

**LETTER OF EXEMPTION FOR THE PROPOSED
MABANE ROAD UPGRADE, SWEETWATERS,
KWAZULU-NATAL**

FOR TERRATEST (PTY) LTD

DATE: 28 MAY 2018

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Abbreviations

HP	Historical Period
IIA	Indeterminate Iron Age
LIA	Late Iron Age
EIA	Early Iron Age
ISA	Indeterminate Stone Age
ESA	Early Stone Age
MSA	Middle Stone Age
LSA	Late Stone Age
HIA	Heritage Impact Assessment
PIA	Palaeontological Impact Assessment

INTRODUCTION

The proposed project primarily comprises the re-alignment and blacktop surfacing of gravel access roads which will provide access to surrounding residential properties. These roads lead onto Mabane Road, Sweetwaters, KZN. The proposed roads will be 5.5m in width and will include formalised drainage which will be designed and constructed in accordance with the SANRAL Drainage Manual. The proposed road upgrades and alignments are being undertaken in accordance with the approved town planning layouts which are being implemented in the area to formalise the existing residential settlement.

The road is located in Sweetwaters. Pietermaritzburg, and is an offshoot from the Sweetwaters Main Rd.(fig. 1 - 4)

Umlando was requested to comment on the need for an HIA for the project. I noted that the area was in an built up area of Sweetwaters. The chances of heritage sites occurring in this area are rare. I suggested a letter requesting exemption from further HIA work, with a basic desktop study. After the letter of exemption was written, I was informed of graves occurring in the area. The graves were mapped, photographed and a management plan put into place.

