

**PHASE ONE CULTURAL HERITAGE IMPACT  
ASSESSMENT OF THE PROPOSED  
CARISBROOKE QUARRY, WITHIN THE  
UBUHLEBEZWE LOCAL AND HARRY GWALA  
DISTRICT MUNICIPALITIES.**



**ACTIVE HERITAGE cc.**

FOR: EnviroPro

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**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<br>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 (2006).                       |
| 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<br>Middle Stone Age 250 000 - 25 000 BP<br>Late Stone Age 30 000 - until c. AD 200 |

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## EXECUTIVE SUMMARY

A phase one cultural heritage survey of the proposed Carisbrooke Quarry, within the Ubuhlebezwe local and Harry Gwala district municipalities, identified two heritage sites. The Carisbrooke Railway Station can be classified as a heritage site relating to the recent 'Struggle-era' history of South Africa. This Station is situated some 450m from the proposed Quarry Site and mitigation is possible. A second heritage feature of the area, however, relates to the entire hill upon which the proposed quarry site is situated. This hill, called Ndlovini, is regarded as a 'living heritage site' with various and diverse intangible associations. The consultant could not locate any archaeological or human-made artefacts or features on the Hill. However, local perceptions (some indigenous and other of more exotic origin) regard the hill, and associated rocky outcrops and springs, as sacred. It is believed that the proposed mining operations will anger the ancestors and other deities associated with the hill and that misfortune would ensue. It is unclear, however, how widespread these indigenous perceptions are and what the time-depth of these would be. It was beyond the scope of this Phase One Heritage Impact Assessment to conduct a detailed study of local and indigenous perceptions regarding the project area. However, it is important to notice that 'living heritage' is also protected by National Heritage Legislation. A Phase Two Heritage Impact Assessment focusing specifically on the 'living heritage' values of the area is therefore proposed before any mining activity may be considered. This study must entail detailed interviews and site visits with diverse members of the local and affected communities. Possible mitigation measures must be discussed and indigenous solutions must be recorded and discussed. Attention is drawn to the South African Heritage Resources Act, 1999 (Act No. 25 of 1999) and the KwaZulu-Natal Heritage Act (Act no 4 of 2008) which, requires that operations that may damage any heritage site, 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)  |
| Type of development:      | <p>Matzogystix (Pty) Ltd have applied for a Mining Permit in terms of section 27 of the Mineral and Petroleum Resources Development Act (No. 28 of 2002), to mine dolerite on a community owned portion of land in Ward 2 of the uBuhlebezwe Local Municipality, Harry Gwala District. The Inyezi Communal Property Association own Portion 3 of Lot 9 Incalu 5000, where the mining will take place. The property is 214.66 hectares in extent. The mining area, including all stockpile areas, offices, parking etc. will ultimately measure a total area of 4.99 hectares.</p> <p>There will be very little activity associated with the construction phase apart from establishing a site office and setting up the screening and crushing equipment in the demarcated areas. The site has existing dirt through the Remainder Portion of Woodburn Valley No. 15322 which is owned by the Bo Woodburn Family Trust. The site is located approximately 8km south of Ixopo town (as the crow flies). Access to the mine area will be restricted and controlled during operation. The applicant will only commence with removing material using excavators on approval of this application.</p> <p>Mining will be carried out in phases so that only portions of the 4.99 hectare site will be cleared at any one time. In the long term, the activity will result in the clearance of more than 1 hectare of indigenous vegetation from the property, triggering an Environmental Impact Assessment (EIA).</p> <p>Blasting will be required either weekly or bi-monthly to soften material so that it can be removed by excavator. A stone crusher and screening plant will also be used on the site. The crusher will be used to reduce the size of larger stones to a finer grade. This will increase the range of consumers depending on the size of stone provided by the quarry (i.e. larger stones required for French drains or landscaping compared to the crushed smaller stones used for the construction of roads). The blasting, crushing and screening of material on site will qualify as primary processing of the mined material.</p> |
| Rezoning or subdivision:  | Rezoning  |
| Terms of reference        | To carry out a Heritage Impact Assessment   |
| 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) (NHRA) and the KwaZulu-Natal Heritage Act, 1997 (Act No. 4 of 2008)  |

### 1.1. Details of the area surveyed:

The proposed development is situated within the uBuhlebezwe Local and Harry Gwala District Municipalities. The site is situated approximately 8km to the south of Ixopo and it overlooks the R56 Provincial Road to the west (Fig 1). The property is located at an elevation of approximately 1200m above mean sea level. The south facing slope of the hill will be mined. The gradient drops off steeply to the north, east and west of the property. Timber farming is a typical land use surrounding the site, however, grasslands and some indigenous woody vegetation occurs on the hill (Figs 4 & 5). The Inyezi Community is located to the north-east of the hill.

