

# **Logistics & Office Facility for Almarai**

Abu Dhabi, UAE

Keller successfully fulfilled its project scope within the designated time frame, maintaining the highest standards of quality and safety throughout the process.



## The project

The construction of a logistics and office facility at ICAD III, located in Abu Dhabi Industrial City, Abu Dhabi, UAE, involved significant groundwork. As part of this project, Keller has been tasked with executing ground improvement works to enhance the in-situ weak soil conditions for both the roadways and non-building areas. M/s KELLER (Special Geotechnical Contractors) had been assigned by Contractor M/s **Amana Steel Building Company** for carrying out Ground Improvement works by Vibro Replacement Dynamic replacement and stone columns method required for this project.

### The challenge

Challenging project due to its complex stratigraphy of intermittent medium and soft layers, so that multiple GI Techniques like dynamic replacement and Vibro replacement were required.

The primary challenge of the project involved completing a substantial area within the specified timeframe, while also addressing the diverse soil characteristics encountered. An additional area has been allocated as a variation to ensure the completion within the same timeframe.

Underground utilities were identified, necessitating the implementation of the vibro replacement dry method.

#### The solution

Keller implemented a ground improvement technique utilized vibro replacement through the dry method for the installation of stone columns (SC) to enhance bearing capacity. Additionally, Keller conducted dynamic replacement and facilitated 19 plate load tests were carried out by a third-party agency.

#### **Project facts**

Owner(s)

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**Keller business unit(s)** 

Keller Grundbau GmbH

Main contractor(s)

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**Solutions** 

Ground improvement

**Markets** 

Commercial

**Techniques** 

Vibro stone columns Dynamic replacement