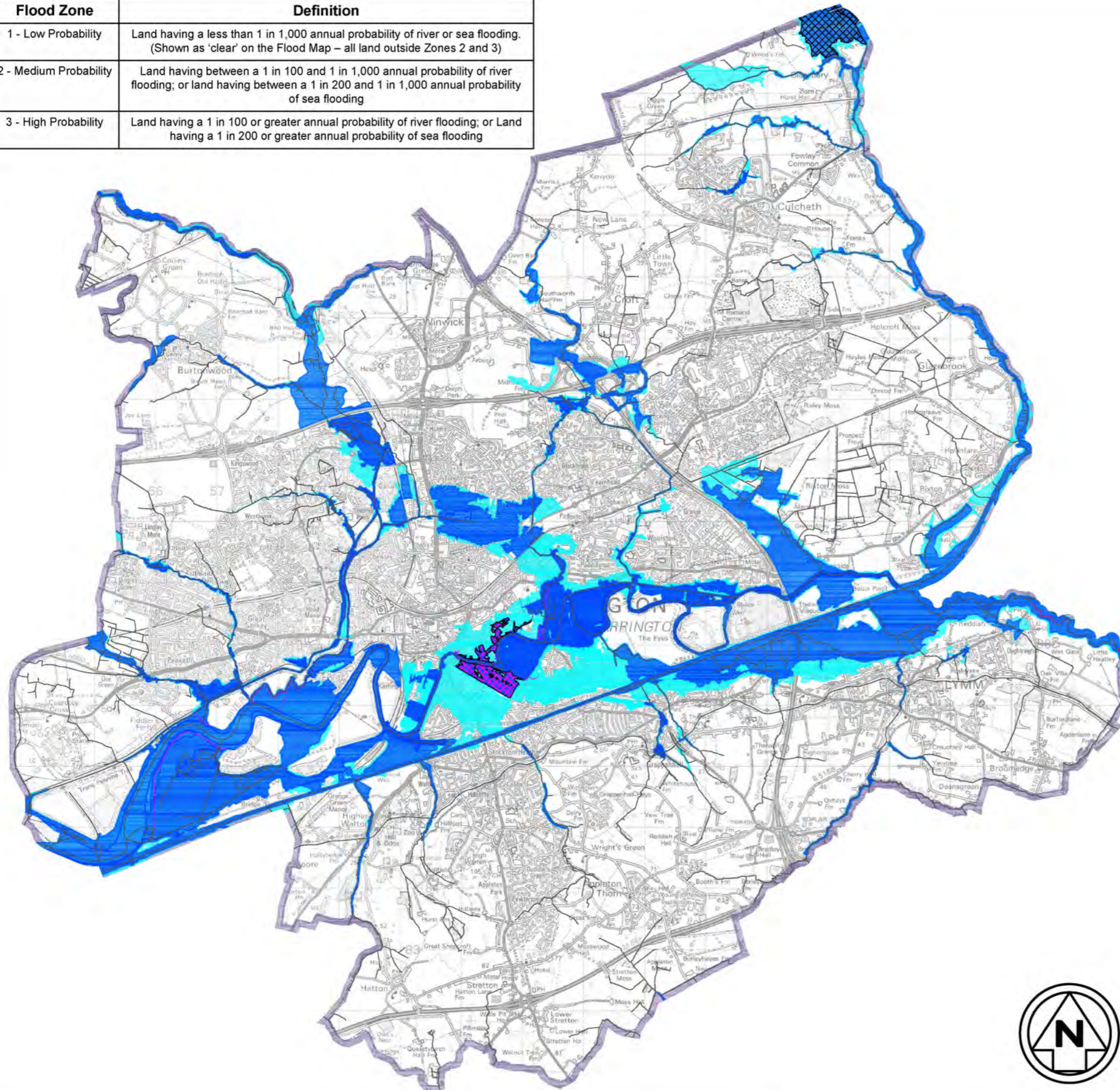


Flood Zone	Definition
1 - Low Probability	Land having a less than 1 in 1,000 annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map – all land outside Zones 2 and 3)
2 - Medium Probability	Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding
3 - High Probability	Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding



**NOTES**

-  100m Borough Boundary Buffer
-  Flood Zone 3
-  Flood Zone 2
-  Areas Benefiting from Flood Defences
-  Watercourses

These Flood Zones refer to the probability of river and sea flooding, ignoring the presence of defences.

