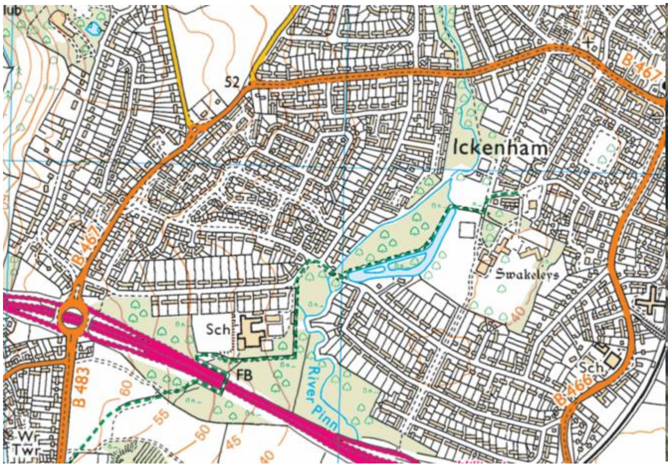
WtFR Ltd

Flood Risk Assessment

Development at

59 Thornhill Road, Ickenham, UB10 8SQ





On behalf of
Gurmeet Jhita

Date: 7th October 2026

Reference: 2026/09/Q13

Issue sheet

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1. Introduction

WtFR Ltd has been commissioned by Gurmeet Jhita to undertake a Flood Risk Assessment (FRA) in connection with the planning application for the proposed development at 59 Thornhill Road, Ickenham, UB10 8SQ.

This FRA has been produced to demonstrate how risks from all sources of flooding to the site and flood risk to others from the development will be managed, in order to satisfy the requirements, set out in the National Planning Policy Framework (NPPF).

A full assessment of the flood risk to the site and consideration of the surface water management as a result of the development has been considered as part of this analysis.

Data has been gathered from a number of other sources including: the Environment Agency (EA), the British Geological Society (BGS), National Soil Research Institute (NSRI), aerial photographs, Ordnance Survey (OS), commercially available historical mapping and relevant strategic documents developed by London Borough of Hillingdon Council, in their capacity as both Local Planning Authority and Lead Local Flood Authority.

2. Site Description

Area Size: 650m^2 (total) 200m^2 (impermeable)

Grid reference: TQ 07038 85815

The proposal is for a double storey front and rear extension to existing dwelling at 59 Thornhill Road, Ickenham, UB10 8SQ.

Figures 1 and 2 below show location details of the development site. Figure 3 shows an aerial photograph of the development site.

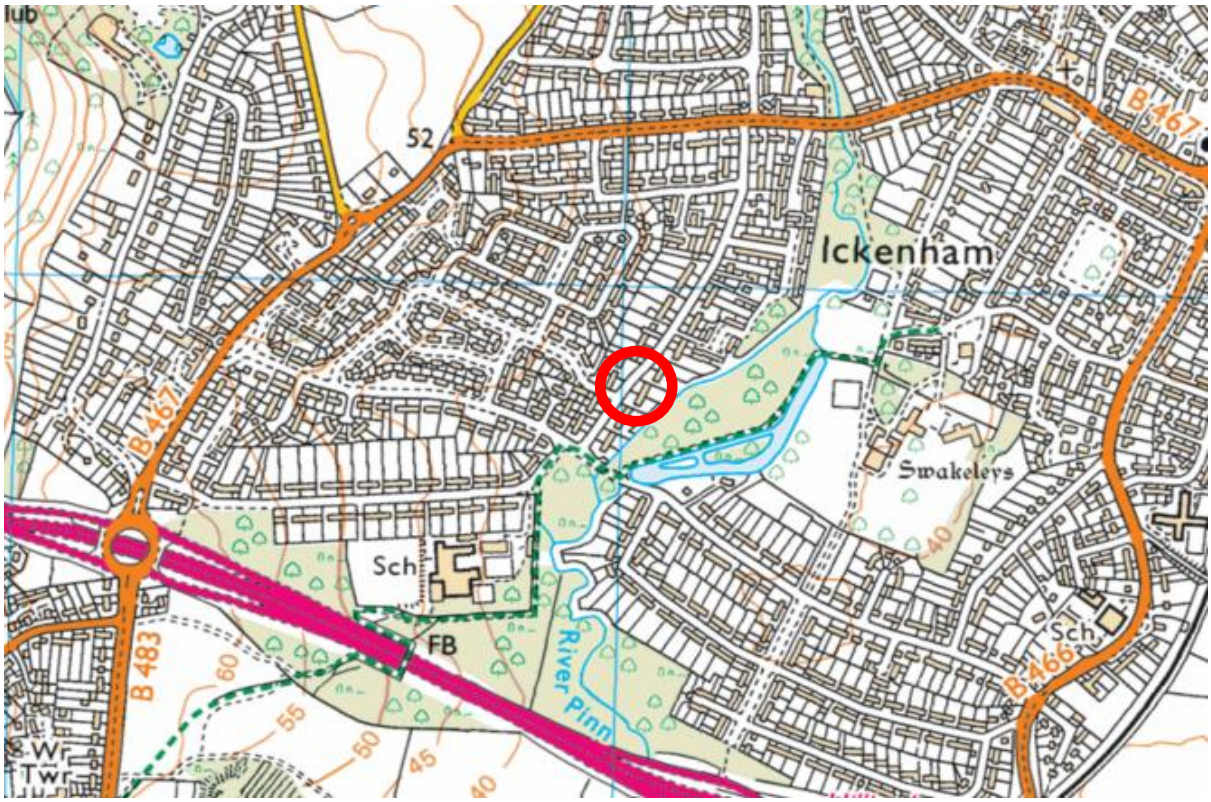


Figure 1 – Location of the site, highlighted.

