

7624206030

NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION

Asbestos Control Program

59-17 Junction Boulevard, 8th Floor, Flushing, NY 11373-5108

ONLY
TYPEWRITTEN
FORMS WILL BE
ACCEPTED



ASBESTOS PROJECT NOTIFICATION

(ASBESTOS INSPECTION REPORT)

Building Dept. or TRU No
For OFFICIAL USE ONLY

When submitting this form at the NYC Department of Buildings, the original form and three (3) copies with original signatures are required. Submittal at the NYCDEP requires one copy of the form with original signatures. This form must be submitted to the NYC DEP not less than one week in advance of the start of abatement activities.

1. \$1200
(See fee schedule)

I. FACILITY

2. Address 23 Thames Street Borough Manhattan Zip 10006
Premise # Prefix Street Name

AKA 21 Thames Street 3. Block 52 4. Lot 8

5. Type of Facility Commercial 6. Name of Building _____

II. BUILDING OWNER

7. Name Greenwich Street Project, LLC. 8. Contact Person Chanan Rozenbaum

9. Tel. # (347) 643-9960 Fax # (212) 208-4614

10. Address 666 Fifth Avenue City New York State NY Zip 10103

III. GENERAL CONTRACTOR

11. Name _____ Tel. # _____

IV. ASBESTOS ABATEMENT CONTRACTOR

12. Name Hazardous Elimination Corp. 13. Contact Person Ernie Carranza

14. Federal Employer ID. # PII 15. Tel. # (631) 752-2898 Fax # (631) 752-2910

16. Address 195 H Central Avenue City Farmingdale State NY Zip 11735

V. THIRD PARTY AIR MONITOR

17. Name Airtek Environmental Corp. 18. Contact Person Benn Lewis

19. Federal Employer ID. # PII 20. Tel. # (212) 768-0516 Fax # (212) 768-0759

21. Address 39 West 38th Street City New York State NY Zip 10018

22. Sample Analysis Laboratory Airtek / ATC Associates 23. NYS DOH ELAP # 11040/10879

VI. PROJECT INFORMATION

24. Starting date for this portion of work _____ Projected completion date _____

Asbestos work schedule: ☒ Monday ☒ Tuesday ☒ Wednesday ☒ Thursday ☒ Friday ☒ Saturday ☒ Sunday

Shift From: _____ ☐ am ☐ pm to _____ ☐ am ☐ pm

If other, specify _____

Access to inspect the premises must be provided during the work schedule indicated in this item.

25. Total amount of asbestos-containing material to be abated during this work

18,322 Square Feet, and/or 57 Linear Feet

ACP7
12/20/02

6426206039 **ASBESTOS INSPECTION REPORT (continued)**26. Asbestos Hauler DJM Co. Inc. NYS DEC Permit # NJ-344 Tel.# (973) 491-0006Disposal Site(s) Meadowfill Landfill, Bridgeport WV & Cumberland Landfill Shippberg, PA

27. This asbestos abatement is part of a (Item a through e requires filing of this form with the NYC Department of Buildings)

- a) ☒ Demolition b) ☐ Boiler Replacement c) ☐ Sprinkler Replacement d) ☐ Renovation/Alteration
 e) ☐ Fireproofing Replacement f) ☒ Other (Describe) Asbestos Abatement/WTC Dust Remediation

28. TYPE OF ABATEMENT (Check all appropriate boxes)

- ☒ Removal ☐ Enclosure ☐ Encapsulation ☐ Repair ☐ Clean up

29. ABATEMENT PROCEDURE (Check all appropriate boxes)

- ☒ Full Containment ☐ Glovebag ☐ Tent ☒ DEP Variance Application

30.LOCATIONS OF ABATEMENT

Floor(s)	SECTION OF FLOOR (e.g. entire, east wing, room #, boiler room, lobby, etc.)	AFFECTED SURFACES CONTAINING ACM (e.g. Pipe lagging, ceiling, plenum ducts, storage tanks, decking, etc.)	AMOUNT OF ACM		DESCRIPTION OF WORK BEING PERFORMED (e.g. running cable, installing fire sprinklers, removing and replacing boilers, etc.)
			SQUARE FEET	LINEAR FEET	
Bsmt-5	Entire	WTC Dust	9,064		Sub-Chapter G
Bsmt	Entire	Pipe Insulation		32	Asbestos Abatement
1	Entire	Pipe Insulation		15	Asbestos Abatement
2	Entire	Pipe Insulation		10	Asbestos Abatement
Roof	1st Floor Roof	Roof & Flashing	146		Asbestos Abatement
Roof	5th Floor Roof	Roof, Flashing & Tar	525		Asbestos Abatement
1-5	Facade	Window Caulk	10		Asbestos Abatement
1-5	Facade	WTC Dust	8,576		WTC "Bldg Ext. Cleanup"
Roof	5th Floor Roof	Coping Stone Caulk	1		Asbestos Abatement

Additional pages attached ☐

31. I hereby declare that the information provided herein is true and complete to the best of my knowledge. I am familiar with Federal, State and NYC laws and regulations applicable to asbestos related work.

<u>Airtek Environmental</u> Print Name of Air Monitor _____ Signature _____ Date	<u>Hazardous Elimination</u> Print Name of Asbestos Contractor _____ Signature _____ Date	<u>Airtek Environmental</u> Print Name of Applicant _____ Signature _____ Date
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32. I understand that as the owner of a building where asbestos abatement activity occurs, I am responsible for the performance of the asbestos abatement activities in accordance with the Asbestos Control Program Rules. I have contracted the third party air monitor who is completely independent of all parties involved in the asbestos project. I hereby declare that I have authorized the filing of this notification for the work specified herein.

Greenwich Street Project, LLC.

Print Name of Owner

Signature

Date

A STAMPED COPY OF THIS FORM INCLUDING AMENDMENTS MUST BE AVAILABLE AT THE WORK SITE.Any modification of information provided on this form must be reported immediately in writing directly to the NYC DEP ACP.

The requirements of the Asbestos Control Program Rules may not be lawfully avoided or lessened through the performance of work in incremental or piecemeal fashion.



NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION
Asbestos Control Program
 59-17 Junction Boulevard, 8th Floor, Corona, NY 11368-5107
Asbestos Variance Application

FOR OFFICIAL USE ONLY

Variance # _____
 Fee Paid _____
 Notification # _____

ONLY
TYPEWRITTEN
FORMS WILL BE
ACCEPTED

I. FACILITY

Address 21-23 Thames Street Borough Manhattan Zip 10006

**Application must be
made at least 2
weeks prior to the
start of work.**

II. APPLICANT

Name Airtek Environmental Corp.

