MCERTS - EDM Inspection Report

Llanfair PG WwTW

13 March 2026

Report No. CFS/ 20574

Version No. 26.1

Site Information

Site Name:	Llanfair PG WwTW
Consent/Permit Holder:	Dŵr Cymru Welsh Water
Site Address:	Lôn Pwllfanogl Llanfairpwllgwyngyll Anglesey LL61 6PD
Site Contact:	Statutory & Regulatory Maintenance Manager
Contact Details:	mcerts@dwrcymru.com
Site Ref or Postcode:	494
Grid Ref (Sensor):	SH 53006 71069
Consent/Permit No:	CG0081101
Location of EDM Sensor:	Storm Overflow
Number of EDMs:	1
Instrument Type:	Type A (non contact) - R
Instrument/Device(s):	Vega Vegapuls C22 with Vegamet 862
Level Meter Serial Number:	73681651
Sensor Serial Number:	73229651
Date of Inspection:	13/03/2026
Inspector:	MI 05 014
Inspection Report No:	CFS/ 20574
Survey Pack:	C
Uncertainty:	± 3.2 mm

* Kit Inventory and calibration data recorded on central QMS database

PASS

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

Site Details

Site Description
Llanfair PG WwTW is a sewage treatment works with activated sludge plant (see process diagram).

Location of Event Monitor(s)
The EDM is located above the Dual sided storm weirs

Overflow Point(s) Requiring Event Monitoring
Storm Overflow (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, Comments or Changes to the Setup
Parameters - No changes made to A & B values. **Risks** - Storm screen may to blind, leading a spill event being recorded without flow discharging over the weir. **Telemetry** - The level meter has been commissioned to telemetry and tested. Flow Meter reading = 616.1mm telemetry reading 616mm

Storm Weir (through wave screen)

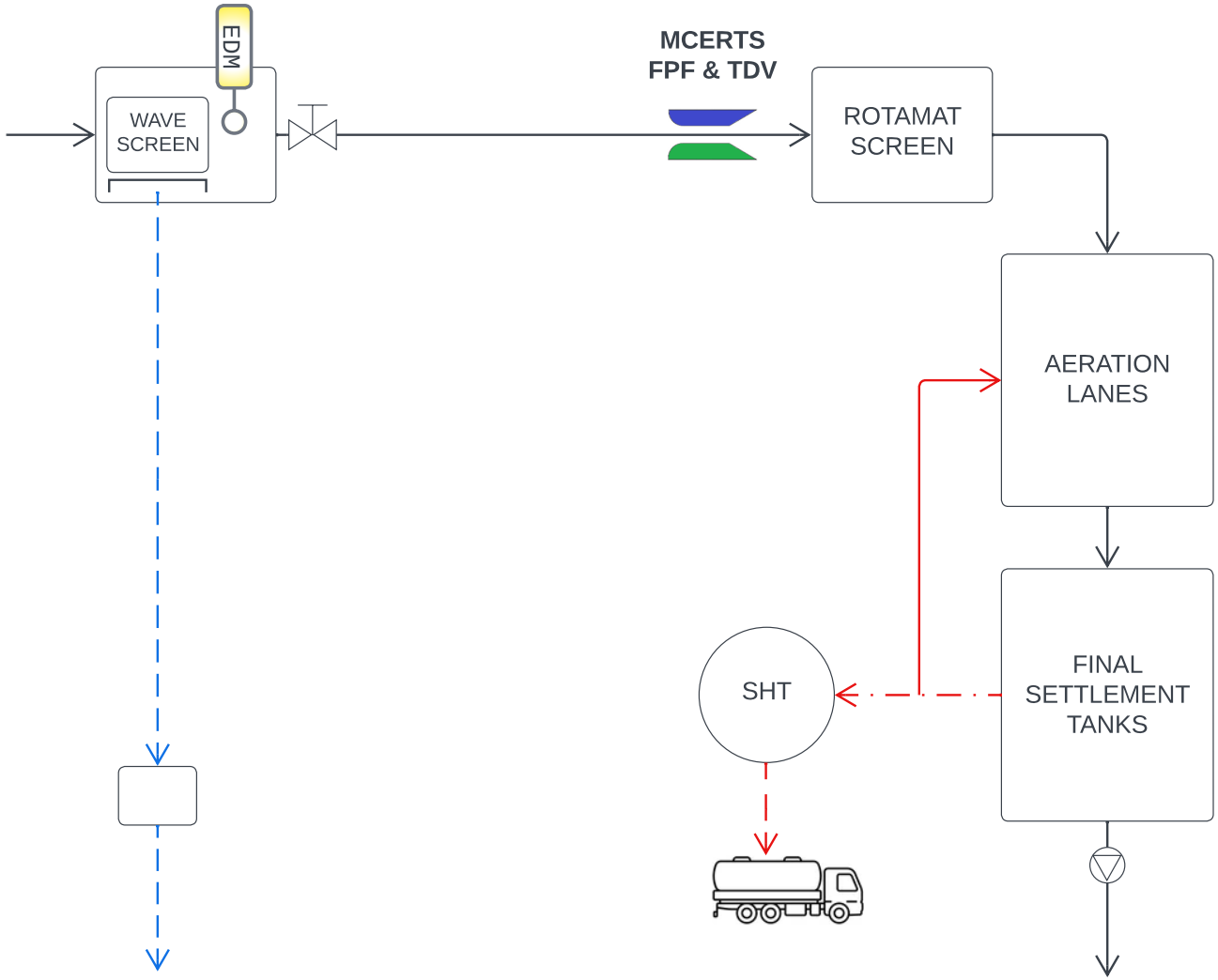
Overview of Spill Location

Sensor & Serial No.

