

Product 4 (Detailed Flood Risk) for Green Park, Reading

Our Ref: WT11948

Product 4 is designed for developers where Flood Risk Standing Advice FRA (Flood Risk Assessment) Guidance Note 3 Applies. This is:

- i) "all applications in Flood Zone 3, other than non-domestic extensions less than 250 sq metres; and all domestic extensions", and
- ii) "all applications with a site area greater than 1 ha" in Flood Zone 2.

Product 4 includes the following information:

Ordnance Survey 1:25k colour raster base mapping;
Flood Zone 2 and Flood Zone 3;
Relevant model node locations and unique identifiers (for cross referencing to the water levels, depths and flows table);
Model extents showing *defended* scenarios;
FRA site boundary (where a suitable GIS layer is supplied);
Flood defence locations (where available/relevant) and unique identifiers; (supplied separately)
Flood Map areas benefiting from defences (where available/relevant);
Flood Map flood storage areas (where available/relevant);
Historic flood events outlines (where available/relevant, not the Historic Flood Map) and unique identifiers;
Statutory (Sealed) Main River (where available within map extents);

A table showing:

- i) Model node X/Y coordinate locations, unique identifiers, and levels and flows for *defended* scenarios.
- ii) Flood defence locations unique identifiers and attributes; (supplied separately)
- iii) Historic flood events outlines unique identifiers and attributes; and
- iv) Local flood history data (where available/relevant).

Please note:

If you will be carrying out computer modelling as part of your Flood Risk Assessment, please read the enclosed guidance which sets out our requirements and best practice for computer river modelling.

This information is based on that currently available as of the date of this letter. You may feel it is appropriate to contact our office at regular intervals, to check whether any amendments/ improvements have been made. Should you re-contact us after a period of time, please quote the above reference in order to help us deal with your query.

This information is provided subject to the enclosed notice which you should read.

This letter is not a Flood Risk Assessment. The information supplied can be used to form part of your Flood Risk Assessment. Further advice and guidance regarding Flood Risk Assessments can be found on our website at

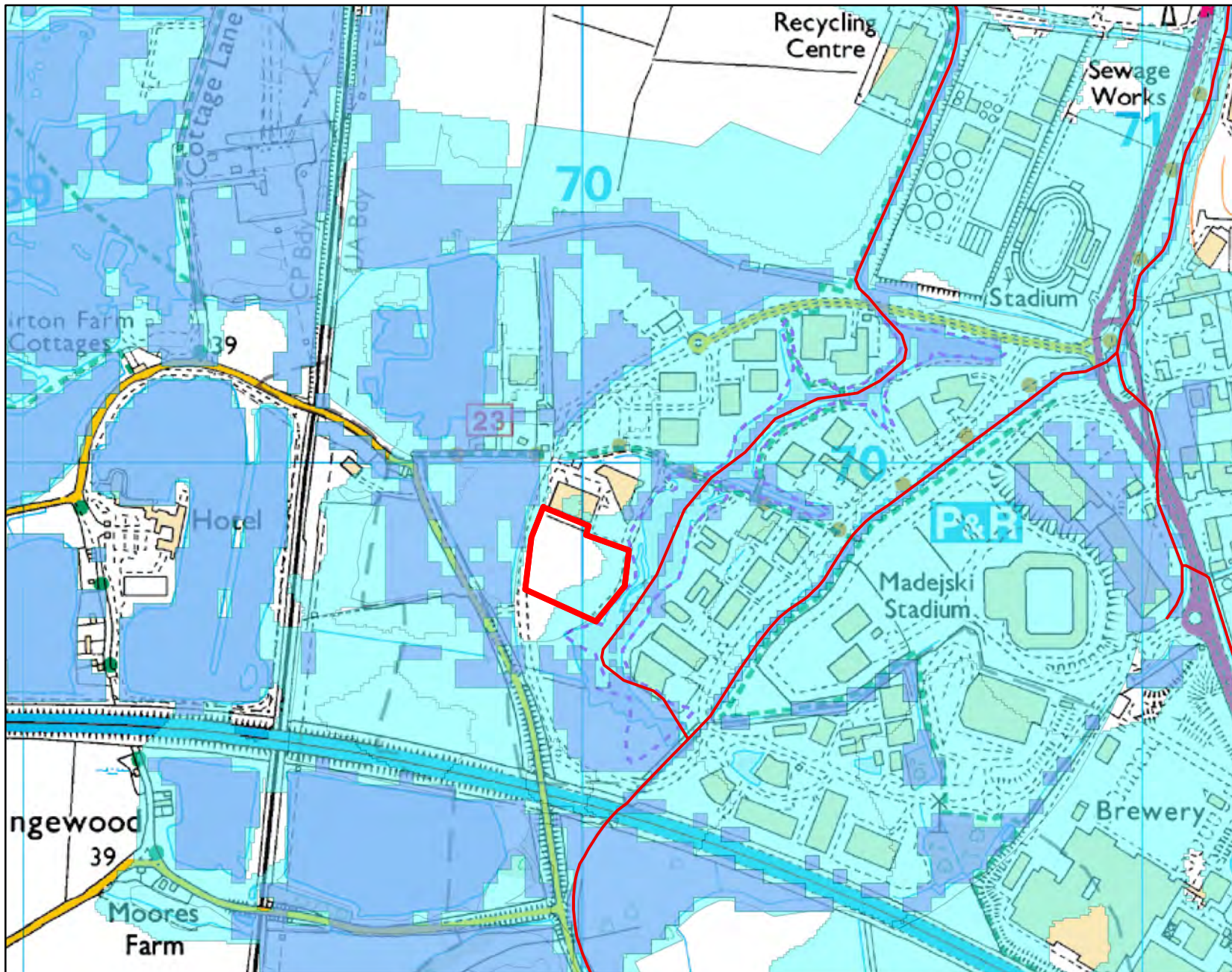
<http://www.environment-agency.gov.uk/research/planning/82584.aspx>

