

ERECTION
OF
AGRICULTURAL BUILDING

NGR 272558/108234
EASTMERE FARM
LAPFORD
DEVON. EX17 6QU

FLOOD RISK ASSESSMENT

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EASTMERE FARM - LAPFORD – DEVON – EX17 6QU
FLOOD RISK ASSESSMENT**

APRIL 2023

1.00 Introduction

The applicant is applying to Mid Devon District Council for planning permission to reconfigure buildings and erect new agricultural buildings on an existing site within an agricultural holding, land at Lapford. Devon.

2.00 Development Site

The proposed development site is located to the South of the A377 on a modest agricultural holding comprising permanent pasture, and buildings currently used ancillary to the holding for stabling and the storage of fodder, farm machinery and implements. Looking over the lifetime of the proposed development, the site straddles Flood Zone 2 and therefore a Flood Risk Assessment is necessary.

3.00 Development Proposals

The development proposal for the site is to erect agricultural buildings ancillary to the Holding. The proposed development is therefore classified as Zone 2, and will be designed and constructed to:-

- Remain operational and safe in times of flood.
- Result in no loss of the floodplain storage
- Not impede water flows and not increase flood risk elsewhere.

The lifetime of the proposed development as an agricultural use is assumed to be 100yrs. The ground floor to remain as an agricultural use.

4.0 Sequential Test.

The proposed development is considered a minor development, affecting existing buildings and land use outside the requirements of the sequential test.

5.0 Exception Test.

The development providing storage for seasonal fodder and secure accommodation for farming implements used in the holding reduces the need for travel trips into the site by bringing fodder from offsite locations into the site at harvest outside the winter (flood) season. The development sited on a level plateau to the edge of the flood Zone 2, utilising the site of existing buildings historically located above the flood plain and considered will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere.

6.0 Site Specific Hazards.

Appendix "A" provides the Flood Risk Assessment Data for the Site – Environment Agency Product 4.

6.01 Tidal Flooding

No data provided / available as it is considered outside tidal influence.

6.02 Fluvial flooding

The buildings sited on a level plateau above the flood plain are to the edge of flood zone 2 is considered in an area of medium probability of flooding.

6.03 Surface water flooding

Development affects an existing structure and no changes proposed to the current stormwater arrangements. Any new hardstanding to be fully permeable. Surface water is currently managed by discharge of r.w. gutters and downpipes to intermediate storage with discharge to the adjacent culvert all within land owned by the applicant. The existing entrance at the highway properly formed with kerb upstand to reduce risk of stormwater ingress from the highway.

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- 6.04 **Groundwater flooding**
As works intend to be based around an existing building sited on a level plateau, with no significant ground works proposed, not considered applicable.
- 7.00 **Flood Risk Management**
A subscription to the EA flood warning service is proposed and site managers will be made aware of a "Site Flood Plan".
- 7.01 **Flood control measures-**
The site is to remain open and allow for the free movement of water through and over the adjacent curtilage. No habitable accommodation is provided and land immediately accessible above the flood risk areas available for animal refuge.
- 7.02 **Flood mitigation measures**
The works of conversion will follow guidance to incorporate flood mitigation measures and resilient construction techniques. Any services to the property are to be sited above the flood risk level and located clear of the Flood Risk Zone.
- 8.00 **Conclusion -**
The existing and proposed structures can be provided to be flood resilient. Development will take place on a level plateau with a lower risk of flooding and where access at all times is available to a place of refuge. The development is considered to provide sustainable and safe accommodation for its proposed use.

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Appendix "A"

Flood Risk Map

Environment Agency
Ref: JNEBWME2N87C Product 4

10 Pages

Flood risk assessment data



Location of site: 272558 / 108234 (shown as easting and northing coordinates)

Document created on: 2 March 2023

This information was previously known as a product 4.

Customer reference number: JNEBWME2N87C

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



Flood map for planning (rivers and the sea)

Your selected location is in flood zone 2.

