



**PROPOSED RESIDENTIAL DEVELOPMENT
HIND QUARTERS, MAIN STREET, BOTCHESTON**

FLOOD RISK ASSESSMENT

May 2026

Commissioned by: Mr. & Mrs. Dulan

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Project Reference: NS_0115_27

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1.0 INTRODUCTION AND DEVELOPMENT DESCRIPTION

1.1 Project Introduction and Objectives

Mr. & Mrs. Dulan have commissioned Swan Environmental Services Ltd. to prepare a Flood Risk Assessment (FRA) to support proposed residential development on land at Hind Quarters, Main Street, Botcheston, Leicestershire.

This document represents a site-specific FRA for the proposed development.

1.2 Planning Policy and Guidance

This FRA has been undertaken with due regard to the following national and local planning policy and flood risk guidance.

1.2.1 National Planning Policy

The National Planning Policy Framework (NPPF)¹ and associated technical guidance for flood risk and coastal change² aim to steer new development to areas with the lowest risk of flooding.

The NPPF recommends that development should only be allowed in areas at risk of flooding where a site-specific FRA (and the sequential and exception tests, as applicable) can demonstrate that:

- a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;
- b) the development is appropriately flood resistant and resilient;
- c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;
- d) any residual risk can be safely managed; and
- e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.

Footnote 63 of the NPPF confirms that planning applications for the following development proposals must be supported by a site-specific FRA:

- All developments in Flood Zone 2 or 3.
- Development sites in Flood Zone 1 involving:
 - Sites of 1 hectare (ha) or more;
 - Land identified by the Environment Agency as having critical drainage problems;
 - Land identified in a Strategic Flood Risk Assessment as being at increased flood risk in the future; and
 - Land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use.

¹ GOV.UK, March 2012 (last updated: February 2025), National Planning Policy Framework.

² GOV.UK, March 2014 (last updated September 2025), Guidance, Flood Risk and Coastal Change.

1.2.2 Environment Agency Policy and Guidance

The Environment Agency's guidance for FRAs³ and associated flood risk standing advice supports the NPPF and specifies the requirements for site-specific FRAs, based on the level of flood risk and the vulnerability of the proposed development to flooding.

In addition, an Environment Agency Flood Risk Activity Permit (or exemption) is required for works or structures in, under, over or within eight metres of the top of the bank of the watercourse, designated a 'main river', (or sixteen metres in the case of a tidal watercourse).

1.2.3 Local Policy and Guidance

The following documents provide local flood risk policy and guidance for development within Botcheston, Leicestershire:

- Hinckley & Bosworth Borough Council's Level 1⁴ Strategic Flood Risk Assessment (SFRA) provides a summary of the local hydrology, a review of all potential sources of flood risk within the region and guidance for site-specific FRAs.
- Leicestershire County Council's 2024 Local Flood Risk Management Strategy (LFRMS) provides an overview of flood risk from local sources (surface water, groundwater and ordinary watercourses) and the local strategy for flood risk management.
- Hinckley & Bosworth Borough Council's Local Plan 2006-2026 Site Allocations and Development Management Policies DPD (adopted July 2016) sets out current local planning policy for the region. **DM Policy 7: Preventing Pollution and Flooding** includes the following relevant statements:

Adverse impacts from pollution and flooding will be prevented by ensuring that development proposals demonstrate that:

- a) *It will not adversely impact the water quality, ecological value or drainage function of water bodies in the borough;*
- h) *The development doesn't create or exacerbate flooding by being located away from areas of flood risk unless adequately mitigated against in line with National Policy.*

1.3 Site Location & Requirement for a Site-Specific FRA

The application site comprises land off Main Street, Botcheston, Leicestershire, LE9 9FF, as indicated on the Site Location Plan within Appendix 1. The site is located on the western edge of the hamlet of Botcheston, approximately 11km west of Leicester city centre, and is centred at National Grid Reference SK 47840 05065.

Rothley Brook bounds the site to the west and the Environment Agency's on-line flood map for planning confirms the western part of the site extends into Flood Zones 2 and 3. The NPPF and associated technical guidance confirm that development sites within Flood Zones 2 and 3 must be accompanied by a site-specific FRA.

³ Environment Agency, March 2014 (last updated: October 2025), Guidance – Flood Risk Assessments: applying for planning permission.

⁴ JBA Consulting, January 2025, Hinckley and Bosworth Level 1 Strategic Flood Risk Assessment, Final Report.

1.4 Topography and Existing Land Use

Ordnance Survey mapping confirms the local topography falls gently to the south-west, towards Rothley Brook, with site levels ranging from 100mAOD at Main Street on the eastern boundary to 95mAOD on the western boundary adjacent to Rothley Brook.

Figure 1 presents the Environment Agency's 2022 Composite DTM LiDAR data with 0.5m contour intervals; the approximate site boundary is outlined in red. The LiDAR data confirm site levels fall from 101.5mAOD at the south-eastern site entrance off Main Street, to approximately 94.0mAOD on the western boundary at Rothley Brook. The topographic gradient reduces across the site, from east to west.

There is no evidence of a raised flood defence embankment in the vicinity of Rothley Brook; this is discussed further in Section 2.2.

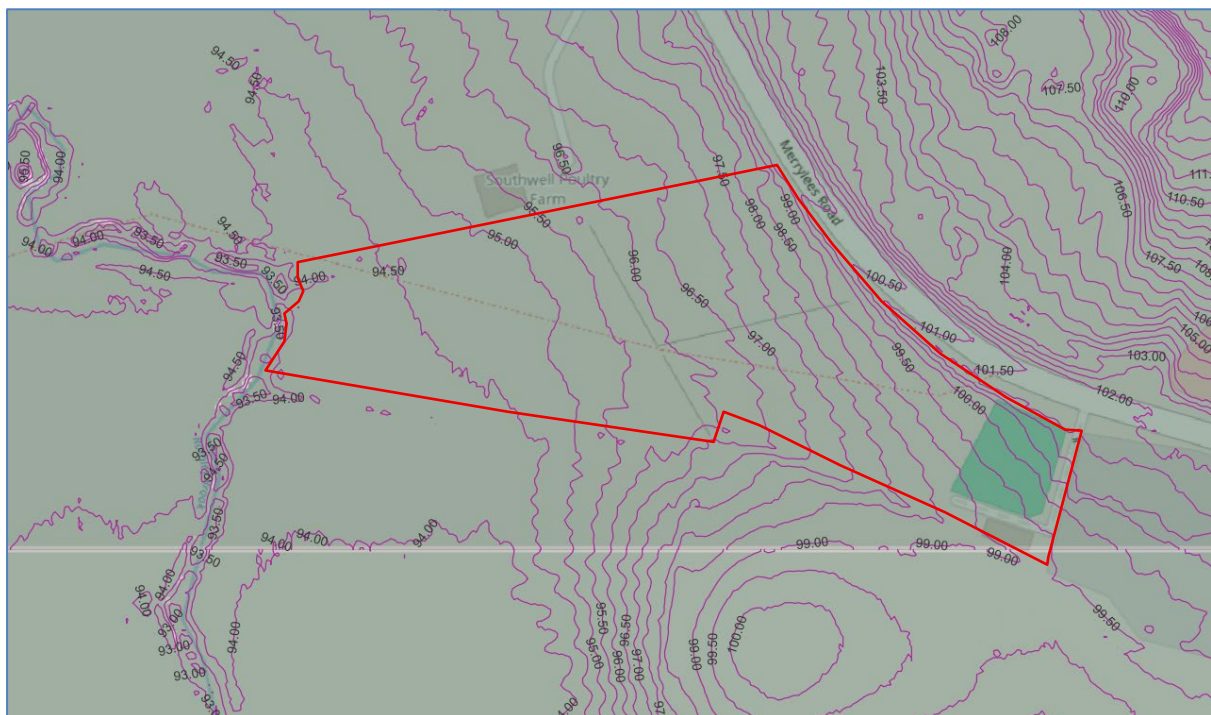


Figure 1. Environment Agency 2022 Composite DTM LiDAR Data

The site currently comprises undeveloped agricultural/equestrian land with a small equestrian building in the south-east corner and vehicular access provided off Main Street at the eastern end of the site, as indicated within Figure 2.



Figure 2. Existing Land Use (extracted from Google Earth Pro, image dated 12/05/2025)

1.5 Proposed Development and Flood Risk Vulnerability Classification

This FRA supports a planning application for residential development. The proposed development layout plan is included within Appendix 2 and comprises 26no. residential dwellings aligned along an internal access road. The site's existing vehicular access off Main Street is retained.

Annex 3 of the NPPF confirms residential dwellings are classified as more vulnerable development, with regards flood risk. This is considered further in Section 2.9.

1.6 Ground Conditions

British Geological Survey mapping indicates that the geology beneath the application site comprises mudstone of the Gunthorpe Member, Sidmouth Mudstone Formation, which is overlain in the west of the site by superficial Alluvium (clay, silt, sand and gravel)⁵. There are no published borehole logs in the vicinity of the site.

Cranfield University's LandIS Soilscales Viewer confirms the soils beneath the site are classified as Soilscape 18: slowly permeable, seasonally wet, slightly acid but base-rich loamy and clayey soils with impeded drainage.

Due to the low permeability ground conditions, a relatively high proportion of incident rainfall will form surface water runoff.

⁵ British Geological Survey, GeoIndex (Onshore) Mapping, accessed 5th May 2026.

No significant groundwater is anticipated within the low permeability mudstone bedrock; limited perched groundwater may be encountered within the Alluvium or near-surface weathered mudstone in continuity with Rothley Brook.

1.7 Hydrological Features & Site Drainage

The application site lies within the surface water catchment of Rothley Brook, which flows in a southerly direction along the western site boundary. Rothley Brook is classified as a main river and is a tributary of the River Soar. No other significant surface water features are identified within a 250m radius of the site.

The local hydrological setting is presented as Figure 3.

