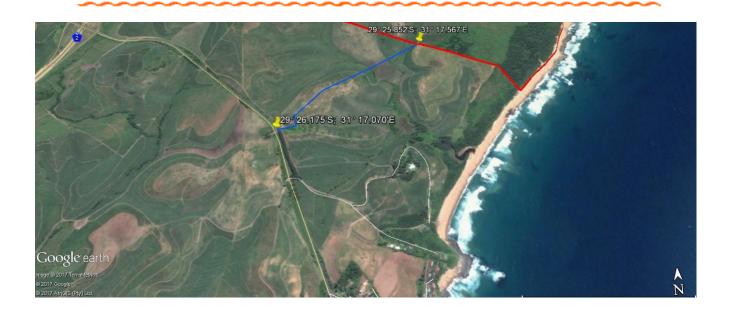


Heritage Impact Assessment of the proposed Tinley Manor North Beach Resort Remainder of the Farm Lot 1 of 1672

KwaDukuza Municipality

KwaZulu-Natal



For

Tongaat Hulett Developments

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01 October 2018

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Management summary

eThembeni Cultural Heritage was appointed by Tongaat Hulett Developments (THD) to undertake a heritage impact assessment of a beach resort development at Tinley Manor, in terms of the National Environmental Management Act 107 of 1998 as amended (NEMA); in compliance with Section 38 of the National Heritage Resources Act 25 of 1999 (NHRA). eThembeni staff inspected the area on 20 October and 21 October 2017 respectively; and completed a controlled-exclusive archaeological surface survey, an architectural assessment of a farmhouse, as well as a database and literature search.

We identified one set of heritage resources within the proposed development area. A residential farmhouse precinct older than 60 years was assessed in terms of the NHRA as the client (THD) has indicated that these are to be demolished. Application for a demolition permit to Amafa will be required and on the basis of this assessment will be be pursued.

Three (3) Iron Age archaeological scatters were observed. These are ephemeral and severely plough disturbed and do not comprise residual archaeological sites. No further subsurface investigation is recommended.

The proposed development will transform the landholdings from agriculture to an Integrated Beach Resort Development, in keeping with the current development trends along this section of the KwaZulu-Natal coastal landscape.

We recommend that this development project proceed with the proposed heritage resource mitigation proposed in the Appendices to this report.

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Introduction

eThembeni Cultural Heritage was appointed by Tongaat Hulett Developments (THD) to undertake a heritage impact assessment of an Integrated Beach Resort Developmen at Tinley North, in terms of the National Environmental Management Act 107 of 1998 as amended (NEMA); in compliance with Section 38 of the National Heritage Resources Act 25 of 1999 (NHRA). See Appendix A.

The proposed Tinley Manor North development area comprises Farm Lot One of 1672. Title Deeds indicate that the parent farm portions were a Deed of Grant to one Pieter Gerhard van der Byl in 1859 and registered in 1861. This land holding was subsequently transferred to the Natal Land and Colonization Company, Ltd on the establishment of the Natal Colony, and subdivided into the current Lots between 1879 and 1882¹. The land holding was purchased in 1915 by Sir J.L Hulett and Sons, Ltd; the predecessors of the Tongaat Hulett Company, the current landowners². The land has been subject to agricultural activity under various leaseships since inception.

Road access to the proposed development area is from the N2 freeway northbound from Durban at the Tinley Manor/Shakaskraal underpass. The site is currently zoned agricultural, sugar cane cultivation being the principle crop. Development rights for full township establishment and residential zoning are in the process of being secured by the landowner, Tongaat Hulett Developments.

Methodology

eThembeni staff inspected the survey area in July 2017 and again on 20 October and 22 October respectively; the latter to complete an architectural conservation assessment of the farmhouse on the property and a reassess the controlled-exclusive archaeological surface survey³ conducted in July, as further cane cutting had taken place. Soil surface visibility was moderate. No excavations or sampling were undertaken, since a permit from Amafa aKwaZulu-Natali is required to disturb a heritage resource. We consulted various provincial databases, including historical, archaeological and geological sources and undertook a limited literature review, included as Appendix B. We assessed the value and significance of heritage resources, as defined in the NHRA, Act 25 1999 and the criteria contained in Appendix C. Culturally significant landscapes were assessed according to the criteria in Appendix D. Geographic coordinates and photographs were obtained with a handheld Garmin Montana 680 global positioning unit (GPS).

See kml file and concept drawings and illustrations provided by the client loaded to the SAHRIS Case File.

¹ http://www.natalia.org.za/Files/4/Natalia%20v04%20article%20p49-54%20C.pdf

² See Appendix F

³ Where 'sufficient information exists on an area to make solid and defensible assumptions and judgements about where [heritage resource] sites may and may not be' and 'an inspection of the surface of the ground, wherever this surface is visible, is made, with no substantial attempt to clear brush, turf, deadfall, leaves or other material that may cover the surface and with no attempt to look beneath the surface beyond the inspection of rodent burrows, cut banks and other exposures that are observed by accident' (King 1978).

Appendix E contains a statement of independence and a summary of our ability to undertake this heritage impact assessment.



