



# REFURBISHMENT AND UPGRADING OF CURRENT SANITATION INFRASTRUCTURE IN MATJHABENG LOCAL MUNICIPALITY

**NCOP Visit**

**11- 15 September 2023**



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# BACKGROUND

On 15 July 2022 the Department of Water & Sanitation (DWS) appointed Vaal Central as the Implementing Agent to oversee the Sanitation Infrastructure Challenges in Matjhabeng Local Municipality, which had been not been operational for more than 10 years, dysfunctional and vandalised. The intervention mandate is divided **into Three (3) areas of Scope**, namely (i) **Wastewater Treatment Works (WWTWs)**, (ii) **Pumpstations** & (iii) **Sewer Networks**.

## **1. Refurbishment OR Upgrading of the Wastewater Treatment Works (WWTWs)**

- A total of 11 WWTWs which 9 requires Refurbishment

## **2. Refurbishment of the Sewer Pump stations :**

- A total of 57 and 52 require Refurbishment

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## **3. Unblocking of sewer network pipelines and blocked chambers.**

- The total of 1543 km of sewer pipelines, which mostly are blocked.

## **Declaration of Disaster**

- Matjhabeng LM Sanitation Challenges– **though declared Disaster by Council –Not Declared Disaster according to Disaster Management Act , Minister of COGTA**
- Procurement Protocol – **In terms of Disaster Management Act could Not be implemented** , leaving the situation to be resolved through normal SCM procurement process which takes time ( from advertisement to appointment -minimum **3-4 months**)

# TECHNICAL PLANNING ACTIVITIES

## Estimated Budget To Completion for Sanitation Interventions: R2.25 Billion over 5 Years

Cashflow per project as submitted by PSP	Orig. Budget	Est. Budget	Cashflow
Sewer Network	67 850 000	1 140 918 939	1 136 942 952
WWTW	365 000 000	844 228 317	660 953 290
Pump Stations	102 800 000	296 227 836	276 469 319
Networks - Emergency works	R 500 000 for start -	-	180 656 913
<b>Total Programme</b>	<b>535 650 000</b>	<b>2 281 375 092</b>	<b>2 255 022 474</b>

R1 500 000 for full project

**2023/2024- Budget : R80 million**

**Expenditure ALL Inclusive April-August 2023 : R193 million**

**Current Appointments : Total = R386 million** Contractors &

- R71,6 million for **8 Contractors** for 8 Pumpstations
- Pending appointment for **2 x WWTWs & 13 Pumpstations**

R585 required in the current FY to be able to complete the 29 projects planned and ready to be awarded. The estimated cost for the entire project scope, including infrastructure upgrades might reach R2,8billion

# SHORT –TERM INTERVENTION

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**SHORT –TERM INTERVENTION : NETWORK UNBLOCKING /REPAIRS ( 3 INTERIM CONTRACTORS ) SEPT-2022 to 30 ARIL 2023**

Pipe Network Repaired/Replaced	Number of Collapsed Pipeline Replaced :27%	Number of Manhole's Unblocked :20%	Pumpstations Refurbished :11%	Number of Households Affected : 26%
<b>716</b> meters of Sewer Pipe Network Repaired	<b>128</b> of 463 (30% of 1543km) estimated collapse pipelines	<b>6040</b> of <b>30 000</b> manholes had been unblocked	<b>6</b> Pumps Stations Have been Refurbished out of 52	<b>33 271</b> of <b>127 000</b> households

