

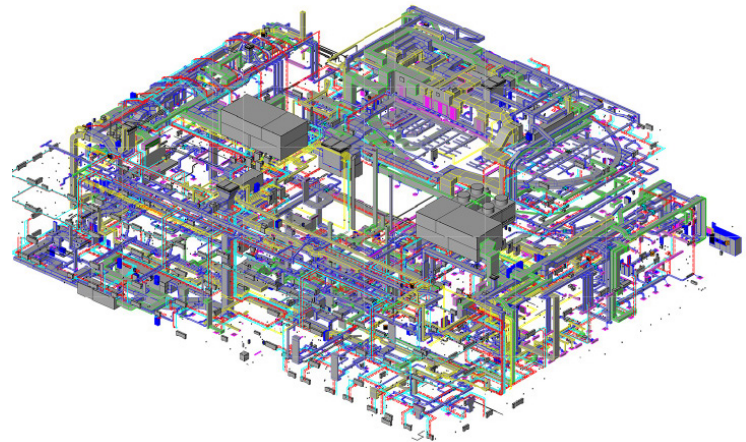
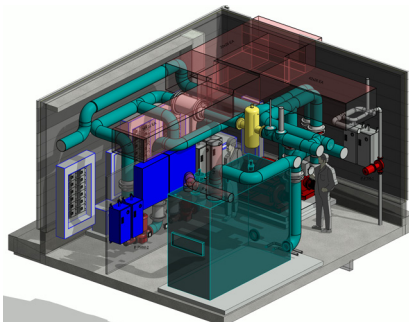
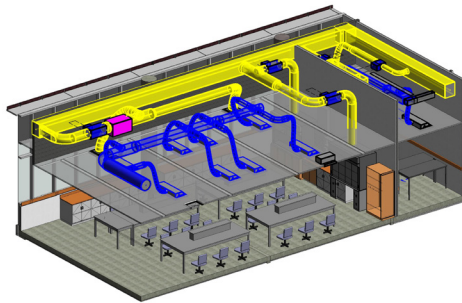
REVIT



*Rebecca Fischer, PE, LEED AP BD+C
Project Manager*

THE STANDARD FOR MEP SYSTEM DESIGN

Rebecca Fischer is a graduate of Penn State and has worked with Mueller Associates since 2006. She has been using Autodesk's Revit and Navisworks software for building information modeling (BIM) since 2006.



Above, Revit model of the historic renovation of the National Academy of Sciences headquarters in Washington, DC.

Left, Revit models of the new Bowie State University Center for Natural Sciences, Nursing, and Mathematics.

