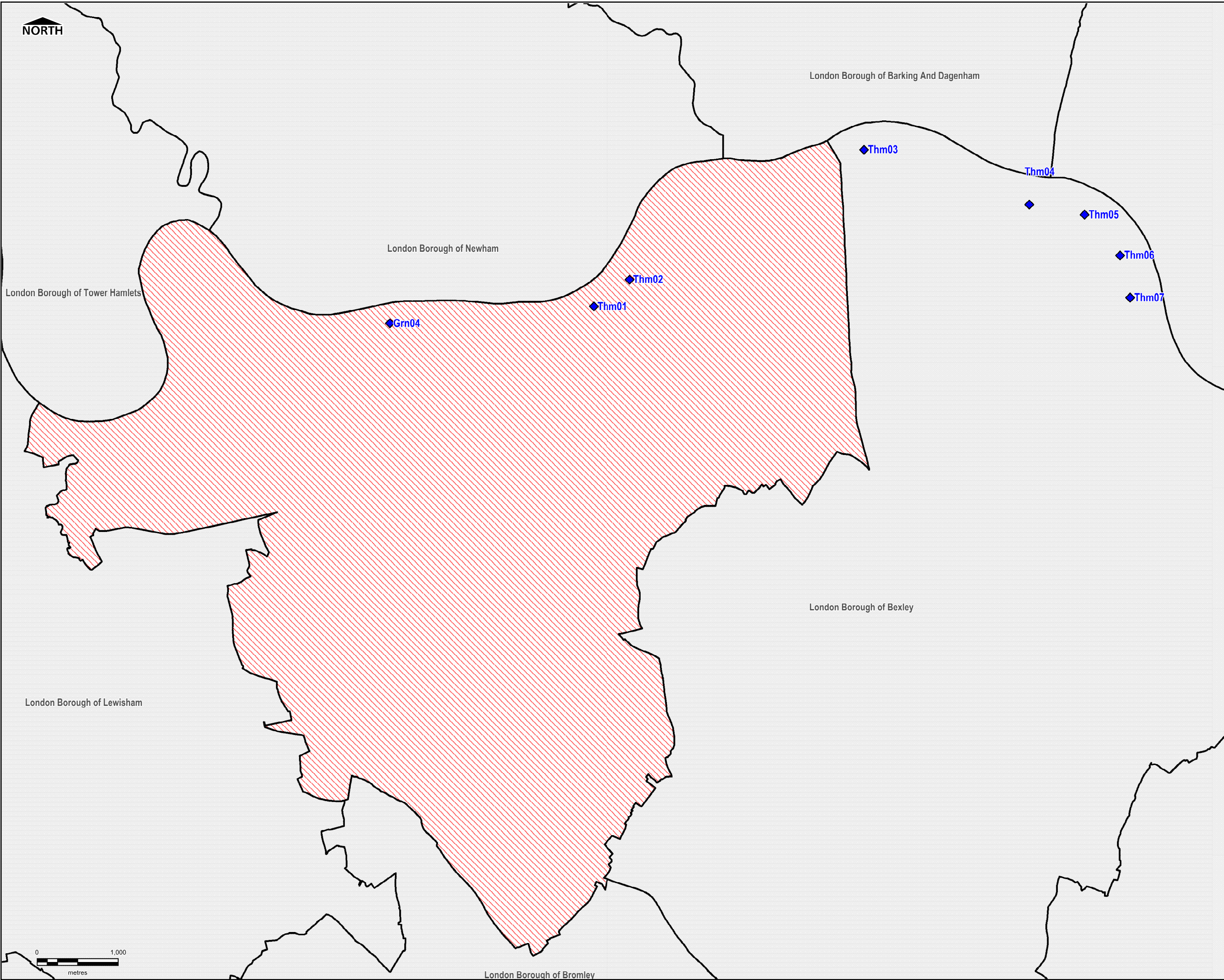


NORTH



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LEGEND

- Administrative Boundaries
- Breach Locations downstream of the Thames Barrier

Notes
 Breach locations Thm03 - Thm07 are located to the east of the RB of Greenwich study area. However flooding from a breach at these locations affects the RB of Greenwich study area.
 Refer to the Level 1 SFRA Report for further details on the Thames tidal Breach modelling study and mapped outputs.

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Revision Details				Suffix
Purpose of Issue	VERSION 2			

Client

Project Title
ROYAL BOROUGH OF GREENWICH STRATEGIC FLOOD RISK ASSESSMENT UPDATE

Drawing Title
OVERVIEW OF THAMES TIDAL BREACH LOCATIONS

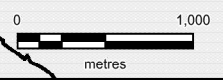
Drawn	Checked	Approved	Date
HB	EC	SK	07/2017
AECOM Internal Project No. 60484258		Scale at A3 1:40,000	

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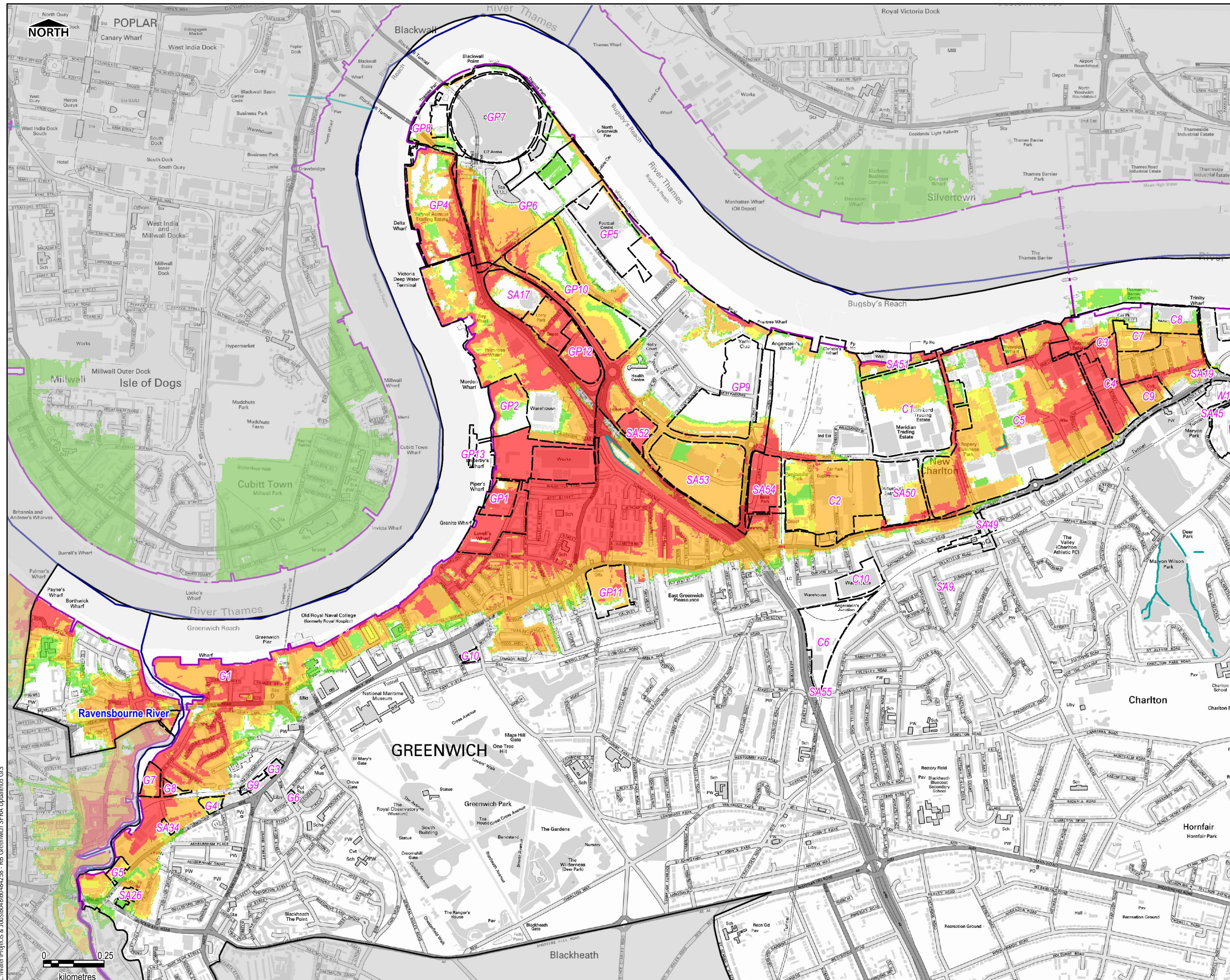
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FIGURE C0	02

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London Borough of Bromley



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LEGEND

- Administrative Boundaries
- Watercourses
 - Main River - Surface
 - Main River - Culverted
 - Ordinary Watercourse - Surface
 - Ordinary Watercourse - Culverted
- Flood Hazard Rating
 - Low (Caution)
 - Moderate (Danger for some)
 - Significant (Danger for most people)
 - Extreme (Danger for all)
- Flood Defences
- Modelled Breach Locations

Notes

As part of the Environment Agency rolling programme of flood risk modelling studies, tidal breach modelling has been undertaken for the River Thames for a number of breach locations along the Thames tidal frontage (Thames Embayment Modelling, CH2MHill February 2015 and Thames Tidal Upriver Breach Inundation Assessment, Atkins 2017). One of the outputs of these modelling studies is flood hazard mapping which categorises the danger to people for different combinations of flood water depth and velocity. The derivation of these categories is based on the methodology set out by Defra in Flood Risks to People FD2320 using the following equation: Flood Hazard Rating = $(V+0.5)^D + DF$. Where V = velocity (m/s), D = depth (m), DF = debris factor

The study area for this SFRA is both upstream and downstream of the Thames Barrier. For breach locations downstream of the Barrier (Thames Embayment Modelling), the 0.5% and 0.1% AEP design events have been simulated for the present day (2014) and including climate change to 2065 and 2100.

For breach locations upstream of the Barrier (Thames Tidal Upriver Breach Inundation Assessment), return periods cannot be applied to water levels in the same manner as they can downstream of the Barrier, as water levels are a function of the maximum tide level allowed through the Barrier, as defined by the barrier closure rule / matrix. As a result, a Maximum Likely Water Level (MLWL) is applied and scenarios have been simulated for the MLWL for 2100.

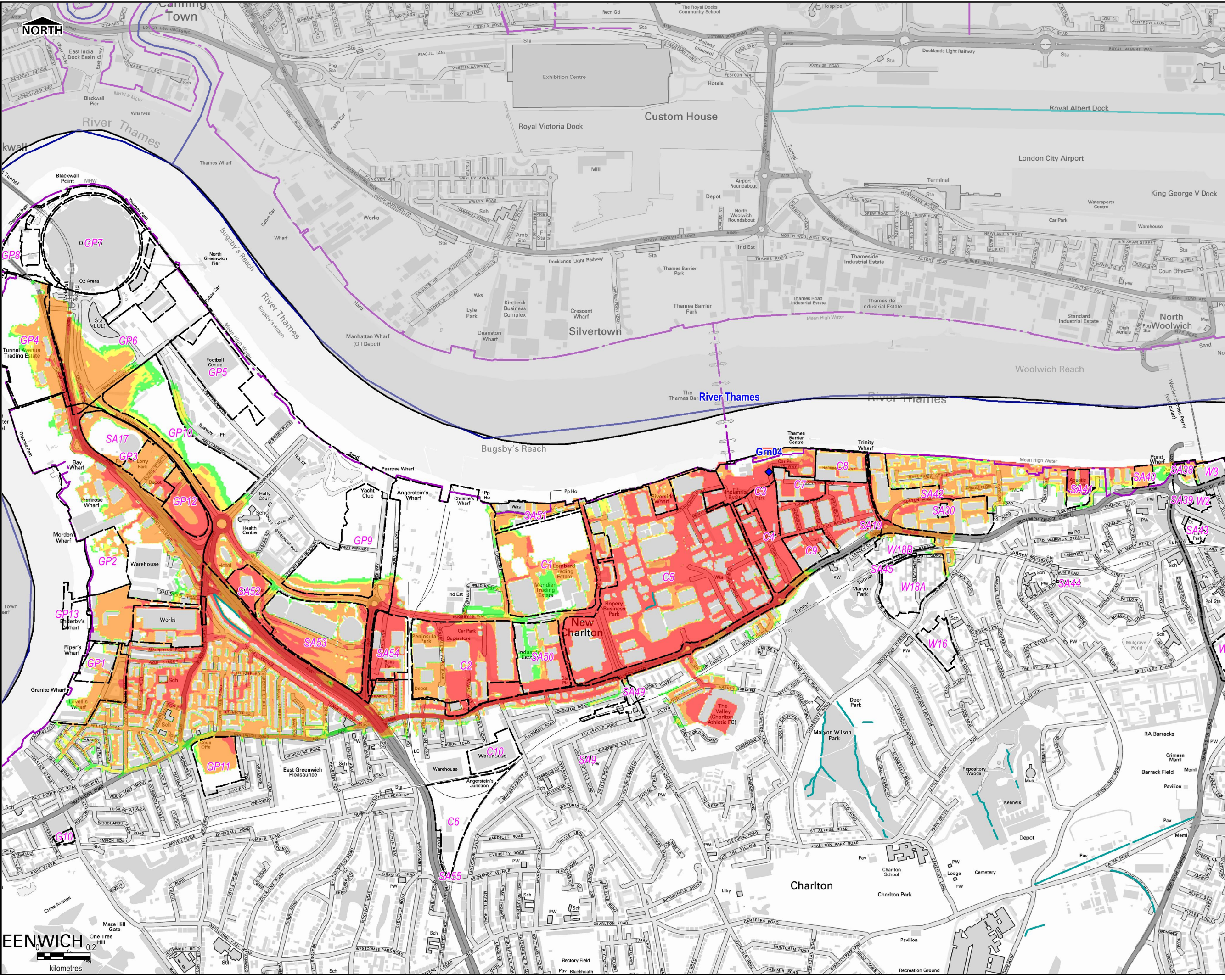
This map is intended to provide a strategic overview of the residual risk of tidal flooding and should not be used to assess flood risk for individual properties.

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Update to the Environment Agency Thames Flood Defence Breach Hazard Mapping	HB/SK	2007/17	02
Revision Details			Suffix
Purpose of Issue	Version 2		
Client			
Project Title	Royal Borough of Greenwich Level 1 Strategic Flood Risk Assessment		
Drawing Title	Maximum Hazard Rating for the Year 2100- Upstream of the Thames Barrier		
Drawn	Checked	Approved	Date
HB	EC	SK	07/2017
AECOM Internal Project No. 60484258	Scale at A3 1:14,000		
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			02

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LEGEND

- Administrative Boundaries
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- Modelled Breach Locations

Notes

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Upstream breach locations removed	HB/SK	28/08/2017	02
Revision Details			Suffix

Purpose of Issue

VERSION 2

Client

ROYAL BOROUGH OF GREENWICH

Project Title

**ROYAL BOROUGH OF GREENWICH
LEVEL 1 STRATEGIC FLOOD RISK
ASSESSMENT**

Drawing Title

**MAXIMUM HAZARD RATING - GREEN04
(MLWL FOR THE YEAR 2100)**

Drawn	Checked	Approved	Date
HB	EC	SK	07/2017

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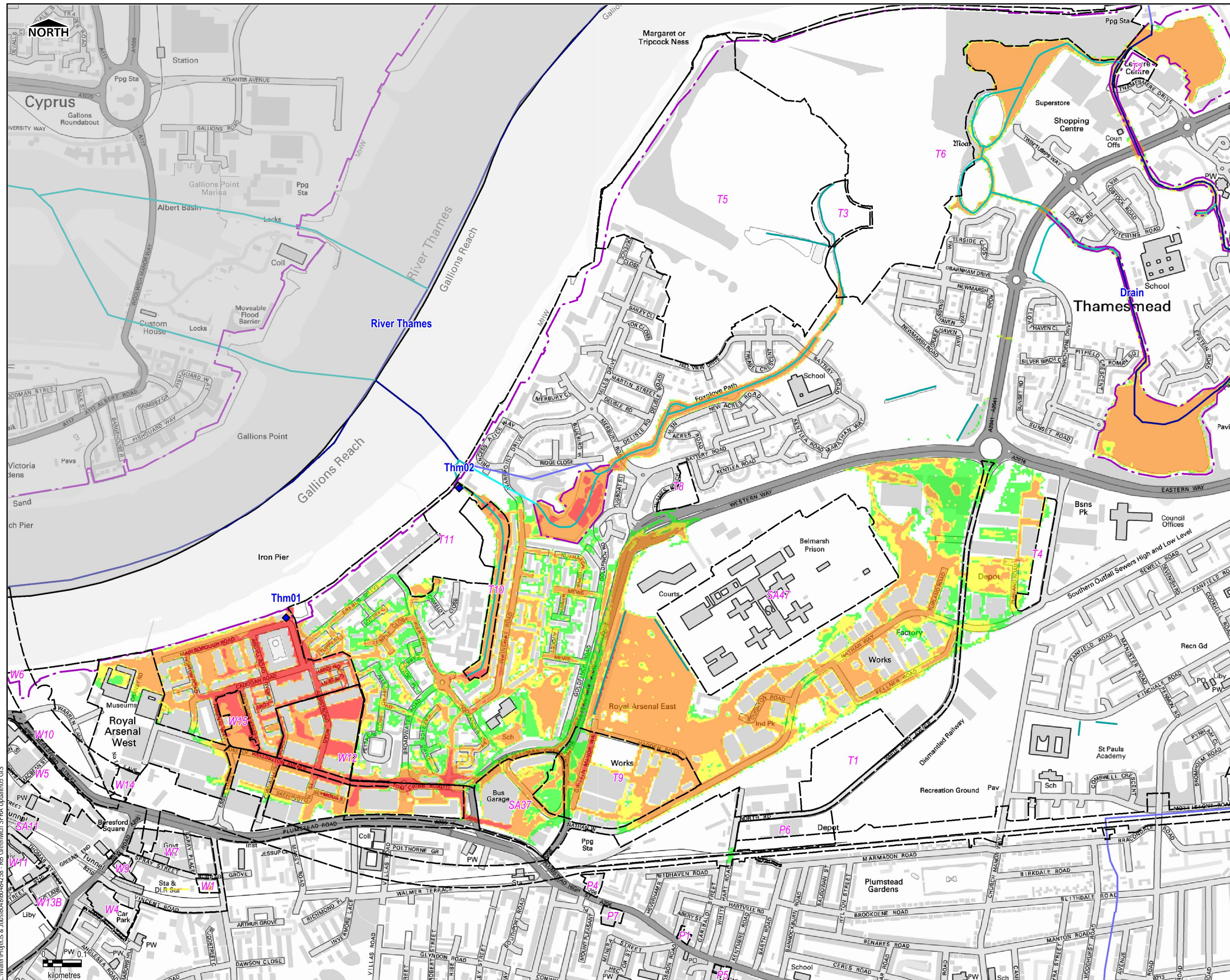
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FIGURE C2	02

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GREENWICH
One Tree Hill
0.2 kilometres



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LEGEND

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- Watercourses
 - Main River - Surface
 - Main River - Culverted
 - Ordinary Watercourse - Surface
 - Ordinary Watercourse - Culverted
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- Flood Defences
- Modelled Breach Locations

Notes

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Revision Details	Suffix

Purpose of Issue: **VERSION 2**

Client: **ROYAL BOROUGH OF GREENWICH**

Project Title: **ROYAL BOROUGH OF GREENWICH LEVEL 1 STRATEGIC FLOOD RISK ASSESSMENT**

Drawing Title: **MAXIMUM HAZARD RATING - THM1 (MLWL FOR THE YEAR 2100)**

Drawn	Checked	Approved	Date
SL	SK	SK	07/2017

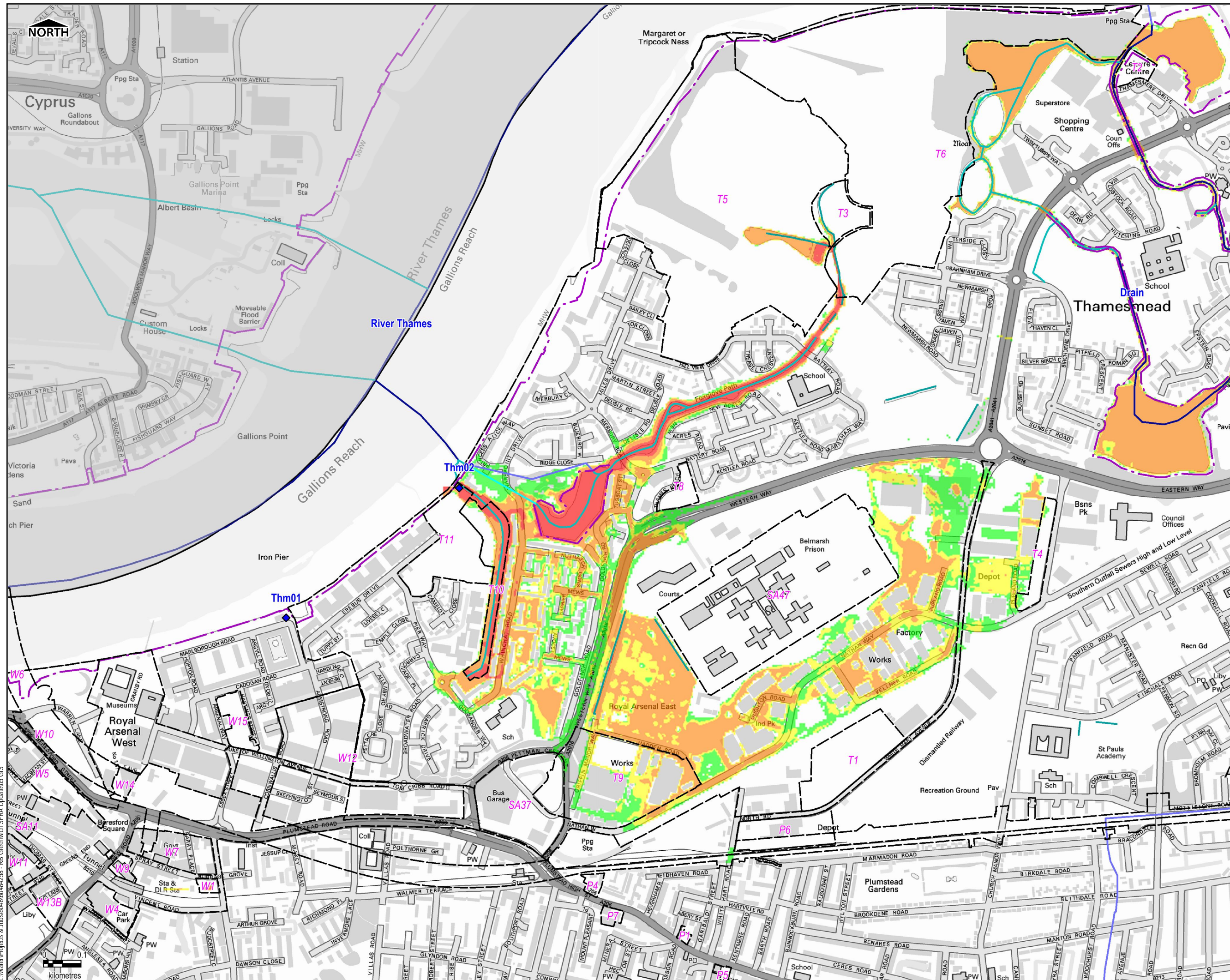
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FIGURE C3	02

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LEGEND

- Administrative Boundaries
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- Modelled Breach Locations

Notes

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Revision Details	Suffix

Purpose of Issue: **VERSION 2**

Client: **ROYAL BOROUGH OF GREENWICH**

Project Title: **ROYAL BOROUGH OF GREENWICH LEVEL 1 STRATEGIC FLOOD RISK ASSESSMENT**

Drawing Title: **MAXIMUM HAZARD RATING -THM2 (MLWL FOR THE YEAR 2100)**

Drawn	Checked	Approved	Date
SL	SK	SK	07/2017

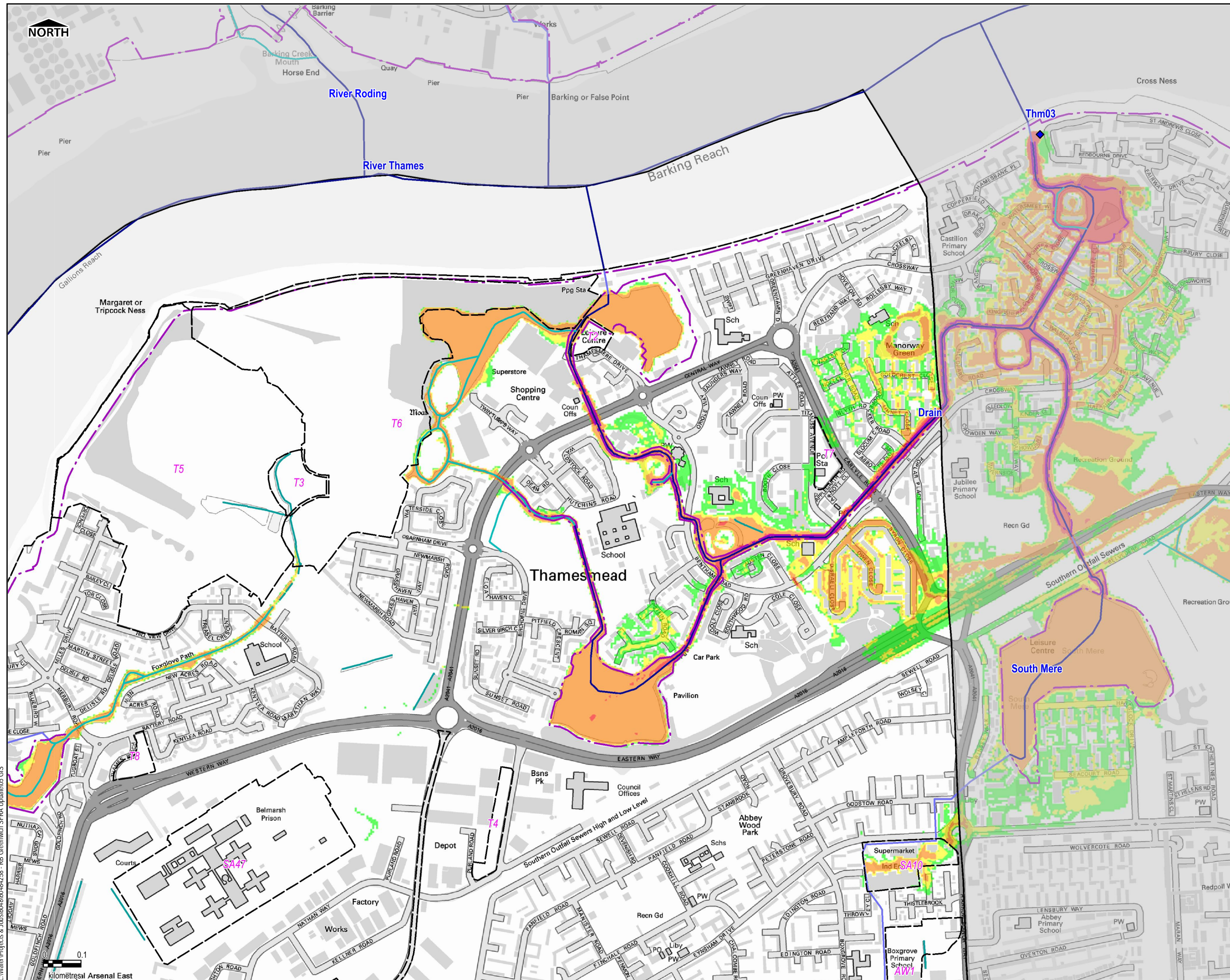
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FIGURE C4	02

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LEGEND

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Notes

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Revision Details		Suffix	

Purpose of Issue: **VERSION 2**

Client: **ROYAL BOROUGH OF GREENWICH**

Project Title: **ROYAL BOROUGH OF GREENWICH LEVEL 1 STRATEGIC FLOOD RISK ASSESSMENT**

Drawing Title: **MAXIMUM HAZARD RATING - THM3 (MLWL FOR THE YEAR 2100)**

Drawn	Checked	Approved	Date
SL	SK	SK	07/2017

AECOM Internal Project No: 60484258 Scale at A3: 1:9,000

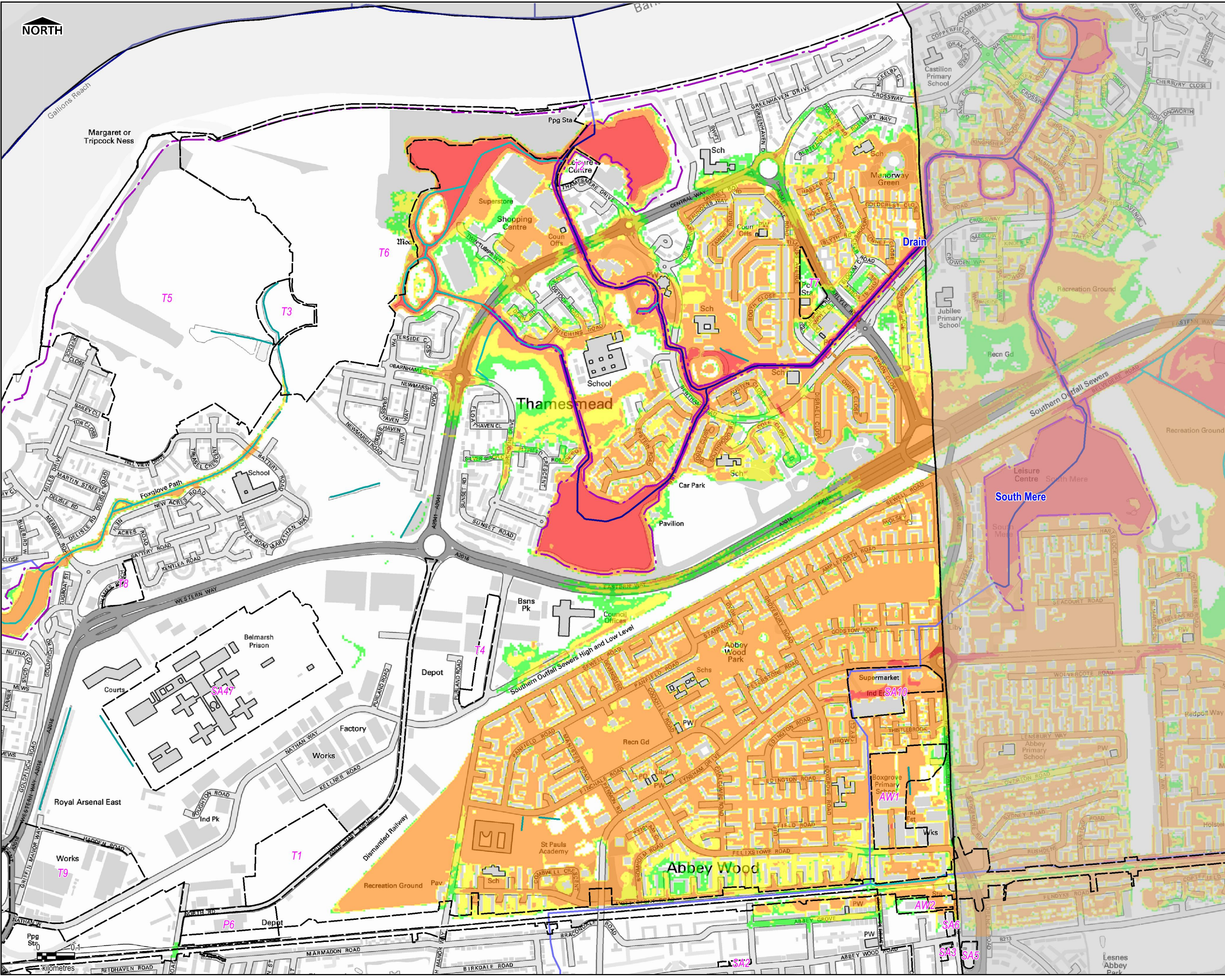
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FIGURE C5	02

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0.1
Kilometres Arsenal East



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LEGEND

- Administrative Boundaries
- Watercourses
 - Main River - Surface
 - Main River - Culverted
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- Flood Hazard Rating
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- ◆ Modelled Breach Locations

Notes

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Revision Details	Suffix
Purpose of Issue	

VERSION 2

Client
ROYAL BOROUGH OF GREENWICH

Project Title
**ROYAL BOROUGH OF GREENWICH
 LEVEL 1 STRATEGIC FLOOD RISK
 ASSESSMENT**

Drawing Title
**MAXIMUM HAZARD RATING -THM4
 (MLWL FOR THE YEAR 2100)**

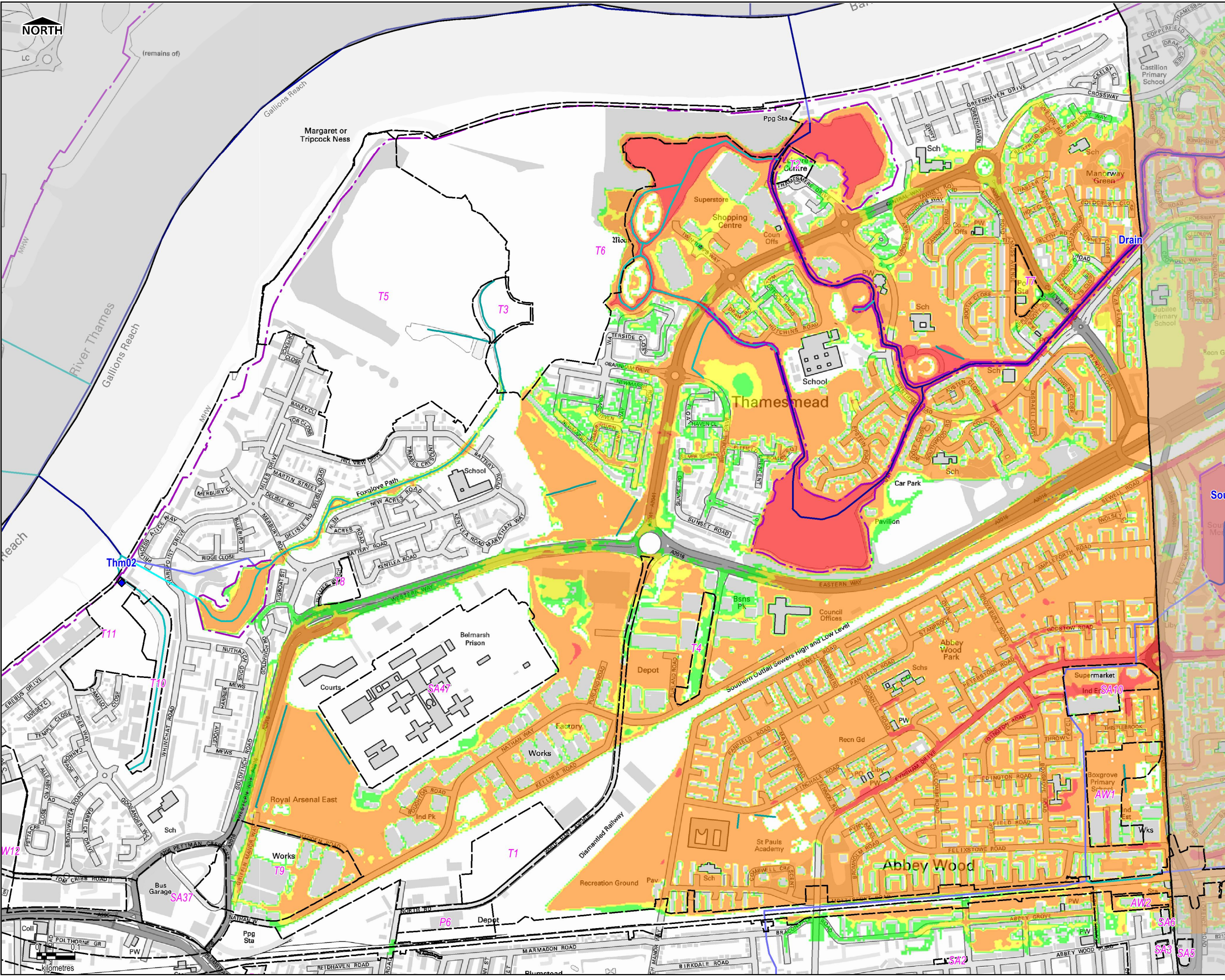
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- LEGEND**
- Administrative Boundaries
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Purpose of Issue	

VERSION 2

Client
ROYAL BOROUGH OF GREENWICH

Project Title
**ROYAL BOROUGH OF GREENWICH
 LEVEL 1 STRATEGIC FLOOD RISK
 ASSESSMENT**

Drawing Title
**MAXIMUM HAZARD RATING -THM5
 (MLWL FOR THE YEAR 2100)**

Drawn	Checked	Approved	Date
SL	SK	SK	07/2017

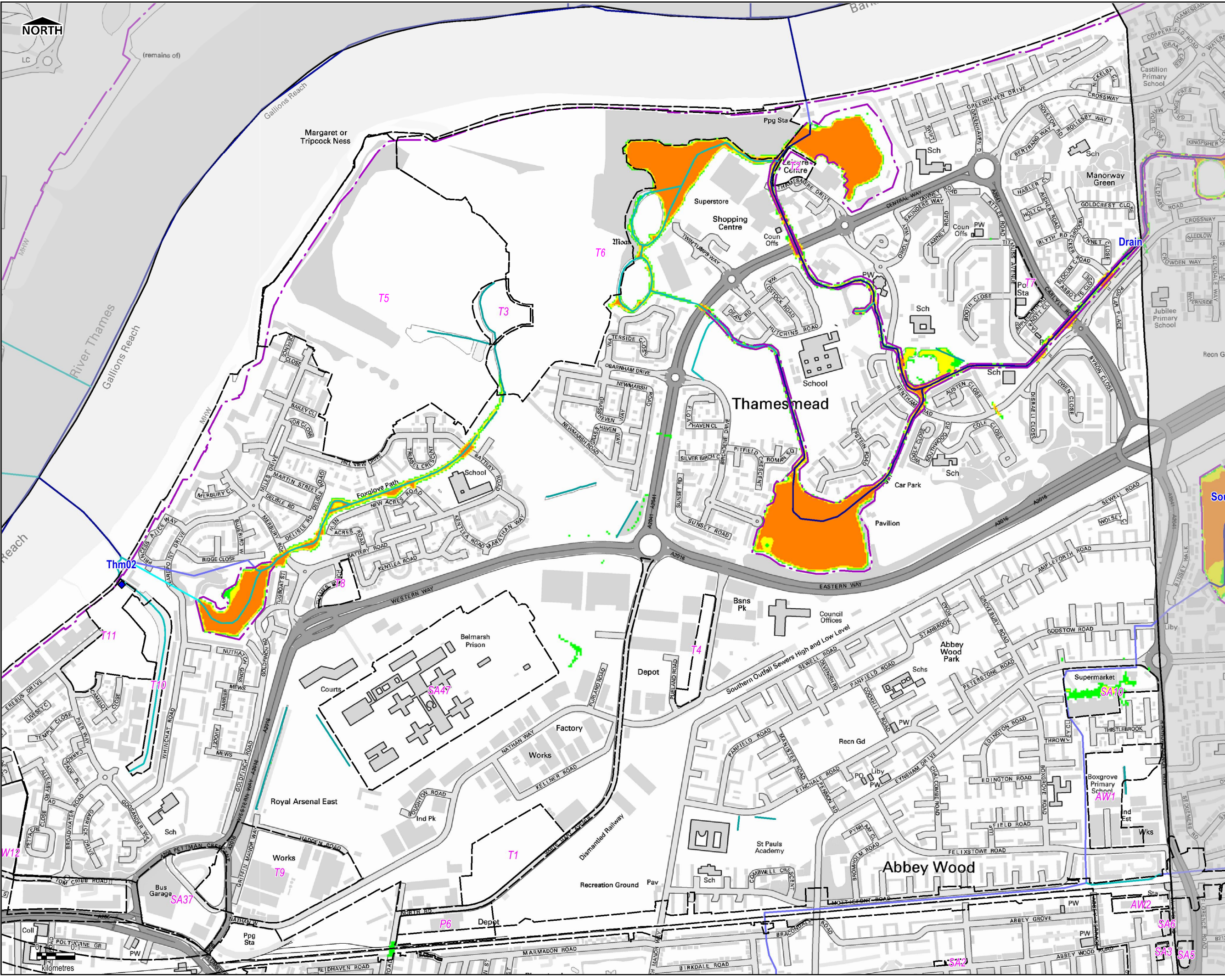
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FIGURE C7	02

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- LEGEND**
- Administrative Boundaries
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Purpose of Issue: **VERSION 2**

Client: **ROYAL BOROUGH OF GREENWICH**

Project Title: **ROYAL BOROUGH OF GREENWICH LEVEL 1 STRATEGIC FLOOD RISK ASSESSMENT**

Drawing Title: **MAXIMUM HAZARD RATING - THM6 (MLWL FOR THE YEAR 2100)**

Drawn	Checked	Approved	Date
SL	SK	SK	07/2017

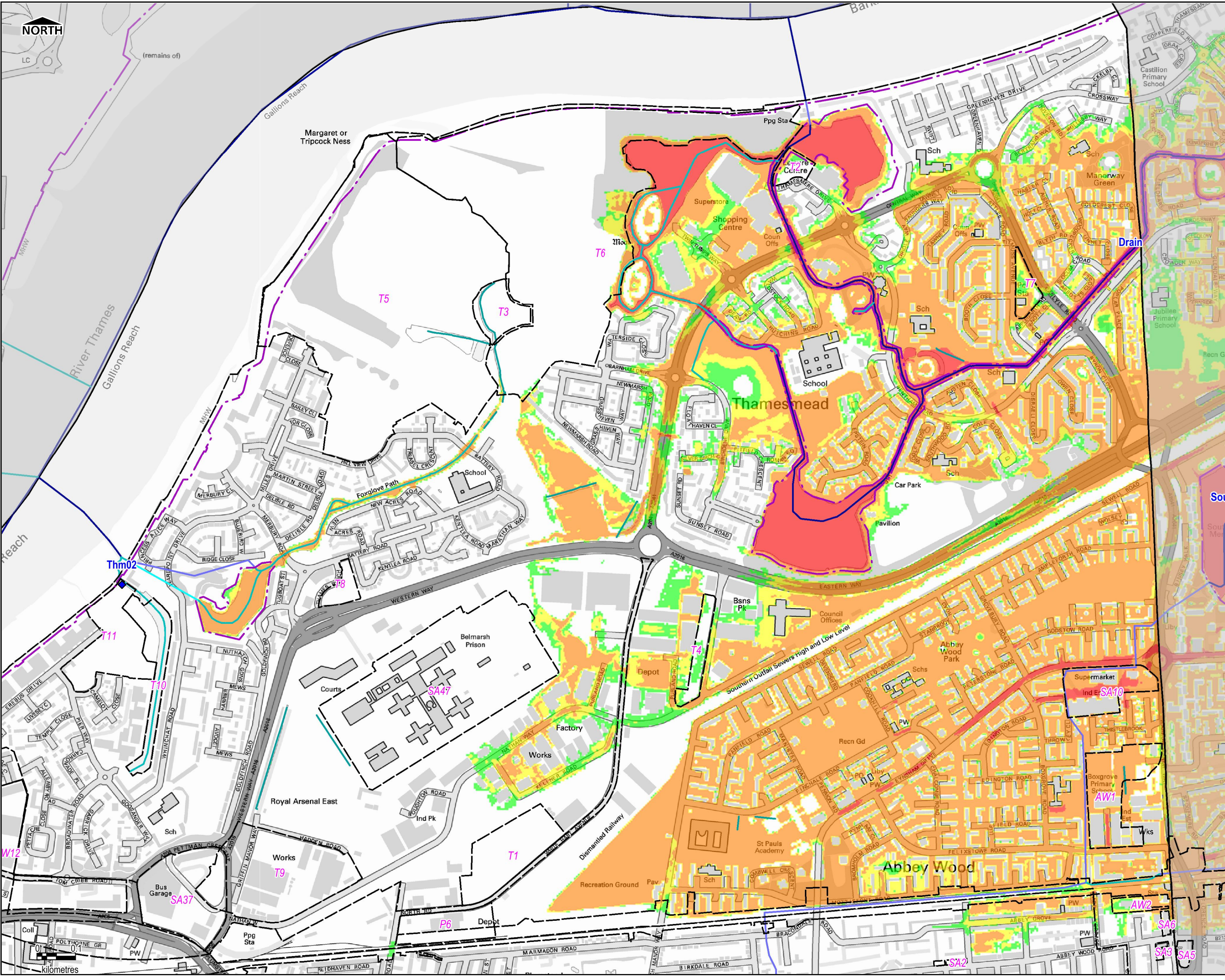
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FIGURE C8	02

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LEGEND

- Administrative Boundaries
- Watercourses
 - Main River - Surface
 - Main River - Culverted
 - Ordinary Watercourse - Surface
 - Ordinary Watercourse - Culverted
- Flood Hazard Rating
 - Low (Caution)
 - Moderate (Danger for some)
 - Significant (Danger for most people)
 - Extreme (Danger for all)
 - Flood Defences
 - ◆ Modelled Breach Locations

Notes

As part of the Environment Agency rolling programme of flood risk modelling studies, tidal breach modelling has been undertaken for the River Thames for a number of breach locations along the Thames tidal frontage (Thames Embayment Modelling, CH2MHill February 2015). One of the outputs of this modelling is flood hazard mapping which categorises the danger to people for different combinations of flood water depth and velocity. The derivation of these categories is based on the methodology set out by Defra in Flood Risks to People FD2320 using the following equation: Flood Hazard Rating = $(v+0.5)^D + DF$ where v = velocity (m/s), D = depth (m), DF = debris factor.

The study area for this SFRA is both upstream and downstream of the Thames Barrier. For breach locations downstream of the Barrier, the 0.5% and 0.1% AEP design events have been simulated for the present day (2014) and including climate change to 2065 and 2100.

For breach locations upstream of the Barrier, return periods cannot be applied to water levels in the same manner as they can downstream of the Barrier, as water levels are a function of the maximum tide level allowed through the Barrier, as defined by the barrier closure rule / matrix. As a result, a Maximum Likely Water Level (MLWL) is applied and scenarios have been simulated for the MLWL for the present day (2014) and including climate change to 2065 and 2100.

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

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Revision Details	Suffix		
Purpose of Issue	VERSION 2		
Client	ROYAL BOROUGH OF GREENWICH		
Project Title	ROYAL BOROUGH OF GREENWICH LEVEL 1 STRATEGIC FLOOD RISK ASSESSMENT		
Drawing Title	MAXIMUM HAZARD RATING - THM7 (MLWL FOR THE YEAR 2100)		
Drawn	Checked	Approved	Date
SL	SK	SK	07/2017
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Drawing Number	Rev
FIGURE C9	02

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