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Design in Transit

PUBLIC TRANSPORTATION NEVER LOOKED SO GOOD

By Camille Lefevre, with an introduction by Christopher Hudson

It's one of Minnesota's feel-good stories of 2004: the once-embattled Hiawatha Light Rail Transit (LRT) line, the area's first non-bus metro transit since streetcars last traversed Minneapolis in the 1950s, opened in June to great fanfare and a larger-than-anticipated ridership, and the route extended from 12 to 17 stations in December. Why all the hoopla? Sleek, quiet, and environmentally friendly (i.e., electric) vehicles are one reason, and eye-catching, individually designed stations are another.

The latter concept is the brainchild of Steve Durrant, director of Planning and Urban Design at URS Corporation, the firm commissioned by the Minnesota Department of Transportation to manage the Hiawatha project. Initial plans called for three station designs: one for downtown stops, another for city neighborhood stations, and a third for suburban locations. Durrant, however, saw an opportunity to create a string of civic landmarks while increasing community participation in the project. In short, he enlisted five Minneapolis architecture firms—Barbour LaDouceur, Cunningham Group, ESG Architects, Julie Snow Architects, and Meyer, Scherer & Rockcastle—to collaborate with local artists and neighborhood residents on the design of distinctive architectural statements for each locale. The idea found favor with the State Designer Selection Board.

Of course, not all went according to the original plan. The Warehouse District station was added to the north end of the route, the Nicollet Mall station was redesigned, and the City of Minneapolis hired HGA to design a combination parking garage/LRT stop to replace the original design for the Downtown East station, to name a few major changes. In addition, the project's design-build construction approach, in which the architects handed over their conceptual designs and partially completed construction documents to the design-build contractor, resulted in a number of design tweaks along the way. Overall, however, the original designs remained largely intact.

In the following pages, Camille Lefevre highlights one station by each of the original five firms plus HGA. It's our hope that these profiles prompt you to take a closer look—or perhaps a first look—at one of the most unique public transit lines in the country. Enjoy the ride!—C.H.



38th Street station by MS&R



Nicollet Mall station by ESG Architects



Franklin Avenue station by Barbour LaDouceur Design Group



Cedar-Riverside station by Julie Snow Architects

Hiawatha LRT Fast Facts

Opening: Partial service between Fort Snelling and Minneapolis Warehouse District began June 26, 2004; full service to the airport and Mall of America began December 4, 2004.

Ridership projection: 9,500 per day in 2004; 19,300 per day in 2005; 24,800 per day by 2020.

Length: 12 miles, connecting four of the Twin Cities' most popular destinations—downtown Minneapolis, the Metrodome, Minneapolis/St. Paul International Airport, and the Mall of America in Bloomington.

Stations: 17

Light rail vehicles: 24–26 cars, each 94 feet long and articulated with 66 seats. Each car can carry 187 passengers at full capacity. Equipped with luggage racks and bicycle storage hangers.

Power: Electrically powered by wires 16 feet overhead.

Top speed: 55 mph, with a general service speed of 40 mph and slower speed downtown.

Accessibility: Fully ADA-compliant stations and transit with four wheelchair locations per vehicle. Level boarding at each train door. Ramps and tactile edges at all stations. Elevators at stations on bridges.

Cost: \$715.3 million

Construction approach: Design-build with separate contracts for light rail vehicles and airport tunnels.

Corridor development potential to year 2020: 7,150 new housing units, more than 19 million square feet of new commercial development, and more than 67,000 new jobs.

50th Street Station

MEYER, SCHERER & ROCKCASTLE



Design team (left to right): David Cochran, AIA; Rich Foster; Tracy Jacques, AIA

Artwork abounds at the 50th Street station, designed by Meyer, Scherer & Rockcastle, Minneapolis, local artist Karen Wirth, and others. Perched at the edge of Minnehaha Park, the station reflects the bucolic neighborhood setting, and its natural and cultural history, through a silver-metal "hedge" in which a network of picket fences, leaves and branches, and wagon-wheel shapes overlap (by artist Deborah Mersky); in words from Native American stories clustered together in the shapes of tree trunks on the shelters' glass panels (Joann Verberg); in the finely detailed, etched metal plates—embedded in the brick walkways—that depict such local fauna as American toads, pumpkin sunfish, and crows (Greg Lefevre); and in the structure of the station, as well.

