INSIGHT

Facility project keeps moving thanks to a virtual site visit

How do you hold a site visit when the project team is dispersed across various states—or in self-isolation due to a worldwide pandemic? This was the question that the Bartlett & West facilities team faced as part of electrical and dust collection system upgrade projects at the Kansas State University (KSU) O.H. Kruse Feed Technology Innovation Center (feed mill) in Manhattan, Kansas.

Project overview

For the past four years, Bartlett & West has worked with KSU on various project phases to add a dust collection system in the College of Agriculture's feed mill facility. The purpose is to capture grain dust so it isn't floating in the air and causing a fire hazard. In addition, in response to a dust hazard analysis, the feed mill needs certain lighting, conduit, wiring and other electrical equipment updates.

As part of the projects, Bartlett & West organized a kickoff meeting with project stakeholders. The meeting needed to include KSU department and facility heads, equipment suppliers and the Bartlett & West project team. However, at the same time, the U.S. was experiencing the effects of the COVID-19 pandemic. Getting all the necessary stakeholders on-site was not an option.

Facility scanning

Luckily, as a firm with offices and staff spread throughout the U.S., Bartlett & West was already leveraging a facility scanning tool. This platform creates interactive, virtual 3D imaging of spaces, like those used in real estate for virtual house tours but with some added capabilities such as the option to take measurements. The tool has helped project team members across various locations see and understand project spaces without costly site visits. It was used to document conditions at the KSU feed mill just a few weeks before the COVID-19 outbreak hit the United States.

Virtual site visit

Despite having team members who hadn't been to the facility and were dispersed across Kansas and Nebraska, the project team was able to easily coordinate a remote kickoff meeting for the dust collection project. They avoided potential project delays and costly travel time thanks to the virtual imaging of the space. They also were able to talk through spots where ductwork would go and look at clearances with no issues. One of the project stakeholders was even on quarantine but was able to participate and provide valuable project input due to the virtual solution. Four days later, the team also used this technology for a second kickoff meeting on the electrical improvements project with participants from locations in Kansas and Iowa. Additionally, Bartlett & West held two internal team kickoff meetings using the same 3D images.

Lessons learned

For KSU, the three-hour, virtual kickoff meeting saved many hours of travel costs and allowed more people to participate than would have been possible in the physically confined facility. In fact, KSU is considering further leveraging the virtual tour to show students what feed mill operations look like without bringing them in the facility.

While a crisis caused the team to hold the kickoff meeting virtually, the successful implementation of the 3D imaging technology also showed Bartlett & West the potential to consider virtual site tours for future projects. It has proven valuable to help limit costs and schedule conflicts for geographically dispersed teams on future facility projects, from treatment plants and pump stations to industrial and institutional facilities.