

Section 19 Flood and Water Management Act 2010

Report Title: Worlingham Way & Oulton Rd, Lowestoft

Report Reference(s): CRN 00410987, 00412161 & 00412205

	Name	Date
Report Author	Jason Skilton	
Responsible Officer:	Jason Skilton	
Checked by:	Matt Williams	12/2/2024
RMA Review:		
Approved by:	Matt Hullis	12/2/2024
Date Published		
Date Report Closed		

Introduction

Suffolk County Council, Lead Local Flood Authority (LLFA) has determined that in accordance with our criteria, it is considered necessary and appropriate to carry out an investigation into this flood event.

This is in accordance with Section 19 (1) of the Flood and Water Management Act 2010, and in accordance with Section 19 (2) of the Flood and Water Management Act 2010, to publish the results and notify the relevant risk management authorities (RMAs).

Section 19 Local authorities: investigations

(1) On becoming aware of a flood in its area, a lead local flood authority must, to the extent that it considers it necessary or appropriate, investigate—

(a)which risk management authorities have relevant flood risk management functions, and

(b)whether each of those risk management authorities has exercised, or is proposing to exercise, those functions in response to the flood.

(2) Where an authority carries out an investigation under subsection (1) it must—

(a) publish the results of its investigation, and

(b)notify any relevant risk management authorities.

Criteria for an investigation (as per Appendix D of the Suffolk Flood Risk Management Strategy):	✓
There was a risk to life because of flooding?	
Internal flooding of one property (domestic or business) has been experienced on more than one occasion?	✓
Internal flooding of five properties has been experienced during one single flood incident	
Where a major transport route was closed for more than 10 hours because of flooding	
Critical infrastructure was affected by flooding	
There is ambiguity surrounding the source or responsibility of a flood incident	

1. Worlingham Way, Lowestoft, NR32 4SD & Oulton Road, Lowestoft NR32 4QU
2. **Location of Flooding**

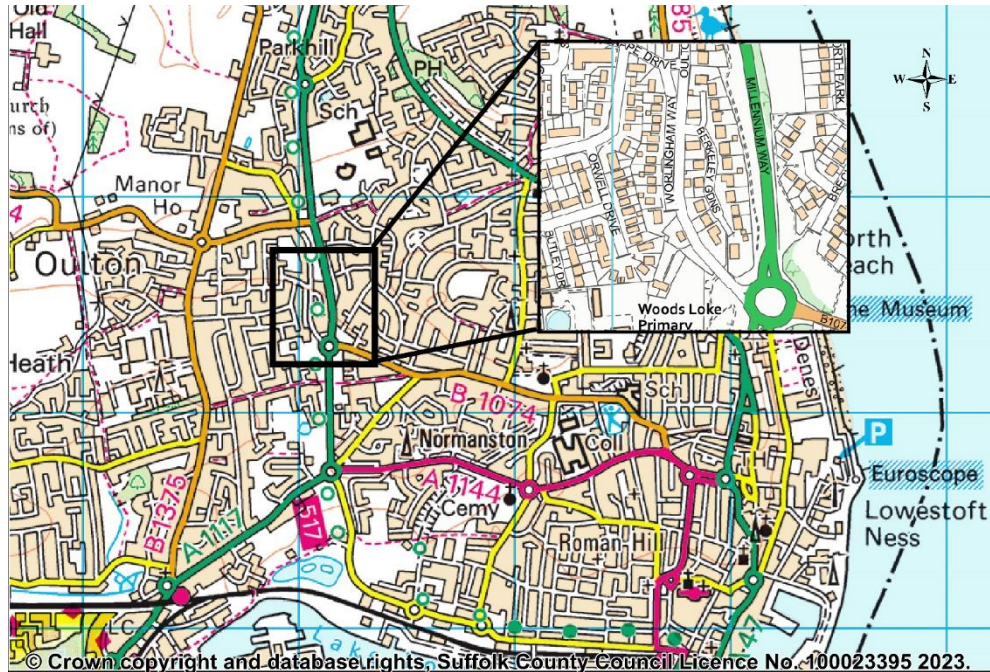


Figure 1 – Location Plan

3. **Records of any historical flooding**
 - 3.1 See appendix A
4. **Effects of flood event**
 - 4.1 Internal flooding of main living area of two dwellings, one previously flooded in 2015.
 - 4.2 Flooding of road outside of properties
5. **Predicted Flood Risk**
 - 5.1 Pluvial (surface water) – The national flood maps (Figure 2) predict that the area is at risk of pluvial flooding. Pluvial flooding is recorded to represent a Low to High risk at this location. Predicted flood depths range from 300-900mm. This information can be interrogated further here: <https://check-long-term-flood-risk.service.gov.uk/map>
Low risk – Annual likelihood of flooding of 0.1-1%
Medium risk – Annual likelihood of flooding of 1-3.33%
High risk – Annual likelihood of flooding of >3.33%

