

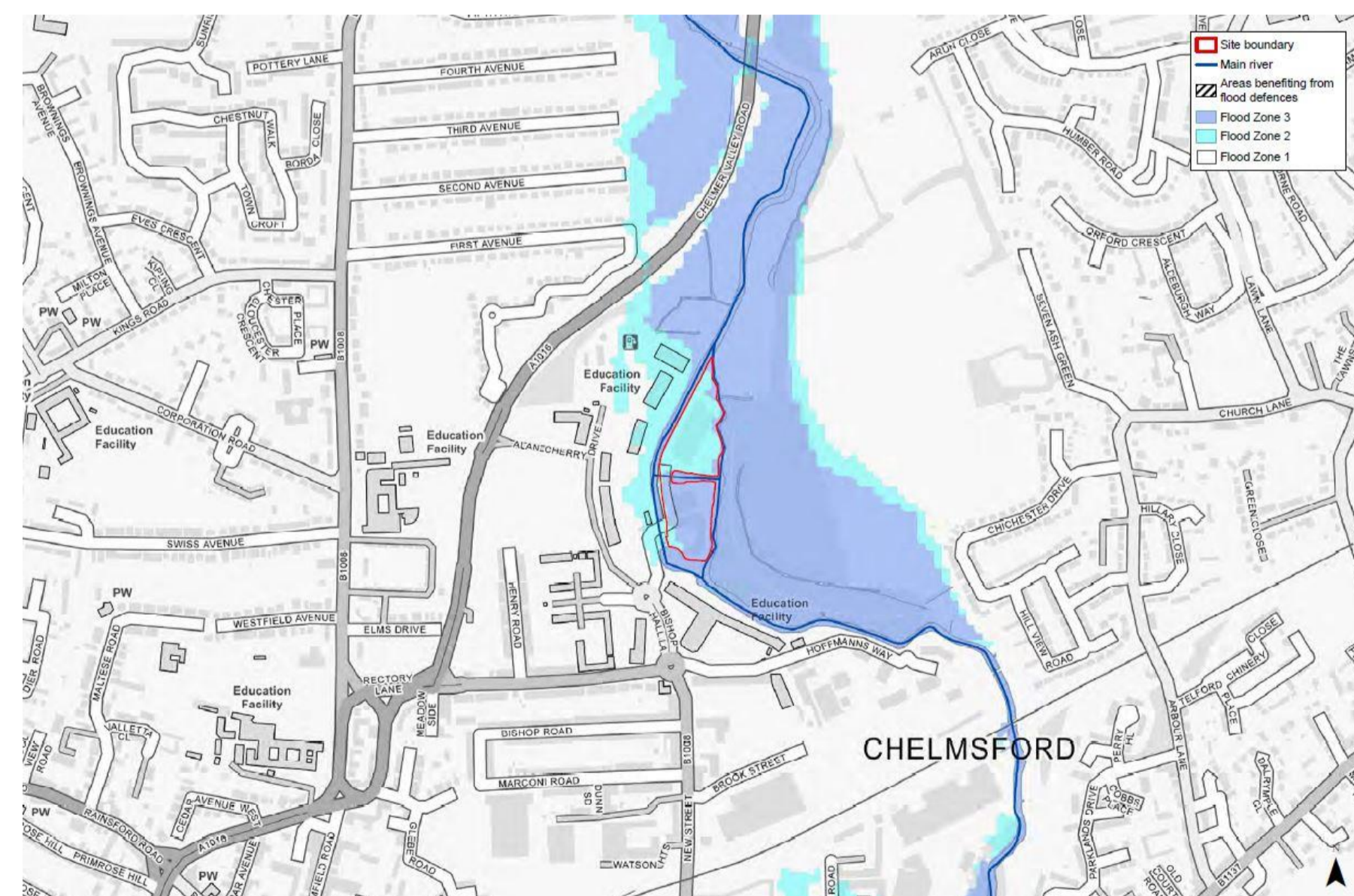
# 11 FLOOD RISK

The River Chelmer flows south along the western side of the site, while a small side channel diverges from the main River Chelmer upstream of the site and forms the eastern boundary as it arcs around both islands before re-joining the River Chelmer within the vicinity of the Mill Pond to the south. Between the two islands, an overflow weir spills off the left bank of the River Chelmer into a wide basin before being conveyed into the side channel.

## Existing Flood Risk

The Environment Agency (EA) Flood Zone map indicates that Rivermead North lies mainly within Flood Zone 2 (between a 1 in 100 (1.0%) and 1 in 1,000 (0.1%) annual probability of river flooding). Rivermead South lies mainly within Flood Zone 3 (1 in 100 (1.0%) or greater annual probability of river flooding).

The EA flood data indicates the site was impacted in the severe flood of 1947, but is at low probability of flooding from other sources (i.e. surface water, groundwater, artificial sources such as reservoir breach). This is consistent with the information in the Chelmsford Supplementary Report to the Mid Essex Strategic Flood Risk Assessment (SFRA).



