PHASE ONE HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED UPGRADE OF THE NATIONAL ROUTE N2, MTHATHA TO VIEDGESVILLE, EASTERN CAPE.

ACTIVE HERITAGE cc.

For: SLR

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Frans received his MA (Archaeology) from the University of Stellenbosch and is presently a PhD candidate on social anthropology at UKZN.. His PhD research topic deals with indigenous San perceptions and interactions with the rock art heritage of the Drakensberg.

Frans was employed as a junior research associate at the then University of Transkei, Botany Department in 1988-1990. Although attached to a Botany Department he conducted a palaeoecological study on the Iron Age of northern Transkei - this study formed the basis for his MA thesis in Archaeology. Frans left the University of Transkei to accept a junior lecturing position at the University of Stellenbosch in 1990. He taught mostly undergraduate courses on World Archaeology and research methodology during this period.

From 1991 – 2001 Frans was appointed as the head of the department of Historical Anthropology at the Natal Museum, Pietermaritzburg. His tasks included academic research and publication, display conceptualization, and curating the African ethnology collections of the Museum. He developed various displays at the Natal Museum on topics ranging from Zulu material culture, traditional healing, and indigenous classificatory systems. During this period Frans also developed a close association with the Departments of Fine Art, Psychology, and Cultural and Media Studies at the then University of Natal. He assisted many post-graduate students with projects relating to the cultural heritage of South Africa. He also taught post-graduate courses on qualitative research methodology to honours students at the Psychology Department,

University of Natal. During this period he served on the editorial boards of the *South African Journal of Field Archaeology* and *Natalia*.

Frans left the Natal Museum in 2001 when approached by a Swiss funding agency to assist an international NGO (Working Group for Indigenous Minorities) with the conceptualization of a San or Bushman museum near Cape Town. During this period he consulted extensively with various San groupings in South Africa, Namibia and Botswana. He also made major research and conceptual contributions to the Kamberg and Didima Rock Art Centres in the Ukhahlamba Drakensberg World Heritage Site.

Between 2003 and 2007 Frans was employed as the Cultural Resource Specialist for the Maloti Drakensberg Transfrontier Project – a bilateral conservation project funded through the World Bank. This project involved the facilitation with various stakeholders in order to produce a cultural heritage conservation and development strategy for the adjacent parts of Lesotho and South Africa. Frans was the facilitator for numerous heritage surveys and assessments during this project. This vast area included more than 2000 heritage sites. Many of these sites had to be assessed and heritage management plans designed for them. He had a major input in the drafting of the new Cultural Resource Management Plan for the Ukhahlamba Drakensberg World Heritage site in 2007/2008. A highpoint of his career was the inclusion of Drakensberg San indigenous knowledge systems, with San collaboration, into the management plans of various rock art sites in this world heritage site. He also liaised with the tourism specialist with the drafting of a tourism business plan for the area.

During April 2008 Frans accepted employment at the environmental agency called Strategic Environmental Focus (SEF). His main task was to set-up and run the cultural heritage unit of this national company. During this period he also became an accredited heritage impact assessor and he is rated by both Amafa and the South African Heritage Resources Agency (SAHRA). He completed almost 50 heritage impact assessment reports nation-wide during an 18th month period.

Frans left SEF and started his own heritage consultancy called “Active Heritage cc” in July 2009. Although mostly active along the eastern seaboard his clients also include international companies such as Royal Dutch Shell through Golder Associates, and UNESCO. He has now completed almost 600 heritage conservation and management reports for various clients since the inception of “Active Heritage cc”. Amongst these was a heritage study of the controversial fracking gas exploration of the Karoo Basin and various proposed mining developments in South Africa and proposed developments adjacent to various World Heritage sites. Apart from heritage impact assessments (HIA’s) Frans also assist the National Heritage Council (NHC) through Haley Sharpe Southern Africa’, with heritage site data capturing and analysis for the proposed National Liberation Route World Heritage Site and the national intangible heritage audit. In addition, he is has done background research and conceptualization of the proposed Dinosaur Interpretative Centre at Golden Gate National Park and the proposed Khoi and San Interpretive Centre at Camdeboo, Eastern Cape Province. During 2009 he also

produced the first draft dossier for the nomination of the Sehlabathebe National Park, Lesotho as a UNESCO inscribed world heritage site.

Frans was appointed as temporary lecturer in the department of Heritage and Tourism, UKZN in 2011. He is also a research affiliate at the School of Cultural and Media Studies in the same institution.

Frans's research interests include African Iron Age, paleoecology, rock art research, San ethnography, traditional healers in South Africa, and heritage conservation. Frans has produced more than fourty publications on these topics in both popular and academic publications. He is frequently approached by local and international video and film productions in order to assist with research and conceptualization for programmes on African heritage and culture. He has also acted as presenter and specialist for local and international film productions on the rock art of southern Africa. Frans has a wide experience in the fields of museum and interpretive centre display and made a significant contribution to the conceptual planning of displays at the Natal Museum, Golden Horse Casino, Didima Rock Art Centre and !Khwa tu San Heritage Centre. Frans is also the co-founder and active member of "African Antiqua" a small tour company who conducts archaeological and cultural tours world-wide. He is a Thetha accredited cultural tour guide and he has conducted more than 50 tours to heritage sites since 1992.

