Settlement: Lyde

Location of Investigation

Figure 1: Large Scale Map showing the location of Lyde



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 Flood Risk Management	Herefordshire Council (Land Drainage Authority)
duties or functions relating to the event	

The watercourse in Lower Lyde 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

Watercourse Catchment: Tributary of the River Lugg.

Three properties reported internal flooding in Lyde during the February 2020 event with the depth of internal flooding recorded as less than 6 inches.

The respondents recorded previously flooding in 2007. Herefordshire Council records identify some history of flooding in the location prior to 2009.

One property reported that the source of flooding was a 'blocked ditch, culvert or bridge'. The same respondent commented that drains were blocked by debris on Church Road and that the flood water came from this road. A second respondent also records that flood water came from Church Road. The first respondent elaborated to explain that a culvert alongside Church Road had filled to capacity and indicated that they considered the capacity of the culvert was a recurring issue.

Number of Internally Flooded Properties related to key flood event	3
Number of Internally Flooded Properties during most acute flood	3
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

The Flood Map for Planning indicates that the location is in Flood Zone 1. However, the Environment Agency Flood Mapping does not provide Flood Zones for watercourses with less than a 3km² catchment. It is possible that the site is located in Flood Zone 3.

OS mapping shows a small watercourse crossing Church Road, which has been culverted under the properties on either side of the road. The Surface Water Flood Map shows an area of flood risk which coincides with this watercourse, particularly around the properties which reported flooding.

Our investigations have identified that there was originally a 450mm dia highway culvert below Church Lane. A developer has extended this culvert as a 375mm dia culvert. The resident upstream of the road has installed a 450mm dia culvert. Our inspection identified that the downstream end of the culvert is only 300mm dia.

The condition of the culvert is unknown. It is possible that the fluvial flooding occurs due to inadequate capacity of the culvert.

Damage to Cultural Heritage Sites: None recorded.

Previous reports of floods

Prior the 16th February 2020 flood event, previous flood events have been recorded as having occurred in 2007 and 2009.

Previous Flood Risk Studies

There are no flood risk studies previously undertaken at this location.

Conclusions

Herefordshire Council Land Drainage Authority proposes to exercise their flood risk management function in response to the recent flooding.

Review of the data and mapping indicates the flooding arises from a culverted watercourse.

No level survey or hydrology calculations have been completed to date and so there is no available information to identify the size of culvert that would be needed to convey flow adequately. Discissions have been held with members of the community regarding upsizing the final length of 300mm dia pipe. The works to upsize the 300mm dia pipe may prove practical, however the likely outcome of any such works remains to be confirmed.

Herefordshire Council LLFA have identified a requirement to promote delivery of a Flood Risk Management project to upsize part of the riparian owned culvert. DEFRA grant funding is being sought for this study based on the existing fluvial flood risk in the village of Lyde. It is possible that private contributions will be required. Further governance reports will be required prior to any formal application for funding.

The respective property owners are responsible for maintaining the culvert as riparian owners. The length of 300mm dia culvert will need to be established prior to the submission of the grant application.

A highway drainage project to improve the highway drainage on Church Road, was delivered in July 2021.