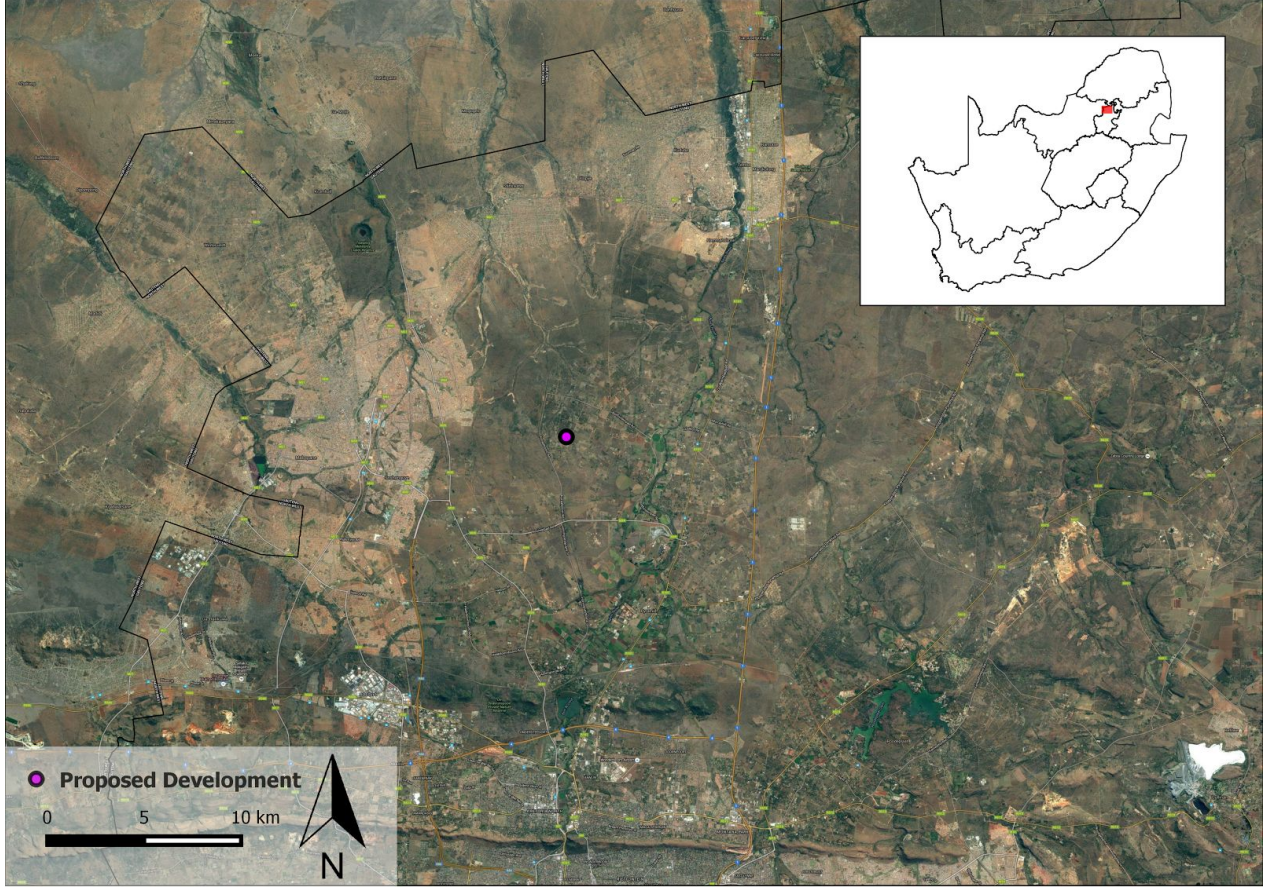




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HERITAGE SCREENER

CTS Reference Number:	CTS16_036
Client:	CSIR
Date:	18 July 2016
Title:	Basic Assessment for the proposed Pacific Ora Projects (Pty) Ltd Pig and Vegetable Production facility on farm Bultfontein 107-JR, Rooiwal, Gauteng
 <p>Figure 1a. Satellite image with proposed development area indicated in Gauteng province.</p>	
Recommendation by CTS Heritage Specialists: (Type 1)	<ul style="list-style-type: none"> (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.

