

SECTION 02 82 14
ASBESTOS ABATEMENT-EXTERIOR FACADE BRICKWORK

SECTION 02 82 14

1.01 REFERENCE STANDARDS

- A. 29 CFR 1926 - Safety and Health Regulations for Construction; Current Edition.

ASBESTOS ABATEMENT OF EXTERIOR BUILDING COMPONENTS

PART 1. GENERAL

3.01 1.01- GENERAL

- A. Coordinate the work of these procedures with work of other section of the contract.
- B. The Contractor for this work is referred to the "INSTRUCTION TO BIDDERS" "FORM OF PROPOSAL", "GENERAL CONDITIONS", "CONTRACT DRAWINGS" DIVISION I – Exterior Brickwork and all "Amendments" and "Addenda" thereto, if any, all of which are hereby made part of the Contract Documents.
- C. Payment for asbestos abatement work for exterior components shall be made as described in each Item of Work in Division I.
- D. The work for this Contract shall be under the direction and supervision of Authority's Representative, Local Law 11 Unit, 24-02 49th Avenue, 3rd Floor, Long Island City, New York 11101 and Contract Support for the Asbestos Abatement portion of this contract is the Environmental compliance unit of The Asset and Capital Management Division- NYCHA, 24-02 49th Avenue, 3rd Floor, Long Island City, New York 11101. Telephone no. (718) 730-8304.
- E. All measurements required for proper execution of the work is the Contractors responsibility. Before submitting bid examine all existing conditions which may impact on the work and include them in the bid price.
- F. Prospective bidders may gain access to the work area, for inspection purposes, by contacting the Construction Management Build Consultant.

THE OTHER REQUIREMENTS SPECIFIED IN THIS DIVISION APPLY TO ASBESTOS ABATEMENT BEYOND WHAT IS REQUIRED BY FEDERAL, STATE, AND CITY REGULATIONS:

1.02- ASBESTOS WORK

ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF ALL MUNICIPAL AND OTHER PUBLIC AGENCIES HAVING JURISDICTION. ANY REQUIREMENTS SPECIFIED HEREIN WHICH CONFLICT WITH SUCH RULES OR REGULATIONS SHALL BE REFERRED

TO THE AUTHORITY FOR DECISION. ALL ASBESTOS REMOVAL AND DISPOSAL TO BE PERFORMED UNDER THIS CONTRACT SHALL BE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND CITY REGULATIONS. APPLICABLE REGULATIONS, GUIDELINES AND STANDARDS ARE TO INCLUDE, BUT ARE NOT LIMITED TO:

- A. New York City D.E.P. Title 15, Chapter 1.
- B. New York State Industrial Code Rule 56.
- C. US EPA Regulations for Asbestos 40 CFR 61 Subparts A & M.
- D. OSHA 29 CFR 1926 and 1910.
- E. N.Y. State DEC - Article 27, Title 3 and 15.

THE FOLLOWING REQUIREMENTS APPLY TO ASBESTOS ABATEMENT BEYOND WHAT IS REQUIRED BY FEDERAL, STATE, AND CITY REGULATIONS:

PART 2. PROCEDURE

15.01 2.01- SCOPE OF WORK

- A. Furnishing labor, materials, services, insurance and equipment necessary for the proper disposal of asbestos-containing material required for performing work specified in Division 03 by the General Contract. This specification applies to the following type of work:
1. Re-caulking vertical Expansion Joint at parapet wall (caulking)
 2. Re-caulking around window frames and underneath the sill (caulking)
 3. Re-caulking Horizontal Expansion Joint between spandrel beam and brickwork (caulking)
 4. Re-caulking all Vertical Expansion Joints (caulking)
 5. Removal of vertical expansion joint caulk (ACM) ???SF
 6. Removal of parapet wall coping stone joint caulk (ACM) Attachment C
 7. Removal of window caulk (ACM) where damaged bricks are removed.
 8. Removal of damaged bricks (at spandrel beams) and possible waterproofing tar (ACM) disturbance.
 9. Removal of damaged bricks (at window lintels) and possible waterproofing tar (ACM) disturbance.
 10. Replacement of brickwork in cavity walls (ACM -- flashing membrane, tar and caulking)
 11. Replacement of brickwork in solid walls (ACM -- flashing membrane, tar and caulking)
 12. Installation of new or removing and replacing existing horizontal expansion joints (ACM -- flashing membrane, tar and caulking).
 13. Installation of new or removing and replacing existing vertical expansion joints (ACM -- caulking).
 14. Removal and replacement of roof parapet walls (ACM -- tar, caulking, flashing membrane and waterproofing membrane).
 15. Replacement of damaged window sills (ACM – caulking and flashing)
 16. Removal, disposal and replacement of entire steel lintels over window opening (ACM -- flashing membrane, tar and caulking)
 17. Repairing masonry compactor stack (ACM – caulking and base flashing)
 18. Repairing masonry boiler stack (ACM -- caulking).
 19. Replacement of terra-cotta coping (ACM -- caulking, flashing membrane and tar)
 20. Replacement of concrete coping stone and removal and resetting of existing coping stones (ACM -- caulking, flashing membrane and tar)
 21. Replacement of exterior wythe of concrete block wall -- regular and split ribbed blocks (ACM -- flashing membrane, tar and inner caulking)
 22. Replacement of window frames caulking (ACM -- caulking)
 23. Remove and reinstall precast concrete lintels over window openings (ACM -- flashing membrane, tar and inner caulking).
 24. Replacement of through wall flashing at bulkhead walls (ACM -- flashing membrane, tar)
 - a. Note: Contractor shall dispose of materials such as bricks, masonry blocks, steel lintels, windowsills, copings, concrete and wood cants, etc. as ACM when these materials have asbestos adhering to them. Cost of disposing of these materials as ACM must be included in Form of Proposal for unit price of items listed above. There will be no separate payments for disposal of these items like ACM.
- B. Violations to asbestos regulations governing this abatement work will not be tolerated. At the Authority's discretion, the Asbestos Handler Supervisor of this project will be required to be replaced.
- C. The Contractor shall carry asbestos insurance when removing asbestos and throughout the entire process and assume full liability for failure to comply with Federal, State and City Regulations.

- D. This work will be monitored by an Authority Inspector and/or a Representative on behalf of the Authority acting as an Asbestos Project Monitor. The Asbestos Handler Supervisor shall adhere to the direction of the Inspector and Project Monitor.

2.02- SPECIAL CONDITIONS

- 1. PERFORM ALL ASBESTOS WORK BETWEEN THE HOURS OF 8:00 AM AND TO 4:00 PM.**
- 2. SPECIAL FILING REQUIREMENTS WILL REQUIRE THAT THE CONTRACTOR APPLY FOR AND OBTAIN APPROVAL FOR SPECIFIC VARIANCES FROM NYC DEP. ALL COORDINATION OF THE SPECIAL CONDITIONS MUST GO THROUGH THE ENVIRONMENTAL INSPECTOR.**

2.03- FILINGS

1. Submit all filings with the Construction Management Build Consultant for
 - a. review and signature, as the Owner, prior to submittal to the required
 - b. regulatory agencies.
2. Contractor shall submit the following documents when requesting approval
 - a. and signing of NYC DEP filings with the Environmental Inspector:
3. Contractor's Asbestos Handler License from NYS Dept. of Labor.
4. Sub-Contractor approval letter from the Construction Management Build Consultant.
5. Filing notifications to the NYS Dept of Labor
6. Filing notifications to the E.P.A.
7. Asbestos waste transporter permit from NYS DEC
8. Designated disposal site landfill permit.
9. Filing this work with the NYC DEP Abatement of all materials are to be filed and abated following the NYC DEP requirements. Along with all permit and other required filing. The contractor must petition for specific variances from DEP regulations. The NYC DEP has previously approved variance requests for the following types of work:
 - a. Filings shall include but are not limited to the following:
 - 1) For work involving the waterproofing tars, vertical expansion joint caulking, installation of horizontal expansion joints, and window lintel removal, the NYC DEP filing should include NYC DEP Attachment EC, "Exhibit A" and/or "Exhibit C" (of this specification) which represents specific requests and conditions that have been previously approved by the NYCDEP for this type of work.
 - 2) For work involving waterproofing tar from spandrel beam area during brick replacement work, the NYCDEP filing should include the use of NYCDEP Attachment D and "Exhibit D" (of this Specification) which represents specific requests and conditions that have been previously approved by the NYC DEP for this type of work.
 - 3) For work involving the removal of caulking from intact windows, the NYC DEP filing should include "Exhibit B" (of this specification) which represents specific requests and conditions that have been previously approved by the NYC DEP for this type of work.
10. Test tents are required for the abatement of waterproofing (tar) coating associated with bolt tightening (NYC DEP Attachment FTS) and/or brick work replacement and waterproofing removal from parapet walls (NYCDEP Attachment FT). At a minimum, 2 test tents are required per Development. This work must be coordinated with the Environmental Inspector in addition to the coordination that is required by the NYCDEP.
11. The Contractor shall pay the filing fees for notification of asbestos work as
 - a. required by the New York State Department of Labor, Division of Safety
 - b. and Health. This cost shall be incorporated into the Contractor's bid.

