



A3 Northbound Services  
Liphook



## FLOOD RISK ASSESSMENT

On behalf of  
**Liphook A3 Services**

MT/5570/FRA.2  
July 2021

*Experience and expertise working together*



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## 1.0 INTRODUCTION

1.1 Bellamy Roberts LLP has been instructed by A3 Liphook Services to prepare a Flood Risk Assessment (FRA) in support of the proposal to provide a drive-through lane at the existing Starbucks facility, and the change of use of the former Travelodge Hotel to 6 self-contained office units at the A3 Northbound Services, Liphook.

1.2 The application site is located wholly within Flood Zone 1, revealing the site has a low probability of flooding from rivers or the sea (see **Appendix 1**). The Flood Risk Assessment has given due consideration to the threat of flooding from other sources, such as surface water flooding, and a desktop study of the existing ground conditions has been undertaken.

1.3 The purposes of the FRA are as follows:

- To confirm that the proposed development will not be subject to unacceptable flood risk or to show that flood risk can be managed acceptably; and
- To demonstrate that the proposed development will not increase risk of flooding elsewhere,

## 2.0 SITE LOCATION AND FEATURES

2.1 The Ordnance Survey National Grid Reference (NGR) for the centre of the site is 482784, 132329. For clarity, a plan showing the location of the site is provided at Figure 1.



Figure 1: Site Location Plan

- 2.2 The site topography generally falls from east to west, with a level difference of approximately 2-3 between the eastern and western boundaries. This is over a distance of approximately 120m, i.e. a gradient of circa 1:40 – 1:60. For reference, the topographical survey is attached at **Appendix 2**.

#### Existing Watercourse

- 2.3 There are no watercourses within the application site.

#### Ground Conditions

- 2.4 British Geological Survey (BGS) mapping has been reviewed which reveals the bedrock is the Sandgate formation. This comprises sandstone, siltstone and mudstone (see Figure 2). Superficial deposits have not been recorded at this location.

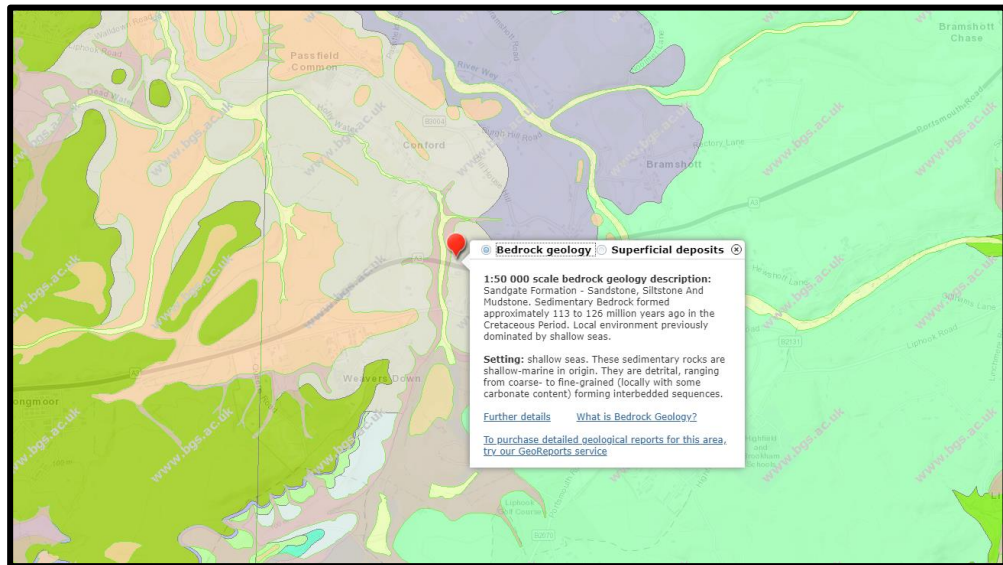


Figure 2: Bedrock Geology

### 3.0 DEVELOPMENT PROPOSAL

- 3.1 The scheme will provide a drive-through lane at the existing Starbucks facility, and the change of use of the former Travelodge Hotel to 6 self-contained office units.
- 3.2 Vehicular access to the service station is achieved directly from the northbound A3, via dedicated entry/exit slip roads. Access to the existing Starbucks and Travelodge is achieved from the internal road network via a single access. The proposal will retain this access albeit to serve the Starbuck only. A new access is proposed to serve the proposed office units.
- 3.3 The existing Starbucks facility has a floor area of 262m<sup>2</sup> and the Travelodge has a floor area of 1,119m<sup>2</sup>, and provides 40 bedrooms. No changes are proposed to the existing floor areas.

### 4.0 FLOOD RISK ASSESSMENT

- 4.1 Based upon the latest Flood Zone Mapping issued by the Environment Agency (EA), the site lies entirely within Flood Zone 1. Flood Zones are defined as follows:

- **Flood Zone 1 (FZ1)** - Land having a less than 1 in 1000 annual probability of river or sea flooding;
- **Flood Zone 2 (FZ2)** - Land having between a 1 in 100 and 1 in 1000 annual probability of river flooding;
- **Flood Zone 3 (FZ3)** - Land having a 1 in 100 or greater annual probability of river flooding.