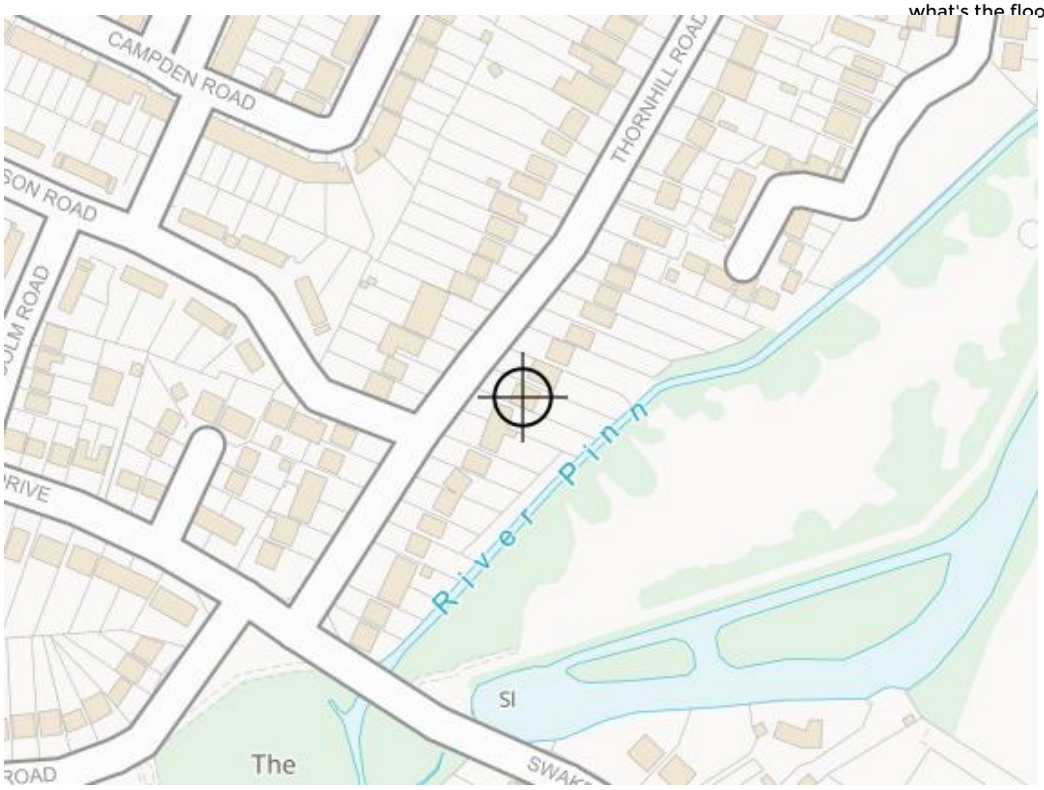


Figure 2 –detailed location of the development site, highlighted.



Figure 3 – aerial photograph of the development site.

3. Flood Risk Assessment

3.1 National Planning Policy

The current National Planning Policy Framework sets out national planning policy for managing flood risk and coastal change. It requires development proposals to take account of flood risk from all sources, both now and in the future, including the likely effects of climate change. The Framework places flood risk policy within a dedicated flood risk and coastal change chapter and expects development to be directed away from areas at highest risk wherever possible.

For development proposed in areas at risk of flooding, national policy requires decision makers to be satisfied that the development would be safe for its lifetime, would not increase flood risk elsewhere, would be appropriately flood resistant and resilient where necessary, would incorporate sustainable drainage unless there is clear evidence that this would be inappropriate, and would include safe access, escape and residual risk management arrangements where appropriate.

The Planning Practice Guidance on Flood Risk and Coastal Change advises that a site-specific FRA should assess the flood risk to and from the development and demonstrate how flood risk will be managed now and over the development's lifetime, taking climate change into account and having regard to the vulnerability of its users.

The objectives of a site-specific FRA are to establish:

- whether a proposed development is likely to be affected by current or future flooding from any source;
- whether it will increase flood risk elsewhere;
- whether the measures proposed to deal with these effects and risks are appropriate;
- evidence for the local planning authority to apply the Sequential Test where required; and
- whether the development will be safe and pass the Exception Test, where applicable.

The guidance also confirms that the information provided in an FRA should be credible, fit for purpose and proportionate to the degree of flood risk, the scale and nature of the development, and the information already available, including the Strategic Flood Risk Assessment and Environment Agency flood risk mapping.

A proportionate FRA should therefore consider flood risk from all relevant sources, including rivers, the sea, surface water, groundwater, sewers, reservoirs and other artificial sources, together with the effects of climate change, residual risk, drainage, resilience, refuge and access arrangements where these matters are relevant to the application.

3.2 Local Planning Policy

Local Authorities consider flood risk through relevant environmental and climate change policies which enforce the requirements of the NPPF. Relevant local policy, as outlined by London Borough of Hillingdon Council, is contained within the;

i) Strategic Flood Risk Assessment
ii) Local Flood Risk Management Strategy

The Strategic Flood Risk Assessment (SFRA) and the Local Flood Risk Management Strategy (LFRMS) are key sources of flood risk specific information for the area. The SFRA provides a more detailed review of flood risks and recommendations for ensuring developments can be constructed and operated safely in accordance with the NPPF.

3.3 Flood Risk Zones, Vulnerability and Classification

These Flood Zones refer to the probability of river and sea flooding, ignoring the presence of defences. They are shown on the Environment Agency's Flood Map for Planning available on the Environment Agency's web site, as indicated in the table below.

Table 1 – Flood Zones

Flood Zone	**Definition**
Zone 1 *Low Probability*	Land having a less than 1 in 1,000 annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map – all land outside Zones 2 and 3)
Zone 2 *Medium Probability*	Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or Land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding. (Land shown in light blue on the Flood Map)
Zone 3a *High Probability*	Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding. (Land shown in dark blue on the Flood Map)
Zone 3b *The Functional Floodplain*	This zone comprises land where water has to flow or be stored in times of flood. Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. (Not separately distinguished from Zone 3a on the Flood Map)

Table 2 – Flood Risk Vulnerability Classification

Essential Infrastructure
• Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk. • Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works that need to remain operational in times of flood. • Wind turbines.

Highly Vulnerable

- Police and ambulance stations; fire stations and command centres; telecommunications installations required to be operational during flooding.
- Emergency dispersal points.
- Basement dwellings.
- Caravans, mobile homes and park homes intended for permanent residential use.
- Installations requiring hazardous substances consent (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as 'Essential Infrastructure').

More Vulnerable

- Hospitals
- Residential institutions such as residential care homes, children's homes, social services homes, prisons and hostels.
- Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels.
- Non–residential uses for health services, nurseries and educational establishments.
- Landfill* and sites used for waste management facilities for hazardous waste.
- Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan.

Less Vulnerable

- Police, ambulance and fire stations which are **not** required to be operational during flooding.
- Buildings used for shops; financial, professional and other services; restaurants, cafes and hot food takeaways; offices; general industry, storage and distribution; non-residential institutions not included in the 'More Vulnerable' class; and assembly and leisure.
- Land and buildings used for agriculture and forestry.
- Waste treatment (except landfill* and hazardous waste facilities).
- Minerals working and processing (except for sand and gravel working).
- Water treatment works which do not need to remain operational during times of flood.
- Sewage treatment works, if adequate measures to control pollution and manage sewage during flooding events are in place.

Water Compatible Development

- Flood control infrastructure.
- Water transmission infrastructure and pumping stations.
- Sewage transmission infrastructure and pumping stations.
- Sand and gravel working.
- Docks, marinas and wharves.
- Navigation facilities.
- Ministry of Defence installations.
- Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location.
- Water-based recreation (excluding sleeping accommodation).
- Lifeguard and coastguard stations.

- Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms.
- Essential ancillary sleeping or residential accommodation for staff required by uses in this category, subject to a specific warning and evacuation plan.

