

Flood Risk Assessment

18, GRACE CLOSE, CHIPPING SODBURY, BRISTOL, BS37 6NS

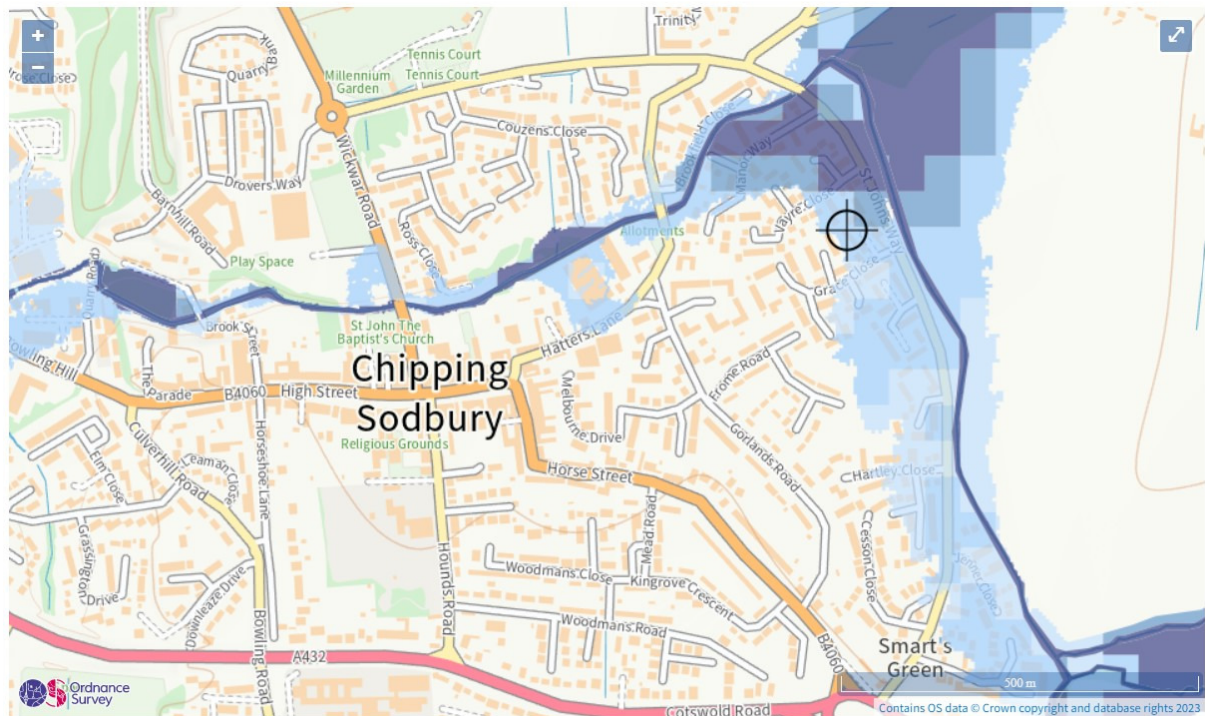
Description of development

2 Storey side extension with a ground floor area of 27m². The proposed ground floor level for the new extension will match the existing ground floor level the ground floor of the property is set at 92.606 AOD. The ground level for the site is 92.213 this puts the FFL over 300mm above the external site level. The property is in flood zone 2 and would fall into the “more vulnerable category” (Dwelling houses)

We have contacted the Environment agency to obtain Flood data for the site their information is detailed in the documents attached to this assessment.

Overview

Flooding from Rivers or Sea is shown as Low Risk on Environment agency data see flood map below.



Extent of flooding from rivers or the sea

● High ● Medium ● Low ● Very Low ⊕ Location you selected

Flooding from Surface water is shown as Very Low Risk on Environment Agency data see flood map below.



Extent of flooding from surface water

● High
 ● Medium
 ● Low
 Very low
 ⊕ Location you selected



Surface water flood risk: water depth in a low risk scenario

Flood depth (millimetres)

● Over 900mm
 ● 300 to 900mm
 ● Below 300mm
 ⊕ Location you selected

There is no flood risk identified from Reservoirs as shown in Environment Agency data see map below.



Maximum extent of flooding from reservoirs:

● when river levels are normal ● when there is also flooding from rivers ⊕ Location you selected

Landmark home check report and information from the property owner confirm that the property has not flooded in the last 23 years, it also notes that local flood prevention measures are in place.

Flooding levels

The EA has provided the following data for flood levels for the property:-

DEFENDED

5% (1 in 20) AEP Fluvial Depth	0.00m
1% (1 in 100) AEP Fluvial Depth	0.14m
1% (1 in 100) AEP +20%CC Fluvial Depth	0.25m
1% (1 in 100) AEP +30%CC Fluvial Depth	0.30m
1% (1 in 100) AEP +40%CC Fluvial Depth	0.36m
0.1% (1 in 1000) AEP Fluvial Depth	0.52m

5% (1 in 20) AEP Fluvial Level	0.00mAOD
1% (1 in 100) AEP Fluvial Level	92.27mAOD
1% (1 in 100) AEP +20%CC Fluvial Level	92.37mAOD
1% (1 in 100) AEP +30%CC Fluvial Level	92.43mAOD
1% (1 in 100) AEP +40%CC Fluvial Level	92.48mAOD
0.1% (1 in 1000) AEP Fluvial Level	92.65mAOD

UNDEFENDED

5% (1 in 20) AEP Fluvial Depth	0.00m
1% (1 in 100) AEP Fluvial Depth	0.14m
1% (1 in 100) AEP +20%CC Fluvial Depth	0.24m
1% (1 in 100) AEP +30%CC Fluvial Depth	0.29m
1% (1 in 100) AEP +40%CC Fluvial Depth	0.34m
0.1% (1 in 1000) AEP Fluvial Depth	0.52m

5% (1 in 20) AEP Fluvial Level	0.00mAOD
1% (1 in 100) AEP Fluvial Level	92.27mAOD
1% (1 in 100) AEP +20%CC Fluvial Level	92.37mAOD
1% (1 in 100) AEP +30%CC Fluvial Level	92.42mAOD
1% (1 in 100) AEP +40%CC Fluvial Level	92.47mAOD
0.1% (1 in 1000) AEP Fluvial Level	92.65mAOD

As noted at the start of this document the finished floor level for the existing and proposed ground floor will be 92.606 AOD. The 1% (1/100) AEP +40%CC Fluvial level (Defended (defended level is higher than the undefended level for the same frequency occurrence)) gives a level of 92.47 AOD. This gives a 136mm of freeboard between level of flood water and finished floor level.

As a result of the flood level it is proposed that flood resilient construction extending 300mm above the 1% (1/100) AEP +40%CC Fluvial level (Defended) level in line with Environment Agency guidance for minor extensions to British Standard 85500:2015 be included in the development.

The property owners flood resilience plan will be updated in line with recommendations within the Construction Industry Research and Information Association (CIRIA) Property Flood Resilience Code of Practice.

Access and Escape

There are no areas of the proposed floor that would be below the 1% (1/100) AEP +40%CC Fluvial level (Defended) flood level, as such no access / escape plan it to be provided. It is noted that the levels around the building would be of a depth that could be walked through if required.

Surface water run off

Surface water run off from the proposed extension will be disposed of via soakaway in line with Building Regulations approved document H.

Drawings

See drawings submitted for Planning Permission and Environment Agency supplied data and plans that accompany this assessment.