

Longwood Gardens West Conservatory

Building Enclosure and Waterproofing Consulting | Kennett Square, PA



CLIENT

Bancroft Construction Company

BACKGROUND

Longwood Gardens, originally known as Pierce Park, was purchased by Pierre du Pont in July 1906. After serving as a private event space for Mr. du Pont for several decades, the gardens were opened to the public in 1946.

The West Conservatory is a new glass-enclosed building consisting of 32,000 square feet of underground basement and a 32,000 square foot elevated slab. The gardens, which are constructed above occupied space, appear to float on water, allowing the plants to thrive within a controlled environment. The water feature also includes movable planters.

The new West Conservatory was constructed to replace a series of outmoded greenhouses at that location. WJE was brought on to assist the project team in producing a high-performance building enclosure that met or exceeded the Owner's project requirements. Our work involved review of both the waterproofing and cladding systems for the project, including complex detailing of the surrounding water features, which terminate directly against the conservatory's enclosure.



SOLUTION

WJE performed a review of the building enclosure design documents to identify potential concerns related to water penetration, air leakage, vapor diffusion, and thermal performance within the building enclosure system. Our review considered issues regarding durability, compatibility, continuity, and constructability.



WJE then assisted the construction team with the detailing of the waterproofing. We worked closely with the team throughout the shop drawing and installation processes for the garden's waterproofing. In addition, WJE supported the installation of the glazed enclosure, which included a stick-built glazed aluminum curtain wall and opaque spandrel cladding. This system also incorporated concealed air- and water-resistive barrier systems, gutters, and flashings.



WJE's work on the conservatory was recognized with a 2025 Architizer A+ Popular Choice Award and a 2024 International Architecture Award in the Public Spaces category.