

<b>DATE</b>	30-01-2026
<b>OUR REF.</b>	BMS-048
<b>PA REF.</b>	PA/03462/25
<b>LOCATION</b>	Site at, Ta' Mgarr ix-Xini, Ta' Mgarr ix-Xini, Ghajnsielem

<b>DESCRIPTION OF WORKS</b>	Demolition of existing boundary walls, site clearance, and excavation to the required levels, followed by the construction of an extension to the existing Sewage Treatment Plant. The extension will include a pre-treatment area, a new water plant room, thickening and dewatering facilities, a ferric dosing kiosk, a subterranean sludge holding reservoir, and an MBR area.
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### **Project Description Statement\_V4 - addendum**

This document has been prepared as an addendum to the *Project Description Statement – Fourth Version*, published on 20 October 2025. It addresses clarifications requested following queries received in relation to the proposed upgrades to the Gozo Wastewater Treatment Plant (WWTP).

#### *Environmental Performance and Compliance with the Recast UWWTD*

The proposal aims to improve the environmental performance of the Gozo WWTP and ensure compliance with the requirements of the Urban Waste Water Treatment Directive (recast).

As outlined in the tender documentation, Water Services Corporation (WSC) established the following background and scope:

To provide process and hydraulic resilience to this plant and ensure effective and efficient treatment of all raw wastewaters generated for a period covering at least up to the year 2040, Water Service Corporation (WSC) shall be contracting the design, installation, testing and commissioning of an 8,000 m<sup>3</sup>/day extension to the existing Gozo WWTP to the average of 14,000 m<sup>3</sup>/day of raw wastewater inlet, to a final treated water effluent in line with Urban Waste Water Treatment directive (recast).

This requirement is further referenced in *Section 2.1.2 – Final Effluent Consent* of the tender document. *Table 2.2* specifies the effluent consent limits applicable to the new WWTP prior to discharge via the sea outfall. These limits apply either as maximum allowable concentrations or minimum percentage reductions, based on results from a 24-hour composite sample analysed by an ISO 17025 accredited laboratory.

Parameter	Unit	Annual Average Consent (spot - 24 per year)	Minimum Influent Load Removal (%) (Upper Tier)
Temperature	°C	40° C, or 5° C above ambient temp (whichever is the lowest)	N/A
pH	-	6 - 10	N/A
COD	mg/l	125	75
BOD	mg/l O <sub>2</sub>	25	70 - 90
TOC	mg/l	37	75
TSS	mg/l	10	90
TP	mg/l	0.5	90
TN	mg/l	8	80

Figure 1 – Extract from Tender document Table 2.2

#### Flow Measurement and Bypass Recording as part of the IPPC permit

As part of the IPPC permit improvement programme, the Environment and Resources Authority (ERA) requested the installation of a flowmeter and a bypass/automated overflow recording system, which were not included in the original design features.

These requirements have since been incorporated into the design specifications. The use of a Parshall flume is proposed, which is suitable for accurate flow measurement under high-flow conditions. Details of implementation will be provided as part of the plant upgrade design.

- Designing, building, supplying, installing, testing and commissioning of a new emergency overflow bypass channel/pipe and a Parshall flume including civil, mechanical, and electrical works as specified at clause 2.2.4.

Figure 2 - Extract from Tender document

#### Design Metrics and Future Flows

Design metrics shall be expressed in accordance with the terminology defined in Directive (EU) 2024/3019, specifically using Dry Weather Flow (DWF) as the reference parameter.

This approach is consistent with Section 2.1.1 – Future Design Flows and Loads of the tender document. Table 2.1 [below] outlines the expected raw municipal wastewater inlet flows, loads, and concentrations for the design horizon year 2040, based on current measured data and projected growth.

The plant design explicitly accounts for future population growth and is required to remain robust under varying weather conditions. The upgraded facility will have a total treatment capacity of 12,000 m<sup>3</sup>/day, compared to the existing capacity of 6,000 m<sup>3</sup>/day, with maximum screened and treatment capacities allowing for increased flows during wet weather events, in line with the tender specifications.

**Table 2.1 - Expected future flows, loads and concentrations for the upgraded Gozo WWTP**

Volume	Gozo WWTP Raw Wastewater - 2040		
Minimum Flow (m <sup>3</sup> /d)	4,000		
Maximum Screened Flow (m <sup>3</sup> /d)	36,000		
Average Screened Flow (m <sup>3</sup> /d)	14,000		
Maximum Flow to Secondary Treatment (m <sup>3</sup> /d)	20,000		
Average Flow to Secondary Treatment (m <sup>3</sup> /d) - MBR (Note 1)	8,000		
Maximum Flow to Secondary Treatment (m <sup>3</sup> /d) - MBR (Note 1)	12,000		
Pollutant (Average)	Average	80%ile (Daily Maximum)	95%ile
	[mg/l]	[mg/l]	[mg/l]
COD	700.0	850.0	1000.0
BOD	270.0	350.0	420.0
TSS	220.0	296.0	456.0
TN	65.0	75.0	102.0
NH <sub>4</sub> -N	62.0	73.0	78.0
TP	7.0	8.1	10.0
Chloride	676.0	706.0	865.0
Conductivity (µS/cm) (Note 2)	4,000	4,500	5,500
pH range	6.21 - 7.99		

Figure 3 - Extract from Tender document - Table 2.1

### Sludge Drying and Leachate Considerations

Further information has been requested regarding the sludge drying process, including the proposed locations for sludge drying and storage.

It is noted that the dissolved organic carbon (DOC) present in leachates from sludge and screenings cannot be fully controlled by the sewage treatment plant operator alone. Full compliance in this regard is dependent on the complete disconnection of farm waste (RAM-

MAFA) from the sewer system, as well as the implementation of new sewer discharge control regulations, which are expected to enter into force in the coming months.

#### Treatment Process Phasing and Temporary Works

##### Correction to the PDS document

There are no temporary treatment plants proposed for the Gozo WWTP. The reference to temporary treatment units was included in error, having been inadvertently carried over from documentation related to the North Sewage Treatment Plant.

##### Existing Infrastructure

With reference to Figure 22, no decommissioning of any existing infrastructure will occur as part of this project. All existing treatment units, including clarifiers, shall be retained.

Please let us know if further documentation or clarification is required.