Figure 1. Tinley Manor Study Area

Observations

No construction activities associated with the proposed project had begun prior to our visit, in accordance with provincial heritage legislation.

Places, buildings, structures and equipment

We identified a farm house and ancillary structures older than 60 years.

See detailed report (below).

Places to which oral traditions are attached or which are associated with living heritage

None will be affected.

Historical settlements and townscapes

None will be affected.

Landscapes and natural features

The proposed development will transform the site from agriculture to an Integrated Beach Resort Development. However, this is in keeping with the KwaDukuza IDP and current developmental trends along this section of the KwaZulu-Natal North Coast landscape.

Geological sites of scientific or cultural importance

None will be affected.

Archaeological and palaeontological sites

Three (3) Iron Age archaeological scatters of *Perna perna* shell associated with adiagnostic pottery sherds were observed. These are ephemeral and severely plough disturbed and do not comprise residual archaeological sites. No further subsurface investigation is recommended.

Palaeontological significance is addressed below.

Graves and burial grounds

None were observed or reported.

Movable objects excluding any object made by a living person

None will be affected.

Battlefields

None will be affected.

Traditional building techniques

None will be affected.

Summary of findings in terms of the NHRA, Act 25 of 1999 Section 38 (3)

(a) the identification and mapping of all heritage resources in the area affected

- i. A farmhouse structure older than 60 years
 - (see architectural report and assessment below)
- ii. Three indeterminate Iron Age archaeological scatters. (no further mitigation recommended)

(b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in regulations

- i. Structures low heritage significance at all levels for their historic, social and spiritual values
- ii. Archaeological scatters low heritage significance at all levels for their scientific value.

(c) an assessment of the impact of development on such heritage resources

The client will seek a demolition permit for the farmhouse on the property.

Archaeological sites – have already been destroyed by previous agricultural activities. No further mitigation measures recommended.

Architectural Assessment and Report

GENERAL BACKGROUND

The homestead is situated about 2km towards the coast off the N3, North of Salt Rock, on a Farm now owned by Tongaat-Hulett. The main house & outbuildings are about 200m from the beach sand & coastal vegetation line with 180 degree views of the ocean & onto the beautiful small protected Sharks Bay to the South West. This bay is home to The Umhlali Ski Boat Club, one of 4 Ski boat launch sites in the KwaDukuza Municipality and is in constant use. The ski boat club is situated on land owned by Tongaat-Hulett. Around the point and south of the ski boat club, lies the town of Tinley Manor Beach.

The rolling dunes of the farm are all currently planted with sugarcane with a strip of indigenous coastal forest along the edge of the beach. This strip is compromised by evidence of some invasive species in parts.

To the North boundary of the property there is a small estuary which sometimes opens to the sea in wet seasons. There is also a smaller estuary on the Southern border of the farm at the ski boat launching site.

The house is situated high on the first dune, overlooking the bay, in line with the coastline and faces in a South Easterly angle, towards the sea view.



BACKGROUND HISTORY

I have been told by locals that the original farmhouse was built around about 1910 by a Tom Bertram, and later passed on to his son George. After that it was owned by the Ridl and then the Blake families. This is hearsay and as such unconfirmed background. It is presently owned by Tongaat-Hulett. The house would have functioned as a traditional family farmhouse with the nearby barn structure being likely to be the same age, as it would have been needed for storage of farming equipment.

GENERAL CONSTRUCTION OF THE HOUSE

The age of the house, as claimed above, would most probably appear to be correct.

It is a simply laid-out and modest building with a barn type roof and gables at each end. There are two lean-to verandahs, on the sea-facing South Easterly side and the inland facing North Westerly side. This was obviously done to take advantage of the view on the South East side but to seek protection in windy weather on the North West verandah.

The construction is traditional 230mm brickwork, plastered. The original house may have had face brick plinths but if so, these have since been plastered.

The roof is at a 35 degree pitch and the lean-to verandahs are at 5 degrees. All currently have asbestos sheeting but would most likely have been corrugated iron when built. There is a fireplace in the dining room which is still in its original condition aside from having been painted. Its' chimney appears to have been altered over the years but it does bear some likeness to the chimneys of the early 1900's. It has managed to retain its chimney pot.

There have been various alterations to the original house.

- The back verandah on the South West kitchen side has been enclosed on both ends to increase the kitchen size and on the opposite end to create an additional bedroom. A bathroom has been haphazardly tacked onto the North East end to serve this bedroom.
- The front verandah on the South East side has also had one end enclosed to create an en-suite bathroom for the main bedroom.
- The old sea facing verandah (its' concrete steps still visible below) has been covered by an un-roofed timber deck, onto which the dining room and lounge open out.
- The dining room has had its original windows on the South East side removed and replaced with sliding folding aluminium doors.
- All original timber windows in the house have been replaced with aluminium ones in a similar proportion.
- There are new aluminium windows on the South East side which are of a more modern proportion The outbuilding has a collection of steel windows from about the 1970's.
- Inside the house, the wall between the lounge & dining room has been removed to make a more open plan space.

There are timber sprung floors in most rooms which seem in good condition. The skirting boards appear to be original, 160mm high, simply shaped in keeping with its' basic farm cottage style. All internal doors have 100mm architraves. Most rooms have inside airbricks in early 1900's style but all have been blocked up externally.

