George Street Loft, Glossop

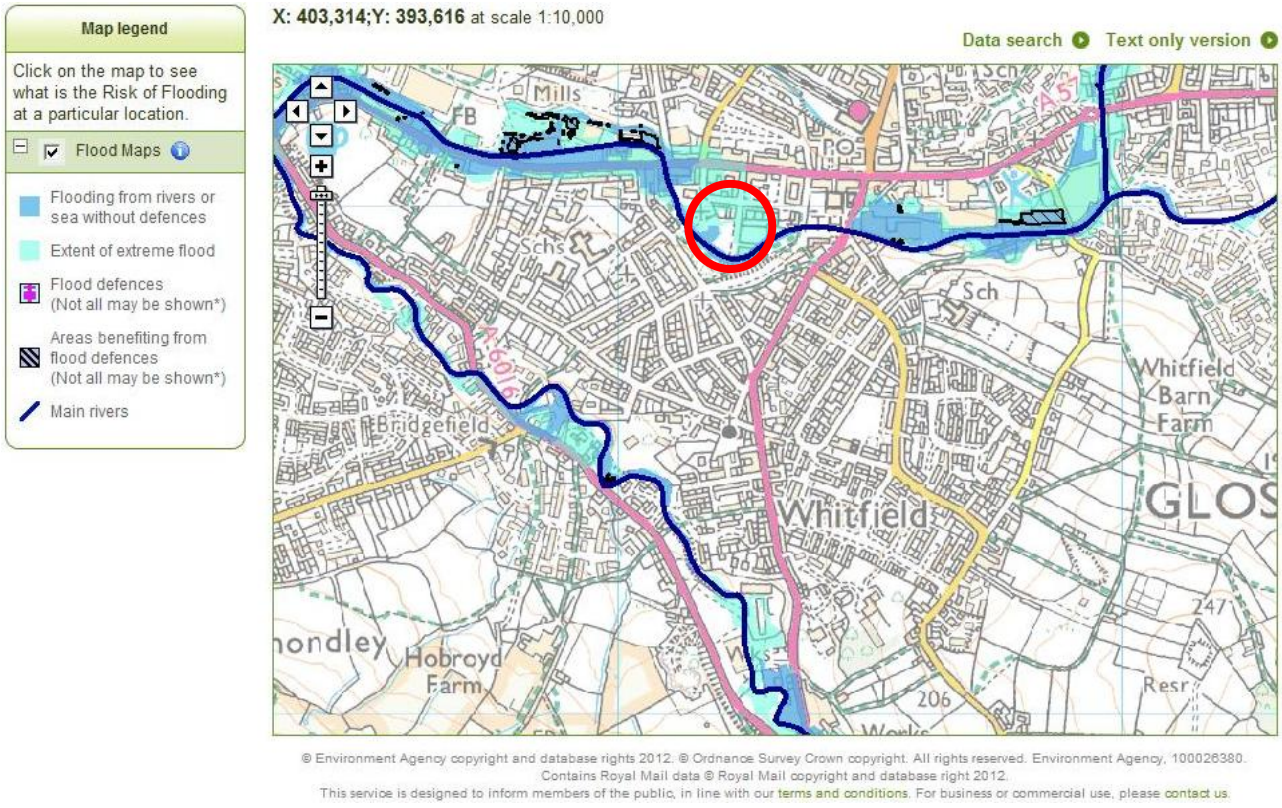
Flood Risk Assessment **5th July 2012**

INTRODUCTION

The property is located at George Street, Glossop. The site has pedestrian access from George Street with on street parking and a delivery area to the south of the site. The planning application which this Flood Risk Assessment relates to is for the proposed works as detailed below:-

- Single storey extension to north east of site with Net Floor Area (NFA) of 23.81m^2 (to EN 15221-6);
- Removal of 1no. external flue, and installation of 4no. new flues;
- Replacement of existing windows;
- Replacement of shopfront to George Street elevation;
- Replacement of roof to existing building.

FLOOD RISK EVALUATION



The above Flood Risk evaluation map has been taken from the Environment Agency website and George Street in Glossop is circled in red. This shows the property being in an area susceptible to 'extreme flood' and having a 'low to moderate' risk of flooding, i.e. a

range of flood exposure between 1 in 75 years and 1 in 200 years. The nearby watercourse identified as the source of flooding locally has no defences.

MITIGATION

Reference has been made to Environment Agency document 'Householder and other minor extensions in Flood Zones 2 and 3' in accordance with PPS 25 and CLG document 'Improving the Flood Performance of New Buildings – Flood Resilient Construction'. This states that the extension should be designed in the following manner:

'Floor levels within the proposed development will be set no lower than existing levels AND flood proofing of the proposed development has been incorporated where appropriate.'

The floor level of the extension is to match that to the existing building Ground Floor to the rear of the property and hence being no lower than the existing floor level.

The limitations of the existing structure in resisting flood water ingress without a full rebuild of the Ground Floor walls and floor prohibits a 'water exclusion strategy' (as defined in the aforementioned documents), and therefore to protect the existing and proposed structure a 'water entry strategy' (as defined in the aforementioned documents) has been adopted, whereby the floor level is chiefly set at 150mm above the exterior ground level where possible to enable draining of the Ground Floor when the flood water subsides. Gullies to rainwater pipes will also be installed to provide a means of egress of water from the site.

The drainage provided to the roof of the new extension will provide effective storm water management to the area taken by the footprint of the extension whilst reducing ground soak allowing the ground locally to accept more moisture with unpaved surfaces. In the event of flood it is proposed that vulnerable contents of the retail and workshop space will be moved to the First Floor level.