

Flood Risk Assessment

Cliff Mill House

Southwell Road

Lowdham



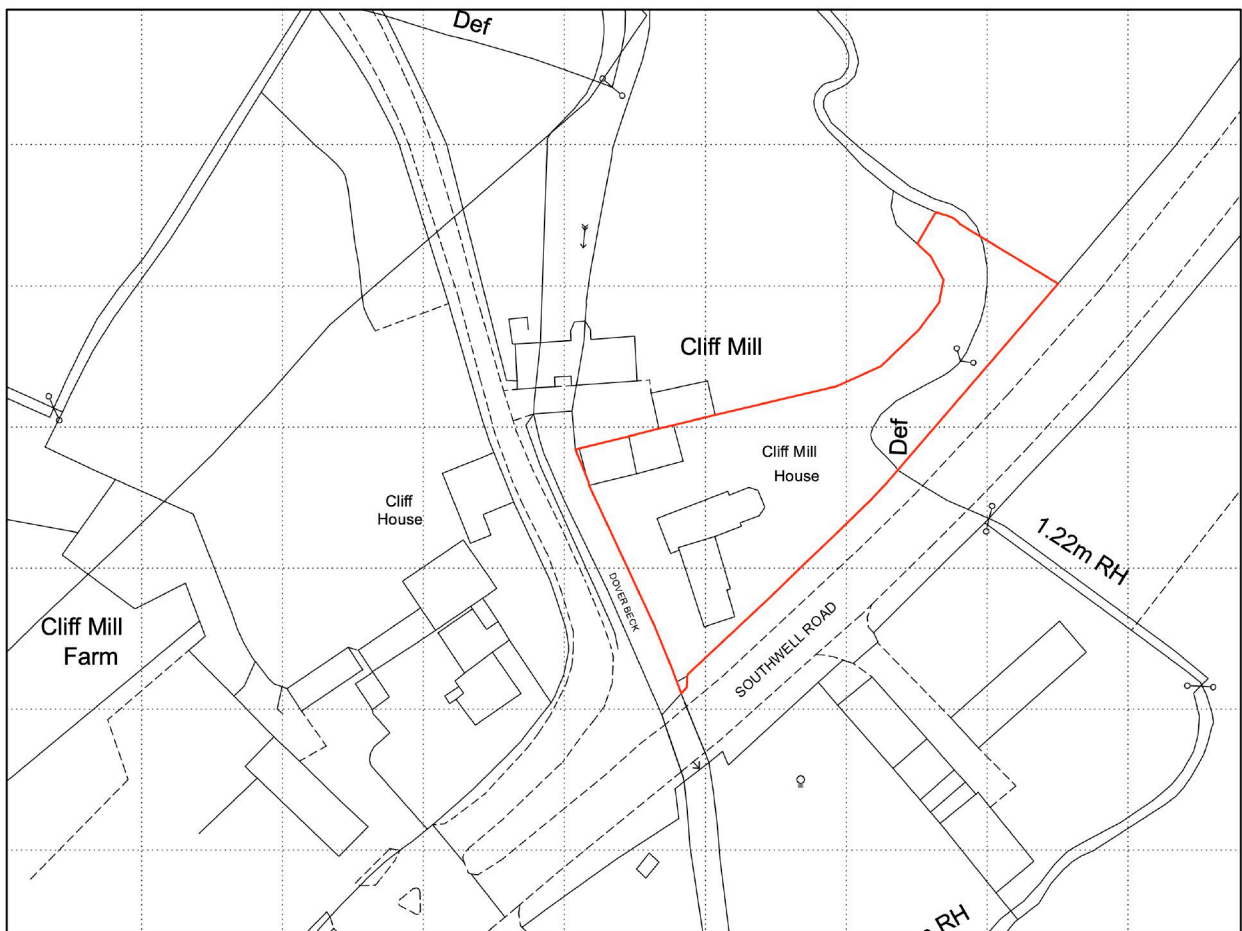
Site Analysis

Introduction

This Flood Risk Assessment is part of a Householder Planning Application for a new carport and garden equipment shed

The site abuts a listed building (Cliff Mill) though it is not linked to the listing of that building.

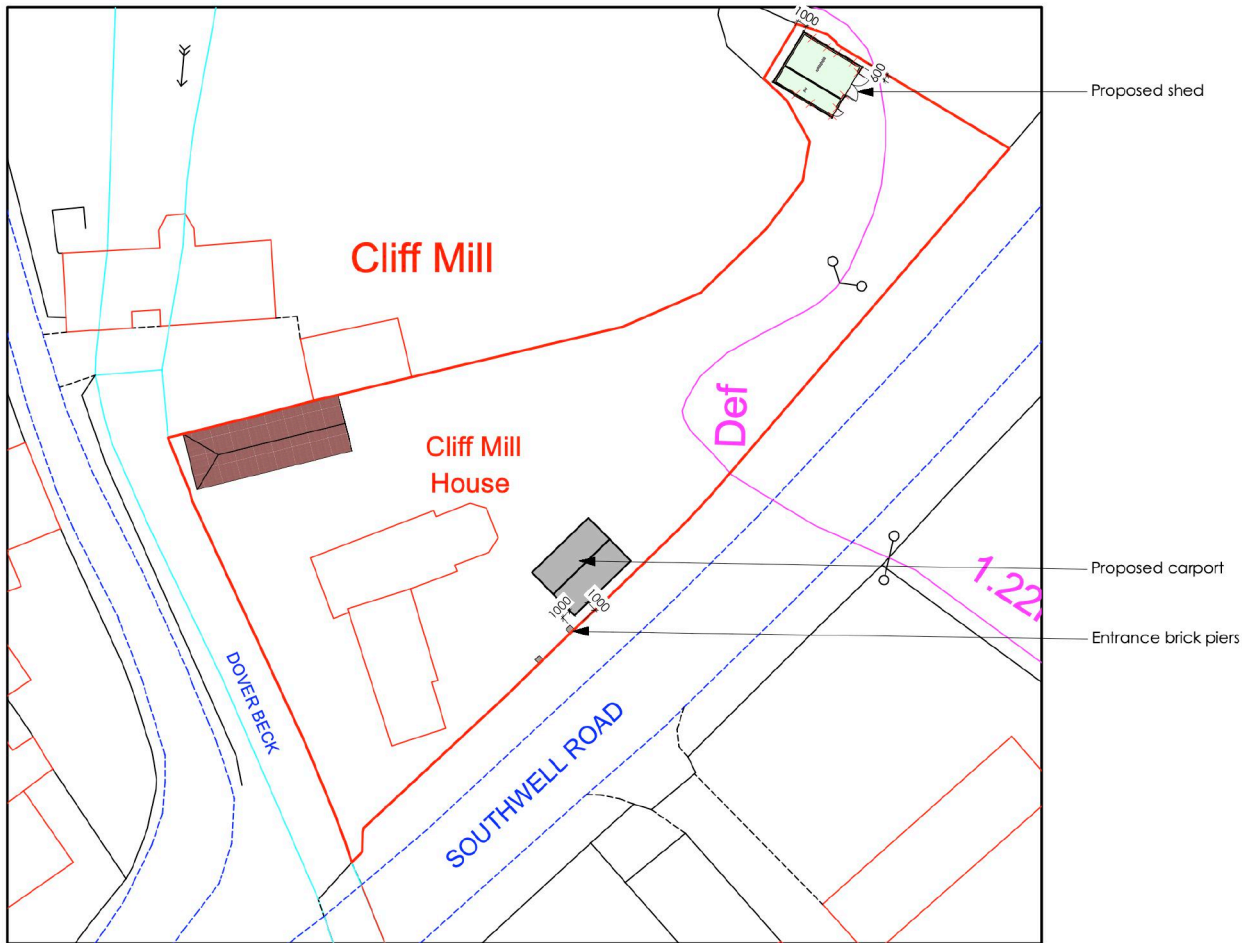
The site is located alongside the stream Dover Beck.