The property is approximately 214.66 hectares in extent. The mining area, including all stockpile areas, offices, parking etc. will ultimately measure a total area of 4.99 hectares. The GPS coordinates for the proposed quarry Site are:

| <b>Co-ordinates:</b> | <b>Latitude</b> | <b>Longitude</b> |
|----------------------|-----------------|------------------|
| Quarry Edge 1        | 30°13'22.38"S   | 30° 1'32.24"E    |
| Quarry Edge 2        | 30°13'17.96"S   | 30° 1'38.03"E    |
| Quarry Edge 3        | 30°13'17.90"S   | 30° 1'41.10"E    |
| Quarry Edge 4        | 30°13'23.80"S   | 30° 1'42.96"E    |
| Quarry Edge 5        | 30°13'27.43"S   | 30° 1'34.87"E    |
| Quarry Edge 6        | 30°13'24.02"S   | 30° 1'33.73"E    |

The proposed quarry site needed to be near the crest of the hill to reduce the amount of overburden requiring clearing during operation. The mine area was therefore shifted around the current layout (Fig 1). The location of the proposed quarry area takes into account the following:

- 100m buffer from all drainage lines to the west of the site;
- Steep gradient associated with the eastern side of the property (see close contours in Figure above);
- Existing access to the south of the property. This access is to be discussed and confirmed; and
- Buffers associated with the various servitudes running along the western boundary of the property. The location of the quarry needs to take into account the various buffers associated with the infrastructure as well as the relevant health and safety restrictions when blasting in close proximity to this infrastructure. The South African National Road Agency Limited (SANRAL) have been included as an I & AP to provide comment on the location of the quarry in proximity to the railway line, the Department of Transport (DoT) due to the proximity of the R56 as well as Eskom for the powerlines traversing the north and eastern portions of the property.

## 2 BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

The greater Ixopo area has never been intensively surveyed for heritage sites. However, some sites have been recorded by cultural resource consultants who have worked in the area during the last two decades whilst archaeologists from the KwaZulu-Natal Museum have made sporadic visits to the area. The available evidence, as captured in the KwaZulu-Natal Museum heritage site inventories, indicates that the greater Ixopo area contains a wide spectrum of archaeological sites covering different time-periods and cultural traditions. These include five Early Stone Age sites, two Middle Stone Age sites, four Later Stone Age sites, two rock painting sites, four Early Iron Age sites, three Later Iron Age sites, and one historical site. Various buildings and farmsteads belonging to the Victorian and Edwardian periods occur in the area. These would also be protected by heritage legislation (Derwent 2006).

Stone Age sites of all the main periods and cultural traditions occurs in the greater Ixopo area. Most of these occur in open air contexts as exposed by donga and sheet erosion. The occurrence of Early Stone Age tools in the near vicinity of permanent water resources is typical of this tradition. These tools were most probably made by early hominins such as *Homo erectus* or *Homo ergaster*. Based on typological criteria they most probably date back to between 300 000 and 1.7 million years ago. The presence of the first anatomically modern people (i.e. *Homo sapiens sapiens*) in the area is indicated by the presence of a few Middle Stone Age blades and flakes. These most probably dates back to between 40 000 and 200 000 years ago. The later Stone Age flakes and one rock painting site identified in the area are associated with the San (Bushmen) and their direct ancestors. These most probably dates back to between 200 and 20 000 years ago.

The San were the owners of the land for almost 30 000 years but the local demography started to change soon after 2000 years ago when the first Bantu-speaking farmers crossed the Limpopo River and arrived in South Africa (Mitchell 2002). By 1500 years ago these early Bantu-speaking farmers also arrived in the greater Ixopo area. Due to the fact that these first farmers introduced metal technology to southern Africa they are designated as the Early Iron Age in archaeological literature. Their distinct ceramic pottery is classified to styles known as “Msuluzi” (AD 500-700), Ndongondwane (AD 700-800) and Ntshokane (AD 800-900). Most of the Early Iron Age sites in the greater Ixopo area belong to these traditions (Maggs 1989:31; Huffman 2007:325-462). These sites characteristically occur on alluvial or colluvial soil adjacent to large rivers, such as the Mzimkhulu River, below the 1000m contour. The Early Iron Age farmers originally came from western Africa and brought with them an elaborate initiation complex and a value system centred on the central significance of cattle.

