide to Palaeosensitivity Map legend

	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.

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

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 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

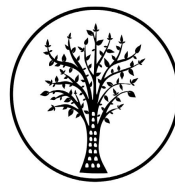
DETERMINATION OF THE COVERAGE RATING ASCRIBED TO A REPORT POLYGON

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

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

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

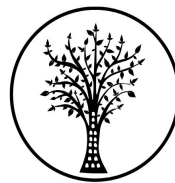
(2) The heritage resources and the area proposed for development are only partially recorded - The surveys undertaken in the area have not adequately captured the heritage resources and/or there are sites which require mitigation or management plans. Further specific heritage work is recommended for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

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com



CTS HERITAGE

- 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.

CTS Heritage

34 Harries Street, Plumstead, Cape Town, 7800

Tel: (021) 0130131 Email: info@ctsheritage.com Web: www.ctsheritage.com