6. WORK SHALL NOT BEGIN UNTIL THERE IS AN APPROVED SCHEDULE AND THE NYCDEP V-2 FORM HAS BEEN RECEIVED BY THE ENVIRONMENTAL INSPECTOR.

2.04- MISCELLANEOUS

- 1) If at any time the Authority Representative or any agency having

(a) jurisdiction decides that work practices are violating pertinent regulations, **OR ENDANGERING WORKERS, HE WILL IMMEDIATELY NOTIFY THE CONTRACTOR'S ASBESTOS HANDLER SUPERVISOR THAT OPERATIONS WILL CEASE UNTIL ALL CORRECTIVE ACTION IS TAKEN.**

2. CONTRACTOR AND ASBESTOS SUB-CONTRACTOR WILL BE REQUIRED TO ATTEND AN ON SITE MEETING (ASBESTOS WALK THROUGH MEETING) WITH THE CONSTRUCTION MANAGEMENT BUILD CONSULTANT REPRESENTATIVES, PRIOR TO START OF WORK TO EXAMINE SITE CONDITIONS, AND TO PLAN SEQUENCE OF OPERATION.

2.05 PROTECTION OF PROPERTY

WHERE WORK IS PERFORMED, THE CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR ALL DAMAGE TO PROPERTY BELONGING TO THE AUTHORITY. RESTORE ANY EQUIPMENT FURNISHED UNDER THIS CONTRACT AND ANY PROPERTY OF THE AUTHORITY DAMAGED BY THIS CONTRACTOR OR HIS EMPLOYEES TO ITS ORIGINAL CONDITION OR REPLACED WITHOUT COST TO THE AUTHORITY.

2.06 MATERIALS AND APPLICATION

- (1) Materials (chemical solutions) shall be delivered in their original containers, sealed by the Manufacturer. Opened containers are not to be used on this project. Containers are to be clearly labeled with Manufacturer's name, product identification and lot numbers, and shall be stored out of the weather in their original, tightly sealed containers. Materials shall be mixed according to Manufacturer's directions and specifications.
- (2) The following list are approved materials for use on this project. Approval of an equivalent product must be obtained prior to use of the product on this project Approval must be requested prior to the filing of this project:
- (3) Fire Fighting Foam- BioFoam by Peter Staikos, 307 7th Avenue, New York, NY10001, Tel: (212) 627-1533, or Super Foam II, by NYPCO Industries, Navy Yard, Brooklyn, NY11205, Tel: (718) 596-3000, or Pronto Extra-Foam by Twin-Chem. Inc. 5010 Hickory Hill Dr. Woodstock, GA30188, Tel: (800) 442-4958, or approved equivalent.
- (4) Penewet wetting agent and penetrant by Fiberlock Technologies, Inc or Chem-Safe Gold wetting agent and penetrant by Aramsco 1665 Imperial Way Thorofare, N.J. 08088 Telephone (800) 767-6933 or approved equivalent.
- (5) Encapsulant shall be Serpiflex Shield Formula #5 by International Protective Coatings Corp., (732) 531-3667, or Chem-Safe 500 by ARAMSCO, 1655 Imperial Way, Thorofare, N.J. 08086, (800) 767-6933, or approved equal.

