

BLUEBELL BARN NURSERY
NORTH END, LONDON ROAD, EAST GRINSTEAD
RH19 1QQ

Document Title:

FLOOD RISK ASSESSMENT

Client:

MR PORTER

Project Number:

26-0060

11th March 2026

Document Ref.: 26-0060-MCE-XX-XX-RP-C-0001-S2-P01

Report Ref.: FRA

Internal Approval & Revision History

Rev.	Date	Author	Checker	Approver	Summary of Changes
P01	11/03/26	JEM	MJF	JEM	

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Project Number: 26-0060

Current Revision: P01

Date: 11/03/2026

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1. Introduction and Brief

This report has been prepared for Mr Porter to assess Flood Risk for the proposed development at Bluebell Barn Nursery, North End, London Road, East Grinstead, RH19 1QQ. The proposal is for the replacement of an existing shelter area at the site.

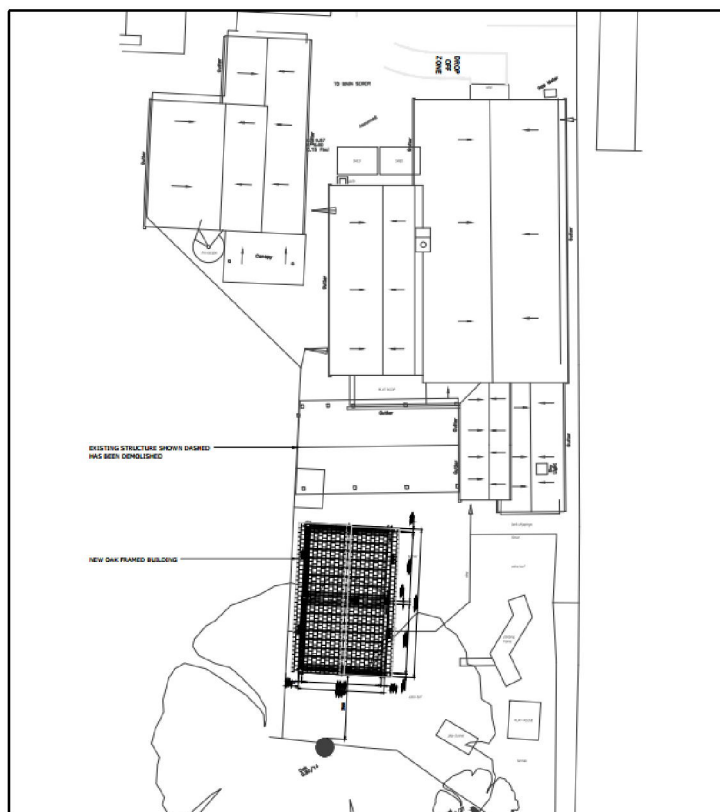


Figure 1-1 – Development Proposals

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2. Existing Site Conditions

2.1 Location

The development site is located at Bluebell Barn Nursery, North End, London Road, East Grinstead, RH19 1QQ. The British National Grid Reference is E:537837 N:139214. The figures below show the site in the wider area, more locally and then an aerial image to show the site in its current context.

