

## **LAX Airport Southwest Terminal**

Instrumentation and Monitoring Services During the Construction of the Support of Excavation

**Los Angeles - UNITED STATES** 







2017 - 2019



Morgner



**2**Underground
Vibration Monitors

24

Months of Data Management

## **PROJECT DESCRIPTION**

The Southwest Airlines Terminal 1.5 Development Program at LAX Airport is a four-story terminal connection between Terminals 1 and 2. The connector provides additional space for ticket counters, baggage carousels, federal security requirements, a bus gate, and an additional screening checkpoint. It also improves the overall guest experience and eases traffic congestion between the two terminals with bus routes to the new Midfield Satellite Concourse.

The multi-tenant terminal building (225,000 sqft) features an outbound baggage system and an inbound baggage system, a loading dock with receiving area, vertical circulation, and rooms to support building services such as mechanical, electrical, plumbing, and information technology. Additionally, the project includes a vertical circulation core that provides connectivity between the terminal and the future automated people mover. The Terminal 1.5 connector was designed and built to LEED Silver certification and CalGreen Tier 1 standards.

## **MONITORING NETWORK**

Sixense was hired to monitor the displacements of the support of excavation and the underground vibrations affecting the Central Outfall Sewer due to the construction of the SOE. The Instrumentation & Monitoring program included two (2) AMTS Cyclops and two (2) underground vibration monitors. The I&M program also included tiltmeters, strain gauges, load cells, inclinometers, monitoring prisms, and reflectorless points.

All the data was available in near-real-time via Sixense Northern America's Integrated Database Management System (IDMS), Geoscope. The web-based platform sent automatic alerts via email if the threshold values were ever exceeded, giving the client the visibility they needed on their operations throughout the scope of work.

