

NORTH

London Borough of Richmond Upon Thames

Spelthorne Borough Council

East and West Molesey

Walton On Thames

Dead River

Lower Mole

Thames Ditton, Long Ditton, Hinchley Wood and Weston Green

River Thames

Esher

Claygate

Runnymede Borough Council

Weybridge

Hersham

River Rythe

London Borough of Kingston Upon Thames

River Wey

Brooklands

Epsom And Ewell District Council

Woking Borough Council

Cobham, Oxshott, Stoke D'Abernon and Downside

Middle Mole

Guildford Borough Council

Mole Valley District Council

THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- Elmbridge BC boundary
 - Settlement Area boundary
 - Local Planning Authority Boundaries
 - Main Rivers
- LIDAR Topographic Survey (mAOD)
- < 5m
 - 10m
 - 20m
 - 30m
 - 50m
 - >70m

Notes

1. Light Detection and Ranging (LIDAR) is an airborne mapping technique, which uses a laser to measure the distance between the aircraft and the ground.
2. This dataset has a spatial resolution of 1m. The Environment Agency's LIDAR data archive contains digital elevation data derived from surveys carried out since 1998.
3. The Environment Agency typically fly LIDAR along the river corridors and this accounts for the missing coverage over the south east part of Weybridge.

Crown Copyright. All Rights Reserved. Elmbridge Borough Council LA 100024882 2018. Contains Environment Agency data © Environment Agency and database right 2018.

Revision Details	By	Check	Date	Suffix

Purpose of Issue: **FINAL**

Client:  **Elmbridge Borough Council**
...bridging the communities...

Project Title: **Elmbridge Borough Council Level 1 Strategic Flood Risk Assessment**

Drawing Title: **LiDAR Topographic Survey**

Drawn	Checked	Approved	Date
HB	SL	SK	September 2018
Internal Project No.	Scale at A3		
60565750	1:50,000		

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND IS SUBJECT TO THE TERMS OF ACOM'S AGREEMENT BY ITS CLIENT. ACOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING ACOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

AECOM Infrastructure & Environment UK Limited
Migport
Alcon Link
Basingstoke
RG21 7PP
Telephone 01256 310300

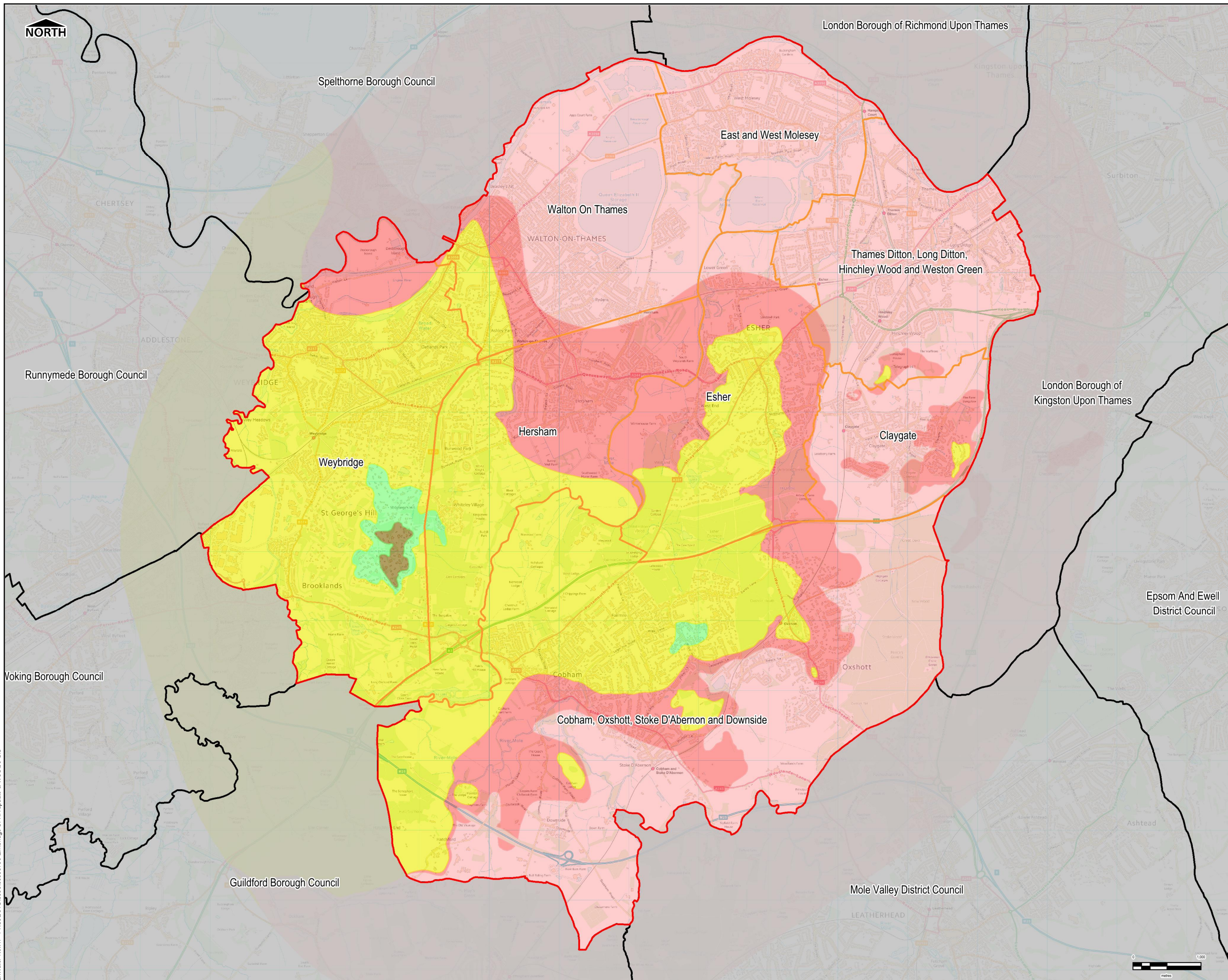


Drawing Number: **FIGURE B1** Rev: **01**

L:\Water New\4 - PROJECTS\60565750 Elmbridge SFRA update & WCS30 GIS



NORTH



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- Elbridge BC boundary
- Settlement Area boundary
- Local Planning Authority boundary

Bedrock Formation

- Bedrock Bagshot Formation
- London Clay
- Windlesham Formation
- Camberley Sand
- Claygate Member

Notes

1. Bedrock geology (formerly known as 'solid' geology by BGS) is the term used for the main mass of rocks forming the earth and is present everywhere, where exposed at the surface, or concealed beneath superficial deposits or water.
2. The data shown is the BGS Bedrock Geology data.
3. Further information on Bedrock Geology can be found within Section 2.3 of the Level 1 SFRA report

Intended Use

The 1:50 000 scale digital map data is generalised and the geological interpretation should be used only as a guide to the geology at a local level, not as a site-specific geological plan based on detailed site investigations.