* Landfill as defined in Schedule 10 to the Environmental Permitting (England and Wales) Regulations 2010.

Table 3 - Flood risk vulnerability and flood zone 'compatibility'

Flood Zones	Flood Risk Vulnerability Classification				
	Essential Infrastructure	**Highly Vulnerable**	**More Vulnerable**	**Less Vulnerable**	**Water Compatible**
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test required	✓	✓	✓
Zone 3a†	Exception Test required†	✗	Exception Test required	✓	✓
Zone 3b*	Exception Test required*	✗	✗	✗	✓*

Key:

✓ Development is appropriate

✗ Development should not be permitted.

Notes to table 3:

- This table does not show the application of the Sequential Test which should be applied first to guide development to Flood Zone 1, then Zone 2, and then Zone 3; nor does it reflect the need to avoid flood risk from sources other than rivers and the sea;
- The Sequential and Exception Tests do not need to be applied to minor developments and changes of use, except for a change of use to a caravan, camping or chalet site, or to a mobile home or park home site;
- Some developments may contain different elements of vulnerability and the highest vulnerability category should be used, unless the development is considered in its component parts.

† In Flood Zone 3a essential infrastructure should be designed and constructed to remain operational and safe in times of flood.

* In Flood Zone 3b (functional floodplain) essential infrastructure that has to be there and has passed the Exception Test, and water-compatible uses, should be designed and constructed to:

- remain operational and safe for users in times of flood;
- result in no net loss of floodplain storage;

- not impede water flows and not increase flood risk elsewhere.

Minor development in context of Planning Practice Guidance

Section 17 of the Planning Practice Guidance for Flood Risk and Coastal Change states:

Minor development means:

- minor non-residential extensions: industrial/commercial/leisure etc. extensions with a footprint less than 250 square metres.
- alterations: development that does not increase the size of buildings e.g. alterations to external appearance.
- householder development: For example; sheds, garages, games rooms etc. within the curtilage of the existing dwelling, in addition to physical extensions to the existing dwelling itself. This definition excludes any proposed development that would create a separate dwelling within the curtilage of the existing dwelling e.g. subdivision of houses into flats.

Furthermore section 18 of the Planning Practice Guidance for Flood Risk and Coastal Change looks at whether minor developments likely to raise flood risk issues? It states:

Minor developments are unlikely to raise significant flood risk issues unless:

- they would have an adverse effect on a watercourse, floodplain or its flood defences;
- they would impede access to flood defence and management facilities, or;
- where the cumulative impact of such developments would have a significant effect on local flood storage capacity or flood flows.

The Environment Agency's advice on flood risk assessment is helpful for ensuring extensions or alterations are designed and constructed to conform to any flood protection already incorporated in the property and include flood resilience measures in the design.

The Environment Agency's advice for minor developments – household extensions is that to make sure floor levels are either no lower than existing floor levels or 300 millimetres (mm) above the estimated flood level. If your floor levels aren't going to be 300mm above existing flood levels, you need to check with your local planning authority if you also need to take flood resistance and resilience measures.

4. Sources of flooding

4.1 Fluvial/Tidal

The Environment Agency's Flood Map for Planning (Rivers and Sea) identifies fluvial and tidal flood zones and provides an indication of whether or not these zones are protected, due to the presence of flood defences (also highlighted). Figure 4, below, presents the Flood Map for the surrounding area.



Figure 4 – Fluvial flood risk – EA Flood Map for Planning (Rivers and Sea).

The EA Flood Map identifies that the site to be within Flood Zone 3, where the chance of flooding in any given year is greater than 1 in 100 (1%). The proposed extensions to the front and rear of the property are both in Flood Zone 2, which has a chance of flooding between the 1 in 100 (1%) year and 1 in 1000 year (0.1%) events.

4.2 Historic Flooding

Analysis of strategic flood risk documents developed by the London Borough of Hillingdon does not indicate any historic flooding.

4.3 Surface Water Flooding

The Environment Agency's Risk of Flooding from Surface Water (RoFSW) identifies pluvial flood risk. Figures 5 and 6 below presents the RoFSW for the development site and the surrounding area.



Figure 5 – Flooding from surface water sources 1 in 30 year plus climate change, RoFSW

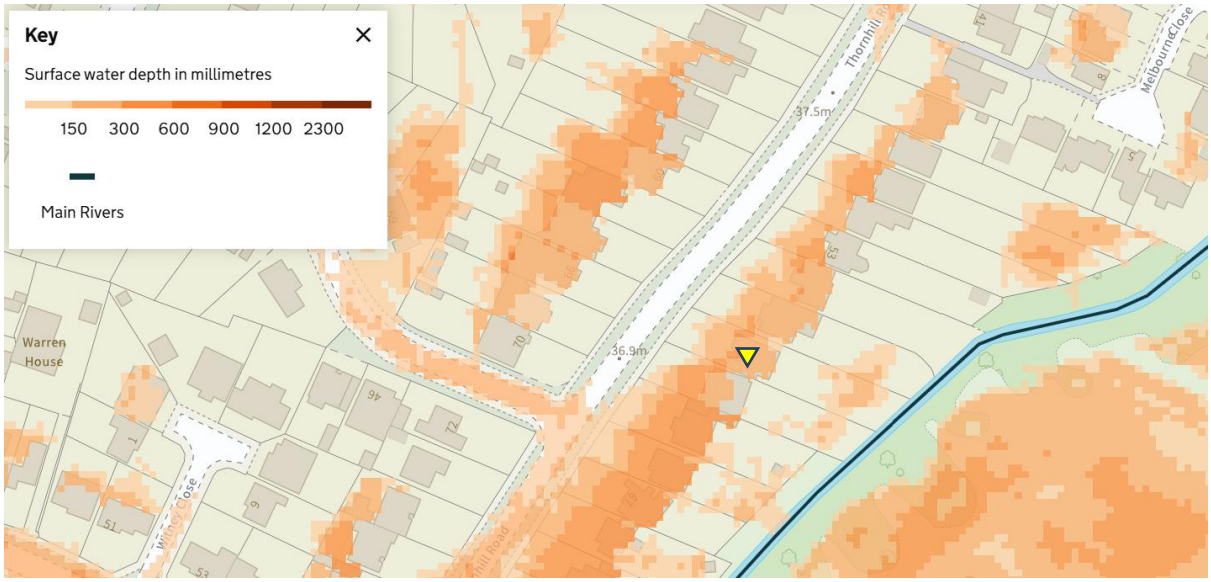


Figure 6 – Flooding from surface water sources 1 in 100 year plus climate change, RoFSW

The RoFSW shows that area in the vicinity of the development site is at risk of surface water in the 1 in 30 (3.3%) plus climate change event. In such an event flood depths are predicted to be up to 300mm.

In the 1 in 100 year plus climate change event, flood depths may be to 600mm at the front of the property, with the rear continuing to be a maximum of 300mm.

