# Appendix 5

# Flood Maps

# Flood map for planning

| Your reference | Location (easting/northing) | Created |
|---|---|---|
| **Unspecified** | **535124/137154** | **25 November 2025 11:10** |

**Your selected location is in flood zone 1, an area with a low probability of flooding.**

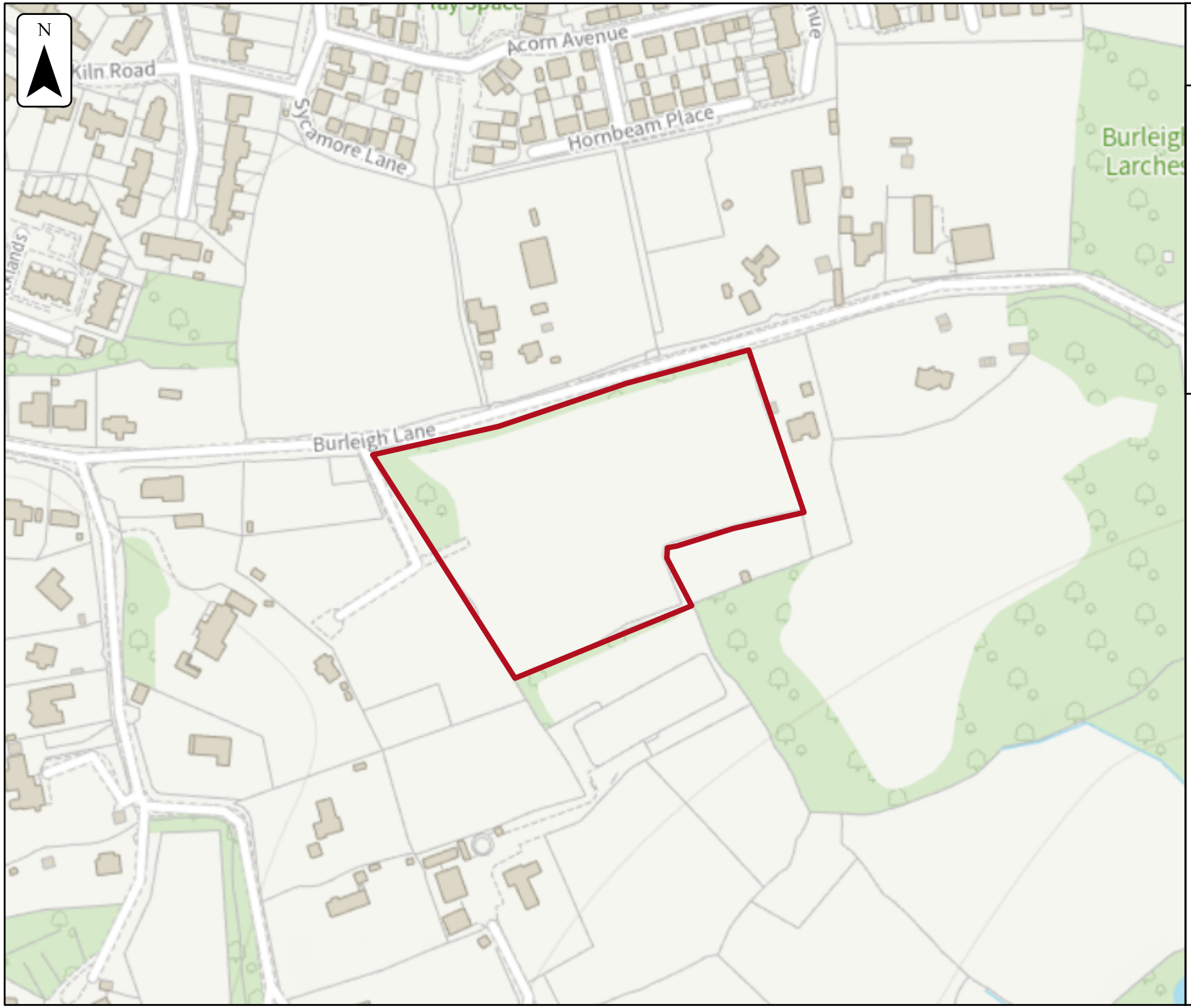
You will need to do a flood risk assessment if your site is **any of the following**:

- bigger than 1 hectare (ha)
- in an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

**Notes**

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.




