

**A LETTER OF RECOMMENDATION FOR THE EXEMPTION OF A FULL
PHASE 1 HERITAGE IMPACT ASSESSMENT (HIA) FOR THE PROPOSED
BELFAST WATER TREATMENT WORKS, BUSHBUCKRIDGE MUNICIPALITY,
EHLANZENI DISTRICT, MPUMALANGA.**

For: Jacana Environmentals cc
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Prepared by Frans Roodt

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DECLARATION OF INDEPENDENCE

I, Frans Roodt representing R&R Cultural Resource Consultants, hereby confirm my independence as a specialist archaeologist and heritage practitioner and declare that I have no business, financial, personal or other interest in any proposed activity, application or appeal in respect of this proposed project other than fair remuneration for the work performed.



FRANS ROODT (*BA Hons, MA Archaeology, Post Grad Dip. in Museology; UP*)
Principal Investigator (ASAPA member 120)

1. BACKGROUND (See Annexure A for relevant legislation)

EVN Africa (Pty) LTD was appointed by the Bushbuckridge Local Municipality for the construction of the water treatment works and associated infrastructure along the Sabie River near Belfast village. The water abstraction pump station in the Sabie River falls within the Kruger National Park. The development replaces an existing non-functional water system that was damaged during floods in 2000.

The extent of the proposed infrastructure footprint is in the order of 8 056 m² or 0.8 hectares. The project involves the construction of the following new infrastructure:

- water abstraction pump station;
- water treatment plant platform (plant to be supplied by SANParks);
- raw water pump station;
- bulk pump line between the extraction station and the water treatment plant;
- access road from the R536 tar road; and
- fencing of the treatment plant area.

Jacana Environmentals cc was appointed to undertake the application for environmental authorisation and the author was appointed to consider the possible developmental impact on heritage resources on the terrain. Both SANParks and the local community are informed and involved in the project, and in strong support thereof.

2. LOCATION AND TERRAIN DESCRIPTION (Figures 2 and 6)

The project area is situated on the farm Belfast 296 KU along the R536 Road on route to Skukuza and approximately 30km east of Hazyview. General coordinates: S24°58'06" E31°21'59".

The project area is located on the banks of the Sabie River. The abandoned and partially demolished infrastructure of a former water extraction scheme is present on the terrain. Although the area is densely vegetated with trees shrubs and grass, the impact of the previous water scheme is clearly visible and consists of the remains of buildings, reservoir and trenching.

3. METHODOLOGY

A survey was undertaken by means of a walk-about on the terrain. The traversed route is recorded on the Google image, Figure 7. Emphasis was placed on disturbed surface areas, the river embankment and built structures. The SAHRIS database was consulted. One case study consisting of two monitoring reports (Kudzala Antiquity 2012a&b) located approximately 4 km to the east on Portion 10 of the farm Belfast 296 KU is relevant to this project. However, no heritage remains were found here. A heritage impact assessment for a bulk water scheme was undertaken at Nyongane about 20km to the west where no heritage remains were recorded (Vungandze Project cc 2015). Roodt, Antonites & Kruger (2005) excavated an Eiland Iron Age site north of Bushbuckridge at coordinates S24°40'38.4"; E30°59'13.6". Google Earth and the 1:50 000 map 2431 CD was studied to identify possible indicators of archaeological and heritage sites.

4. RESULTS OF THE SURVEY (See Annexure B for a summary of terminology)

4.1 Stone Age remains

No Stone Age material was noted. In addition, the terrain is not suitable for Rock Art as there are no large loose-standing boulders or rock overhangs which could facilitate rock art.

4.2 Iron Age

No Iron Age cultural material was recorded.

4.3 Intangible Heritage

The Belfast community is aware of and supports the project and has raised no objection with regard to the development. No signs of ritual use or the presence of graves were noted in the project area.

4.4 The built environment

The built environment consists of abandoned and partially demolished structures of a former water extraction plant. All of these buildings were built with modern precast cement bricks and include a water extraction platform, reservoir, residential buildings, ablution, office and storage facilities. These buildings are not older than 60 years and their architecture and building style have no significance (Figures 2 – 5).

4.5 Palaeontology

The area falls within the grey colour code of the SAHRIS Palaeontological Sensitivity Map. No further action is required.

5. CONCLUSION

No significant heritage sites or cultural material was detected in the Belfast Water Treatment project area. The proposed re-development will have no negative impact on archaeological or other heritage resources. This document serves as a statement to that effect. From a heritage perspective we have no objection with regard to the proposed development, although the principal of *absence of evidence is not necessarily evidence of absence* applies.

In view of the urgency of the project, the fact that the terrain has already been disturbed by a previous similar development and the support of SANParks for the local community, the Environmental Consultant has indicated that the Bushbuckridge Local Municipality will apply to the Competent Authority for exemption from following the full Environmental Assessment process

6. RECOMMENDATIONS AND MANAGEMENT MEASURES

In support of the above it is recommended that the development is exempted from a full Heritage Impact Assessment. Mitigation measures will, however, be required should any chance discoveries of subterranean archaeological material be made during the development. In such an event the heritage authority or the archaeologist must be informed immediately and work ceased in that particular area.

