

Flood Risk Assessment

Proposed Garage Conversion and First Floor Extension

at:

86 Beech Hill, Haywards Heath. RH16 3TT

Client: Mr A Sear

Introduction

The site is currently a residential property. The proposal is to convert the existing garage to a snug and add a first floor side extension to create an additional bedroom and ensuite/dressing room to the master bedroom.

This assessment has been undertaken to compile information concerning the site and the surrounding area and the source of any flood risk. The assessment will also provide information on mitigation measures to be undertaken to manage any flood risk to the proposal.

Data has been sought from the Environment Agency.

Site Analysis

The property is located in Haywards Heath, in a residential area. The site is within Flood Zone 1, see Appendix A, Environment Agency Flood Map.

The proposal will include the raising of the existing garage floor slab level to match the existing house level. The current floor level of the property fronting Beech Hill is 225mm higher than ground level outside the front door. Due to the site levels and gradient of the road, the house is set well above the level of the road and pavement and location of possible surface water flooding.



Photograph 1 – Taken from the road at the front of the property during the survey.



Image 1 – Taken from google streetview showing the angle of the road down the hill and the property set well above road level

The proposal will not result in an increased number of occupants and/or users of the building and will not change the use or times of occupancy.

A review has been undertaken with the Environment Agency's data indicating the potential sources of flood risk is from rivers and coastal sources and surface run-off (pluvial).

Surface Water (Pluvial) Flooding

According to the EA's Risk of Flooding from Surface Water map, Appendix B, there is a medium risk of pluvial flooding in the area of the property. Medium risk has a chance of flooding of between 1% and 3.3% each year. The flows of water would not be affected by the garage conversion or first floor extension, and as the property is set well above the level of the road it is highly unlikely to be affected by flooding.

River and Seas

According to the EA's Risk of Flooding from River and Seas map, Appendix C, there is a very low risk of pluvial flooding in the area of the extension. Very low risk has a chance of flooding of less than 0.1% each year. The flows of water would not be affected by the garage conversion or first floor extension.

Groundwater and Reservoir Flooding

According to the EA, flooding from groundwater is unlikely in this area.

According to the EA, flooding from reservoirs is unlikely in this area.

Sewer Flooding

It is recommended that Southern water are contacted to check if any recent events have affected the property.

Mitigation Measures

The property owner must sign up to the EA's flood warning direct service to receive Flood Alerts and Flood Warnings.

The floor level of the garage conversion will match the existing property floor level and be 225mm above the existing drive level at the front of the main part of the property. Mitigation measures are to be implemented to limit the effect of flooding on the conversion.

Materials are to be used to limit the effect of flooding. The brickwork is to match existing. As the infill wall to the garage door and front door/window opening is constructed, the mortar joints are to be fully filled to reduce the risk of water penetration

A 1200 gauge damp proof membrane will be laid over the floor lapped up to overlap with the existing damp proof course.

The floor and wall insulation is to be a rigid closed cell material.

The existing surface water drainage will be unaffected by the proposal.

Any changes to the foul drainage system will be undertaken in accordance with the best practice and Approved Document H1 of the Building Regulations. Non-return valves are to be fitted to all new below ground drainage pipes.

