

Flood Risk Assessment for:
 68 Sherborne Way
 Hedge End
 Southampton
 SO30 0JP

Development site

The proposed development site is located at 68 Sherborne Way, Hedge End, Southampton, SO30 0JP and is currently a semi-detached residential house. Looking over the lifetime of the proposed development, parts of the site lies within Flood Zone 2 & 3 and therefore a Flood Risk Assessment is required.



Development proposals

The proposed development is the installation of an air source heat pump. This will be located at the front of the property and can be seen in the appended document 'Site Plan'. Cross referencing this with the 'Flood Levels Map' from the Environment Agency, The heat pump sit within Flood Zone 2. As such it will be located on a custom built solid base and mounted on vibration absorbing stands. It will sit approx 150mm above ground level. The proposed development is classified as More Vulnerable. The lifetime of the proposed development is assumed to be 100 years.

Sequential Test

This application is for minor development and is not be subject to the sequential test.

Exception Test

This application is for minor development and is not be subject to the exception test.

Site specific flood hazards

The proposed development site lies within Flood Zone 2 & 3 with the main risk of flooding coming from a fluvial (river) source.

Fluvial flooding

Flood model data for the site suggests that over the lifetime of the development, flood depths of around 0.26m can be expected at the very front of the site.

At the location of the proposed heat pump, the flood depths can be expected to be 0.00m.

Surface water flooding

Surface water at the site is currently managed by guttering linked to a soak-away. The proposals for surface water management are unchanged.

Flood control measures

The heat pump is to be raised from ground level by approximately 150mm.

Flood mitigation measures

- Subscription to the Environment Agency flood warning service.

