MCERTS - EDM Inspection Report

Llanarmon-yn-lal WwTW

29 April 2025

Report No. CFS/ 17923v1

Version No. 25.7

Site Information

Site Name:	Llanarmon-yn-Ial WwTW
Consent/Permit Holder:	Dŵr Cymru Welsh Water
Site Address:	Off B5431 Llanarmon-Yn-Ial Denbighshire CH7 4QX
Site Contact:	Statutory & Regulatory Maintenance Manager
Contact Phone Number:	mcerts@dwrcymru.com
Site Ref or Postcode:	512
Grid Ref (Sensor):	SJ 18982 55911
Consent/Permit No:	CM0001201
Location of EDM Sensor:	Waste water overflow to storm management system
Number of EDMs:	1
Instrument Type:	Type A (non contact) - R
Instrument/Device(s):	Vega Vegamet 862 with C 22
Level Meter Serial Number:	69828228
Sensor Serial Number:	69211865
Date of Inspection:	29/04/2025
Inspector:	Sam Lawson - MI 23 032/1
Inspection Report No:	CFS/ 17923v1
Survey Pack:	F
Uncertainty:	± 1.7 mm
Site Compliance:	Following a site inspection, the measurement system was found to meet the requirements of the Environment Agency *MCERTS: requirements for installing and using event duration monitors - MCERTS Performance Standard.* Published 28th August 2024

* Kit Inventory and calibration data recorded on central QMS database

P A S S

Site Details

Site Description
Llanarmon-yn-lal WwTW is a sewage treatment works with biological trickling filters (see process diagram).

Location of Event Monitor(s)
The EDM is located above the Right sided storm weir in a U-shaped channel

Overflow Point(s) Requiring Event Monitoring
Waste water overflow to storm management system (See Process Diagram.)

Verification / Calibration
The sensor was mounted on a rigid bracket with a removable datum plate to reference the sensor height relative to the hydraulic datum. The reference height of the datum plate has been set accurately and recorded.

Site Maintenance Arrangements, Evidence and Suitability
A routine maintenance schedule has not been confirmed but is required as part of the consent holders Quality Management System, as audited by CSA. The level measurement system was found to be in a satisfactory condition at the time of the Inspection.

MCERTS Approved Product
The installed meter has a valid MCERTS Approved product certificate. Certificate number: CSA MC210360/01

System Observed in Operation
The EDM was not observed in a storm condition during the inspection. However, there is no evidence to suggest that the system would not be suitable, during a storm event.

Indicated Discharge Status
The indicated discharge status can be observed on site by: The level activation - Access to telemetry required.

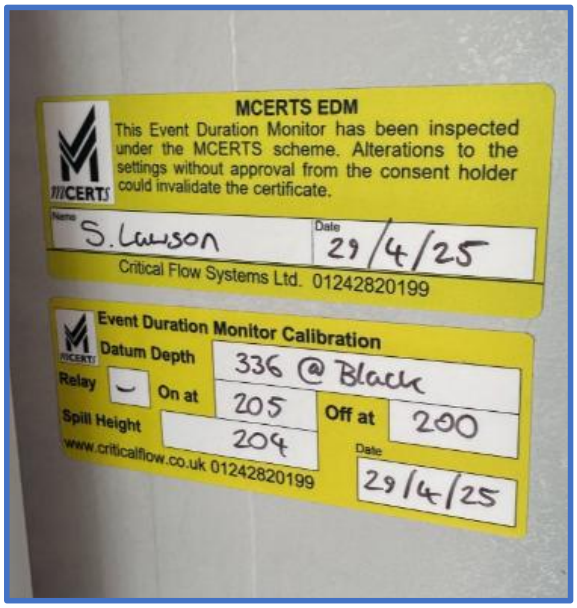
Telemetry Arrangements
The Event Monitor data is collected on the SCADA system. The data is transmitted using an analogue 4/20mA signal

Inspector's Judgements or Comments About the Installation
The humus return has now been moved further downstream. Photo evidence supplied on 17/12/25. V1 report issued with the following amendments: On/Off spill points adjusted. Telemetry commissioned 27/01/2026