1. Proposed Development Summary

Pacific Ora Projects (Pty) Ltd is proposing a small-scale pig and vegetable production endeavour on 8 hectares of the farm 120 Bultfontein 107-JR, located in the Rooiwal/Onderstepoort area of Pretoria North, Gauteng Province. This area falls under the Tshwane Metropolitan Municipality, and is approximately 35 km north of Pretoria. The proposed project will include the following components:

- Office building and employee facilities
- 40 cubic metre slurry dam to store pig waste for use as fertilizer
- Approximately 5 hectares of granadilla and spinach crop
- Pig houses with a total of 910 pigs
- Already existing municipal infrastructure (roads and electricity connection)

2. Application References

Name of relevant heritage authority(s)	South African Heritage Resources Agency
Name of decision making authority(s)	Department of Environmental Affairs and Development Planning (DEA&DP)

3. Property Information

Erf number / Farm number	Farm Bultfontein 107-JR
Local Municipality	City of Tshwane
Previous Magisterial District	Wonderboom
Province	Gauteng Province
Current Use	Vacant
Current Zoning	Agricultural
Total Extent	8.741ha

4. Nature of the Proposed Development

Surface area to be affected/destroyed	8.741 ha
Depth of excavation (m)	< 0.5m
Height of development (m)	+~3m
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	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):	

7. Mapping

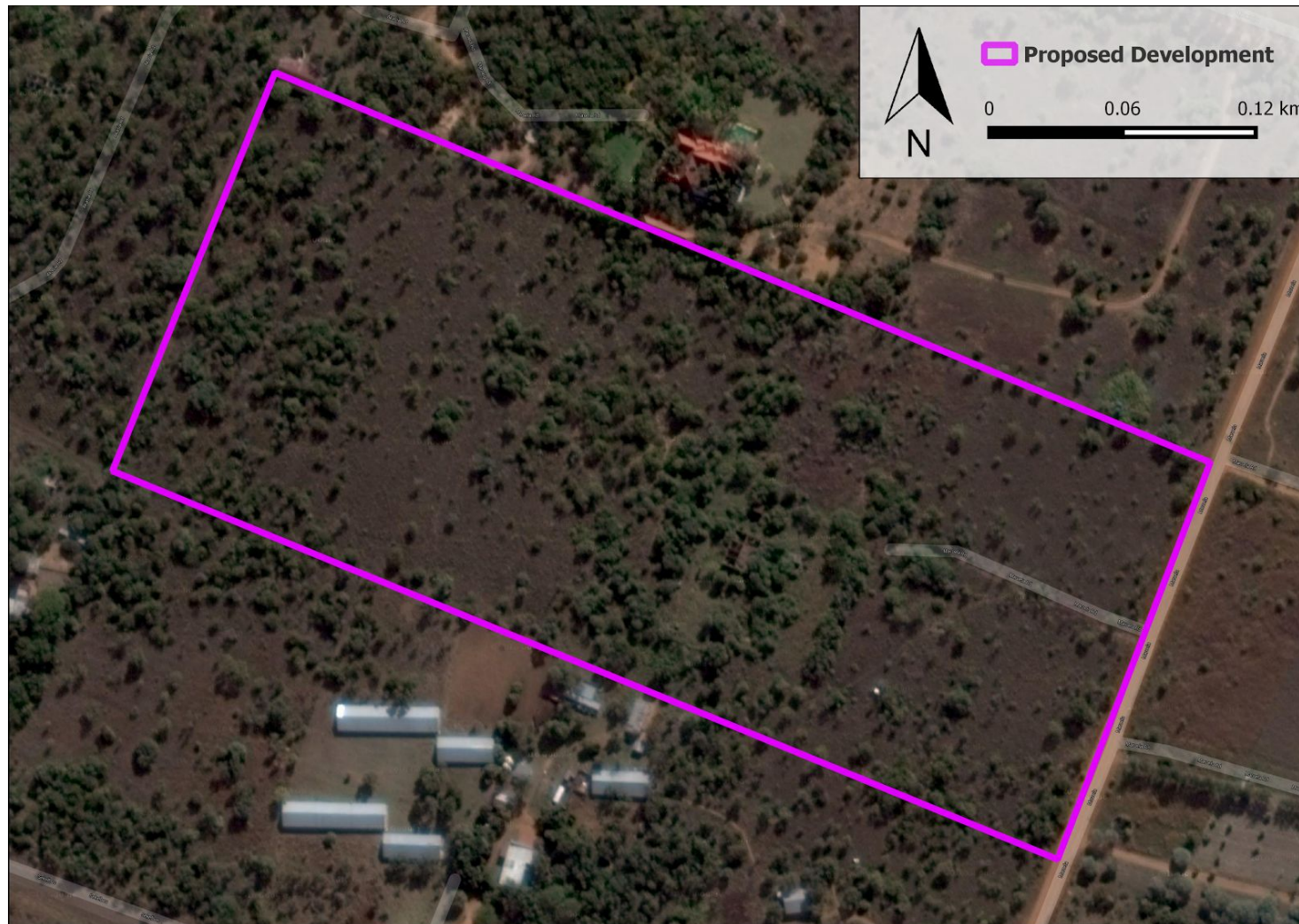


Figure 1b. Overview Map. Satellite image with proposed development area indicated.