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Rev.	Revision Details	Rev by	Chk by	Date:

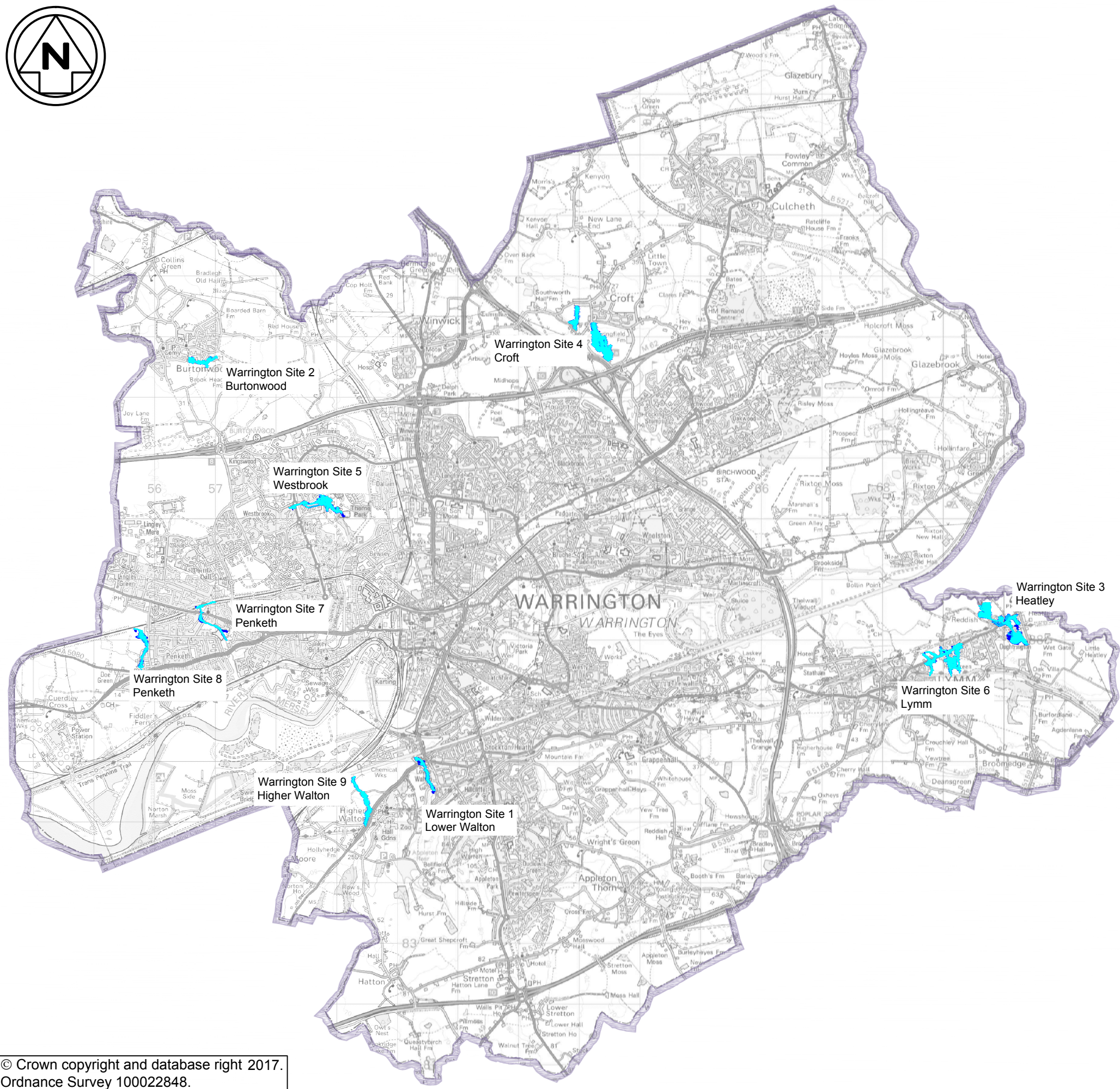
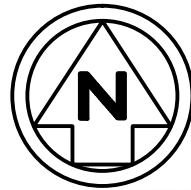
 **WARRINGTON**  
Borough Council

