



CTS HERITAGE

HERITAGE SCREENER

CTS Reference Number:	CTS22_101
SAHRIS Reference:	
Client:	Savannah Environmental (Pty) Ltd
Date:	May 2022
Title:	Proposed development of the Harmony PV Facility near Welkom

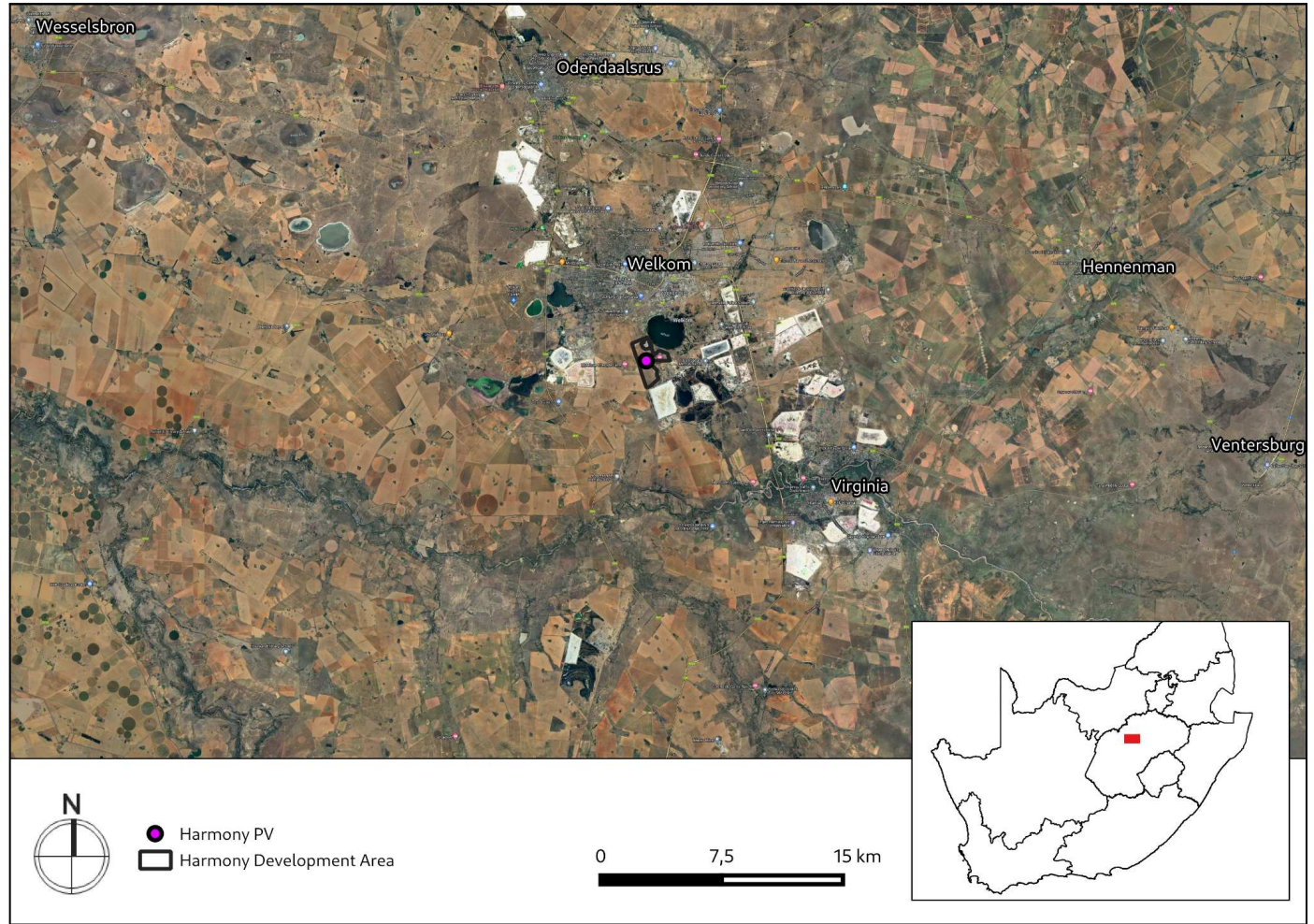


Figure 1a. Satellite map indicating the location of the proposed development in the Free State

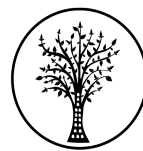
RECOMMENDATION

As it is possible that significant heritage resources will be impacted by the proposed development, it is recommended that a Heritage Impact Assessment is completed that satisfies section 38(3) of the NHRA and assesses likely impacts to archaeological and palaeontological heritage.

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1. Proposed Development Summary

The development of a renewable energy facility, overhead powerline and associated infrastructure is proposed by FREEGOLD HARMONY PTY LTD. The project entails the development of a Photovoltaic (PV) Solar Energy Facility and associated infrastructure with a capacity of up to 30MW over 75ha of land and will be known as Harmony Central Plant Solar PV, the facility will include a grid connection and other associated infrastructure.

H Harmony One Plant Solar PV is based near Harmony 1 Gold Plant operations located in the Town of Welkom and ~14km Northwest of the town of Virginia within the **Matjhabeng** Local Municipality respectively, and within the Lejweleputswa District Municipality, Free State Province.

2. Application References

Name of relevant heritage authority(s)	SAHRA
Name of decision making authority(s)	DFFE

3. Property Information

Latitude / Longitude	28° 1'13.22"S 26°45'10.48"E	
Erf number / Farm number	STUIRMANS PAN 92	RE/90
	STUURMANS PAN 157	RE/157
	MARMAGELI 20	RE/20
	WELKOM 80	RE/80
Local Municipality	Matjhabeng	
District Municipality	Lejweleputswa	
Province	Free State	

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Current Use	Mining
Current Zoning	Agriculture

4. Nature of the Proposed Development

Total Area	75ha
Depth of excavation (m)	<2m
Height of development (m)	Max 20m pylons

5. Category of Development

<input checked="" type="checkbox"/>	Triggers: Section 38(8) of the National Heritage Resources Act
	Triggers: Section 38(1) of the National Heritage Resources Act
<input checked="" type="checkbox"/>	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-
<input checked="" type="checkbox"/>	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 Appendix 3 and 4 for a full description of our methodology and map legends)

