Settlement: Credenhill

Location of Investigation

Figure 1: Large Scale Map showing the location of Credenhill

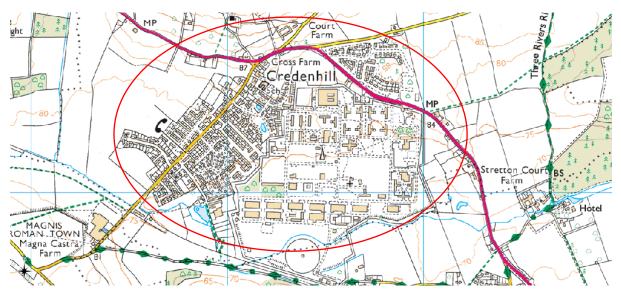
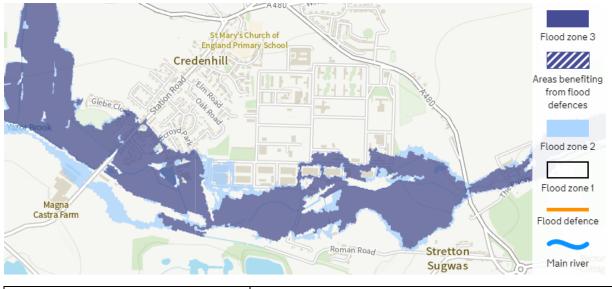


Figure 2: Environment Agency's Flood Map for Planning (Rivers and Sea), June 2021



Date of key flood event				February 16 th 2020
Authorities	with	risk	management	Herefordshire Council (Land Drainage Authority)
duties or functions relating to the event				

Yazor Brook is designated as an Ordinary Watercourse which therefore falls under the regulatory supervision of Herefordshire Council Land Drainage Authority.

Key Flood Event

Flood Type: Fluvial and Surface Water

Watercourse Catchment: Yazor Brook is a tributary of the River Wye.

Ten properties are recorded as suffering internal flooding at this location in February 2020 in Credenhill. Depths of flood water ranged from less than 6 inches to 2ft. Some respondents reported outbuildings were also affected, with depths of up to 3ft recorded there. Flooding was stated as lasting for up to 1 day inside with up to 7 days for external areas.

Five respondents reported previous flooding. The dates which were provided were 'mid 1980s', 1990, March 2010, July 2017, July 2018 and Oct 2019. Herefordshire Council records identify flooding in 2007.

Respondents have noted repeated flooding while Herefordshire Council records show flood history in this location.

Credenhill Parish Council have filed a report providing details of the flooding.

The Fire Service attended a domestic property at 5am on 16th October.

Number of Internally Flooded Properties related to key flood event	10
Number of Internally Flooded Properties during most acute flood	10
Impact on Strategic Highway Network	None reported
Impact on Critical Services	None reported
Health Risks	No injuries or loss of life were reported

Description of Flooding

Surface Water flooding affected five properties, from three separate sources:-

- An empherical watercourse that originates at Credenhill Park Wood;
- Direct runoff from fields south of the A480;
- A low lying property has been impacted by runoff

A further four properties were flooded from the Yazor Brook or it's upstream tributaries.

The descriptions of the flood mechanism in the questionnaire returns indicate that most of the properties experienced flooding from the same source, as most of them mention flood water from the hills and fields flowing onto the main road and towards their properties. Many also mention that the drains and gullies were at capacity and one mentions an overflowing ditch by the main road. There are also reports of an overflowing river or stream, blocked bridge or culvert and groundwater or a spring was selected in one instance. There is one a statement that the 'Yazor Brook breached it banks, encircled the house and came up through the drains.'

Most of the properties are identified as being at risk of surface water flooding according to the Surface Water Flood Map.

Damage to Cultural Heritage Sites: 3 listed properties are located within the Flood Zone.

Previous reports of floods

Prior to the 16th February 2020 flood, previous flood events have been reported as having occurred in the Mid 1980s', 1990, 1998, 2007, March 2010, July 2017, July 2018 and October 2019.

Previous Flood Risk Studies

There are no flood risk studies previously undertaken at this location although Herefordshire Council have completed hydraulic modelling of the Yazor Brook. The modelling supported delivery of a Flood Alleviation Scheme (FAS) that was installed to facilitate development in central Hereford. The FAS facilitates the transfer of peak flows from the Yazor Brook to the River Wye, the intake structure is located at Credenhill.

Conclusions

A Flood Alleviation Scheme (FAS) was constructed on the Yazor Brook at Credenhill and has been functional since 2012. Flows enter a 1.4 km culvert that discharges flow to the River Wye at the Old Weir. The primary driver for the scheme was the need for a strategic solution to flood risk in central Hereford and thus enable redevelopment of the Edgar Street Grid area. The properties referenced in this report that flooded from the Yazor Brook are located a significant distance from the inlet weir, accordingly due to the gradient of the brook and the relative height of the banks the presence of the FAS may have limited impact on local flood risk. Herefordshire Council facilitates a walk-through inspection of the culvert every 2 years, the last inspection was on 29th May 2020.

Herefordshire Council Highways Authority are engaged in delivering highway drainage improvement on the A480, to facilitate the diversion of floodwater that arises from the Credenhill Park Wood ephemeral watercourse.