DESKTOP SURVEY OF THE PROPOSED DIBILIZA SHOPPING CENTRE, MANGUZI, KWAZULU-NATAL

FOR TRIPLO4

DATE: 31 AUGUST 2016

By Gavin Anderson

Umlando: Archaeological Surveys and Heritage

Management

PO Box 102532, Meerensee, 3901

Phone/fax: 035-7531785 Fax: 0865445631

Cell: 0836585362



TABLE OF CONTENT

INTRODUCTION	
KWAZULU-NATAL HERITAGE ACT NO. 4 OF 2008	9
METHOD	11
Defining significanceRESULTS	12
RESULTS	15
DESKTOP STUDY	15
PALAEONTOLOGICAL IMPACT ASSESSMENT	18
CONCLUSION	19
TABLE OF FIGURES FIG. 1 GENERAL LOCATION OF THE STUDY AREA	5
FIG. 2: AERIAL OVERVIEW OF THE STUDY AREA	6
FIG. 3: TOPOGRAPHICAL OVERVIEW OF THE WESTERN STUDY AREA	
FIG. 4: SCENIC VIEWS OF THE PIPELINE ROUTE	
TABLE 1: SAHRA GRADINGS FOR HERITAGE SITES	
FIG. 5: LOCATION OF KNOWN HERITAGE SITES NEAR THE STUDY AREA	
FIG. 6: STUDY AREA IN 1962	17

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

05/09/2016

INTRODUCTION

The client proposes to build a Shopping mall and junction called Dubiliza Junction. The development is to take place on Reserve 14 of Farm 15834 in the uMhlathuze District, KwaZulu-Natal. There is currently some development that exists on this property including the current PFS.

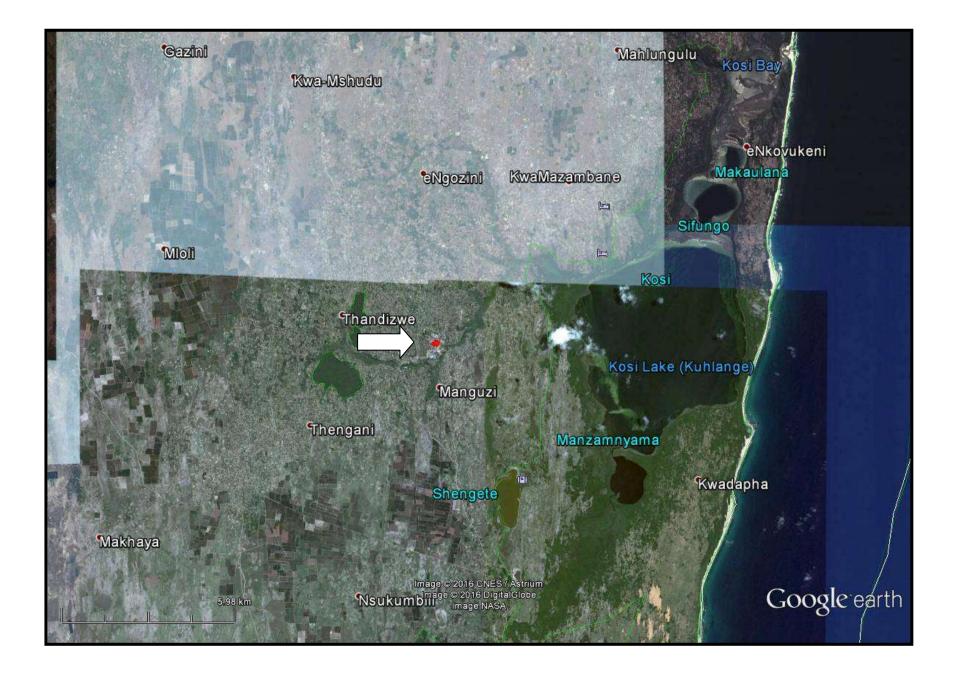
The existing filling station is located in the southeast corner of the property. The developer proposes to relocate the filling station on the same property to the north-east corner. This upgrade and repositioning of the station will allow for better access to the garage of the adjacent main road (N22). This roads leads directly to the Kosi Bay border post which indicates that there will be a fair amount of traffic. The potential repositioning also allows for larger vehicles i.e. trucks to access this garage.

The rest of the development will be utilized for a proposed shopping centre. The total size of the proposed centre is 8200 square meters.

