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28th November 2023

Project: 2 Poplar Place, London, SE28 8BB

SUPPORTING DOCUMENTS

FLOOD RISK ASSESSMENT

Description of Works:

Construction of a two storey side extension & associated internal reconfigurations.

Local Authority: Greenwich Council

Purpose:

This Flood Risk Assessment (FRA) has been prepared to assess the potential flood risk associated with the proposed development of a double storey rear extension and internal alterations at 2 Poplar Place, London, SE28 8BB. The property is situated within Flood Zone 3, as designated by the Environment Agency's Flood Risk Map.



1. Site Description:

The property is located at 2 Poplar Place, London, SE28 8BB. It is situated within Flood Zone 3, indicating a high probability of flooding from rivers, coastal waters, and other sources. The proposed development involves a double storey rear extension, which could potentially increase flood risk if not appropriately managed.

- 2. Flood Risk Assessment:
- 2.1 Flood Sources:

The primary flood sources affecting the area are river flooding and tidal/coastal flooding, primarily from the River Thames and groundwater.

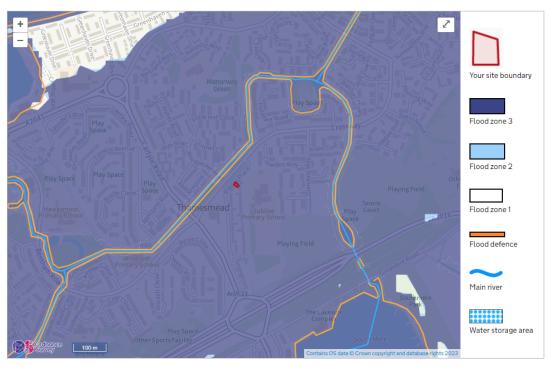


Fig. 1: Flood Zone Map demonstrating the location of the development site within Flood Zone 3, benefitting from existing flood defences.





Fig. 2: Flood map demonstrating the risk/extent of flooding from surface water for the proposed development site (Very Low)



● High ● Medium ● Low ● Very Low ◆ Location you selected

● <u>High</u> ● <u>Medium</u> ● <u>Low</u> ○ <u>Very Low</u> ⊕ Location you selected

Fig. 3: Flood map demonstrating the risk/extent of flooding from surface water for the proposed development site (Very Low)



2.2 Climate Change Considerations:

The assessment includes consideration of potential climate change impacts on flood risk, accounting for increased frequency and severity of extreme weather events.

2.3 Existing Flood Defences:

It's important to note that the site currently benefits from flood defences (as shown in Figure 1) on the east and west banks of the associated streams stemming from the River Thames. These existing flood defences play a role in managing flood risk in the area.

2.4 Proposed Development:

The proposed double storey rear extension will not affect the level of sleeping accommodation (first floor and above). Surface water should be discharged via the existing system, and the incorporation of small-scale Sustainable Drainage Systems (SuDS) like rainwater planters and water butts is recommended for improved drainage.

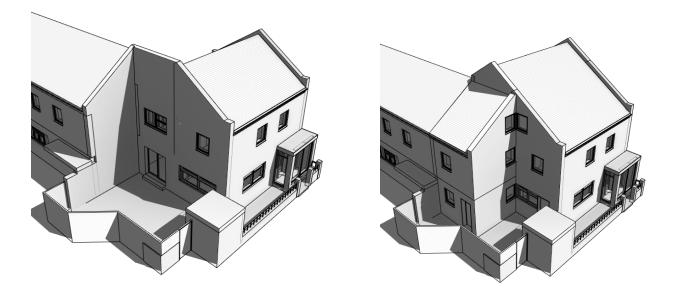


Fig. 4: [From Left to Right] Existing & Proposed 3D Visual of the Development Property

3. Flood Risk Management:

3.1 Sustainable Drainage Systems (SuDS):

To mitigate flood risk, the design should integrate SuDS measures. These can include rainwater planters and water butts, which help manage surface water runoff.



3.2 Ground Level Design:

Finished floor levels (FFLs) should not be set lower than the existing ground floor level. This aligns with the Environment Agency's standing advice for minor extensions.

3.3 Safe Access/Egress:

Given that the proposal involves an extension to an existing dwelling, it's important to maintain consistent access/egress arrangements in line with the existing scenario.

3.4 Flood Resilient Design:

The design should incorporate flood resilience and resistance techniques as outlined in 'Improving the flood performance of new buildings' by the Department for Communities and Local Government (DCLG, 2007), including:

- The proposed extension will have the same floor level as the existing house, which is above the predicted flood depth in the area.
- The extension will be constructed from masonry construction, offering low permeability.
- The floor construction will be concrete slabs with a coated impermeable membrane.
- All new electrical wiring will be raised above 450mm to accommodate potential flooding.
- All new paving built externally will be permeable.

3.5 Flood Evacuation Plan:

In the event of a major flooding event, a comprehensive flood evacuation plan must be organized. Evacuation should follow the provided flood evacuation route overleaf, with residents seeking refuge South of McLeod Road, Abbey Wood.

The owners of the property will complete the Environment Agency personal flood plan template, which consolidates the information and records the contact details of the relevant service providers.

This will include: electricity provider, gas provider, water provider, telephone provider, insurance provider and policy number, local council.

The owners will familiarise themselves with the location of the electricity, gas and water cut off locations, and the closest location to purchase protective measures (including sand bags).

In addition to the above, the owners will subsequently sign up to receive free flood alerts from Royal Borough of Greenwich local authority.





Fig. 5: Draft Flood Evacuation Plan

4. Conclusion:

4.1 Given the property's location within Flood Zone 3, it is essential to implement appropriate flood risk management measures for the proposed development at 2 Poplar Place, London, SE28 8BB. Considerations for existing sleeping accommodation levels, drainage, ground levels, access/egress, flood-resilient design, and flood evacuation routes are vital to ensure safety and minimize flood impact.

4.2 This Flood Risk Assessment, along with the additional comments, provides a comprehensive overview of flood risk considerations associated with the proposed development. Collaboration with relevant authorities, experts, and stakeholders is crucial to ensuring that the development successfully mitigates flood risk and ensures the well-being of all residents.

Date of Assessment: 28.11.2023 Prepared by: Extension Architecture