

MCERTS - EDM Inspection Report

Llanbrynmair WwTW

12 March 2026

Report No. CFS/ 20562v1



Site Name:	Llanbrynmair WwTW	
Consent/Permit Holder:	Dŵr Cymru Welsh Water	
Site Address:	Tafolwern Llanbrynmair Powys SY19 7DT	
Site Contact:	Statutory & Regulatory Maintenance Manager	
Contact Details:	mcerts@dwrwymru.com	
Site Ref or Postcode:	848	
Grid Ref (Sensor):	SH 89350 02685	
Consent/Permit No:	CG0114201	
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 Vegapuls C22 with Vegamet 862	
Level Meter Serial Number:	76471140	
Sensor Serial Number:	77015001	
Date of Inspection:	12/03/2026	
Inspector:	MI 05 014	
Inspection Report No:	CFS/ 20562v1	
Survey Pack:	C	* Kit Inventory and calibration data recorded on central QMS database
Uncertainty:	± 2.5 mm	P A S S
Site Compliance:	Following a site inspection, the measurement system was found to meet the requirements of the Environment Agency <i>MCERTS: requirements for installing and using event duration monitors - MCERTS Performance Standard</i> . Published 28th August 2024	

Site Details

Site Description

Llanbrynmair WwTW is a sewage treatment works with biological trickling filters (see process diagram).

Location of Event Monitor(s)

The EDM is located above the Dual sided storm weirs

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 good 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, Comments or Changes to the Setup

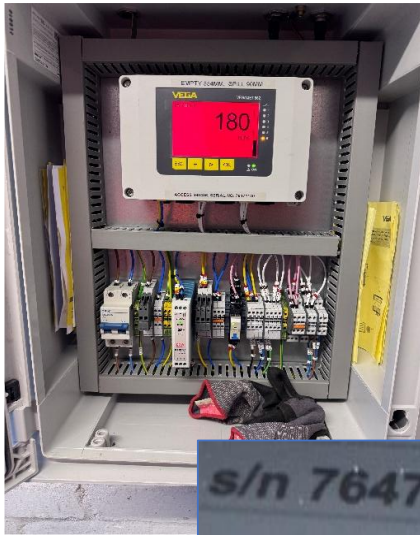
Telemetry:

The flow meter has been commissioned to the telemetry system and verified. Level meter reading 181mm, telemetry reading 181.0013mm



Storm Weir

Storm Weir & Sensor Location



s/n 76471140



s/n 77015001

Level Meter & Serial No.