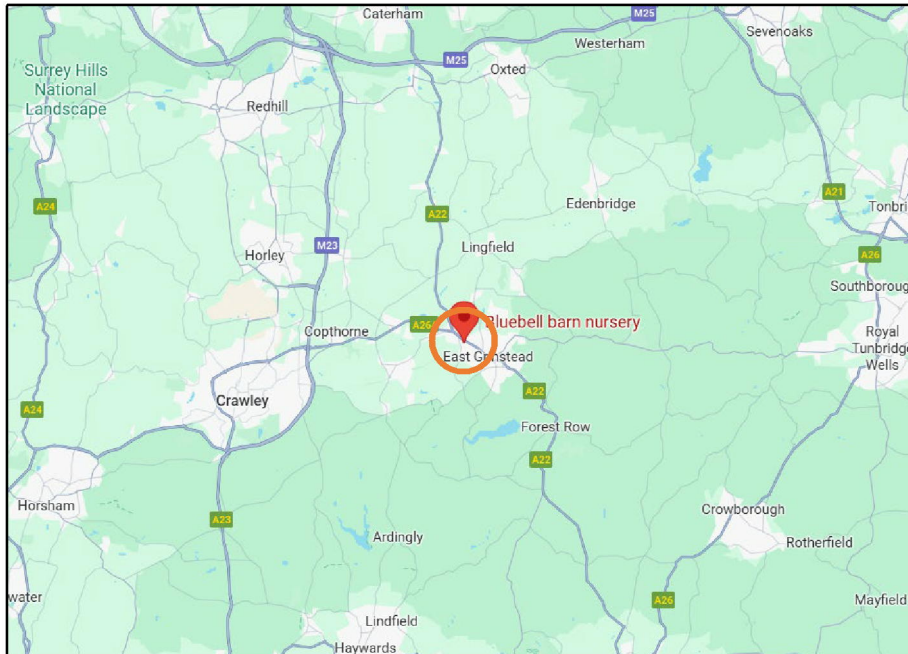


Figure 2-1 – Site Location (shown by orange circle) ©Google Maps

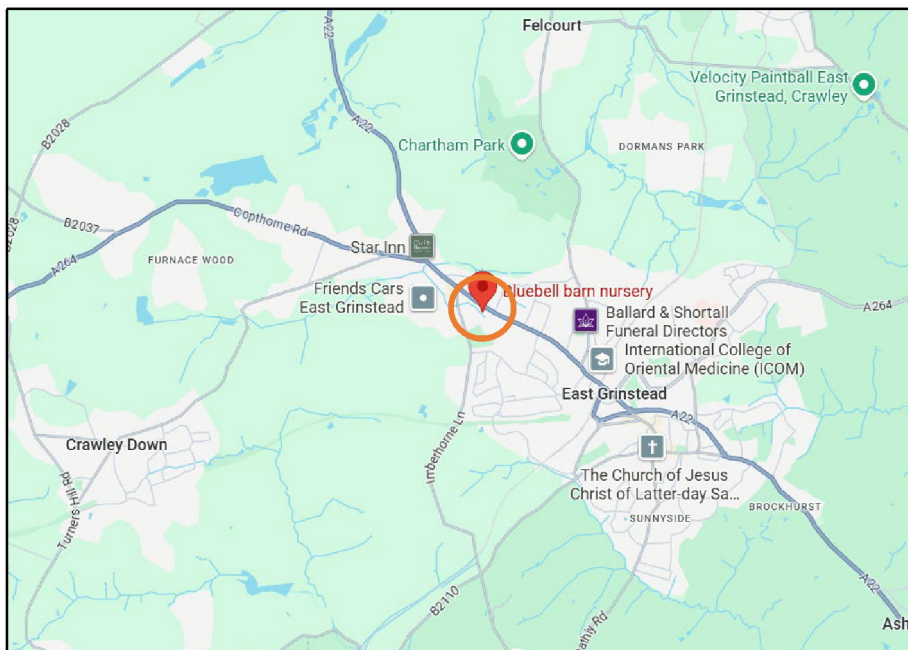


Figure 2-2 – Site Location (shown by orange circle) ©Google Maps

The following aerial image provides additional information about the context of the site and surrounding areas.



Figure 2-3 – Site Location (approximate site boundary in orange) ©Google Maps

The site comprises an existing building, parking to the north-east and garden/play area to the south-west. It is bounded by London Road (A22) to the north, residential dwellings to the south-east and north-west and allotments to the south. A watercourse is present within the allotment land.

2.2 Site Topography

The levels generally fall towards the middle of the site. The rear garden / play area falls north to south, with a fall of approximately 250mm. The parking area falls north to south, with a fall of approximately 750mm. The existing building is elevated against the surrounding land, with an FFL of 10m (local datum).

3. Proposed Development

The proposal is for the replacement of an existing shelter area at the site. The following figure shows the Architect's current proposals.