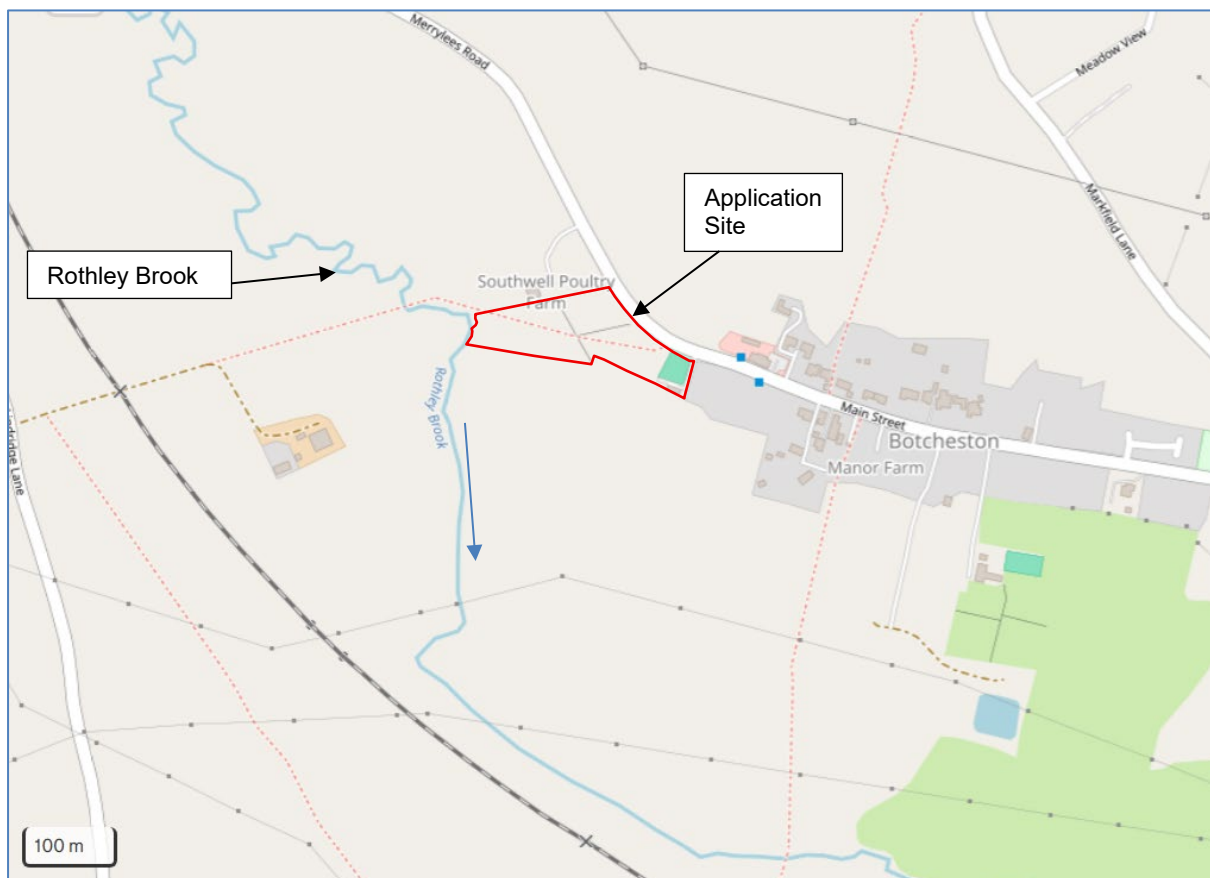


Figure 3. Hydrological Site Setting

The application site comprises undeveloped agricultural/equestrian land, with no formal drainage systems.

1.8 Climate Change

The Environment Agency's climate change allowances guidance⁶ confirms that rainfall, river flows and sea levels are predicted to increase as a result of climate change, which must be considered throughout the lifetime of the proposed development.

⁶ Environment Agency, February 2016 (last updated: May 2022), Guidance: Flood Risk Assessments: Climate Change Allowances.

The application site lies within the Soar Management Catchment, where peak river flows are predicted to increase by between 28% (central allowance) and 60% (upper end allowance) by the 2080s. The Environment Agency guidance confirms that the central climate change allowance (28%) is appropriate for more vulnerable development within Flood Zone 2 or 3a. This has been considered within the assessment of fluvial flood risk (Section 2.2).

Within the Soar Management Catchment, the peak rainfall intensity for the 1.0% annual probability event is predicted to increase by between 25% (central allowance) and 40% (upper end allowance) by the 2070s. This has been considered within the assessment of surface water flood risk (Section 2.3) and the recommendations for surface water drainage design (Section 2.10).

2.0 FLOOD RISK ASSESSMENT

2.1 Sources of Information

In addition to the site setting and flood risk planning policy and guidance outlined in Section 1, the following sources of information have been consulted during the preparation of this FRA:

- Environment Agency online flood maps and long-term flood risk service – for information regarding surface water, groundwater, reservoir and fluvial/tidal flood risk.
- The Environment Agency has been consulted for site-specific flood risk data (formerly referred to as Product 4 data); their response, dated 18th May 2026, includes flood model data from the 2022 Rothley Brook model and is included as Appendix 3.

All potential sources of flooding to the application site are considered below.

2.2 Flood Risk from Rivers and the Sea

The application site is not coastal or in the vicinity of a tidal watercourse and is not therefore at risk of flooding from the sea.

The Environment Agency's flood map for planning presents information regarding the fluvial flood risk to the application site and is included as Figure 4 below. The majority of the site lies within Flood Zone 1, defined as land with less than 0.1% annual probability (AEP) of flooding from rivers. The western part of the site extends into Flood Zones 2 and 3 associated with Rothley Brook. Flood Zone 2 is defined as land with between 0.1% and 1.0% AEP of flooding from rivers and Flood Zone 3 represents land with more than 1.0% AEP of flooding from rivers.

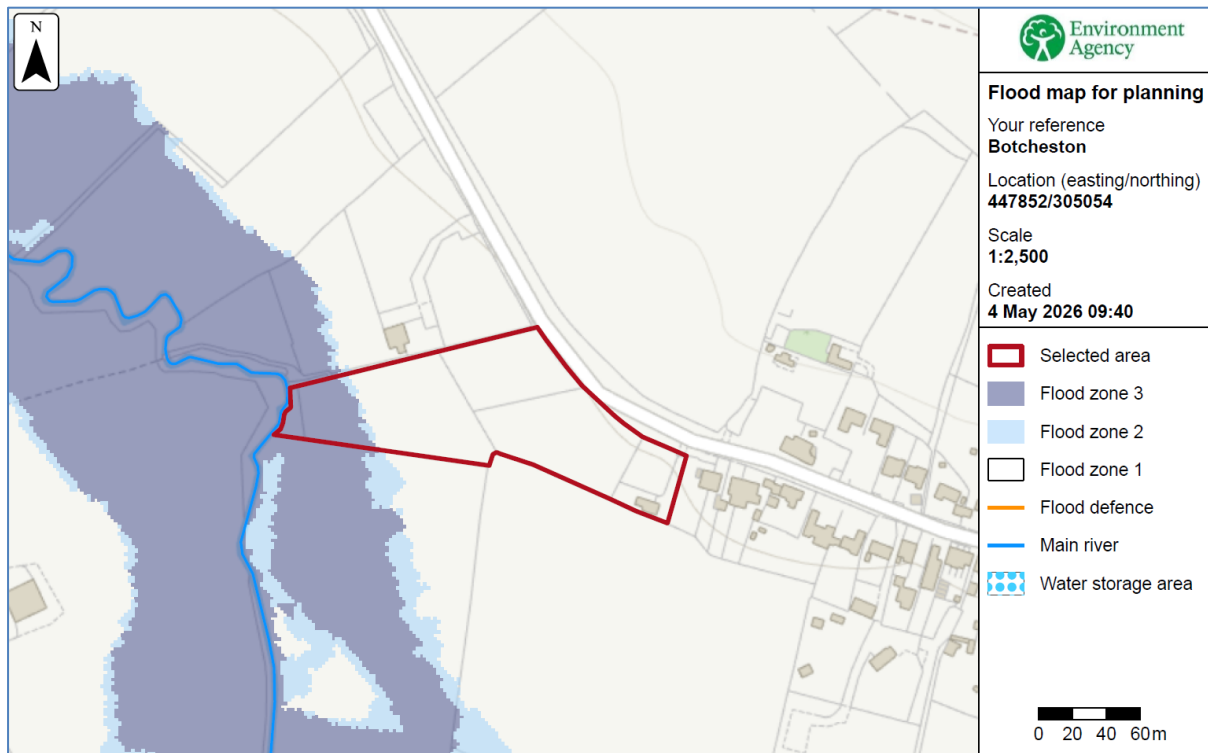


Figure 4. Environment Agency Site-Specific Flood Map for Planning

The flood zone map (Figure 4) does not take account of flood defences or climate change but does confirm there are no formal flood defences for Rothley Brook in the vicinity of the site.

The flood zone map does not distinguish between Flood Zones 3a and 3b. Figure 5 presents the Flood Zone 3a and 3b extents of Rothley Brook, extracted from the Level 1 SFRA. Appendix B of the SFRA confirms Flood Zone 3b of Rothley Brook is represented by the 3.3% AEP defended modelled flood extent, which remains appropriate and up to date. Figure 5 confirms no part of the site extends into Flood Zone 3b, the functional floodplain; therefore, the western part of the site lies within Flood Zones 2 and 3a only.