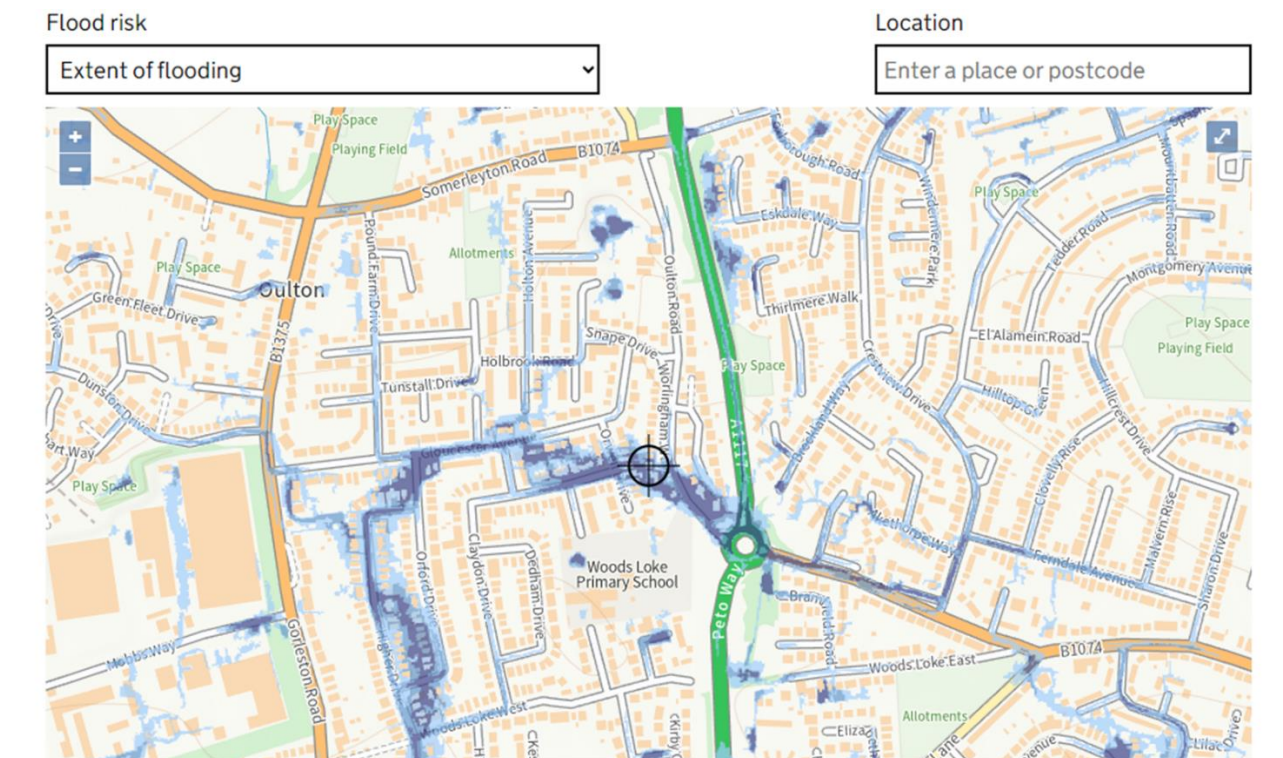


Figure 2 – Environment Agency National Mapping, predicted surface water flood risk

6. Flooding Source(s) & Likely cause(s):

6.1 Significant rainfall – 4th to 5th July 2023

A key contributing factor of the flooding was the intense nature of the rainfall, which is equivalent to a 1:16 year rainfall event.

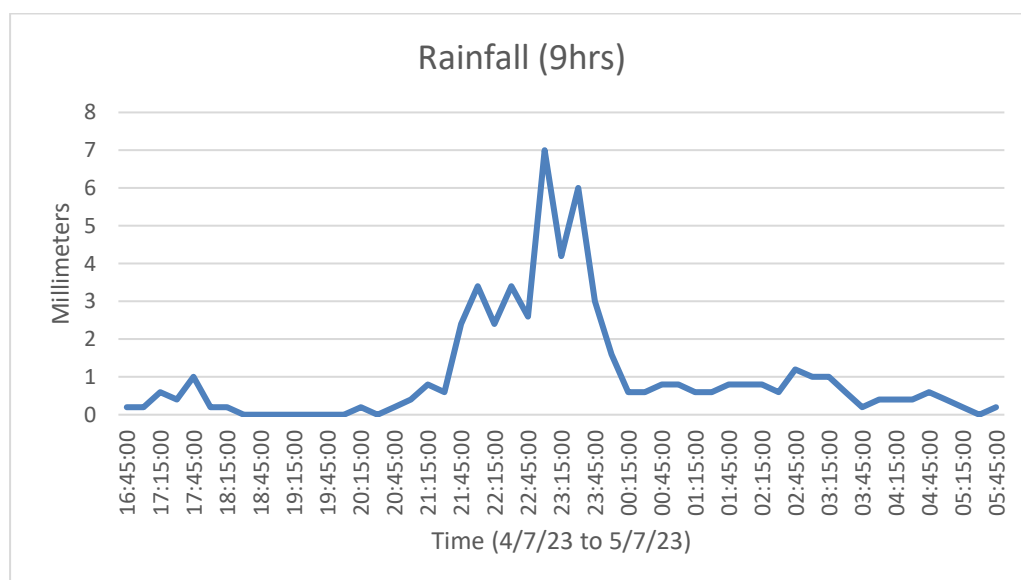


Figure 3 – Graph of rainfall from 04/07/2023 (16:45) to 05/07/2023 (05:45)