Various features place the house in the early 1900's and a few of these still evident, namely:

- The house layout plan, which would conform to a simple cottage of that era
- The symmetrical positioning of remaining original windows on the North East elevation
- The proportions of most of the windows
- The size and shape of a few remaining airbricks
- The shaped, clipped timber barge trimming on both gable ends & the roof vent space. The original infill louvres presumably rotted and have been replaced by boarding.
- The timber sprung floor
- The addition of a more modern garage building at a much later date, presumed to have been added onto an original outhouse structure, which is visible protruding from the side of the garage on the South West elevation next to an old fireplace structure, the chimney of which has been demolished.



The North East gable - note 3 windows & their positioning in relation to the 5 airbricks & the gable roof vent. Also note the floor ventilation openings.



The en-suite bathroom added haphazardly onto the North East gable end



Interior of original lounge showing the removed portion of dividing wall. Note - on the right, facing the sea and opening onto the S.E verandah, original double doors position and a window either side, illustrating the symmetry synonymous with the era.



Garage with demolished chimney protruding on the left of the older outhouse structure.



The South Easterly sea-facing side - part 1



The South Easterly sea-facing side – part 2



The approach to the house on the North West side

The ancillary barn structure is situated about 18 metres away from the house to the South West. It consists of a brick base plinth with asbestos side cladding fixed to timber upright supports which also support timber trusses & and asbestos roof sheeting. It is possible that this was originally also corrugated iron cladding. A portion of the building next to the main double doors is walled in brickwork. The building has a pitched roof with a lean-to on the North East side. In contrast to the house, this building and has not been well maintained and is not in good condition.



The South West side of the barn



The North East side of the barn

CONCLUSION

This is a comfortable family home which has evolved from its origins as a simple farm cottage to accommodate a more modern style of open plan living. Various alterations having been done to the original structure. It appears to be structurally sound, and there were no major cracks visible. The timber flooring seems in good condition. I did not manage to look above the ceilings at the roof timbers but all the ceilings appear level and sound. The old timber barges are taking strain. An expert opinion would be needed to judge the roof condition.

Externally the only "noble feature" of the original humble abode that remains intact is the general roof configuration although the original material has probably been replaced. There has been a badly planned added-on portion over the one en-suite bathroom which disturbs the balance on the relatively unaltered North East gable elevation.

I would say that whilst this undoubtedly has always been a wonderful place to live, with an interesting recent past, it no longer is an intact example of South African Architecture of its' location and era due to the various alterations that have been made over the past century. A demolition permit application can be pursued.

Deirdre Serfontein

(Pr S Arch Technologist; SACAP no. ST 1702)

Archaeological Summary

Archaeological Survey

The Tinley Manor topography and landscape is typical of the coastal littoral Pleistocene frontal dune cordon comprising deep Berea Formation sands with a more recent Late Pleistocene/Holocene (12.5-15 kya) aeolian sand overburden. Along this dune cordon, within a distance of about three kilometres from the shoreline, virtually every dune ridge reveals the remains of Iron Age settlement. Typically, artefacts include ceramic sherds, marine shell and upper and lower grindstones. Artefacts on metalworking sites include furnace remains, slag, bloom and *tuyere*⁴ fragments.

Decades of agricultural activity (consisting mainly of sugar cane cultivation along this coastline) churn the upper 30-40 centimetres of soil, blurring the visible spatial layout of sites. However, the presence of a site can still be noted by the occurrence of the aforementioned artefacts, and deposits sometimes remain intact at depth.

The field survey located 3clusters (targets) of ceramic scatters and marine shells at hilltop locations (See kml loaded to SAHRIS). These were ubiquitous occurrences of undecorated and adiagnostic sherds at densities of < 5 shards/m². Whilst indicating previous settlement *loci*, plough activity has so displaced the archaeological material as to render it impossible to reconstruct or ascertain the original settlement layout. Further, the farm was previously planted to timber. Prior to replanting with sugar canes de-stumping was undertaken. This has destroyed all archaeological integrity of any form. Having been mapped and recorded these occurrences are of no further scientific/research interest.

The Berea Red Sands of the Westbrook study area are not considered to be palaeontologically sensitive. No further mitigation in this regard is warranted.

⁴ Tuyeres are manufactured clay bellows' pipes used to force air into iron smelting and smithing furnace.

Recommendations

Farmhouse. Apply for demolition permit as per request of the client on the strength of the assessments conducted.

Conclusion

We recommend that this project proceed with the recommended heritage resource mitigation.

On the clients instruction we will submit the report via SAHRIS to Amafa aKwaZulu-Natali, in fulfilment of the requirements of the NHRA.

According to Section 38(4) of the Act:

The report shall be considered timeously by the PHRA which shall, after consultation with the person proposing the development, decide -

- (a) whether or not the development may proceed;
- (b) any limitations or conditions are to be applied to the development;
- (c) what general protections in terms of this Act apply, and what formal protections may be applied to such heritage resources;
- (d) whether compensatory action shall be required in respect of any heritage resources damaged or destroyed as a result of the development; and
- (e) whether the appointment of specialists is required as a condition of approval of the proposal.