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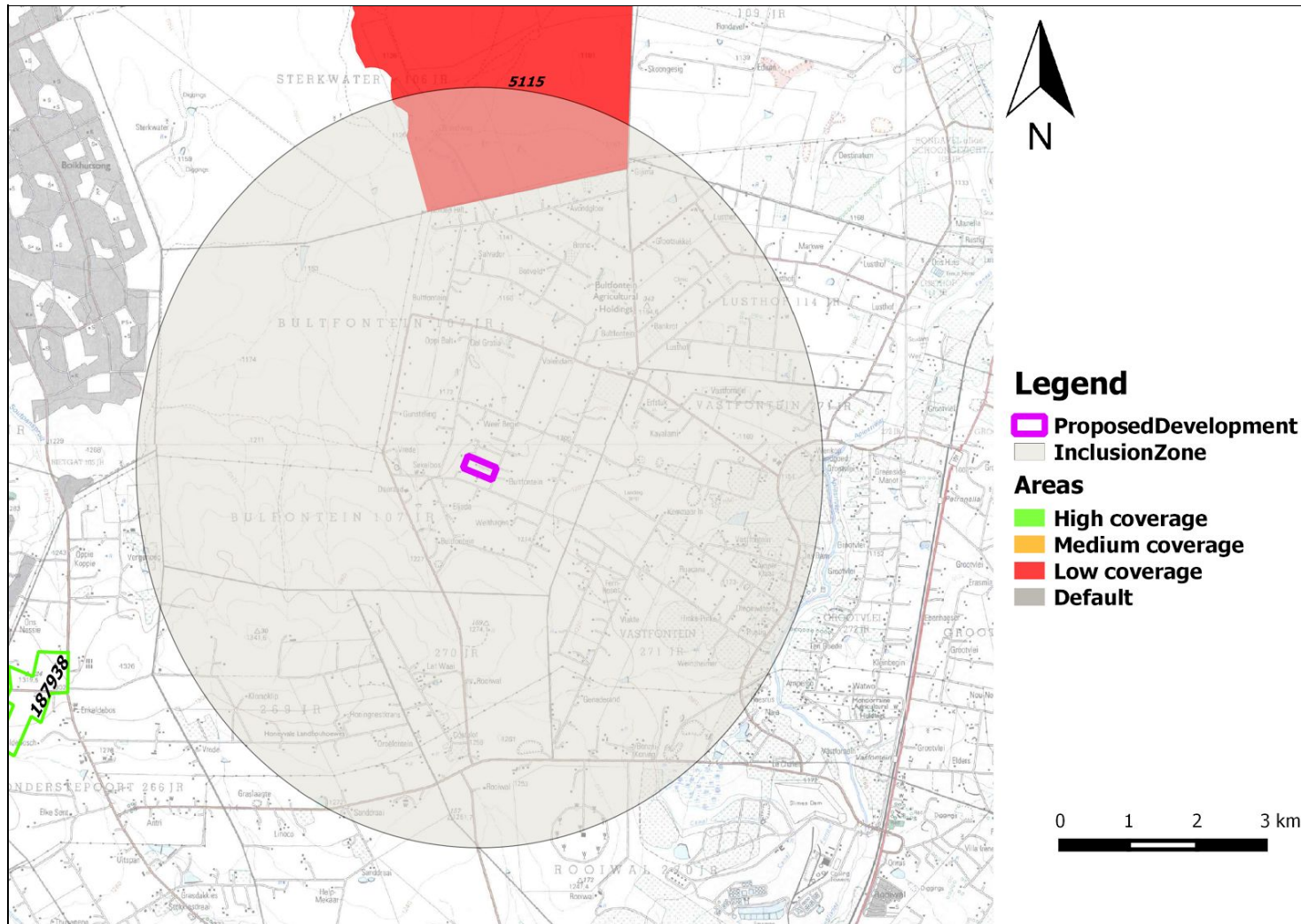


Figure 2. Previous surveys map. Previous research surveys done in and near the proposed development area with reference IDs indicated (please see Appendix 2 for full reference list).



