



UGU DISTRICT MUNICIPALITY
PROJECT PROFILE
(WATER SERVICES INFRASTRUCTURE GRANT)
EMERGENCY BOREHOLES PROGRAMME

August 2023

COMPILED BY:



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ON BEHALF OF:



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PROJECT BACKGROUND

The Water services masterplan identified the need to continue using boreholes and springs as alternative water supply in all areas. Boreholes and springs are proposed to supplement the water demands and will have to remain in place until adequate bulk water becomes available.

Additional boreholes are required in areas where there are no existing boreholes, areas where boreholes no longer have capacity and where the existing raw water supply is inadequate to cope with the demand

The business plan for EMERGENCY BOREHOLES PROGRAM approved by DWS on 15 December 2022 was implemented by Ugu DM from 01 March 2023 to 20 July 2023. The scope of works on the approved Business Plan was for Construction of new Boreholes as follows;

- Conduct geo-hydrological investigations and reporting
- Conduct drilling of the 55 new boreholes, yield tests and water quality tests
- Supply and installation of Solar pumps,
- Supply and installation of Solar Panels (Number depends on pump size)
- Installation of tank stand and 10 000L Jojo tank (stand installed on concrete plinths)
- Pipework from borehole to tank and standpipes (length varies for each borehole)
- Construction of standpipes
- Electrical works
- Commissioning of boreholes

The approved business plan was for the implementation of 55 new boreholes within Ugu District. A total of 60 boreholes have been completed, this indicates that five (05) additional boreholes were completed. A number of dry holes were experienced, Umuziwabantu has the highest number with seven (07), Umzumbe LM had 2 dry holes and 2 collapsed holes. Umdoni LM and Ray Nkonyeni LM both had 1 dry hole each. Different geo-hydrologists were used at Umuziwabantu but the results were the same, the conclusion was that most of the areas might have a water table that is too low for boreholes.

CONTRACT DATA

ITEM	DESCRIPTION	ANSWER
1	Project Name:	Emergency Boreholes Programme
2	Project Status: <ul style="list-style-type: none">• Planning and Implementation	100%
3	Construction Period (Start and End Dates)	01 March 2023 to 30 July 2023
4	Duration	3 Months
5	Budget (Including VAT)	R 43 090 995.00

SCOPE OF WORKS

Under this contract there were sixty (60) Boreholes, the following activities have been done:

Professional Services

- Conduct Geo-hydrological Investigations and Geo-Survey report
- Drilling of new boreholes,
- Conduct yield and water quality tests

Construction

- Equipping of boreholes including pump and secondary works
- Supply and installation of solar system
- Fencing (where required)
- Supply and installation of tanks
- Construction of stand taps
- Provision of reticulation network where required

Sixty (60) boreholes have been commissioned.

PROGRESS OF WORK

Item N°	Activity Description	% Weight	Scheduled Work Done			% Overall Progress
			Billed Qty	Work Done	% Progress	
1	Umzumbe LM					
1.1	Geohydrological Investigation: Feasibility, Geophysical surveys and report	10	15	15	100%	10
1.3	Drilling New Boreholes, Yield Testing and Water Quality	10	15	15	100%	10
1.4	Equipping of boreholes	5	15	15	100%	5
2	Umuziwabantu LM					
2.1	Geohydrological Investigation: Feasibility, Geophysical surveys and report	10	15	13	86.67%	8.67
2.3	Drilling New Boreholes, Yield Testing and Water Quality	10	15	13	86.67%	8.67
2.4	Equipping of boreholes	5	15	10	66.67	3.33
3	Umdoni LM					
3.1	Geohydrological Investigation: Feasibility, Geophysical surveys and report	10	10	10	100%	10
3.3	Drilling New Boreholes, Yield Testing and Water Quality	10	10	9	90%	9
3.4	Equipping	5	10	10	100%	5
4	Ray Nkonyeni LM					
4.1	Geohydrological Investigation: Feasibility, Geophysical surveys and report	10	15	15	100%	10
4.2	Drilling New Boreholes, Yield Testing and Water Quality	10	15	15	100%	10
4.3	Equipping of boreholes	5	15	25	100%	5
TOTAL						100%

COMMENTS

The Progress is currently at 100% as detailed in Table A1 below. Five (05) additional boreholes have been completed.

CHALLENGES

- Delay in procurement of materials like Solar Panels and Tank Stands by contractors
- Collapsing Of Holes which Required Blowing and Cleaning

BENEFICIAIRES

The beneficiaries were based on the area of supply for each borehole within Umdoni LM, Umzumbe LM Umuziwabantu and Ray Nkonyeni LM

STAKEHOLDERS

The Project Team consists of the following stakeholders:

Funder	: Department of Water & Sanitation
Water Services Authority	: UGU District Municipality
Technical Consultant (Engineer)	: WNA Consulting (PTY) LTD
Contractor	: Panel of Contractors
Project Steering Committee	: Ward Councilor, Ward Committee and Induna

PROJECT PHOTOS



Fig1. Installed Tank stand and 10,000L Tank



Fig. 2 Installed Solar Panels



Fig 3 Borehole Reference Name Tag



Fig 3 Borehole Reference Name Tag



Fig1. Installed Tank stand and 10,000L Tank