

Putting Projects into Perspective:

rojo Architecture Designs in 3D using Vectorworks Architect





Whether designing a 500 square-foot interior build out or a 500,000 square-foot mixed-use development, 3D helps put projects into perspective for rojo Architecture.

rojo Architecture had been working on a master plan for a 500,000 square-foot mixed-use development in Tarpon Springs, Florida, for nearly two years when it got the green light to proceed with the first component: a medical arts building adjacent to an existing hospital. But first, the Tampa, Florida, architecture and interior design firm had to create a visual plan to show how the building would fit into its environment and fulfill the requirements of everyone who had a stake in the project: the eventual tenants, city officials, the developer, and potential investors. Impressed with the initial 3D model of the medical arts building rojo created, stakeholders also asked the firm to further develop conceptual designs for the other buildings. And, the firm had only three weeks to fulfill their request. That's where the best-in-class 3D modeling capabilities in Vectorworks® Architect came in handy once again.



Architect Case Study: Putting Projects into Perspective: rojo Architecture Designs in 3D using Vectorworks Architect

The master plan included hardscape plans, parking plans, traffic flows, and pedestrian walkways, in addition to the building complexes. Among these were the existing hospital, the proposed medical arts building, a parking garage, an assisted living facility, an apartment building, retail shopping space, a supermarket, townhomes, a bank branch, and a commercial office building. All this had to be represented in a series of site views that illustrated how each stakeholder's requirements would be met.

The city requested that the medical arts building not be higher than the hospital. The city also anticipated potential community opposition to the development's overwhelming scale within its surroundings, due to its density, height, and overall program. So city officials pushed the development to be in scale with the surrounding area to deter opposition. But, the biggest hurdle was convincing the hospital's board of directors—a group of laypeople who didn't know how to read conventional site plans and elevations. So, rojo had to quickly generate detailed models of the proposed buildings to include large-scale 3D site views of the 15-acre site. rojo also created individual height and massing models for each building, in order to depict how the complex would look when finished.



A Versatile Solution

The team began by gathering all of the site-relevant information—from civil engineering drawings and Google™ Earth data to CAD files from other architects—and importing it into one single file in Vectorworks. In addition to using the textures and symbols from the libraries already built into Vectorworks and the custom ones they created using Vectorworks, they gathered more from Internet sources and imported them, too.

“The incredible combination of symbols and textures we’re able to make use of in Vectorworks is very important when it comes to selling our designs,” explains Rob Glisson, rojo principal. “The more realistic all of those little touches—such as trees, signs, people, cars, and walkway patterns—make our designs look, the more likely our client will approve the project.”

“The incredible combination of symbols and textures we’re able to make use of in Vectorworks is very important when it comes to selling our designs.”



Flexible Workflow

Then, they brought the 3D models of all the proposed buildings they’d just created into the same file. “No matter where a file originates from or what format it is, Vectorworks can handle it all,” explains Rob Glisson, rojo principal. “Because Vectorworks Architect can incorporate a large amount of information from different sources into one file, that made it very easy for everyone to see how the proposed structures were going to interact with the existing buildings and surrounding areas.”

“It’s not hard to build a model in Vectorworks Architect—and it never has been.”

They even rendered the entire file using Renderworks, Vectorworks’ visualization plug-in. “We created the 3D models of each building separately and referenced them to bring them into one large file to render, since we were concerned about the amount of time it would take to render,” says Glisson. “We were up against the clock, but Renderworks did a fantastic job and rendered the file without a hitch. The better we can show what something is going to look like, the better we sell it to clients, and the better job contractors can do in creating it—then everyone is happy.”

rojo also finds designing in 3D to be a valuable time saver.

“Even when we’re doing an interior build out, we’ll use the Wall tool and assign it a height, for example,” Glisson explains. “The more completely everyone can draw right from the beginning, the more time we’ll eliminate later, when it comes time to do building sections and elevations, because the 3D model will generate all of that for us automatically.”

“The more completely everyone can draw right from the beginning, the more time we’ll eliminate later when it comes time to do building sections and elevations, because the 3D model will generate all that for us automatically.”



A Smart Investment

Its exceptional 3D and visualization capabilities aren't the only reasons rojo uses VectorWorks.

"We've never needed to look at another program, because Vectorworks meets all of our needs as project architects," says Glisson. "We use Vectorworks from the very beginning conceptual stages, through schematics and design development, to presentations and final construction documents. We don't need Google SketchUp, because we can create conceptual drawings just as easily in Vectorworks—and take them a lot further without having to redraw them. Vectorworks is also a fine graphics tool for us. While a lot of people use Adobe® Illustrator, we can achieve exactly the results we want with Vectorworks."

"We've never needed to look at another program, because Vectorworks meets all our needs."

Glisson adds, "And, for all of the power it provides us, Vectorworks is surprisingly affordable."

This has also served rojo well over the years, as the firm has grown and added new seats. Glisson finds it easy and inexpensive to train new employees, too.

"For all the power it provides us, Vectorworks is surprisingly affordable."

"We have to train all new people, and we can do it in two days on site with Vectorworks," says Glisson. "We give them the Vectorworks two-day training CDs, and, in three days, they're drawing. We're project architects, not CAD jockeys or professional renderers, so we're not interested in a program that is so hard to use that we need specialists to run it."





rojo Mojo

Two things have always been a given for rojo Architecture: the Macintosh computer and Vectorworks software. Principal Rob Glisson has used VectorWorks on a Macintosh since he began his career in 1992.

“We’ve never had the need or desire to look at any other program,” affirms Glisson. “In fact, we have Vectorworks files that go all the way back to 1992—that’s a long history for CAD files,” says Glisson. “And, I can still open them using the latest version of Vectorworks.”

rojo Minimum

rojo Architecture has a basic philosophy: the rojo minimum.

“We set a high minimum standard for everything we do at rojo, and Vectorworks consistently exceeds it,” explains Glisson. “Vectorworks has always worked flawlessly for us, and it keeps getting better. It’s truly state of the art in our profession.”

The 12-person Tampa, Florida, based architecture and interior design firm practices throughout the Southeast on corporate, religious, educational, hospitality, and residential projects. Recent work includes the 500,000 square-foot mixed-use development in Tarpon Springs, a multimillion-dollar private residence, and a historic renovation of a 100-year-old sanctuary.

For more information, visit www.getrojo.com