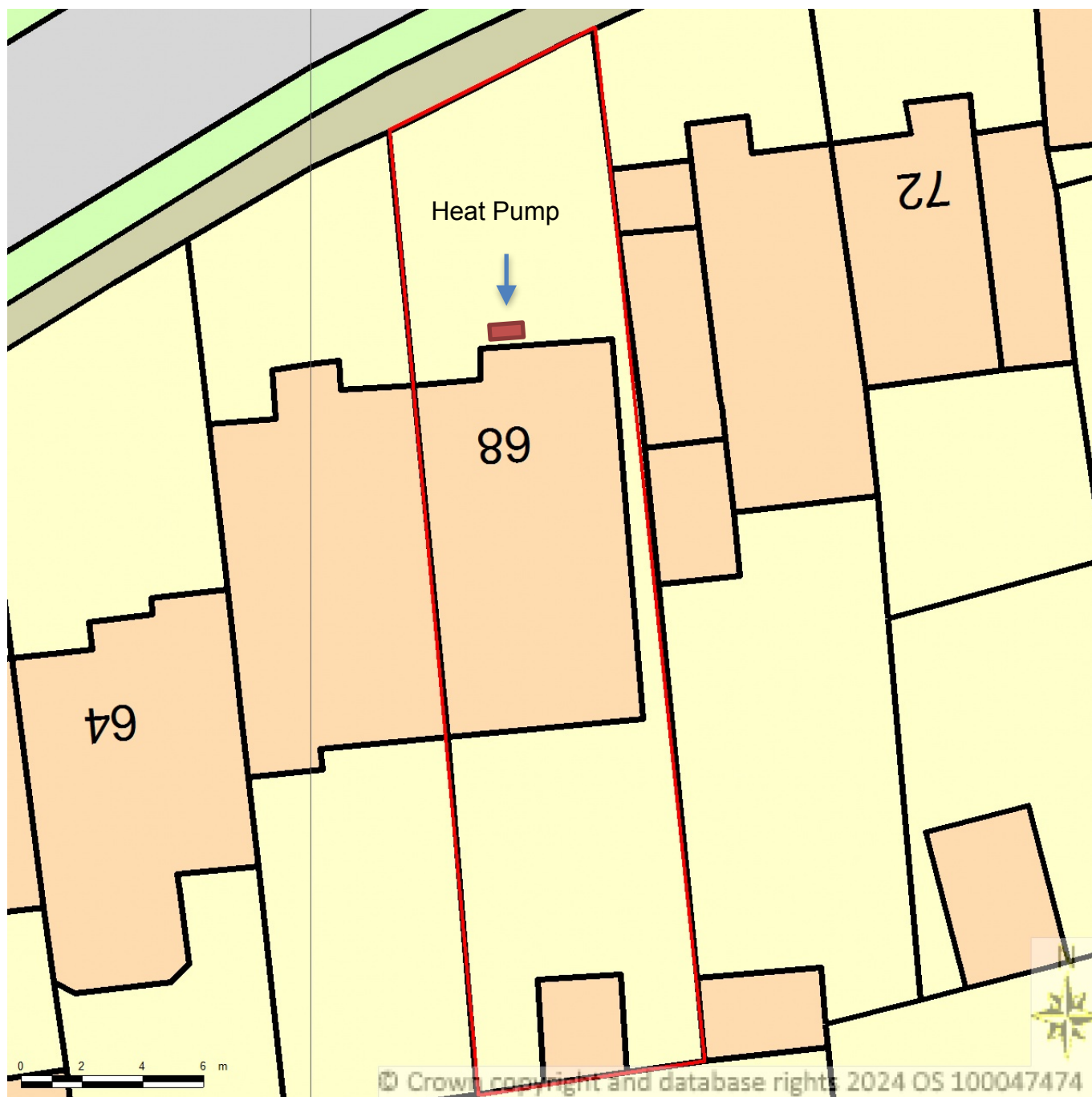
Conclusions

The installation of a heat pump is a minor addition to the existing property. Although a small part of the site is in flood zone 3, the proposed location for the heat pump is in zone 2.

Historical data shows no recorded historic flooding at the site. The detailed data from the Environment Agency (on pages 15 & 16 of the attached report) shows that point 7 is closest to where the heat pump will be. At point 7 there is no data