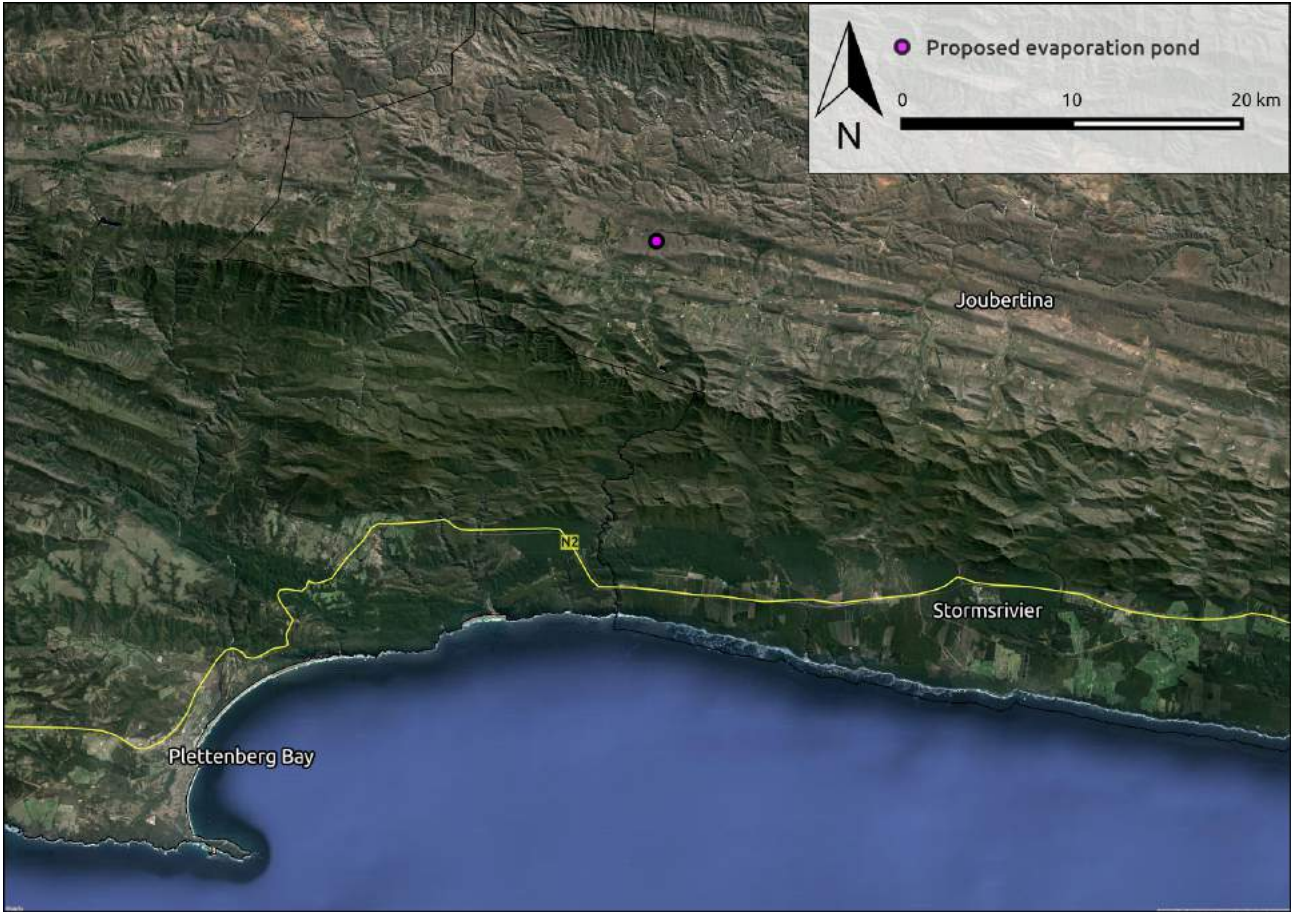




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## HERITAGE SCREENER

CTS Reference Number:	<b>CTS16_025</b>	
Client:	<b>SRK Consulting</b>	
Date:	<b>16 May 2016</b>	
Title:	<b>Effluent evaporation ponds, Louterwater, Eastern Cape</b>	
Recommendation by CTS Heritage Specialists: (Type 2)	<p><b>(2) The heritage resources and the area proposed for development are only partially recorded - It is recommended that:</b></p> <ul style="list-style-type: none"><li>- an AIA be conducted, with a focus on Stone Age archaeological sites</li><li>- no palaeontological assessments be conducted</li></ul>	

**Figure 1a.** Satellite image with proposed development area indicated in the Eastern Cape Province.



## 1. Proposed Development Summary

SRK Consulting was appointed by Granor Passi (Pty) Ltd to conduct an Integrated Basic Assessment and Waste Management Licence process for the proposed construction of effluent evaporation ponds for their plant at Louterwater. The proposed site is located to the north-east of Louterwater, which is situated along the R62.