FIG. 1 GENERAL LOCATION OF THE STUDY AREA

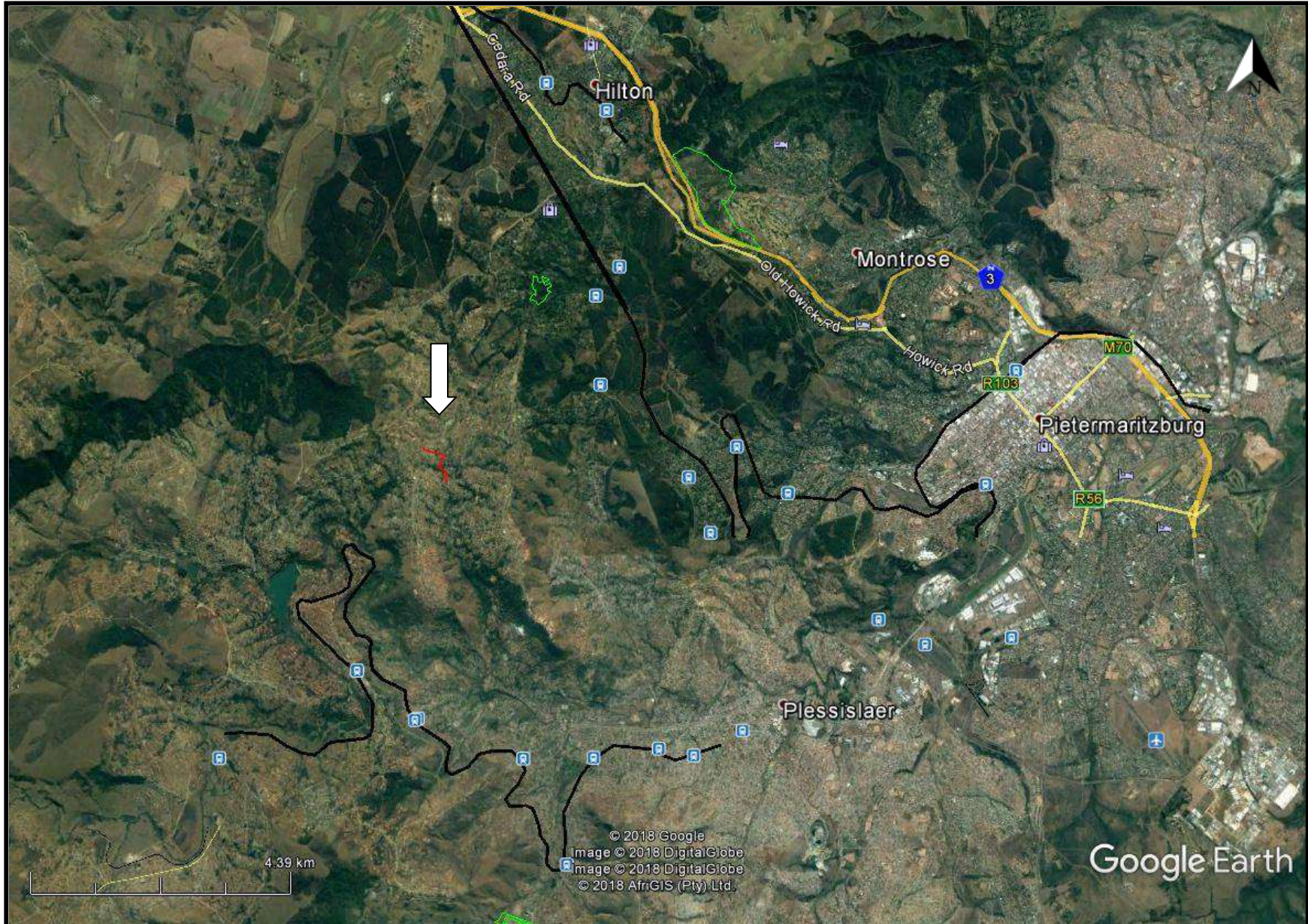


FIG. 2: AERIAL OVERVIEW OF THE STUDY AREA

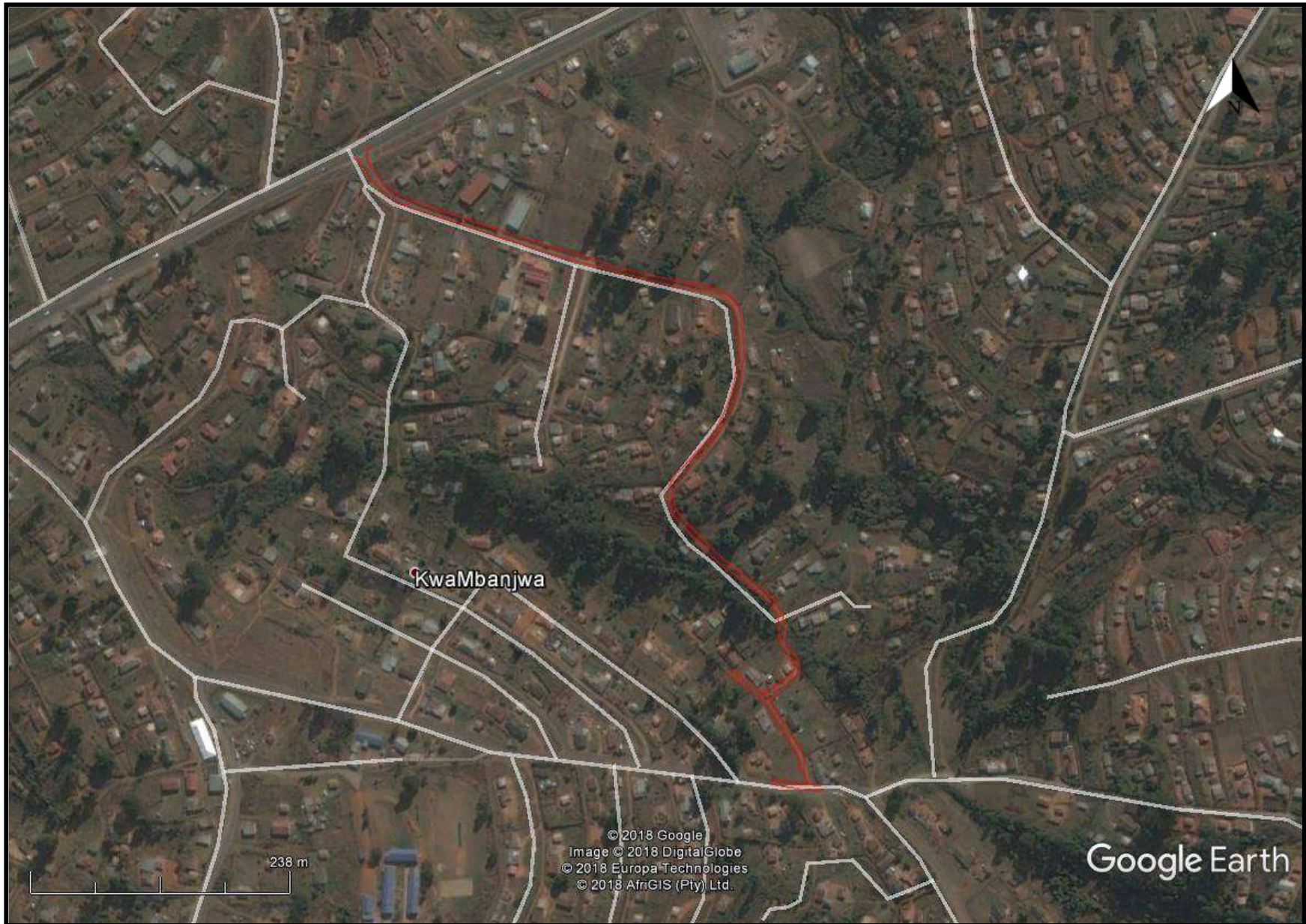


FIG. 3: TOPOGRAPHICAL OVERVIEW OF THE STUDY AREA

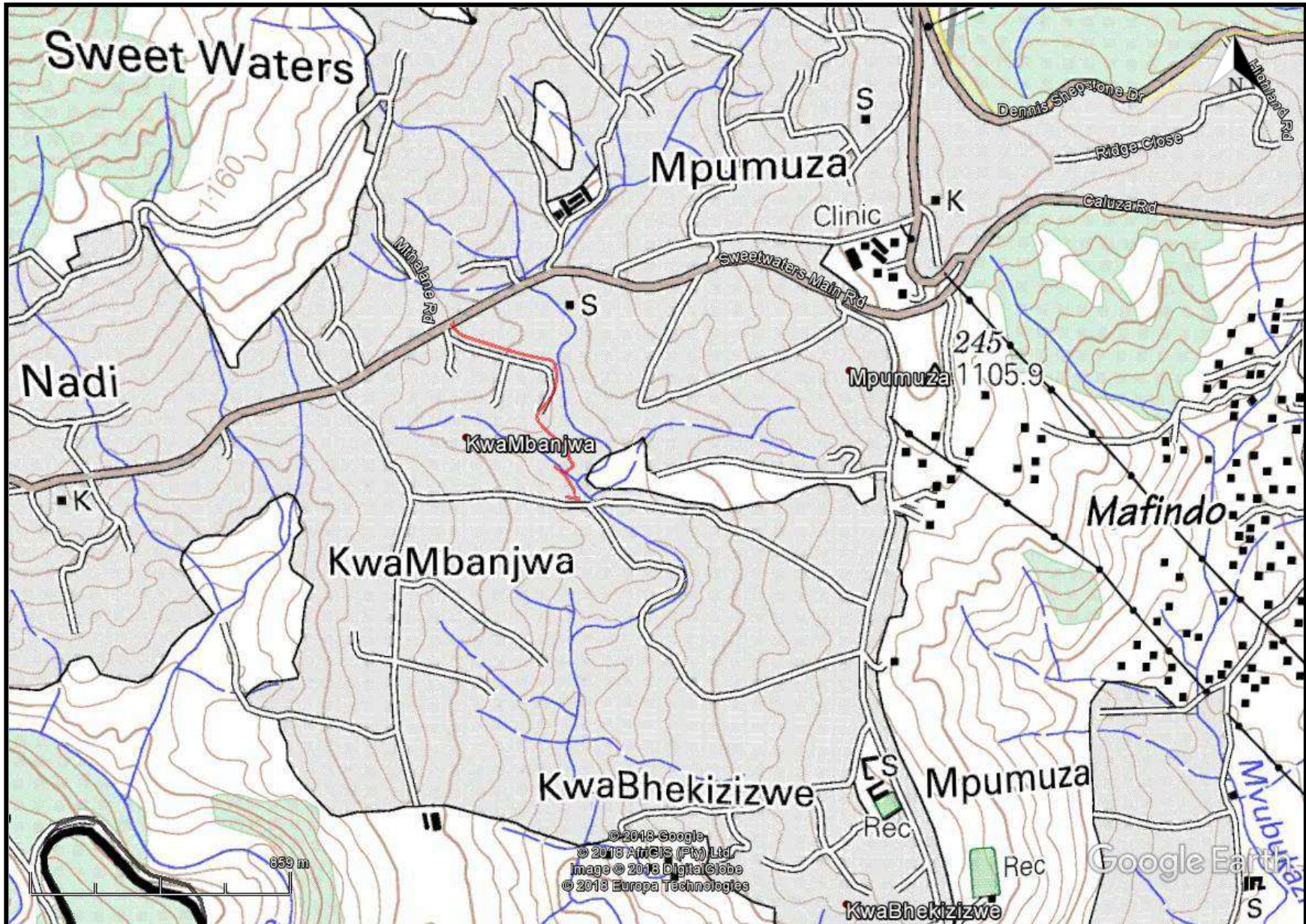


FIG. 4: SCENIC VIEWS OF MABANE ROAD



DESKTOP STUDY

The desktop study consisted of analysing various maps for evidence of prior habitation in the study area, as well as for previous archaeological surveys. The archaeological database indicates that there are archaeological sites in the general area (fig. 5). These sites include all types of Stone Age, Iron Age and Historical Period sites. No sites occur in the study area.

No national monuments, battlefields, or historical cemeteries are known to occur in the study area.

The 1937 aerial photographs show that the area was agricultural fields (fig. 6). While some houses do occur on/near the road upgrade, they have been destroyed by successive houses.

The 1968 1:50 000 topographical map indicates that some of the area is still grasslands, while the area near Mabane Road has been urbanised (fig. 7).

The palaeontology is rated as having high to very high significance (fig. 8). However the area has been disturbed and the project is a road upgrade, not a new road. It is unlikely to affect palaeontological layers or be deeper than 1.5m..

The maps suggest that there are no (remaining) heritage resources that will be affected by the road.