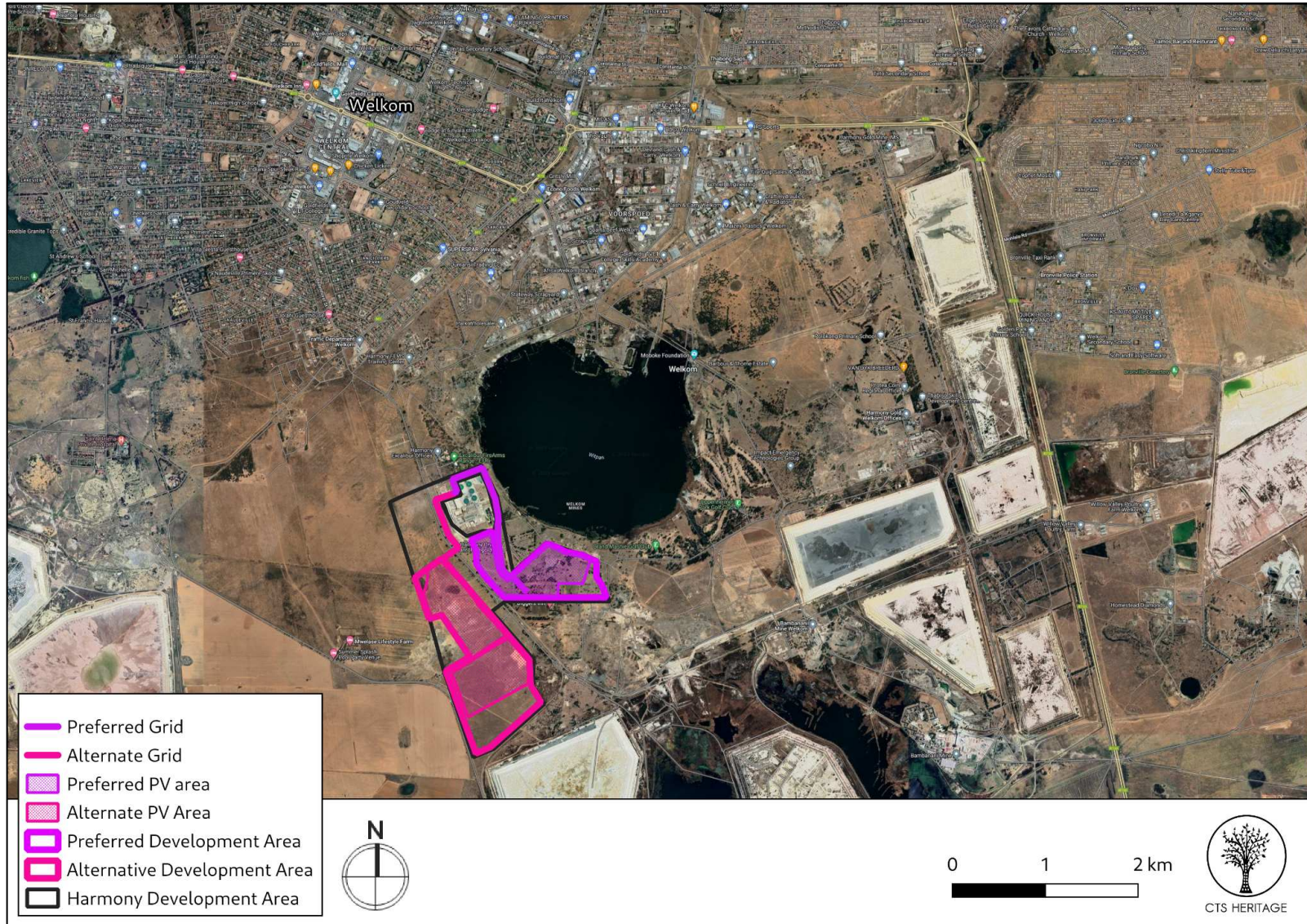


Figure 1b. Overview Map. Satellite image (2022) indicating the proposed development area



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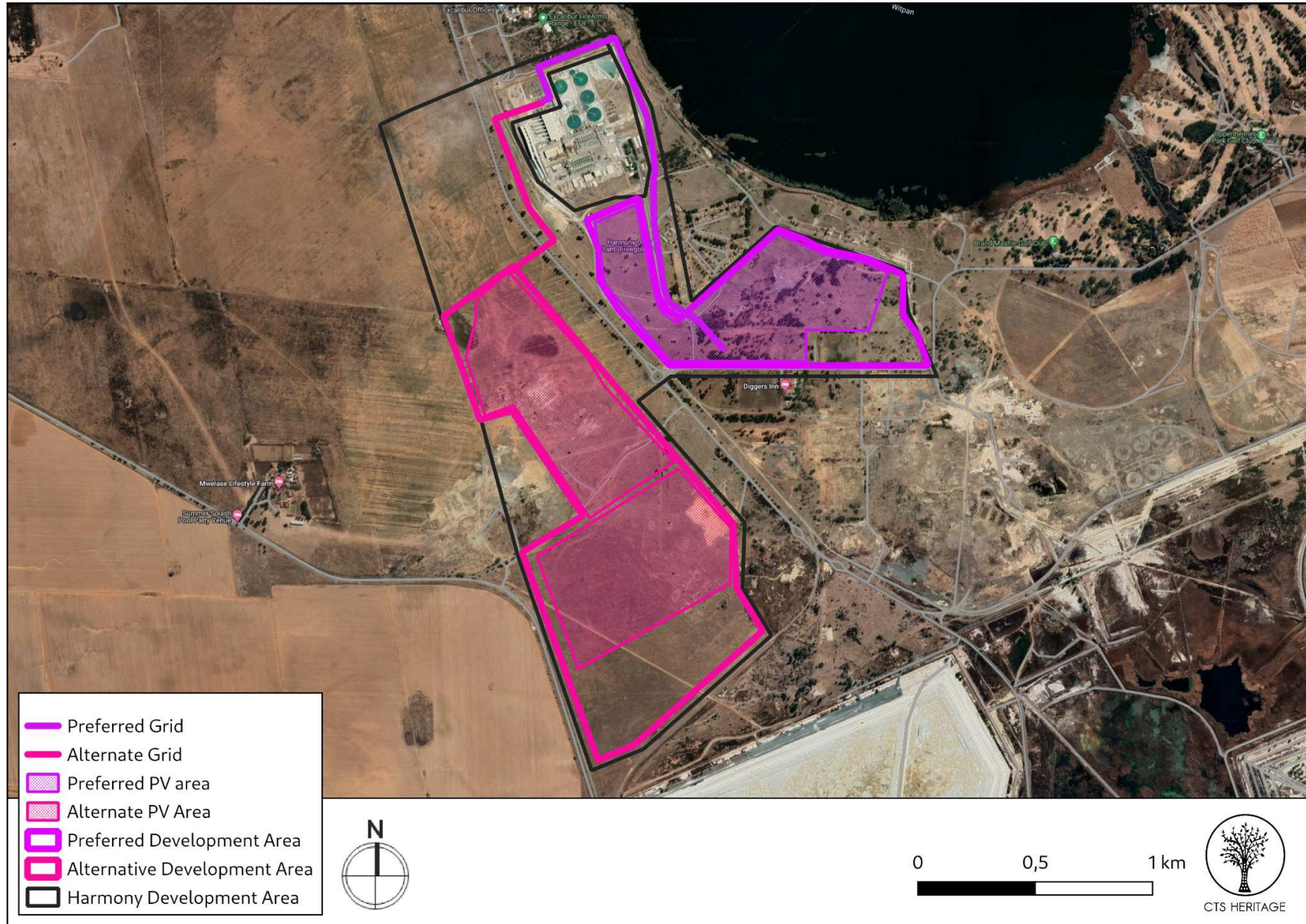


Figure 1c. Overview Map. Satellite image (2022) indicating the proposed development area