Tel # (212) 768-0516

Address 39 West 38th Street City New York State NY Zip 10018

Capacity: ☐ Contractor ☒ Consultant ☐ Owner ☐ Other _____ Contact Person Benn Lewis

III. SPECIFY ALL NYC DEP OR NYS DOL (ICR56) ASBESTOS RULE PROVISIONS FROM WHICH A VARIANCE IS REQUESTED

1-41(c), 1-41(d), 1-81(j), 1-81(m), 1-82(a), 1-83(a), 1-83(b)2, 1-91, 1-102(b), 1-112(d), 1-112(e), 1-125(i)

SPECIFY FLOORS AND/OR AREAS WHERE WORK INVOLVING THIS VARIANCE IS TO OCCUR

Basement, 1st, 2nd, 3rd, 4th, 5th & Roof

REASONS FOR REQUEST AND DESCRIPTION FOR PROPOSED ACTION (Attachment(s) shall be submitted in TRIPLICATE)

Explain why the procedures required by Title 15, Chapter 1 of the Rules of the City of New York (RCNY) and/or Part 56 of Title 12 of New York Codes, Rules and Regulations (Subparts 56-4 through 56-17) cannot be used. (Attach Additional Sheets)

State the alternative procedures that will be employed to satisfy each requirement as modified. (Attach Additional Sheets)

Provide color coded drawings identifying work area(s) and location of decontamination enclosure system(s).

IV. FEE SCHEDULE

Amount of ACM affected by this variance: 18,322 square feet + 57 linear feet = Total Amount of ACM 18,379 feet

	If total amount of ACM is less than 5000 feet:	If total amount of ACM is 5000 feet or more:
Seven day notification period waiver	\$300	\$400
First sub-section (per category)	\$400	\$600
Each additional sub-section (per category)	\$200	\$300
Maximum fee	\$1200	\$1800

*See Section 1-03(e)
of the NYCDEP
Asbestos Rules for
category definitions.*

Enter applicable fee based on schedule above

Total Fees \$ _____

V. I hereby declare that the information provided herein and in any and all accompanying attachments is true and complete to the best of my knowledge. I understand that failure to comply with conditions set forth by the Department in an approval of the application shall render this variance null and void.

Greenwich Street Project, LLC.
 Print Name of Owner

Airtek Environmental Corp.
 Print Name of Applicant (If not owner)

Signature of Owner

Date

Signature of Applicant

Date

Work involving a variance may not commence prior to the receipt of the Department's approval of the application. Any violation of the terms of any variance issued pursuant to Title 15, Chapter 1 of the RCNY Section 1-03 is considered a violation of the lettered subdivision modified by the variance.

ACP9
2/2001



AIRTEK ENVIRONMENTAL CORP.

39 WEST 38TH STREET, 12TH FLOOR, NEW YORK, NY 10018
PHONE (212) 768-0516 FAX (212) 768-0759
WWW.AIRTEKENV.COM

June 9, 2005

Mr. Rajappan Radhakrishnan, Director
New York City Department of Environmental Protection
Bureau of Air, Noise and Hazardous Materials
59-17 Junction Blvd., 8th Floor
Jamaica, NY 11373

Re: Variance Request – 21-23 Thames Street
Building Decontamination and De-construction

Dear Mr. Radhakrishnan:

The Copper Group, Inc. has engaged Airtek Environmental Corp. (Airtek) to prepare the following Variance Request in support of the decontamination and de-construction of the building located at 21-23 Thames Street, New York, NY.

Though it sustained little physical damage, the buildings at 21-23 Thames Street was impacted in places by fallout from the events of September 11, 2001. It is the Owner's intent to conduct abatement of in-place asbestos, and to effect a decontamination of the interior of the building so that conventional demolition activities can be completed.

Asbestos Survey:

Airtek has undertaken an asbestos survey intended to coordinate and complete previous survey work that has been conducted at the site. All previous documentation was reviewed and a site survey and bulk sampling was conducted. Based on this survey work, an inventory of in-place asbestos has been developed. The results of this survey are attached.

Health & Safety Plan:

A Certified Industrial Hygienist (CIH) from Airtek has developed a site-specific HASP to be applied to all site decontamination operations. The HASP details requirements for access/egress and requirements for Personal Protective Equipment for workers at the site. The HASP is attached.

Mr Rajappan Radhakrishnan – NYC DEP
21-23 Thames Street Variance Request
Airtek Project 05-0701 – June 9, 2005

NYC DEP Variance Application:

In order to execute the particular requirements of this unique project, specific relief from RCNY Title 15 is requested as follows:

We request relief from 1-125(i): Isolation Barriers. It is the intent of the project to seal all windows and communicating openings to the outside of the building from the outside with two layers of 6-mil poly and plywood barriers. The intent of this action is to create a sealed structure that will allow decontamination activities within the building while reducing the possibility of migration of dust to the outside of the structure.

We request relief from 1-81(j); 1-81(m); 1-91; 1-102(b); 1-41(c); 1-41(d); 1-112(d); and 1-112(e): Attachment FR - Procedures for use of Foam or Similar Viscous Liquid in Removal of Asbestos Containing Roofing (ACRM) in New York City. Roof membrane, flashing, and roof tar remain on the roof of the building.

We request relief from 1-83(b)2: Attachment DW – Waste Decontamination in Worker Decon. This request is made to provide for the efficient decontamination of the workspace at the entry to the building so that an interior decon can be built. Attachment DW is requested because the erection of full worker and waste decons outside the building will result in blockage of the sidewalk. This request is only for the initial entry-cleaning phase.

We request relief from 1-41(c); 1-41(d); 1-81(m); 1-82(a); 1-83(a); 1-91; Attachment EC – Abatement of Exterior ACM Caulking Materials. ACM window caulk exists on the window frames of the building.

We request relief from 1-41(c); 1-41(d); 1-81(m); 1-82(a); 1-83(a); 1-91; Attachment IC – Abatement of Exterior ACM Caulking Materials from the top of the Parapet wall(s) on the Roof. ACM coping stone caulk exists on the parapets of the building.

Utilities - General:

Utility service is currently cut off to the building. All electricity and water required for the work will be drawn from sources outside the building.

Mr Rajappan Radhakrishnan – NYC DEP
21-23 Thames Street Variance Request
Airtek Project 05-0701 – June 9, 2005

Project Monitoring:

Project Monitoring: Throughout the decontamination activities, project air monitoring will be conducted in addition to the Perimeter Monitoring described above. Project Monitoring will be conducted in strict accordance with RCNY Title 15 Chapter 1, Section 1-41 to 1-45, with the exception that all sample analyses will be by TEM.

Clearance Testing: Aggressive area clearance testing for asbestos will be conducted for all work areas by TEM. Aggressive clearance testing for metals will be conducted by NIOSH 7300.