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Scope of Work.

The applicant is looking to provide a carport to provide additional cover for two vehicles and will be located close to the main entrance. The shed will be for the storage of gardening equipment and will be located at the far end of the site.

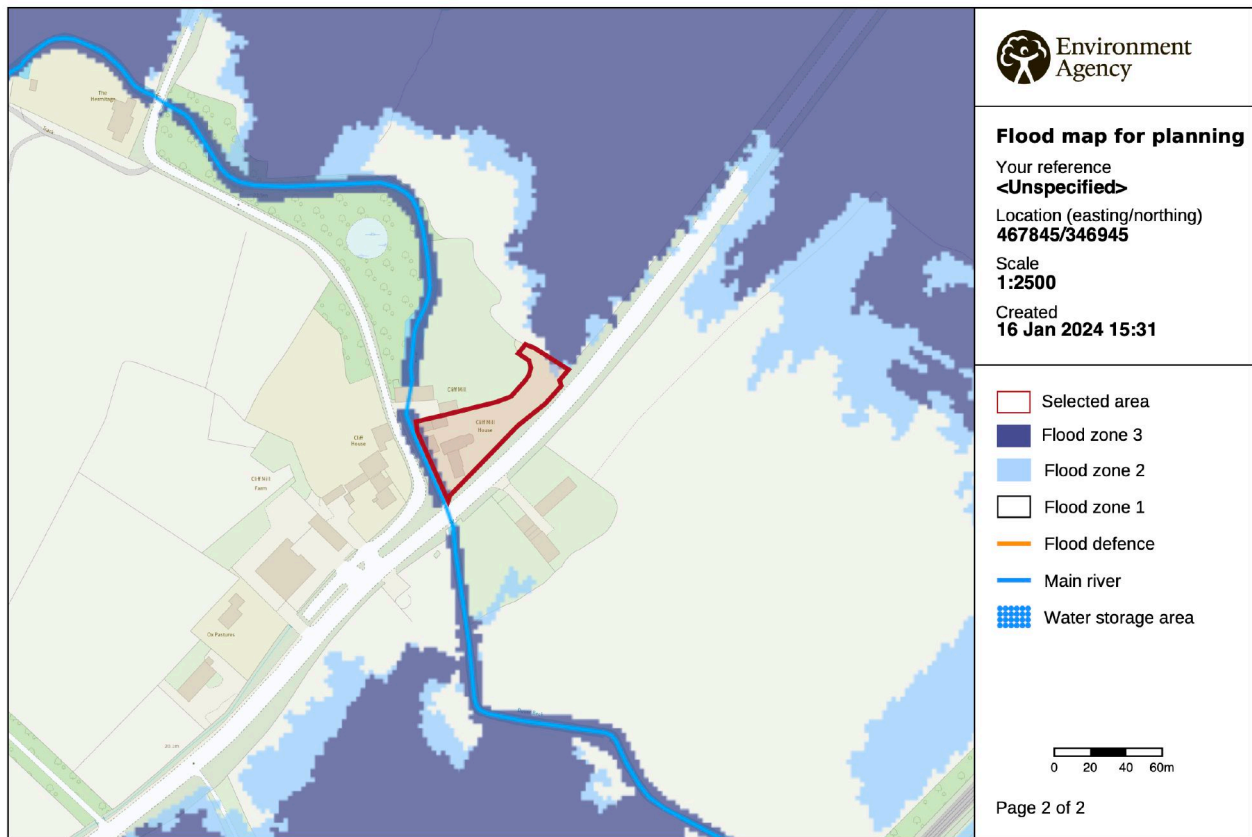


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Constraints

The edge of the site is considered to be in a Zone 3 floodplain as indicated on the image below, though the majority of the site is not affected. The proposed building locations are also not within the areas indicated as Zone 2 & 3 and will therefore not be affected by potential flooding.

The attached flood risk data package from the Environment Agency indicates this also.



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Product 4: Flood Risk Data Package for
Cliff Mill House, Lowdham, NG14 7DR



Shaun Oakley
Via Email

Our Ref: EMD-344038

Your Ref:

Date: 19 February 2024

Dear Shaun

Enquiry regarding Products 4 & 8 for Cliff Mill House, Lowdham, NG14 7DR

Thank you for your enquiry which was received on 23 January 2024.

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:
<https://data.gov.uk/publisher/environment-agency>

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

Information Warning - OS background mapping

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Attribution

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Product 8

We have considered your request under the provisions of the Freedom of Information Act 2000 / Environmental Information Regulations 2004 (EIR). The Act requires that we respond to requests by advising you whether or not information is held, and if so by providing you with that information.

EIR Regulation 3(2) states that information is held if it is in our possession and has been produced or received by us, or it is held by another person on our behalf at the time the request is received.

Information not held

In this case, the information you have requested is not held by the Environment Agency, and we are therefore refusing your request on the grounds that there is no information we can provide.

Where a request is for environmental information, the Regulations allow us to refuse to disclose it if the exception at EIR Regulation 12(4)(a) applies. The regulation states that a public authority may refuse to disclose environmental information to the extent that it does not hold that information when an applicant's request is received.

It is not possible for us to conduct a public interest balancing test because the reason for non-disclosure is that the information is not held.

Rights of appeal

If you are not satisfied you can contact us within 2 calendar months to ask for our decision to be reviewed. We shall review our response to your request and give you our decision in writing within 40 working days.

