



Nant Cae Dudwg – Scour Protection Works (2022)

Flood Alleviation Scheme delivered to reduce the risk of ordinary watercourse and surface water flooding to 11 residential and 3 commercial properties and highway assets in the Cilfyndd area.

Scheme Summary	
Strategic Flood Risk Area	Lower Taf
Location	Nant Cae Dudwg, Cilfynydd
Properties benefiting	11 residential and 3 commercial properties
Type of scheme	Watercourse Channel Rehabilitation
Cost	£248,000
Contractor	DT Contracting
Status	Completed
Scheme Completion Date	February 2022
Funding Source	Welsh Government FCERM Small Scale Schemes



Before (Left) and After (Right) Watercourse Channel Rehabilitation Works - Nant Cae Dudwg Flood Alleviation

Scheme Background

The area of Cilfynydd associated with the Nant Cae Dudwg ordinary watercourse has been subject to several flooding events in recent years, the most significant incident occurring on the 15th and 16th February 2020 following Storm Dennis, where 8 homes were internally flooded up to depths of 1.5 – 1.8m, associated with the overtopping of the watercourse.

Cilfynydd is noted as an area of high surface water and ordinary watercourse flood risk based on Natural Resources Wales's (NRW) Flood Risk Assessment Wales (FRAW) maps. The community of Cilfynydd is also identified as the 128th most at risk community for ordinary watercourse and surface water flooding in Wales according to the Communities at Risk Register (CaRR) which was developed by NRW to provide an objective means of identifying risk and prioritising flood risk management activities at a Wales-wide, community level.

Scheme Description

The aim of the project was to review the condition of the Nant Cae Dudwg ordinary watercourse and **implement further scour control measures** following the damages caused during Storm Dennis in February 2020. These works were completed in addition to the Nant Cae Dudwg flood alleviation scheme completed in 2014.

The scheme comprised of repairs to the existing scour protection system, removal of high-risk trees from the banks of the watercourse and the implementation of further bank scour protection to **improve the stability of the watercourse and reduce the risk of debris entering the Nant Cae Dudwg**, causing further scouring and debris mobilisation towards the culvert inlet adjacent to Pant Du Road.

The scheme also facilitated the installation of an access ramp at the site, to improve future maintenance of the watercourse.

Scheme Benefits



Reduced flood risk to **14 properties**



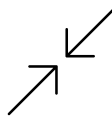
Reduced the risk of debris entering the watercourse and mobilising towards the downstream culvert



Improved scour protection along the watercourse



Improved maintenance access to the upstream debris control mechanism



Reduced risk of blockages to the culvert downstream



Improve long term resilience of the downstream culvert and community