Environment Agency

## Flood map for planning

Your reference
**Unspecified**

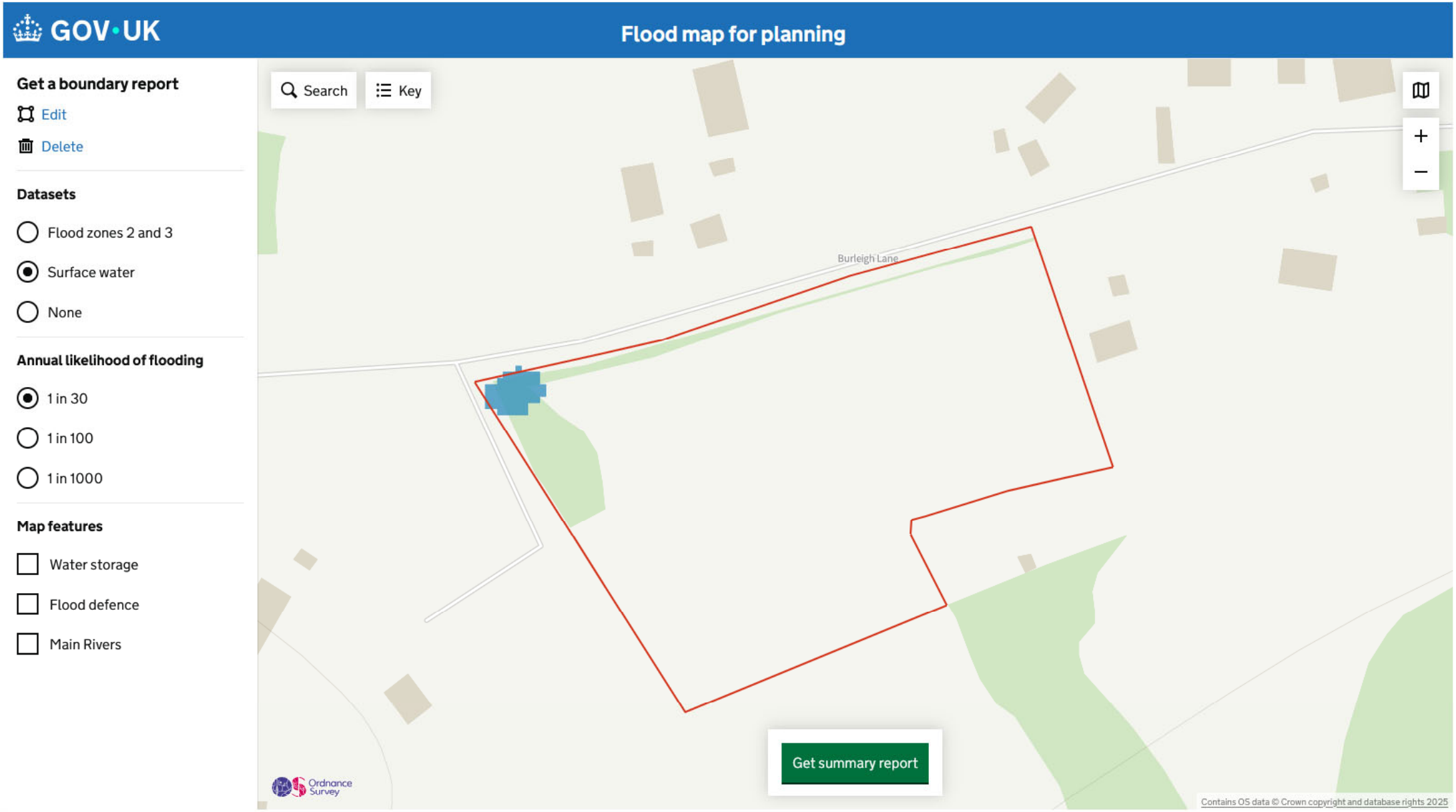
Location (easting/northing)
**535124/137154**