Declaration of Consultants independence

Frans Prins is an independent consultant to SLR and has no business, financial, personal or other interest in the activity, application or appeal in respect of which he was appointed other than fair remuneration for work performed in connection with the activity, application or appeal. There are no circumstances whatsoever that compromise the objectivity of this specialist performing such work.

Frans Prins

LIST OF ABBREVIATIONS AND ACRONYMS

EIA	Early Iron Age
ESA	Early Stone Age
HISTORIC PERIOD	Since the arrival of the white settlers - c. AD 1820 in this part of the country
IRON AGE	Early Iron Age AD 200 - AD 1000 Late Iron Age AD 1000 - AD 1830
LIA	Late Iron Age
LSA	Late Stone Age
MSA	Middle Stone Age
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998 and associated regulations (2010).
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999) and associated regulations (2000)
SAHRA	South African Heritage Resources Agency
STONE AGE	Early Stone Age 2 000 000 - 250 000 BP Middle Stone Age 250 000 - 25 000 BP Late Stone Age 30 000 - until c. AD 200

EXECUTIVE SUMMARY

A Heritage Impact Assessment, including a ground survey, of the proposed upgrading of the N2 between Mthatha and Viedgesville in the Eastern Cape Province identified no heritage sites on the footprint. The area is also not part of any known cultural landscape. The SAHRIS fossil sensitivity map however indicates that the area is highly sensitive in term of paleontological features. A field survey by a qualified palaeontologist will have to be conducted and a protocol of finds established before any development may take place Attention is drawn to the South African Heritage Resources Act, 1999 (Act No. 25 of 1999) which, requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage agency.

1 BACKGROUND INFORMATION ON THE PROJECT

Table 1. Background information

Consultant:	Frans Prins (Active Heritage cc) for SLR
Background to the study	The broad objectives of the project are: To improve the road condition, reduce road user costs and improve safety on this important economic route by improving the existing road; To improve the mobility function of rural road corridor between Viedgesville and the edge of Mthatha CBD (Ultra City). In order to accomplish this goal, improvements to the geometry, pavement structure and cross section are likely will be required; To improve access management (consolidating the existing access points) by providing access (link) roads as part of a supporting road network that links to the upgraded intersection and/or interchanges. To improve the provision of access for multiple transport modes by providing facilities for safe usage (provide public transport facilities); To improve the existing urban road infrastructure through Mthatha CBD (Shell Ultra City to Madeira Street). This section will be analysed to determine the most appropriate upgrade strategy; Consider traffic decongestion strategies to improve LOS through CBD & urban section.
Type of development:	The road will be reconstructed on a completely new, off-set alignment, whilst traffic continues to use the existing N2 where possible. The construction methods selected ensures the accommodation of two-way traffic along the entire route. • Type 1: Off-set construction • Type 2: Temporary road widening to accommodate traffic • Type 3: Temporary deviation • Type 4: Temporary deviation in order to build interchanges • Type 5: Urban Traffic Accommodation
Rezoning or subdivision:	Rezoning

Terms of reference	To carry out an Heritage Impact Assessment (AIA)
Legislative requirements:	The Heritage Impact Assessment was carried out in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and following the requirements of the National Heritage Resources Act, 1999 (Act No. 25 of 1999)

1.1. Details of the area surveyed:

The project is located in the Eastern Cape on National Route N2 Section 18, which connects the village of Viedgesville (km 65.3) at the southern end of the Project, with Mthatha CBD (km 85.4) on the northern end of the project (Figs 4-6). The N2 is a crucially important route that forms a link between the towns of Mthatha and East London while passing through the towns of Idutywa and Butterworth. The route falls under the jurisdiction of the King Sabata Dalindyebo Local Municipality within the Oliver Tambo District Municipality (Fig 1).

The GPS coordinates for the relevant section of the N2 are:

Start (at Viedgesville): S 31° 43' 11.99" E 28° 41' 26.42"
End (at Mthatha): S 31° 35' 32.34" E 28° 47' 21.10"

Borrow and quarry pits in the near environs of the N2 has also been investigated. The context and GPS coordinates of these are presented in Table 2 (Fig 2).

