

Isle of Wight Local Flood Risk Management Strategy

Appendix K: Brading

July 2016

Isle of Wight Council, Planning and Housing Services

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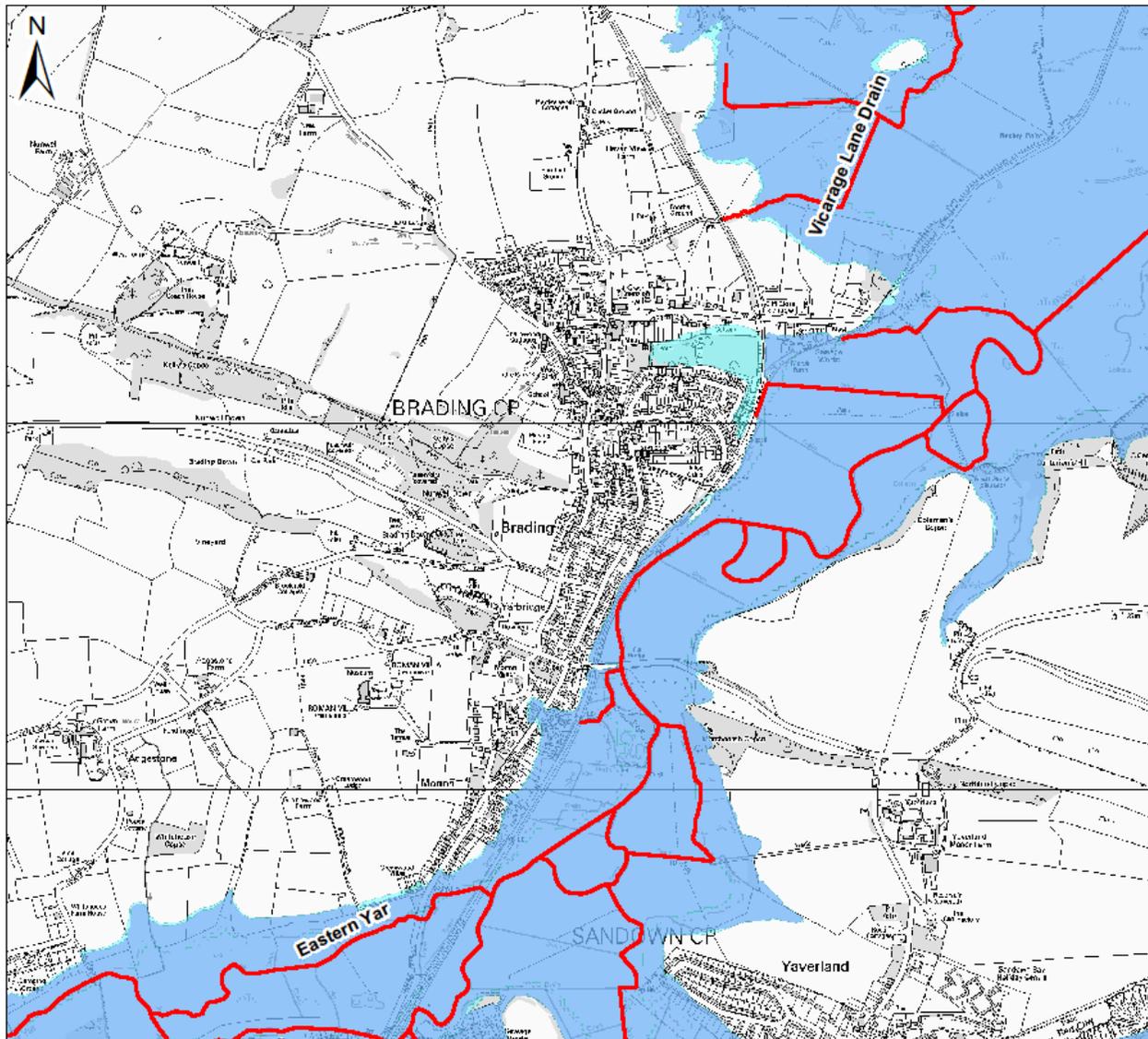
DOCUMENT CONTROL