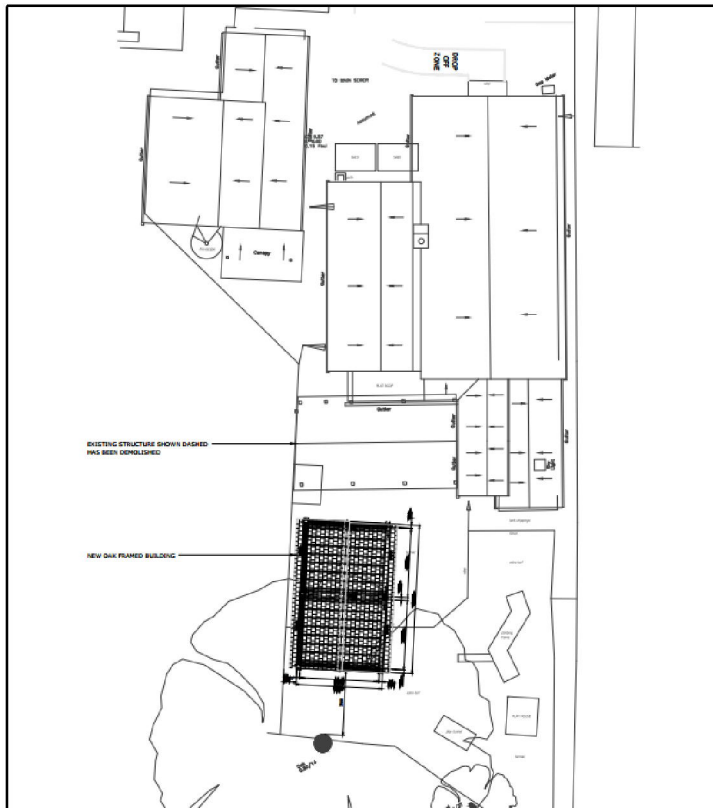


Figure 3-1 – Development Proposals

4. Flood Risk

This Flood Risk Assessment (FRA) has been produced in accordance with current best practice, recommendations and guidance set out in the National Planning Policy Framework (NPPF) and associated documents valid at the time of writing.

4.1 Criteria

As according to the NPPF, a site typically requires a site specific FRA for all development in Flood Zones 2 and 3. In Flood Zone 1, an assessment should accompany all proposals involving: sites of 1ha or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a Strategic Flood Risk Assessment (SFRA) as being at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use.

4.2 Flood Risk Zones

The PPG defines a number of flood zones based on the probability of flooding. It also provides guidance on the most appropriate form of development within each zone. The flood risk is summarised as below.

Table 4-1 – Flood Zone Definitions

Flood Zone	Definition
Zone 1 – Low Probability	Land having a less than 0.1% (1 in 1000) annual probability of river or sea flooding.
Zone 2 – Medium Probability	Land having between a 1% and 0.1% (1 in 100 and 1 in 1000) annual probability of river flooding; or land having between a 0.5% and 0.1% annual probability of sea flooding.
Zone 3a – High Probability	Land having a 1% (1 in 100) or greater annual probability of river flooding; or Land having a 0.5% (1 in 200) or greater annual probability of sea.
Zone 3b – The Functional Floodplain	This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise: - 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.

4.3 Strategic Flood Risk Assessment (SFRA)

An SFRA, published in 2024, has been prepared for Mid Sussex District Council (MSDC). The MSDC website also has an interactive map identifying future and historic sources of flooding. These two sources have been reviewed and referred to within this FRA.

4.4 Surface Water Management Plan (SWMP)

At the time of writing, a SWMP for the area did not appear publicly available.

4.5 Historic Flooding

The SFRA reviews historic flooding and the following sections summarise the findings within the SFRA.

4.5.1 Fluvial Flooding

There was no historical flooding within the vicinity reported within the online Historic Flood Map.

4.5.2 Surface Water Flooding

There was no historical flooding within the vicinity reported within the online Historic Flood Map.

4.5.3 Flooding from Sewers

There was no historical flooding within the vicinity reported within the online Historic Flood Map.

4.5.4 Groundwater Flooding

There was no historical flooding within the vicinity reported within the online Historic Flood Map.