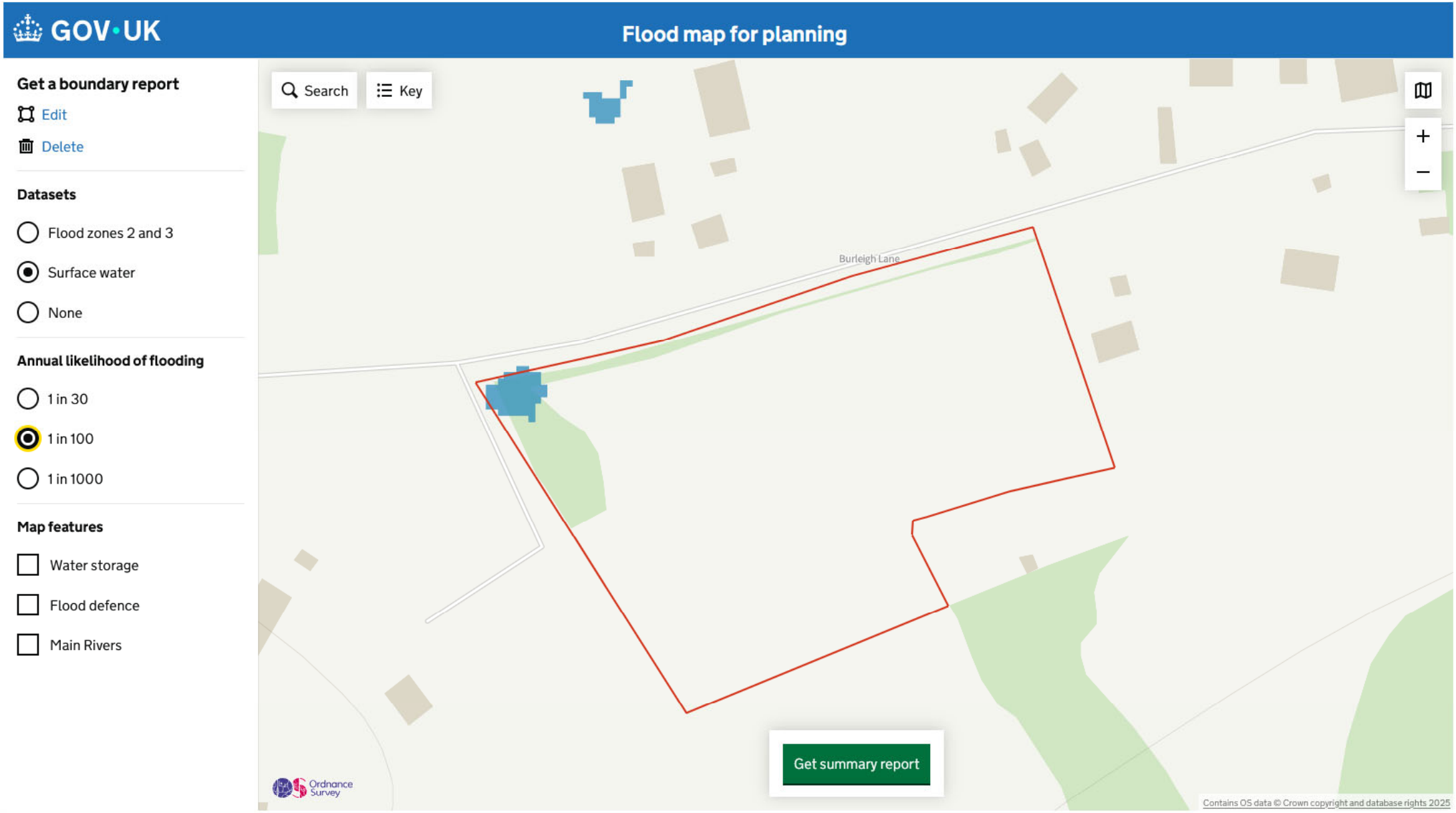
Scale
**1:2,500**

Created
**25 Nov 2025 11:10**

- Selected area
- Flood zone 3
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Water storage area

0 20 40 60 m


GOV·UK
Flood map for planning
Get a boundary report
Edit
Delete
Datasets
Flood zones 2 and 3
Surface water
None
Annual likelihood of flooding
1 in 30
1 in 100
1 in 1000
Map features
Water storage
Flood defence
Main Rivers
Search
Key
Burleigh Lane
Get summary report
Ordnance Survey
Contains OS data © Crown copyright and database rights 2025