Clearance Criteria:

Clearance testing for asbestos will be acceptable when all samples for a given work area meet the 70 structures per square millimeter TEM standard. Clearance testing for metals will be acceptable when all samples meet the following criteria:

Antimony	250 ug/m3
Barium	250 ug/m3
Beryllium	1.0 ug/m3
Cadmium	5.0 ug/m3
Chromium (III)	250 ug/m3
Copper	500 ug/m3
Lead	25 ug/m3
Manganese	100 ug/m3
Mercury	12.5 ug/m3
Nickel	50 ug/m3
Zinc	1,000 ug/m3

Exterior:

The exterior of the building was decontaminated as a part of the NYC DEP Building Exterior Cleaning Program following 9/11/01. Airtek's visual inspection of the façade indicates that it is advisable to conduct low-pressure power washing prior to initialing demolition activities. The exterior of the building will be cleaned in accordance with the NYC DEP WTC Dust/Residue Roof & Façade Cleaning Procedures (attached).

Interior:

Phase 1 – Access Facility:

Mr Rajappan Radhakrishnan – NYC DEP
21-23 Thames Street Variance Request
Airtek Project 05-0701 – June 9, 2005

In order to allow a working space for access/egress, and to keep the Decontamination facility out of the work area, a preliminary soft strip and clean-up of the 133 Greenwich Street retail store area. This abatement will be conducted according to Subchapter G with a Personnel Decon exterior to the building. Attachment DW will be used to allow the cleaning of the small amount of waste for this preliminary phase. Upon satisfactory Clearance by TEM, this Decon will be dismantled, and a Decon facility will be established in the cleaned entry space to support the balance of the decontamination.

Phase II – Soft Strip:

All interior materials, including moveable objects, will be subject to decontamination and removal or, if porous, will be bagged and disposed of as ACM waste. All ceiling systems (plaster, tiles, sheetrock, etc.), wall systems (plaster, wall board, etc.), and floor systems, (tiles, carpet, etc.) will be removed and bagged for disposal as ACM waste. Remaining structural members, pipes, boiler and freezer boxes will be wet-wiped, HEPA vacuumed, and encapsulated with a penetrating encapsulant. All accessible interstitial spaces will be wet-wiped, HEPA-vacuumed, and encapsulated. Operable windows will be articulated, wet wiped, HEPA-vacuumed, and encapsulated.

Phase III – In Place Interior Friable ACM:

Upon completion of the soft strip phase, interior friable ACM will be abated.

1. Pipe Insulation – 50 lf

Following 2nd and 3rd cleanings and the settling periods, final air testing will be conducted by TEM. Upon successful clearance air testing, the building will be turned over to the demolition contractor for conventional demolition.

Phase IV - In Place Exterior ACM:

In-place ACM has been identified as follows:

1. Roof Membrane – 350 sf
2. Roof Flashing – 100 sf
3. Bulkhead Tar – 20 sf
4. Window Caulk – 9 sf (210 lf)
5. Coping Stone Caulk – 1 sf

Mr Rajappan Radhakrishnan – NYC DEP
21-23 Thames Street Variance Request
Airtek Project 05-0701 – June 9, 2005

These materials will be abated last in the decontamination sequence. For detailed information on the asbestos survey conducted, please refer to the Airtek Asbestos Survey Report dated May 31, 2005 (Attached).

Structural Framing:

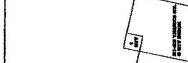
Due to the impossibility of removing structural framing without the risk of building collapse, all structural framing will be wet-wiped, HEPA vacuumed, and encapsulated with penetrating encapsulant. As a part of the conventional demolition that will follow the decontamination, these materials will be characterized for asbestos content and RCRA characteristics, and will be disposed of as appropriate based on the test results.

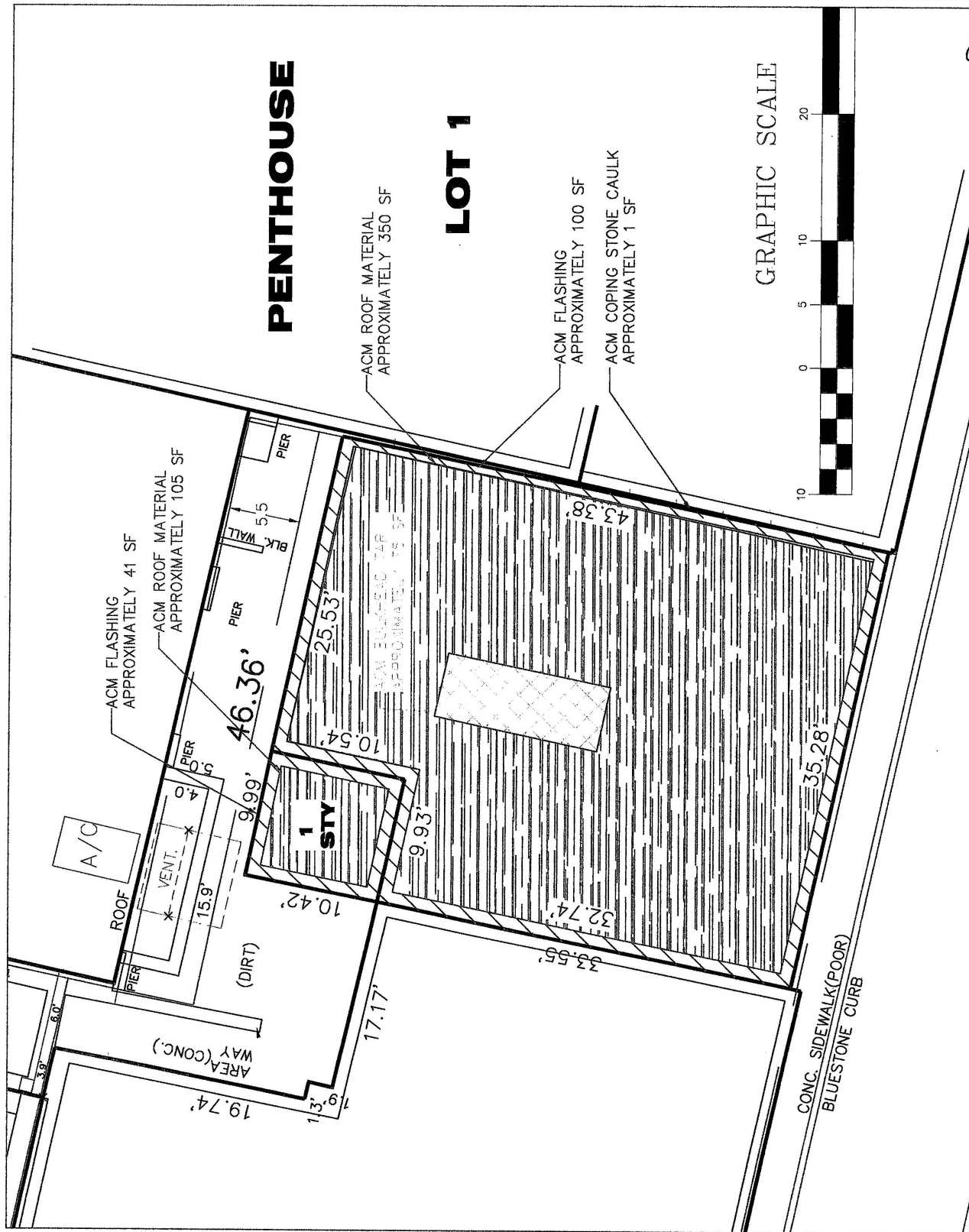
Thank you for your time and consideration,

