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ENERGY AND CLIMATE CHANGE ENVIRONMENT AND SUSTAINABILITY INFRASTRUCTURE AND UTILITIES LAND AND PROPERTY MINING, QUARRYING AND MINERAL ESTATES WASTE RESOURCE MANAGEMENT



**GALLAGHER ESTATES LTD** 

WYKHAM PARK FARM, BANBURY

**Flood Risk Assessment** 

November 2014



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#### **GALLAGHER ESTATES LTD**

Wykham Park Farm, Banbury

**Flood Risk Assessment** 

November 2014

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# DRAWINGS

CA10769-001	Site Location		
CA10769-002	Indicative Surface Water Management Plan		
CA10769-003	Existing Drainage Characteristics		
JJG043-035-H	Wykham Park Farm Parameter Plan		
17711 OGL	Topographical Surveys (Greenhatch Group, November 2012)		
CA10769/002			

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## 1 INTRODUCTION

#### 1.1 General

- 1.1.1 Wardell Armstrong LLP has been commissioned to prepare a Flood Risk Assessment (FRA) and Outline Drainage Strategy on behalf of Gallagher Estates Ltd to support an outline planning application for a mixed use development on land at Wykham Park Farm, located to the south of Banbury, Oxfordshire.
- 1.1.2 This report sets out the findings of the FRA required by the Local Planning Authority, and the Environment Agency, in support of the planning application. The assessment has been carried out in accordance with the guidance set out in the National Planning Policy Framework (NPPF).

## 1.2 Methodology

- 1.2.1 The methodology for this FRA has comprised a desktop study, supplemented by site inspections and liaison with the Environment Agency and Thames Water.
- 1.2.2 Reference has been made to relevant plans and documents, including the Cherwell District Council Level 2 SFRA Boundary Updates and Additional Sites Assessment (Second Addendum) dated August 2014, the Cherwell and West Oxfordshire Level 1 Strategic Flood Risk Assessment dated April 2009, the Oxfordshire County Council Preliminary Flood Risk Assessment dated June 2011, the Wykham Park Farm Banbury Drainage Impact Assessment Final Report dated June 2013 and Thames Water's public sewer records.

## 1.3 Background Information

- 1.3.1 The Department for Communities and Local Government (DCLG) published the NPPF and the Technical Guidance to the National Planning Policy Framework (Technical Guidance) in March 2012. The NPPF replaces the guidance previously contained within Planning Policy Statement 25 (PPS25) Development and Flood Risk.
- 1.3.2 The NPPF and the accompanying Technical Guidance aim to ensure that flood risk is taken into consideration at all stages of the planning process in order to avoid inappropriate development in areas at medium-high risk of flooding.

1.3.3 The NPPF and the Technical Guidance advocate the use of a risk-based 'Sequential Test' to direct development away from areas at the highest risk of flooding. Where development is necessary in high risk areas, the NPPF aims to ensure that the development is safe without increasing flood risk and where possible, reducing flood risk overall. Table 1 below, extracted from Table 1 of the Technical Guidance, defines the levels of flood risk within England.

Table 1: Flood Zones						
Flood Zone	Flood zone Classification	Description				
Flood Zone 1	Low Probability	This zone comprises land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any one year (<0.1%).				
Flood Zone 2	Medium Probability	This zone comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% - 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% - 0.1%) in any year.				
Flood Zone 3a	High Probability	This zone comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%) or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.				
Flood Zone 3b	Functional Floodplain	The zone comprises land where water has to flow or be stored in times of flood.				

- 1.3.4 As part of its general obligations under the Water Resources Act 1991, the Environment Agency has carried out surveys of its existing flood defences and published a series of nationwide 'Indicative Floodplain Maps' based upon information from historic flood events and basic hydraulic modelling. In 2004 the EA published an online 'Flood Map' which shows areas across England and Wales that could be affected by flooding from rivers or the sea. The Flood Map is updated at quarterly intervals as more detailed data becomes available.
- 1.3.5 The Flood Map shows areas which may be affected by a 1 in 100 year fluvial flood or a 1 in 200 year tidal/coastal flood (ie Zone 3 as defined in the NPPF). It also shows which areas may be affected by an extreme 1 in 1000 year flood (ie Zone 2 as defined in the NPPF). The Flood Map also provides information on the location of raised flood defences such as embankments and walls, built in the last five years to protect against a 1 in 100 year fluvial flood, or flooding from the sea with an annual probability of 1 in

200 years, together with some, but not all, older defences and defences which protect against smaller floods. Areas that would benefit from flood defences in the event of a 1 in 100 year fluvial flood, or flooding from the sea with an annual probability of 1 in 200 years, are also shown.