GOV·UK
Flood map for planning
Get a boundary report
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None
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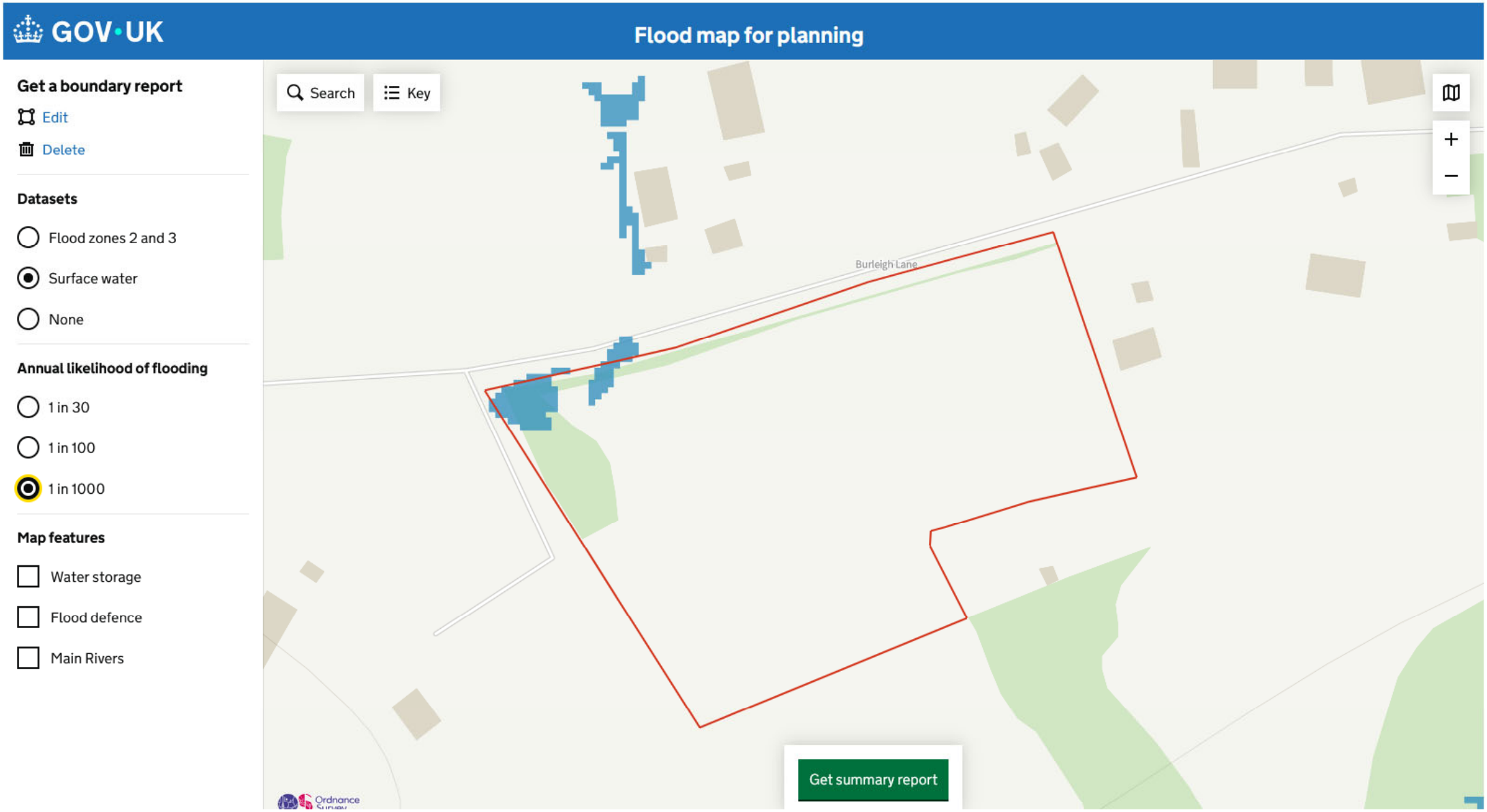
GOV·UK
Flood map for planning
Get a boundary report
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Map features
Water storage
Flood defence
Main Rivers
Search
Key
Burleigh Lane
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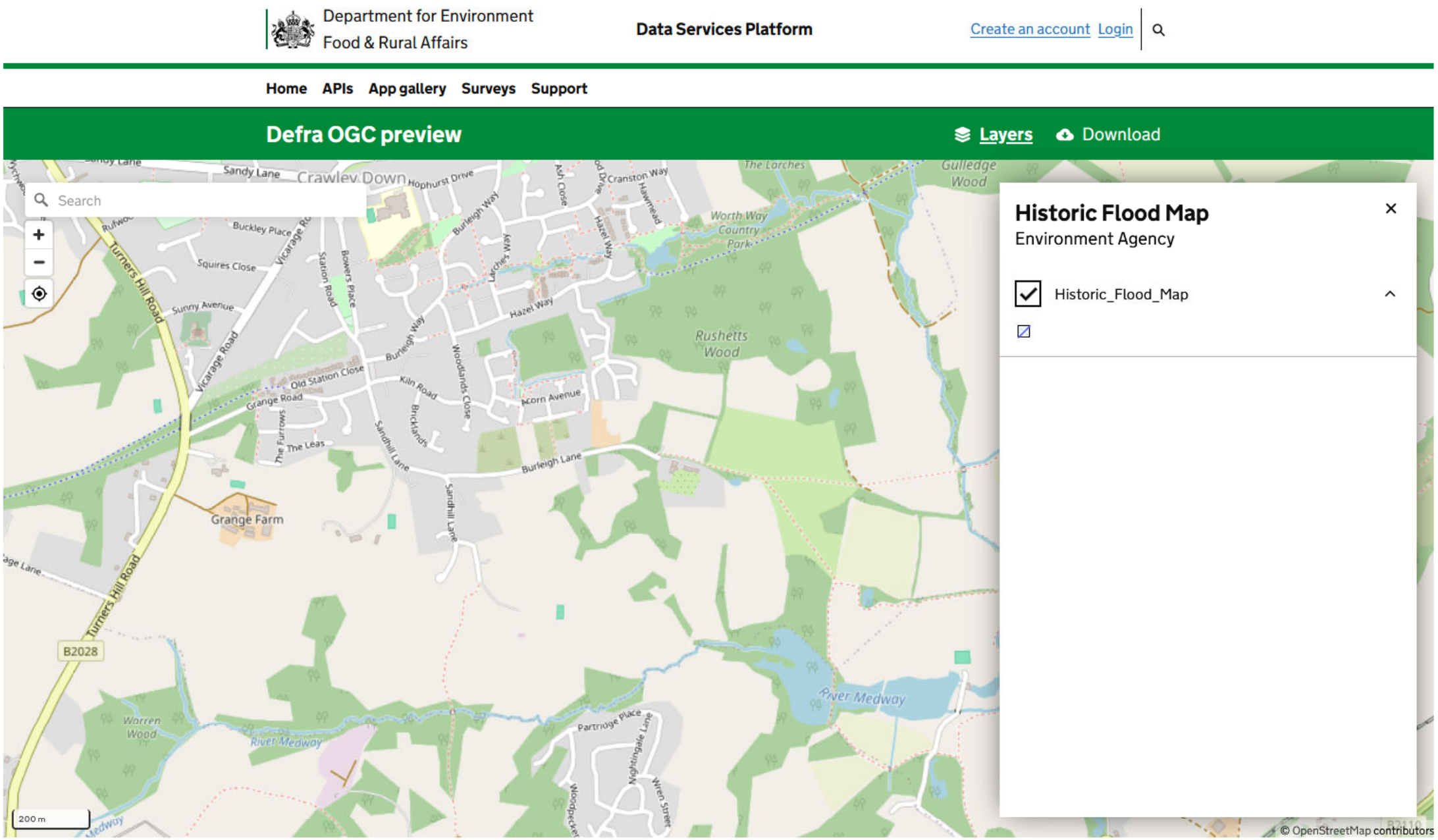
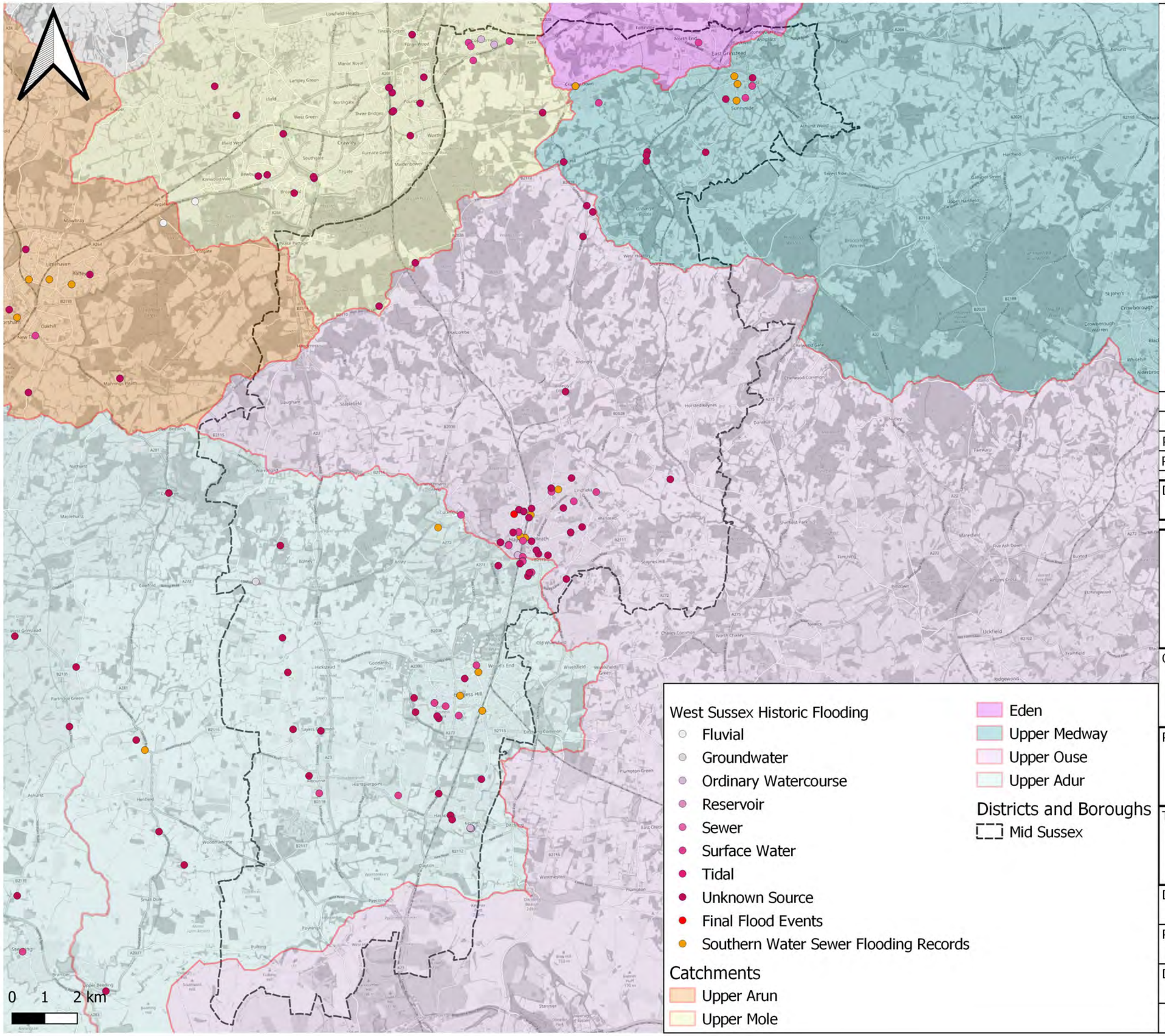
Ordnance Survey