Later Iron Age sites also occur in this area. These were Bantu-speaking agropastoralists who arrived in southern Africa after 1000 year ago via East Africa. Later Iron Age communities in KwaZulu-Natal were the direct ancestors of the Zulu people (Huffman 2007). Many African groups moved through the study area due to the period of tribal turmoil as caused by the expansionistic policies of king Shaka Zulu in the 1820's. It is known from oral history that the Ixopo area was occupied by the eNtlawini, Bhaca, and Zulu refugees in the 19<sup>th</sup> century (Bryant 1965). Their descendants still live in the area. After the Anglo-Zulu war of 1879 and the Bambatha Rebellion of 1911 many of the African people in the study area adopted a Zulu ethnic identity.

### **3 BACKGROUND INFORMATION OF THE SURVEY**

#### **3.1 Methodology**

A desktop study was conducted of the archaeological databases housed in the KwaZulu-Natal Museum. The SAHRIS website was consulted for previous CRM work in the close environs of the study area. In addition, the available archaeological and heritage literature covering the greater Ixopo area was also consulted. Aerial photographs covering the study area was scrutinised for historical and Iron Age sites. A ground survey following accepted archaeological methodology was conducted on the 16th January 2017.

#### **3.2 Restrictions encountered during the survey**

##### **3.2.1 Visibility**

Potential heritage site visibility is good.

##### **3.2.2 Disturbance.**

No disturbance of any potential heritage features was noted.

#### **3.3 Details of equipment used in the survey**

GPS: Garmin Etrek

Digital cameras: Canon Powershot A460

All readings were taken using the GPS. Accuracy was to a level of 5 m.



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## **4 DESCRIPTION OF SITES AND MATERIAL OBSERVED**

### **4.1 Locational data**

Province: KwaZulu-Natal

Town: Ixopo

Municipality: Ubuhlebezwe Local and Harry Gwala District Municipalities

### **4.2 Description of the general area surveyed**

The desktop survey located no archaeological sites within 2km from the project area. However, one historical site associated with the recent Struggle History of South Africa occurs approximately 450m to the north west of the proposed quarry site. In addition, the entire hill on which the proposed quarry site is situated contains intangible heritage values and can therefore be regarded as a 'living heritage' site. A description of these follows below.

## **5 STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)**

### **5.1 The Carisbrooke Railway Station**

#### **5.1.1 Background**

The Carisbrooke Railway Station is situated below the Hill at approximately 450m to the North West of the proposed quarry site (Figs 2 & 6). The GPS coordinates for the Station are: S 30° 13' 4.67" E 30° 1' 35.18"

The Carisbrooke Railway Station is rather unimposing and comprises of a small station building and a few associated structures. However, the Station is older than 60 years old and, just on account of its age, protected by provincial heritage legislation. In addition, the Station is situated in Alan Paton Country and it is actually mentioned in his acclaimed book 'Cry my Beloved Country' (Paton 1948). One of the central themes in this book is the social protest against the structures of the society that would later give rise to apartheid. As such it falls within the genre of Struggle-era literature and politics. The Carisbrooke Railway Station can therefore be rated as a Struggle-era site associated with one of the literary giants of South Africa. It is certainly rated as locally significant (Table 4) and should be afforded greater importance.

### **5.1.2 Mitigation**

The Carisbrooke Railway Station is not directly threatened by the proposed development as it is situated more than 400m from the quarry site. However, it is imperative that the developers maintain and respect a buffer zone of at least 50m around this heritage site. No development or removal of material may occur within this buffer zone. No access Roads may be constructed within this buffer zone and office and construction equipment may not be placed or stored within the perimeters of the buffer zone.

