ARCHAEOLOGICAL SPECIALIST STUDY

In terms of Section 38(8) of the NHRA for a

Proposed development of the 132kV Oya Overhead Power Line near Matjiesfontein, Western and Northern Cape

HWC Ref:

Prepared by

CTS HERITAGE

In Association with

Oya Energy (Pty) Ltd

October 2020

CTS HERITAGE

THE INDEPENDENT PERSON WHO COMPILED A SPECIALIST REPORT OR UNDERTOOK A SPECIALIST PROCESS

I Jenna Lavin, as the appointed independent specialists hereby declare that we:

• act/ed as the independent specialist in this application;

• regard the information contained in this report as it relates to my specialist input/study to be true and correct, and

• do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;

• have and will not have no vested interest in the proposed activity proceeding;

• have disclosed, to the applicant, EAP and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management Act;

• am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations, 2010 (specifically in terms of regulation 17 of GN No. R. 543) and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;

• have ensured that information containing all relevant facts in respect of the specialist input/study was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments on the specialist input/study;

• have ensured that the comments of all interested and affected parties on the specialist input/study were considered, recorded and submitted to the competent authority in respect of the application;

• have ensured that the names of all interested and affected parties that participated in terms of the specialist input/study were recorded in the register of interested and affected parties who participated in the public participation process;

• have provided the competent authority with access to all information at our disposal regarding the application, whether such information is favourable to the applicant or not; and

• are aware that a false declaration is an offence in terms of regulation 71 of GN No. R. 543.

Jenna Lavin
Signature of the specialist

CTS Heritage
Name of company

September 2020
Date

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EXECUTIVE SUMMARY

Oya Energy (Pty) Ltd (hereafter referred to as "Oya Energy") is proposing to construct a 132kV overhead power line and substations northwest of Matjiesfontein in the Western and Northern Cape Provinces (hereafter referred to as the "proposed development"). The overall objective of the proposed development is to feed the electricity generated by the proposed Oya Energy Facility (part of separate on-going EIA process with DEFF Ref No.: 14/12/16/3/3/2/2009) as well as potentially the nearby developments into the national grid.

An archaeologist conducted a survey of the site and its environs on the 22 October 2020 to determine what archaeological resources are likely to be impacted by the proposed development. A portion of the area proposed for development was not easily accessible, due to restricted road access. As a result, the entirety of the proposed development area was not able to be surveyed. Power Line Corridor Alternative 4 is the preferred development option for the section of the proposed overhead power line which connects the Oya on-site substation to the Kappa substation (i.e. Oya to Kappa) and as such, this alignment was the primary focus of the field assessment. Sampling was implemented and approximately 25km of the area was surveyed by foot.

The findings of the survey were dominated by a diffuse scatter of low density Middle Stone Age (MSA) artefacts spread across the broader landscape. The MSA lithics identified were predominantly made out of silcrete, chert, hornfels and quartzite. The field assessment methodology provides an adequate sample of the kinds of archaeological resources that are to be found along the flatter plains of the Karoo. Overall, the survey has provided a very good account of the range of archaeological material that is present in the area and is entirely consistent with the previous studies for the wind and solar farms that are proposed or already constructed.

Based on the assessment completed, the area proposed for development has an overall low archaeological sensitivity. It is unlikely that the proposed development of the 132kV overhead power line and substations will negatively impact on significant archaeological heritage as the footprint of the powerline and substations infrastructure is limited.

Despite the abundance of diffusely scattered archaeological material, no intact and cohesive sites were found that have not been significantly altered through surface deflation and erosion in the exposed plains covering much of this route. No mitigation is required prior to construction.

Should any significant archaeological resources be identified during the course of development, work must cease and HWC must be contacted regarding an appropriate way forward.

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1. INTRODUCTION

1.1 Background Information on Project

Oya Energy (Pty) Ltd (hereafter referred to as "Oya Energy") is proposing to construct a 132kV overhead power line an substations northwest of Matjiesfontein in the Western and Northern Cape Provinces (hereafter referred to as the "proposed development"). The overall objective of the proposed development is to feed the electricity generated by the proposed Oya Energy Facility (part of separate on-going EIA process with DEFF Ref No.: 14/12/16/3/3/2/2009) as well as potentially the nearby developments into the national grid. The grid connection and substations (this application) require a separate EA, in order to allow the EA to be handed over to Eskom. The proposed power line and substation development is located in the Witzenberg and Karoo Hoogland Local Municipalities respectively, which fall within the Cape Winelands and Namakwa District Municipalities.

The entire extent of the proposed overhead power line and substation development is located within one of the Strategic Transmission Corridors as defined and in terms of the procedures laid out in GN No. 1131, namely the Central Corridor. The proposed overhead power line project will irrespective of this be subject to a Basic Assessment (BA) process in terms of the NEMA (as amended) and Appendix 1 of the EIA Regulations, 2014 promulgated in Government Gazette 40772 and GN R326, R327, R325 and R324 on 7 April 2017. The competent authority for this BA is the DEFF.

At this stage, it is anticipated that the proposed development will include a 132kV power line and a 33/132kV substation to feed electricity generated by the renewable energy facilities owned by the applicant into the national gird at the Kappa substation.

The type of power line towers being considered at this stage include both lattice and monopole towers and it is assumed that these towers will be located approximately 200m to 250m apart. The towers will be up to 45m in height, depending on the terrain, but will ensure minimum overhead line clearances from buildings and surrounding infrastructure.

300m wide power line corridors (i.e. 150m on either side) are being assessed to allow flexibility when determining the final route alignment. The proposed power line however only requires a 31m wide servitude and as such, this servitude would be positioned within the assessed corridor.

The size of the proposed Oya and Kudusberg substation and O&M building sites will be approximately 4 hectares (ha) each. It should be noted that only one (1) route is possible for the section of the proposed power line which connects the Kudusberg on-site substation (authorised under 14/12/16/3/3/1/1976/AM1) to the Oya on-site substation (i.e. Kudusberg to Oya). No alternatives can therefore be provided for this section of the power line. The Kudusberg to Oya power line corridor route is approximately 16.6km in length and runs from the Kudusberg on-site substation along the RE/194, 1/158, RE/159, RE/156, 1/156 and RE/155 properties to the Oya on-site substation.

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Five (5) power line corridor route alternatives have however been provided for the section of the proposed overhead power line which connects the Oya on-site substation to the Kappa substation (i.e. Oya to Kappa). The above-mentioned alternatives are described below:

- Power Line Corridor Alternative 1 (Oya to Kappa): Approximately 34.14km in length and runs along the RE/155, RE/152, 2/152, RE/169, RE/243, 241, 240 and RE/244 properties to the Kappa substation
- Power Line Corridor Alternative 2 (Oya to Kappa): Approximately 32.43km in length and runs along the RE/155, 3/155, RE/152, 2/152, RE/169, 13/168, 5/168, 1/243, RE/243, 241 and 240 properties to the Kappa substation
- Power Line Corridor Alternative 3 (Oya to Kappa): Approximately 30.56km in length and runs along the RE/155, 4/168, 13/168, 5/168, 1/243, 240 and RE/244 properties to the Kappa substation
- Power Line Corridor Alternative 4 (Oya to Kappa): Approximately 32.94km in length and runs along the RE/155, 4/168, 13/168, RE/169, RE/243, 241 and 240 properties to the Kappa substation
- Power Line Corridor Alternative 5 (Oya to Kappa): Approximately 32.26km in length and runs along the RE/155, RE/152, 2/152, RE/169, 5/168, 1/243 and 240 properties to the Kappa substation
- 'No-go' alternative: The 'no-go' alternative is the option of not fulfilling the proposed project as well as prevent the connection of the energy development in the area to feed electricity into the national grid. This alternative would result in no environmental impacts from the proposed project on the site or surrounding local area. It provides the baseline against which other alternatives are compared and will be considered throughout the report. Implementing the 'no-go' option would entail no development. The affected properties are currently not used for agricultural activities, although they are suitable for very low-level grazing.

The power line corridor route alternatives provide different route alignments contained within an assessment corridor of up to approximately 300m wide. This is to allow for flexibility to route the power line within the authorised corridor.

The 'no-go' option is a feasible option, however, this would prevent the proposed development from contributing to the environmental, social and economic benefits associated with the development of the renewables sector.

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1.2 Description of Property and Affected Environment

The area proposed for development is located within a mountainous landscape within which the predominant land use is grazing land for domestic stock and game, however one of the farms offers accommodation to tourists. It is a semi-arid region and the vegetation is characteristic of the Succulent Karoo Biome. The mountain ridges are largely undeveloped and are covered in varying densities of knee high shrubs. The area is sparsely populated and some of the farms are no longer being actively used for grazing. There are a number of farmhouses and numerous jeep tracks across the large area but the site remains predominantly natural and very isolated. Natural ephemeral streams (currently dry) and various small earthen dams were observed.

