

Flood risk assessment data



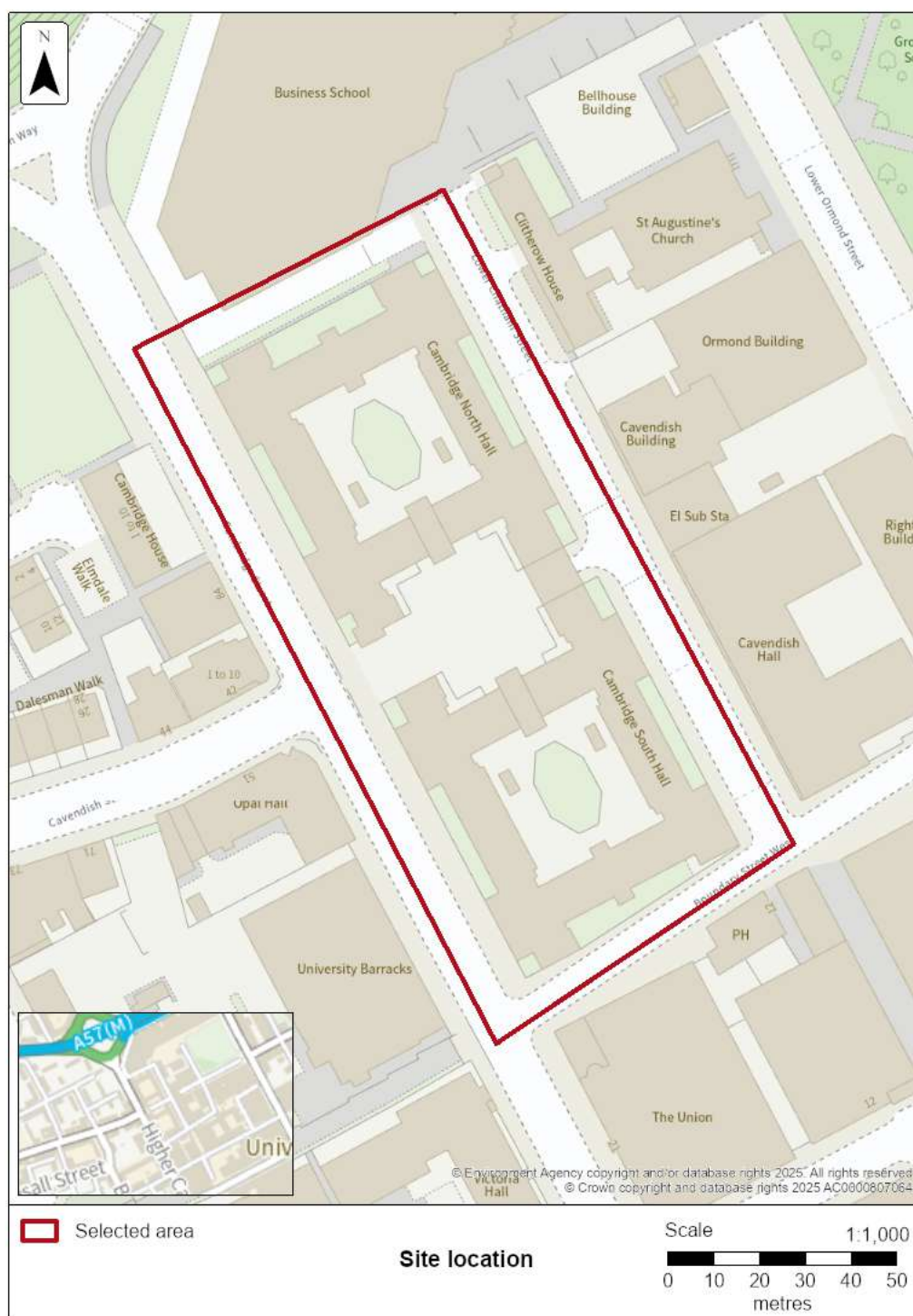
Location of site: 384153 / 396969 (shown as easting and northing coordinates)

Document created on: 14 April 2025

This information was previously known as a product 4.

Customer reference number: WVXRMHR1MAJ3

Map showing the location that flood risk assessment data has been requested for.



How to use this information

You can use this information as part of a flood risk assessment for a planning application. To do this, you should include it in the appendix of your flood risk assessment.

We recommend that you work with a flood risk consultant to get your flood risk assessment.

Included in this document

In this document you'll find:

- how to find information about surface water and other sources of flooding
- information on the models used
- definitions for the terminology used throughout
- flood map for planning (rivers and the sea)
- past floods
- modelled data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

Information that's unavailable

This document **does not** contain:

- flood defences and attributes

We aren't able to display flood defence locations and attributes as there are no formal flood defences in the area of interest.

Surface water and other sources of flooding

When using the surface water map on the [check your long term flood risk service](#) the following considerations apply:

- surface water extents are suitable for use in planning
- surface water climate change scenarios may help to inform risk assessments, but the available data fall short of what is required to assess planned development
- surface water depth information should not be used for planning purposes

To find out about other factors that might affect the flood risk of this location, you should also check:

- [reservoir flood risk](#)
- groundwater flood risk - you could use the [British Geological Survey groundwater flooding data](#), [groundwater: current status and flood risk](#) and the guide on [mining and groundwater constraints for development](#) - further information may be available from the lead local flood authority (LLFA)
- your local planning authority's SFRA, which includes future flood risk

Your Lead Local Flood Authority is Manchester District.

