

Wrapped with Style

A recent building renovation in downtown Boston received a unique graphic wrap — a stylized version of the finished building's facade.

BY K. SCHIPPER

CUSTOMER: Boston Federal Associates, Boston

DESIGNER: E.R. Racek Associates, Boston

PRINTER: Castle Graphics, Concord, Mass.

CONSULTANT: Joanne Rose, Impact Graphics, Reno, Nev.

INSTALLATION: Marr Scaffolding Co., South Boston, Mass.

When the state of Massachusetts opted to wrap its historic state-house building while renovating the facade, it may have launched a trend that will put super-sized art on the streets of Boston for years to come.

One of the first to follow the state's lead was CB Richard Ellis/Whittier Partners. The real estate company chose to wrap the facade of its 11-story, 90,000-square-foot office building in Boston with an artistic print during an upgrade of the building. This was instead of the more traditional debris netting required by the federal Occupational Safety and Health Administration (OSHA).

A SURREAL APPROACH

Rather than take the state's approach of reproducing an historic Boston frieze, though, the property owners and their architect, E.R. Racek Associates of Boston, took a more surreal approach by using Adobe Photoshop to create a stylized version of the upgrade's rendering.

The idea for the wrap actually came from the architects — particularly former associate Kevin Racek — say both Racek project manager David Battat and Charles Kenny, general partner in Boston Federal Associates, which owns the property.

"The client did have some concerns about the building being wrapped in debris netting," says Battat. "The question

from them was whether the job could be done without debris netting, but that wasn't an option."

Kenny agrees, adding that concern for the project's appearance during the six-month renovation was of some importance. "We're dealing with a building that's fully tenanted," he says. "We paid a lot of attention to whether this would serve the same function as the debris netting, and it does. We also wanted to make things a little nicer for the tenants."

And, while Battat says the architectural firm's principal, Eugene Racek, was aware of other buildings that had been wrapped in graphics, the recent statehouse project (see *DG*, Sept. 2001, page 46 for full coverage) really brought the idea to the forefront in a community that has so far banned super-graphics carrying commercial advertising.

PROCESS OF EVOLUTION

Deciding what to actually put on the wrap was a process of evolution. The architects initially proposed using a white background and only blowing up the images of one or two windows. Over time, both sides agreed that a full-size reproduction of the entire facade might be the best answer.

While discussion was going on about the artwork for the scaffold-wrap, Battat says officials at Racek were searching for a company to do the printing. Through industry contacts and an Internet search, they finally hit upon the Concord, Mass.-based Castle Graphics.

"We got a call asking, 'What can you guys do in terms of large-format graphics? We want to wrap a building,'" says Tim Knauer, account manager at Castle for the project. "I explained some of the different options to them, and then we had a meeting. I showed them some of the different materials we could use. Because they were looking at cov-



The 11-story, 90,000-square-foot facade of a Boston office gets covered with a stylized print during an upgrade of the building. The pixelated graphic of the finished facade was used instead of the more traditional debris netting required by OSHA.



Installation was handled by Marr Scaffolding, the company used for the renovation. Joanne Rose of the Reno, Nev.-based Impact Imaging serve as a consultant.



The material used was Ultra Mesh from Ultra Flex. It took about 65 hours to print, and when assembled, the graphic measured 110' X 128' and weighed 1,400 lbs.

ering such a big space, we obviously had to go with a perforated material so wind could pass through it.”

Until this project, Castle had mainly concentrated on large concert backdrops and smaller building graphics. Knauer acknowledges there was a learning curve for his company on the best ways of engineering such a large banner to be safe and look good.

“I ended up contacting some different companies that have done this type of work in places such as New York and Los Angeles,” he says. “I learned a lot.” Fortunately, everyone involved says there was plenty of good communication during the project.

To that end, the owners, project manager, construction company and architects would have weekly meetings, and Knauer gave periodic progress updates. “Castle worked very hard with us,” says Battat. “They were most responsive to us.”

