
Sussex Building Consultancy Limited



Flood Risk Analysis for Replacement Dwelling with Access Parking.

68 Ancton Way, Elmer, Bognor Regis, PO22 6JP.

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Revision :

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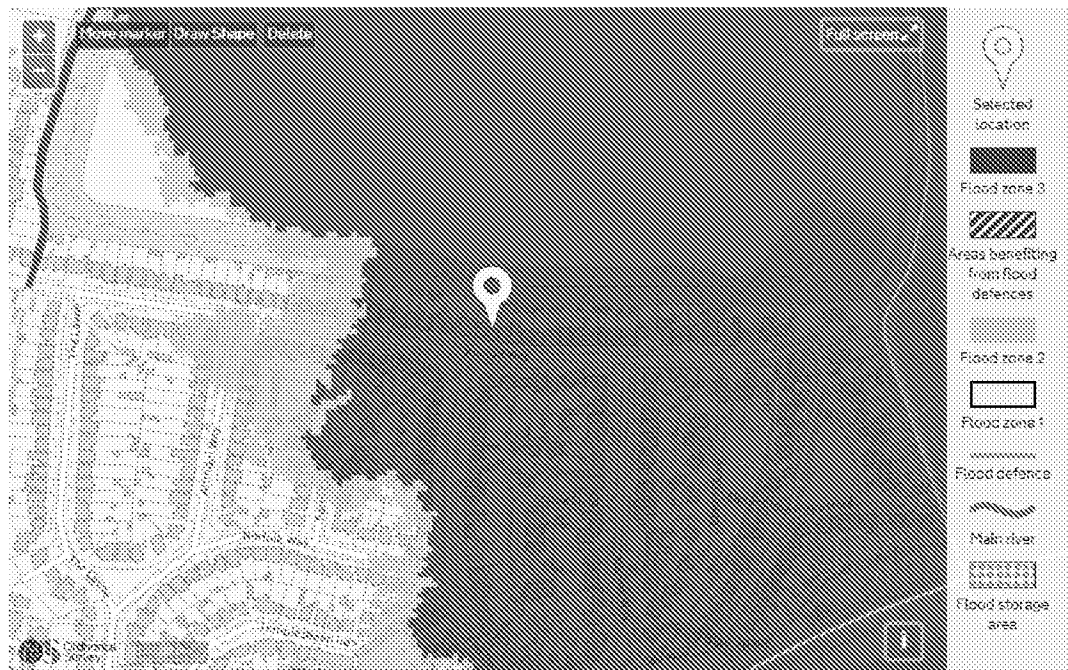
Picture – Existing Site Plan.

1.0 Introduction

- 1.1 68 Ancton Way is a single storey residential property set within the private Elmer Estate near Bognor Regis close to the sea.
- 1.2 The work proposed is to demolish the existing sub-standard property and replace with a new 2 – storey, 3 x bed house on a similar footprint.
- 1.3 This report seeks to undertake a flood risk assessment of the site to accompany the planning application.

2.0 Flood Zone

- 2.1 The site, located near to the sea in Felpham falls predominantly within Flood Zone 3, and hence within the area at risk of flooding.
- 2.2 The map from the Environment Agency shown below indicates this.



Picture – Environment Agency Flood Map Extract.

- 2.3 The topography of the site is predominantly flat set at about 3.2 m AOD with the main finished floor levels of the current property set at 3.57 m AOD.
- 2.4 The site benefits from the Elmer Coastal defences that are considered to be in 'fair' condition giving reasonable protection to a 1 in 100 year storm.
- 2.5 Should the sea defences be breached, the Environment Agency maps indicate that the site would be liable to flood, although this model does not take account of sea defences.



Picture – Location Plan.

3.0 Sources.

- 3.1 Information has been taken from the Environment Agency website and the Government 'Flood Map for Planning' service.