For information about sewer flooding, contact the relevant water company for the area.

About the models used

Model name: Corn Brook 2017

Scenario(s): No defences exist fluvial, no defences exist climate change fluvial

Date: 31 December 2017

These models contain the most relevant data for your area of interest.

Terminology used

Annual exceedance probability (AEP)

This refers to the probability of a flood event occurring in any year. The probability is expressed as a percentage. For example, a large flood which is calculated to have a 1% chance of occurring in any one year, is described as 1% AEP.

Metres above ordnance datum (mAOD)

All flood levels are given in metres above ordnance datum which is defined as the mean sea level at Newlyn, Cornwall.

Flood map for planning (rivers and the sea)

Your selected location is in flood zone 2.

Flood zone 3 shows the area at risk of flooding for an undefended flood event with a:

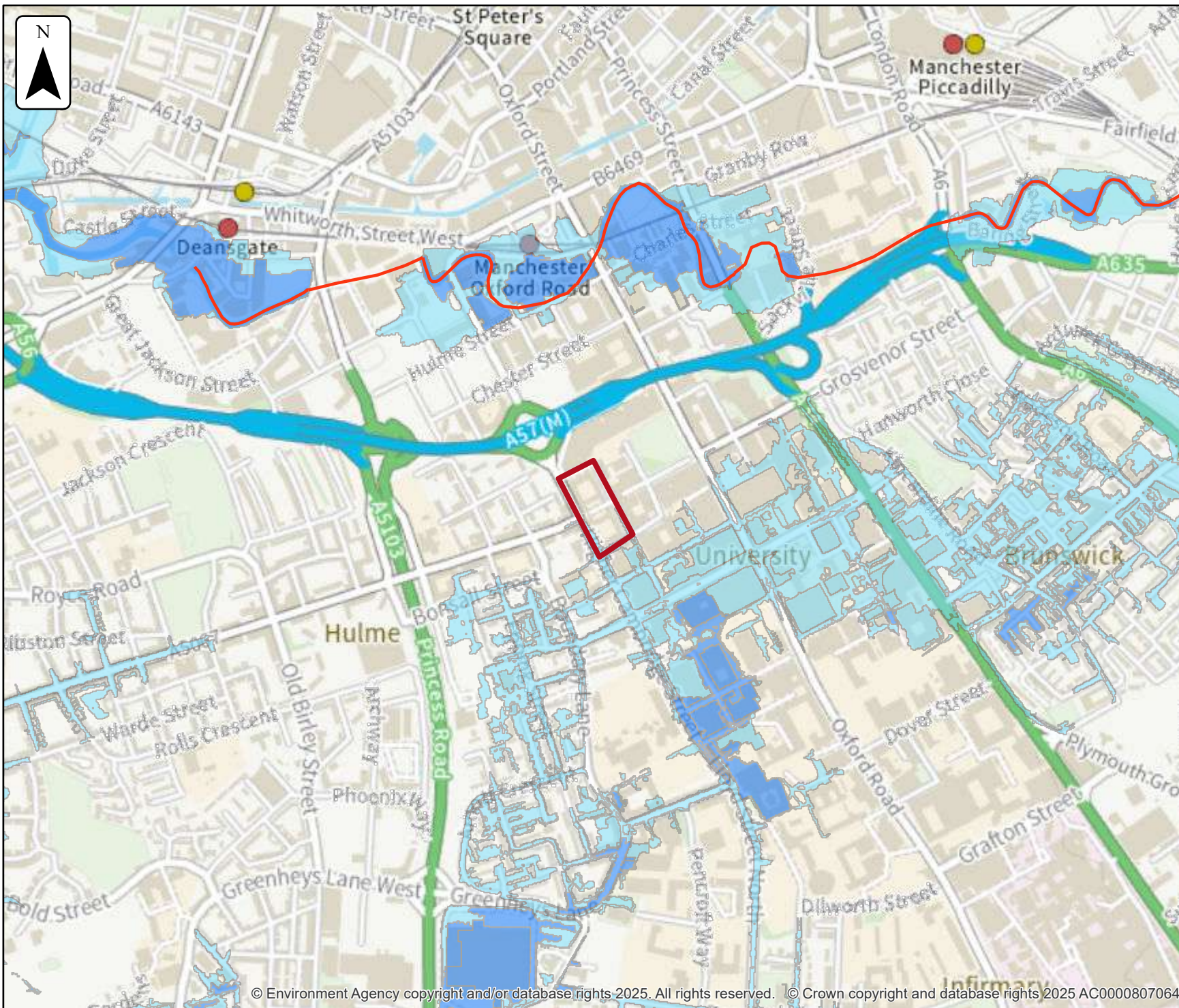
- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- between a 0.1% and 0.5% probability of occurring in any year for flooding from the sea
- between a 0.1% and 1% probability of occurring in any year for fluvial (river) flooding