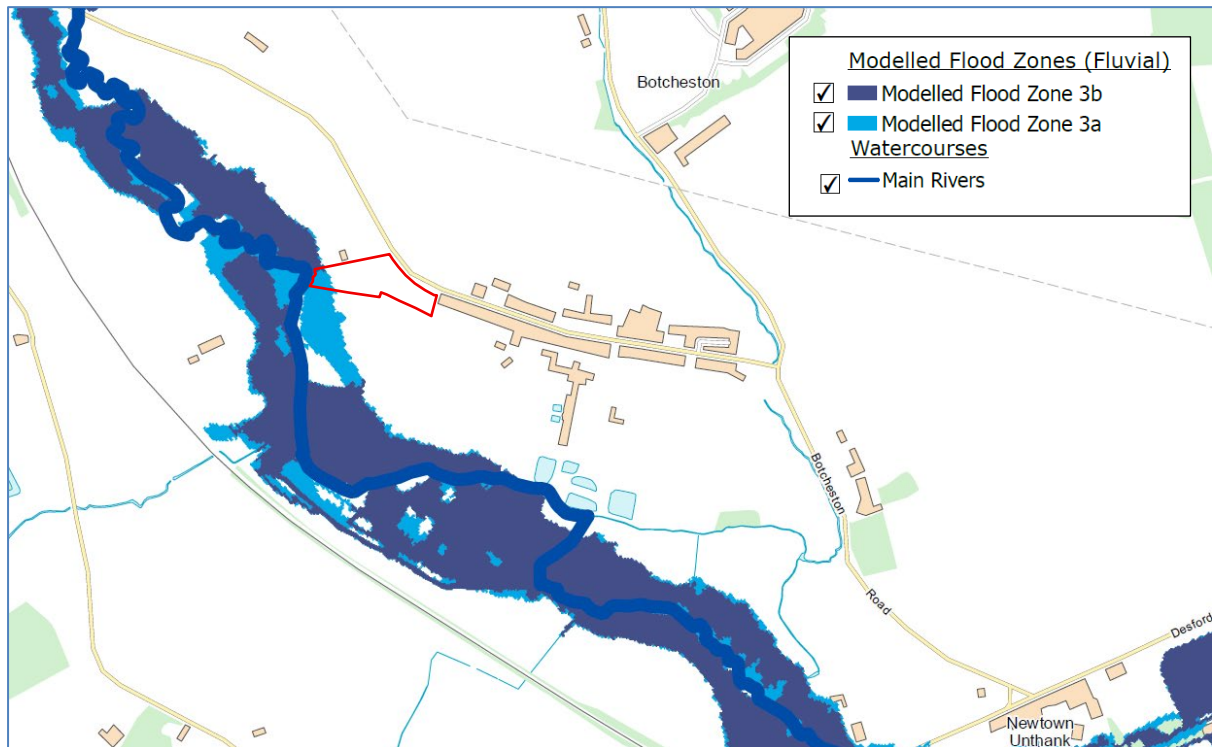


Figure 5. Flood Zone 3a & 3b Extent (extracted from SFRA Detailed Map B4)

The Environment Agency has provided flood model data from the 2022 Rothley Brook Model. Model results for the defended scenarios, with allowance for any flood defences, are identical to the undefended model results, confirming the site does not benefit from flood defences.

Figure 6 presents the locations of 2-D floodplain nodes and peak predicted flood water levels for the extreme 0.1% AEP flood event, which is equivalent to Flood Zone 2. The peak predicted flood water levels for nodes within and immediately adjacent to the application site are presented below.

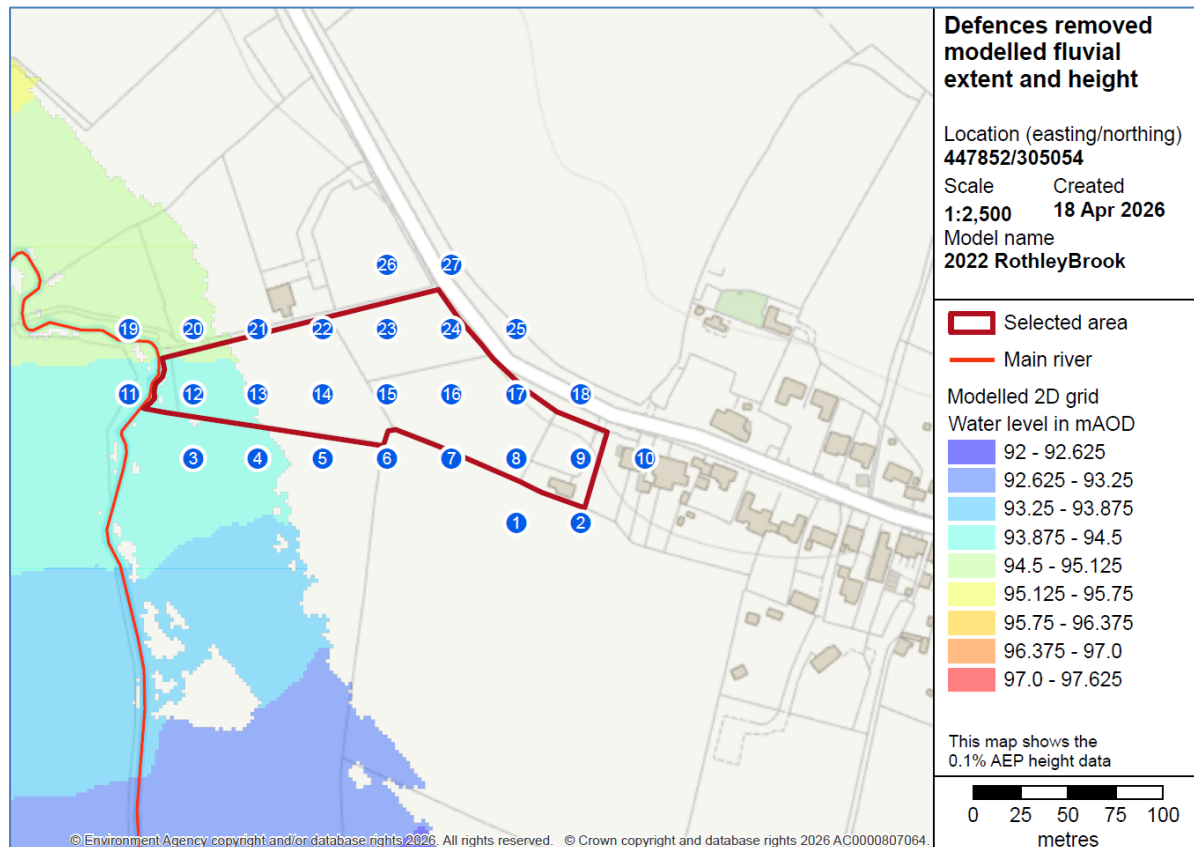


Figure 6. Environment Agency 2022 Rothley Brook Model Node Locations

Model Node	Peak Predicted Flood Water Level (mAOD)			
	1.0% AEP	0.1% AEP	1.0% AEP + 20% Climate Change	1.0% AEP + 30% Climate Change
11	94.32	94.41	94.37	94.38
12	94.39	94.44	94.42	94.43
13	Dry	Dry	Dry	Dry
20	94.46	94.53	94.50	94.51

The design fluvial flood event for the development is represented by the 1.0% AEP event with allowance for climate change (i.e. the future Flood Zone 3a extent). Section 1.8 confirms a 28% climate change allowance is appropriate within Flood Zone 3a; therefore, the design flood event is the 1.0% AEP + 28% climate change event. This scenario has not been included within the 2022 Rothley Brook model; therefore, the model results for the 1.0% + 30% climate change scenario are considered representative of the design flood event. Based on the available model results, a peak design flood water level of **94.51mAOD** is inferred from node 20, adjacent to the upstream, northern site boundary.

The peak predicted 0.1% AEP flood water levels (equivalent to Flood Zone 2) exceed the design flood water levels (based on the 1.0% AEP + 30% climate change model results) at each model node. The proposed development layout (refer to Appendix 2) ensures no built development or land raising within Flood Zone 2, defined by the peak 0.1% AEP flood water levels. Therefore, it is inferred that no development is also proposed within the floodplain, defined by the design flood water level (1.0% AEP + 30% climate change).

The requirement for further fluvial flood risk mitigation measures is reviewed in Section 2.10.

2.3 Surface Water Flood Risk

Figure 7 presents an extract of the Environment Agency's risk of flooding from surface water map, with the application site outlined approximately in red. Virtually the entire site is shown to have a very low risk of surface water flooding, defined as less than 0.1% AEP. Isolated areas in the west and south of the site are indicated to have a low risk of surface water flooding, defined as between 0.1% AEP and 1.0% AEP. These represent isolated areas of potential surface water ponding, rather than overland flow pathways, and the peak predicted flood water depths are <200mm.

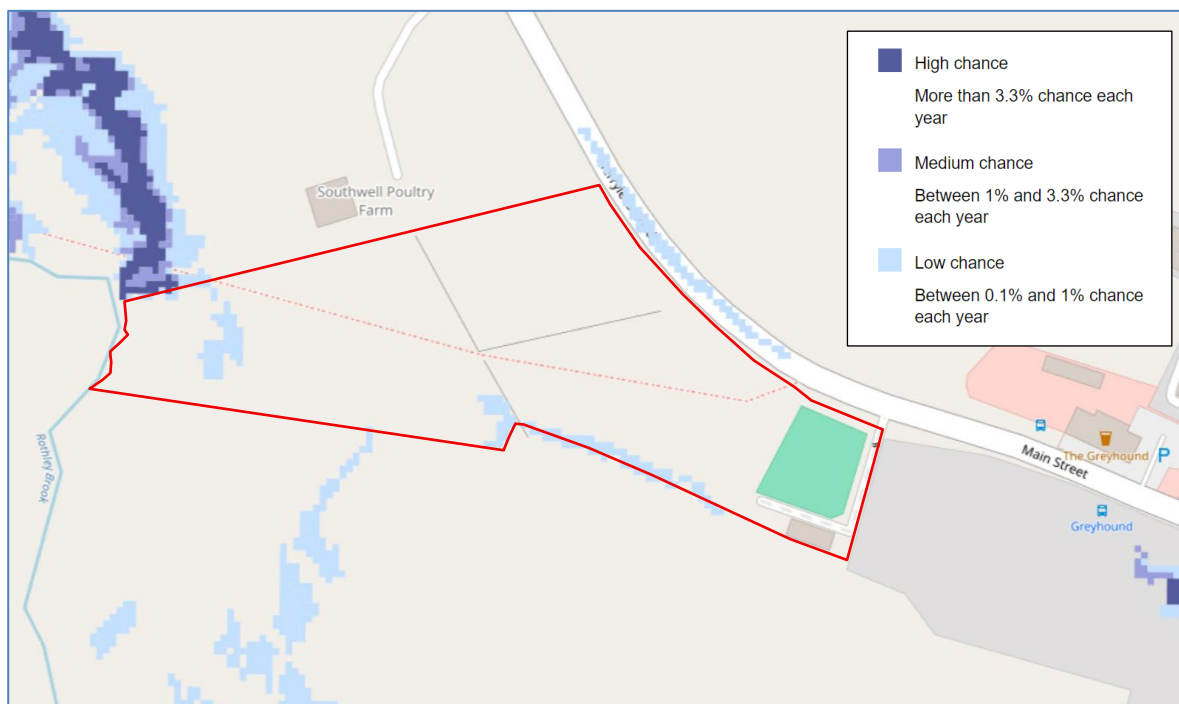


Figure 7. Environment Agency Risk of Flooding from Surface Water Map

The Environment Agency's Long Term Flood Risk Service mapping confirms the risk of surface water flooding within the site in the future with allowance for climate change (2040 - 2060) remains very low, with isolated areas of low flood risk.