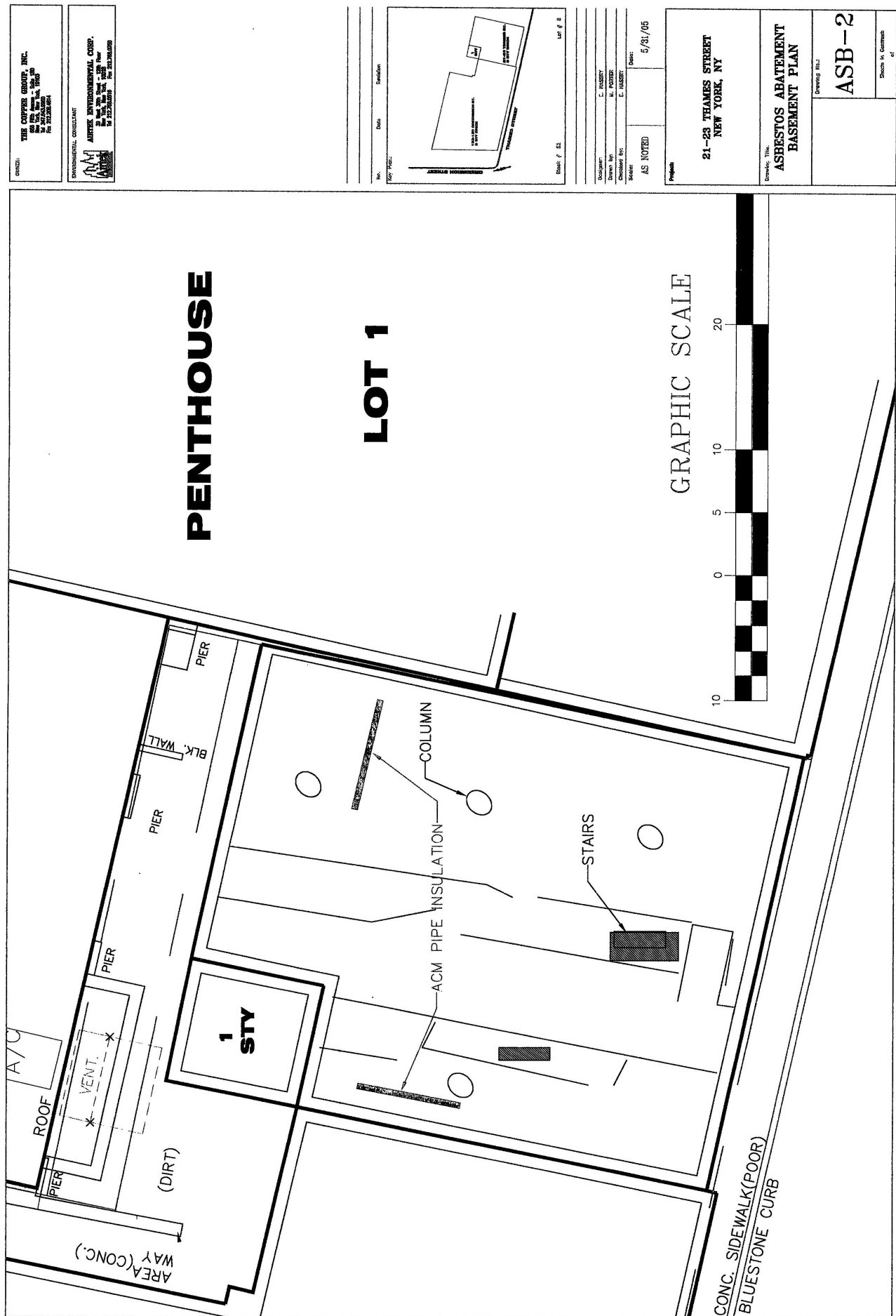
Sincerely,

Michael Porter
Senior Project Manager
NYS DOL Asbestos Project Designer

MP:bl

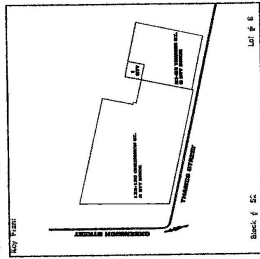
DRAWN: THE COPPER GROUP, INC. 601 E. Main St., 2nd Fl. New York, N.Y. 10002 Tel. 212-685-1000	ENVIRONMENTAL CONSULTANT ARTIST ENVIRONMENTAL CORP. 20 W. 23rd St., 10th Fl. New York, N.Y. 10011 Tel. 212-693-1000		SHEET 2 OF 22 5/31/05 Lot # 8	Designer: <u>C. HANCOCK</u> Drawn By: <u>M. PORTER</u> Checked by: <u>C. HANCOCK</u> Station: _____ Date: <u>5/31/05</u>
PROJECT:		21-23 THAMES STREET NEW YORK, NY		
DRAWING TITLE:		ASBESTOS ABATEMENT ROOF PLAN		
DRAWING NO.:		ASB-1		





OWNER: THE OFFICE GROUP, INC. 100 W. 30th St., 10th Fl. New York, NY 10001 Tel: 212-269-8800
DESIGN/CONSULTANT: ARTKIN ENVIRONMENTAL CORP. 100 W. 30th St., 10th Fl. New York, NY 10001 Tel: 212-269-8800

