

# FROM GRAY TO GREEN

WRITTEN BY KEVIN KUZMA PHOTOGRAPHED BY JENNIFER BROTHERS

## Infrastructure projects mark new, more environmentally conscious era for Kansas City.

Where there was once only asphalt, a line of saplings now runs along 12th Street past a stretch of narrow buildings from Baltimore to Locust. Last summer, there was an improvement project here that shut off a lane of traffic. After a few weeks, the orange cones were picked up, the honking subsided, and new tree planters adorned the sidewalks.

The addition of some greenery might not seem to be anything spectacular or a great leap forward in the environmental movement. Beneath those planters, though, lies the innovation: a water reclamation system that recycles rainwater, in turn preventing the city from spending funds on watering the landscaping or using harmful chemicals to keep the mostly gray cityscape a more healthy color.

Apart from the obvious aesthetic improvements, the 12th Street streetscape project is among several projects that have turned city officials on to

the benefits of environmentally conscious decision making on urban infrastructure projects.

Cities can develop reputations as easily as people can. Kansas City, until recently hasn't had a reputation for being progressive or being on the front lines of the green movement. But with a new string of government- and privately led projects achieving esteemed designations for incorporating ecological features, the city's position is gradually beginning to change.

An essential philosophy in the recycling movement is that anything can be saved. Rick Usher, the downtown projects coordinator in the City Manager's office, is a believer in that ideal as it applies to reviving downtown in a meaningful and yet environmentally conscious way.

"It's important not only in terms of thinking of the environment, but also in balancing the city budget and long-term cost savings," Usher says. "Just a year

*"I started thinking about how we impact the well-being of our clients, their neighborhood, the city, and the planet. What I found was that many, if not most, design and planning decisions were reducing human potential and the vitality of the environment—even on projects that had won design awards and national recognition," says Bob Berkebile, founding principal at BNIM Architects.*

or two ago, people would have thought going green on these types of projects would have been too expensive. Now, not only is it good marketing, you can also save money."

Governments nationwide are recognizing the same advantages. Communities such as Portland, Ore., and Minneapolis are recognizing the savings on cost, alleviating burdens on already-stressed city resources, and creating more eco-friendly communities.

Under the leadership of a new city council that supports green initiatives, Kansas City has now begun to focus on the efficiencies in designing and planning new buildings and streetscape projects to meet LEED standards.

Kansas City is now home to several LEED-certified projects. LEED, which stands for Leadership in Energy and Environmental Design, is a rigorous process that can add some design or construction costs, but increasingly, owners are finding certification worth the additional effort. Some communities are benefiting from tax incentives,

which Kansas City may begin to explore. For a project to become certified, a third-party group must evaluate it based on established criteria for sustainability in categories such as sustainable sitework, water efficiency, energy efficiency, emissions, materials, and air quality.

Kansas City native Bob Berkebile was instrumental in working with The US Green Building Council to create the criteria for LEED designation. Berkebile, founding principal at BNIM Architects, was the architect of the Hyatt Regency hotel walkway project before it collapsed on July 17, 1981, killing 114 people and injuring more than 200 others. The disaster drove him to push the American Institute of Architects for more research and emphasis on the unintended consequences and environmental impacts from design and construction projects.

"It was the longest night of my life," Berkebile says. "During the process of removing the dead and seriously injured people, the first question I had was, 'Did I kill all these people?' I wanted to understand the relationship between our design and the impact on these people. I started thinking about how we impact the well-being of our clients, their neighborhood, the city, and the planet. What I found was that many, if not most, design and planning decisions were reducing human potential and the vitality of the environment—even on projects that had won design awards and national recognition."

Now a LEED designation is among the highest standards the design and construction industries can achieve. For a local example, look no further than the recent Bartle Hall Ballroom expansion project, which was built to LEED Silver criteria.

Facing a space shortage and the need to improve an aging convention center, the city turned to Kansas City-based HNTB Corporation with BNIM to find a solution. And the answer that now spans the busy intersection across I-670 was nothing short of an engineering and architectural achievement. The new ballroom structure was considerably expanded to 3,000-guest capacity, and the convention hall was modernized to increase its functionality.

In order to optimize the facility's energy performance, engineers called for new insulation, high-performance glass systems, and energy-efficient HVAC and lighting systems. Now the city is

saving an estimated 30% of the typical water usage with landscaping materials and special plumbing fixtures that were implemented.

More city-led, eco-friendly projects are slated. Construction began last fall on a new vehicle impound facility at 7750 East Front St. to support the Neighborhood and Community Services department. El dorado architects designed a two-building structure that sits on a 25-acre plot with space for about 2,000 cars, offices, and a vehicle shed. The \$19.6-million total project cost will benefit from careful site location, building orientation, good insulation, controlled daylighting, and an innovative mechanical system. And the contractor will limit the amount of construction waste that will find its way to a landfill by 75%.

This spring, construction will begin on a new Metro Patrol facility at 77th and Prospect in North Kansas City. With more than 27,500 square feet of space, the state-of-the-art building will be another environmentally sustainable project that will achieve a LEED Silver rating. Engineers designed the building to minimize solar heat gains in the summer. Native species of ground cover, grasses, and shade trees along with areas of bio-retention to handle storm-water runoff are combined to create an environmentally sustainable landscape.

City officials say Kansas City's central location is key for LEED projects. Critical construction materials don't have to be driven across the country, which saves the air from harmful fuels.

"There are a couple reasons why it's important to consider the environment," says Eric Bosch, manager of architecture for Kansas City's Capital Improvements Management office. "First, undertaking projects in this way is just the right thing to do. And then, there are materials available to us in a 500-mile radius, so we can save money on shipping. Marble, precast-concrete, limestone, and steel fabricators are close by. There's lots of manufacturing of different products in this area."

That bodes well for a city that will continue to build in green ways. Usher says with the Mayor's goal to welcome another 50,000 residents downtown, a more attractive city that has taken the green movement into account—whether aesthetically or in its execution—will entice more people. "Going green" is a popular catchphrase at present, but the longevity of that slogan is imperative to the city's colorful future. 