to suggest it is at risk of a flood event. In addition the heat pump will be raised above ground level by 150mm, further decreasing its risk from a flooding event.

This assessment has found no specific flood risks with the proposed development.

BLOCK/SITE PLAN
 AREA 36m x 36m
 SCALE 1:200 on A4
 CENTRE COORDINATES: 449508, 112878



Flood risk assessment data

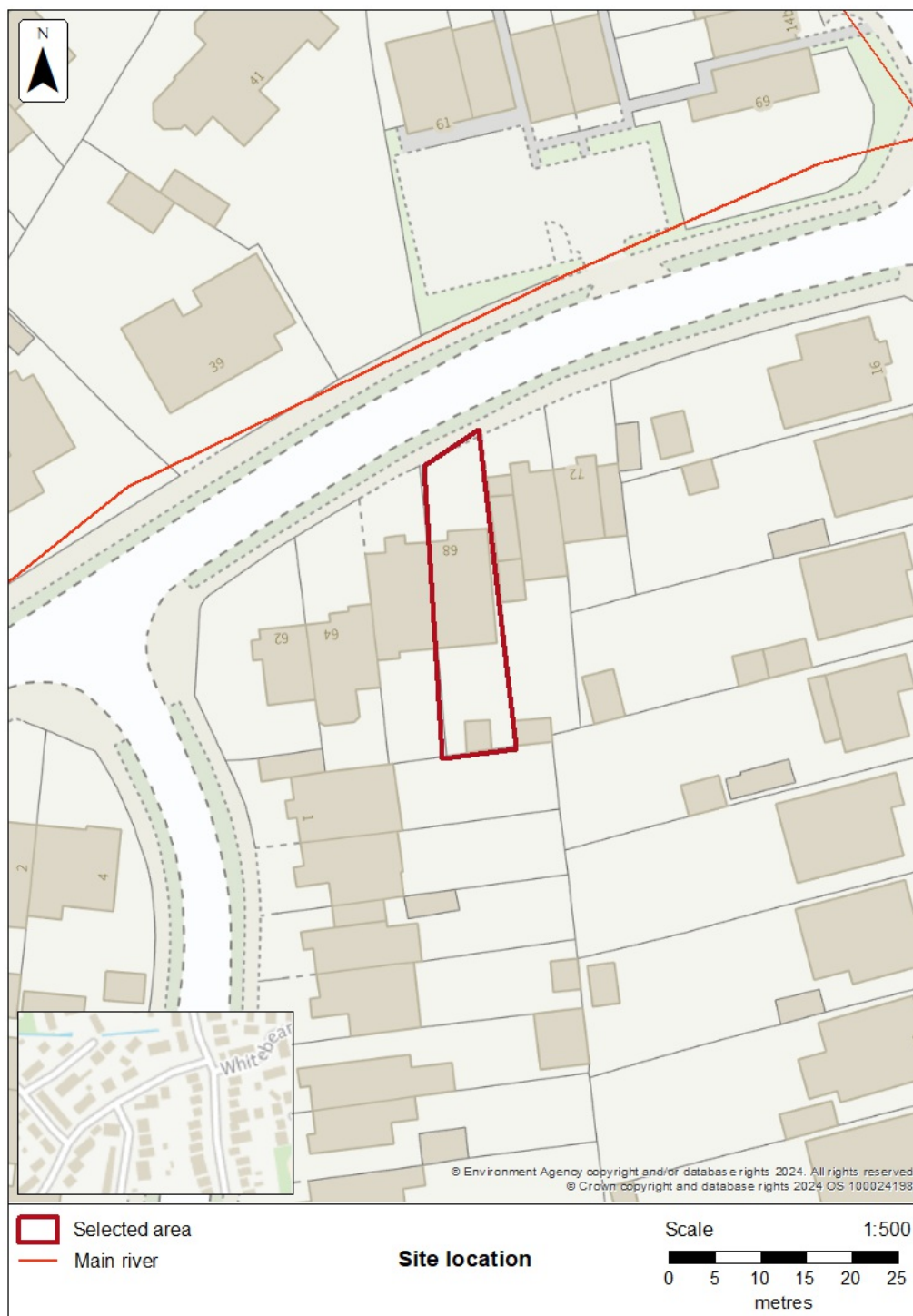
Location of site: 449507 / 112876 (shown as easting and northing coordinates)