4.4 Reservoir

The Environment Agency's Risk of Reservoir Flooding Map identifies the maximum extent of flooding that may be expected in the unlikely event that a reservoir dam failed. Figure 7 below, presents the risk map for development site and the surrounding area. The development is at risk of flooding.

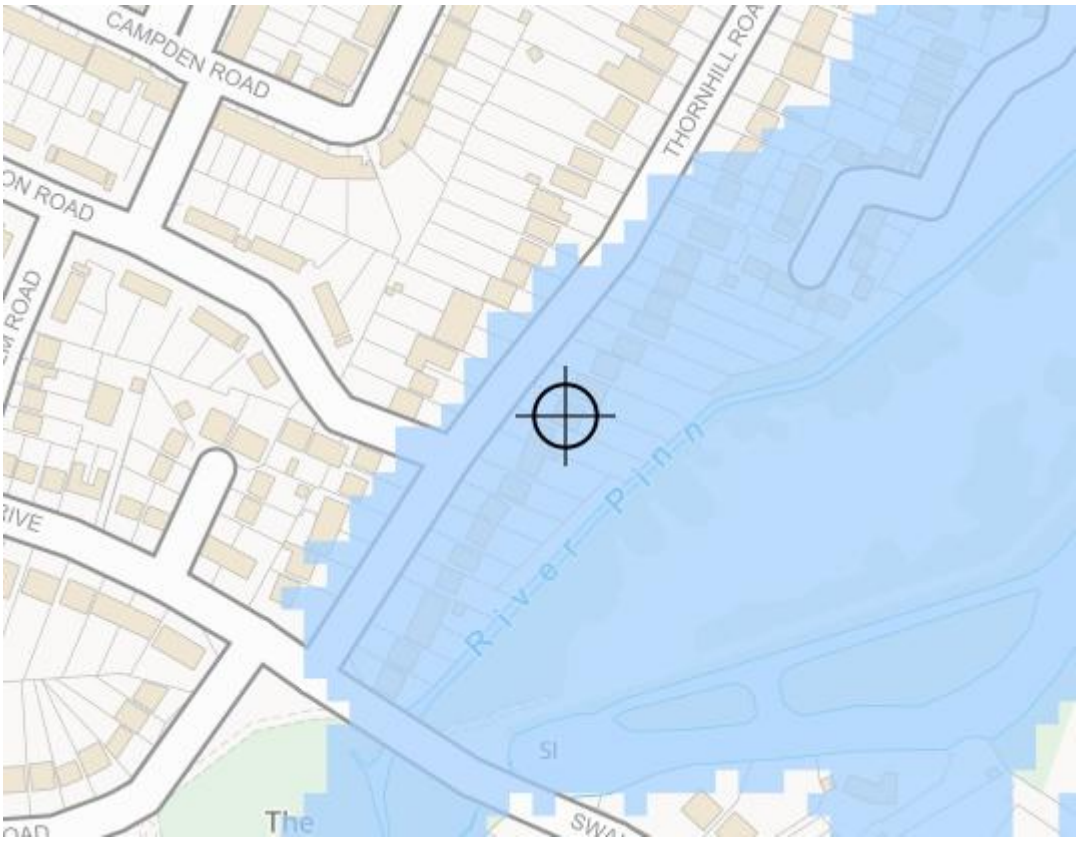


Figure 7 – Flooding from reservoir flooding.

The development is at risk of flooding from Ruislip Lido reservoir which is owned by the London Borough of Hillingdon.

Reservoir flooding is extremely unlikely to happen. There has been no loss of life in the UK from reservoir flooding since 1925. All large reservoirs must be inspected and supervised by reservoir panel engineers. As the enforcement authority for the Reservoirs Act 1975 in England, the Environment Agency ensures that reservoirs are inspected regularly, and essential safety work is carried out.

4.5 Groundwater

The Environment Agency's Groundwater Vulnerability Map indicates that the development site is situated over a medium, as shown in Figure 8. Further analysis shows that the development site is not situated over a Groundwater Source Protection Zone, as shown in Figure 9.

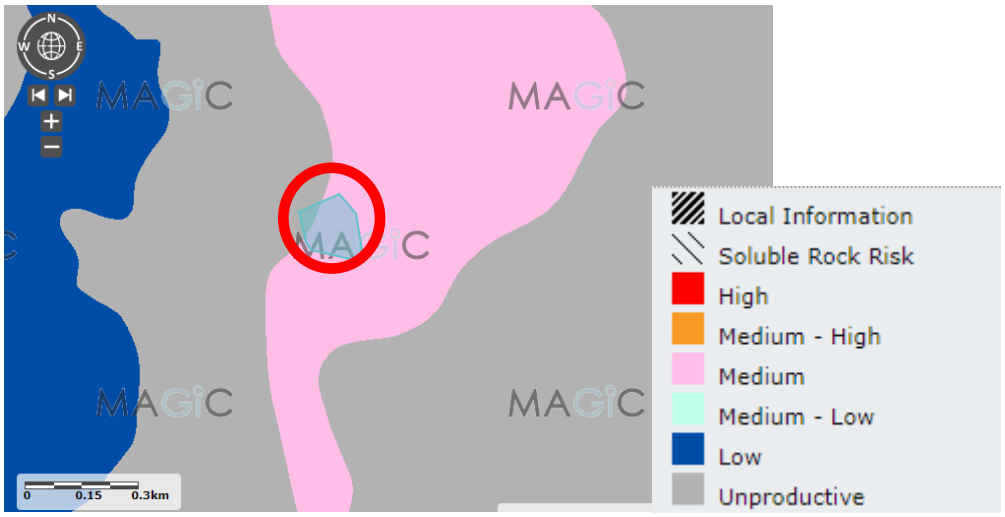


Figure 8 – Groundwater vulnerability map, site highlighted.