It's important to remember that the flood zones on this map:

- refer to the land at risk of flooding and do not refer to individual properties
- refer to the probability of river and sea flooding, ignoring the presence of defences
- do not take into account potential impacts of climate change



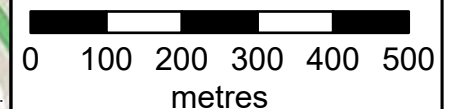
Flood map for planning

Location (easting/northing)
384153/396969

Scale
1:10,000

Created
14 Apr 2025

-  Selected area
-  Main river
-  Flood defence
-  Water storage area
- Flood Zones 2 and 3
Rivers and Sea
-  Flood Zone 2
-  Flood Zone 3



Modelled data

This section provides details of different scenarios we have modelled and includes the following (where available):

- outline maps showing the area at risk from flooding in different modelled scenarios
- modelled node point map(s) showing the points used to get the data to model the scenarios and table(s) providing details of the flood risk for different return periods
- map(s) showing the approximate water levels for the return period with the largest flood extent for a scenario and table(s) of sample points providing details of the flood risk for different return periods

Climate change

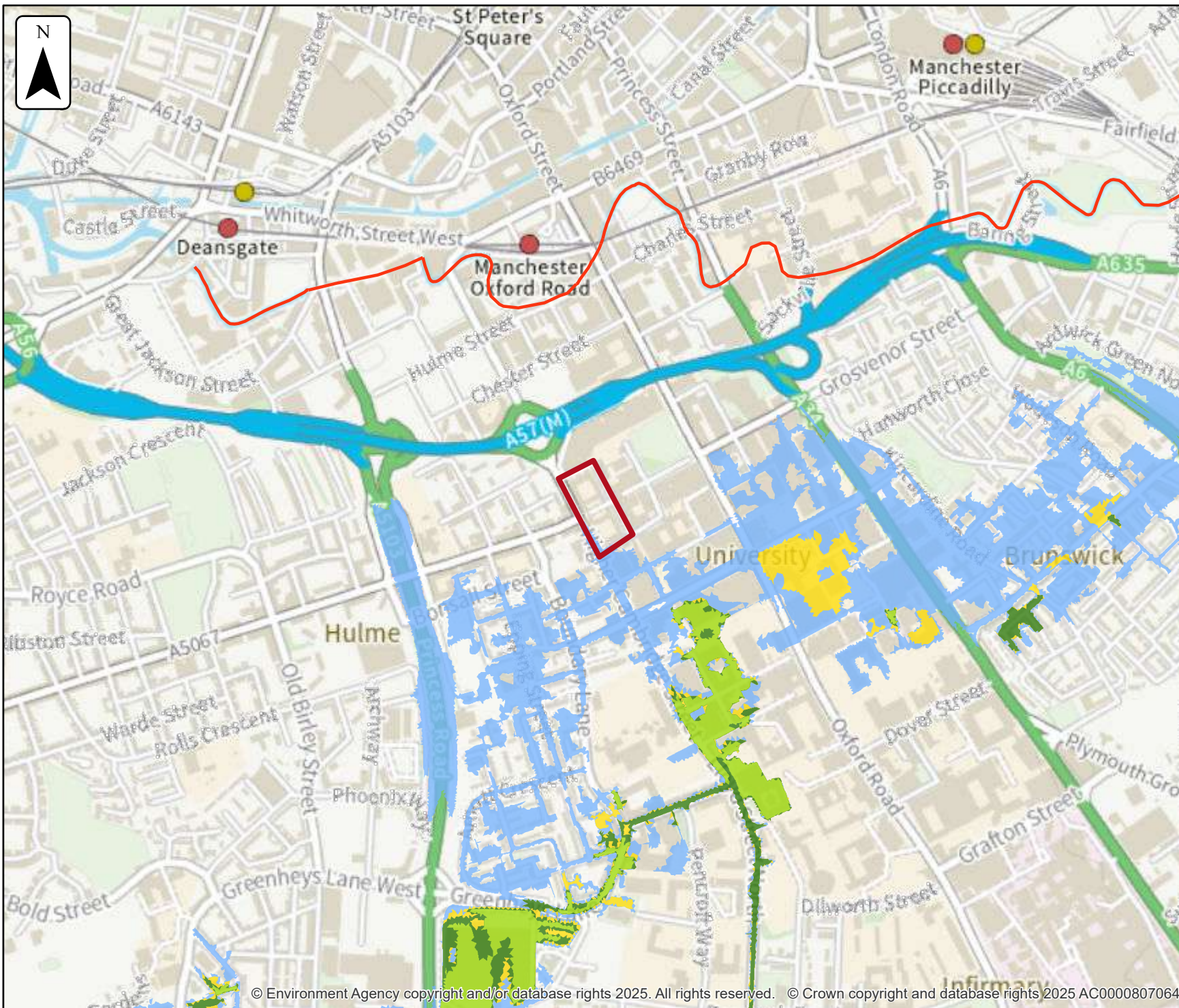
The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

Modelled scenarios

The following scenarios are included:

- No defences exist modelled fluvial: risk of flooding from rivers where there are no flood defences
- No defences exist climate change modelled fluvial: risk of flooding from rivers where there are no flood defences, including estimated impact of climate change



No defences exist climate change modelled fluvial extent

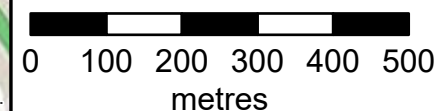
Location (easting/northing)
384153/396969

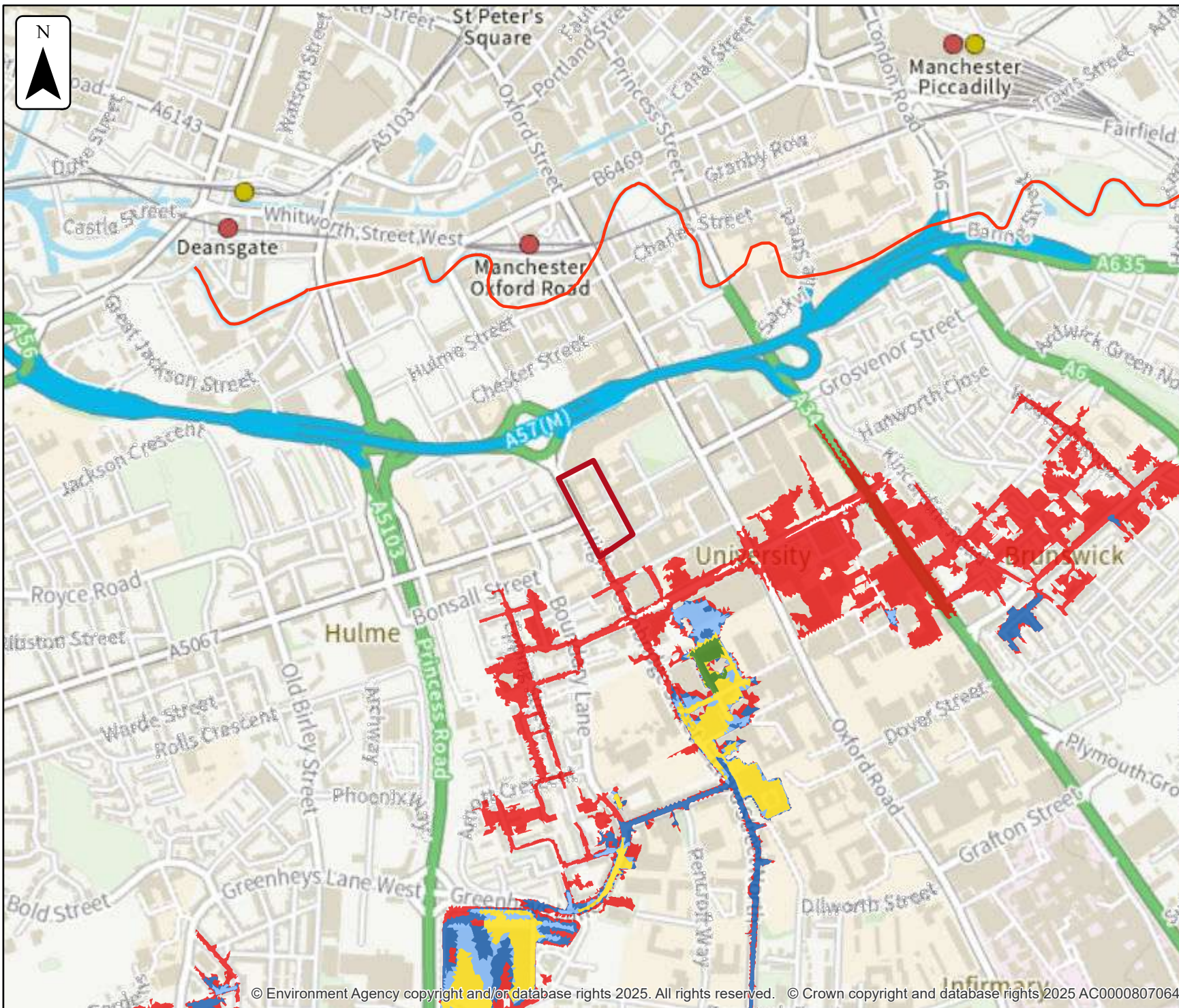
Scale Created
1:10,000 14 Apr 2025

Model name
Corn Brook 2017

- Selected area
- Main river
- Modelled flood extent
 - 1% AEP (+30%)
 - 1% AEP (+35%)
 - 1% AEP (+70%)
 - 0.1% AEP (+30%)

Flood extents may not be
visible where they overlap
other return periods





No defences exist modelled fluvial extent

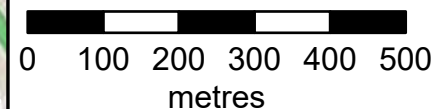
Location (easting/northing)
384153/396969

