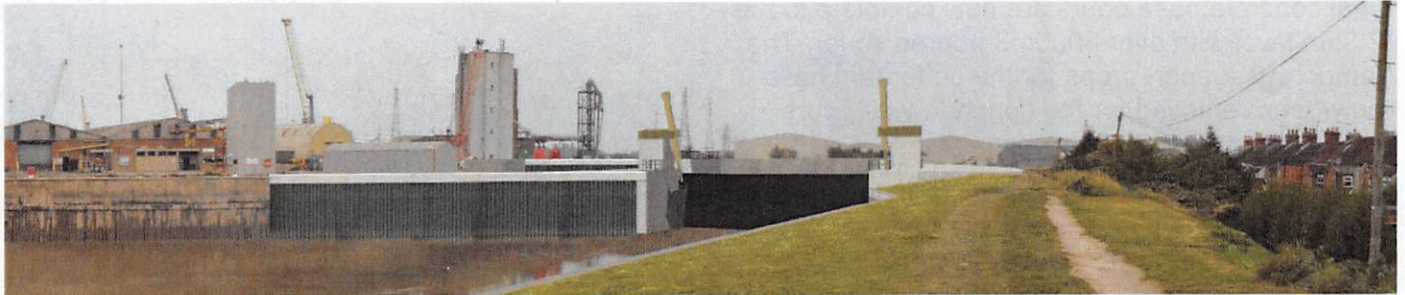


# Boston Barrier scheme update

28/06/2019



## Scheme background

Boston has a history of tidal flooding. The town flooded in 1953, again in 1978 and more recently during the tidal surge on 5 December 2013. Flood defences through the town average around 6.00 metres AOD. The height of the 2013 tidal surge reached 6.08 metres AOD and caused extensive flooding in the town when defences were over-topped, damaged or breached. As a result, over 800 properties flooded across 55 streets.

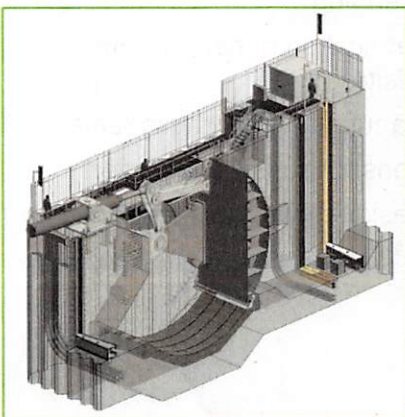
The £100 million Boston Barrier scheme is deemed a 'National Priority Project' within the Environment Agency's Six Year Programme and is fully funded by Government Flood Defence Grant in Aid

Benefits of the scheme include:

- Providing better protection to over 14,000 properties including approximately 800 businesses against tidal flooding.
- Deliver economic benefits of £1,116 million.

The £75 million design and build contract was awarded to Bam Nuttall and Mott MacDonald joint venture (BMM JV) and preliminary enabling works began in winter 2017 with construction commencing in January 2018.

The Boston Barrier itself will be installed by December 2019 with the project as a whole completed in winter 2020 to early 2021.



The primary role of the Boston Barrier is to reduce the risk of tidal flooding, but its multi-functional design means it has the potential to retain water levels through the town in the future, subject to additional approvals being sought and granted. This will enable future waterways enhancements, as part of the 'Fens Waterways Link'.

The design is for a 25 metre wide steel 'rising cill' barrier which will be raised into position by two hydraulic rams at either side. When the barrier is lowered it will sit flush in a concrete recess on the river bed to allow navigational craft to safely pass above it.

## Construction

Piling works for the cofferdam are complete and the internal area has now been drained of water. The final concrete base pours are now complete to the -2.85m level with over 3000m<sup>3</sup> poured so far. The temporary support props for the cofferdam have now been removed for the concrete wall pours which are currently underway.

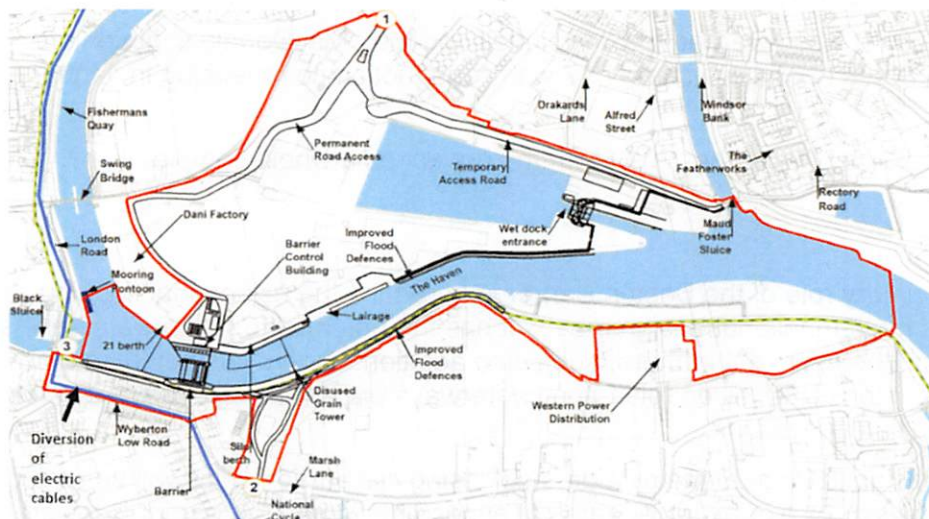
24 precast recess beams weighing 20 tonnes each, have now been placed and pushed into position. The precast units form a recess where, once in place, the barrier will stay in its lowered position on the bed of the river when not in use. The supply chain is being used to fabricate materials off site as much as possible which provides a better working environment for the team and ensures the high accuracy required in the steelwork, reinforcement cages and pre-cast concrete whilst they are made.



The barrier gate is being fabricated in the Netherlands by suppliers Hollandia and is due to be delivered by barge in the summer. Hunger are undertaking fabrication of the hydraulic rams for the barrier, which are being made in Germany.

Work on the barrier control room is steadily taking shape with the roof, brickwork and installation of windows now complete.

## The year ahead



- Continued construction of flood walls
- Electrical & mechanical fix of barrier control room
- Dredging
- Fabrication of barrier gate offsite
- Manufacture hydraulic rams
- Construction of the barrier
- Design of wet dock entrance