# SEWER BIOSOLIDS UNBLOCKING



Excavation on a collapsed line in Kutlwanong



Pumping sewer waste out in preparation for fixing collapsed sewer in Kutlwanong



Unblocking Manhole 15590 at Kgotsong Clinic



Manhole 15590 at Kgotsong flowing after unblocking

## BENEFICIATION DATA

AREAS	WARDS
Bronville	11
Kutlwanong	18, 20, 21
Meloding	6, 7
Nyakallong	19
Odendaalsrus	36
Phomolong	2
Rheedespark	35
Riebeckstad	25
Thabong	10, 13,14,15,16,17,26,28,29,30,31
Virginia	8
Welkom	24,32,34
Out of 25 Area – The interim intervention worked on the critical and urgent 11 Areas to unblock and repair the collapsed sewer network & Refurbished 6 Pumpstations	The total wards in Matjhabeng LM are <b>36 and 26 Wards</b> that were worst affected with sewer spillages were attended to from September 2022 to 30 April 2023

# Emergency Intervention : May – June 2023

## Network Coverage

- The Networks Coverage falls within **36 Wards and 25 Areas**
- The current appointment covers **initially 6 Areas totalling 23 Wards**
- **13 Wards not** covered by Current Appointments
- 2 x Contractors withdrew thus **7 Wards affected** in Thabong Ext 2 & 4
- The total Wards not covered **is 20 Wards thus more than 21 Areas**

## Slow Start – Caused by unblocking due to critical areas requiring daily maintenance as :

- The 4 x Contractors commenced with Emergency Unblocking of the **Network – May to June 2023**
- **The Areas not covered required daily Unblocking of the Network and Contractors were deviating from the appointment of Repair / Replacement of Blocked , Collapsed Network**
- **MLM procured the Jetting / Combination Truck** to commence with daily Unblocking from June **and that relieved the 4xContractors to commence with their required work**

Contractor	Area	CURRENT PROGRESS	
		Percentage	Comment
<b>Hlwella trading</b>	Thabong, Ext.3 Wards 11, 23 & 24	6.8%	Call outs for Emergency works affects actual works progress on site, However contractor is progressing on cleaning the main outfall sewer line under the scope, CCTV service provider to be appointed.
<b>Sefako Engineering</b>	Thabong, Ext.1 Wards 12, 14, 15, 16 & 17	9.5%	Call outs for Emergency works affects actual works progress on site, However contractor is progressing on cleaning the main outfall sewer line under the scope and conducting CCTV inspections (Awaiting reports)
<b>Botong Civils</b>	Welkom Wards 27, 32, 33 & 34	10.2%	10x Pumps operating 24hrs, installed at various location within Welkom area (Emergency works) deplete project funding as the pumps cost +/- R2.3m for a month only. Also it affects actual works progress on site, However contractor is progressing on cleaning the main outfall sewer line under the scope and conducting CCTV inspections (Awaiting reports).
<b>Isiphethu</b>	Kutlwanong Wards 18, 20, 21, & 22	8.8%	2x Pumps operating 24hrs, installed at different locations at Kutlwanong area (Emergency works) deplete project funding as the pumps cost +/- R300k for a month only. Call outs for Emergency works also affects actual works progress on site, However contractor is progressing well on cleaning the main outfall sewer line under the scope and conducting CCTV inspections (Awaiting reports).

# PROCUREMENT STRATEGY

**The Programme has a total of 78 Projects that are ready for implementation and are divided as follows:**

1. Sewer Network – 25 Projects/ Area to cover the 36 Wards in Matjhabeng LM.
2. Wastewater Treatment Works – 9 Projects.
3. Pumpstations – 44 Projects

**The Prioritised Projects from 78 Projects are 59 in total and divided into Four (4) Financial Years as depicted below:**

- **Year 1 (2022/23** – Commenced in Sept 2022 to April 2023) the procurement of the PSPs was activated and  
10 the procurement for 3 Sewer Network contractors commenced with unblocking of sewers.
- **Year 2 (2023/24)** – an average of 29 projects are to be activated.
- **Year 3 (2024/25)** – an average of 26 projects are to be activated.
- **Year 4 (2025/26)** – an average of 4 projects are to be activated