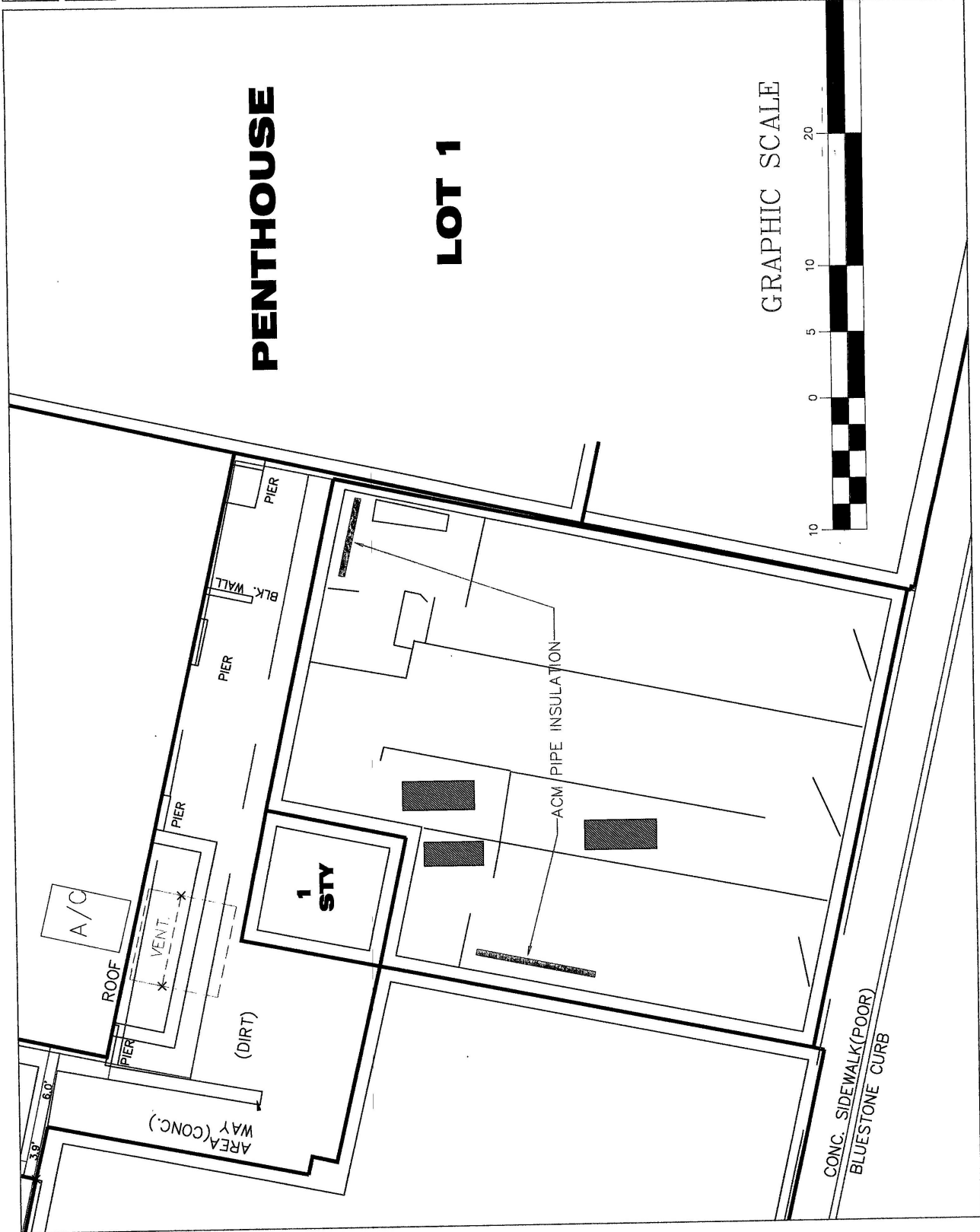
No.	Date	Revisions
100	5/31/05	



Block 6 St. Lot 6 St.

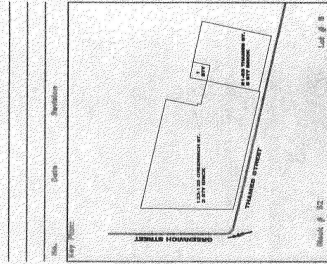
Author:	C. HANSEN
Drawn by:	M. POKORNY
Checked by:	C. HANSEN
Scale:	AS NOTED
Date:	5/31/05

Project:	21-23 THAMES STREET NEW YORK, NY
Drawing Title:	ASBESTOS ABATEMENT FIRST FLOOR PLAN
Drawing No.:	ASB-3
Sheet in Context:	3 of 3



THE COOPER GROUP, INC.
 200 W. 57th St., 10th Fl.
 New York, NY 10019
 Tel: 212-512-2000 Fax: 212-512-2001

ADT ENVIRONMENTAL CORP.
 100 W. 57th St., 10th Fl.
 New York, NY 10019
 Tel: 212-761-0101 Fax: 212-761-0709