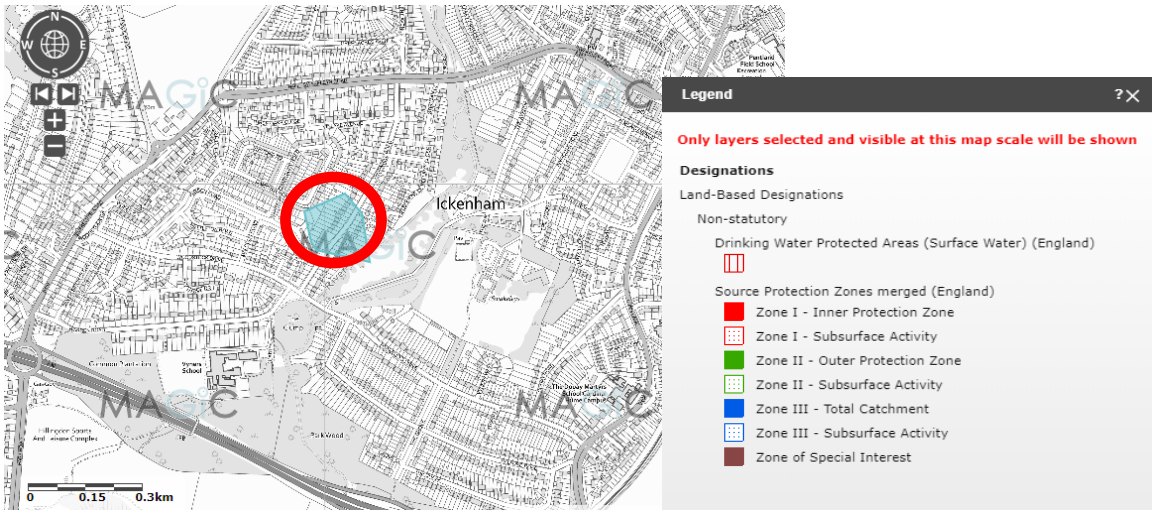


Figure 9 – Groundwater source protection zones, site highlighted.

Due to the minimal groundworks required for this development the impact on groundwater is considered to be negligible.

However, it is recommended that a groundwater mitigation plan is developed that may be implemented if groundwater is encountered during constriction.

4.6 Geology

Figures 10 and 11 present information from the British Geological Survey.

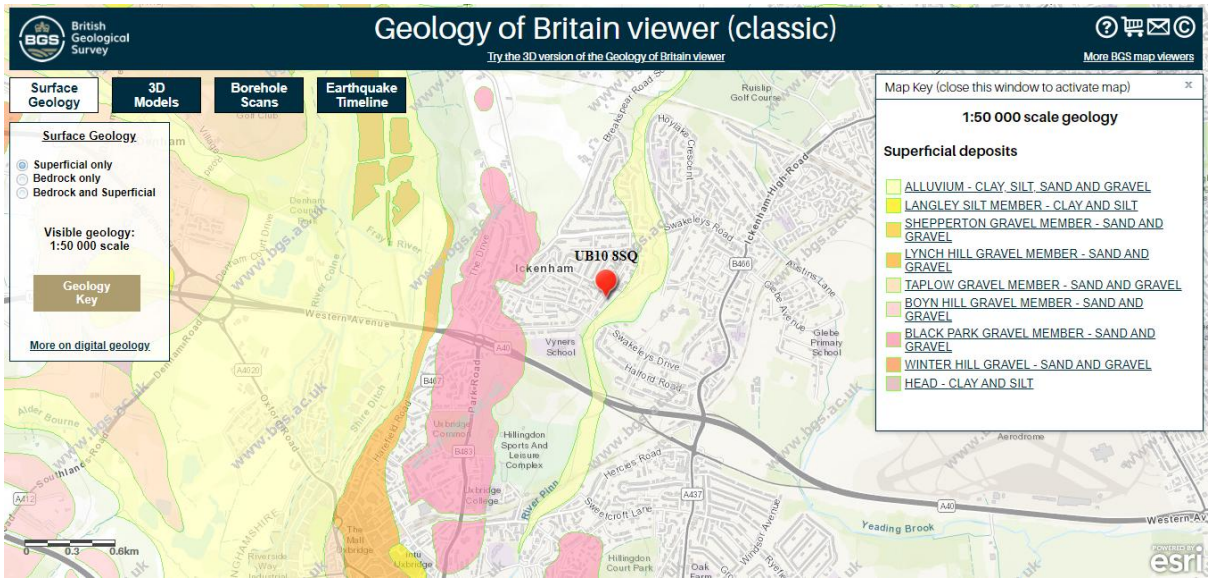


Figure 10 – Superficial Geology of the development.

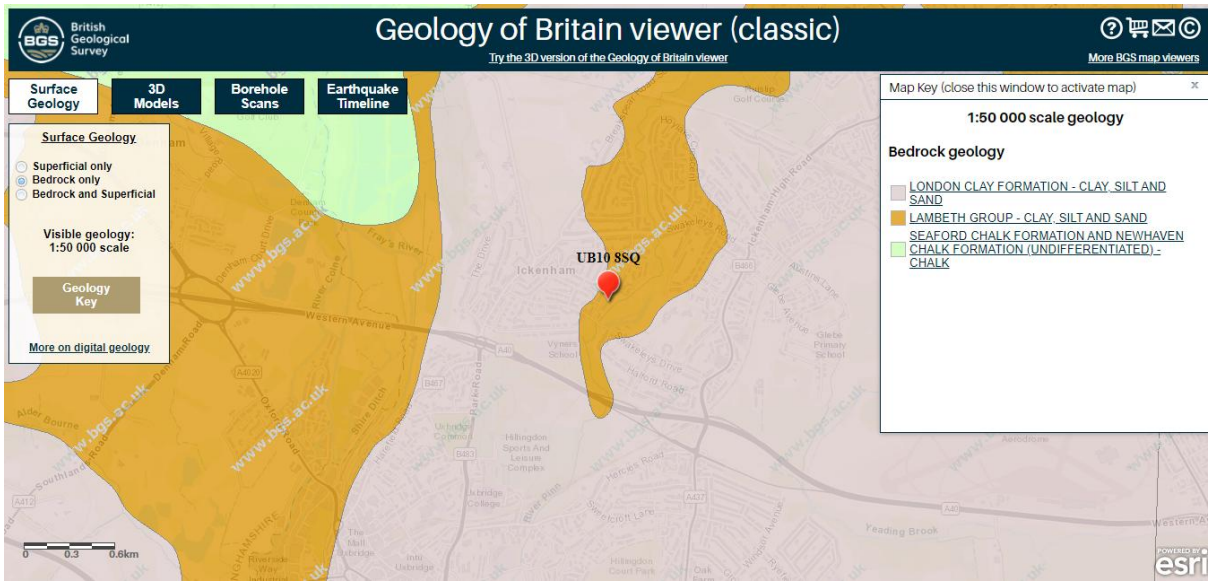


Figure 11 – Bedrock geology of the development.

There are no superficial deposit records at the development site.

With regards to the bedrock, the site is underlain by the Lambeth Group - Clay, Silt and Sand. The sedimentary bedrock formed approximately 48 to 59 million years ago in the Palaeogene Period. The local environment was previously dominated by swamps, estuaries and deltas.

5. Proposed development

This FRA is prepared to support a planning application for double storey front and rear extension to existing dwelling at 59 Thornhill Road, Ickenham, UB10 8SQ.

Buildings used for residential dwellings are classified as being **More Vulnerable** development within Table 2 of the Planning Practice Guidance. The EA Flood Map for Planning (Rivers and Sea) identifies that the existing building is within Flood Zone 2, where the chance of flooding in any given year is between the 1 in 100 (1%) and 1 in 1000 (0.1%). The location of the front extension is also within flood zone 2. The location of the rear extension encroaches just into flood zone 3. Flood Zone 3 has a risk of greater than 1 in 100 (1%) in any one year. More Vulnerable minor developments within Flood Zone 3 are acceptable.

