



**Attention          Bernadet Pawandiwa**

Dear Ms Pawandiwa

**Application for Exemption from a Phase 1 Heritage Impact Assessment for the proposed  
Vutshini-Nkandla Water Scheme (North): Phase One  
Nkandla Local Municipality, KwaZulu-Natal, South Africa**

**Project description**

The uThungulu District Municipality is planning to construct the proposed Vutshini-Nkandla Water Scheme (North) located within the rural areas of Wards 2, 3, 8 and 10 of the Nkandla Local Municipality to the north of the settlement of Qudeni. The proposed water scheme is aimed at providing potable water to communities within this region and will require the construction of a water abstraction works on the Nsuzi River as well as a water treatment works. From the water treatment works, water will be pumped through rising mains (diameter not exceeding 300 mm) to reservoirs (not exceeding 3 MI) before being distributed through gravity mains (diameter not exceeding 200 mm) to smaller reservoirs close to the targeted communities. From these reservoirs, water will be supplied to the communities through a reticulation network with pipes not exceeding 100 mm in size. Due to the overall size of the proposed water scheme, construction has been divided into a number of phases, with Phase 1 being the most urgent to be implemented. The proposed Vutshini-Nkandla Water Scheme (North) project will include the following project components:

- Water Abstraction from the Nsuzi River and the construction of a water treatment works (***This component of the water scheme is being dealt with in a separate Environmental Impact Assessment which is scheduled to commence within the next year and makes up Phase 4 of the Water Scheme.***)
- Rising Mains. From the water treatment works, water will be pumped through rising mains (diameter not exceeding 300 mm).
- Storage reservoirs and pump stations. Five storage reservoirs (not exceeding 3 MI) will be constructed during Phases 1 & 2 of the water scheme.
- Gravity mains. From the reservoirs water will be distributed through gravity mains (diameter not exceeding 200 mm) to smaller reservoirs close to the targeted communities.
- Reticulation network. From these reservoirs, water will be supplied to the communities through a reticulation network with pipes not exceeding 100 mm in size.
- The provisions of electricity to the three pump stations (22 kV) and some of the reservoirs.

Phase 1 will consist of three separate Environmental Authorisation applications for the three proposed pipelines to be constructed during Phase 1. As such, the Heritage Impact Assessment Report is required to address the following three components:

**Nkandla Water Scheme (North) Phase 1: Pipeline P1-1**

Pipeline P1-1 of the Vutshini-Nkandla Water Scheme (North) is 8.7 km long with a working servitude of 10 m in width and will consist of the following components:

- Rising mains. The construction of a 200 mm rising main from the proposed site of the water treatment works to the Reservoir R1-2.
- Storage reservoirs and pump stations. The construction of three storage reservoirs (not exceeding 3 MI) namely R1-1, R1-2 and R1-3.

**Vutshini-Nkandla Water Scheme (North) Phase 1: Pipeline P1-2**

Pipeline P1-2 of the Vutshini-Nkandla Water Scheme (North) is 3.2 km long with a working servitude of 10 m in width and will consist of the following components:

- Gravity mains. The construction of 90 mm gravity main from the proposed reservoir site R 1-3 to Reservoir R1-2.
- Storage reservoirs and pump stations. The construction of one storage reservoir (not exceeding 3 MI) namely R1-3.

**Nkandla Water Scheme (North) Phase 1: Pipeline P1-3**

Pipeline P1-3 of the Vutshini-Nkandla Water Scheme (North) is 6.4 km long with a working servitude of 10 m in width and will consist of the following components:

- Rising mains. The construction of a 110 mm rising main from the proposed reservoir site R 1-4 to Reservoir R1-2. (+- 6.4 km in length)
- Storage reservoirs and pump stations. The construction of one storage reservoir (not exceeding 3 MI) namely, R1-4.

