ON THE *Waterfront*

The main currents in Perkins Eastman's waterfront work

Above
The Wharf, Washington, DC
Photograph by Sarah Mechling / Copyright Perkins Eastman

By Jennica Deely

It's a crisp spring morning in Nashville when officials from Metro Nashville Planning Department join Perkins Eastman principals Vaughan Davies and Eric Fang on board one of Metro's fireboats for their first tour of the Cumberland River. In silhouette against the pale early light, birds swoop in long arcs between water and sky, their sharp cries rising above the drone of the boat engine. Downriver to the right, the water laps against the steep shoreline. Trees and bushes scramble up the rocky hillsides to apartment buildings and towers perched on the bluffs above. To the left, scattered along the low, flat plain, warehouses, gravel parking lots, concrete piers, and box trucks assemble and reassemble themselves like a game of Tetris. It is here, pulled forward by the river's current, that path and purpose align.

"It starts with water. When you get onto the water, it puts you in a different place, in a different mindset, you're seeing the world completely differently from most people around you." – Vaughan Davies

This morning boat ride in Nashville heralds the launch of a new study—"Imagine East Bank"—that will help forge a vision and plan for the future redevelopment of Nashville's East Bank on the Cumberland River. Encompassing more than 330 acres of land, this ambitious study, which began in April, is exploring ways to better engage the public in plans for a variety of uses for the East Bank—residential, recreational, commercial, and industrial—while also bolstering the area's resiliency in the era of climate change.

This boat ride, the shoreline walks, and riverside presentations that will follow are the first and most integral steps in Perkins Eastman's distinctive waterfront planning and design process. "It starts with water," says Davies. "When you get onto the water, it puts you in a different place, in a different mindset, you're seeing the world completely differently from most people around you." Perkins Eastman's process—approaching the project from the water first—speaks to its legacy of work along waterfronts in cities across the United States and around the world including Washington, DC; Buffalo; Baltimore; Long Beach; New York City; and Qingdao, China. Focused within the firm's Urban Design + Planning and Large Scale Mixed-Use practices, Davies and Fang lead this complex work along with principals Stan Eckstut and Hilary Bertsch, among others.

Eckstut, who has played a major role in nearly all of the firm's waterfront work, including legacy projects such as Battery Park City in New York City, Huishan North Bund in Shanghai, and Inner Harbor East in Baltimore, believes that great waterfronts, like great cities, must feature all types of uses and spaces. In addition to the variety of the onshore built environment, "Great waterfronts also rely on a lot of activities in the water," says Eckstut.

Programming in Parallel: Water and Land

The success of projects like The Wharf in Washington, DC, and Canalside in Buffalo showcase the value of this thinking. "A lot of people talk about waterfront projects, and what they mean is the development is in front of a

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Part of the water-first approach is to develop a water plan—essentially a map of all of the activities on or related to the water—that can inform the best usage for the land along its edges. The plan aims to answer many questions, Bertsch explains, such as: Who uses the water? Are there barges? Recreational boaters? Fishing boats? Who has the right-of-way? Are there protected wetlands to consider? Do birds nest along the shore? Are the fish populations healthy? How will climate change affect the development? Where is the 100-year flood line? Is swimming allowed? What is the proportion of public versus private access?

While the water informs ways in which the land can be used, Bertsch explains, "It's really capitalizing on that adjacency to the water to make value on the land." Bertsch's work with Canalside in Buffalo, located at the Western terminus of the Erie Canal, is a prime example of how water and land plans work together. Buffalo's proximity to the canal had long been a vibrant locus for commercial and industrial activity. As economies and shipment routes changed, however, usage of the canal decreased and the downtown tow-ways were backfilled. Through the development of a water plan, Bertsch and the team discovered ways to bring the water back to these sections of the canal. More water led to more opportunities for visitors to walk along its banks and more frontage to anchor waterfront activities. Lined with restaurants and shops, the canals have become connections to the many different levels of public and retail environments now present in Buffalo. In this respect, starting on the water—regardless of whether it's Buffalo, New York City, or Nashville—sets up a very different way of responding, way of seeing, way of communicating with the public. As Davies notes, "We're taking into account the public realm [the water] as the primary factor for describing a future neighborhood."