The development will benefit from a sustainable surface water drainage strategy for the appropriate management of incident rainfall and surface water runoff, as outlined in Section 2.10.

2.4 Groundwater Flood Risk

The Environment Agency's online Long Term Flood Risk Service confirms the site is not within a Groundwater Flood Alert Area. Detailed map B4 of the SFRA confirms the site lies within an area with 'no risk' of groundwater flooding, as indicated on Figure 8.

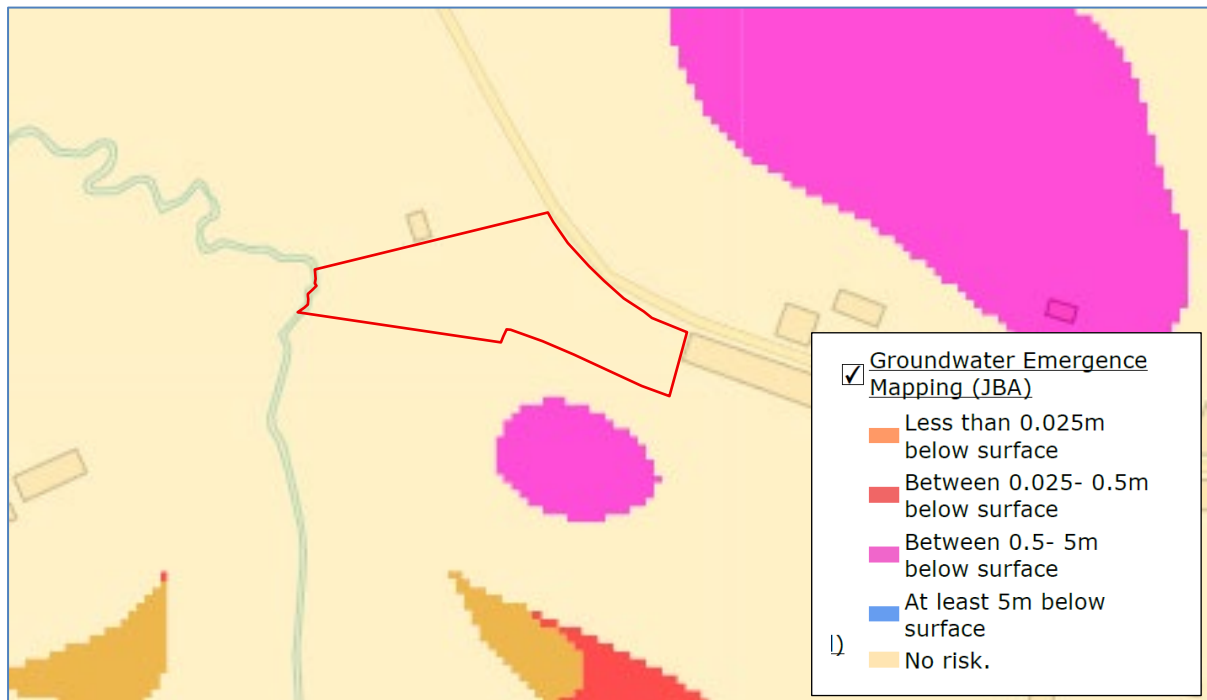


Figure 8. Groundwater Flood Risk (Extracted from SFRA Detailed Map B4)

No below ground (basement) development is proposed; therefore, the risk of groundwater flooding to the development is assessed as very low and acceptable.

2.5 Flooding from Artificial Drainage Systems

The application site comprises undeveloped agricultural/equestrian land and is semi-rural; therefore, the risk of flooding site from off-site drainage systems is assessed as very low and acceptable.

2.6 Flooding from Reservoirs and Infrastructure Failure

The Environment Agency's online Long Term Flood Risk Service and reservoir flood mapping confirms the western part of the site is within the predicted flood extent of local reservoir(s), in the unlikely event of reservoir failure. Thornton Reservoir is located approximately 2.5km north-north-west and upstream of the site and is managed by Severn Trent Water; it has a total reported capacity of 1,320,000m³.

In England, reservoirs that are capable of holding 25,000m³ or more of water are regulated under the Reservoirs Act 1975, as amended by the Flood and Water Management Act, 2010. These reservoirs are registered with the Environment Agency and subject to inspection and supervision by reservoir engineers. Therefore, due to the tight regulations on periodic inspections and maintenance of the reservoirs, the probability of reservoir failure is very unlikely and the risk of flooding to the application site from reservoirs is considered very low and acceptable.

2.7 Historic Flooding & Flood Warning Areas

Review of the Environment Agency's online recorded flood outlines and site-specific flood risk data (Appendix 3) confirms there is no record of flooding within the application site from rivers, groundwater or surface water.

The site is not located within an Environment Agency Flood Warning Area, but the western part of the site extends into the Flood Alert Area for Rothley Brook, Quorn Brook and Sileby Brook in Leicestershire. The Flood Alert Area is outlined in Figure 9 and approximately coincides with the extent of Flood Zones 2 and 3; this is discussed further in Section 2.10.

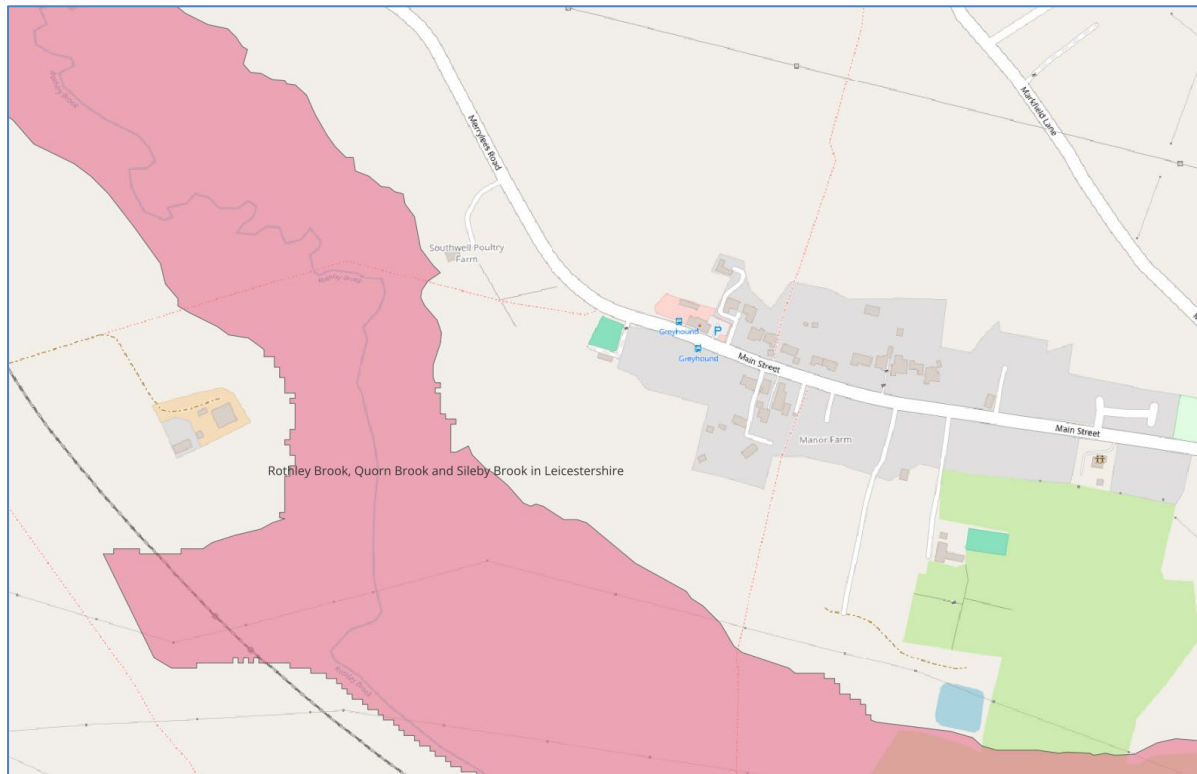


Figure 9. Environment Agency Flood Alert Area

2.8 Flood Risk Summary

Table 1 presents a summary of flood risk within the application site and identifies any requirement for flood risk mitigation.

Table 1: Hind Quarters, Botcheston – Flood Risk Summary

Source	Flood Risk within Application Site	Discussion and Flood Risk Mitigation Requirements
Fluvial Flooding	Very Low – High	The western part of the application site extends into Flood Zones 2 and 3 of the adjacent Rothley Brook. The site does not benefit from flood defences. No built development is proposed within Flood Zone 2 or 3. Section 2.2 confirms a peak predicted design flood water level of 94.51mAOD which informs appropriate flood risk mitigation measures in Section 2.10.
Tidal Flooding	N/A	No flood risk mitigation required.
Flooding from High Groundwater	Very Low	The site has ‘no risk’ of groundwater flooding. No below ground (basement) development is proposed and no flood risk mitigation required.
Surface Water Flooding	Very Low – Low	The Environment Agency’s surface water flood mapping confirms the majority of the site has a very low risk of flooding from surface water. Isolated areas of low surface water flood risk are indicated, associated with ponding of incident rainfall and runoff. A sustainable surface water drainage strategy will be developed for the management of surface water runoff and flood risk; this is discussed further in Section 2.10.
Flooding from Artificial Drainage Systems	Very Low	No flood risk mitigation required. Site drainage systems should be maintained throughout the life of the development.
Flooding due to Infrastructure Failure	Very Low	No flood risk mitigation required.

Table 1 confirms the only significant potential source of flooding within the site is Rothley Brook, which forms the site’s western boundary. Appropriate flood risk mitigation measures are outlined in Section 2.10.

2.9 The Sequential Test & Environment Agency Flood Zone Compatibility

The flood risk sequential test aims to steer new development to areas of low flood risk.

Paragraph 175 of the NPPF confirms:

The sequential test should be used in areas known to be at risk now or in the future from any form of flooding, except in situations where a site-specific flood risk assessment demonstrates that no built development within the site boundary, including access or escape routes, land raising or other potentially vulnerable elements, would be located on an area that would be at risk of flooding from any source, now and in the future (having regard to potential changes in flood risk).

