

FLOOD RISK ASSESSMENT FOR MINOR DEVELOPMENT.

55 STATION ROAD ROYAL WOOTTON BASSETT

DATED : 20 JUNE 2025



GEOGRAPHICAL LOCATION



SITE LOCATION MAP

Surface water map

Yearly chance of flooding

● Flood area (extent)

■ High chance

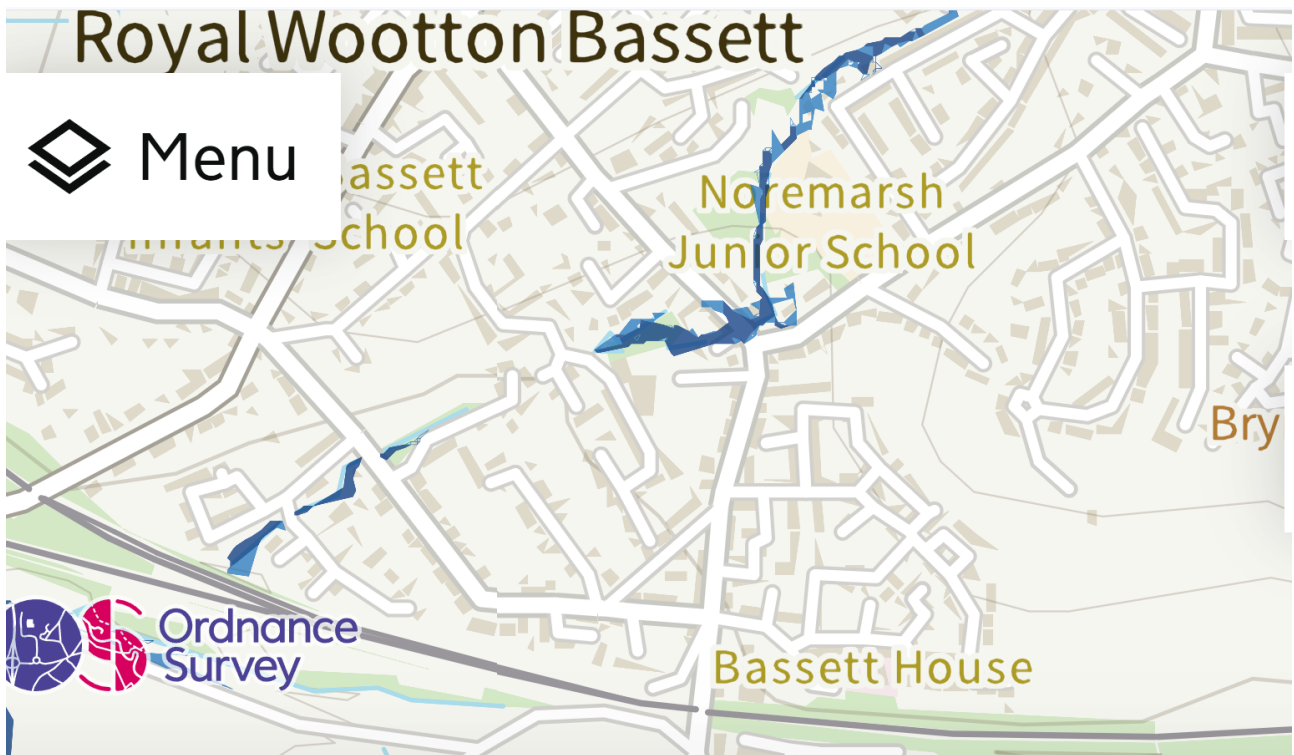
■ Medium chance

■ Low chance



LOW RISK FROM THIS SOURCE

ENVIRONMENT AGENCY FLUVIAL FLOOD MAPPING.



SITE IN FLOOD ZONE 3 CONTIGUOUS WITH FLOOD ZONE1

PROPOSED MINOR DEVELOPMENT, A RESIDENTIAL EXTENSION AT 55 STATION ROAD ROYAL WOOTTON BASSETT WILTSHIRE. SW4 7ED.

