

## North Quad Residential and Academic Complex



### Project Description

The complex will include residential space consisting of suite-style units providing housing that responds to students' contemporary needs, and is not currently available in our housing inventory. The academic space will include the majority of the School of Information, and several highly complementary programs from the College of Literature, Science, and the Arts including Communication Studies, Film and Video Studies, and the Language Resource Center. Classrooms, dining, gallery space, group study areas, and some amenities will also be part of the complex. Flexible and integrated living and learning space will facilitate collaboration and engagement between students and faculty. The mixed-use development will foster student interaction and learning and will provide an appropriate mix of academic, residential, and formal and informal gathering spaces. North Quad will include sufficient space to accommodate 460 student beds and living areas, dining facilities, and, academic and support spaces.

### Energy Efficiency Measures

- Maximum insulation in foundation walls, exterior walls, and roof assemblies
- Energy efficient windows/glazing for increased thermal performance
- Use of increased inspections, including infrared scans during construction to identify missing insulation, gaps in the enclosure, and other wall/roof assembly deficiencies
- Reduction of lighting levels through use of occupancy sensors in residential bathrooms, corridors, and classrooms
- Variable water flow controls in lieu of constant volume controls on resident room fan coil units
- Controls to shut down air flow to conference rooms when rooms unoccupied
- Use of occupancy sensors to reset space temperatures to allow wider temperature swings when rooms are unoccupied (included in 26 major spaces such as classrooms)
- Increase thermostat deadbands (the gap between the heating setpoint and cooling setpoint during which no conditioning is provided)
- Use of controls to optimize fan speeds supplying air to VAV (variable air volume) boxes
- Variable flow exhaust hoods in kitchen
- Exhaust heat recovery (from residential bathroom exhaust)

### Other Sustainability Features

- Use of an Erosion and Sedimentation Control Plan during construction to reduce pollution from construction by controlling soil erosion, waterway sedimentation, and airborne dust generation
- North Quad constructed on a previously developed site (former Frieze Building site) in lieu of a greenfield site
- North Quad sited on public and UM bus routes, encouraging use of public transit
- Installation of bike racks to encourage use of bicycles for transportation
- No new parking provided on-site (to reduce pollution and land development impacts)
- Use of water conserving plumbing fixtures, including low-flow shower heads, low-flow urinals, and dual-flush toilets
- The plaza/courtyard is a Green roof that covers a significant portion of the lower level

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- Natural daylighting provided to underground spaces via sunken courtyards
- No increase in the amount of impervious surface- no stormwater run-off increase
- Use of select sustainable materials (e.g. terrazzo flooring, linoleum and cork flooring)
- Use of low-VOC materials (e.g. carpets, paints)
- Use of regional and local materials where possible (e.g. limestone, brick)
- Water-efficient landscaping

**Project Data**

- Budget: \$186.4 M
- Schedule: Completion Scheduled for Spring 2010
- Square Feet: 360,000 gross sq. ft.

**Substantially Complete: May 2010**

- Project Status: Substantial Completion
- Design Complete: 100%
- Construction Complete: 100%