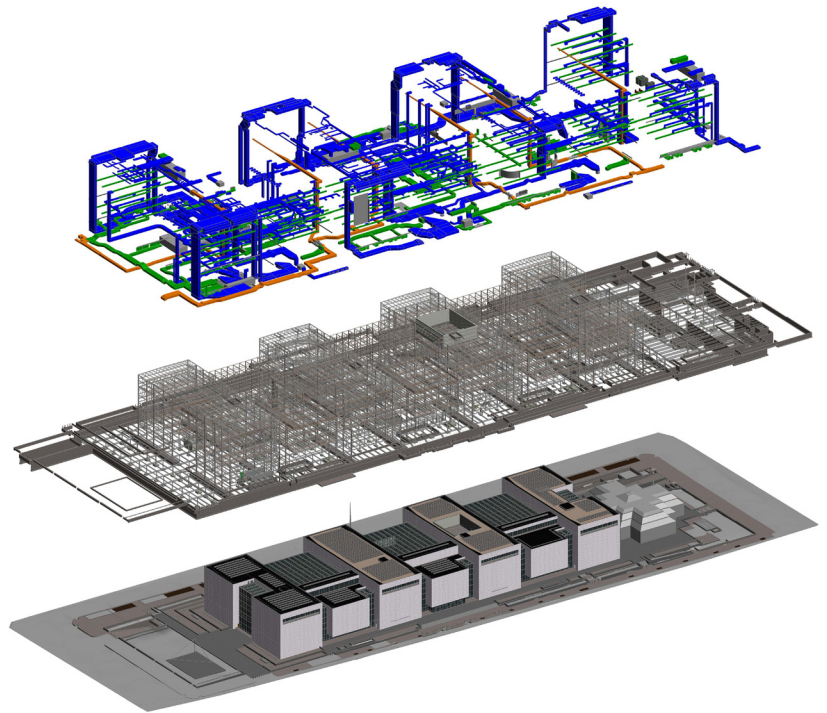
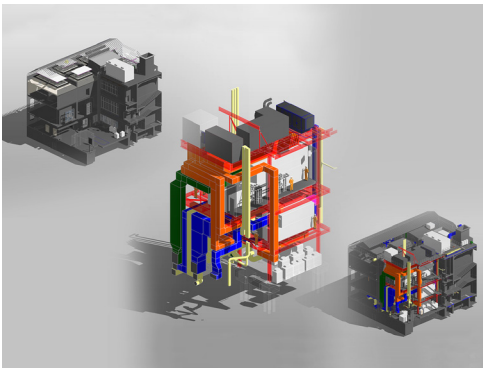
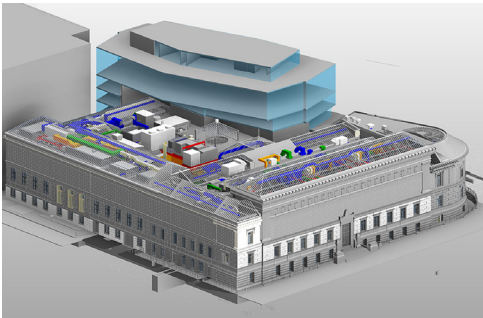
Q: WHAT WAS YOUR INTRODUCTION TO REVIT? WHAT WERE YOUR EARLY IMPRESSIONS OF THE MODELING SOFTWARE?

A: I've been using Revit MEP here at Mueller since 2006. I graduated with my engineering degree in 2003, and the program didn't exist when I was in school. Our management at Mueller recognized early on that we needed to embrace this technology, and provided us with comprehensive training. We saw where the industry was going. Our first project using BIM was the new Visitor & Admissions Building at the University of Delaware. At first, the software was not as well suited for mechanical/electrical engineering, but it has improved by leaps and bounds.



Mueller

ON POINT



Q: WHAT HAS IMPROVED SINCE YOUR EARLIEST USE OF THE SOFTWARE?

A: At the beginning, we were only able to model ductwork and electrical systems. Now, we have the ability to model just about every mechanical, electrical, plumbing, and fire protection system. We can do the electrical panel schedules, which we couldn't do before. The software has advanced tremendously, and our own training and proficiency has improved. Our entire professional and production team is trained in Revit. It makes it a lot easier when we're using the technology across the board, rather than having just a few Revit "specialists."

Q: HOW MANY OF MUELLER'S CURRENT PROJECTS ARE USING BIM TECHNOLOGY?

A: Nearly all of them. It's one of the biggest differences from three or four years ago. Nearly every project, including our university and museum work, is done in Revit today. It's become the standard, especially for large projects.

Q: WHAT ADVANTAGES DO YOU SEE AS YOU WORK WITH BIM?

A: The software really lends itself to a much more integrated approach to design. We can see the other

Above Left, Revit models of the renovation of the historic Corcoran School of Arts and Design in Washington, DC.

Above Right, Revit model of the multi-phased renovation of the Smithsonian Institution's National Air and Space Museum (NASM).

disciplines' design intents in a 3-D environment, with real-time updates. We export the models to Navisworks so that we can do our own clash detection. Mueller also has a comprehensive Revit-based library with details on equipment and fixtures. It streamlines our design time and effort and can be used to support life cycle and maintenance programs.

Q: HOW DO YOU KEEP CURRENT WITH UPDATED PROGRAMS?

A: We participate in the Autodesk user groups and Autodesk University. I've also had the opportunity to visit the Autodesk offices in New Hampshire and test their last two Revit MEP products prior to release and provide feedback. We have a lot of knowledge about BIM in this office and that's based in part on our experience but it's also a result of our commitment to continue to learn and take advantage of the latest resources.