Fig. 1 - 3 shows the locality of the road upgrade. Figure 4 shows some of the BWSS routes.

Umlando was requested to undertake a survey of the study area; however, we noted that it only requires a letter of exemption with a basic desktop study as the area has been developed and impacted already.

FIG. 1 GENERAL LOCATION OF THE STUDY AREA



Dibiliza Shapping centre exemption, doc Umbando 05/09/2016

FIG. 2: AERIAL OVERVIEW OF THE STUDY AREA

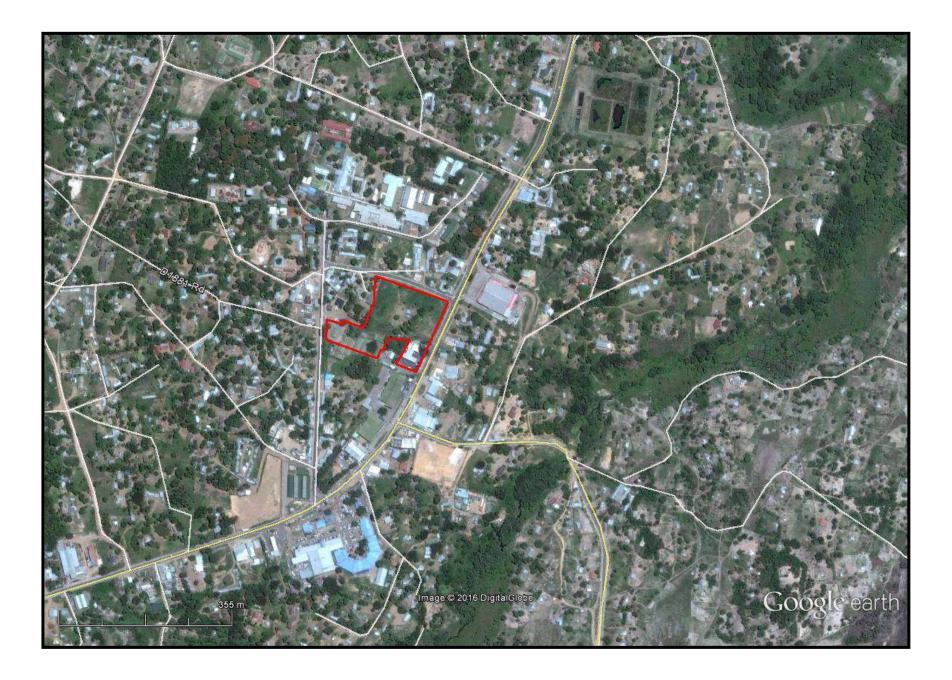


FIG. 3: TOPOGRAPHICAL OVERVIEW OF THE WESTERN STUDY AREA

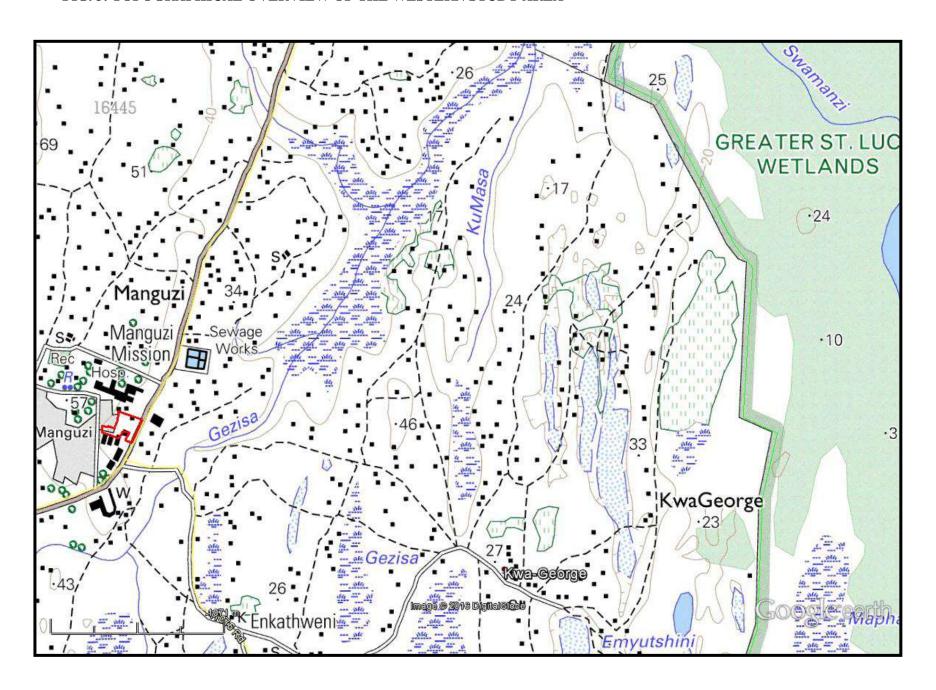
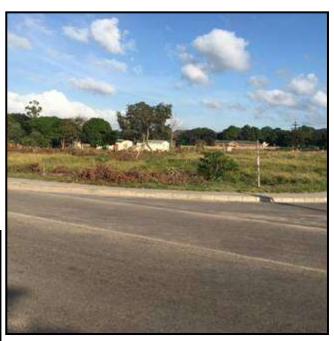