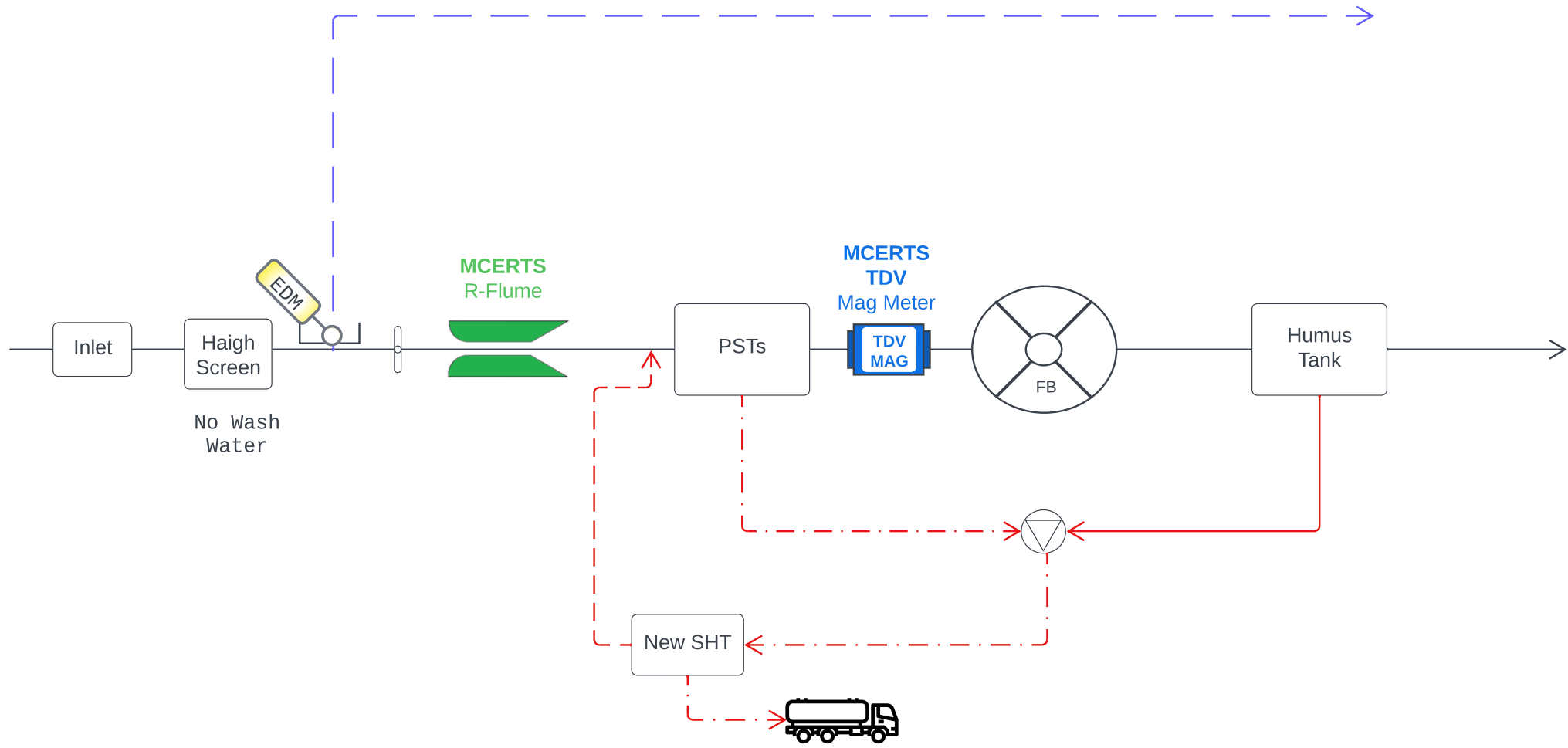
Level Sensor & Serial No.



