

Preliminary
Façade Characterization Report

Remediation and Deconstruction of
Fiterman Hall, 30 West Broadway,
New York, New York

Prepared for:

Dormitory Authority of the State of New York
&
The City University of New York

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Environmental Site Characterization – Façade Report
 Fiterman Hall – 30 West Broadway, New York, NY
 Airtek Project 05-0867 – January 10, 2006

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1.0 INTRODUCTION

Airtek Environmental Corporation (Airtek) has been retained by Pei Cobb Freed & Partners, Architects, LLP (PCFP) on behalf of the Dormitory Authority of the State of New York (DASNY) and The City University of New York (CUNY) to conduct an environmental characterization study of the Fiterman Hall Building located at 30 West Broadway, New York, NY (Fiterman Hall, the Building, or 30 West Broadway). The Building is a 15-story, 370,000 (SF) classroom building owned by CUNY and operated prior to 9/11 by CUNY/Borough of Manhattan Community College. For purposes of the environmental decontamination and deconstruction of Fiterman Hall, DASNY is acting as and for the Building owner. The building was physically damaged by the collapse of 7 World Trade Center, and impacted by the environmental effects of the entire World Trade Center Collapse.

This report is focused on the façade of the Building. A characterization report detailing conditions interior to the Building has been prepared under separate cover.

1.1 Purpose and Objectives of the Façade Characterization Study

DASNY/CUNY insists that appropriate environmental safeguards are put in place at 30 West Broadway to protect workers and the public both during the planning stages of the project, and during the abatement and demolition phases. In support of this effort, it is necessary to closely examine both the structure and building components of the Fiterman Hall Building, and the residual impact of the dust disseminated by the collapse of the World Trade Center (WTC).

The primary focus of the instant investigation and report is the suitability of the building façade as a component of the containment system that will allow the safe and controlled abatement and removal of both building components that pre-dated 9/11, and the dust and dust-impacted building components that remain.

Considerations investigated included the following:

- Integrity and construction of the façade as it relates to the façade's use as a barrier during abatement

- Confirmation of the efficacy of the NYC DEP cleaning of the exterior façade of the building post-9/11

- Asbestos-containing building materials potentially existing on and within the façade

- Lead-containing or lead-painted components on and within the façade

- The potential for WTC Contaminants of Potential Concern (CoPCs) both on and within the façade construction

- The physical and environmental state of the "Gash Area," where the building was physically damaged by the collapse of WTC 7

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The study findings will assist in determining what measures and protocols may be required in support of the Fiterman Building cleaning and deconstruction plan. In particular, the results of the Study are intended to provide reference information allowing for informed decisions to be made by the project team regarding appropriate cleaning and deconstruction methods. These decisions include the development and implementation of engineering controls to contain the work zone (i.e., to ensure no exposure to the surrounding community during the cleaning and deconstruction) and appropriate methods for the disposal or recycling of materials generated by the cleaning and deconstruction activities. Using the available characterization results, DASNY/CUNY its consultants, and the selected deconstruction contractor can develop and implement appropriate deconstruction protocols and safety precautions for the cleaning and deconstruction process to ensure the health and safety of workers and the residents of the surrounding community.

1.2 Background

Fiterman Hall is a 1950's-era steel and concrete structure that was used as an office building until the early 1990's when the building was converted to use as a classroom building by the Borough of Manhattan Community College (BMCC). A number of renovation and upgrade projects were executed at Fiterman Hall. In the 1990's the ribbon window system was completely replaced with a new, modern window system. In 2000 and 2001 the building underwent a complete interior gut rehabilitation that included extensive asbestos abatement. On September 11, 2001, this renovation was nearly complete, and the building was 50% occupied by BMCC.

The collapse of WTC 7 tore open the façade of Fiterman Hall from the roof down to the basement, filled the southeast corner of the building with debris, and allowed the incursion of WTC dust. The NYC Department of Design and Construction conducted an emergency response clean-out of the building debris that had rained down from WTC 7 into the building, and DASNY conducted a building stabilization project that included shoring of the gash area, the installation of temporary barriers where the façade had been breached, and the netting of the damaged façade.

In 2005, DASNY/CUNY retained a project team headed by Pei Cobb Freed and Partners Architects, LLP to conduct an investigation of the existing building in support of the planning and execution of an abatement and demolition project intended to prepare the 30 West Broadway site for the construction of a brand new educational facility. On July 1 2005, Airtek was granted Variance File No. 05-0919 by the NYS Department of Labor on behalf of DASNY/CUNY for a variance to allow the investigative team access to conduct the required investigation. All site work undertaken in support of this investigation was conducted in strict accordance with terms and conditions of the NYS DOL Variance for the work, and with the site Health & Safety Plan (HASP).

1.3 Information Sources

Information sources drawn upon to support the investigation included the following:

Existing documentation related to the original 30 West Broadway structure,
documentation of the renovation activities conducted by DASNY/CUNY/BMCC,
and documentation of the activities undertaken in response to the events of 9/11;

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Interviews with personnel familiar with building operations, renovation project details, and post 9/11 response activities;

Close visual inspection and testing of specific materials and components of the façade systems.

2.0 CHARACTERIZATION COMPONENTS

2.1 Documentation Review

Where previously existing documentation of building structure and condition was available, these documents were reviewed for information pertinent to the subject investigation. Documentation reviewed by the investigation team included the following:

- Limited original as-built drawings
- 2000/2001 renovation specs and drawings
- Pre-9/11 ACBM Survey Reports – DASNY Consultants
- Pre-9/11 LBP Survey Reports – DASNY Consultants
- WTC Characterization Report – Cambridge Horizon Consultants

2.2 Interviews – Historical Research

Specific personnel with direct knowledge of building operations, building history, pre 9/11 construction/renovation activities, and post- 9/11 site activity were made available to the investigation team. Personnel made available included:

- BMCC Building Operations Personnel
- DASNY/CUNY Pre-9/11 Construction Management Personnel
- DASNY/CUNY Post 9/11 Response Management Personnel

2.3 Façade Visual Inspection

A floor-by-floor, façade-by-façade inspection was conducted by the investigation team. The inspection team included USEPA Lead Inspectors, NYC Asbestos Investigators, NYS Asbestos Inspectors experienced in pre-demolition building inspection in general, and in WTC response inspection in particular. All site work conducted as a part of this inspection was conducted in strict accordance with the terms and conditions of both the NYS DOL Variance for this work, and the site HASP.

2.4 Asbestos-Containing Building Material Inspection and Testing

An Asbestos Inspection and Material Survey is required to facilitate the proposed deconstruction of the Building and to comply with: (1) the New York City Department of Buildings permitting requirements, and (2) the pre-demolition requirements promulgated by the New York City Department of Environmental