

Householder and other minor extensions in Flood Zones 2 and 3

Applications for planning permission should be accompanied by a completed form. An electronic version can be submitted by 'printing' it to a PDF writer.

This guidance is for domestic extensions and non-domestic extensions where the additional footprint created by the development does not exceed 250 sq. metres. It should NOT be applied if an additional dwelling is being created, e.g. a self contained annex.

We recommend that:

Planning Authorities:

- 1) Refer the applicant to the standing advice pages on the Environment Agency website or provide them with a copy of this page for them to include as part of the planning application submission.
- 2) Check the planning application to ensure that one or other of the mitigation measures from the table below has been incorporated.

Applicants:

Complete the table below and include it with the planning application submission. The table, together with the supporting evidence, will form the Flood Risk Assessment (FRA) and will act as an assurance to the Local Planning Authority (LPA) that flood risk issues have been adequately addressed.

Applicant to choose one or other of the flood mitigation measures below	Applicant to provide the LPA with the supporting information detailed below as part of their FRA	Applicant to indicate their choice in the box below. Enter 'yes' or 'no'
Either ; Floor levels within the proposed development will be set no lower than existing levels AND, flood proofing of the proposed development has been incorporated where appropriate.	Details of any flood proofing / resilience and resistance techniques, to be included in accordance with ' <i>Improving the flood performance of new buildings</i> ' CLG (2007)	YES
Or; Floor levels within the extension will be set 300mm above the known or modelled 1 in 100 annual probability river flood (1%) or 1 in 200 annual probability sea flood (0.5%) in any year. This flood level is the extent of the Flood Zones	This must be demonstrated by a plan that shows finished floor levels relative to the known or modelled flood level. All levels should be stated in relation to Ordnance Datum ¹	NO

Subterranean/basement extensions

Due to the risk of rapid inundation by floodwater basements should be avoided in areas at risk of flooding. The LPA may hold additional guidance for basement extensions.

Self-contained basement dwellings are 'highly vulnerable' development and should not be permitted in Flood Zone 3. We are opposed to these developments.

Continued...

¹ Ordnance Datum or the abbreviation 'OD' is the mean level of the sea at Newlyn in Cornwall from which heights above sea level are taken. The contour lines on Ordnance Survey maps measure heights above OD for example, though these are not accurate enough for a flood risk assessment..

Cumulative impact of minor extensions and the removal of Permitted Development rights.

There is potential for the cumulative impact of minor extensions to have a significant effect on flood risk. Where local knowledge (Strategic Flood Risk Assessment held by the LPA/information provided by the parish council) suggests this is the case the guidance contained in FRA guidance note 2 should be applied. FRA guidance note 2 can also be applied where permitted development rights have been removed for flood risk reasons. The Environment Agency does not usually comment on minor development in this category.

Permeable paving and changes to permitted development rights for householders

On the 1st October 2008 the General Permitted Development Order (GPDO) in England was amended by the Government (Statutory Instrument 2008 No. 2362).

One of the changes introduced by the GPDO amendment is the removal of permitted development rights for householders wishing to install hard surfacing in front gardens which exceeds 5sq. metres (i.e. 1m x 5 m) without making provision to ensure permeability. This means that use of traditional materials, such as impermeable concrete, where there is no facility in place to ensure permeability, requires an application for planning permission.

In order to help and advise householders of the options for achieving permeability and meeting the condition for permitted development status the Department for Communities and Local Government (CLG) has produced guidance on permeable paving which can be found on the following link <http://www.communities.gov.uk/publications/planningandbuilding/pavingfrontgardens>

The Environment Agency supports the GPDO amendment as it is in line with the recommendations of the Pitt Report regarding the need to better tackle the impact of surface water flooding. However, Local Planning Authorities should determine these applications in accordance with the CLG guidance **without** consulting the Environment Agency.

End of comment

Emsworth Sailing Club, Emsworth

Flood Risk Assessment

Club House Extension

Prepared for

Emsworth Sailing Club

55 Bath Road

Emsworth

Hampshire

PO19 7ES

August 2012

Job No: S128012



Revision	Amendments	Prepared By	Checked	Status	Date
1	First Issue	IJW		Draft	31/08/12

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FIGURES

Figure 1: Aerial view Emsworth Sailing Club.

