

Flood Risk Assessment

Project: **Single storey extension kitchen to side and rear.**

Location: **49 Broad Oak Lane, Didsbury, Manchester, M20 5QB**

Date: **October 2022**

Site Analysis

The proposal site is a semi-detached dwelling located in a cul-de-sac in East Didsbury are of South Manchester. The property is a 2-storey brick build building, with a pitched roof. The runoff from the roof and hard standing area, discharges into the main sewer.

Across from the proposal site, there is a primary school, which has large, grassed areas, allowing for natural drainage, and attenuation.

The property is located approximately 175 metres away from the River Mersey. The cul-de-sac where the property is located is higher than the other dwellings closer to the River Mersey. There is no record of the property flooding from the River Mersey in the last 100 years.

Statement:

- i. The site is located within Flood Zone 2 – Grid Reference is 384981 / 389543– as identified on Environment Agency's Flood Map. (See Appendix 1)
- ii. The 100 Year flood level is 34.23 AOD – obtained from Environment Agency's Data (See Appendix 2).
- iii. There are flood defences protecting this site.
- iv. Existing minimum ground level is 33.2 Metres AOD – See Site Location Plan. (See Appendix 3).
- v. Development levels for the proposed ground level will be as existing ground level. Finished floor levels will be 150mm above minimum ground level, to address the low to medium flood risk.
- vi. The existing hard surface area will not be increased as a result of the proposed development. The surface run-off from the proposal site will remain as existing; this is discharged into the existing below ground drainage system.

APPENDIX 1

ENVIRONMENT AGENCY'S FLOOD MAP

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:

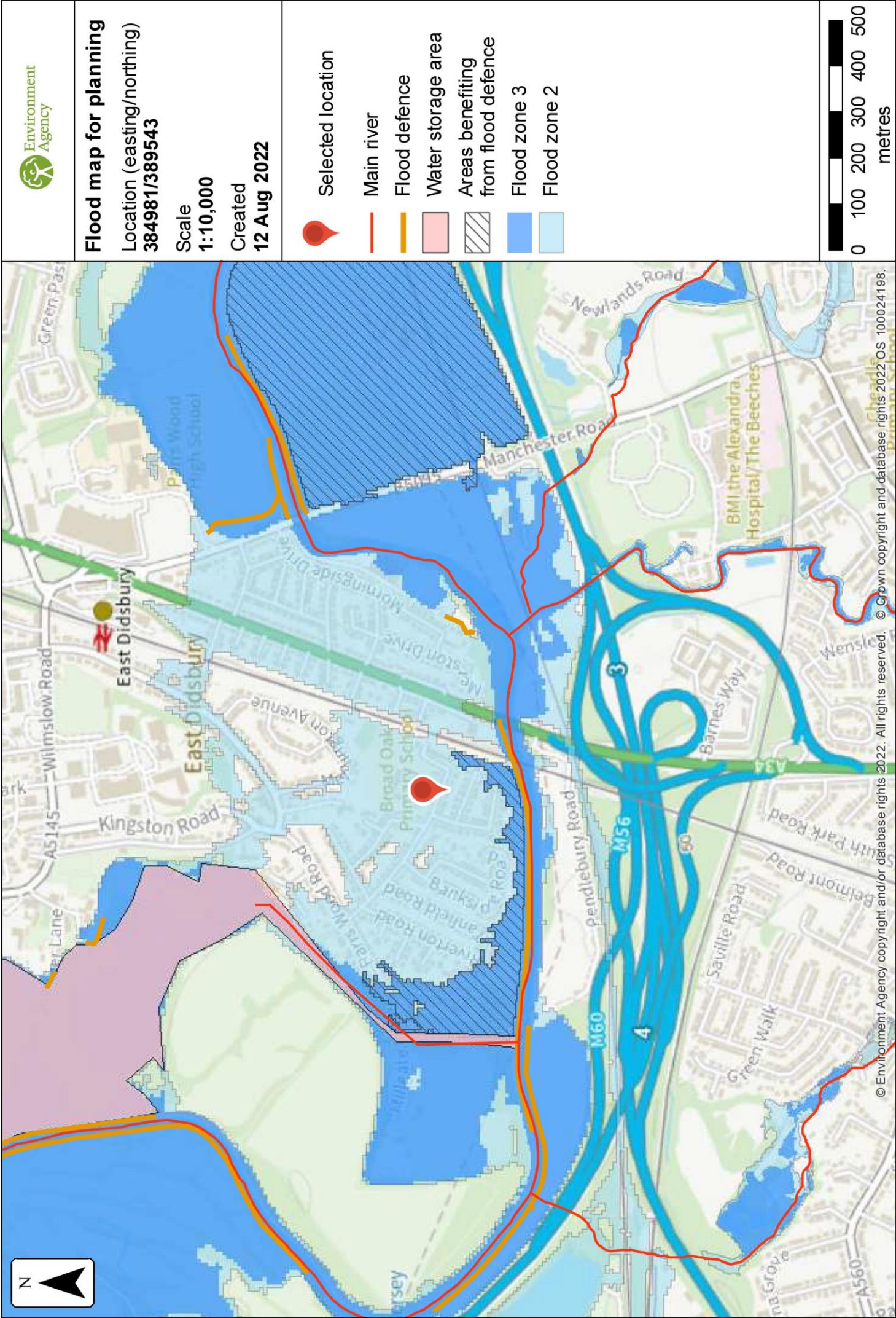
- refer to the land at risk of flooding and do not refer to individual properties
- refer to the probability of river and sea flooding, ignoring the presence of defences
- do not take into account potential impacts of climate change

