ENVIRONMENTAL ASSESSMENT PRACTITIONER
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PROPONENT:
Umhlathuze Local Municipality
Civic Centre Central Business District, 5 Mark Strasse, Richards Bay, 3900

BACKGROUND INFORMATION DOCUMENT

THE PROPOSED DEVELOPMENT OF THE UMHLATHUZE REGIONAL WASTE WATER TREATMENT WORKS FOR WATER RE-USE

1. INTRODUCTION AND BACKGROUND

The City of uMhlathuze (CoU) has conducted a feasibility study on the suitable strategies to address the current water supply backlog within the municipal area. The findings of the study concluded that the treated wastewater can be utilised as an alternative to potable water usage. The City is targeting the effluent that is currently discharged into the ocean. As such, it was concluded that suitable infrastructure must be developed to deal with wastewater that can be utilised for industrial use. The project is to be located on a property formally described as "Remainder of Erf 11451 Richards Bay".

2. PURPOSE OF THE BACKGROUND INFORMATION DOCUMENT

The purpose of this Background Information Document (BID) is to provide Interested and Affected Parties (I & APs) with background information pertaining to the proposed project and to introduce the Environmental Impact Assessment (EIA) process to be followed. It also aims to inform I & APs on how to fully participate in the EIA process. It further indicates the important role of public participation during the assessment phase, as input from I & APs contributes to ensuring that all potential issues are considered within the study. The issues raised by the I & APs will be examined and included in the Reports as the project unfolds.

3. DESCRIPTION OF ACTIVITY

The project entails the development of a Regional Waste Water Treatment Works. The facility will include a domestic treatment plant which will provide effluent directly to the low quality off-takers; a wastewater treatment work which will provide additional supply to the Industrial plant which will then provide effluent to the higher quality off-takers. The effluent that is currently discharged into the ocean is intended to be treated and reused. The project also entails a network of pipelines that will be used to collect the effluent from various existing Wastewater Treatment Works and the pipelines that will be distributing the treated water from the proposed plant to the potential off-takers. A proposed reservoir with a storage capacity of 25 Ml will be on the industrial plant site.

4. NEED AND DESIRABILITY

The need and desirability of the proposed project can be attributed to the existing water backlog which is also exacerbated by the droughts in the Kwa-Zulu Natal Province which is depleting the water supply in various municipalities in the Province.

The CoU is dependent on an adequate supply of water to sustain both itself and its residents. Inadequate supply of water will meaningfully constrain the growth and development potential for this key center, with obvious and serious negative socio-economic consequences for both the region and the country.

The commercial and industrial sectors accounts for the bulk usage and further growth in the municipal area would increase the demand for potable water on the city. The wastewater re-use is regarded as an alternative option to supplement this need and thus "free up" the demand for potable water for domestic, commercial and industrial sectors. It is therefore prudent that the CoU investigate and consider other sources of water, and the reuse of wastewater is one, to close the gap between the available yield versus the current and future demand.

It has been investigated that approximately 70% of the CoU's potable water supply is used by industry and commerce related users. If the CoU could utilise the available effluent and provide the treated water (reuse water) to industry as an alternative to potable water, they will be able to re-allocate the freed-up potable water to domestic users, and therefore be able to augment their available supply volumes.

According to the Feasibility Studies undertaken, the re-use water potential is approximately 79, 5 Mℓ /day. Industrial off-takers committed in writing that they would be able to utilise 72, 91 Mℓ /day of re-use water if it can be supplied at economically viable rates.

The current water discharged into the ocean could therefore be targeted as sources of re-use water. The planned development for the city will impose an increased water demand as well as increased sewer treatment volumes on CoU infrastructure. The CoU will have an estimated water demand of 304, 01 Mℓ /day resulting in a water supply deficit.