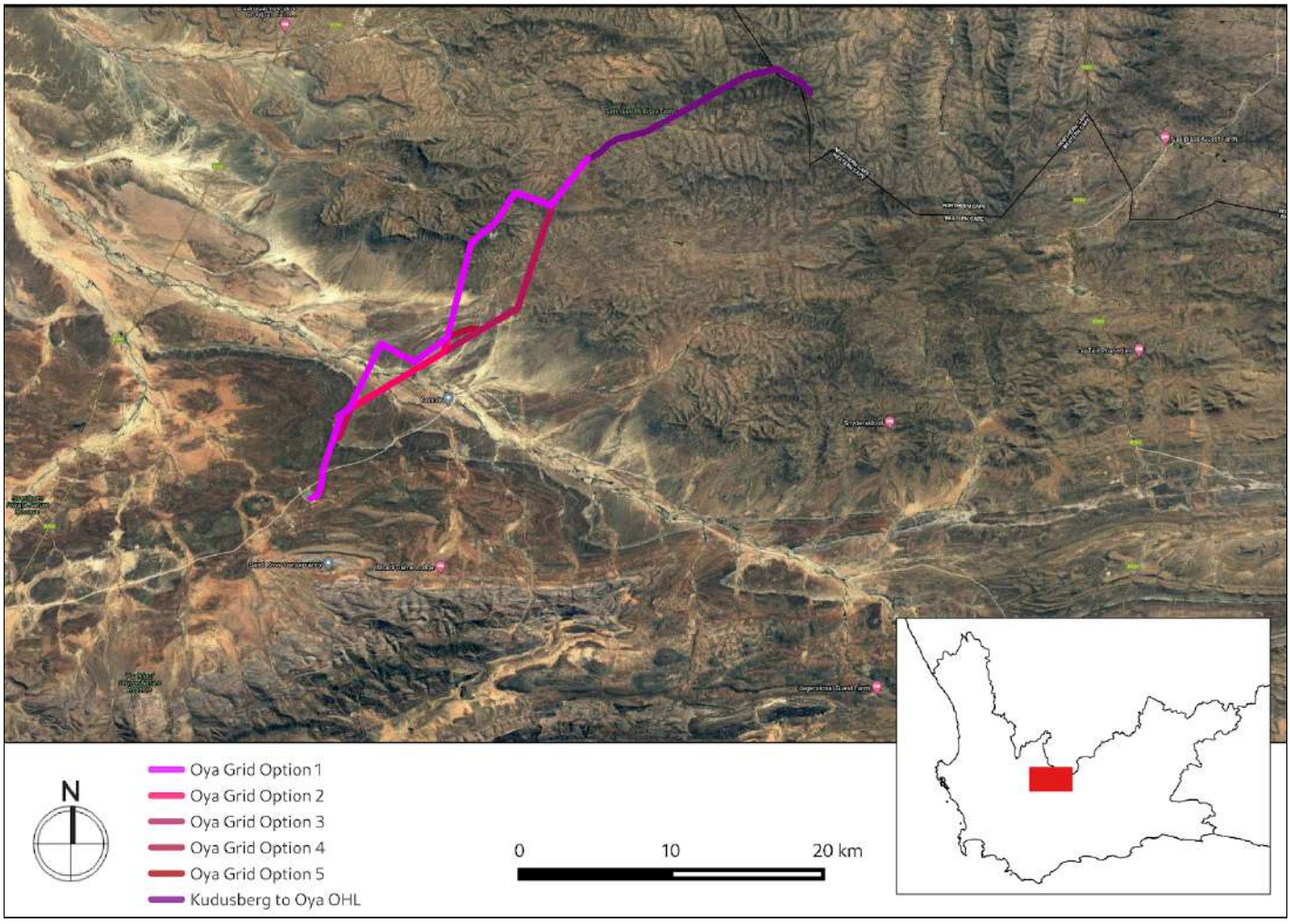

Figure 1.1: Close up satellite image indicating proposed location of development

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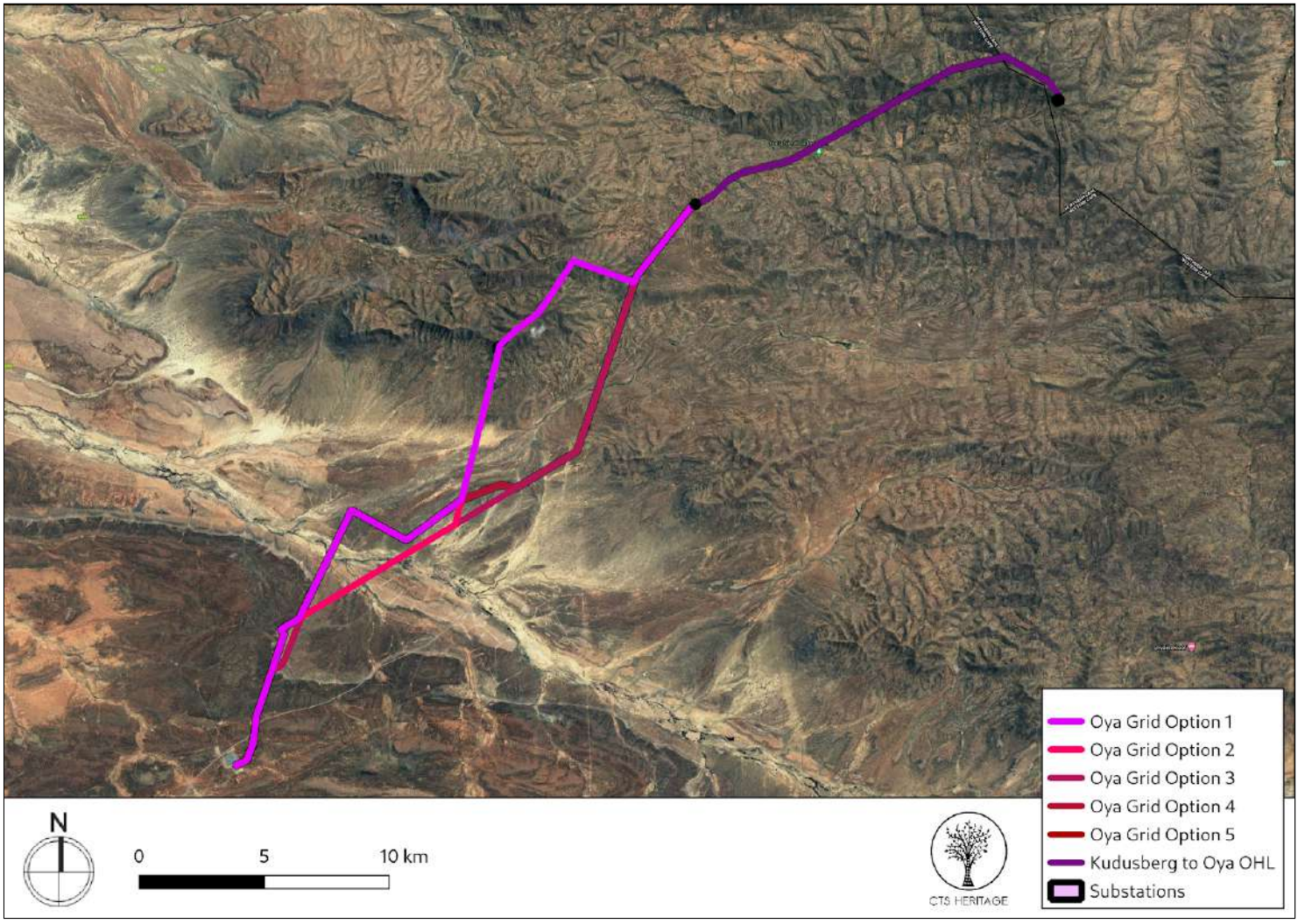

Figure 1.2: Area proposed for development

2. METHODOLOGY

2.1 Purpose of Archaeological Study

The purpose of this archaeological study is to satisfy the requirements of section 38(8), and therefore section 38(3) of the National Heritage Resources Act (Act 25 of 1999) in terms of impacts to archaeological resources.

2.2 Summary of steps followed

- An archaeologist conducted a survey of the site and its environs on the 22 October 2020 to determine what archaeological resources are likely to be impacted by the proposed development.
- The area proposed for development was assessed on foot and by 4x4 vehicle, photographs of the context and finds were taken, and tracks were recorded (at 20m intervals) using a GPS.
- The identified resources were assessed to evaluate their heritage significance in terms of the grading system outlined in section 3 of the NHRA (Act 25 of 1999).
- Alternatives and mitigation options were discussed with the Environmental Assessment Practitioner.