If you would like advice from us regarding your development proposals you can complete our pre application enquiry form which can be found at

<http://www.environment-agency.gov.uk/research/planning/33580.aspx>

Map centred on Green Park, Reading

Created 06/10/2013 REF WT11948



Kilometres

0 0.125 0.25

Legend

- Main River
- Site location
- Flood defences
- Areas benefiting from flood defences
- Flooding from rivers or sea (FZ3)
- Extent of extreme flood (FZ2)
- Flood Map - flood storage areas

Flooding from rivers or sea without defences (Flood Zone 3) shows the area that could be affected by flooding:

- from the sea with a 1 in 200 or greater chance of happening each year
- or from a river with a 1 in 100 or greater chance of happening each year.

The Extent of an extreme flood (Flood Zone 2) shows the extent of an extreme flood from rivers or the sea with up to a 1 in 1000 chance of occurring each year.

Defence information

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Defence Location: No defences on Main River

Description: This location is not currently protected by any formal defences and we do not currently have any flood alleviation works planned for the area. However we continue to maintain certain watercourses and the schedule of these can be found on our internet pages.

Model information

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Model: Kennet (Tyle Mill to Thames Confluence) 2007

Description: The information provided is taken from the Kennet (Tyle Mill to Thames confluence) 2007. The study was carried out using 2D modelling software (ISIS-Tuflow).

Model design runs:

1 in 5 / 20% AEP; 1 in 20 / 5% AEP; 1 in 100 / 1% AEP and 1 in 100+20% / 1% AEP with climate change

Mapped Outputs:

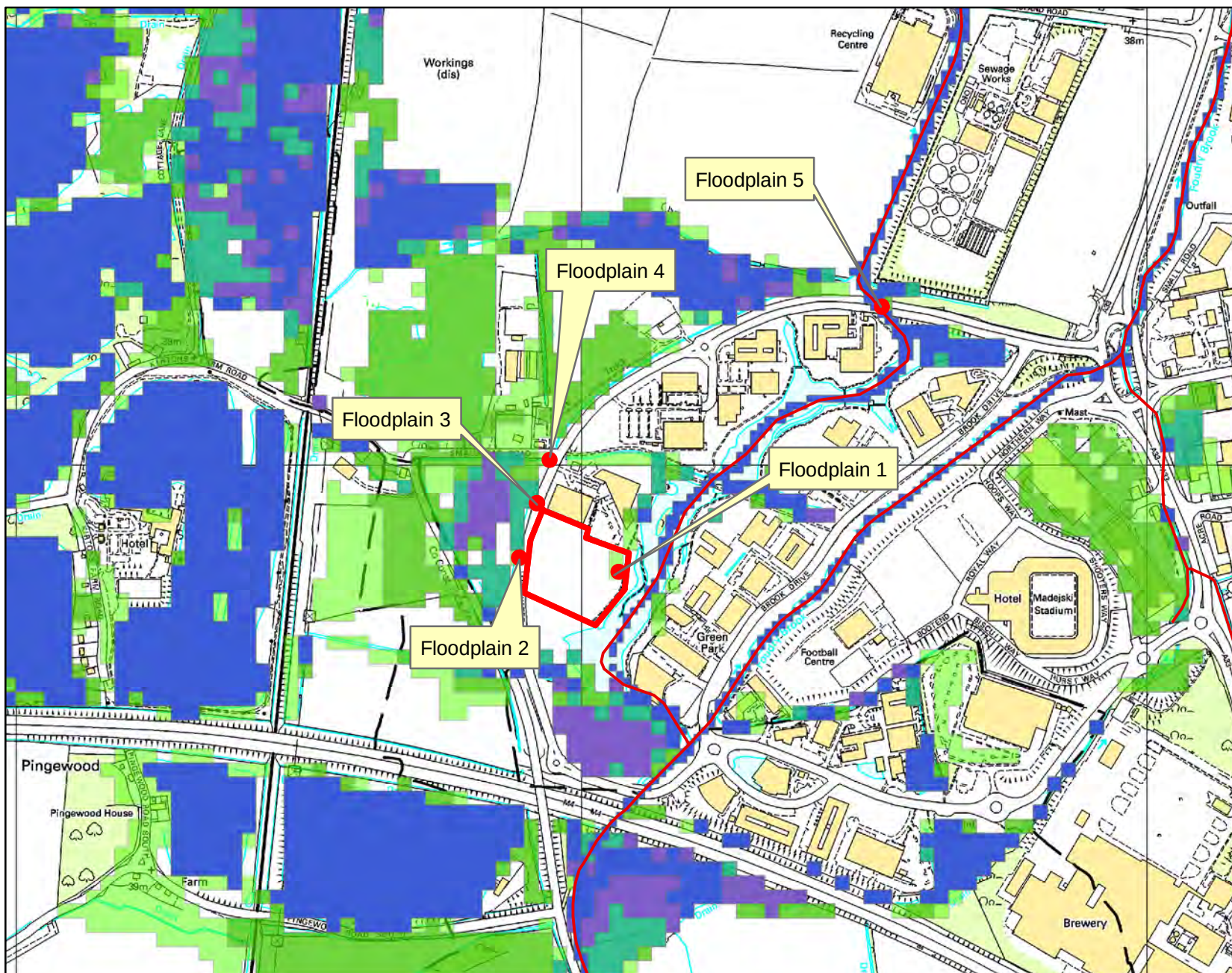
1 in 5 / 20% AEP; 1 in 20 / 5% AEP; 1 in 100 / 1% AEP and 1 in 100+20% / 1% AEP with climate change

Model accuracy:

Levels $\pm$ 250mm

Map centred on Green Park, Reading

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Kilometres

0 0.125 0.25

Legend

- Main River
- Site location
- 20% AEP Flood Outline
- 10% AEP Flood Outline
- 5% AEP Flood Outline
- 1% AEP Flood Outline
- 1% AEP +CC Flood Outline

AEP = Annual Exceedance Probability
The probability of a flood of a particular magnitude, or greater, occurring in any given year

1%CC = 1% Climate Change extent
This is the 1% AEP event with an allowance for climate change (+20% on river flows)