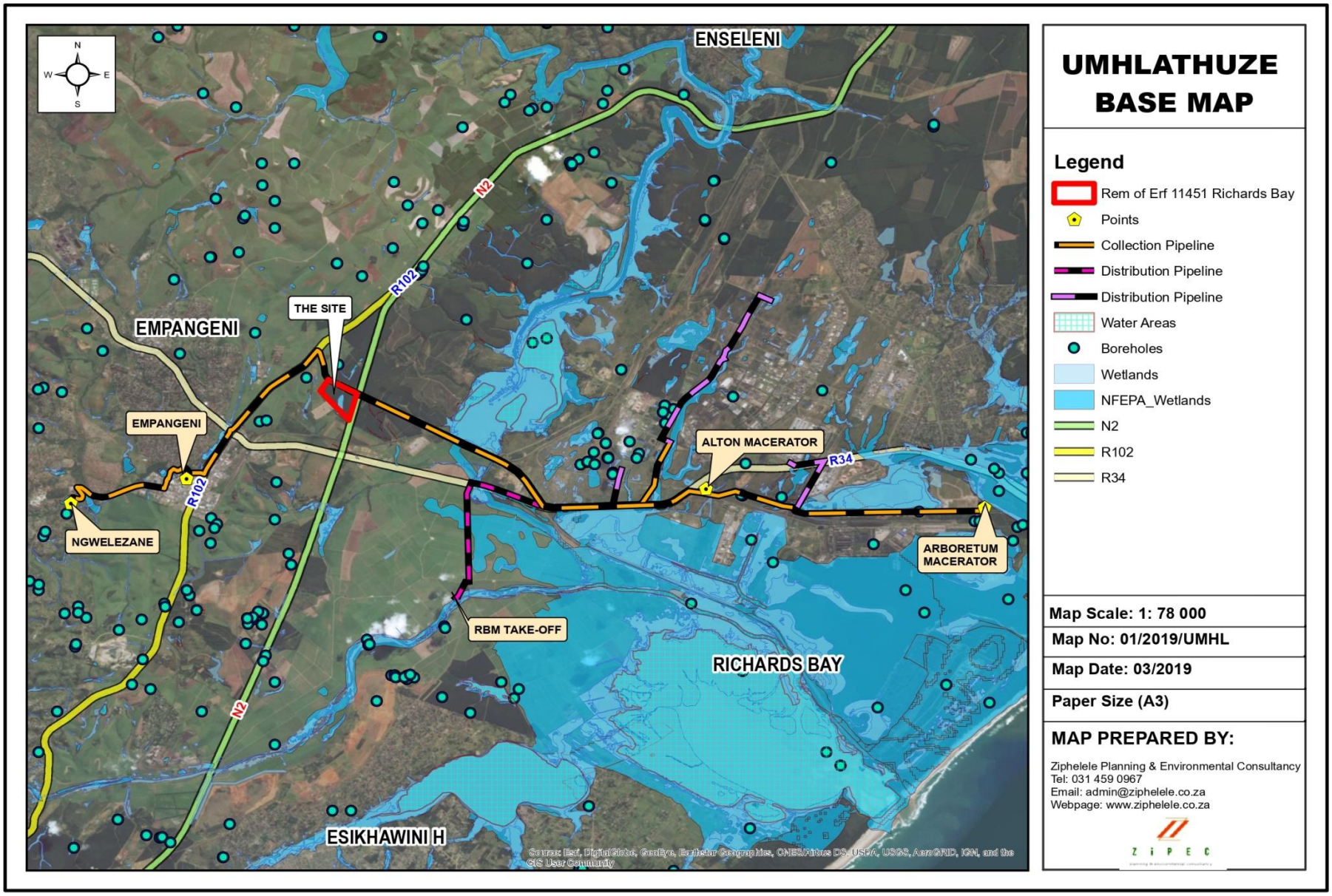
The project is desirable because it is aimed to demonstrate and address the CoU strategic objectives associated with the provision of water, in order to permit economic growth and for wellbeing of its citizens. Additionally, the proposed establishment of the wastewater treatment works will allow for the CoU to save a significant amount of money which can be directed towards other imperative projects.

The feasibility study concluded that the most beneficial option for the supply of re-use water should be maximized to match the total demand, and the most beneficial option for the supply of re-use water is to establish a regional wastewater treatment works.

