

# North Witham

## Review of Flooding 5<sup>th</sup> to 6<sup>th</sup> January 2025 –

### Executive Summary

#### What happened

Late December 2024 to early January 2025 brought extreme wet, and wintry weather. South Witham Rainfall gauge received 47.6mm of rain over 30.25 hours between 05:30hrs on 05/01/2025 and 11:45hrs on 06/01/2025. This is close to the monthly average for January exacerbated by saturated and frozen ground, leading to the highest levels on record at North Witham gauging station of 95.79mAOD, at which point the gauge drowned out. Two properties reported external flooding, and one internal flooding. Properties were protected from internal flooding by defences built as part of a flood alleviation scheme in 2003, some of the defences have been since altered, which resulted in the internal property flooding.

#### Investigation into main river flooding

An investigation was conducted by the Environment Agency into the possible contributing factors for the flooding. Key areas reviewed include:

- Rainfall, catchment conditions, and river responses.
- Alterations to the flood defences built as part of the flood alleviation scheme in 2003.

#### Key Findings

- **Rainfall and Catchment Conditions:** High rainfall (47.6mm) fell on saturated and frozen ground, coupled with minimal vegetation interception, resulting in record river levels. These river levels exceed the modelled prediction for a 1 in 200 (0.5%) chance event however the river gauge drowned out and estimated levels exceed the modelled prediction for a 1 in 1000 (0.1%) chance event in any one year.
- **Alterations to the Flood Defences:** The floodwall of the property Pheasant Cottage has been altered to remove steps over the flood wall and replace them with a demountable defence. It is unknown if the defence was in place at the time of the flood, or if the defence either failed or was overtopped, as the crest height of the demountable is lower than the surrounding floodwall.

#### Key Actions the Environment Agency will be taking forward:

- Attempt to contact the homeowner of Pheasant cottage regarding the restoration of the flood defences to as built condition
- Investigate the possibility of upgrading the river level gauge to continue reading in high flow events.

#### Final Considerations

The Environment Agency recognises that while steps can be taken to improve resilience, flood risk cannot be eliminated. Future flooding events may exceed design standards for defences. Any proposals for improving flood protection must meet strict cost-benefit criteria based on predicted damages and frequency of flooding amongst wider issues.