The client may contact the Case Officer, Ms Bernadet Pawandiwa, at Amafa's Head Office. Tel. 033 3946 543; Email: Bernadetp@amafapmb.co.za; should they have any queries with regards to this application.

APPENDIX A

STATUTORY REQUIREMENTS

GENERAL

The identification, evaluation and management of heritage resources in South Africa is required and governed by the following legislation:

- National Environmental Management Act (NEMA) Act No 107 of 1998
 - a. Basic Environmental Assessment Section (23)(2)(d)
 - b. Environmental Scoping Report Section (29)(1)(d)
 - c. Environmental Impacts Assessment Section (32)(2)(d)
 - d. Environmental Management Plan Section (34)(b)
- KwaZulu-Natal Heritage Act No 4 of 2008
 - a. Protection of heritage resources Chapters 8 and 9
 - b. Heritage Resources Management Chapter 10
- National Heritage Resources Act (NHRA) Act No 25 of 1999
 - a. Definition and management of the national estate Chapter I
 - b. Protection and management of heritage resources Chapter II
 - c. Heritage Resources Management Section 38
- Minerals and Petroleum Resources Development Act (MPRDA) Act No 28 of 2002
 - a. Section 39(3)
- Development Facilitation Act (DFA) Act No 67 of 1995
 - a. The GNR.1 of 7 January 2000: Regulations and rules in terms of the Development Facilitation Act, 1995 Section 31.

NATIONAL HERITAGE RESOURCES ACT NO 25 OF 1999

Heritage Impact Assessments

Section 38(1) of the National Heritage Resources Act of 1999 requires a heritage impact assessment in case of:

- the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length;
- the construction of a bridge or similar structure exceeding 50 m in length;
- any development or other activity which will change the character of a site-
- (i) exceeding 5 000 m² in extent; or
- (ii) involving three or more existing erven or subdivisions thereof; or
- (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or

- (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
 - the re-zoning of a site exceeding 10 000 m² in extent; or
 - any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority.

Reports in fulfilment of Section 38(3) of the Act must include the following information:

- the identification and mapping of all heritage resources in the area affected;
- an assessment of the significance of such resources in terms of the heritage assessment criteria set out in regulations;
- an assessment of the impact of the development on such heritage resources;
- an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
- the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
- if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- plans for mitigation of any adverse effects during and after completion of the proposed development.

Definitions of heritage resources

The Act defines a heritage resource as any place or object of cultural significance i.e. of aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance. This includes, but is not limited to, the following wide range of places and objects:

- living heritage as defined in the National Heritage Council Act No 11 of 1999 (cultural tradition; oral history; performance; ritual; popular memory; skills and techniques; indigenous knowledge systems; and the holistic approach to nature, society and social relationships);
- ecofacts (non-artefactual organic or environmental remains that may reveal aspects of past human activity; definition used in KwaZulu-Natal Heritage Act 2008);
- places, buildings, structures and equipment;
- places to which oral traditions are attached or which are associated with living heritage;
- historical settlements and townscapes;
- landscapes and natural features;
- geological sites of scientific or cultural importance;
- archaeological and palaeontological sites;
- graves and burial grounds;
- sites of significance relating to the history of slavery in South Africa;

- movable objects, but excluding any object made by a living person;
- battlefields; and
- traditional building techniques.

Furthermore, a place or object is to be considered part of the national estate if it has cultural significance or other special value because of—

- its importance in the community, or pattern of South Africa's history;
- its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons; and
- its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa.

A 'place' is defined as:

- a site, area or region;
- a building or other structure which may include equipment, furniture, fittings and articles associated with or connected with such building or other structure;
- a group of buildings or other structures which may include equipment, furniture, fittings and articles associated with or connected with such group of buildings or other structures;
- an open space, including a public square, street or park; and
- in relation to the management of a place, includes the immediate surroundings of a place.

'Structures' means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

'Archaeological' means -

- material remains resulting from human activity which are in a state of disuse and are in or on land and are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;
- rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface
 or loose rock or stone, which was executed by human agency and is older than 100 years including any
 area within 10 m of such representation;

- wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation;
- features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found.

'Palaeontological' means -

any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trace.

MANAGEMENT OF GRAVES AND BURIAL GROUNDS

Graves younger than 60 years fall under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance No 7 of 1925 as well as the Human Tissues Act No 65 of 1983 and the National Health Act (Act 61 of 2003) Regulations relating to the management of human remains No.R.363 of 22 May 2013. Such graves are the jurisdiction of the National Department of Health and the relevant Provincial Department of Health and must be submitted for final approval to the Office of the relevant Provincial Premier. This function is usually delegated to the Provincial Member of the Executive Council for Local Government and Planning, or in some cases the MEC for Housing and Welfare.

Authorisation for exhumation and reinternment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. In order to handle and transport human remains the institution conducting the relocation should be authorised under Section 24 of the Human Tissues Act No 65 of 1983 and the National Health Act (Act 61 of 2003) Regulations relating to the management of human remains No.R.363 of 22 May 2013.