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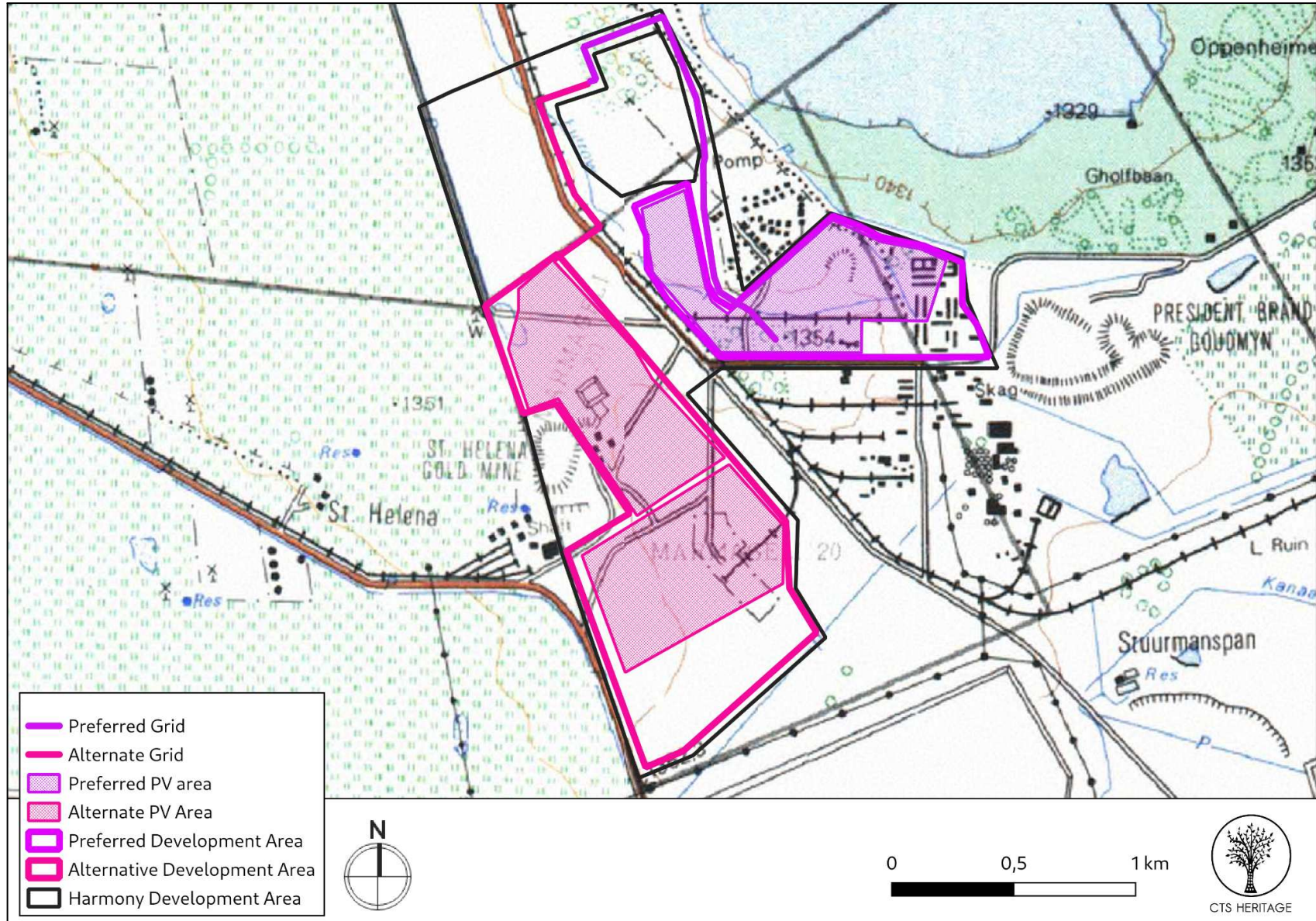


Figure 1d. Overview Map. Extract from 1:50 000 Topo

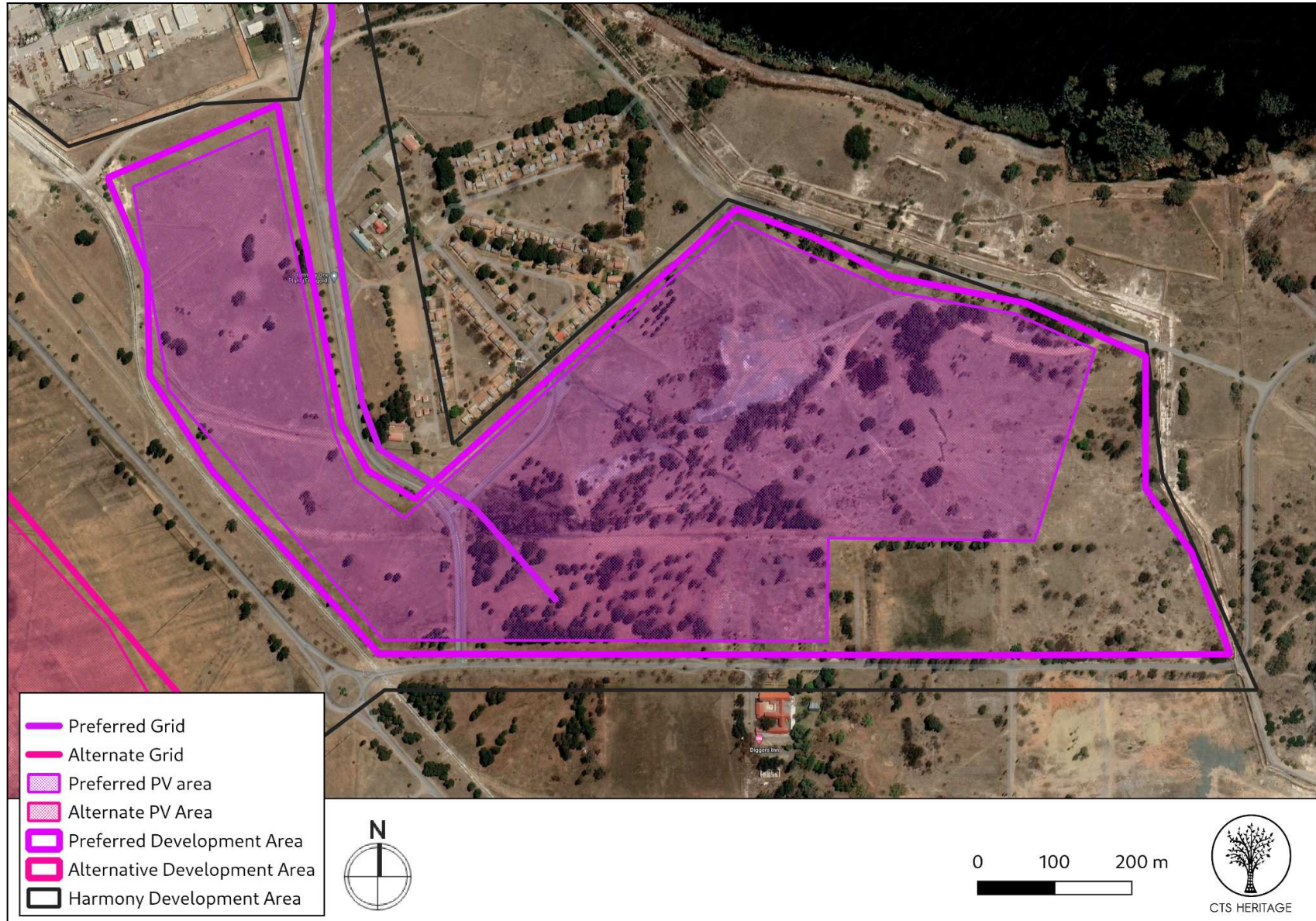
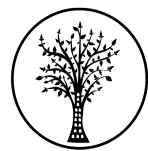


