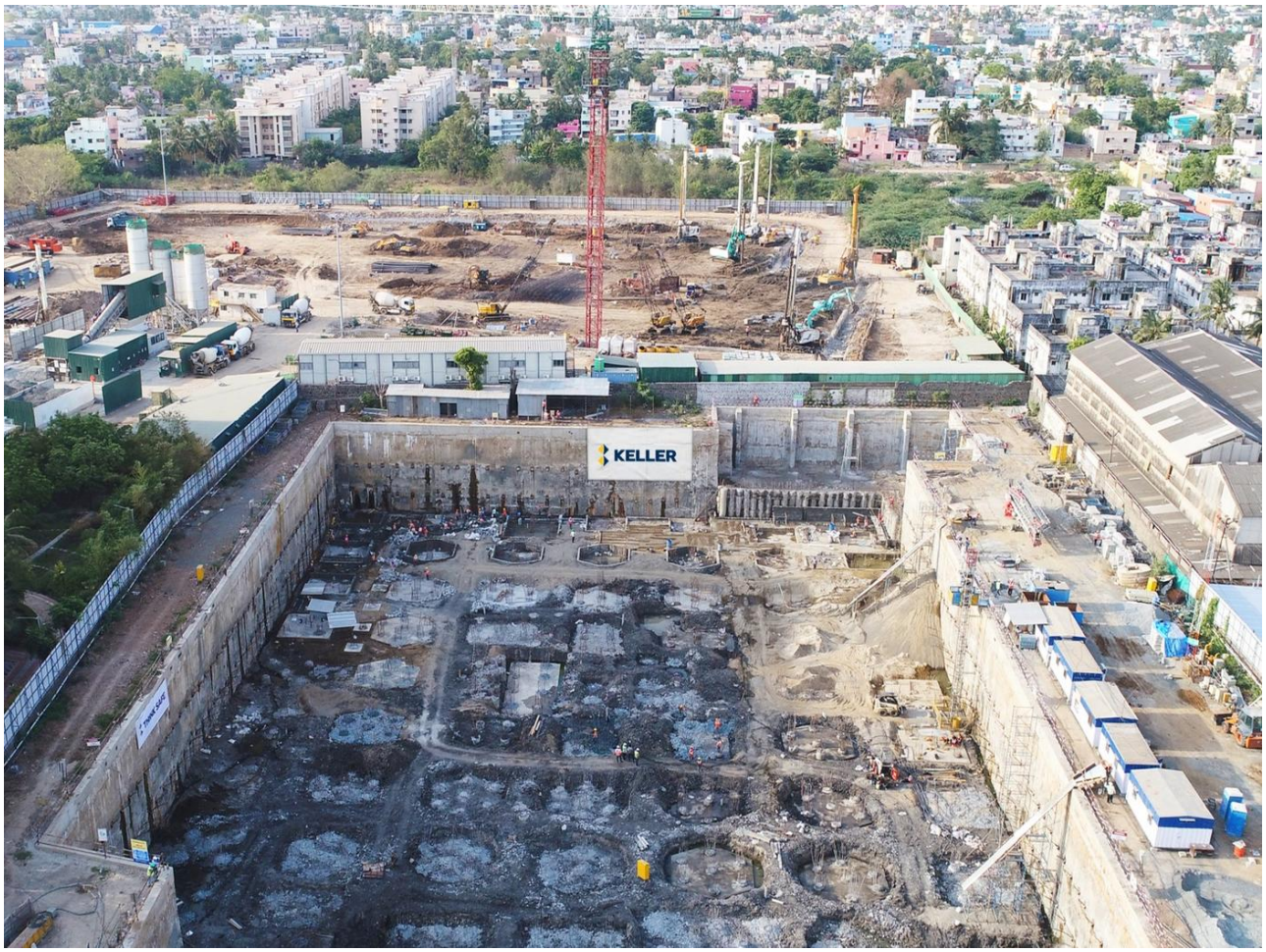
Retention system solution for an IT hub

Chennai, Tamil Nadu

Keller successfully executed a complete foundation package achieving quality and safety compliance throughout the 4.5 million safe man hours.



The project

Horizonview Properties Pvt Ltd (K Raheja Corp) proposed to construct a 10 storey IT park building at Porur, Chennai including three basement levels. Keller was commissioned by the main contractor to design and execute an optimised retention system solution for the basement excavation and foundations for the building.

The challenge

The varying soil and rock profile made the 12.5m deep excavation very challenging. Minimising water seepage between the d-wall panel joints and through anchors, and installation of piles with deep cut off levels were also very critical tasks.

The solution

To address the geotechnical challenges associated with this project, Keller designed and executed a complete foundation package comprising a 650m long diaphragm wall with two level ground anchors to support a 12.5m deep excavation, including 200,000 cubic metres of earthwork and 1,000 large diameter bored piles to support the basement and foundations.

Project facts

Owner(s)
Horizon View Properties Pvt. Ltd

Keller business unit(s)
Keller India

Main contractor(s)
Horizon View Properties Pvt. Ltd

Solutions
Earth retention and shoring

Markets
Commercial and residential

Techniques
Diaphragm walls and barrettes