

Sweepers, Saucelands Lane, Shipley, West Sussex

Flood Risk Assessment

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-

Notes/Amendments/Issue Purpose
For Information

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Acronyms	
AOD	Above Ordnance Datum
EA	Environment Agency
FRA	Flood Risk Assessment
NPPF	National Planning Policy Framework
PPG	Planning Practice Guidance
WSCC	West Sussex County Council
SFRA	Strategic Flood Risk Assessment
BGS	British Geological Survey

1 Introduction

Price & Myers have been commissioned to undertake a Flood Risk Assessment (FRA) for the demolition of an existing dwelling and the erection of a double-storey dwelling at Sweepers, Saucelands Lane, Shipley, West Sussex.

This report has been prepared in accordance with the National Planning Policy Framework (NPPF), the Planning Practice Guidance (PPG) *Flood Risk and Coastal Change*, and Horsham District Council's Strategic Flood Risk Assessments (SFRA, April 2010 and January 2020). The report also incorporates advice and guidance from the Environment Agency (EA) and CIRIA documents.

The EA's Flood Map for Planning shows that the site is located within Flood Zone 1, an area at low risk of tidal and/or fluvial flooding. Furthermore, the EA's flood maps indicate that the site is not within an area at risk of surface water flooding. However, the homeowners have recently experienced surface water flooding, which prompted the request for this assessment to evaluate flood risk at the site. Consequently, this FRA focuses on flood risk from surface water, while also assessing flood risk from all other potential sources.



Figure 1.1: Site Location (Google Maps)

2 Site Description and Location

The site is situated to the south of Saucelands Lane and covers an area of approximately 0.63 ha. An existing house, garage, and outbuildings, with associated soft and hard landscaped areas, currently occupy the site. It is bounded by existing residential properties to the south and west, Saucelands Lane to the north, and Hooklands Lane to the east. Vehicular access to the site is available from Hooklands Lane.

The site's postcode is RH13 8PS, and the OS grid reference is 512639E, 121040N. The site falls slightly to the northwest, with a maximum level difference of approximately 0.5m, and an average ground level of 17.00m AOD.

The nearest watercourse to the site is a ditch that runs alongside the northern boundary of Saucelands Lane.