This data is updated on a quarterly basis as better data becomes available.

Areas benefiting from defences

This map shows the areas benefiting from defences for 2 possible events:

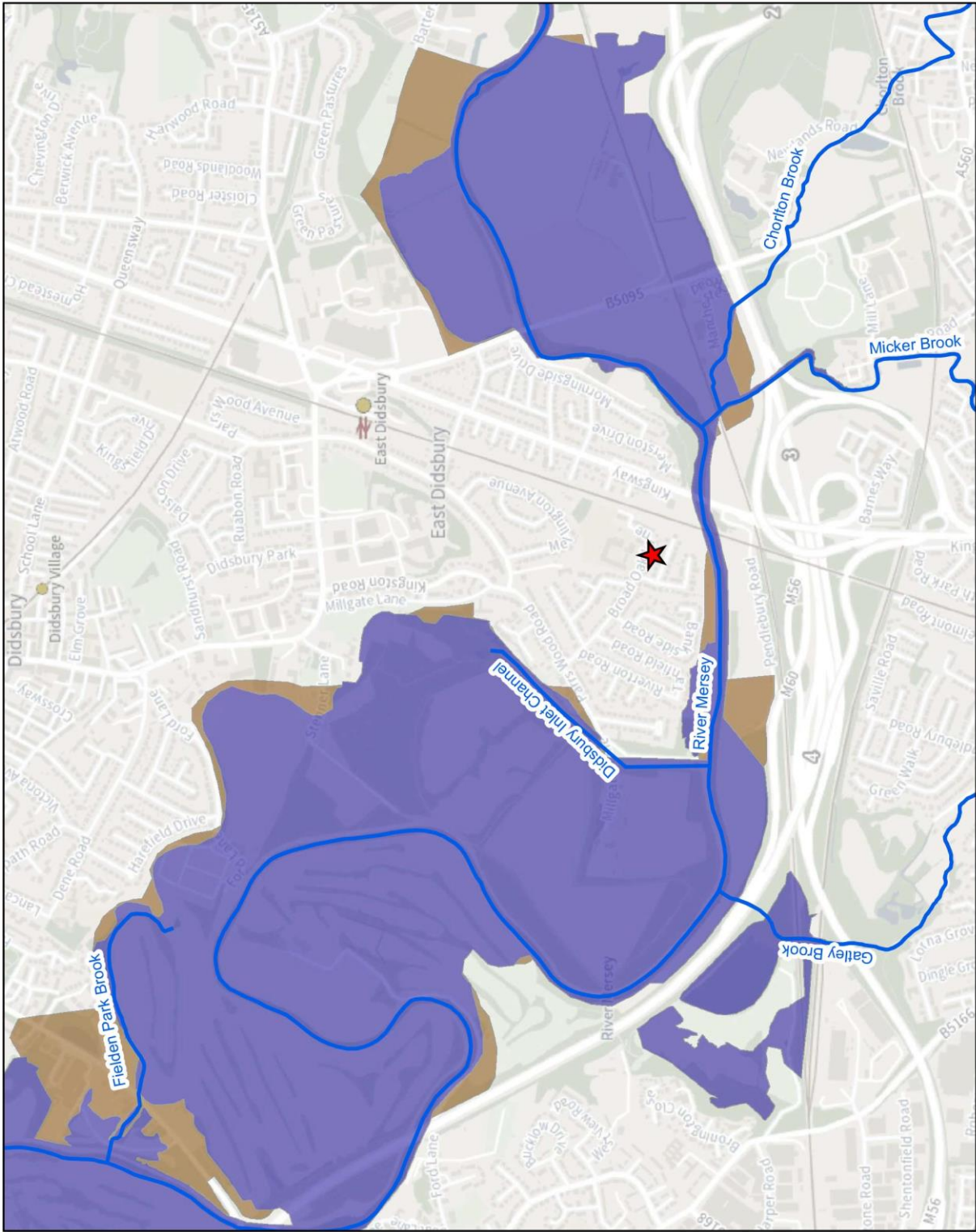
- fluvial (river flooding) event that has a 1% annual exceedance probability (AEP), this means a 1% chance of occurring in any one year
- tidal or coastal event that has a 0.5% annual exceedance probability (AEP), this means a 0.5% chance of occurring in any one year



