CUBE BUILDING CONSULTANCY

Flood Risk Assessment

Flood Risk and Severity (Surface Water)

The current flood risk of the site due to surface water is low, with a low risk of surface water flooding reaching 20cm, the risk of surface water reaching any greater height is considered to be very low. However, the risk of flooding due to surface water is expected to increase to medium between 2040 and 2060, whilst the depth of water is expected to remain the same.

The areas of the property most likely to be affected by surface water flooding will be the front of the property facing the street, as well as the rearmost section of the back garden. The proposed rear extension to the property is located in an area that is very unlikely to be affected by flooding as the ground level was found to be higher than the surrounding area during site inspections, this was confirmed by flood risk maps of the area.

Flood Risk and Severity (Rivers and Sea)

The current flood risk of the site due to rivers and the sea is low, and the depth of any flood water is very likely to be very low (very unlikely chance of waters reaching or exceeding 20cm in depth). The risk of flooding due to rivers and the sea in 2036 to 2069 is also expected to be low, with no increase in the depth of water expected.

The areas of the property that are most likely to be affected by flooding are the same as with the areas affected by surface water due to the nature of the site. Once again, the location of the proposed extension is not in any areas that will be affected by flooding due to the site of the proposed extension sitting at a higher elevation than the rest of the site.

Overall Flood Risk and Severity

The overall flood risk can be assessed as low to very low for the rear extension to the property due to the nature of the site, as the proposed extension will sit at a higher elevation compared to the rest of the site.

The overall severity of flooding is assessed to be low to very low for the proposed extension to the property. This is due to the low depth of water expected which is due to the higher relative elevation of the affected areas, when compared to the surrounding ground.

Flood Mitigation Measures

Limited flood mitigation measures are necessary for the proposed extension. Considering the fact that the expected levels of flood water are low to very low, the method of appropriate flood proofing will be in incorporating resistance measures, due to the low expected risk of

flooding, is not appropriate to incorporate extensive measures. The flood mitigation measures that are appropriate to incorporate include:

- keeping the internal floor level of the proposed extension at the same level at the existing internal floor level (which is already offset above the surrounding ground level)
- the use of more impermeable materials in the construction of the proposed extension (most notably the exterior walls) such as pressed bricks