Flood zone 3 shows the area at risk of flooding for an undefended flood event with a:

- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- between a 0.1% and 0.5% probability of occurring in any year for flooding from the sea
- between a 0.1% and 1% probability of occurring in any year for fluvial (river) flooding

It's important to remember that the flood zones on this map:

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

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



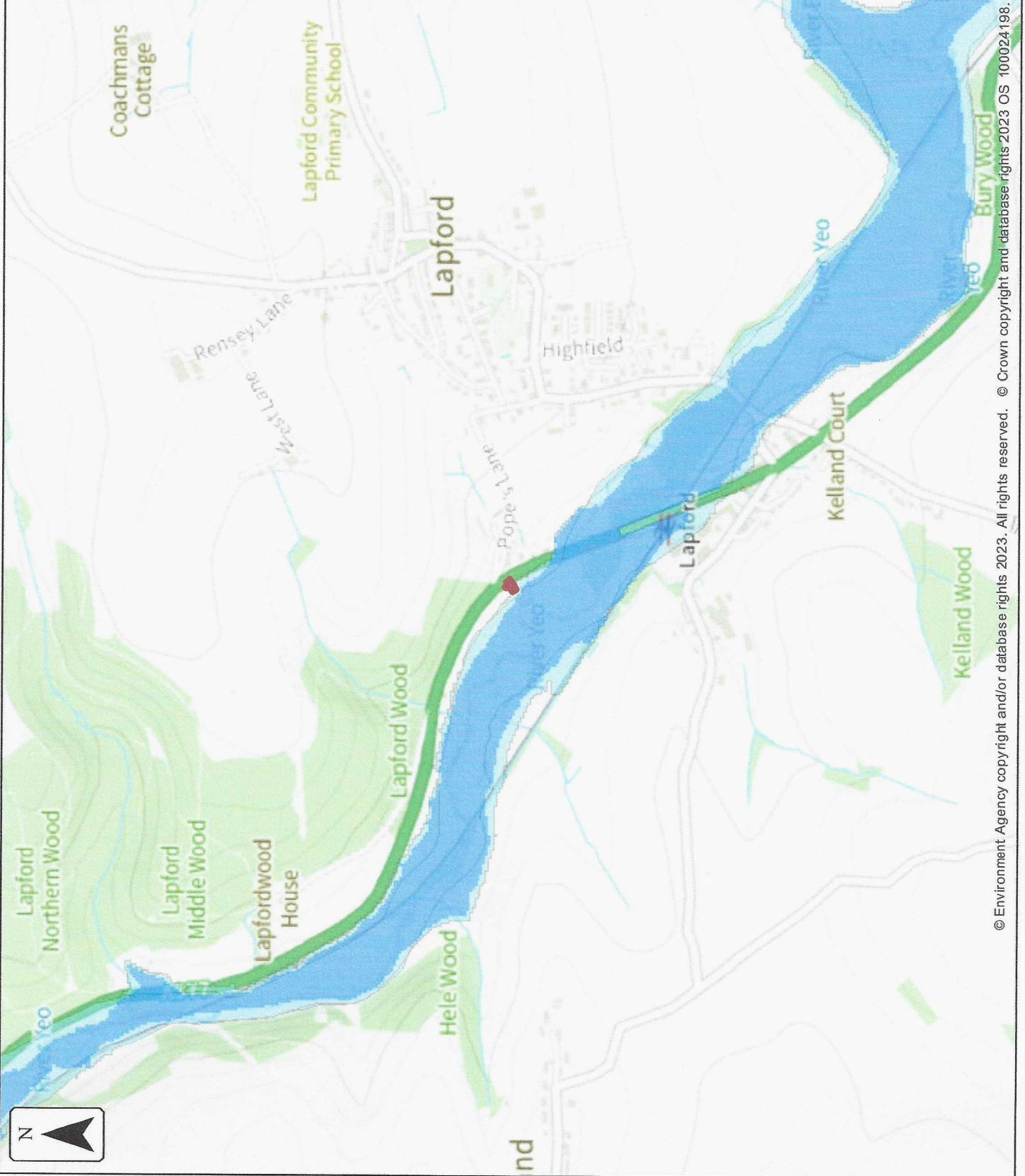
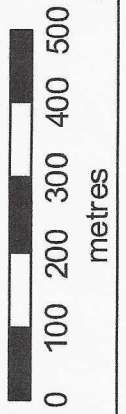
Flood map for planning