Table 2: List of Borrow Pits investigated

Borrow Pit No (DR&PW Ref)	Condition	DMR Reference	Year approved	DMR Borrow Pit No in EMP	Material	Description / Owner	GPS Coordinates
BP792	Existing	EC/30/5/1/3/3/21 (0574) EM	2005	Borrowpit 1	Highly Weathered Dolerite	DRPW	S31° 145' 50.07" E 28° 47' 37.39"
BP793	Existing			Borrowpit 2	Highly Weathered Dolerite	DRPW	S 31° 45' 34.96" E 28° 47' 28.31"
BP794	New			Borrowpit 3	Highly Weathered Dolerite	DRPW	S 31° 44' 42.24 E 28° 47' 7.91"
BP795	Existing			Borrowpit 4	Weathered Mudstone	DRPW	S 31° 42' 19.68" E 28° 46' 55.59"
BP797	Existing			Borrowpit 5	Highly Weathered Mudstone	DRPW	S 31° 44' 42.24 E 28° 47' 7.91"
BP1328	Existing	EC 2/3/2/1 (18 (EM)	2012	290-BP01	Decomposed Dolerite	DRPW	S 31° 43' 65.6" E 28° 41.395"
N2/18-1	Currently being mined	EC2/3/2/1(18)EM	2012	Quarry	Dolerite	DRPW	S 31° 41.783" E 28° 42.913"
C1	Existing	None	Unknown	Unknown	Dolerite	Mquanduli	S 31° 42' 13.15" E 28° 47' 10.57"
C2	New	Private	Unknown	Unknown	Dolerite	Usiba Mining and Exploration	S 31° 38' 12.92 E 28° 43' 56.40"
W Dolerite	Existing / Disturbed	Un-registered	N/A	N/A	Highly Weathered Dolerite	Communal Land	S 31° 45' 11.13" E 28° 47' 11.73"
N2/18-2	New	Un-registered	N/A	N/A	Highly Weathered Dolerite	Communal Land	S 31° 39' 12.92 E 28° 43' 56.42"

1.2. Cultural Heritage legislation

According to Section 3 (2) of the NHRA, the heritage resources of South Africa include:

"a. places, buildings, structures and equipment of cultural significance;
b. places to which oral traditions are attached or which are associated with living heritage;
c. historical settlements and townscapes;
d. landscapes and natural features of cultural significance;
e. geological sites of scientific or cultural importance;
f. archaeological and palaeontological sites;
g. graves and burial grounds, including.
ancestral graves;
ii. royal graves and graves of traditional leaders;
iii. graves of victims of conflict;
iv. graves of individuals designated by the Minister by notice in the Gazette;
v. historical graves and cemeteries; and
vi. other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
h. sites of significance relating to the history of slavery in South Africa;
i. movable objects, including objects recovered from the soil or waters of South Africa, including
archaeological and palaeontological objects and material, meteorites and rare geological specimens;
ii. objects to which oral traditions are attached or which are associated with living heritage;
iii. ethnographic art and objects;
iv. military objects;
v. objects of decorative or fine art;
vi. objects of scientific or technological interest; and
vii. books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996)."

In terms of section 3 (3) of the NHRA, a place or object is to be considered part of the

national estate if it has cultural significance or other special value because of:
“a. its importance in the community, or pattern of South Africa's history;
b. its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
c. its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
d. its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
e. its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
f. its importance in demonstrating a high degree of creative or technical achievement at a particular period;
g. its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
h. its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
i. sites of significance relating to the history of slavery in South Africa.”

2 BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

The archaeological history of the Province of the Eastern Cape Province dates back to about 2 million years and possibly older, which marks the beginning of the Stone Age. The Stone Age in the Eastern Cape Province was extensively researched by archaeologists attached to the Albany Museum in Grahamstown, the University of Stellenbosch, the then University of Transkei (UNITRA), Fort Hare University and more recently by rock art researchers attached to the Rock Art Research Institute at the University of the Witwatersrand. The Stone Age period has been divided in to three periods namely: Early Stone Age (ESA) dating between 2 million years ago to about 200 000 years ago, Middle Stone Age (MSA) dating between 200 000 years ago to about 30 000 years ago, and the Later Stone Age (LSA) which dates from 30 000 to about 2 000 year ago. The Stone Age period ends around approximately 2 000 years ago when Bantu-speaking Iron Age farmers from the north arrived in southern Africa. The Iron Age is also divided into three periods, namely: Early Iron Age (EIA) dating between AD 200 and AD 900, Middle Iron Age (MIA) dating between AD 900 and AD 1300, Late Iron Age (LIA) dating between AD 1 300 and 1 820.