Leading with the Locals

Neighborhoods thrive best when they engage with and advocate for their residents.

"If you design for locals first and the locals love it, then you're automatically taking care of the tourists," Davies says. He recalls how local input was prioritized with Perkins Eastman's Rainbow Harbor development in Long Beach, CA. Inspired by a woman who attended public meetings for the project from the start, "Mother's Beach" is a treasured and highly popular feature of the beautiful crescent-shaped harbor. It came about because of her, says Davies—"She showed us all a picture of her sitting on the beach with a bucket and spade as a little child."

Right
Rainbow Harbor was a catalyst and primary anchor for the revitalization of Downtown Long Beach. Rainbow Harbor, Long Beach, CA. Copyright trekandphoto / Adobe Stock

Throughout the planning process, the woman remained engaged in meetings, occasionally reminding the team of the photo and her childhood memories, ultimately inspiring the team to name a special section of the beach in her honor. Sometimes it's the small things, the little moments that arise from a community's collective memories that make the biggest impact in the history and legacy of the city.

Nashville is often associated with its legendary music industry presence. And while the western side of the river is where many of the city's music landmarks and its high-rise downtown district are located, the eastern side is a different story. In some areas, the bank is significantly lower in elevation than its western neighbor. Here, the area is dominated by industrial uses and is more representative of the city's history as a manufacturing center.

This is particularly evident from a bird's-eye view. Five bridges transect the 330+ acres of the Imagine East Bank study and create a formidable, looming presence as they tower above the river and touch down on the East Bank shore. But this effect can be reversed, Davies believes, with a new perspective of the bridges and the circumstances they create. During the group's first tour of the river, Davies was struck by the incredible industry and craftsmanship of the structures, which is best observed from the water and below. "There is a tremendous opportunity to engage the edges of the bridges and the viaducts," Davies says. "One of the really unique attributes of Nashville is there is a precedent there of buildings being located alongside the bridges. There's no reason why those bridges can't be much more people-friendly, with elevated sidewalks and landscaped, shaded pathways."

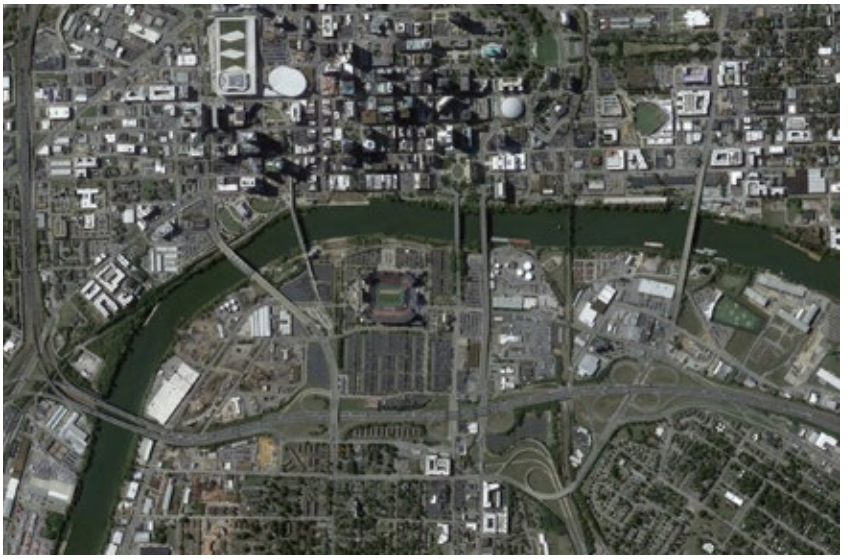
Building Resiliency by the Water

Public beaches, riverfront restaurants, elevated sidewalks, and landscaped pathways are fantastic ways to bring people to the water, but what happens when too much water—in the form of flooding and massive rainstorms—comes to the people instead?

