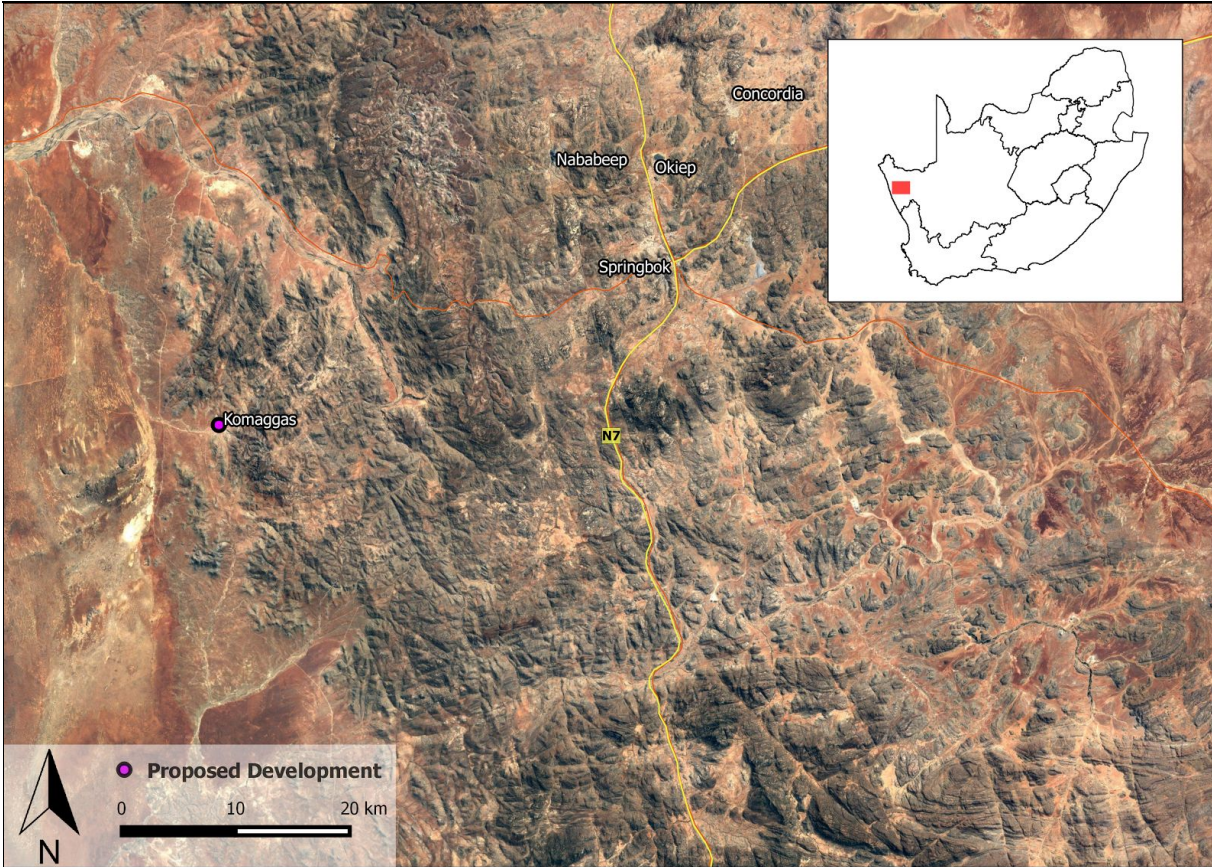
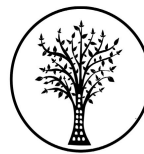




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HERITAGE SCREENER

CTS Reference Number:	CTS16_044	 <p>Figure 1a. Satellite image with proposed development area indicated in the Northern Cape province.</p>
Client:	SRK	
Date:	30 August 2016	
Title:	22kv Powerline to Kommagas Substation	
Recommendation by CTS Heritage Specialists: (Type 1)	<p>(1) The heritage resources in the area proposed for development are sufficiently recorded for the purposes of this development. - It is recommended that no further heritage studies are required</p>	



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1. Proposed Development Summary

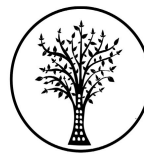
Eskom intends to construct a 22kv powerline from Kommagas substation to Buffelsriver pumps. The powerline will extend for approximately 14.5 km and will consist of 300 wood pole structures holding up the electrical cabling. It is anticipated that the installation of these wooden poles will require holes with an area of 1m² excavated to a depth of approximately 2m. On 15 June 2016, SAHRA required that a Heritage Impact Assessment in terms of section 38(8) be completed for the approximately 3 km of powerline that does not run along the existing R355 road. Of the 300 wood poles anticipated for the entire length of the powerline, approximately 35 will be installed in the 3 km of powerline assessed as part of this Desktop Analysis.