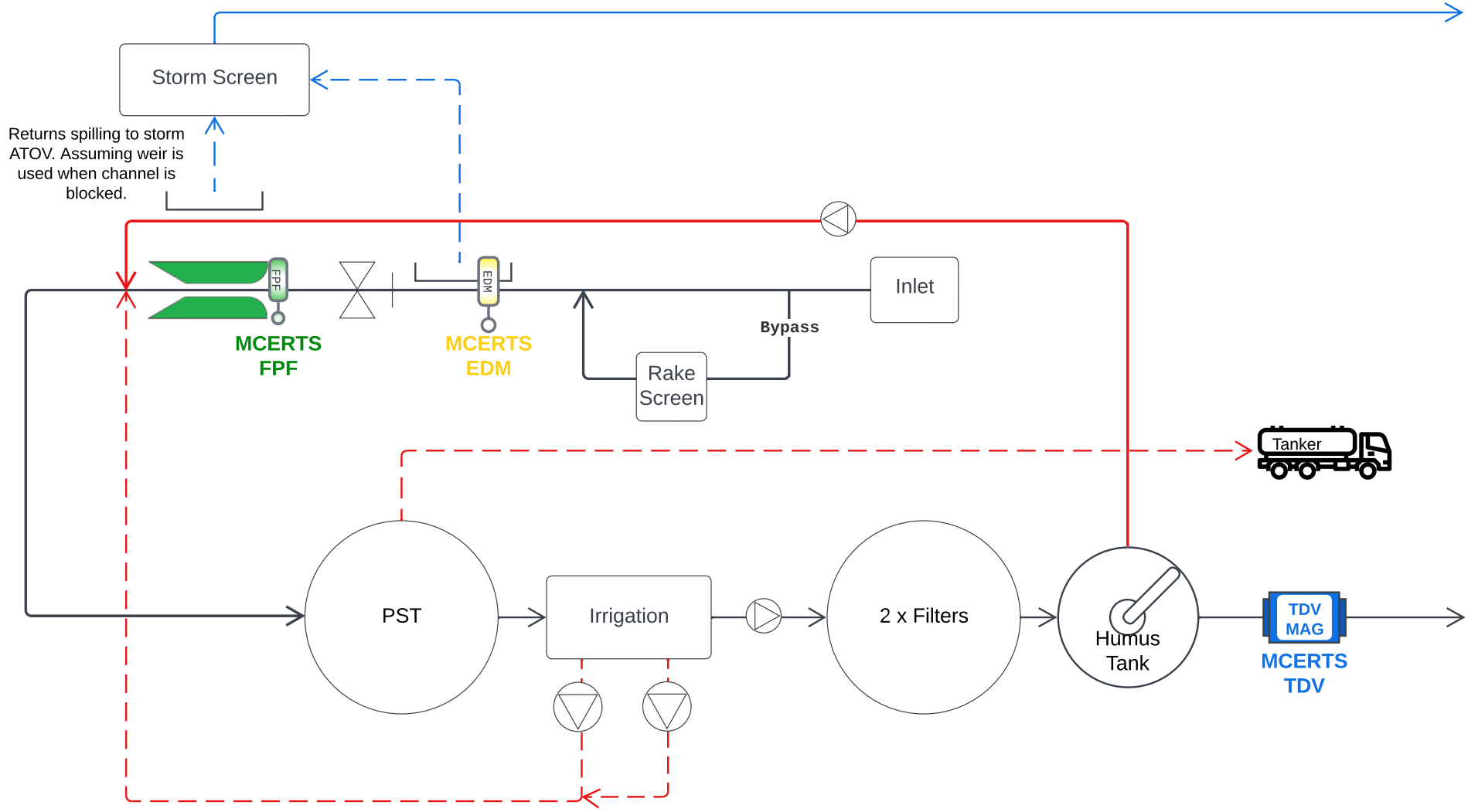
EDM Level Meter and Serial Number

EDM Level Sensor and Serial Number

EDM Location



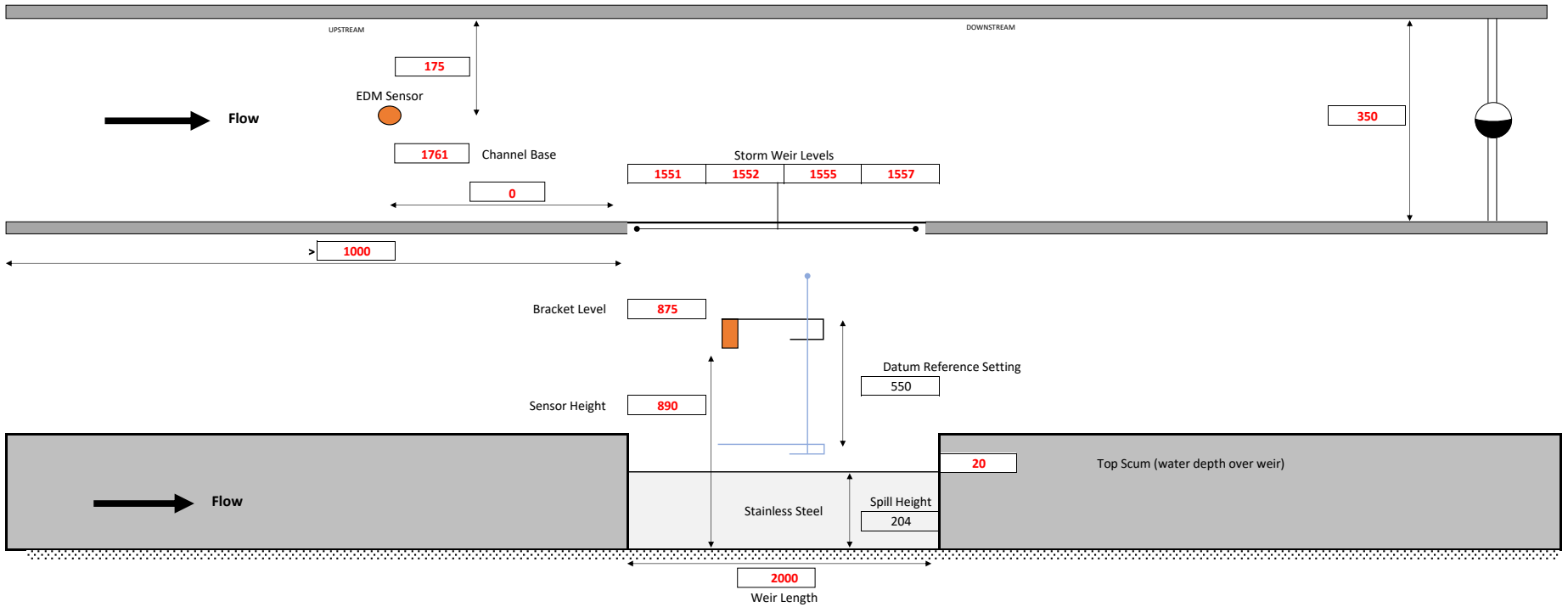
MCERTS EDM Flow Meter Labels



Treated Flow Storm Flow Storm Overflow Humus Returns Top Liquors De-Sludge Washwater	*Process interpreted from site visit and has not been confirmed*	CRITICAL FLOW	Process Diagram - Llanarmon-yn-lal STW	*Site Owner - DCWW*	*Date -* 29/04/2025
Comments -					

Rev	Date	Drawn By	Notes
A	09/05/2025	LJB	Details added to previous process drawing

Site Name	Llanarmon-yn-Ial WwTW	EDM Level Meter	Vega Vegamet 862 with C 22	Location	Storm Overflow
Event Duration Monitor	Date	29 April 2025			
Total Uncertainty	1.7 mm				



Depth Readings	
336	336
336	336
336	336
336	336
336	336
VAR +1	1.00

Measured Temp.	n/a °C
Instrument Temp.	n/a °C
Error	**0.0** mm
Datum Level	336 mm
Instrument Level	336 mm
Error	**0** mm
Sensor height above spill	686 mm
Accuracy	0.09 %
Error	**0.62** mm
Estimate of wave height	3 mm
Repeatability#1	**0.4** mm
Total Uncertainty	1.7 **mm**

Sensor Height	890 mm
Base Level	1761 mm (Staff Reading)
Lowest Weir Level	1557 mm (Staff Reading)
Spill Height	204 mm

Analogue Output	0 mm - 4mA
	858 mm - 20mA
Storm Event Activated	204 mm - 7.8 mA
Event De-Activated	203 mm - 7.79 mA

Bracket Level	875	Staff Reading
Bobbin	Black	(550 mm)
Datum Ref. Ht.	**336**	mm

Compliance Check	
Uncertainty < ±5mm	OK
Logging Intervals <2min	OK
Sensor location upstream from weir	OK
Sensor distance to weir	OK
Sensor securely mounted	OK
Sensor Height	OK
Sunshade Required	No
Sunshade Installed	No
Sensor in channel centre	n/a

Notes: #1 Repeatability uses IS4359 14.5.1
Total Uncertainty uses Error items in 'bold'

All dimensions in mm, unless stated otherwise.