

Rutgers Law School

Camden, New Jersey

Nathan Reynolds
Structural Option



SENIOR THESIS WEBSITE: [HTTP://WWW.ENGR.PSU.EDU/AE/THESIS/PORTFOLIOS/2008/NER116](http://www.engr.psu.edu/ae/thesis/portfolios/2008/NER116)

Project Team:

- Owner: Rutgers University
- Architect: Ayers/Saint/Gross Architects and Planners
- Structural Engineer: Christakis VanOcker Morrison
- MEP Engineer: Mueller Associates
- Civil Engineer: Remington & Vernick Engineers
- Roofing Consultant: Wiss, Janney, Elstner Associates
- Hardware Consultant: John P. Jester Associates, Inc.
- Audiovisual Consultant: Shen Milsom & Wilke, Inc.
- Cost Estimator: International Consultants, Inc.

General Building Information:

- Size: 66,800 GSF addition
- Height: 6 stories plus penthouse, 85'-0"
- Dates for Construction: May 2006 – August 2008
- Project Cost Information: \$25,900,000
- Project Delivery Method: CM at Risk

Lighting/Electrical System:

- 480Y/277V Secondary, 3PH, 4W Supply to Building
- (2) Main Switchboards (2500A East Building, 1200A West Building)
- 100KW Natural Gas Back-up Generator



Architecture:

- Expansion and renovation of 1970's-era law building
- Create space for classrooms, seminar rooms, student organizations, and faculty offices
- Create a bridge over 5th Street to connect the existing building to the new addition
- Develop a roof terrace above existing building

Structural System:

- (6) Moment Resisting Steel Frame to resist lateral loads
- 20'-0" x 46'-8" Typical Bay Spacing
- Combination Typical Shallow Strip and Moment Footings with Drilled Piles
- Steel W-Shapes Forming Bridge over Fifth Street

Mechanical System:

- Water HVAC System Located in Penthouse
 - (3) 1020MBH Boilers
 - (1) 250 Ton Screw Type Chiller
 - (1) 250 Ton Cooling Tower