If you are still not satisfied following this, you can raise a concern with the Information Commissioner, who is the statutory regulator for Freedom of Information and the Environmental Information Regulations. The contact details are:

Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF
Tel: 0303 123 1113
Website: <http://ico.org.uk>

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

Tyler Marsh
Customers & Engagement Officer
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

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://data.gov.uk/publisher/environment-agency>
- <https://flood-map-for-planning.service.gov.uk/>

This location is within Flood Zone 1.

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.
- This data is updated on a quarterly basis as better data becomes available.
- The NaFRA 2 will be completed Summer 2024 and the flood zones will then be updated [NaFRA2](#) (As such we are not accepting any flood map challenges at this time).

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	<ul style="list-style-type: none"> • 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)

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

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:

-  **29% (central)**
-  **39% (higher central),**
-  **62% (upper)**

Modelled Information: Nottingham Tributaries, Dover Beck, JBA, 2014

Node point reference	Location	50% (1 in 2 year) modelled level (mAOD)	50% (1 in 2 year) modelled flow (m³/s)	20% (1 in 5 year) modelled level (mAOD)
DBK_3538	SK 67798 46964	20.91	3.04	21.11
DBK_3525	SK 67799 46952	19.90	3.04	20.06
DBK_3472	SK 67818 46901	19.86	3.04	20.02
DBK_3457	SK 67823 46885	19.83	3.04	19.99

Node point reference	Location	20% (1 in 5 year) modelled flow (m³/s)	10% (1 in 10 year) modelled level (mAOD)	10% (1 in 10 year) modelled flow (m³/s)
DBK_3538	SK 67798 46964	4.04	21.24	4.76
DBK_3525	SK 67799 46952	4.04	20.15	4.76
DBK_3472	SK 67818 46901	4.04	20.10	4.76
DBK_3457	SK 67823 46885	4.04	20.07	4.76

Node point reference	Location	5% (1 in 20 year) modelled level (mAOD)	5% (1 in 20 year) modelled flow (m³/s)	2% (1 in 50 year) modelled level (mAOD)
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DBK_3538	SK 67798 46964	21.31	5.22	21.34
DBK_3525	SK 67799 46952	20.19	5.22	20.20
DBK_3472	SK 67818 46901	20.13	5.22	20.14
DBK_3457	SK 67823 46885	20.09	5.22	20.11

Node point reference	Location	2% (1 in 50 year) modelled flow (m ³ /s)	1.33% (1 in 75 year) modelled level (mAOD)	1.33% (1 in 75 year) modelled flow (m ³ /s)
DBK_3538	SK 67798 46964	5.42	21.35	5.47
DBK_3525	SK 67799 46952	5.42	20.21	5.47
DBK_3472	SK 67818 46901	5.42	20.15	5.47
DBK_3457	SK 67823 46885	5.42	20.11	5.47

Node point reference	Location	1% (1 in 100 year) modelled level (mAOD)	1% (1 in 100 year) modelled flow (m ³ /s)	0.5% (1 in 200 year) modelled level (mAOD)
DBK_3538	SK 67798 46964	21.36	5.51	21.37
DBK_3525	SK 67799 46952	20.21	5.51	20.22
DBK_3472	SK 67818 46901	20.16	5.51	20.16
DBK_3457	SK 67823 46885	20.11	5.51	20.11

Node point reference	Location	0.5% (1 in 200 year) modelled flow (m ³ /s)	0.1% (1 in 1000 year) modelled level (mAOD)	0.1% (1 in 1000 year) modelled flow (m ³ /s)
DBK_3538	SK 67798 46964	5.58	21.41	5.89
DBK_3525	SK 67799 46952	5.58	20.25	5.89
DBK_3472	SK 67818 46901	5.58	20.19	5.89
DBK_3457	SK 67823 46885	5.58	20.13	5.89

Node point reference	Location	1% + 20% flow (1 in 100 year plus climate change) modelled level (mAOD)	1% + 20% flow (1 in 100 year plus climate change) modelled flow (m ³ /s)
DBK_3538	SK 67798 46964	21.37	5.61
DBK_3525	SK 67799 46952	20.22	5.61
DBK_3472	SK 67818 46901	20.16	5.61
DBK_3457	SK 67823 46885	20.12	5.61

Please note: The flows provided represent **in channel flow only** and do not consider flow on the floodplain.

All data is discussed as metres above Ordnance Datum (mAOD). This is based on the Ordnance Datum Newlyn in Cornwall. Tide gauges have been used over time to calculate a mean sea level datum point. This point is marked as height zero on maps in Britain. For more information please see: [Ordnance Datum Newlyn reaches 100 years | Blog | Ordnance Survey](#)

There is no product 8 data available for this site.

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 records of historic fluvial flooding at this location in 1947. Please note that we may or may not hold the original records in question. We do not make any claim as to the reliability of recorded flood extents or that all flood events in the area have been recorded. Please also be aware that flood defences may have been built after these historic flood events. Note - This information relates to the area the above-named property is in and is not specific to the property itself - it **does not** provide an indicator of flood risk **at individual property level**.

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 **Nottinghamshire County Council**, and we recommend that you contact them with concerns about any flooding issues for this area.

Critical Drainage Area: This area is also under the management of **Trent Valley Internal Drainage Board**. This is due to the complex drainage system.

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.