Figure 1e. Overview Map. Preferred



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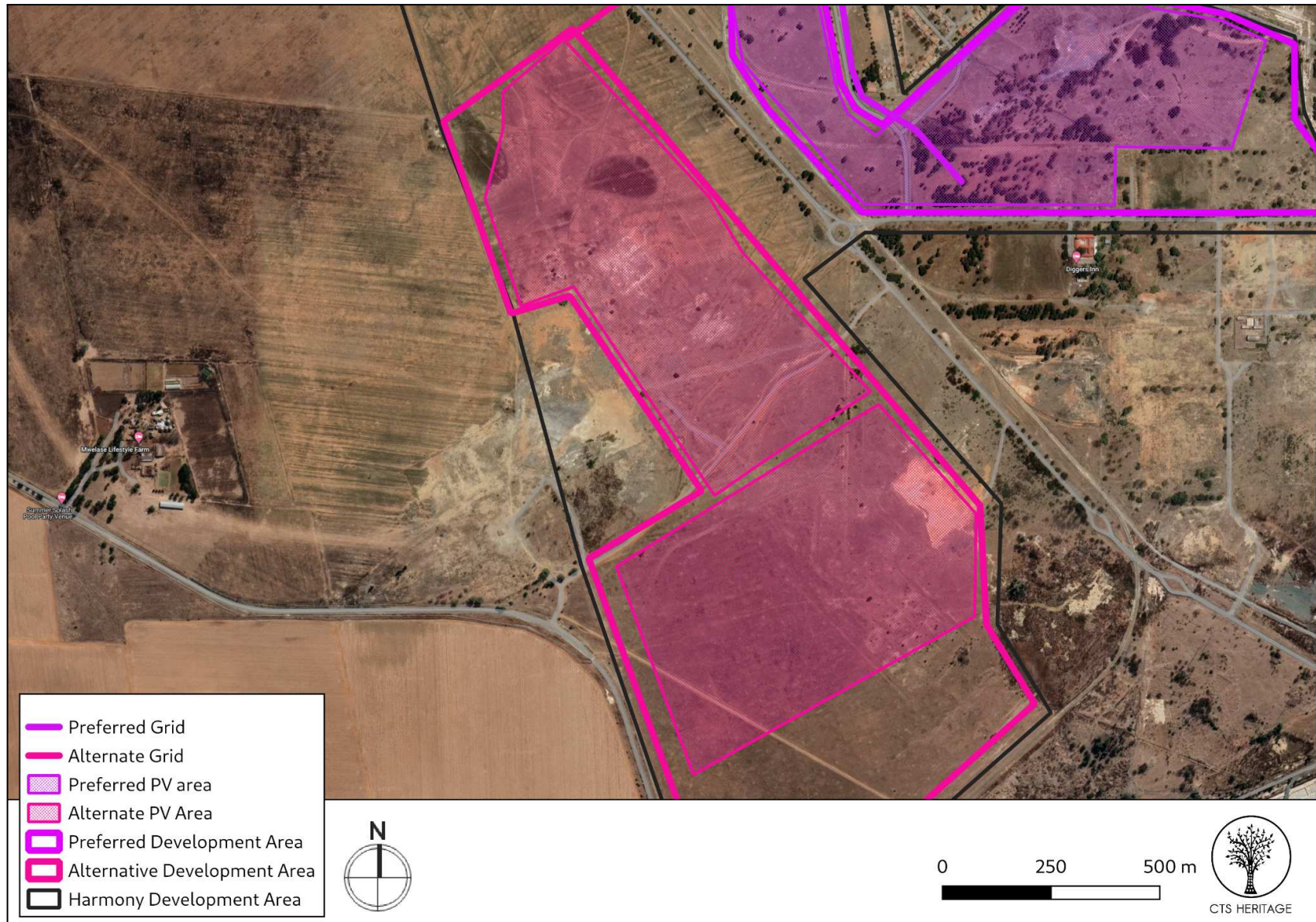


Figure 1f. Overview Map. Alternative

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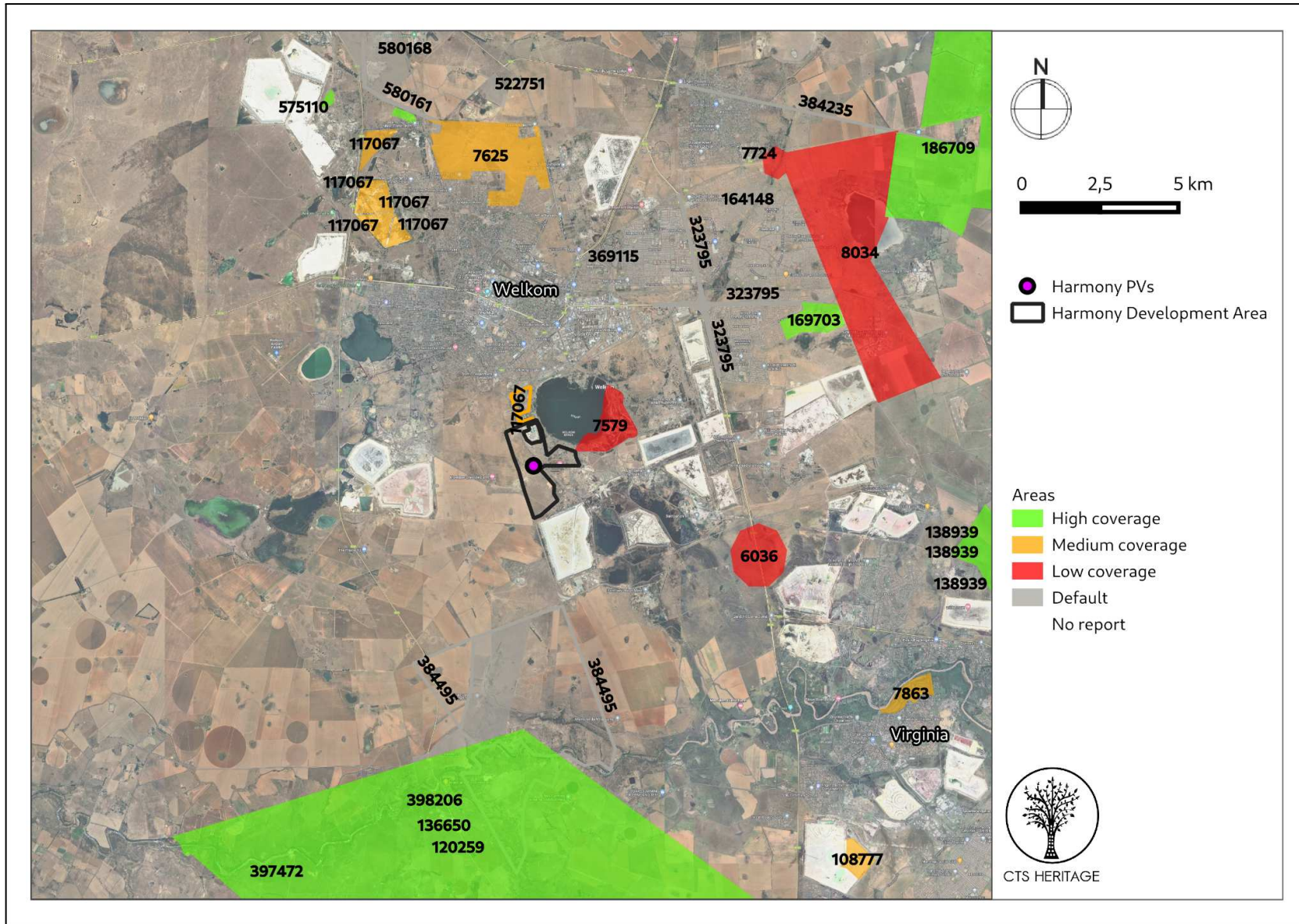


Figure 2. Previous HIAs Map. Previous Heritage Impact Assessments covering the proposed development area with SAHRIS NIDS indicated. Please see Appendix 2 for a full reference list.