Modelled floodplain flood levels

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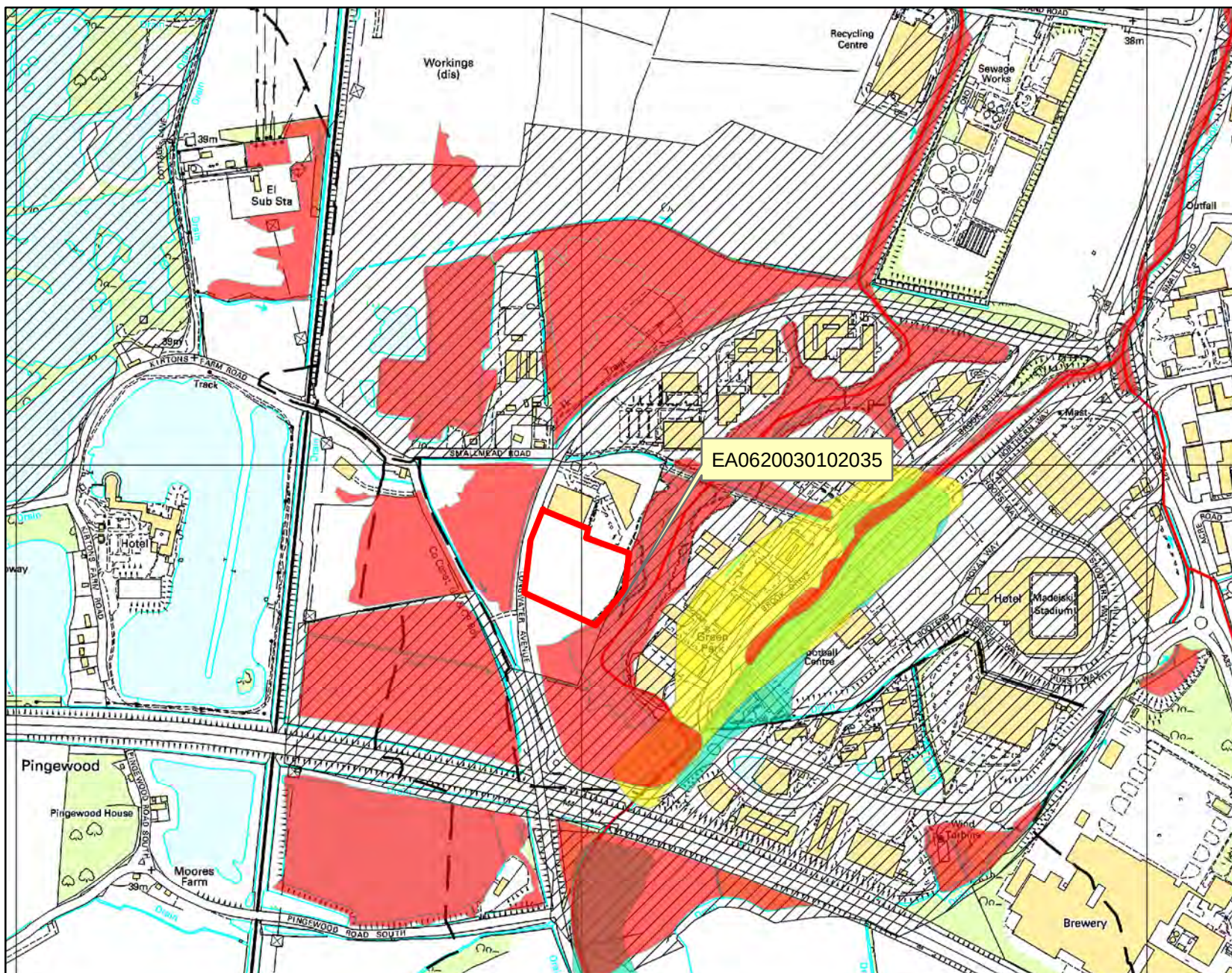
The modelled flood levels for the closest most appropriate model grid cells for your site are provided below:

				flood levels (mAOD)				
2D grid cell reference	Model	Easting	Northing	20% AEP	10% AEP	5% AEP	1% AEP	1% AEP with climate change allowance (+20% on river flows)
Floodplain 1	Kennet (Tyle Mill to Thames Confluence) 2007	470067	169808	n/a	n/a	n/a	n/a	39.09
Floodplain 2	Kennet (Tyle Mill to Thames Confluence) 2007	469889	169836	n/a	n/a	n/a	n/a	39.1
Floodplain 3	Kennet (Tyle Mill to Thames Confluence) 2007	469917	169935	n/a	n/a	38.68	38.85	39.1
Floodplain 4	Kennet (Tyle Mill to Thames Confluence) 2007	469940	170010	n/a	n/a	n/a	n/a	39.1
Floodplain 5	Kennet (Tyle Mill to Thames Confluence) 2007	470530	170284	38.44	38.56	38.68	38.87	39.1

This flood model has represented the floodplain as a grid.
The flood water levels have been calculated for each grid cell.

Historic Map centred on Green Park, Reading

Created 06/11/2013 REF WT11948



Kilometres

0 0.125 0.25

Legend

- 2003
- 1993
- 1992
- 1971
- Main River
- Site location

Flooding from rivers or sea without defences (Flood Zone 3) shows the area that could be affected by flooding:
- from the sea with a 1 in 200 or greater chance of happening each year
- or from a river with a 1 in 100 or greater chance of happening each year.

The Extent of an extreme flood (Flood Zone 2) shows the extent of an extreme flood from rivers or the sea with up to a 1 in 1000 chance of occurring each year.

Historic flood data

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Our records show that the area of your site has been affected by flooding. Information on the floods that have affected your site is provided in the table below:

[illegible]

Please note the Environment Agency maps flooding to land not individual properties. Floodplain extents are an indication of the geographical extent of a historic flood. They do not provide information regarding levels of individual properties, nor do they imply that a property has flooded internally.

Start and End Dates shown above may represent a wider range where the exact dates are not available.