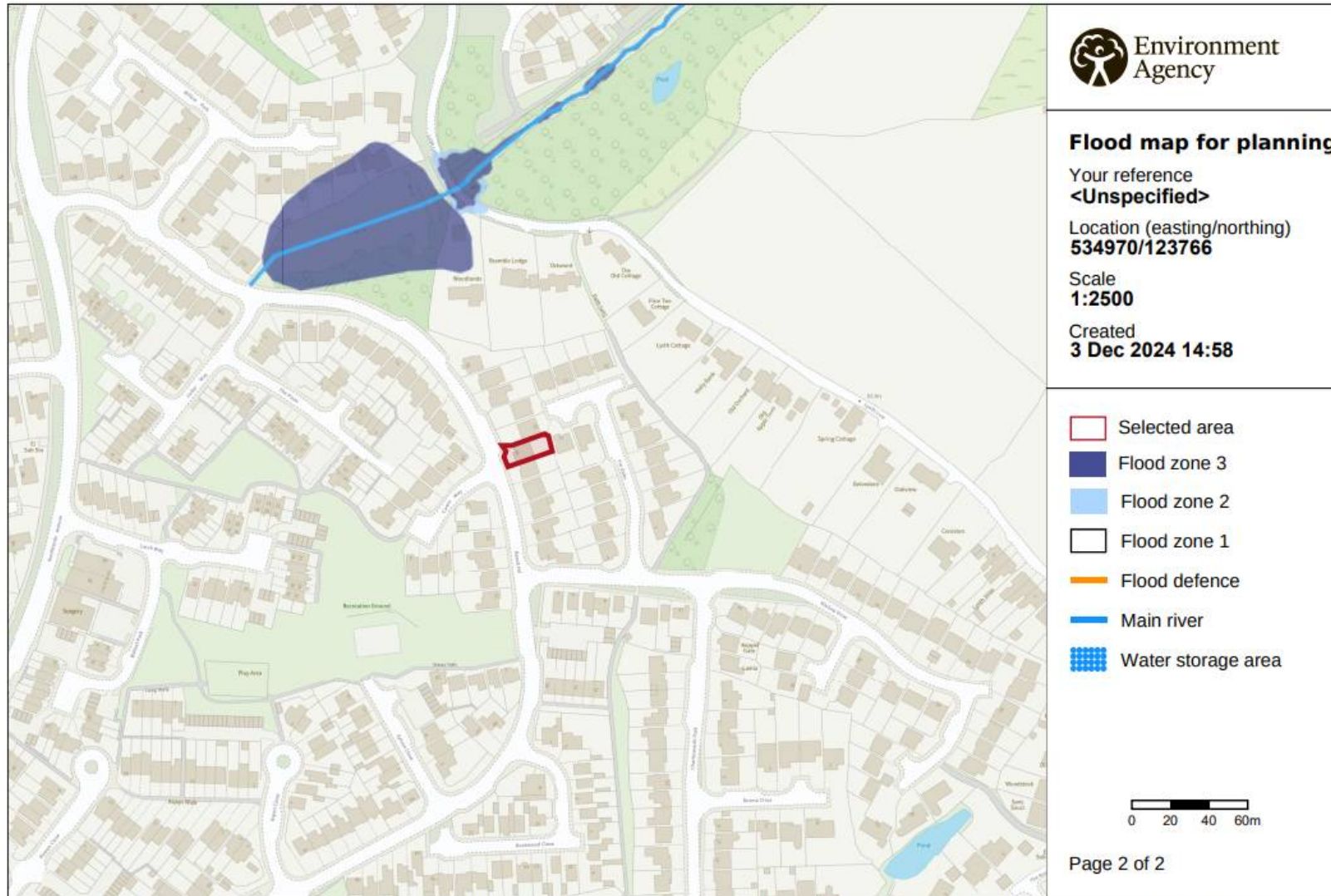
Regular maintenance of drains should be undertaken to reduce flood risk.

Safe access and egress to the property

The proposal is to provide a garage conversion and first floor side extension to the existing property. The floor level will be the same as the existing property and the ground levels will remain as existing. The proposed conversion will not effect the method of access or egress to the original property in the event of flooding. However, as part of the mitigation methods, the homeowner will sign up to the Environment Agencies flood warning direct service to receive Flood Alerts and Flood Warnings. This will enable the homeowner to evacuate the property safely and carry out any mitigation measures in a timely manner.