2.07- PREPARATION ACTIVITIES

- A. See "Exhibit A", "Exhibit B" and "Exhibit D".
- B. Hand tools used next to the roof edge, where a parapet wall is present or not, requires that the hand tools be tied off with a safety line.

2.08- REMOVAL

1. SEE "EXHIBIT A", "EXHIBIT B", "EXHIBIT C" AND "EXHIBIT D".

2. THE USE OF HANDHELD POWER TOOLS MUST BE APPROVED BY THE ENVIRONMENTAL

1. Inspector. Only power tools that have a factory installed HEPA filtration

2. attachment shall be considered for approval.

3. POWER SAWS, OF ANY TYPE, ARE PROHIBITED FROM USE ON ASBESTOS-CONTAINING ROOFING MATERIALS.

4. ASBESTOS REMOVAL IS PROHIBITED UNTIL AIR MONITORING EQUIPMENT IS IN PLACE AND OPERATING.

5. PRIOR TO THE TEMPORARY SEALING OF AN ABATED SECTION OF A ROOF, THE CONTRACTOR'S ASBESTOS HANDLER SUPERVISOR MUST INSPECT AND APPROVE THE WORK AREA AND DOCUMENT SUCH INSPECTION AND APPROVAL ON A SUPERVISOR INSPECTION REPORT. THE SUPERVISOR MUST THEN COORDINATE AND REQUEST AN INSPECTION BY THE ENVIRONMENTAL INSPECTOR.

2.09- CLEANING REQUIREMENTS

1. SEE "EXHIBIT A", "EXHIBIT B" AND "EXHIBIT D".

2.10- PACKAGING AND DISPOSAL OF ASBESTOS AND RELATED DEBRIS

- A. Asbestos debris and poly waste shall be removed from the premises prior to the end of the work shift. At no time will asbestos debris be allowed to be stored on site once the Contractor has left site.
- B. Site specific generator labels shall include the building location address, City and State, the date of abatement, the abatement Contractor's name, and the words "New York City Housing Authority.
- C. All asbestos waste is to be transported directly to a transfer station or the landfill. No asbestos waste is to be stored or transferred to another location prior to transport to a transfer station or the landfill.
- D. No asbestos waste is to be removed from site without a properly documented waste manifest.
- E. All asbestos waste shall also be required to comply with U.S. Environmental Protection Agency Regulations, Title 40, Part 61, Sub-part A & B (40 CFR A & B) and OSHA Regulations (((29 CFR 1910))) for Collecting, Packaging, Transporting and Disposing of Asbestos.

2.11- ASBESTOS WASTE MANIFESTS

- A. All asbestos waste shall be properly manifested prior to removal from the Authority's property.
- B. Waste transporting shall follow all provisions of the Environmental Conservation Law, Title 3, of Article 27.
- C. Copies of the manifest, after all asbestos has been removed from specifying the location, and indicated where the waste will be transported, shall be given to the Authority's Inspector and/or the Project Monitor.
- D. A final copy signed by the landfill is to be submitted to NYCHA Environmental Compliance Unit, Attention Sonia Rigby 24-02 49th Avenue, 3rd floor, Long Island City, NY. 11101.. Telephone No. (718) 730-8304.

2.12- INDEPENDENT AIR MONITORING AND AIR CLEARANCE

- A. Clearance air monitoring is not required. However, the Authority may
 - 1. perform air monitoring at its own discretion.

PART 3. SUBMISSIONS(ALSO SEE DIVISION 01 FOR MORE INFORMATION)

57.01 A. WITHIN 14 CALENDAR DAYS CALCULATED FROM THE DATE OF THE AUTHORITY'S LETTER OF

AWARD, THE CONTRACTOR SHALL TENDER HIS SUBMISSIONS. SIX (6) SETS FOR THE SUBMISSIONS ARE REQUIRED. IT SHALL CONTAIN A LIST OF ALL MATERIALS AND EQUIPMENT

PROPOSED TO BE USED, GIVING THE MANUFACTURER'S NAME, TRADE NAME, CATALOG NUMBER OR OTHER POSITIVE MEANS OF IDENTIFICATION. IT SHALL BE ACCOMPANIED WITH MANUFACTURER BROCHURE OR LITERATURE DESCRIBING THE ITEM. IN GENERAL, ITEMS SHALL

INCLUDE BUT NOT BE RESTRICTED TO THE FOLLOWING:

1. ASBESTOS REMOVAL FOAM (MFRS. LIT.)

2. ASBESTOS ENCAPSULANT (MFRS. LIT.)

NOTE: ACCEPTABLE PRODUCTS LISTED IN MATERIALS, SECTION 2.06, DIV. 2, A AND B.

