

The Challenge

The contractor is tasked with an AS-Built scan for a sub-floor that is above an accessible ceiling while the asset remains open for business. The contractor is not be able to examine the sub-floor for data collection and inspection prior to construction start, unless an un-invasive procedure can be found.

ISI tasked to deliver a LD3 grouped data set in plain view with a .pdf file linked to the high resolution scan groups and a BIM ready 3D model with a 2D Auto CAD file including 2D views (top, side and front)

The Solution

Intelisum's LiDAR/CMOS patented technology is able to pick strategic points to complete a series of 360 degree scans in a confined

sub-floor/ceiling space. Having the ability to scan the entire area with minimal business disruption was critical.

The Results

LD3 software and hardware allowed ISI to extract accurate AS-Built information in a clean, safe and timely manner. The space of operation was minimal which showed ISI's ability to get clear real time data solely by raising the LiDAR/CMOS camera through ceiling tiles.

Data taken in this manner allowed the contractor to have viable real time data 6 months prior to the start of the construction. This intelligent information allowed for a schedule reduction of 30 days once construction began.

The Intelisum Approach:

ISI worked closely with Grunley to scan a occupied building with minimal disruptions to the business operations

Project Management (2 Days):

- ▶ Initial scoping of the project looking for technology synergies
- ▶ Ongoing active linking with other contractors and technologies
- ▶ Coordinating internal team in achieving deliverables

Scanning (1 Days):

- ▶ Site set up and targeting
- ▶ On site scanning and knitting scans contractors and technologies

Post processing (6 Days):

- ▶ BIM modeling 3 days
- ▶ 3D modelling and animation
- ▶ Auto CAD data 3 days

Total Savings :

- ▶ Total ISI time 6 Days
- ▶ Traditional Methods 58 Days
- ▶ ISI saved 52 Days or \$ 68k

CLIENT RESPONSE:

"We estimate that the detailed existing conditions revealed by the scans--data we would not otherwise have been able to acquire for another 6months, when the space will be turned over to us for construction--will shorten phase IV of this project by 30days. At \$9,700 per day conservatively we produced an initial R.O.I of 4.73:1"