

Flood Risk Assessment

Proposed Development: Rebuild of existing garage to form single-storey gym and storage (front elevation)
Site Address: 100 Old Fort Road, Shoreham-by-Sea

1. Introduction

This Flood Risk Assessment (FRA) has been prepared to support a planning application for the proposed demolition and rebuild of an existing garage to form a single-storey gym at the front elevation of 100 Old Fort Road, Shoreham-by-Sea.

The proposal constitutes minor development within the curtilage of an existing residential property. The footprint of the new structure will closely match the existing garage footprint, with no significant increase in impermeable area.

This assessment considers potential flood risks to and from the site and demonstrates that the development will remain safe for its lifetime without increasing flood risk elsewhere, in accordance with the National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG).

The following FRA has been completed following standing advice from <https://www.gov.uk/guidance/flood-risk-assessment-standing-advice> for minor extensions, whereby a minor extension is defined as “a householder or non-domestic extension with a floor space of no more than 250 square metres”.

2. Site Location & Description

The property is located on Old Fort Road in Shoreham-by-Sea, West Sussex. Shoreham-by-Sea lies within the administrative area of Adur District Council and near the coastal settlement of Shoreham-by-Sea.

The site is situated close to the coastline and the mouth of the River Adur. The surrounding area is predominantly residential in character.

The site is currently occupied by a dwelling with a front garage. The proposal involves rebuilding this garage to form a gym space. The development:

- Remains single storey
- Does not materially extend beyond the existing footprint
- Does not introduce sleeping accommodation
- Is classified as "Less Vulnerable" development under flood risk planning guidance

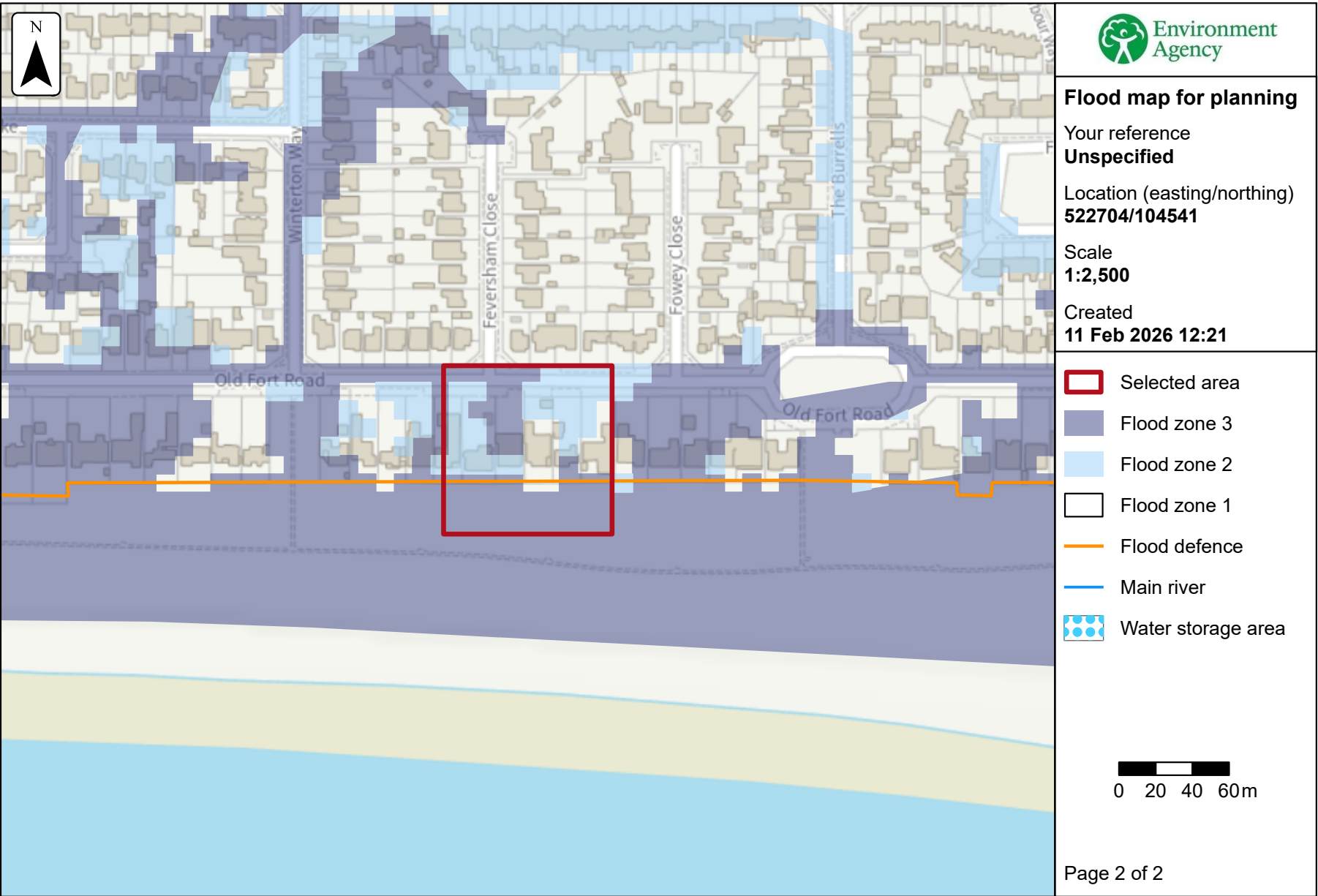
Ground levels across the site are generally flat, consistent with the coastal setting.