Figure 2: Location of the Proposed Development

Figure 3: Environment Agency Indicative Flood Mapping

Figure 4: Table D.3, reproduced from NPPF Technical Guide (March 2012)

APPENDICES

Appendix A: SK-120824-1 Existing and Proposed Flood Mitigation Measures

1.2 Site Location

The site area is bounded by Chichester Harbour on its east, south and west sides. Large residential dwellings are located either side Bath Road running north to south immediately north of the site.

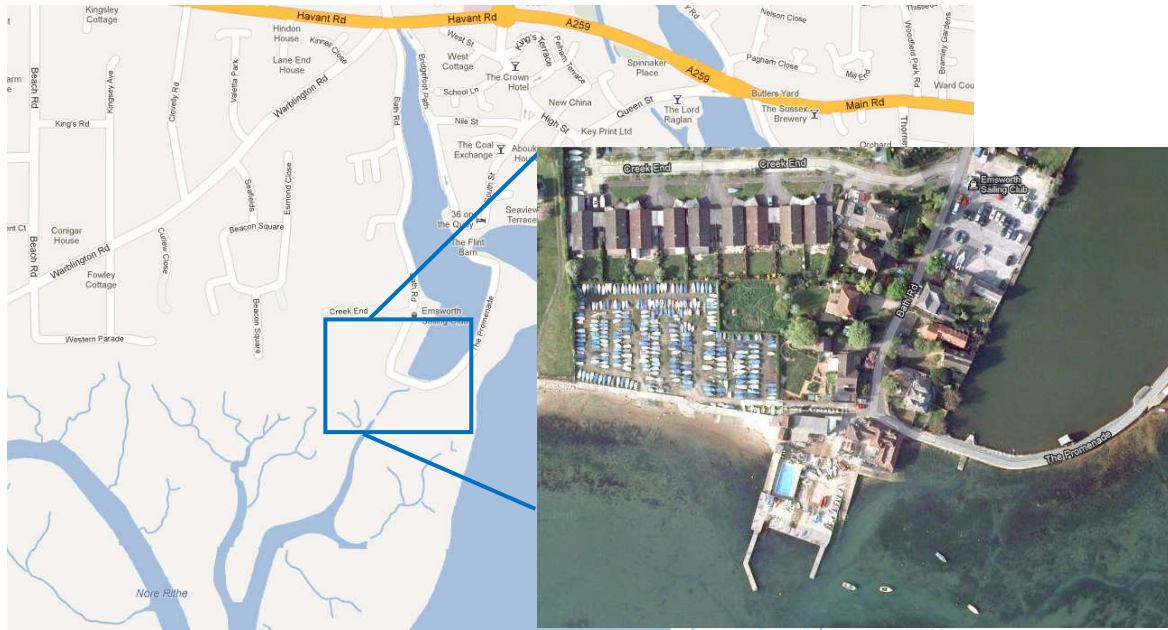


Figure 2: Location of the Proposed Development

Flood Zone

1.3 Environment Agency Indicative Flood Mapping

An extract of the Environment Agency's Indicative Flood Map for the site is shown in Figure 2 below. The areas shown in blue are at risk of tidal flooding with a less than 0.5% (1 in 200) chance of occurring (Zone 3) and the areas shown in light blue are at risk of flooding in a major flood with up to a 0.5% to 0.1% chance of occurring (Zone 2). All areas falling outside of Zones 2 & 3 are in Flood Zone 1

The site can be identified from Figure 3 as being located in Flood Zone 3, and therefore at high risk of flooding from tidal or fluvial sources.