Graves older than 60 years situated outside a formal cemetery administered by a local authority fall under Section 36 of the National Heritage Resources Act No 25 of 1999 as well as the Human Tissues Act of 1983. Accordingly, such graves are the jurisdiction of the South African Heritage Resources Agency (SAHRA). The procedure for Consultation Regarding Burial Grounds and Graves (Section 36(5) of NHRA) is applicable to graves older than 60 years that are situated outside a formal cemetery administrated by a local authority. Graves in the category located inside a formal cemetery administrated by a local authority will also require the same authorisation as set out for graves younger than 60 years over and above SAHRA authorisation.

If the grave is not situated inside a formal cemetery but is to be relocated to one, permission from the local authority is required and all regulations, laws and by-laws set by the cemetery authority must be adhered to.

The protocol for the management of graves older than 60 years situated outside a formal cemetery administered by a local authority is detailed in Section 36 of the National Heritage Resources Act:

- (3) (a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority—
- (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- (b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or

- (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.
- (4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority.
- (5) SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection (3)(b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority—
- (a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and
- (b) reached agreements with such communities and individuals regarding the future of such grave or burial ground.
- (6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority—
- (a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and
- (b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

APPENDIX B

ARCHAEOLOGICAL AND HISTORICAL CONTEXT OF THE STUDY AREA

The Stone Age⁵

No systematic Early and Middle Stone Age research has been undertaken in the immediate proposed development area. However, open air scatters of stone artefacts, probably with low heritage significance, have been reported along the coastal littoral by Davies (O. Davies, 1970. Pleistocene beaches of Natal. Annals of Natal Museum 20(2). Sibudu Cave, along the middle reaches of the Tongaat River, is the focus of current Middle Stone Age investigation and is serially nominated for World Heritage status⁶.

At a general level, South Africa's prehistory has been divided into a series of phases based on broad patterns of technology. The primary distinction is between a reliance on chipped and flaked stone implements (the Stone Age) and the ability to work iron (the Iron Age). Spanning a large proportion of human history, the Stone Age in Southern Africa is further divided into the Early Stone Age, or Paleolithic Period (about 2 500 000–150 000 years ago), the Middle Stone Age, or Mesolithic Period (about 150 000–30 000 years ago), and the Late Stone Age, or Neolithic Period (about 30 000–2 000 years ago). The simple stone tools found with australopithecine fossil bones fall into the earliest part of the Early Stone Age.

The Early Stone Age

Most Early Stone Age sites in South Africa can probably be connected with the hominin species known as *Homo erectus*. Simply modified stones, hand axes, scraping tools, and other bifacial artifacts had a wide variety of purposes, including butchering animal carcasses, scraping hides, and digging for plant foods. Most South African archaeological sites from this period are the remains of open camps, often by the sides of rivers and lakes, although some are rock shelters, such as Montagu Cave in the Cape region.

The Middle Stone Age

The long episode of cultural and physical evolution gave way to a period of more rapid change about 200 000 years ago. Hand axes and large bifacial stone tools were replaced by stone flakes and blades that were fashioned into scrapers, spear points, and parts for hafted, composite implements. This technological stage, now known as the Middle Stone Age, is represented by numerous sites in South Africa.

Open camps and rock overhangs were used for shelter. Day-to-day debris has survived to provide some evidence of early ways of life, although plant foods have rarely been preserved. Middle Stone Age bands hunted medium-sized and large prey, including antelope and zebra, although they tended to avoid the largest and most dangerous animals, such as the elephant and the rhinoceros. They also ate seabirds and marine mammals that could be found along the shore and sometimes collected tortoises and ostrich eggs in large quantities.

The Late Stone Age

Basic toolmaking techniques began to undergo additional change about 40 000 years ago. Small finely worked stone implements known as microliths became more common, while the heavier scrapers and points of the Middle Stone Age appeared less frequently. Archaeologists refer to this technological stage as the Late Stone

⁵ http://www.britannica.com; article authored by **Colin J. Bundy,** Julian R. D. Cobbing, Martin Hall and **Leonard Monteath Thompson.**

⁶ (Wadley, L. and Jacobs, Z. 2004. SAJS. 100 (3). 146-151; Sibudu Cave, KwaZulu-Natal: Background to the excavations of Middle Stone Age and Iron Age occupations. Wadley, L. 2006. Partners in grime: results of multi-disciplinary archaeology at Sibudu Cave. Southern African Humanities 18:315-341.

Age. The numerous collections of stone tools from South African archaeological sites show a great degree of variation through time and across the subcontinent.

The remains of plant foods have been well preserved in numerous cave and shelter sites in KwaZulu-Natal. Animals were trapped and hunted with spears and arrows on which were mounted well-crafted stone blades. Bands moved with the seasons as they followed game into higher lands in the spring and early summer months, when plant foods could also be found. When available, rock overhangs became shelters; otherwise, windbreaks were built. Shellfish, crayfish, scavenged cetaceans and seabirds were also important sources of food, as were fish caught on lines, with spears, in traps, and possibly with nets.

In the foothills of the Drakensberg and above the escarpment a large number of rock shelters with occupation deposits occur in the Clarence Formation formerly known as Cave Sandstone. These sandstones provide the canvas for the wealth of rock art sites that have been recorded in the Okhahlamba/Drakensberg mountains.