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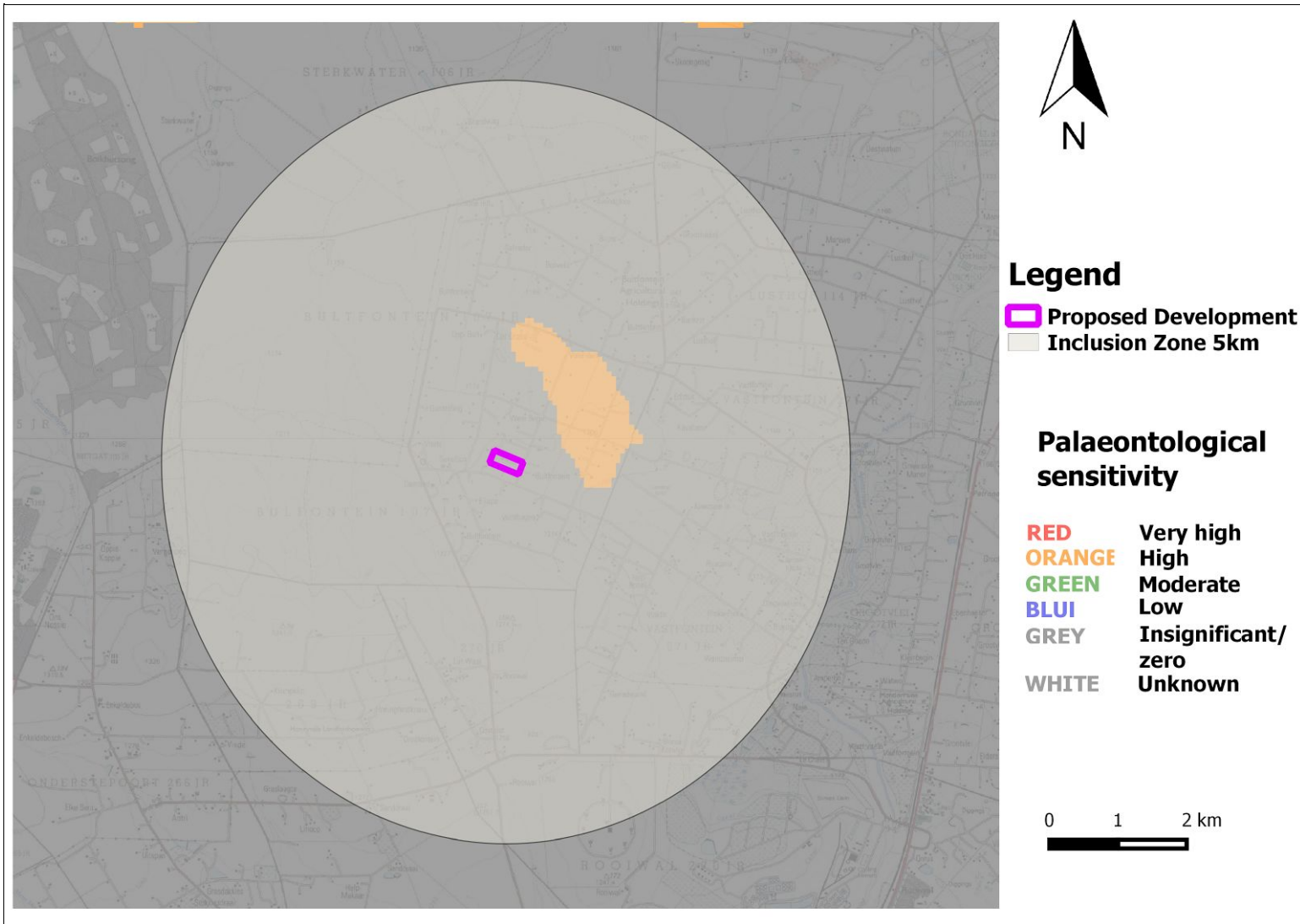


Figure 3. Palaeo Map. Palaeosensitivity of the study area. See Appendix 3 for full guide to the legend.