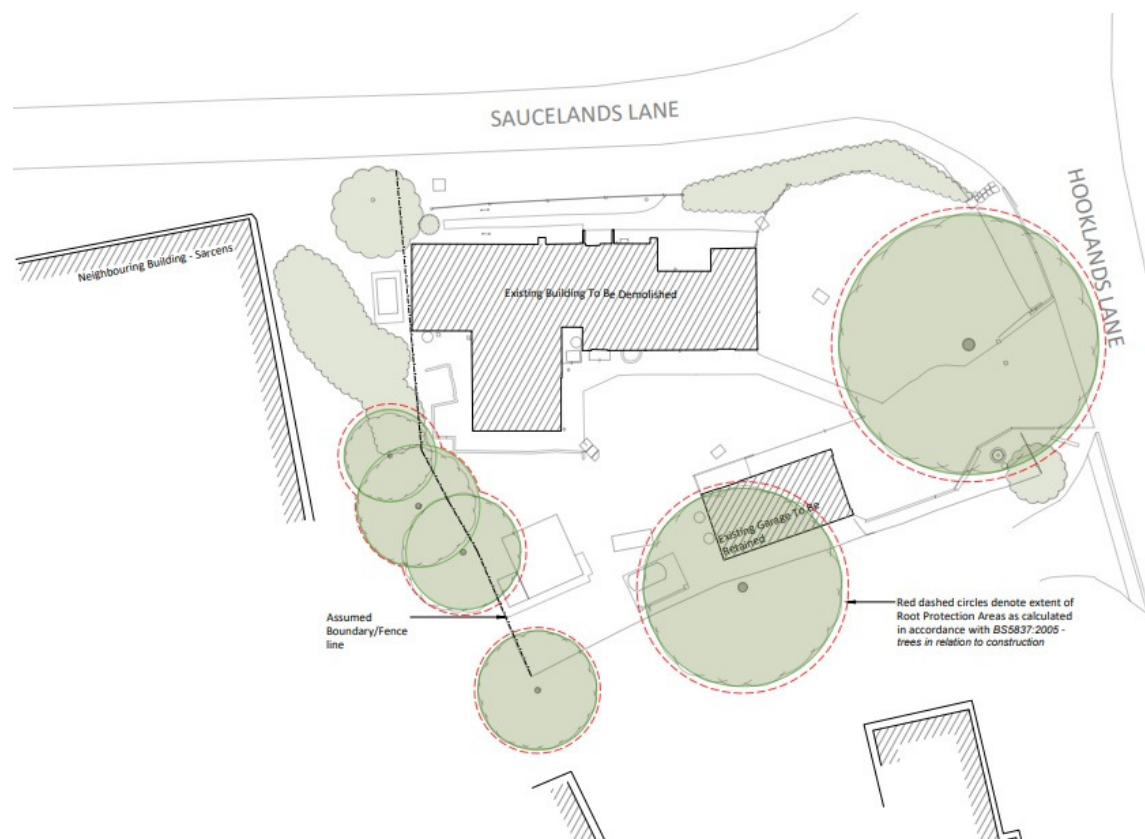


Figure 2.1: Existing Site Arrangements

3 Development Proposal

The development proposals involve demolishing the existing dwelling and constructing a new two-storey dwelling. Modifications to the site's landscaped areas will also be carried out.



Figure 3.1: Proposed Site Layout

4 Flood Risk Assessment

4.1 Flood Risk from Watercourses and Tidal Flooding

The EA's flood map for planning shows that the site is located in Flood Zone 1. Land in Flood Zone 1 is at low risk of flooding from rivers, having an annual probability of river flooding of less than 0.1%.