Document created on: 9 September 2024

This information was previously known as a product 4.

Customer reference number: U8R644BU8GXN / SSD375776HF

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)
- historic flooding
- flood defences and attributes
- information to help you assess if there is a reduced flood risk from rivers and the sea because of defences
- modelled data
- climate change modelled data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

Surface water and other sources of flooding

Use the [long term flood risk service](#) to find out about the risk of flooding from:

- surface water
- ordinary watercourses
- reservoirs

Or you can contact your Lead Local Flood Authority for further information.

Your Lead Local Flood Authority is Hampshire County Council.

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

About the models used

Model name: Hampshire JFLOW Modelling 2016

Scenario(s): Defences removed fluvial, defences removed climate change fluvial

Date: 1 November 2016

This model contains 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 3.

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

The flood zones are not currently being updated. The last update was in November 2023. Some of the flood zones may have changed, however all source data is included in the models below.



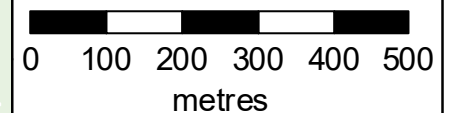
Flood map for planning

Location (easting/northing)
449507/112876

Scale
1:10,000

Created
9 Sep 2024

-  Selected area
-  Main river
-  Flood zone 3
-  Flood zone 2



Historic flooding

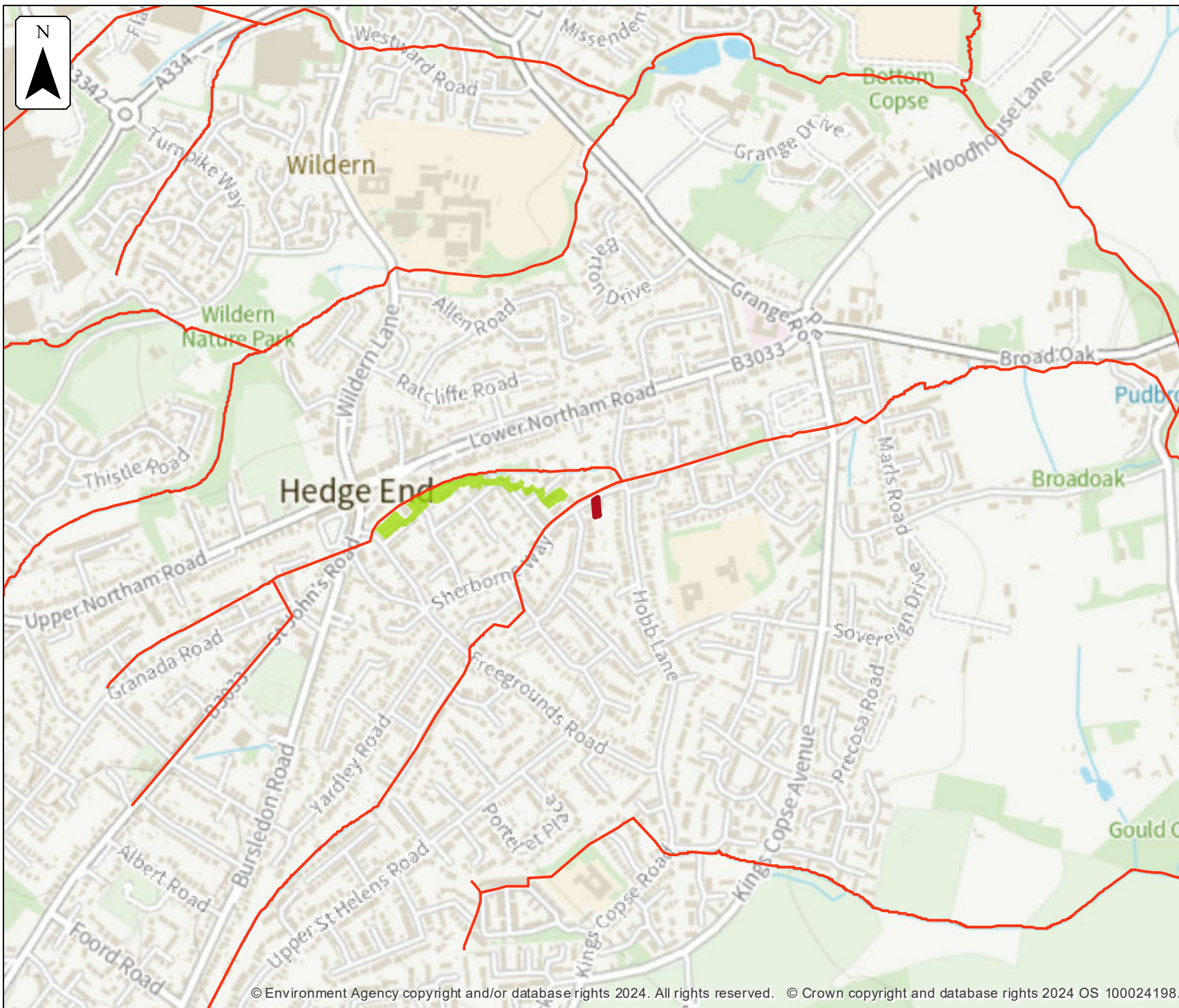
This map is an indicative outline of areas that have previously flooded. Remember that:

- our records are incomplete, so the information here is based on the best available data
- it is possible not all properties within this area will have flooded
- other flooding may have occurred that we do not have records for
- flooding can come from a range of different sources - we can only supply flood risk data relating to flooding from rivers or the sea

You can also contact your Lead Local Flood Authority or Internal Drainage Board to see if they have other relevant local flood information. Please note that some areas do not have an Internal Drainage Board.

Your Lead Local Flood Authority is Hampshire County Council.

[Download recorded flood outlines in GIS format](#)



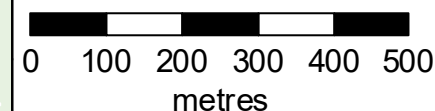
Historic flood map

Location (easting/northing)
449507/112876

Scale
1:10,000

Created
9 Sep 2024

-  Selected area
-  Main river
- Date of flood event
-  November, 1975



Historic flood event data

Start date	End date	Source of flood	Cause of flood	Affects location
5 November 1975	5 November 1975	main river	unknown	No