PERMITS, PERMITS

As various other aspects of the project — including finalizing the artwork — moved forward, one job Knauer took on was obtaining many of the necessary permits and permissions from Boston officials. This included getting a fire permit and various approvals from a structural engineer and the Boston Redevelopment Authority and the city’s inspection services department.

Both he and Battat say that staying away from a commercial appearance and concentrating more on the aesthetic aspects of the project helped with the design approval.

One obstacle, Battat says, was having the

substrate approved by the local fire department. Since the 1942 Coconut Grove fire killed 491 residents of the Boston area, the fire department has wielded a great deal of power over what materials are allowed to be used on any projects.

Battat says he was particularly concerned about a decision made just prior to the job to go to a wider material.

“We definitely wanted to use the 16-foot material, rather than the six-foot-width that was initially proposed,” he says. “We were able to very quickly get approval from the fire department on the new material, but there was a whole lot of running and chasing involved.”

CREATING THE LOOK

As the permits were being approved, Battat and Mirren Fischer, an architectural designer with Racek, continued working with the clients on finalizing the artwork for the wrap. Fischer explains that after several photographs of the building failed to produce what she calls, the *right results*, she opted to use a low-resolution digital photo of a rendering for the renovation. She loaded it into Photoshop on her computer and began manipulating it.

“I came up with a number of options,” she says. “Some of them were more surreal than others. The one we ended up using is one of the more conservative of the images, because the owners were more interested in that particular look.”

To create the final design, Fischer says most of the manipulation she did was done with

Photoshop’s watercolor and pixelated filters. She notes that both are memory-intensive. “It took a lot of time and the computer kept crashing,” she says. “The finished file, before we managed to compress it, was something like 800 MB.” That’s a huge file.

Getting the design from Fischer’s computer to one at Castle Graphics also proved problematic. Some of that was due to the need to work with a high-resolution photo for the final print; the rest came from translation problems between Fischer’s PC and the Macintosh G-4s used by Castle. Ultimately, the graphics company ordered a new high-res photo of the rendering which they loaded into one of its computers via a drum scanner.

Fischer then spent time at Castle Graphics trying to duplicate her Photoshop manipulating efforts on the Mac. Knauer admits it’s an approach that’s a little out of the ordinary — although the end result was a more manageable file of 300-400 MB.

“Normally we like to keep the design in-house, but since they had a designer they wanted to devote to this project, we were happy to let them,” Knauer says. “Once she had her file where she wanted it, we brought her in and did the manipulations again. Obviously, because it was pixelated already, the image was very forgiving.”

“Since I’d met with the clients, I knew what they were looking for,” says Fischer. “The two images didn’t match completely, but I knew what would and wouldn’t be acceptable to the client.”

Although resolution definitely wasn’t a problem with the pixelated image, color



Two 150-foot truck-mounted aerial platforms were employed to lift the folded material to the top of the scaffolding. The largest single piece of the image measures 90 feet in width. It was accomplished without a single tear or rip.

matching was certainly an issue for the architects.

“They were very nervous about color matching and darkness, and they all wanted to be sure it was right,” says Knauer. “We ran a whole bunch of 4' x 6' samples for three levels: the bottom of the building, the middle of the building and the top of the building. Normally we might run one sample and if the customer says that it needs to be a little darker, we'll darken it by a certain percent and just do it.”

Fischer, who was actively involved in that aspect of the job, as well, says the big problem, with both the architects and the client, was getting some perception of the project's *scale* from the samples.

“We were trying to imagine what it would be like to blow it up 3,000 percent,” she says. “We'd physically hang them off the scaffold and step back a couple hundred yards to try to figure out what they'd look like when they were blown up to the size of the building.”

THAT'S A WRAP

After the final approvals were given, the entire image was printed in 16-foot strips on a super-wide inkjet onto Ultra Mesh from the German company Ultra Flex. Knauer says it took about 65 hours to print the pieces, which, when assembled, measure 110' x 128' and weigh 1,400 lbs.