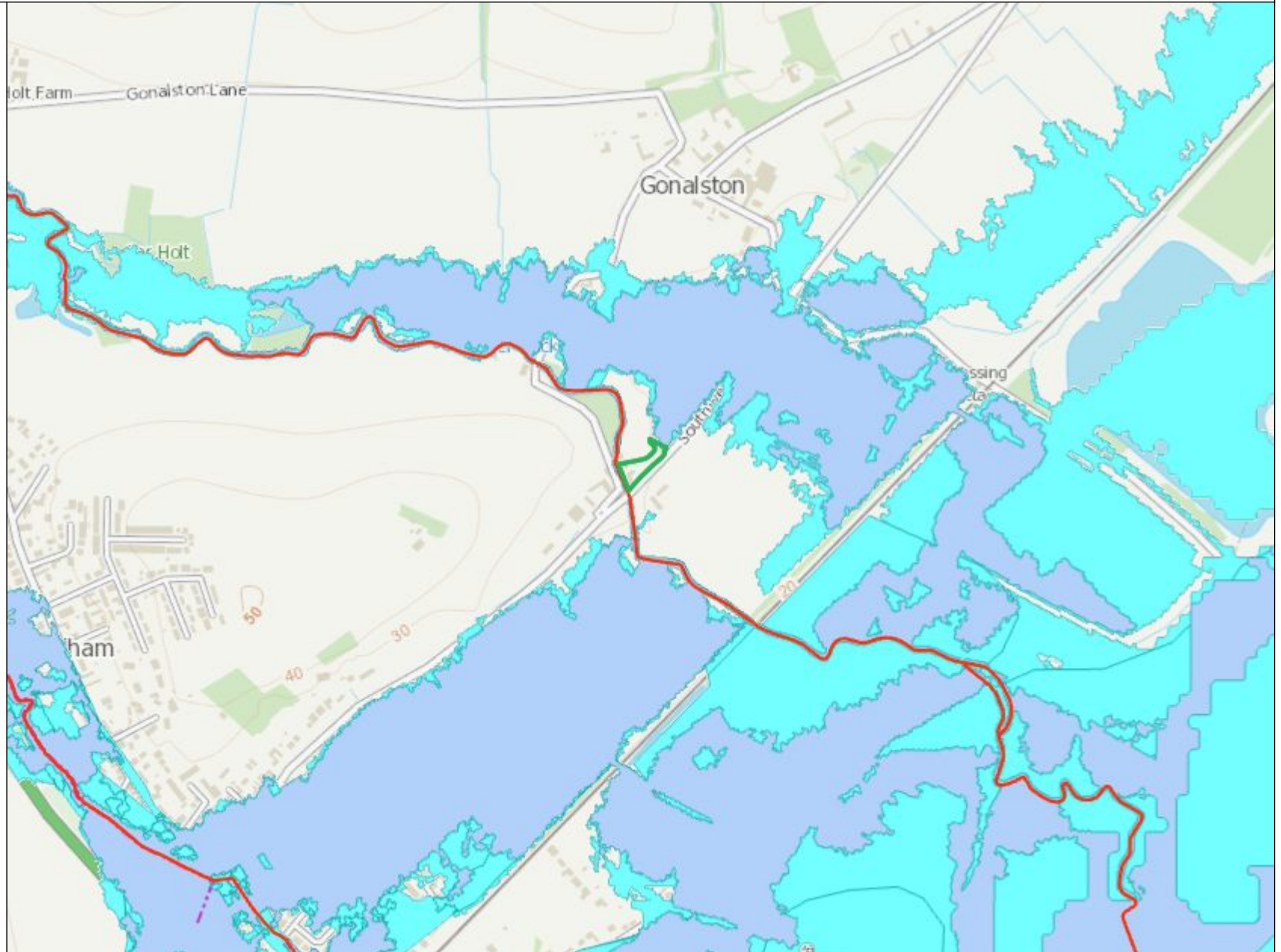
Strategic flood risk assessments: We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site-specific flood risk assessment. This should give you information about the potential impacts of climate change in this catchment areas 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, professional assistance can be provided by our planning officers, by contacting planning.trentside@environment-agency.gov.uk.

Detailed Flood Map, centred on Southwell road, Lowdham [EMD 344038]

Legend

- Statutory Main Rivers
- - - Defences
- ▭ Flood Storage Areas
- ▭ Flood Zone 3
- ▭ Flood Zone 2



Detailed River Network Map, centred on Southwell road, Lowdham [EMD 344038]



Legend

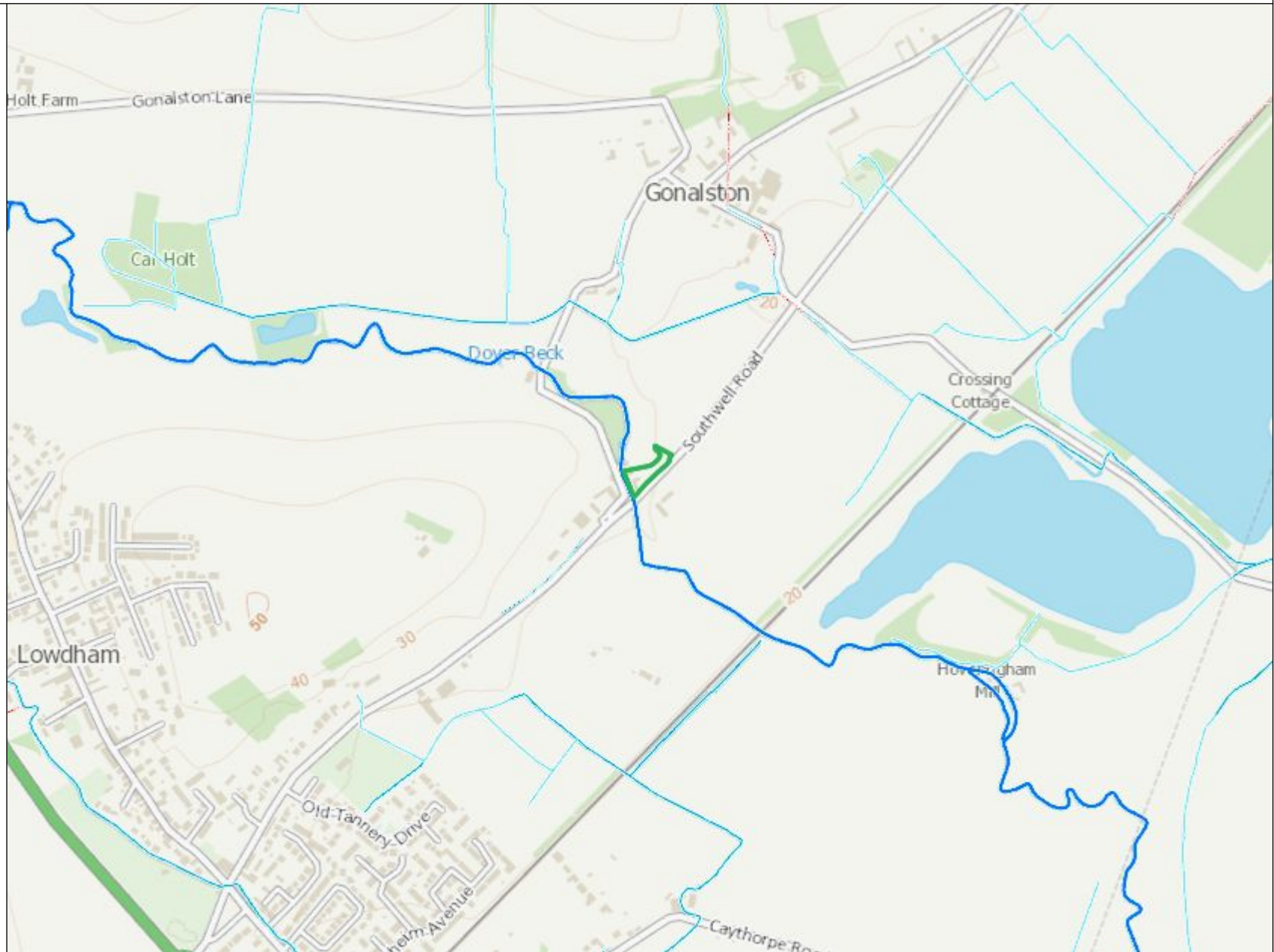
Detailed River Network

- Primary River
- Secondary River
- Tertiary River
- Lake / Reservoir
- Canal
- Canal Tunnel
- - - Extended Culvert
- - - Multiple Channel Culvert
- - - Underground River (potential sewer)
- - - Underground River (inferred)
- - - Underground River (local knowledge)
- Undefined