The proposed development layout (refer to Appendix 2) takes into consideration the extent of Flood Zones 2 and 3 associated with Rothley Brook; no land raising, built development or site access/egress routes are proposed within Flood Zone 2 or 3. Section 2.2 of this report confirms that the peak predicted flood water levels used to define Flood Zone 2 exceed the design flood water levels, with allowance for climate change. In addition, the risk of flooding from all other potential sources is low or very low. Therefore, no development is proposed in areas at risk now or in the future from any form of flooding, confirming the flood risk sequential test does not apply.

As outlined above, the proposed development layout restricts all built development to low probability Flood Zone 1. Residential land use is defined as 'more vulnerable' development, with regard flood risk. Table 2 of the NPPF technical guidance for flood risk and coastal change confirms that all development types, including more vulnerable development, are appropriate and compatible within Flood Zone 1.

2.10 Flood Risk Mitigation Measures

The proposed development layout, as outlined in Appendix 2, has taken into consideration fluvial flood risk from Rothley Brook, with no development or land raising proposed within Flood Zone 2 or 3. As detailed in Section 2.2, no development or land raising is proposed within the floodplain, defined by the design flood water level (equivalent to 1.0% AEP + climate change).

All areas of proposed development, including the site access/egress route, are within low probability Flood Zone 1 and outside the extent of the Environment Agency's Flood Alert Area. Therefore, there is no requirement for a Flood Warning and Evacuation Plan.

The peak predicted design flood water level for the site is 94.51mAOD; the following flood risk mitigation measures are recommended, based on the site setting, the design flood water level and the Environment Agency's standing advice for vulnerable development:

- A minimum finished floor level of **94.81mAOD** (equivalent to 300mm above the design flood water level) is recommended. If it is not feasible to raise the finished floor level to 94.81mAOD, floor levels should be raised as high as practicable and passive flood resistant design incorporated to 94.81mAOD. Flood resistant design aims to keep flood water out of the building; measures include use of flood proof doors, anti-flood air bricks, low permeability construction materials and sealed or raised service entry points. Flood resistant products should meet British Standard BS851188-1:2019+A1:2021.
- External site levels should be designed with a nominal fall away from the buildings towards surface water drainage infrastructure. A sustainable surface water drainage strategy is required for the development to ensure the appropriate management of incident rainfall and surface water runoff. The drainage strategy should be designed to manage runoff during rainfall events up to and including the 100-year + 40% climate change event, with off-site discharge restricted to the pre-development Greenfield rate. Rainwater harvesting (e.g. water butts) should be maximised and the potential for infiltration drainage should be investigated via infiltration testing; however, due to the low permeability ground conditions it is assumed that the majority of surface water runoff would discharge via a controlled outfall to Rothley Brook, in accordance with the drainage hierarchy. The sustainable drainage (SuDS) strategy should be designed in accordance

with The SuDS Manual⁷ and should provide multiple benefits, where feasible, including surface water attenuation, water quality, amenity and biodiversity. The drainage strategy report should include details of long-term maintenance and management responsibilities and schedules.

- Rothley Brook is classified as a main river; therefore, any works within 8m of the edge of the river bank are subject to the Environmental Permitting Regulations and specifically the requirement for a Flood Risk Activity Permit. Outfall pipes less than 300mm diameter through a headwall are exempt from Flood Risk Activity Permit requirements, but an exemption must be registered with the Environment Agency, and works must be undertaken in accordance with the conditions of the exemption. Alternatively, a Flood Risk Activity Permit would be required for the works.

⁷ CIRIA, 2007, C753, The SuDS Manual.

3.0 SUMMARY AND CONCLUSIONS

This report represents a site-specific Flood Risk Assessment to support a planning application for residential development at Hind Quarters, Main Street, Botcheston.

The Environment Agency flood map for planning indicates that the western part of the application site extends into Flood Zones 2 and 3 associated with the adjacent Rothley Brook; therefore, a detailed site-specific FRA is required. The development layout takes into consideration the flood zone extents, with no land raising, built development, access or egress routes proposed within Flood Zone 2 or 3; therefore, the flood risk sequential test does not apply.

A review of all potential sources of flooding to the site has been undertaken and the Environment Agency has been consulted for flood model data for Rothley Brook.

The 2022 Rothley Brook flood model confirms a peak predicted design flood water level of 94.51mAOD during the 1.0% AEP + climate change flood event; this is less than the 0.1% AEP flood water level that defines Flood Zone 2. Therefore, no development or land raising is proposed within the floodplain, as defined by the design flood event. The risk of flooding from all other potential sources is assessed as low or very low and acceptable.

The following flood risk mitigation measures are recommended, based on current guidance and the findings of this FRA:

- A minimum finished floor level of **94.81mAOD** (equivalent to 300mm above the design flood water level) is recommended. If it is not feasible to raise the finished floor level to 94.81mAOD, floor levels should be raised as high as practicable and passive flood resistant design incorporated to 94.81mAOD. Flood resistant design aims to keep flood water out of the building; measures include use of flood proof doors, anti-flood air bricks, low permeability construction materials and sealed or raised service entry points. Flood resistant products should meet British Standard BS851188-1:2019+A1:2021.
- External site levels should be designed with a nominal fall away from the buildings towards surface water drainage infrastructure. A sustainable surface water drainage strategy is required for the development to manage runoff during rainfall events up to and including the 100-year + 40% climate change event, with off-site discharge restricted to the pre-development Greenfield rate.
- Rothley Brook is classified as a main river; therefore, any works within 8m of the edge of the river bank are subject to the Environmental Permitting Regulations and specifically the requirement for a Flood Risk Activity Permit. Outfall pipes less than 300mm diameter through a headwall are exempt from Flood Risk Activity Permit requirements, but an exemption must be registered with the Environment Agency, and works must be undertaken in accordance with the conditions of the exemption.

In summary, this FRA concludes that with the proposed mitigation, the proposed residential development on land off Main Street, Botcheston is appropriate and sustainable with regards to flood risk.

4.0 CLOSURE

This report has been prepared with all reasonable skill and care, and in accordance with the services agreed with the Mr. & Mrs. Dulan. Relevant information provided by Mr. & Mrs. Dulan has been accepted in good faith as being accurate and valid. This report is based on the relevant guidance and legislation in force at the date of the report and should be reviewed if such guidance and legislation are amended or superseded.

Swan Environmental Services do not warrant that the advice in this report will guarantee the availability of flood insurance either now or in the future.

It will be the owner's /occupier's responsibility to ensure the recommended flood risk mitigation measures outlined within this FRA are implemented and to maintain any site drainage systems throughout the lifetime of the development.

This report is for the exclusive use of Mr. & Mrs. Dulan; no warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from Swan Environmental Services.

APPENDIX 1 – Site Location Plan

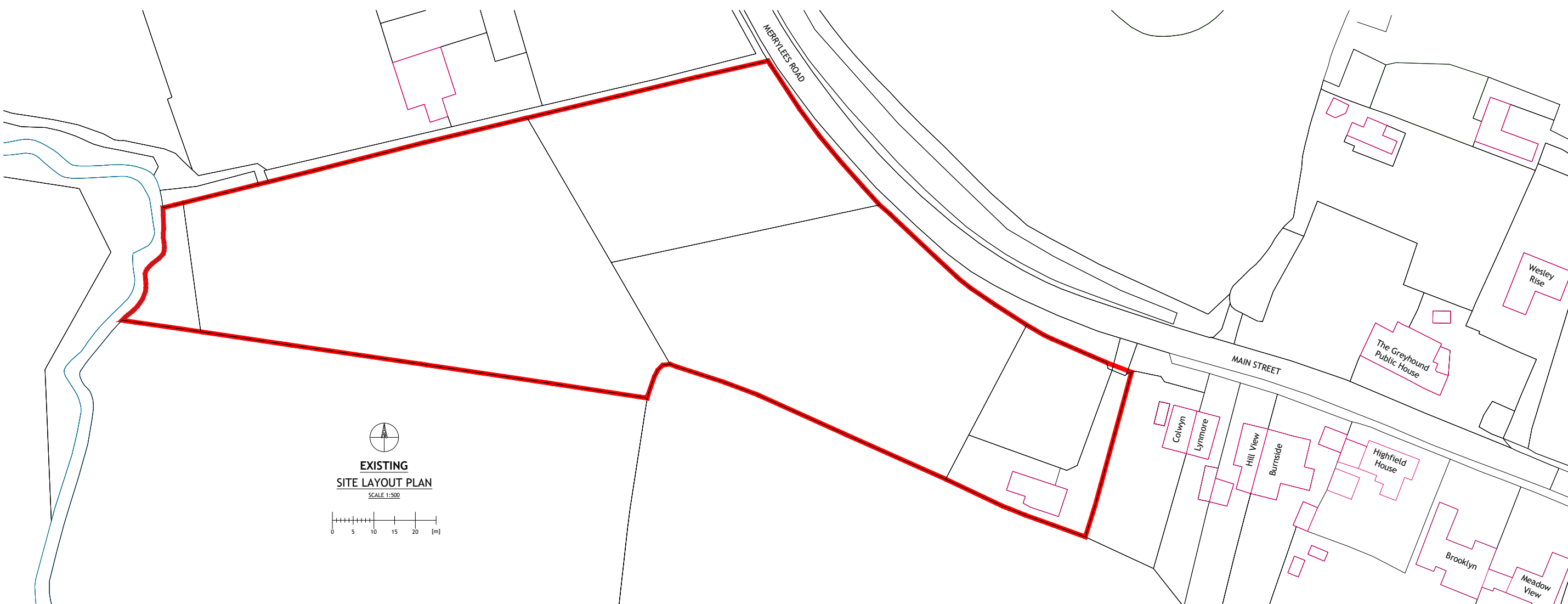


NO.	DR.	INFO
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APPENDIX 2 – Existing and Proposed Development Layout Plans



ACCOMMODATION SCHEDULE
SEMI 130 m² - 6
SEMI 120 m² - 16
DETACHED 160 m² - 4

NO.	DR.	INFO
DATE		
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APPENDIX 3 – Environment Agency Product 4 Data



Nicola Sugg
Via Email

Our Ref: EIR2026/20803

Your Ref:

Date: 18/05/2026

Dear Nicola,

Enquiry regarding Product 4 - LE9 9FF

Thank you for your enquiry which was received on 19/04/2026.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004. The information is attached.

