Flood Risk Assessment For Property 78 Churchbury Lane Enfield, EN1 3TY

20<sup>th</sup> January 2024

Introduction

This Flood Risk Assessment has been prepared in conjunction with the guidance provided in the publication 'Technical Guidance to the National Planning Policy Framework' produced by the Department for Communities and Local Government in order to meet the objectives of the 'National Planning Policy Framework'. It has been produced in regards to 78 Churchbury Lane, Enfield EN1 3TY development for which planning permission is required.

The site area is 411m2 (0.0411 HA)

Application Planning Policy

National Planning Policy Framework (NPPF), issued by the Department for Communities and Local Government in December 2023, deals with development planning and flood risk based on planning zones and the Environment Agency Flood Map. The requirement of the policy is for flood zones and vulnerability classification relevant to the proposed development to be established and identified, based upon an assessment of existing and future conditions.

Site Description and Location

78 Churchbury Lane is a 4 bedroom two-storey semi-detached house with a loft conversion on a corner plot, located on the western side of Churchbury Lane with the junction of Parsonage Lane.

The existing development manages surface water through gutters and rainwater pipes that drain to the public sewer.

#### Proposed Development

Our proposal is to remove the conservatory and garage / store at the front side of the property and to provide a single storey rear and two storey rear and side extension and a dormer to the existing loft conversion. In our proposal, the existing front garage will be relocated in this extension in the same position.

The additional site coverage of the site will be 57m2. Due to the size of the site (411m2), this will not have any impact to the existing flood levels. This will not increase the flood risk elsewhere.

Flood Zones and what they mean.

Flood zone 1

Locations in flood zone 1 have a low probability of flooding. This means in any year land has a less than 0.1% chance of flooding from rivers or the sea.

Flood zone 2

Locations in flood zone 2 have a medium probability of flooding. This means in any year land has between a 1% and 0.1% chance of flooding from rivers and between a 0.5% and 0.1% chance of flooding from the sea.

Flood zone 3

Locations in flood zone 3 have a high probability of flooding. This means in any year land has a 1% or more chance of flooding from rivers, or a 0.5% or more chance of flooding from the sea.

The property is in the flood zone 1 were the nearest river is the 'New River' which approximately 1 mile away. As noted above under flood Zone 1, there is only 0.1% chance of any flooding from the river.

The property currently has no bedrooms on the ground floor and will remain this way in our proposal. The proposed garage will be slightly raised from the outside level and have an 'Aco' drain at the threshold.

The property at the front is currently 200mm above the external ground by the porch and slopes down towards the footpath. At the rear, the property is 575mm higher than the external ground level and continues to slope further down. Our proposal, the difference from the internal and external will be 585mm.

We have shown on our existing and proposed drawings cross sections through the building showing the above with levels. As you can see, there is no change in ground levels.

### Sources of Flooding

### 1. Fluvial Flooding.

The nearest possible source is the New River. As shown on the 'Extent of flooding map' below, it shows the property is zone 1 and has a low probability of flooding

## 2. Tidal Flooding.

In this area where the property is located, there is no tidal flooding.

3. Flood defences.

There no flood defences for this site area for the property. Being zone 1, it is not required.

# 4. Climate Change.

The predicted extent and depth of surface water / rain flooding for this location is extremely low.

# 5. Surface water flooding.

The OS Mapping and the EA's Mapping shows that there are no indications of large rivers, canals or lakes in the area of the site, therefore the flood risk is extremely minimal.

## 6. Drainage and infrastructure.

The drainage and infrastructure , already in place as existing. There will not be any change to the existing main drains. The connections will remain as existing and there will not be any surface water drains passing through the building.

# 7. Groundwater.

There have not been any historic flooding incidents within this arear of the property. The property is largely situated on hard and soft landscaping and any all new external material will be permeable. For example, a new rear patio, this will have permeable etc.

#### 8. Canals, lake and reservoirs.

There are none in the area. Only the New River as noted above, where the property is in the zone 1 location.

Our typical construction methods for our proposed extensions will as follows.

### Proposed Floor Construction.

A suspended beam and block floor with 1500 gauge damp proof membrane, rigid floor insulation and a reinforced screed. There will be a minimum 300mm void below. We will provide an underfloor ventilation (telescopic vents) which be 2254mm minimum above the external ground floor. The existing property floor is a suspended timber floor.

## Proposed external walls.

These will be of a cavity construction will a cavity wall filled with 90mm rigid insulation leaving a 10mm residual gap. The DPC will be a minimum of 300mm above the external ground level in order for it to fall in line with the telescopic vents.

## Doors

Doors all doors will be of Upvc and sealed around all edges that will minimise any water entering the building.

## Electrics

All sockets, switch, fuse board, utility lines etc. will be a minimum of 450mm above the internal floor level. (Note: This is a Building Regulations requirement)

## Drainage

All new drainage will be either clay or Upvc pipes

Any pipes 400mm below ground will be sealed with foam and mastic.

Around the property we will be providing Aco drains, gravel and permeable paving to patios.

The remaining site is largely with hard and soft landscape (grass). This will remain and we will be providing permeable paving at the side and rear of the property.

# Conclusion.

The property / site is in zone 1 were flooding is most unlikely to happen.

This site area of 411m2 (0.0411 HA) with a large amount of soft landscaping.

The increase of volume of water run-off is minimal.

This will not increase the flood risk elsewhere.

Therefore, we consider that our proposed scheme is suitable for this site.