Offline Drainage features

Detailed River Network




- Primary River
- Secondary River
- Tertiary River
- Lake / Reservoir
- Canal
- Canal Tunnel
- - - Extended Culvert
- - - Multiple Channel Culvert
- - - Underground River (potential sewer)
- - - Underground River (inferred)
- - - Underground River (local knowledge)
- Undefined

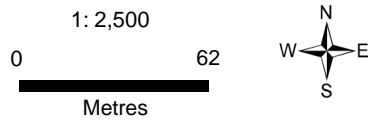


Surface Water Map, centred on Southwell road, Lowdham [EMD 344038]



Legend

-  Flood Extent 1 in 30
-  Flood Extent 1 in 100
-  Flood Extent 1 in 1000



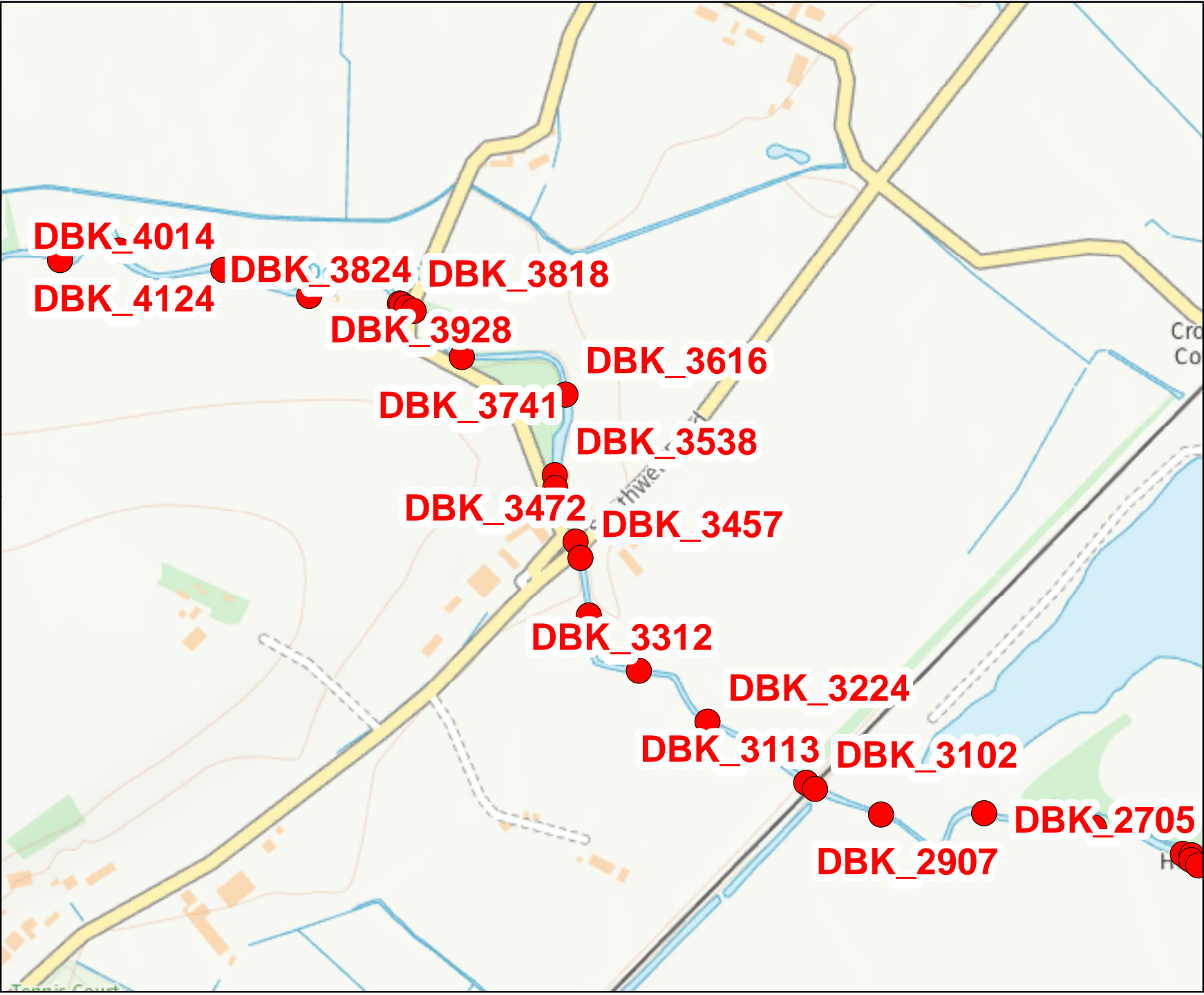
Modelled Nodes Map Centred on Southwell road, Lowdham [EMD 344038]



Scale 1:5,000
Date created: 30 January 2024

Legend

- Modelled Nodes_Dover Beck




SOURCE:
Nottingham Tributaries SFRM,
Dover Beck, JBA, 2014

Modelled Flood Extents Map Centred on Southwell road, Lowdham [EMD 344038]



Scale 1:25,000
Date created: 30 January 2024

Legend

 1 in 1000yr extent

SOURCE:
Trent and Tributaries at Newark,
Halcrow, 2011



Modelled Flood Extents Map Centred on Southwell road, Lowdham [EMD 344038]