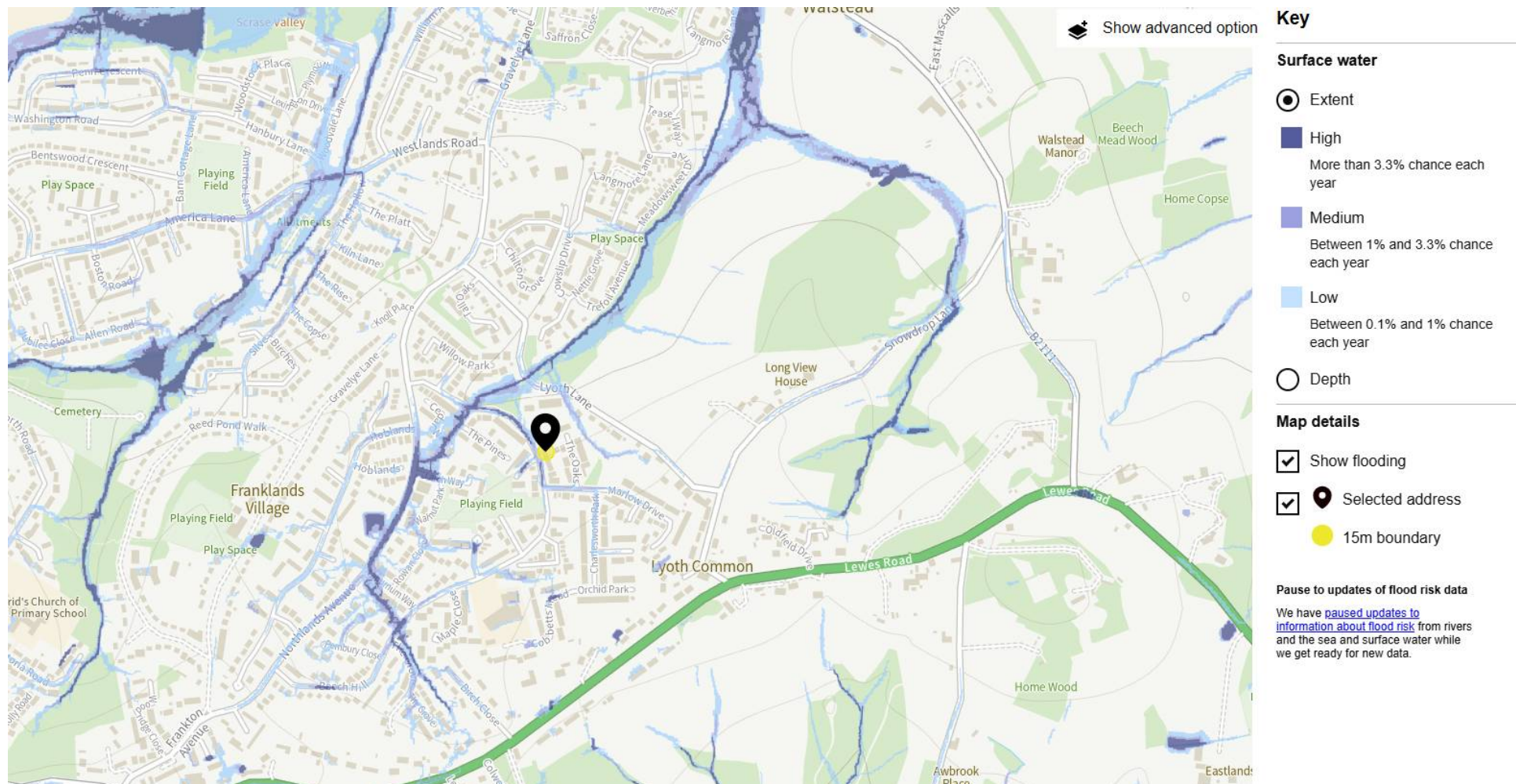
Escape would remain as the existing situation, via the front door of the property. Beech Hill has a steep gradient and the occupants can escape up the hill away from any potential areas of flooding at the bottom of the road.

APPENDIX A – FLOOD ZONE MAP



© Environment Agency copyright and / or database rights 2024. All rights reserved. © Crown Copyright and database right 2024. Ordnance Survey licence number AC0000807064.

APPENDIX B – SURFACE WATER AND PLUVIAL FLOODING MAP



APPENDIX C – RIVERS AND SEAS FLOODING MAP

