

# Wolf River Greenway 14A Bridge over Wolf River Memphis, Tennessee



FISHER ARNOLD

## PROJECT EXPERIENCE

The Wolf River Greenway is located along the scenic Wolf River in Memphis, TN. The paved trail and greenway amenities provide recreational space for pedestrians and cyclists. The protected green space corridor will eventually extend for a total of 36 miles through bottomland hardwood forests, fields, and wetlands. The Greenway provides opportunities for people to connect, exercise, enjoy nature, and generally improve their quality of life by having access to this hidden scenic experience.

The Wolf River Conservancy has completed 11.6 miles of the Greenway and has 3.25 miles under construction as-of 2021. Fisher Arnold worked directly for Chris-Hill Construction, the design-build Contractor for the Phase 14A Segment, which includes a signature 270 foot span cable-stayed truss pedestrian bridge across the Wolf River. During this project Fisher Arnold participated in design charrettes with the Conservancy to evaluate bridge types and construction methods for the remote location for such a long-span bridge. Fisher Arnold worked with the geotechnical engineer in the completion of subsurface investigations to determine site soil characteristics and foundation recommendations. Ultimately, the Owner and Contractor selected a pre-engineered weathering steel cable-stayed truss for the site. Fisher Arnold worked with the bridge fabricator and contractor and developed foundation designs for tieback anchorages and tower abutments which consisted of driven steel H-Piles and concrete caps. The 2½" diameter backstay cables are seated atop tieback anchorage foundations designed to resist the high-seismic loads in the Memphis area. Additionally, Fisher Arnold provided environmental and hydraulic assessments and analysis for this project, securing the necessary environmental permits and making a no-rise determination for the new river crossing.