2.1 Stone Age

2.1.1 Early Stone Age (ESA)

The ESA is considered as the beginning of the stone tool technology. It dates back to over 2 million years ago until 200 000 years ago. This period is characterised by the Oldowan and Acheulean industries. The Oldowan Industry, dating to approximately between over 2 million years and 1.7 million years predates the later Acheulean. The Oldowan Industry consists of very simple, crudely made core tools from which flakes are struck a couple of times. To date, there is no consensus amongst archaeologists as to which hominid species manufactured these artefacts. The Acheulean Industry lasted from about 1.7 million years until 200 thousand years ago. Acheulean tools were more specialized tools than those of the earlier industry. They were shaped intentionally to carry out specific tasks such as hacking and bashing to remove limbs from animals and marrow from bone. These duties were performed using the large sharp pointed artefacts known as hand axes. Cleavers, with their sharp, flat cutting edges were used to carry out more heavy duty butchering activities (Esterhuysen, 2007). The ESA technology lasted for a very long time, from early to middle Pleistocene and thus seems to have been sufficient to meet the needs of early hominids and their ancestors. Although not identified on the study area, ESA tools occurrence have been reported in other sites in the Transkei (Derricourt 1977: Feely 1987). Apart from stone artefacts, the ESA sites in the Transkei have produced very little as regards other archaeological remains. This has made it difficult to make inferences pointing to economical dynamics of the ESA people in this part of the world (Mazel 1989).

2.1.2 Middle Stone Age (MSA)

The MSA dates to between 200 000 and 30 000 years ago, and is generally associated with the emergence of anatomically modern humans. The MSA technology is therefore believed to have been manufactured by fully modern humans known as *Homo sapiens* who emerged around 250 000 years ago. While some of the sites belonging to this time period occur in similar contexts as those of ESA, most of the MSA sites are located in rock shelters. Palaeoenvironmental data suggest that the distribution of MSA sites in the high lying Drakensberg and surrounding areas was influenced by the climate conditions, specifically the amount and duration of snow (Carter, 1976). In general, the MSA stone tools are smaller than those of the ESA. Although some MSA tools are made from prepared cores, the majority of MSA flakes are rather irregular and are probably waste material from knapping exercises. A variety of MSA tools include blades, flakes,

scrapers and pointed tools that may have been hafted onto shafts or handles and used as spearheads. Between 70 000 and 60 000 years ago new tool types appear known as segments and trapezoids. These tool types are referred to as backed tools from the method of preparation. Residue analyses on the backed tools from South African MSA sites including those in KZN indicate that these tools were certainly used as spear heads and perhaps even arrow points (Wadley, 2007). Derricourt (1977) reported a few MSA sites in the Transkei and some sites investigated by Opperman (1987) in the 1970's and 1980's occur near Maclear directly to the north west of the project area.

2.1.3 Late Stone Age (LSA)

Compared to the earlier MSA and ESA, more is known about the LSA which dates from around 30 000 to 2 000 (possibly later) years ago. This is because LSA sites are more recent than ESA and MSA sites and therefore achieve better preservation of a greater variety of organic archaeological material. The Later Stone Age is usually associated with the San (Bushmen) or their direct ancestors. The tools during this period were even smaller and more diverse than those of the preceding Middle Stone Age period. LSA tool technology is observed to display rapid stylistic change compared to the slower pace in the MSA. The rapidity is more evident during the last 10 000 years. The LSA tool sequence includes informal small blade tradition from about 22 000 – 12 000 years ago, a scraper and adze-rich industry between 12 000 – 8 000 years ago, a backed tool and small scraper industry between 8 000 – 4 000 years and ending with a variable set of other industries thereafter (Wadley, 2007). Adzes are thought to be wood working tools and may have also been used to make digging sticks and handles for tools. Scrapers are tools that are thought to have been used to prepare hides for clothing and manufacture of other leather items. Backed tools may have been used for cutting as well as tips for arrows It was also during Later Stone Age times that the bow and arrow was introduced into southern Africa – perhaps around 20 000 years ago. Because of the extensive use of the bow and arrow and the use of traps and snares, Later Stone Age people were far more efficient in exploiting their natural environment than Middle Stone Age people. Up until 2 000 years ago Later Stone Age people dominated the southern African landscape. However, shortly after 2 000 years ago the first Khoi herders and Bantu-speaking agro-pastoralists immigrated into southern Africa from the north. This led to major demographic changes in the population distribution of the subcontinent. San hunter-gatherers were either assimilated or moved off to more marginal environments such as the Kalahari Desert or some mountain ranges unsuitable for small-scale subsistence farming and herding. The San in the coastal areas of the study area were

the first to have been displaced by incoming African agro pastoralists. However, some independent and sometimes hybrid groups continue to practice their hunter gatherer lifestyle in the foothills of the Drakensberg until the period of white colonialisation around the 1840's (Opperman 1987; Wright & Mazel, 2007; Mallen 2008; Henry 2010).

