



OUR FIRM & LIGHTING DESIGN EXPERTISE

For more than 35 years, Systems West Engineers has provided mechanical and electrical consulting services across Oregon, specializing in the institutional market. Our team offers master planning, feasibility studies, energy analysis, sustainable design, construction administration, and commissioning with deep expertise in lighting, fire protection, plumbing, HVAC, electrical power, electronic safety and security, and technology systems. This breadth of services allows us to deliver coordinated, integrated solutions that enhance performance, efficiency, and user experience.

Lighting design has become one of our most impactful offerings, helping architects bring their vision to life while supporting energy efficiency and code compliance. Our team partners with architects early in the process to integrate lighting strategies that elevate aesthetics, improve occupant well-being, support the architect's vision, and meet the unique requirements of each project.

Lighting Design Expertise

- **Holistic Approach:** Seamless collaboration with architects to align lighting with architectural intent, occupant needs, and budget considerations.
- **Sustainability Focus:** Expertise in LEED-certified projects, emphasizing energy efficiency and innovative daylighting solutions.
- **Performance-Driven Solutions:** Designs that balance visual comfort, functionality, and long-term maintainability.
- **Technical Excellence:** Integration of state-of-the-art lighting controls and technology to enhance flexibility and efficiency.
- **Proven Results:** Lighting designs delivered for award-winning projects across the Pacific Northwest

Meet Our Lighting Designer



Jim McCarty, LC brings over 27 years of architectural lighting design experience and a unique perspective shaped by 10 years of professional theater work in San Diego. His background in live performance taught him the power of light to transform space, a skill he now applies to projects across Oregon and Washington. Jim's expertise spans educational, cultural, and commercial buildings, with many projects achieving LEED certification. His ability to harmonize aesthetic vision with technical performance ensures that each project delivers beautiful, efficient, and maintainable lighting solutions.





Project Spotlights

The best way to understand the impact of our lighting design is to see it in action. The following projects showcase our ability to translate architectural vision into luminous, energy-conscious environments.

SPRINGFIELD PUBLIC SCHOOLS HAMLIN MIDDLE SCHOOL, DESIGN SPRINGFIELD, OR

At the heart of the school's design are specialized instructional spaces including art labs, band rooms, and flexible maker spaces that require high-performance MEP systems to support acoustics, air quality, lighting, and technological integration. These systems were carefully engineered to ensure occupant comfort and precise environmental control while accommodating the dynamic, varied uses of a 21st-century learning environment. In addition, stage lighting was provided in the cafeteria/gymnasium, enabling the district to use the space as a flexible, auditorium-like venue.



OREGON STATE UNIVERSITY CORDLEY HALL RENOVATION, DESIGN CORVALLIS, OR

This state-of-the-art laboratory building renovation includes all new MEP systems, modern academic instructional classrooms, and a 220-seat lecture hall designed for both sound and visual presentation quality, with lighting carefully tuned for lectures and museum-like display exhibits. The renovation also accommodates multiple stringent laboratory spaces including a vivarium, BSL-2 containment lab, clean rooms, PCR labs, radioisotope hoods, wet collections, dirt labs, plant clinic, anatomy labs, and cell and tissue culture and high-value research collection spaces, where lighting supports visibility, precision work, and safety.





HOMES FOR GOOD OFFICE REMODEL, DESIGN EUGENE, OR

The remodel of Homes for Good's 38,000-square-foot facility brought the agency's staff, previously split between two locations, under one roof to improve communication and collaboration. The project involved a major renovation that included updates to central building systems, construction of new restrooms, and reconfiguration of the clinic suite. Careful coordination was required to overcome limited ceiling heights for ductwork and to maintain clinic ventilation during construction. Outdated fans dating back to the building's 1959 construction were also replaced with new equipment, ensuring reliable operation and improved occupant comfort.



CITY OF EUGENE ECHO HOLLOW POOL RENOVATION AND EXPANSION, DESIGN EUGENE, OR

The Echo Hollow Pool renovation and expansion was designed to optimize facility performance while advancing the City of Eugene's climate goals. At the heart of the project was the integration of a heat pump chiller to provide building and pool heating, reducing energy use and greenhouse gas emissions. Additional work included balancing existing systems, updating the BAS for improved efficiency, and addressing unforeseen retrofit challenges such as repairing the below-grade air distribution system. Energy modeling, night-flushing optimization, and advanced metering supported LEED certification, while creative solutions such as retractable wall panel ventilation and ceiling fan networks improved air circulation and comfort for users.