Location (easting/northing)
272558/108234

Scale
1:10,000

Created
2 Mar 2023

-  Selected area
-  Flood zone 3
-  Flood zone 2



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Historic Information

The map below is an indicative outline of areas that have previously flooded.

Historic outlines may not be visible where they overlap. You can download the outlines separately via the link below.

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

Our historic flood event outlines:

- are an indication of the geographical extent of an observed flood event. We map flooding to land, not individual properties.
- do not give any indication of flood levels for individual properties. They also do not imply that any property within the outline has flooded internally.
- are based on a combination of anecdotal evidence, Environment Agency staff observations and survey.
- do not provide a definitive record of flooding.

It is possible that there will be an absence of data in places where we have not been able to record the extent of flooding. It is also possible for errors to occur in the digitisation of historic records of flooding.

In addition to the Historic Flood Map we also hold historic flood information locally.

We have records of this area flooding in: November 1954, 9th January 1968 and April 1996.

Please see attached maps/photographs if available.

Remember that: other flooding may have occurred that we do not have records for.

Please note that our records are not comprehensive. Therefore, we advise that you make further enquiries locally with specific reference to flooding at this location. You should consider contacting the relevant Local Planning Authority and/or water/sewerage provider for the area.






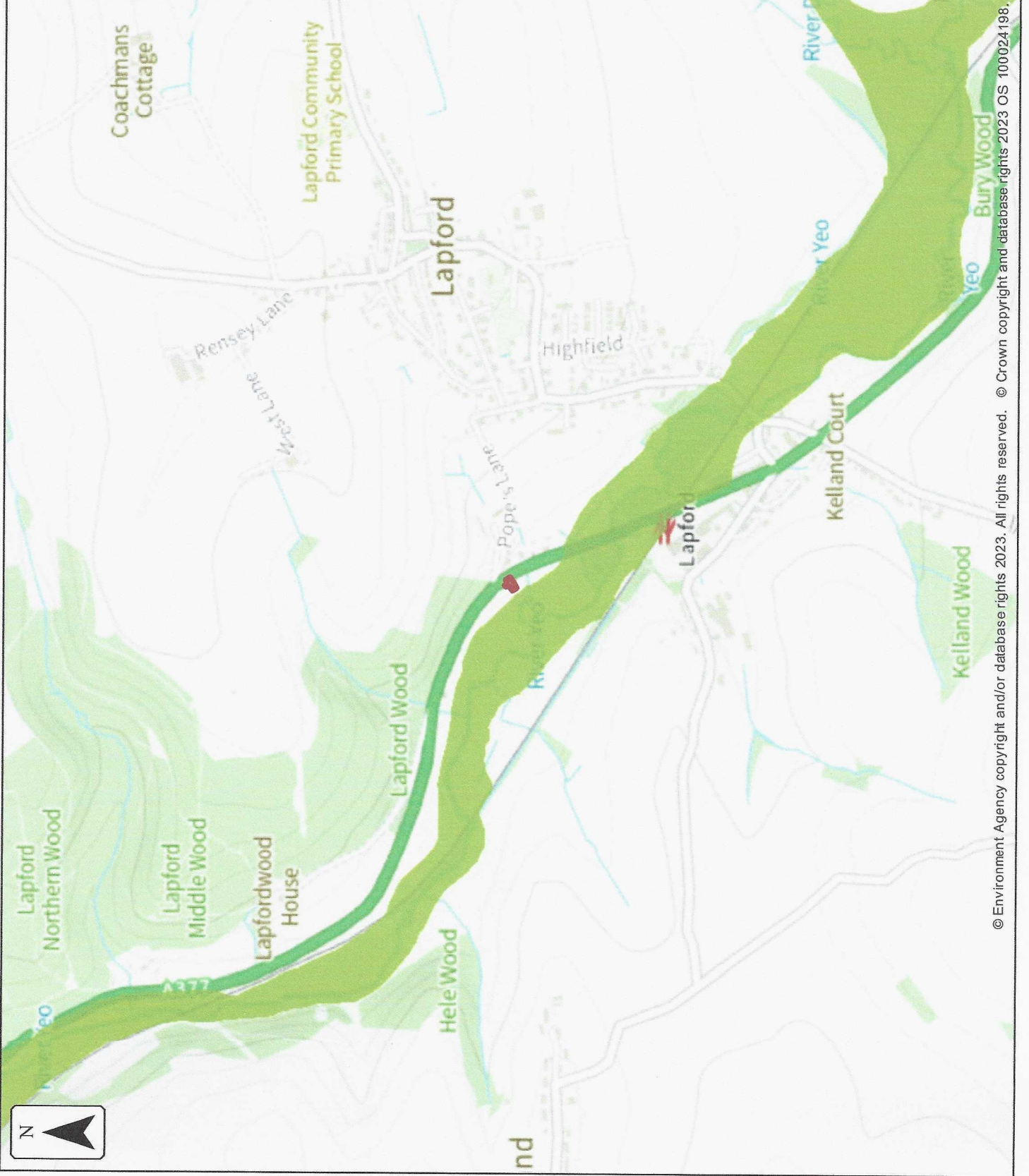
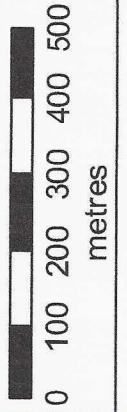
Historic flood map