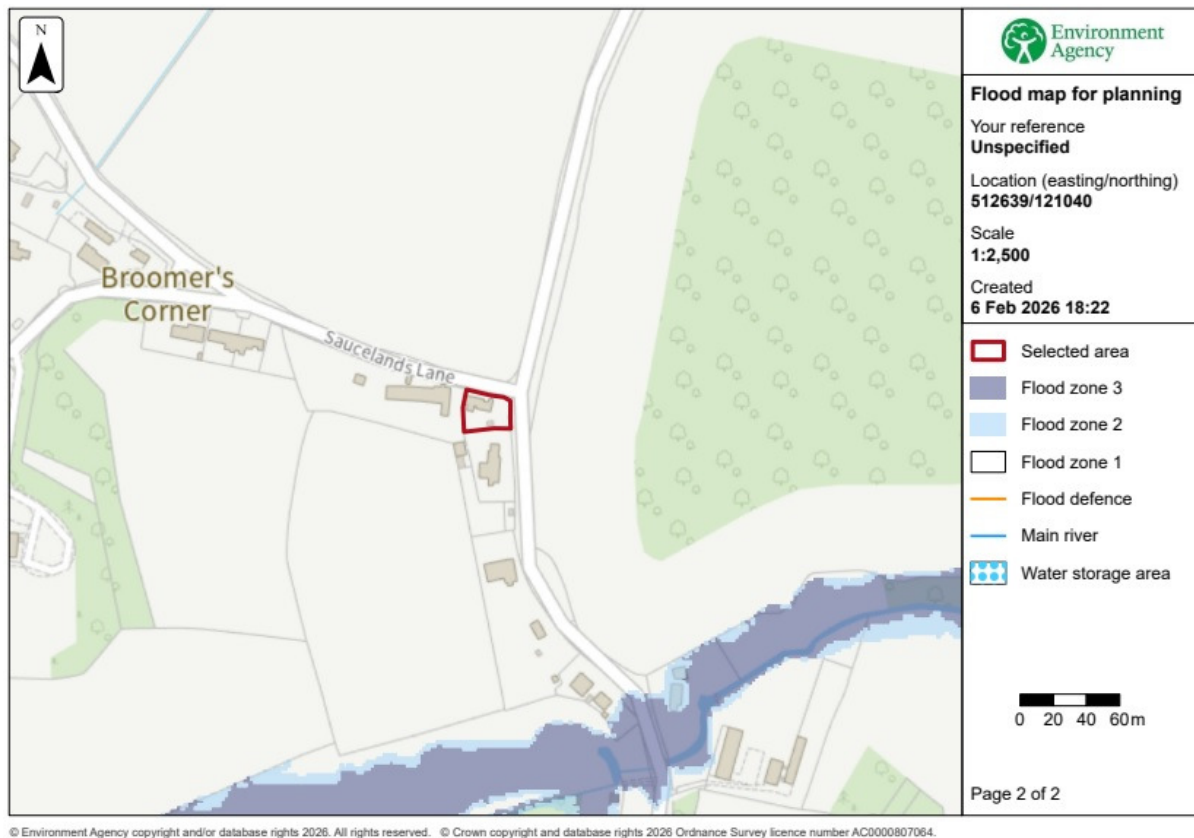


Figure 4.1: Environment Agency's Flood Map for Planning – Fluvial/Tidal

4.2 Historical Records

The SFRA (2010) states that "*pluvial flooding has been noted to have affected a large number of roads in Horsham, Pulborough, Southwater, Thakeham, Washington, Slinfold, Cowfold and Henfield during heavy rainfall events.*" Section 2.7 provides information on historical flood incidents within the District. This information shows that flooding was recorded in Shipley twice in 1974; however, no specific locations are provided in these records. It should be noted that this report was prepared in 2010 and therefore does not include flood incidents that have affected the District since that time.

4.3 Flood Risk from Groundwater

Groundwater flooding occurs when water originating from sub-surface permeable strata emerges from the ground, typically after prolonged rainfall.

A ground investigation report was not available at the time of writing. However, British Geological Survey maps indicate that River Terrace deposits of sand and gravel form the superficial geology at this location, as shown in Figure 4.2 below. Therefore, groundwater may be present at shallow depths.

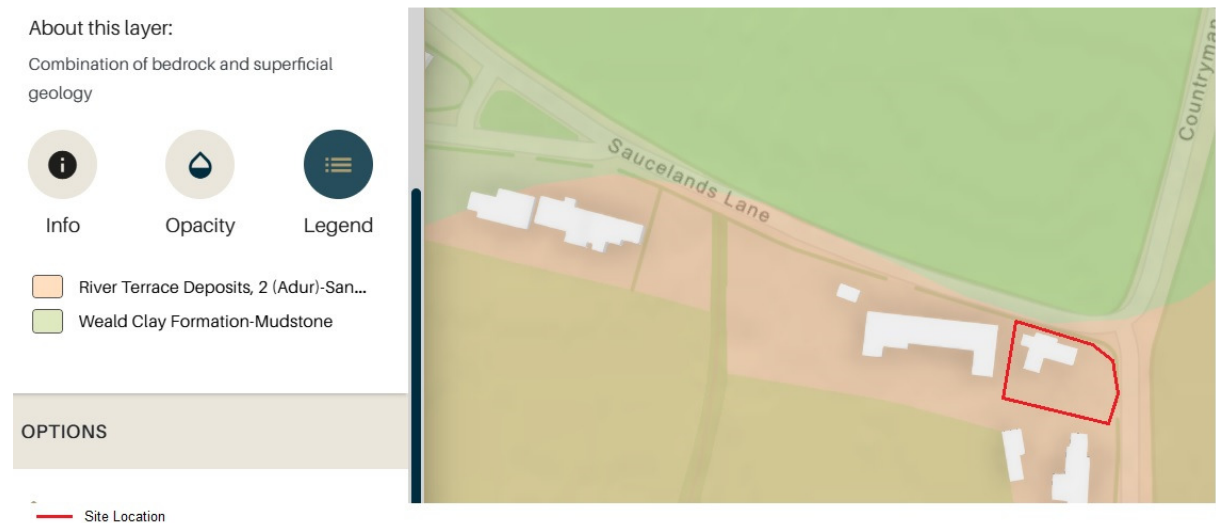


Figure 4.2: British Geological Survey Maps – Combined Bedrock & Superficial Geology

The homeowners reported that the existing floor is consistently damp, suggesting that groundwater is present at shallow depth. It is therefore recommended that the proposed Finished Floor Level (FFL) be raised above the surrounding ground levels and that a suspended floor be provided.