Product 4

Detailed Flood Risk Assessment Map/data for the above site.

The Flood Map for Planning is now classed as Open Data. As such it can be downloaded free of charge under an open data licence from the following address:
[Flood map for planning - GOV.UK](#)

Please refer to [Open Government Licence](#) which explains the permitted use of this information.

Information Warning - OS background mapping

The mapping of features provided as a background in this product is © Ordnance Survey. It is provided to give context to this product. The Open Government Licence does not apply to this background mapping. You are granted a non-exclusive, royalty free, revocable licence solely to view the Licensed Data for non-commercial purposes for the period during which the Environment Agency makes it available. You are not permitted to copy, sub-license, distribute, sell or otherwise make available the Licensed Data to third parties in any form. Third party rights to enforce the terms of this licence shall be reserved to OS.

Attribution

Contains Environment Agency information © Environment Agency and/or database rights.

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Data Available Online

Many of our flood datasets are available online:

- Flood Map For Planning ([Flood Zone 2](#), [Flood Zone 3](#), [Flood Storage Areas](#), [Flood Defences](#), [Areas Benefiting from Defences](#), ,)
- [Risk of Flooding from Rivers and Sea](#)
- [Historic Flood Map](#)
- [Current Flood Warnings](#)

Please get in touch if you have any further queries or contact us within two months if you'd like us to review the information we have sent.

Yours sincerely

EMD Customers & Engagement Team
East Midlands

For further information please contact the Customers & Engagement Team on 02084 747770

Direct e-mail:- EMDenquiries@environment-agency.gov.uk

ENC – FRA Advisory Text

To report environmental problems please visit www.gov.uk/report-environmental-problem or call the incident hotline on 0800 80 70 60

Flood Map for Planning: The Flood Map for Planning is now classed as Open Data. As such it can be downloaded free of charge under an open data licence from the following addresses:

- <https://flood-map-for-planning.service.gov.uk/>

This location is within Flood Zone 3.

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.
- ignore the presence of defences,
- do not take into account potential impacts of climate change.
- The Flood Map for Planning on Gov.uk was last updated in Winter 2025 as part of our new National Flood Risk Assessment, NaFRA2.
- Our new National Flood Risk Assessment has improved the quality and consistency of our national flood risk products due to better methods and input data. This means there are some changes to flood risk information in many areas when the new data has been published.

Probability	Percentage chance of flooding each year
1 in 2 year	50%
1 in 5 year	20%
1 in 20 year	5%
1 in 50 year	2%
1 in 100 year	1%
1 in 1000 year	0.1%
Surface Water Flooding	
1 in 30	High Risk
1 in 100	Medium Risk
1 in 1000	Low Risk

Zone 1: Low Probability	Land having a less than 0.1% annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map for Planning – all land outside Zones 2, 3a and 3b)
Zone2: Medium Probability	Land having between a 1% and 0.1% annual probability of river flooding; or land having between a 0.5% and 0.1% annual probability of sea flooding. (Land shown in light blue on the Flood Map)
Zone 3a: High Probability	Land having a 1% (1 in 100) or greater annual probability of river flooding; or Land having a 0.5% or greater annual probability of sea. (Land shown in dark blue on the Flood Map)
Zone 3b: Functional Floodplain	• land having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or • land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding). • Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. • (Not separately distinguished from Zone 3a on the Flood Map)

Updated Climate Change Guidance: On 19th February 2016, the [Flood risk assessments: climate change allowances](#) was published on www.gov.uk website. It has replaced previous guidance [Climate Change Allowances for Planners](#). The climate change guidance can be found at: <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

The climate change allowances for this location are:

-  **28% (central)**
-  **37% (higher central),**
-  **60% (upper)**

Defence Information Flood defence data is routinely updated and freely available at: [AIMS Spatial Flood Defences \(inc. standardised attributes\) - data.gov.uk](#) and [AIMS Asset Bundle - data.gov.uk](#).

There are no Environment Agency maintained raised defences in this area.

Historic Information: We have no records of historic fluvial flooding at this location. However, we would advise that this does not mean there has never been historic flooding in this location or that the area is automatically free from a risk of flooding. We do not claim that all flood events have been recorded.

Surface Water & Drainage: The Environment Agency (empowered under the Water Resources Act 1991) concentrates on the major elements of the drainage system, managing flood risk arising from designated "main rivers" and the sea. The Flood & Water Management Act (2010) has given Lead Local Flood Authorities (LLFAs) responsibility for the management of local flood risk, which includes surface runoff, groundwater, and flooding from ordinary watercourses (smaller rivers and streams). The LLFA for this area is **Leicestershire County Council**, and we recommend that you contact them with concerns about any flooding issues for this area.

Further information and maps for surface water, ordinary watercourses, and reservoir flooding can be found here: <https://www.gov.uk/check-long-term-flood-risk> ; [Reservoir flood maps: when and how to use them - GOV.UK \(www.gov.uk\)](#)

Open Data Information: Many datasets are now classed as Open Data and as such can be downloaded free of charge under an open data licence from the following address: <https://data.gov.uk/publisher/environment-agency>

Permitting Information: Under the Environmental Permitting (England and Wales) Regulations 2016, any permanent or temporary works in, over or under a designated main river will require an Environmental Permit for Flood Risk Activities from the Environment Agency. Any permanent or temporary works within 8 metres of the top of bank of a designated main river, or landward toe of a flood

defence may require an Environmental Permit for Flood Risk Activities from the Environment Agency. In addition, any permanent or temporary works within the floodplain of a designated main river may also require an Environmental Permit for Flood Risk Activities. To find out whether your activity requires a permit or falls under a relevant exclusion, exemption or standard rule please follow this link: <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits>. The Environment Agency require access to the watercourse and free movement up to 8m from the river bank/ defence for maintenance purposes.

Please note that a permit is separate to and in addition to any planning permission granted.

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. 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 Assessment Advisory: All guidance on how to complete a full site specific Flood Risk Assessment (FRA) can be found here: [Flood risk and coastal change - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/flood-risk-and-coastal-change). Furthermore, information on how to use modelling for FRA's can be found here: [Using modelling for flood risk assessments - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/using-modelling-for-flood-risk-assessments). In addition, professional assistance can be provided by our planning officers, by contacting planning.trentside@environment-agency.gov.uk.

Flood risk assessment data



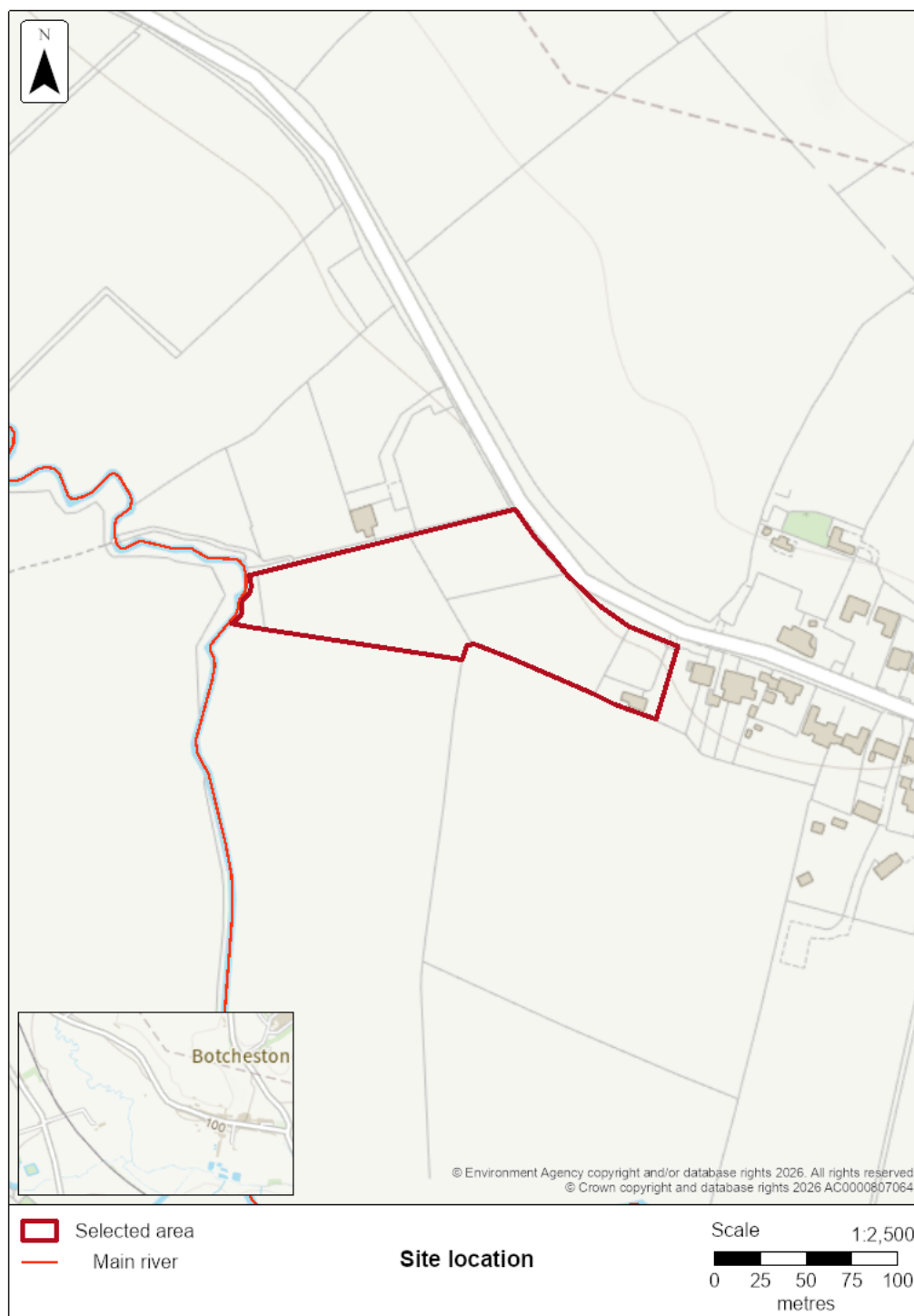
Location of site: 447852 / 305054 (shown as easting and northing coordinates)

Document created on: 18 April 2026

This information was previously known as a product 4.