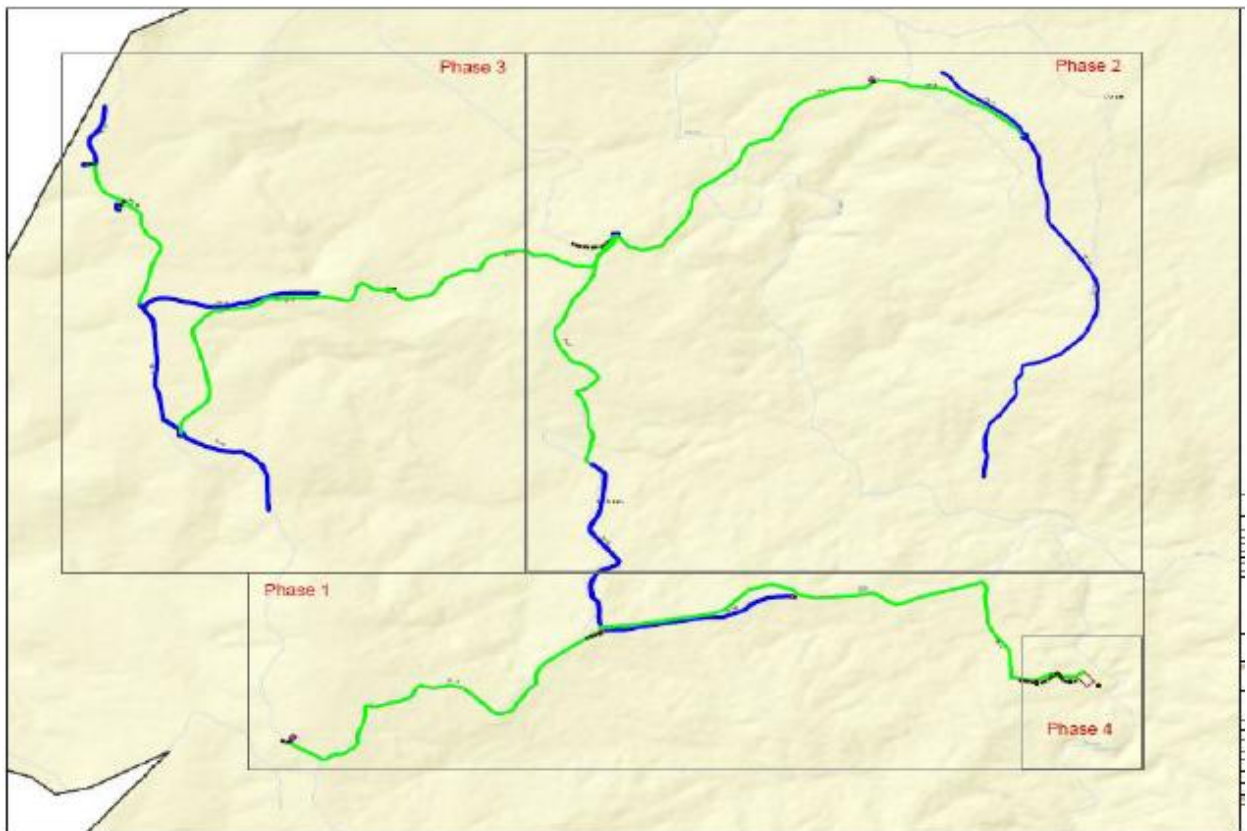


Figure 1 Proposed Vutshini-Nkandla Water Scheme (North) showing all Phases

**Route Alignments** When selecting the route alignments for the proposed Vutshini-Nkandla Water Scheme (North) pipelines, the following criteria were taken into account by the engineering team to find the most practical and cost effective alignments:

- The placing of the pipelines close to and along existing roads and tracks.
- Following contours.
- Following ridge lines which will limit impacts on wetlands and sensitive environments.

In total, approximately 18 km of pipeline will be constructed for Vutshini-Nkandla Water Scheme (North): Phase 1 and will include the construction of gravity pipelines and rising mains. The topography of the supply area is characterised by very steep and hilly terrain. As far as possible, the pipelines will follow existing roadways and tracks. When this is not possible, the pipelines are to follow contours to reduce the steep drops and rises in the pipe work which result in high pressure heads within the pipes. Co-ordinates of the pipeline alignments were provided for the assignment.