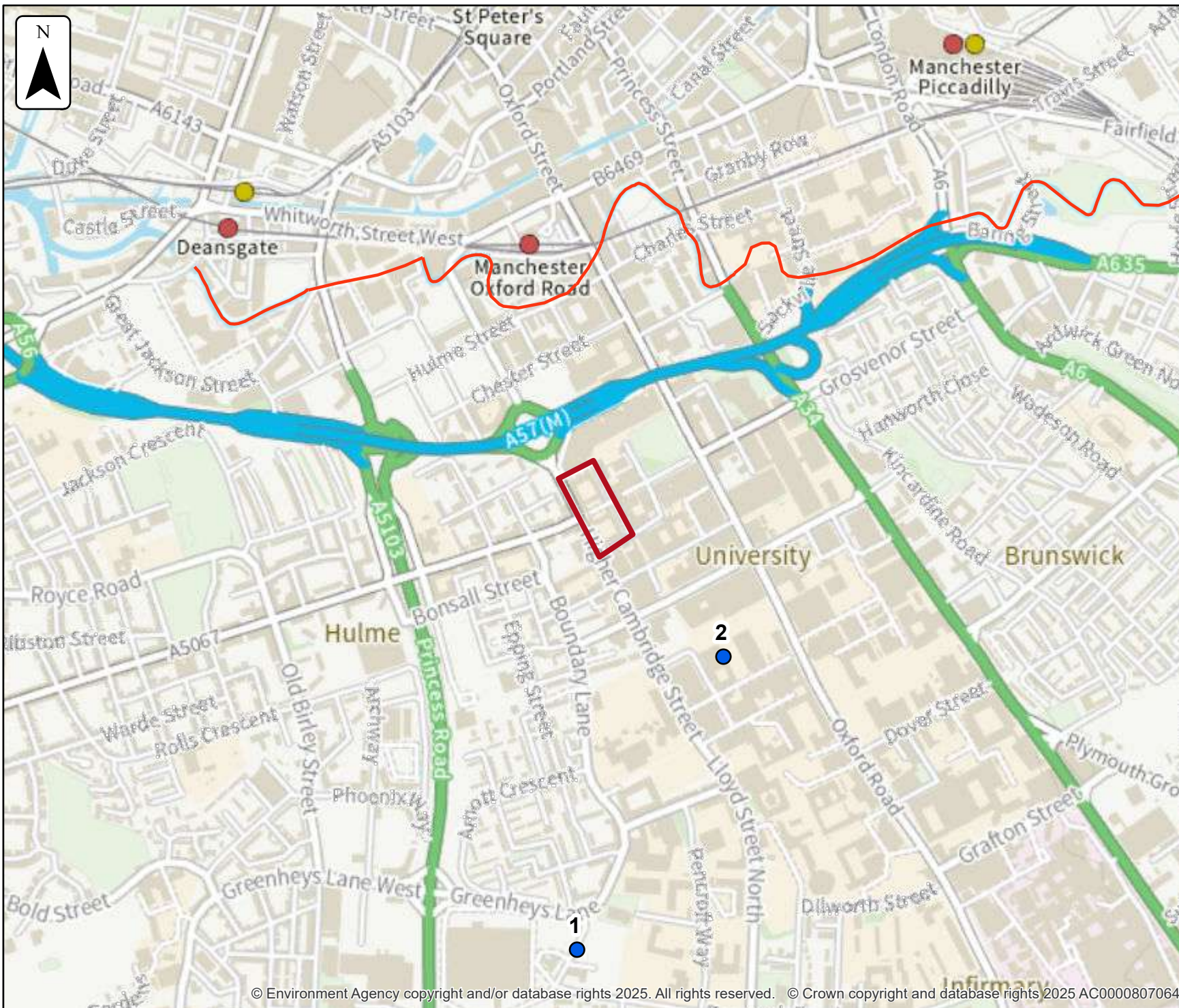
Scale Created
1:10,000 14 Apr 2025

Model name
Corn Brook 2017

- Selected area
- Main river
- Modelled flood extent
 - 2% AEP
 - 1.33% AEP
 - 1% AEP
 - 0.5% AEP
 - 0.1% AEP

Flood extents may not be
visible where they overlap
other return periods





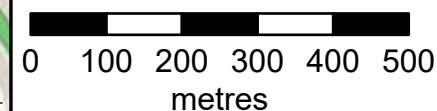
No defences exist climate change modelled fluvial node locations

Location (easting/northing)
384153/396969

Scale Created
1:10,000 14 Apr 2025

Model name
Corn Brook 2017

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

No defences exist climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
				Level	Level	Level	Level
1	952465	384116	396112	33.75	33.79	34.02	34.46
2	952467	384400	396681	37.38	37.39	37.47	37.77

Data in this table comes from the Corn Brook 2017 model.

Level values are shown in mAOD, and flow values are shown in cubic metres per second.

Any blank cells show where a particular scenario has not been modelled for this location.