4. ACTIVITY LOCATION

The proposed wastewater reuse plant will be located on the property described as the Remainder of Erf 11451 Richards Bay; the activity footprint is approximately 20 Ha. See Figure 1 below.

Figure 1: Map indicating the locality and context of the site as well as the proposed pipeline routes.



5. DESCRIPTION OF NEMA TRIGGERED ACTIVITIES

NEMA: EIA Regulations and Listing Notices (7 April 2017)

G. N	ACTIVITY DESCRIPTION	RELEVANCE TO THIS PROJECT
327	**No. 19:** The infilling or depositing of any material of more than [5] 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than [5] 10 cubic metres from [—(i)] a watercourse; [(ii) the seashore; or (iii)the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or estuary, whichever distance is the greater—] but excluding where such infilling, depositing, dredging, excavation, removal or moving— a) will occur behind a development setback; b) is for maintenance purposes undertaken in accordance with a maintenance management plan; [or] c) falls within the ambit of activity 21 in this Notice, in which case that activity applies; d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.	The WwTW sites and pipelines traverse watercourses on site
325	**No. 11:** The development of facilities or infrastructure for the transfer of 50 000 cubic metres or more water per day, from and to or between any combination of the following — (i) water catchments; (ii) water treatment works; or (iii) impoundments; excluding treatment works where water is to be treated for drinking purposes	The proposed pipelines will distribute approximately 85000 cubic meter of effluent per day
	No. 15: The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or maintenance purposes undertaken in accordance with a maintenance management plan.	The proposed sites to be cleared is approximately 20Ha within CBA
	No. 25: The development and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage with a daily throughput capacity of 15 000 cubic metres or more.	The proposed plant will treat approximately 85000 cubic meter of effluent per day
324	**No. 2:** The development of reservoirs, [for bulk water supply] excluding dams, with a capacity of more than 250	The proposed reservoir has a storage capacity of approximately 25000cubic

G. N	ACTIVITY DESCRIPTION	RELEVANCE TO THIS PROJECT
	cubic metres. (d) viii. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;	meters
	No. 12: The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan **(d) KwaZulu Natal** (v) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (vii) On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning;	The proposed sites to be cleared is approximately 18Ha within CBA

6. DESCRIPTION OF NATIONAL WATER ACT TRIGGERED ACTIVITIES

Activity	Description	Applicability
Section 21 C	Impeding or diverting the flow of water in a watercourse	Applicable -Any development within 500m of a wetland or within the 1:100-year Floodline / —Riparian Zone WWTW Site and Pipeline route
Section 21 I	Altering the bed, banks, course or characteristics of a watercourse.	Applicable - Any development within 500m of a wetland or within the 1:100-year Floodline / —Riparian Zone WWTW Site and Pipeline route
Section 21 F	Discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit	Not applicable – Effluent will be reused.
Section 21 G	Disposing of waste in a manner which may detrimentally impact on a water resource;	Applicable Sludge handling dams Reservoirs

7. EIA PROCESS

The EIA is a legislative tool used to ensure that the potential impacts that may occur due to the proposed development are avoided or mitigated. In South African legislation the environment includes, social, economic and bio-physical aspects that the EIA should assess equitably. The EIA process is divided into two phases, the Scoping Phase and the Environmental Impact Assessment Phase. This proposed development is currently in the Scoping Phase of the assessment.
The Scoping Phase aims to:

- Investigate and gather information on the proposed site, in order to establish an understanding of the area
- Establish how the proposed development activities will potentially impact on the environment

8. YOUR INVOLVEMENT

The involvement of Interested and Affected Parties (I&AP's) is essential in the public participation process. I&AP's may participate by registering with the Environmental Assessment Practitioner (EAP) as per the details contained herein.

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The Public Participation Process will include:

- Advertisement in the local newspaper
- Notice board on site
- Circulation of the BID (this document) to all identified I&APs
- Review of the report by all registered I&APs and the relevant authorities
- A public meeting (**as and when required based on the interest shown)**

The I&AP are requested to obtain the I&AP registration and feedback form from our webpage or by sending an email requesting to our offices.