B. IN THE EVENT THAT ANY SUBMITTED MATERIAL IS REJECTED BY THE AUTHORITY, THE CONTRACTOR SHALL TENDER NEW SUBMISSIONS, WHICH SHALL CONFORM TO THE AUTHORITY'S REQUIREMENTS WITHIN 10 CALENDAR DAYS CALCULATED FROM THE DATE OF THE REJECTION.

C. SUBMISSIONS MUST BE TENDERED WITHIN 30 CALENDAR DAYS FROM THE DATE OF THE AUTHORITY'S LETTER OF AWARD, UNLESS DULY EXTENDED IN WRITING BY THE AUTHORITY.

D. DO NOT BEGIN WORK, ORDER, FABRICATE OR DELIVER MATERIALS TO THE SITE UNTIL FINAL

APPROVAL OF SUBMISSIONS. SEND SUBMISSIONS TO THE CONSTRUCTION MANAGEMENT BUILD CONSULTANT.

EXHIBIT A

NYC DEP

59-17 JUNCTION BLVD.

CORONA, NEW YORK 11373-5107

RE: VARIANCE REQUEST

FOR EXTERIOR

SPANDREL BEAM TIGHTENING,

VERTICAL EXPANSION JOINT REMOVAL, AND/OR

WINDOW LINTEL REMOVAL

TO WHOM IT MAY CONCERN:

DUE TO THE FACT THAT THERE ARE PRACTICAL DIFFICULTIES IN CONSTRUCTING A FULL CONTAINMENT, A TENT ENCLOSURE OR FOLLOWING THE PLASTIC PREPARATION AND AIR MONITORING AS REQUIRED BY ATTACHMENT EC, NYCHA IS REQUESTING THE FOLLOWING VARIANCE FROM TITLE 15 CHAPTER 1 OF THE RULES OF THE CITY OF NEW YORK:

WE ARE REQUESTING A VARIANCE FROM THE FOLLOWING SUBSECTIONS:

SECTION 1-41(C) DURING ABATEMENT AIR SAMPLING INSIDE WORK AREA.

SECTION 1-41(D) NO POST ABATEMENT CLEARANCE AIR MONITORING.

SECTION 1-81(M) PARTIAL PLASTICIZATION OF THE WORK AREA.

SECTION 1-82(A) &

1-83(A) REMOTE DECONTAMINATION FACILITIES.

SECTION 1-91 NO NEGATIVE AIR.

THE REQUIREMENTS FOR ABATEMENT SHALL BE AS FOLLOWS:

PREPARATION

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.

PROTECTION BELOW THE WORK AREA IS REQUIRED WITH PLASTIC SHEETING. WHERE SPACE PERMITS, THE PLASTIC SHEETING SHALL COVER THE GROUND. IN OTHER INSTANCES, SUCH AS WHERE SHRUBS ARE PRESENT, THE PLASTIC SHEETING SHALL COVER OVER THE SHRUBS AND CONTINUE OUTWARD FROM THE BUILDING. THE PLASTIC SHEETING SHALL START AT THE BASE OF THE BUILDING AND EXTEND TO A DISTANCE OF AT LEAST 20' FROM THE BUILDING. THE SHEETING MUST EXTEND UP THE SIDE OF THE BUILDING A MINIMUM OF 12". SECURE THE SHEETING TO THE GROUND SO THAT IT WILL NOT BLOW IN THE WIND.

THE ELEVATED PLATFORM SHALL BE AT LEAST 1' BELOW THE SURFACE 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 2' ON THREE SIDES. THE PLASTIC ON THE SIDE FACING THE FACADE SHALL BE ATTACHED DIRECTLY TO THE BUILDING JUST BELOW THE SURFACE TO BE ABATED.