Figures 12 and 13 show the existing floor layouts and Figures 14 and 15 show the proposed floor layouts.

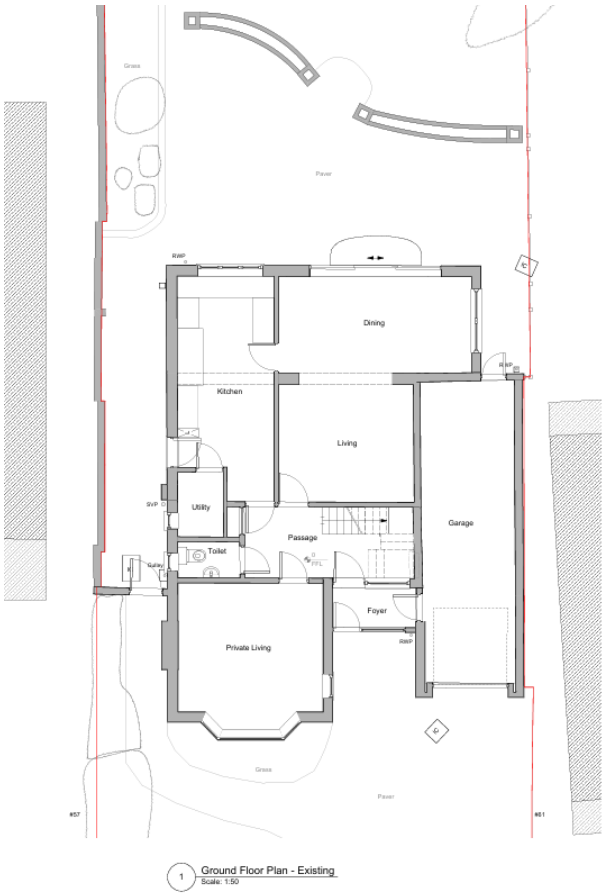


Figure 12 – Existing ground floor layout.

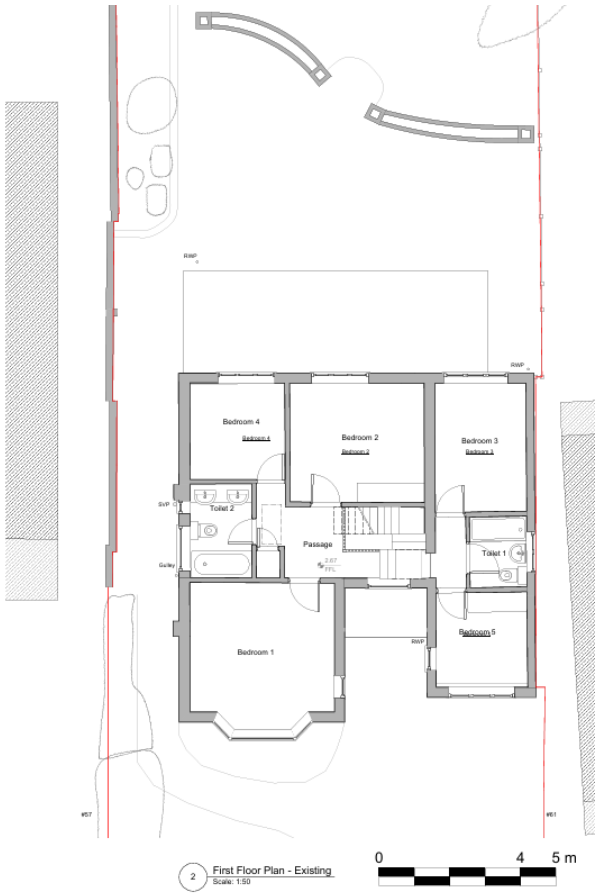


Figure 13 – Existing first floor layout.

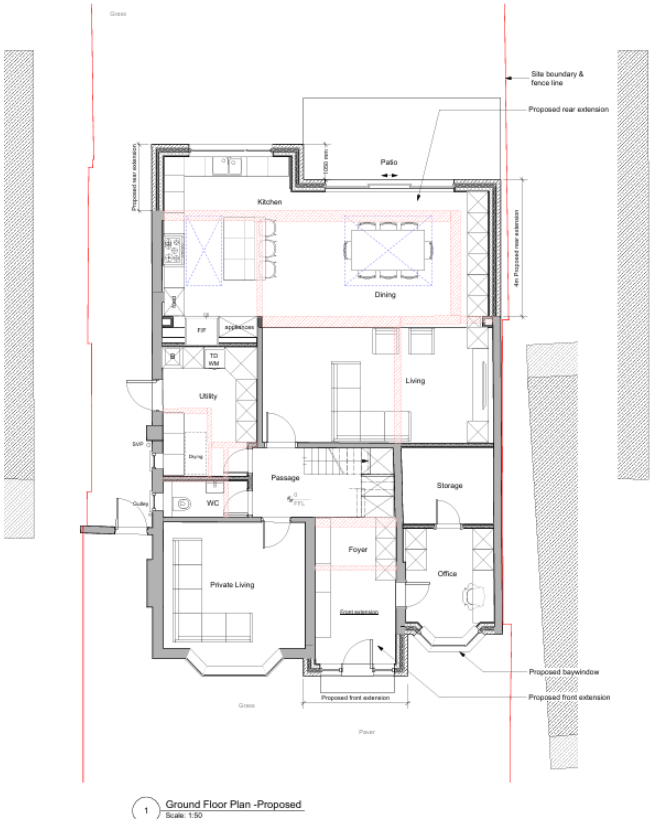


Figure 14 – Proposed ground floor layout.

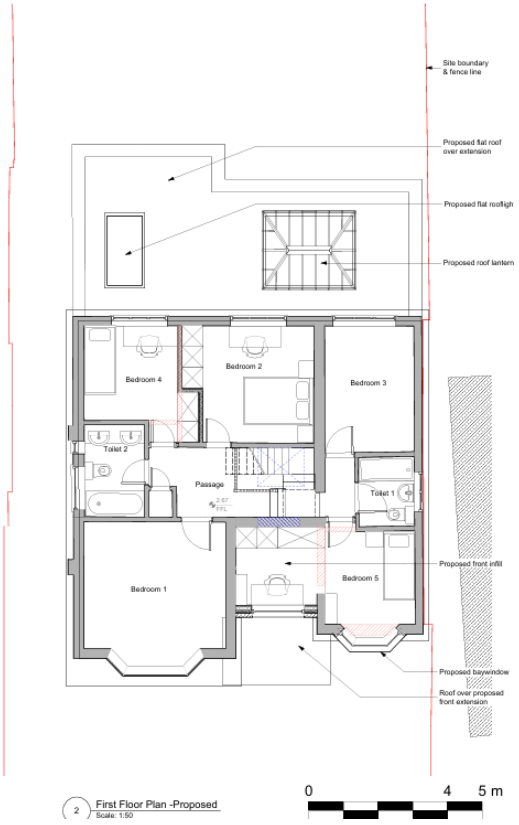


Figure 15 – Proposed first floor layout.