## 2. Application References

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

## 3. Property Information

<b>GPS Coordinates</b>	33°46'58.91"S, 23°40'19.057"E
<b>Farm Name/Number</b>	Portion 3 and Portion 10 of the Farm Grootkloof No. 301
<b>Local Municipality</b>	Kou-Kamma
<b>District Municipality</b>	Sarah Baartman
<b>Previous Magisterial District</b>	Joubertina
<b>Province</b>	Eastern Cape
<b>Current Use</b>	Vacant
<b>Current Zoning</b>	Agricultural
<b>Total Extent</b>	16,475 ha



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#### 4. Nature of the Proposed Development

Surface area to be affected/destroyed	16,475 ha
Depth of excavation (m)	Unknown
Height of development (m)	NA
Expected years of operation before decommission	NA

#### 5. Category of Development

<b>Triggers: Section 38(8) of the National Heritage Resources Act</b>	X
<b>Triggers: Section 38(1) of the National Heritage Resources Act</b>	
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	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 <sup>2</sup>	
5. Other (state):	

#### 6. Additional Infrastructure Required for this Development

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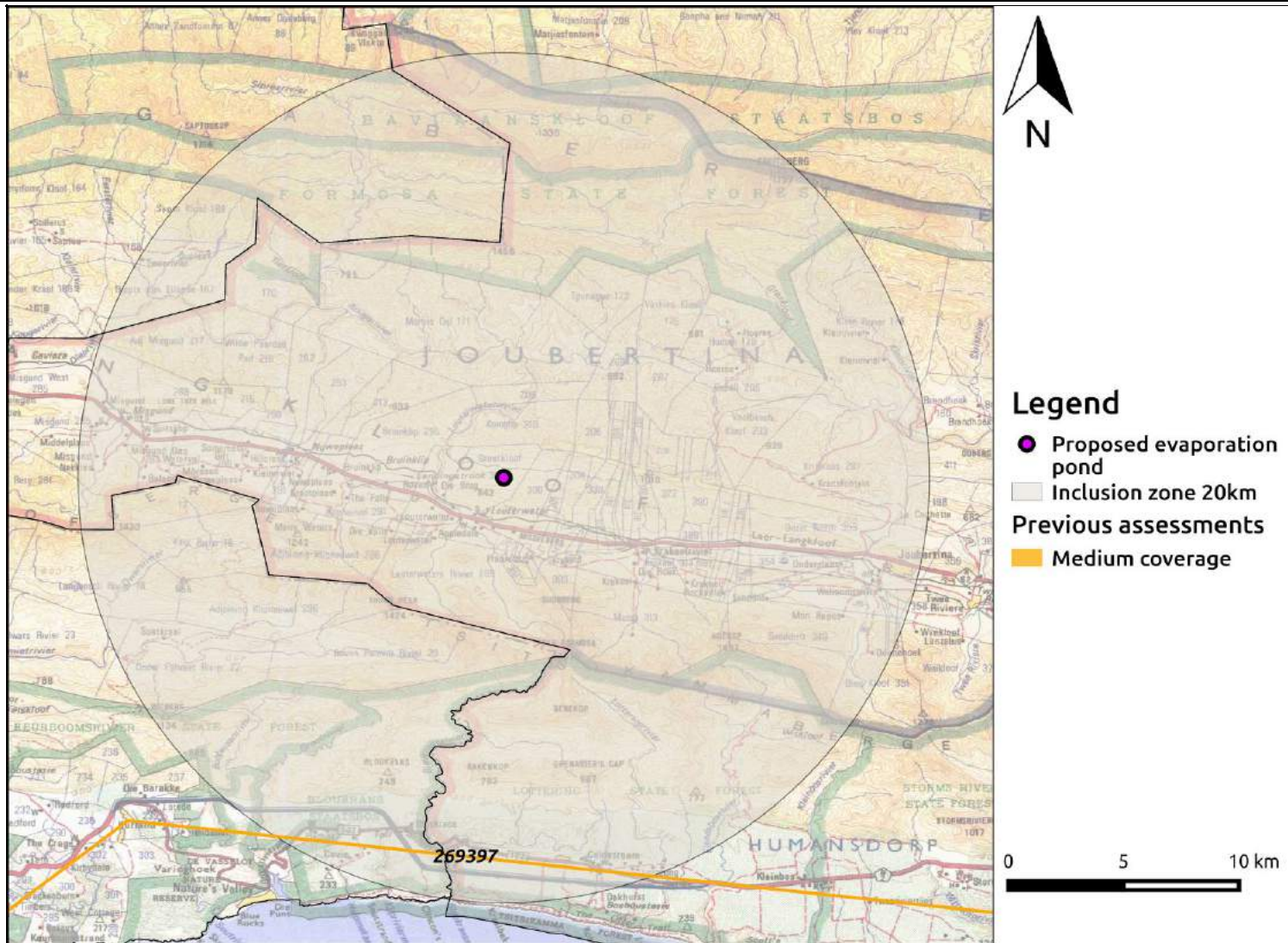
## 7. Mapping - Please see Appendices 3 and 4 for legend keys and methodology.



**Figure 1b. Overview Map.** Satellite image (2016) with proposed development indicated.



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**Figure 2a. HIAs Map.** Previous Heritage Impact Assessments conducted within 20km of the proposed development area with SAHRIS NID labels indicated.



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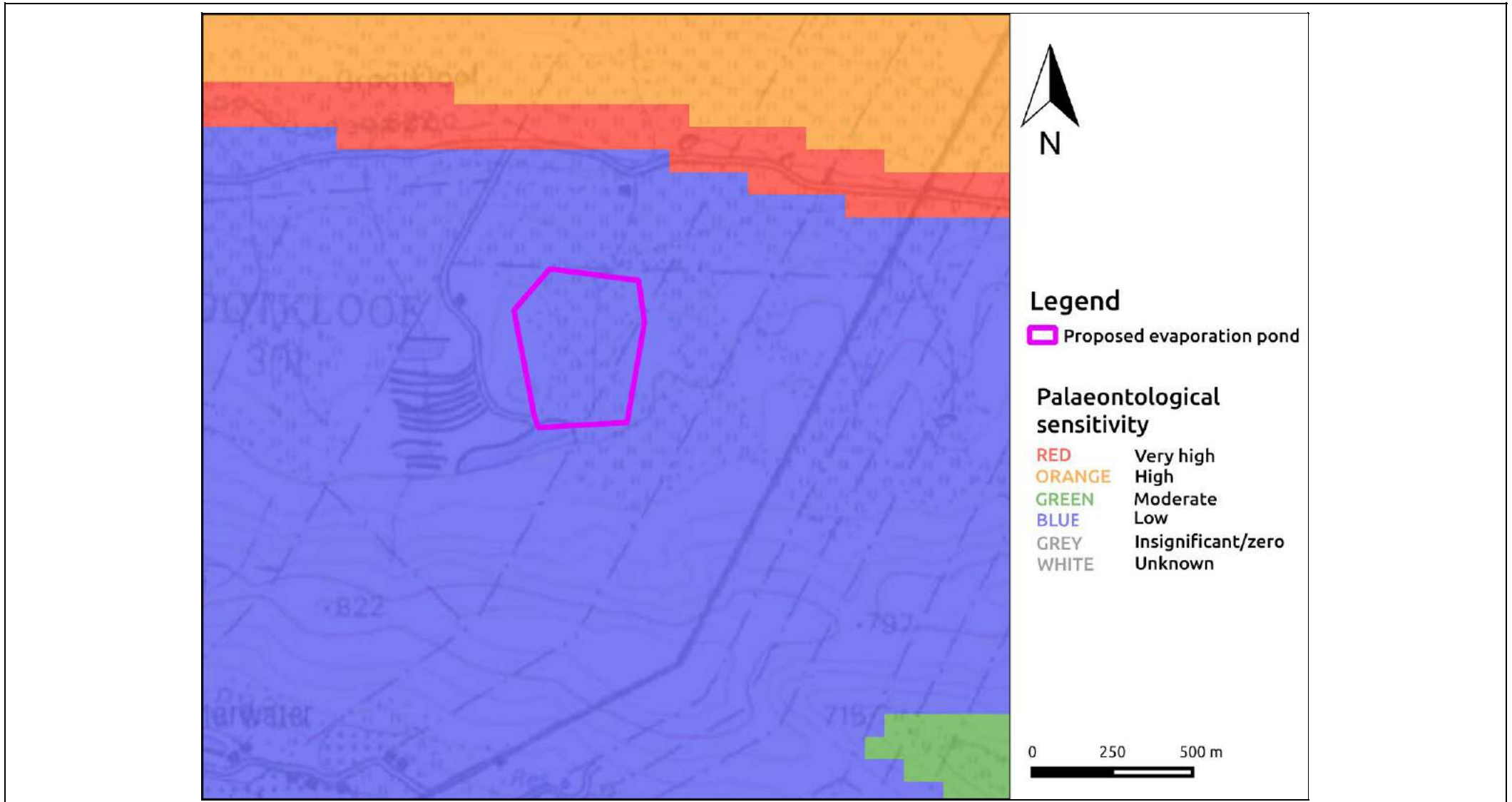


