

Longwood Gardens: Longwood Reimagined

A Reimagined Garden Experience Tuned for Atmosphere

VISION

Support the Longwood Reimagined project with acoustics, MEP, AV, and show-system integration that preserve the sensory character of Longwood Gardens.

PARTNERSHIP

Coordinate across JB&B, Jaffe Holden, and Trinity Consultants to support conservatory, dining, event, administrative, and garden spaces.

VALUE-ADD

Deliver integrated MEP and AV systems, acoustic design, and show-system coordination across a complex glasshouse environment where climate, horticulture, and visitor experience are inseparable.

Longwood Gardens has long stood apart as one of the country's most celebrated cultural and botanical destinations, known for experiences where landscape, architecture, engineering, and atmosphere feel inseparable. That legacy was expanded through Longwood Reimagined, a major transformation of the gardens that included the West Conservatory — a 32,000-square-foot glasshouse with a subterranean service level — along with a new administration building, restaurant and event space, a second glasshouse, a standalone restroom building, and expanded exterior landscapes.

The project brought together multiple Trinity Consultants teams. Jaros, Baum & Bolles (JB&B) provided MEP and AV consulting for the West Conservatory and broader Longwood Reimagined project. Jaffe Holden provided acoustic design for the Longwood Reimagined project and related spaces, along with AV support tied specifically to extending the Main Fountain Garden show system from the firm's prior work at Longwood Gardens. Trinity Consultants also supported acoustic design needs through its broader team.

OWNER
Longwood Gardens, Inc.

ARCHITECT
*Weiss/Manfredi Architecture/
Landscape/Urbanism*

LANDSCAPE ARCHITECT
*Reed Hilderbrand LLC
Landscape Architecture*

LIGHTING DESIGNER
Tillotson Design Associates

AV MANUFACTURER
Meyer Sound

MEP/FP/IT/SEC/AV/CELLULAR
DAS/ERRCS
*Jaros, Baum & Bolles,
a Trinity Consultants team*

ACOUSTICS/SHOW
SYSTEM EXTENSION
Jaffe Holden, a Trinity Consultants team

VISION

The Longwood Reimagined project was designed to feel both new and unmistakably Longwood. The visitor experience is shaped by glass, water, planting, movement, light, and sound, all working together in a setting where technical systems are most successful when they feel natural to the place.

For the Trinity Consultants teams, the vision centered on supporting that atmosphere through sound, technology, and building systems. Our JB&B team's MEP and AV consulting addressed the full range of systems required for a working glasshouse: climate modeling, natural ventilation, integrated shading and humidity controls, geothermal heating and cooling for the project's actively conditioned spaces, rainwater capture and reuse, and the audiovisual infrastructure supporting the conservatory's programming spaces, all designed to support both horticultural requirements and visitor experience without calling attention to themselves. Our Jaffe Holden team's acoustic work helped shape spaces for gathering, dining, programming, and daily operations while preserving the sensory richness that defines Longwood Gardens.

PARTNERSHIP

Longwood Reimagined required close coordination across new construction, historic context, landscape, horticulture, visitor experience, and operations. Weiss/Manfredi and Reed Hilderbrand shaped a conservatory and garden environment where architecture, planting, water, and movement are tightly interwoven. The Trinity Consultants teams supported that vision from different but connected roles.

Our JB&B team led MEP and AV consulting for the West Conservatory and broader Longwood Reimagined project. The work began with a detailed indoor climate model developed in partnership with Atelier 10, analyzing the thermal dynamics of the all-glass structure to assess impact on both visitor comfort and botanical growing conditions. That modeling informed a highly integrated systems approach: earth tubes passively precondition ventilation air drawn underground through gardens adjacent to the building; automated blinds manage solar heat gain and light levels across the glasshouse; operable openings allow natural ventilation whenever outdoor conditions permit; and a geothermal well field with water-to-water heat pumps provides all-electric heating and cooling to the project's actively conditioned spaces. Rainwater capture and reuse systems support the project's broader sustainability strategy. Humidity, temperature, irrigation, root-zone heating, and lighting controls are coordinated within a single environmental framework tailored to the needs of the conservatory's plantings and its visitors.

VALUE-ADD

At Longwood Gardens, technical design had to do more than perform well. It had to recede into the experience. Jaffe Holden approached the acoustic work with that balance in mind, helping shape reflective, active, and highly sensory environments so they could support gathering, dining, programming, and daily operations while maintaining Longwood's calm.

The acoustic work responded to different conditions across the project: glasshouse volumes, event and dining spaces, administrative areas, library spaces, and exterior garden environments.

The distinctiveness of Longwood Reimagined, and particularly the West Conservatory, lies in how completely its systems are woven together. Our JB&B team's MEP and AV work supported that integration directly: natural ventilation coordinated with automated shading, geothermal conditioning and rainwater capture and reuse supporting the project's sustainability goals, and environmental controls calibrated to the overlapping demands of botanical health and visitor comfort. Audiovisual systems for the campus's classroom spaces extended that same attention to operational detail into Longwood's educational programming. Jaffe Holden's targeted show-system extension built on the firm's earlier Main Fountain Garden work, allowing new areas to tie back into an established Longwood performance infrastructure.

ABOUT TRINITY CONSULTANTS

Trinity Consultants, a leading global environmental consulting firm, provides services and solutions in the EHS Regulatory Compliance, Built Environment, Life Sciences, and Water & Ecology markets. Founded in 1974, Trinity has the technical expertise, industry depth, and capabilities to help clients achieve their goals across the natural and built environments.