Flood defences and attributes

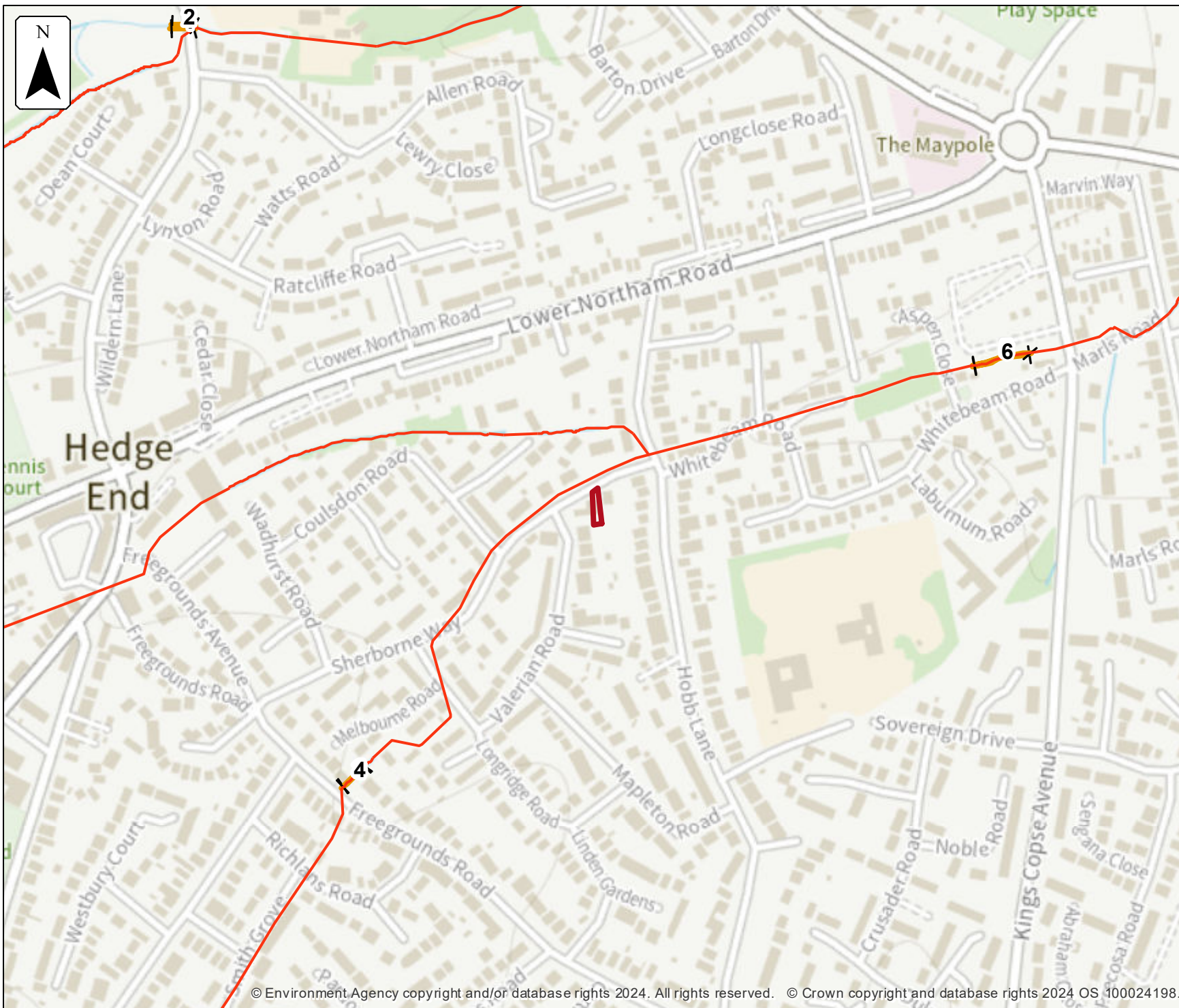
The flood defences map shows the location of the flood defences present.

The flood defences data table shows the type of defences, their condition and the standard of protection. It shows the height above sea level of the top of the flood defence (crest level). The height is in mAOD which is the metres above the mean sea level at Newlyn, Cornwall.

It's important to remember that flood defence data may not be updated on a regular basis. The information here is based on the best available data.

Use this information:

- to help you assess if there is a reduced flood risk for this location because of defences
- with any information in the modelled data section to find out the impact of defences on flood risk



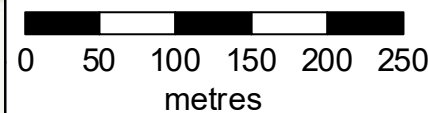
Flood defences

Location (easting/northing)
449507/112876

Scale
1:5,000

Created
9 Sep 2024

-  Selected area
-  Main river
-  Flood defence



Flood defences data

Label	Asset ID	Asset Type	Standard of protection (years)	Current condition	Downstream actual crest level (mAOD)	Upstream actual crest level (mAOD)	Effective crest level (mAOD)
1	453878	Engineered High Ground					
2	453781	Engineered High Ground					
3	403678	Engineered High Ground					
4	403677	Engineered High Ground					
5	387070	Engineered High Ground			17.08	17.67	
6	387068	Engineered High Ground			16.52	17.32	

Any blank cells show where a particular value has not been recorded for an asset.