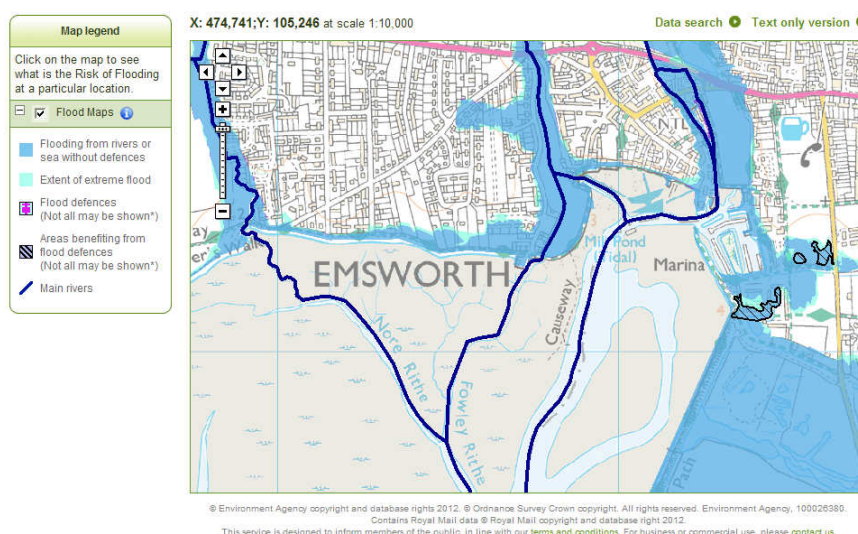


Figure 3: Environment Agency Indicative Flood Mapping

Sequential Test

The development is a minor extension to an existing site hence the Sequential Test is not applicable.

2.0 Flood Risk Vulnerability and Flood Zone Compatibility

2.1 Flood Zone Vulnerability

In accordance with 'Table 2: Flood risk vulnerability classification' of NPPF Technical Guide, the proposed development can be classed as "Less Vulnerable/Water Compatible".

2.2 Flood Zone Compatibility

Table 3: Flood risk vulnerability and flood zone 'compatibility' of NPPF Technical Guide (below) shows that 'Less Vulnerable/Water Compatible' development in Flood Zone 3 is appropriate and the Exception Test is not therefore required.

Flood risk Vulnerability classification		Essential infrastructure	Water compatible	Highly Vulnerable	More Vulnerable	Less vulnerable
Flood Zone	Zone 1	✓	✓	✓	✓	✓
	Zone 2	✓	✓	Exception test required	✓	✓
	Zone 3a	Exception test required	✓	x	Exception test required	✓
	Zone 3b	Exception test required	✓	x	x	x

Figure 4: Table 3, reproduced from NPPF Technical Guide (March 2012)

3.0 Potential Sources of Flooding

3.1 Tidal Flooding

Environment Agency mapping shows the site to lie within flood zone 3, high risk.

4.0 Existing/Proposed Drainage Arrangements

4.1 Existing Surface Water Drainage

The site is thought to currently drain to the adjacent harbour.

4.2 Proposed Surface Water and Sustainable Drainage (SuDS)

It is proposed to connect new drainage required to serve the extension to the existing drainage. The increase in area and hence run off is minor and will have minimal impact on the receiving waters.

5.0 Flood Risk Management Measures

5.1 Existing Flood Mitigation Measures

It is known that the existing site is subject to flooding during high tide / surge conditions and measures are put in place by the sailing club to minimise the effects of this occurrence.

The club puts in place flood mitigation measures when the tide reaches 5.0m, which happens several times per year. At these times when the atmospheric pressure is low (below 1000), and when there is a southerly wind, then the clubhouse is prone to flooding.

The club currently uses flood boards, and there is a sump pump to allow any water that does breach the barrier to be evacuated. The current thinking is that no flood protection is required to the changing room/workshop block or to the new storage shed. In these cases the buildings will be allowed to flood and the water will be allowed to flow out.

The existing and proposed flood mitigation measures are indicated on SK-120824-1 included in Appendix A.

5.2 Flood Proofing / Resilience

The proposed changing room extension will be designed and constructed using flood resilient techniques and materials. It is not proposed to specifically flood proof these works.

Proposals include the following:

- Solid ground floor slab

- Water resilient internal finishes

- Electrical wiring and sockets located above predicted tidal flood level (with climate change)

6.0 Off Site Impacts

The proposed development is minor and of small area such that it is unlikely to impact upon the existing runoff from the site or flood plain area. Adjacent sites are therefore unaffected by the proposed development.

7.0 Residual Risks

As the site already has measures in place to deal with short term flooding experienced due to high tides and storm surges the risk is already known and catered for.

8.0 Conclusion

This report has presented the findings of a Flood Risk Assessment that has been carried out for the proposed changing rooms extension. The assessment has been carried out using the guidelines and criteria as set out in document NPPF.

As the site is located in an area subject to known tidal flooding the sailing club already has flood mitigation and protection measures in place. These and flood resilient construction measures will be incorporated in the proposed works.

The report demonstrates that the proposed development has a minimal impact on flood risk, both within the site and off-site.