EA Flood Zone Map

## Proposed Flood Risk Mitigation Strategy

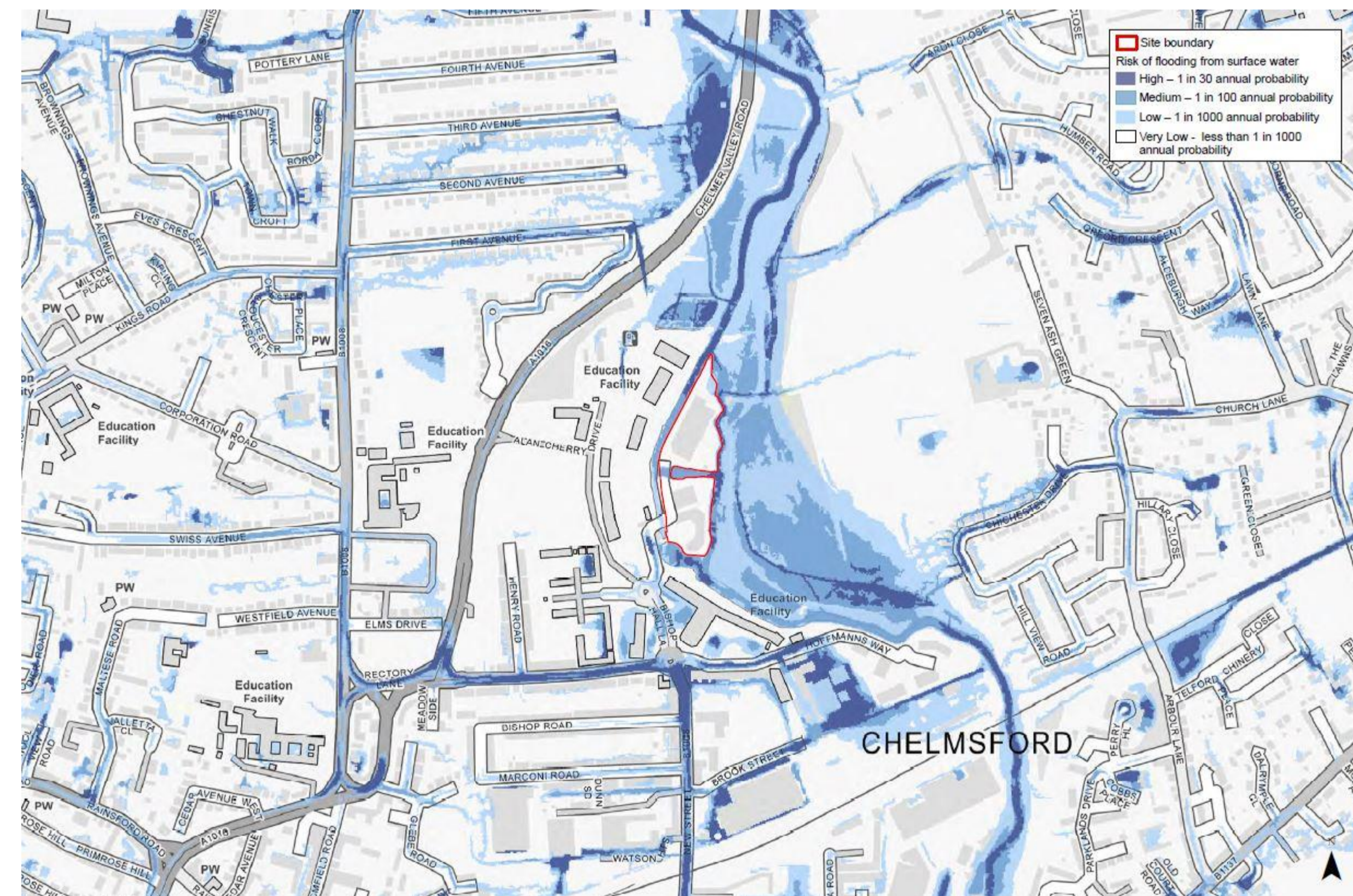
The scheme incorporates a comprehensive flood risk mitigation strategy, to demonstrate occupants and users will be safe in times of flooding and the development does not increase flood risk elsewhere. This includes the following elements:

**Elevated Ground Floor Levels** – floor levels above 1 in 100 annual probability plus allowance for climate change flood levels;

**Flood Compensation Scheme** – an improvement in floodplain storage capacity;

**Safe Access Arrangements** – safe access arrangements to ensure occupants/users are safe in times of flooding and can achieve access/egress to/from the wider area safely; and

**SuDS Surface Water Drainage Strategy** – impermeable areas for both parts of the site will be reduced. Source control features such as lined permeable paving will be provided, which will serve to filter and enhance water quality and reduce runoff into the River Chelmer.



EA Surface Water Flood Risk