Department for Environment
Food & Rural Affairs
Data Services Platform
Create an account
Login
Home
APIs
App gallery
Surveys
Support
Defra OGC preview
Layers
Download
Search
Historic Flood Map
Environment Agency
Historic_Flood_Map
Sandy Lane
Crawley Down
Hophurst Drive
Buckley Place
Squires Close
Vicarage Road
Turners Hill Road
Station Road
Bowers Place
Burleigh Way
Larches Way
Hazel Way
Cranston Way
Hawmead
Worth Way Country Park
The Larches
Gulledge Wood
Rushetts Wood
Sunny Avenue
Old Station Close
Grange Road
Kiln Road
Woodlands Close
Acorn Avenue
The Furrows
The Leas
Bricklands
Sandhill Lane
Burleigh Lane
Grange Farm
B2028
Warren Wood
River Medway
Partridge Place
Nightingale Lane
Wren Street
Woodpecker
200 m
© OpenStreetMap contributors




Do not scale - Use only figured dimensions
The contractor is to check all dimensions on site and report any discrepancies to the site Supervisor
This drawing is to be read in conjunction with other standard documentation



Note:
This plan is furnished as a general guide only and the Statutory Undertakers concerned state that no warranty as to its correctness is given or implied. It must not be relied upon in the
excavations or other works made in the vicinity of each utilities service.

| REV | DATE | BY | DESCRIPTION | CHK | APP |
|---|---|---|---|---|---|
| P01 | 17/12/2024 | EM | FIRST ISSUE | AR | KW |

DRAWING
A - AUTHORISED AND ACCEPTED

WSP House, 70 Chancery Lane, London, WC2A 1AF
+44 (0)2073 145 000
wsp.com

CLIENT:
west sussex county council

PROJECT:
Local Flood Risk Management Strategy Mapping

TITLE:
003 - Mid Sussex Historic Flood Map

| DRAWN: | CHECKED: | APPROVED: |
|---|---|---|
| EM | AR | KW |
| PROJECT: 70121454 | SCALE: 1:1 | DATE: 19/12/2024 |

DRAWING: 70121454-WSP-DG-WA-0003-P01
REV: P01

# Appendix 6

## Proposed Site Layout and Positively Drained Areas Plan

BURLEIGH LANE

Planning application DM/25/1593 North west of

Proposed Pedestrian/Cycle Access

Category U tree to be removed

Existing Access Closed Off

A1

A2

A3

A4

A5

A6

A7

A8

B1

B2

B3

| PROPOSED AREAS KEY | | |
|---|---|---|
| | Site boundary | 18,458m sq |
| | Roofs | 1,285m sq |
| | Green Roofs | 545m sq |
| | Access Road | 1,181m sq |
| | Footways | 433m sq |
| | Drives | 385m sq |
| TOTAL | | **3,829m sq** |
| | Grasscrete | 240m sq |

