Flood Risk Assessment

147 Montague Street, Worthing, BN11 3BX.

This Flood Risk Assessment (FRA) has been prepared in accordance with the requirements of the National Planning Policy Framework (NPPF) and the Planning Policy Guidance (PPG).

The NPPF sets out how the planning system should help to minimise vulnerability and provide resilience to the impacts of climate change. This FRA therefore takes in to account the updated Climate Change Allowances (updated 10 May 2022).

This FRA will demonstrate that the proposed conversion will be safe and will not increase the risk of flooding to the surrounding area.

Address

147 Montague Street, Worthing, BN11 3BX. Please refer to the Planning & Heritage Letter for details of the existing site.

Proposal

"Change of use from ancillary storage building to residential accommodation, comprising a 2 bedroom property, including an upward extension to provide first floor accommodation."

The proposal provides for living accommodation at ground floor level, with bedrooms at first floor level.

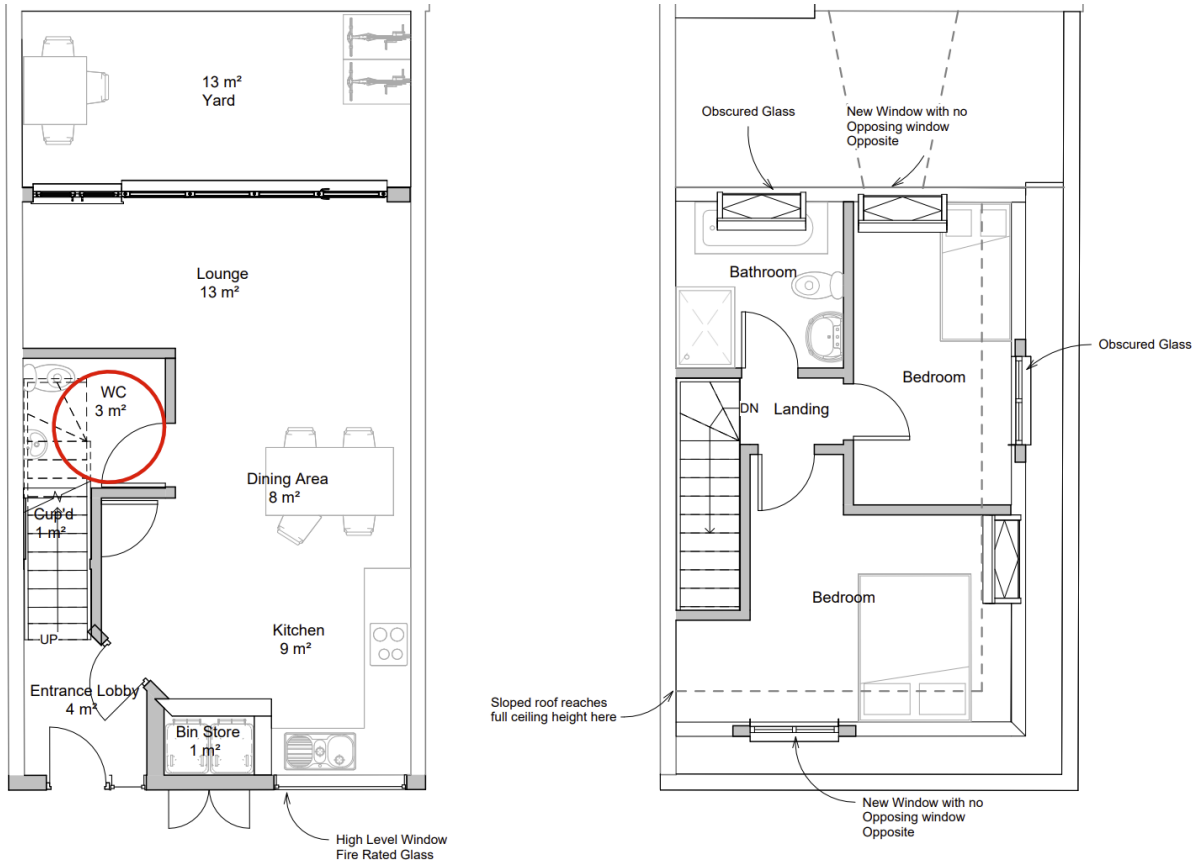


Figure 1 Ground and First Floor Plans

Flood Risk

The Government's Flood Maps for Planning indicates that the site is situated on the periphery of Flood Zone 2 where land and property have a medium probability of flooding (Refer to Figure 1).



Figure 2 – Government's Flood Maps for Planning

Furthermore, the site is considered to lie adjacent also to an area classified as 'low' risk of flooding from surface water (refer to Figure 2) and at 'low' risk of flooding from the sea (refer to Figure 3).

