Flood Risk Assessment
Application H14-0176-24 - Applicant: South Holland District Council
Vehicular entrance and hardstanding 82 Surfleet Road, Pinchbeck, PE11 3XY.

Introduction

Development site
The proposed development site is located at 82 Surfleet Road, Pinchbeck and is currently a residential property owner by South Holland District Council.

Looking over the lifetime of the proposed development, the site lies within Flood Zone 3 and therefore a Flood Risk Assessment is required.

Development
The development proposal for the above site is the construction of an off road parking area within the properties garden to support a disabled tenant and the construction of an associated dropped footway crossing.

The proposed development is therefore classified as less vulnerable. The lifetime of the proposed development is assumed to be 100 years.

Site specific flood hazards
The proposed development site lies within Flood Zone 3 with the main risk of flooding coming from river source. The site is also at potential low risk from surface water flooding.

Fluvial flooding
River flooding mainly occurs when the river's catchment area receives larger volumes of water (for example through rainfall) than the river channel can cope with. This results in river levels rising causing flooding outside of the primary channel.

The closest river to the site is the River Glen which runs south to north and is approximately approximately 425 m to the west of the site.

According to data available on Gov.UK the site is a medium risk of flooding from rivers and the sea , which means that the site has a chance of flooding of between 1% and 3.3% each year.

Surface water flooding
According to data available on Gov.UK the site is a very low risk of surface water flooding, meaning that area has a chance of flooding of less than 0.1% each year.

Surface water at the site is currently managed by existing highway surface water drainage system . The proposals for surface water management are direct run off from the hardstanding either, to the adjacent garden areas or to the existing highway surface water drainage system.

Flooding from Groundwater
Groundwater flooding occurs when the water levels in the ground rise above surface elevations.

Water levels below the ground can rise during wet winter months, and fall again in the summer as water flows out into the rivers. Groundwater flooding may take weeks or months to dissipate because groundwater flow is much slower than surface flow and water levels thus take much longer to fall.

However there are no reported instances of groundwater flooding from the current tenants of the property.

Flood Risk Management Measures

The proposed development will marginally reduce the permeability of part of the site which will alter the site's response to rainfall. The volume of water that runs off the site will be minimal and the existing surface water drainage will be adequate to accommodate any increase in flow from the development.

Conclusions

The proposed development at 82 Surfleet Road, Pinchbeck is not considered likely to put the site or any adjacent sites at a higher risk of flooding, or give rise to any significant flood risk in the future as a result of climate change.

Dave Higgs
Project Surveyor – Green Energy
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