7. REFERENCES

Kudzala Antiquity, 2012a. First Progress Report on the Archaeological Monitoring of construction activity at Elephant Point located on Portion 10 of the farm Belfast 291 (Sic) KU, Mpumalanga Province. Unpublished report for Eco 8 Environmental Planners.

Kudzala Antiquity, 2012b. Second Progress Report on the Archaeological Monitoring of construction activity at Elephant Point located on Portion 10 of the farm Belfast 291 (Sic) KU, Mpumalanga Province. Unpublished report for Eco 8 Environmental Planners.

Roodt, F, Antonites, X, & Kruger, N. 2005. An Eiland Iron Age site on the road alignment terrain of the Bushbuckridge clay brick factory. Phase 2 Heritage Impact Assessment. Unpublished report.

Vungandze Project cc, 2015. Phase 1 heritage impact assessment for the proposed Nsikazi North Bulk Water Scheme upgrade in Nyongane, Mpumalanga Province. Unpublished report for Enpact Environmental Consultants cc.



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Figure 1. View of the area between the abstraction point and treatment plant..



Figure 2. View of the existing abandoned abstraction station with Sabie River in the background.



Figure 3. View of abandoned buildings.



Figure 4. View of partially demolished residence and outbuildings.



Figure 5. View of an abandoned reservoir on site.

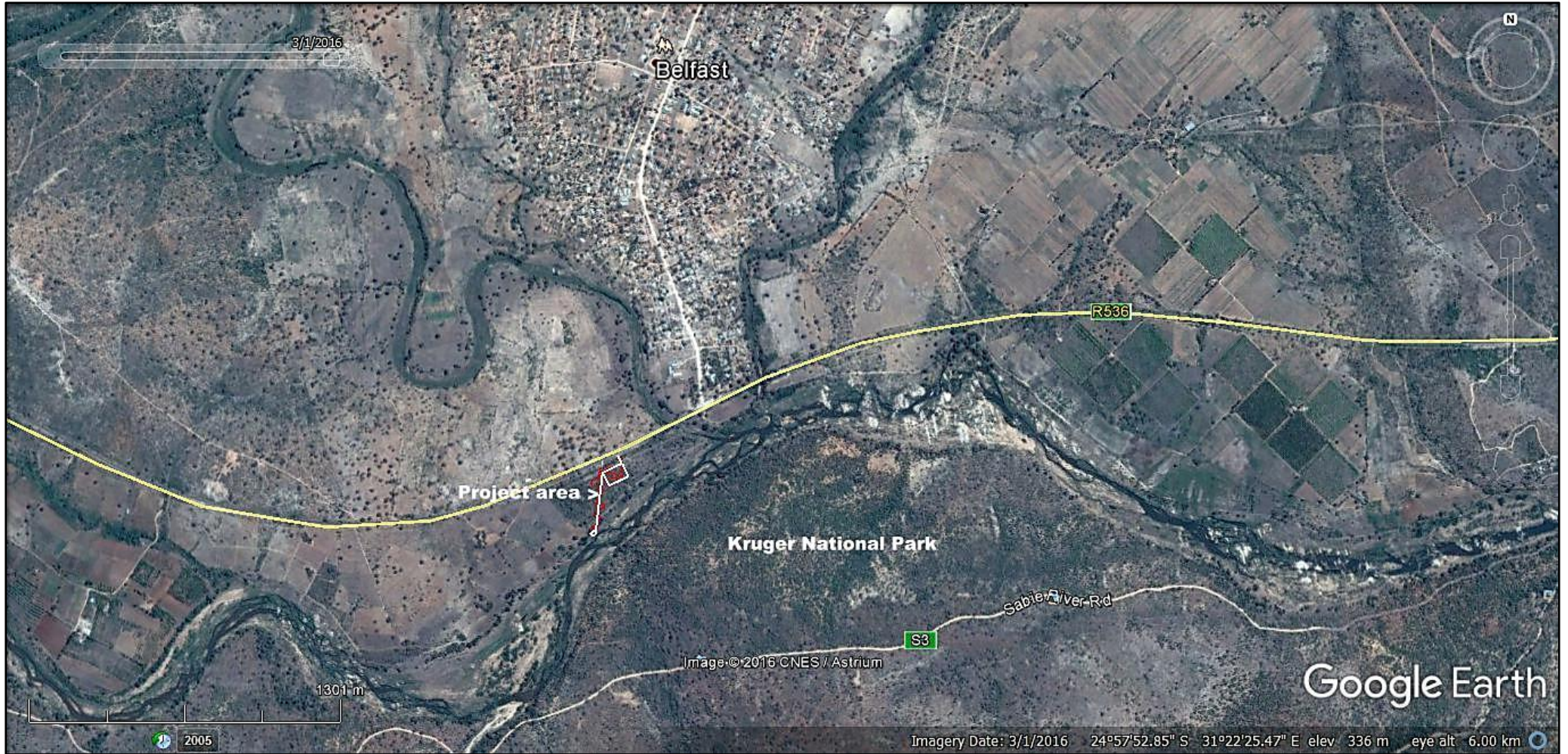


Figure 6. Google Earth image indicating location of the proposed project.