**Table 2. Evaluation of Carisbrooke Railway Station**

| Significance criteria in terms of Section 3(3) of the NHRA |  |               |
|--|--|---------------|
|  | <b>Significance</b>  | <b>Rating</b> |
| 1.   | <b>Historic and political significance</b> - The importance of the cultural heritage in the community or pattern of South Africa's history.                          | High          |
| 2.   | <b>Scientific significance</b> – Possession of uncommon, rare or endangered aspects of South Africa's cultural heritage.   | None.         |
| 3.   | <b>Research/scientific significance</b> – Potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage.    | Average       |
| 4.   | <b>Scientific significance</b> – Importance in demonstrating the principal characteristics of a particular class of South Africa's cultural places/objects.          | None.         |
| 5.   | <b>Aesthetic significance</b> – Importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.                               | None.         |
| 6.   | <b>Scientific significance</b> – Importance in demonstrating a high degree of creative or technical achievement at a particular period.                              | None.         |
| 7.   | <b>Social significance</b> – Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.                  | None.         |
| 8.   | <b>Historic significance</b> – Strong or special association with the life and work of a person, group or organization of importance in the history of South Africa. | High.         |
| 9.   | The significance of the site relating to the history of slavery in South Africa.   | None.         |

## 5.2 The Ndlovini Hill

### 5.2.1 Background

The entire hill on which the proposed quarry site is situated is called Ndlovini Hill by members of the local community. The hill, including the associated quarry site, was surveyed by the consultant and no archaeological sites or man-made heritage features occur on this property. However, the hill has prominent intangible heritage associations for local and affected communities and it is in fact a 'living heritage site'. The GPS coordinates for the central section of Ndlovini Hill is: S 30° 13' 26.43" E 30° 01' 45.13"

### 5.2.2 Living Heritage

Living (or intangible) heritage encompasses all those ideas, traditions, customs and memories that are passed from generation to generation. It includes things such as language, folklore, traditional medicine and healing, music, songs, dances and recipes. These are all things that contribute to the identity of a group (Orton et al 2016). The Department of Arts and Culture (2009:5) defines living heritage as "cultural expressions and practices that form a body of knowledge and provide for continuity, dynamism, and meaning of social life to generations of people as individuals, social groups, and communities." Part of the importance of living heritage is that it helps to create a new national identity and promotes heritage that was repressed by missionaries, colonists and the apartheid regime (Department of Arts and Culture, 2009). Living Heritage is mentioned as an important heritage category in the National Heritage Resources Act and the Department of Arts and Culture has produced a White Paper on Living Heritage. Unfortunately, there are no provincial policy guidelines on Living Heritage sites and this makes it difficult to assess and grade such sites.

In terms of the present study the consultant conducted an interview with Mr Edmund Duma, a local school principal and amateur historian, who had been visiting Ndlovini Hill since the mid 1990's. According to Mr Duma the hill is sacred and should be protected against all potential development otherwise the ancestors and other celestial deities would be angered and cause misfortune. The following tangible heritage aspects are associated with Ndlovini Hill.

- The hill is said to be the abode of the ancestors and other celestial deities. Community members claim that there are caverns and tunnels below the surface and that one can hear that the hill is hollow when it is climbed. These underground caverns are also inhabited by ancestral beings.

- It is said that strong winds and even rain always follows after a veldfire has raged on top of the hill. This is a sign of the ancestors displaying their displeasure with the way the people are managing the area.
- Various springs emanate from the Hill, especially on the eastern aspect. These eventually fed into the Ncalu River – a stream that is associated with the mythical Inkanyamba (a water serpent) and the training of traditional healers.
- The hill is also ascended and often used for prayer (in the Christian tradition) by local ministers and priests. In his book “Cry the Beloved Country” the renowned South African author Alan Paton (1948) , wrote about a local priest whose son was going to be put to death by hanging during the early apartheid years. The night before this could happen, the priest climbed to the top of the hill and prayed at a shelter. In this way the Hill is also significant as a feature relating to the Apartheid and Struggle-era history of South Africa.
- Interestingly, shallow shelter-like formations occur in a rocky outcrop on the eastern side of the Hill. Here the rocky outcrops assume various shapes and forms. It was during the late 1990’s that Mr Edmund Duma started to identify iconic shapes in these and other rocky formations in KwaZulu-Natal. The area on the eastern side of Ndlovini Hill came to be called “the Area of the Gods” (GPS coordinates: S 30° 13’ 20.48” E 30° 01’ 53.67”) (Figs 2, 5, 7). Here Edmund Duma identified an elephant shaped rock said to be an image of the Hindu God Lord Ganesha. He also identified rocks said to be representations of the Hindu Monkey God, Hanuman, as well as a representation of the deity Shiva. Members of the local Hindu community has subsequently been to Ndlovini Hill but not all of them are convinced that these are indeed representations of Hindu deities. Nevertheless, the president of the South African Hindu Maha Sabha, Ashwin Trikamjee, said the rock formation could be that of an elephant or an image of Ganesha. It would be up to people and devotees to decide (Soobramoney 2015).