Contains Ordnance Survey data © Crown copyright and database right 2018. Contains BGS data © NERC 2018. All rights reserved.

By	Check	Check	Suffix
	Check	Date	

Purpose of Issue

FINAL



Project Title

Elbridge Borough Council Level 1 Strategic Flood Risk Assessment

Drawing Title

Bedrock Geology

Drawn	Checked	Approved	Date
HB	SL	SK	September 2018
Internal Project No.	Scale at A3		
60565750	1:50,000		

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND IS SUBJECT TO THE TERMS OF AECOM'S APPOINTMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING AECOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

AECOM Infrastructure & Environment UK Limited
 Midpoint
 Alcon Link
 Basingstoke
 RG24 7PP
 Telephone 01256 310300

Drawing Number

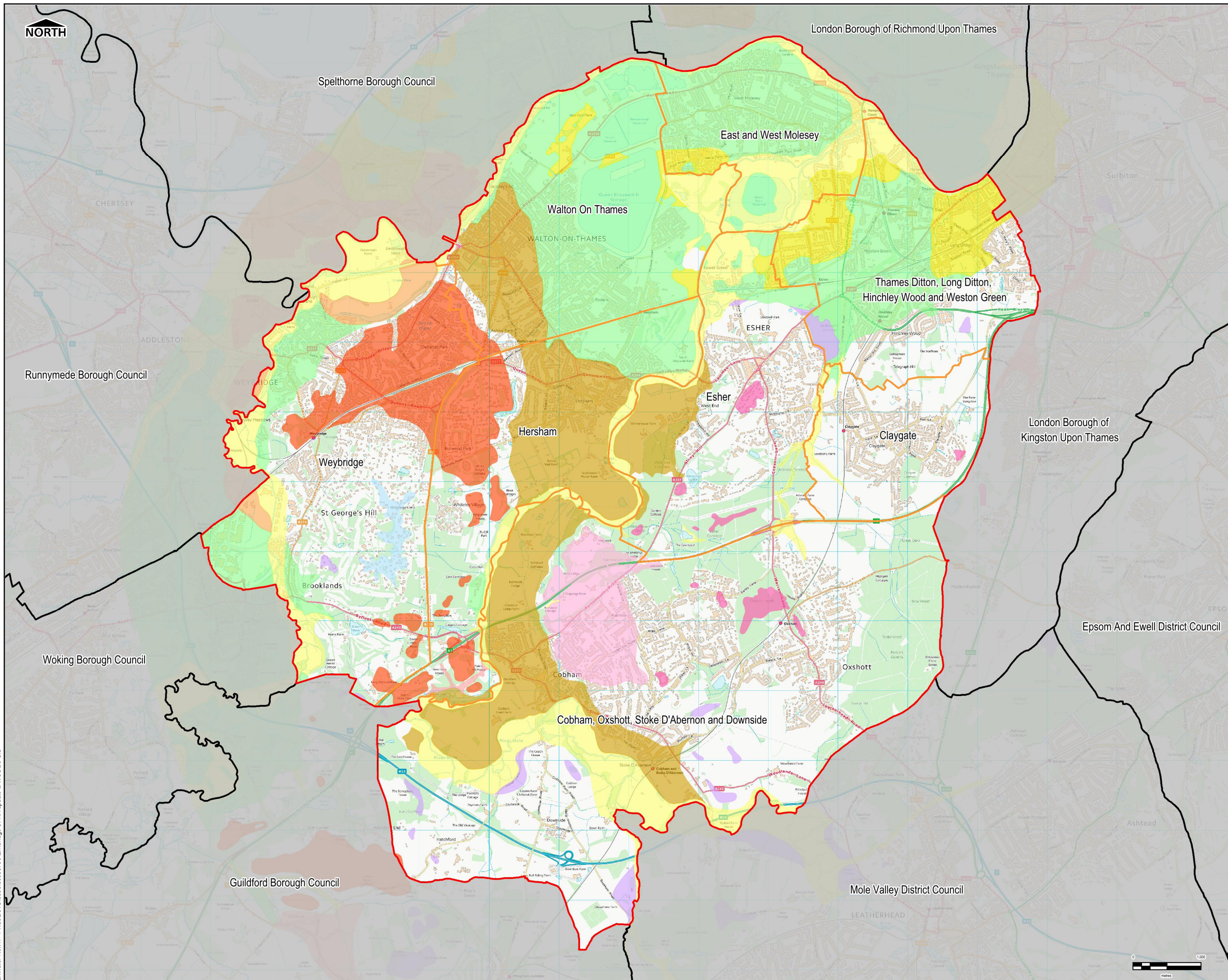
FIGURE B2

Rev

01

L:\Water New\4 - PROJECTS\60565750 Elbridge SFRA update & WCS30 GIS

NORTH



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE AND IS SUBJECT TO AMENDMENT

LEGEND

- Elbridge BC boundary
 - Settlement Area boundary
 - Local Planning Authority boundary
- Superficial Deposits
- Sand and Gravel
 - River Terrace Deposits
 - Head
 - Black Pearl Gravel
 - Boyn Hill Gravel
 - Taplow Gravel
 - Lynch Hill Gravel
 - Shepperton Gravel
 - Langley Silt
 - Kempton Park Gravel
 - Alluvium

Notes

1. Superficial deposits (formerly known as 'triff' by BGS) are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 2.6 million years from the present. They rest on older deposits or rocks referred to as bedrock.
2. The data shown is the BGS Superficial Deposits Geology data.
3. Further information on Superficial Deposits Geology can be found within Section 2.3 of the Level 1 SFRA report

Intended Use

The 1:50 000 scale digital map data is generalised and the geological interpretation should be used only as a guide to the geology at a local level, not as a site-specific geological plan based on detailed site investigations.