4.6 Flood Map for Planning

A review of the Environment Agency's online mapping tools has identified that the development site is within Flood Zone 1, an area with a low probability of flooding from Rivers and Sea.

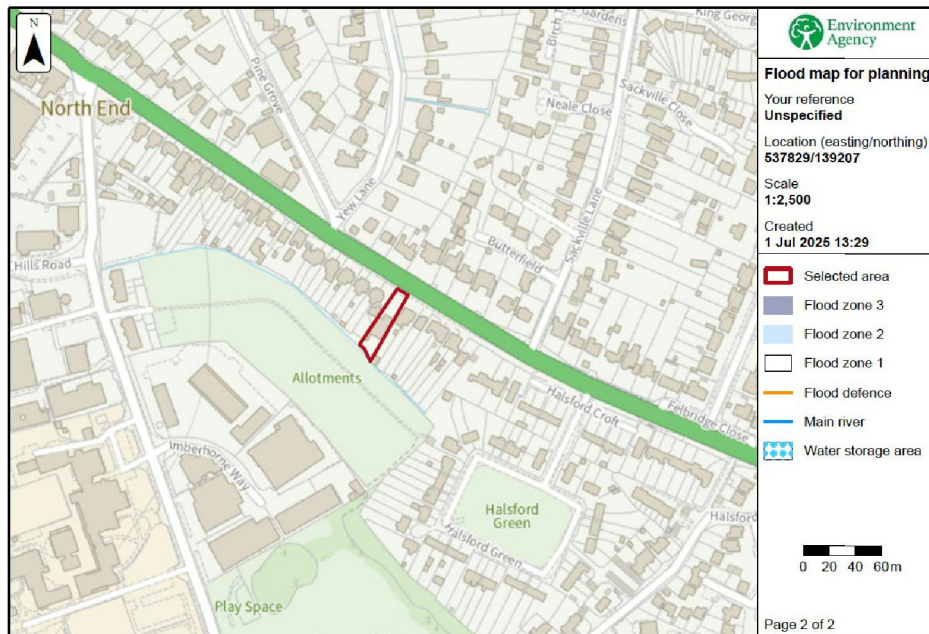


Figure 4-1 – Extract of the Environment Agency's Flood Map for Planning

Flood Zone 1 comprises land having a less than 0.1% (1 in 1000) annual probability of river or sea flooding. Therefore, the risk of flooding from fluvial or tidal sources is considered negligible.

4.7 Long Term Flood Risk – Surface Water

A review of the Environment Agency's online mapping tools has identified that the development site is at low to high risk of flooding from surface water, including consideration of climate change.

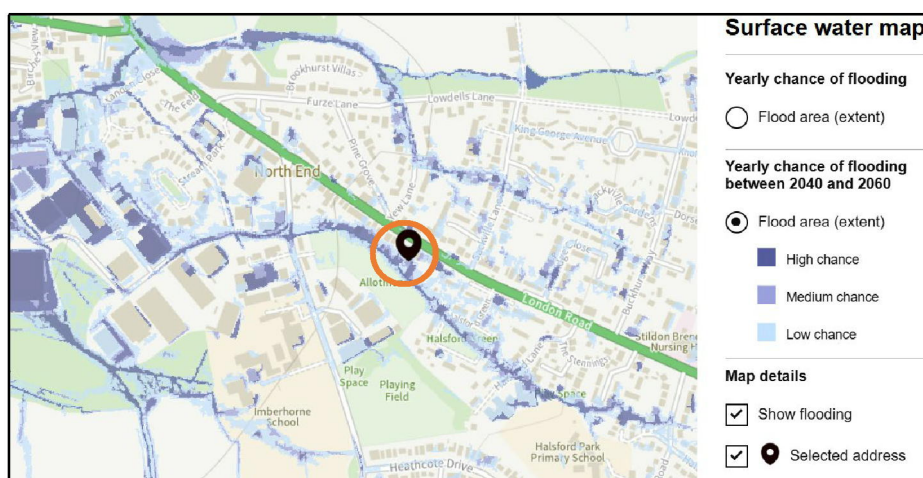


Figure 4-2 – Extract of the Environment Agency's Long Term Flood Risk Map (including climate change allowance)

The long term surface water flood risk data (including climate change allowance) has been obtained from DEFRA and compared with the site layout. A sketch has been appended to this report and extract shown below.