FIG. 4: SCENIC VIEWS OF THE STUDY AREA











KWAZULU-NATAL HERITAGE ACT NO. 4 OF 2008

"General protection: Structures.—

- No structure which is, or which may reasonably be expected to be older than 60 years, may be demolished, altered or added to without the prior written approval of the Council having been obtained on written application to the Council.
- Where the Council does not grant approval, the Council must consider special protection in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- The Council may, by notice in the Gazette, exempt—
- A defined geographical area; or
- defined categories of sites within a defined geographical area, from the provisions of subsection where the Council is satisfied that heritage resources falling in the defined geographical area or category have been identified and are adequately protected in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- A notice referred to in subsection (2) may, by notice in the *Gazette*, be amended or withdrawn by the Council.

General protection: Graves of victims of conflict.—No person may damage, alter, exhume, or remove from its original position—

- the grave of a victim of conflict;
- a cemetery made up of such graves; or
- any part of a cemetery containing such graves, without the prior written approval of the Council having been obtained on written application to the Council.
- General protection: Traditional burial places.—
- No grave—
- not otherwise protected by this Act; and
- not located in a formal cemetery managed or administered by a local authority, may be damaged, altered, exhumed, removed from its original position, or otherwise disturbed without the prior written approval of the Council having been obtained on written application to the Council.

The Council may only issue written approval once the Council is satisfied that—

- the applicant has made a concerted effort to consult with communities and individuals who by tradition may have an interest in the grave; and
- the applicant and the relevant communities or individuals have reached agreement regarding the grave.

General protection: Battlefield sites, archaeological sites, rock art sites, palaeontological sites, historic fortifications, meteorite or meteorite impact sites.—

- No person may destroy, damage, excavate, alter, write or draw upon, or otherwise disturb any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- Upon discovery of archaeological or palaeontological material or a
 meteorite by any person, all activity or operations in the general vicinity of
 such material or meteorite must cease forthwith and a person who made
 the discovery must submit a written report to the Council without delay.
- The Council may, after consultation with an owner or controlling authority, by way of written notice served on the owner or controlling authority, prohibit any activity considered by the Council to be inappropriate within 50 metres of a rock art site.
- No person may exhume, remove from its original position or otherwise disturb, damage, destroy, own or collect any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- No person may bring any equipment which assists in the detection of metals and archaeological and palaeontological objects and material, or excavation equipment onto any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, or meteorite impact site, or

- use similar detection or excavation equipment for the recovery of meteorites, without the prior written approval of the Council having been obtained on written application to the Council.
- The ownership of any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site, on discovery, vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government." (KZN Heritage Act of 2008)

METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. Here we would consult the database that has been collated by Umlando. These databases contains archaeological site locations and basic information from several provinces (information from Umlando surveys and some colleagues), most of the national provincial monuments and battlefields in Southern (http://www.vuvuzela.com/googleearth/monuments.html) and cemeteries southern Africa (information supplied by the Genealogical Society of Southern Africa). We use 1st and 2nd edition 1:50 000 topographical and 1937 aerial photographs where available, to assist in general location and dating of buildings and/or graves. The database is in Google Earth format and thus used as a quick reference when undertaking desktop studies. Where required we would consult with a local data recording centre, however these tend to be fragmented between different institutions and areas and thus difficult to access at times. We also consult with an historical architect, palaeontologist, and an historian where necessary.

The survey results will define the significance of each recorded site, as well as a management plan.