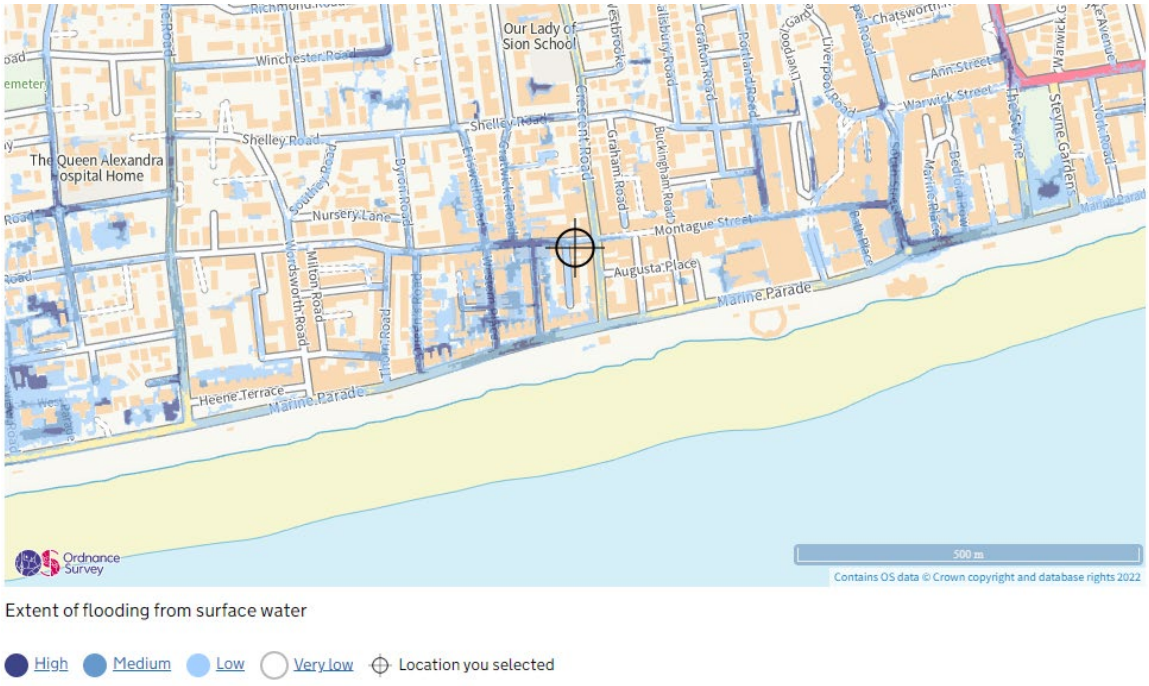


Figure 3 - Government's Flood Maps for Planning – Surface Water Flooding

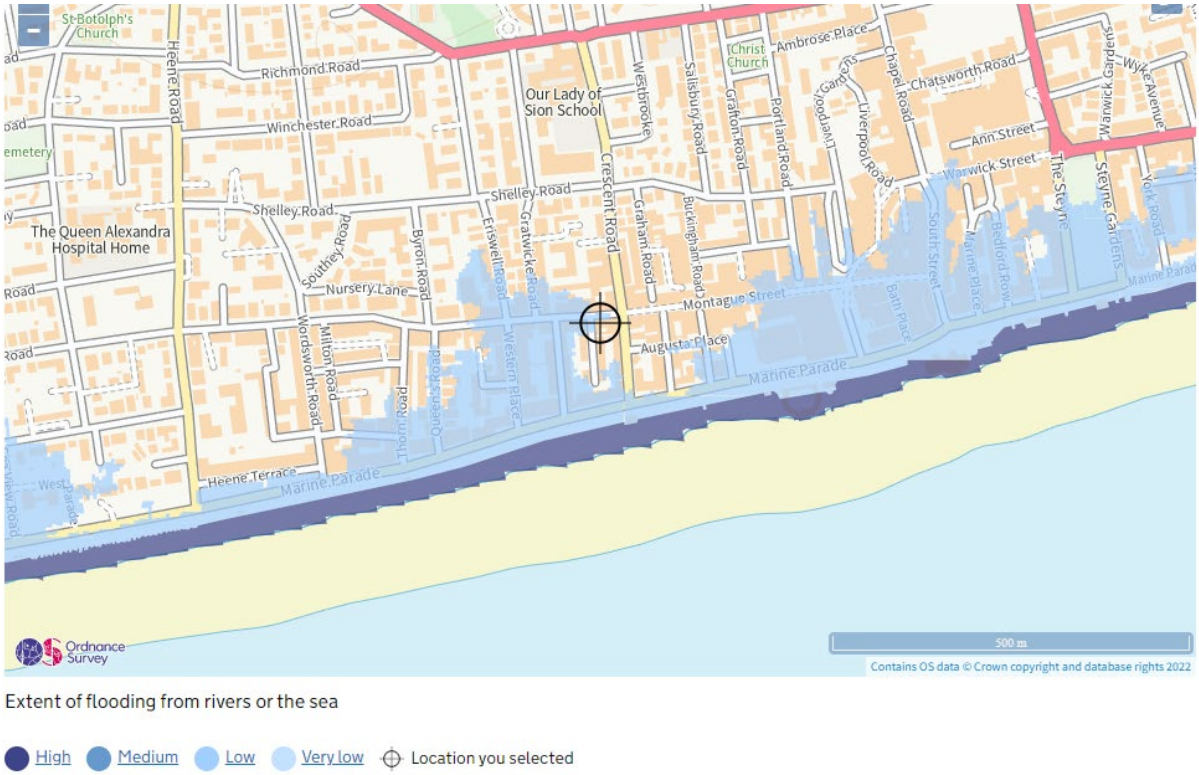


Figure 4 - Government's Flood Maps for Planning – Flood Extent from the Sea

The proposals consist of the change of use from ancillary storage building to residential accommodation, comprising a 2 bedroom property, including an upward extension to provide first floor accommodation.

Residential development is classified as "More Vulnerable" whilst Retail/shops are classified as "Less Vulnerable" as identified within the PPG, Paragraph 066 *(Reference: 7-066-20140306).* Whilst the proposed change of use in technical terms would result in a change from a 'less vulnerable' use (commercial unit) to a 'more vulnerable' use (dwellings) there would be no increased risk of any form of flooding to the proposed dwelling.

The Environment Agency's Guidance on Flood Risk Assessments (Climate Change Allowances) identifies that allowances for climate change must be made within flood risk assessments to help provide resilience to flooding and coastal change. Climate change allowances are predictions of anticipated change for:

- peak river flow
- peak rainfall intensity
- sea level rise
- offshore wind speed and extreme wave height

Peak River Flow Allowances

As identified within the Guidance, peak river flow allowances show the anticipated changes to peak flow by river basin district. As the site is not situated within close proximity to a river or any 'river basin district' as identified in Table 1, this allowance is not considered appropriate or relevant to the proposals.

Peak Rainfall Intensity Allowance

As identified within the Guidance, increased rainfall affects river levels and land and urban drainage systems. As set out above, the site is not situated within close proximity to a river therefore the increased rainfall to river levels is not relevant to the proposals.

In terms of land and urban drainage systems, the Guidance states that drainage systems should be designed to make sure there is no increase in the rate of runoff discharge from the site for the upper end allowance (as identified in Table 2 of the Guidance).

