



## Nant Gwawr Phase 1 Flood Alleviation Scheme

Flood Alleviation Scheme delivered to reduce the risk of ordinary watercourse and surface water flooding to 232 properties and the highway network in the Aberaman area.

Scheme Summary	
Strategic Flood Risk Area	Mid Cynon 1
Location	Nant Gwawr, Aberaman
Properties benefiting	232 Properties
Type of scheme	Complex Flood Alleviation Scheme
Cost	£400,000
Contractor	Alun Griffiths Ltd
Status	Completed
Scheme Completion Date	2014
Funding Source	Welsh Government Flood Risk Management Grant & European Regional Development Fund



*Culvert Inlet Upgrade - Nant Gwar Phase 1 Flood Alleviation Scheme, Aberaman*

## Scheme Background

Historical flooding issues associated with the Nant Gwawr ordinary watercourse conveying through Aberaman, as well as localised surface water flooding causing disruption along the highway at Cardiff Road, have impacted this area on several occasions.

The community of Aberaman is noted as being ranked 115<sup>th</sup> most at risk of surface water and ordinary watercourse flooding in Wales according to the Community at Risk Register (CaRR) and based on Natural Resources Wales's (NRW) Flood Risk Assessment Wales (FRAW) maps there is high surface water and ordinary watercourse flood risk along the entirety of the Nant Gwawr ordinary watercourse length and surrounding area.

## Scheme Description

The Nant Gwawr flood alleviation scheme was completed thanks to funding from Rhondda Cynon Taf Council capital funds, the Welsh Government's Flood Risk Management Grant and the European Regional Development Fund to alleviate historical flooding issues centred around the Nant Gwawr ordinary watercourse in Aberaman.

The flood alleviation scheme comprised of the **renewal of the Cardiff Road culvert network and new inlet and outlet configurations**. Downstream watercourse works involved **increasing the capacity of the Nant Gwawr watercourse** together **erosion/scour protection to improve the resilience of the watercourse** against damages caused during storm events.

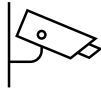
Existing structures in the watercourse have been modified to improve the flow of water, with overflow systems also used at critical areas along the watercourse to provide resilience against potential blockages. Telemetry devices, including a CCTV camera, rain gauge and water level warning system was installed at the Cardiff Road culvert inlet to provide the Council's maintenance teams with advanced warnings of potential blockage.

In addition to the watercourse improvements, highway improvements along Cardiff Road were also facilitated during the works to minimise extended disruption to the local area. These comprise of carriageway widening between the junctions with Abergwawr Street and Curre Street, traffic management and extensive re-surfacing of the carriageway between Sunnybank Street, junction of Lewis Steet and Mount Hill Street.

## Scheme Benefits



Reduced flood risk to **232 residential properties**.



**CCTV Monitoring** of culvert inlet adjacent to Cardiff Road.



**Early warning alarm system** installed for Council maintenance purposes.



**Highway improvements** carried out as part of this scheme to reduce disruption.



**Reduced the risk of debris** entering the culvert network and causing blockages.



**Improved Maintenance access** installed to the culvert and watercourse.