Dating from the Later Stone Age are numerous engravings on rock surfaces, mostly on the interior plateau, and paintings on the walls of rock shelters in the mountainous regions, such as the Drakensberg and Cederberg ranges. The images were made over a period of at least 25 000 years. Although scholars originally saw the South African rock art as the work of exotic foreigners such as Minoans or Phoenicians or as the product of primitive minds, they now believe that the paintings were closely associated with the work of medicine men, shamans who were involved in the well-being of the band and often worked in a state of trance. Specific representations include depictions of trance dances, metaphors for trance such as death and flight, rainmaking, and control of the movement of antelope herds:

'Most rock art researchers accept that southern African hunter-gatherer (Bushman/San) painters used animal imagery to model beliefs and concepts central to their cosmology. The eland is probably the best-known model, but species choice varies according to geographical area. Previous studies have tended to focus on morphology in order to identify painted and engraved animal depictions that the painters used as natural models. Morphology, however, is not always sufficient to positively identify a motif's zoological affinities [including] therianthropic images from the Western Cape Province and adjacent parts of the Eastern Cape Province, South Africa, popularly known as 'mermaids' (Hollmann 2005b:84).

Iron Age⁷

Archaeological evidence shows that Bantu-speaking agriculturists first settled in southern Africa around AD 300. Bantu-speakers originated in the vicinity of modern Cameroon from where they began to move eastwards and southwards, sometime after 400 BC, skirting around the equatorial forest. An extremely rapid spread throughout much of sub-equatorial Africa followed: dating shows that the earliest communities in Tanzania and South Africa are separated in time by only 200 years, despite the 3 000 km distance between the two regions. It seems likely that the speed of the spread was a consequence of agriculturists deliberately seeking iron ore sources and particular combinations of soil and climate suitable for the cultivation of their crops.

The earliest agricultural sites in KwaZulu-Natal date to between AD 400 and 550. All are situated close to sources of iron ore, and within 15 km of the coast. Current evidence suggests it may have been too dry further inland at this time for successful cultivation. From 650 onwards, however, climatic conditions improved and agriculturists expanded into the valleys of KwaZulu-Natal, where they settled close to rivers in savanna or bushveld environments. There is a considerable body of information available about these early agriculturists.

Seed remains show that they cultivated finger millet, bulrush millet, sorghum and probably the African melon. It seems likely that they also planted African groundnuts and cowpeas, though direct evidence for these plants is lacking from the earlier periods. Faunal remains indicate that they kept sheep, cattle, goats, chickens and dogs, with cattle and sheep providing most of the meat. Men hunted, perhaps with dogs, but hunted animals made only a limited contribution to the diet in the region.

⁷ Whitelaw (1997). Whitelaw (2009). Whitelaw (2015).

Metal production was a key activity since it provided the tools of cultivation and hunting. The evidence indicates that people who worked metal lived in almost every village, even those that were considerable distances from ore sources.

Large-scale excavations in recent years have provided data indicating that first-millennium agriculturist society was patrilineal and that men used cattle as bridewealth in exchange for wives. On a political level, society was organised into chiefdoms that, in our region, may have had up to three hierarchical levels. The villages of chiefs tended to be larger than others, with several livestock enclosures, and some were occupied continuously for lengthy periods. Social forces of the time resulted in the concentration of unusual items on these sites. These include artefacts that originated from great distances, ivory items (which as early as AD 700 appear to have been a symbol of chieftainship), and initiation paraphernalia.

This particular way of life came to an end around AD 1000, for reasons that we do not yet fully understand. There was a radical change in the decorative style of agriculturist ceramics at this time, while the preferred village locations of the last four centuries were abandoned in favour of sites along the coastal littoral. In general, sites dating to between 1050 and 1250 are smaller than most earlier agriculturist settlements. It is tempting to see in this change the origin of the Nguni settlement pattern. Indeed, some archaeologists have suggested that the changes were a result of the movement into the region of people who were directly ancestral to the Nguni-speakers of today. Others prefer to see the change as the product of social and cultural restructuring within resident agriculturist communities.

Whatever the case, it seems likely that this new pattern of settlement was in some way influenced by a changing climate, for there is evidence of increasing aridity from about AD 900. A new pattern of economic interdependence evolved that is substantially different from that of earlier centuries, and is one that continued into the colonial period nearly 500 years later.

Along this part of the coastline, within a distance of about three kilometres from the shore, virtually every dune top includes the remains of a Late Iron Age homestead. Typically, artefacts include undecorated ceramic sherds, marine shell and upper and lower grindstones. Artefacts on metalworking sites include furnace remains, slag, bloom and ceramic sherds.

Decades of agricultural activity (consisting mainly of sugar cane cultivation along this coastline) churn the upper 30 centimetres of soil, blurring the visible spatial layout of sites. However, the presence of a site can still be noted by the occurrence of the aforementioned artefacts, and deposits sometimes remain intact at depth.

Bibliography

Aldenderfer, M.S. and Hale-Pierce, C.A. 1984. *The Small-Scale Archaeological Survey Revisited*. American Archaeology 4(1):4-5.