The following Figure 3 clearly identifies the application site as being within Flood Zone 1 (see Appendix 1).

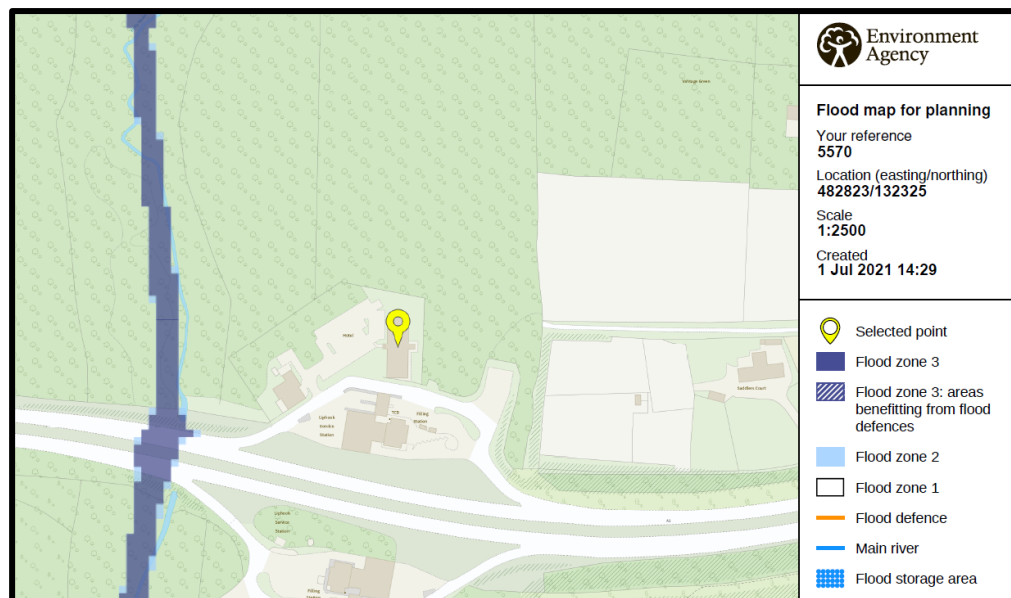


Figure 3: Flood Zone Map (Source: EA)

### Surface Water Flood Risk Zones

4.2 In addition to river flooding, other sources of flooding must be considered, such as surface water flood risk. This can be caused as a result of failure of sewer infrastructure, lack of infiltration into the ground, or natural topography routing the rainfall run-off. An extract from the EA surface water flood risk map is provided at Figure 4, revealing the application site has a very low risk of surface water flooding.

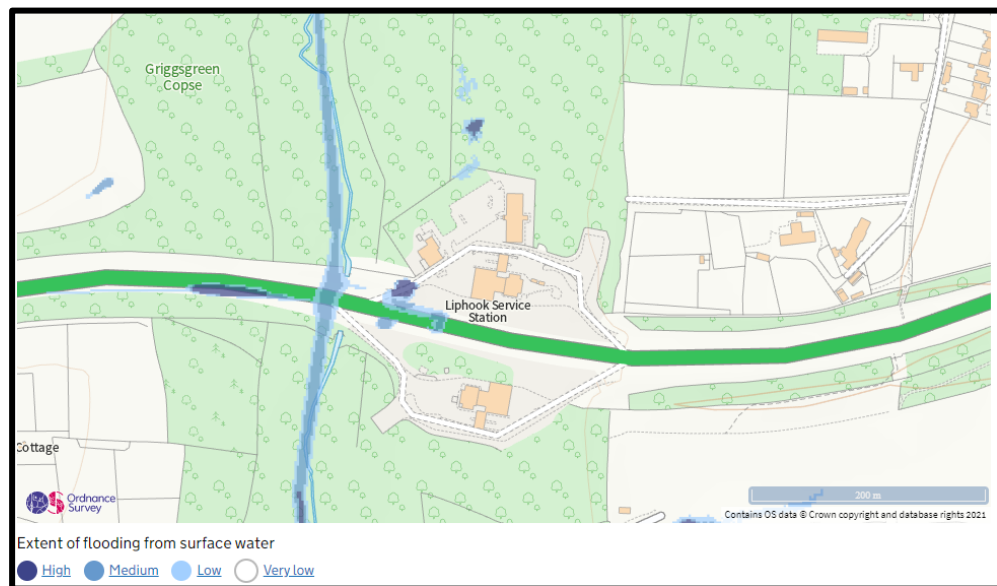


Figure 4: Surface Water Flood Risk Map (Source: EA)

### Foul and Surface Water Drainage

- 4.3 Foul and surface water at the existing site is discharged to an existing Thames Water public sewer. The proposal will continue to utilise this means of disposal.