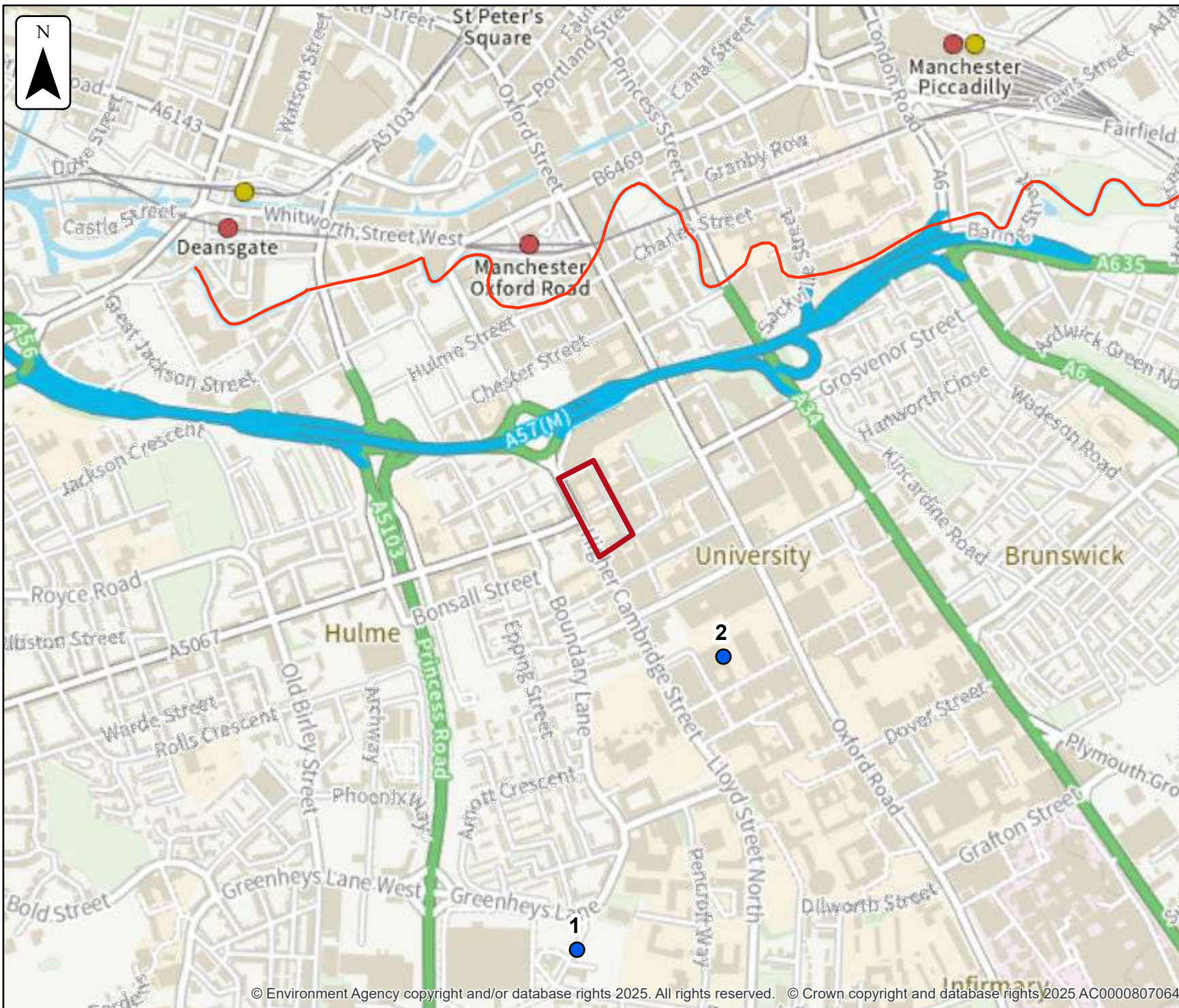
No defences exist climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
				Flow	Flow	Flow	Flow
1	952465	384116	396112	1.57	1.63	2.05	4.51
2	952467	384400	396681	2.40	2.49	3.13	7.13

Data in this table comes from the Corn Brook 2017 model.

Level values are shown in mAOD, and flow values are shown in cubic metres per second.

Any blank cells show where a particular scenario has not been modelled for this location.



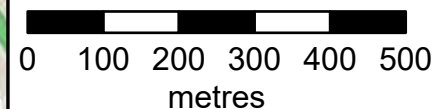
No defences exist modelled fluvial node locations

Location (easting/northing)
384153/396969

Scale Created
1:10,000 14 Apr 2025

Model name
Corn Brook 2017

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

No defences exist

Label	Modelled location ID	Easting	Northing	20% AEP	10% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level	Level	Level
1	952465	384116	396112	32.28	32.37	32.51	32.77	33.26	33.47	33.83	34.34
2	952467	384400	396681	34.99	35.19	35.77	36.89	37.13	37.27	37.41	37.66

Data in this table comes from the Corn Brook 2017 model.

Level values are shown in mAOD, and flow values are shown in cubic metres per second.

Any blank cells show where a particular scenario has not been modelled for this location.

No defences exist

Label	Modelled location ID	Easting	Northing	20% AEP	10% AEP	4% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	952465	384116	396112	0.27	0.34	0.47	0.81	1.03	1.21	1.70	3.47
2	952467	384400	396681	0.39	0.48	0.67	1.20	1.56	1.84	2.65	5.49

Data in this table comes from the Corn Brook 2017 model.

Level values are shown in mAOD, and flow values are shown in cubic metres per second.