Appendix A: SK-120824-1 Existing and Proposed Flood Mitigation Measures

NOTE - THIS
DOOR THRESHOLD
IS APPROX 300mm
ABOVE JETTY
LEVEL

NEW SUMP
+ PUMP

LEGEND

FB

FLOOD BARRELS

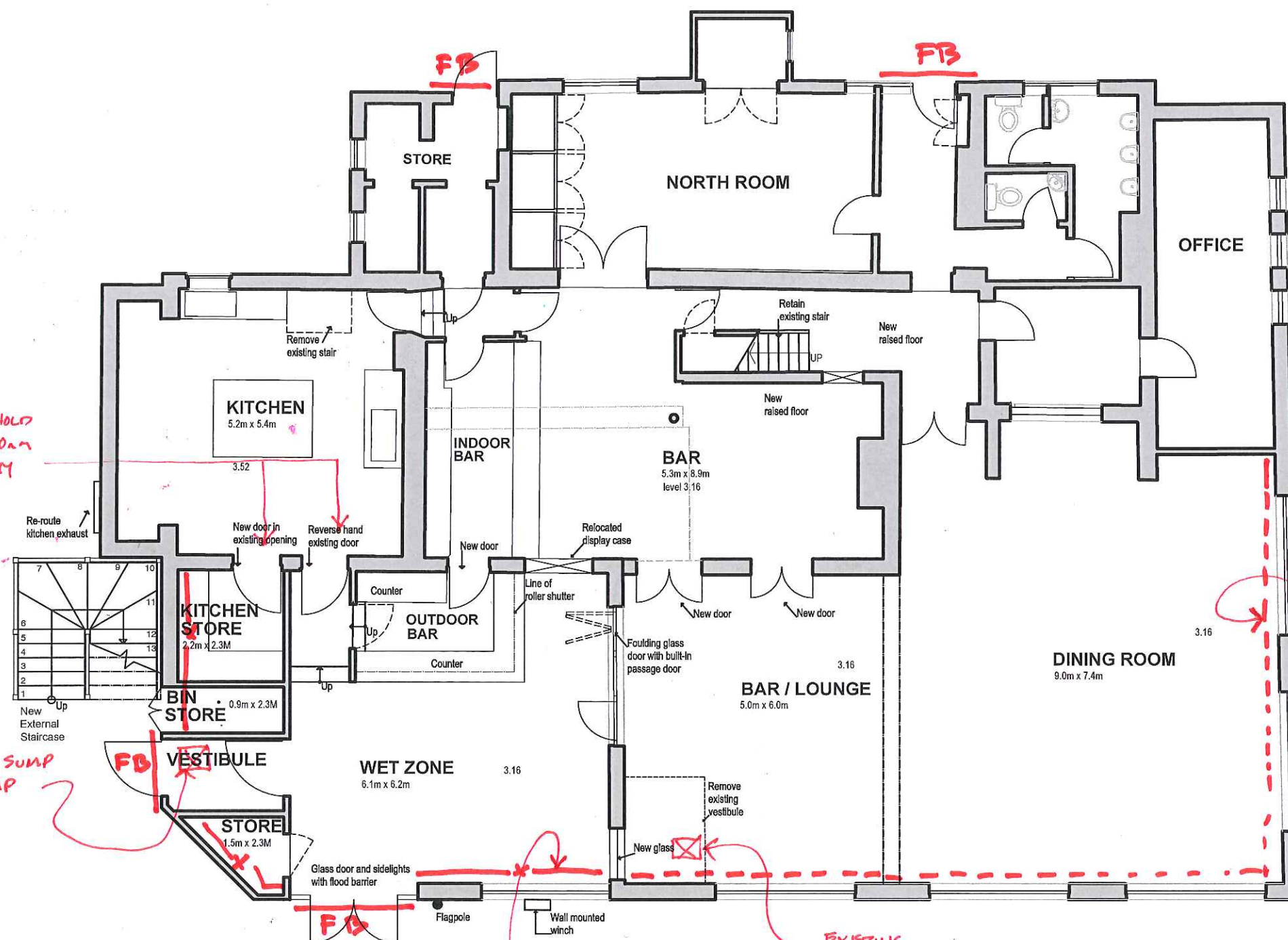
☒

SUMP

EXISTING TANKING

—X—

NEW TANKING



EXISTING
TANKING
TO WINDOW
CILL LEVEL

EXISTING
SUMP -
MADE
REDUNDANT

NEW TANKING
TO WINDOW CILL
LEVEL

BMSWORTH SAILING CLUB

FLOOD MITIGATION
MEASURES

SE- 120824-1

24 AUG 12

PULLIS WILLIAMS ARCHITECTS.