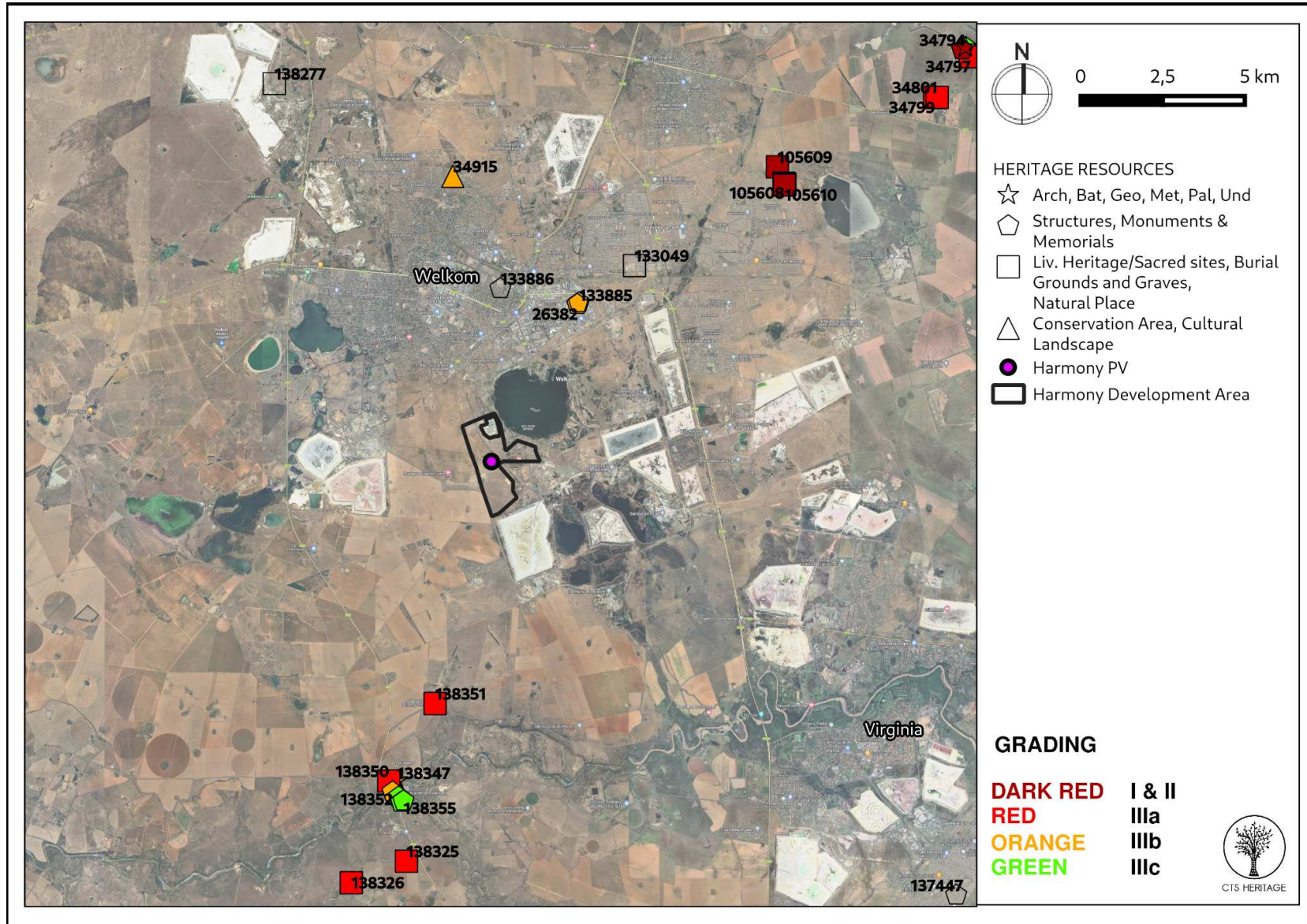
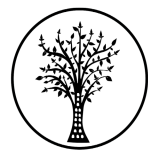


Figure 3. Heritage Resources Map. Heritage Resources previously identified within the study area, with SAHRIS Site IDs indicated in the insets below. Please See Appendix 4 for full description of heritage resource types.



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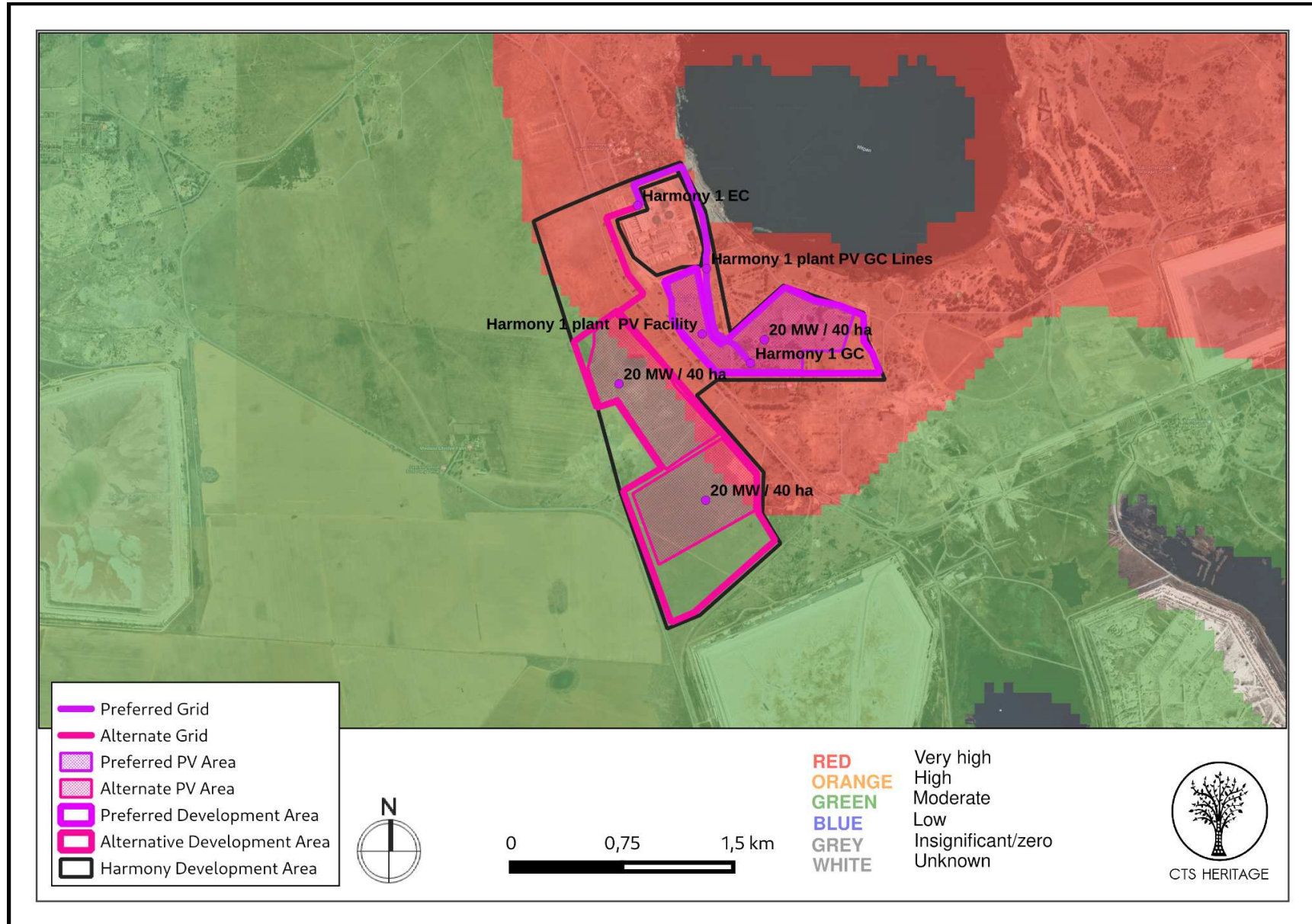


Figure 4a. Palaeosensitivity Map. Indicating fossil sensitivity underlying the study area. Please See Appendix 3 for a full guide to the legend.