Contains Ordnance Survey data © Crown copyright and database right 2018. Contains BGS data © NERC 2018. All rights reserved.

Revision Details	By	Check	Date	Suffix

Purpose of Issue

FINAL

Client



Project Title

Elbridge Borough Council Level 1 Strategic Flood Risk Assessment

Drawing Title

Superficial Geology

Drawn	Checked	Approved	Date
HB	SL	SK	September 2018
Internal Project No.	Scale at A3		
60565750	1:50,000		

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND IS SUBJECT TO THE TERMS OF ACOM'S APPOINTMENT BY ITS CLIENT. ACOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOLLOWING ACOM'S EXPRESS AGREEMENT TO SUCH USE, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

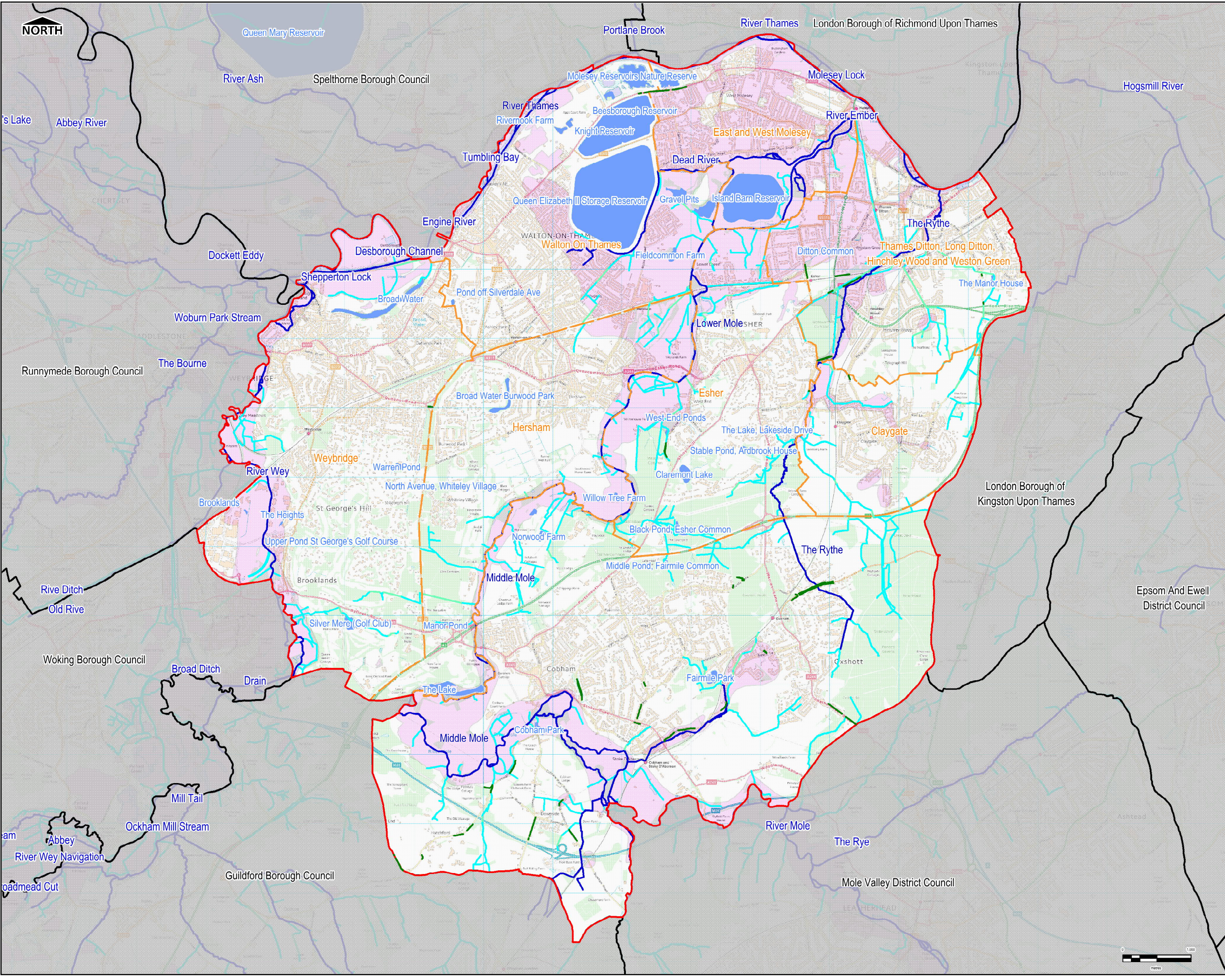
AECOM Infrastructure & Environment UK Limited



Migros Link
Basingstoke
RG21 7PP
Telephone 01256 310300

Drawing Number	Rev
FIGURE B3	01

L:\Water New\4 - PROJECTS\60565750 Elbridge SFRA update & WCS30 GIS



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- Elmbridge BC boundary
- Local Planning Authority boundary
- Settlement Area boundary
- Main Rivers
- Open Ordinary Watercourses
- Culverted Ordinary Watercourses
- Surrey County Council Highways Ditches
- Surface Water Bodies
- Environment Agency Historic Flood Map (Fluvial Flooding)

Notes

1. Watercourse defined on a 'Main River Map' designated by Defra. The Environment Agency has permissive powers to carry out flood defence works, maintenance and operational activities for Main Rivers only.
2. A watercourse that does not form part of a Main River. This includes all rivers and streams and all ditches, drains, cuts, culverts, dikes, sluices (other than public sewers within the meaning of the Water Industry Act 1991) and passages, through which water flows according to the Land Drainage Act 1991.
3. Water bodies within the Borough have been identified from a review of the Ordnance Survey (OS) 1:10,000 scale mapping. Water bodies have been identified that are 0.01km² or greater.

Contains Ordnance Survey data © Crown copyright and database right 2018.