Economic Regeneration, Growth and Environment Directorate  
Transport and Environment  
New Town House, Buttermarket Street, Warrington WA1 2NH

Project  
**Warrington Borough Council  
Preliminary Flood Risk  
Assessment**

Drawing Title  
**Environment Agency Flood  
Map for Planning (Feb 2017)**

Drawn by	J S Dawson-Parry	e-mail	jparry@warrington.gov.uk
Approved by	J W Turton	Telephone	01925 442534
Date	04 April 2017	Fax	01925 443255
Sheet	1 of 1	Phase / Revision	
Scales	Not to Scale	Drawing No.	<b>Figure 8</b>



**NOTES**

- 100m Borough Boundary Buffer
- 5yr Flood Extents
- 30yr Flood Extents
- 100yr Flood Extents

Rev.	Revision Details	Rev by	Chk by	Date:

**WARRINGTON**  
 Borough Council

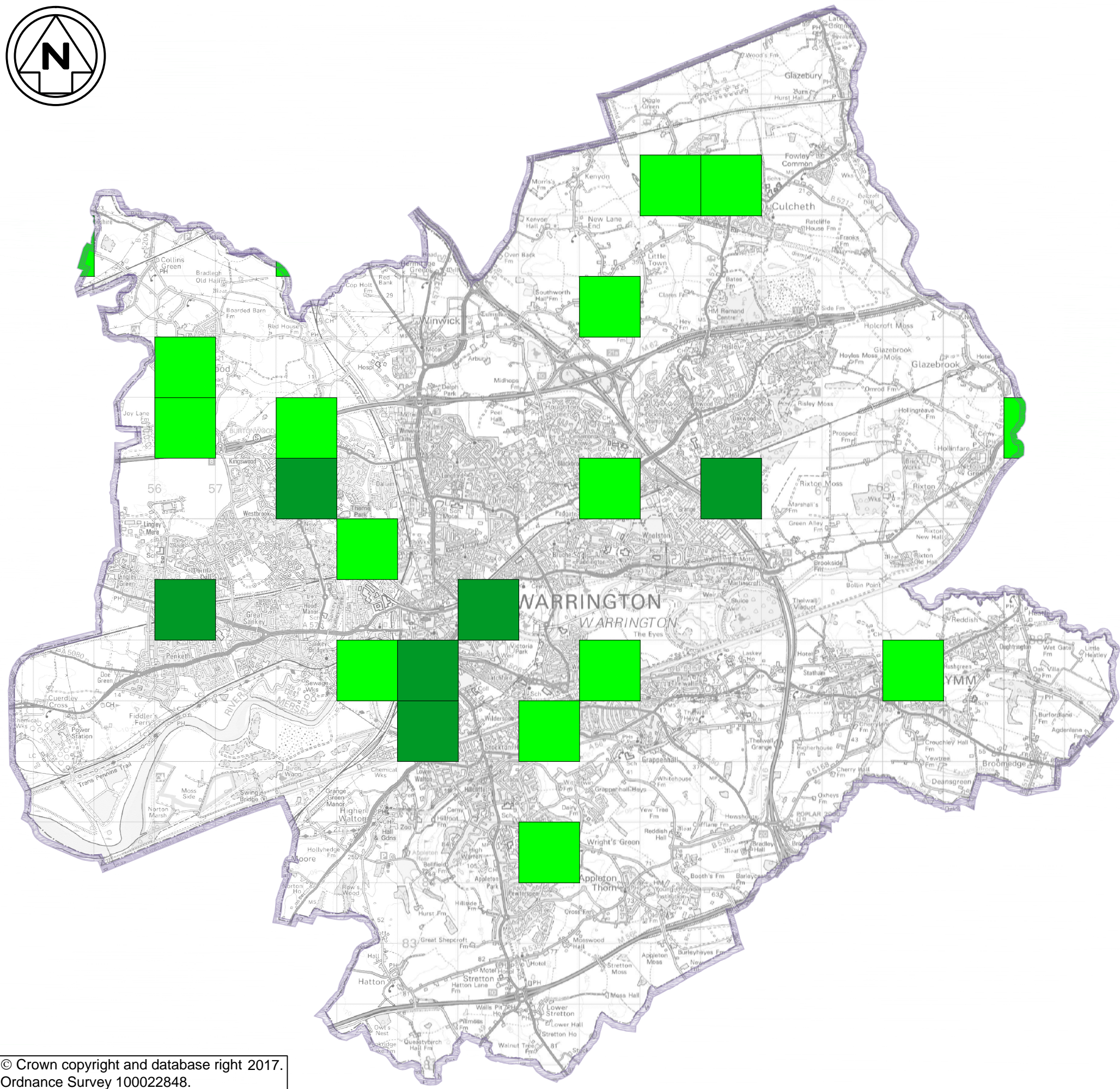
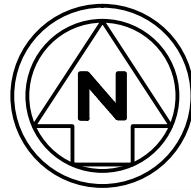
Economic Regeneration, Growth and Environment Directorate  
 Transport and Environment  
 New Town House, Buttermarket Street, Warrington WA1 2NH