The devastating 2010 flood of the Cumberland River is still very present in the minds of Nashvillians. In May of that year, heavy rains and runoff caused the river to swell, flooding parts of Nashville and surrounding areas of Tennessee and Kentucky. Nearly 11,000 properties were damaged or destroyed in the flood, 10,000 people were displaced from their homes, and 26 people died. The flood caused more than $2 billion in private-property damage and $120 million in public infrastructure damage in the city. Managing ever-increasing events like this one demands a nuanced and scientific approach.

Leading the Nashville study's approach to resiliency is Fang, who has worked on large-scale projects, waterfronts, mixed-use, and resiliency plans for more than two decades. Fang cites Perkins Eastman's 20-year track record at the forefront of thinking about how cities can engage with the waterfront in a way that is proactive about climate change. And Fang should know—his work with Perkins Eastman includes the celebrated Arverne by the Sea project in New York, which became a widely referenced case study for resilient community design in the wake of Hurricane Sandy in 2012. "That area of New York got devastated. It was really on the front lines," says Fang. "Arverne had the benefit of newer infrastructure built under current regulations. We had actually thought about how to protect it from the ocean and developed potential remediation plans." The project was widely published at the time in articles that heralded its resiliency in the face of the storm. As a result, Fang says, "We were called upon to work with Mayor Mike Bloomberg's Special Initiative for Resilience and Rebuilding, the landmark long-term resiliency plan for New York City. It woke up a lot of people in the profession and the wider public to the perils of climate change," Fang says.

In Washington, DC, The Wharf's master plan expands on this research with a variety of methods to manage abundant stormwater. "It's always easy to make a place nice on a beautiful sunny day, but you also want to recognize and have it be a place where people want to go when it's not," says Bertsch. A variety of methods can mitigate heavy rainfall and stormwater surge, providing for comfort and safety during a weather event. These include features like floating wetlands; durable, waterproof, and permeable surfaces; and buildings designed to flood, meaning their mechanical systems are placed on a higher floor above the flood line or engineered to be sealed off from encroaching water. The Nashville study is considering flood mitigation management strategies like those at The Wharf and Arverne by the Sea to guide future climate-change-resilient developments along the East Bank.



Above

Top: The Imagine East Bank Study encompasses more than 330 acres along the Cumberland River's East Bank. Photography: Google Images Imagery ©2021 TerraMetrics, Map data ©2021 Google

Bottom left: Historic image of the Cumberland River in Nashville, TN

Bottom right: The view under the bridges along the Cumberland River showcases the possibility for developing this interesting part of the landscape. Photography: Perkins Eastman

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Getting Started

Perseverance and tenacity are necessary for managing the scale and complexity of large-scale waterfront developments. Perkins Eastman is fortunate to draw on its decades-long, ongoing experience with projects around the globe. For instance, Davies notes, "The firm's first major waterfront, Battery Park City, took 40 years—and that's in one of the most dynamic real estate markets in the world."

Getting these projects off the ground, however, is a different matter. "The hardest part is getting started," Eckstut notes. "The plan has to be big enough to have a critical mass and embrace the vision for that particular waterfront, even if it's just one town square or one main street. Too small and the vision can't gain traction," Eckstut continues, "but too big means taking on too much financial risk and is likely to fail."

Taking the Long View

The success of Perkins Eastman's large-scale practice and waterfront work is grounded in this pragmatic thinking and guided by a refreshing and holistic philosophy. As Davies explains, "It really is about an eye-level experience, an immersive experience, not an observer experience."

