S. T. E.

S.

Building



Joseph S. Murray - Structural Option

Science, Technology, Environment, Policy, and Society Building

www.engr.psu.edu/ae/thesis/portfolios/2013/jsm5242/index.html

• 135,000 square foot project

- 5 stories plus Mech. Penthouse
- Constructed 8/2008 8/2010
- Bethlehem, PA
- Design-Bid-Build Contract
- \$62 million total cost

PROJECT TEAM:

Structural:

Owner: Lehigh University Bethlehem, PA

CM: Alvin H. Butz Allentown, PA

Architect: BCJ Architects Philadelphia, PA

Oaks, PA

Civil: Barry Isett & Assoc. Trexlertown, PA

CVM Structures

MEP/Fire: Flack & Kurtz New York, NY

Landscape: Lager Raabe Skafte Philadelphia, PA

Architectural Features:

- Classrooms, Laboratories, Faculty Offices, Atrium
- LEED Gold Certification
- Brick and stone exterior masonry walls
- Decorative wood finished and structural wood planks
- Glass curtain walls, clearstories, and glass atrium
- Fritted glass artwork and custom tiling incorporate art with science

Structural Features:

- Semi-rigid Steel Moment Frame System
- Composite Steel Deck with concrete slab
- Grade Beam and Caisson foundation

Mechanical Features:

- Custom Air Handling Units with Heat Exchangers
- Dedicated Laboratory Emergency Exhaust System

Lighting / Electrical Features:

- Automated photosensors to minimize electrical demand from lighting
- Daylighting emphasized through glass curtain walls and clearstories