A row of steel columns, placed in slightly staggered positions rather than in a straight line, gradually branch into tree-like supports for the glass (or "tree") canopy, until the structure itself leaves off and a row of real trees takes over. "This approach alludes to a transformation from city to nature," explains Garth Rockcastle, FAIA, principal, "as it moves from architecture to landscape architecture."

MS&R also designed the two stations before (or after, depending on the direction of travel) 50th Street. "We were the only team that had three consecutive stations," Wirth explains, "and we approached the project as if the three were a unit. Travelers move sequentially

through each station, so we wanted a visual relationship among them." The 38th Street stop (see photo on page 40) is a single-platform station designed with soffit and eave details, layers of roofing over entrances, and a horizontal "porch" to reflect the Craftsman bungalows so well known in this neighborhood.

The platform at the 46th Street station is split, as the station is sited at a crossroads between St. Paul and Minneapolis where grain was once transported between mills and markets. Echoing the roofs of neighborhood houses and the simple roofs of a farmers' market, the transit shelters are structured to double as weekend market stalls.

The platform at the 50th Street station is split and the sections placed kitty-corner to each other. "We wanted all of our stations to have a presence from various vantage points, so what you see from the road or the train or platform provides different levels of reading and experience," Wirth says. Meetings with neighborhood constituencies provided input and insight in the form of historic documents, original photography, and written materials, which "informed our early thoughts about how to use text at the station," Rockcastle says. For her part, Wirth says she "approached all of these stations as if they were site-specific sculpture, so each station would reflect not only what the neighborhood asked for, but convey a history, a mood, and a feeling about the people who have lived here in the past and now live here." ♦



Warehouse District Station

ELNESS SWENSON GRAHAM ARCHITECTS



Design team (left to right): David Cochran, AIA; Rich Foster; Tracy Jacques, AIA

Two different downtown communities—one of historic industry, the other of modern commerce with a growing theater district—meet at the Warehouse District station. Accordingly, in designing the station, Elness Swenson Graham Architects, Minneapolis, collaborating with Minneapolis artist Karen Wirth, was charged with making an architectural statement that straddles, and embraces, the two neighborhoods.

During community meetings, recalls Tracy Jacques, AIA, senior designer, ESG, "representatives from the Warehouse District felt strongly that the station should be transparent and not have a lot of presence." In addition, Charlie Nelson, who oversees historicism in architecture and design for the Minnesota Historical Society, told the design team "to interpret, not replicate, the Warehouse District's historical look," according to Jacques.

Conversely, representatives from the area's other constituency, Hennepin Avenue and the theater district, "wanted the station to boldly announce itself," Jacques says. So Wirth went out into the communities to "find common ground," Jacques explains. "She did these great photographic surveys of structures and patterns in the neighborhoods. From those surveys, we drew inspiration for the platform and the form of the station. So the station responds to the differing conditions from the two constituencies with a design that transitions subtly from one end of the platform to the other."

The 1st Avenue end of the station, which faces the historic Warehouse District, features traditional paving materials, and brick knee walls with a criss-cross pattern framing small, black-and-white photos—printed onto ceramic tiles—of people and scenes that reflect the area's history. "History is built into the knee walls," Jacques says. Another signature element on this end of the station is an "abstracted street light," he explains, "so from the warehouse side there are dark-green light columns with traditional-feeling light fixtures on top."

As the station moves east toward Hennepin, the brick is left behind for steel columns. The design was to be complemented by up-lighting of the steel roof canopy, a screen of animated horizontal lighting elements, and a dramatic artist-designed 85-foot light tower announcing the station location at the Hennepin end. These lighting aspects have not yet been realized. Nor have the lighting elements of the Nicollet Mall station (see photo on page 40), also designed by ESG with Minneapolis artist Tom Rose, been installed: back-lit art panels beneath the undulating roof canopy, and colorful super-graphics on the rooftops.

Still, as riders' final destination at the north end of the Hiawatha line, the Warehouse District station "tells a story about the two neighborhoods or business environments the station is a part of," Jacques says, "conveying the energy and life of those areas while bridging their influences." ♦

