

Food Risk Assessment

Address: 7 Somerford Avenue Manchester M20 1GD

Proposal: Erection of Single Storey Rear Extension

A basic flood risk is requested by the Manchester Council for this application as this site is in a Flood Risk Zone 3. (FRZ 3)

The site is a semi-detached property which consist of manly residential properties. The property is in a FRZ 3 which has been shown to have a 0.1% to 1% chance of flooding.

Please note that this flood assessment does not purport to provide definitive legal advice, nor can it be used to demonstrate that the site will never flood in the future.

The proposed extension will be raised above a void by 300 millimetres hence there would be not a flood storage reduction; no compensation is considered required based on the mitigation measures feasible as agreed with the EA on similar schemes and flood settings. The site is at low risk from all sources of flooding.

The site is in a FZ3, and the FRA demonstrates it is a high risk from all sources of flooding.

Local Policy

Local authorities consider flood risk through relevant environmental and climate change policies which enforce the requirements of the NPPF.

The Strategic Flood Risk Assessment (SFA) is a key source of flood risk specific information for the area. The SFRA provided a more detailed review of floods risk and recommendations for enduring developments can be conducted and operated safely in accordance with the NPPF.

Existing Flood Risk

Fluvial and Tidal.

There are no surface water features present on the site according to the EA flood map and the SFRA the site is in the Flood Zone 3. This is associated with the river Irwell.

Flood Data Design Response – response to EA Data

The scheme can incorporate designs in response to the EA Flood Level Data.

Existing ground level to remain unchanged.

The underside of the floor slab will therefore be as at /above the 1 in 100 years + cc flood level hence there will be no off setting in the flood plan.

There will be no additional footprint lower than the 1 in 100 yr + cc flood level.

- No bedrooms are on the ground floor.
- All site users will have safe refuge in emergency above the extreme flood level for lifetime of the proposal.
- Overall improvements in flood risk terms
- The raised ground floor could incorporate a flood void to allow water to flow freely under the building as agreed with the EA on other schemes.

In the critical lower probability flood events if flood waters were to potentially reach the site, evacuation would be feasible and the preferred option; refuge to upper level would be feasible for all site users.

The site is within the EA flood warning area.

Strategic Flood Risk Assessment.

The SFRA does not have site specific mapping but is referred to where appropriate in the following sections.

The SFRA mapping however is out of date; the EA website map is up to date.

Ground Water

The site is not within a groundwater susceptibility area and not in an area identified with potential for elevated groundwater. There is no ground investigation data available for the site to confirm the geology and ground water levels on the site.

However, there are no records from the existing site users of the site being flooded because of ground water. The proposed extension is considered not to include any works which could increase the risk of flooding from ground water sources.

Artificial Sources of Flooding

There are no reservoir/ lakes/canals within the immediate vicinity of the sites.

Flood History

From available information including the site owners (over 10 years) and the SFRA, the site has not been inundated by historic flood events.

Assessments of the proposed extension.

The proposed single storey rear extension is to form small downstairs Wc and sink.

- No bedrooms are on the ground floor.
- No basement
- No associated parking area
- Raised ground level of 200mm above 1 in 100yr + cc
- Underfloor of slab to be in 100yr +cc level

Flood Resilience.

Where feasible the proposed extension will utilize the flood resilience techniques recommendations that have previously been issued by various councils.

These include:

- Ground slab will be fully waterproofed; details to be provided at detailed design in Building Regulations.
- Plasterboard will be installed in horizontal sheets rather than conventional vertical installation methods to minimize the amount of plasterboard that could be damaged in a flood event.
- The ground floor slab will be concrete, in order to minimize damage and reduce the turn round time for returning the property to full operation after a flood event.
- Wall sockets to be raised to high as feasible and not practicable in order to minimize damage if flood water inundates the property.
- Any wood fixings on the ground floor will be robust and/or protected by suitable coatings in order to minimize damage during a flood event.
- Airbricks will be raised to as high as is feasible and practicable.
- The damp proof membrane will be installed above the main floor slab and tied into the walls where appropriate, to reduce the turnaround time for returning the property to full operations after a flood event.

Conclusion

The proposed scheme incorporates suitable flood resilient measures which include resilient building construction to the proposed extension.

Th site is in within a low to medium probability area of flooding, based on the likely flood risk, is considered that the proposed extension could be constructed and operated safely in Flood Risk Terms and therefore is an appropriate extension in accordance with the NPPF.