Modelled data

This section provides details of different scenarios we have modelled (where available):

Climate change

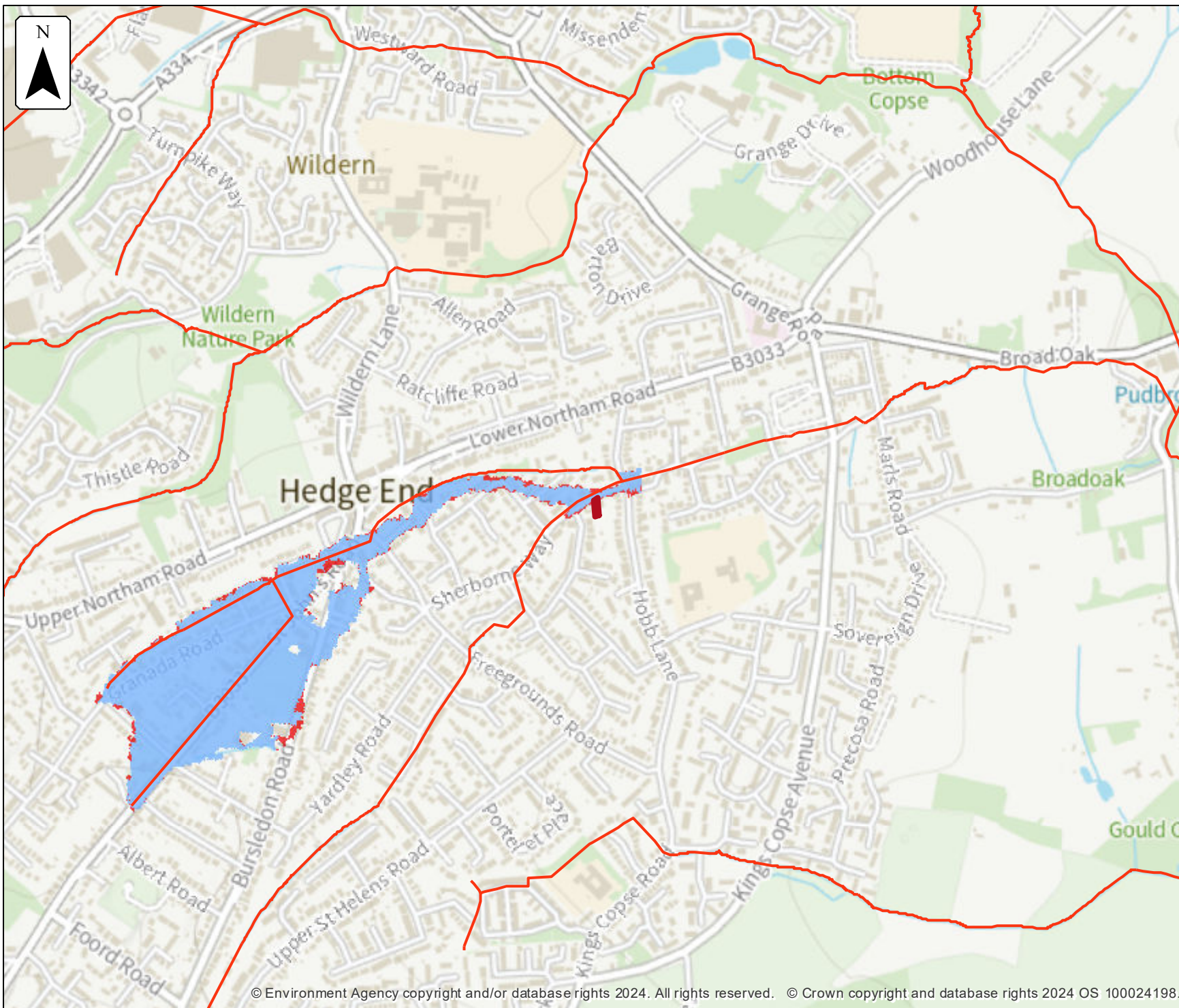
The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

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:

- Defences removed modelled fluvial: risk of flooding from rivers where flood defences have been removed
- Defences removed climate change modelled fluvial: risk of flooding from rivers where flood defences have been removed, including estimated impact of climate change



