

A1. Bramhall Green

1.1. Overview

Bramhall Green is an area in Bramhall. It is adjacent to the grounds of Bramhall Park. The area lies on and around Lady Brook which is part of the wider Micker Brook catchment that includes many tributaries, Poynton Brook and Norbury Brook that rise at Lyme Park. The Main River falls towards the Micker Brook at Cheadle Hulme and then Cheadle and confluences with Chorlton Brook and the River Mersey at Cheadle Wood. The Micker Brook catchment is one of the largest in the area.

The area is low lying at the foot of three major routes that are steeply sloping toward Bramhall Green roundabout including A5143 Bridge Lane up to Hazel Grove, A5102 Bramhall Lane South to Stockport and A5102 to Bramhall Village.

Bramhall Green is classified as Flood Zone 3 and has a high risk of flooding from rivers (Figure A1.1.) and Bridge Lane is at high risk of surface water flooding (Figure A1.2.) and has experienced flooding during high rainfall over the last few years.

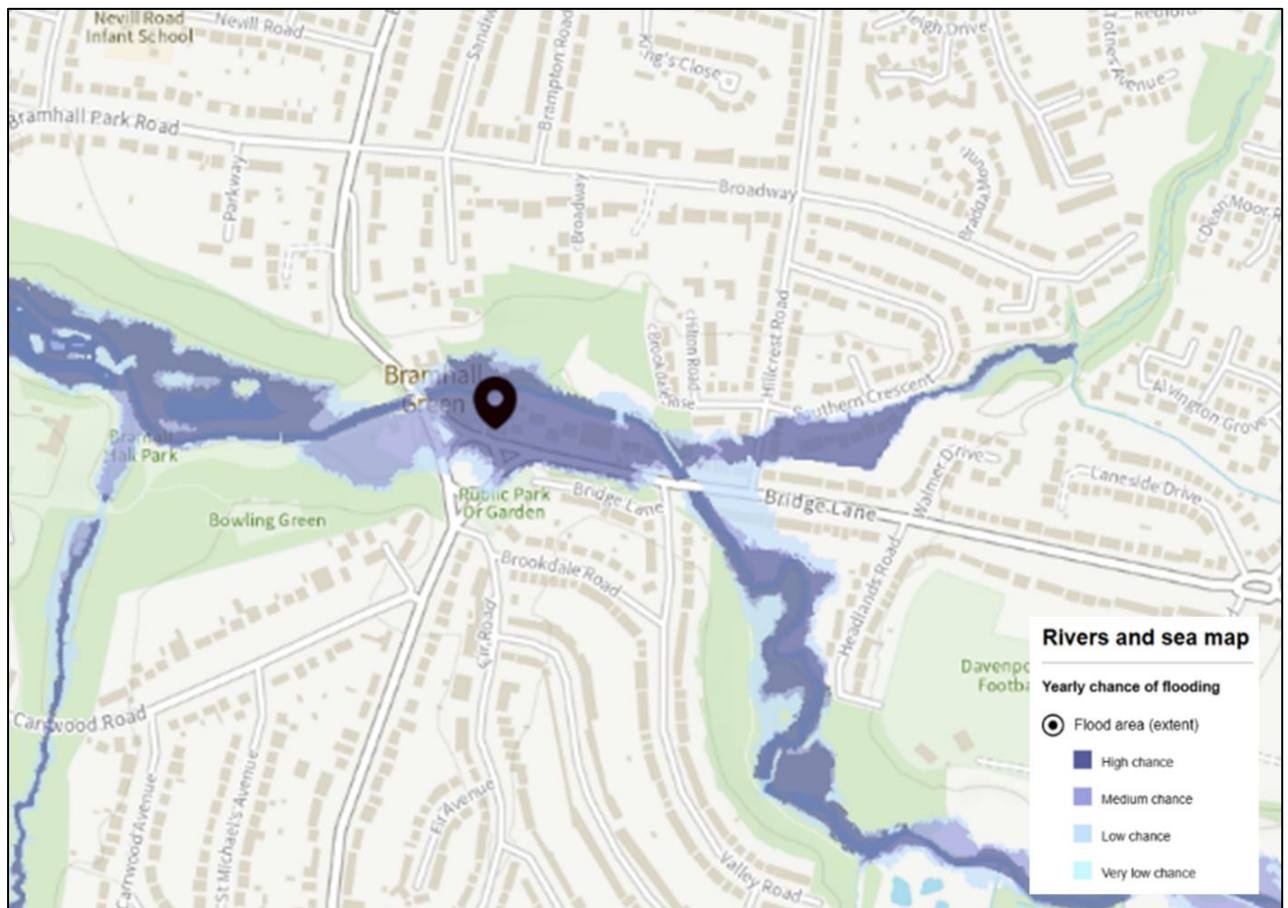


Figure A1.1. Bramhall Green Fluvial Flood Risk maps. Image Source: Environment Agency