Revision Details	By	Check	Date	Suffix

Purpose of Issue: **FINAL**



Project Title: **Elmbridge Borough Council Strategic Flood Risk Assessment**

Drawing Title: **Watercourses and Waterbodies**

Drawn	Checked	Approved	Date
HB	SL	SK	September 2018
Internal Project No.	Scale at A3		
60565750	1:50,000		

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF A CONTRACT AGREEMENT BY ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR REUSE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOR PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

AECOM Infrastructure & Environment UK Limited
 Midpoint
 Alencon Link
 Basingstoke
 RG21 1PP
 Telephone 01256 310300

Drawing Number	Rev
FIGURE B4	01

L:\Water New\4 - PROJECTS\60565750 Elmbridge SFRA update & WCS30 GIS



NORTH

THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE AND IS SUBJECT TO AMENDMENT

LEGEND

- Elmbridge BC boundary
- Settlement Area boundary
- Local Planning Authority boundary

Areas Susceptible to Groundwater Flooding

- < 25%
- >= 25% < 50%
- >= 50% < 75%
- >= 75%
- Not considered to be prone to groundwater flooding

Notes

1. Areas Susceptible to Groundwater Flooding (ASIGWF) is a strategic scale map showing where groundwater flooding could occur on a 1km square grid. It shows the proportion of each 1km grid square where geological and hydrogeological conditions show that groundwater flooding could occur. The susceptible areas are represented by one of four categories showing the proportion of each 1km square that is susceptible to groundwater emergence. It does not show the likelihood of groundwater flooding occurring.
2. The absence of values for any grid square means that no part of that square is identified as being susceptible to groundwater emergence.
3. The map identifies areas where further investigation is needed to assess whether groundwater flooding may affect property or infrastructure.
4. This data shown is the Environment Agency dataset 'Areas Susceptible to Groundwater Flooding'.
5. Further information on Groundwater Flooding can be found within Section 2.3 of the Level 1 SFRA.

Intended Use

The 1:50 000 scale digital map data is generalised and the geological interpretation should be used only as a guide to the geology at a local level, not as a site-specific geological plan based on detailed site investigations.

This map is intended to provide a strategic overview of susceptibility to groundwater flooding and should not be used to assess flood risk for individual properties.

Contains Environment Agency information © Environment Agency and database right. Contains Ordnance Survey data © Crown copyright and database right 2018.

Revision Details	By	Check	Date	Suffix

Purpose of Issue	FINAL
------------------	-------

Client	 Elmbridge Borough Council
--------	---

Project Title	Elmbridge Borough Council Strategic Flood Risk Assessment
---------------	---

Drawing Title	Areas Susceptible to Groundwater Flooding
---------------	---

Drawn	Checked	Approved	Date
HB	SL	SK	September 2018

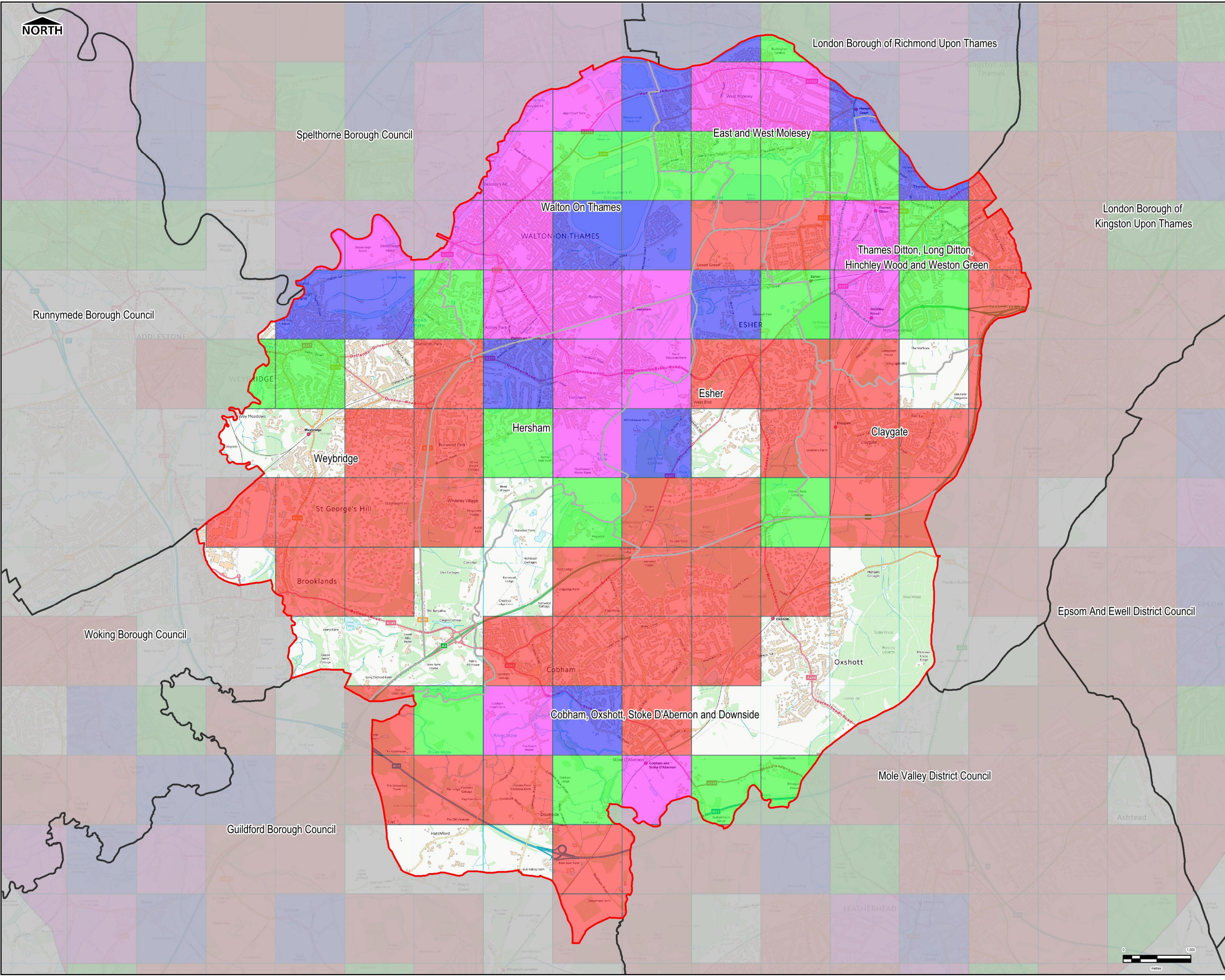
Internal Project No.	Scale at A3
60565750	1:50,000