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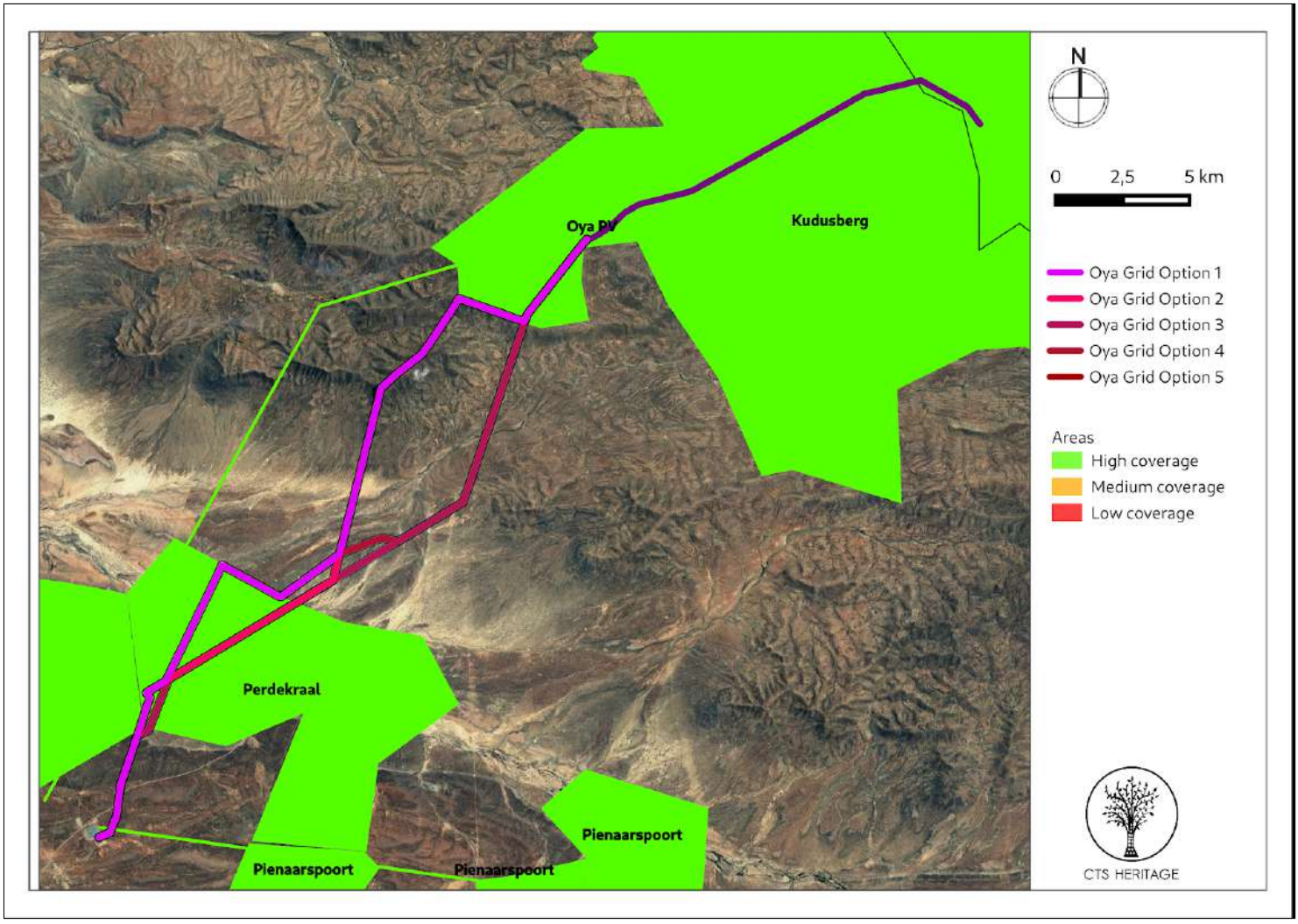

Figure 2: Close up satellite image indicating proposed location of development in relation to heritage studies previously conducted

2.3 Constraints & Limitations

A portion of the area proposed for development was not easily accessible, due to restricted road access. As a result, the entirety of the proposed development area was not able to be surveyed but sampling was implemented and approximately 25km of the area was surveyed by foot.

The experience of the archaeologist, and observations made during the study as well as previous studies, allow us to predict with some accuracy the archaeological sensitivity of the receiving environment.

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3. HISTORY AND EVOLUTION OF THE SITE AND CONTEXT

Heritage Impact Assessments have been completed that overlap or are within 20km of the area proposed for development and are recorded on SAHRIS, the South African Heritage Resources Information System, or have been sourced for this desktop screening assessment. It is noted that wherever an assessment has been completed, heritage resources of significance have been identified. According to Deacon (2008, SAHRIS ID 4843), this area "is well known for its rock art. However this is restricted to the kloofs and higher lying areas. There is the possibility that stone artefacts of different ages may occur in well-watered lowlands and valley margins." In addition, according to Pinto and Smuts (2011, SAHRIS ID 375379), "Agriculture since colonial times has been, to a large extent, marginal and has had a low impact on the archaeological evidence for these early communities. Prehistoric sites in the area, consisting predominantly of surface and sub-surface stone artefact scatters in the open landscape together with overhangs and recesses in the sandstone hills used as shelters, are likely to be well preserved with little disturbance from later historic periods." According to Smuts et al. (2018, SAHRIS NID 514990), studies completed in the broader area identified surprisingly little pre-colonial or stone age archaeology, and distinct spatial patterning to the little that was found. Almost all archaeological material, predominantly in the form of scatters, has been identified on the flat floodplains up to the foothills of the mountains, and within river valleys along watercourses… The area is known to have been inhabited since the Early Stone Age (ESA) and throughout the Middle Stone Age (MSA). Later Stone Age (LSA) scatters have also been documented throughout the region, although at remarkably low density, although excavations at cave sites near Sutherland yielded significant LSA cultural material" Furthermore, Smuts et al (2018) notes that rock art and archaeological resources associated with the trek boers and historical occupation of the area are known from the region. In addition, it has been noted that there is often a more dense accumulation of archaeological artefactual material along an exposure of the Collingwood Formation (Pc) as this formation provides an excellent raw material source. Part of the proposed OHL lies along this formation (Figure 5b).

In 2016 a Draft HIA (Hart et al.) for the proposed Kolkies and Karee WEFs on neighbouring properties was not completed as the project was cancelled. Hart et al. (2016) note that in terms of impacts to archaeology, sites tend to be found on the banks of river beds. Discrete scatters of Middle Stone Age artefacts are often identified in sheet washed locations at several farms in the area but they are not considered to be of high significance. In general, Hart et al. (2016) found that Late and Early Stone Age Archaeology is sparse. Hart et al. (2016) also found that the built environment is sparse. Hart et al. (2016) note that previous heritage work has shown there are numerous stone cairns along the dry river beds which may represent graves. Similarly, in the archaeological assessment completed for the Oya Energy facility by Fourie (2020), burial grounds and graves, some old farmsteads and kraals. Lavin and Wiltshire (2020) identified diffuse scatters of Middle and Later Stone Age artefacts in the neighbouring Pienaarspoort REF area.

As such, it is likely that the proposed OHL and substations development will impact on significant archaeological and other heritage resources and as such, an assessment that identifies this impact is recommended. However, much of the OHL alternative alignments have been covered by existing completed heritage assessments (Figure 2). As such, only the portions of the alternatives that have not yet been assessed are surveyed for impacts to archaeological heritage in this report.

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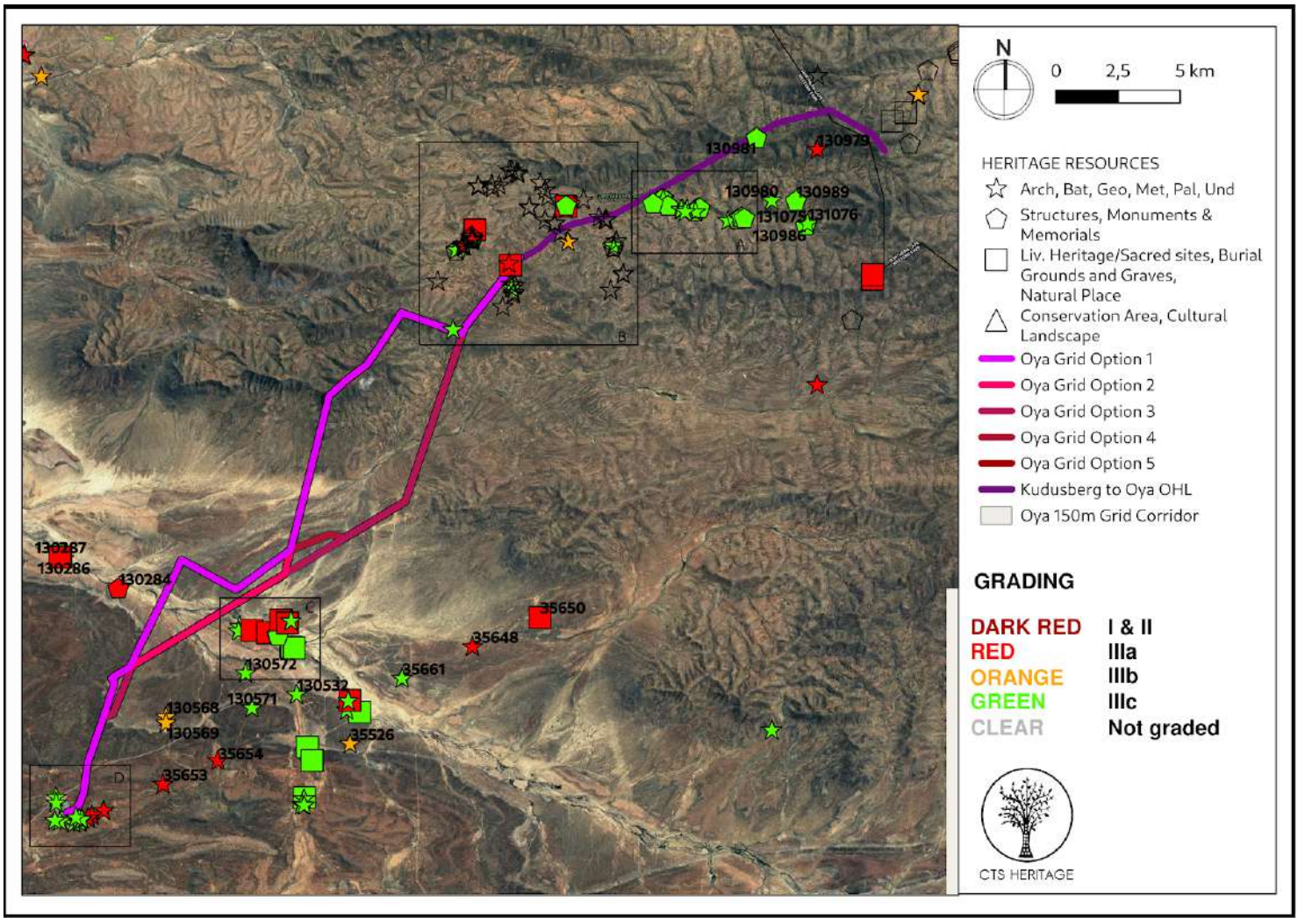

