Flood Risk Assessment

Residential Development
Hough Lane, Wombwell
Barnsley

August 2017

Issue 01









FAIRHURST

CONTROL SHEET

CLIENT: **Balmoral Group Holdings Ltd.**

PROJECT TITLE: **Residential Development, Hough Lane, Wombwell, Barnsley**

REPORT TITLE: **Flood Risk Assessment**

PROJECT REFERENCE: **117436**

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					Checked	
					Approved	

This document has been prepared in accordance with procedure OP/P02 of the *Fairhurst Quality and Environmental Management System*

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Flood Risk Assessment

Planning Policy

- This report has been prepared using the following Resources:
- NPPF: National Planning and Policy Framework
- Technical Guidance to the National Planning and Policy Framework
- Technical Advice Note 15 – Development and Flood Risk
- Guidance for Flood Risk Assessment in Flood Zone 1 and Critical Drainage Areas
- Environment Agency FRA Guidance Note 1

The Development Proposal

The client, Balmoral Group Holdings, propose to develop a new residential development, at the site of a former industrial site, on Hough lane, Wombwell, Barnsley.

The 1.45 Ha brownfield site is located at OS Ref: SE3907802480, and is bounded to the North by Hough Lane, to the East and West by existing residential developments, and to the South by existing greenfield land.

The site falls form North to South, from a level of 99.990 (local grid) at the existing site entrance off Hough lane, to a low point of 93.06 (local grid) at the southern boundary of the site. The embankment along the southern boundary of the site falls to the south.

Sources of Flood Risk

As shown on the Environmental Agency's Flood Map, the site is located within Flood Zone 1, which is defined in the Technical Guidance to the National planning policy Framework as "land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%).

Fluvial Flows

The site is not considered to be at risk of flooding due to fluvial flows, this is due to the location and level of the existing watercourse relative to the development site. The culverted watercourse runs from North to south through the adjacent residential development to the West, the outlet is to the Southwest of the proposed development site, on the low side of the existing embankment.

Sewer Flooding

The site is not considered to be at risk of flooding due to sewer flooding. The proposed sewers that will serve this site will be designed in accordance with Sewers for Adoption, 7th edition, enduring that flows will be suitably contained within the network.

The provision of the extended detention basin will reduce discharge from the site to 20% of the existing flowrate, and will contain surface flows generated within the site during the critical 200 year rainfall event

In Accordance with the Technical Guidance to the National Planning and Policy Framework, the attenuation and sewer design will account for 30% climate change.

Overland Flow

The site is not considered to be at risk of flooding due to groundwater, this is due to the topography of the site, which falls form North to South, from a level of 99.990 at the existing site entrance off Hough lane, to a low point of 93.06 at the southern boundary of the site. The embankment along the southern boundary of the site falls to the south.

Groundwater

The site is not considered to be at risk of flooding due to groundwater, this is due to the topography of the site, which falls form North to South, from a level of 99.990 at the existing site entrance off Hough lane, to a low point of 93.06 at the southern boundary of the site. The embankment along the southern boundary of the site falls to the south.

Zone 1 - low probability

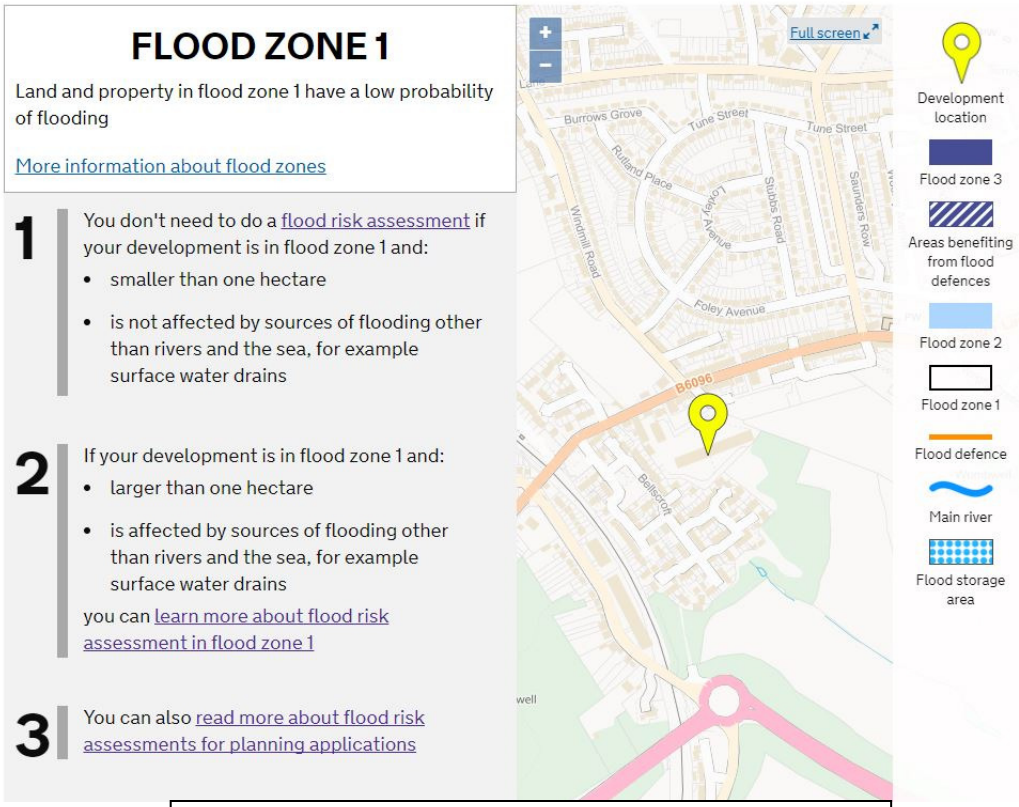
Definition
This zone comprises land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%).