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF A COM'S AGREEMENT WITH ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

AECOM Infrastructure & Environment UK Limited
 Midpoint
 Alencon Link
 Basingstoke
 RG22 7PP
 Telephone 01256 310300



Drawing Number	Rev
FIGURE B5	01



L:\Water\New4 - PROJ\CTS\6056460565750 Elmbridge SFRA update & WCS30 GIS



NORTH

THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- Elmridge BC boundary
- Local Planning Authority boundary
- Settlement Area boundary

BGS Infiltration SuDS Map (Detailed)

- Highly compatible for infiltration SuDS
- Probably compatible for infiltration SuDS
- Opportunities for bespoke infiltration SuDS
- Very significant constraints are indicated

Notes

The 1:50 000 scale digital map data is generalised and the geological interpretation should be used only as a guide to the geology at a local level, not as a site-specific geological plan based on detailed site investigations.

Descriptions of each of the categories are as follows:

- Highly compatible for infiltration SuDS: The subsurface is likely to be suitable for free-draining infiltration SuDS.
- Probably compatible for infiltration SuDS: The subsurface is probably suitable for infiltration SuDS although the design may be influenced by the ground conditions.
- Opportunities for bespoke infiltration SuDS: The subsurface is potentially suitable for infiltration SuDS although the design will be influenced by the ground conditions.
- Very significant constraints are indicated: There is a very significant potential for one or more geohazards associated with infiltration.

Intended Use

This map is intended to provide a strategic overview of infiltration SuDS suitability and should not be used to assess suitability for individual properties.

Reproduced from the British Geological Survey Map data at the original scale of 1:50000 Licence 2013/040 British Geological Survey. ©NERC. All rights reserved. Contains Ordnance Survey data © Crown copyright and database right 2018.

Revision Details			
By	Check	Check Date	Suffix

Purpose of Issue: **FINAL**



Project Title: **Elmridge Borough Council Strategic Flood Risk Assessment**

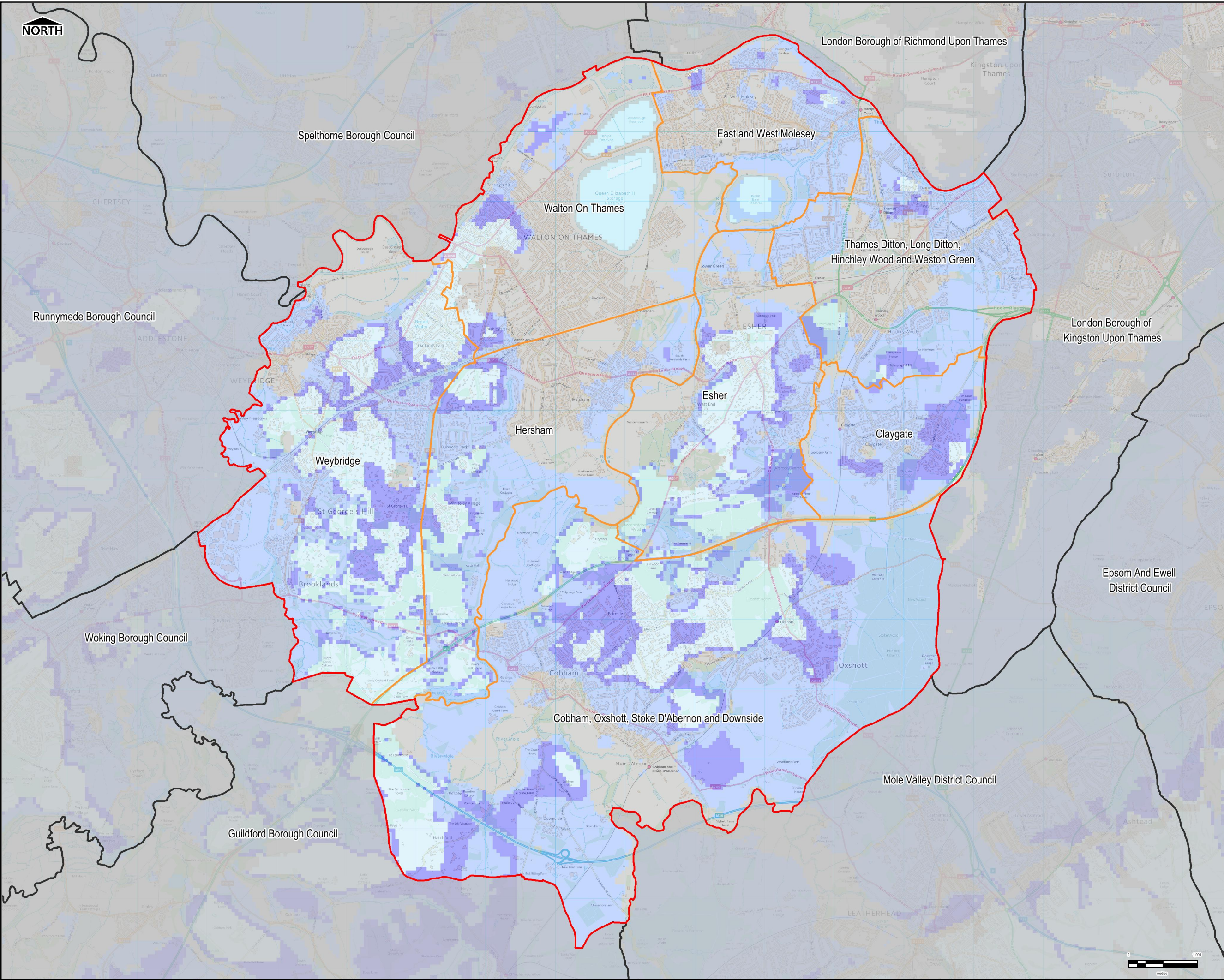
Drawing Title: **BGS Infiltration SuDS Map (detailed)**

Drawn	Checked	Approved	Date
HB	SL	SK	September 2018
Internal Project No.		Scale at A3	
60565750		1:50,000	

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF A COMMERCIALLY AGREED AGREEMENT TO SUPPLY, AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.