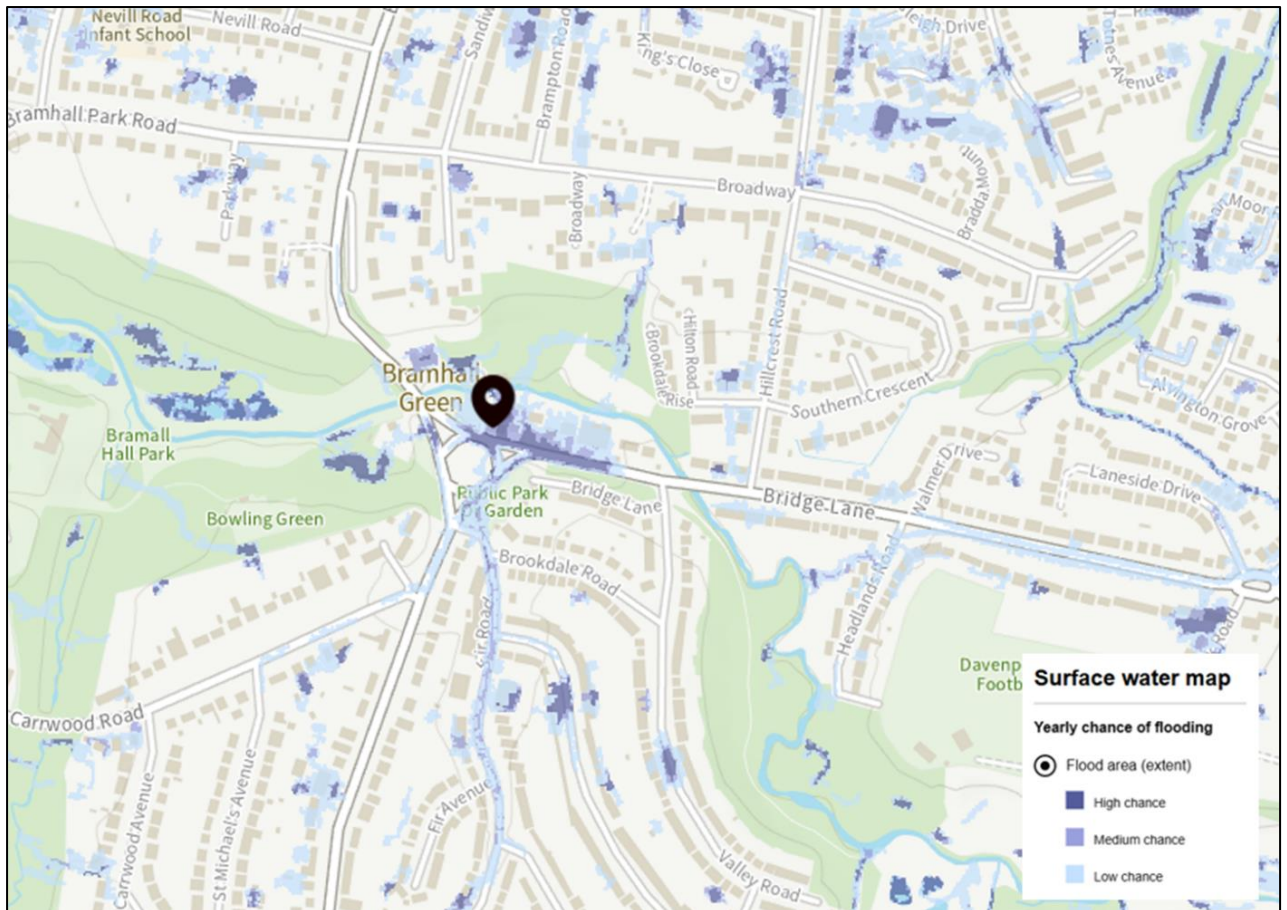


Figure A1.2. Bramhall Green Surface water Flood Risk maps. Image Source: Environment Agency

1.2. Flooding Analysis

Overnight the area experienced fluvial flooding from the river combined with surface water from the highways. Highway and property drainage was overwhelmed by fast flows from Bridge Lane and Bramhall Lane South. Both surface water and highway drainage systems drain and flow to Lady Brook which had overtopped its banks and so drainage systems were backed up and unable to discharge. The duration and intensity of the heavy rainfall in the Bramhall area and the runoff from the entire Lady Brook catchment caused the river levels to rise. The localised direct run-off from hard-standing drives and roads to the low spot on the roundabout added to the volume of surface water runoff that ponded in the low-lying areas.

