



Flood Risk Assessment

**Land for Biodiversity Net Gain Improvements
Land at Weedon Road
Aston Abbots
Buckinghamshire**

Revision 0: January 2024

Report Reference: 1107-FRA-01-0

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Revision Record

Revision	Date	Description	Written	Approved
0	10.01.24	Planning Issue	ZS	MJA

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1.0 Introduction

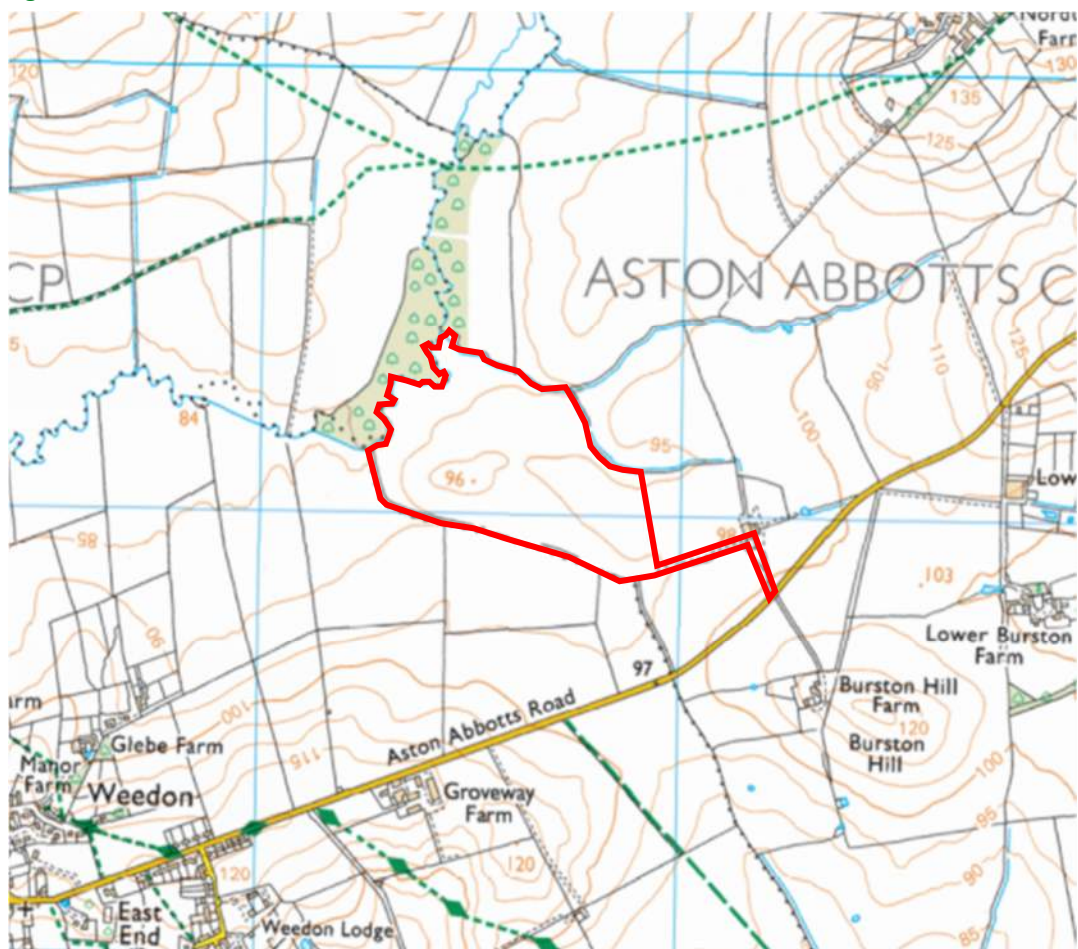
1.1 Instructions

- 1.1.1 This Flood Risk Assessment has been prepared from instructions received from Amet Property for Burston Farmers Ltd.
- 1.1.2 The report has been prepared to support the submission of a planning application.
- 1.1.3 The benefit of this report is to our instructing Client.

1.2 Site Location

- 1.2.1 The proposed change of use development is located at land north of Weedon Road / Aston Abbots Road, Aston Abbott, as shown in **Figure 1.1** below and enclosed in **Appendix A**. The approximate National Grid Reference for the site is E482582 N219087.

