# Gallaudet University WASHINGTON, DC est. 1864

## PATRICK B. MURPHY MECHANICAL OPTION

www.arche.psu.edu/thesis/eportfolio/2007/portfolios/pbm119



James Lee Sorenson Language and Communication Center

#### Future home of

ASL and Deaf Studies
Communication Studies
Government and History
Hearing, Speech, and Language Sciences
Linguistics

Sociology

Image courtesy of Gallaudet University



#### **PROJECT INFORMATION**

**Building:** 3 story office and research wing with mechanical

basement and 2 story classroom wing emanate

from central atrium

**Size:** 87,000 SF

Cost: \$24,054,000 (estimated)
Completion: Late Summer 2008

#### **ARCHITECTURAL DESIGN**

- Adapts to the 'visu-centric' way of being in deaf culture
- Atrium serves as functional and symbolic heart of facility
- Enclosure primarily masonry and glass curtain walls
- Attempting to garner LEED v2.1 Certified Rating
- Colonnaded classroom wing reflects repetition of columns at historic Chapel Hall across campus green
- Features several acoustically sensitive audiology labs

### MECHANICAL SYSTEM

- 6 AHUs serve distinct functional zones for indep. operation
- Each space served with a VAV terminal unit
- Steam and Chilled Water supplied from campus utilities
- VFDs and Air-side economizers reduce energy use
- Sound attenuators used on AHUs and VAVs for sensitive acoustical spaces

#### **ELECTRICAL SYSTEM**

- 2000A switchboard serves 480/277V, 3-phase, 4-wire system
- 300 kW diesel emergency generator
- Increased ambient lighting in the many video conf. rooms
- Occupancy sensors in single offices, restrooms, and storage

#### STRUCTURAL SYSTEM

- Concrete caissons support cast-in-place concrete grade beams and foundation walls
- Structural steel skeleton supports upper floors
- Composite floor system supported by open web trusses

#### **PROJECT TEAM**

Architects: SmithGroup (primary)

Kuhn Riddle Architects

**Engineers:** 

MEP: SmithGroup

Structural: McMullan & Assoc.

Civil: Edwards & Kelcey

Acoustics: Cavanauch Tocci Assoc.

A/V: Technology Design

Resources LLC

Construction Manager: Heery Int'l.

**Specifications:** Heller and Metzger, PC

Code Compliance: The Protection

**Engineering Group** 