Any blank cells show where a particular scenario has not been modelled for this location.



No defences exist modelled fluvial extent and height

Location (easting/northing)
384153/396969

Scale Created
1:1,000 14 Apr 2025

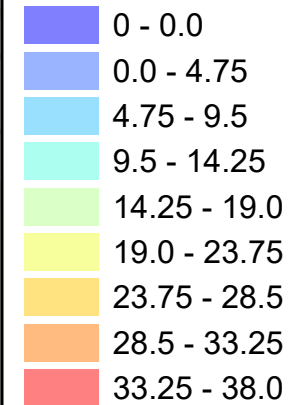
Model name
Corn Brook 2017

 Selected area

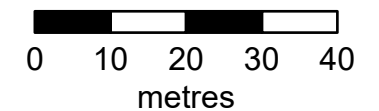
 Main river

Modelled 2D grid

Water level in mAOD



This map shows the
0.1% AEP height data



Sample point data

No defences exist

Label	Easting	Northing	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth
1	384163	396873	NoData	NoData	NoData	NoData	0.11
2	384135	396901	NoData	NoData	NoData	NoData	NoData
3	384163	396901	NoData	NoData	NoData	NoData	NoData
4	384191	396901	NoData	NoData	NoData	NoData	NoData
5	384219	396901	NoData	NoData	NoData	NoData	NoData
6	384135	396929	NoData	NoData	NoData	NoData	NoData
7	384163	396929	NoData	NoData	NoData	NoData	NoData
8	384191	396929	NoData	NoData	NoData	NoData	NoData
9	384219	396929	NoData	NoData	NoData	NoData	NoData
10	384107	396957	NoData	NoData	NoData	NoData	NoData
11	384135	396957	NoData	NoData	NoData	NoData	NoData
12	384163	396957	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth
13	384191	396957	NoData	NoData	NoData	NoData	NoData
14	384219	396957	NoData	NoData	NoData	NoData	NoData
15	384107	396985	NoData	NoData	NoData	NoData	NoData
16	384135	396985	NoData	NoData	NoData	NoData	NoData
17	384163	396985	NoData	NoData	NoData	NoData	NoData
18	384191	396985	NoData	NoData	NoData	NoData	NoData
19	384079	397013	NoData	NoData	NoData	NoData	NoData
20	384107	397013	NoData	NoData	NoData	NoData	NoData
21	384135	397013	NoData	NoData	NoData	NoData	NoData
22	384163	397013	NoData	NoData	NoData	NoData	NoData
23	384079	397041	NoData	NoData	NoData	NoData	NoData
24	384107	397041	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth
25	384135	397041	NoData	NoData	NoData	NoData	NoData
26	384163	397041	NoData	NoData	NoData	NoData	NoData
27	384135	397069	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			NoData	NoData	NoData	NoData	0.24

Data in this table comes from the Corn Brook 2017 model. Height values are shown in mAOD, and depth values are shown in metres.

Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

No defences exist

Label	Easting	Northing	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height
1	384163	396873	NoData	NoData	NoData	NoData	36.50
2	384135	396901	NoData	NoData	NoData	NoData	NoData
3	384163	396901	NoData	NoData	NoData	NoData	NoData
4	384191	396901	NoData	NoData	NoData	NoData	NoData
5	384219	396901	NoData	NoData	NoData	NoData	NoData
6	384135	396929	NoData	NoData	NoData	NoData	NoData
7	384163	396929	NoData	NoData	NoData	NoData	NoData
8	384191	396929	NoData	NoData	NoData	NoData	NoData
9	384219	396929	NoData	NoData	NoData	NoData	NoData
10	384107	396957	NoData	NoData	NoData	NoData	NoData
11	384135	396957	NoData	NoData	NoData	NoData	NoData
12	384163	396957	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height
13	384191	396957	NoData	NoData	NoData	NoData	NoData
14	384219	396957	NoData	NoData	NoData	NoData	NoData
15	384107	396985	NoData	NoData	NoData	NoData	NoData
16	384135	396985	NoData	NoData	NoData	NoData	NoData
17	384163	396985	NoData	NoData	NoData	NoData	NoData
18	384191	396985	NoData	NoData	NoData	NoData	NoData
19	384079	397013	NoData	NoData	NoData	NoData	NoData
20	384107	397013	NoData	NoData	NoData	NoData	NoData
21	384135	397013	NoData	NoData	NoData	NoData	NoData
22	384163	397013	NoData	NoData	NoData	NoData	NoData
23	384079	397041	NoData	NoData	NoData	NoData	NoData
24	384107	397041	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height
25	384135	397041	NoData	NoData	NoData	NoData	NoData
26	384163	397041	NoData	NoData	NoData	NoData	NoData
27	384135	397069	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			NoData	NoData	NoData	NoData	36.50

Data in this table comes from the Corn Brook 2017 model. Height values are shown in mAOD, and depth values are shown in metres.

Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



**No defences exist
climate change
modelled fluvial
extent and height**

Location (easting/northing)
384153/396969

Scale Created
1:1,000 14 Apr 2025

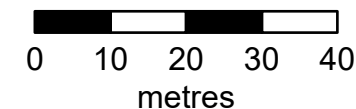
Model name
Corn Brook 2017

-  Selected area
-  Main river

Modelled 2D grid
Water level in mAOD

-  0 - 0.0
-  0.0 - 4.75
-  4.75 - 9.5
-  9.5 - 14.25
-  14.25 - 19.0
-  19.0 - 23.75
-  23.75 - 28.5
-  28.5 - 33.25
-  33.25 - 38.0

This map shows the
0.1% AEP +30% height data



Sample point data

No defences exist climate change

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
1	384163	396873	NoData	NoData	NoData	0.21
2	384135	396901	NoData	NoData	NoData	NoData
3	384163	396901	NoData	NoData	NoData	NoData
4	384191	396901	NoData	NoData	NoData	NoData
5	384219	396901	NoData	NoData	NoData	NoData
6	384135	396929	NoData	NoData	NoData	0.10
7	384163	396929	NoData	NoData	NoData	NoData
8	384191	396929	NoData	NoData	NoData	NoData
9	384219	396929	NoData	NoData	NoData	NoData
10	384107	396957	NoData	NoData	NoData	NoData
11	384135	396957	NoData	NoData	NoData	NoData
12	384163	396957	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
13	384191	396957	NoData	NoData	NoData	NoData
14	384219	396957	NoData	NoData	NoData	NoData
15	384107	396985	NoData	NoData	NoData	NoData
16	384135	396985	NoData	NoData	NoData	NoData
17	384163	396985	NoData	NoData	NoData	NoData
18	384191	396985	NoData	NoData	NoData	NoData
19	384079	397013	NoData	NoData	NoData	NoData
20	384107	397013	NoData	NoData	NoData	NoData
21	384135	397013	NoData	NoData	NoData	NoData
22	384163	397013	NoData	NoData	NoData	NoData
23	384079	397041	NoData	NoData	NoData	NoData
24	384107	397041	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Depth	Depth	Depth	Depth
25	384135	397041	NoData	NoData	NoData	NoData
26	384163	397041	NoData	NoData	NoData	NoData
27	384135	397069	NoData	NoData	NoData	NoData
Max value in selected area:			NoData	NoData	NoData	0.33

Data in this table comes from the Corn Brook 2017 model. Height values are shown in mAOD, and depth values are shown in metres.

Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

No defences exist climate change

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
1	384163	396873	NoData	NoData	NoData	36.60
2	384135	396901	NoData	NoData	NoData	NoData
3	384163	396901	NoData	NoData	NoData	NoData
4	384191	396901	NoData	NoData	NoData	NoData
5	384219	396901	NoData	NoData	NoData	NoData
6	384135	396929	NoData	NoData	NoData	36.58
7	384163	396929	NoData	NoData	NoData	NoData
8	384191	396929	NoData	NoData	NoData	NoData
9	384219	396929	NoData	NoData	NoData	NoData
10	384107	396957	NoData	NoData	NoData	NoData
11	384135	396957	NoData	NoData	NoData	NoData
12	384163	396957	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
13	384191	396957	NoData	NoData	NoData	NoData
14	384219	396957	NoData	NoData	NoData	NoData
15	384107	396985	NoData	NoData	NoData	NoData
16	384135	396985	NoData	NoData	NoData	NoData
17	384163	396985	NoData	NoData	NoData	NoData
18	384191	396985	NoData	NoData	NoData	NoData
19	384079	397013	NoData	NoData	NoData	NoData
20	384107	397013	NoData	NoData	NoData	NoData
21	384135	397013	NoData	NoData	NoData	NoData
22	384163	397013	NoData	NoData	NoData	NoData
23	384079	397041	NoData	NoData	NoData	NoData
24	384107	397041	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP (+30%)	1% AEP (+35%)	1% AEP (+70%)	0.1% AEP (+30%)
			Height	Height	Height	Height
25	384135	397041	NoData	NoData	NoData	NoData
26	384163	397041	NoData	NoData	NoData	NoData
27	384135	397069	NoData	NoData	NoData	NoData
Max value in selected area:			NoData	NoData	NoData	36.60

Data in this table comes from the Corn Brook 2017 model. Height values are shown in mAOD, and depth values are shown in metres.

Any blank cells show where a particular scenario has not been modelled for this location.

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'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

Strategic flood risk assessments

We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site specific flood risk assessment.

This should give you information about:

- the potential impacts of climate change in this catchment
- areas defined as functional floodplain
- flooding from other sources, such as surface water, ground water and reservoirs

Your Lead Local Flood Authority is Manchester District.

About this data

This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

Flood risk activity permits

Under the Environmental Permitting (England and Wales) Regulations 2016 some developments may require an environmental permit for flood risk activities from the Environment Agency. This includes any permanent or temporary works that are in, over, under, or nearby a designated main river or flood defence structure.

[Find out more about flood risk activity permits](#)

Help and advice

Contact the Greater Manchester Merseyside and Cheshire Environment Agency team at inforequests.gmmc@environment-agency.gov.uk for:

- [more information about getting a product 5, 6, 7 or 8](#)
- general help and advice about the site you're requesting data for