ANY SCAFFOLDING ERECTED SHALL BE CONSTRUCTED, MAINTAINED, AND OPERATED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE, AND CITY RULES AND REGULATIONS.

REMOVE ALL MOVABLE ITEMS FROM THE GROUND BENEATH THE WORK AREA; COVER GRASS, SHRUBS, GARDENS AND PLAY AREAS.

RESTRICT ACCESS TO THE GROUND BENEATH THE WORK AREA BY ERECTING TEMPORARY FENCING OR ASBESTOS WARNING BARRIER TAPE AT A 25' PERIMETER FROM THE BUILDING.

THE 4 SIDES OF THE SCAFFOLD MUST BE COVERED WITH SHEETING. A TARP MUST BE HUNG BENEATH THE SCAFFOLDING IN ORDER TO CATCH ANY FALLING DEBRIS.

ALL OPENINGS (I.E. WINDOWS, AIR CONDITIONING UNITS, VENTS, ETC.) ON THE LEVEL WHERE THE ABATEMENT IS TO TAKE PLACE, ONE FLOOR ABOVE AND ONE FLOOR BELOW, MUST BE COMPLETELY SEALED (ON THE EXTERIOR SIDE) WITH 1 LAYER OF FIRE RETARDANT 6-MIL POLYETHYLENE SHEETING. THE EXTERIOR WINDOW SILLS MUST NOT BE EXPOSED.

DURING ASBESTOS REMOVAL THE ASBESTOS HANDLERS MUST WEAR APPLICABLE PERSONAL PROTECTIVE EQUIPMENT AND RESPIRATORY PROTECTION.

PERSONNEL PERFORMING THE WORK SHALL BE NYS/NYC CERTIFIED ASBESTOS HANDLERS. A 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.

EACH ABATEMENT TEAM SHALL BE EQUIPPED WITH APPROPRIATE TOOLS, RAGS, A PORTABLE SUPPLY OF AMENDED WATER, AND A HEPA VACUUM. AFTER THE ACM IS ADEQUATELY WETTED, IT SHALL BE STRIPPED USING HAND TOOLS, WITH THE ACM BEING DIRECTLY BAGGED OR DROPPED INTO A FLEXIBLE CATCH BASIN AND PROMPTLY BAGGED.

THE STRIPPED SURFACE 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.

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.

ASBESTOS REMOVAL – SPANDREL BEAM TIGHTENING

FOLLOWING BRICK REMOVAL (BY OTHERS, IN WHICH NO ASBESTOS MATERIALS ARE TO BE DISTURBED), THE ASBESTOS HANDLER SHALL WET THE AREA OF REMOVAL AND REMOVE A 4" X 4" SQUARE OF THE BLACK CLOTH AND ENOUGH OF THE FLASHING TAR TO PROPERLY ATTACH THE RATCHET TO THE BOLT HEAD. ALL ASBESTOS DEBRIS IS TO BE BAGGED AS ASBESTOS WASTE.

PRIOR TO LEAVING THE WORK AREA, ALL TOOLS MUST BE DECONTAMINATED.

ASBESTOS REMOVAL – VERTICAL EXPANSION JOINT REMOVAL

WET THE CAULKING PRIOR TO REMOVAL. USE HAND TOOLS TO REMOVE THE CAULK AND DISPOSE OF THE CAULK AS ASBESTOS WASTE.

ASBESTOS REMOVAL –WINDOW LINTEL REMOVAL

REMOVE THE TOP BRICK BELOW THE LINTEL IMMEDIATELY TO THE RIGHT AND LEFT SIDES OF THE WINDOWS OR ADDITIONAL BRICKS ABUTTING WINDOWS AS REQUIRED FOR STRUCTURAL REPAIRS. CAULKING THAT IS DISLODGED FROM THIS ACTIVITY MUST BE DISPOSED OF AS ASBESTOS WASTE. IN ADDITION, THE REMOVED BRICK SHALL BE DISPOSED OF AS ASBESTOS WASTE.