The renowned San rock paintings of the Drakensberg region also belongs to the Later Stone Age period although the majority were made between 4000 years ago and about 120 years ago. Rock Art can be in the form of rock paintings or rock engravings. The Eastern Province is renowned for the prolific San rock painting sites concentrated in the southern Drakensberg and adjacent areas (Blundell 2004; Mallen 2008; Henry 2010). These sites are the subject of ongoing research by post-graduate students of the Rock Art Research Institute, University of the Witwatersrand. Recently researchers identified 3 new traditions/styles of rock art in the Eastern Cape Drakensberg (*ibid*). Rock art sites are known from the greater Queenstown area to the west of the project area and Tsolo to the immediate north of the project area. One painted site occurs at Kambi Forest adjacent to the Mthatha River before it enters the Mthatha Dam (Derricourt 1977). All the other sites include typical San fineline paintings. These include paintings of wild ungulates such as eland and other wild bovids as well contact period imagery with depictions of early African agriculturists in contact with San hunter-gatherers. Various other Later Stone Age open air sites are known from the greater Mthatha area. Unfortunately, these have not been well recorded and many are now only known from badly provenanced museum collections (Derricourt 1977). Feely (1988) did locate LSA sites with a possible association with pastoralism in the area to the immediate south of the study area. It is also known from the historical literature that Khoi pastoralist groups frequented the areas to the west and southwest of the project area in the historical past (Peires 1981). However, more systematic research is needed on pastoralism in this part of the Eastern Cape Province.

2.2 Iron Age

2.2.1 Early Iron Age (EIA)

Unlike the Stone Age people whose life styles were arguably egalitarian, Iron Age people led quite complex life styles. Their way of life of greater dependence on agriculture necessitated more sedentary settlements. They cultivated crops and kept domestic animals such as cattle, sheep, goats and dogs. Pottery production is also an important feature of Iron Age communities. Iron smelting was practised quite significantly by Iron Age society as they had to produce iron implements for agricultural use. Although Iron

Age people occasionally hunted and gathered wild plants and shellfish, the bulk of their diet consisted of the crops they cultivated as well as the meat of the animals they kept. EIA villages were relatively large settlements strategically located in valleys beside rivers to take advantage of the fertile alluvial soils for growing crops (Maggs 1989; Huffman 2007). The EIA sites in the Eastern Cape Province dates back between AD 600 to AD 900. Based on extensive research on EIA sites in the eastern seaboard they can be divided along the following typological criteria and time lines according to ceramic styles (Maggs, 1989; Huffman 2007):

_ Msuluzi (AD 500-700);

_ Ndondondwane (AD 700 – 800);

_ Ntshekane (AD 800 – 900).

However, no known Early Iron Age sites occur within the study area probably as the greater portion of this area is situated above the 1000m contour. The vast majority of Early Iron Age sites occur below the 1000m contour along areas in the large river valleys with a rainfall of less than 700mm a year.

2.2.2 Late Iron Age (LIA)

The LIA is not only distinguished from the EIA by greater regional diversity of pottery styles but is also marked by extensive stone wall settlements. However, in this part of the world, stone walls were not common as the Nguni people used thatch and wood to build their houses (Derricourt 1977). This explains the failure to obtain sites from the aerial photograph investigation of the study area. LIA sites in the Eastern Cape Province occur adjacent to the major rivers in low lying river valleys but also along ridge crests above the 800m contour. The LIA in the greater project area can be ascribed to the Thembu tribal cluster or their immediate predecessors (Feely 1987). It is also possible that some stone walled sites, especially those incorporating shelters or caves, were constructed by hybrid Khoisan/Nguni groups. Trade played a major role in the economy of LIA societies. Goods were traded locally and over long distances. The main trade goods included metal, salt, grain, cattle and thatch. This led to the establishment of economically driven centres and the growth of trade wealth. Keeping of domestic animals, metal work and the cultivation of crops continued with a change in the organisation of economic activities (Maggs, 1989; Huffman 2007). The existing data base does not indicate the location of any Later Iron Age sites in the greater project area. However, this is most probably an artefact of archaeological survey preferences in the past. It is known from oral history, for instance, that some early Thembu groupings

occupied the area from the 17th century onwards (Peires 1981) and it is possible that systematic archaeological ground surveys will locate sites of this period in due course

2.3 Historic Period

Oral tradition is the basis of the evidence of historical events that took place before written history could be recorded. This kind of evidence becomes even more reliable in cases where archaeology could be utilised to back up the oral records. Sources of evidence for socio political organization during the mid-eighteenth to early nineteenth century in the study area and the Transkei suggest that the people here existed in numerous small-scale political units of different sizes, population numbers and political structures (Feely 1987; Wright & Hamilton, 1989). This period was largely characterised by rage and instability as political skirmishes broke due to the thirst for power and resources between chiefdoms. During the 2nd half of the eighteenth century, stronger chiefdoms and paramouncies emerged. However, these were not fully grown states as there was no proper formal central political body established. This changed in the 1780's when a shift towards a more centralized political state occurred in parts of northern KwaZulu-Natal. The Zulu kingdom, established by King Shaka however became the most powerful in KwaZulu-Natal in the early years of the 19th century and had a marked influence on the local Nguni chiefdoms of the project area (Feely 1987). Refugees from north of the Umtavuna River such as the Bhaca and Qwabe tribes moved into the Transkei and asked the Mpondo chief for permission to settle in adjacent parts. These refugees were collectively called amaMfengu and many of these people were settled in parts of the project area and the adjacent areas near Qumbu and Mount Fletcher. One group of refugees from the north, the amaNgwane, crossed the Umthatha River near the project area, and fought a decisive battle against British colonial troops and their Thembu and Xhosa allies in 1828 at Mbholompo Point. During this episode the amaNgwane was defeated and the tribe broken-up (Peires 1981). The area to the immediate west of the project area specifically saw tremendous interaction between Thembu agriculturalists and Khoisan pastoralists in the recent past (ibid).