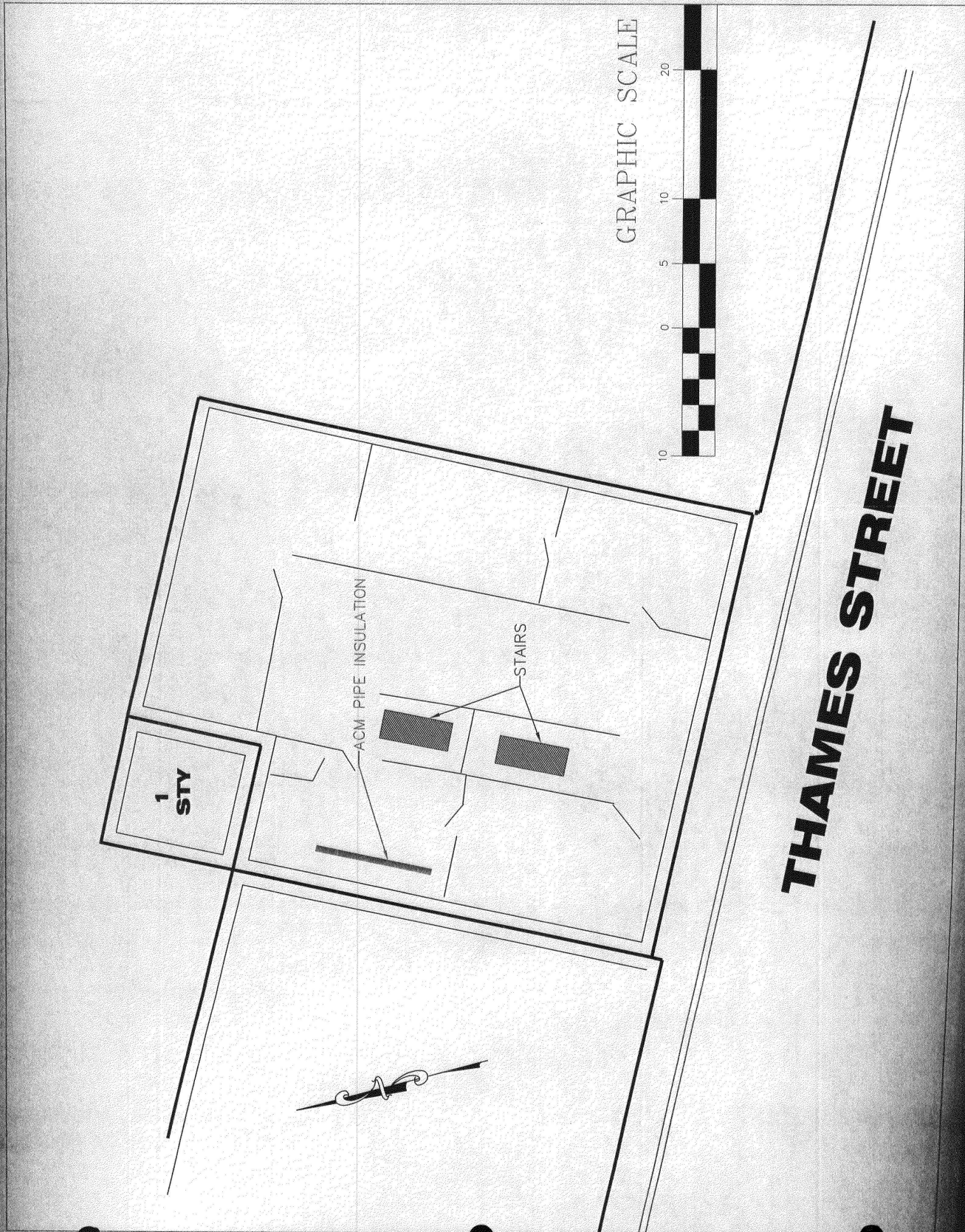


Project: 21-23 THAMES STREET
 NEW YORK, NY
 Date: 5/31/05
 AS NOTED

Project: 21-23 THAMES STREET
 NEW YORK, NY

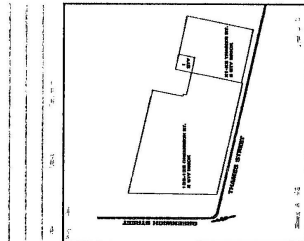
ASBESTOS ABATEMENT
 SECOND FLOOR PLAN

ASB-4



THE OFFICE OF THE
 DEPUTY CLERK OF THE
 CITY OF NEW YORK
 100 NASSAU ST., 10TH FL.
 NEW YORK, NY 10038

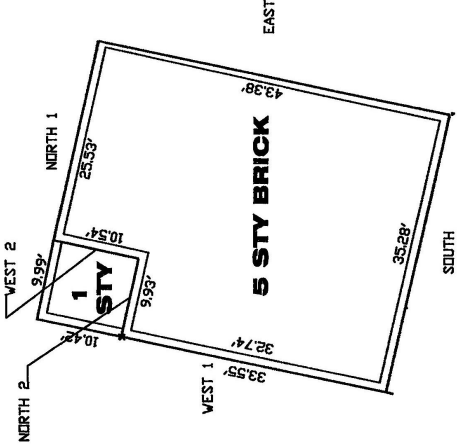
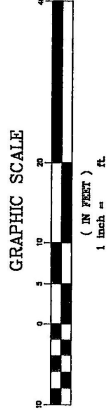
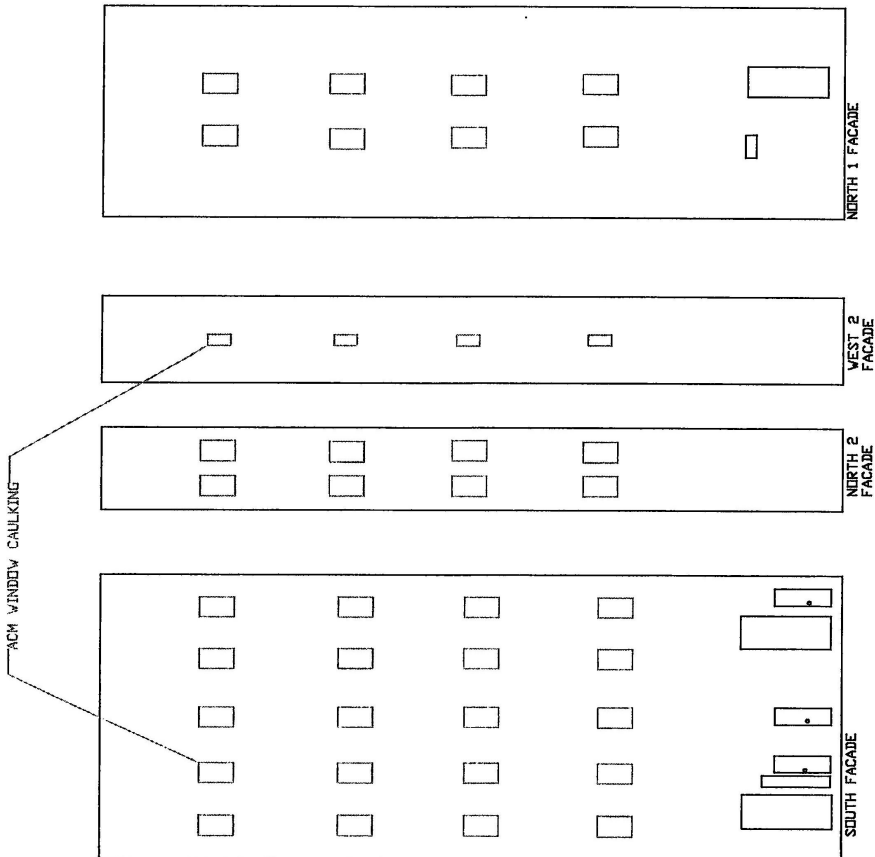
ADRIAN INVESTMENT CORP.
 100 NASSAU ST., 10TH FL.
 NEW YORK, NY 10038
 100 NASSAU ST., 10TH FL.
 NEW YORK, NY 10038



21-23 THAMES STREET
 NEW YORK, NY
 10038

ASBESTOS ABATEMENT
 ELEVATIONS PLAN

ASB-5



NYC DEP ASBESTOS CONTROL PROGRAM

VAR # _____

ATTACHMENT DW

REQUIREMENTS FOR THE USE OF THE SHOWER ROOM OF THE WORKER DECONTAMINATION
UNIT TO DECONTAMINATE ASBESTOS WASTE

(REFERS TO ASBESTOS PROJECTS OF 1,000 OR MORE LINEAR FEET OR SQUARE FEET).

APPLIES TO VARIANCE FROM TITLE 15, CHAPTER 1, RULES OF THE CITY
OF NEW YORK SECTION 1-83(b)2; {15 RCNY § 1-83(b)2}.