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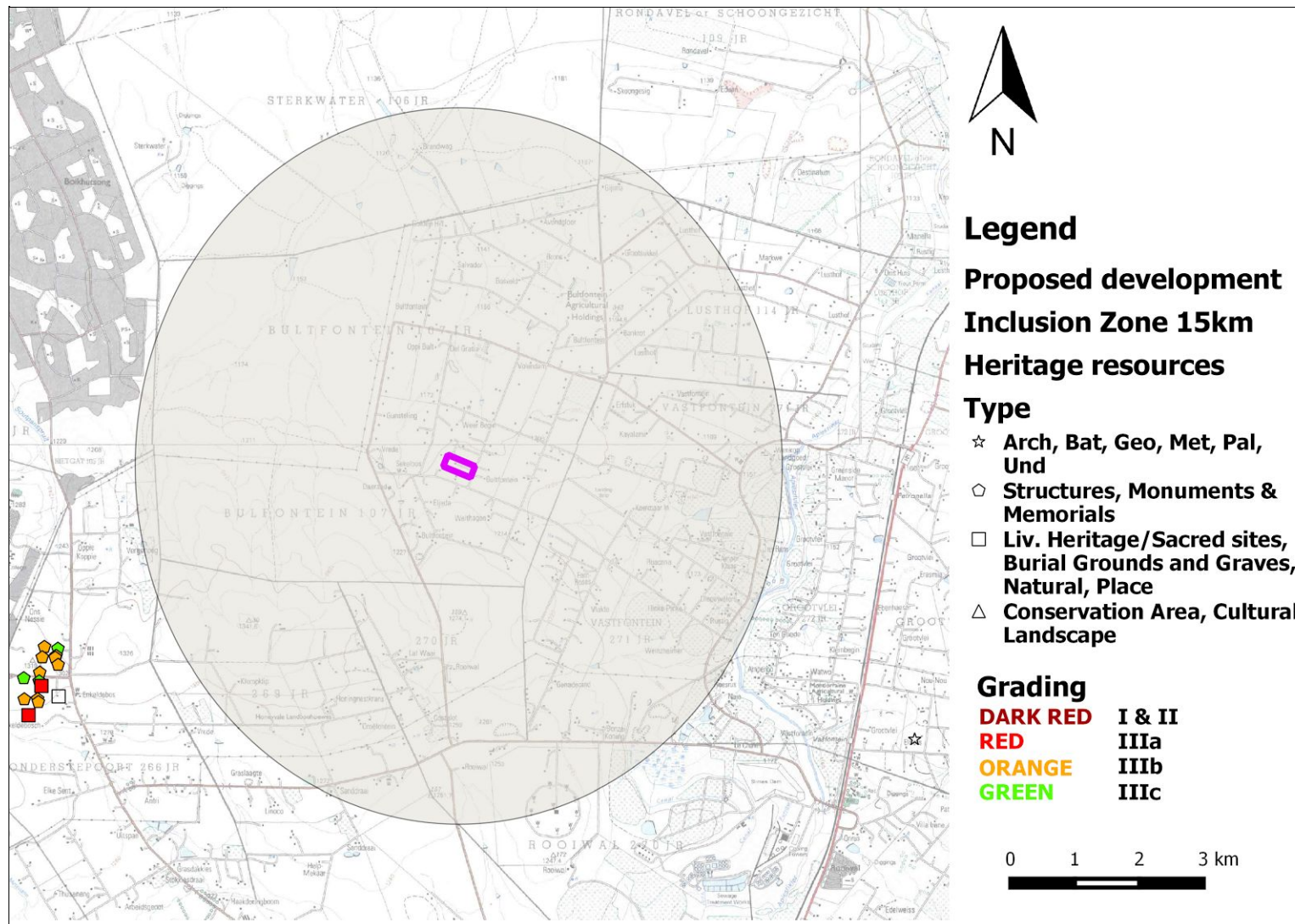


Figure 4a. Heritage Resources Map. Heritage resources previously identified in and near the study area. No known heritage resources occur within the Inclusion Zone.