River levels at Bramhall Park were to the top of the river embankment, although it is understood that levels did not exceed the embankment as there are no reports to suggest it did. The river levels were seen to be at the soffits of both the single span bridges at Bramhall Lane South so that indicates that debris was not collected at these bridges and flow was not constrained. However, flow was able to overtop low spots in the left bank of Lady Brook upstream of the Brookdale Club and Theatre.

Figure A1.3. summarises the indicative flood flow routes from Lady Brook to the rear of the Bridge Lane properties and also along Bridge Lane and Bramhall Lane South which contributed to the floodwaters at the low spot around Bramhall Green Roundabout.



Figure A1.3. Bramhall Green Site overview Image with indicative flood flow routes.

1.3. Flooding Impacts

The properties and road were flooded along the north side of Bridge Lane. Bridge Lane and the roundabout were closed to traffic. The flooding was not as extensive as 2019 that covered a larger area, but some properties were flooded adjacent to the river.

Figure A1.4 shows the extent of flooding at Bramhall Green during the event.



Figure A1.4. Image showing flood waters in Bramhall Green on 01.01.2025. Image Source: DMW Droneography (Facebook).

There were several properties affected externally with garden and driveway flooding and those that experienced internal flooding within Bramhall Green area are summarised in Table A1.1.

Table A1.1. Flood Impact Summary

Number of properties evacuated	Number of properties flooded	Number of domestic properties flooded	Number of commercial premises flooded	Comment
0	11	8	3	As reported to Stockport Council prior to publishing

Table A1.2. provides a brief summary of the flood event, impact and response in Bramhall Green.

Table A1.2. Bramhall Green Flooding Summary

Date	<ul style="list-style-type: none"> 1st January 2025
Affected Roads	<ul style="list-style-type: none"> Bridge Lane, Bramhall Lane South
Description	<ul style="list-style-type: none"> Out of bank flow of Lady Brook and overland flow along highways towards low spot in Bridge Lane and roundabout.
Flood Alert / Warning Issued	<ul style="list-style-type: none"> Flood Alert issued for Middle River Mersey catchment including areas near Bramhall, Stockport, Sale, Altrincham and Urmston on 31/12/24 at 17:06. The properties on Bridge Lane were included. Bramhall Green was not covered by a Flood Warning At time of flooding event
Flooding Impacts and Observations	<ul style="list-style-type: none"> Property damage Highways flooded affecting access Additional stress and mental anguish on the community over repeated flooding
Summary of Flooding Incident Response	<ul style="list-style-type: none"> Stockport Officers attended the site to liaise with affected residents at Bramhall Green. Property owners do what they can to protect their own properties

1.4. Existing Measures in the Catchment

A major project led through the Upper Mersey Catchment Partnership was established after flooding in 2019 to focus on improvements to the general river environment. Many ideas have been discussed and thought through and some have been implemented with grant funding. The existing measures are designed to reduce the speed of water and hold flows back prior to getting to Bramhall Green and Cheadle. Although the measures may appear small, water is stored upstream and released more slowly and so reducing the impact of flooding.

Existing Measures:

- Leaky Dams – Mirlees Fields, Hazel Grove
- Leaky Dams – Poynton Brook, Poynton
- Secondary Channels and Leaky Dams – Lyme Park
- Leaky Dams and Wetland – Bruntwood Park
- Leaky Dams – Cheadle Golf Club

Ongoing regular inspection of Lady Brook channel is undertaken by the Environment Agency and regular inspection of Bramhall Lane South structures by Stockport Council as Highways Authority is undertaken.

Gully cleansing along Bridge Lane and Bramhall Lane South is undertaken by Stockport Council Highway Authority as per the gully operational plan with a risk-based approach.

A flood warning service for Lady Brook and Micker Brook has been developed by the Environment Agency and went live in July 2025.