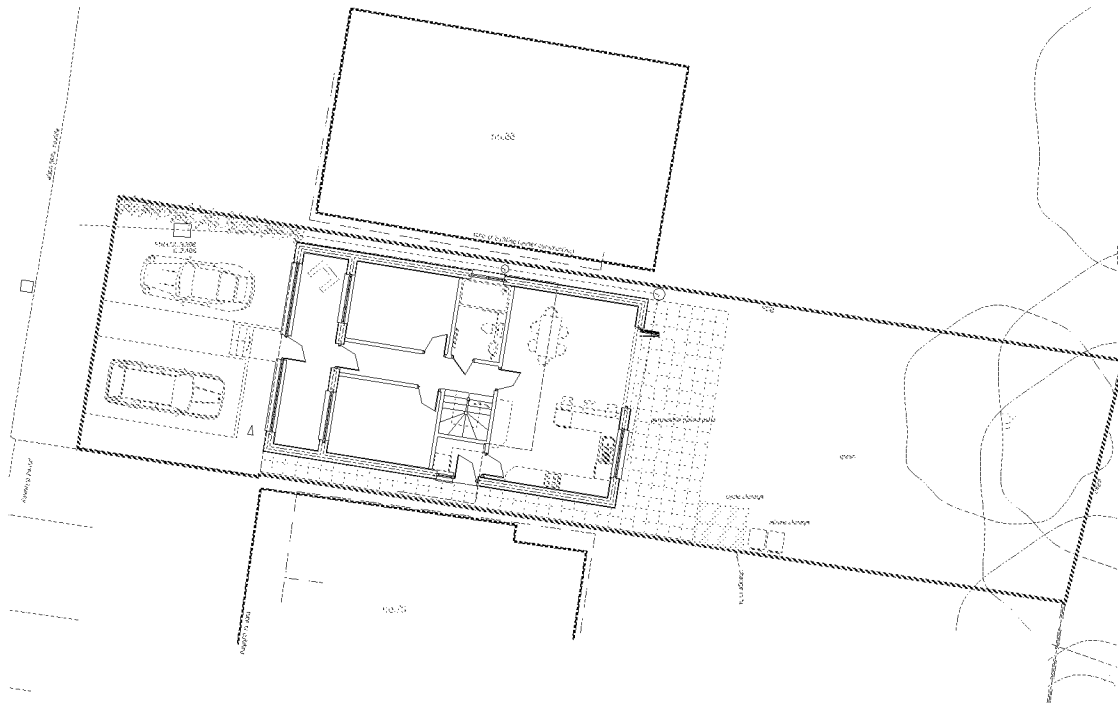
4.0 Proposed Flood Resilient Measures

- 4.1 Electrical sockets located on the ground floor are to be installed at raised levels to minimise damage and expediate reoccupation.
- 4.2 Locate gas and electric metres above predicted flood levels.
- 4.3 Provide non return valves for services to prevent back-flow.
- 4.4 Seal service entries with expanded foam insulation.
- 4.5 Adopt closed cell insulation within the build.
- 4.6 Floor levels to be set a minimum of 300 mm above external ground level.

5.0 Exception Test

- 5.1 The exception test should identify where the benefits of the building outweigh the risks associated with the building in an area at risk from flooding.

- 5.2 The layout of the building with the sleeping accommodation located on the first floor only allows for occupants to be kept safe in the event of extreme flood and not require immediate rescue by the emergency services.
- 5.3 The development is to replace an existing single storey dwelling with one of two floors, overall, the impact of flooding is lessened by the advantages of having an upper floor level.



Picture – Proposed site plan.

6.0 Conclusion

- 6.1 The site is located within Flood Zone 3.
- 6.2 According to the Environment Agency there was some flooding of the area, however, there are no records of this site being flooded.
- 6.3 The exception test shows that the benefits of having the development far outweigh the risks involved with building on this site and with sleeping accommodation located on the first floor only.
- 6.4 The flood resilient measures listed above are to be incorporated into the design.
- 6.5 The FRA prepared for No. 66 Ancton Way has been previously accepted for the development of a replacement dwelling, this site is at the same level and similar measures are proposed.
- 6.6 The proposed floor levels are to be set 300 mm above the 1 in 200 year probability tidal flood (0.5% AEP) and not lower than 3.44 m AOD – in this case 3.5 m AOD.

- 6.7 For these reasons we feel that this development would be entirely suitable for this site and not impose additional strain on the emergency rescue services during times of potential flood.