Butler, W. 1984. *Cultural Resource Management: The No-Collection Strategy in Archaeology*. American Antiquity 44(4):795-799.

Davies, O. 1970. Pleistocene beaches of Natal. Annals of the Natal Museum. 20(2).

Deacon, J. 1996. *Archaeology for Planners, Developers and Local Authorities*. National Monuments Council. Publication no. PO21E.

Deacon, J. 1997. Report: Workshop on Standards for the Assessment of Significance and Research Priorities for Contract Archaeology. In: Newsletter No. 49, Sept.1998. South African Association of Archaeology.

Dunnell, R.C. and Dancey, W.S. 1983. *The Siteless Survey: A Regional Scale Data Collection Strategy*. In: Advances in Archaeological Method and Theory 6:267-287. M.B. Schiffer, ed. Academic Press, New York.

Horwitz, L, Maggs, T. & Ward, V. 1991. Two shell middens as indicators of shellfish exploitation patterns during the first millenium AD on the Natal north coast. *Natal Museum Journal of Humanities* 3: 1-28.

King, T.F. 1978. *The Archaeological Survey: Its Methods and Uses*. Interagency Archaeological Services, Department of the Interior, Washington, D.C.

Lightfoot, K.G. 1989. A Defence of Shovel Test Sampling: A Reply to Short. American Antiquity 54(2):413-416.

Maggs, T. 1989. *The Iron Age farming communities*. In Duminy, A. and Guest, B. (eds) Natal and Zululand from earliest times to 1910. A new history pp. 28-48. Pietermaritzburg: University of Natal Press.

Mazel, A. 1989. *The Stone Age peoples of Natal*. In Duminy, A. and Guest, B. (eds) Natal and Zululand from earliest times to 1910. A new history pp. 28-48. Pietermaritzburg: University of Natal Press.

McManamon, F.P. 1984. *Discovering Sites Unseen*. In Advances in Archaeological Method and Theory 8:223-292, M.B. Schiffer, ed. Academic Press, New York.

Raper, P. E. (1989). Dictionary of Southern African Place Names. Jonathan Ball. ISBN 978-0-947464-04-2.

Schiffer, M.B., Sullivan A.P., and Klinger, T.C. 1978. *The Design of Archaeological Surveys*. World Archaeology 10:1-28.

Wadley, L. and Jacobs, Z. 2004. Sibudu Cave, KwaZulu-Natal: Background to the excavations of Middle Stone Age and Iron Age occupations. *SAJS*. 100 (3). 146-15.

Wadley, L. 2006. Partners in grime: results of multi-disciplinary archaeology at Sibudu Cave. *Southern African Humanities* 18:315-341.

Wahl, E.J. and van Schalkwyk, L.O. 2004. 'Rescue excavation of an Iron Age Shell midden, Shrimp Lane, Salt Rock, KwaZulu-Natal'. Proceedings of the Southern African Association of Archaeologists Biennial Conference, Kimberley.

Whitelaw, G. 1991. Precolonial iron production around Durban and in southern Natal. *Natal Museum Journal of Humanities* 3: 29-39.

Whitelaw, G. 1997. What Da Gama missed on his way to Sofala. Natalia 27: 30-41.

Whitelaw, G. 2009. An Iron Age fishing tale. Southern African Humanities 21: 195-212.

Whitelaw, G. 2015. Economy and Cosmology in the Iron Age of KwaZulu-Natal. Unpublished D.Phil thesis. Faculty of Science. University of the Witwatersrand.

Zubrow, E.B.A. 1984. *Small-Scale Surveys: A Problem for Quality Control*. American Archaeology 4(1): 16-27.

APPENDIX C

SIGNIFICANCE AND VALUE OF HERITAGE RESOURCE SITES

The following guidelines for determining site significance were developed by the South African Heritage Resources Agency in 2003. We use them in conjunction with tables of our own formulation (see that for the Southern African Iron Age, below) when considering intrinsic site significance and significance relative to development activities, as well as when recommending mitigatory action.

Type of Resource

Archaeological Site

importance in history

It has significance relating to the history of slavery

Importance for a direct link to the history of slavery in South Africa.

Place

Structure

Palaeontological Site	
Geological Feature	
Grave	
Type of Significance	
Historical Value	
It is important in the community, or pattern of history	
Importance in the evolution of cultural landscapes and settlement patterns	
Importance in exhibiting density, richness or diversity of cultural features illustrating the human occupation and evolution of the nation, Province, region or locality.	
Importance for association with events, developments or cultural phases that have had a significant role in the human occupation and evolution of the nation, Province, region or community.	
Importance as an example for technical, creative, design or artistic excellence, innovation or achievement in a particular period	

It has strong or special association with the life or work of a person, group or organisation of

Importance for close associations with individuals, groups or organisations whose life, works or activities have been significant within the history of the nation, Province, region or community.

Aesthetic Value

It is important in exhibiting particular aesthetic characteristics valued by a community or cultural group

Importance to a community for aesthetic characteristics held in high esteem or otherwise valued by the community.

Importance for its creative, design or artistic excellence, innovation or achievement.