3 BACKGROUND INFORMATION OF THE SURVEY

3.1 Methodology

A desktop study was conducted of the archaeological databases housed in the KwaZulu-Natal Museum and the SAHRA inventory of heritage sites in the Eastern Cape Province.

The SAHRIS website was also consulted in order to locate additional sites and to evaluate the results of previous surveys near the study area. In addition, the available archaeological and historical literature covering the Eastern Cape was also consulted. Aerial photographs covering the project area was scrutinised for potential Iron Age and Historical period structures.

A ground survey using accepted archaeological methodology was conducted on the 20th November 2018. The consultant also spoke to local community members during this survey in order to assess the recent history and heritage significance of the project area. Particular attention was paid to the locality of potential graves within the footprint.

4 DESCRIPTION OF SITES AND MATERIAL OBSERVED

4.1 Locational data

Province: Eastern Cape Province
Towns: Mthatha and Viedgesville

4.2 Heritage Survey Results

The available data bases and literature did not suggest that any heritage features or sites of the following categories occur on the project area.

- Archaeological Sites
- Living Heritage Sites
- Cultural Landscapes
- Sites or areas with oral traditions attached to it (Table 5).

No heritage site is situated closer than 50m to the N2 or any of the associated Borrow Pits (Figs 7-10). A couple of Cultural Resource Management Projects have been conducted in the area during the last 10 years. Most of these, however, focused on the areas to the immediate north and south of the proposed road upgrade. A study by Van Ryneveld (2010) located a Later Iron Age Site approximately 6km to the south of the project area. However this site will not be impacted upon by the proposed road upgrade. None of the cultural heritage surveys in the greater Mthatha area covered the actual footprint.

4.2.1 Abandoned Homesteads and Associated Graves

Although various abandoned homesteads and associated graves were observed during the survey none of these occur closer than 50m to the proposed road upgrade or any of the identified borrow pits (Figs 7- 10). The buildings immediately adjacent to the proposed road upgrade appear to be relatively modern and certainly younger than 60 years old (Fig 9). None of these have any heritage value.

4.3 Field Rating

SAHRA developed a methodology to evaluate the significance of heritage sites (Table 3). As there are no remaining heritage sites in the project area the field rating could not be applied and is irrelevant.

Table 3. Field rating and recommended grading of sites (SAHRA 2005)

Level	Details	Action
National (Grade I)	The site is considered to be of National Significance	Nominated to be declared by SAHRA
Provincial (Grade II)	This site is considered to be of Provincial significance	Nominated to be declared by Provincial Heritage Authority
Local Grade IIIA	This site is considered to be of HIGH significance locally	The site should be retained as a heritage site
Local Grade IIIB	This site is considered to be of HIGH significance locally	The site should be mitigated, and part retained as a heritage site
Generally Protected A	High to medium significance	Mitigation necessary before destruction
Generally Protected B	Medium significance	The site needs to be recorded before destruction
Generally Protected C	Low significance	No further recording is required before destruction

Table 4. Evaluation and statement of significance (excluding paleontology)

Significance criteria in terms of Section 3(3) of the National Heritage Resources Act		
	Significance	**Rating**
1.	**Historic and political significance -** The impor-tance of the cultural heritage in the community or pattern of South Africa's history.	None.
2.	**Scientific significance** – Possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.	None.
3.	**Research/scientific significance** – Potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage.	None.
4.	**Scientific significance** – Importance in demonstra-ting the principal characteristics of a particular class of South Africa's natural or cultural places/objects.	None.
5.	**Aesthetic significance** – Importance in exhibiting particular aesthetic characteristics valued by a com-munity or cultural group.	None.
6.	**Scientific significance** – Importance in demonstra-ting a high degree of creative or technical achieve-ment at a particular period.	None.
7.	**Social significance** – Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.	None .
8.	**Historic significance** – Strong or special association with the life and work of a person, group or organiza-tion of importance in the history of South Africa.	None.
9.	The significance of the site relating to the history of slavery in South Africa.	None.

4.4 Preliminary Paleontological Desktop Analysis

The project area falls within a red zone as characterised by the SAHRIS Fossil Sensitivity Map (Fig 3). The area is highly sensitive in terms of potential fossil finds. Accordingly, a field assessment, by a SAHRA accredited palaeontologist and protocol for finds will be required before any development may take place.