Defences removed modelled fluvial extent

Location (easting/northing)
449507/112876

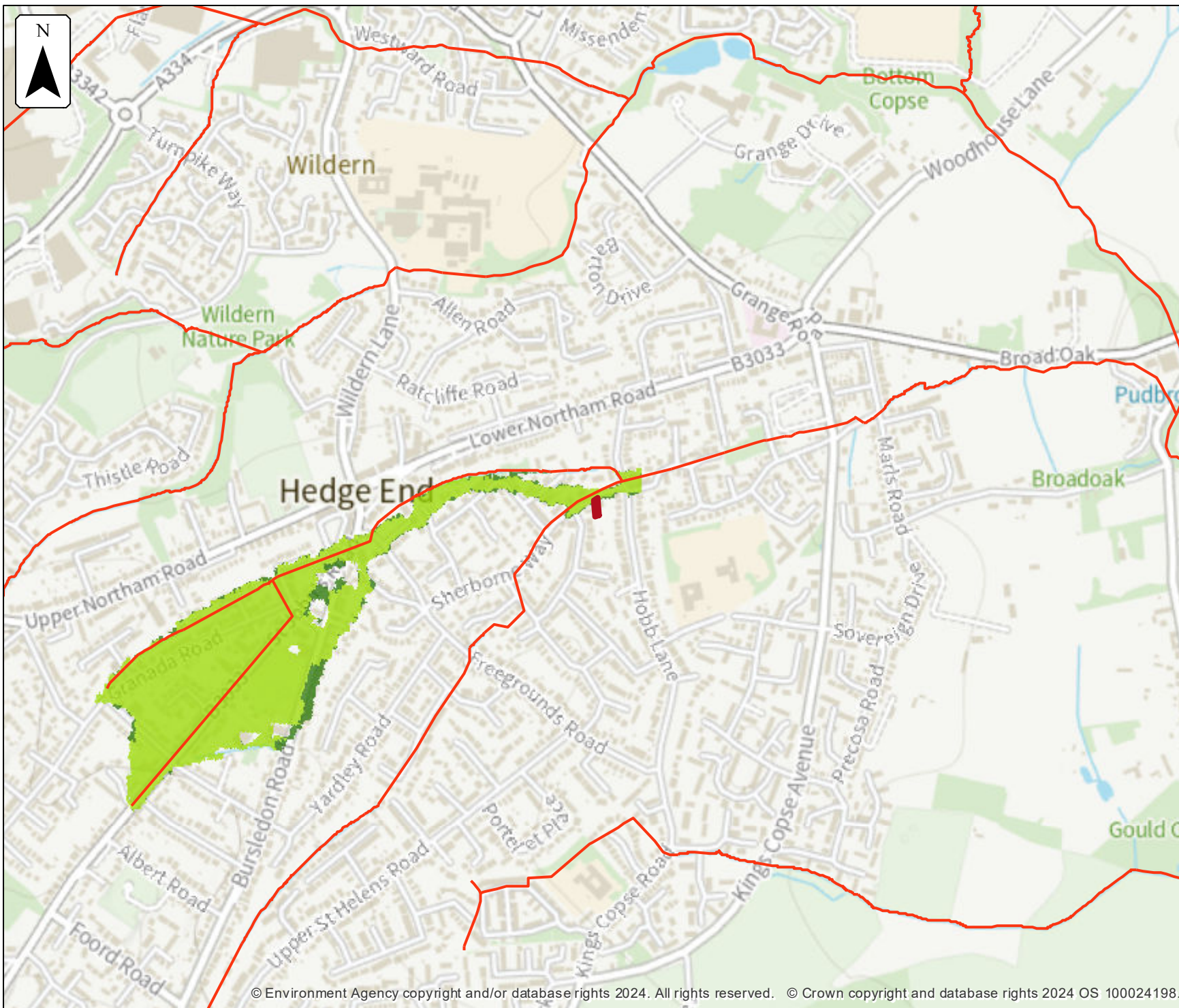
Scale Created
1:10,000 9 Sep 2024

Model name
**Hampshire JFLOW
Modelling 2016**

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

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





Defences removed climate change modelled fluvial extent

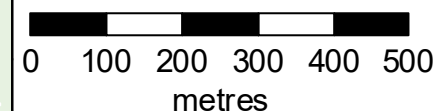
Location (easting/northing)
449507/112876