FIG. 5: LOCATION OF KNOWN HERITAGE SITES NEAR THE STUDY AREA

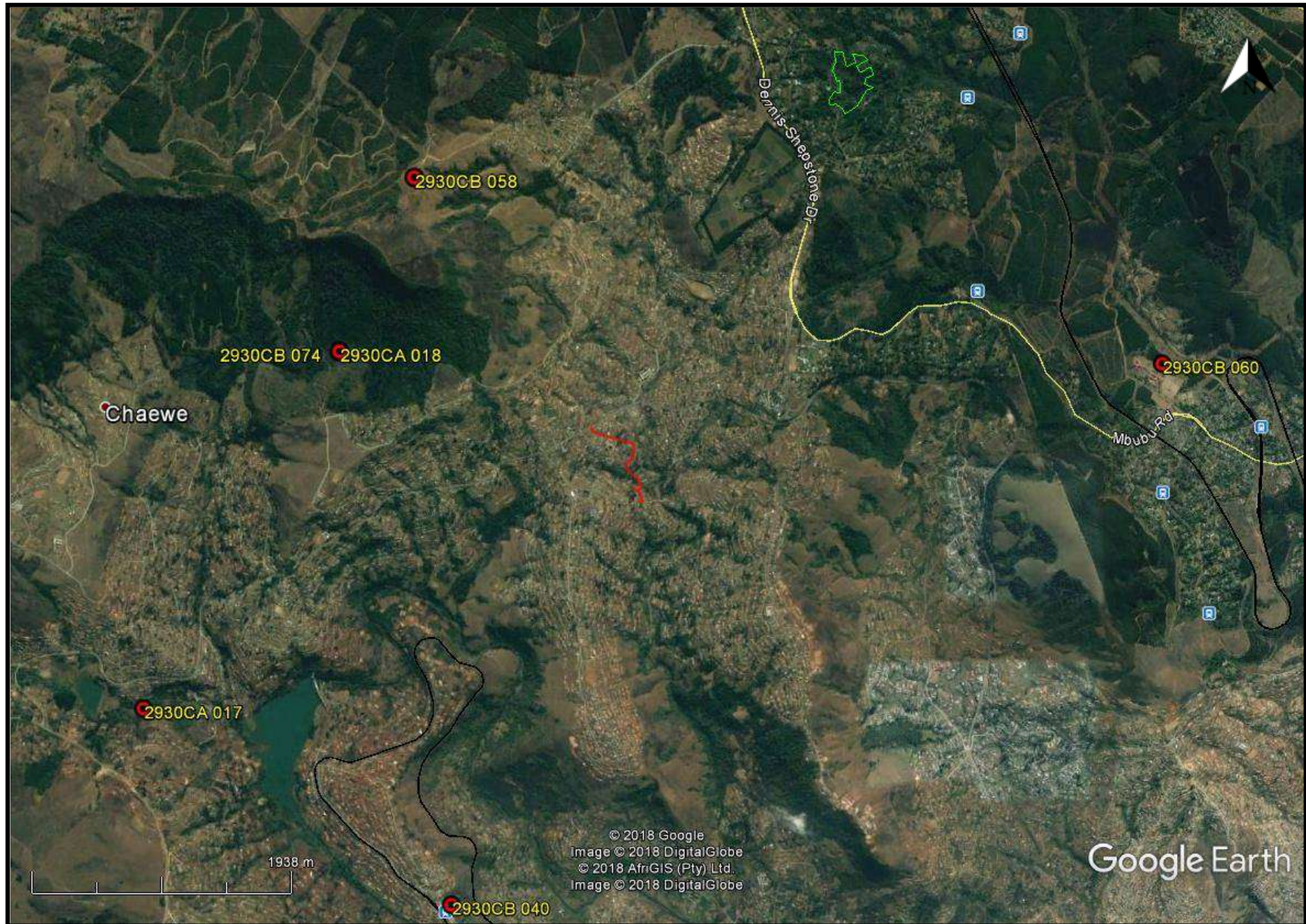


FIG. 6: STUDY AREA IN 1937



