



**BACKGROUND INFORMATION  
DOCUMENT  
AND OPPORTUNITY TO COMMENT**

**PROPOSED CONSTRUCTION OF PORTIONS OF  
ENHLALAKAHLE PIPELINE: GREYTOWN BULK  
WATER SERVICE SCHEME- PHASE 2; UMVOTI  
LOCAL MUNICIPALITY, UMZINYATHI DISTRICT,  
KZN**



**REFERENCE NUMBER:**

**DC24/0010/2013**

## INTRODUCTION

The purpose of this Background Information Document (BID) is to provide information to potential Interested and Affected Parties (I&APs) regarding the proposed construction of portions of the Enhlalakahle pipeline: Greytown bulk water supply scheme – phase 2, UMzinyathi Municipality, KZN.

Based on the motivation and guidance from the KZN Department of Agriculture and Environmental Affairs (DAEA), a Basic Assessment Process for an environmental authorisation must be made in terms of the relevant listed activities in Listing Notice 1 and 3 (GNR 544 and 546, 18 June 2010) of the National Environmental Management Act (NEMA) as per the project scope and description. Triplo4 Sustainable Solutions was appointed as independent environmental assessment practitioner, on behalf of uMzinyathi District Municipality, represented by Royal Haskoning DHV, to undertake the Basic Assessment Process.

This document describes the proposed activities within the construction of the Enhlalakahle pipeline, and provides an overview of the environmental authorisation requirements and processes. It also provides I&APs with an initial opportunity to comment on the proposed project and to register as a stakeholder.

The draft Basic Assessment (BA) Report with relevant attachments will be available for public review at the Greytown public library and to stakeholders for a period of 40 days from **24 May 2013 to 04 July 2013**, as part of the environmental authorisation processes, to provide I&AP's / stakeholders with additional information and further opportunities to raise issues of concern and suggestions for enhanced benefits. Thereafter, the final Basic Assessment Report will be submitted for comment to registered I&AP's and DAEA for consideration.

**Comments on the BID to reach us by no later than end of business day: 17 May 2013.**

**Comments on the BA Report to reach us by no later than end of business day: 04 July 2013.**

Your comments, issues, concerns and suggestions on any aspect of the proposed project, including the technical and public participation processes, will help to focus the application, and will ultimately assist the authorities to make a decision.

Please complete the enclosed comment and registration sheet or contact Triplo4 Sustainable Solutions by mailing or faxing a letter, or by telephone or e-mail, should you wish to receive further information about the proposed project and the BA.