FLOOD RISK ASSESSMENT / DESK TOP STUDY.

This report is compiled to accompany a planning application. Detailed plans are provided to the planning department by the applicant.

It adheres to the criteria within the National Planning Policy Framework (NPPF) and its guidance notes as well as the Environment Agency (EA) Advice notes to local authorities.

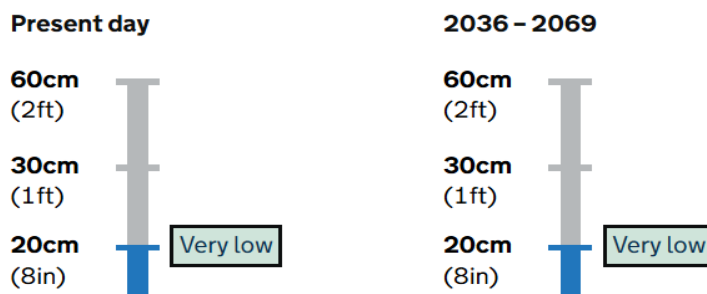
As shown in the fluvial mapping from the EA the site lies in Flood Zone 3 which has a potential to flood in exceptional conditions. It is contiguous with flood zone 1.

The EA also states in its mapping summary that any threat from surface water is “very low” and it indicates this mapping also includes groundwater threat which it states is very unlikely to happen.

The EA mapping also shows that there is no threat to the site from reservoir malfunction. It also states that the risk from rivers and the sea is “very low”

In its new mapping the EA also shows what height would be reached by any flood water associated with the site. This is shown below.

Chance of flooding to 20cm



At this location there's a **Very low** chance of flooding to **20cm** (or 8 inches).

Between 2036 and 2069 this stays at a **Very low** chance of flooding to **20cm** (or 8 inches).

200mm is below DEFRA guidelines for safe passage for vehicles and pedestrians alike. DEFRA states that up to 300mm of water is allowable for safe passage. Emergency vehicles would be able to go on and off site during any flooding.

Under this criteria an evacuation plan is not necessary.

In NPPF guidance notes it poses the question “what is a minor development.”

It states :

What is meant by “minor development” in relation to flood risk

Minor development means:

- minor non-residential extensions: industrial/commercial/leisure etc extensions with a footprint less than 250 square metres.
- alterations: development that does not increase the size of buildings eg alterations to external appearance.
- householder development: For example; sheds, garages, games rooms etc within the curtilage of the existing dwelling, in addition to physical extensions to the existing dwelling itself. This definition excludes any proposed development that would create a separate dwelling within the curtilage of the existing dwelling eg subdivision of houses into flats.

NPPF criteria states that minor development of this nature does not qualify for the sequential test but that a flood risk assessment must be compiled.

Under NPPF the proposed development is looked upon as “more vulnerable” as it is for residential development. According to the EA’s advices the minimum requirements for an FRA need to comply with Las advices:

Residential/Industrial/Commercial extensions with a ground floor footprint less than 250m² within Flood Zone 2 and 3 should confirm that:

Floor levels within the proposed development will be set no lower than existing levels.

AND

Flood proofing of the proposed development has been considered by the applicant and will be incorporated where appropriate.

OR

Floor levels within the extension will be set 300mm above the known or modelled 1%(1 in 100 chance each year) river flood level or 0.5% (1 in 200 chance each year) tidal and coastal flood level. This must be demonstrated by a plan to OS Datum/GPS showing finished floor levels relative to the known or modelled flood level

It is considered that the first option is applicable in this case.

Flood Resilience Measures

It is recommended that the external doors of the extension should be made flood proof and that further flood resilience measures be taken.