It is difficult to give an objective evaluation of these local perceptions relating to the intangible heritage of Ndlovini Hill (Table 3). However, it is evident that these perceptions and others should be evaluated against the opinions of diverse members of the local community – not all of whom may agree with these beliefs. It is also important to establish the age, if possible, relating to the origins of these local perceptions. It is entirely possible that some of these relate to the recent “invention of tradition” rather than age-old beliefs associated with the landscape. However, even recently established beliefs may still have intangible heritage value and should be evaluated as such. In addition, it is important to establish if the entire Ndlovini Hill should be left untouched or if sections, such as the footprint with no apparent tangible heritage features, may be developed

It is therefore imperative that a second heritage impact assessment, based specifically on the intangible heritage values of the area, should be called-for before a final assessment can be made. This second phase heritage impact assessment should entail detailed oral interviews and site visits with various sectors of the local and affected

community. It is beyond the scope of this Phase One Heritage Impact Assessment to conduct such detailed ethnographic investigations.

#### *5.2.2.1 Mitigation*

At this point of the investigation it would be premature to suggest mitigation in terms of the 'living heritage' of the footprint and the greater Ndlovini Hill area. A second phase heritage impact assessment based specifically on the intangible heritage values of the area should first be conducted. The recommendations of this second phase study should inform the way forward in terms in mitigation.

**Table 3. Preliminary evaluation of Ndlovini Hill including the proposed quarry site.**

| Significance criteria in terms of Section 3(3) of the NHRA |  |                                       |
|--|--|---------------------------------------|
|  | <b>Significance</b>  | <b>Rating</b>                         |
| 1.   | <b>Historic and political significance</b> - The importance of the cultural heritage in the community or pattern of South Africa's history.                          | High, but needs further evaluation.   |
| 2.   | <b>Scientific significance</b> – Possession of uncommon, rare or endangered aspects of South Africa's cultural heritage.   | Average.                              |
| 3.   | <b>Research/scientific significance</b> – Potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage.    | Average                               |
| 4.   | <b>Scientific significance</b> – Importance in demonstrating the principal characteristics of a particular class of South Africa's cultural places/objects.          | High, but needs further evaluation    |
| 5.   | <b>Aesthetic significance</b> – Importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.                               | None.                                 |
| 6.   | <b>Scientific significance</b> – Importance in demonstrating a high degree of creative or technical achievement at a particular period.                              | None.                                 |
| 7.   | <b>Social significance</b> – Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.                  | None.                                 |
| 8.   | <b>Historic significance</b> – Strong or special association with the life and work of a person, group or organization of importance in the history of South Africa. | Average, but needs further evaluation |
| 9.   | The significance of the site relating to the history of slavery in South Africa.   | None.                                 |

### 5.3 Field Rating

- The field rating of the Carisbrooke Railway Station is Local Grade 111A (Table 4). The site is considered to be of high significance locally and should be retained as a heritage site.
- The preliminary rating for the Ndlovini Hill (including the proposed mining area) is Local Grade 111A (Table 4). However, this rating may change given the recommendations of a Second Phase Heritage Impact Assessment.

**Table 4. 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                |



## **6 RECOMMENDATIONS**

No tangible heritage sites, features or artefacts occur on the proposed quarry site and they therefore do not pose any risk to the proposed mining activities. However, the entire Hill (called Ndlovini), upon which the proposed quarry site is situated, is a 'living heritage' site and is regarded as sacred. No mining activities may take place on the hill until such a time that a Phase Two Heritage Impact Assessment with a particular focus on the intangible heritage values of the area is completed. This study should entail a thorough study and evaluation of these local beliefs by interviewing diverse sectors of the local and affected communities. The results of the study will help to formulate mitigation – if applicable. It should also be pointed out that the KwaZulu-Natal Heritage Act requires that operations exposing or damage any heritage site or feature should cease immediately pending an evaluation by the heritage authorities.

## **7 RISK PREVENTATIVE MEASURES ASSOCIATED WITH CONSTRUCTION**

Not applicable until results of a Phase Two Heritage Impact Assessment is known.