### **Return address for comments and to register as an Interested & Affected Party:**

**Attention: Hantie Plomp / Chen Read**

**Triplo4 Sustainable Solutions**

**P.O. Box 6595, Zimbali, 4418**

**Office: 032 946 3213 Cell: 083 308 8003 / 072 0490888 Fax: 032 946 0826**

**E-Mail: [hantie@triplo4.com](mailto:hantie@triplo4.com) / [chen@triplo4.com](mailto:chen@triplo4.com)**

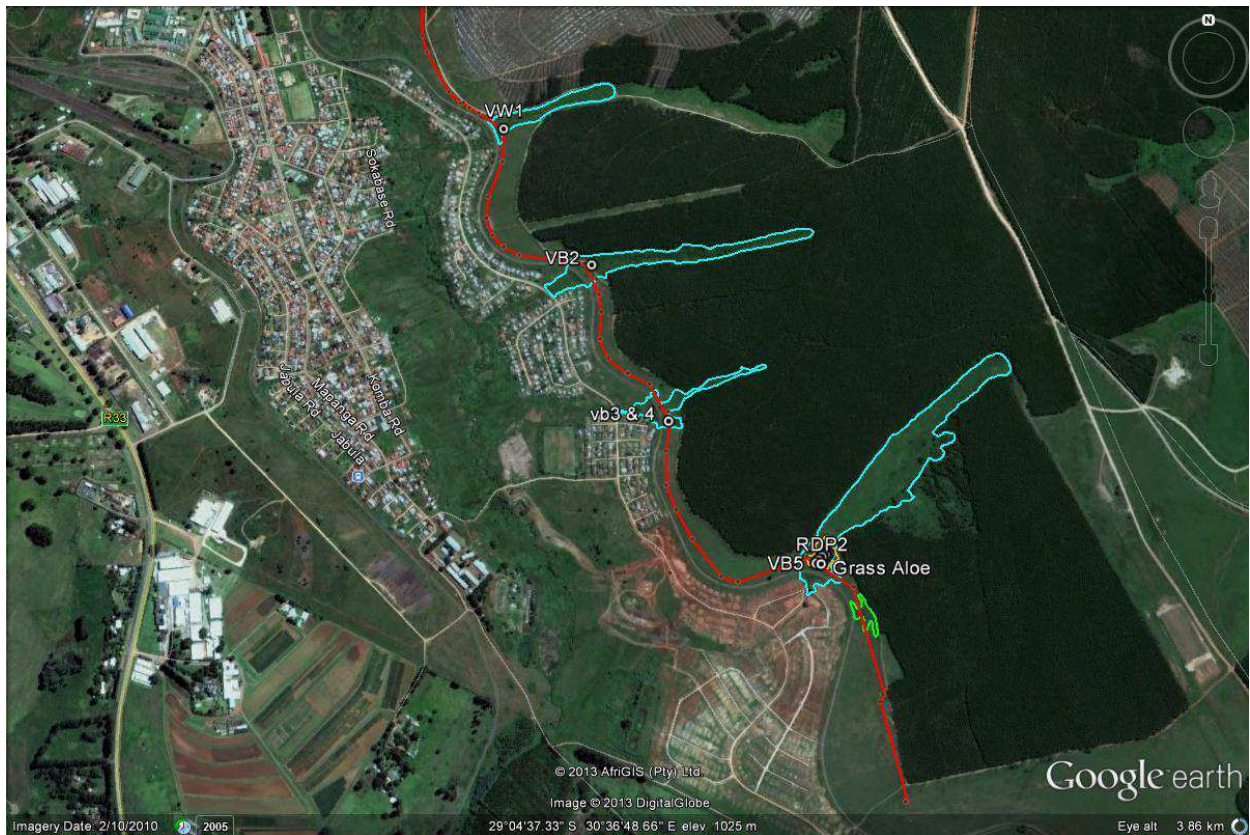
## LOCATION OF PROPOSED PROJECT

The project area lies approximately 1.5km south-east to Greytown and to the east of Enhlalakahle community. The entire pipeline will run from the existing Greytown Water Treatment Works to the existing Enhlalakahle Reservoirs.

The proposed activities that require an environmental authorisation are located along the proposed pipeline route to be situated between the existing plantation service road and railway line. These are **5 sections** of the pipeline that **bisect sensitive areas**

are of a total length of approximately **500 metres**, and an additional 320 metres associated with the buffer zones of 32 meters on either side of each portion.

**Location Map: Sensitive areas within the proposed Enhlalakahle Pipeline route**









**Figure1:** Location map

**Co-ordinates of proposed development:**

Activity	Latitude	Longitude
<b>Section A – Valley bottom wetland No.1:</b>		
Starting point	<b>South: 29°04'09.37"</b>	<b>East: 30°36'34.62"</b>
End point:	<b>South: 29°04'10.73"</b>	<b>East: 30°36'35.98"</b>
<b>Section B – Valley bottom wetland No.2:</b>		
Starting point	<b>South: 29°04'22.93"</b>	<b>East: 30°36'42.63"</b>
End point:	<b>South: 29°04'24.53"</b>	<b>East: 30°36'45.31"</b>
<b>Section C – Valley bottom wetlands No.3+4:</b>		
Starting point	<b>South: 29°04'34.34"</b>	<b>East: 30°36'50.83"</b>
End point:	<b>South: 29°04'37.79"</b>	<b>East: 30°36'52.66"</b>
<b>Section D – Valley bottom wetland No.5 (including rocky outcrop and protected mistbelt grassland):</b>		
Starting point	<b>South: 29°04'49.29"</b>	<b>East: 30°37'04.83"</b>
End point:	<b>South: 29°04'50.77"</b>	<b>East: 30°37'08.81"</b>
<b>Section E – Seepage wetland No.6:</b>		
Starting point	<b>South: 29°04'52.07"</b>	<b>East: 30°37'10.4"</b>
End point:	<b>South: 29°04'55.46"</b>	<b>East: 30°37'11.88"</b>

**Site Photographs:**

	
<p>The existing Greytown Water Treatment Works</p>	<p>The access road to the reservoir from road R74.</p>
	
<p>Wetland and Mistbelt grassland</p>	<p>Valley bottom wetland</p>
	
<p>Poison Bulb - Red listed "Declining" plant</p>	<p>Valley bottom wetland</p>

**PROJECT DETAIL**

The overall project, Greytown Bulk Water Supply Scheme – Phase 2, is initiated by UMzinyathi District Municipality, and funded by DWA under the RBIG -Rural Bulk Infrastructure Grant. The project proposes the construction of approximately 4.26km of HDPE pipeline (with internal diameter less than 0,36 meters) for the transfer of potable water between existing reservoirs to augment the supply of water, in order to ensure adequate provision of water to the newly constructed low cost housing project.