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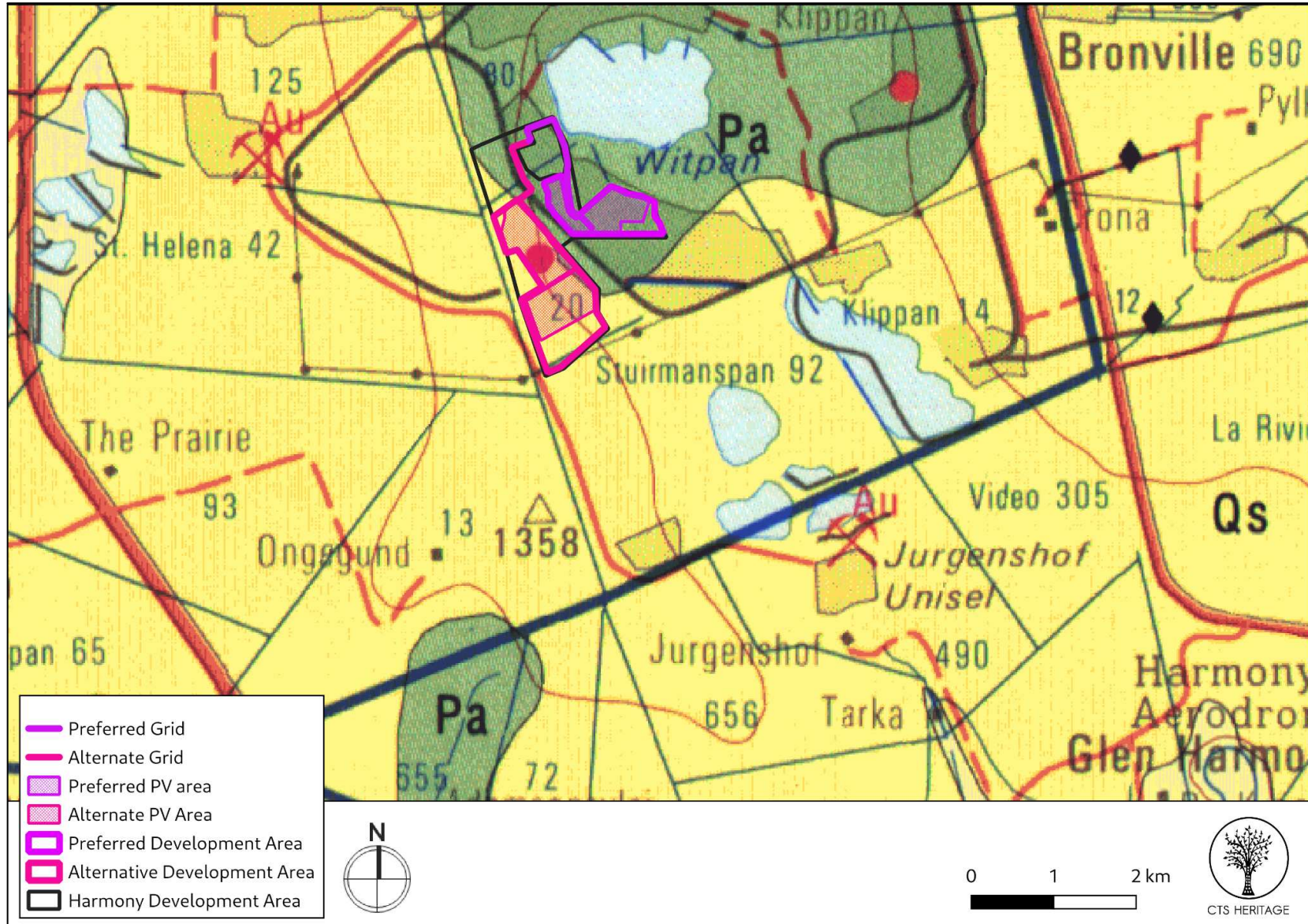


Figure 4b. Geology Map. Extract from the CGS 2826 Winberg Geology Map indicating that the development area is underlain by sediments of the Adelaide Subgroup of the Beaufort Group (Pa) and Quaternary Sands (Qs)



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8. Heritage Assessment

Background

This application is for the proposed development of a PV facility and associated grid infrastructure located within the town of Welkom in the Free State Province. Much of the history of Welkom is centred around the discovery of gold in the northwestern Free State. It was proclaimed a town in 1948, nine years after a major gold discovery was made in Odendaalsrus, just north of Welkom. The proposed development is intended to supply the existing gold mining infrastructure in and near Welkom with electricity. According to Van der Walt (2015), “One of the earliest monuments at Welkom is located at the place where the Voortrekkers established a lookout post on the bank of the Sand River in the 1800s. This was in order to protect the Voortrekkers from Matabele cattle marauders. The establishment of the town was approved in 1946, and it developed very quickly thereafter. The town was named after one of the farms on which it was established. By the 1980s Welkom was a well-developed city. By 1982 13 large gold mines were located in a circumference of 23 kilometres from Welkom. (Niehaber et al. 1982: 71-72)”

The study area falls within the bioregion described by Mucina et al (2006) as the Dry Highveld Grassland Bioregion with the vegetation described as Vaal-Vet Sandy Grassland within a Grassland Biome. Land use in the general area is characterized by mining and agriculture, dominated by crops and cattle farming. The study area is characterised by deep sandy to loamy soils based on the extensive agricultural activities.” According to Fourie (2021), “Existing surrounding land uses associated with the project area include a combination of mining related infrastructure and developments, powerlines, refuse dumps and dirt roads.” As the area proposed for development is located within an existing mining area, it is very unlikely that significant built environment heritage will be impacted by the proposed development. Furthermore, the history of Welkom is intimately linked with the gold mining industry and as such, it is unlikely that the proposed PV development will negatively impact on this unique cultural landscape as it is proposed to support the gold mining industry.

Archaeology

According to Fourie (2021), “The Free State has a rich archaeological and historical history going back millions of years and includes significant aspects such as Later Stone Age rock art, Battlefields and Iron Age stonewalled enclosures. The general surroundings of the study area became a melting pot of contact and conflict as it represents one of many frontiers where San hunter-gatherers, Nguni and Sotho-Tswana agro-pastoralists, Dutch Voortrekkers and British Colonists all came together. The ravages of war also swept across these plains, and in particular the South African War (1899-1902) as well as the Boer Rebellion (1914-1915).” Archaeological sites spanning the Earlier, Middle and Later Stone Age have been found in the region despite the extensive agricultural and mining transformation of the area. No Sites dating to the Early or Middle Iron Age have been recorded or are expected for the study area. The same goes for the Later Iron Age period where the study area is situated outside the western periphery of distribution of Late Iron Age settlements in the Free State. However to the north of the study area, ceramics from the Thabeng facies belonging to the Moloko branch of the Urewe tradition were recorded at Oxf 1 and Platberg 32/71 (Maggs 1976, Mason 1986). Despite the high number of heritage impact assessments completed in the broader area (Figure 2, Appendix 2), no archaeological sites of significance have been identified in close proximity to the proposed development area. This is likely due to the extreme transformation of the area as a result of historic and ongoing gold mining activities.

Based on the known archaeological sensitivity of the broader context, it is unlikely that the proposed development will impact on significant Stone Age or Iron Age archaeological heritage however it is possible that informal or unmarked graves may be present within the development area.

Palaeontology

According to the SAHRIS Palaeosensitivity Map the development sites are underlain by sediments of moderate and Very High fossil sensitivity (Figure 4). The Adelaide Subgroup of the Beaufort Group is the very highly sensitive formation and caenozoic regolith is the moderately sensitive formation underlying the development area according to the extract from the CGS 2826 Winberg Geology Map (Figure 5). According to the updated biostratigraphy (Smith et al., 2020), the whole of the Adelaide Subgroup has been divided into five Assemblage Zones based on the dominant or temporally exclusive vertebrate fossils. If vertebrate fossils were common in this region and had been well mapped then the specific Assemblage Zone would have been indicated in the literature. Common names for the fossils that could occur here are fish, amphibians, reptiles, therapsids, terrestrial and freshwater

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tetrapods, as well as freshwater bivalves, trace fossils including tetrapod trackways and burrows. Where the vertebrates do not occur it is possible to find sparse to rich assemblages of vascular plants of the late Glossopteris Flora, including some petrified logs), and insects are also prevalent at some sites.

A desktop Palaeontological assessment (2013) was completed by Millstead for an adjacent development which is of relevance here. Millstead (2013) notes that “The Cainozoic regolith and the Adelaide Subgroup are both potentially fossiliferous and their stratigraphic equivalents are known to contain scientifically important fossil assemblages elsewhere in South Africa. Accordingly, it may be reasonably expected that significant fossils may be present within the project area.” He goes on to note that “Thus, the historical farming processes have probably destroyed any fossil materials that may have been present at surface in these areas. Similarly, where present the regolith cover would hide any fossils contained within the underlying Adelaide Subgroup from discovery. The potential for a negative impact on the fossil heritage of the area can be quantified in the following manner. Any fossil materials that may have been present at/or near the surface in the cultivated regolith will have been historically destroyed and the likelihood of any negative impact is categorised as negligible. The possibility of a negative impact on the depth interval between the maximum depth of ploughing and the maximum depth of excavations within the regolith is categorised as low (due to the scarcity of fossils in general).”