- Both the inside and outside of the extension works should be coated with flood resilient material to a height 400mm above the ground floor level.
- The electrical wiring should drop from the ceiling to sockets 400mm above ground floor level.
- All drainage and waste pipes should be fitted with 'non-return valves' to prevent the ingress of contaminated water back into the building.
- No metal piping should be used under the extensions to avoid future corrosion.
- The mortar mix should include flood protective material including the foundations.
- The ground floor should be of concrete rather than wood.
- The electrics should be connected to the mains box so that this controls all electrics to the whole property.

SUSTAINABLE DRAINAGE

It is recommended that over capacity water butts should be used for water harvesting . The water could then be used for internal washing and toilet flushing facilities as well as for outside use for vehicle cleaning and washing down paintwork and also for garden irrigation in the summer months.

In the event of exceptional storms the water butts could overtop in which case it is also recommended that French Drains be provided to collect the overspill and transmit the flow to a garden border for on site attenuation.

Flood Evacuation

This is not considered necessary as the site complies with NPPF criteria

Private impounded water sources.

There are none in the area.

Sewer incidents

There is no history of significant incidents in the immediate area of the site.

Offsite Implications

There will be none with the recommendations as made.

Residual Risk/ Pluvial

This deals with incidents occurring that are outside the normal capacity of a flood risk assessment, basically, freak occurrences.

The only source of this could be flooding from pluvial affects. Such as the “great storm” of 2007 and also the countrywide flooding of 2023/2024

This was when in 2007 two anti-cyclones swept over the country creating the “great storm of 2007” and more recently another deluge in 2023/2024

Both were described as being of “biblical proportions”

Hundreds of homes which had no history of flooding,were invaded by surface water.

However, it is also very important to remember that the Met. Office provides specialist forecasts to the emergency services and other government departments, as well as to the international community and has continuous operational capability.

The National Severe Weather Warning Service provides severe weather alerts and warnings to the general public and emergency responders, giving up to five days advance notice of disruptive weather conditions. These are updated daily in the run up to the weather event and include maps showing the risk of disruption across the UK.

5 days' notice of extreme conditions would be more than adequate for residents to prepare for pluvial events. It would enable occupants to leave the property in the dry before any great storm would arrive.

Having said that, the 2007 storm affected such a large area of the country that it would not be particularly relevant to a single site alone and it would be anomalous within the remit of a standard flood risk assessment to include such detail as a definitive source of flooding.

The NPPF guidance notes includes a table for flood risk vulnerability and this shows that under the criteria the site is acceptable for the development proposed subject to the exception test being carried out. This is covered in this report.

Table 2: Flood risk vulnerability and flood zone 'incompatibility'

Flood Zones	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 †	X	Exception Test required	✓	✓
Zone 3b *	Exception Test required *	X	X	X	✓ *

Key:

✓ Exception test is not required

Compensation

The existing footprint stands at 96.45 sq.metres. The new footprint including the extension would be 99.45sq.metres. The increase in footprint would therefore be 3 sq.metres. This so minimal that it is considered compensation is not necessary.

However calculations can be carried out if the local authority so wish

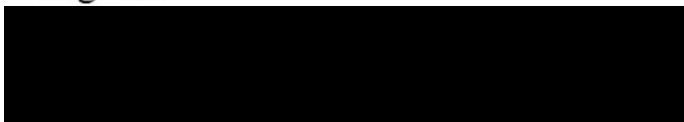
CONCLUSION

This report agrees with the EA legend that there is very little threat from rivers and the sea; It also states there there is very low risk from surface water. ,

Groundwater and reservoirs are both said by the EA to be unlikely to cause flooding. The threat from violent storms in the future has been considered but it is considered that five days warning would be more than enough time to prepare for such extreme events by vacating the property in the dry before a storm affects the local area. Flood resilience measures have been included in this report,

All criteria within the NPPF and the EA |Advisory notes to local authorities has been considered and used where relevant to compile this report.

Signed

A solid black rectangular box used to redact the signature of David Eggleton.

David Eggleton
Managing Director