DAEA confirmed that listed activities are triggered for the construction of **5 sections** of the proposed pipeline that bisect sensitive areas, namely:

- Natural Midlands Mistbelt Grassland, which is one of the most endangered vegetation units in SA;
- A patch of low-lying rocky outcrop adjacent to valley bottom with several red listed "Declining" Poison Bulbs *Boophone distichta*. Some are as close to 2 m from the proposed alignment. According to the Specialist a rescue and recovery programme for bulbous geophytes and moribund termite mounds will be required;
- Five valley bottom wetlands as well as a patch of hillslope seepage wetland that may require a Water Use Licence from the Department of Water Affairs. Communication and site visit with DWA will determine the relevant licence/authorisation requirements.

## PROJECT MOTIVATION

The Greytown water supply is currently stable, however, with the water demand continues to grow, the storage capacity of potable water in the existing reservoirs continues to fall below its supply security level. Low cost Housing development in the Enhlalakahle area is presently serviced by boreholes. In line with prior experience in the area, the boreholes are not anticipated to offer a sustainable water supply to the settlement development. Other water supply related problems are the higher than optimal static water pressure at the lower lying area, predominantly to the eastern side of Greytown. Additionally, there is limited bulk distribution capacity to continue increasing the supply to the eastern areas of Greytown, and no spare capacity to provide for new housing areas.

The Greytown water supply scheme is proposed to ensure adequate provision of water to the newly constructed low cost housing project. Secondary benefits of the project will provide temporary employment opportunities during the construction and post-construction phases as well as during the anticipated on-going maintenance of the pipeline

From the environmental perspective, most of the land for the proposed route has already been transformed or heavily impacted on by the current housing activities as well as previous agricultural and current forestry activities. Additionally, most of the total route (approx. 3.1km of 4.2km) does not bisect any sensitive areas.

In order to protect the sensitive areas that are anticipated to be bisected, mitigation measures will be proposed as per Environmental Management Programme, to ensure the protection and adequate rehabilitation of sensitive areas. Additional precaution measures will be proposed to ensure the prevention and/or minimization of environmental pollution and/or degradation potentially resulting from the planning, construction and operational phases of the project. These measures would include, but not be limited to, waste management and invasive alien plants control.

## SPECIALIST EVALUATION AND POTENTIAL ALTERNATIVES

A specialist Ecological Habitat Assessment has been conducted. The following are the main findings:

- Large sections of the entire pipeline route bisect transformed or secondary succession Ngogoni *Aristida junciformis* grasslands, and are degraded due to forestry impacts and other human disturbance activities, such as harvesting of medicinal plants, rock removal and frequent fires.
- The existing Enhlalakahle Reservoir is situated within an afforested or completely transformed environment and the vegetation around the reservoir consists mainly of pioneer weedy and alien invasive plant species.
- Due to the transformed and degraded vegetation surrounding the pipeline and reservoir site, it's highly unlikely that any threatened plant species remain in the immediate area.

- Poison Bulbs Boophone distichta, which are currently Red Listed as ‘Declining’, mainly due to unsustainable harvesting of the plants for the traditional medicinal practices, were observed between 2-25m from the proposed pipeline alignment, within the foot-slopes of a rocky outcrop, situated on the eastern slopes of a grassland hill, which is situated within the Midlands Mistbelt Grassland vegetation unit.
- The proposed pipeline bisects five valley bottom wetlands as well as a remnant hillslope seepage wetland. The majority of the valley bottom wetlands have been heavily impacted on by surrounding forestry as well as the high density human settlements.
- No sensitive or endangered mammals were recorded within the study area. The majority of larger mammal species as well as the highly secretive Oribi are likely to have been eradicated or have moved away from the area during forestry as well as high levels of human activities from the adjacent settlements.
- The entire valley bottom wetland areas and adjacent hillslope seepage wetlands with their associated vegetation are extremely sensitive to further negative impacts and must be considered sensitive. Potential impacts of the construction activities must be strictly managed during the construction of the proposed pipeline.
- The area around the pipeline and the cleared servitude must be appropriately rehabilitated as well as re-vegetated (use existing seed bank within the top-soil), due to the sensitivity of the Mistbelt grassland.

