

15 August 2025

Enquiries: L. Parnell

Attention: Mr L. Litholi

Dear Sir

RE: AVAILABILITY OF MUNICIPAL ENGINEERING SERVICES FOR REM/9/313, GRABOUW SERVICE AREA

We would hereby confirm that the following services are available for Rem/9/313, Grabouw

Roads and Stormwater

There is existing paved roads, which will provide access to the property. No upgrade is required for the short-term planning, but we need to keep in mind the road infrastructure within the town indicates prevailing sentiment pertained to the escalating degradation of the internal roads, underscored by the proliferation of potholes and drainage inefficiencies. Mitigating these challenges necessitates a nuanced approach, involving targeted interventions such as patching, resurfacing initiatives, and the meticulous prioritization of road routes based on their strategic significance.

Stormwater management challenges, with a specific focus on informal settlements, which are particularly susceptible to flooding and resultant infrastructure degradation. In addressing vulnerabilities, the proposal to integrate lockable covers for manholes emerged as a potential solution to mitigate theft and unauthorized access, thereby safeguarding critical infrastructure assets.

Raw Water Source

Eikenhof Dam is presently the sole surface (and raw) water source supplying the town of Grabouw. Although Eikenhof Dam is owned and managed by the Groenland Water Use Association / GWUA (Irrigation Board), TWKM signed a new Service Level Agreement (SLA) with GWUA, which makes provision for an annual allocation of 4.420 ML/annum for the town of Grabouw.

Sewer Connector Lines

The internal sewerage from the new proposed development will gravitate in a network of 160 mm diameter pipes.

Potable Water Supply & Storage

The water network is available and consist of a combination of 160 /110 /75mm diameter pipelines. Reservoirs have sufficient capacity to supply the development with potable water.

Reticulation pipe characteristics: Pipe distribution network analysis reveals a composition of approximately 60% asbestos cement (AC) and 40% polyvinyl chloride (PVC) pipes, with diameters ranging from Ø150mm to Ø75mm, reflecting a varied network infrastructure.

WTW is presently operating at 7 ML/d which is still less than the design capacity of 15 ML/d.

Solid Waste – Transfer Station

A Transfer Station is being constructed, to accommodate the waste generated from the property.

Capacity to Collect Solid Waste

Theewaterskloof Municipality has sufficient capacity exists to collect solid waste generated from this development.

Waste Water Treatment

Waste Water Treatment Works has sufficient capacity to treat additional load. The condition of the WWTW is problematic due to frequent breakdowns and the need for mechanical repairs. TWKM's more recent self-evaluation of treatment works performance indicates scores in the 30s, reflecting prevailing challenges related to equipment functionality and repair procedures.

Notably, the following are notable asset condition and maintenance failures:

- The mechanical belt press (for sludge dewatering) is still broken as also reported in the DWS Green Drop Report 202222
- Deteriorating / broken scum baffles, blockages and stilling well at the clarifiers are causing carry over of sludge to the maturation ponds
- As a result of above, the maturation ponds are full of sludge that is detrimental to final effluent water quality. One of the dam / pond retaining walls is broken and needs to be repaired.
- The site is located next to the municipal waste transfer station which makes site tidiness problematic.
- General housekeeping and site maintenance is needed in addition to capital improvements.
- breakdowns have been recurrent and the three no of ponds need to be cleaned.
- Security measures for site access control is not sufficient.

Regards


H. Matthee

DIRECTOR: TECHNICAL AND INFRASTRUCTURE IMPLEMENTATION SERVICES