Figure 3. Heritage Resources Map. Heritage Resources previously identified in and near the study area, with SAHRIS Site IDs indicated

A number of known archaeological heritage resources fall within the 300m buffer area proposed for the Oya OHL and substations development according to SAHRIS (Figure 3a and 3b). These are SAHRIS Site ID 130730, 130734, 130768 and 130981, as well as an archaeological site with SAHRIS ID 131154 along the river course. Site 130730 is graded IIIA and is described by Fourie (2020) as "Three grave features including a medium-density scatter of MSA and LSA stone tools… The site is located on the eastern bank of a river and has evidence of flooding. Three possible stone grave features were identified. The first grave (OYPV-10a) consists of packed stones in a semi-rectangular shape. The second grave (OYPV- 10b) has two sharp rectangular stones placed in one corner, most likely forming part of a grave marker that has been washed away or covered by sand from the river. The third grave feature (OYPV-10c) contains two stones placed on the eastern and western end, marking the feature as a grave. A medium-density scatter of MSA and LSA tools were found around the site. The stone tools mostly consist of cores, flakes, blades and chunks, and formal tools such as scrapers. The tools were made from chert, shale, and hornfels. Burial grounds and graves are protected under Section 36 of the NHRA 25 of 1999. Thus, the site is provisionally rated as having a high heritage significance with a heritage rating of IIIA. All graves have high levels of emotional, religious and in some cases historical significance. It is also important to understand that the identified graves could have significant heritage value to the relevant families."

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Site 130981 is a structure that is graded IIIC and is described as “Circular cobble-built structure, piled stone, likely hut or shelter”. The remaining sites are all archaeological observations that are considered to be not conservation-worthy (130734 and 131154).

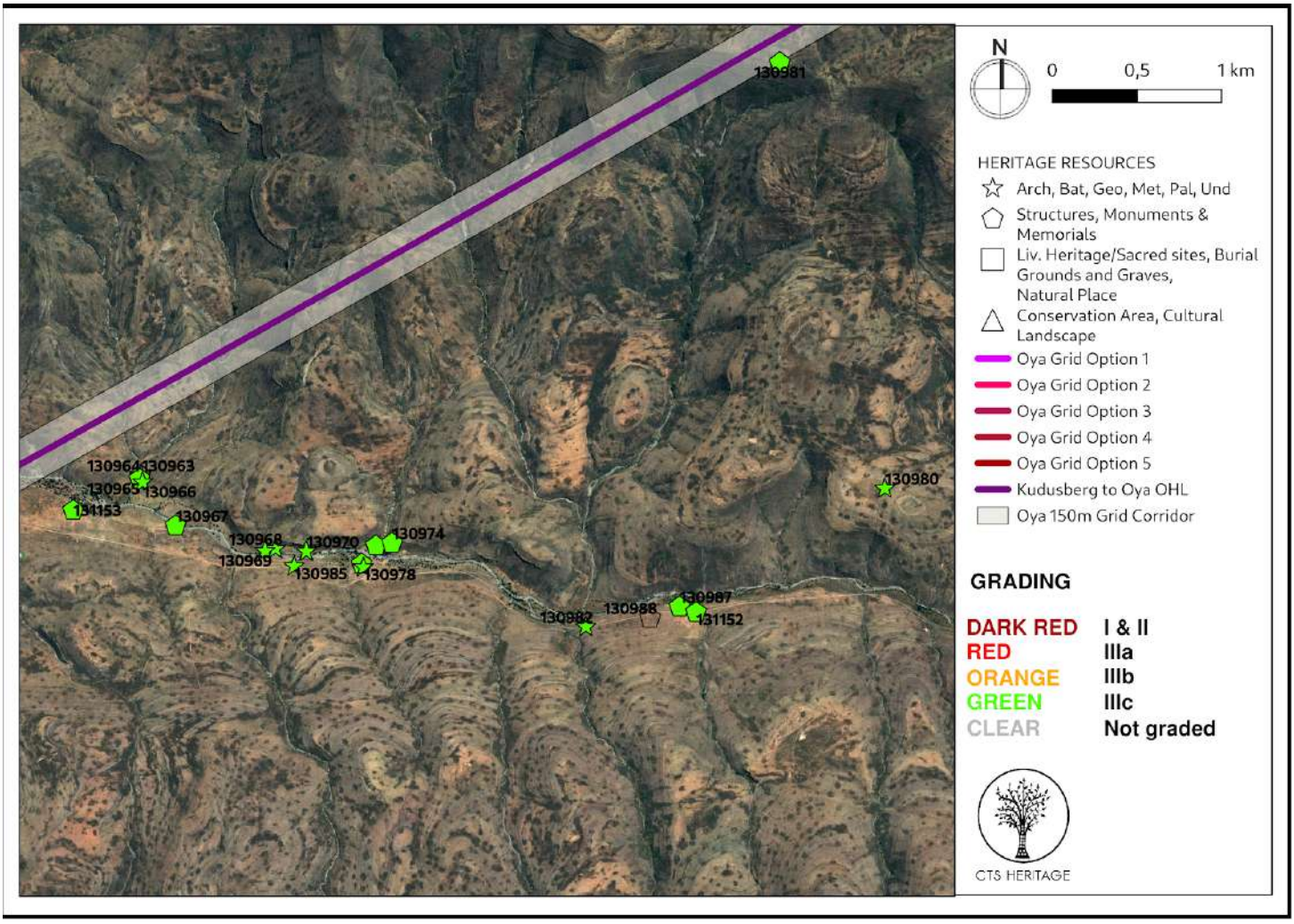

Figure 3a. Indicating known heritage resources relative to the proposed layout

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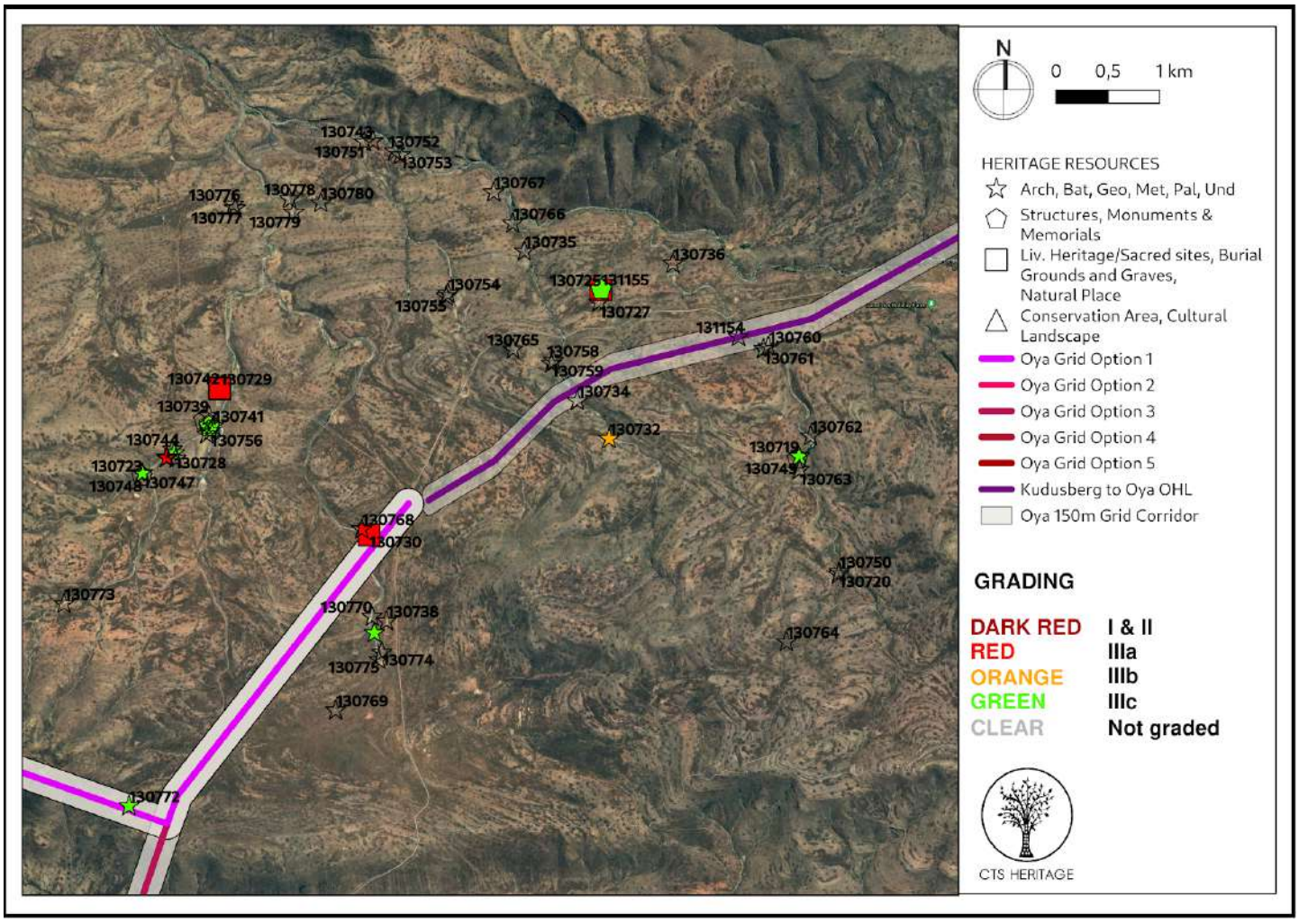

Figure 3b. Indicating known heritage resources relative to the proposed layout

4. IDENTIFICATION OF HERITAGE RESOURCES

4.1 Field Assessment

An archaeologist conducted a survey of the site and its environs on the 22 October 2020 to determine what archaeological resources are likely to be impacted by the proposed development. A portion of the area proposed for development was not easily accessible, due to restricted road access. As a result, the entirety of the proposed development area was not able to be surveyed. Only the portions of the alternatives that have not yet been assessed are surveyed for impacts to archaeological heritage in this report.

