

159 Charville Lane, Hayes, UB4 8PB
Flood Warning and Evacuation Plan
Nimbus Engineering Consultants Ltd
May 2021

FLOOD WARNING AND ACTION PLAN FOR 159 CHARVILLE LANE, HAYES, UB4 8PB

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PREPARED BY

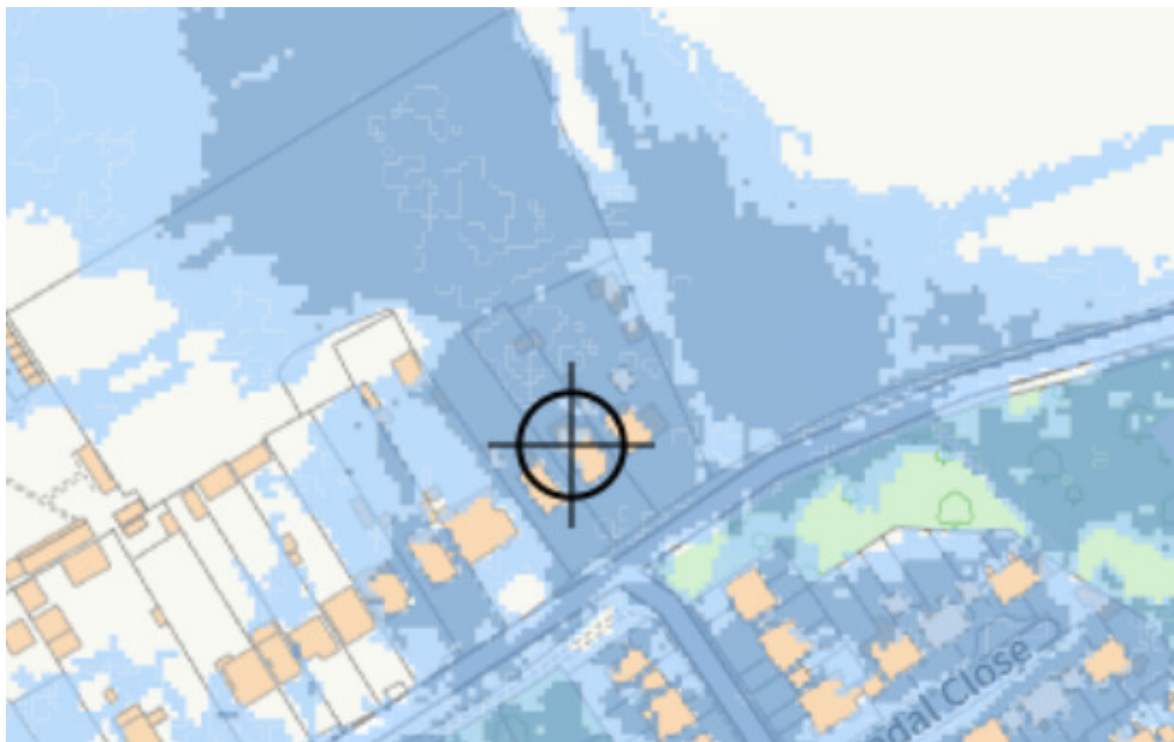


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1. INTRODUCTION

Nimbus Engineering Consultants Ltd, have prepared this Flood Action Plan in line with advice received from London Borough of Hillingdon. This report will be presented to the residents of the property to describe their required course of action in the event of surface water flooding which will be immediately outside the building, as shown on the flood maps from the Environment Agency, shown below:



Surface water flood risk: water depth in a low risk scenario
Flood depth (millimetres)

● Over 900mm ● 300 to 900mm ● Below 300mm ⊕ Location you selected

Figure 1 – Surface Water Flood Map from the Environment Agency

The flood maps state the depth of flooding to be between 300mm and 900mm, however, comparing this flood map with the levels around the site shows that the depth of flooding is more likely to be around 500mm in depth. The building has been raised 400mm above the external ground levels, and flood barriers have been proposed in order for the residents to fit to the front and rear doors as soon as the flood alarm sounds, and this will stop flood water from entering the property.

This safe access and egress of the residents is essential in order to reduce the potential risk to life.

2. SAFE ACCESS AND EGRESS

It is essential that safe access and egress routes are planned in advance and that residents do not put themselves at risk by walking through flood water, which, has the potential to knock them off their feet. It also imperative that residents are made aware of the hidden dangers such as blown manholes.

As part of the deeds, the owners of these properties will be presented with a copy of this report in order to understand the access and egress risks to the rear of the site.

In order to ensure that all residents and visitors are aware that flooding is imminent, a warning system will be installed at the outer face of the building; this warning will be a 'Red' alert and inform residents that the depth of flooding has reached 150mm depth and they should stay within their properties until the flooding subsides.