2. Application References

Name of relevant heritage authority(s)	NBKB and SAHRA
Name of decision making authority(s)	NBKB and SAHRA

3. Property Information

GPS Coordinates	S -3476854.13638 E 1945994.56638
Farm Name and Number	Remainder Farm 200
Local Municipality	Nama Khoi Local Municipality
District Municipality	Namakwa
Previous Magisterial District	Namakwaaland
Province	Northern Cape
Current Use	Agricultural
Current Zoning	Agricultural
Total Extent	3 km



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4. Nature of the Proposed Development

Surface area to be affected/destroyed	Approximately 1 m ² per pole x 35 poles = 35 m ²
Depth of excavation (m)	2 m
Height of Infrastructure (m)	11 m

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.	X
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	
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.

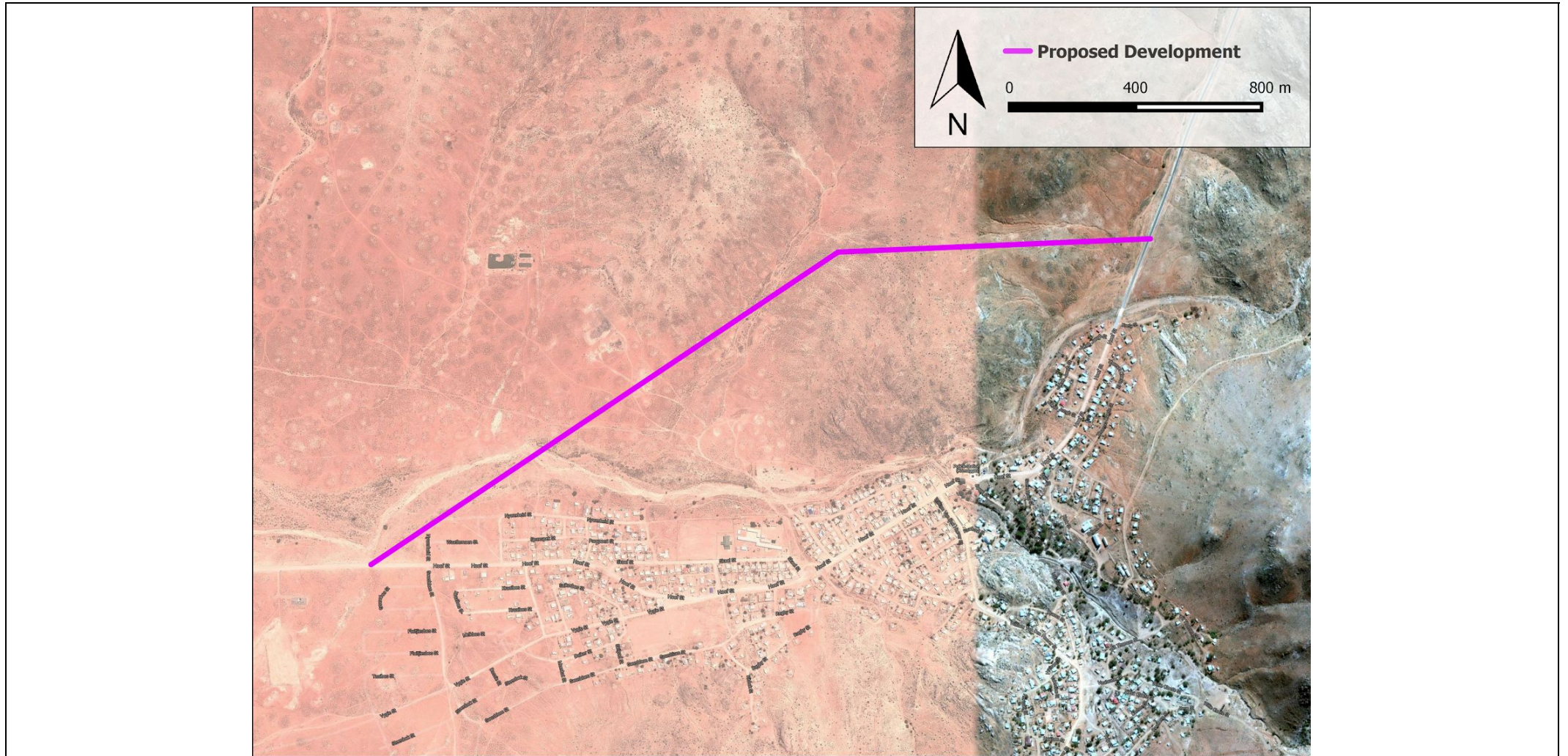


Figure 1b. Overview Map. Satellite image with proposed development indicated.



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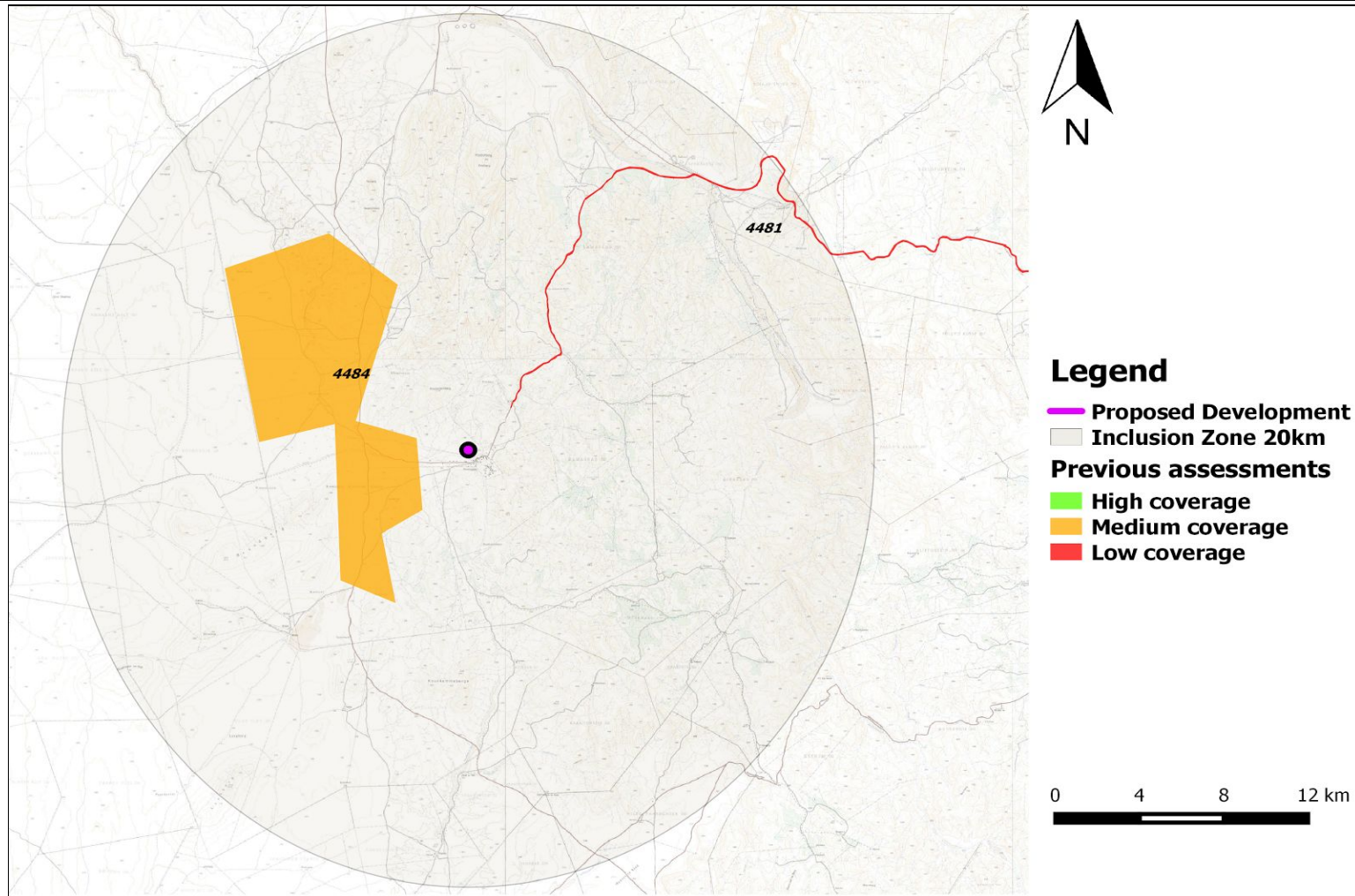


