

# Case Study

## Port Salford Manchester



### Project Description:

As part of ongoing developments at Port Salford, an engineered retaining wall was to be constructed near to an existing watermain.

Existing site investigation information suggested the formation soils did not have sufficient bearing capacity to support the proposed structure.

Pre-construction GDL deployed our in-house Cone Penetration Testing rig (CPT) to confirm the extents of the soft materials and then mass soil mixing was utilised as an insitu technique to improve the strength of the native soils.

<b>Key Works:</b>	CPT / Mass Soil Mixing
<b>Client:</b>	Peel Ports
<b>Main Contractor:</b>	Sisk
<b>Date / Duration:</b>	October 2021 / 3 wks

### Project Challenges / GDL Solutions:

- Restricted access.
- Programme critical
- Working adjacent to live watercourse and existing live 24 inch potable watermain.

### Project Benefits for Client:

- Simplified the improvement of underlying soils to form a suitable base for the retaining wall by improving the existing ground insitu.
- Mass mixing the soils reduced temporary works requirements which in turn brought technical and cost benefits.
- Commercially advantages compared to traditional dig and replace techniques.
- Reduced lorry movements to the local road network as no soils were removed or stone imported to the project.



[www.grounddevelopments.co.uk](http://www.grounddevelopments.co.uk)



EARTHWORKS



SOIL STABILISATION



VIBRO STONE COLUMNS



DEEP SOIL MIXING