

# Wright Park

Tacoma, Washington

## Pedestrian Overpass

**Owner:**

[Metro Parks Tacoma](#)

**Engineer:**

[Peterson Structural Engineers](#)

**Architect:**

[BOE architects. pllc](#)

**Contractor:**

[Star Construction](#)

**Technical Description:**

- 54' Span x 8' Wide Continental® Pedestrian Truss
- Style: Custom
- Finish: Painted
- Decking: Trex

**Installation:**

May 2017



Wright Park, located in Tacoma, Washington, is a 27-acre arboretum boasting more than 600 trees. In 1886, the Tacoma Land Company donated 20 acres to the City of Tacoma mandating that it "forever" be used as a public park. In 1909, the following statement was made by the Metro Parks Tacoma Board of Park Commissioners in response to organizations wanting to build in the park:

"It is the city's responsibility to preserve a place where the people can get recreation ... and spend their spare time ... in the health giving environment of trees, plants and flowers."

In addition to the arboretum, the present-day park also features the historic, 1909 W.W. Seymour Botanical Conservatory—one of three Victorian-era conservatories on the West Coast—a playground, a sprayground, a lawn bowling or bocce ball field, and a duck pond. When the existing, wooden pedestrian bridge spanning the gap between the upper and lower ponds deteriorated beyond repair, Metro Parks decided to replace it with a steel structure that would reflect the park's history and beauty.

A custom 54' span x 8' wide [Continental® Pedestrian Truss](#) with Trex decking was selected as the best solution. The painted structure includes powder-coated mesh panels with a custom decorative railing attachment, derived from the shape of the nearby Conservatory. The single span was delivered to the site and lifted into place via crane, and the bridge opened to the public just one week later.

"We really wanted to have a unique statement bridge," said Kristi Evans, Metro Parks Project Administrator.

The biggest challenge of this project was making sure the bridge was designed according to the very specific and detailed vision of Metro Parks. Since Metro Parks wanted a Vierendeel truss bridge without diagonal members, the vertical members had to be oversized in order to manage the added load put on them.



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"Typically, a pedestrian bridge will have diagonal members in the railings, but we took those out of this one to highlight the decorative railing," added Bill Sandbo, Project Engineer, with Peterson Structural Engineers. "We also have two sloped sides as opposed to a flat or cambered bridge."

As stated above, it was imperative that the decorative form of the structure reflect the shape of the historic conservatory. Instead of a cambered bridge, Metro Parks wanted one that had a flat landing area in the middle of the span and a round decorative railing above the top chord. Since Wright Park is a landmark on the Tacoma Register of Historic Places, the bridge project required and received approval from the city's Landmarks Preservation Commission. The commission approved the project in July 2016. The project team worked together to meet the challenges, and Metro Parks was happy with the final product.

"It was important that the bridge, even though it's of modern construction, be elegant in its design detailing and very photogenic," concluded Marty Stump, Metro Parks Tacoma Capital Design and Construction Manager.