Cambridge, Massachusetts: City Hall Annex, 344 Broadway
“The Oldest Green Building Worldwide”

LEED Gold
Municipal Building
Constructed 1871
Registered historic district
Renovated 2004
Cost: $11.76 million
Architect: HKT Architects Inc.
Four floors: 33,216 square feet

The original Harvard Grammar School held 900 students. It was topped by a Mansard roof until an 1899 fire destroyed it. In his restoration, Architect George Fogerty added skylights over the stairways, a new top floor, and brick parapets in place of the mansard roof. The 2004 renovation restored the exterior of the building to Fogarty’s 1899 design. Using Fogerty’s original architectural rendering, the parapets, which had been removed in the 1950s, were completely reconstructed.

Renovation was necessary due to a gas leak that caused mold spores to spread throughout the building in 2000. The Cambridge City Council wanted all new capital projects to be “green” so the building was renovated to LEED Gold standards with the help of a $337,500 grant from the Massachusetts renewable energy trust. According to principal architect, William Hammer, the exterior is nearly identical to the 1899 design, but almost none of the fabric from the interior was saved.

Chirsanne Beckner * Eco-Preservation [Falsetto] * Spring 2009 * University of Oregon
The Cambridge City Hall Annex achieved a LEED Gold rating in 2005, earning 39 of a possible 69 points. The building’s many green upgrades include:

- Water efficient landscaping: Reduces water usage by 50%
- Energy Star roof reduces heat absorption
- Bike storage, showers, subsidized mass transit passes
- Construction crew Recycled 80% of construction waste
- Steel framing, carpet and ceiling materials include recycled content
- More than 50% sustainably harvested wood
- Carbon dioxide sensors to ensure fresh air
- Paints, adhesives and carpets were low in VOCs
- Roof-mounted solar panels produce 10% of the building’s electricity
- Ground source heat pump system (No boiler or furnace)
- Maximized daylighting
- Double glazed panes in operable windows
- Daylight and occupancy sensors minimize electrical demand

Preservation and sustainability goals clashed twice: designers wanted to tilt the solar panels to 40% to capture more sunlight, which would have made them visible from the street. The panels were installed flat. Also, historic windows had to be replaced with aluminum clad double glazed windows.

The project was featured in Preservation, Jan/Feb 2008.