



## CASE STUDY

### Bream Street Wharf

#### THE PROJECT

Mixed use development comprising 2 to 7 storeys and 3,700m<sup>2</sup> basement, Bream Street, Fish Island, London.

#### THE PROBLEM

Nearby Lea Navigation river wall led to high levels of ground water, resulting in a need to minimise temporary propping.

#### REMEDY'S SOLUTION

Design of interlocking secant piled retaining wall to form a basement sub-structure and 600mm & 450mm diameter bearing piles designed for working loads up to 1,300kN.

## Secant Pile Retaining Wall & Bearing Piles

Remedy Geotechnics Ltd. recently completed the design of 280 linear metres of secant retaining wall and over 900 number 600mm and 450mm diameter bearing piles for the large Bream Street development in East London, overlooked by the Olympic Stadium. When complete the new development will deliver over 500 new homes - including 30% affordable housing at the site between the Regent's Canal and River Lea, and next to the Queen Elizabeth Olympic Park.

Underlying this iconic development the ground comprises a veneer of historic Made Ground, overlying soft Alluvium and water bearing River Terrace Gravel, beneath which lies clay of the Lambeth Group formation. With such high ground water and a large excavation, Remedy designed the secant retaining wall comprising interlocking 600mm diameter CFA

piles to extend through the water bearing soils to toe into the Lambeth Group clay. The interlocking secant piles were designed to toe into the underlying clay formation to ensure this large excavation could be undertaken without the need for groundwater pumping.

The close proximity to the river wall of the Lea Navigation meant retaining wall deflection criteria were especially critical in this area. Remedy focused their design effort into minimising the need for temporary propping. Only where absolutely necessary and where the excavated depth approached 6m was temporary propping designed in.

**Contact Remedy Geotechnics** - we'll give you an answer every time.

Leave the ground to us!

[www.remedygeotechnics.com](http://www.remedygeotechnics.com)

Follow Us @RemGeotechnics



#### London & Midlands

0207 206 2576  
01788 211778

#### North & Scotland

01423 589500

[admin@RemedyGeotechnics.com](mailto:admin@RemedyGeotechnics.com)