Project  
**Warrington Borough Council  
 Preliminary Flood Risk  
 Assessment**




Drawing Title  
**Ordinary Watercourse Model  
 Outputs from Cheshire Mid-  
 Mersey Partnership Project**

Drawn by	J S Dawson-Parry	e-mail	jparry@warrington.gov.uk
Approved by	J W Turton	Telephone	01925 442534
Date	04 April 2017	Fax	01925 443255
Sheet	1 of 1	Phase / Revision	
Scales	Not to Scale	Drawing No.	<b>Figure 9</b>

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**NOTES**

-  100m Borough Boundary Buffer
-  1 Key Service
-  2+ Key Services

Key service considered at risk of flooding if more than 50% of its buffered perimeter (p50) is flooded by the 1 in yyyy (100) annual probability rainfall with a depth threshold of ddd (0mm).

Rev.	Revision Details	Rev by	Chk by	Date:

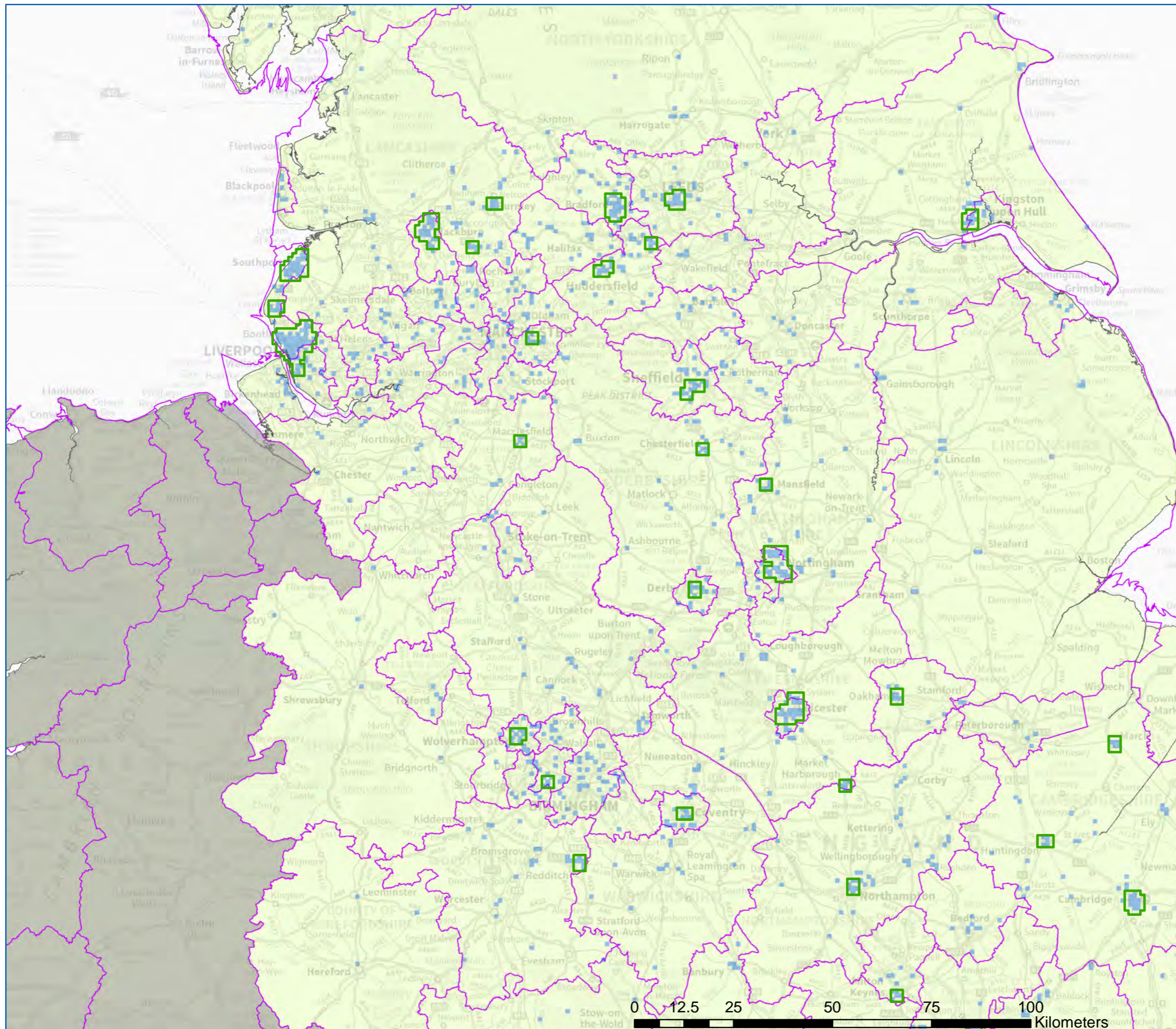

**WARRINGTON**  
 Borough Council  
 Economic Regeneration, Growth and Environment Directorate  
 Transport and Environment  
 New Town House, Buttermarket Street, Warrington WA1 2NH

Project  
**Warrington Borough Council  
 Preliminary Flood Risk  
 Assessment**

Drawing Title  
**Review of Critical Services  
 at Risk of Flooding from  
 Surface Water**

Drawn by	J S Dawson-Parry	e-mail	jparry@warrington.gov.uk
Approved by	J W Turton	Telephone	01925 442534
Date	18 May 2017	Fax	01925 443255
Sheet	1 of 1		Phase / Revision
Scales	Drawing No.		Figure 10
Not to Scale			

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- Clusters
- Places Above Flood Risk Thresholds
- Lead Local Flood Authorities

Clusters and Places Above Flood Risk Thresholds (blue squares) shown on this map are for the P100\_D0\_p50\_200\_1\_20 case.

