West Virginia University Alumni Center

Morgantown, WV

Gregory Smithmyer Mechanical Option

Project Team

Owner:	WVU Alumni Association
Architect:	IKM Incorporated
Civil/Structural:	ALPHA Associates
MEP:	H.F. Lenz Company

Project Information

Size:	48,000 Square Feet
Date of Construction:	Spring 2007-Fall 2008
Cost:	$12 Million
Project Delivery Method:	Design-Bid-Build
Stories:	3 (Bell Tower Extends to 4th)

Architecture

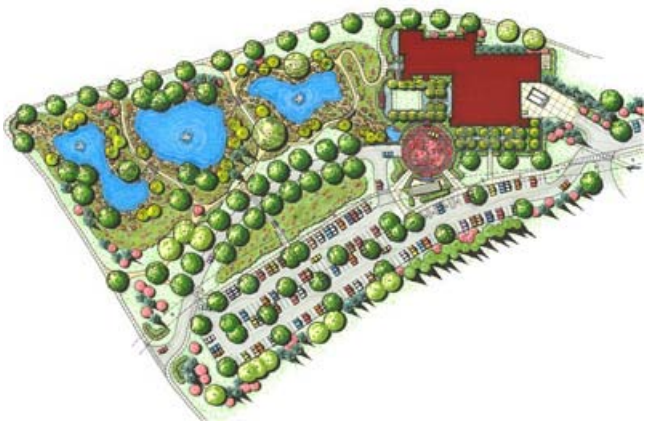
The WVU Alumni Center presents itself as a large country mansion capped with a large bell tower. The 3-story portion includes office space, conference rooms, and a commercial kitchen while the 2-story portion houses the Grand Hall. The exterior walls are face brick on 6" structural steel studs. Glazing is double paned and argon filled with low-e coating. The visible roof is a pre-fabricated Mansard style truss with synthetic slate shingles.

Mechanical

- 9 AHU's with direct expansion cooling and gas heating serve most spaces
- (1) Kitchen and (3) Banquet Hall AHU's are Constant Air Volume
- Remaining 5 AHU's are Variable Air Volume with electric terminal reheat
- Electric fin-tube heating serves the Pre-Event Loggia
- Direct Digital Control system monitors temperature, humidity and Carbon Dioxide levels

Electrical/Lighting

- 1200 A, 480Y/277 V, 3 Ø, 4-wire main switchboard serves lighting, HVAC and plumbing equipment
- 225 kVA dry transformer steps power down to 208Y/120 V
- 800 A, 208Y/120 V, 3Ø, 4-wire distribution panel serves lighting, receptacles, and HVAC equipment
- Most spaces lit by T-8 fluorescent fixtures with high color rendering
- Emergency Power provided by Fuel Oil Generator



Structural

- Typically 12" or 16" deep steel beams to 16" or 24" deep girders
- 12K1 or 24K10 roof joists spaced @ 4' on center for most roof framing
- 36LH10 Long Span Joists with full diagonal bracing for Banquet Hall
- 1.5 VLI 20 Gage Composite Deck with 3000 psi concrete thickness of 4.5"
- Strip and Spread footing foundations