### **Site assessment and recommendations**

eThembeni staff inspected the proposed pipeline alignment and reservoir localities on 23 January 2015. No heritage resources were identified within the proposed spheres of activity. The study area falls within blue and grey sensitivity modelling on the Palaeo-sensitivity map and thus no PIA is justified.

Given the nature of the project as an upgrade within existing servitudes and water supply infrastructure, we believe that a Phase 1 HIA for this project is not justified.

Accordingly, on behalf of the client, ACER (Africa) Environmental Consultants, we are applying for exemption from an HIA for the project.

Please could you convey Amafa's decision on this matter to the appointed Environmental Practitioner, Mr Giles Churchill, of **ACER (Africa) Environmental Management Consultants**.  
[giles.churchil@acerafrica.co.za](mailto:giles.churchil@acerafrica.co.za)

Yours sincerely

Len van Schalkwyk.



## Images of Study Area

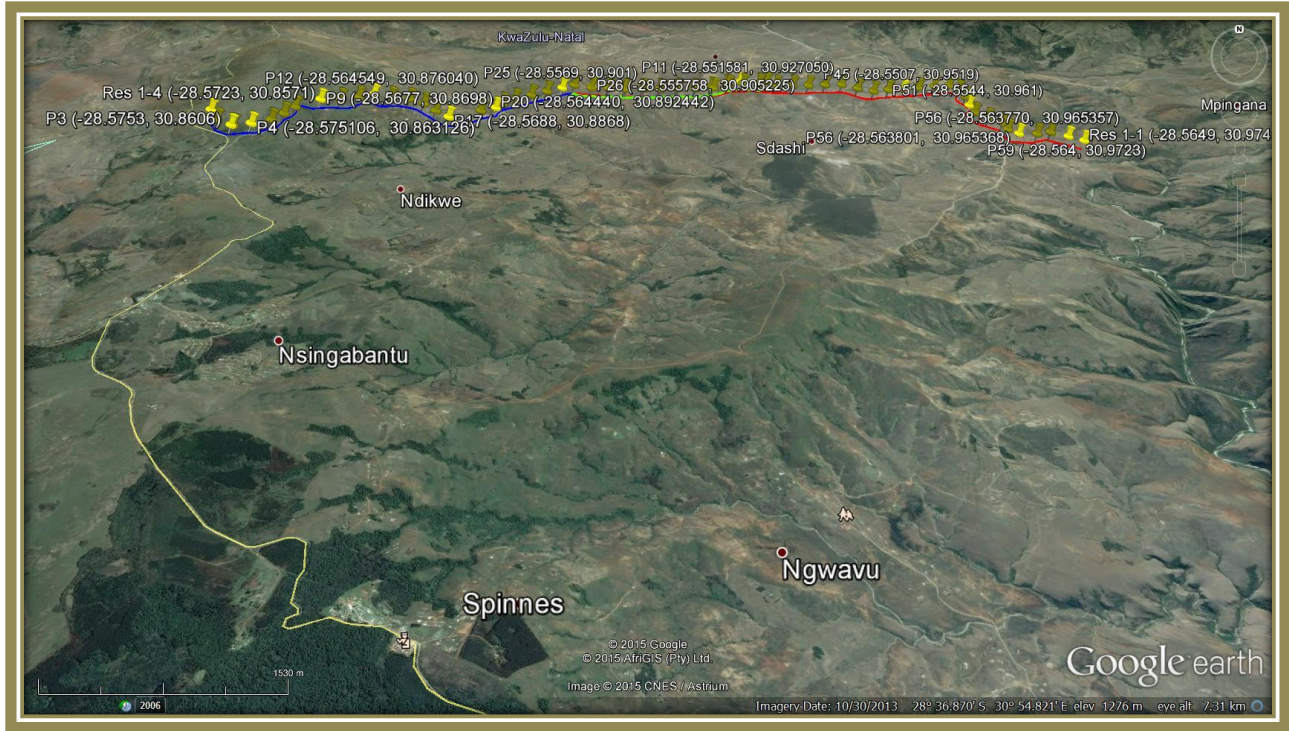


Existing infrastructure within road reserve – (note yellow water line marker)



Pipeline alignment within road reserve





Google Image with co-ordinates provided