4.4 Flood Risk from Surface Water and Overland Flows

Surface water flooding occurs when intense rainfall is unable to soak into the ground or enter a drainage system due to blockages or the system's capacity being exceeded. Overland flows can also be generated by burst water mains, failed dams, or failures in systems that store or transfer water.

The EA's Flood Map for Planning shows that the site is not within an area at risk of flooding from surface water during storm events with a return period of up to 1 in 1,000 years, as shown in Figure 4.3 below.

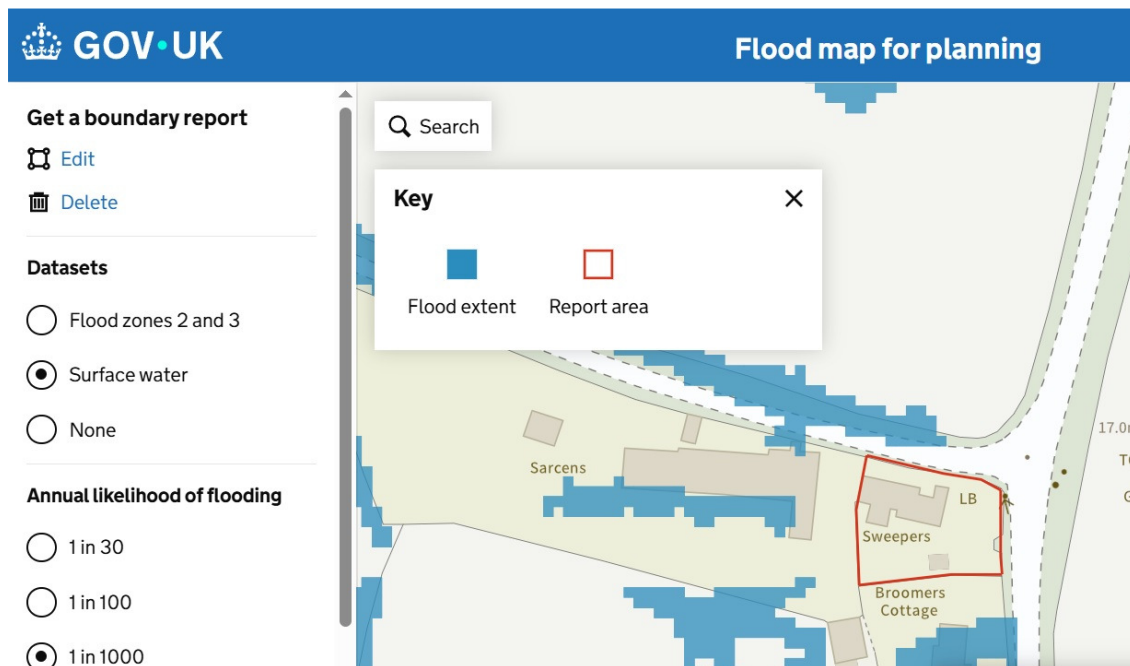


Figure 4.3: Flood Map for Planning – Surface Water (1 in 1000year)

The homeowners reported that the property flooded in January 2026 following a period of prolonged rainfall. Figure 4.4 shows floodwater present along Saucelands Lane and within the external areas surrounding the house. A timber board was installed by the homeowner as a temporary barrier to prevent floodwater from entering the property. As shown in Figure 4.4, approximately half of the board was submerged at the peak of the flood event. The site topographical survey indicates that the doorstep level is set at 17.06m AOD. Based on the observed depth of inundation relative to the timber board, the floodwater level is estimated to have reached approximately 75mm above the doorstep level (approx. 17.136m AOD). Considering the proposed development lifetime of 100 years and the anticipated increase in rainfall intensity associated with climate change, it is recommended that the FFL is set at 17.300m AOD. This provides just over 150mm of freeboard above the recorded flood level.