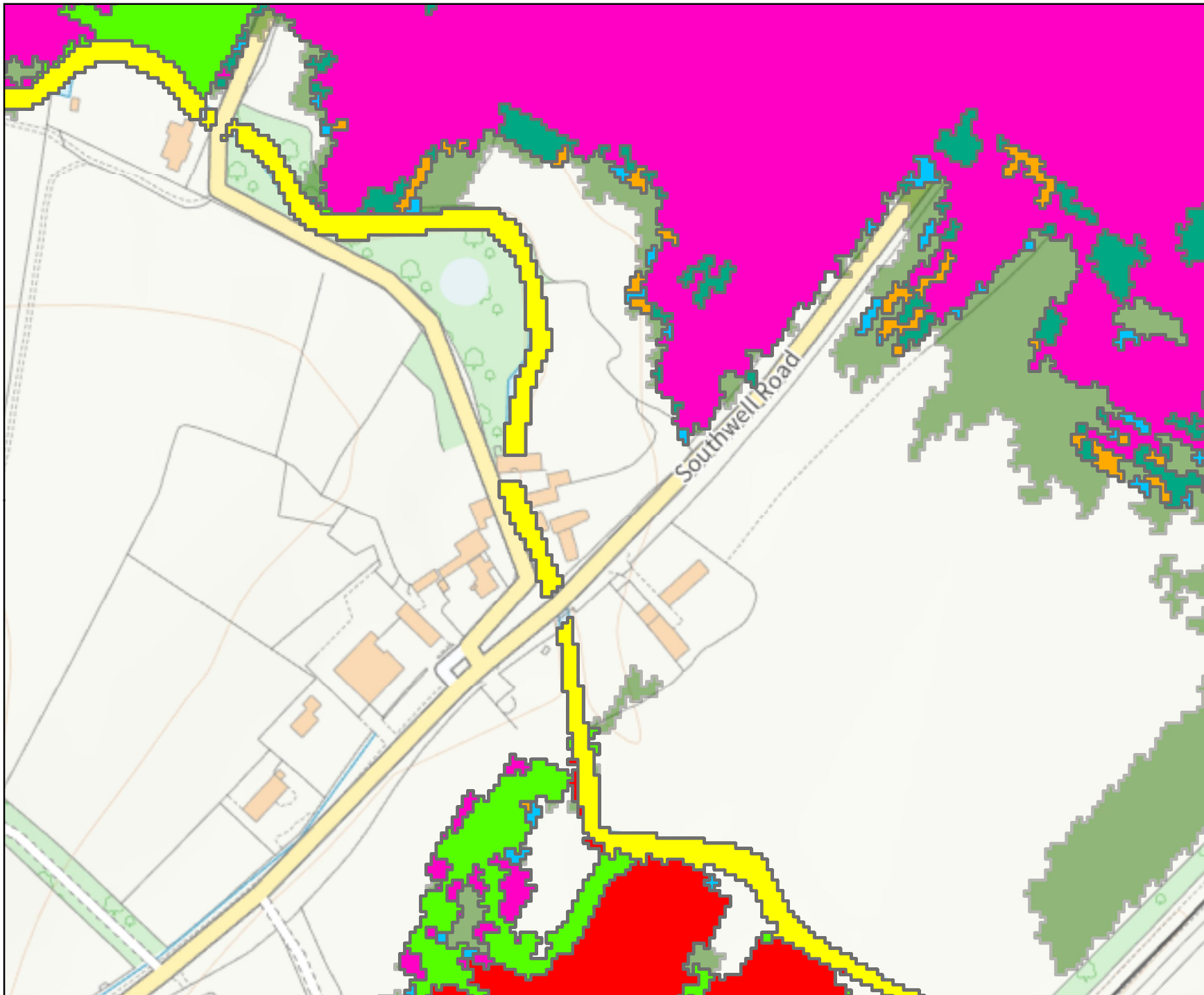
Scale 1:2,500

Date created: 30 January 2024

Modelled Flood Extents

- 1 in 5 year extent
- 1 in 10 year extent
- 1 in 20 year extent
- 1 in 50 year extent
- 1 in 75 year extent
- 1 in 100 year extent
- 1 in 200 year extent
- 1 in 1000 year extent

SOURCE:
Nottingham Tributaries SFRM,
Dover Beck, JBA, 2014



Floodplain Heights Map

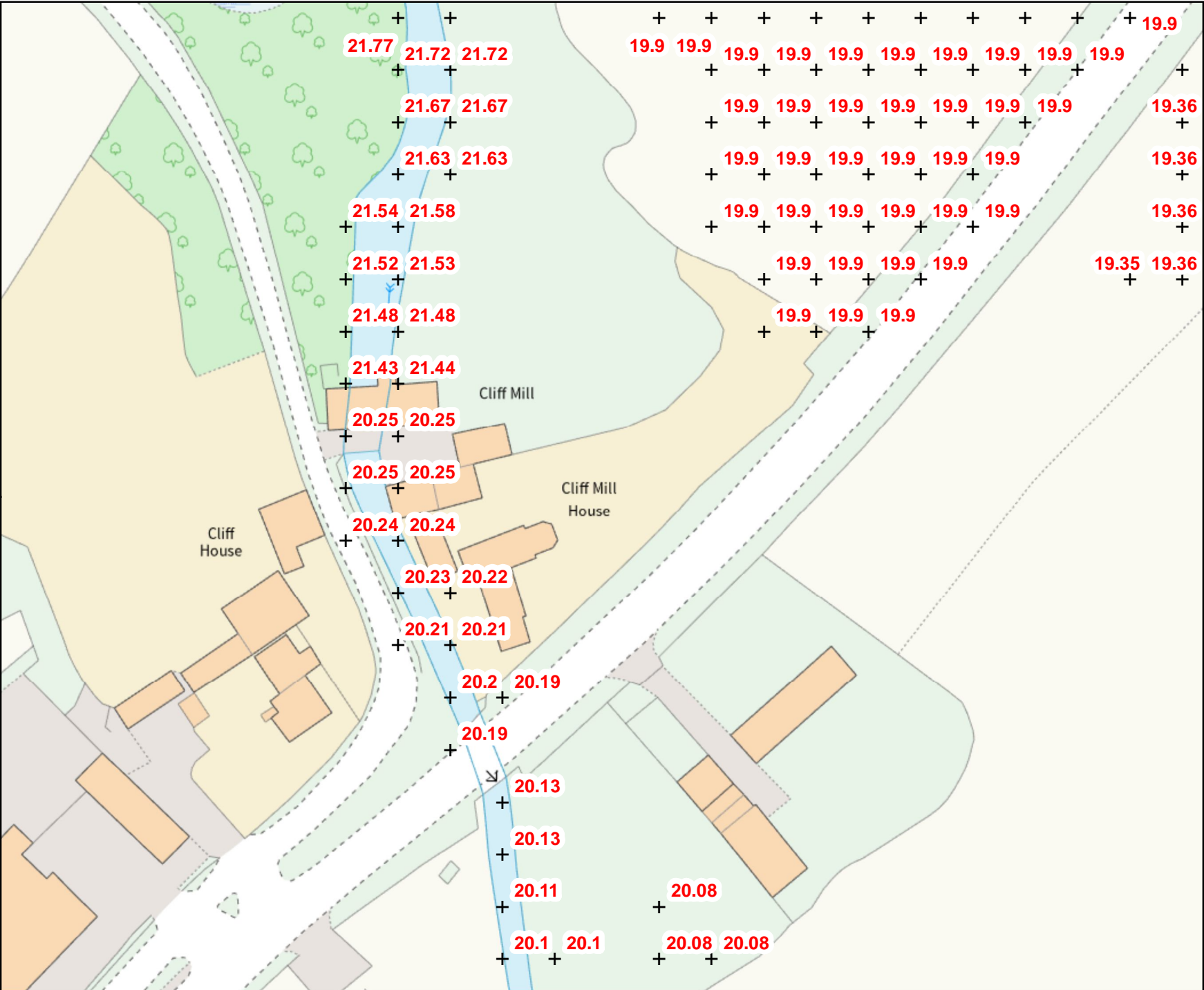
Centred on Southwell road, Lowdham [EMD 344038]