Umbando Dibiliza Shopping centre exemption, doc 05/09/2016 All sites are grouped according to low, medium, and high significance for the purpose of this report. Sites of low significance have no diagnostic artefacts or features. Sites of medium significance have diagnostic artefacts or features and these sites tend to be sampled. Sampling includes the collection of artefacts for future analysis. All diagnostic pottery, such as rims, lips, and decorated sherds are sampled, while bone, stone, and shell are mostly noted. Sampling usually occurs on most sites. Sites of high significance are excavated and/or extensively sampled. Those sites that are extensively sampled have high research potential, yet poor preservation of features.

Defining significance

Heritage sites vary according to significance and several different criteria relate to each type of site. However, there are several criteria that allow for a general significance rating of archaeological sites.

These criteria are:

1. State of preservation of:

- 1.1. Organic remains:
- 1.1.1. Faunal
- 1.1.2. Botanical
- 1.2. Rock art
- 1.3. Walling
- 1.4. Presence of a cultural deposit
- 1.5. Features:
- 1.5.1. Ash Features
- 1.5.2. Graves
- 1.5.3. Middens
- 1.5.4. Cattle byres
- 1.5.5. Bedding and ash complexes

2. Spatial arrangements:

- 2.1. Internal housing arrangements
- 2.2. Intra-site settlement patterns
- 2.3. Inter-site settlement patterns

3. Features of the site:

- 3.1. Are there any unusual, unique or rare artefacts or images at the site?
 - 3.2. Is it a type site?
- 3.3. Does the site have a very good example of a specific time period, feature, or artefact?

4. Research:

- 4.1. Providing information on current research projects
- 4.2. Salvaging information for potential future research projects

5. Inter- and intra-site variability

- 5.1. Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and artefacts?
- 5.2. Can this particular site yield information about a community's social relationships within itself, or between other communities?

6. Archaeological Experience:

6.1. The personal experience and expertise of the CRM practitioner should not be ignored. Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

7. Educational:

- 7.1. Does the site have the potential to be used as an educational instrument?
 - 7.2. Does the site have the potential to become a tourist attraction?
- 7.3. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.

8. Other Heritage Significance:

- 8.1. Palaeontological sites
- 8.2. Historical buildings

- 8.3. Battlefields and general Anglo-Zulu and Anglo-Boer sites
- 8.4. Graves and/or community cemeteries
- 8.5. Living Heritage Sites
- 8.6. Cultural Landscapes, that includes old trees, hills, mountains, rivers, etc related to cultural or historical experiences.

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. This occurs in Phase 2. These test-pit excavations may require further excavations if the site is of significance (Phase 3). Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts.

The above significance ratings allow one to grade the site according to SAHRA's grading scale. This is summarised in Table 1.

TABLE 1: SAHRA GRADINGS FOR HERITAGE SITES

SITE SIGNIFICANCE	FIELD RATING	GRADE	RECOMMENDED MITIGATION
High	National	Grade 1	Site conservation / Site
Significance	Significance		development
High	Provincial	Grade 2	Site conservation / Site
Significance	Significance		development
High	Local	Grade 3A /	
Significance	Significance	3B	
High	Generally		Site conservation or
Medium	Protected A		mitigation prior to development /
Significance			destruction
Medium	Generally		Site conservation or
Significance	Protected B		mitigation / test excavation /
3			systematic sampling / monitoring
			prior to or during development /
			destruction
Low	Generally		On-site sampling monitoring
	•		
Significance	Protected C		or no archaeological mitigation
			required prior to or during
			development / destruction

RESULTS

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 no known archaeological sites in the general area (fig. 5). This is probably a result of the area being relatively populated over the last 20 years.

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

The 1962 topographical map indicates that the area is sparsely populated and that there is a mission nearby. This changes dramatically by 2002 (fig. 3), and 2016 (fig. 4), where the area has been developed and populated.

The area is unlikely to have any heritage sites in the footprint and it should be exempt from further HIA studies.