1. The worker decontamination unit shall be fully framed and plywood sheathed and constructed in compliance with 15 RCNY § 1-82.
2. The shower room shall be equipped with at least a 6 feet flexible hose for waste decontamination.
3. A remote holding area as per 15 RCNY § 1-83(a)2 (with a lockable door) for the asbestos waste shall be located at the worksite and shall comply with all applicable Department of Sanitation Regulations (16 RCNY 8 et. seq.).
4. Any roll-on/roll-off container/trailer used for a remote holding area shall be fully plasticized on all interior surfaces and shall have a lockable door and shall be labeled as per OSHA Regulation 29 CFR 1926.58K(2)(ii) and shall comply with 16 RCNY 8 et. seq.
5. Waste removal shall not occur during worker shift changes or when workers are showering or changing.
6. All other applicable sub-sections of 15 RCNY § 1-83 shall be complied with.

NOTE: This attachment may be revised in the future.

TRU/JM 6/98

NYC DEP Asbestos and Lead Control Program

VAR #

ATTACHMENT EC

APPLIES TO VARIANCE FROM TITLE 15, CHAPTER 1, OF THE RULES OF THE CITY OF NEW YORK,
SECTIONS 1-41(c), 1-41(d), 1-81(m), 1-82(a), 1-83(a), and 1-91.
(For Small Projects exclude 1-81(m), 1-82(a), 1-83(a), and 1-91, and add 1-106)

REQUIREMENTS FOR ABATEMENT OF ACM CAULKING MATERIALS FROM BUILDING FACADES

1. All windows and other openings within 20 feet of the affected ACM caulking material shall be fully closed or otherwise sealed with two layers of plastic. This includes openings on the same floor and also openings on immediately adjacent floors above and below.
2. The inside frames of the windows and other openings within the affected adjacent interior space shall be fully plasticized with one (1) sheet of 6-mil plastic. The seal shall be airtight between the window (or other opening) and the building interior.
3. Any scaffolding erected shall be constructed, maintained, and operated in accordance with the applicable federal, state, and city rules and regulations.
4. At the base of the scaffolding (either upon the sidewalk tunnel or at grade level), a work place or restricted area shall be established. This space shall be plasticized with one (1) layer of 6-mil plastic from one (1) foot up the building exterior wall to the edge of the sidewalk tunnel or at least five (5) feet away, whichever is greater. It shall be cordoned off with clearly identifiable asbestos hazard tape. This space (except the decon) shall be replasticized at the end of each shift.
5. The remote worker/waste decontamination enclosure system, constructed in accordance with Attachment D, shall be erected at ground level. This unit shall be maintained in the work place for the duration of the abatement.
6. The elevated platform shall be at least one (1) foot below the surface or joint to be abated. This work area shall be plasticized with a single layer of 6-mil plastic. The plastic shall extend up from the platform to a minimum height of two (2) feet on three sides. The plastic on the side facing the facade shall be attached directly to the building just below the surface or joint to be abated.
7. At the beginning of each shift, an area sample shall be taken on the scaffolding to obtain at least one (1) sample. Independent third parties shall perform air sampling.
8. If area air samples taken within the building interior are below 0.01 f/cc, or the measured background level, no further clearance air samples will be required.
9. Personnel performing the work shall be NYS/NYC certified asbestos handlers. An NYS/NYC certified asbestos handler/supervisor shall be in the work place at all times during the ACM caulking abatement. The asbestos handler/supervisor shall establish and maintain a log as that term is defined at 15 RCNY § 1-02.

NYC DEP Asbestos and Lead Control Program

VAR #

10. Each abatement team shall be equipped with appropriate tools, rags, a portable supply of amended water, and a HEPA vacuum. After the ACM caulking material is adequately wetted, it shall be stripped using hand tools, with the ACM caulking material being directly bagged or dropped into a flexible catch basin and promptly bagged. The stripped joints shall then be HEPA vacuumed, and then wet-wiped, to remove any loose debris still in place. All exposed joints shall be coated with a transparent encapsulant.
11. Upon completion of the stripping at a location and before moving to the next, the surfaces of the immediate work area shall be rendered free of visible debris. Next, the plastic covering of the platform shall be carefully cleaned and secured, at the next work area. New plastic sheeting shall be applied only as needed.
12. If visible emissions are noted or if the asbestos-in-air concentrations within the building exceed 0.01 f/cc or the measured background level, all work shall stop. Abatement procedures shall be reevaluated. Work shall not resume until NYCDEP is notified.

NOTE: This attachment is under review for possible future revision.

NYC DEP ASBESTOS CONTROL PROGRAM

VAR # _____

ATTACHMENT FR

**PROCEDURES FOR USE OF FOAM OR SIMILAR VISCOUS LIQUID
IN REMOVAL OF ASBESTOS CONTAINING ROOFING MATERIAL (ACRM) IN NEW YORK CITY****A) VARIANCE APPLICATION**

Applicant shall apply to NYC DEP for a variance from Title 15, Chapter 1, Rules of the City of New York sections: 1-81(j), 1-81(m); 1-91; 1-102(b); 1-41(c), 1-41(d); 1-112(d) and 1-112(e). {Also see Item E.4 below re 1-82(a) and 1-83(a)}.

NOTE: The applicant shall comply with all applicable sections of Title 15, Chapter 1, Rules of the City of New York.

B) ACCEPTABLE FOAM OR VISCOUS LIQUID

1. Shall be non-toxic, and not require special respiratory protection for handling.
2. Shall coat and maintained a stable blanket (minimum 1" thickness) for the duration of the removal process.
3. Shall wet the ACRM and remain wet through the bagging process.
4. Shall leave an identifiable colored residue when it dissipates.
5. Shall not require special disposal.

C) PERSONAL PROTECTION

1. Appropriate personal protective equipment shall be worn.
2. Persons entering the work area shall be provided with well-tractioned and correctly-fitting rubber boots.

D) BACKGROUND CONDITIONS

1. Preliminary examination shall be conducted and precautions shall be taken to prevent damage to the interior of the building and to ensure no adverse effect on the structural stability of the roof due to the abatement activity.
2. Abatement shall not be carried out during adverse weather conditions (e.g. precipitation, heavy winds, etc).
3. The work area on the roof shall be cordoned off, and only authorized persons shall have access to the "designated" work area.

E) MINIMUM REMOVAL PROCEDURES

1. Electric power in the work area shall be shut down and isolated.
2. Movable objects shall be removed from the work area, or kept in place and wrapped in one sheet of 6-mil plastic sheeting. Fixed objects including perimeter walls, bulkheads, cooling towers, ducts and other rooftop appurtenances shall be covered in one sheet of plastic (minimum height= 6 ft.)
3. The worker decontamination unit shall be constructed at an entry/exit from each work area in accordance with 15 RCNY § 1-82, with at least a shower room and a clean room. In addition to the shower head(s), the shower room shall be equipped with a flexible hose for waste decontamination (for removal of less than 1,000 square feet). FOR MORE than 1,000 square feet of removal, a separate waste decontamination facility as per 15 RCNY § 1-83 shall be located at an entry/exit from each work area.
4. Remote decontamination facilities will be considered; however, a variance must be requested from 15 RCNY § 1-82(a) and, also, from 15 RCNY § 1-83(a) (if more than 1,000 square feet will be removed).
5. The remote holding area for the asbestos containing waste shall comply with Title 16, Chapter 8, Rules of the City of New York. (16 RCNY 8 et seq.)

continued p.2.