Scale Created
1:10,000 9 Sep 2024

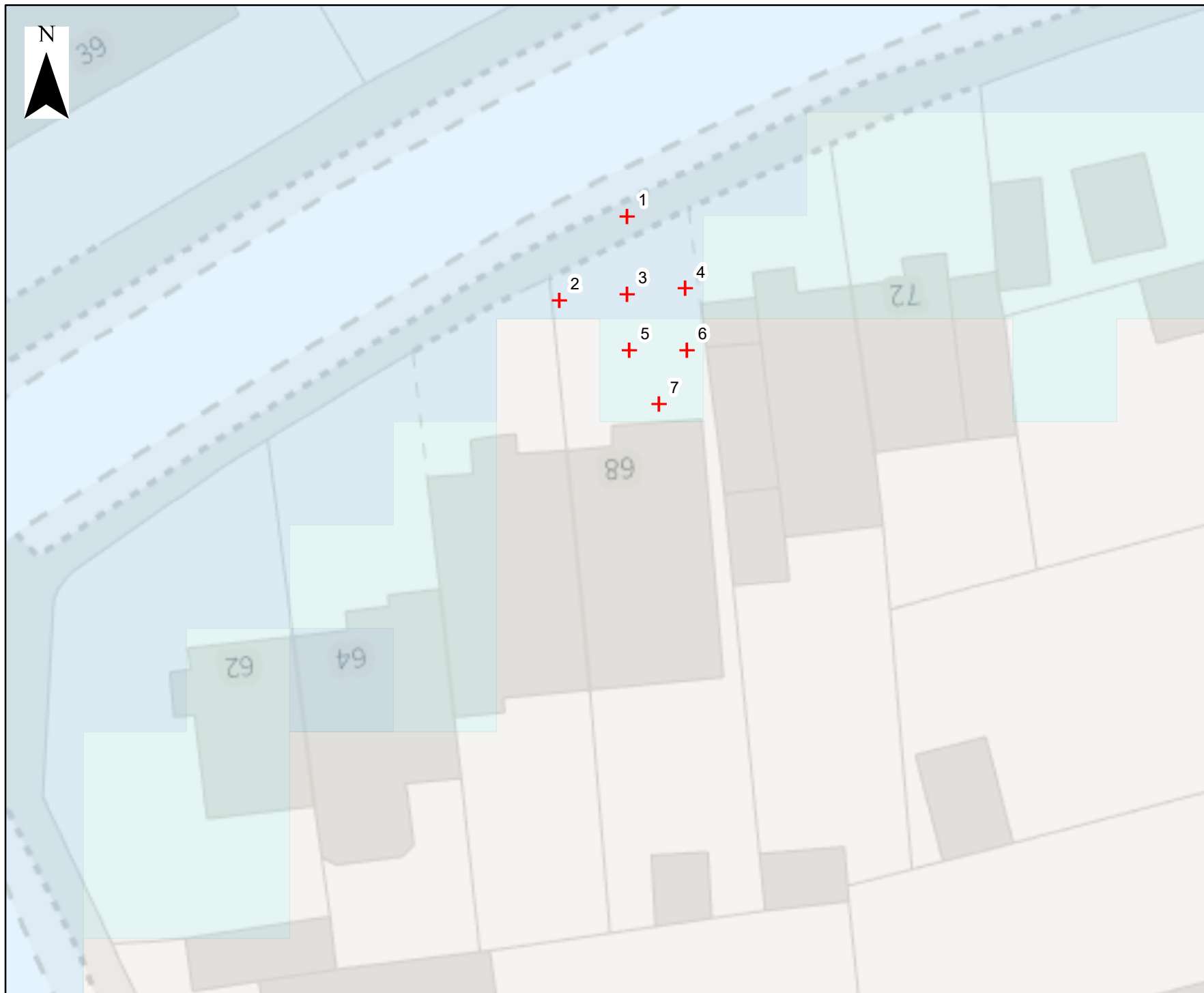
Model name
**Hampshire JFLOW
Modelling 2016**

-  Selected area
-  Main river
- Modelled flood extent
 -  1.0% AEP (+35%)
 -  1.0% AEP (+45%)
 -  1.0% AEP (+105%)

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



2016 JFLOW - Flood Levels Centred on: SU4950712877



Flood Levels Map

Location (easting/northing)
449507/112877

Scale

1:250

Created
13th September 2024

Legend

+ Location Points

flood_zone_3

flood_zone_2

0 1 2 4 6 8 Meters

Water Depths & Levels for SU4950712877

Point	Water Depth (Metres)		Water Surface Level (mAOD*)		Ground Level
	1% Annual Probability/1 in 100 Year (Flood Zone 3)	0.1% Annual Probability/1 in 1000 Year (Flood Zone 2)	1% Annual Probability/1 in 100 Year (Flood Zone 3)	0.1% Annual Probability/1 in 1000 Year (Flood Zone 2)	
1	0.06	0.26	22.08	22.28	22.02
2	NoData	0.12	NoData	22.51	22.39
3	0.02	0.13	22.28	22.39	22.26
4	NoData	0.07	NoData	22.40	22.33
5	NoData	NoData	NoData	NoData	22.34
6	NoData	NoData	NoData	NoData	22.36
7	NoData	NoData	NoData	NoData	22.42

* Levels in metres above Ordnance Datum Newlyn

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 Hampshire County Council.

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 Solent and South Downs Environment Agency team at ssdenquiries@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