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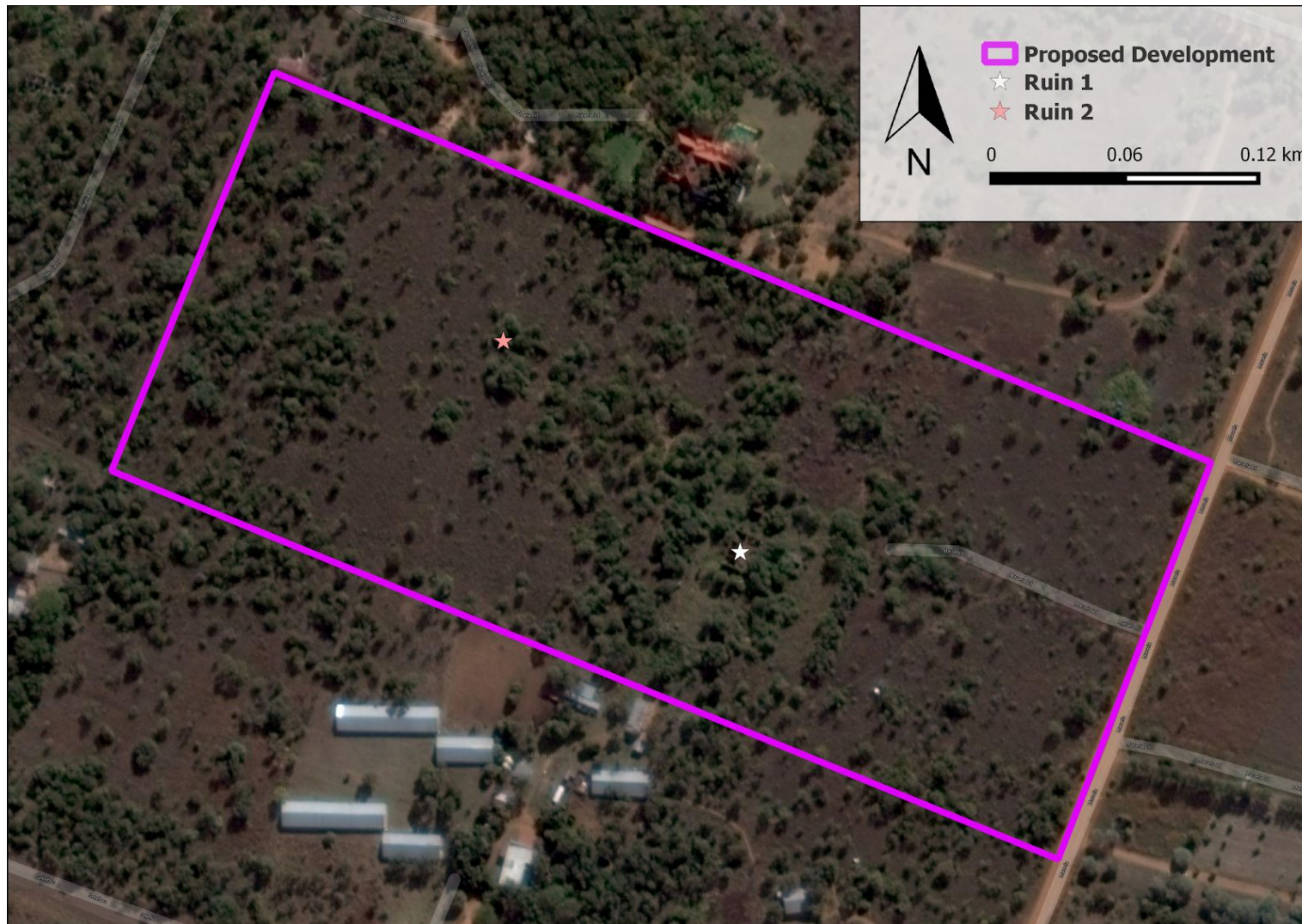


Figure 4b. Heritage Resources Map. Possible heritage resources identified on site through GoogleEarth (Ruin 1 and Ruin 2).



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Figure 4c. 2004 Google Earth aerial image of proposed development area indicating structures that are now ruins



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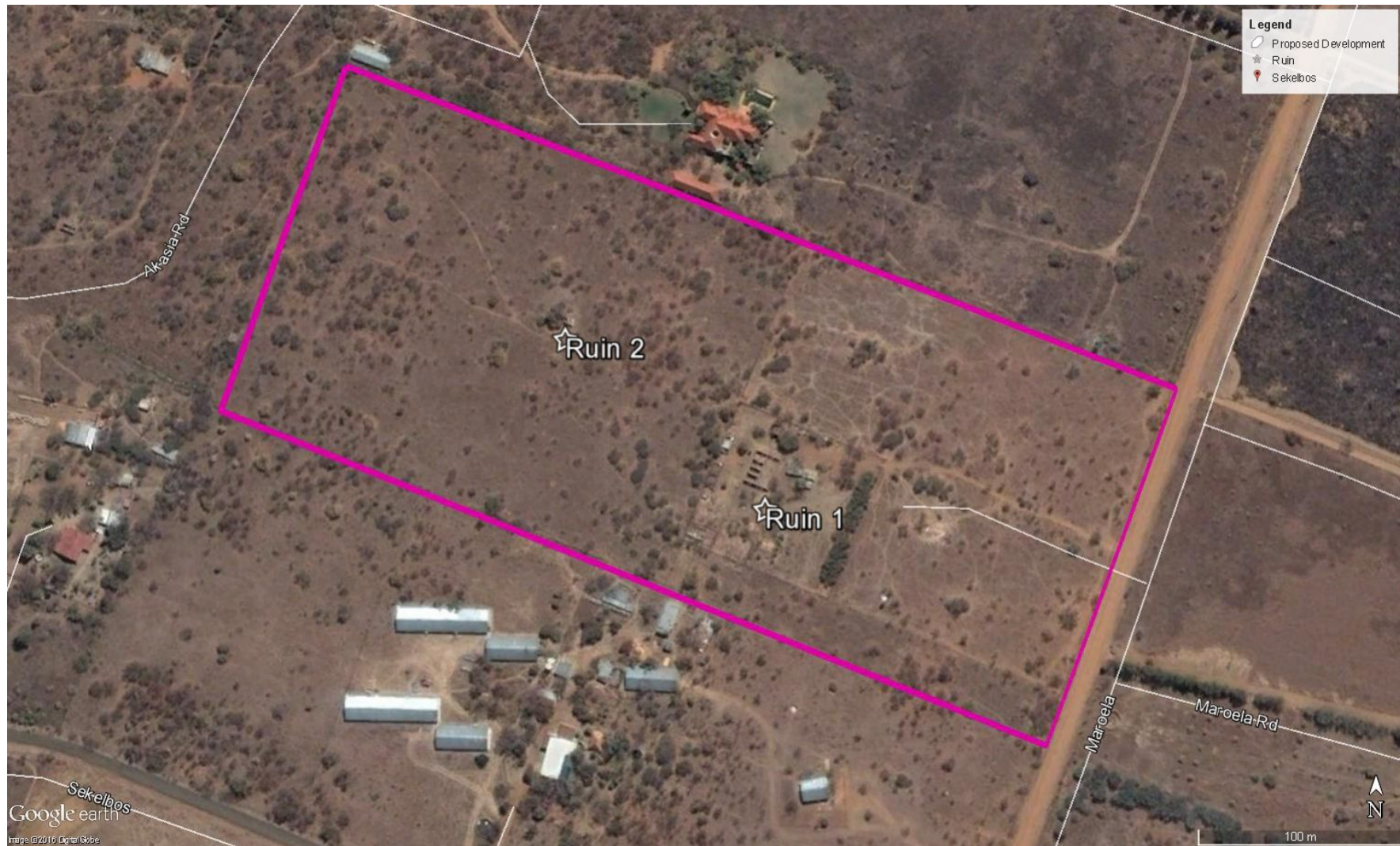