Location (easting/northing)
272558/108234

Scale
1:10,000

Created
2 Mar 2023

-  Selected area
-  Main river
-  Date of flood event
January, 1968



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Modelled data

About the models used

Model name: Devon Hydrology Strategy

Date: 2012

This model contains the most relevant data for your area of interest.

You will need to consider the [latest flood risk assessment climate change allowances](#) and factor in the new allowances to demonstrate the development will be safe from flooding.

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.



Flow Node Map

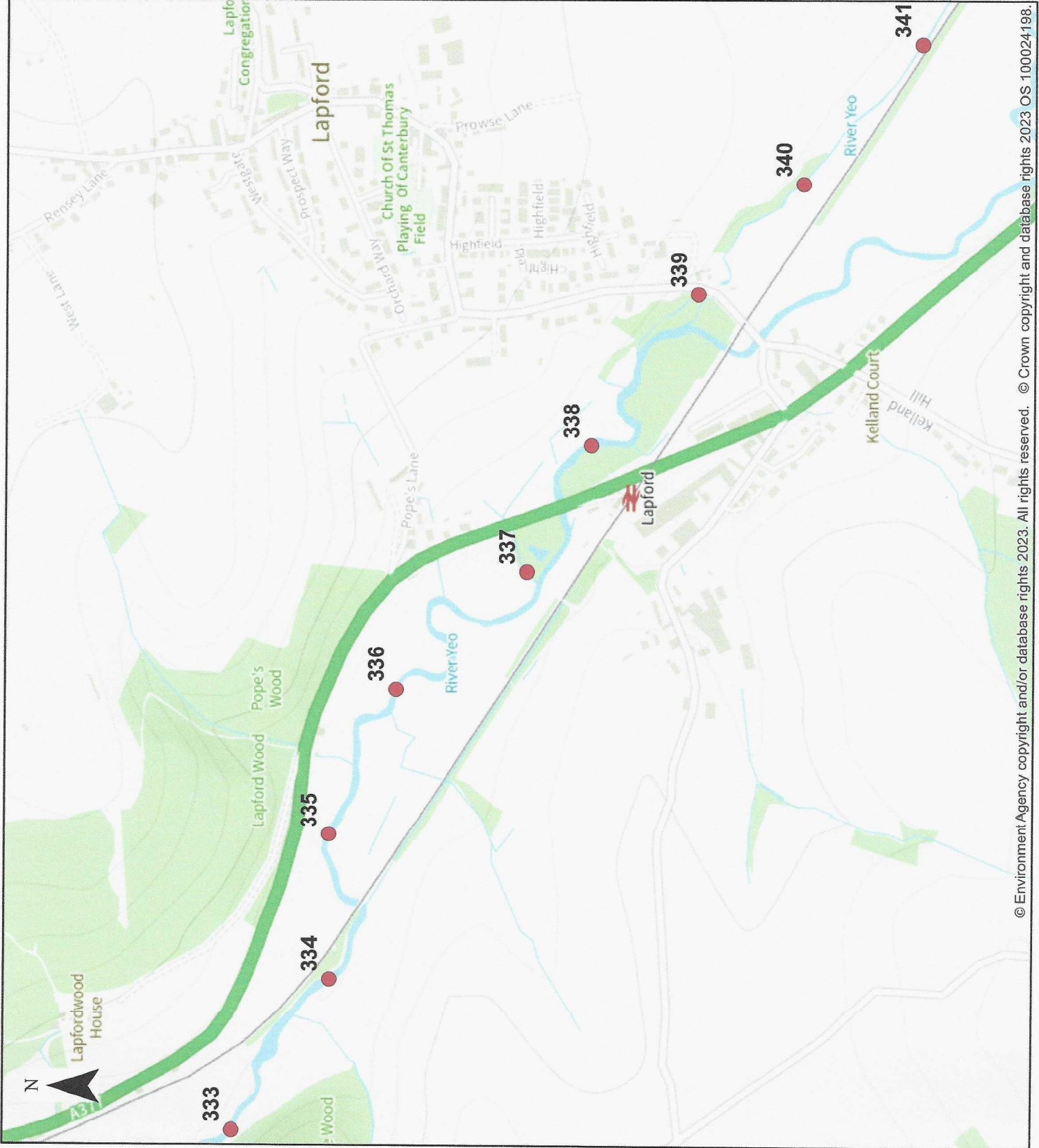
Location (easting/northing)
272558/108234

Scale Created
1:7,000 2 Mar 2023

Model name
**Devon Hydrology Strategy
2012**

Legend

● Devon Hydrology Strategy Nodes



Modelled Flood Flows

Node Reference	Easting	Northing	Area (km ²)	Modelled Flood Flows, in m ³ /s (undefended model run)							Source	Confidence
				QMED	10yr	25yr	50yr	100yr	250yr	1000yr		