6.2 Exceedance of surface water drainage system

Local surface water drainage is comprised of two systems. There is the local highway drainage system, which solely serves the public highway. There is also the Anglian Water surface water sewer, which serves private areas and to which the highway drainage system ultimately connects.

The Anglian Water surface water sewer serves a large urban area upstream of the location of flooding. It continues through urban areas downstream of the flooding, before ultimately discharging into Oulton Broad along Caldecott Rd.

Prior to reaching Worlingham Way, the Anglian Water surface water sewer comprises a single 500mm pipe. The catchment upstream of this is served by two separate 525mm pipes (one from Akethorpe Way and one from Millenium Way), which connect into this single 500mm pipe. A further 225mm pipe from Cavendish close is also then connected to the system.

Two further sperate systems then connect, one from Worlingham Way and one from Berkeley Gardens, both utilising 150mm pipes.

At this point, the Anglian Water system increases in size to a 525mm pipe.

A system with multiple pipes of larger diameter, served by a single pipe of smaller diameter is logically going to be susceptible to exceedance during severe rainfall events. Further detailed assessment will be required to determine if this was a factor in recent flooding.

6.3 Properties lower than the road

Some properties are lower than the road. As a result, these properties are naturally vulnerable to surface water flows from adjacent (higher) land. They are also vulnerable to failures of surface water infrastructure within their curtilage. For example, surface water landing on the property unable to drain due to blockage will pond and present a threat to the property.

7. Photo(s) of flooding



Figure 4 – Flooding on Oulton Road

8. Risk Management Authorities, Non-Risk Management Authority and flood risk function(s)

Risk Management Authority	Relevant Flood Risk Function(s)
Suffolk County Council	Lead Local Flood Authority, Highways Authority & Asset Owner
Anglian Water	Asset Owner
Non Risk Management Authority	Relevant Flood Risk Function(s)
Property owners	

9. LLFA Recommended Action(s):

Action	Risk Management Authority	Timescale for response	Latest Progress Update for Actions
Assess the maintenance and capacity of their surface water drainage assets.	Suffolk County Council (Highway Authority)	6 months	Maintenance - Gullies on Worlingham way cleansed June 23 (annual cycle), Oulton Road May 2023 (annual cycle), The roundabout outer circle April 2023 (biennial cycle), Inner circle still to be done. SCC have commissioned the whole area to be cleansed and jetted with some survey/investigation. Capacity assessment - Outstanding
Assess the maintenance and capacity of their surface water drainage assets.	Anglian Water	6 months	Maintenance – Outstanding Capacity assessment - Outstanding
Installation of property flood resilience measures	Property owner	N/A	

10.

This report will be reviewed and updated every 6 months until actions are marked as complete

Reviewer	Date of Review

Disclaimer

This report has been prepared and published as part of Suffolk County Council's responsibilities under Section 19 of the Flood and Water Management Act 2010. It is intended to provide context and information to support the delivery of the local flood risk management strategy and should not be used for any other purpose.

The findings of the report are based on a subjective assessment of the information available by those undertaking the investigation and therefore while all reasonable efforts have been made to gather and verify such information may not include all relevant information. As such it should not be considered as a definitive assessment of all factors that may have triggered or contributed to the flood event.

The opinions, conclusions and recommendations in this Report are based on assumptions made by Suffolk County Council when preparing this report, including, but not limited to those key assumptions noted in the Report, including reliance on information provided by third parties.

Suffolk County Council expressly disclaims responsibility for any error in, or omission from, this report arising from or in connection with any of the assumptions being incorrect.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the time of preparation and Suffolk County Council expressly disclaims responsibility for any error in, or omission from this report arising from or in connection with those opinions, conclusions, and any recommendations.

The implications for producing Flood Investigation Reports and any consequences of blight have been considered. The process of gaining insurance for a property and/or purchasing/selling a property and any flooding issues identified are considered a separate and legally binding process placed upon property owners and this is independent of and does not relate to Suffolk County Council highlighting flooding to properties at a street level. Property owners and prospective purchasers or occupiers of property are advised to seek and rely on their own surveys and reports regarding any specific risk to any identified area of land.

Suffolk County Council forbids the reproduction of this report or its contents by any third party without prior agreement.