8 MAPS AND FIGURES

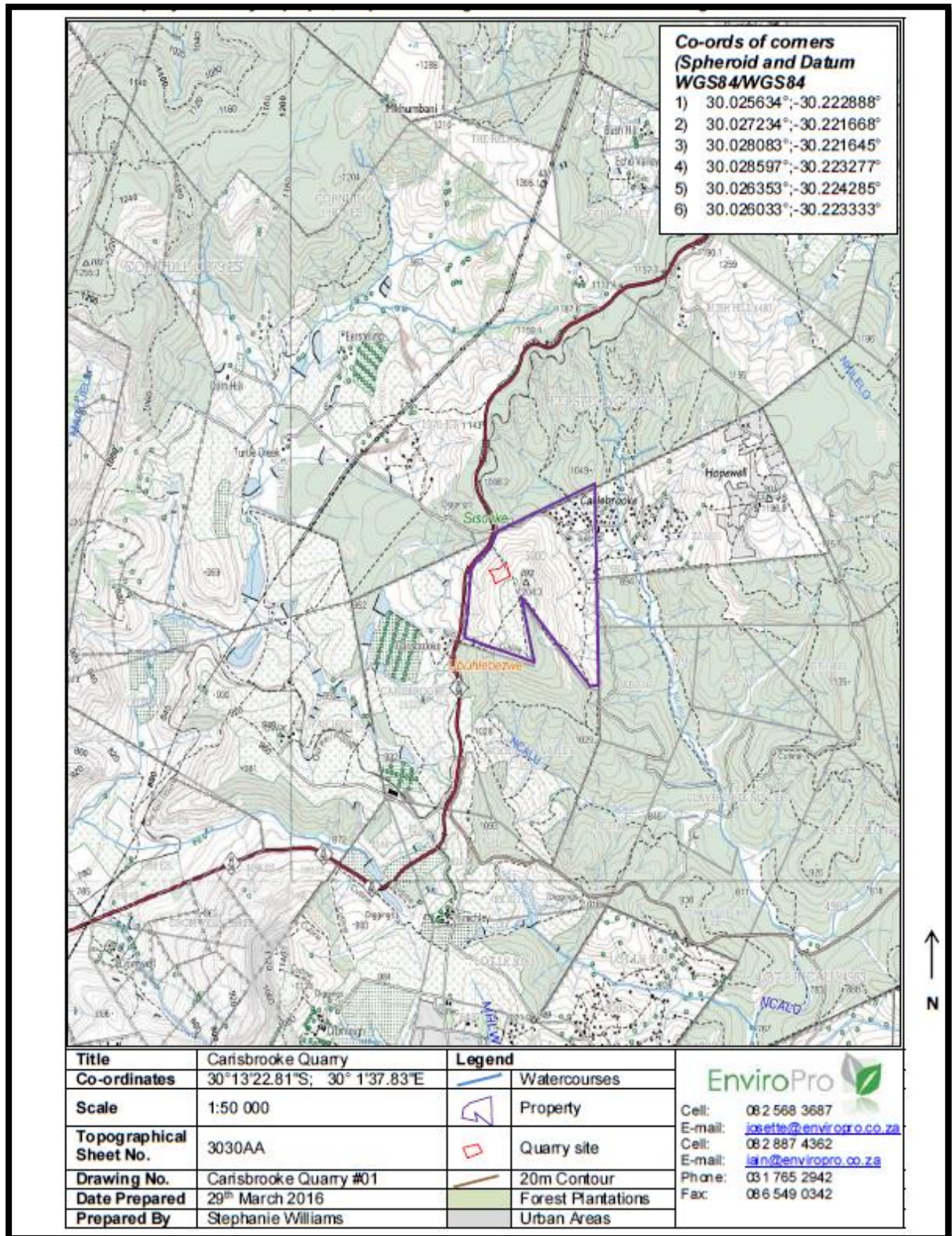
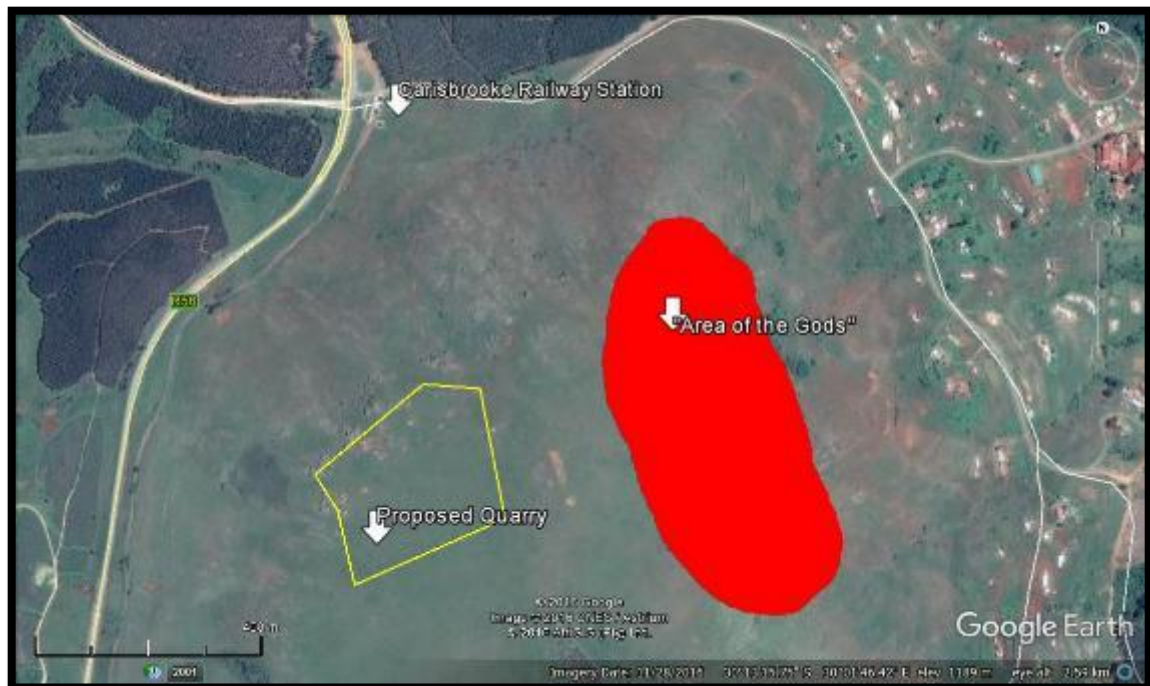