Figure 4-3 – Extract of MCE Sketch 26-0060-MCE-XX-XX-DR-C-1400 (Surface Water Flood Risk Including Climate Change) (Shelter circled in orange)

As can be seen from the previous extract, the proposed shelter lies within the low to medium flood risk areas. When compared with the former shelter area, the proposal appears to be in a slightly improved area where flood risk is concerned.

The proposed structure is open, and therefore floodwater can flow freely in and out, ensuring that flood capacity is not reduced.

Therefore, although risk of flooding from surface water is considered low-medium, the risk shall not increase as a result of development.

4.8 Flood Risk from Groundwater

The Environment Agency online resources suggests that flooding from groundwater is unlikely in the area.

Therefore, the risk of flooding from groundwater is considered low.

4.9 Flood Risk from Reservoirs

The Environment Agency online resources suggests that flooding from the breach of a reservoir is unlikely in the area.

Therefore, the risk of flooding from reservoirs is considered low.

4.10 Flood Risk from Public Sewers, Highways and Private Drains

4.10.1 Public Sewers

There are no known historic flood events at the site, nor any known public sewers within the site.

Thus, the risk to this development site is considered low.

4.10.2 Highways Drainage

There are no known historic flood events at the site, nor any known highways drainage within the site.

Thus, the risk to this development site is considered low.

4.10.3 Private Drainage

There are no known issues with the private drainage on site. Any new drainage would be installed in accordance with current standards.

Thus, the risk for this development site is considered low.

4.11 Sequential Test

The replacement appears to have been placed in an area at slightly lower risk than the original structure. Therefore, the layout has been developed sequentially and the sequential test satisfied.

4.12 Vulnerability Classification

The technical guidance for the NPPF indicates that buildings used for nurseries are classified as “more vulnerable”.

The technical guidance for the NPPF also includes a list of appropriate land uses in each flood zone dependant on vulnerability to flooding as represented in the following table.

Table 4-2 – Flood Risk Vulnerability and Flood Zone Compatibility

Flood Risk Vulnerability Classification		Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Flood Zone	Zone1	Development is appropriate	Development is appropriate	Development is appropriate	Development is appropriate	Development is appropriate
	Zone 2	Development is appropriate	Development is appropriate	Exception Test Required	Development is appropriate	Development is appropriate
	Zone 3a	Exception Test Required	Development is appropriate	Development should not be permitted	Exception Test Required	Development is appropriate
	Zone 3b Functional Floodplain	Exception Test Required	Development is appropriate	Development should not be permitted	Development should not be permitted	Development should not be permitted

It is clear from the previous table that the development is considered appropriate and therefore the Exception Test is not required.

4.13 Exception Test

In accordance with the NPPF, the Exception Test should demonstrate that:

1. The development would provide wider sustainability benefits to the community that outweigh the flood risk; and
2. The development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and where possible, will reduce flood risk overall.

As noted in the previous section, the Exception Test is not required.

4.14 Flood Resilience

The proposed shelter shall be a timber structure, with one elevation completely open. Therefore, there are no appropriate flood resilient measures for the structure, save for ensuring the timber is appropriately treated to extend lifetime as much as practicable with consideration of water.

Should any electricity and lighting be installed, then it is suggested that this should be installed at high level.

4.15 Flood Warning and Emergency Planning

The users of the site should be encouraged to register with the Government's Flood Warning Service. Flood Alerts, Flood Warnings and Severe Flood Warnings are issued to residents and businesses within flood risk areas. This system dials out a message to the recipient when a particular category of flood warning is being advised. The message can be communicated through text message or a phone call.

The building operator should also ensure an appropriate emergency plan is in place. A stay put policy would not be appropriate at the location of the shelter. A wider site policy should be adopted, considering evacuation measures.