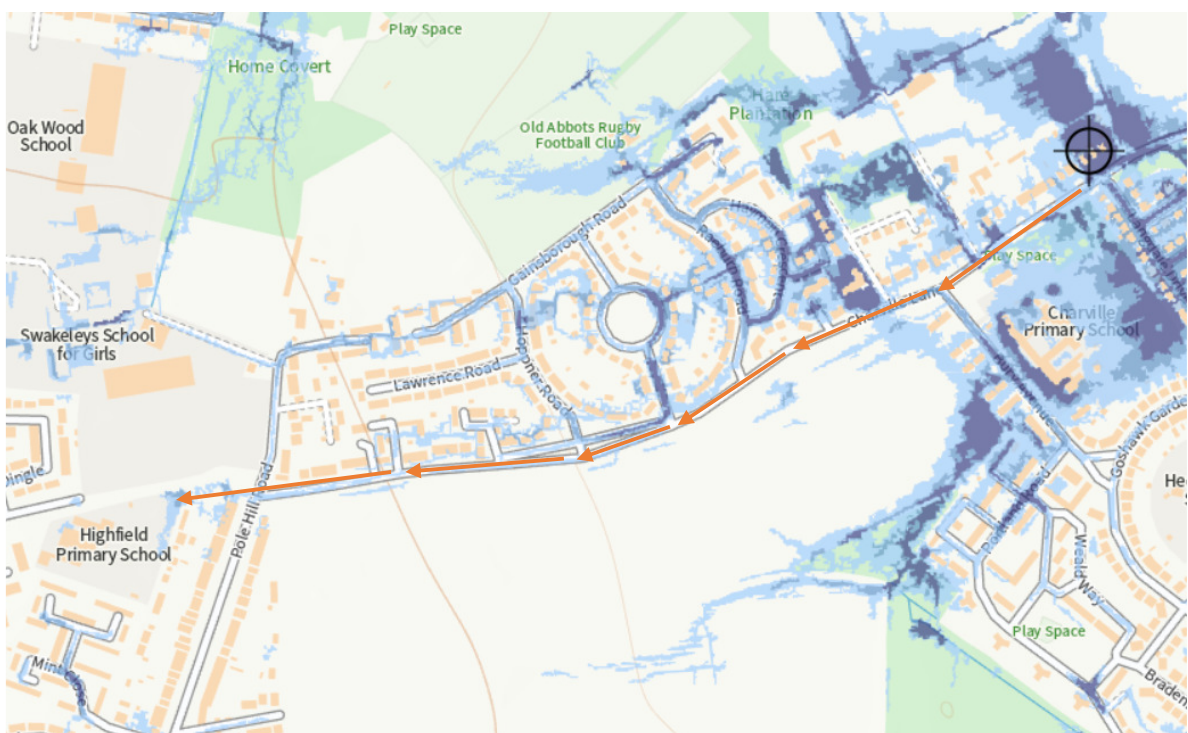
This alarm is an audio and visual alarm that warns of the imminent risk.

The alarm system will have a detection probe which will be placed 150 mm above ground at the outer face of the building, away from any areas where ponding of surface water is likely to occur.

This alarm will be operational prior to the new accommodation being occupied. The homeowner will be responsible to oversee the long term maintenance of the system.

2.1 Emergency Planning

When the flood alarm sounds, the residents are advised to fit front and rear flood barriers, and seek refuge at Highfield Primary school, following the route shown by the red arrows below, unless advised otherwise by the emergency services.



Surface water flood risk: water depth in a low risk scenario
Flood depth (millimetres)

Over 900mm 300 to 900mm Below 300mm ⊕ Location you selected

The depths of flooding during an extreme storm event will be below 300mm in depth, therefore this route will be safe to access and egress as soon as the flood warning has been received.

Residents are also advised to prepare a flood plan, which includes a checklist of things to consider during a flood. The residents should have an emergency flood grab bag ready so they can 'grab' and take this to an evacuation area, in the event of a flood, where they have been advised to leave their properties by the emergency services.

It is essential that the grab bag should include the following items:

- **Torch**
- **Warm and waterproof clothing for all residents**
- **Food**
- **Medication**
- **Rubber gloves**
- **Wellingtons**

You should also consider the following items in this grab bag:

- **Toys for children and pets**
- **Change of clothes**

All residents will be provided with a copies of this emergency plan as part of their lease or deeds, to ensure that they are aware of the potential risk to life as a result of flooding.

A safe access, or exit route, is a route that is only safe for use by occupiers without the intervention of the emergency services or others.

It should also be noted that vehicles should not be driven through floodwater.

DEFRA's Flood Risk Assessment Guidance for New Development Phase 2 (FD2320) suggests:

- *'Cars will stop and/or float in water as shallow as 0.5m, whilst some emergency vehicles may survive in water of 1m. A fire engine remains controllable in depths of 0.5m up to a flow velocity of 5 m/sec, due to high-level air intakes/exhausts'.*

3. FLOOD WARNING

3.1 Alarm System

In order to ensure that all residents and visitors are aware that flooding is imminent, a warning system will be installed at the outer face of the front of the building; this warning will be a 'Red' alert and inform residents that the depth of flooding has reached 150mm depth and they should remain in their properties and not attempt to egress the site unless notified by the emergency services. Should the residents be away from their dwellings they will be advised to either to fit flood barrier and seek refuge within their properties immediately or stay away until the flooding subsides.

This alarm is an audio and visual alarm that warns of the imminent risk.

The alarm system will have a detection probe which will be placed 150 mm above ground at the outer face of the building, away from any areas where ponding of surface water is likely to occur.

4. SUMMARY

Once a flood warning has been received, residents should fit flood barriers and remain in their dwellings, and follow the access and egress route mentioned in the report, unless instructed to do otherwise by the emergency services. This will minimise the risk to life.