Customer reference number: 2NDYWCKB7UUY

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)
- 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

Information that's unavailable

This document **does not** contain:

- past floods
- flood defences and attributes

We do not have past flooding data for this location.

Please note that:

- 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 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.

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 Leicestershire County.

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

About the models used

Model name: 2022_RothleyBrook

Scenario(s): Defended fluvial, defences removed fluvial, defended climate change fluvial

Date: 24 November 2021

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



Flood map for planning

Location (easting/northing)
447852/305054

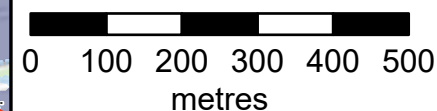
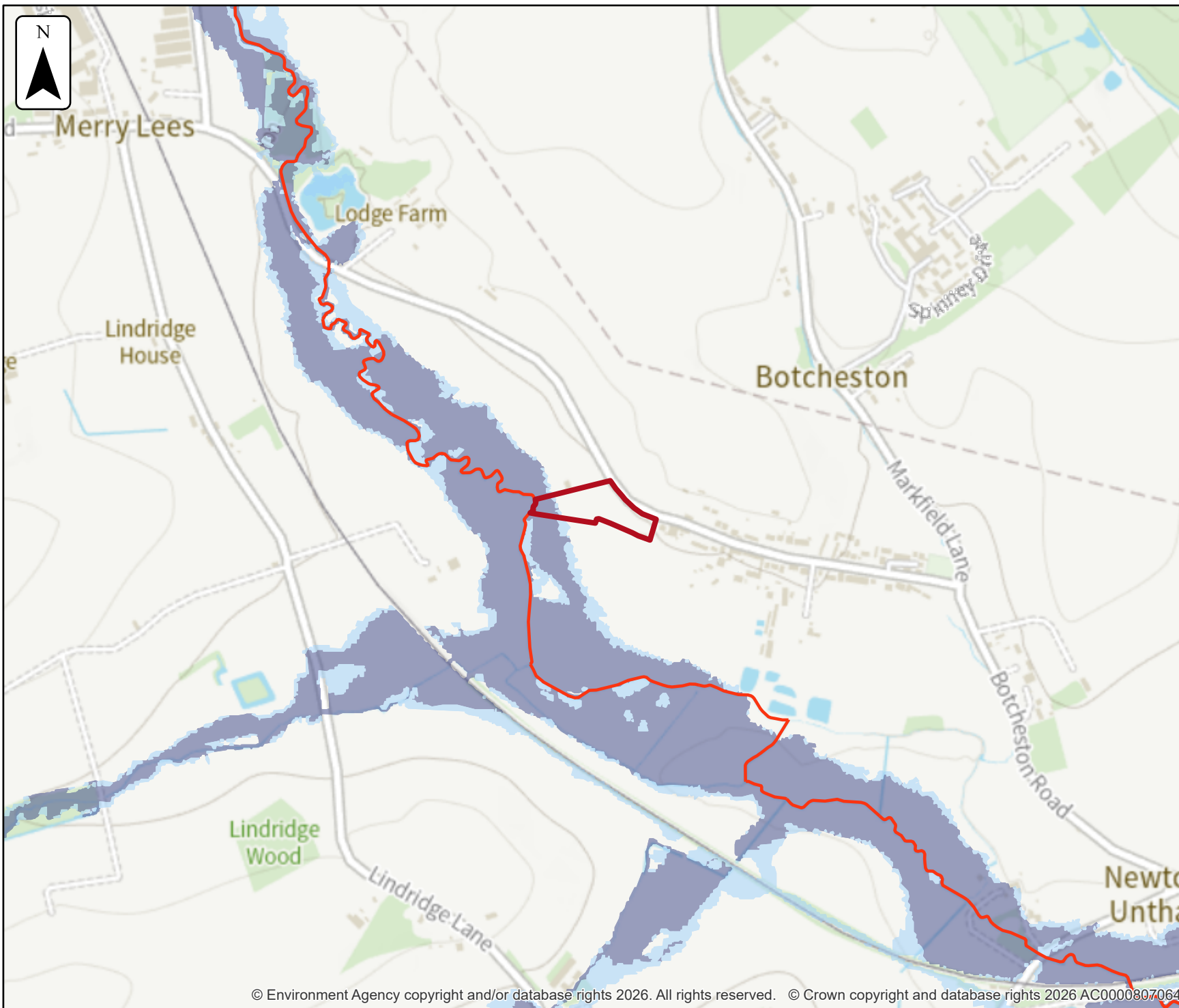
Scale

1:10,000

Created

18 Apr 2026

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



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:

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



Defences removed modelled fluvial extent

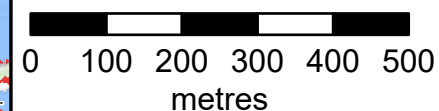
Location (easting/northing)
447852/305054

Scale Created
1:10,000 18 Apr 2026

Model name
2022 RothleyBrook

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

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





Defended climate change modelled fluvial extent

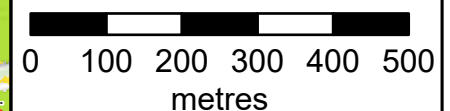
Location (easting/northing)
447852/305054

Scale Created
1:10,000 18 Apr 2026

Model name
2022 RothleyBrook

-  Selected area
-  Main river
- Modelled flood extent
-  1% AEP (+20%)
 -  1% AEP (+30%)
 -  1% AEP (+50%)

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





Defended modelled fluvial extent

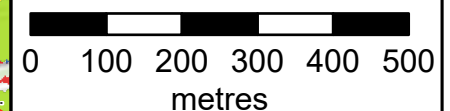
Location (easting/northing)
447852/305054

Scale Created
1:10,000 18 Apr 2026

Model name
2022 RothleyBrook

-  Selected area
-  Main river
- Modelled flood extent
 -  5% AEP
 -  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





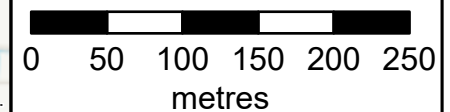
Defended modelled fluvial node locations

Location (easting/northing)
447852/305054

Scale Created
1:5,000 18 Apr 2026

Model name
2022 RothleyBrook

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defended

Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Level	Level	Level	Level	Level	Level	Level	Level	Level	Level
1	1429812	447392	305310	96.21	96.31	96.43	96.49	96.50	96.51	96.52	96.53	96.54	96.95
2	1429888	447411	305296	96.16	96.26	96.36	96.42	96.44	96.45	96.47	96.48	96.54	96.67
3	1429667	447489	305218	95.54	95.63	95.73	95.80	95.84	95.91	95.97	96.02	96.14	96.25
4	1429823	447562	305157	94.87	94.98	95.11	95.19	95.23	95.29	95.31	95.33	95.38	95.41
5	1429819	447707	304993	93.59	93.69	93.80	93.91	93.95	93.98	94.0	94.01	94.04	94.14
6	1429720	447710	304693	92.47	92.53	92.59	92.65	92.70	92.77	92.81	92.83	92.88	92.95
7	1429719	447721	304752	92.90	92.92	92.95	92.97	92.98	92.99	93.0	93.01	93.02	93.05
8	1429827	447721	304820	92.93	92.95	92.97	93.0	93.01	93.02	93.03	93.04	93.07	93.13
9	1429808	447768	304641	91.61	91.64	91.70	91.75	91.78	91.83	91.88	91.90	91.95	92.02
10	1429666	447884	304573	91.09	91.13	91.19	91.24	91.29	91.35	91.40	91.43	91.49	91.59

Data in this table comes from the 2022 RothleyBrook 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.

Defended

Label	Modelled location ID	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
				Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
1	1429812	447392	305310	5.15	6.19	7.50	8.21	8.40	8.55	8.59	8.60	8.64	9.18
2	1429888	447411	305296	5.15	6.19	7.50	8.21	8.40	8.55	8.59	8.60	8.75	9.17
3	1429667	447489	305218	5.45	6.52	7.90	8.69	8.95	9.20	9.46	9.70	10.55	12.55
4	1429823	447562	305157	5.45	6.52	7.90	8.79	9.39	10.37	11.13	11.70	12.99	16.37
5	1429819	447707	304993	5.45	6.52	7.99	9.48	10.19	10.80	11.19	11.44	12.09	12.61
6	1429720	447710	304693	4.85	5.14	5.43	5.65	5.75	5.89	6.02	6.11	6.30	6.62
7	1429719	447721	304752	4.85	5.14	5.43	5.65	5.75	5.89	6.02	6.11	6.30	6.62
8	1429827	447721	304820	5.59	6.37	7.18	7.80	8.07	8.29	8.41	8.50	8.80	8.82
9	1429808	447768	304641	5.03	5.44	5.97	6.57	7.06	7.78	8.37	8.70	9.44	11.03
10	1429666	447884	304573	5.03	5.44	5.99	6.57	7.06	7.81	8.43	8.78	9.49	10.47

Data in this table comes from the 2022 RothleyBrook 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.



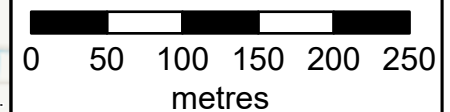
Defences removed modelled fluvial node locations

Location (easting/northing)
447852/305054

Scale Created
1:5,000 18 Apr 2026

Model name
2022 RothleyBrook

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defences removed

Label	Modelled location ID	Easting	Northing	1% AEP	0.1% AEP	1% AEP	0.1% AEP
				Level	Level	Flow	Flow
1	1429812	447392	305310	96.53	96.95	8.60	9.40
2	1429888	447411	305296	96.48	96.67	8.60	9.40
3	1429667	447489	305218	96.02	96.25	9.70	12.56
4	1429823	447562	305157	95.33	95.41	11.70	16.37
5	1429819	447707	304993	94.01	94.14	11.44	12.61
6	1429720	447710	304693	92.83	92.95	6.11	6.62
7	1429719	447721	304752	93.01	93.05	6.11	6.62
8	1429827	447721	304820	93.04	93.13	8.50	8.82
9	1429808	447768	304641	91.90	92.02	8.70	11.03
10	1429666	447884	304573	91.43	91.59	8.78	10.47

Data in this table comes from the 2022 RothleyBrook 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.