Alternatives assessed comprise location of pipeline route alignments to identify the most feasible routes with cognisance of the sensitive environments. After assessing route alternatives, the current proposed alignment (between the road and railway line) is deemed the most environmental and socio-economic feasible option within the scope of available options and constraints.

## ENVIRONMENTAL PROCESSES

### Relevant Environmental Legislation

The below mentioned environmental activities are triggered by the proposed pipeline, thus requiring a Basic Assessment Process to be conducted and Environmental Authorisation from KZN DAEA (uMzinyathi District):

#### Listing Notice 1 (GNR 544, 2010):

Activity number	Activity description	Comments
18	The infilling or depositing of any material of more than 5 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from a watercourse.	It is anticipated that more than 5 cubic meters of soil, sand or rock will be excavated or moved during the construction of the pipelines through each of the sensitive areas.
11	The construction of infrastructure or structures covering 50 square metres or more where such construction occurs within a watercourse or within 32 metres of a watercourse.	Five valley bottom wetlands as well as a patch of hillslope seepage wetland will be crossed during the construction phase. It is anticipated that each section's area exceed 50 square meters. In addition, communication and site visit with DWA will determine the relevant licence/authorisation requirements.

#### Listing Notice 3 (GNR 546, 2010):

Activity number	Activity description	Comments
12	The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation":  (a) Within any critically endangered or -endangered ecosystem listed in terms of section 52 of the NEMBA	The proposed sections of the pipeline will occur within critically endangered ecosystems listed in terms of Section 52 of NEMBA.

## BASIC ASSESSMENT PROCESS

The basic assessment process being followed comprises of the following:

- Submission of an Application for Authorization to DAEA;

- Public participation Process:
  - Submission of a Background Information Document (this document) to identified stakeholders;
  - An advertisement in the local newspaper (The Greytown Gazette);
  - Placement of site notifications at the site; and;
  - Relevant I&AP's consultation to address issues and concerns raised.
- Compilation of Draft Basic Assessment Report for I&AP's and Stakeholder review and comments, which will be available for review and comment at the Greytown Public Library for a period of 40 days from 24 May 2013 to 04 July 2013 and submitted in hardcopy to Government Departments;
- Submission of the final Basic Assessment Report and details of I&AP consultation to registered I&AP's and DAEA for an environmental authorisation;
- Communication to I&AP's regarding the Environmental Authorisation.

**Your contributions are important**

You can get involved in the process:

1. By responding (by phone, fax or e-mail) to our invitation for your involvement in the process;
2. By completing the attached comment form and e-mailing, posting or faxing it to Triplo4 Sustainable Solutions;
3. In writing contacting or telephoning consultants if you have a query, comment or require further project information; and
4. By reviewing and commenting on the BA Report within the allowed 40-day review period.

In terms of the NEMA Regulations (GN 543) you are invited to formally register as an I&AP.

**REGISTRATION FORM:**

Proposed construction of portions of Enhlalakahle pipeline: Greytown bulk water supply scheme – phase 2, UMzinyathi Municipality, KZN.

**Attention:** Hantie Plomp / Chen Read Cell: 083 308 8003

**Office:** 032 946 3213

**E-mail:** hantie@triplo4.com / chen@triplo4.com

**Fax:** 032 946 0826

<b>Title (Mr/Mrs/Ms)</b>		<b>Phone</b>	
<b>Name</b>		<b>Fax</b>	
<b>Organisation / Interes</b>		<b>E-mail</b>	
<b>Signature</b>			

Please tick the appropriate circle and confirm your contact details above:

Registration

- I would like to register as an Interested and Affected Party for the BA process for this Project
- Non stakeholder: I would like you to take me off your distribution sheet for the Proposed. I would not like to receive any further information regarding this process.

Other

If you know of any other individual or organisation that would be interested in registering as an Interested and Affected Party please provide their contact details:

<b>Title (Mr/Mrs/Ms)</b>		<b>Phone</b>	
<b>Name</b>		<b>Fax</b>	
<b>Organisation / Interes</b>		<b>E-mail</b>	
<b>Signature</b>			

**I have the following queries/comments:**

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