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

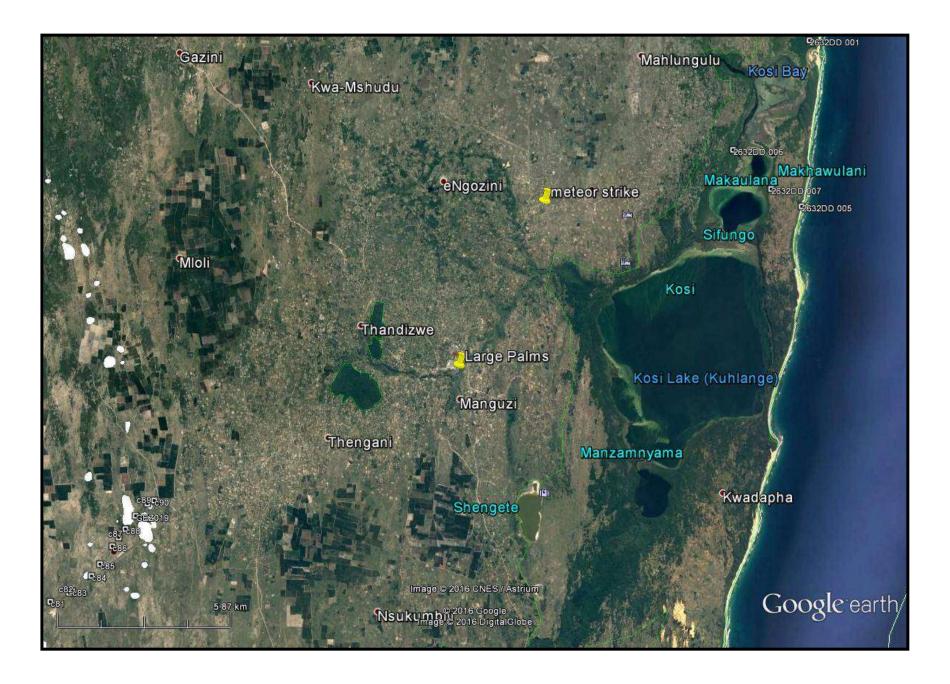
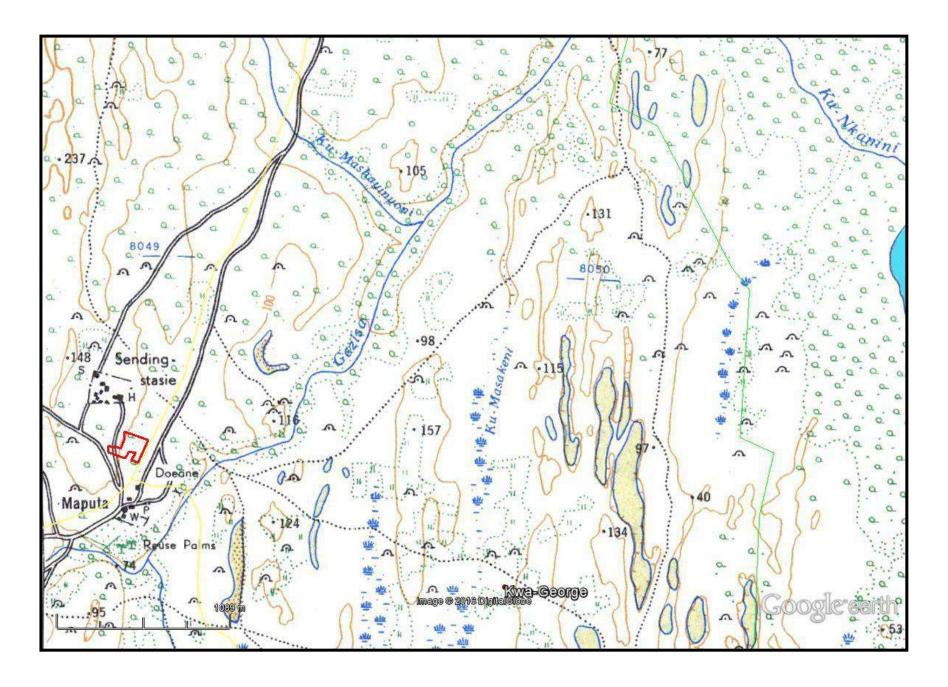


FIG. 6: STUDY AREA IN 1962



PALAEONTOLOGICAL IMPACT ASSESSMENT

The palaeontological sensitivity map indicates that the area is at the intersection of high palaeontological sensitivity. However, the area has already been disturbed by various construction activities. The area should be exempt from further palaeontological work. A protocol for any finds should be made whereby the ECO and/or Amafa KZN are informed of any chance finds.



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.	

CONCLUSION

A desktop heritage survey was undertaken for the proposed Dibiliaza Shopping Centre. The desktop noted that the area has been severely affected by various developments and infrastructures over the last 15 - 20 years and that is was highly unlikely that any heritage remains would occur in the area.

We recommend that the project be exempt from further HIA studies