FIG. 7: STUDY AREA IN 1968

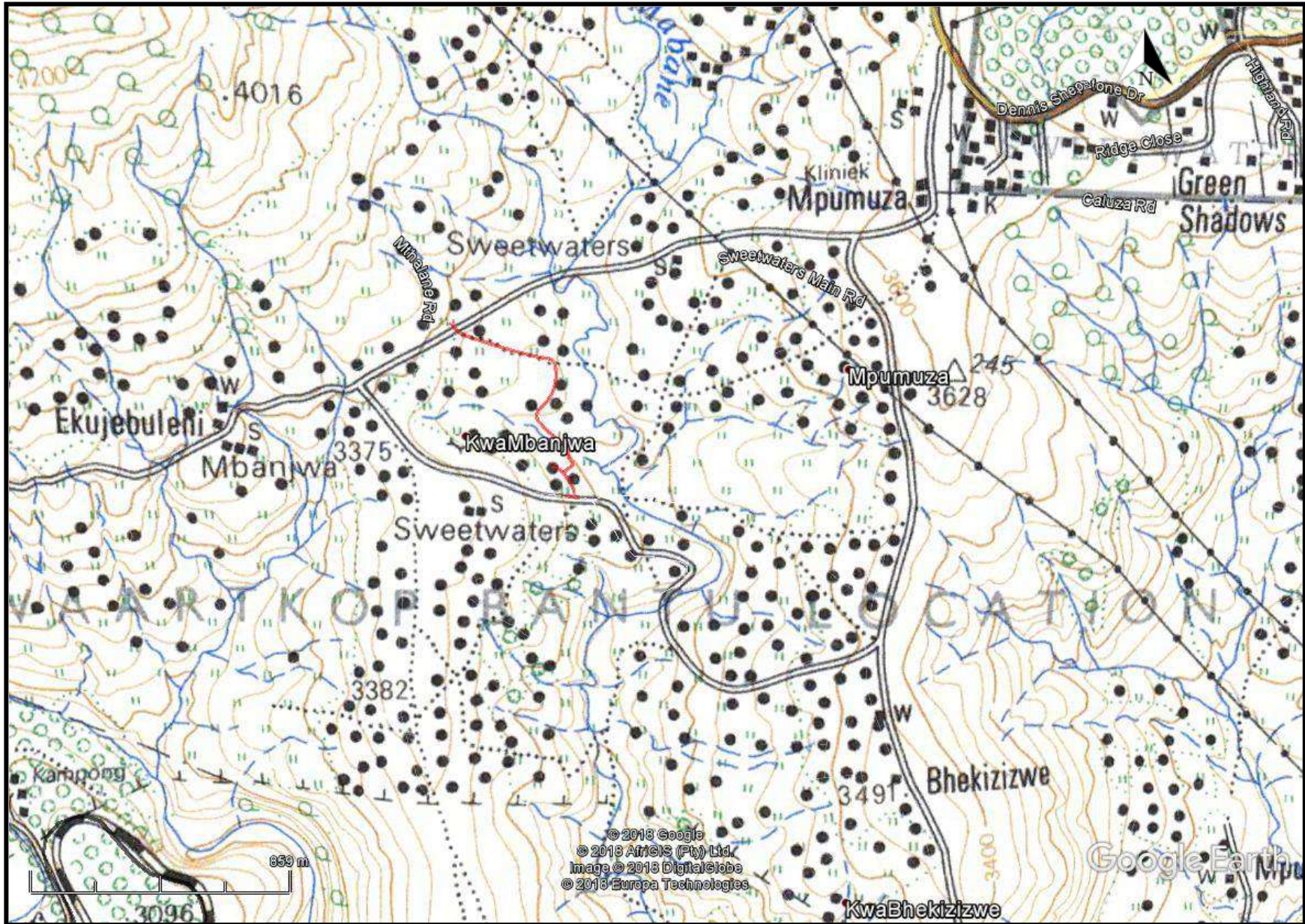
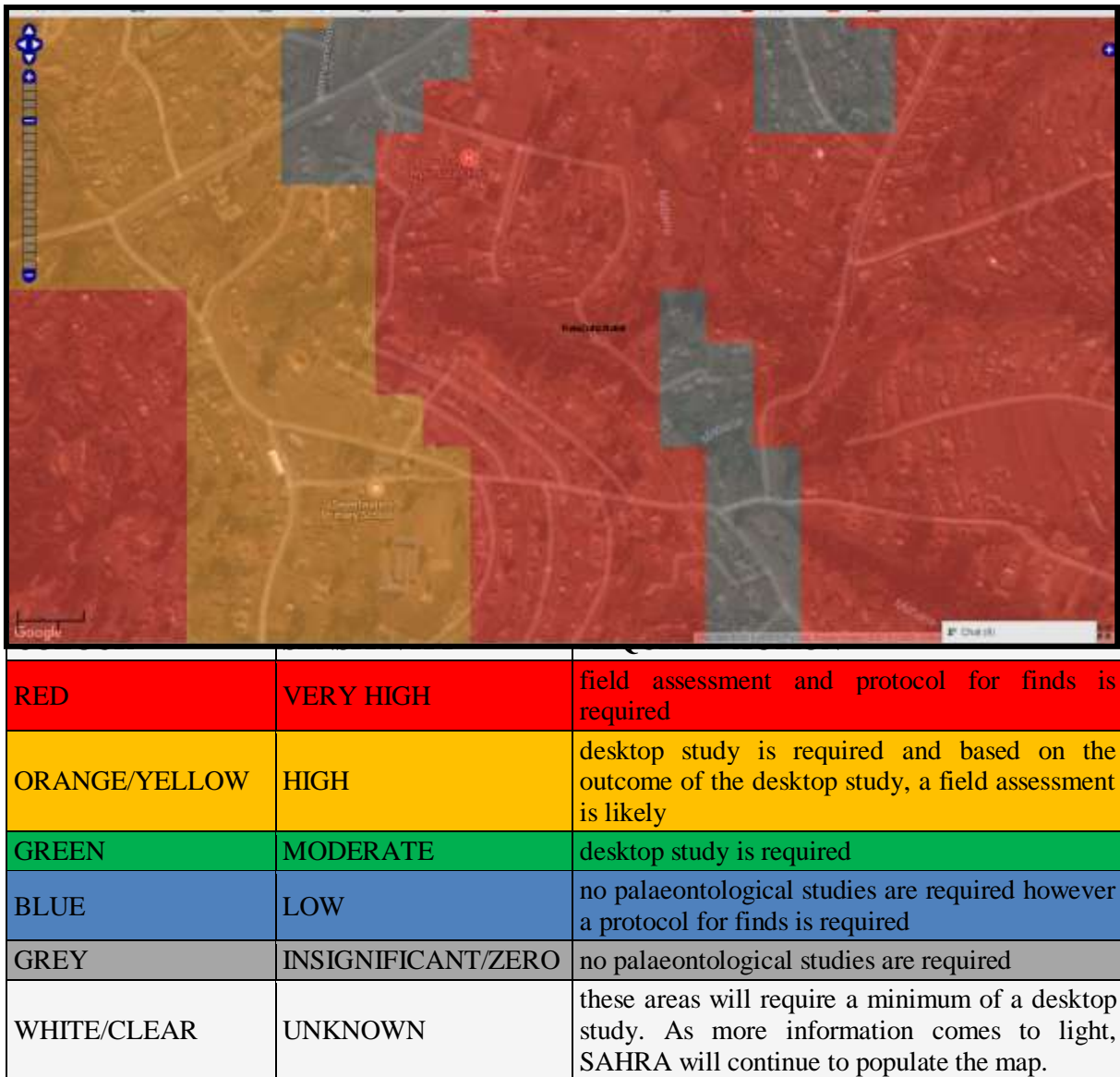