Figure 3. Palaeo Map. Palaeosensitivity of the study area.



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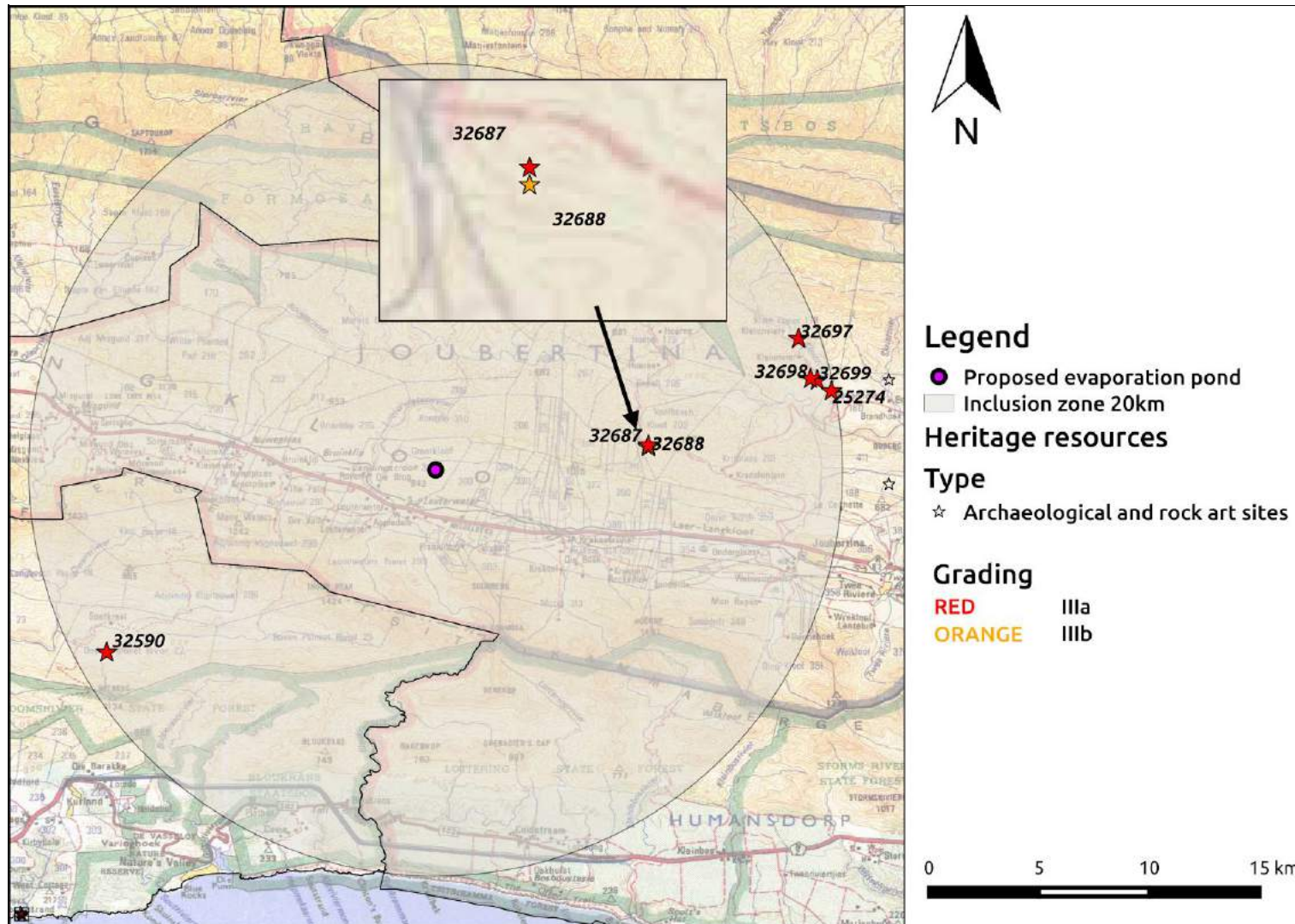


