

Keeping Public Works On Track

Leading Transportation Design Firm Uses Autodesk® Collaborative Project Management to Effectively Coordinate Efforts on \$300 Million Light Rail Project

Buzzsaw is ready to go on-demand: you can have a site up and running in a matter of minutes. At the same time, it provides you with powerful administrative tools to control the access to information, so it's very secure.

—Keith Meyer
Vice President
Rajappan & Meyer



Project Summary

Rajappan & Meyer Consulting Engineers, Inc. (R&M) is a specialized transportation project development, civil and structural engineering and design firm headquartered in San Jose, California. One of R&M's most challenging projects was designing a \$300 million light rail project for the Santa Clara Valley Transportation Authority (VTA). Traditional methods of collaboration – such as exchanging information via CD, or printing out hard copies of drawings and then express shipping them – were impractical when there were so many specialized disciplines and subcontractors that needed to work together. By using the Autodesk® Buzzsaw® Collaborative Project Management solution, R&M was able to:

- Improve collaboration by providing subcontractors and consultants with one centralized location for design information
- Ensure widespread adoption and usage across groups due to product intuitiveness and ease of use
- Reduce risk and minimize potential for human error by making sure that everyone has access to the most current drawings and documents
- Enhance client satisfaction by providing ready access to important project details that are needed for presentations to oversight boards and other authorities

The Challenge

A Leading Design Firm

Rajappan & Meyer Consulting Engineers, Inc. (R&M) is a specialized transportation project development, civil and structural engineering and design firm headquartered in San Jose, California. In business since 1994, the company has grown to be among the largest transportation design firms in Northern California, focusing exclusively on public works transportation improvements.

Tackling Mutli-Disciplinary Transportation Projects

One of R&M's most challenging projects was designing a \$300 million light rail project for the Santa Clara Valley Transportation Authority (VTA). "Light rail projects are incredibly complex," said Keith Meyer, a partner at R&M. "There are hundreds of miles of underground cable and electrical systems that power the trains. Those, in turn, need to be coordinated three-dimensionally with the rest of the design, which includes civil, structural, drainage, and traffic systems."

Rajappan & Meyer Consulting Engineers

Traditional methods of collaboration – such as exchanging information via CD, or printing out hard copies of drawings and then express shipping them – were impractical when there were so many specialized disciplines that needed to work together. “For the VTA project, we needed some sort of mechanism to guarantee that all these parties were in continuous communication – and that the files they were sharing were the most current and up-to-date,” said Meyer. “And that’s how we chose Buzzsaw.”

The Solution

Instant Notification and Ease of Use

Autodesk Buzzsaw works seamlessly with other Autodesk products to provide a simple, secure, and proven collaborative project management solution. R&M uses Autodesk AutoCAD and Autodesk Land Desktop to create its designs, and then saves the files in Autodesk’s compact but data rich DWF format. These plans and drawings can then be uploaded to Buzzsaw’s secure online site and shared with the VTA and other relevant parties. Whenever these files are updated, automatic notifications and reminders are sent out to project managers, ensuring that everyone is on the same page. Just as important as Buzzsaw’s functionality has been the ease with which it has been deployed. “We have a wide variety of technical capabilities on any given job,” said Meyer. “Even though everybody’s a professional, there are varying degrees of proficiency with computer systems. The fact that we got everybody on the project to use Buzzsaw really says something about its intuitiveness and ease of use. It’s not complicated at all.”

The Results

Reducing Risks With Better Coordination

Using Buzzsaw as their Collaborative Project Management solution has helped R&M ensure that the VTA project stays on track. “Multi-disciplinary jobs like the VTA project are probably the most coordination-intensive jobs there are,” said Meyer. “Buzzsaw improves the quality of our coordination. That’s important from a risk reduction standpoint.”

Meyer commented further on Buzzsaw’s risk reduction benefits: “Buzzsaw’s versioning capabilities are incredibly important from a liability standpoint. By keeping a very precise version history, we are able to document the design decisions that were made along the way, and then retrieve that information if the need arises.”

Improving Client Service

Ultimately, Autodesk Collaborative Project Management makes R&M a more efficient organization and allows it to offer a higher level of service to its clients. “There have been instances where the client needed access to an environmental report, or the latest construction drawings before they gave a status update to their oversight board. Of course, all the information was right there on the Buzzsaw site, easily accessible and totally up to date. Having one centralized location for both the client and the consultant team has been a very positive experience for all parties.”



For more information or to learn more, visit:
www.autodesk.com/collaborativepm



Autodesk Buzzsaw has helped Rajappan & Meyer Consulting Engineers simplify, centralize and streamline collaboration for up to 150 users on more than 2,000 sheet sets for the Santa Clara Valley Transit Authority’s \$300 million transportation project.