Since there is a very small chance that fossils from the Adelaide Subgroup below the ground surface may be disturbed, it is recommended that a Fossil Chance Find Protocol be implemented during development.

RECOMMENDATION

As it is possible that significant heritage resources will be impacted by the proposed development, it is recommended that a Heritage Impact Assessment is completed that satisfies section 38(3) of the NHRA and assesses likely impacts to archaeological and palaeontological heritage.

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9. Scoping Assessment Impact Table

Impact

- Impact to archaeological and built environment resources
- Impact to palaeontological resources
- Impact to Cultural Landscape
- Cumulative Impact

Desktop Sensitivity Analysis of the Site

- Impact to significant archaeological resources such as Stone Age artefact scatters, remnants of Iron Age settlements, burial grounds and graves, historical artefacts, historical structures and rock art engravings through destruction during the development phase and disturbance during the operational phase is possible.
- Impacts to palaeontological resources are unlikely.
- There is the potential for the cumulative impact of proposed solar energy facilities to negatively impact the cultural landscape due to a change in the landscape character from rural and mining to semi-industrial, however, due to the density of mining activities in the area, the impact on the experience of the cultural landscape is not foreseen to be significant.

Issue	Nature of Impact	Extent of Impact	No-Go Areas
Impact to significant heritage resources through destruction during the development phase and disturbance during the operational phase.	Destruction of significant heritage resources	Local scale with broader impacts to scientific knowledge	None known at present

Gaps in knowledge & recommendations for further study

The heritage resources in the area proposed for development are not yet sufficiently recorded

Based on the available information, including the scale and nature of the proposed development, it is likely that significant heritage resources will be impacted by the proposed development and as such it is recommended that further heritage studies are required in terms of section 38 of the NHRA with specific focus on impacts to archaeological heritage.

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APPENDIX 1

List of heritage resources within the development area

Site ID	Site no	Full Site Name	Site Type	Grading
26467	9/2/318/0001	Farmhouse, Ferreirasrust, Hennenman District	Building	Grade II
26382	9/2/345/0001	MOTH Club House, 24 12th Street, Voorspoed East, Welkom	Building	Grade IIIb
25720	VRC-01	Virginia Railway Cutting	Palaeontological	Grade IIIb
36272	LEB01	Lebone 01	Structures	Grade IIIc
36273	LEB02	Lebone 02	Cultural Landscape	Grade IIIc
36274	LEB03	Lebone 03	Building	Grade IIIb
36275	LEB04	Lebone 04	Building	Grade IIIc
36276	LEB05	Lebone 05	Transport infrastructure	Grade II
34793	UTK001	UITKYK 001	Building	Grade II
34794	UTK002	UITKYK 002	Structures	Grade IIIc
34795	UTK003	UITKYK 003	Building, Artefacts	Grade IIIb
34915	PHA001	Phakisa 001	Conservation Area	Grade IIIb
34797	UTK004	UITKYK 004	Burial Grounds & Graves	Grade IIIa
34799	UTK005	UITKYK 005	Burial Grounds & Graves	Grade IIIa
34801	UTK006	UITKYK 006	Burial Grounds & Graves	Grade IIIa
127591	TSF-S1	Thabong Solar Farm Site 1	Building	Grade II
127592	TSF-S2	Thabong Solar Farm site 2	Stone walling	Grade IV

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138277	NPV-001	Nyala PV	Burial Grounds & Graves	
105608	Grave of Vuyo Edward Charles	Grave of Vuyo Edward Charles, Thabong Cemetery, Welkom	Burial Grounds & Graves	Grade II
105609	Grave of Albert Ndooyisile Xhamfu	Grave of Albert Ndooyisile Xhamfu, Thabong Cemetery	Burial Grounds & Graves	Grade II
105610	Grave of Samuel Zuka Baloi	Grave of Samuel Zuka Baloi Site	Burial Grounds & Graves	Grade II
138325	TRC1-014	TETRA4 CLUSTER 1	Burial Grounds & Graves	Grade IIIa
138347	TRC1-035	TETRA4 CLUSTER 1	Artefacts	Grade IIIb
138348	TRC1-036	TETRA4 CLUSTER 1	Structures	Grade IIIc
138349	TRC1-037	TETRA4 CLUSTER 1	Archaeological	Grade IIIb
138350	TRC1-038	TETRA4 CLUSTER 1	Burial Grounds & Graves	Grade IIIa
138351	TRC1-039	TETRA4 CLUSTER 1	Burial Grounds & Graves	Grade IIIa
138352	TRC1-040	TETRA4 CLUSTER 1	Bridge	Grade IIIb
138353	TRC1-041	TETRA4 CLUSTER 1	Building	Grade IIIc
138354	TRC1-042	TETRA4 CLUSTER 1	Building	Grade IIIc
138355	TRC1-043	TETRA4 CLUSTER 1	Building	Grade IIIc
133049	Thabong Electrical Infrastructure	Erven 30671 & 8172 Thabong	Place	
105605	Grave of Itumeleng Caswell Mokobo	Grave of Itumeleng Caswell Mokobo	Burial Grounds & Graves	Grade II
137631	Ferreirasrust Farm	Ferreirasrust Farm	Monuments & Memorials	
133885	DC18/NAMM/0008	War Memorial, MOTH Shellhole, Welkom	Monuments & Memorials	
133886	DC18/NAMM/0013	War Memorial, Jan Hofmeyer RD, Welkom	Monuments & Memorials	

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APPENDIX 2

Reference List with relevant AIAs and PIAs

Heritage Impact Assessments				
Nid	Report Type	Author/s	Date	Title
6036	AIA Phase 1	Cobus Dreyer	15/09/2005	Archaeological and Historical Investigation of the Proposed New Filling Station at Virginia, Free State
7579	AIA Phase 1	Cobus Dreyer	10/03/2008	First Phase Archaeological and Cultural Heritage Investigation of the Proposed Oppenheimer Park Golf Estate, Welkom, Free State
7625	AIA Phase 1	Francois P Coetzee	01/02/2008	Cultural Heritage Survey of the Proposed Phakisa Housing Development, Welkom, Free State
7724	AIA Phase 1	Cobus Dreyer	20/06/2007	First Phase Archaeological and Cultural Heritage Assessment of the Proposed New MTN Cell Phone Mast at Pumlani Cemetery, Thabong, Welkom, Free State
7863	AIA Phase 1	Cobus Dreyer	30/08/2006	First Phase Archaeological and Cultural Heritage Investigation of the Proposed Sandrivier Golf Estate, Virginia, Free State
8034	AIA Phase 1	Cobus Dreyer	05/03/2004	Archaeological and Historical Investigation of the Graves at the Proposed Housing Developments near Thabong, Welkom, Free State
108777	Heritage Impact Assessment Specialist Reports	Anton van Vollenhoven	30/11/2011	A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED WITS GOLD DBM PROJECT CLOSE TO VIRGINIA, FREE STATE PROVINCE
117067	HIA Phase 1	Frans Prins	31/01/2013	Cultural Heritage Desktop Assessment of the proposed Bio-energy Facility, Harmony Gold Mine , Welkom, Free State Province
120259	PIA Desktop	Barry Millstead		Desktop Palaeontological Heritage Impact Assessment Report for the Oryx Solar Energy Facility
120639	Archaeological Specialist Reports	Jaco van der Walt	30/08/2013	Archaeological Impact Assessment report for the Proposed Everest Solar Energy Facility
124729	Heritage Scoping	Jaco van der Walt	08/05/2013	Archaeological Scoping Report for the Proposed Oryx Energy Facility

