The Phase 2 Works include the excavation of recent contaminated sediments from the Pudzeoch Basin on the Upper Clyde in Renfrew and its disposal offsite.

The excavated void, approximately 9,500 cubic metres, was replaced with imported specified fills to a level of -2.5 m A.O.D.

An additional berm was formed above the basin invert level at the Southern end of the dock to 3.0m A.O.D. to facilitate the movement of plant required for the construction of the pumping station under the Phase 3 Contract.

The load from the fill material was expected to generate excess pore water pressures in the underlying natural cohesive alluvial deposits. To ensure that critical pore water pressures were not exceeded (i.e. failure is avoided) and also provide the opportunity to accelerate the infilling programme monitoring of the pore water pressures was required.

It was considered the most appropriate instrumentation was vibrating wire settlement cells and piezometers. The piezometers were installed within the middle of the cohesive alluvium layer, where pore pressures and much of the long term settlements were expected to be generated, and the settlements cells were installed within the natural underlying sand deposits below the recent sediments that will be removed, and above the cohesive stratum.

All sensors were connected to an automatic data acquisition system which could be accessed remotely via the internet using Monitoring Point data visualisation software.