Power Line Corridor Alternative is the preferred development option for the section of the proposed overhead power line which connects the Oya substation to the Kappa substation (i.e. Oya to Kappa) and as such, this alignment, as well as the Kudusberg Oya OHL, was the primary focus of the field assessment. Sampling was implemented and approximately 25km of the area was surveyed by foot.

The findings of the survey were dominated by a diffuse scatter of low-density Middle Stone Age (MSA) artefacts spread across the broader landscape. The MSA lithics identified were predominantly made out of silcrete, chert, hornfels and

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quartzite. The field assessment methodology provides an adequate sample of the kinds of archaeological resources that are to be found along the flatter plains of the Karoo. Overall, the survey has provided a very good account of the range of archaeological material that is present in the area and is entirely consistent with the previous studies for the wind and solar farms that are proposed or already constructed.

Figure 4.1: Contextual Image of development area

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Figure 4.2: Contextual Image of development area

Figure 4.3: Contextual Image of development area

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Figure 4.4: Contextual Images of Development Area

Figure 4.5: Contextual Images of Development Area

Figure 4.6: Contextual Images of Development Area

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Figure 4.8: Contextual Images of Landscape

Figure 4.9: Contextual Images of Development Area

Figure 4.10: Contextual Images of Landscape - existing infrastructure in the landscape

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Figure 4.11: Contextual Images - existing infrastructure in the landscape

Figure 4.12: Contextual Images - existing infrastructure in the landscape

Figure 4.13: Contextual Images - existing infrastructure in the landscape

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Figure 4.14: Contextual Images - existing infrastructure in the landscape

Figure 4.15: Contextual Images - existing infrastructure in the landscape

Figure 4.16: Contextual Images

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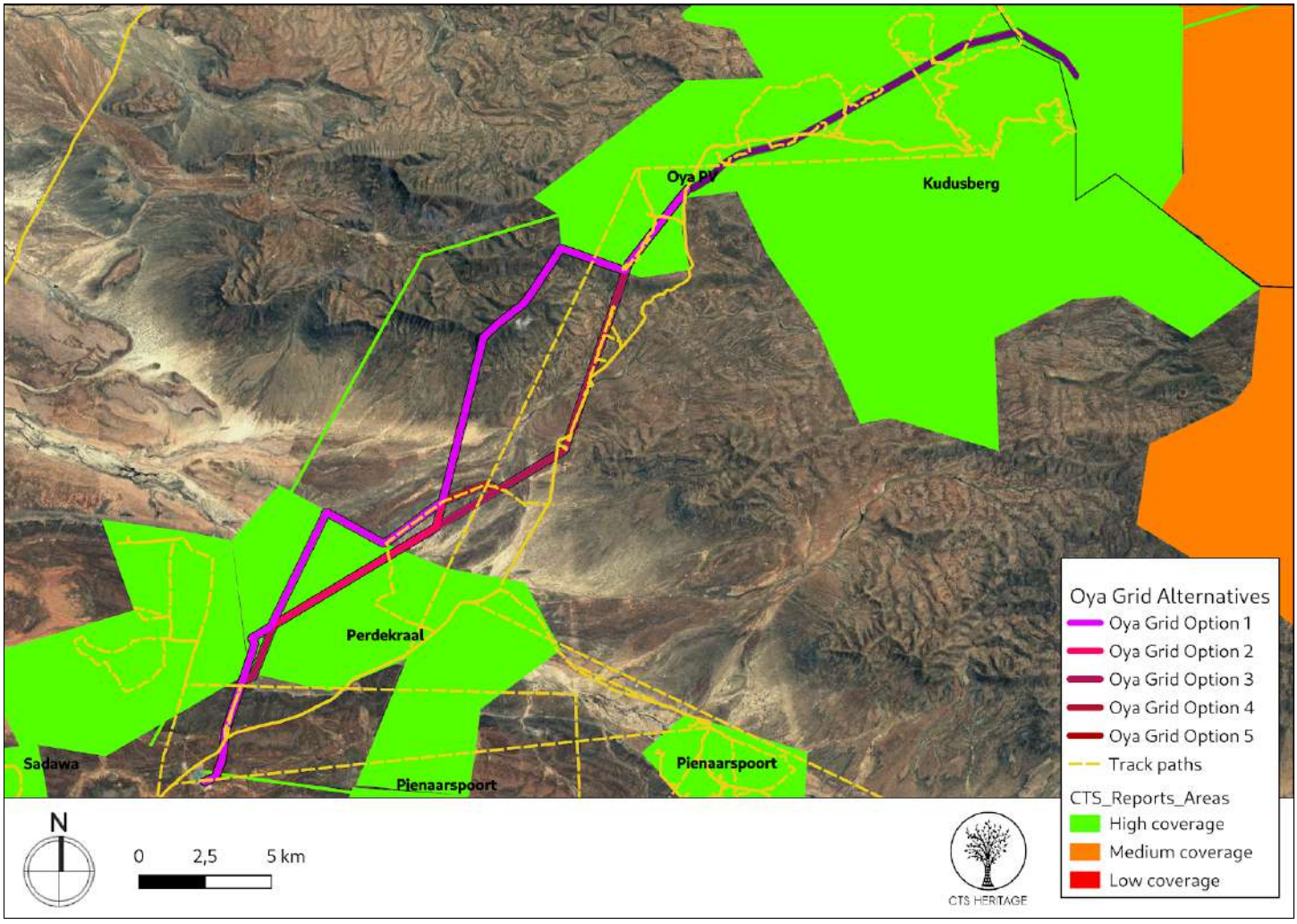

Figure 5: Overall track paths of foot survey overlaid with the areas previously in already approved HIAs

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4.2 Archaeological Resources identified

The most southerly portion of the survey area (**OYA1-OYA19**) is characterised by flat lying topography with occasional slopes. There is varied shrub cover growing over sandy red soils with scattered sandstone, greywacke boulders and occasional rocky ridges cut by ephemeral streams and sheetwash action. Bioturbation is evident throughout. The distribution of the archaeological finds can be described as a background scatter resulting from the action of surface deflation and ephemeral streams. The highest concentration of finds (**OYA11-OYA16**) was located within an area cut by numerous ephemeral streams and sheet wash activity, therefore were most likely not in their original context. For example, **OYA17** which represents 9 silcrete flakes, was located within an ephemeral stream. Archaeological findings **OYA4**-**OYA10** and **OYA19** were located on a slope cut by ephemeral streams, while **OYA1-OYA3** occurred on residual soils.

The findings **OYA20-OYA30** occurred in an area where the topography was generally flat and covered by sparse vegetation and traversed by jeep tracks. The isolated archaeological finds were likely out of context due to the impact of the well-used jeep tracks.

The isolated archaeological resources **OYA31-OYA39** occurred at the base and along a steep slope comprising red soils with scree slope material of greywacke and quartzite rock fragments. The area was cut by several large ephemeral streams and the vegetation was moderate to sparsely developed.

Table 2: Archaeological observations noted during the field assessment

Site No.	Site Name	Description	Co-ordinates		Grading	Mitigation
OY1	**Oya OHL_1**	Hornfels flake, MSA	-33,09289	20,01967	NCW	None required
OY2	**Oya OHL_2**	3 Chert flake, MSA	-33,09225	20,01967	NCW	None required
OY3	**Oya OHL_3**	2 Hornfels flakes, MSA	-33,09182	20,01962	NCW	None required
OY4	**Oya OHL_4**	2 Hornfels flakes and 1 chert flake, MSA	-33,09000	20,01976	NCW	None required
OY5	**Oya OHL_5**	3 Hornfels flakes and 2 Chert flakes, MSA	-33,08886	20,02025	NCW	None required
OY6	**Oya OHL_6**	5 Hornfels flakes, MSA	-33,08802	20,02066	NCW	None required
OY7	**Oya OHL_7**	Hornfels flake and patinated silcrete flake, MSA	-33,08728	20,02093	NCW	None required
OY8	**Oya OHL_8**	Possible handaxe and 2 hornfels flakes	-33,08627	20,02140	NCW	None required
OY9	**Oya OHL_9**	2 chert flakes, upper grindstone and 2 silicified shale flakes	-33,08415	20,02244	NCW	None required
OY10	**Oya OHL_10**	Weathered silicified shale	-33,08191	20,02330	NCW	None required