Figure 4d. 2006 Google Earth aerial image of proposed development area indicating structures that are now ruins



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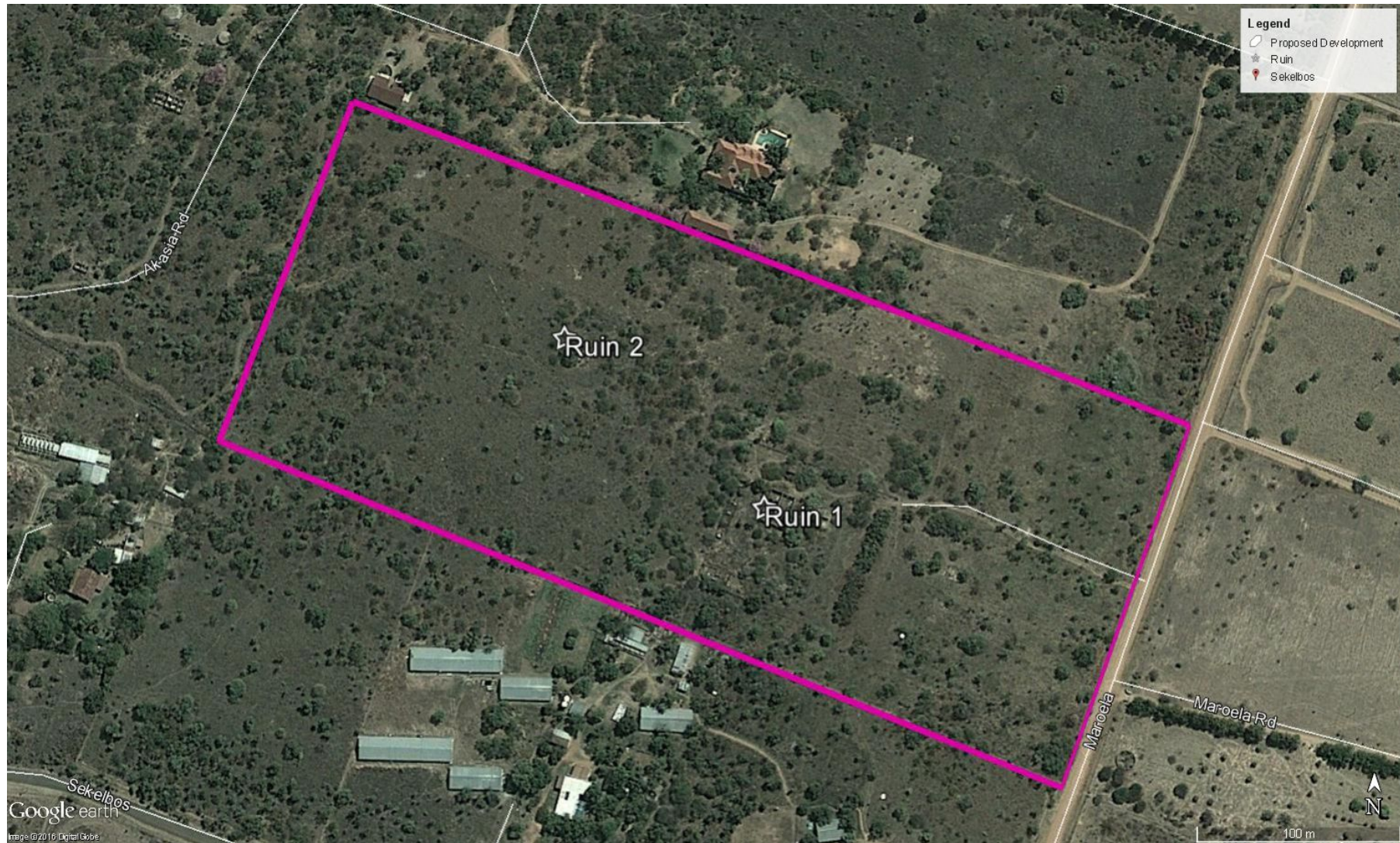