Installation of a flood alarm positioned towards the rear of the property, where the initial area of flooding is anticipated, should be considered.

4.16 Flood Risk Summary

The site has been assessed in accordance with the latest guidance provided within the NPPF and supplementary guidance documents.

Accordingly, the potential flood risk at the location of the replacement shelter has been summarised below:

Table 4-3 – Flood Risk Summary

Source	Risk
Rivers (Fluvial)	Low
Sea (Tidal)	Low
Surface Water (Pluvial)	Low-Medium
Groundwater	Low
Reservoirs	Low
Public Sewers	Low
Highways Drainage	Low
Private Drainage	Low

Having considered the potential sources of flooding, most have been identified as having a low risk to the development site. It is believed that the main risk of flooding to the development site is surface water. However, it is apparent that the risk shall not increase as a result of development.

The building users should sign up to the government's flood warning service and building operator should ensure an appropriate emergency procedure is in place.

5. Conclusions

This document has been produced in accordance with current best practice, recommendations and guidance set out in the National Planning Policy Framework (NPPF) and associated documents valid at the time of writing.

This report concludes:

1. The site comprises an existing building, parking to the north-east and garden/play area to the south-west. It is bounded by London Road (A22) to the north, residential dwellings to the south-east and north-west and allotments to the south. A watercourse is present within the allotment land.
2. The proposal is for the replacement of an existing shelter area at the site.
3. A review of the available Environment Agency Flood Maps and SFRA conclude that:
 - a. The majority of the sources of flooding present a low risk to the site.
 - b. It is believed that the main risk of flooding to the development site is surface water. It is believed that the main risk of flooding to the development site is surface water. However, it is apparent that the risk shall not increase as a result of development.
4. An emergency plan should be developed, if not already in place.

Appendix 1 – Proposed Site Plan



Name: 1.0			
REV	REVISION DETAIL	BY	DATE
			12/26
Client:  MPP Ltd Glen Farm, Bones Lane, Lingfield, Surrey, RH7 6HR			
Job: Bluebell Barn Nursery, London Road, East Grinstead, West Sussex. RH19 1QQ			
Title: Proposed Site Plan			
Status: For Planning			
Drawn By: NT	Date: Jan 2026	Scale: 1:100 @ A1	
Drawn No: SK-005 - Proposed Site Plan	Revision: P		

Appendix 2 – Environment Agency Flood Map for Planning

Flood map for planning

Your reference
Unspecified

Location (easting/northing)
537829/139207

Created
1 July 2025 13:29

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)

