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Local Hit

Target Field Station - Minneapolis

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Revival

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LIGHTFAIR 2016
Review



Out of the Park

Using colors that resonate locally, lighting designers created a strong visual signature for the Target Field Station in downtown Minneapolis

BY REBECCA POGSON

Minneapolis's Target Field Station is not only a transportation hub connecting multiple modes of travel, it's also a destination unto itself—a communal backyard for the Twin Cities. The 60-acre open-air multimodal transit interchange links nearly 500 trains from light and commuter transit networks, a daily bus operation, and miles of biking and walking trails. It's also a place where people gather, an urban oasis filled with activity. On an expansive "great lawn," visitors can attend a concert, see a movie or have a picnic. In a 1,000-seat amphitheater under the rail station they can watch a performance on "the cascade," an oversized stairway used as seating. In an urban plaza (with parking underneath), they can shop or eat out. And then there's perhaps the most obvious draw: during baseball season, they can catch a Twins game next door.

Perkins Eastman Architects' vision for Target Field Station was to create an iconic destination for game day

and beyond, including year-round activities and events. According to Paul Whitaker, senior lighting designer and theatre consultant for Schuler Shook, Minneapolis, the goal for the lighting design, which earned the firm a 2015 IES Illumination Award of Merit, was to make the hub an extension of the ballpark, with all the excitement of going to a baseball game. “The transit station needed to create a sense of arrival for people coming to the game by train,” says Whitaker.

To imbue the park with a striking appearance at night, Whitaker and team focused the exterior lighting design on a few signature architectural elements: the train canopy, the campanile (aka bell tower) and under the bridge at the lower level. “We worked hard to accentuate the form of each architectural element,” says Whitaker. “All the feature lighting elements take their cue from the architecture they are lighting.”

COLORS MINIMIZED

Color-changing uplight on both the train canopy and campanile matches the red, white and blue colors of the Twins and Target. A daily light show runs automatically, as well as a kinetic game-day show that the Twins’ facility staff can trigger from inside the adjacent ballpark. Despite the relatively limited color palette, the team was able to create a half-hour show that does not repeat itself. “It was important that the three color-changing elements work together,” says Whitaker. “Each element has its own distinct half-hour show, but shows the work in concert so that each element relates to the other two.”

The campanile’s lighting highlights the structure while revealing the site’s industrial past. Its height makes it an iconic feature for this changing neighborhood and serves as a beacon to lure pedestrians and drivers from nearby roads and highways to the park. Whitaker worked with Perkins Eastman Architects to clad the tower in a metal mesh that was not flat so that it would



Photos: Courtesy of Schuler Shook

1. The train canopy and campanile slowly change color in various patterns, representing the red, white and blue colors of the two project stakeholders.

2. Lighted from the outside and within, the metal mesh campanile serves as a beacon to lure pedestrians and drivers.

3. Direct-view LED fixtures under the bridge morph into different patterns and create a backdrop for performers in the amphitheater. The “cascade” stairway on the right serves as seating.

catch light both inside and out. Color-changing lighting on both sides via LED strips and floods allows flexibility in how the structure is perceived. When illuminated from the outside, the mesh appears opaque; when illuminated from within, the internal structure of the tower is revealed; and when illuminated from both sides, the structure’s depth and form are highlighted.

The large train canopy composed of metal ribs is uplighted with RGB floods from the central beam that supports it. Since there are gaps between the white ribs, the bottom and sides of the ribs pick up the light as it morphs between colors. The light changes on the canopy in slow, undulating waves from one side to the other. “In both the campanile and train canopy, the color-changing lighting gives a lot of dimension because it is constantly morphing and changing the way you perceive the architectural forms,” says Whitaker.

LOWER LEVEL SOLUTIONS

Whitaker also sought to give the lower level its own signature element, the first hint of it occurring as you enter the space via an underpass that ushers pedestrians into the recreational area. “We were concerned that the area under the bridge would feel dark and uninviting,” says Whitaker. To combat this, the team decided to embrace it as a standout feature. The architects designed a random linear structure made of metal channels to hold direct-view color-changing LED fixtures (iLight Hypnotica) with a 1-in. resolution so low-resolution video files can create a dynamic display. Because of their minimal width, the fixtures “disappear” when not in use during the day. At night, the space comes alive in an ever-changing series of patterns. A mural illuminated by 2700K white LED strips provides a focal point as pedestrians enter the park from the lower level.

Poles and bollards throughout the property, and steplights along the sides of the cascade stair

The layout of the bollards helps delineate traffic patterns.



Photo: Courtesy of Schuler Shook

provide light for pedestrians without detracting from performances and the color-changing elements. The layout of the bollards—illuminated, non-illuminated and illuminated pole lights (all from the same family of products by Hess)—helps delineate traffic patterns. “Since many of these fixtures are in close proximity, we wanted to make sure everything had the same detailing. We did not want a vehicle bollard that looked different from the adjacent light pole and illuminated bollards,” explains Whitaker.

Tree uplights provide another layer of light throughout the park. Trees in the planter adjacent to the cascade stair create a backdrop as patrons climb from the lower level. At the two large trellis structures on the upper level, LED in-grade fixtures uplight the underside of the trellis and LED floodlights are integrated into the trellis ribs to light the pavement below. iLight Plexineon White 2X 2800 fixtures provide under-bench light-

ing at both the wood slat benches adjacent to the trellises and the planters and the monumental bench at the top of the cascade stair. “Since you cannot see the individual LEDs, it’s the perfect soft lighting for under the benches; it gives a nice, even light,” says Whitaker. “The fixtures are also able to curve on the horizontal axis, making it a perfect fit for our curved monument bench at the top of the feature stair.”

Because of the federal transportation dollars associated with the project, all fixtures had to be made in the U.S., many from Winona, including LED floodlights and striplights. Energy efficiency was also a major focus. Fixtures were selected based on efficiency and photometric distribution to minimize wattage usage. “We wanted the park to be all LED,” says Whitaker. “Additionally, we wanted fixtures that were robust and maintenance free.”

The 104,000-sq ft park contains a train platform and canopy, campanile, great lawn, amphitheater, retail and underground parking.



Photo: Nick Benson/Oltergoose, Inc.

NO GAME TODAY

One of the bigger challenges was balancing game nights versus the everyday look. The area needed pre- and post-game lighting that would draw people to the space, but that would also be comfortable for local residents on non-game days. “Although originally an industrial area, it is quickly becoming more residential,” says Whitaker. The program on non-game nights is more subdued, slowly changing from one color to the other so as not to disturb local residents. On game days, the effects are more kinetic, with side-to-side, strobe-like sweeps of color.

In addition, safety was a concern. “The ambient lighting and feature lighting promote security and provide a nice communal space for the neighborhood. We wanted to make sure the space was comfortable and well lit,” says Whitaker. “We worked very hard to make sure the ambient light

was evenly distributed throughout the park, but also wanted it to be soft and subtle, putting the focus on the large architectural elements.”

The result is a lighting design that energizes the city’s communal backyard—game day or not. □

Rebecca Pogson is a freelance writer and former LD+A associate editor.

THE DESIGNER



Paul Whitaker, LEED AP, is a senior lighting designer and senior theatre consultant with Schuler Shook in Minneapolis. He also designs lighting for theatrical productions nationwide.

FAST FACTS

- The lighting is all LED to promote efficiency and easier maintenance.
- The two-story park required targeted design strategies, above and below.
- While it’s adjacent to the Twins’ stadium, the park is used year-round.