6. Surface Water Drainage

The existing runoff rate from the site can be calculated using the Modified Rational Rainfall Method. Where Q = 2.78 * Cv * Cr * Ri * A

Cv = **0.75** – Fully impermeable areas i.e. existing roads and hardstanding

Cr = **1.3** – Routing Coefficient (CIRIA C697 recommends a value of 1.3)

Ri = **120**mm Rainfall intensity

A = **0.02**ha current impermeable area

Q = 2.78 * 0.75 * 1.3 * 120 * 0.02

Q = 6.5 l/s

Hillingdon Council, in their guidance document 'Minor Development Flood Risk Assessment Requirements' set out that surface water from minor developments, including new extensions, must not connect directly to the sewer network, and must be controlled on site through soakaway or tank.

It is therefore recommended that appropriate measures are implemented to direct surface water, including roof water, to water butts and/or a soakaway area. The garden area has sufficient capacity to provide an adequate soakaway function.

On this basis, the proposed discharge of surface water from the development will not see any surface water flooding on site in the 1 in 30 year and 1 in 100 year plus climate change events. Therefore, it will not increase the risk of surface water / sewer flooding elsewhere.

7. Hierarchy of disposing surface water

The Planning Practice Guidance and part H of the Building Regulations state that "generally, the aim should be to discharge surface run off as high up the following hierarchy of drainage options as reasonably practicable:

- into the ground (infiltration);
- to a surface water body;
- to a surface water sewer, highway drain, or another drainage system;
- to a combined sewer".

7.1 Infiltration

It is recommended that appropriate measures are implemented to direct surface water, including roof water, to water butts and/or a soakaway area. The garden area has sufficient capacity to provide an adequate soakaway function.

8. Use of SuDS

The NPPF, Planning Practice Guide and the Ministerial Statement all look at the use of SuDS as a priority to aid the disposal of surface water from new developments.

There is adequate capacity within the curtilage of the property to include SuDS measures. A soakaway will be introduced to minimise surface water runoff from the site, as shown in Figure 16. Furthermore, a water butt can be installed which would assist with grey water recycling.

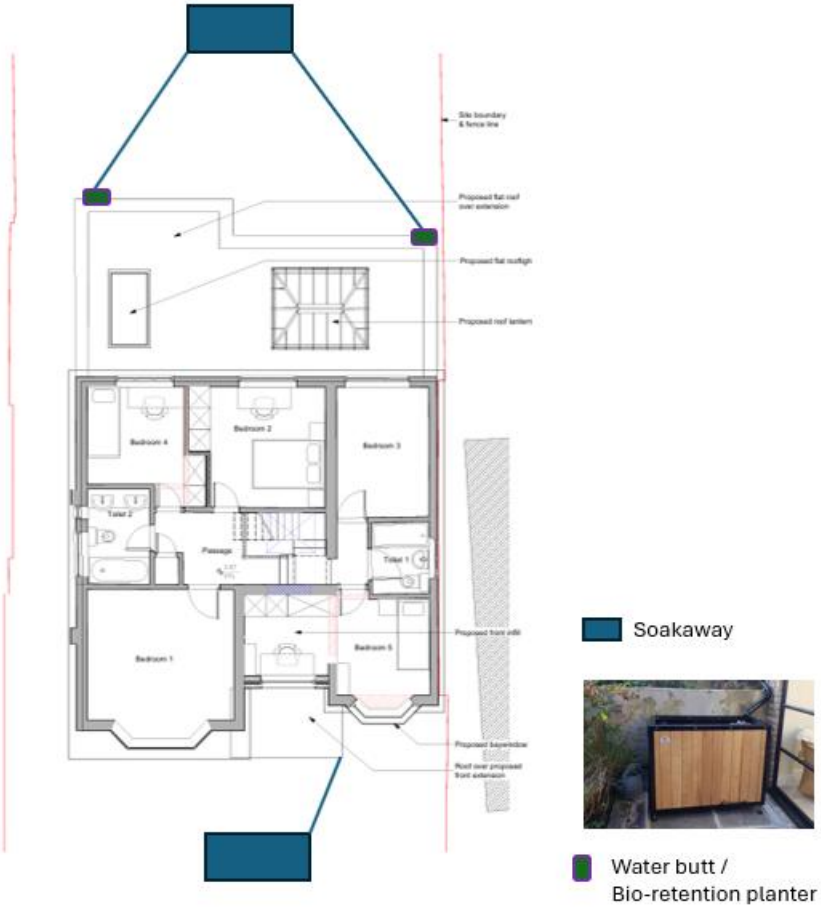


Figure 16 – Proposed surface water schematic.

9. Management of flood risk

9.1 Fluvial

The analysis of flooding from fluvial and tidal sources shows that the existing building is within Flood Zone 2, where the chance of flooding in any given year is between the 1 in 100 (1%) and 1 in 1000 (0.1%). The location of the front extension is also within flood zone 2. The location of the rear extension encroaches just into flood zone 3. Flood Zone 3 has a risk of greater than 1 in 100 (1%) in any one year.

Table 2 of this report details that residential developments are classified as More Vulnerable; Environment Agency guidance for minor development identifies that minor More Vulnerable developments in Flood Zones 2 and 3 are acceptable.

In accordance with EA standing advice for minor developments, it is recommended that finished floor levels are set no lower than that of the existing building.

It is also recommended that the residents of the property register for the EA Flood Warning Service, which is available in the area and develop a flood plan that may be implemented in the event of extreme flooding. Details of a flood plan are set out in section 9.5 of this report.

9.2 Surface Water

The development site is described as being at risk from surface water flooding, which means that the flood risk is greater than 1 in 30 (3.3%) in any year.

It is recommended that consideration be given to flood resistance and resilience measures during the design stage. Further guidance in this respect is provided in section 9.3 of this report.

Hillingdon Council, in their guidance document 'Minor Development Flood Risk Assessment Requirements' set out that surface water from minor developments, including new extensions, must not connect directly to the sewer network, and must be controlled on site through soakaway or tank.

There is adequate capacity within the curtilage of the property to include SuDS measures. A soakaway will be introduced to minimise surface water runoff from the site.

With regards to maintenance of the surface water system on site, we make reference to the House of Commons Ministerial Statement (HCWS161) on Sustainable Drainage Systems. "in considering planning applications, local planning authorities should consult the relevant lead local flood authority on the management of surface water; satisfy themselves that the proposed minimum standards of operation are appropriate and ensure through the use of planning conditions or planning obligations that there are clear arrangements in place for ongoing maintenance over the lifetime of the development".
Therefore, we expect a condition to be inserted regarding the surface water drainage. However, a maintenance schedule has been produced. This can be found in Table 4 below.

