

**Campbell Hall Renovation  
MECHANICAL & ELECTRICAL DESIGN**

**HISTORIC BUILDING**

Owner:  
Western Oregon University  
345 N Monmouth Avenue  
Monmouth, OR 97361  
Steve Miller (503) 838-8070

Client:  
McBride Architects, PC  
PO Box 13705-0705  
Portland, OR 97213  
Skip Fresn (503) 916-1808

*Project Start:* October 1993  
*Project Finish:* July 1995  
*Facility Type:* Educational  
*Building Age:* Built 1871  
*Construction Cost (Total):* \$2,150,000  
*Construction Cost (EESI Portion):* \$801,800  
*Engineering Fees:* \$34,130  
*Project Size:* 25,765 square feet

EESI Staff Involved: Fred Shaub, Randy Boyd, John Balaam, Tim Thatcher, & Dan Pullen.

Project Description: Campbell Hall is the oldest building (1871) in Oregon's university system that is still used based on its original intent, in this case as a fine arts building. Complete with department offices, lecture halls, studios, and galleries, the building has been restored and remodeled throughout, including the addition of a special seismic protection system.

EESI performed full mechanical, HVAC, plumbing, electrical power, and lighting design documents for this historic renovation project. Energy Code Compliance forms were completed for both mechanical and electrical.

Design included revamp of the steam radiation system to hydronic heat and modern air distribution system throughout. The new HVAC system included 13 air handlers with economizer capability and chilled water coils for the future addition of air conditioning. Design provided upgrade for indoor air quality per UBC Chapter 12. A new Building Automation System (BAS) was designed to be integrated with the existing system on campus. Plumbing design included bringing plumbing fixtures into ADA code compliance.

A complete new electrical system was designed. It included a new 800 amp main distribution panel fed by a dry-type 300 KVA transformer.

Seismic design involved all HVAC piping, ductwork, plumbing, and electrical raceways extending from the basement to the upper floors included a flexible joint to allow at least six inches of lateral movement in the event of an earthquake.

**Valsetz Dining Hall Remodel  
MECHANICAL DESIGN**

**REMODEL**

Owner:

Western Oregon University  
345 N Monmouth Avenue  
Monmouth, OR 97361  
Steve Miller (503) 838-8070

Client:

McBride Architects, PC  
PO Box 13705-0705  
Portland, OR 97213  
Skip Fresn (503) 916-1808

*Project Start:* May 1995

*Project Finish:* May 1995

*Facility Type:* Educational

*Building Age:* Built 1971

*Construction Cost* (EESI Portion): \$7,000 $\tau$

*Engineering Fees:* \$487

*Project Size:* 3,488 square feet

$\tau$  Estimated

EESI Staff Involved: Fred Shaub & Ron Phelps.

Project Description: Design of air distribution system modifications for remodel of dining facility.

**Werner College Center  
MECHANICAL, ELECTRICAL, & CONTROLS DESIGN**

**ADDITION**

Owner:  
Western Oregon University  
345 N Monmouth Avenue  
Monmouth, OR 97361  
Kathrine Shears (503) 838-8239

Client:  
McBride/Seder Associated Architects  
PO Box 13705-0705  
Portland, OR 97213  
Richard "Mac" McBride  
(503) 916-1808

*Project Start:* January 1996  
*Project Finish:* February 1999  
*Facility Type:* Educational  
*Building Age:* Built 1960  
*Construction Cost (Total):* \$1,600,000  
*Construction Cost (EESI Portion):* \$331,324  
*Engineering Fees:* \$44,969  
*Project Size:* 21,500 square feet

EESI Staff Involved: Fred Shaub, Ron Anderson, Randy Boyd, Jim Cook, Ron Phelps, & John Balaam.

Project Description: Provided HVAC, plumbing, and electrical power/lighting design for new kitchen, dining and bookstore addition.

The Main Campus underground steam distribution services existed under the new addition. Design included renovation and rerouting a portion of the accessible steam tunnel service and sanitary sewer system.

**Valsetz Dining Hall Office Addition  
MECHANICAL & ELECTRICAL DESIGN**

**ADDITION**

Owner:

Western Oregon University  
345 N Monmouth Avenue  
Monmouth, OR 97361  
Kathrine Shears (503) 838-8042

Client:

Benchmark Architectural Services  
250 SW Jefferson  
Corvallis, OR 97333  
Gary Day (541) 752-1939

*Project Start:* March 1996  
*Project Finish:* March 1997  
*Facility Type:* Education  
*Building Age:* New addition 1996  
*Construction Cost (Total):* \$175,000τ  
*Construction Cost (EESI Portion):* \$55,000τ  
*Engineering Fees:* \$6,180  
*Project Size:* 2,200 square feet

τ Estimate

EESI Staff Involved: Jerry Selberg, Randy Boyd, & Pete Sanford.

Project Description: Design of HVAC for addition, rerouting of underground utilities, and design of lighting, power, and signal system. The addition included offices for the University.