

THE SCHOOL OF FOREST RESOURCES BUILDING

UNIVERSITY PARK, PENNSYLVANIA

CHRIS HOYMAN

LIGHTING/ELECTRICAL

PROJECT TEAM

- OWNER: THE PENNSYLVANIA STATE UNIVERSITY
- CONSTRUCTION MANAGER: GILBANE BUILDING COMPANY
- ARCHITECT: BOWER LEWIS THROWER ARCHITECTS
- STRUCTURAL AND CIVIL ENGINEER: GANNETT FLEMING
- MEP: BARD, RAO, AND ATHANAS

CONSTRUCTION INFORMATION

- TIMELINE: OCTOBER 2004 TO MAY 2006
- TOTAL PROJECT COST: \$27,000,000
- DELIVERY: DESIGN-BID-BUILD WITH MULTIPLE PRIMES

STRUCTURAL

- STEEL FRAME CONSTRUCTION
- 5-1/2" SLAB ON METAL DECK FLOOR SYSTEM
- BEAM SIZES INCLUDE W12X22, W16X31, AND W16X36
- TYPICAL BAY SIZE: 20' X 36'
- MULTIPLE WALL SYSTEMS INCLUDING CURTAIN AND MASONRY WALLS

LIGHTING

- TYPICALLY 277V FLUORESCENT
- 2' X 2' AND LINEAR PENDANT FLUORESCENT FIXTURES COMMON
- RECESSED DOWNLIGHTS USED AS ACCENTS
- OFFICES EQUIPPED WITH OCCUPANCY SENSORS



ELECTRICAL

- ONE 480Y/277V 2000A 50 KAIC MAIN DISTRIBUTION SWITCHGEAR (MDS)
- TWO AUTOMATIC TRANSFER SWITCHES FEEDING LIFE SAFETY AND EMERGENCY LAB EQUIPMENT LOADS
- TWO 480/277V PANEL BOARDS FED DIRECTLY BY MDS WHICH PROVIDE POWER TO ALL OTHER PANELS
- TEN STEP-DOWN TRANSFORMERS TO FEED 208/120V LOADS

MECHANICAL

- UTILIZES PENN STATE UNIVERSITY CAMPUS CHILLED WATER AND STEAM SYSTEMS FOR COOLING AND HEATING
- RADIANT PANEL AND ENCLOSED FIN TUBE RADIATORS PROVIDE HEAT
- ONE 54,000 CFM AIRHANDLER SERVES LAB AREAS OF BUILDING, TWO 40,000 CFM AIRHANDLERS SERVE REMAINDER OF BUILDING
- MAIN BUILDING EXHAUST FANS LOCATED IN THE ATRIUM PULL 22,500 CFM EACH



[HTTP://WWW.ARCH.E.PSU.EDU/THESIS/EPORTFOLIO/CURRENT/PORTFOLIOS/CAH280/](http://www.arche.psu.edu/thesis/eportfolio/current/portfolios/cah280/)