General information

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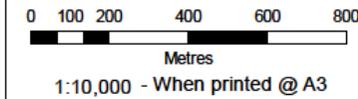
Revision history

| Summary of changes | Completed by | Date | Current version? |
|--------------------|-------------------------|------------|------------------|
| First Draft | EA/IWC | 28/11/2013 | No |
| Second Draft | EA/IWC | 02/05/2014 | No |
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| Consultation Draft | IWC | 31/03/2016 | No |
| Final Draft Report | IWC | 14/06/2016 | No |
| Final Report | IWC Executive Committee | 14/07/2016 | Yes |
| Programmed Review | IWC | 31/07/2021 | |



Legend

- Main River
- Flood Zone 3
- Flood Zone 2



Notes

Flood Map Areas (assuming no defences)

Flood Zone 3

Shows the area that could be affected by flooding:
 - from the sea with a 1 in 200 (0.5%) or greater chance of happening each year.
 - or from a river with a 1 in 100 (1%) or greater chance of happening each year.

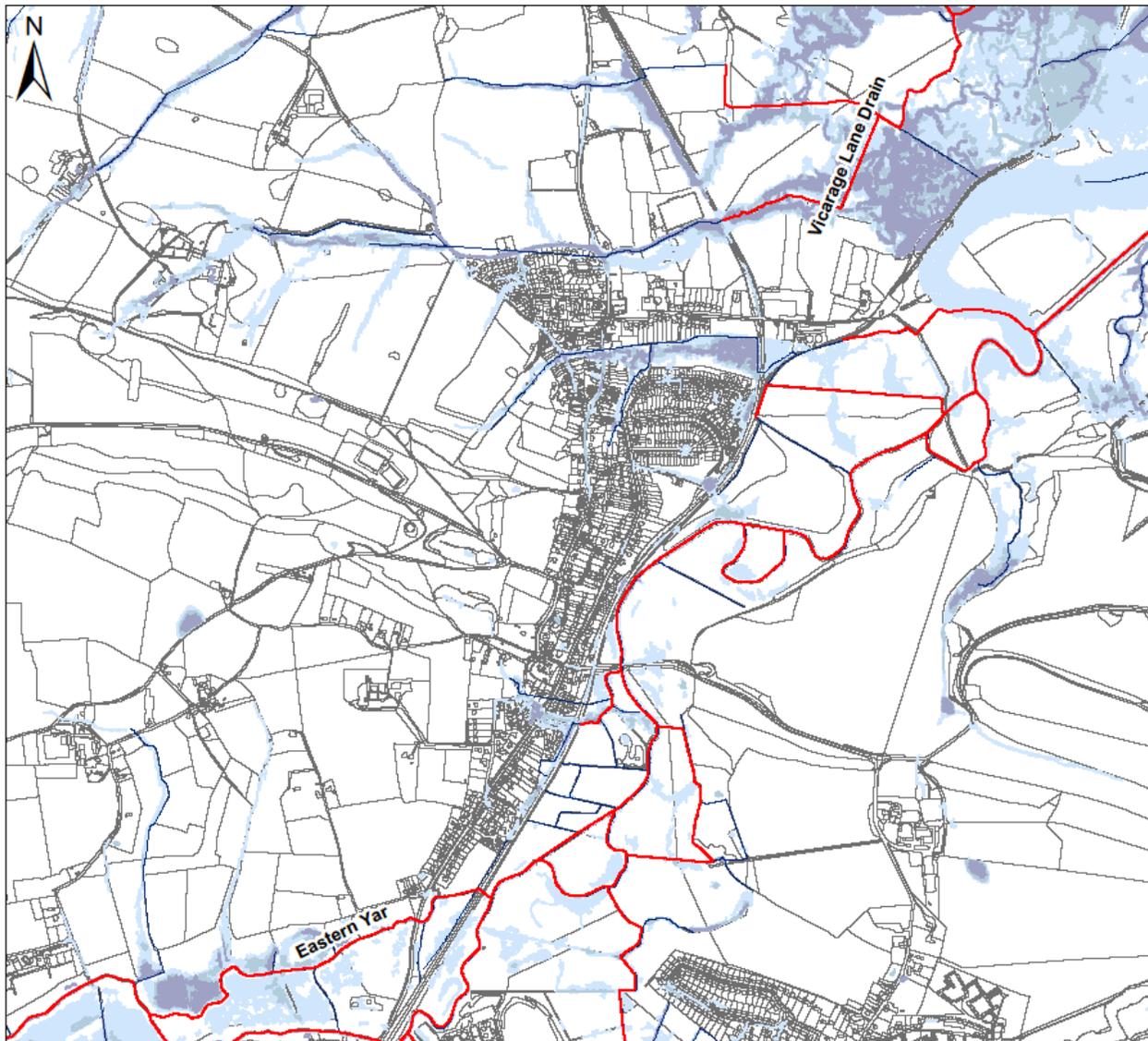
Flood Zone 2

Shows the extent of an extreme flood from rivers or the sea with up to a 1 in 1000 (0.1%) chance of occurring each year.

Figure K1

Environment Agency Flood Zones 2 & 3 for Brading

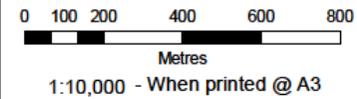
November 2014



Local Flood Risk Management Strategy

Legend

- Main River
- Ordinary Watercourses
- High
- Medium
- Low



Notes

Likelihood of flooding from Surface Water

- High :**
Greater than or equal to 1 in 30 (3.3%) chance in any given year.
- Medium :**
Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year.
- Low :**
Less than 1 in 100 (1%) but greater than or equal to 1 in 1,000 (0.1%) chance in any given year.
- Very Low :**
Less than 1 in 1,000 (0.1%) chance in any given year.

Figure K2

Updated Flood Map for Surface Water (UFMfSW) for Brading

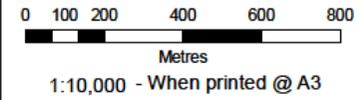
May 2015



Local Flood Risk Management Strategy

Legend

- Recorded Flood Events



Notes

Location of reported flooding incidents

Figure K3
Historic flood events for Brading

May 2015

Area overview Brading is situated on the north western side of the Eastern Yar floodplain on the eastern limb of the Brading Downs. The Brading Downs follow the central ridge of chalk which runs across the Island. This chalk stratum is present under the middle of the settlement. Despite Brading's inland location, flooding from extreme tides is a real risk to the settlement. Historic flood outlines are held by the Environment Agency for two events which occurred in 2000 and 1974. The 2000 outline shows the floodwaters not to have crossed the railway line, which runs between the edge of the floodplain and the town. However, the 1974 event was more extensive.