Calibration Labels



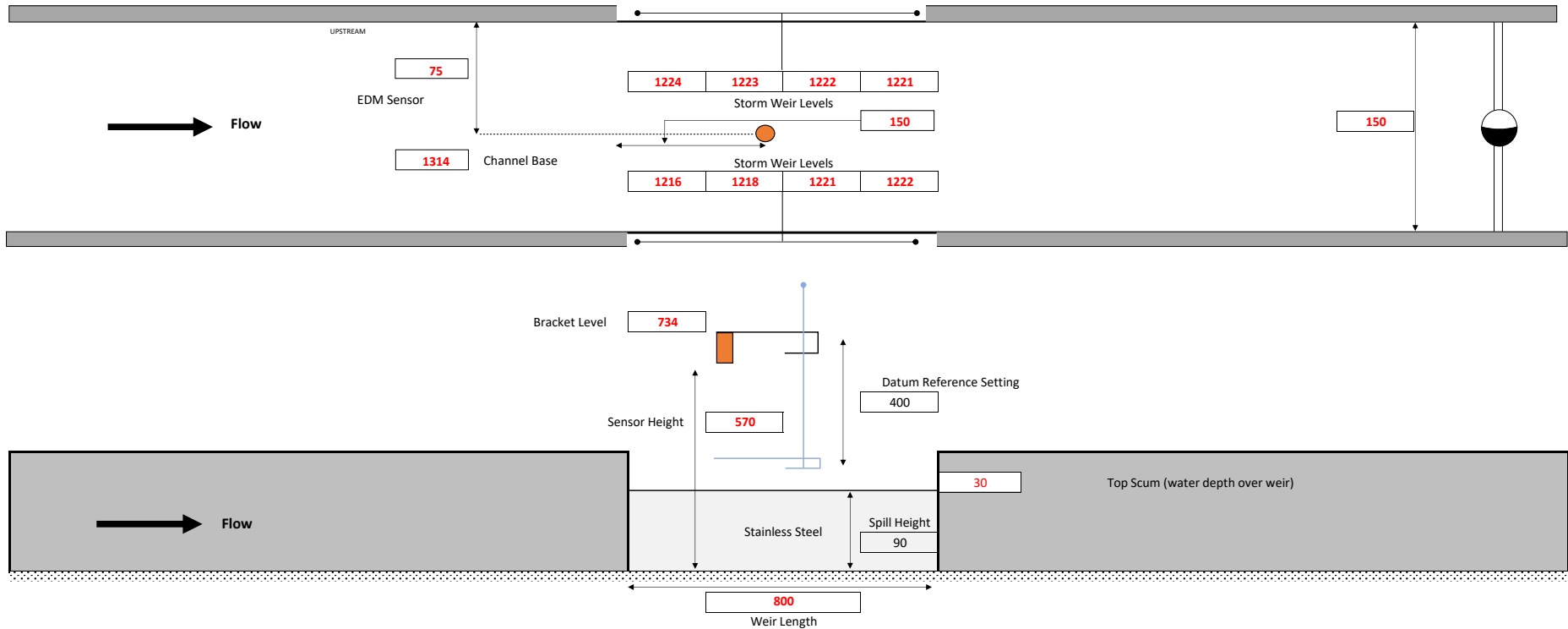
Site Under Construction ATOV



Treated Flow	Process interpreted from site visit and has not been confirmed		Process Diagram - Llanbrynmair WwTW		Site Owner - Dŵr Cymru Welsh Water	Date - 17/12/2025
Storm Flow			Rev	Date	Drawn By	Notes
Storm Overflow	Comments - A new R Flume has been installed at the inlet for FPF flow measurement.	A	19/12/2022	PDR	MCERTS Inspection	
Humus Returns		B	17/12/2025	CSP	MCERTS FPF Inspection	
Top Liquors		C	12/03/2026	AJB	MCERTS EDM Inspection	
De-Sludge						
Washwater						

Site Name	Llanbrynmair WwTW		EDM Level Meter	Vega Vegapuls C22 with Vegamet 862	Location	Storm Overflow
Event Duration Monitor	Date	12 March 2026				
Total Uncertainty	2.5 mm					

DUAL SIDED STORM WEIRS



Depth Readings	
180	180
180	180
180	180
180	180
180	180
VAR +1	1.00

Measured Temp.	°C
Instrument Temp.	n/a °C
Temp. Error	0.0 mm
Datum Level	180 mm
Instrument Level	180 mm
Calibration Error	0 mm
Survey Error	1 mm
Sensor height above spill	480 mm
Accuracy	0.09 %
Instrument Error	0.42 mm
Estimate of wave height	2 mm
Repeatability^{#1}	0.4 mm
Telemetry Error	2 mm
Total Uncertainty	2.5 mm

Sensor Height	570 mm
Base Level	1314 mm (Staff Reading)
Lowest Weir Level	1224 mm (Staff Reading)
Spill Height	90 mm

Analogue Output	0 mm - 4mA
	554 mm - 20mA
Storm Event Activated	90 mm - 6.6 mA
Event De-Activated	89 mm - 6.57 mA

Bracket Level	734	Staff Reading
Bobbin	White	(400 mm)
Datum Reference Height	180	mm

Compliance Check	
Uncertainty < ±5mm	OK
Logging Intervals <2min	OK
Sensor location upstream from weir	Not applicable
Sensor distance to weir	OK
Sensor securely mounted	OK
Sensor Height	OK
Sunshade Required	No
Sunshade Installed	No
Sensor in channel centre	OK

Notes: #1 Repeatability uses IS4359 14.5.1
 Default Values: Telemetry Error for Relay = 0, for 4/20mA = 2mm
 Total Uncertainty uses Error items in 'bold'

All dimensions in mm, unless stated otherwise.