Figure 7. Google Earth image showing basic layout of the proposed project.

ANNEXURE A: RELEVANT LEGISLATION

Two sets of legislation are relevant for the protection of heritage resources and graves.

The National Heritage Resources Act (25 of 1999) (NHRA)

This Act established the South African Heritage Resources Agency (SAHRA) and makes provision for the establishment of Provincial Heritage Resources Authorities (PHRA). The Act makes provision for the undertaking of heritage resources impact assessments for various categories of development as determined by Section 38. It also provides for the grading of heritage resources (Section 7) and the implementation of a three-tier level of responsibilities and functions for heritage resources to be undertaken by the State, Provincial authorities and Local authorities, depending on the grade of the Heritage resources (Section 8).

In terms of the National Heritage Resources Act (1999) the following is of relevance:

Historical remains

Section 34(1) No person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

Archaeological remains

Section 35(3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority or to the nearest local authority or museum, which must immediately notify such heritage resources authority.

Subsection 35(4) No person may, without a permit issued by the responsible heritage resources authority-

- (a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- (c) trade in, sell for private gain, export or attempt to export from the republic any category of archaeological or palaeontological material or object, or any meteorite; or
- (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist with the detection or recovery of metals or archaeological material or objects, or use such equipment for the recovery of meteorites.

Subsection 35(5) When the responsible heritage resources authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or palaeontological site is under way, and where no application for a permit has been submitted and no heritage resources management procedures in terms of section 38 has been followed, it may-

- (a) serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order;
- (b) carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is necessary;
- (c) if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph (a) to apply for a permit as required in subsection (4); and
- (d) recover the costs of such investigation from the owner or occupier of the land on which it is believed an archaeological or palaeontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.

Subsection 35(6) The responsible heritage resources authority may, after consultation with the owner of the land on which an archaeological or palaeontological site or meteorite is situated; serve a notice on the owner or any other controlling authority, to prevent activities within a specified distance from such site or meteorite.

Burial grounds and graves

Subsection 36(3)

- (a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority-
- (c) 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
- (d) 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 detection or recovery of metals.

Subsection 36(6) Subject to the provision of any 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 content of such grave or, in the absence of such person or community, make any such arrangement as it deems fit.

Culture Resource Management

Subsection 38(1) Subject to the provisions of subsection (7), (8) and (9), any person who intends to undertake a development* ...

must at the very earliest stages of initiating such development notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

*'development' means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of the heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including-

- (a) construction, alteration, demolition, removal or change of use of a place or a structure at a place;
- (b) carry out any works on or over or under a place*;
- (e) any change to the natural or existing condition or topography of land, and
- (f) any removal or destruction of trees, or removal of vegetation or topsoil;

**place means a site, area or region, a building or other structure* ..."

**structure means any building, works, device or other facility made by people and which is fixed to the ground ..."

The Human Tissues Act (65 of 1983)

This Act protects graves younger than 60 years. These fall under the jurisdiction of the National Department of Health and the Provincial Health Departments. Approval for the exhumation and re-burial must be obtained from the relevant Provincial MEC as well as the relevant Local Authorities.

ANNEXURE B: TERMINOLOGY

Early Stone Age:	The Oldowan “chopper” tools dating to between 1.7 and 2 million in southern Africa and the Acheulean hand axe industry complex dating to \pm 1.4 Myr – 250 000 yrs. before present.
Middle Stone Age:	Various lithic industries in SA dating from \pm 250 000 yrs. - 22 000 yrs. before present.
Late Stone Age:	The period from \pm 22 000 yrs. to the contact period with either Iron Age farmers or European colonists.
Early Iron Age:	Most of the first millennium AD.
Middle Iron Age:	10 th to 13 th centuries AD.
Late Iron Age:	14 th century to colonial period. <i>The entire Iron Age represents the spread of Bantu speaking peoples.</i>
Historical:	Mainly cultural remains of western influence and settlement from AD 1652 onwards – mostly structures older than 60 years in terms of Section 34 of the NHRA.
Phase 1 assessment:	Scoping surveys to establish the presence of and to evaluate heritage resources in a given area.
Phase 2 assessment:	In depth culture resources management studies which could include major archaeological excavations, detailed site surveys and mapping / plans of sites, including historical / architectural structures and features. Alternatively, the sampling of sites by collecting material, small test pit excavations or auger sampling.
Sensitive:	Often refers to graves and burial sites although not necessarily a heritage place, as well as ideologically significant sites such as ritual / religious places. <i>Sensitive</i> may also refer to an entire landscape / area known for its significant heritage remains.