Figure 4e: 2011 Google Earth aerial image of proposed development area indicating structures that are now ruins

8. Heritage statement and character of the area

Pacific Ora Projects (Pty) Ltd is proposing a small-scale pig and vegetable production endeavour on 8 hectares of the farm 120 Bultfontein 107-JR, located in the Rooiwal/Onderstepoort area of Pretoria North, Gauteng Province. This area falls under the Tshwane Metropolitan Municipality, and is approximately 35 km north of Pretoria (Figure 1). The proposed project will include the following components:

- Office building and employee facilities
- 40 cubic metre slurry dam to store pig waste for use as fertilizer
- Approximately 5 hectares of granadilla and spinach crop
- Pig houses with a total of 910 pigs
- Already existing municipal infrastructure (roads and electricity connection)

The SAHRA palaeosensitivity map indicates that the area to be impacted by the proposed development is underlain by stratigraphy that has insignificant sensitivity for potential impacts to palaeontological resources as the entire area is underlain by rocks of the Raseebie Granophyre Suite.

There were no heritage resources recorded within the inclusion zone for this proposed development. Two ruins were noted within the development footprint on Google Earth (Maps 4b, c, d and e). On Friday 22 July, Prof. A. von Vollenhoven conducted a site inspection to determine the significance of these ruins.

During the inspection, it was noted that Ruin 1 consists of the remains of a house which forms part of a farm yard. It is not very traditional and also includes many additional structures, some of which are temporary (eg asbestos buildings). The bricks used to build these structures indicate that the building was built between 1960 and 1980 and these ruins have been deemed to have no heritage significance.

Ruin 2 is the ruin of a small building, most likely a shed, in which a power generator was placed. The bricks here likely date to approximately the same age as Ruin 1, perhaps even younger. Please see Appendix 1 for photographs taken on site. No other archaeological or other heritage resources were identified on the property proposed for development.

The proposed development is located within a highly transformed area and it is therefore unlikely that significant heritage resources will be directly impacted by the proposed development. It is therefore our recommendation that **no further heritage studies are required in terms of section 38 of the National Heritage Resources Act (Act 25 of 1999).**

(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.



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APPENDIX 1 - Photographs of the site



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Picture 1: Ruin 1



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Picture 2: Ruin 1



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Picture 3: Ruin 2



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Picture 4: Ruin 2



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APPENDIX 2 - Reference List

Previous heritage research surveys within the 5 km inclusion zone

SAHRIS ID	Report Type	Author	Date	Title	Company
187938	HIA	Polke Birkholtz	12/07/2012	Heritage Impact Assessment - Proposed Development of Portions 68, 69, 112, 113, 114, 115 and 116 of the farm Onderstepoort 266-JR, Tshwane Metropolitan Municipality, Gauteng Province	PGS Heritage and Grave Relocation Consultants
5115	HIA	Udo Kusel	17/09/2007	Cultural Heritage Resources Impact Assessment of the Farm Sterkwater 106 JR, Bultfontein Area, Tshwane, Gauteng;	African Heritage Consultants CC

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APPENDIX 3 - Keys/Guides

Key/Guide to Acronyms

AIA	Archaeological Impact Assessment
DARD	Department of Agriculture and Rural Development (KwaZulu-Natal)
DEA	Department of Environmental Affairs
DEADP	Department of Environmental Affairs and Development Planning (Western Cape)
DEDEAT	Department of Economic Development, Environmental Affairs and Tourism (Eastern Cape)
DEDECT	Department of Economic Development, Environment, Conservation and Tourism (North West)
DEDT	Department of Economic Development and Tourism (Mpumalanga)
DEDTEA	Department of Economic Development, Tourism and Environmental Affairs (Free State)
DENC	Department of Environment and Nature Conservation (Northern Cape)
DMR	Department of Mineral Resources
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.



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 PALAEOONTOLOGICAL 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:



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- 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.**

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