The notation used to define a case is: Pyyyy\_Dddd\_ppp\_kkk\_nnn, where:

a property is considered at risk of flooding if more than 50% of its buffered perimeter (p50) is flooded by the 1 in yyyy annual probability rainfall with a depth threshold of ddd mm.

- 1km grid squares are "blue squares" if at least one of the following flood risk indicators is above the threshold:
1. Number of People > ppp
  2. Key Services > kkk
  3. Number of Non-Residential Properties > nnn

Clusters are created from the blue square layer and are the union of all 3x3 km grids that contain at least 5 touching blue squares.

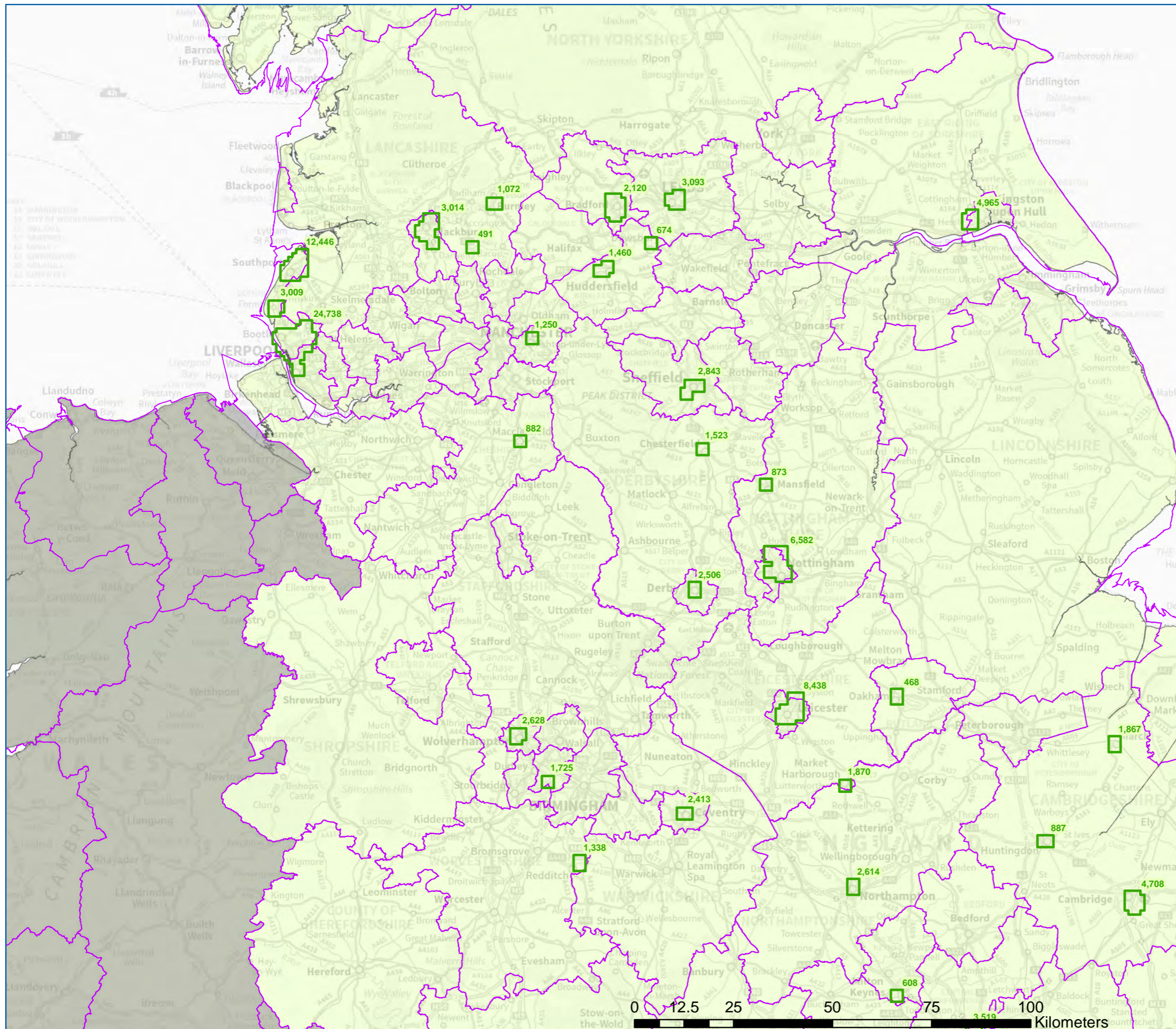
Indicators calculated using the uFMfSW V3 property point dataset which is based on NRD2014 with flooding attributes derived from the updated Flood Map for Surface Water.



