

VULAMEHLO CROSSBORDER WATER SUPPLY SCHEME

1. PROJECT NAME

Vulamehlo Cross Border Water Supply Scheme: Construction of civil, mechanical and electrical works to optimise the operation of the Vulamehlo water treatment works

2. BACKGROUND

The Ugu District Municipality supplies portable water to areas in Ugu District and some areas under Harry Gwala District Municipality through the Vulamemehlo Cross Border Water Scheme. The Vulamehlo Cross Border Water Scheme is intended to provide water supply recieved from uMthwalume River to communities residing in Breamer,Mayfield , Kenterton , Nyavini, KwaNkosi ,Enkulu, Okhalweni (Qhamuka)Gugha, Ngwenda , KwaMgayi, Jolivet , Hluthankungu and Hlokozi located as follows:

UGU DISTRICT MUNICIPALITY	LOCAL MUNICIPALITY	AREAS
UGU DM	Umdoni	Breamer, Mayfield and Kenterton
	Umzumbe	Nyavini, KwaNkosi, Enkulu, KwaMgayi, Okhalweni,Gugha and Gwenda
HARRY GWALA	Ubuhlebezwe	Jolivet, Hluthankungu and Hlokozi

The Vulamehlo Waterworks has a current design capacity of 2.5Mℓ/day to be upgraded 5Mℓ/day . Tenders for the extension works closed June 2023 and construction commenced in October 2023

3. PROJECT DESCRIPTION AND LOCATION

3.1 Project Description

The capacity of Vulamehlo Water Treatment Works is to be augmented as follows:

- Raw water abstraction by de-silting the weir and possibly increasing weir height,
- Construction of new raw water tank
- Construction of new chemical storage building
- Construction of new mixing channel
- Construction of the new clarifier to increase sedimentation

- Construction of new filters
- Supply and laying of interconnection pipework
- Construction of clear water reservoir
- Desludging of existing sludge beds
- Supply and installation of mechanical and electrical components
- Construction of roadworks to improve access in the WTP
- Clean and repair existing fence to increase security

When all of the above work has been completed, the Vulamehlo Water Treatment Works will have a rated capacity of 5 Mℓ/d.

3.2 Project Location

The Vulamehlo Water treatment Works is located in Ubuhlebezwe Local Municipality in Harry District Municipality, The project area is at 32 KM west of Umzinto and 7 km inland from Jolivet Boxer Jolivet via R612 from Umzinto to Ixopo .

PROJECT DURATION

CONTRACT DATES:

Commencement Date: 18 October 2023

Completion Date: 18 October 2024

4. PROJECT FUNDING AND COSTING

R 39 481 070.03 (incl VAT)

5. CONSTRUCTION ROLE PLAYERS

- | | |
|---------------------------|-------------------------------------|
| • Implementing Agent: | Ugu District Municipality |
| • Consulting Engineer: | ZIYANDA Consulting cc |
| • ISD Consultant | Sbungane Trading cc |
| • Environmental Control | Isolendalo Invironmental Consultant |
| • OHS Control | Maliphuzi PTY Ltd |
| • Civil Works Contractor: | Thubalam Trading cc |

6. CONSTRUCTION STATUS

The construction of raw water tanks, clarifier and clear water reservoir is on progress. The overall construction progress is at 22.6%. The progress on the construction of the civil works is as indicated below:

Item No.	Activity Description	% Progress
1	General Compliance (Contractual Requirements, Site Establishment Setting out	83.3%
2	Raw Water Tank	43.4%
3	Clarifier	46.9%
4	Clear Water Reservoir	39.6%
5	Chemical Storage Building	0%
6	Subtotal for Chemical Storage Building	0%
7	Mixing Channel	0%
8	Backwash Effluent Return Pumpstation	0%
9	Interconnecting Pipework	0%
10	Filters Civil Structure	0%
11	Mechanical & Electrical	0%
12	Access Roadworks	0%
13	Sludge drying beds	0%
14	De-silting of Weir	0%
15	Raising Weir Wall	0%
16	General site rehabilitation	0%
	Overall Progress	22.6%

7. BREAKDOWN PROJECT COSTING

Description	Cost
Contract Ugu-07-1630-2023: Civil, Mechanical and Electrical works	R 34 331 365.24
Engineering and Construction management and Site Supervision Costs	R 4 806 391.13
Subtotal 1	R 39 137 756.37
15 % VAT	R 5 870 663. 46
TOTAL 2	R 45 008 419.83

8. JOB OPPORTUNITIES

The project employed 13 people from the local community, 6 SMMEs from local have been appointed and are expected to employ from local community as they may be required.

9. INJURIES / ACCIDENTS

No major injuries have been reported on site.

10. CHALLENGES EXPERIENCED

- Delayed issuance of construction permit by Department of Labour.
- Suspension of construction activities due safety non compliances
- Work stoppages by Nyavini Business Forums
- Slow progress by the contractor

11. CONCLUSION

Notwithstanding the challenges highlighted above, the project is being implemented an the local community is benefiting from the work opportunities arising out of the construction project. On completion, Ugu District Municipality will be able to extend the water supply network to areas that previously had no clean water and hence further reduce the water supply backlog.

Waterworks
Structure

Photographs

Raw Water
Tank



Clarifier



Clear water
reservoir



Clarifloculator

**36M³/day
Clarifloculator**



Treated Water
pumpstation





Treated Water Pumpstation MCC