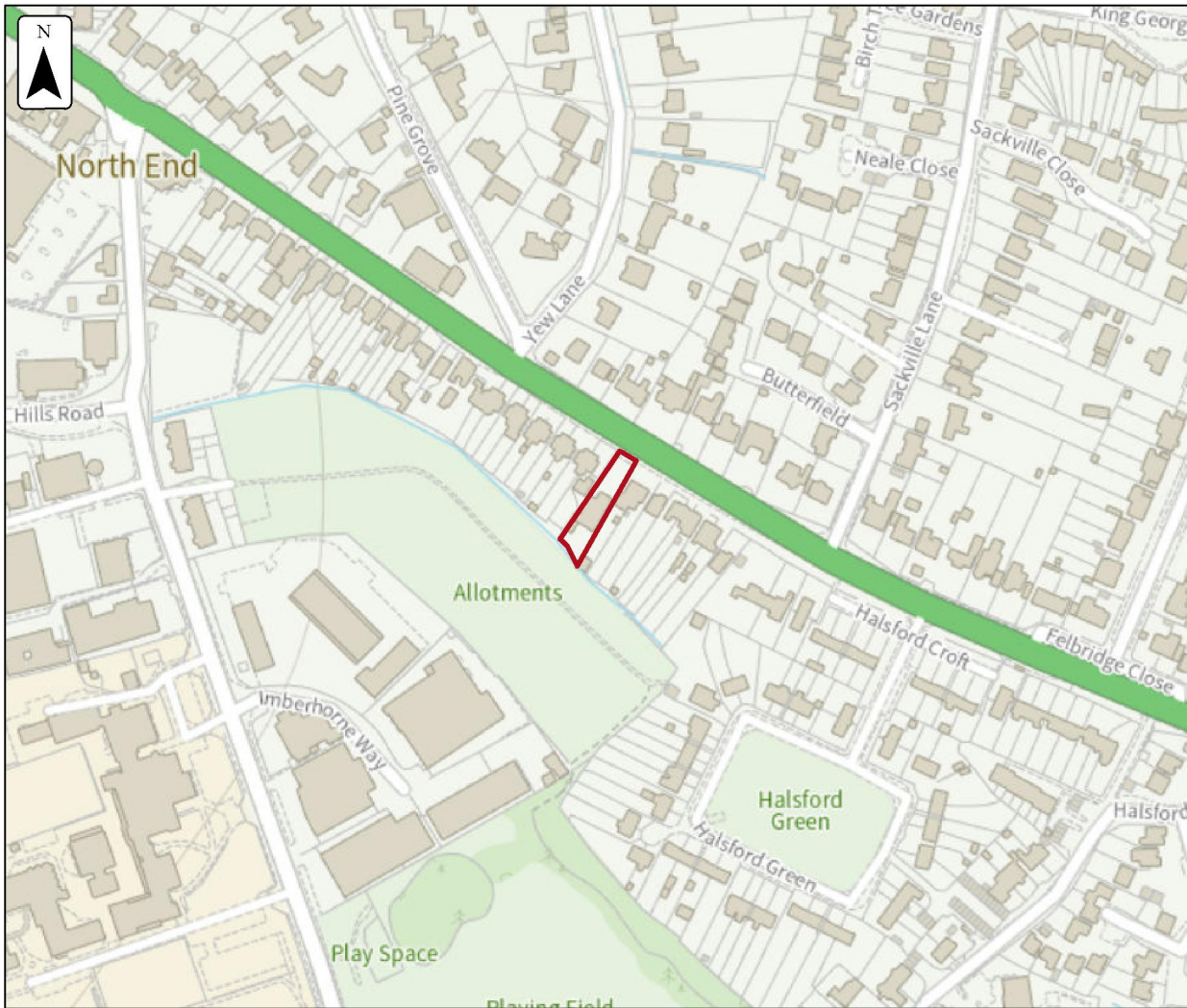
Notes

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.

Flood risk data is covered by the Open Government Licence which sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2025 AC0000807064. <https://flood-map-for-planning.service.gov.uk/os-terms>