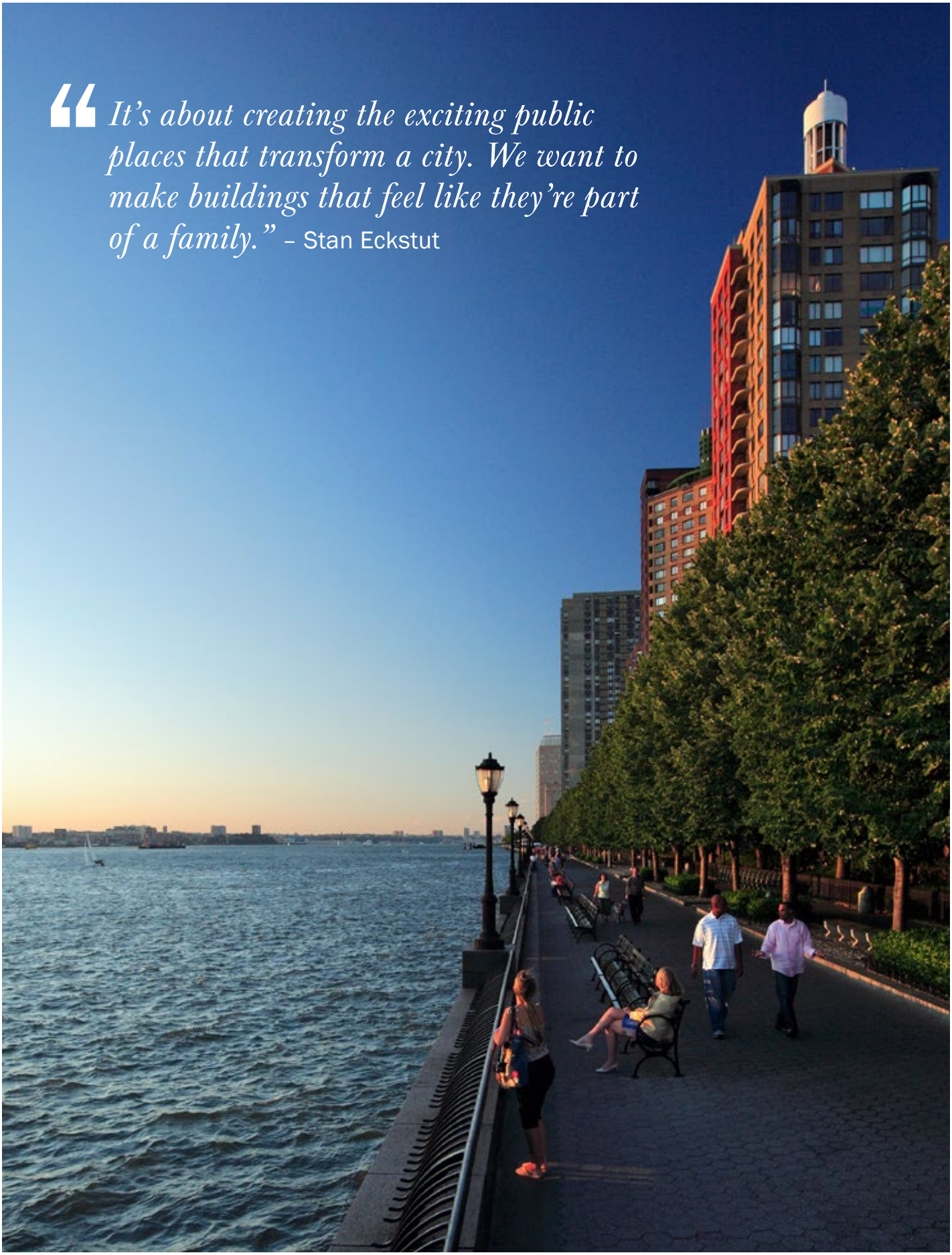
"When you look at the success of waterfronts, they all address how to provide public access to the waterfront in a way that's meaningful to the people who actually live there," says Bertsch. Fang agrees. "Battery Park City feels like New York. It's unique, there was nothing like it before in New York, but now everybody visits Battery Park City and thinks 'This is New York.' And The Wharf—it feels like DC—but there was never anything like it in DC."

In the case of Nashville, Davies says, "We're hopefully influencing the dialogue right now in the way that we're talking about it. I think this is a huge opportunity for Nashvillians to engage in the design process. They're all part of the East Bank story."

In the end, says Eckstut, "It's about creating the exciting public places that transform a city. We want to make buildings that feel like they're part of a family." **N**

Right
The Wharf, Washington, DC. Copyright Jeffrey Goldberg/Esto / Courtesy Perkins Eastman

Opposite page
Battery Park City Esplanade. Copyright Wayne Chasan / Courtesy Perkins Eastman


“It’s about creating the exciting public places that transform a city. We want to make buildings that feel like they’re part of a family.” – Stan Eckstut