333	271789	108483	127.55	45.60	70.40	84.60	96.30	109.20	128.70	164.30	Lapford	Medium
334	272001	108350	127.31	45.50	70.20	84.30	96.00	108.80	128.20	163.70	Lapford	Medium
335	272201	108352	127.2	45.30	69.90	84.00	95.60	108.40	127.80	163.20	Lapford	Medium
336	272404	108261	126.69	45.20	69.70	83.70	95.30	108.00	127.30	162.60	Lapford	Medium
337	272566	108083	126.43	45.00	69.40	83.40	95.00	107.60	126.90	162.00	Lapford	Medium
338	272742	107996	126.31	44.90	69.30	83.20	94.80	107.40	126.60	161.70	Lapford	Medium
339	272950	107850	125.25	44.80	69.20	83.10	94.60	107.20	126.40	161.40	Lapford	Medium
340	273106	107707	125.17	44.80	69.10	82.90	94.40	107.00	126.20	161.10	Lapford	Medium
341	273297	107545	125.08	44.70	68.90	82.80	94.30	106.90	125.90	160.80	Lapford	Medium

Data in this table comes from the Devon Hydrology Strategy 2012
 created 02/03/2023

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

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 Devon Cornwall and the Isles of Scilly Environment Agency team at dcisenquiries@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