

Flood Risk Assessment

For Application at:

Startifants Farm Chipping Preston Lancashire

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## Introduction

ML Planning Consultancy Ltd have been instructed by client Mrs Robinson to prepare a Flood Risk Assessment for the application site at Startifants Farm, in support of a planning application to convert an existing barn to one dwelling.

#### The Site

The application site is located to the south east of Chipping village, as shown below:



#### Flooding Issues

PPG 25 and the new National Planning Policy Framework have set criteria for flooding issues with regards to planning applications and developments. Strategic Flood Risk Assessments must be produced for developments in flood zones to help manage flood risk from all sources, taking account of advice from the Environment Agency and other relevant flood risk management bodies by:

- *"applying the Sequential Test;*
- *if necessary, applying the Exception Test;*
- safeguarding land from development that is required for current and future flood management;
- using opportunities offered by new development to reduce the causes and impacts of flooding"

"The aim of the Sequential Test is to steer new development to areas with the lowest probability of flooding. If this is not possible for the development to be located in zones with a lower probability of flooding, the Exception Test can be applied if appropriate. For the Exception Test to be passed, a site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall".

The NPPF states that "minor developments and changes of use should not be subject to the Sequential or Exception Tests, but should still meet the requirements for site-specific flood risk assessments".

From the Environment Agency's Flood Map shown below it can be seen that the application site lies within Flood Zone 3. Flood Zone 3 is a high risk area with an

annual probability of flooding of 1% or greater from rivers and 0.5% or greater from the sea. (If no defenses are in place).



### Existing Drainage

Water will drain into the existing drainage network on site, which in turn discharges to the adjacent watercourse. There is no where within the site that water could collect due to the natural topography. There will not be any increase in surface water runoff as a result of this planning application.

## **Proposed Development**

The proposed development includes the conversion of an agricultural building.

### **Results & Mitigating Measures**

The 1 in 100 year flood level for the site (including climate change) is **99.15m** AOD.

The existing ground level of the site is currently **100.12m** AOD. Finished floor levels will be set no lower than the existing floor level, and can therefore be concluded that the building will not be at risk from flooding.

As a precautionary measure, all electrical wiring within the new dwelling will be routed down from the ceiling at ground floor to minimise risk of damage from flood waters. All floor coverings to the ground floor will be hard surfaced such as quarry tiles etc. All major electrical appliances will be mounted above ground level. There are a number of escape routes from the property if flooding were to occur. Inhabitants would then be able to make their way east to higher ground away from the flooding source.

A concrete flood wall will be introduced within the cavity of the new dwelling to a height of 1m. No electrical wiring will be present in the property below this level. Flood approved door seals will be installed to all ground floor openings.

All information of flood risk and evacuation routes should be made available to purchasers of the property throughout its lifetime.

There will be a net reduction is hard standing around the new dwelling after creating domestic garden areas. These will be laid to lawn, with borders and permeable gravel pathways, further aiding the escape of flood waters before they were to reach the dwelling itself.

The base level of the adjacent stream is some 3.5m lower than this quoted ground level. If flooding were to occur it is likely that when the stream banks were breached water would flow west towards the highway rather than east towards the dwelling due to the natural topography of the area, as shown in the accompanying levels plan.

The applicant has lived on site for decades and has never experienced any flooding on site. It is therefore felt that if finished floor levels of the property are kept no lower than the existing levels flooding should not be an issue and should not cause any significant hazard to occupants of the new dwelling.

Finished internal floor levels of the dwelling must be set no lower than the existing internal floor level of the barn.