## Preliminary Flood Risk Assessment for England

**Clusters for 1% AEP rainfall showing places where flood risk thresholds are exceeded**  
(see notes below legend for definition of at risk and 1km grid thresholds used)

<b>Drawn by:</b>	Peter Robinson, JBA Consulting
<b>Date:</b>	30/11/2016
<b>Status:</b>	FINAL
<b>File Name:</b>	...ArcGIS\Projects\FINAL_Cluster Mapbook_with_BS.mxd
<b>Drawing Number:</b>	BS12
Contains Ordnance Survey data © Crown copyright and database right 2016	<b>Scale:</b> 1:935,230 @ A3



- Clusters (with num of people at risk)
- Lead Local Flood Authorities

Clusters shown on this map are for the P100\_D0\_p50\_200\_1\_20 case.

The notation used to define a case is: Pyyyy\_Dddd\_p50\_ppp\_kkk\_nnn, where:

a property is considered at risk of flooding if more than 50% of its buffered perimeter (p50) is flooded by the 1 in yyyy annual probability rainfall with a depth threshold of ddd mm.

1km grid squares are "blue squares" if at least one of the following flood risk indicators is above the threshold:

1. Number of People > ppp
2. Key Services > kkk
3. Number of Non-Residential Properties > nnn

Clusters are created from the blue square layer and are the union of all 3x3 km grids that contain at least 5 touching blue squares.

Indicators calculated using the uFMFSW V3 property point dataset which is based on NRD2014 with flooding attributes derived from the updated Flood Map for Surface Water.



## Preliminary Flood Risk Assessment for England

**Clusters for 1% AEP rainfall showing number of people at risk**

(see notes below legend for definition of at risk and 1km grid thresholds used)

<b>Drawn by:</b>	Peter Robinson, JBA Consulting
<b>Date:</b>	30/11/2016
<b>Status:</b>	FINAL
<b>File Name:</b>	...ArcGIS\Projects\FINAL_Cluster Mapbook_without_BS.mxd
<b>Drawing Number:</b>	BS12
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**Environment  
Agency**

## Preliminary Flood Risk Assessment for England

Increase in people at risk of flooding in 1 km grid from the 0.1% AEP rainfall event compared with the 1% AEP event.

(see legend for definition of at risk)

**People at risk on 1 km grid**

**Absolute increase (1% to 0.1% AEP)**

1 - 150

151 - 500

501 - 1500

1501 - 6500

Lead Local Flood Authorities

Number of people at risk of flooding shown on this map = 2.34 x Number of residential properties at risk of flooding.

A property is considered at risk of flooding if more than 50% of its buffered perimeter (p50) is flooded by the 0.1% or 1% annual probability rainfall (as appropriate) with a depth threshold of zero mm.

Property counts calculated using the uFMFSW V3 property point dataset which is based on NRD2014 with flooding attributes derived from the updated Flood Map for Surface Water.

**Drawn by:** Peter Robinson

**Date:** 13/12/2016

**Status:** FINAL

**File Name:** ...ArcGIS\Projects\ FINAL\_People\_sensitivity.mxd

**Drawing Number:**

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**Scale:** 1:1,900,000 @A3