1.5. Review of previous Recommended Actions from July 2019 flood event.

As part of the Section 19 report for the July 2019 event a number of recommended actions were proposed for the mitigation of flood risk in the Bramhall Green Area. Table A1.3 provides a summary of the progress to date and how an increased understanding of the flooding mechanisms following the 1st January 2025 event has shaped the recommended actions outlined in Section 1.6.

Table A1.3. Summary of progress on July 2019 S19 actions

Recommended Actions from July 2019 Section 19	Progress Update
Fitting of non-return valves to highway drainage outfalls	Review undertaken but additional measures required for online storage prior to outfall which are considered in Recommended Action ID BG4 in Section 1.6
Establish measures for discharge of highway runoff in 'tide lock' conditions e.g. pumped drainage or extend outfalls further downstream	Review undertaken but additional measures required for online storage prior to outfall which are considered in Recommended Action ID BG4 in Section 1.6
Property Level Defences (PLP).	Measures installed by some properties along Bridge Lane. Stockport Council have promoted flood resilience through increased communications and have supported affected residents to explore property protection measures. Stockport Council have promoted the Flood Hub to affected residents. A direct link from the Flood pages of the Stockport Council website to the Flood Hub is provided.
Removal/relief of hydraulic constraint at Bramhall Bridge	Review undertaken through hydraulic assessment and considered financially unviable. Alternative investigation of channel is considered in Recommended Action ID BG2 in Section 1.6
Linear defences upstream of Bramhall Bridge	Review undertaken and confirmed that linear defences in isolation would not mitigate risk to properties due to the complex flooding mechanisms and interaction of fluvial, surface water and drainage systems.
Catchment runoff control measures; slow the flow in upper reaches of the catchment.	Implementation of leaky dams and secondary channels as detailed in Section 1.4.
Upstream flood attenuation reservoir(s)	Implementation of leaky dams and secondary channels as detailed in Section 1.4.
Develop Micker Brook catchment specific flood warning system based on local rainfall and gauged flows.	A flood warning service for Lady Brook and Micker Brook went live in July 2025.

1.6. Recommended Actions

The following actions are recommended for the Bramhall Green flooding hotspot area:

Action ID	Recommended Action	RMA Lead	Stakeholders	Timescale	Constraints
BG1	When requested provide advice to riparian landowners of their channel maintenance obligations for Lady Brook along the rear of Grange Road properties.	Environment Agency	Riparian owners	Ongoing	Riparian owners, especially homeowners, are unable to carry out maintenance due to physical or financial constraints. Environment Agency will need to monitor resource availability and situational circumstances when responding to enquiries regarding riparian responsibilities.
BG2	Investigate opportunities for adjusting downstream channel bed elevations (e.g. through weir removal) to improve hydraulic gradient through the Bramhall Lane South structures, reducing elevated upstream water levels during an event.	Environment Agency	Stockport Council, as LLFA and Parks, Friends of Bramhall Hall and Park, Local residents	3 years	Management of resources and funding constraints to undertake investigations and any potential opportunity for works identified Working within ecological legislation and restrictions for undertaking works around a watercourse. Wider engagement with Stockport Council departments
BG3	Investigate any further potential natural flood management measures to attenuate flows upstream and slow down rates of runoff within Norbury Brook catchment and Lady Brook through Happy Valley.	Environment Agency	Stockport Council, as LLFA and Parks , Local Residents	3 years	Requirement to manage resources and funding constraints to undertake investigations and any potential opportunity for works identified Limited space available within the upper brook catchment to provide additional measures. Wider engagement with Stockport Council departments

Action ID	Recommended Action	RMA Lead	Stakeholders	Timescale	Constraints
BG4	Investigate opportunities to provide storage to manage highway runoff when outfalls are surcharged due to elevated brook levels or investigate extension of highway drainage downstream to outfall within Bramhall Park.	Stockport Council, as LLFA and Highway Authority	Local residents	3 years	Requirement to manage resources to undertake investigations and any potential opportunity for works identified Need to manage any works within the wider streetworks and highway maintenance schedule to minimise network disruption.
BG5	Investigate opportunities to direct runoff from Bramhall Lane South towards Lady Brook in Bramhall Park through kerb lowering and changes to road camber.	Stockport Council, as LLFA and Highway Authority	Local residents	3 years	Requirement to manage resources to undertake investigations and any potential opportunity for works identified Need to manage any works within the wider streetworks and highway maintenance schedule to minimise network disruption.