



Boston Barrier Flood Defence, Lincolnshire

Project Summary

LOCATION

Boston, Lincolnshire

CONTRACTOR

BAM Nuttall and Mott MacDonald

PRODUCT USED

High density screening barrier

PROJECT COMPLETION

Winter 2020



The Background

The town of Boston in Lincolnshire has long been under threat from tidal flooding – and in 2013 a major tidal surge over-topped existing flood defences, causing flood damage to more than 800 properties.

In late 2017, BAM Nuttall and Mott MacDonald won a major Government contract to build a £75m flood defence barrier, designed to protect over 14,000 properties in Boston and surrounding areas. On completion of the works, the town will have some of the best flood protection in the UK outside London.

The Challenge

The joint venture company between BAM Nuttall and Mott MacDonald needed to reduce the impact of the construction work on local residents – especially significant noise from the pile-driving hammers which would be needed to build solid foundations for the barrier.

Sound Control Services (SCS) were among a number of specialist companies approached by the joint venture. The requirement was for advice and recommendations on a temporary noise reduction solution which would enable the major construction work to be carried out effectively, with minimum disruption to the large number of local residents and businesses.





“BAM Nuttall needed a high performance noise barrier that was a more robust, fully waterproof and higher density product than what is generally available on the market. Our Quilted Acoustic High Density Barrier fitted the bill perfectly, so I had no hesitation in recommending this product. After supplying a number of blankets for testing, we were absolutely delighted to be awarded the contract for this prestigious project.”

Jim O'Shaughnessy, MD,
Sound Control Services

- Using waterproof materials would enable the screening to be used long term (or even permanently, if required) in challenging weather conditions
- The additional advantage of being able to brand the temporary noise reduction barrier with graphics, logos and messaging to suit the joint venture's needs

Sound Control Services are an independent British company specialising in noise control consultancy – and the design, manufacture, supply and installation of acoustic materials for a wide range of applications and industries. Check out other examples of our work at soundcontrolservices.co.uk.

The Ideal Solution

The winning proposal put forward by Sound Control Services consisted of the installation of a high density temporary screening barrier for maximum noise attenuation, and offering the following key advantages over competitor solutions:

- High density screening is essential for effective noise control – and especially effective at blocking out low frequency sound.
- The higher weight barrier is more durable, with a 900g tough reinforced wipe-clean facing on both sides

“BMMJV (Bam Nuttall & Mott Macdonald JV) tried out various sound absorbent panels and found that the ones acquired from Sound Control Services were the most effective in assisting to reduce the direct noise from the piling works and to comply with best practice.”

Gordon Hounslow, Stakeholder Manager,
BMMJV Boston Barrier Project

About the Boston Barrier

The Boston Barrier partnership consists of the Environment Agency, Lincolnshire County Council, Boston Borough Council and Black Sluice Internal Drainage Board.

According to Executive Director of Operations at the Environment Agency, Toby Willison:

“This state-of-the-art defence will help protect Boston's communities and businesses from the kind of flooding the town experienced in December 2013. The barrier's 25-metre wide hydraulic-powered gate, when not in use, will lay flat on the riverbed out of sight, but will be raised to close off the River Witham when flooding is expected, preventing high tides on the North Sea from raising river levels in the town.”

Boston has a long history of tidal flooding, most recently in December 2013 when more than 800 properties flooded across 55 streets. Flooding also occurred in 1953 and 1978.

The Boston Barrier will be installed by December 2019 with the project as a whole completed by winter 2020.

