Flood Risk Assessment

Ref: 1430 – 17 Porthleven Drive, Manchester

Introduction

This flood risk assessment is to support the planning application for 17 Porthleven Drive, The application is for a single storey rear extension as shown on the plans submitted.

The site falls close within flood zone 2

The SUDS for the proposed property will be unchanged and all the existing drainage will be used for the new property

1. Flood Mitigation

There are numerous techniques outlined in the documents 'improving the flood performance of new buildings' that can be applied to a new extension, these not only protect the property during a flood event but also enable the property to be re-habitated as soon as possible after one.

As a minimum it is recommended that we will incorporate the following into the ground floor construction.

1. Seal off all air bricks to the building (or if not possible replace them with 'Anti-flood air bricks',
2. All existing exterior brickwork to be coated with proprietary sealant coating system.
3. All existing windows and doors at ground level to be uPVC with doubled glazed units, sealec on all contact edges, any glazing below 1m AGL to be toughened glass,
4. Provide min 50mm high proprietary removable flood barriers,
5. Mount any service meters 90mm above floor level and place in plastic housings,
6. Boiler to be mounted as high as possible,
7. Install one way flap valves to all main drainage outlets (including lockable lids on inspection chambers if appropriate)
8. Floor levels within the proposed development should be set no lower than existing levels

Consideration should also be given to the following techniques these are not essential however installing all or some of the features will significantly reduce the impact during and after a flood event.

1. Walls up to 1m above ground level to be plastered with ‘Limelite renovation plaster’ which will reduce the extent to which flood water will penetrate,
2. Use Vinyl and thermoplastic floor tile rather than ceramic,
3. Replace door hinges with butt hinges this allows doors to be lifted off and placed in a dry place until flood subsides.

2. Conclusion

It is clear that the proposed extension would not increase the impact of flood risk compared to the existing dwelling.

The finished ground floor level will be min200mm above ground level and by establishing the flood prevention and proofing techniques outlined within this report it will help reduce the impact of flooding and / or minimise damage following such an event.