Figure 1.1 Site Location Plan



1.3 Current Use and Description

1.3.1 The site currently comprises of arable land. The site falls from east to west with towards the watercourse.

1.4 Proposed Development

1.4.1 The proposed development will comprise a change of use of the current farm land into land for a biodiversity net gain (BNG) improvement area. The extent of land to be used is marked on the plan enclosed in **Appendix A**.

1.4.2 The 'Flood Risk Vulnerability Classification' of various development types is defined within Annex 3 of the National Planning Policy Framework (NPPF) – July 2021. A BNG development is classified as a Water Compatible development. The relevant extract from Annex 3 of the NPPF is set out below.

Water-Compatible Development

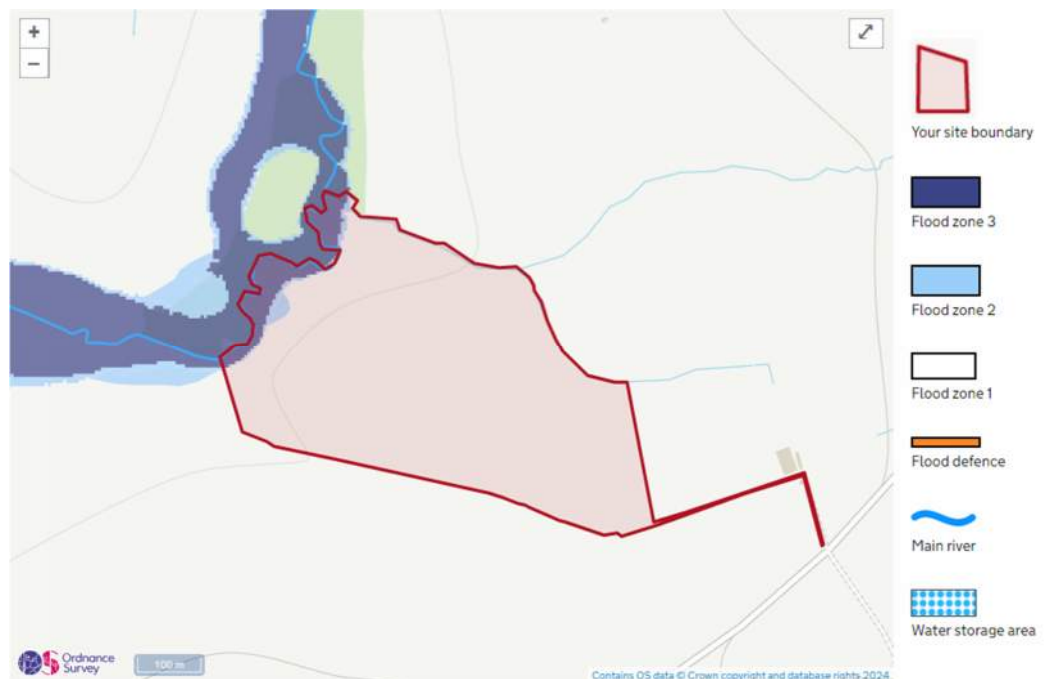
- Flood control infrastructure.
- Water transmission infrastructure and pumping stations.
- Sewage transmission infrastructure and pumping stations.
- Sand and gravel working.
- Docks, marinas, and wharves.
- Navigation facilities.
- Ministry of Defence installations.
- Ship building, repairing, and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location.
- Water-based recreation (excluding sleeping accommodation).
- Lifeguard and coastguard stations.
- Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms.
- Essential ancillary sleeping or residential accommodation for staff required by uses in this category, subject to a specific warning and evacuation plan.

2.0 Site Specific Flood Risk

2.1 Risk of Fluvial / Tidal Flooding

- 2.1.1 The likelihood of fluvial and tidal flooding is defined on the Environment Agency's map 'Flood Map for Planning'. This flood map is published on the gov.uk website.
- 2.1.2 An extract of this flood map is provided below in **Figure 2.1**. The approximate site boundary is shown in red.

Figure 2.1: Fluvial / Tidal Flood Risk - 05/01/24



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

- 2.1.3 The Environment Agency's flood map shows that the proposed development site is located within Flood Zone 1 (Low Probability), Flood Zone 2 (Medium Probability), and Flood Zone 3 (High Probability) and as such, the development is at a low (less than 1 in 1000 years) to high (greater than 1 in 100 years) risk of flooding from rivers or the sea.