Figure 2. HIAs Map. Previous Heritage Impact Assessments done in and near the proposed development area with SAHRIS ID's indicated. Please see Appendix 1 for a complete reference list.



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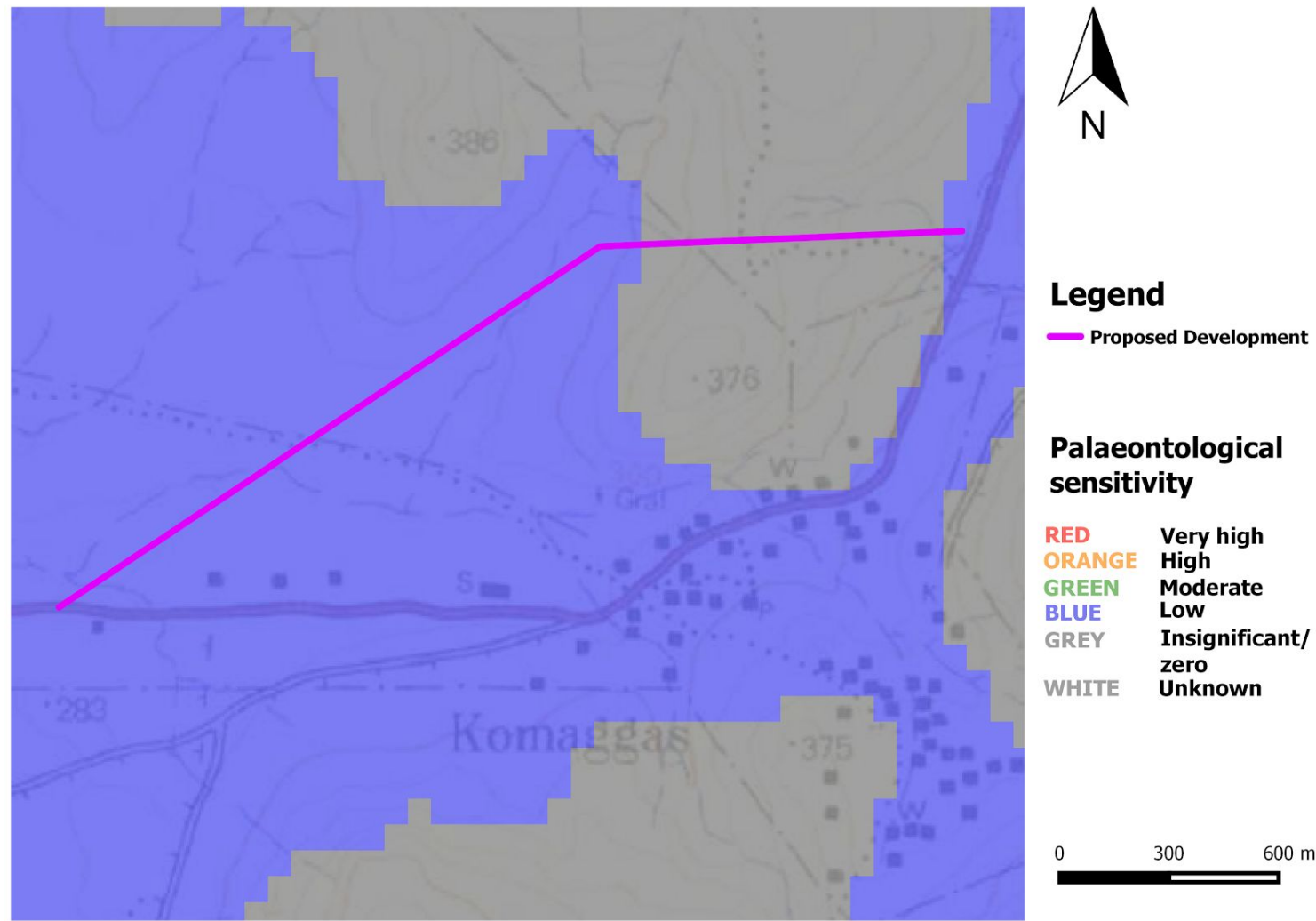


Figure 3. Palaeo Map. Palaeosensitivity of the study area. See Appendix 3 for full guide to the legend.