Flood map for planning

Your reference
Unspecified

Location (easting/northing)
537829/139207

Scale
1:2,500

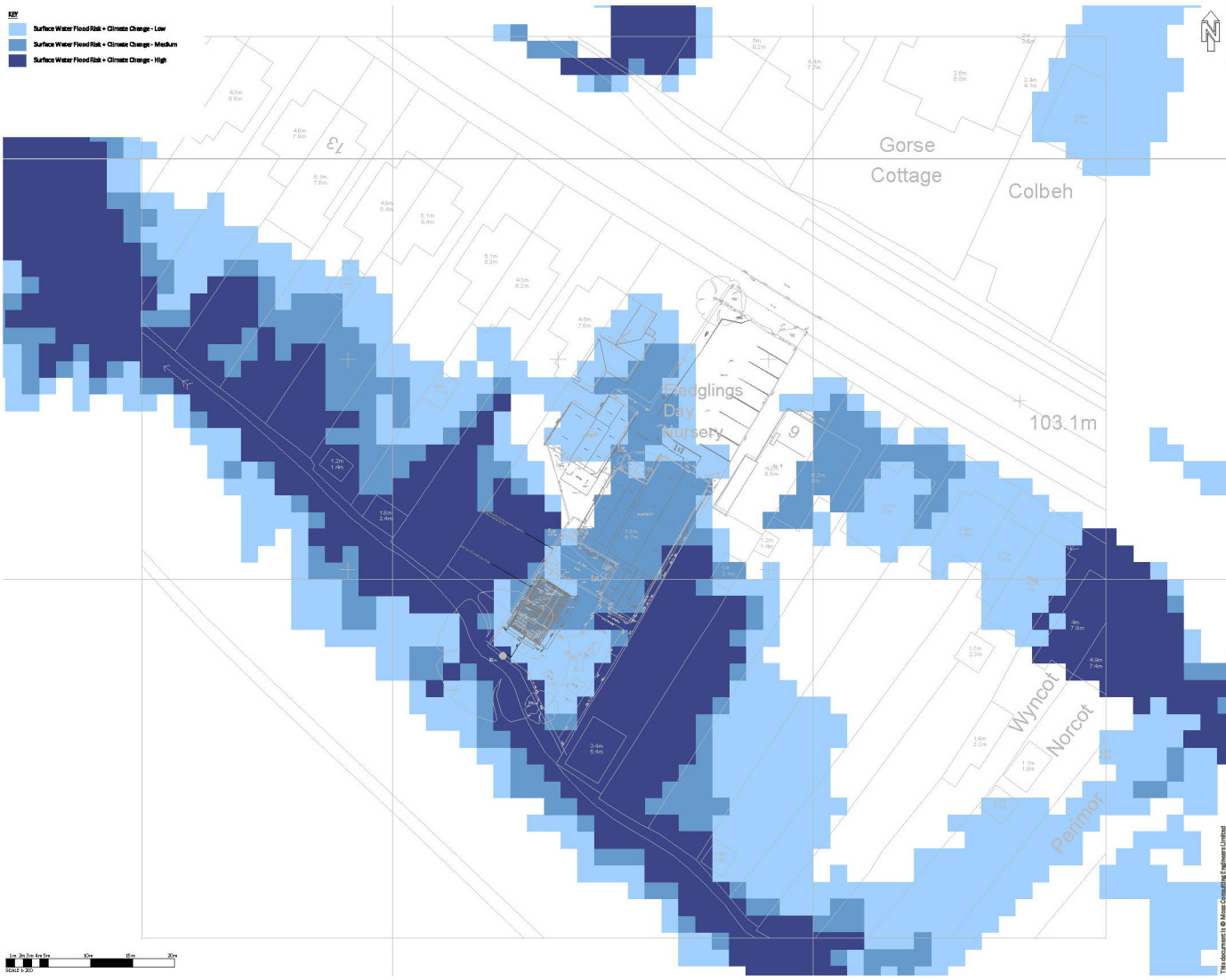
Created
1 Jul 2025 13:29

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

0 20 40 60m

Page 2 of 2

Appendix 3 – Long Term Surface Water Flood Map



- KEY**
- Surface Water Flood Risk - Climate Change - Low
 - Surface Water Flood Risk - Climate Change - Medium
 - Surface Water Flood Risk - Climate Change - High

- DO NOT SCALE THIS DRAWING. ALL SETTING OUT TO ARCHITECT'S DETAILS AND DRAWINGS THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWING ISSUES AND THE SPECIFICATION.
- Notes:**
- All building materials, components and workmanship to comply with the appropriate public sector building regulations, within standards and codes of practice and the appropriate manufacturer's recommendations.
 - For all specialist work see relevant drawings.
 - Any discrepancies, errors or omissions to be reported to the project co-ordinator for further instructions before commencement of works.
 - The Engineer is not responsible for alterations, except where shown on his drawings. All setting out information, dimensions, etc. shall be calculated from the Architect's drawings.
 - Position of topographical survey and of Architect layout approximate only.



Project Name		Project Ref	
Drawing No.		Drawing Date	
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MR PORTER			
BLUEBELL BARN NURSERY NORTH END, LONDON ROAD EAST GRINSTEAD, RH19 1QQ			
Drawing Title SURFACE WATER FLOOD RISK LAYOUT (INCLUDING CLIMATE CHANGE)			
Drawn by	Check by	Scale	Rev of this sheet
26-0060	MAE	MAE/26	1.000 (0 of 1)
Drawing Code 26-0060 - MAE - XX - XX - DR - C - 1.400			
Drawing Status SUITABLE FOR INFORMATION PRELIMINARY			



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