Drawing Number: **FIGURE B6** Rev: **01**



L:\Water New\4 - PROJECTS\60565750 Elmridge SFRA update & WCS30 GIS

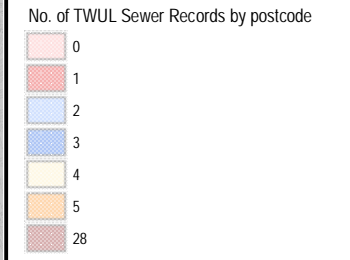


NORTH

THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- Elmbridge BC boundary
- Local Planning Authority boundary
- Settlement Area boundary
- Post Code Sector Boundary



Notes

1. TWUL has supplied records of sewer flooding for the Borough through their DG5 register on the total number of properties affected by and at risk of sewer flooding based on historic flooding. This data has been displayed using the 4 digit postcode boundaries in the Borough.

Intended Use

This map is intended to provide a strategic overview of historic sewer flooding and should not be used to assess flood risk for individual properties

Contains Ordnance Survey data © Crown copyright and database right 2014. Contains Thames Water data. All rights reserved.

Revision Details			
By	Check	Check Date	Suffix

Purpose of Issue

FINAL



Project Title

Elmbridge Borough Council Level 1 Strategic Flood Risk Assessment

Drawing Title

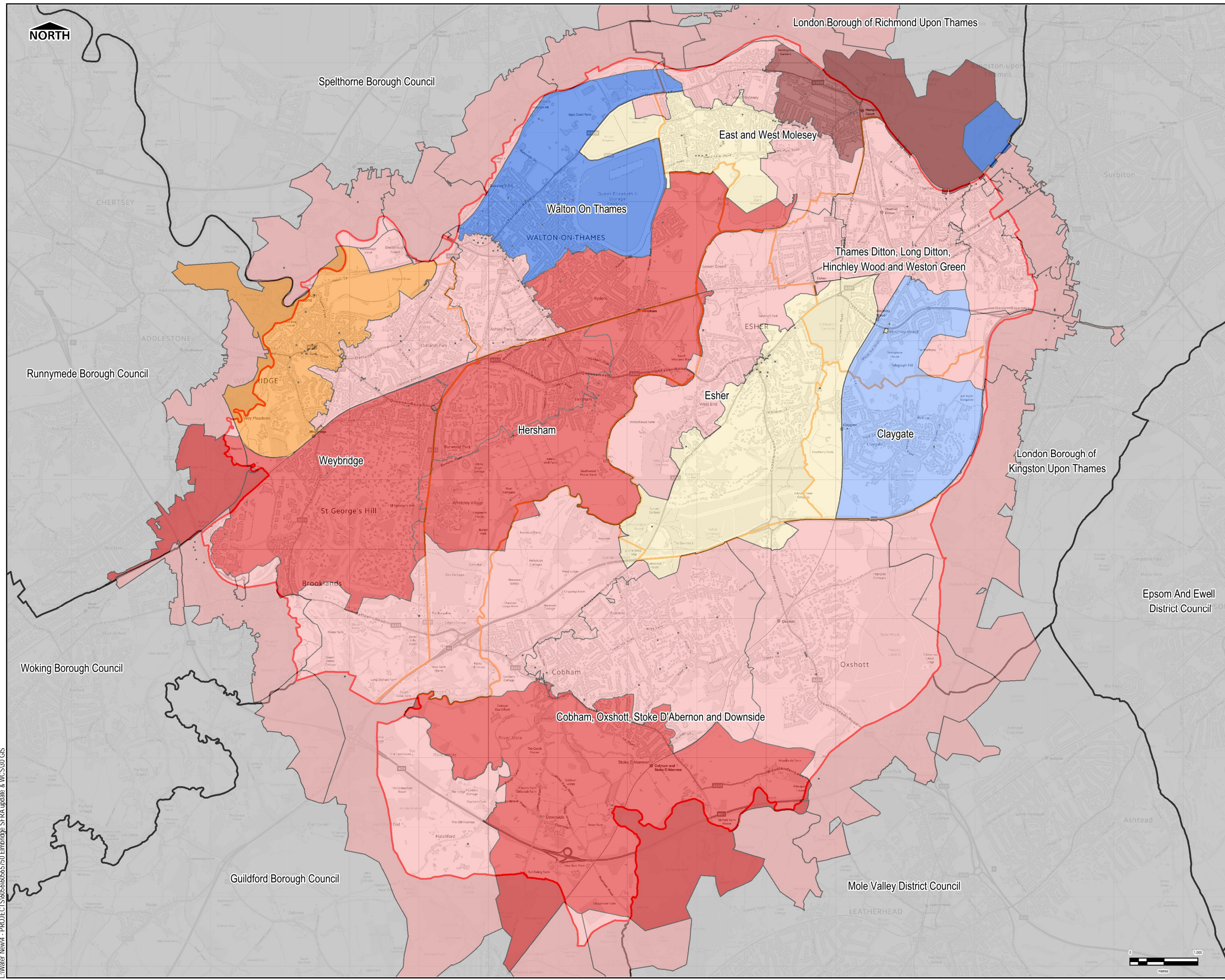
Recorded Incidents of Internal Sewer Flooding

Drawn	Checked	Approved	Date
HB	SL		September 2018
Internal Project No.		Scale at A3	
60565750		1:50,000	

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF ACOM'S AGREEMENT WITH ITS CLIENT. ACOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOR ANY PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