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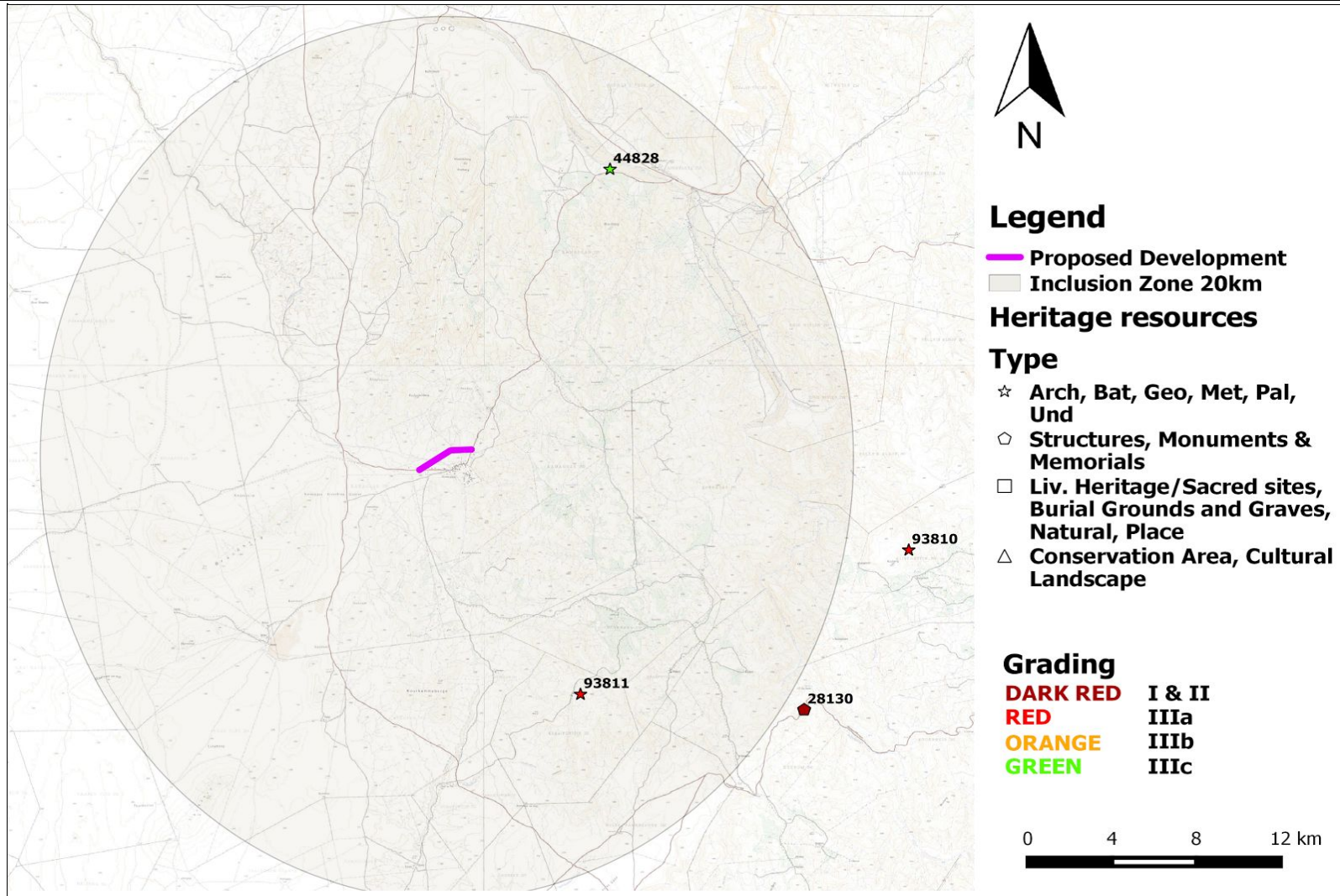


Figure 4. Heritage Resources Map. Heritage resources previously identified in and near the study area. Please see Appendix 2 for a full site list.



