

Oasis Lagoon - Phase 3

Dubai, UAE

The Oasis Lagoon project is a unique project. An old lagoon with a huge quantity of water inside needed to be backfilled with ground improvement.



The project

EMAAR intends to build a residential community in Me'aisem, Dubai, UAE. The project consists of 3 Phases. The Oasis will be a unique residential development centered on creating a direct yet causal relationship with nature for everyone through the liberal use of water and green spaces. It is envisioned as an exclusive residential community of low-density mansions, villas, and townhouses set in a rich environment of water canals, lagoons, beaches and continuous ribbons of parks and green spaces in which all residents have access to the water and green amenities, and most enjoy direct frontage to these.

The challenge

The main challenge of the project was to manage the equipment, carry out the soil improvement as there was always high ground water pressure due to lagoon and to perform relevant ground improvement techniques to achieve project criteria. Additionally, each box had different improvement depths with different techniques.

The solution

Keller adopted three different ground improvement techniques VC, RIC and DC. We made sure that we have a suitable working platform meeting our standard. We improved these areas and did Post testing achieving criteria and handed over to main contractor for their scope of work. Multiple VC cranes were deployed on client's request to save areas from seepage of water and complete before timeframe.

Keller improved the 425,000m² area within the agreed time frame and maintaining Keller standards for quality and safety and received a special HSE appreciation certificate from the client in addition to a perfect customer feedback form.

Project facts

Owner(s)

-

Keller business unit(s)

Keller Foundations Contracting

Main contractor(s)

-

Solutions

Ground improvement

Markets

Residential

Techniques

Rapid impact compaction (RIC)

Dynamic compaction

Vibro compaction