3. Flood Risk Context

3.1 Flood Zones

According to the Environment Agency Flood Map for Planning (to be confirmed at application stage), parts of Shoreham-by-Sea are located within Flood Zone 2 and Flood Zone 3 due to tidal influence from the River Adur and the sea.

Given the site’s coastal proximity, it is likely that the property falls within Flood Zone 2 or Flood Zone 3 (tidal). Below is a ‘Flood Map for Planning’ obtained from the Environment agency.



The proposed development is minor in scale and replaces an existing structure – you will also see that 100 Old Fort Road site boundary is in Flood Zone 1 (house and garage & 2 (parts of the front garden

4. Sources of Flood Risk

Potential sources of flooding include:

- 1. **Tidal flooding** from the coast and River Adur
- 2. **Fluvial flooding** from the River Adur
- 3. **Surface water (pluvial) flooding**
- 4. **Sewer flooding**

4.1 Tidal & Fluvial Flooding

The principal flood risk in Shoreham-by-Sea is tidal, associated with the River Adur estuary and coastal storm surges. Shoreham benefits from tidal flood defences.

As the proposal replaces an existing garage of similar footprint, it does not:

- Increase the built footprint significantly
- Increase floodplain storage loss
- Introduce more vulnerable uses

The use as a gym (ancillary to the dwelling) is less vulnerable than residential accommodation.

4.2 Surface Water

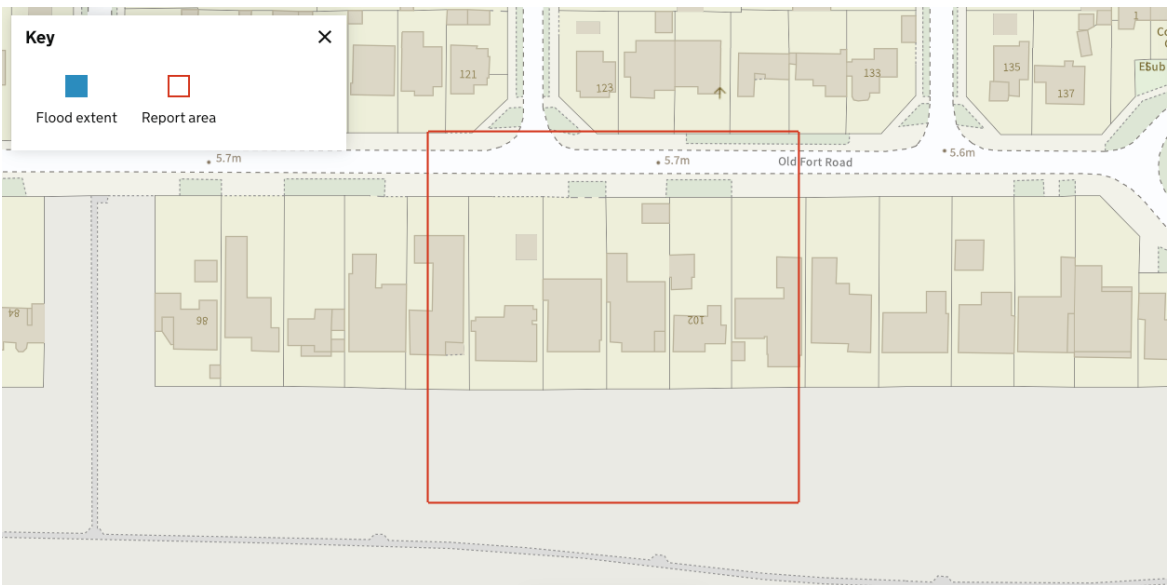
The proposal does not materially increase impermeable area. Roof runoff will be directed to existing drainage systems or to a suitable soakaway, subject to ground conditions.