-5m 0 5 10 15 20m

N

TITLE
Proposed Site Layout and Positively Drained Areas Plan

| SCALE | PROJECT. No. |
|---|---|
| 1:500 @ A3 | 23425 |
| REPORT TYPE | DRG. No. |
| FRA | 03 - |

# Appendix 7

## Preliminary Drainage Strategy Plan and Calculations

Proposed Main Entrance

Ditch IL 12.542m AOD

Outfall to ditch via concrete bagwork headwall

Proposed development to north west of site as planning application DM/25/1593

BURLEIGH LANE

Proposed Pedestrian/Cycle Access

Category 'C' Tree to be removed

HB

Hydrobrake manhole
CTL-SHE-0081-2300-0400-6000
passing 2.3 l/s @ 400mm head

Existing Access Closed Off

95% voided storage crate 1.0m x 0.5m x 0.4m deep
1140m² x 0.4m deep (1 layer)
IL 126.0m AOD
600mm minimum cover

A1 A2 A3 A4 A5 A6 A7 A8 B1 B2 B3

N

-5m 0 5 10 15 20m

KEY:

- Green roofs
- Voided subbase under permeable road / driveway surfacing.
- Private storm water pipe and inspection chamber
- Concrete bagwork headwall
- 95% voided storage crate 1.0m x 0.5m x 0.4m deep
  1140m² x 0.4m deep (1 layer)
  IL 126.0m AOD
  600mm minimum cover
- HB Hydrobrake manhole
  CTL-SHE-0081-2300-0400-6000
  passing 2.3 l/s @ 400mm head

TITLE
Preliminary Drainage Strategy Plan

| SCALE | PROJECT. No. |
|---|---|
| 1:500 @ A3 | 24025 |
| REPORT TYPE | DRG. No. |
| FRA | 04 - |

## Design Settings

| | | | |
|---|---|---|---|
| Rainfall Methodology | FEH-22 | Minimum Velocity (m/s) | 1.00 |
| Return Period (years) | 2 | Connection Type | Level Soffits |
| Additional Flow (%) | 0 | Minimum Backdrop Height (m) | 0.200 |
| CV | 1.000 | Preferred Cover Depth (m) | 1.200 |
| Time of Entry (mins) | 5.00 | Include Intermediate Ground | ✓ |
| Maximum Time of Concentration (mins) | 30.00 | Enforce best practice design rules | ✓ |
| Maximum Rainfall (mm/hr) | 150.0 | | |

## Nodes

| Name | Area (ha) | Cover Level (m) | Diameter (mm) | Depth (m) | Invert Level (m) |
|---|---|---|---|---|---|
| Storage Crates | 0.388 | 127.000 | 1200 | 1.000 | 126.000 |

## Simulation Settings

| | | | | | |
|---|---|---|---|---|---|
| Rainfall Methodology | FEH-22 | Analysis Speed | Normal | Starting Level (m) | |
| Rainfall Events | Singular | Skip Steady State | x | Check Discharge Rate(s) | x |
| Summer CV | 1.000 | Drain Down Time (mins) | 1440 | Check Discharge Volume | x |
| Winter CV | 1.000 | Additional Storage (m³/ha) | 0.0 | | |

### Storm Durations

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 15 | 60 | 180 | 360 | 600 | 960 | 2160 | 4320 | 7200 | 10080 |
| 30 | 120 | 240 | 480 | 720 | 1440 | 2880 | 5760 | 8640 | |

| Return Period (years) | Climate Change (CC %) | Additional Area (A %) | Additional Flow (Q %) |
|---|---|---|---|
| 2 | 0 | 0 | 0 |
| 10 | 0 | 0 | 0 |
| 30 | 0 | 0 | 0 |
| 100 | 0 | 0 | 0 |
| 100 | 45 | 0 | 0 |

## Node Storage Crates Online Hydro-Brake® Control

| | | | |
|---|---|---|---|
| Flap Valve | x | Objective | (HE) Minimise upstream storage |
| Replaces Downstream Link | x | Sump Available | ✓ |
| Invert Level (m) | 126.000 | Product Number | CTL-SHE-0081-2300-0400-2300 |
| Design Depth (m) | 0.400 | Min Outlet Diameter (m) | 0.100 |
| Design Flow (l/s) | 2.3 | Min Node Diameter (mm) | 1200 |

## Node Storage Crates Depth/Area Storage Structure

| | | | | | |
|---|---|---|---|---|---|
| Base Inf Coefficient (m/hr) | 0.00000 | Safety Factor | 2.0 | Invert Level (m) | 126.000 |
| Side Inf Coefficient (m/hr) | 0.00000 | Porosity | 0.95 | Time to half empty (mins) | |

| Depth (m) | Area (m²) | Inf Area (m²) | Depth (m) | Area (m²) | Inf Area (m²) | Depth (m) | Area (m²) | Inf Area (m²) |
|---|---|---|---|---|---|---|---|---|
| 0.000 | 1140.0 | 1140.0 | 0.400 | 1140.0 | 1187.9 | 0.401 | 0.0 | 1187.9 |

**Results for 2 year Critical Storm Duration. Lowest mass balance: 100.00%**

| Node Event | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|---|---|---|---|---|---|---|---|---|
| 1440 minute summer | Storage Crates | 930 | 126.090 | 0.090 | 7.0 | 97.5518 | 0.0000 | OK |

| Link Event (Outflow) | US Node | Link | Outflow (l/s) | Discharge Vol (m³) |
|---|---|---|---|---|
| 1440 minute summer | Storage Crates | Hydro-Brake® | 2.1 | 139.6 |