Figure 1. Topographical map showing the location of the proposed Carisbrooke Quarry Site (Source: EnviroPro).



**Figure 2. Google aerial photograph showing the location of identified heritage sites or areas in the near vicinity of the proposed quarry site.**



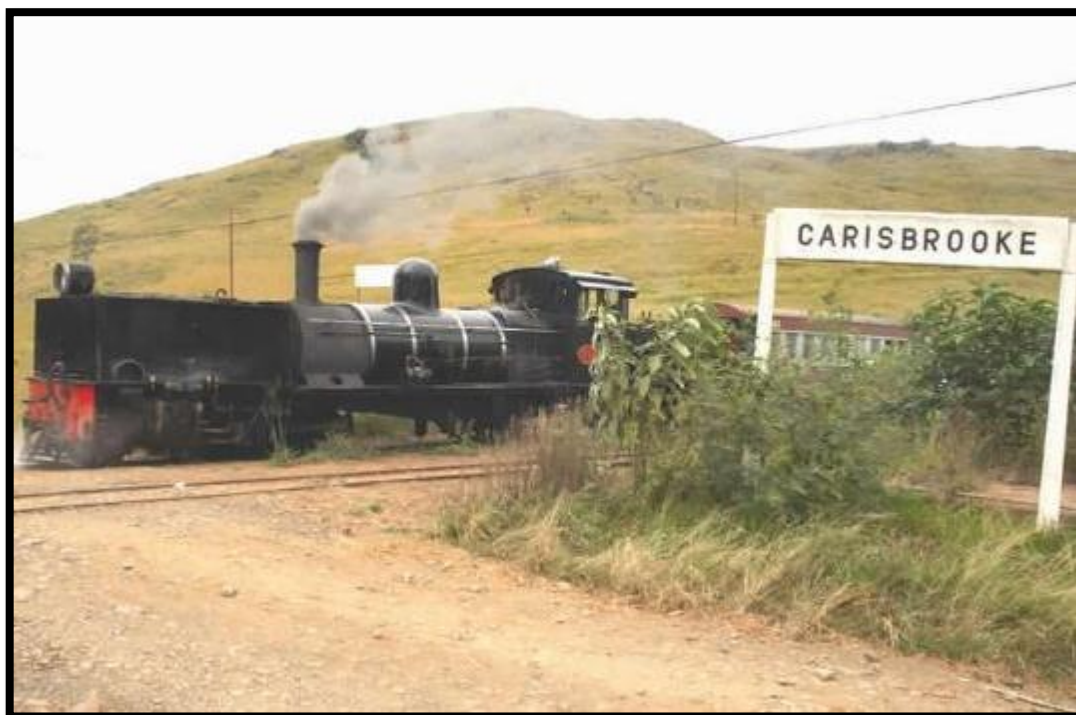
**Figure 3. Google aerial photograph showing the location of the rocky outcrop symbolising Lord Ganesha on the eastern side of Ndlovini Hill.**



