REF: 2021/3343/NEW

11th August 2021



**London Borough of Camden** 

30A Glenloch Road, London, NW3 4DN

## Enlargement of existing basement including the enlargement of the front lightwell

## **Basement Impact Assessment**

The development site at 30 Glenloch Road lies in an area of Superficial Geology, with a shallow formation of Taplow Gravel. British Geological Survey (BGS) data provides an average layer thickness of 5m, with depths up to 9m. Below this lies a bedrock formation of up to 200m of London Clay, but more typically 90-130m. The Taplow Gravel formation is a Secondary 'A' Aquifer and predominantly comprises sand and gravel, with localised lenses of silt, clay or peat. It is characteristically free-draining. The London Clay formation is an over-consolidated, fissured, silty clay deposited in a marine shelf environment. It has a high plasticity and is subject to shrink/swell behaviour which can result in foundation damage. The proposed development has foundations that are less than 3m in depth, so it is solely within the superficial geology.

The existing site has no slopes greater than 7 degrees, no history of subsidence and is not over or in the exclusion zone of any tunnels. All answers to CPG: Basements: Figure 13: Slope stability screening flowchart are no.

The entire development site lies in flood zone 1. Land and property in flood zone 1 have a low probability of flooding. There is no requirement to carry out a flood risk assessment as the development is smaller than 1 hectare and it is not affected by sources of flooding other than rivers and sea. Historically the existing basement has never been subject to flooding. There are also no named surface water features within 300m of the site. There is no extra surface water created as there is no increase in hard standing or roof area. All answers to CPG: Basements: Figure 14: Surface flow and flooding screening flowchart are no.

Further to this the development site also has low risk of rising groundwater. If groundwater in the upper aquifer were forced to find an alternative flow route past an underground obstruction, it could cause the surrounding groundwater level to increase. The existing buildings foundations are approximately 2m below ground level. Under the proposals, these foundations will be underpinned by under 1m. In this case it is extremely unlikely that the development will form a barrier to the existing groundwater regime even if groundwater levels were to rise significantly. It therefore has no effect on neighbouring properties. All answers to CPG: Basements: Figure 12: Subterranean (ground water) flow screening chart are no.

Information gathered from a desktop and site survey has been used to assess potential impacts resulting from the extension and conversion of a basement into habitable space. Due to the surrounding characteristics and the size of the proposed development it is concluded that the development is unlikely to result in any specific land or slope stability, groundwater or surface water issues and therefore there is no requirement to carry forward to the scoping stage of the Basement Impact Assessment.