5 RECOMMENDATIONS

- No heritage sites or features occur within 50m from the footprint.
- The area is also not part of any known cultural landscape.
- There is no need for mitigation in terms of general heritage as no sites or features will be threatened by the proposed development.
- Although the consultant did not see any graves it is possible that 'invisible' graves may be exposed during the proposed development. Should this be the case then all construction activities must be halted and a heritage consultant or the Eastern Cape PHRA be contacted for further evaluation.
- It is also important to point out that a ground survey of the project area by a qualified palaeontologist will be required before any development may take place.
- It should be pointed out that the South African Heritage Act requires that all activities should cease immediately should the developers unearth any additional heritage sites or artefacts pending an evaluation by the heritage authorities.

6 MAPS AND PHOTOGRAPHS

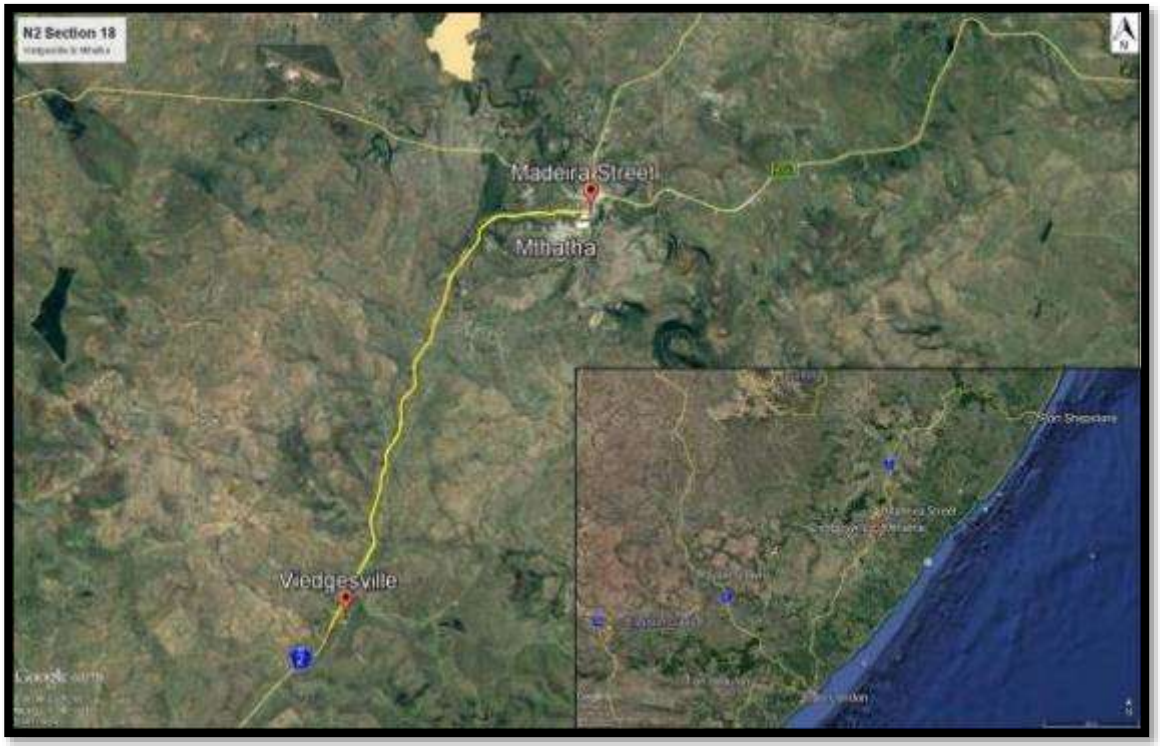

Figure 1. Google Aerial Imagery showing the location of Plot A and Plot B relative to the R61 and the Mthatha Dam\ (Source SANRAL Report 2018).

