

Lidsey Drainage Impact Assessment

Site Address: 5 Limmer Lane, Felpham

Planning Reference: FP/70/26/HH

1. Introduction

This Lidsey Drainage Impact Assessment has been prepared in response to the Council's request for further information.

The Council has advised that the application site is located within **Local Flood Risk Zone LFRZ_017 – Felpham Road, Felpham**, and has requested that the assessment refers to **page 86 of the Lidsey Surface Water Management Plan**.

This statement therefore identifies the relevant Local Flood Risk Zone, summarises the predicted flood impact and flood risk information for **LFRZ_017**, and sets out the preferred interventions which could and will be implemented as part of the proposed development where applicable.

2. Local Flood Risk Zone

The application site is identified by the Council as being within:

Local Flood Risk Zone: LFRZ_017

Location: Felpham Road, Felpham

The Lidsey Surface Water Management Plan identifies this area as being subject to local flood risk associated with surface water drainage, local drainage capacity and wider drainage network constraints.

3. Predicted Flood Impact

The predicted property flood impacts for **LFRZ_017** are summarised below:

Rainfall Return Period	Predicted Residential Properties at Risk	Predicted Commercial Properties at Risk
1 in 30 year storm event	28	18
1 in 100 year storm event	37	19
1 in 100 year + climate change event	47	26

4. Summary of Local Flood Risk

The Lidsey Surface Water Management Plan identifies the following local flood risk characteristics for **LFRZ_017**:

Flood Risk Source / Matter	Summary
Pluvial flood risk	Medium
Fluvial flood risk	Medium
Groundwater flood risk	Medium
Public sewer flood risk	Medium
Main flood mechanism	Pluvial flooding associated with limited capacity in the surface water drainage system. Potential impacts from fluvial sources are also noted.
Flood risk receptors	Residential and commercial properties
Predicted flood hazard	Low flood hazard for the 1 in 100 year storm event
Historic flood information	Flooding from groundwater and surface water has historically been recorded in the wider locality following prolonged winter rainfall and extreme rainfall events.

5. Preferred Interventions and Proposed Drainage Strategy

The Lidsey Surface Water Management Plan identifies the preferred interventions for **LFRZ_017** as including **Asset Management** and **Increasing Surface Water Conveyance**.

The proposed development responds to these preferred interventions as follows:

Preferred Intervention	Proposed Development Response
Asset Management	The proposed development will not interfere with existing drainage infrastructure. New drainage features within the site will be designed to allow future inspection and maintenance.
Increasing Surface Water Conveyance	Surface water will be managed within the site boundary and will not discharge uncontrolled onto adjoining land or the public highway.
SuDS / source control	Surface water arising from the proposed development will be managed in accordance with Sustainable Drainage System principles. New areas of hardstanding will be formed using permeable construction or otherwise designed to be SuDS compliant.
On-site surface water disposal	Surface water from roof areas and hardstanding will be directed to a suitable soakaway located within the site, subject to confirmation of ground conditions and infiltration capacity.

Surface water from the proposed development, including roof water and hardstanding areas, will be directed to a suitable soakaway located within the site. The soakaway will be designed and installed in

accordance with the relevant Building Regulations and good practice guidance, subject to confirmation of ground conditions and infiltration capacity.

The proposed drainage strategy will ensure that surface water is disposed of sustainably on site and will not discharge onto adjoining land or the public highway.

Foul water will be disposed of via the existing public drainage system.

6. Conclusion

The application site has been assessed with reference to **Local Flood Risk Zone LFRZ_017 – Felpham Road, Felpham**, as requested by the Council.

The proposed development will manage surface water within the site boundary in accordance with Sustainable Drainage System principles. New hardstanding will be permeable or otherwise SuDS compliant, and surface water from roof and hardstanding areas will be directed to a suitable on-site soakaway, subject to confirmation of ground conditions and infiltration capacity.

The proposed development will not increase uncontrolled surface water runoff from the site and will not increase flood risk elsewhere.