**Results for 10 year Critical Storm Duration. Lowest mass balance: 100.00%**

| Node Event | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|---|---|---|---|---|---|---|---|---|
| 960 minute summer | Storage Crates | 705 | 126.141 | 0.141 | 14.6 | 153.2999 | 0.0000 | OK |

| Link Event (Outflow) | US Node | Link | Outflow (l/s) | Discharge Vol (m³) |
|---|---|---|---|---|
| 360 minute winter | Storage Crates | Hydro-Brake® | 2.3 | 143.2 |

**Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%**

| Node Event | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|---|---|---|---|---|---|---|---|---|
| 960 minute summer | Storage Crates | 765 | 126.183 | 0.183 | 18.1 | 197.8770 | 0.0000 | OK |

| Link Event (Outflow) | US Node | Link | Outflow (l/s) | Discharge Vol (m³) |
|---|---|---|---|---|
| 180 minute summer | Storage Crates | Hydro-Brake® | 2.3 | 147.6 |

**Results for 100 year Critical Storm Duration. Lowest mass balance: 100.00%**

| Node Event | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|---|---|---|---|---|---|---|---|---|
| 1440 minute summer | Storage Crates | 1140 | 126.250 | 0.250 | 16.9 | 270.7561 | 0.0000 | OK |

| Link Event (Outflow) | US Node | Link | Outflow (l/s) | Discharge Vol (m³) |
|---|---|---|---|---|
| 60 minute summer | Storage Crates | Hydro-Brake® | 2.3 | 139.7 |

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 100.00%**

| Node Event | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|---|---|---|---|---|---|---|---|---|
| 2160 minute summer | Storage Crates | 1740 | 126.397 | 0.397 | 17.7 | 430.1935 | 0.0000 | OK |

| Link Event (Outflow) | US Node | Link | Outflow (l/s) | Discharge Vol (m³) |
|---|---|---|---|---|
| 60 minute summer | Storage Crates | Hydro-Brake® | 2.3 | 189.8 |

# Appendix 8

# Interim Drainage Management and Maintenance Plan

# Interim Drainage Management and Maintenance Plan

The Civil Engineering Practice
11 Tungsten Building
George Street
Fishersgate
Sussex
BN41 1RA
01273 424424
reception@civil.co.uk
www.civil.co.uk

| | |
|---|---|
| **Project** | **Land South of Burleigh Lane, Crawley Down** |
| **Project Number** | **24025** |
| **By** | Steve Doughty |
| **Date** | 26 Nov 2025 |

## 1 Introduction

1.1 This Interim Drainage Management and Maintenance Plan has been prepared as the initial draft of the document that will become the Drainage Maintenance and Management Manual.

1.2 The Drainage Management and Maintenance Manual will be completed as part of the Operation and Maintenance Manual to be provided by the Principal Contractor on completion of construction.

1.3 The Drainage Management and Maintenance Manual will be handed over to a Management Company appointed by the Developer on behalf of the Residents on project completion.

1.4 The Drainage Management and Maintenance Manual will remain a live document and will be used to guide and record the management and maintenance of the surface water and foul drainage systems.

1.5 In the event that the Management Company becomes unable to discharge its duties within two years of first appointment the Developer will endeavour to appoint an alternative on behalf of the Residents.

## 2 During Construction

2.1 Once appointed the Contractor will prepare a site specific method statement for the control of silt and other pollutants during construction. CIRIA Report C532, Control of water pollution from construction sites, provides further guidance on this.

2.2 The Contractor will maintain the proposed drainage system during construction and until the handing over of the site.

## 3 Surface Water Drainage System

3.1 Overview

3.1.1 The surface water drainage system has been designed as a Sustainable Urban Drainage System (SuDS)

3.1.2 The system has been designed to collect surface water from the roofs and discharge it via storage crates to the watercourse at the northern site boundary.

3.1.3 Driveways and parking areas have been designed as permeable paving.

3.2 How the System will Function

3.2.1 Surface water falling on the roofs will be collected in gutters and discharged via rainwater pipes and below ground drainage pipes to the storage crates.

3.2.2 Catchpits within the below ground pipe work system will trap silt and debris and provide a point of access for maintenance.

3.2.3 The driveways, parking areas and highways have been designed as permeable paving systems which will provide water quality treatment prior to discharging to the crates.

## 4 Foul Water Drainage System

4.1 Foul water will be discharged to an onsite pumping station via conventional pipework laid at self cleansing velocity and will require minimal maintenance.

4.2 The pumping station will discharge foul water to the existing public foul sewer located beneath Sandhill Lane to the west of the site.

4.3 The foul pumping station will be maintained in accordance with the manufacturer's requirements.

4.4 Alternatively foul water could be collected into individual cess pits within each curtilage and tankered away on a monthly basis.

## 5 Schedule of Maintenance

5.1 Management of shared drainage facilities (where not adopted by a Statutory Undertaker) will be passed on to a Management Company.

5.2 Maintenance of individual property drainage connections is the responsibility of the individual property owners.

5.3 There are three categories of maintenance activities:

- **Regular maintenance**

  Basic tasks undertaken on a frequent and predictable schedule, including vegetation management, litter and debris removal, and inspections.

- **Occasional maintenance**

  Tasks that are likely to be required periodically, but on a much less frequent and predictable basis than the routine tasks (sediment removal is an example).

- **Remedial maintenance**

  Intermittent tasks that may be required to rectify faults associated with the system. Where remedial work is found to be necessary, it is likely to be due to site-specific characteristics or unforeseen events, and as such timings are difficult to predict.