6. Provisions shall be made to ensure a safe and adequate air supply to affected building(s). All vents, skylights, air intakes, windows and doors opening onto the roof, and all other openings are to be sealed with 2 layers of 6-mil plastic or fitted with HEPA-filters where appropriate.
NOTE: In lieu of sealing vents, air intakes, etc., with 2 layers of plastic or HEPA-filters, temporary extensions may be installed to a height of 10 feet to ensure adequate air exchange. Drains may be equipped with 5 micron filtering systems in lieu of being sealed.

FOAM PROCEDURES FOR ACRM REMOVAL

7. Prior to actual removal the built-up roofing shall be blanketed and wetted with a minimum 1" coating of the acceptable foam or viscous liquid which shall be maintained for the duration of the removal until the material is bagged. The foam or viscous liquid shall be confined to the work area.
8. Manual methods of removal are recommended; however, if hand-held power tools are used to drill, cut into, or otherwise disturb the asbestos-containing roofing material, the power tools shall be equipped with HEPA-filtered local exhaust ventilation and operated to prevent potential fiber release.
9. Portable HEPA-vacuum machines shall be available during abatement.
10. Clean-up procedures shall involve removal and bagging of
 - a) the asbestos containing roofing material (ACRM)
 - b) visible accumulations of asbestos containing waste
 - c) all excess foam or similar viscous liquid
 - d) all debris, and shall be followed by a thorough wet cleaning.
11. All tools shall be wet cleaned and HEPA-vacuumed, and then removed from the work area upon completion.
12. The work area shall be allowed to dry completely before the visual inspection is conducted. This inspection, to be performed by the independent third party air monitoring firm/consultant, shall confirm the absence in the work area of:
 - a) ACM or ACW bags or debris,
 - b) excess foam or other viscous liquid.

NOTE: If the work area fails visual inspection, it shall undergo another wet cleaning and/or HEPA vacuuming until it passes the visual inspection.
13. When the visual inspection is successful, all plastic may be removed.

F) AIR MONITORING

1. Daily continuous air sampling inside the work area and, also, in all spaces where egress from the work area is through the structure itself, shall be conducted in accordance with sections 1-41(a), 1-41(b) and 1-42 of Title 15, Chapter 1, Rules of the City of New York.
2. If any air sample(s) within the work area exceed 0.01 f/cc or the background level, whichever is greater, then work shall stop and methods shall be altered to reduce airborne fiber concentrations to the aforementioned level.
3. Clearance air monitoring is not required.
4. Personal air monitoring data shall be submitted to the Department within one week after the completion of the project, if requested.

G) GENERAL PROVISIONS

A copy of the approval, the corresponding notification, and this procedure shall be posted conspicuously at the entrance to the work area.

NOTE: A conservative approach has been used in the design of this protocol to provide as much relief as possible while maintaining adequate measures to safeguard health and safety.

The Department of Environmental Protection will consider additional variances in conjunction with this application.

TRU/JM 6/98

NYC DEP ASBESTOS CONTROL PROGRAM

VAR# _____

ATTACHMENT IC

APPLIES TO VARIANCE FROM TITLE 15, CHAPTER 1, RULES OF THE CITY OF NEW YORK,
SECTIONS 1-41(c), 1-41(d), 1-81(m), 1-82(a), 1-83(a) and 1-91.
[For Small Projects exclude 1-81(m), 1-82(a), 1-83(a) and 1-91, and add 1-106]

REQUIREMENTS FOR ABATEMENT OF ACM CAULKING MATERIALS FROM THE TOP OF THE PARAPET
WALL(S) ON THE ROOF

1. The entire roof is considered the work area, unless barriers are use to identify and restrict the work area.
2. All openings on the roof and other openings/windows within 20 feet of the affected ACM coping stone caulking material shall be fully closed or sealed with one layer of plastic.
3. Roof surfaces extending 5 feet on both sides and 6 feet in front shall be covered with at least 1 layer of 6 mil plastic, along the length of the parapet wall to be abated. The plastic layers on the roof surfaces shall extend 6" inches up the parapet wall.
4. At the base of the building, directly below the parapet wall to be abated, a restricted area shall be established. This space shall be plasticized with 1 layer of 6-mil plastic from 6 inches up the building exterior wall to the edge of the sidewalk at least 5 feet away. It shall be cordoned off with clearly identifiable asbestos hazard tape. At the end of each shift, the plastic has to be cleaned, removed and disposed as asbestos waste.
5. The remote worker/waste decontamination enclosure system, shall be constructed in accordance with Attachment D, and shall be erected on the roof of the building. This unit shall be maintained in the work place for the duration of the abatement.
6. Each work area shall be supplied with appropriate tools, rags, a portable supply of amended water, and a HEPA vacuum. After the ACM coping stone caulking material is adequately wetted, it shall be stripped using hand tools. The stripped joints shall then be HEPA vacuumed, and then wet-wiped, to remove any loose debris still in place or on the poly. All exposed joints shall be coated with a clear encapsulant.
7. All ACM caulking material shall be bagged directly on detachment from the substrate.

8. One area sample per shift shall be taken in the work area during removal. A minimum of 3 samples for small asbestos projects and a minimum of 5 samples for large asbestos project shall be collected and analyzed.
9. Personnel performing the work shall be NYS/NYC certified asbestos handlers. An NYS/NYC certified asbestos supervisor shall be in the work place at all times during the ACM coping stone caulking material abatement. The asbestos supervisor shall establish and maintain a log as required in 15 RCNY.
10. Upon completion of the stripping work, the parapet wall surfaces shall be cleaned and HEPA vacuumed to ensure no visible ACM debris in the work area. All plastic shall be removed and properly disposed as asbestos waste.
11. All tools shall be wet cleaned and HEPA-vacuumed and then removed from the work area upon completion.
12. The work area shall be allowed to dry completely before the visual inspection is conducted. This inspection, to be performed by the independent third party air monitoring firm/consultant, shall confirm the absence of ACM or debris in the work area prior to the removal of the hazard tapes/barriers.
13. If visible emissions are noted or if the asbestos-in-air concentrations within the building exceed 0.01 f/cc or the measured background level, all work shall stop. Abatement procedures shall be reevaluated. Work shall not resume until NYCDEP is notified.

NOTE: This attachment is under review for possible future revision.

TRU/JM 7/98