2.2 Risk of Surface Water Flooding

2.2.1 The likelihood of surface water flooding is defined on the Environment Agency’s map ‘Flood risk from surface water’. This flood map is published on the gov.uk website.

2.2.2 An extract of this flood map is provided below in **Figure 2.2**. The approximate site boundary is shown in red.

2.2.3 Regarding the accuracy of this map the EA state that:

“Flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast. In addition, local features can greatly affect the chance and severity of flooding. Because of this, we report the highest risk within 20m of a specific location, such as an individual property. This means reports for neighbouring properties may show different levels of risk.”

Figure 2.2: Surface Water Flooding - 08/01/24



Extent of flooding from surface water
● High ● Medium ● Low ○ Very low 📍 Location you selected
Source: <https://check-long-term-flood-risk.service.gov.uk/map>

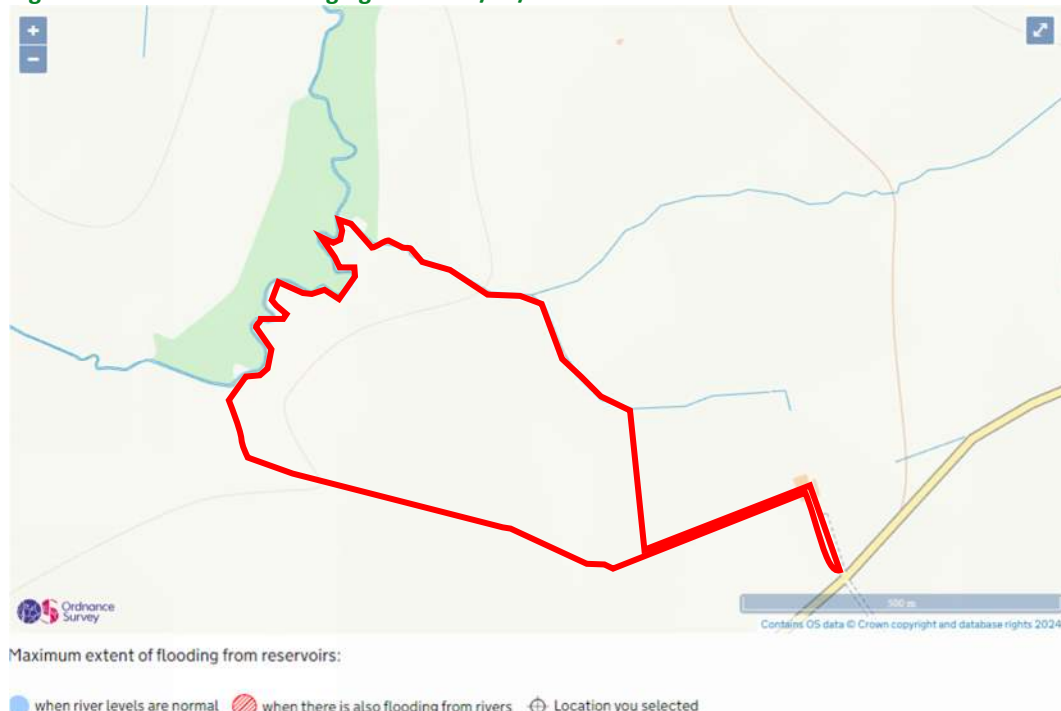
2.2.4 The site is located predominately within an area of very low surface water flood risk and partially in an area of low, medium and high surface water flood risk.

2.3 Risk of Reservoirs, Canals, and Other Artificial Sources Flooding

2.3.1 The likelihood of reservoir water flooding is defined on the Environment Agency's map 'Flood Risk from Reservoirs'. This flood map is published on the gov.uk website.

2.3.2 An extract of this flood map is provided below in **Figure 2.3**. The approximate site boundary is shown in red.

Figure 2.3: Reservoir Flooding - gov.uk - 08/01/24



Maximum extent of flooding from reservoirs:

● when river levels are normal ● when there is also flooding from rivers 📍 Location you selected

Source: <https://check-long-term-flood-risk.service.gov.uk/map>

2.3.3 The site is not at risk of reservoir flooding.

2.3.4 We are not aware of any canals or other artificial sources which may cause flooding on the site.

2.4 Risk of Ground Water Flooding

2.4.1 We do not have any records of ground water flooding within the vicinity of the site. We therefore consider the risk of ground water sewer flooding to be low.