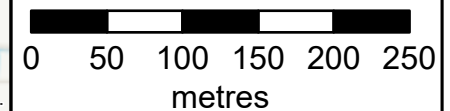
Defended climate change modelled fluvial node locations

Location (easting/northing)
447852/305054

Scale Created
1:5,000 18 Apr 2026

Model name
2022 RothleyBrook

-  Selected area
-  Modelled location
-  Main river



Modelled node locations data

Defended climate change

Label	Modelled location ID	Easting	Northing	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)
				Level	Level	Level	Flow	Flow	Flow
1	1429812	447392	305310	96.55	96.55	96.93	8.60	8.61	9.47
2	1429888	447411	305296	96.56	96.59	96.65	8.61	8.61	9.44
3	1429667	447489	305218	96.15	96.19	96.24	10.77	11.21	12.20
4	1429823	447562	305157	95.37	95.38	95.40	13.43	14.32	15.89
5	1429819	447707	304993	94.05	94.08	94.12	12.20	12.31	12.53
6	1429720	447710	304693	92.89	92.91	92.94	6.35	6.45	6.60
7	1429719	447721	304752	93.03	93.03	93.05	6.35	6.45	6.60
8	1429827	447721	304820	93.07	93.09	93.12	8.76	8.78	8.82
9	1429808	447768	304641	91.96	91.98	92.01	9.63	10.10	10.82
10	1429666	447884	304573	91.50	91.53	91.57	9.66	10.01	10.40

Data in this table comes from the 2022 RothleyBrook 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.



Defended modelled fluvial extent and height

Location (easting/northing)
447852/305054

Scale Created
1:2,500 18 Apr 2026

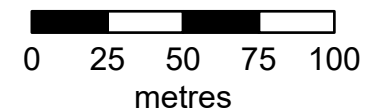
Model name
2022 RothleyBrook

-  Selected area
-  Main river

Modelled 2D grid
Water level in mAOD

-  92 - 92.625
-  92.625 - 93.25
-  93.25 - 93.875
-  93.875 - 94.5
-  94.5 - 95.125
-  95.125 - 95.75
-  95.75 - 96.375
-  96.375 - 97.0
-  97.0 - 97.625

This map shows the
0.1% AEP height data



Sample point data

Defended

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height	Height	Height
1	447920	304985	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
2	447954	304985	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
3	447750	305019	NoData	NoData	NoData	NoData	NoData	94.11	94.12	94.13	94.16	94.19
4	447784	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	94.18	94.19
5	447818	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
6	447852	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
7	447886	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
8	447920	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
9	447954	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
10	447988	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
11	447716	305053	NoData	NoData	NoData	NoData	NoData	94.27	94.30	94.32	94.36	94.41
12	447750	305053	NoData	NoData	NoData	NoData	NoData	NoData	94.38	94.39	94.42	94.44

[illegible]

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Height	Height	Height	Height	Height	Height	Height	Height	Height	Height
25	447920	305087	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
26	447852	305121	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
27	447886	305121	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			93.90	94.01	94.15	94.34	94.36	94.40	94.43	94.45	94.49	94.52

Data in this table comes from the 2022 RothleyBrook 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.

Defended

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
1	447920	304985	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
2	447954	304985	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
3	447750	305019	NoData	NoData	NoData	NoData	NoData	0.00	0.01	0.02	0.05	0.08
4	447784	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	0.02	0.03
5	447818	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
6	447852	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
7	447886	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
8	447920	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
9	447954	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
10	447988	305019	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
11	447716	305053	NoData	NoData	NoData	NoData	NoData	0.08	0.12	0.14	0.18	0.22
12	447750	305053	NoData	NoData	NoData	NoData	NoData	NoData	0.00	0.01	0.04	0.06

[illegible]

Label	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.33% AEP	2% AEP	1.33% AEP	1% AEP	0.5% AEP	0.1% AEP
			Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth	Depth
25	447920	305087	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
26	447852	305121	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
27	447886	305121	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			1.06	1.11	1.18	1.25	1.27	1.29	1.31	1.32	1.34	1.36

Data in this table comes from the 2022 RothleyBrook 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.



Defences removed modelled fluvial extent and height

Location (easting/northing)
447852/305054

Scale Created
1:2,500 18 Apr 2026

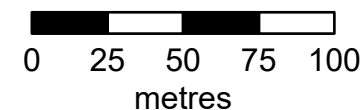
Model name
2022 RothleyBrook

-  Selected area
-  Main river

Modelled 2D grid
Water level in mAOD

-  92 - 92.625
-  92.625 - 93.25
-  93.25 - 93.875
-  93.875 - 94.5
-  94.5 - 95.125
-  95.125 - 95.75
-  95.75 - 96.375
-  96.375 - 97.0
-  97.0 - 97.625

This map shows the
0.1% AEP height data



Sample point data

Defences removed

Label	Easting	Northing	1% AEP	0.1% AEP	1% AEP	0.1% AEP
			Height	Height	Depth	Depth
1	447920	304985	NoData	NoData	NoData	NoData
2	447954	304985	NoData	NoData	NoData	NoData
3	447750	305019	94.13	94.19	0.02	0.08
4	447784	305019	NoData	94.19	NoData	0.03
5	447818	305019	NoData	NoData	NoData	NoData
6	447852	305019	NoData	NoData	NoData	NoData
7	447886	305019	NoData	NoData	NoData	NoData
8	447920	305019	NoData	NoData	NoData	NoData
9	447954	305019	NoData	NoData	NoData	NoData
10	447988	305019	NoData	NoData	NoData	NoData
11	447716	305053	94.32	94.41	0.14	0.22
12	447750	305053	94.39	94.44	0.01	0.06

Label	Easting	Northing	1% AEP	0.1% AEP	1% AEP	0.1% AEP
			Height	Height	Depth	Depth
13	447784	305053	NoData	NoData	NoData	NoData
14	447818	305053	NoData	NoData	NoData	NoData
15	447852	305053	NoData	NoData	NoData	NoData
16	447886	305053	NoData	NoData	NoData	NoData
17	447920	305053	NoData	NoData	NoData	NoData
18	447954	305053	NoData	NoData	NoData	NoData
19	447716	305087	94.50	94.58	1.05	1.13
20	447750	305087	94.46	94.53	0.12	0.20
21	447784	305087	NoData	NoData	NoData	NoData
22	447818	305087	NoData	NoData	NoData	NoData
23	447852	305087	NoData	NoData	NoData	NoData
24	447886	305087	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP	0.1% AEP	1% AEP	0.1% AEP
			Height	Height	Depth	Depth
25	447920	305087	NoData	NoData	NoData	NoData
26	447852	305121	NoData	NoData	NoData	NoData
27	447886	305121	NoData	NoData	NoData	NoData
Max value in selected area:			94.45	94.52	1.32	1.36

Data in this table comes from the 2022 RothleyBrook 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.



Defended climate change modelled fluvial extent and height

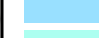
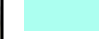
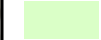
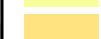
Location (easting/northing)
447852/305054

Scale Created
1:2,500 18 Apr 2026

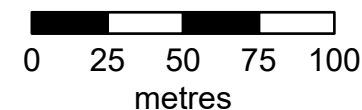
Model name
2022 RothleyBrook

-  Selected area
-  Main river

Modelled 2D grid
Water level in mAOD

-  92 - 92.625
-  92.625 - 93.25
-  93.25 - 93.875
-  93.875 - 94.5
-  94.5 - 95.125
-  95.125 - 95.75
-  95.75 - 96.375
-  96.375 - 97.0
-  97.0 - 97.625

This map shows the
1% AEP +50% height data



Sample point data

Defended climate change

Label	Easting	Northing	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)
			Height	Height	Height	Depth	Depth	Depth
1	447920	304985	NoData	NoData	NoData	NoData	NoData	NoData
2	447954	304985	NoData	NoData	NoData	NoData	NoData	NoData
3	447750	305019	94.17	94.17	94.19	0.06	0.06	0.08
4	447784	305019	94.19	94.19	94.19	0.03	0.03	0.03
5	447818	305019	NoData	NoData	NoData	NoData	NoData	NoData
6	447852	305019	NoData	NoData	NoData	NoData	NoData	NoData
7	447886	305019	NoData	NoData	NoData	NoData	NoData	NoData
8	447920	305019	NoData	NoData	NoData	NoData	NoData	NoData
9	447954	305019	NoData	NoData	NoData	NoData	NoData	NoData
10	447988	305019	NoData	NoData	NoData	NoData	NoData	NoData
11	447716	305053	94.37	94.38	94.40	0.19	0.20	0.22
12	447750	305053	94.42	94.43	94.44	0.04	0.05	0.06

Label	Easting	Northing	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)
			Height	Height	Height	Depth	Depth	Depth
13	447784	305053	NoData	NoData	NoData	NoData	NoData	NoData
14	447818	305053	NoData	NoData	NoData	NoData	NoData	NoData
15	447852	305053	NoData	NoData	NoData	NoData	NoData	NoData
16	447886	305053	NoData	NoData	NoData	NoData	NoData	NoData
17	447920	305053	NoData	NoData	NoData	NoData	NoData	NoData
18	447954	305053	NoData	NoData	NoData	NoData	NoData	NoData
19	447716	305087	94.56	94.56	94.57	1.11	1.11	1.12
20	447750	305087	94.50	94.51	94.53	0.17	0.18	0.19
21	447784	305087	NoData	NoData	NoData	NoData	NoData	NoData
22	447818	305087	NoData	NoData	NoData	NoData	NoData	NoData
23	447852	305087	NoData	NoData	NoData	NoData	NoData	NoData
24	447886	305087	NoData	NoData	NoData	NoData	NoData	NoData

Label	Easting	Northing	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)	1% AEP (+20%)	1% AEP (+30%)	1% AEP (+50%)
			Height	Height	Height	Depth	Depth	Depth
25	447920	305087	NoData	NoData	NoData	NoData	NoData	NoData
26	447852	305121	NoData	NoData	NoData	NoData	NoData	NoData
27	447886	305121	NoData	NoData	NoData	NoData	NoData	NoData
Max value in selected area:			94.50	94.50	94.51	1.34	1.35	1.35

Data in this table comes from the 2022 RothleyBrook model. Height values are shown in mAOD, and depth values are shown in metres.

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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 Leicestershire County.

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 East Midlands Environment Agency team at emdenquiries@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