WET THE LINTEL AND REMOVE. LINTELS THAT ARE CONTAMINATED WITH BLACK FLASHING CEMENT ARE TO BE DISPOSED OF ASBESTOS WASTE. THE REMAINING FLASHING THAT IS REQUIRED TO BE REMOVED FROM THE OPENED SPACE MUST BE WETTED, REMOVED BY HAND TOOLS, AND DISPOSED OF ASBESTOS WASTE. HEPA VACUUMS ARE TO BE USED AS A FINAL CLEANING OF THE AREA.

REMOVE THE WINDOW SILL IN LOCATIONS DESIGNATED OR DIRECTED TO BE REPLACED. ACM CAULKING THAT IS ADHERED TO BE REMOVED SILL SHALL BE WETTED WITH WATER THAT HAS A SURFACTANT ADDITIVE AND SCRAPED FROM THE SILL, FROM THE EXISTING BRICKS TO REMAIN AND FROM THE WINDOW FRAME. DEBRIS MUST BE DISPOSED OF ASBESTOS WASTE.

CLEAN-UP

COLLECT AND DISPOSE OF ANY DEBRIS ON THE SCAFFOLD AND SHEETING.

WET WIPE THE POLYETHYLENE SHEETING ON THE WINDOWS. REMOVE THE SHEETING FROM THE WINDOWS AND WET WIPE AND HEPA VACUUM THE WINDOW COMPONENTS.

ONCE COMPLETED, THE SCAFFOLDING IS TO BE WET WIPED, THE ATTACHED PLASTIC SHEETING WET WIPED AND REMOVED. THE GROUND LEVEL IS TO BE INSPECTED FOR ANY POSSIBLE ASBESTOS DEBRIS AND DISPOSED OF ASBESTOS WASTE.

AT THE END OF THE WORKDAY FOLD THE GROUND SHEETING IN UPON ITSELF AND DISPOSE OF PROPERLY.

THE SUPERVISOR MUST CONDUCT A THOROUGH, VISUAL INSPECTION OF THE WORK AREA AND AREAS ADJACENT TO THE WORK AREA. ANY VISIBLE DEBRIS MUST BE DISPOSED OF IMMEDIATELY. THE VISUAL INSPECTION SHOULD FOCUS ON AREAS ACCESSIBLE TO CHILDREN (E.G. WINDOW SILLS, PLAY AREAS, BARE SOIL)

AIR MONITORING

DURING ASBESTOS ABATEMENT, AREA AIR MONITORING SHALL BE PERFORMED AT A GROUND LEVEL BENEATH THE SCAFFOLDING AND ON THE SCAFFOLDING IN COMPLIANCE WITH TITLE 15 RCNY SECTION 1-41(C).

IF VISIBLE EMISSIONS ARE NOTED OR IF AIR SAMPLES ARE AT OR ABOVE 0.01 F/CC, WORK IS REQUIRED TO BE STOPPED AND ABATEMENT PROCEDURES SHALL BE ALTERED SO AS TO REDUCE THE AIRBORNE FIBER LEVELS. WORK SHALL NOT RESUME UNTIL CORRECTED.

EXHIBIT B

NYCDEP

**59-17 JUNCTION BLVD.
CORONA, NEW YORK 11373-5107
RE: VARIANCE REQUEST FOR EXTERIOR
WINDOW CAULKING REMOVAL
ASSOCIATED WITH INTACT WINDOWS**

TO WHOM IT MAY CONCERN:

THE NEW YORK CITY HOUSING AUTHORITY (NYCHA) HAS CONTRACTED OUT TO HAVE PARTIAL ASBESTOS-CONTAINING CAULK REMOVAL AND REPLACEMENT (NO WINDOW REMOVAL) ON THE EXTERIOR SIDE OF THE WINDOWS AT WAGNER HOUSES. NYCHA BELIEVES THAT THERE IS NO HEALTH RISK FROM ASBESTOS EXPOSURE DURING THIS REMOVAL AND THEREFORE IS REQUESTING RELIEF FROM WINDOW PLASTICIZATION AND AIR SAMPLING ON THE INTERIOR SIDE OF THE BUILDING DURING ABATEMENT FOLLOWING THE EC ATTACHMENT.

