

Best of 2006 Awards

Office of the Chief Medical Examiner DNA Forensics Biology Laboratory

AWARD OF MERIT: Public Works and Facilities



No public laboratory in the country performs more DNA analysis than the Office of the Chief Medical Examiner in New York – even the Federal Bureau of Investigation. Yet, for years the examiner's office staff managed to serve as a critical part of the criminal forensics process out of a cramped 6,300-sq.-ft. laboratory on the edge of the city's Bellevue Hospital Center complex in Manhattan.

It was only a matter of time before the city had to pony up and build a facility that could match the intensity of its activity.

The city broke ground in November 2001 and this fall finished construction of the new \$290 million facility, which gives the medical examiner's office more than 50 times the space than it had previously – and a modern forensic biology laboratory that could make any CSI fan tingle.

The 355,000-sq.-ft., 15-story facility between First Avenue and the Franklin D. Roosevelt Drive north of East 26th Street, still on the Bellevue campus, now houses eight different forensics labs, each one designed for a different component of the criminal investigations process. The design effort required careful coordination with the medical examiner's staff to ensure that the space would be flexible enough to house fast-evolving technologies in the forensics field.

The exterior features precast concrete panels, glazed aluminum curtain wall, metal panels, granite-faced precast panels, and site-installed granite, along with specialty glass, aluminum, and steel pieces. The glass curtain-wall façade was designed to reflect the image of nearby Bellevue Hospital, while also controlling the amount of light that enters the building in an effort to protect material evidence from sunlight damage. Its clean lines exude a subdued, modernist look.

Construction on the narrow 77 ft. by 321 ft. site footprint required demolition of a nearby garage as well as extensive rerouting of existing utilities for the Bellevue campus. During construction, even more utilities than expected popped up, requiring the team to build a below-grade, pile-supported platform to reroute and lay both new and old utility systems. "You could tell it was challenging," said one of the panel jurors.

The foundation posed another hurdle. On the east end of the site, the bedrock dramatically slopes toward the East River, requiring installation of a 7-ft.-thick concrete mat on existing sand bearings in order to support the building. Workers had to dig 28 ft. below the water table, using a dewatering plan of deep wells, shallow wells, and a sheeting system to cut off water at the site's rock and clay layer.

Key Players

Owner-Developer: N.Y.C. Office of the Chief Medical Examiner

Program Manager: Dormitory Authority of the State of New York

Architect: Perkins Eastman Architects

General Construction: TDX Construction; Gilbane Building

Geotechnical Engineer: Cosentini Associates

Structural Engineer: Severud Associates Consulting Engineers

Civil Engineer: Mueser Rutledge Consulting Engineers

Curtain Wall Consultant: Gilsanz Murray Steficek

Laboratory Planner: Health, Education, and Research Associates

Landscape: Sullivan Group Design

Lighting: Cline Bettridge Bernstein Lighting Design

Security Consultant: Ducibella Venter and Santore

Laboratory M-E-P: Harley Ellis

Vertical Transportation: Jenkins & Huntington