Scale 1:1,000
Date created: 30 January 2024

Legend

+ 1 in 1000yr Height (mAOD)






SOURCE:
Nottingham Tributaries SFRM,
Dover Beck, JBA, 2014

Modelled Flood Extents Map Centred on Southwell road, Lowdham [EMD 344038]

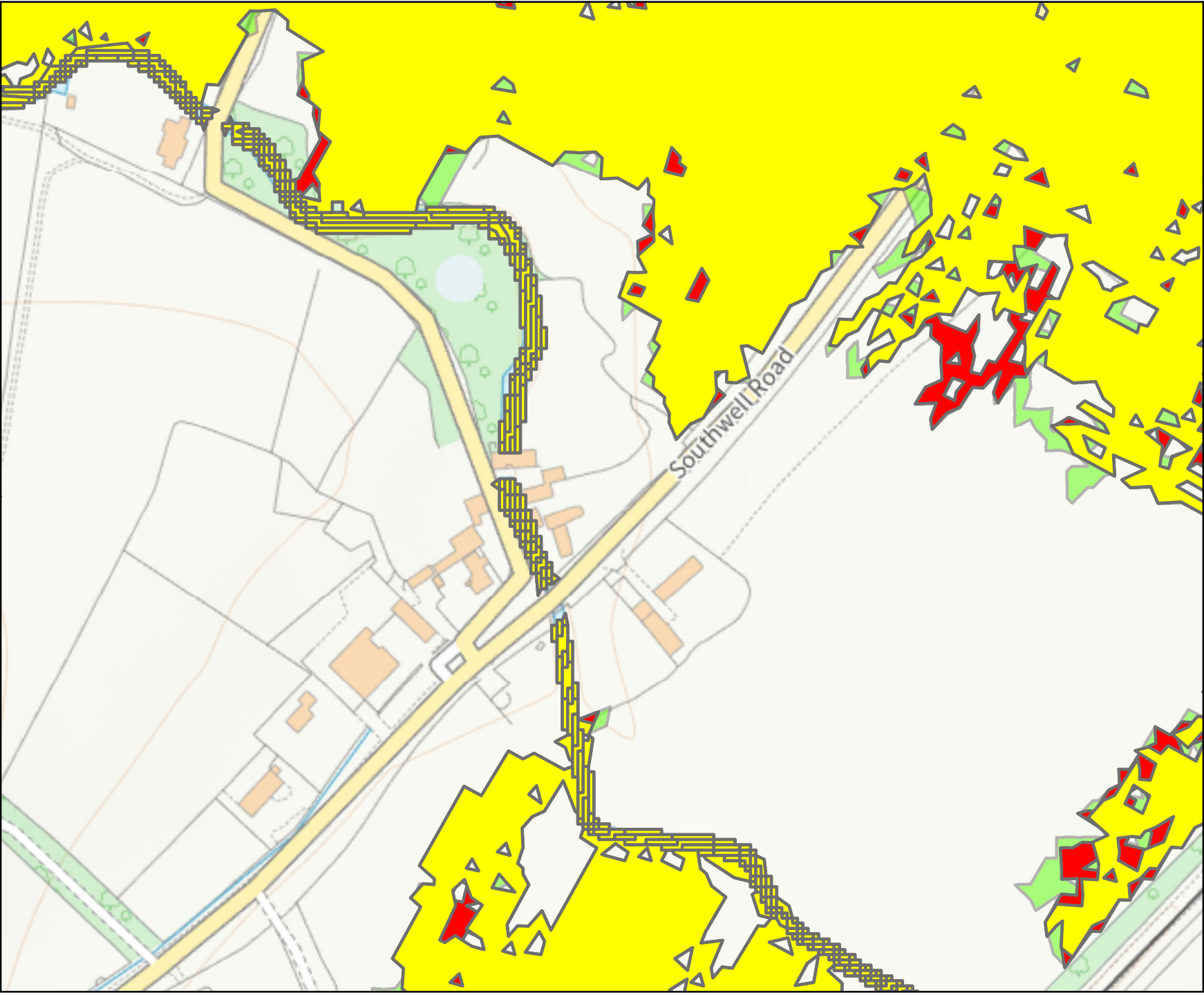


Scale 1:2,500
Date created: 30 January 2024

Modelled Flood Extents Climate Change Legend

-  1 in 100 year +20%CC extent
-  1 in 100 year +30%CC extent
-  1 in 100 year +50%CC extent