APPENDIX 2

ENVIRONMENT AGENCY DETAILED FLOOD DATA

**Recorded Flood Outline Map centred on Broad Oak Lane, Manchester, M20 5QB.
Created on 03/10/2022 [FAVCWC8F8FVV/GMMMC275208AB].**



1:14,770

N

Legend



Site Location



Main River

Recorded Flood Outline

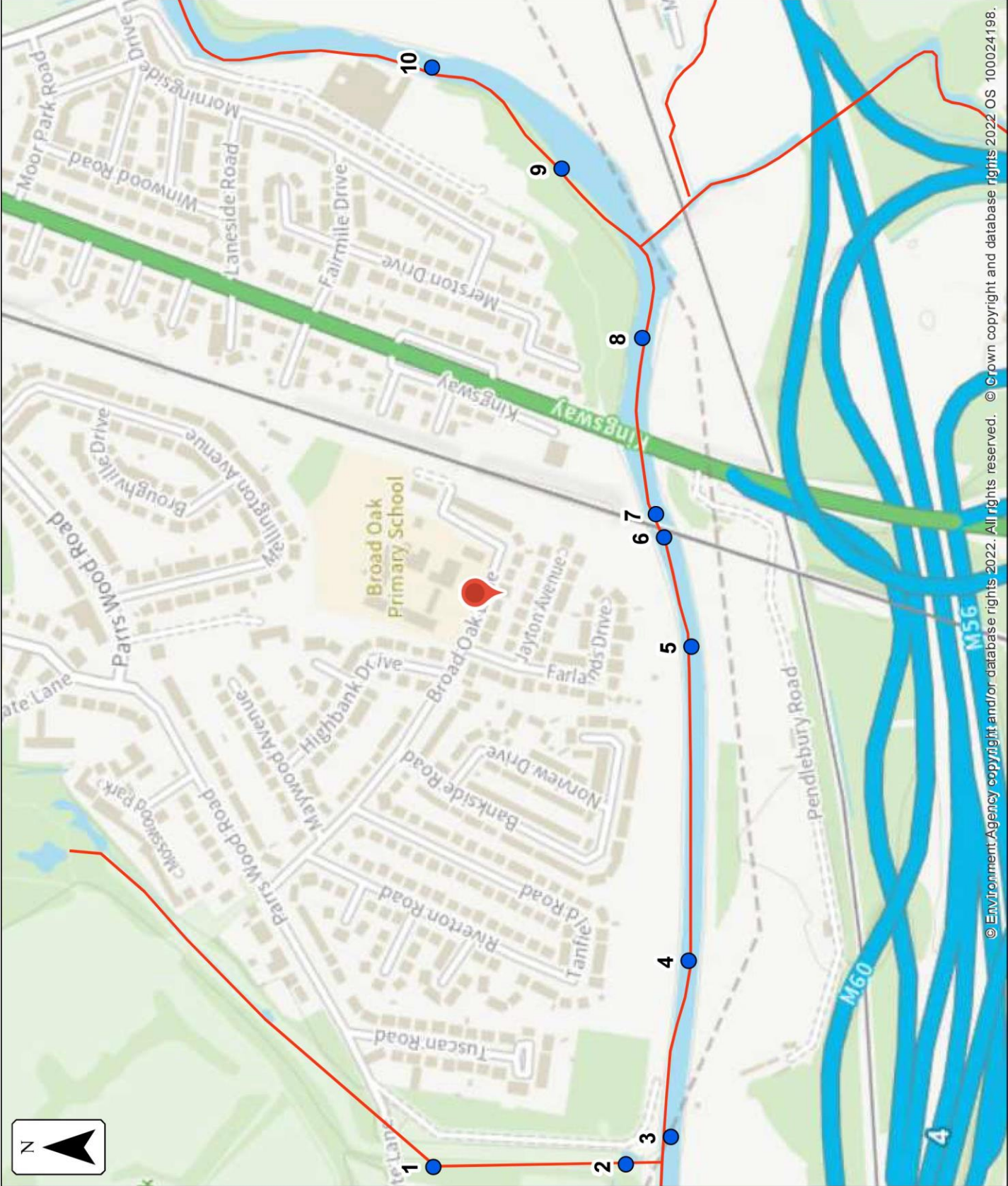
Start Date



01/01/1964



20/01/2021



**Defended modelled
fluvial
node locations**

Location (easting/northing)
384981/389543

Scale
1:5,000

Created
12 Aug 2022

Model name
Upper Mersey 2017



Selected location



Modelled location



Main river



0 50 100 150 200 250

metres

Modelled node locations data

Defended

Label	Modelled location ID	Easting	Northing	5% AEP		2% AEP		1.33% AEP		1% AEP		0.5% AEP		0.1% AEP	
				Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow	Level	Flow
1	1290645	384425	389610	28.15	1.96	28.66	11.05	29.34	16.04	29.42	12.12	29.49	12.20	29.92	12.90
2	1290586	384427	389424	28.20	0.50	28.68	0.50	29.35	0.50	29.43	0.50	29.50	0.50	29.92	0.50
3	1290662	384454	389381	32.33	310.98	32.64	362.53	32.73	381.46	32.79	397.44	32.98	423.22	33.43	576.64