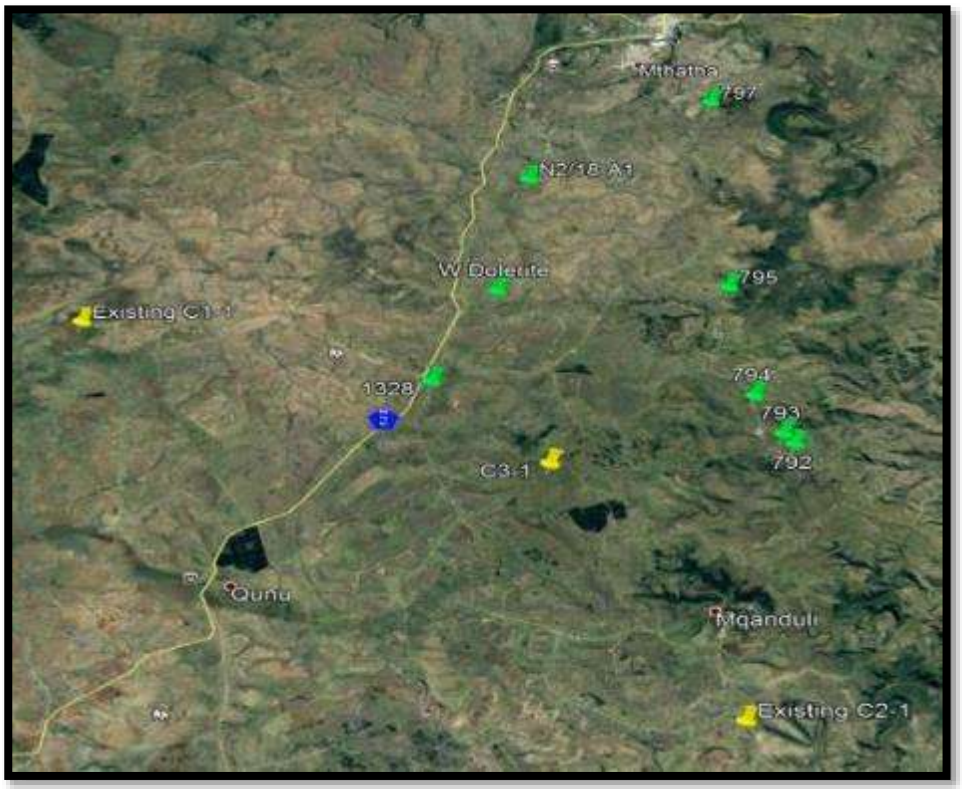

Figure 2. Google Earth Imagery showing the location of Borrow Pits investigated (Source: SANRAL Report 2018).

1 in 250 000 geological formation layers are courtesy of the Council for GeoScience
For more information, go to How to Use the Palaeontological (fossil) Sensitivity Map

Colour	Sensitivity	Required Action
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	LOW	no palaeontological studies are required however a protocol for finds is required
GREY	INSIGNIFICANT/ZERO	no palaeontological studies are required
WHITE/CLEAR	UNKNOWN	these areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map.

Figure 3. SAHRIS Fossil Sensitivity Map of the Project Area (indicated by blue polygon). The red background colour indicates that the area has a high sensitivity and that a field survey by a qualified palaeontologist will be required.

Figure 4. Start of the N2 section near the Shell Garage to the immediate south of Mthatha. No heritage sites occur within 50 m from the road.

Figure 5. Central section of the N2 surveyed. No heritage sites occur closer than 50m to the road.

Figure 6. Section of the N2 (southern) near Viedgesville. Modern housing situated adjacent to the road. No heritage features are situated closer than 50m to the road.

Figure 7. Disturbed soil heaps near Mthatha. Interviews with local residents confirmed that these are not graves.

Figure 8. Although graves were encountered during the survey these are located more than 50m from the N2.

Figure 9. Modern housing adjacent to the N2 (southern section) near Viedgesville. None of the buildings appear to be older than 60 years old.

Figure 10. None of the Borrow Pits in the project area had any heritage sites or features in its near environs.

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APPENDIX 1 RELOCATION OF GRAVES

Burial grounds and graves older than 60 years are dealt with in Article 36 of the NHR Act, no 25 of 1999. The Human Tissues Act (65 of 1983) protects graves younger than 60 years. These fall under the jurisdiction of the National Department of Health and the Provincial Health Departments. Approval for the exhumation and reburial must be obtained from the relevant Provincial MEC as well as the relevant Local Authorities.

Below follows a broad summary of how to deal with grave in the event of proposed development.

- If the graves are younger than 60 years, an undertaker can be contracted to deal with the exhumation and reburial. This will include public participation, organising cemeteries, coffins, etc. They need permits and have their own requirements that must be adhered to.
- If the graves are older than 60 years old or of undetermined age, an archaeologist must be in attendance to assist with the exhumation and documentation of the graves. This is a requirement by law.

Once it has been decided to relocate particular graves, the following steps should be taken:

- Notices of the intention to relocate the graves need to be put up at the burial site for a period of 60 days. This should contain information where communities and family members can contact the developer/archaeologist/public-relations officer/undertaker. All information pertaining to the identification of the graves needs to be documented for the application of a SAHRA permit. The notices need to be in at least 3 languages, English, and two other languages. This is a requirement by law.

- Notices of the intention needs to be placed in at least two local newspapers and have the same information as the above point. This is a requirement by law.

- Local radio stations can also be used to try contact family members. This is not required by law, but is helpful in trying to contact family members.

- During this time (60 days) a suitable cemetery need to be identified close to the development area or otherwise one specified by the family of the deceased.

- An open day for family members should be arranged after the period of 60 days so that they can gather to discuss the way forward, and to sort out any problems. The developer needs to take the families requirements into account. This is a requirement by law.

- Once the 60 days has passed and all the information from the family members have been received, a permit can be requested from SAHRA. This is a requirement by law.

- Once the permit has been received, the graves may be exhumed and relocated.
- All headstones must be relocated with the graves as well as any items found in the grave