

FLOOD RISK ASSESSMENT (FRA)

Proposal : Combined single-storey rear extension to
Nos. 61 and 63
at
Address : 61, 63 Burnage Hall Road,
Manchester, M19 2JP



1. Introduction

This Flood Risk Assessment (FRA) has been prepared in support of a full planning application for the construction of a combined single-storey rear extension serving Nos. 61 and 63 Burnage Hall Road, Manchester.

The purpose of this FRA is to:

- Assess the site in relation to all sources of flood risk
- Demonstrate that the development is safe for its lifetime
- Confirm that the proposal does not increase flood risk elsewhere
- Identify appropriate mitigation and resilience measures

The assessment has been prepared in accordance with:

- National Planning Policy Framework (NPPF)
- Planning Practice Guidance (PPG) – Flood Risk and Coastal Change
- Environment Agency Flood Map for Planning
- Greater Manchester Lead Local Flood Authority (LLFA) requirements

2. Site Description

The site comprises two adjoining residential properties at 61 and 63 Burnage Hall Road, which are both under the same ownership. The proposal involves a combined rear extension spanning the two properties.

Key site characteristics:

- Existing residential dwellings (Use Class C3)
- Located within a built-up residential area
- Rear gardens to both properties
- No change of use proposed
- Development already constructed (retrospective application)

The combined extension has the following characteristics:

- **Depth:** 4.4 metres
- **Height:** 3.7 metres
- **Roof:** Flat roof with skylights
- **Materials:** To match existing dwellings
- **Finished Floor Level (FFL):** Approximately 650mm above existing ground level

3. Proposed Development

The development consists of a single-storey rear extension across both properties, providing additional internal living accommodation. The works do not involve:

- Any basement construction
- Any increase in building height beyond ground floor
- Any change to existing ground levels beyond the raised finished floor

The raised finished floor level is a key mitigation measure and is discussed further in Section 7.

4. Flood Risk Policy Context

Under the NPPF and PPG, development in areas of flood risk must:

- Be located in the lowest risk areas where possible
- Be safe for its lifetime without increasing flood risk elsewhere
- Incorporate mitigation measures where necessary

Although the site lies within Flood Zone 1, additional assessment is required due to:

- Proximity to Flood Zones 2 and 3
- Parts of the site falling within areas at risk of surface water flooding

5. Flood Risk Vulnerability Classification

The development relates to existing residential dwellings (Use Class C3).

Under PPG vulnerability classifications:

- Residential dwellings = **More Vulnerable**

However, the proposal does not introduce new dwellings and does not intensify residential use beyond existing lawful occupation.

6. Assessment of Flood Risk Sources

6.1 Fluvial (River) Flooding

Environment Agency Flood Map for Planning indicates that the site is located within:

- **Flood Zone 1** – Low probability of river flooding (less than 0.1% annual probability)

While Flood Zones 2 and 3 are present in the wider area, they do not extend into the footprint of the site.

Fluvial flood risk to the site: Low

6.2 Surface Water Flooding

Environment Agency surface water mapping indicates that:

- Parts of the wider site and surrounding area are within areas of potential surface water flood risk during intense rainfall events

This is a common characteristic of urban areas where drainage systems can be temporarily overwhelmed during extreme storms.

However:

- The extension footprint represents a modest increase in built form
- The raised finished floor level provides a clear mitigation measure
- The development is single storey and does not introduce vulnerable basement accommodation

Surface water flood risk: Low to Medium (mitigated)

6.3 Groundwater Flooding

There is no evidence to suggest the site lies within an area of significant groundwater emergence. No historical groundwater flooding incidents have been recorded for the properties.

Groundwater flood risk: Low

6.4 Sewer Flooding

As with many urban residential areas, there is a residual risk of sewer surcharge during extreme rainfall events. This risk exists under the current situation and is not increased by the development.

Sewer flood risk: Low

6.5 Artificial Sources

There are no reservoirs, canals, or artificial water bodies in close proximity that pose a flood risk to the site.

Artificial source flood risk: Low

7. Flood Risk Mitigation Measures

7.1 Raised Finished Floor Level

A key mitigation measure is the raised finished floor level, which is approximately:

- 650mm above existing ground level

This provides:

- Protection against shallow surface water flooding
- Increased resilience during extreme rainfall events
- Compliance with good practice guidance for areas at potential surface water risk

7.2 Surface Water Management

- Roof water from the flat roof and skylights is discharged via controlled rainwater goods
- Surface water continues to drain to existing drainage infrastructure
- No increase in runoff rate beyond existing conditions is anticipated

Where possible, water infiltration and attenuation are encouraged within garden areas.

7.3 Flood Resilience and Resistance

While the risk is low, the following measures enhance resilience:

- Use of durable floor finishes at ground level
- Raised electrical sockets where practicable
- Moisture-resistant wall finishes

These measures ensure rapid recovery should surface water ingress occur during extreme events.

8. Impact on Flood Risk Elsewhere

The development:

- Does not reduce floodplain storage
- Does not alter watercourses
- Does not redirect surface water onto neighbouring land
- Does not increase runoff rates beyond existing conditions

As such, the proposal will not increase flood risk elsewhere.

9. Sequential and Exception Tests

Sequential Test

The development is:

- Located within Flood Zone 1
- A retrospective extension to existing dwellings
- On previously developed residential land

The Sequential Test is therefore satisfied.

Exception Test

The Exception Test is not required, as the site lies within Flood Zone 1 and no increase in vulnerability is proposed.

10. Climate Change Considerations

The raised finished floor level and modest scale of development ensure resilience to future climate change impacts, including:

- Increased rainfall intensity
- Higher surface water flood risk

The development is considered safe for its lifetime, taking account of climate change allowances.

11. Conclusion

This Flood Risk Assessment demonstrates that the combined single-storey rear extensions at 61 and 63 Burnage Hall Road, Manchester, M19 2JP:

- Are located within Flood Zone 1
- Are at low risk of fluvial flooding
- Have identified and mitigated surface water flood risk
- Incorporate a raised finished floor level (650mm) as a key mitigation measure
- Will not increase flood risk elsewhere
- Are safe for their lifetime, including climate change considerations

The development therefore fully complies with the NPPF, PPG, and local flood risk policy, and is acceptable in flood risk terms.