

# Broomhill Sands sea defences

## Ground investigation

### *Geotechnical ground investigation*

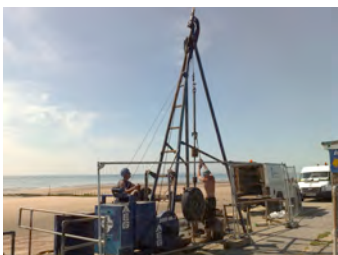
In Newsletter 1 (July 2009) we discussed our plans to carry out a ground investigation at the site. We have now completed our planning and works will be starting on site on Wednesday 2 September 2009. The work is being carried out by Fugro Engineering Services Ltd on behalf of the Environment Agency and we expect them to be working on the beach for about a month. All of the information from the ground investigation will help us to design the new sea defences. We are sorry for any inconvenience these works may cause you.

**Construction sites are dangerous places. The Environment Agency and its contractors will be doing everything they can to ensure public safety and to manage the hazards associated with the works, however we do need your help. Please observe any safety notices and follow the instructions given by our site team which are there to ensure your safety during the works. Please observe any construction from a safe distance and ensure children and animals are kept safe at all times**

The ground investigations will involve a number of investigation techniques, including:

- Trenches – digging out the beach shingle to uncover the buried block work wall. This will expose the wall and allow us to carry out a condition assessment of the buried structure. Small sections of the block work may be removed temporarily to allow further investigation of the core of the structure.
- Trial pits – digging pits mostly along the toe of the existing buried wall to confirm its location and confirm the structural form of the toe of the wall. This will help us to design the new rock revetment.
- Boreholes – driving boreholes through the ground to a depth of around 10m. This allows us to ‘see’ the layers of different sediment at the site. Samples will be taken to allow us to assess the strength of the ground for its ability to bear the load of the new structure.
- Cone Penetration Tests (CPTs) – pushing a small cone into the ground and measuring the ground’s resistance to the penetration. This is another way of finding out the strength of the ground for its ability to bear load. It will also help us to design the groyne and their installation method.

In addition to the team from Fugro, specialist staff from our consultant, Halcrow, will be on site during the ground investigation to oversee the works.



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