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OY11	**Oya OHL_11**	Hornfels and silcrete flakes, MSA	-33,07911	20,02463	NCW	None required
OY12	**Oya OHL_12**	4 Silcrete flakes, MSA	-33,07793	20,02531	NCW	None required
OY13	**Oya OHL_13**	1 hornfels flake and 3 Silcrete flakes, MSA	-33,07740	20,02562	NCW	None required
OY14	**Oya OHL_14**	6 Silcrete flakes, MSA	-33,07649	20,02571	NCW	None required
OY15	**Oya OHL_15**	Silcrete flake, MSA	-33,07592	20,02598	NCW	None required
OY16	**Oya OHL_16**	4 Silcrete flakes, MSA	-33,07565	20,02615	NCW	None required
OY17	**Oya OHL_17**	9 Silcrete flakes, MSA	-33,07686	20,02558	NCW	None required
OY18	**Oya OHL_18**	Silcrete LSA flake?	-33,07856	20,02481	NCW	None required
OY19	**Oya OHL_19**	Hornfels flake, MSA	-33,08073	20,02390	NCW	None required
OY20	**Oya OHL_20**	Chert flake	-33,02648	20,08604	NCW	None required
OY21	**Oya OHL_21**	Chert flake, MSA	-33,02610	20,08660	NCW	None required
OY22	**Oya OHL_22**	Chert flake, MSA	-33,02586	20,08704	NCW	None required
OY23	**Oya OHL_23**	2 chert flakes, MSA	-33,02533	20,08787	NCW	None required
OY24	**Oya OHL_24**	Hornfels flake, MSA	-33,02481	20,08868	NCW	None required
OY25	**Oya OHL_25**	Quartzite flake, MSA	-33,02342	20,09091	NCW	None required
OY26	**Oya OHL_26**	Chert flake, MSA	-33,02198	20,09331	NCW	None required
OY27	**Oya OHL_27**	Chert flake, MSA	-33,02074	20,09533	NCW	None required
OY28	**Oya OHL_28**	Quartzite flake, MSA	-33,02055	20,09564	NCW	None required
OY29	**Oya OHL_29**	Chert flake, MSA	-33,01526	20,10425	NCW	None required
OY30	**Oya OHL_30**	Chert flake, MSA	-33,01302	20,10800	NCW	None required
OY31	**Oya OHL_31**	Chert flake, MSA	-32,99546	20,15786	NCW	None required
OY32	**Oya OHL_32**	Pieces of fossil wood	-32,99533	20,15791	NCW	None required
OY33	**Oya OHL_33**	Ceramic sherd	-32,99171	20,15925	NCW	None required
OY34	**Oya OHL_34**	Piece of fossil wood	-32,99107	20,15950	NCW	None required
OY35	**Oya OHL_35**	Chert flake, MSA	-32,97612	20,16534	NCW	None required
OY36	**Oya OHL_36**	Pieces of ostrich egg shell	-32,97608	20,16535	NCW	None required
OY37	**Oya OHL_37**	Ceramic sherd	-32,97281	20,16700	NCW	None required
OY38	**Oya OHL_38**	Silcrete flake, MSA	-32,95695	20,17280	NCW	None required

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OY39	**Oya OHL_39**	Chert flake, MSA	-32,96062	20,17138	NCW	None required
KB21	**Kudusberg WEF_21**	Chert adze, single piece no other artefacts evident	-32.8413	20.33519	NCW	None required
KB24	**Kudusberg WEF_24**	Chert core, Only minor flaking around edges	-32.89265	20.24085	NCW	None required

4.3 Selected photographic record

(a full photographic record is available upon request)

Figure 6.1: Observations OY2 (left and middle) and OY03 (right)

Figure 6.2: OY5 (left) and OY8 (middle and right)

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Figure 6.3: OY9 and OY11

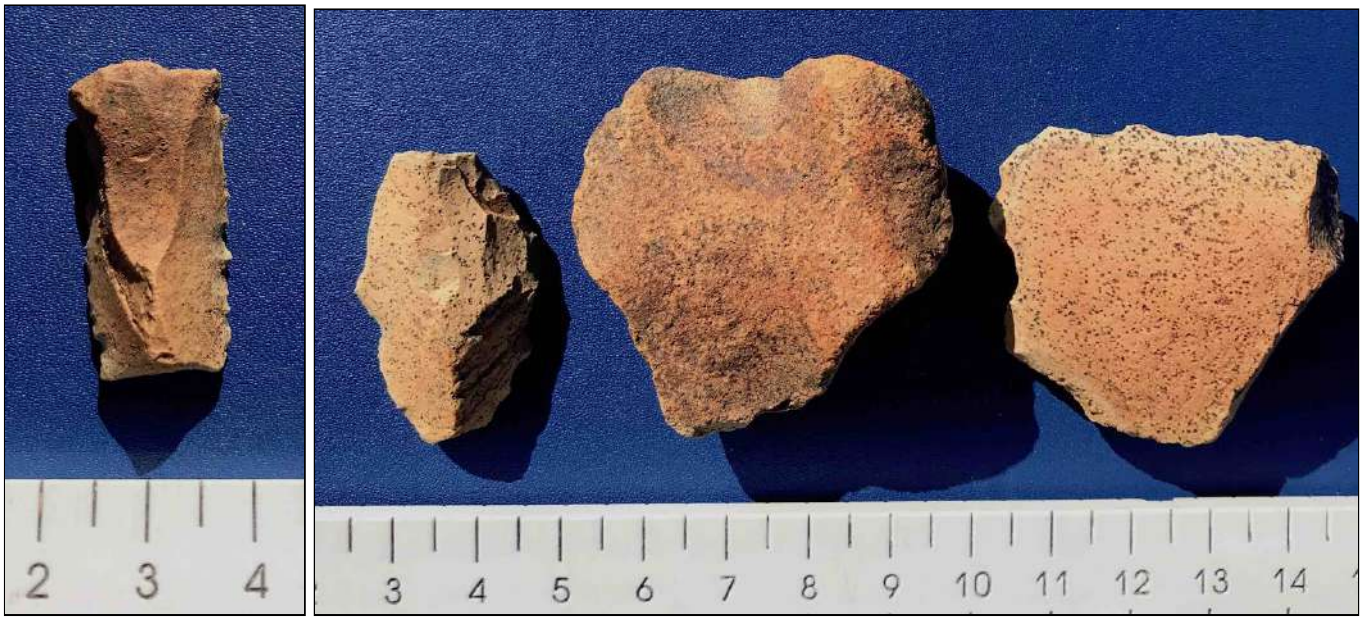

Figure 6.4: OY15 and OY16

Figure 6.5 OY13, OY18, OY20 and OY21

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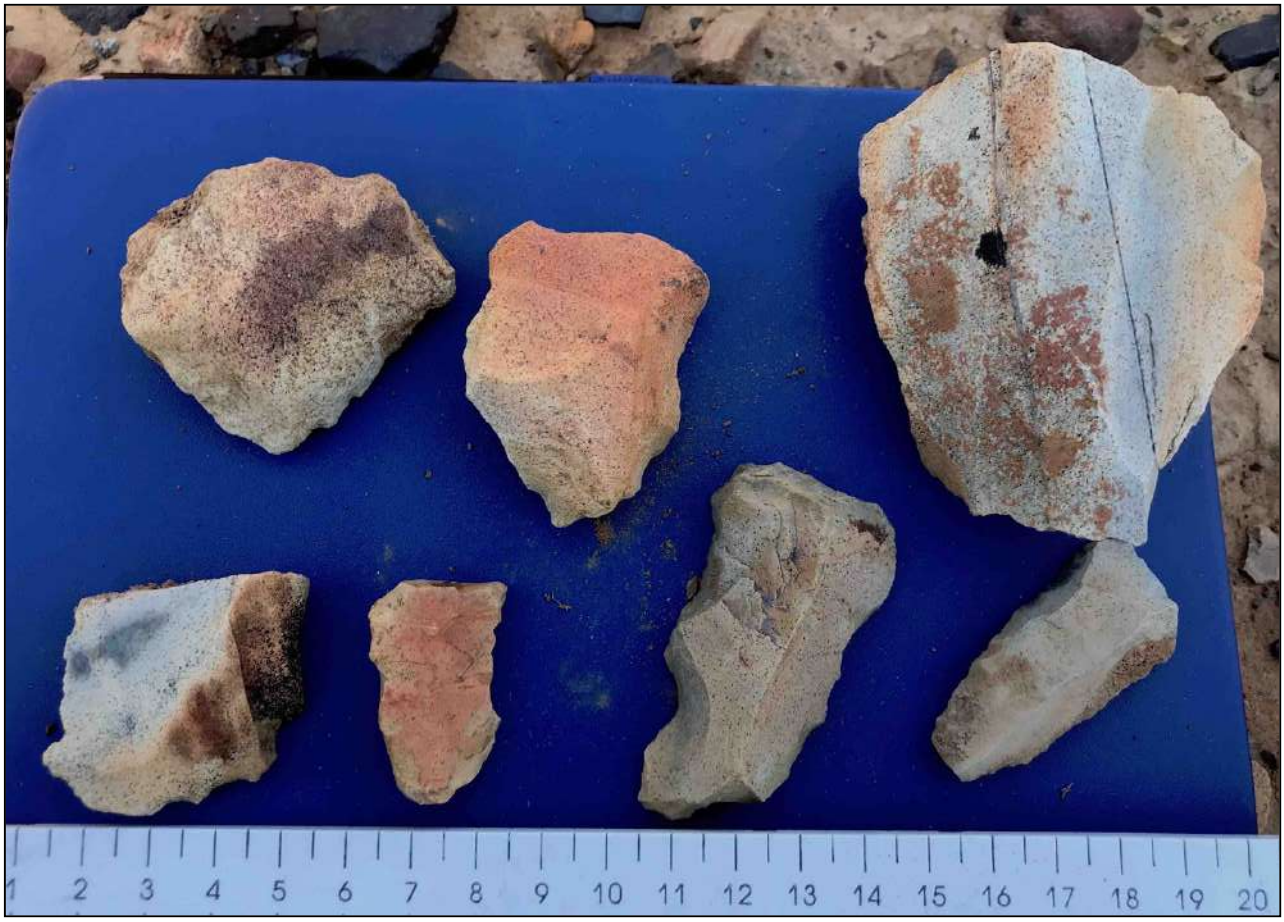

Figure 6.6 OY17

Figure 6.7 OY25, OY27 and OY30

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Figure 6.8 OY32

Figure 6.9 OY33, OY36 and OY37

Figure 6.10 OY38, OY39 and KB24

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5. ASSESSMENT OF THE IMPACT OF THE DEVELOPMENT

5.1 Assessment of impact to Archaeological Resources

Based on the assessment completed, the area proposed for development has an overall low archaeological sensitivity. It is unlikely that the proposed development of the 132kV overhead power line and substations will negatively impact on significant archaeological heritage as the footprint of the power line and substation infrastructure is limited.