FIG. 8: PALAEOLOGICAL IMPACT ASSESSMENT



HUMAN GRAVES




During the course of the road survey, the engineers noted that graves occurred between 5m to 50m from the road edge. These graves were mapped and photographed by the surveyors and a management plan was set for each individual grave. In some cases it is not possible to keep top the 20m buffer due to the location of the grave to the road, and the fact that the road cannot be deviated. In these situations I suggested that the side of the road is stabilised and reinforced. The graves are discussed below.



Grave yard photo number	Grave co-ordinates (Latt & Long)	Phot of Grave	Distance to from road edge to grave	Reason for using existing alignment without relocating grave
1	-29°36'21.47852794"		18m	Grave yard will not be affected by construction
	30°16'20.21270114"			
2	-29°36'22.4445945"		5m	The road alignment was designed in such a way to ensure maximum distance is kept between the road edge and grave road further away from the grave would have a negative effect on the alignment.
	30°16'20.03455121"			


Grave yard photo number	Grave co-ordinates (Latt & Long)	Phot of Grave	Distance to from road edge to grave	Reason for using existing alignment without relocating grave
3	-29°36'22.00603135"		12m	Upgraded road to conform to existing alignment.
	30°16'22.45690041"			
4	-29°36'23.23976374"		5-10m	Grave yard will not be affected by construction works as it is 5m from the road edge at its closest point. Road design to conform existing road alignment as properties are already established.
	30°16'22.44994406"			
5	-29°36'23.96313077"		10m	The upgraded alignment has been moved to ensure at least 5m is kept between the road edge and grave
	30°16'22.83385871"			