The printed mesh was RF (radio frequency) welded, and the exterior edges finished with a Japanese-made Weldabelt material for ease of installation.

Hanging the wrap was handled by the scaffolding company used for the renovation, Marr Scaffolding of South Boston, Mass. Because of Castle's inexperience with projects of this type and size, the company hired Joanne Rose of the Reno, Nev.-based Impact Imaging to serve as a consultant.

Rose explains that when this type of graphic isn't installed effectively it can lead to tears and sags in the fabric. To avoid that, she and a design team with whom she worked from building and scaffolding plans to create a schematic that would ensure success.

The project had both positives and negatives to it. Perhaps the biggest challenge was the wind. The building, near Boston Harbor, is often exposed to extreme wind conditions.

“Any time the staging wall is away from the structure — in this case it had a seven-foot return — you have to really make allowances for wind velocity,” Rose says. “This particular mesh channels about 48 percent of the wind load, so the wind can be transmitted through it. It's not like putting up a solid piece of vinyl.”

On the positive side, Rose says the slight curve of the building's exterior surface and its corner location made for a nice visual effect. “It really looks like a skin over the scaffolding wall,” she says. “It's very tight and it gives you the full image and a lot of impact.”

Also a positive was Marr's willingness to do the installation and its previous experience installing both debris netting and smaller graphics.

“We've been involved in installations of



Because of the windy location and the sheer size of the print, Marr opted to involve a professional engineer who calculated the wind load and advised the company on tie-ins for the project.

other graphic banners,” says Carl Heinrich, Marr’s project manager for the job. “This is the largest one we’ve done to date, and certainly the largest single piece installation we’ve done. The challenge on this one was definitely the size of the finished pieces.”

In fact, because of the size, Marr opted to involve a professional engineer to calculate the wind load and advise the company on tie-ins for the project. “Our policy is typically to double the number of tie-ins OSHA would require on a standard, unenclosed project,” says Heinrich. “We did require more tie-ins because of the wind loads that will be involved with this.”

Certainly one advantage to having Marr do the work is that one of its affiliated companies was able to provide two 150-foot truck-mounted aerial platforms to lift the folded material to the top of the scaffolding. The largest single piece of the image measures 90 feet in width. David King, Castle’s director of operations, explains that the right-hand side of the image was done in three 20-foot wide pieces to accommodate the movement of material onto and off of the scaffolding.

Rose says the actual installation took about 10 hours using a 10-person crew. The image is attached to the scaffold utilizing a mix of threaded connectors, carabiners and ratchet straps.

“The power strap around the perimeter has perforated holes every six inches that will take up to a thousand-pound wind load,” explains



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Designers opted for a low-resolution digital photo of a rendering of the finished facade. To create the final 800 MB design, most of the manipulation was done using Photoshop’s watercolor and pixilated filters. Both are memory-intensive.

Rose. “It offers a great deal of strength, and that’s why we used some ratchet straps to pull the stretch out of it; it’s very tight.”

None of those involved in the project expects there to be any problems with it during the six months or more it’s to be up decorating the site. And, uniformly, they say they’re pleased with the job’s outcome.

LOOKIN’ GOOD

From the architect’s perspective, Racek’s Battat says it’s been a huge success aesthetically while providing a slightly stronger and thicker material than the debris netting.

“We weren’t really sure what would happen blowing up an image to that size,” he says. “It never would have been a disaster, but it might not have been as interesting as it is. As it is, it looks fantastic. It looks good on sunny days and on rainy days.”

Boston Federal’s Kenny says that although the overall cost of the project is greater than the owners had originally planned for, the wrap seems to be paying off financially for them. “The tenants are very pleased,” he says.

Castle’s King says the wrap is generating a great deal of interest from transportation and property management companies wanting to know more about this type of graphic.

“It’s created the most incredible amount of interest I’ve ever seen for a project,” King says. “We spend more than \$100,000 in advertising every year, but I don’t normally get nearly the number of calls this has generated in such a short period of time.”



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