If feasible, sustainable drainage measures (SuDS) such as:

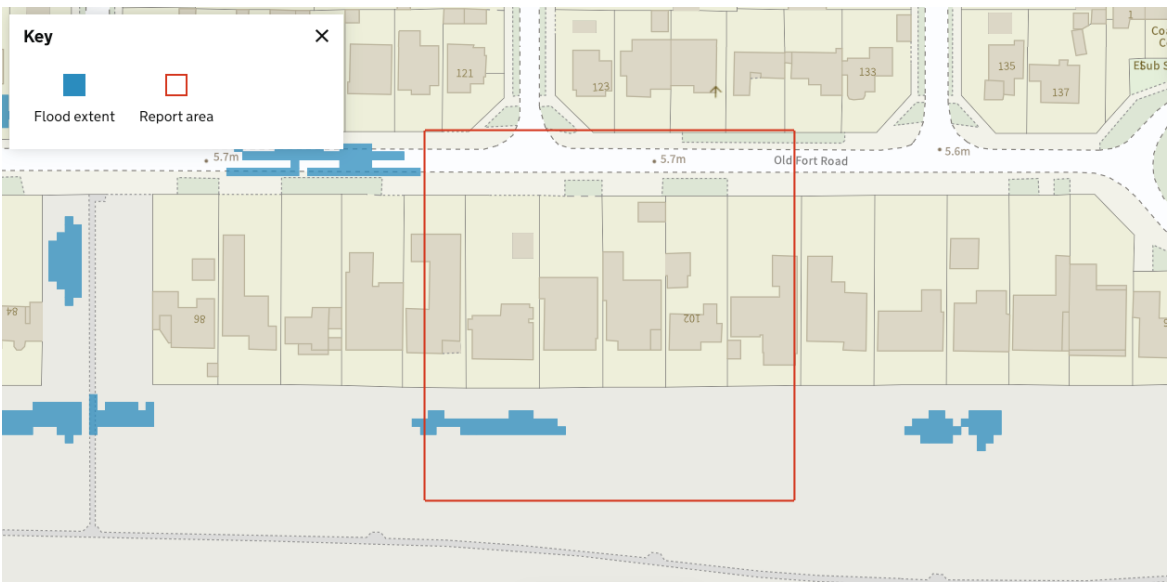
- Soakaway
- Permeable paving
- Water butts

may be incorporated to ensure no increase in surface water runoff.

Below are two maps showing the potential for surface water flooding for both 1 in 100 & 1 in 1000-year scenario, both show there is no potential from surface water flooding.



Surface Water Map 1 in 100 (Environment Agency)



Surface Water Map 1 in 1000 (Environment Agency)

5. Sequential & Exception Tests

For minor development (householder applications), the Sequential Test is not required.

The proposal:

- Is ancillary to an existing dwelling
- Replaces an existing garage
- Does not introduce new residential units
- Does not increase flood risk elsewhere

If the site lies within Flood Zone 2 or 3, the proposal is considered acceptable as minor development under national planning policy.

The Exception Test is not required for minor development.

6. Flood Risk Mitigation Measures

To ensure the development remains safe for its lifetime (assumed 60 years for residential ancillary structures), the following measures are recommended:

1. **Finished Floor Levels (FFL)**
 - Set no lower than existing garage floor level
 - Where feasible, raised above surrounding ground level
2. **Flood-Resilient Construction**
 - Solid concrete floor slab
 - Tiled or sealed concrete floor finish
 - Moisture-resistant plasterboard or cement-based boards
 - Raised electrical sockets (minimum 300mm above floor level, preferably 600mm)
 - Services routed above potential flood level
3. **Flood-Resistant Measures (where appropriate)**
 - Non-return valves to drainage
4. **Safe Access & Egress**
 - As the property remains an existing dwelling, occupants will follow established evacuation procedures in the event of a flood warning.
 - The site benefits from the Environment Agency flood warning service covering the River Adur area.

7. Impact on Floodplain Storage

The proposal rebuilds an existing garage of similar size and footprint. Therefore:

- There is no meaningful loss of floodplain storage
- There is no measurable displacement of flood water
- There is no increased flood risk to neighbouring properties

8. Climate Change

Tidal flood levels are projected to increase due to climate change. However:

- The proposal does not increase vulnerability classification
- The development is small-scale
- Flood-resilient construction ensures recoverability

The design approach ensures the building remains safe and functional over its lifetime.

9. Conclusion

This Flood Risk Assessment demonstrates that the proposed rebuild of the existing garage to form a single-storey gym at 100 Old Fort Road, Shoreham-by-Sea:

- Is minor development
- Does not increase flood risk elsewhere
- Does not increase vulnerability
- Can be made safe for its lifetime through resilient construction
- Is consistent with national and local planning policy