Importance for its contribution to the aesthetic values of the setting demonstrated by a landmark quality or having impact on important vistas or otherwise contributing to the identified aesthetic qualities of the cultural environs or the natural landscape within which it is located.

In the case of an historic precinct, importance for the aesthetic character created by the individual components which collectively form a significant streetscape, townscape or cultural environment.

Scientific Value

It has potential to yield information that will contribute to an understanding of natural or cultural heritage

Importance for information contributing to a wider understanding of natural or cultural history by virtue of its use as a research site, teaching site, type locality, reference or benchmark site.

Importance for information contributing to a wider understanding of the origin of the universe or of the development of the earth.

Importance for information contributing to a wider understanding of the origin of life; the development of plant or animal species, or the biological or cultural development of hominid or human species.

Importance for its potential to yield information contributing to a wider understanding of the history of human occupation of the nation, Province, region or locality.

It is important in demonstrating a high degree of creative or technical achievement at a particular period

Importance for its technical innovation or achievement.

Social Value

It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons

Importance as a place highly valued by a community or cultural group for reasons of social, cultural, religious, spiritual, symbolic, aesthetic or educational associations.

Importance in contributing to a community's sense of place.

It possesses uncommon, rare or endangered aspects of natural or cultural heritage							
Importance for rare, endangered or uncommon structures, landscapes or phenomena.							
Representivity							
It is important in demonstrating the principal characteristics of a particular class of natural or cultural places or objects							
-	_			cteristics of a range of landscapes or as being characteristic of its class.			
Importance in demonstrating the principal characteristics of human activities (including way of life philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, Province, region or locality.							
Sphere of Significance	High	Medium	Low				
International							
National							
Provincial							
Regional							
Local							
Specific Community							

What other similar sites may be compared to this site?

Southern African Iron Age

	Significance		
	- low	- medium	- high
Unique or type site			Yes
Formal protection			Yes
Spatial patterning	?Yes	?Yes	?Yes
Oparial parionning	. 100		
Degree of disturbance	75 – 100%	25 – 74%	0 – 24%
Organic remains (list types)	0 – 5 / m²	6 – 10 / m²	11 + / m ²
Inorganic remains (list types)	0 – 5 / m²	6 – 10 / m²	11 + / m ²
Ancestral graves			Present
Horizontal extent of site	< 100m²	101 – 1000m²	1000 + m ²
Depth of deposit	< 20cm	21 – 50cm	51 + cm
Spiritual association			Yes
Oral history association			Yes
Oral history association			res
Research potential			High
Educational potential			High

Please note that this table is a tool to be used by qualified cultural heritage practitioners who are also experienced site assessors.

APPENDIX D

CULTURAL LANDSCAPES

The American National Parks Services sets out various criteria for the identification and management of cultural landscapes:

'Cultural landscapes are complex resources that range from large rural tracts covering several thousand acres to formal gardens of less than an acre. Natural features such as landforms, soils and vegetation are not only part of the cultural landscape, they provide the framework within which it evolves. In the broadest sense, a cultural landscape is a reflection of human adaptation and use of settlement, land use, systems of circulation and the natural resources and is often expressed in the way land is organised and divided, patterns of types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls and vegetation, and by use reflecting cultural values and traditions.

'Identifying the character-defining features in a landscape and understanding them in relation to each other and to significant historic events, trends and persons allows us to read the landscape as a cultural resource. In many cases, these features are dynamic and change over time. In many cases, too, historical significance may be ascribed to more than one period in a landscape's physical and cultural evolution.

'Cultural landscape management involves identifying the type and degree of change that can occur while maintaining the character-defining features. The identification and management of an appropriate level of change in a cultural landscape is closely related to its significance. In a landscape significant for its association with a specific style, individual, trend or event, change may diminish its integrity and needs to be carefully monitored and controlled. In a landscape significant for the pattern of use that has evolved, physical change may be essential to the continuation of the use. In the latter case, the focus should be on perpetuating the use while maintaining the general character and feeling of the historic period(s), rather than on preserving a specific appearance.

'A cultural landscape is a geographic area, including both natural and cultural resources, associated with a historic event, activity or person. The National Park Services recognises four cultural landscape categories: historic designed landscapes, historic vernacular landscapes, historic sites and ethnographic landscapes. These categories are helpful in distinguishing the values that make landscapes cultural resources and in determining how they should be treated, managed and interpreted...

'The four cultural landscape categories are not mutually exclusive. A landscape may be associated with a significant event, include designed or vernacular characteristics and be significant to a specific cultural group.'

DECLARATION OF INDEPENDENCE

I, Leonard van Schalkwyk, declare that -

- I act as the independent specialist in this application.
- I will perform the work relating to the application in an objective manner even if this results in views and findings that are not favourable to the applicant.
- I declare that there are no circumstances that may compromise my objectivity in performing such work.
- I have no, and will not engage in, conflicting interests in the undertaking of the activity.
- I undertake to disclose to the applicant and the competent authority all material information in
 my possession that reasonably has or may have the potential of influencing any decision to be
 taken with respect to the application by the competent authority; and the objectivity of any
 report, plan or document to be prepared by myself for submission to the competent authority.
- All the particulars furnished by me in this form are true and correct.

LOS Salsal by

05 December 2017.