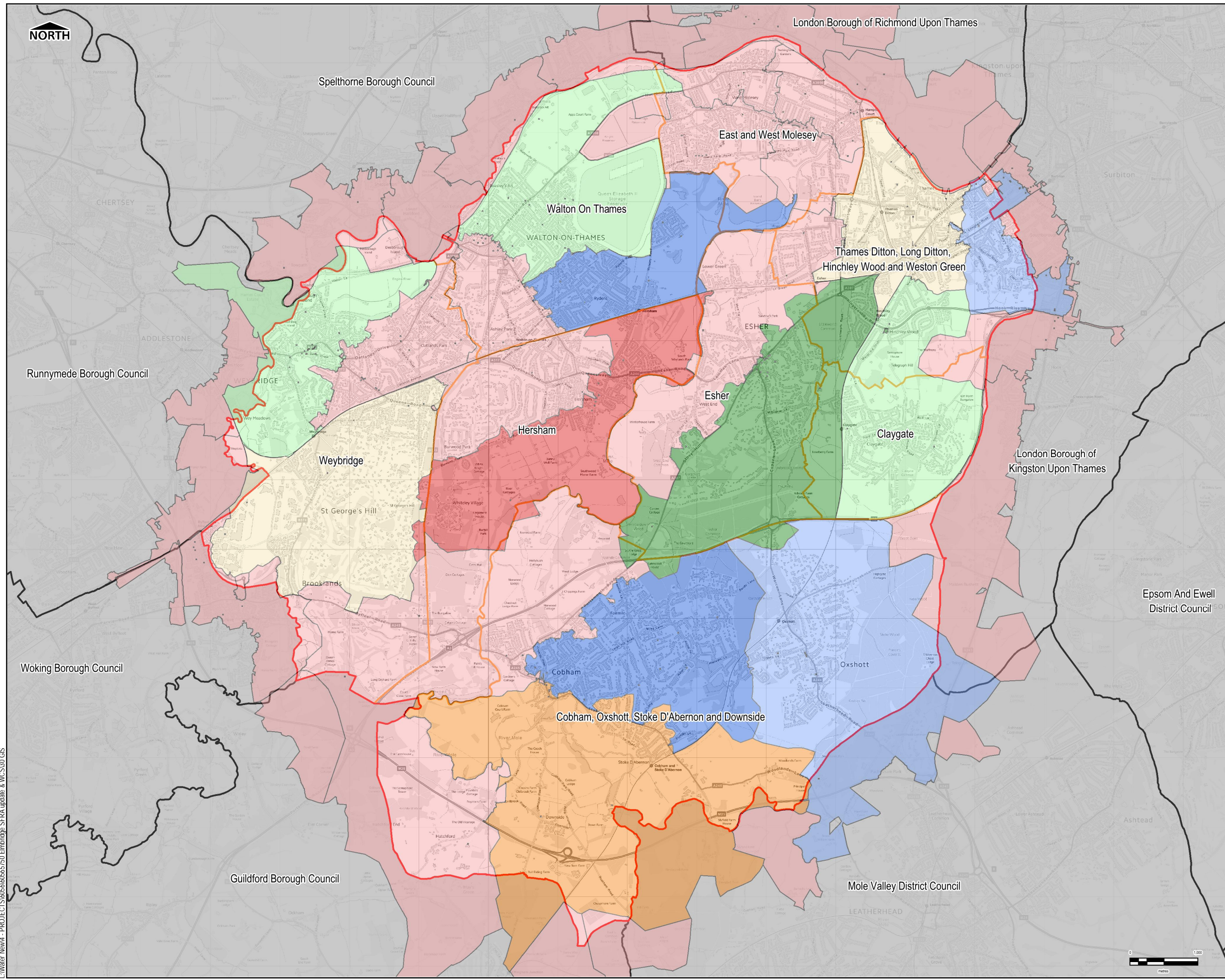


Drawing Number	Rev
FIGURE B7	01



I:\Water New\4 - PROJECTS\60565750 Elmbridge SFRA update & WCS30 GIS





THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- Elbridge BC boundary
- Local Planning Authority boundary
- Settlement Area boundary
- Post Code Sector Boundary

No. of TWUL Sewer Records by postcode

0
1
2
3
4
6
7
18

Notes

1. TWUL has supplied records of sewer flooding for the Borough through their DG5 register on the total number of properties affected by and at risk of sewer flooding based on historic flooding. This data has been displayed using the 4 digit postcode boundaries in the Borough.

Intended Use

This map is intended to provide a strategic overview of historic sewer flooding and should not be used to assess flood risk for individual properties

Contains Ordnance Survey data © Crown copyright and database right 2014. Contains Thames Water data. All rights reserved.

Revision Details	By	Check	Date	Suffix

Purpose of Issue

FINAL



Project Title

Elbridge Borough Council Level 1 Strategic Flood Risk Assessment

Drawing Title

Recorded Incidents of External Sewer Flooding

Drawn	Checked	Approved	Date
HB	SL		September 2018
Internal Project No.	Scale at A3		
60565750	1:50,000		

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF AECOM'S AGREEMENT WITH ITS CLIENT. AECOM ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR FOR ANY PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.