Grave yard photo number	Grave co-ordinates (Latt & Long)	Phot of Grave	Distance to from road edge to grave	Reason for using existing alignment without relocating grave
6	-29°36'27.53"		8.5m	Grave yard will not be affected by construction And road alignment will conform to existing alignment.
	30°16'20.84"			
7	-29°36'28.97544842"		5m	Alignment has been shifted to ensure 5m buffer between grave and upgraded road. Road alignment can't be shifted graves on the opposite side of the road also needing the 5m buffer.
	30°16'20.47108166"			

Grave yard photo number	Grave co-ordinates (Latt & Long)	Phot of Grave	Distance to from road edge to grave	Reason for using existing alignment without relocating grave
8	-29°36'30.42389073"		3m	Current alignment is adjacent to grave site. Upgraded alignment has been shifted to obtain buffer between grave and road
	30°16'21.89968738"			
9	-29°36'30.31774364"		3m	Current alignment is directly adjacent to grave site. Upgraded alignment has been shifted to 3m buffer between grave and road edge.
	30°16'22.5370385"			

Grave yard photo number	Grave co-ordinates (Latt & Long)	Phot of Grave	Distance to from road edge to grave	Reason for using existing alignment without relocating grave
10	-29°36'31.07190956"			Current alignment is directly adjacent to grave site. Upgraded alignment has been shifted to obtain a 3m buffer between grave and road edge. The alignment cannot be shifted more as there is a steep embankment on the opposite side of the road which forms part of the river bank
	30°16'23.67607072"			
11	-29°36'31.71092388"		12m	Grave yard will not be affected by construction
	30°16'24.8943504"			
12	-29°36'33.47670971"		11m	Grave yard will not be affected by construction Road was realigned since the close proximity of grave 12 & 13 could not accommodate the adequate buffers required
	30°16'24.09785013"			

Grave yard photo number	Grave co-ordinates (Latt & Long)	Phot of Grave	Distance to from road edge to grave	Reason for using existing alignment without relocating grave
13	-29°36'33.35145084"		22m	Grave yard will not be affected by construction works. Road was realigned since the close proximity of grave 12 & 13 could not accommodate the adequate buffers required
	30°16'23.32728294"			
14	-29°36'34.86539207"		21m	Grave yard will not be affected by construction works. And adequate buffer between road edge and grave exists.
	30°16'25.2488483"			

Grave yard photo number	Grave co-ordinates (Latt & Long)	Phot of Grave	Distance to from road edge to grave	Reason for using existing alignment without relocating grave
15	29°36'34.66582639"		4.5m	Grave will not be affected by road works. Realignment of the road is not possible as the road will conform to the existing alignment as the alternative option would be to demolish houses as in-between the grave site and a house.
	30°16'23.44581319"			

CONCLUSION

A desktop study was undertaken for the proposed Mabane Road upgrade, Pietermaritzburg. The area has been severely disturbed of the years and the desktop indicated that it was highly unlikely that heritage resources would be located within the road reserve.

Several graves were noted to occur near the road reserve. These occurred mostly inside existing plots and ranged from 4m to 30m from the road reserve. These graves were plotted and management plans for each grave has been established. Those graves that occur near the road reserve will have additional buffering i the form of extra support.

There have been no objections to this form the community.

No further mitigation is required for this project.

EXPERIENCE OF THE HERITAGE CONSULTANT

Gavin Anderson has a M. Phil (in archaeology and social psychology) degree from the University of Cape Town. Gavin has been working as a professional archaeologist and heritage impact assessor since 1995. He joined the Association of Professional Archaeologists of Southern Africa in 1998 when it was formed. Gavin is rated as a Principle Investigator with expertise status in Rock Art, Stone Age and Iron Age studies. In addition to this, he was worked on both West and East Coast shell middens, Anglo-Boer War sites, and Historical Period sites.

DECLARATION OF INDEPENDENCE

I, Gavin Anderson, declare that I am an independent specialist consultant and have no financial, personal or other interest in the proposed development, nor the developers or any of their subsidiaries, apart from fair remuneration for work performed in the delivery of heritage assessment services. There are no circumstances that compromise the objectivity of my performing such work.

A handwritten signature in black ink, appearing to read 'G Anderson', with a horizontal line underneath.

Gavin Anderson
Archaeologist/Heritage Impact Assessor