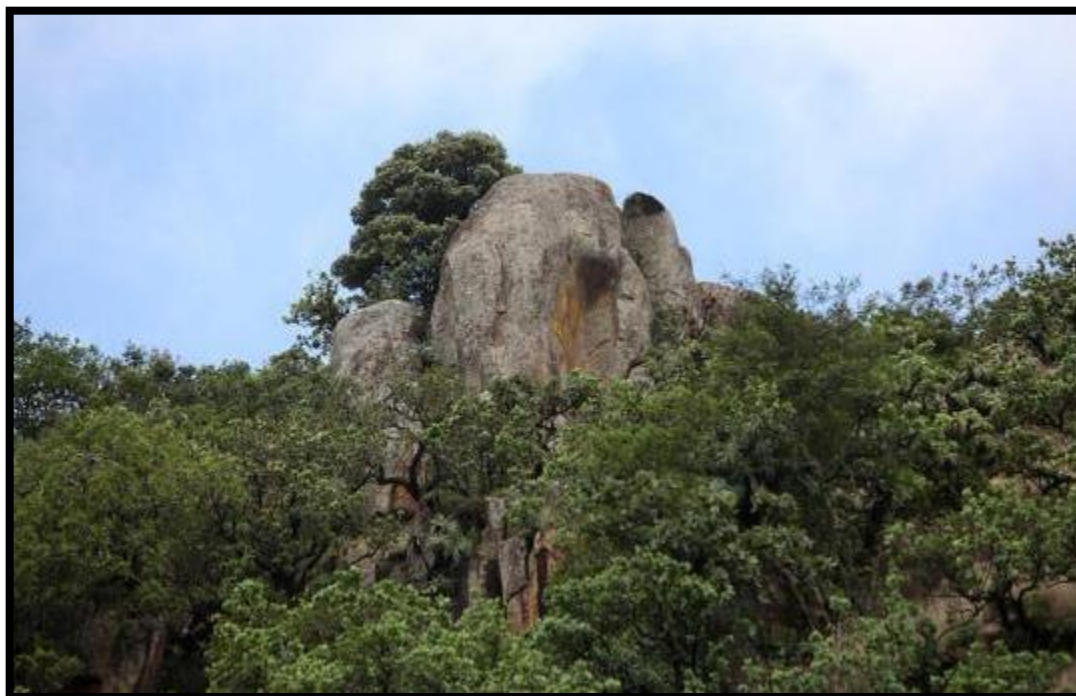
***Figure 4. Photograph taken from the proposed quarry site. No tangible heritage sites or features occur on the footprint.***



***Figure 5. The eastern flank of Ndlovini Hill showing the rocky outcrops with intangible heritage associations in the distance.***



**Figure 6. Photograph of Carisbrooke Railway Station.**



**Figure 7. Photograph of the 'Area of the Gods'. The central rock formation is said to resemble Lord Ganesha, a Hindu elephant deity.**

## 9 REFERENCES

- Bryant, A. T. 1965. *Olden times in Zululand and Natal*. Cape Town: C. Struik.
- Derwent, S. 2006. *KwaZulu-Natal Heritage Sites: a Guide to some Great Places*. Claremont: David Philip.
- Huffman, T. N. 2007. *Handbook to the Iron Age: The Archaeology of Pre-colonial Farming Societies in Southern Africa*. University of KwaZulu-Natal Press. Pietermaritzburg.
- Maggs, T. The Iron Age farming communities. In Duminy, A. and Guest, B. 1989. *Natal and Zululand: from Earliest Times to 1910. A New History*. Pg. 28-46. University of Natal Press. Pietermaritzburg.
- Mitchell, P . 2002. *The Archaeology of Southern Africa*. Cambridge University Press: Cambridge.
- Paton, A. 1948. *Cry My Beloved Country*. Bennet Cerf.
- Orton, J, Almond, J, Clarke, N, Fisher, R. 2016. Draft Report of Oil and Gas Exploration in the Karoo. Chapter 15: Impacts on Heritage. Unpublished Report
- SAHRA, 2005. *Minimum Standards For The Archaeological And The Palaeontological Components Of Impact Assessment Reports, Draft version 1.4*.
- Soobramoney, C. 2015. Local rock an image of Ganesha. *Post 2015*.