2.5 Risk of Sewer Flooding

2.5.1 We do not have any records of sewer flooding within the vicinity of the site. We therefore consider the risk of sewer flooding to be low.

2.6 Previous Flood Events

- 2.6.1 The Environment Agency's Historic Flood Map does not show any flooding within the boundary of the site. The Environment Agency's "Historic Flood Map is a GIS layer showing the maximum extent of all individual Recorded Flood Outlines from river, the sea and groundwater springs that meet a set criterion. It shows areas of land that have previously been subject to flooding in England. Records began in 1946 when predecessor bodies to the Environment Agency started collecting detailed information about flooding incidents".

2.7 Summary of Flood Risk

- 2.7.1 The proposed development site is located within Flood Zone 1 (Low Probability), Flood Zone 2 (Medium Probability), and Flood Zone 3 (High Probability) and as such, the development is at a low (less than 1 in 1000 years) to high (greater than 1 in 100 years) risk of flooding from rivers or the sea.
- 2.7.2 The site is located predominately within an area of very low surface water flood risk and partially in an area of low, medium, and high surface water flood risk.
- 2.7.3 The site is at a low risk of flooding from all other sources.
- 2.7.4 The level of flood risk is compatible with the proposed use.

2.8 Flood Risk Vulnerability and Flood Zone ‘Compatibility’

2.8.1 The suitability of different development types to be built and occupied within a particular Flood Zone is defined within Table 2 of the Planning Practice Guidance for ‘Flood Risk and Coastal Change’. Table 2 is replicated below in **Table 2.1** below. This table maps vulnerability classes against the flood zones to indicate where development is ‘appropriate’ and where it should not be permitted.

2.8.2 The proposed change of use development for BNG is located within Flood Zones 1, 2 and 3 and is classified as a Water Compatible development. Based on this categorisation of the development it is considered ‘appropriate’ neither a Sequential Test nor Exception Test are required.

Table 2.1: Flood risk vulnerability and flood zone ‘compatibility’

Flood Zone	Flood Risk Vulnerability Classification				
	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test required	✓	✓	✓
Zone 3a †	Exception Test required †	✗	Exception Test required	✓	✓
Zone 3b *	Exception Test required *	✗	✗	✗	✓*

✓ Development is appropriate

✗ Development should not be permitted.

† In Flood Zone 3a essential infrastructure should be designed and constructed to remain operational and safe in times of flood.

* * “ In Flood Zone 3b (functional floodplain) essential infrastructure that has to be there and has passed the Exception Test, and water-compatible uses, should be designed and constructed to:

- remain operational and safe for users in times of flood;
- result in no net loss of floodplain storage;
- not impede water flows and not increase flood risk elsewhere.

3.0 Surface and Foul Water Drainage

- 3.1.1 The proposed development will create a BNG improvement area and will not have any surface or foul water drainage.

4.0 Conclusions

4.1 Site location and proposed development

4.1.1 The proposed change of use development to BNG improvement land is located at land north of Weedon Road / Aston Abbots Road, Aston Abbott. The approximate National Grid Reference for the site is E482582 N219087.

4.2 Flood Risk

4.2.1 The proposed development site is located within Flood Zone 1 (Low Probability), Flood Zone 2 (Medium Probability), and Flood Zone 3 (High Probability) and as such, the development is at a low (less than 1 in 1000 years) to high (greater than 1 in 100 years) risk of flooding from rivers or the sea.

4.2.2 Predominantly the site is located within an area of very low surface water flood risk and partially in an area of low, medium, and high surface water flood risk.

4.2.3 The site is at a low risk of flooding from all other sources.

4.2.4 The level of flood risk is compatible with the proposed use.

4.2.5 The proposed development's vulnerability classification is compatible with the Flood Zone therefore the development is appropriate.

4.3 Surface and Foul Water Drainage

4.3.1 The proposed development will create a BNG improvement area and will not have any surface or foul water drainage.



Appendix A

Location Plan

Promap Licence number 100022432