5.4 The following maintenance schedule details the typical tasks to be undertaken at different intervals.

| **Maintenance Schedule** | **Required Action** | **Frequency** |
|---|---|---|
| Regular Maintenance | Manage vegetation and remove nuisance plants - aesthetics | As required |
| | Litter and debris removal - catchpits | Monthly or as required |
| | Maintain / mow swales to ensure vegetation height remains at between 100mm and 150mm | 3 Monthly or as required |
| | Cleaning of gutters and any filters on downpipes | 3 Monthly |
| Occasional Maintenance | Remove sediment and debris from silt trap chambers, channel drains and inlet chambers | 6 monthly |
| | Visual inspection of permeable paving for defects and settlement | Annually |
| | Sweeping / brushing of permeable paving | Every 2 years |
| | Surface and foul water pipework - jetting / rodding | Every 2 years or as required |
| Remedial Maintenance | Remove debris / blockages to silt traps / channel drains / headwalls | As required |
| | Repairs to access chambers / manhole covers | As required |
| | Replace any broken permeable blocks / surface, remedial works to any depressions or rutting | As required |
| | Inspect inlet, outlet from downpipes, channel drains, swales, headwalls and gullies for blockages, standing water and clear | As required |
| Monitoring | Inspect silt traps and note the rate sediment has accumulated | Monthly in the first year and then annually |

**Indicative Schedule of Maintenance for the Proposed Drainage System**

| Component | Inspection Frequency | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1 Month | 3 Months | 6 Months | 1 Year | After leaf fall in Autumn | 2 Years | When alarm indicates |
| Gullies, Channels and Gutters | | | ✓ | | ✓ | | |
| Catchpits | ✓ | | | | ✓ | | |
| Surface and Foul Water Pipework | | | | | | ✓ | |
| Permeable Paving | | | | ✓ | | | |
| Swales | | ✓ | | | | | |
| Flow Controls | | | ✓ | | | | |
| Foul Pumping Station | | | | ✓ | | | ✓ |
| Existing Watercourses | ✓ | | | | | | |

**Inspection Frequency Summary**

## 6 Maintenance Procedures

6.1 It is recommended that the Management Company employ a suitably qualified company to undertake the maintenance works for all shared drainage.

6.2 The following procedures provide a guide to the two most common maintenance items, jetting and silt removal, to be undertaken on site:

6.3 Jetting

6.3.1 Equipment Required:

- High-pressure water jetting equipment.
- Personal protective equipment (PPE) for operators.

6.3.2 Typical Procedure:

- Perform a pre-jetting inspection to assess the level of sedimentation.
- Insert the jetting hose into the pipe, starting from the upstream end.
- Gradually move the jetting hose downstream, ensuring the entire pipe or structure length is cleaned.
- Monitor the process to avoid any damage to the drainage infrastructure.
- Collect dislodged silt and debris at the downstream end using a vacuum or manual removal.

6.4 Silt Removal and Disposal

6.4.1 Equipment Required:

- Vacuum truck or manual removal tools.
- Containers for temporary storage of silt and debris.

6.4.2 Typical Procedure:

- Collect the dislodged silt and debris from the downstream end of pipe or structure.
- Transfer the collected material to the containers.
- Dispose of the collected silt and debris following local regulations and environmental guidelines.

## 7 Financing

7.1 The regular and corrective maintenance of all shared elements of the drainage system will be managed and funded through the Management Company on behalf of the Residents.

7.2 Maintenance of individual property drainage infrastructure will be funded by the individual property owners.

## 8 Health and Safety

8.1 Designers Residual Risks

8.1.1 There are no significant residual risks associated with the construction of the proposed surface or foul water drainage network or permeable paving system beyond common site risks that would reasonably be anticipated by a competent Civil Engineering Contractor.

8.2 Construction Phase

8.2.1 The Principal Contractor will undertake a construction phase Health and Safety Plan for the site.

8.2.2 Prior to handover the Principal Contractor will undertake a review of maintenance activities required and prepare suitable Health and Safety documentation as part of the site hand over documents.

## 9 Design Life

9.1 The design life of the development is likely to exceed the design life of the components within the SuDS network. During the routine drainage inspections it may be determined that some components have reached the end of their functional life cycle.

9.2 Where possible repairs should be the first option considered however if repairs are unviable it will be necessary for the property owner / Management Company to arrange for the replacement of the faulty component.

## 10 Emergency Plan

10.1 Potential flood and maintenance indicators:

- Manholes or inspections chambers overflowing
- Gullies overflowing or ponding
- Channel drains overflowing or ponding
- Other visual indicators of the drainage system not performing as it should

10.2 Should any of the items above occur then immediate action as outlined below should be undertaken:

- Inspect for blockages in the problem area
- Should the problem not be identified via an initial inspection:
    - For unadopted onsite drainage the Management Company should appoint a suitable drainage engineer to inspect and survey the system and jet any blockages
    - For adopted onsite drainage the relevant statutory undertaker should be alerted
    - Where it is suspected that there is a problem with the downstream drainage network the Owner or relevant statutory undertaker of that system should be alerted

10.3 Emergency Contact Details

| | |
|---|---|
| 10.3.1 Management Company | TBC |
| 10.3.2 Maintenance Team | TBC |

# Appendix 9

# Surface Water Exceedance Route Plan

The Croft

Sarane Lodge

BURLEIGH LANE

126.0m

Proposed Pedestrian/Cycle Access

Proposed development to north west of site as planning application DM/20/1593

BURLEIGH LANE

Hedgerows

Sandhill House

-10m 0 10m 20m 30m 40m

N

TITLE
Surface Water Exceedance Plan

SCALE
1:1,000 @ A3

PROJECT. No.
24025

REPORT TYPE
FRA

DRG. No.
05 -