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8. Additional Information

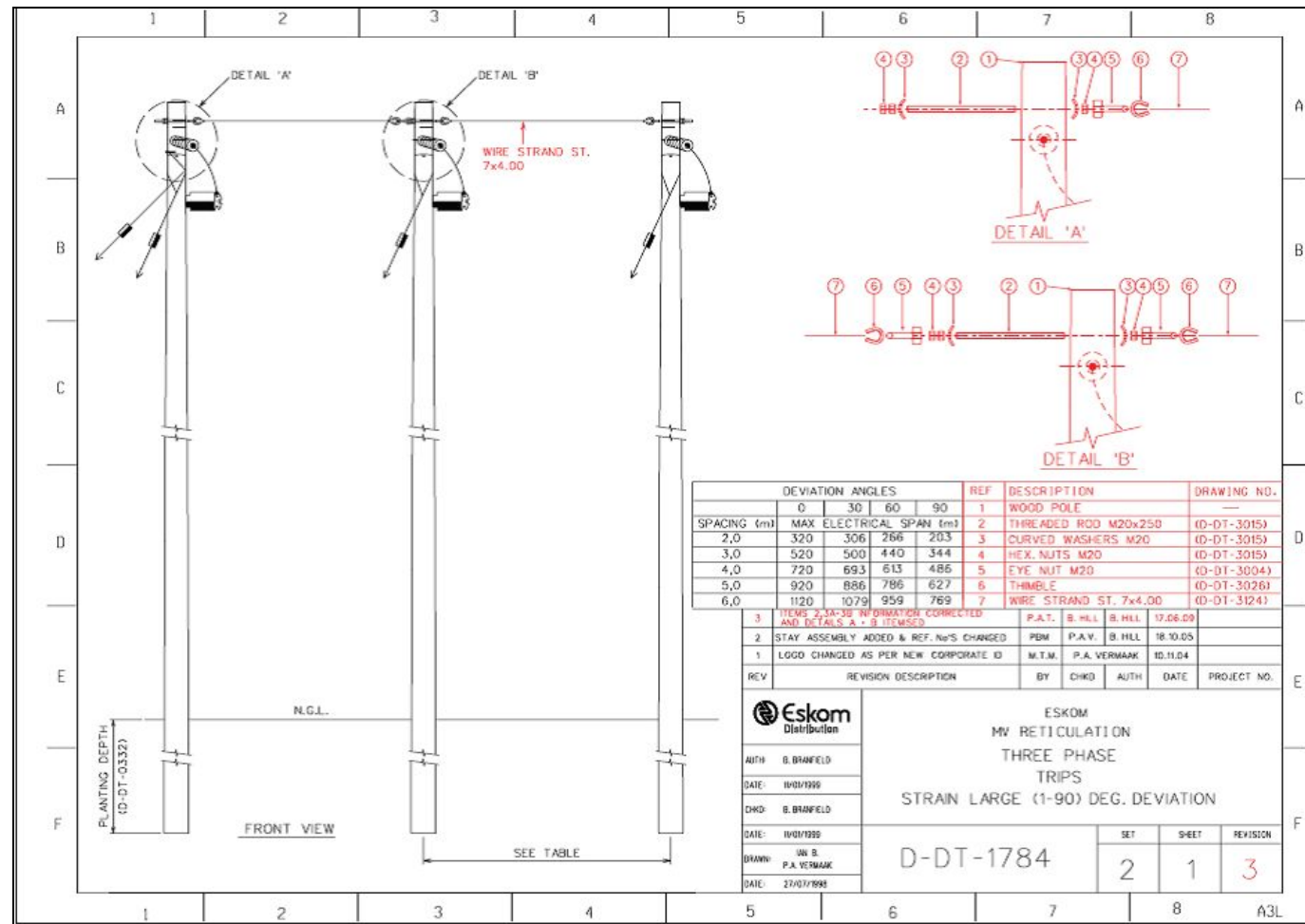


Figure 5. Engineering Drawing: Pole construction (provided by Eskom)



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9. Heritage statement and character of the area