Despite the abundance of diffusely scattered archaeological material, no intact and cohesive sites were found that have not been significantly altered through erosion and deflation in the exposed plains covering much of this route.

The survey has provided a very good account of the range of archaeological material that is present in the area and is entirely consistent with the previous studies for the wind and solar farms that are proposed or already constructed.

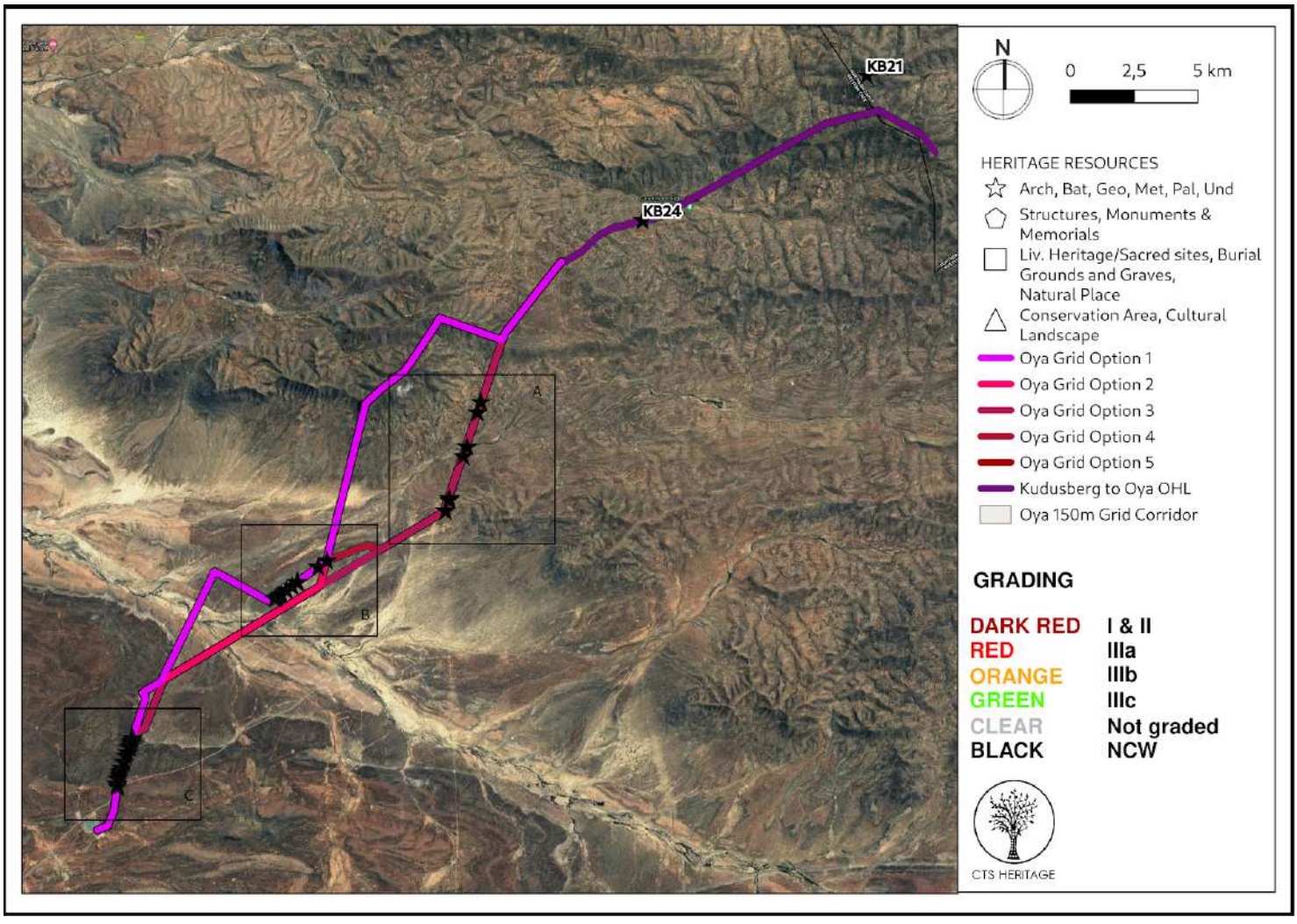

Figure 7: Map of heritage resources identified during the field assessment relative to the proposed development footprint

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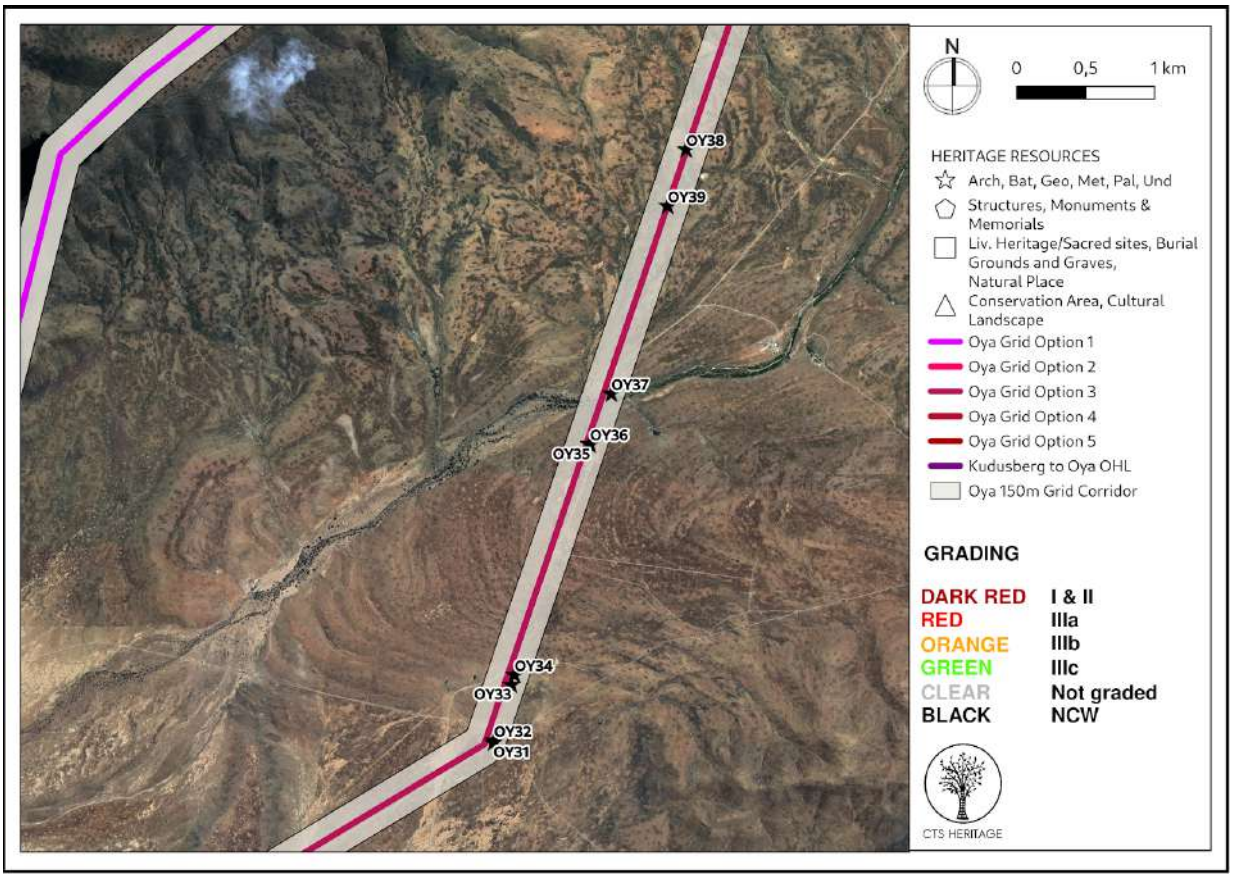

