



Stellar Airpark Storage

Chandler, Arizona, USA

Keller provided complete design and construction for a soil nail support system at Stellar Airpark Storage.



The project

Stellar Airpark Storage is a new, 146,011 sq. ft, four-level, fully climate-controlled storage facility developed on approximately 3.14 acres of a vacant lot in Chandler, Arizona. The facility will feature two above-ground and two below-ground levels, as well as a rental office located on the main level. Ground conditions consisted of dense, stiff soils with some cohesion. Groundwater was not encountered in exploratory borings.

The initial designs did not include solutions for supporting the excavation. However, due to previously unknown existing utilities adjacent to the building footprint, earth retention was required on two portions of the planned excavation.

Keller provided a turnkey, design-build soil nail support system for the two walls, 293 and 88 ft long, respectively. Both walls consisted of five rows of soil nails, totaling 337 nails. The nails were installed at a 35-degree angle from horizontal and ranged from 15 to 24 ft long. The nails and shotcrete were completed ahead of schedule.

Project facts

Owner(s)

Wentworth Property Co., LLC

Keller business unit(s)

Keller

Main contractor(s)

A.R. Mays

Engineer(s)

Terracon

Solutions

Support of excavation

Markets

Commercial

Techniques

Soil nailing

Email address

info@keller-na.com

Phone number

1 (800) 456-6548