4	1290572	384624	389363	32.49	309.74	32.81	362.47	32.90	382.56	32.96	397.46	33.13	422.90	33.53	611.61
5	1290830	384929	389361	32.73	311.04	33.06	362.59	33.17	381.35	33.24	397.52	33.38	423.07	33.94	611.88
6	1290644	385035	389387	32.85	310.09	33.19	362.45	33.29	382.71	33.37	397.20	33.52	421.92	34.23	586.99
7	1290733	385057	389394	32.97	310.09	33.34	362.45	33.45	382.71	33.54	397.20	33.69	421.92	34.51	586.99
8	1290672	385227	389409	33.09	310.73	33.47	362.57	33.60	380.95	33.69	395.39	33.88	416.47	35.0	521.75
9	1290659	385392	389486	33.34	280.93	33.75	317.96	33.86	330.51	33.97	339.85	34.14	353.45	35.17	383.74
10	1290729	385490	389612	33.33	285.90	33.74	299.27	33.86	306.11	33.97	313.60	34.13	324.75	35.15	357.22

Data in this table comes from the Upper Mersey 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.

APPENDIX 3

SITE LOCATION PLAN

Flood risk assessment data

Location of site: 384981 / 389543 (shown as easting and northing coordinates)

Document created on: 12 August 2022

This information was previously known as a product 4.

Customer reference number: FAVCWC8P8FV/GMMC275208AB

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