The scheme is not considered to increase the rate of runoff discharge from the site and is identified as within an area classified as 'low' risk of flooding from surface water (refer to Figure 3).

The proposals do not seek to amend the existing floor levels and seek the conversion of the unit, with no increase in roof area. Therefore there would not be an increased rate of runoff discharged from the site for the upper end allowance.

Sea Level Allowances

The Guidance sets out the anticipated sea level rise in Table 1 and requires FRA's to consider whether it is appropriate to apply high++ allowances in addition to the sea level rise allowances in Table 1.

The residential accommodation would be situated on ground and first floor level which are not considered to be at risk from flooding as indicated on figures 2-4.

Access to the dwelling would be from the ground floor via the existing dedicated access achieved from the rear alley way from Surrey Street.

The Environment Agency operates a flood warning system (Flood Warnings Direct) and it will be recommended that all future occupiers subscribe to this service.

Future occupiers will also be encouraged to produce their own Flood Plan tailored to their individual needs and circumstances.

To conclude, it is considered that the proposed conversion would not be at risk from anticipated sea level rise and as such it would not be appropriate to apply high++ allowances in addition to the sea level rise allowances in Table 1 of the Guidance.

Offshore wind speed and extreme wave height allowance

The offshore wind speed and extreme wave height allowance has been considered within this FRA and are considered to be contained within the Environment Agency's coastal models as referred to in the paragraphs above.

Conclusions

To conclude, the proposed conversion and upward extension will not increase the risk of flooding elsewhere.

Residents will be afforded an area of safe refuge during any possible flood event at first floor level and will be recommended to subscribe to the Environment Agency's flood warning system and will be encouraged to produce their own Flood Plan.

It is therefore considered that the proposal is acceptable with respect to flooding.