### Maintenance and Management

- 4.4 The continued management and maintenance of the drainage system will be essential in ensuring the continued protection of the surface water drainage system. Visual inspection of the drainage network and outfalls should be undertaken on a regular basis to identify any siltation/blockage/disrepair of the drainage network.

# APPENDICES



# APPENDIX 1



# Flood map for planning

Your reference  
**5570**

Location (easting/northing)  
**482823/132325**

Created  
**1 Jul 2021 14:29**

**Your selected location is in flood zone 1, an area with a low probability of flooding.**

## **This means:**

- you don't need to do a flood risk assessment if your development is smaller than 1 hectare and not affected by other sources of flooding
- you may need to do a flood risk assessment if your development is larger than 1 hectare or affected by other sources of flooding or in an area with critical drainage problems

## **Notes**

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

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<https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

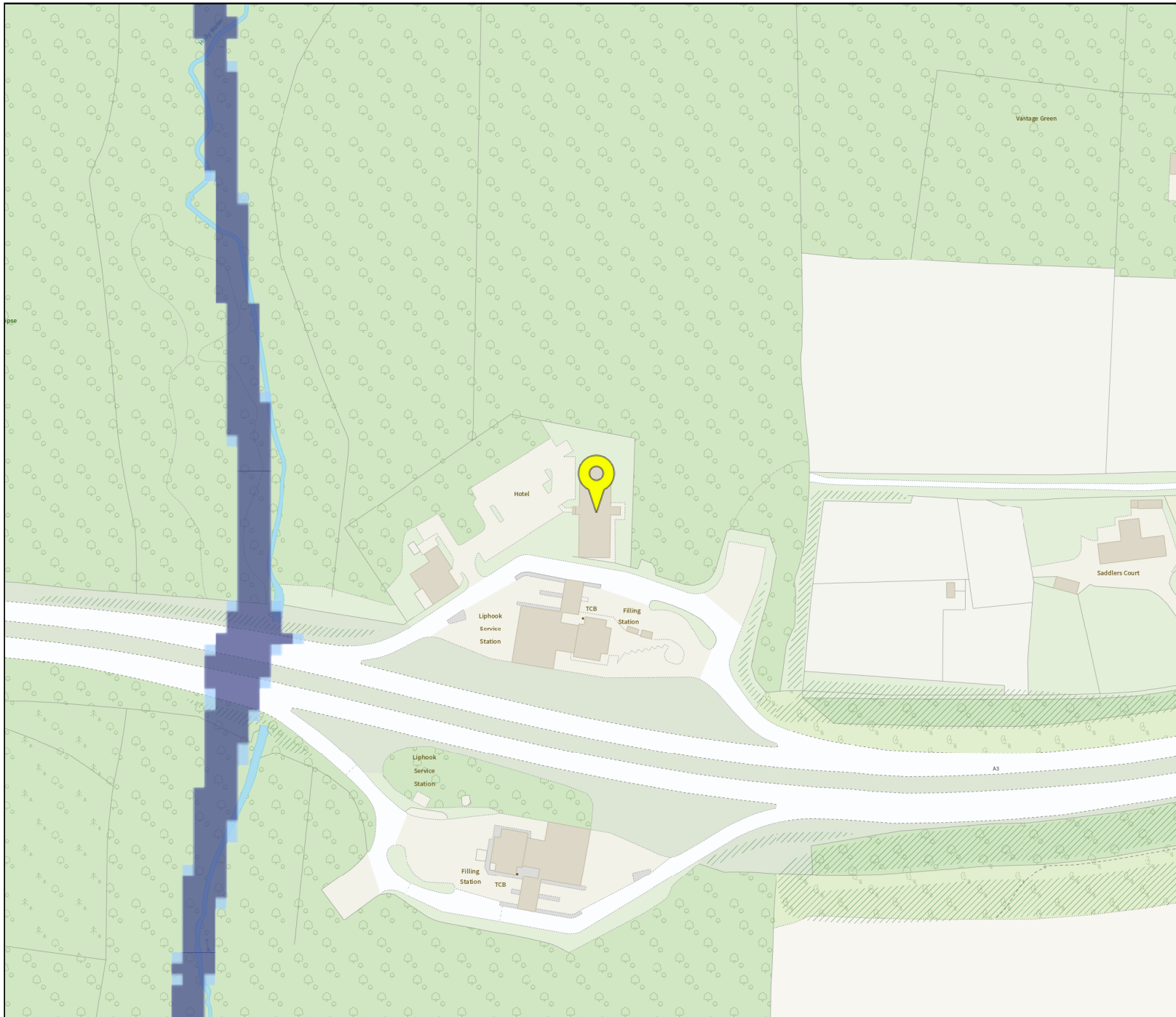
## Flood map for planning

Your reference  
**5570**

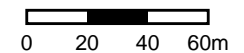
Location (easting/northing)  
**482823/132325**

Scale  
**1:2500**

Created  
**1 Jul 2021 14:29**



-  Selected point
-  Flood zone 3
-  Flood zone 3: areas benefiting from flood defences
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Flood storage area



## APPENDIX 2





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