Figure 4.4: Flood Incident – January 2026

4.5 Flood Risk from Infrastructure Failure

The EA's Long-Term Flood Risk from Reservoirs map (Figure 4.5) shows that the site is not within an affected area. Therefore, the flood risk from reservoir failure is considered low.

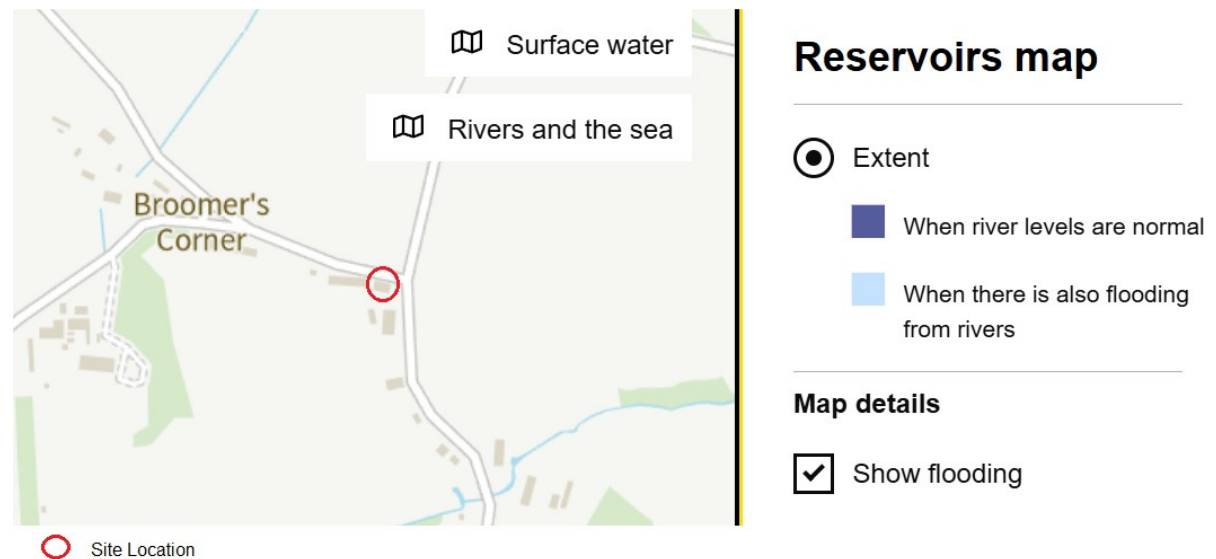


Figure 4.5: 1 EA Flood Risk from Reservoir Failure Map

As there are no sewers at this location, the risk of flooding from surcharged sewers or sewer failure is considered low.

5 Summary & Recommendations

- The proposals involve the demolition of the existing single-storey dwelling and the construction of a new two-storey dwelling.
- The EA's flood maps indicate that the flood risk from watercourses, surface water, and reservoirs is low.
- The homeowners reported that floodwater affected their property and the surrounding roads in January 2026 after a prolonged period of rain. This incident prompted the preparation of this report.
- The floodwater level reached approximately 17.136m AOD during the January 2026 flood event. It is therefore recommended that the FFL be set at 17.300m AOD to provide more than 150 mm of freeboard above the recorded flood level and to allow for climate change.
- BGS maps show that superficial deposits of sand and gravel underlie the site; therefore, groundwater may be present at shallow depths.
- The homeowners reported that the floor slab is permanently damp, suggesting that groundwater rises near the ground surface. It is therefore recommended to provide a suspended floor raised above the surrounding ground levels. The recommended FFL of 17.300m AOD will also mitigate the flood risk from groundwater.

Appendix A

Topographical Survey Drawing