Appropriate uses
All uses of land are appropriate in this zone.

Flood risk assessment requirements
For development proposals on sites comprising one hectare or above the vulnerability to flooding from other sources as well as from river and sea flooding, and the potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water run-off, should be incorporated in a flood risk assessment. This need only be brief unless the factors above or other local considerations require particular attention.

Policy aims
In this zone, developers and local authorities should seek opportunities to reduce the overall level of flood risk in the area and beyond through the layout and form of the development, and the appropriate application of sustainable drainage systems[2].

Technical Guidance to the National Planning Policy Framework – "Table 1: Flood Zones" (Extract)



Environmental Agency – Flood Probability Map (Extract)

Conclusion

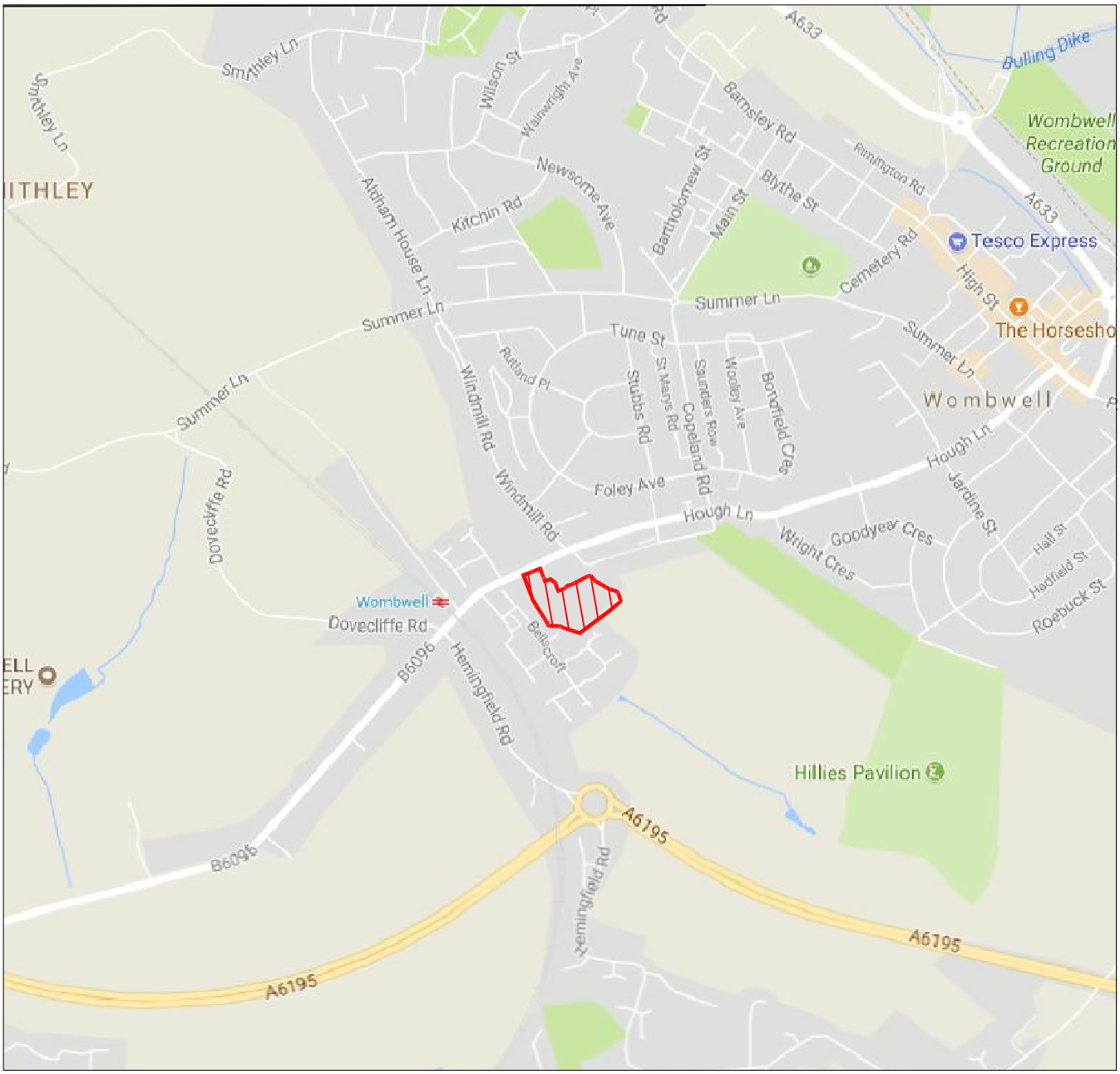
Based on the above information, it is considered that there is not a flood risk to this site.

An appropriate surface water drainage design will be incorporated in the proposed development; therefore it is considered that the proposed development will not cause any flooding issues elsewhere.

Appendix A - Drawings

- 117436/9500 Site Location Plan

Do not scale from this drawing.



OS GRID REFERENCE - SE3907802480

Rev.	Date	Description	Drawn	Checked	Approved

Project Title:

PROPOSED RESIDENTIAL DEVELOPMENT AT HOUGH LANE WOMBWELL, BARNSLEY

Drawing Title:

LOCATION PLAN

FAIRHURST

88 Queens Road,
ABERDEEN, AB15 4YQ
Tel: 01224 321 222 Fax: 01224 323 201

Scale at A4:	Status:	
NTS	For Information	
Drawn:	**Checked:**	**Approved:**
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Date:	**Date:**	**Date:**
08/09/17	08/09/17	08/09/17

Drawing No.: 117436/9500

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