Level Meter & Serial No.

Calibration Labels

Detail of weir and spill point



Treated Flow
Storm Flow
Storm Overflow
RAS
Top Liquors
SAS
Washwater

Process interpreted from site visit and has not been confirmed

CRITICAL FLOW

Process Diagram - Llanfair PG WwTW

Site Owner - DCWW

Date - 12/03/26

Comments -

Rev	Date	Drawn By	Notes
A	12/03/26	CJC	MCERTS EDM Inspection
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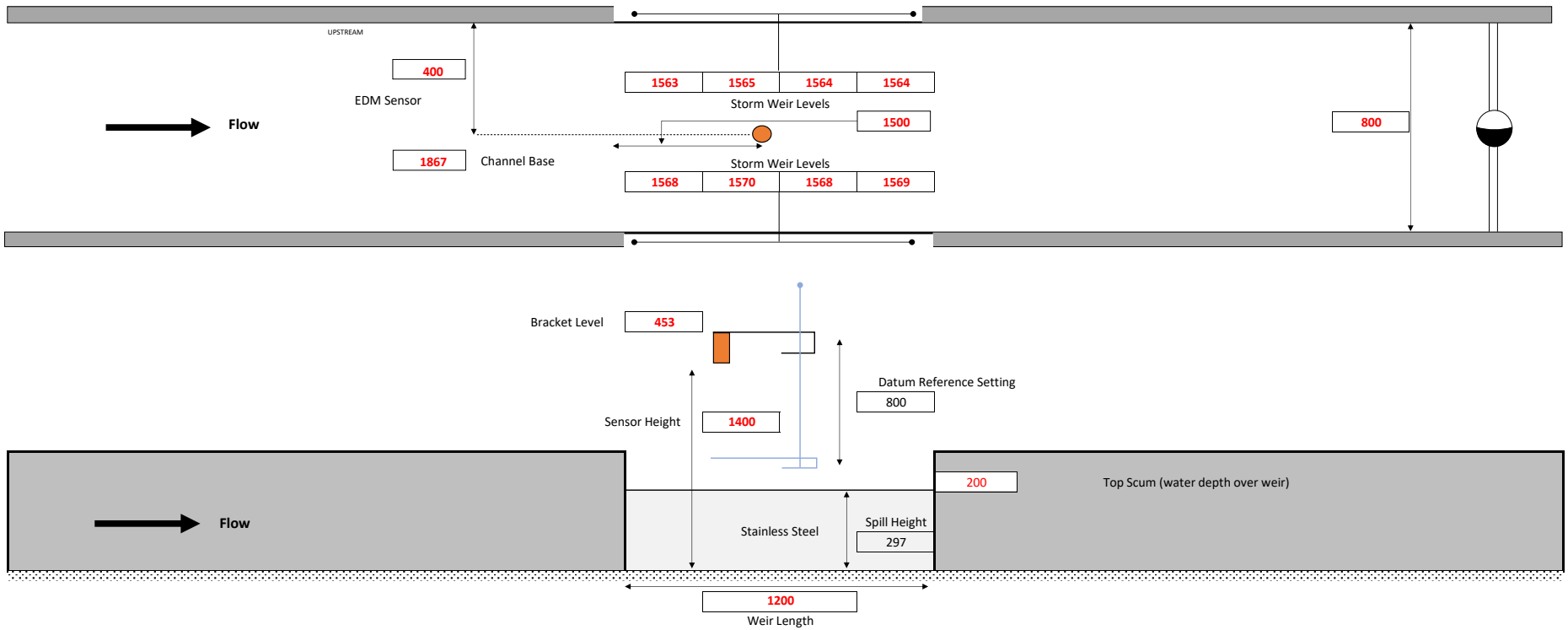
Site Name	Llanfair PG WwTW	EDM Level Meter	Vega Vegapuls C22 with Vegamet 862	Location	Storm Overflow
Event Duration Monitor	Date	13 March 2026			
Total Uncertainty	3.2 mm				

DUAL SIDED STORM WEIRS



Depth Readings	
614	614
614	614
614	614
614	614
614	614
VAR +1	1.00

Measured Temp.		°C
Instrument Temp.	n/a	°C
Temp. Error	**0.0**	**mm**
Datum Level	614	mm
Instrument Level	614	mm
Calibration Error	**0**	**mm**
Survey Error	**1**	**mm**
Sensor height above spill	1103	mm
Accuracy	0.09	%
Instrument Error	**0.96**	mm
Estimate of wave height	**4**	**mm**
Repeatability[#1]	**0.4**	**mm**
Telemetry Error	**2**	**mm**
Total Uncertainty	**3.2**	**mm**

Sensor Height	1400	mm
Base Level	1867	mm (Staff Reading)
Lowest Weir Level	1570	mm (Staff Reading)
Spill Height	297	mm

Analogue Output	0	mm - 4mA
	1392	mm - 20mA
Storm Event Activated	297	mm - 7.41 mA
Event De-Activated	296	mm - 7.4 mA

Bracket Level	453	Staff Reading
Bobbin	Red	(800 mm)
Datum Reference Height	**614**	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.