Soakaway	Regular maintenance	Clearing of inlets, outlets, gutters, withdrawal devices and roof drain filters and other debris. Ensure grass is cut on and around feature	Annual (or following poor performance)	Landowner
	Occasional maintenanc	Protect grass surface from compaction and siltation and manage main area of basin for design function or appearance.	As required	Landowner
	Remedial actions	Replace stones / granual fill in soakaway	As required	Landowner
	Monitoring	Inspection of feature (when required and if suspecting poor performance)	Annual (or following poor performance)	Landowner

Table 4 – suggested surface water scheme maintenance.

9.3 Flood Resistance and Resilience Measures

It is recommended that the proposed works incorporate flood resilience and resistance measures. This would ensure that any extreme flooding and flooding in exceedance events could be mitigated against. Such measures could include:

- External walls rendered resistant to flooding to higher level;
- External ventilation outlets, utility points and air bricks fitted with removable waterproof covers;
- Non-return valves fitted to all drain and sewer outlets;
- Manhole covers secured;
- Anti-siphon fitted to all toilets;
- Kitchen units of solid, water-resistant material;
- Use of MDF carpentry (i.e. skirting, architrave, built-in storage) avoided at ground floor level.

9.4 Safe access and egress

It is recommended that residents of the property register for the EA Flood Warning Service, which is available within the area, and which aims to give a minimum 2-hour advance notification of potential flooding, giving adequate time to implement safety procedures.

In the event of having to evacuate the building, a suitable emergency egress route is available by turning Northeast onto Thornhill Road and travel for approximately 15m to reach Flood Zone 1.

9.5 Flood plan

As the development is situated in Flood Zone 3 it would be prudent for a flood warning and evacuation plan to be set up and implemented post development. This plan would include residents signing up to the Environment Agency flood warning service.

The flood warning service has three types of warning that will help you to prepare for flooding and take action.

Flood Warning	Flood Alert	Flood Warning	Severe Flood Warning
			
What it means?	Flooding is possible. Be prepared.	Flooding is expected. Immediate action required.	Severe flooding. Danger to life.
When it's used?	Two hours to two days in advance of flooding.	Half an hour to one day in advance of flooding.	When flooding poses a significant threat to life.
What to do?	Be prepared to act on your flood plan. Prepare a flood kit of essential items. Monitor local water levels and the flood forecast on our website.	Move family, pets and valuables to a safe place. Turn off gas, electricity and water supplies if safe to do so. Put flood protection equipment in place.	Stay in a safe place with a means of escape. Be ready should you need to evacuate from your home. Co-operate with the emergency services. Call 999 if you are in immediate danger.

Recommended Flood Plan:

Before a flood

- Find out if you are at risk of flooding;
- Find out if you can receive flood warnings;
- Prepare and keep a list of all your contacts to hand or save them on your mobile phone/tablet;
- Think about what items you can move now and what you would want to move to safety during a flood such as pets, cars, furniture and electrical equipment;
- Know how to turn off gas, electricity and water supplies;
- Prepare a flood kit of essential items and keep it handy. It can include copies of important documents, a torch, a battery-powered or wind-up radio, blankets and warm clothing, waterproofs, rubber gloves and a first aid kit including all essential medication.

On receipt of a flood warning

- Tune into your local radio station on a battery or wind-up radio;
- Fill jugs and saucepans with water;
- Grab your already prepared flood kit;
- Collect blankets, torch, first aid kit, medication and food;
- Move important documents, personal items, valuables and lightweight belongings upstairs or to high shelves;
- Raise large items of furniture, or put him in large bags if you have them;
- Move people, outdoor belongings, cars and pets to higher ground;

- Switch off water, gas and electricity at mains when water is about to enter your home. Do not touch sources of electricity when in standing water;
- Fit flood protection products, if you have them, for example flood boards, airbrick covers and sandbags;
- If you do not have non-return valves fitted, plug water inlet pipes with towels or cloths; Know your means of escape;
- Listen to the advice of the emergency service and evacuate if told to do so;
- Avoid walking or driving through flood water. 300mm of fast flowing water can knock over an adult and two feet of water can move a car.

<u>After a flood</u>

- If you have flooded, contact your insurance company as soon as possible;
- Take photographs and videos of your damaged property as a record for your insurance company;
- If you don't have insurance, contact your local authority for information on grants and charities that may help you;
- Flood water can contain sewage, chemicals and animal waste. Always wear waterproof outwear, including gloves, wellington boots and a face mask;
- Have your electrics, central heating and water checked by qualified engineers before switching them back on.

10. Conclusions

The analysis of flooding from fluvial and tidal sources shows that the existing building is within Flood Zone 2, where the chance of flooding in any given year is between the 1 in 100 (1%) and 1 in 1000 (0.1%). The location of the front extension is also within flood zone 2. The location of the rear extension encroaches just into flood zone 3. Flood Zone 3 has a risk of greater than 1 in 100 (1%) in any one year.

Table 2 of this report details that residential developments are classified as More Vulnerable; Environment Agency guidance for minor development identifies that minor More Vulnerable developments in Flood Zones 2 and 3 are acceptable.

The development site is described as being at risk from surface water flooding, which means that the flood risk is greater than 1 in 30 (3.3%) in any year.

In accordance with EA standing advice for minor developments, it is recommended that finished floor levels are set no lower than that of the existing building.

It is also recommended that the residents of the property register for the EA Flood Warning Service, which is available in the area and develop a flood plan that may be implemented in the event of extreme flooding.

It is recommended that consideration be given to flood resistance and resilience measures during the design stage. Further guidance in this respect is provided in section 9.3 of this report.

Hillingdon Council, in their guidance document 'Minor Development Flood Risk Assessment Requirements' set out that surface water from minor developments, including new extensions, must not connect directly to the sewer network, and must be controlled on site through soakaway or tank.

There is adequate capacity within the curtilage of the property to include SuDS measures. A soakaway will be introduced to minimise surface water runoff from the site.

Additional water butts can also be included within the development to aid grey water recycling.

There is no evidence of historic flooding of the development site.

The development is at risk from reservoir failure.

In the event of having to evacuate the building, a suitable emergency egress route is available by turning Northeast onto Thornhill Road and travel for approximately 15m to reach Flood Zone 1.

It is also recommended that the residents of the property register for the EA Flood Warning Service, which is available in the area and develop a flood plan that may be implemented in the event of extreme flooding.

Based on the likely flooding risk, it is considered that the proposed development can be operated safely in flood risk terms, without increasing flood risk elsewhere and is therefore appropriate development in accordance with the NPPF.