SOURCE:
Dover Beck CC
Scenarios, EA, 2021



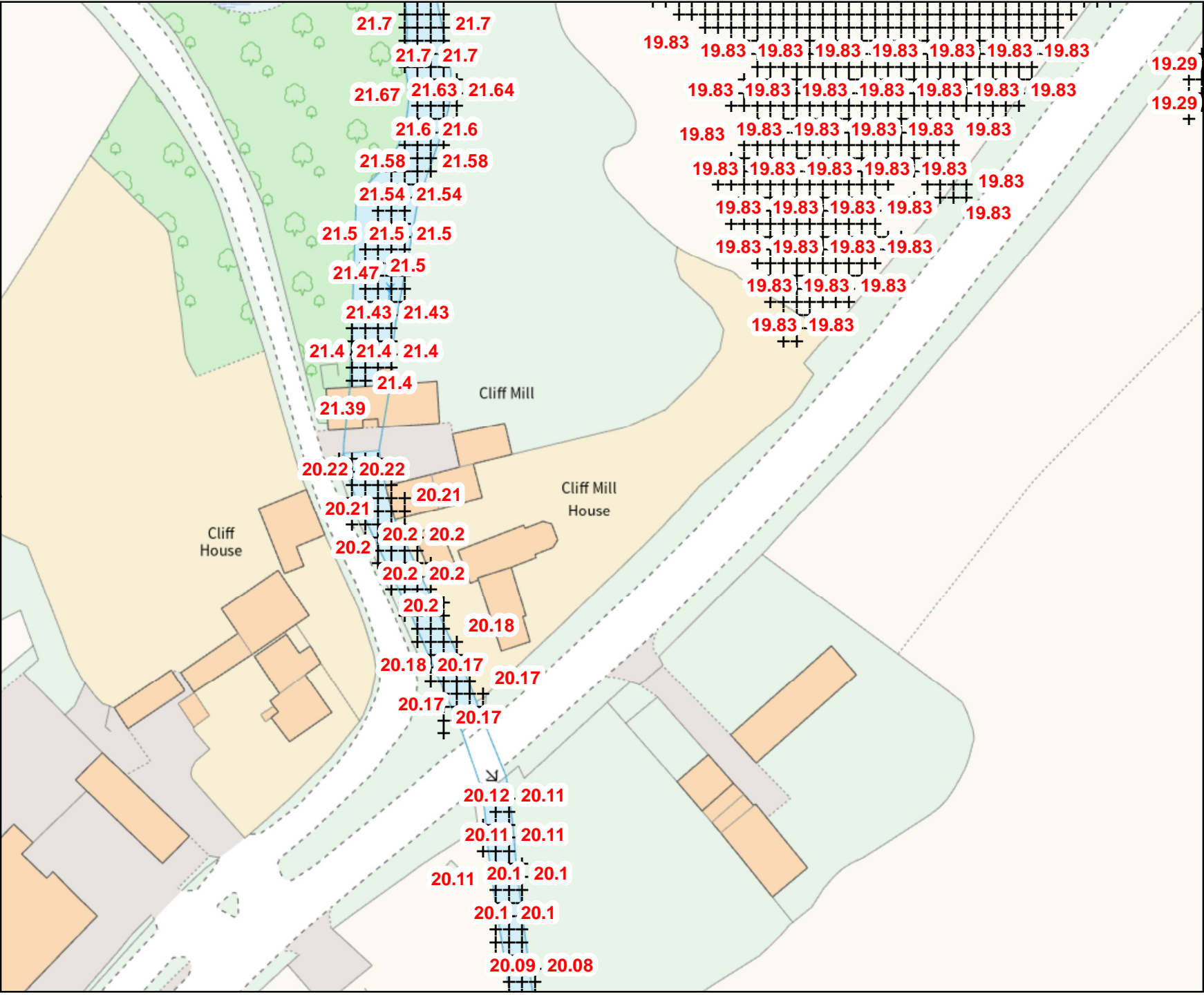
Floodplain Heights Map

Centred on Southwell road, Lowdham [EMD 344038]



Scale 1:1,000
Date created: 30 January 2024

Legend
+ 1 in 100yr +30%CC Height (mAOD)



SOURCE:
Dover Beck CC
Scenarios, EA, 2021

Floodplain Heights Map

Centred on Southwell road, Lowdham [EMD 344038]

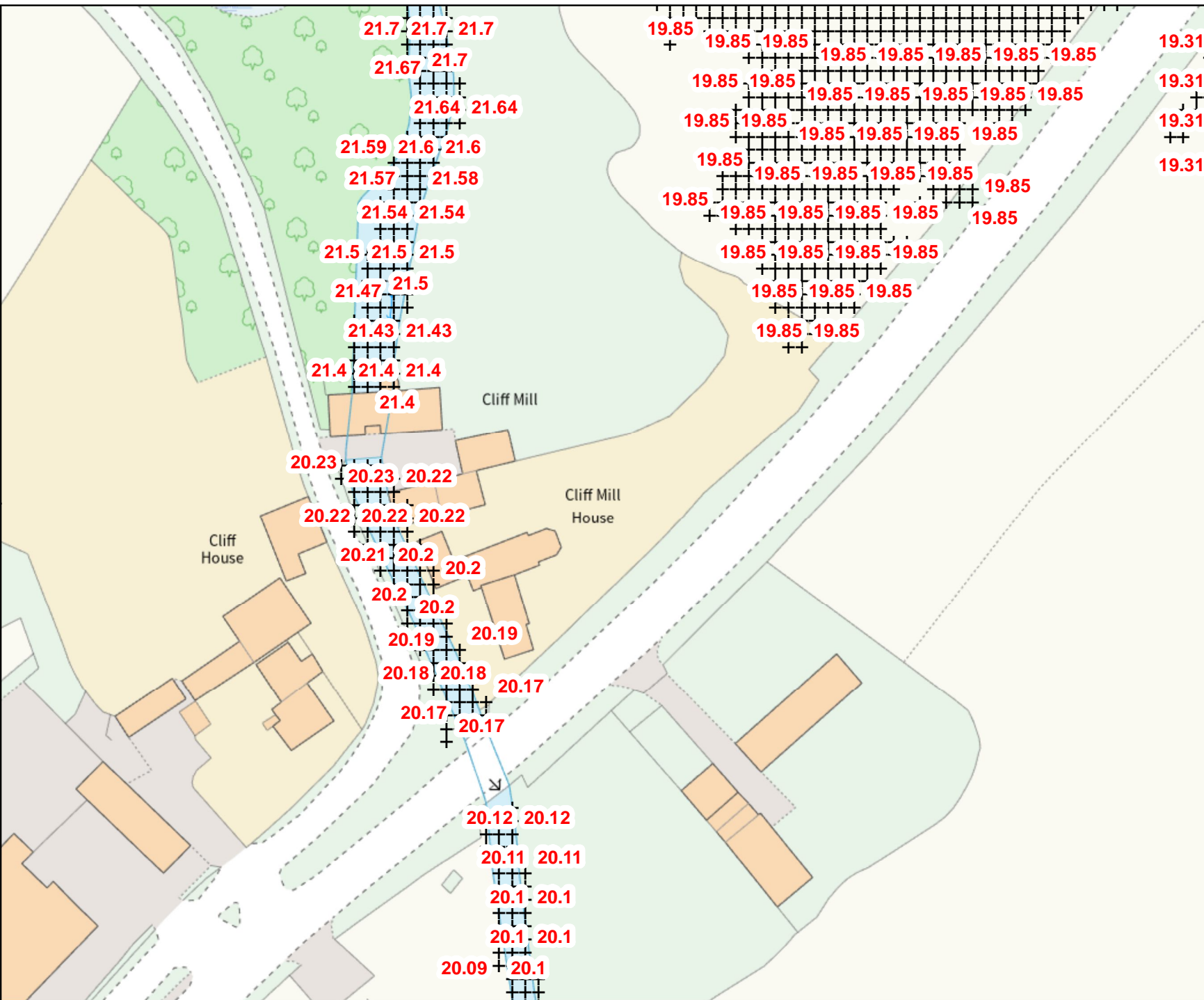


Scale 1:1,000

Date created: 30 January 2024

Legend

+ 1 in 100 yr +50%CC Height (mAOD)



SOURCE:
Dover Beck CC
Scenarios, EA, 2021