



# Bromford and Castle Vale flood risk management scheme

## Background

Bromford and Castle Vale are urban areas in north-east Birmingham and border the bank of the River Tame. Bromford is a densely-populated area comprising a mix of housing and high rise flats, while Castle Vale is predominantly an industrial area and includes business parks and the Fort Dunlop Shopping Centre. The River Tame is the largest tributary of the River Trent and has a history of flooding. The Environment Agency scheme

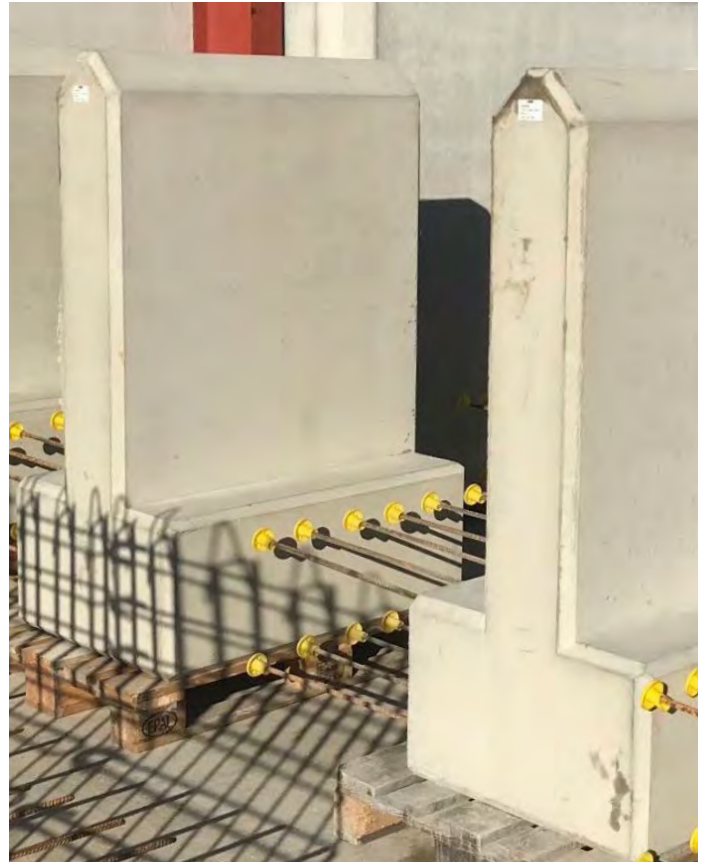
is expected to reduce the risk to over 900 homes and businesses and forms a key part of the River Tame Flood Risk Management Strategy.

## Main contractor



## Solution

In combination with the construction of a series of earth embankments, a low-level flood wall was required along the left bank of the River Tame. The aim was to reduce the risk of flooding to the residential and commercial properties and infrastructure for a flood event with a 1 in 100 (1%) chance of occurring each year. The total cost of the flood defence improvement scheme was approximately £17 million.



## How we helped

We supplied a total of 355 metres of precast flood defence walls which varied in height from 1.495 to 1.995 metres high. In order to reduce the carbon footprint of the project the units were made using 50% GGBS (Ground granulated blast-furnace slag) which reduced the embodied carbon of each unit by 35%.

The units also featured an anti-climb top to the wall as well as weep holes and flap valve in every 20th precast unit. In order to minimise downtime on site, the walls were all delivered to a critical time programme to ensure the installation of the units could be carried out without any delays.