# **LONG-TERM PROJECT IMPLEMENTATION**

# Project Name: Kutlwanong WWTW (Refurbishment – 6 Ml/day)



**Process Design:** Activated sludge

**Project status:** Conditional Assessment Report approved, Design Report submitted for approval, Procurement process complete; Contract awarded

**Presentation to MLM:** Yes

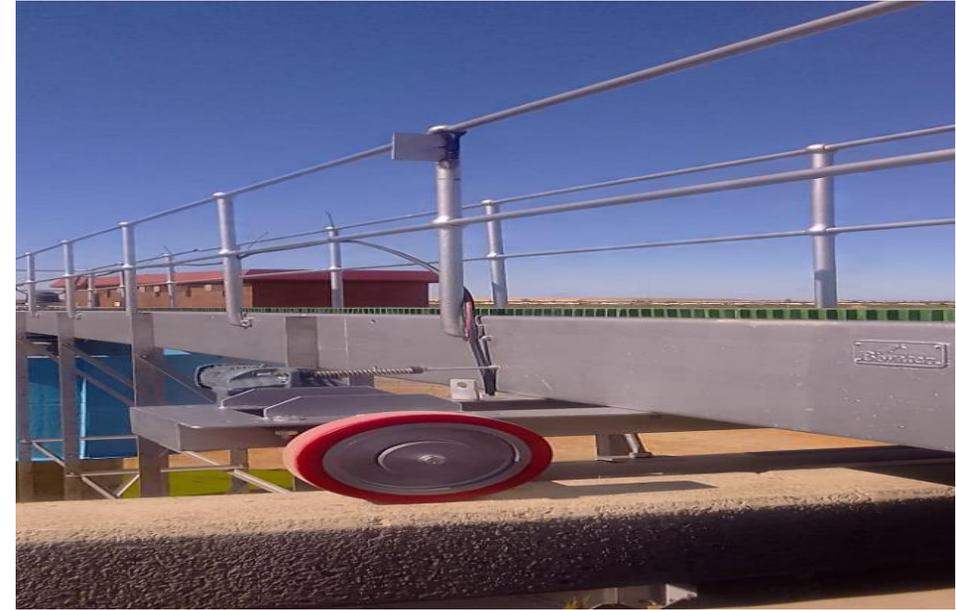
**Estimated Construction Value:** R112.26m

**Estimated Commencement Date:** October 2023

**Anticipated Contractor CIDB grading:** 8ME

**Construction activity on site:** No

# Project Name: Thabong WWTW Phase 1B (Refurbishment – 12 MI/day)



**Process Design:** Activated sludge

**Project status:** Conditional Assessment Report Approved, Design Reports submitted, Procurement documentation submitted, Tender evaluation and adjudication was done pending appointment of a Contractor.

**Presentation to MLM:** Yes – approved

**Estimated Construction Value:** R119,620,720.92

**Estimated Commencement Date:** 11 September 2023

**Anticipated Contractor CIDB grading:** 8ME

**Construction activity on site:** No

# Project Name: Refurbishment: Hennenman WWTW



**Process Design:** Processing of 4Ml wastewater/day

**Project status:** Conditional Assessment Report Approved, Preliminary Design Report submitted, various Supporting Reports submitted, Procurement Documentation in process of preparation.

**Presentation to MLM:** Yes – approved

**Estimated Construction Value:** R80,642million

**Estimated Commencement Date:** January 2024

**Anticipated Contractor CIDB grading:** To be determined

**Construction activity on site:** No, in process of Detail Design

# Project Name: Virginia WWTW (Refurbishment – 26 ML/day)



**Process Design:** Activated sludge

**Project status:** Conditional Assessment Report Approved, Design Reports submitted, Procurement documentation being prepared

**Presentation to MLM:** Yes - approved

**Estimated Construction Value:** R 114 733 560.95

**Estimated Commencement Date:** 01 February 2024

**Anticipated Contractor CIDB grading:** 9ME

**Construction activity on site:** No