Eskom intends to construct a 22kv powerline from Kommagas substation to Buffelsriver pumps. On 15 June 2016, SAHRA required that a Heritage Impact Assessment in terms of section 38(8) be completed for the approximately 3 km of powerline that does not run along the existing R355 road. Approximately 35 wooden poles will be installed in the 3 km of powerline assessed as part of this Desktop Analysis. The total area to be impacted by this proposed development is therefore 35 m²

Dreyer (2002) completed a walkdown assessment of a number of borrow pits utilised for the upgrade of the DR2955 between Kommagas and Springbok. Nine borrow pits were assessed by Dreyer (2002) and of these, only one yielded “crude core flakes and points with convergent flaking forming ridges on the dorsal side, characteristic of Middle Stone Age material, made from quartzite and hornfels.” These were assessed as having low heritage significance (Site ID 44828). A large portion of Remainder Farm 200 was surveyed by Deacon in 2004 for a proposed prospecting application. This survey of the heritage resources in the proposed prospecting area did not reveal any archaeological sites that may be impacted by prospecting activities (Deacon 2004). Other sites identified in the vicinity of the proposed development include two rock art sites (Site ID 93810 and 93811) and an old National Monument (Site ID 28130). However all of the sites identified are more than 10 km away from the proposed development area.

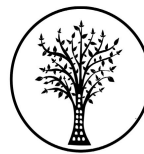
The area proposed for the powerline is underlain by geological stratigraphy of low to zero sensitivity for impacts to palaeontological resources (SAHRIS Palaeosensitivity Map).

From the previous archaeological assessments completed in the vicinity of the proposed development, it is noted that the nature of archaeological resources is low density, low significance surface scatters of possibly Middle Stone Age flaked material. As such, while it is *possible* that the installation of these wooden poles *may* impact on archaeological resources, it is likely that these resources will have low archaeological significance. The nature of the proposed development requires minimal surface disturbance and excavation that is limited to the installation of approximately 35 wooden poles for the 22kv powerline. This limited development footprint (approximately 35 m²) means that it is unlikely that significant heritage resources will be impacted and as such, it is recommended that no further heritage studies are required.

RECOMMENDATION:

The heritage resources in the area proposed for development are sufficiently recorded for the purpose of this development and the development may proceed.

- No further heritage studies are required for this proposed development.
- Should any heritage resources be identified during construction activities, SAHRA must be contacted immediately on 021 462 4502



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Appendix 1: Reference List

Previous Heritage Impact Assessments within the 20 km inclusion zone

Nid	Report Type	Author/s	Date	Title
4484	AIA	Hilary Deacon	22/04/2004	Specialist Report Heritage Impact Assessment Kornavlei Prospecting, near Komaggas, Northern Cape
4481	AIA	Cobus Dreyer	11/11/2002	Archaeological Assessment of the Proposed Upgrading of the Road (Dr2955) between Springbok and Komaggas, Northern Cape



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Appendix 2: Site List

Known Heritage Resources within the 20 km inclusion zone

Site ID	Site Name	Site Type	Grading	Declaration
93810	Klipfontein Rock Art Site	Rock Art	Grade IIIa	NA
28130	Messelpad Pass, Namaqualand District	Building	Grade II	Provincial Heritage Site
93811	Kraaifontein 1 Rock Art Site	Rock Art	Grade IIIa	NA
44828	Road DR2955 between Springbok & Komaggas 01	Artefacts	Grade IIIc	NA

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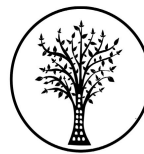
APPENDIX 3 - Keys/Guides

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.



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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.

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

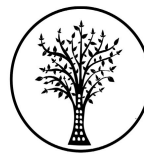
*(a) **Grade I:** Heritage resources with qualities so exceptional that they are of special national significance; Examples of these sites are Mapungubwe Cultural Landscape, The Parliament of South Africa, Sarah Baartman Burial Site, Robert Sobukwe's grave, Lake Fundudzi, Voortrekker Monument, Union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



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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.



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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

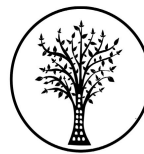
The Heritage Screener includes a set of recommendations to the applicant based on whether an impact on heritage resources is anticipated. One of three possible recommendations is formulated:

(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.

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.**