



FLOOD RISK ASSESSMENT:

SuDS, RIVER, RESERVOIR AND SURFACE WATER

185 Nelson Road,

TW2 7BB

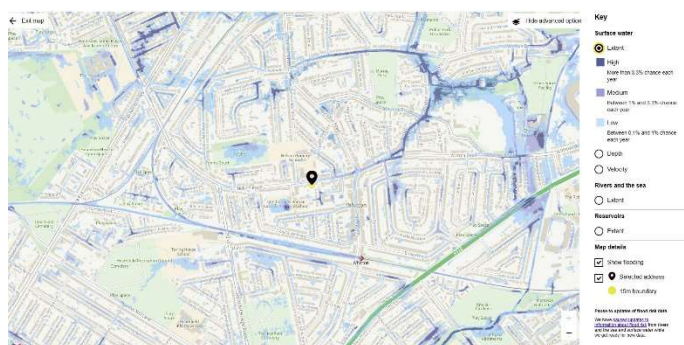
The proposed site 185 Nelson Road, TW2 7BB where the works consist of a ground floor extension.

Surface Water Flood Risk Assessment (Low risk)

The environment agency has indicated the flood risk from surface water is low risk which means that the chance of flooding is 0.1% - 1%. They have stated that in a low-risk scenario the flood depth in millimetres could be below 300mm. In regard to the velocity in a low-risk scenario, the environmental agency has indicated it to be less than 0.25 m/s. However, it is noted that flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast. In addition, local features can greatly affect the chance and severity of flooding. The proposal will be constructed with measures to reduce the effect on to the dwelling.

River & Reservoir Flood Risk Assessment (Zone 1)

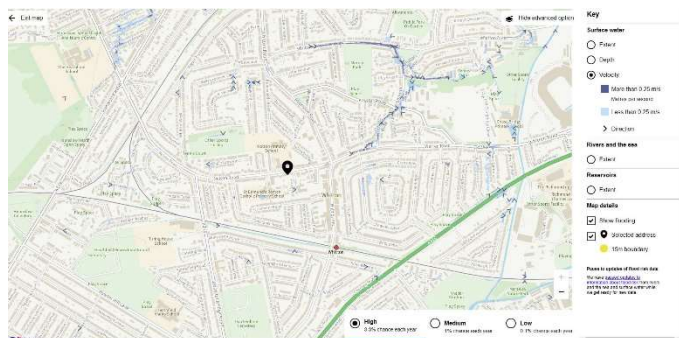
Based on the information set out by the environmental agency the long-term prediction on the risk of flooding from rivers or Reservoir has been classified as high. This factors in the existing flood defences near the nearest river etc.



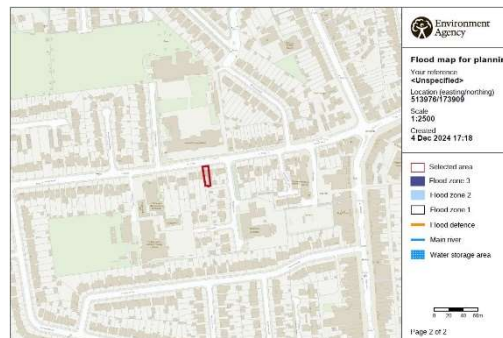
The map above indicates the predicted area of surface water flood risk:



The map above indicates the predicted flood depth for surface water in a low-risk scenario:



The map above indicates the predicted flood velocity from surface water in a low-risk scenario:



The map above shows the affected area coverage and that our development is in flood zone 1:

Flood Protection Proposal

The internal floor level in the existing building will remain unchanged, with our proposed extension flush with the garden floor level. Due to the environmental agency showing there is a low risk of surface area flooding, the following are measures we propose to help prevent flooding from surface water, around the property, subject to Building Control agreement and final approval.

These measures include:

- Soakaway system near openings flush with garden level
- Waterproof sealant on the external walls
- Air bricks with removable covers
- Flood-resilient windows and doors
- Seals to all external low-level pipes, vents, and wire entry points

Below is the detail of the proposed opening at garden floor level:

