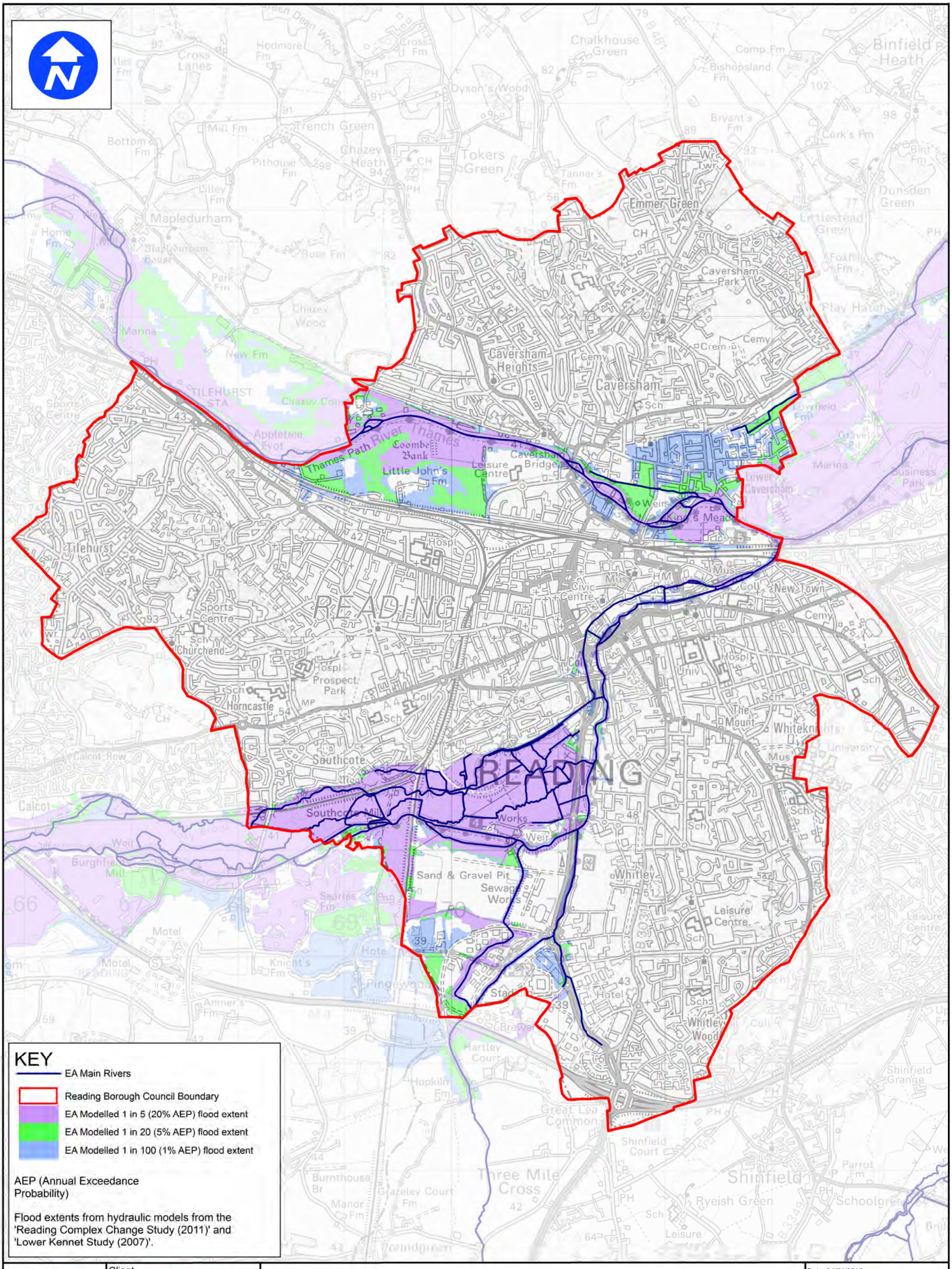


pba peterbrett
www.peterbrett.com
Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

Client: Reading Borough Council — Working better with you

RBC SFRA

Environment Agency Modelled Flood Extents

Date: 04/04/2016
Scale: NTS
Drawn By: SB Checked By: RF
Rev: -
Figure Number
Map F5

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\

KEY

EA Main Rivers

North Character Area

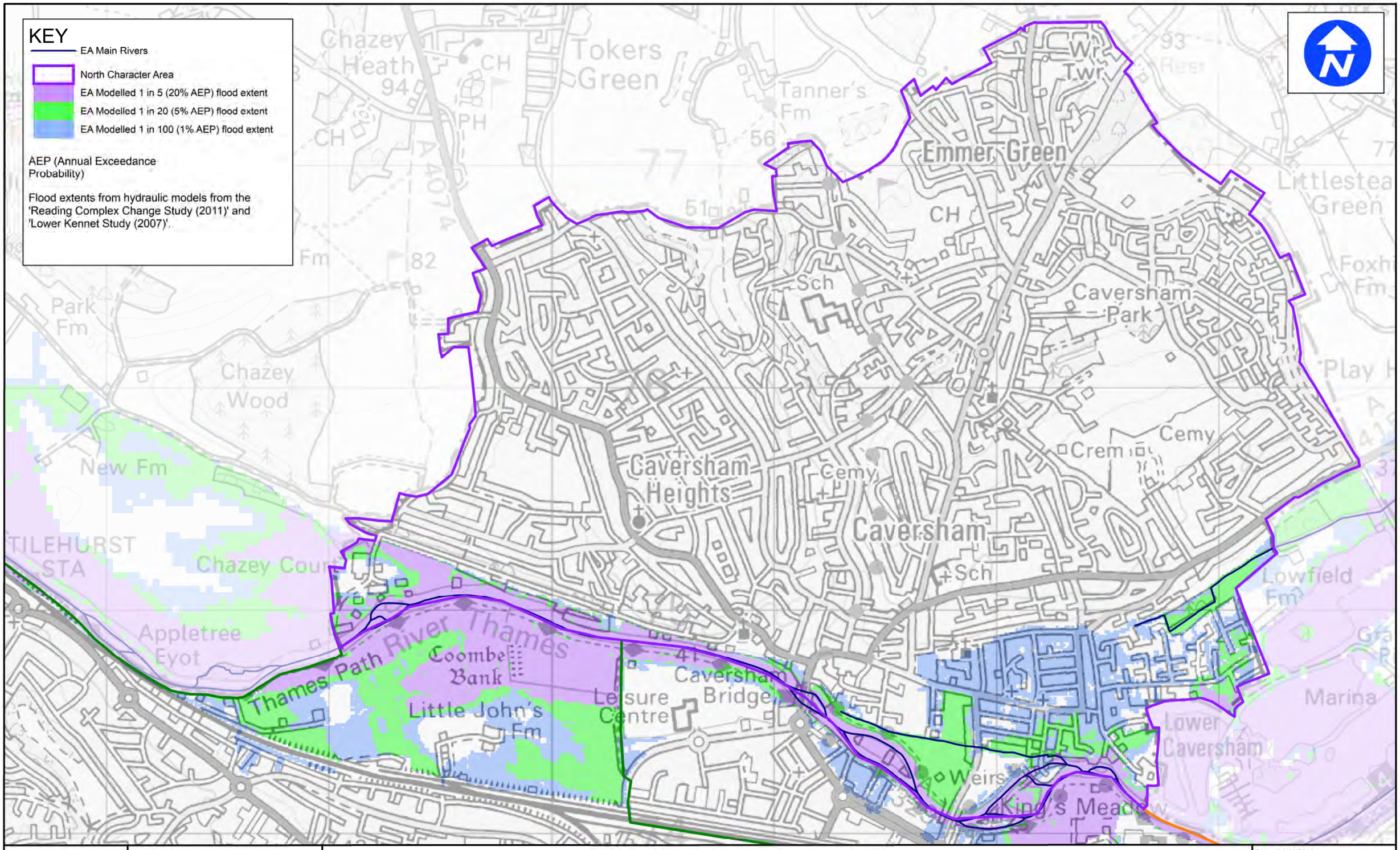
EA Modelled 1 in 5 (20% AEP) flood extent

EA Modelled 1 in 20 (5% AEP) flood extent

EA Modelled 1 in 100 (1% AEP) flood extent

AEP (Annual Exceedance Probability)

Flood extents from hydraulic models from the 'Reading Complex Change Study (2011)' and 'Lower Kennet Study (2007)'.



pba peterbrett

www.peterbrett.com

Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

Client

Reading Borough Council
Working better with you

RBC SFRA

Character Area North
Environment Agency Modelled Flood Extents

Date: 04/04/2016

Scale: NTS

Drawn By: SB Checked By: RF

Rev: -

Figure Number

Map F5_N

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\

KEY

EA Main Rivers

North Character Area

PBA modelled 1 in 100 (1% AEP) plus 70% climate change flood extent

PBA modelled 1 in 100 (1% AEP) plus 35% climate change flood extent

PBA modelled 1 in 100 (1% AEP) plus 25% climate change flood extent

- AEP (Annual Exceedance Probability)
- Flood extents based on PBA's updated hydraulic modelling for the EA climate change guidance (February 2016).
- Based on the EA baseline models for the River Thames (Reading Complex Change Study (2011)) and River Kennet (Lower Kennet Study (2007)).
- Climate change assessed for 'Upper End' (70%) , Higher Central (35%) and Central (25%) bands for 2115 epoch, appropriate for the Thames River Basin area.

pba peterbrett

www.peterbrett.com

Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

Client

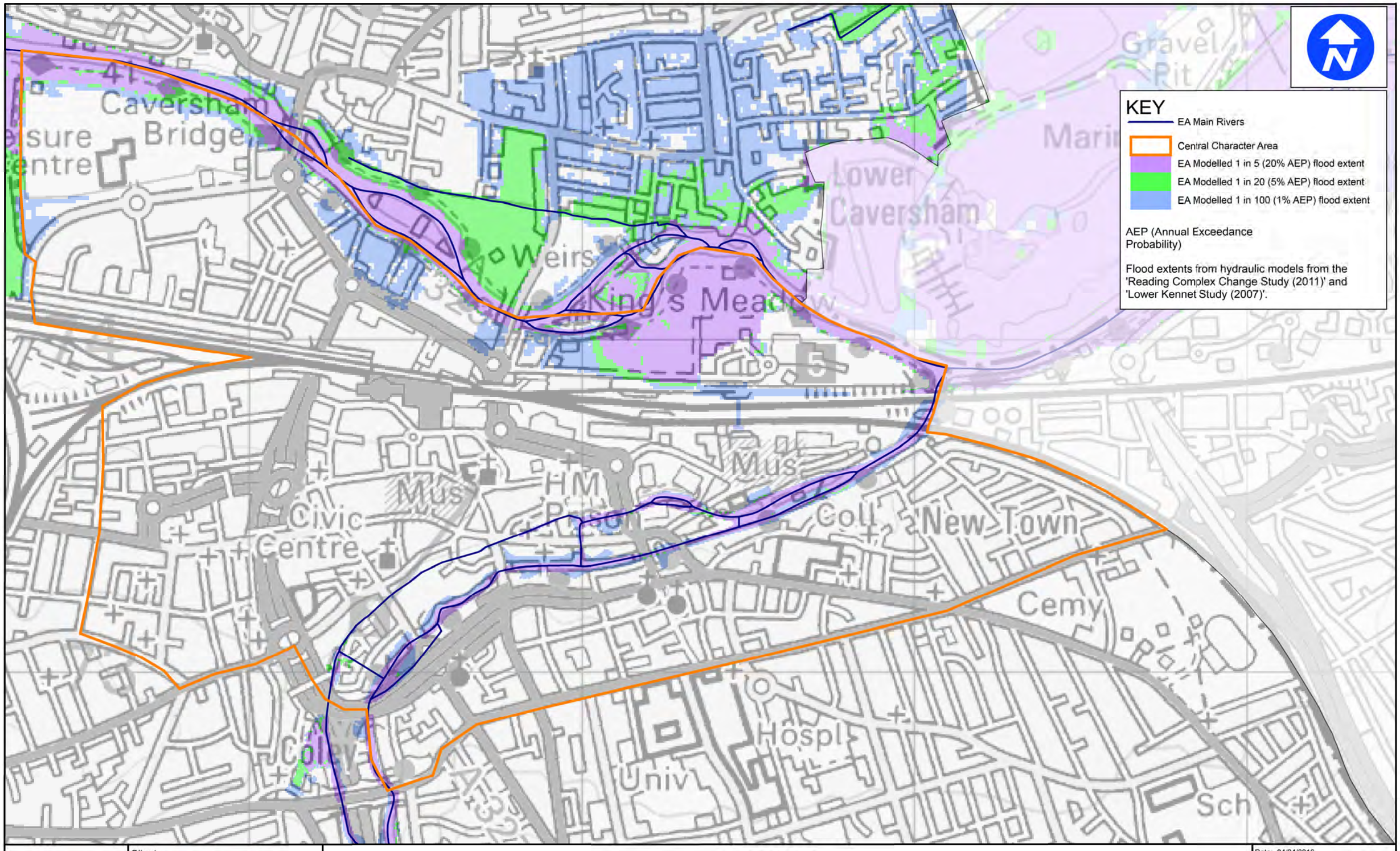
Reading Borough Council
Working better with you

RBC SFRA

Character Area North
Modelled Flood Extents -Climate Change Allowances

Date:	09/03/2017
Scale:	NTS
Drawn By:	SB
Checked By:	RF
Rev:	-
Figure Number	**Map F5_N_CC**

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\



peterbrett
www.peterbrett.com
Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

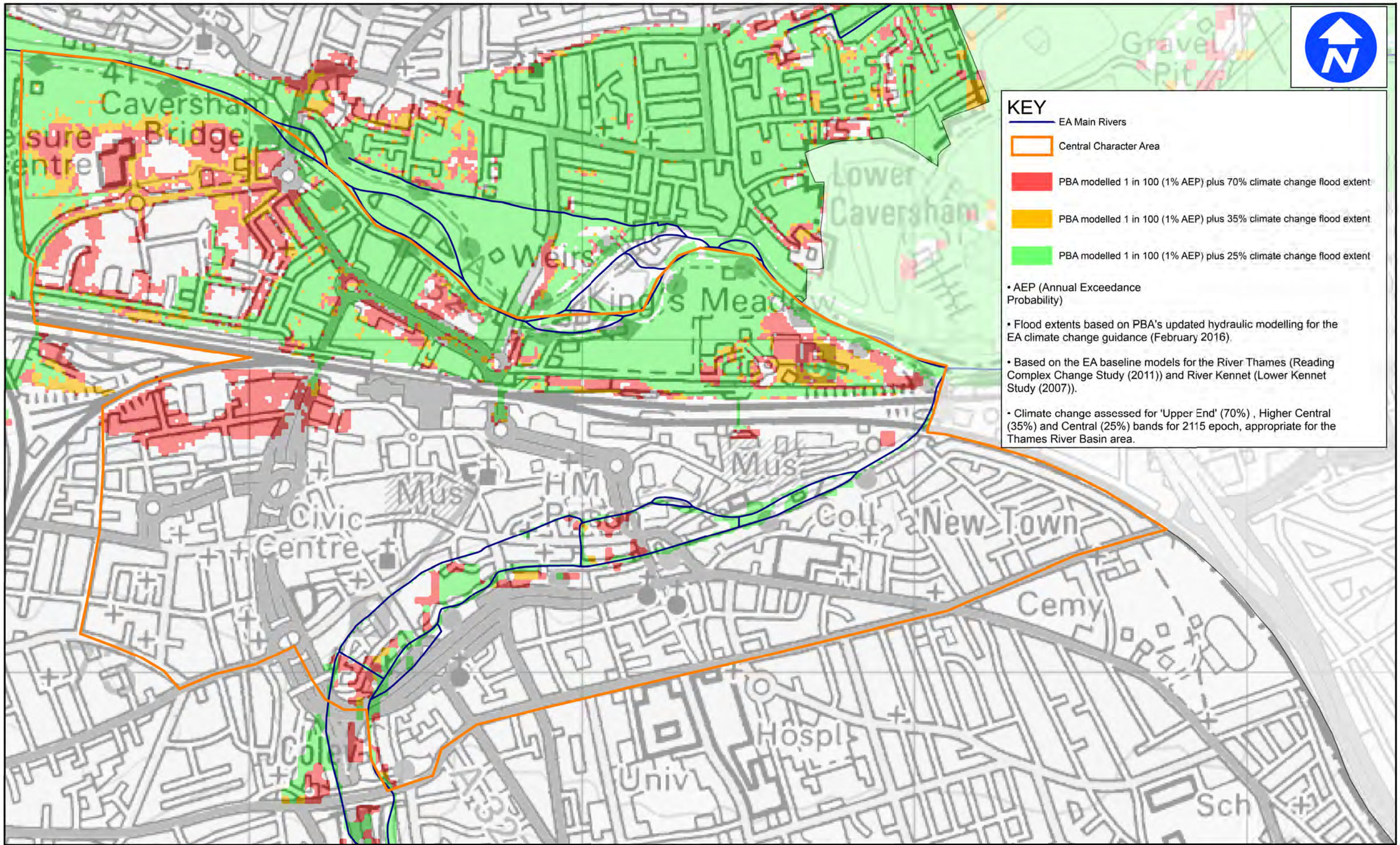
Client
Reading Borough Council
Working better with you

RBC SFRA

Character Area Central
Environment Agency Modelled Flood Extents

Date: 04/04/2016
Scale: NTS
Drawn By: SB Checked By: RF
Rev: -
Figure Number
Map F5_C

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\



pba peterbrett
www.peterbrett.com
Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

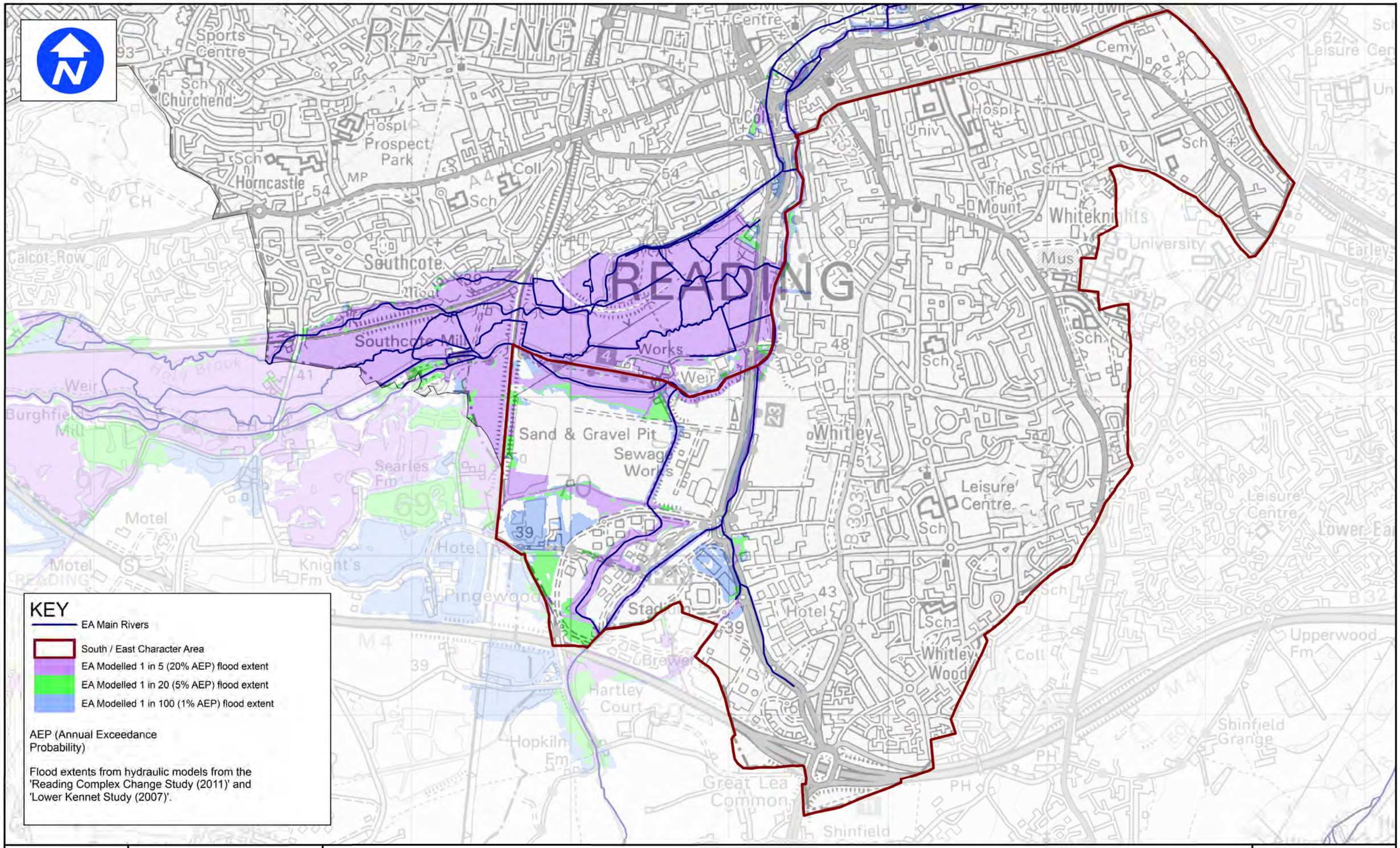
Client
Reading Borough Council
Working better with you

RBC SFRA

Character Area Central
Modelled Flood Extents -Climate Change Allowances

Date: 09/03/2017
Scale: NTS
Drawn By: SB Checked By: RF
Rev: -
Figure Number
Map F5_C_CC

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\



pba peterbrett
www.peterbrett.com
Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

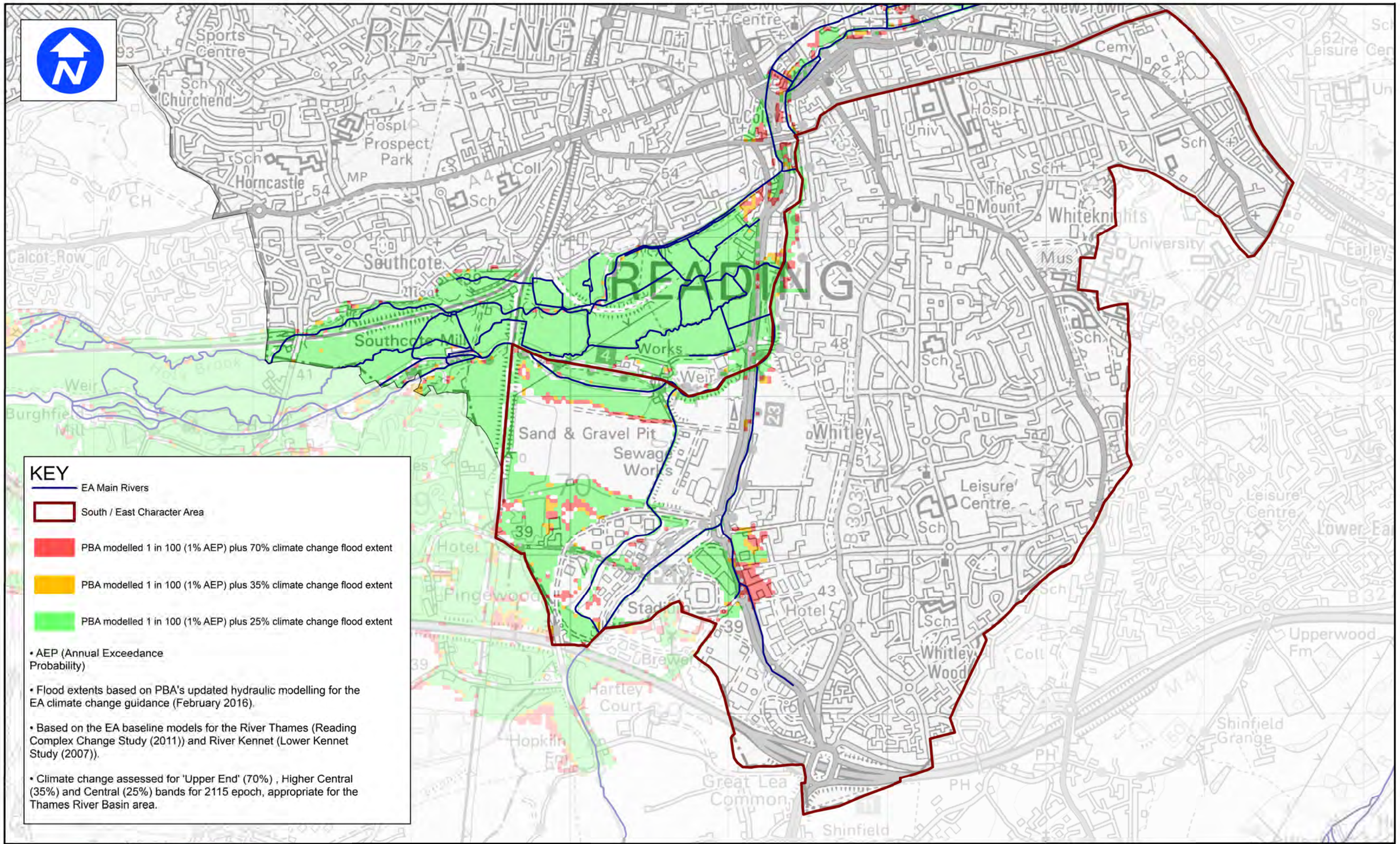
Client
Reading Borough Council
Working better with you

RBC SFRA

Character Area South / East
Environment Agency Modelled Flood Extents

Date: 04/04/2016
Scale: NTS
Drawn By: SB Checked By: RF
Rev: A
Figure Number
Map F5_S

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\



peterbrett
www.peterbrett.com
Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

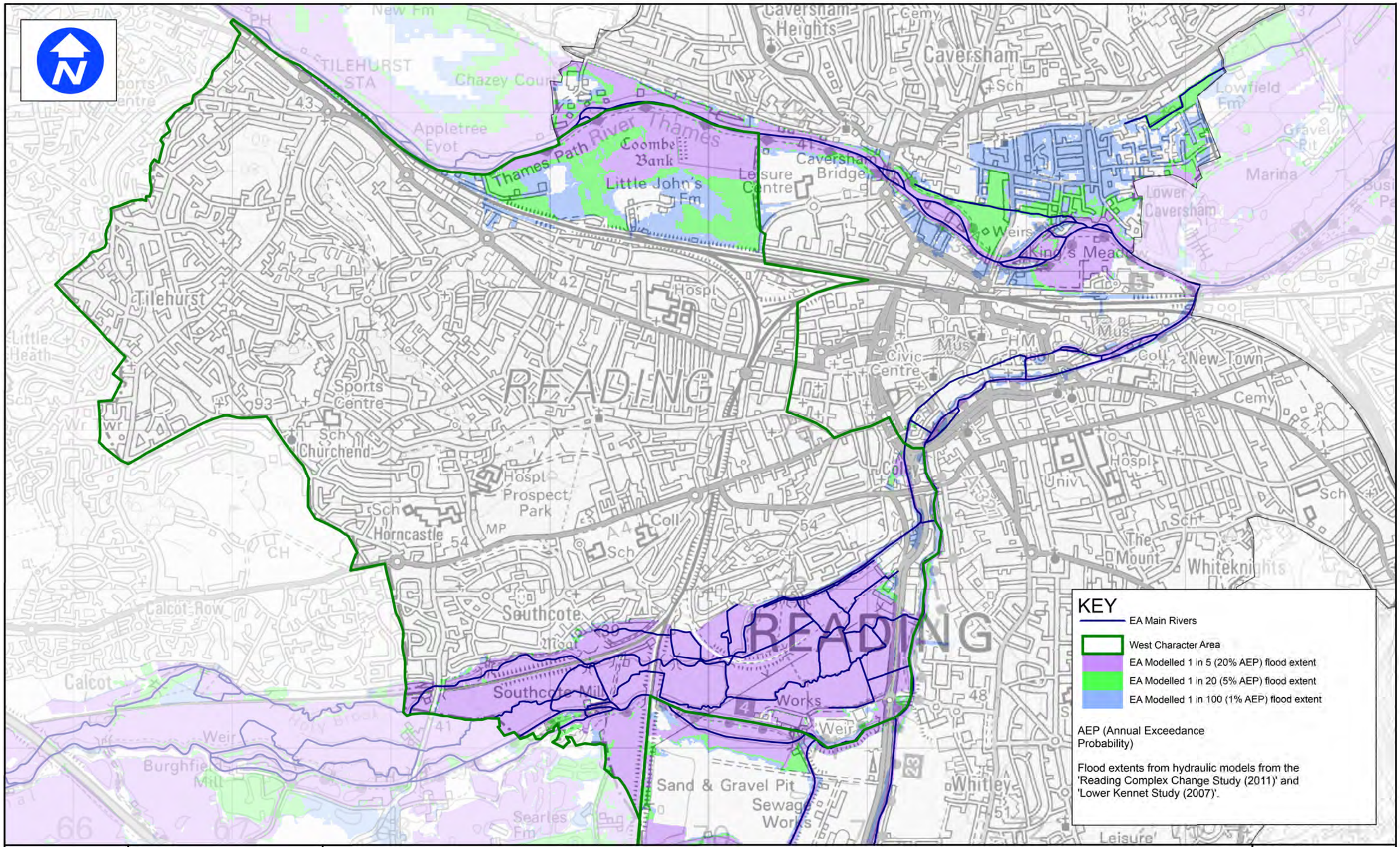
Client
Reading Borough Council
Working better with you

RBC SFRA

Character Area South / East
Modelled Flood Extents -Climate Change Allowances

Date: 09/03/2017
Scale: NTS
Drawn By: SB Checked By: RF
Rev: -
Figure Number
Map F5_S_CC

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\



peterbrett
www.peterbrett.com
Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

Client

Reading Borough Council
Working better with you

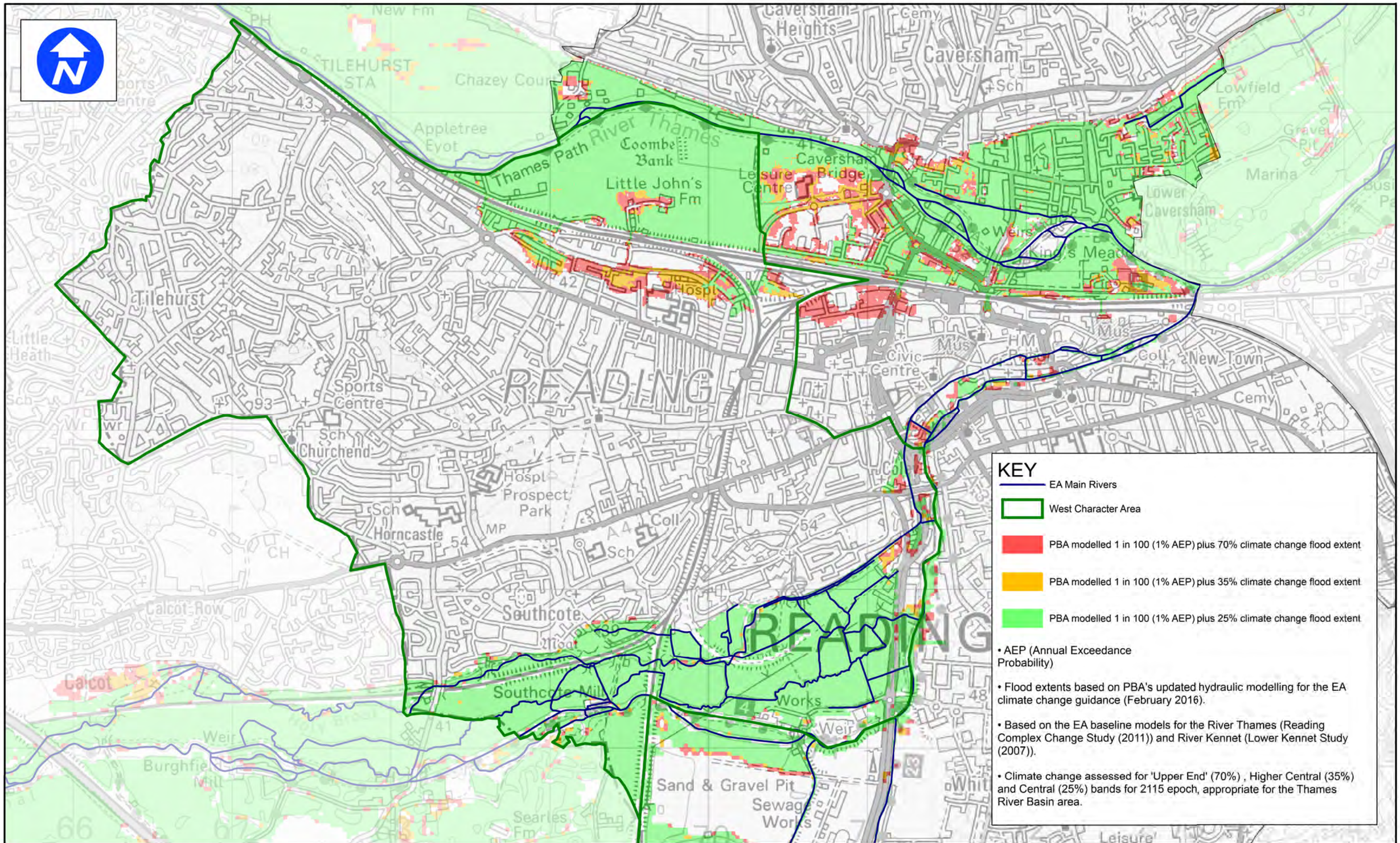
RBC SFRA

Character Area West
Environment Agency Modelled Flood Extents

Date: 04/04/2016
Scale: NTS
Drawn By: SB Checked By: RF
Rev: -
Figure Number

Map F5_W

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\



KEY

- EA Main Rivers
- West Character Area
- PBA modelled 1 in 100 (1% AEP) plus 70% climate change flood extent
- PBA modelled 1 in 100 (1% AEP) plus 35% climate change flood extent
- PBA modelled 1 in 100 (1% AEP) plus 25% climate change flood extent

• AEP (Annual Exceedance Probability)

• Flood extents based on PBA's updated hydraulic modelling for the EA climate change guidance (February 2016).

• Based on the EA baseline models for the River Thames (Reading Complex Change Study (2011)) and River Kennet (Lower Kennet Study (2007)).

• Climate change assessed for 'Upper End' (70%) , Higher Central (35%) and Central (25%) bands for 2115 epoch, appropriate for the Thames River Basin area.

pba peterbrett
www.peterbrett.com
Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

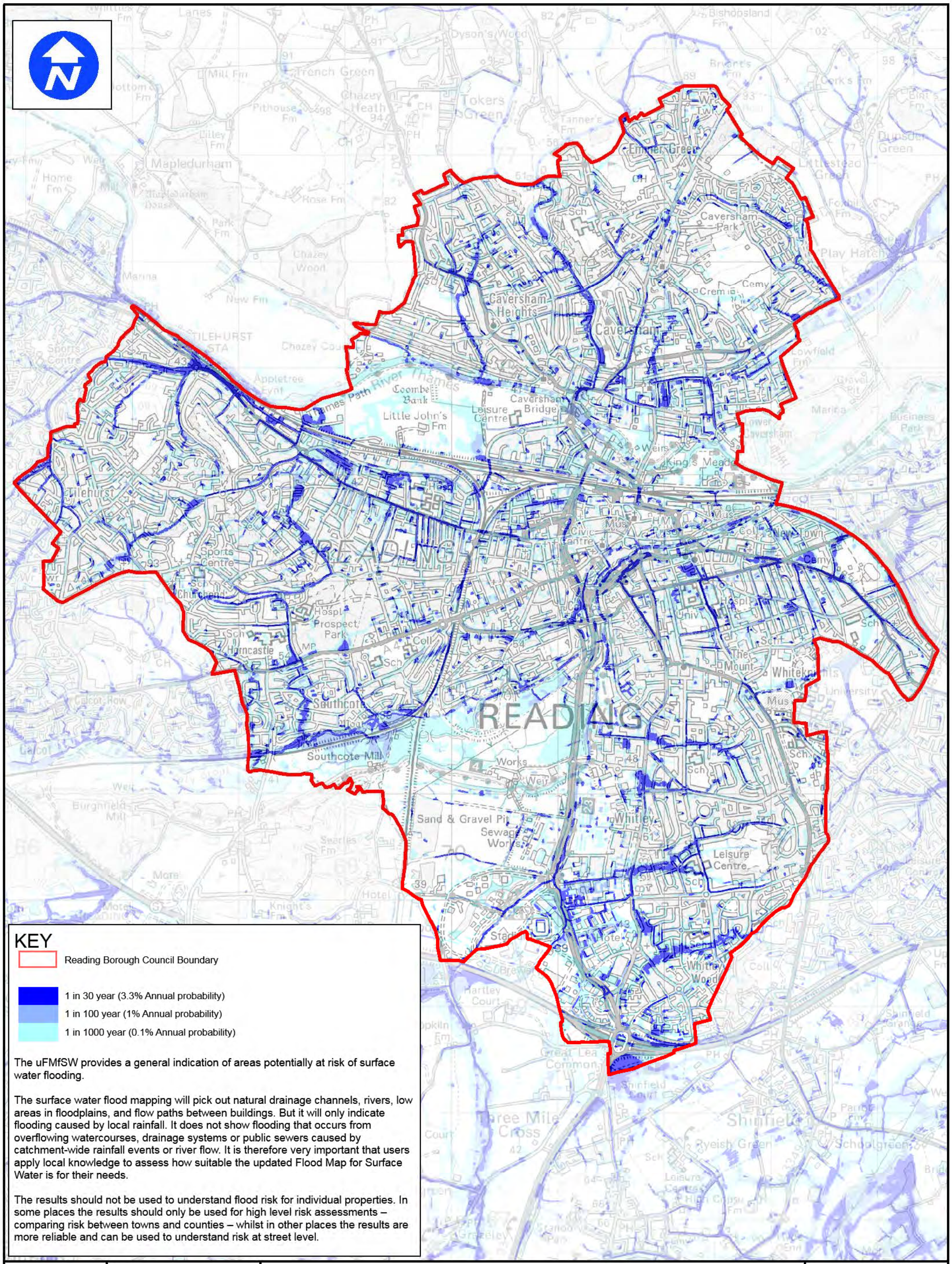
Client: Reading Borough Council — Working better with you

RBC SFRA

Character Area West
Modelled Flood Extents -Climate Change Allowances

Date: 09/03/2017
Scale: NTS
Drawn By: SB Checked By: RF
Rev: -
Figure Number
Map F5_W_CC

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\



KEY

Reading Borough Council Boundary

1 in 30 year (3.3% Annual probability)

1 in 100 year (1% Annual probability)

1 in 1000 year (0.1% Annual probability)

The uFMfSW provides a general indication of areas potentially at risk of surface water flooding.

The surface water flood mapping will pick out natural drainage channels, rivers, low areas in floodplains, and flow paths between buildings. But it will only indicate flooding caused by local rainfall. It does not show flooding that occurs from overflowing watercourses, drainage systems or public sewers caused by catchment-wide rainfall events or river flow. It is therefore very important that users apply local knowledge to assess how suitable the updated Flood Map for Surface Water is for their needs.

The results should not be used to understand flood risk for individual properties. In some places the results should only be used for high level risk assessments – comparing risk between towns and counties – whilst in other places the results are more reliable and can be used to understand risk at street level.

www.peterbrett.com
Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

Client: Reading Borough Council – Working better with you

RBC SFRA

Updated Flood Map for Surface Water (uFMfSW)

Date: 04/04/2016

Scale: NTS

Drawn By: SB Checked By: RF

Rev: -

Figure Number

Map F6

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\

KEY

- Character Area Central
- Character Area North
- Character Area South
- Character Area West
- 1 in 30 year (3.3% Annual Probability)
- 1 in 100 year (1% Annual Probability)
- 1 in 1000 year (0.1% Annual Probability)

The uFMfSW provides a general indication of areas potentially at risk of surface water flooding.

The uFMfSW is not suitable for determining whether an individual property is at risk of flooding but provides an indication of areas where surface water may be stored in times of flood and surface water flow routes.

pba peterbrett

www.peterbrett.com

Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

Client

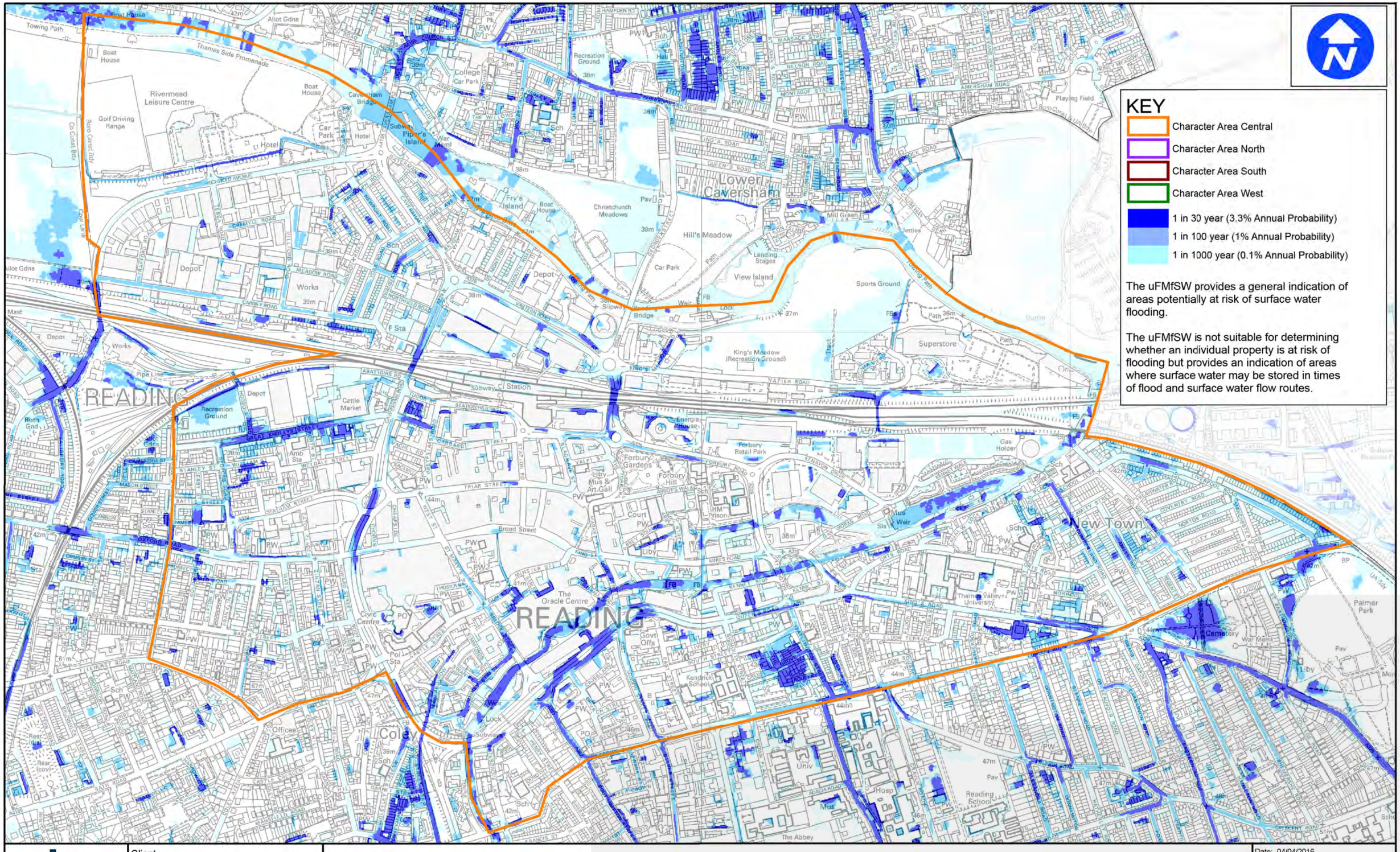
Reading Borough Council
Working better with you

RBC SFRA

Character Area North
Updated Flood Map for Surface Water (uFMfSW)

Date: 04/04/2016
Scale: NTS
Drawn By: SB Checked By: RF
Rev: -
Figure Number

Map F6_N



pba peterbrett

www.peterbrett.com

Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

Client

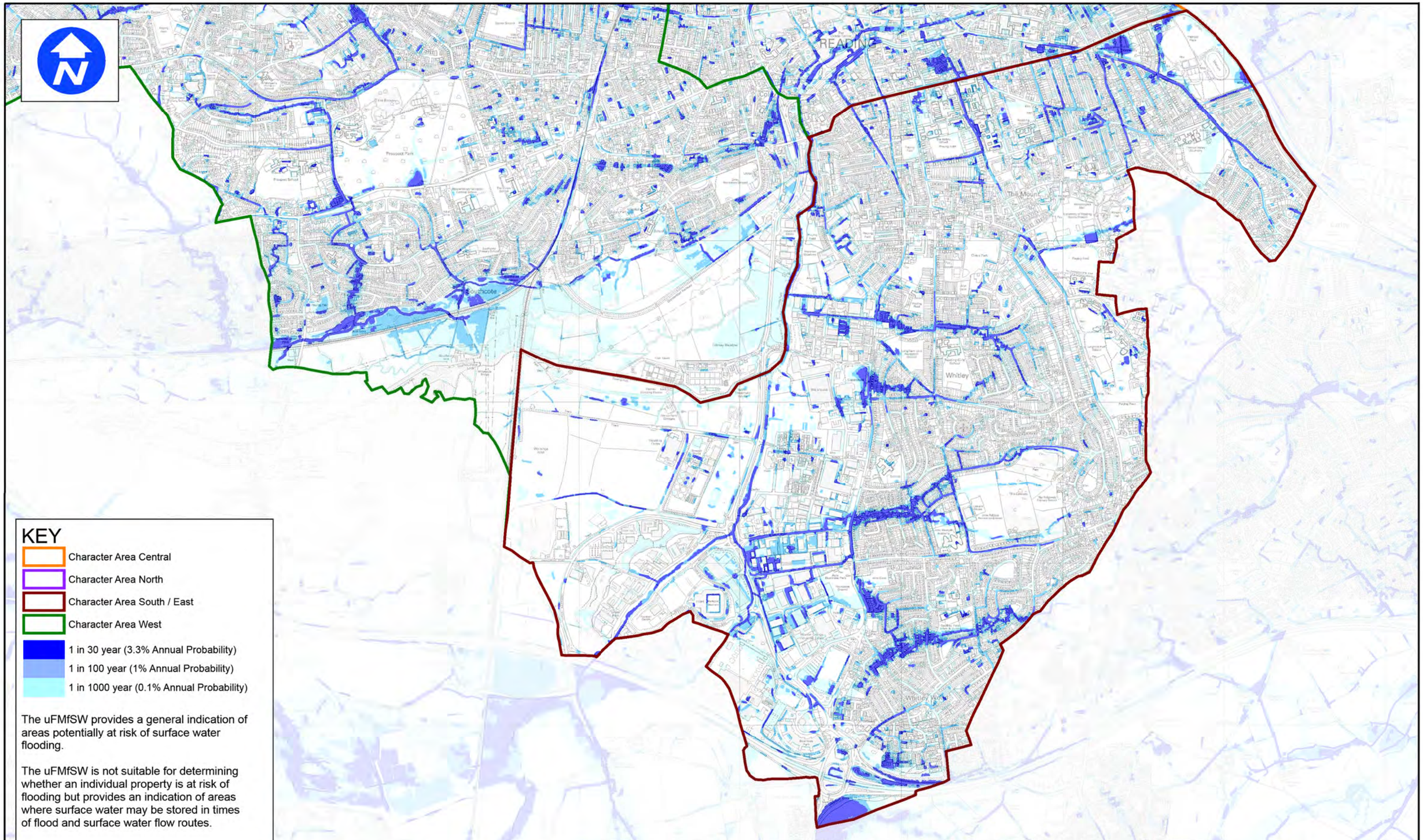
Reading Borough Council
Working better with you

RBC SFRA

Character Area Central
Updated Flood Map for Surface Water (uFMfSW)

Date:	04/04/2016
Scale:	NTS
Drawn By:	SB
Checked By:	RF
Rev:	-
Figure Number	Map F6_C

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\



KEY

- Character Area Central
- Character Area North
- Character Area South / East
- Character Area West
- 1 in 30 year (3.3% Annual Probability)
- 1 in 100 year (1% Annual Probability)
- 1 in 1000 year (0.1% Annual Probability)

The uFMfSW provides a general indication of areas potentially at risk of surface water flooding.

The uFMfSW is not suitable for determining whether an individual property is at risk of flooding but provides an indication of areas where surface water may be stored in times of flood and surface water flow routes.

pba peterbrett

www.peterbrett.com

Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

Client: Reading Borough Council — Working better with you

RBC SFRA

Character Area South / East
Updated Flood Map for Surface Water (uFMfSW)

Date: 04/04/2016
Scale: NTS
Drawn By: SB Checked By: RF
Rev: A
Figure Number

Map F6_S

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\

KEY

- Character Area Central
- Character Area North
- Character Area South
- Character Area West
- 1 in 30 year (3.3% Annual Probability)
- 1 in 100 year (1% Annual Probability)
- 1 in 1000 year (0.1% Annual Probability)

The uFMfSW provides a general indication of areas potentially at risk of surface water flooding.

The uFMfSW is not suitable for determining whether an individual property is at risk of flooding but provides an indication of areas where surface water may be stored in times of flood and surface water flow routes.

peterbrett

www.peterbrett.com

Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

Client

Reading Borough Council
Working better with you

RBC SFRA

Character Area West
Updated Flood map for Surface Water (uFMfSW)

Date: 04/04/2016
Scale: NTS
Drawn By: SB Checked By: RF
Rev: -
Figure Number

Map F6_W

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo

KEY

EA Main River

Whiteknights Lake Hydrological Catchment Area

less than 0.3 m, less than 0.5 m/s
less than 0.3 m, between 0.5 and 2 m/s
less than 0.3 m, greater than 2 m/s

between 0.3 and 2 m, less than 0.5 m/s
between 0.3 and 2 m, between 0.5 and 2 m/s
between 0.3 and 2 m, greater than 2 m/s

greater than 2 m, less than 0.5 m/s
greater than 2 m, between 0.5 and 2 m/s

EA reservoir flood extent outside of RBC boundary

INSET MAP
Whiteknights Lake

Overflow Pipe (general direction)

Auxilliary Spillway

Whiteknights Lake

Normal Water Level approx. 57.6 m AOD

Main Lake

Middle Lake

Upper Lake

peterbrett
www.peterbrett.com
Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

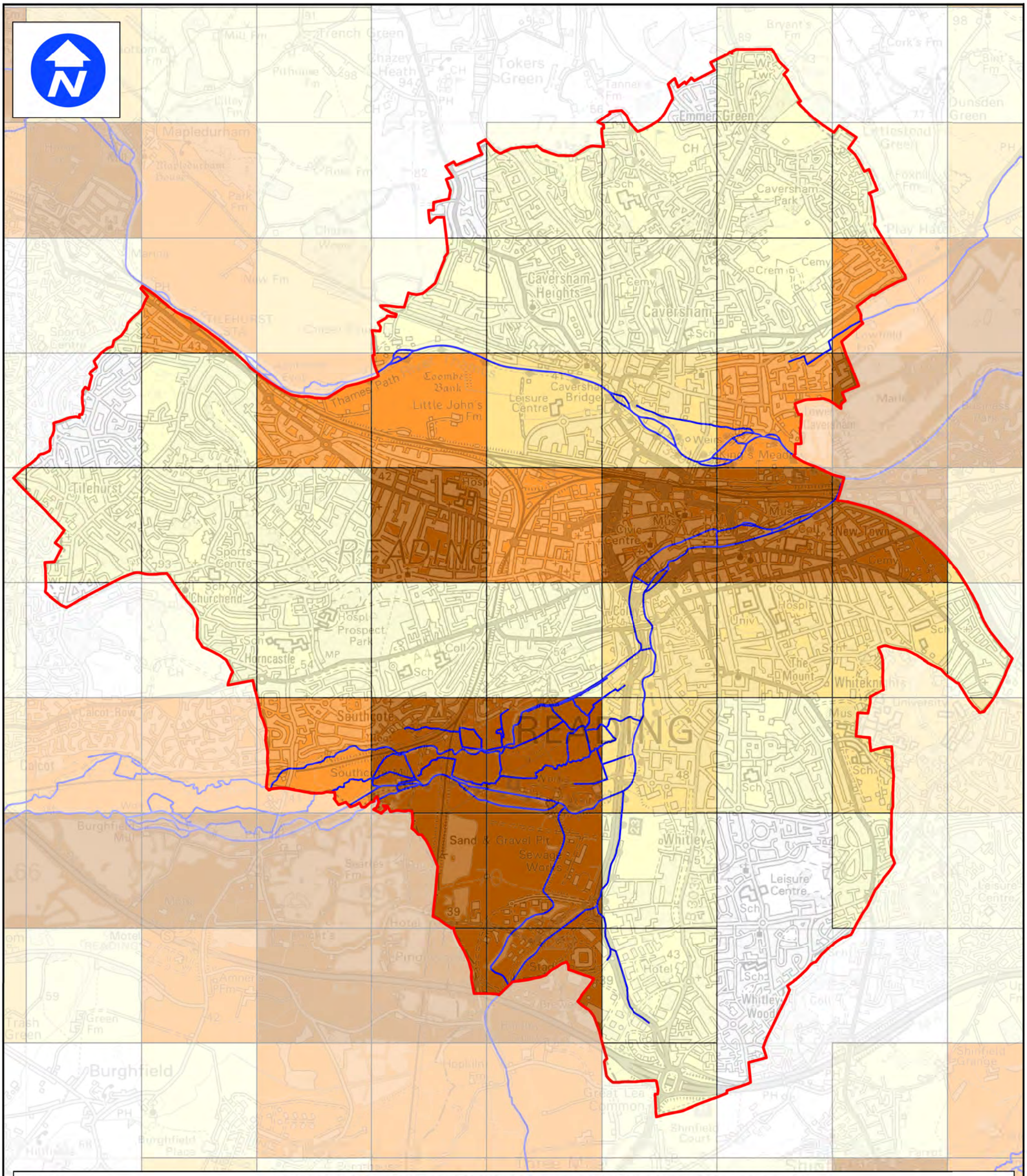
Client: Reading Borough Council — Working better with you

RBC SFRA

Detailed Reservoir Flood Map
Whiteknights Lake

Date: 04/04/16
Scale: NTS
Drawn By: SB Checked By: RF
Rev: -
Figure Number
Map F7

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\



KEY

Reading Borough Council Boundary

Less than 25%

Between 25% and 50%

Between 50% and 75%

Greater than 75%

EA Main River

The Areas Susceptible to Groundwater Flooding map is based on the underlying geology across a 1 km square grid.

It does not take account of the chance of flooding from groundwater rebound. It shows the proportion of each 1km grid square where geological and hydrogeological conditions show that groundwater might emerge. The susceptible areas are represented by one of four area categories (listed to the right) showing the proportion of each 1km square that is susceptible to groundwater emergence. It does not show the likelihood of groundwater flooding occurring.

In common with the majority of datasets showing areas which may experience groundwater emergence, this dataset covers a large area of land, and only isolated locations within the overall susceptible area are actually likely to suffer the consequences of groundwater flooding.

The data should not be interpreted as identifying areas where groundwater is actually likely to flow or pond, thus causing flooding, but may be of use to LLFAs in identifying where, for example, further studies may be useful.

The data was produced to annotate indicative Flood Risk Areas with information to allow LLFAs to determine whether there may be a risk of flooding from groundwater

peterbrett

www.peterbrett.com

Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

Client: Reading Borough Council — Working better with you

RBC SFRA

Areas Susceptible to Groundwater Flooding (AStGWF)

Date: 04/04/2016

Scale: NTS

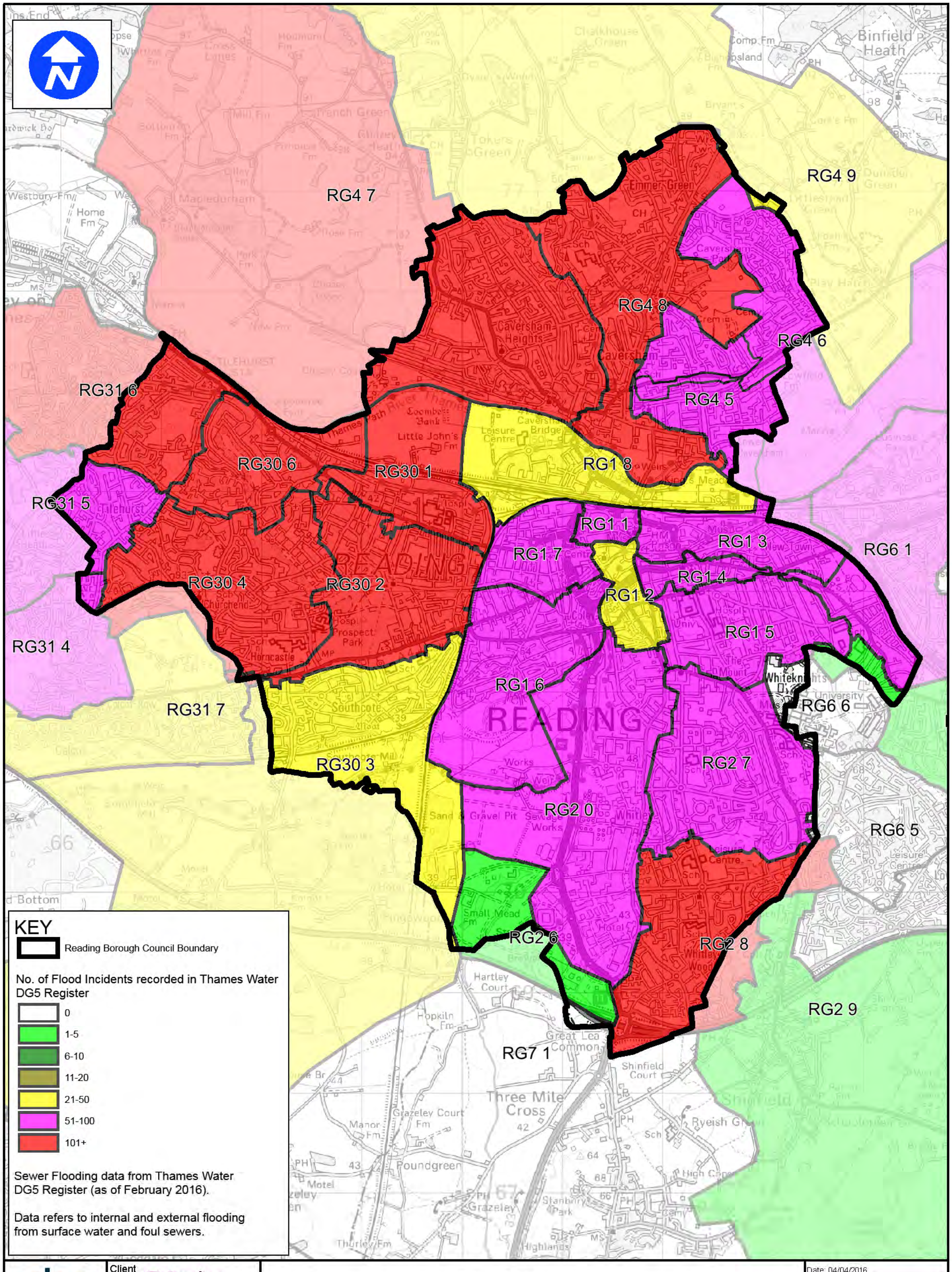
Drawn By: SB Checked By: RF

Rev: -

Figure Number

Map F8

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo



pba peterbrett
www.peterbrett.com
Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

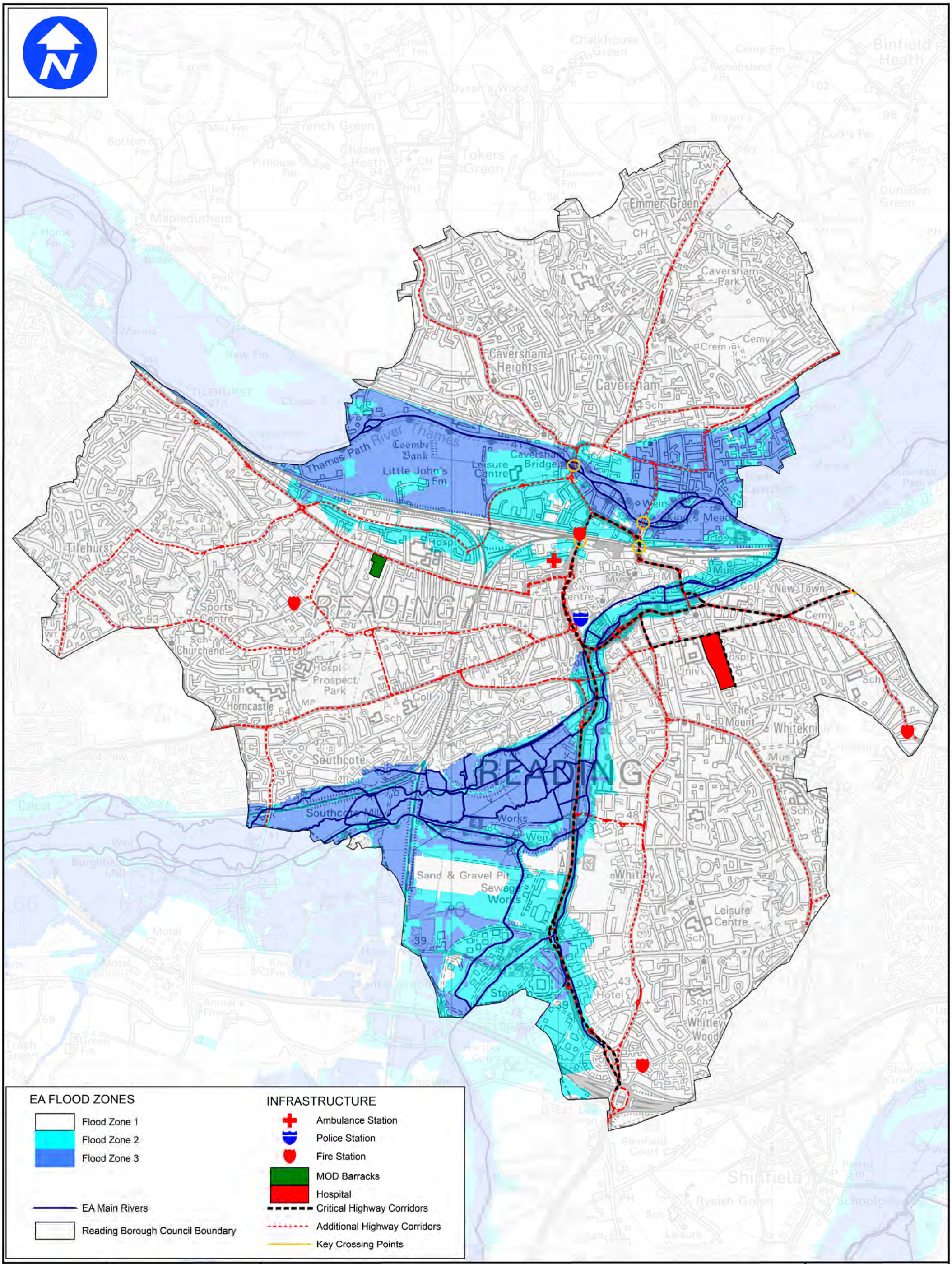
Client: Reading Borough Council — Working better with you

RBC SFRA

Thames Water Sewer Flooding Incidents

Date: 04/04/2016
Scale: NTS
Drawn By: SB Checked By: RF
Rev: -
Figure Number
Map F9

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps\



pba peterbrett

www.peterbrett.com

Peter Brett Associates LLP
READING
Tel: 0118 950 0761 Fax: 0118 959 7498

Client Reading Borough Council
Working better with you

RBC SFRA

RBC Information - Key Infrastructure overlain on EA Flood Zones

Date: 06/12/2016

Scale: NTS

Drawn By: SB Checked By: RF

Rev: -

Figure Number

Map F10

J:\27560 RBC LLFA support\4002 - Reading SFRA\MapInfo\Maps