Figure 4a. Heritage Resources Map. Heritage resources previously identified in and near the study area, with SAHRIS Site IDs indicated.



## 8. Heritage statement and character of the area

SRK Consulting was appointed by Granor Passi (Pty) Ltd to conduct an Integrated Basic Assessment and Waste Management Licence process for the proposed construction of effluent evaporation ponds for their plant at Louterwater where juice concentrate is extracted. The proposed site is located to the north-east of Louterwater, which is situated along the R62.

Considering the sparsity of Heritage Impact Assessments (HIAs) near this proposed development area, a large inclusion zone of 20km was set in order to include as much information as possible. One Archaeological Impact Assessment (AIA) was conducted in 2015 for a fibre optic cable installation proposed from Durban to George (Booth 2015) within the inclusion zone. No specific sites were identified along this route as this assessment was very broad at a scoping level with minimal fieldwork. There are, however, several archaeological sites that were recorded as part of research surveys by Vicky Nardell during her Cape Fold Mountains Rock Art Documentation and Education Project and by Hugo Leggat during his research. These sites include rock shelters with Stone Age material, rock paintings (all Grade IIIa) and one artefact site (Grade IIIb).

The proposed development area is relatively undisturbed and it is likely that Stone Age material will be found. **It is therefore recommended that an Archaeological Impact Assessment be conducted, with a focus on Stone Age archaeological sites.** No buildings are located within the proposed development area.

The proposed effluent evaporation ponds are underlain by the Goudini Formation which is of low fossil significance according to the SAHRIS palaeosensitivity map. This is supported by the Eastern Cape Palaeotechnical report by Almond, De Klerk & Gess (2009). Sparse marine or estuarine fossil assemblages are recorded within the more mudrock-rich part of the succession but only in the Western Cape. **Therefore no palaeontological assessments are recommended for this development.**





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## APPENDIX 1 - Site Lists

### List of sites within 20km inclusion zone and outside proposed development area

Site ID	Site no	Full Site Name	Site Type	Grading
25274	KRS - 01	Kleinrivier Shelter	Archaeological	Grade IIIa
32590	STK1	Soetkraal 1	Rock Art	Grade IIIa
32697	KNR1	Klein Rivier 1 (Bush Camp Shelter)	Rock Art	Grade IIIa
32698	KNR2	Klein Rivier 2 (Porcupine Cave)	Rock Art	Grade IIIa
32699	KNR3	Klein Rivier 3 (Clown Cave)	Rock Art	Grade IIIa
32687	HRE1	Hoeree 1 (Vaalbos A)	Rock Art	Grade IIIa
32688	HRE2	Hoeree 2 (Vaalbos B)	Artefacts	Grade IIIb



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## APPENDIX 2 - Reference List

<b>Nid</b>	<b>Report Type</b>	<b>Author/s</b>	<b>Date</b>	<b>Title</b>
269397	AIA	Celeste Booth	2/3/2015	Archaeological and Heritage Investigation of Proposed Deviations and Repeater Sites for an Environmental Authorisation Amendment for Fibreco Route 4 (George to Port Elizabeth) and 5 (Port Elizabeth to Durban).
108744	Non Impact Assessment Related Reports	John Almond, Billy de Klerk, Robert Gess	1/3/2009	Palaeontological Heritage of the Eastern Cape

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## APPENDIX 3 - Keys/Guides

### Key/Guide to Acronyms

<b>AIA</b>	Archaeological Impact Assessment
<b>DEA</b>	Department of Environmental Affairs
<b>DEDEAT</b>	Department of Economic Development, Environmental Affairs and Tourism
<b>DMR</b>	Department of Mineral Resources
<b>ECPHRA</b>	Eastern Cape Provincial Heritage Resources Authority
<b>HIA</b>	Heritage Impact Assessment
<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>PHRA</b>	Provincial Heritage Resources Authority
<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.



## 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.**