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136650	Archaeological Specialist Reports	Jaco van der Walt	30/08/2013	Archaeological Impact Assessment report for the Oryx Solar Energy Facility
138939	Heritage Impact Assessment Specialist Reports	Karen Van Ryneveld, Gideon Groenewald	17/10/2013	Phase 1 Archaeological Impact Assessment & Palaeontological Assessment Lebone Solar Farm The Remaining Extent of the Farm Onverwag No. 728 and Portion 2 of the Farm Vaalkranz Np. 220, Welkom, Free State Province
158469	Heritage Impact Assessment Specialist Reports	Karen Van Ryneveld	19/10/2013	PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT. THE THABONG SOLAR FARM, UITKYK 509, WELKOM, FREE STATE, SOUTH AFRICA
164148	Heritage Impact Assessment Specialist Reports	Lloyd Rossouw	06/12/2013	Phase 1 Palaeontological and Archaeological Impact Assessment of the proposed Phokeng Township extension at Thabong, Matjhabeng Local Municipality, Free State Province.
169703		Lloyd Rossouw		
186709	PIA Desktop	Gideon Groenewald	14/10/2013	PALAEONTOLOGICAL ASSESSMENT OF THE PROPOSED DEVELOPMENT OF A 75MW PHOTOVOLTAIC SOLAR FARM, ON THE FARM UITKYK 509, WELKOM, FREE STATE PROVINCE.
302636	Archaeological Specialist Reports	Jaco van der Walt	17/06/2015	Archaeological Impact Assessment Report for the Proposed Harmony Gold Eland PV Facility in Welk, Free State Province
302640	Archaeological Specialist Reports	Jaco van der Walt	17/06/2015	Archaeological Impact Assessment Report for the Proposed Harmony Gold NyalaPV Facility in Welk, Free State Province
310004	PIA Desktop	Marion Bamford	03/07/2015	Palaeontological Impact Assessment for three Proposed PV Solar Facilities for Harmony Gold Mining Company, Odendaalsrus, Free State Province
110093	PIA Desktop	Job M. Kibii		Palaeontological Impact Assessment Desktop Study Report for the Proposed Merapi (Excelsior) PV Solar Energy Facilities
110094	HIA Phase 1	Nkosinathi Godfrey Tomose		Heritage Impact Assessment Study for the Proposed PV Solar Energy Facilities, near Excelsior, Free State Province

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117067	HIA Phase 1	Frans Prins	31/01/2013	Cultural Heritage Desktop Assessment of the proposed Bio-energy Facility, Harmony Gold Mine , Welkom, Free State Province
120639	Archaeological Specialist Reports	Jaco van der Walt	30/08/2013	Archaeological Impact Assessment report for the Proposed Everest Solar Energy Facility
120639	Archaeological Specialist Reports	Jaco van der Walt	30/08/2013	Archaeological Impact Assessment report for the Proposed Everest Solar Energy Facility
323795	Heritage Impact Assessment Specialist Reports		31/03/2014	Cultural Heritage Impact Assessment Report for the Proposed SANRAL Thabong Interchange Development, Welkom Region, Free State Province
384235	AIA Phase 1	Lloyd Rossouw	30/09/2016	Phase 1 Archaeological Impact Assessment of a proposed new water pipeline and associated infrastructure between Ventersburg and the Koppie Alleen pump station, FS Province
384495	Heritage Scoping	Nkosinathi Godfrey Tomose	20/12/2016	Heritage Scoping Study for the Proposed Prospecting Rights Application on Farms Adamsons Vley 655, Jonkers Rust 72, Du Preez Leger 324 and Stillewoning 703
384495	Heritage Scoping	Nkosinathi Godfrey Tomose	20/12/2016	Heritage Scoping Study for the Proposed Prospecting Rights Application on Farms Adamsons Vley 655, Jonkers Rust 72, Du Preez Leger 324 and Stillewoning 703

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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 (National)
DEADP	Department of Environmental Affairs and Development Planning (Western Cape)
DEDEAT	Department of Economic Development, Environmental Affairs and Tourism (Eastern Cape)
DEDECT	Department of Economic Development, Environment, Conservation and Tourism (North West)
DEDT	Department of Economic Development and Tourism (Mpumalanga)
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 (National)
GDARD	Gauteng Department of Agriculture and Rural Development (Gauteng)
HIA	Heritage Impact Assessment
LEDET	Department of Economic Development, Environment and Tourism (Limpopo)
MPRDA	Mineral and Petroleum Resources Development Act, no 28 of 2002
NEMA	National Environmental Management Act, no 107 of 1998
NHRA	National Heritage Resources Act, no 25 of 1999
PIA	Palaeontological Impact Assessment
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System
VIA	Visual Impact Assessment

Full guide to Palaeosensitivity Map legend

	RED:	VERY HIGH - field assessment and protocol for finds is required
	ORANGE/YELLOW:	HIGH - desktop study is required and based on the outcome of the desktop study, a field assessment is likely
	GREEN:	MODERATE - desktop study is required
	BLUE/PURPLE:	LOW - no palaeontological studies are required however a protocol for chance finds is required
	GREY:	INSIGNIFICANT/ZERO - no palaeontological studies are required
	WHITE/CLEAR:	UNKNOWN - these areas will require a minimum of a desktop study.

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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.

Sites identified and mapped during research projects will also be considered.

DETERMINATION OF THE EXTENT OF THE INCLUSION ZONE TO BE TAKEN INTO CONSIDERATION

The extent of the inclusion zone to be considered for the Heritage Screener will be determined by CTS based on:

- the size of the development,
- the number and outcome of previous surveys existing in the area
- the potential cumulative impact of the application.

The inclusion zone will be considered as the region within a maximum distance of 50 km from the boundary of the proposed development.

DETERMINATION OF THE PALAEOLOGICAL SENSITIVITY

The possible impact of the proposed development on palaeontological resources is gauged by:

- reviewing the fossil sensitivity maps available on the South African Heritage Resources Information System (SAHRIS)
- considering the nature of the proposed development
- when available, taking information provided by the applicant related to the geological background of the area into account

DETERMINATION OF THE COVERAGE RATING ASCRIBED TO A REPORT POLYGON

Each report assessed for the compilation of the Heritage Screener is colour-coded according to the level of coverage accomplished. The extent of the surveyed coverage is labeled in 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.

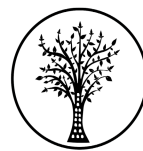
This recommendation is made in instances in which there are already some studies undertaken in the area and/or in the adjacent area for the proposed development. Further studies in a limited HIA may include:

- 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

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- 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.

APPENDIX 5 -Summary of Specialist Expertise

Jenna Lavin, an archaeologist with an MSc in Archaeology and Palaeoenvironments, and currently completing an MPhil in Conservation Management, heads up the heritage division of the organisation, and has a wealth of experience in the heritage management sector. Jenna's previous position as the Assistant Director for Policy, Research and Planning at Heritage Western Cape has provided her with an in-depth understanding of national and international heritage legislation. Her 8 years of experience at various heritage authorities in South Africa means that she has dealt extensively with permitting, policy formulation, compliance and heritage management at national and provincial level and has also been heavily involved in rolling out training on SAHRIS to the Provincial Heritage Resources Authorities and local authorities.

Jenna is a member of the Association of Professional Heritage Practitioners (APHP), and is also an active member of the International Committee on Monuments and Sites (ICOMOS) as well as the International Committee on Archaeological Heritage Management (ICAHM). In addition, Jenna has been a member of the Association of Southern African Professional Archaeologists (ASAPA) since 2009. Recently, Jenna has been responsible for conducting training in how to write Wikipedia articles for the Africa Centre's WikiAfrica project.

Since 2016, Jenna has drafted over 50 Heritage Impact Assessments throughout South Africa.

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