Tidal flood risk Current day tidal flooding is generally modelled to not pass the railway line, however, there are two exceptions to this, one in the north of Brading and one in the south. In the north, flooding is anticipated on the area of open land between *Quay Lane* and *Lower Furlongs*. This may however have an impact to the highways themselves and potential to affect some properties. The pathway of this flooding is assumed to be attributed to a small watercourse passing through the railway embankment within this parcel of land. To the south, the area of modelled impact is shown from *Nicholas Close* affecting other roads and properties to the south-west. *Nicholas Close* is built on a peat marsh at a low elevation of between 1.5 to 3m AOD. A ditch is runs parallel to the railway bank, which is culverted under the railway and joins the Eastern Yar. As with the watercourse in the north, the same pathway of flooding is apparent.

Fluvial flood risk There are no Main Rivers on the western side of the railway line in Brading, as such, modelled fluvial risk tends to only be represented on the eastern side of the railway line, away from any the main settlement. The exception to this is *Nicholas Close* where flooding can be caused by excess water levels in the ditch and water backing up through the culvert from the Eastern Yar as a result of tide locking, or further restrictions in flow such as at the *Yar Bridge*.

Surface water flood risk Surface water flooding is an issue for Brading. The modelled risk shows roads such as *Coach Lane*, *West Street* and *High Street* in the north to be affected, as well as *Morton Road* and *Nicholas Close* in the south. There have been reports of surface water flooding issues at these locations historically to confirm the modelled risk.

Groundwater flood risk Groundwater flooding from the Bagshot Beds is attributed for the cause of basement flooding at some properties on *High Street*, as no other method of flooding was obvious with the threshold being well above the road level. (*The Isle of Wight Autumn 2000 Flood Investigation Study*)

Reservoir flood risk There are currently no known reservoirs on the Island that meet the requirements of the Reservoirs Act 1975, which are reservoirs that hold at least 25,000 cubic metres of water above ground level. As such flood risk from this source is considered to be nil.