



# RIVER VUE APARTMENTS

PITTSBURGH, PENNSYLVANIA

<http://www.engr.psu.edu/ae/thesis/portfolios/2012/LQP5013/index.html>

## PROJECT TEAM

- \* Owner: River Vue Associates, LP
- \* General Contractor & CM: Turner
- \* Architects: Design 4 Studio, Inc. / IDG LLP
- \* Structural Engineer: Whitney, Bailey, Cox & Magnani, Inc.
- \* MEP Engineer: Claitman Engineering Associates Inc.

## BUILDING STATISTICS

- \* Dates of Construction: June 2011-April 2012
- \* Project Delivery Method: Design-Bid-Build
- \* Cost: \$28 Million
- \* Size: 16 stories, 295,000 square feet

## ARCHITECTURE

- \* 16 story structure curved-cornered, aluminum and glass façade with white marble accents
- \* Units include multiple bedrooms, bathroom, kitchen, and living space with retail space on the ground floor.
- \* Two levels of valet parking for residents
- \* Spectacular views of city landmarks and access to Point State Park

## LIGHTING/ELECTRICAL

- \* Day lighting achieved through new bronze glazing and balconies on upper levels
- \* LED bollards and up-lights used for exterior accents
- \* Three Phase, 120/208 V electrical system
- \* Four main transformers serve 2000A switchboard which distributes power to 400, 225, & 100A panel boards throughout the units
- \* Separate emergency and fire alarm electric system



## MECHANICAL

- \* Several simple occupancy zones including apartment units, lobby/retail, parking, and corridors for energy modeling
- \* Two 200 GPM boilers, a 1024 GPM plate heat exchanger and a single air handling unit with enthalpy wheel serve building
- \* All existing duct, registers, grilles, and piping to be replaced in renovation
- \* Natural ventilation achieved through operable windows

## STRUCTURE

- \* Steel frame supporting metal decking with lightweight concrete slab topping
- \* Double curtain wall system comprised of aluminum panels and glazing
- \* Additional bracing to be installed between column lines on ground floor

LAURA C. PICA

MECHANICAL OPTION, DEPARTMENT OF ARCHITECTURAL ENGINEERING

FALL 2011

ADVISER: STEPHEN TREADO