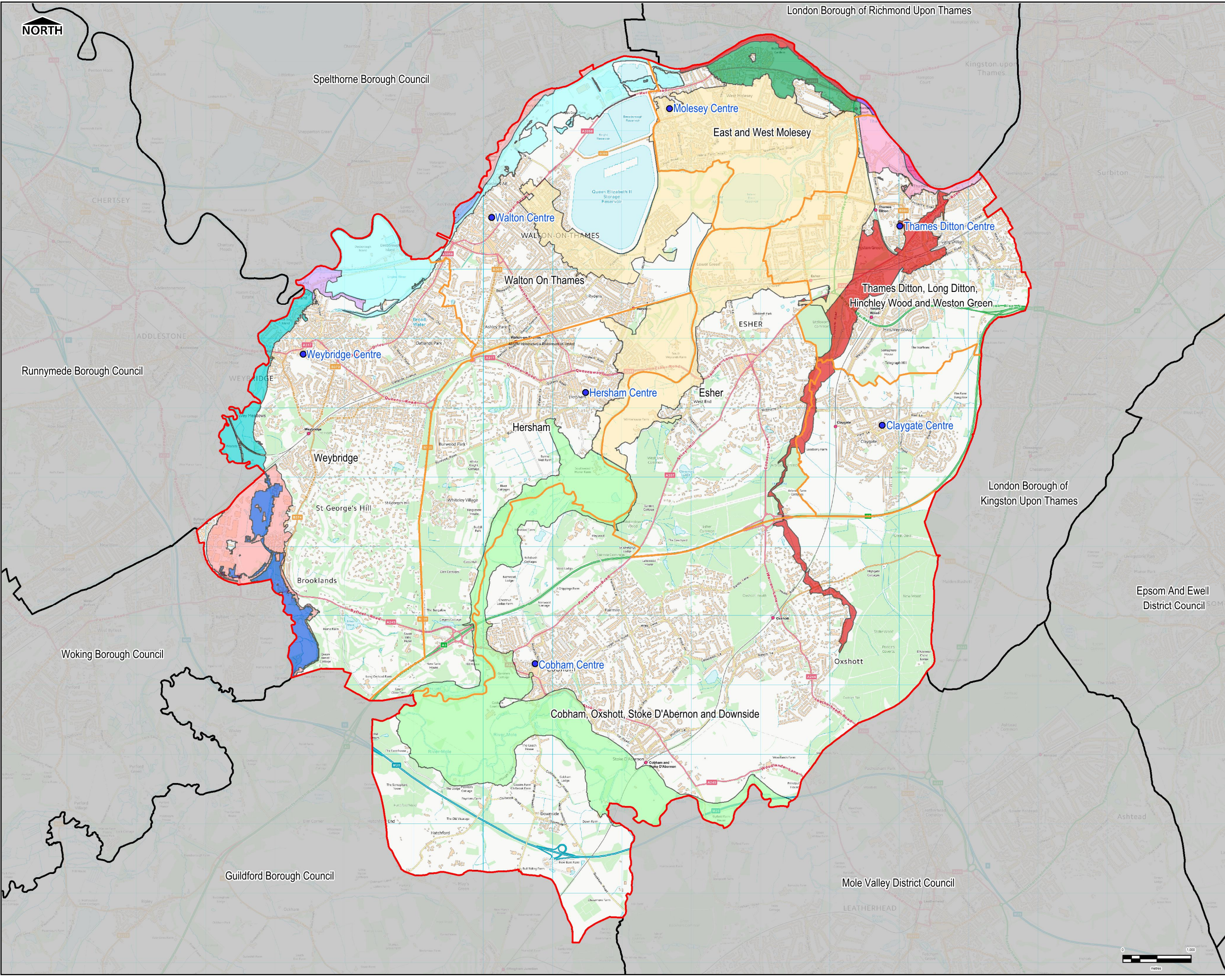
Drawing Number

FIGURE B8

Rev

01

I:\Water_Net\4 - PROJECTS\60565750 Elbridge SFRA update & WCS30 GIS



London Borough of Richmond Upon Thames

Spelthorne Borough Council

Kingston upon Thames

Molesey Centre

East and West Molesey

Walton Centre

Walton On Thames

Thames Ditton Centre

Thames Ditton, Long Ditton, Hinchley Wood and Weston Green

Weybridge Centre

Weybridge

Hersham Centre

Hersham

Esher

Claygate Centre

London Borough of Kingston Upon Thames

St George's Hill

Brooklands

Cobham Centre

Cobham, Oxshott, Stoke D'Abernon and Downside

Woking Borough Council

Epsom And Ewell District Council

Guildford Borough Council

Mole Valley District Council

THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

LEGEND

- Elbridge BC boundary
 - Local Planning Authority boundary
 - Settlement Area boundary
 - Elbridge BC Emergency Rest Centres
- Environment Agency Flood Warning Areas**
- | | |
|--|--|
| Properties closest to the River Thames at Sunbury | River Thames at Hampton and Hampton Wick |
| Properties closest to the River Thames from Platts Eyot to Hampton Court Bridge | River Thames at Shepperton and Lower Hallford |
| Properties closest to the River Thames from Shepperton Lock to Beasley's Ait | River Thames at Sunbury |
| Properties closest to the River Wey between Walsham Meadow and Byfleet town | River Thames at Thames Ditton |
| River Mole at Esher and East Molesey | River Thames at Thames Ditton Island |
| River Mole at Leatherhead and Felcham | River Thames at Wallon |
| River Mole at Stoke D'Abernon, Cobham and South Hersham | River Wey at Weybridge town |
| River Thames at East and West Molesey | River Wey at Wisley and Byfleet |
| River Thames at Hamm Court | The River Rylde between Oxshott and Thames Ditton |

Notes

The Environment Agency provide a free flood warning service for many areas at risk of flooding from rivers and the sea. In some parts of England the Environment Agency may be able to provide warnings when flooding from groundwater is possible. The Environment Agency free flood warning service can provide advance notice of flooding and can provide time to prepare.

The Environment Agency issue flood warnings to homes and businesses when flooding is expected. Upon receipt of a flood warning, occupants should take immediate action.

The Environment Agency issue flood alerts when flooding is possible. Flood alerts cover larger areas than flood warnings and are issued more frequently. Upon receipt of a flood warning, occupants should be prepared for flooding and to take action.

If a flood alert for groundwater is available this does not mean that your property is definitely at risk. It is very difficult to predict the exact location of flooding from groundwater as it is often related to local geology. To help people, the Environment Agency provide flood alerts for large areas that could be affected if groundwater levels were high.

Contains Ordnance Survey data © Crown copyright and database right 2018. Contains Environment Agency data © Environment Agency and database right 2018.

Revision Details	By	Check	Check Date	Suffix

Purpose of Issue: **FINAL**

Client: Elbridge Borough Council

Project Title: **Elbridge Borough Council Level 1 Strategic Flood Risk Assessment**

Drawing Title: **Environment Agency Flood Warning Areas**

Drawn: HB	Checked: SL	Approved: SK	Date: September 2018
Internal Project No: 60575750	Scale: at A3 1:50,000		

THIS DOCUMENT HAS BEEN PREPARED PURSUANT TO AND SUBJECT TO THE TERMS OF A CONTRACT ENTERED INTO BY ITS CLIENT. ACCORDING TO THE LIABILITY FOR REVISION OF THIS DOCUMENT OTHER THAN BY ITS ORIGINAL CLIENT OR REVISION OF THIS DOCUMENT IS NOT THE RESPONSIBILITY OF AECOM AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED.

AECOM Infrastructure & Environment UK Limited
 Midpoint Alcon Link Basingstoke RG24 7PP Telephone 01256 310300

Drawing Number: FIGURE B9	Rev: 01
----------------------------------	----------------

L:\Water New\4 - PROJECTS\6056\60565750 Elbridge SFRA update & WCS30 GIS