Figure 7.1: Inset A

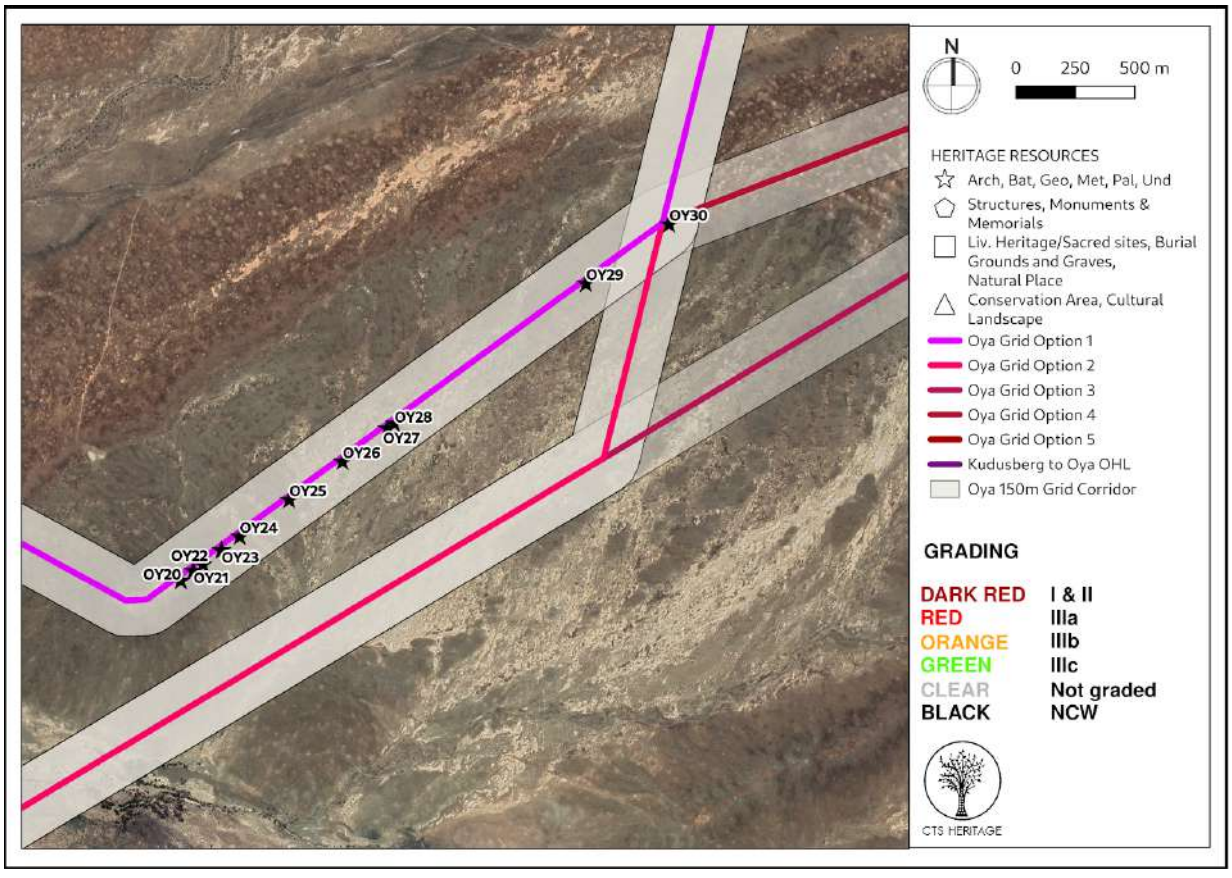

Figure 7.2: Inset B

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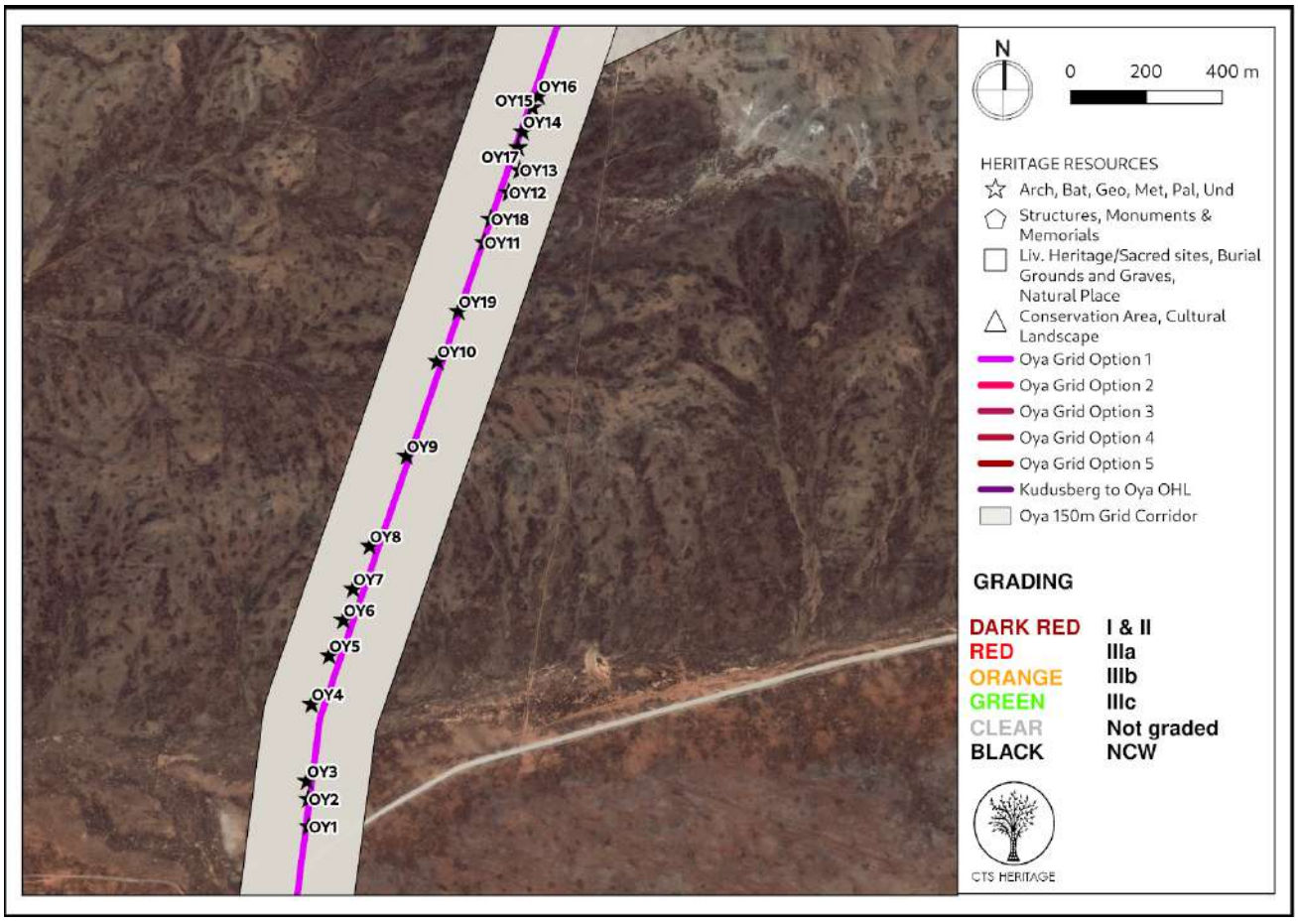

Figure 7.3: Inset C

6. CONCLUSION AND RECOMMENDATIONS

Based on the assessment completed, the area proposed for development has an overall low archaeological sensitivity. It is unlikely that the proposed development of the 132kV overhead power line and substations will negatively impact on significant archaeological heritage as the footprint of the power line and substation infrastructure is limited.

Despite the abundance of diffusely scattered archaeological material, no intact and cohesive sites were found that have not been significantly altered through surface deflation and erosion in the exposed plains covering much of this route. No mitigation is required prior to construction. Alternative 4 is preferred by the developer, and in light of the above information, also in terms of impacts to archaeological resources. The proposed development is unlikely to have a negative impact on significant archaeological resources situated within the corridor for the proposed Oya OHL and substations. The proposed layout is acceptable from an archaeological perspective and should be approved as part of the EA on condition that the proposed mitigation measures including buffer areas and no-go areas are implemented.

Should any significant archaeological resources be identified during the course of development, work must cease and HWC must be contacted regarding an appropriate way forward.

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7. REFERENCES

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8181	AIA Phase 1	Jayson Orton	29/09/2009	HERITAGE STATEMENT FOR THE PROPOSED VERLORENVLEI DIVERSION CANAL, CERES MAGISTERIAL DISTRICT, WESTERN CAPE
6644	AIA Phase 1	Jonathan Kaplan	29/09/2009	ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED DEVELOPMENT ERF 660 DE DOORNS, WESTERN CAPE PROVINCE
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329647	HIA Phase 1	Dave Halkett	15/06/2012	HERITAGE IMPACT ASSESSMENT OF THE IMPACTS RESULTING FROM THE RAISING OF THE EXISTING KEEROM DAM, SITUATED BETWEEN MONTAGU AND TOUWS RIVER, WESTERN CAPE
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53187	HIA Phase 1	Timothy Hart, Lita Webley	01/03/2011	HERITAGE IMPACT ASSESSMENT PROPOSED WIND ENERGY FACILITY
337370	PIA Phase 1	Duncan Miller	01/03/2011	Palaeontological Impact Assessment Proposed Roggeveld Wind Energy Facility
356316	Heritage Screener	Mariagrazia Galimberti, Kyla Bluff, Nicholas Wiltshire	02/02/2016	Heritage Screener CTS15_015b EOH Brandvalley Wind Energy Facility
356318	Heritage Screener	Mariagrazia Galimberti, Kyla Bluff, Nicholas Wiltshire	01/02/2016	Heritage Screener CTS15_015a EOH Rietkloof Wind Energy Facility
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