CURRENTLY THERE IS A REPLACEMENT WINDOW SEATED OVER THE ORIGINAL, BUILDING CONSTRUCTION WINDOW FRAME. THIS PROJECT ENTAILS PARTIAL REMOVAL OF ONLY THE OUTER MOST APPLICATION OF CAULK, WHICH FILLS THE VOID BETWEEN THE REPLACEMENT WINDOW PERIMETER FRAME AND THE EXTERIOR BRICK OF THE BUILDING. THE INTERIOR SIDE OF THE WINDOW IS CAPPED WITH TRIM AND THE JOINTS ARE CAULKED AND PAINTED OVER. ONCE REMOVED, THERE WILL BE NO BREACH IN THE SEAL BETWEEN THE OUTSIDE AND THE INTERIOR OF THE APARTMENT. THIS WILL BE VERIFIED BY INSPECTIONS ONCE THE CAULK HAS BEEN REMOVED. THEREFORE, THE FOLLOWING PROCEDURES WILL BE FOLLOWED AS SET FORTH IN THE EC ATTACHMENT, WHICH APPLIES TO VARIANCE FROM TITLE 15, CHAPTER I, OF THE RULES OF THE CITY OF NEW YORK:

SECTION 1-41 (C) - DURING ABATEMENT AIR SAMPLING INSIDE WORK AREA.

SECTION 1-41 (D) - NO POST ABATEMENT CLEARANCE AIR MONITORING.

SECTION 1-81 (M) - PARTIAL PLASTICIZATION OF THE WORK AREA.

SECTION 1-82 (A) & 1-83 (A) - REMOTE DECONTAMINATION FACILITIES.

SECTION 1-91 - NO NEGATIVE AIR.

ATTACHMENT EC - CONDITION 2

ATTACHMENT EC - CONDITION 8

WE WILL ADHERE TO ATTACHMENT EC, EXCEPT FOR CONDITIONS 2 & 8.

NOTE:

ANY BROKEN APARTMENT WINDOWS OR APARTMENT WINDOWS THAT CANNOT BE PROPERLY CLOSED, WILL BE SEALED ON THE EXTERIOR SIDE WITH 2 LAYERS OF 6 MIL POLY. ANY APARTMENT WINDOW MOUNTED AIR CONDITIONERS OR FANS WILL BE REMOVED FROM THE WINDOW AND THE WINDOW CLOSED PRIOR TO CAULKING REMOVAL. STAIRWELL WINDOWS WILL BE SEALED ON THE INTERIOR SIDE WITH 2 LAYERS OF 6 MIL POLY.

CONTINUOUS AIR SAMPLING SHALL BE MAINTAINED THROUGH OUT THE WORK. IF ANY AIR SAMPLES EXCEED 0.01 F/CC, ALL WORK WILL STOP AND THE DEP WILL BE IMMEDIATELY NOTIFIED.

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.

**REQUIREMENTS FOR ABATEMENT OF ACM CAULKING MATERIALS FROM BUILDING FACADES
ALL WINDOWS AND OTHER OPENINGS WITHIN 20' 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.**

NYCHA REQUESTS TO WAIVE THIS SECTION: THE INSIDE FRAMES OF THE WINDOWS AND OTHER OPENINGS WITHIN THE AFFECTED ADJACENT INTERIOR SPACE SHALL BE FULLY PLASTICIZED WITH 1 SHEET OF 6-MIL PLASTIC. THE SEAL SHALL BE AIRTIGHT BETWEEN THE WINDOW (OR OTHER OPENING) AND THE BUILDING INTERIOR.

ANY SCAFFOLDING ERECTED SHALL BE CONSTRUCTED, MAINTAINED, AND OPERATED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE, AND CITY RULES AND REGULATIONS.

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 1 LAYER OF 6-MIL PLASTIC FROM 1' UP THE BUILDING EXTERIOR WALL TO THE EDGE OF THE SIDEWALK TUNNEL OR AT LEAST 5' 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.

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.

THE ELEVATED PLATFORM SHALL BE AT LEAST 1' 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 2' ON THREE SIDES. THE PLASTIC ON THE SIDE FACING THE FAÇADE SHALL BE ATTACHED DIRECTLY TO THE BUILDING JUST BELOW THE SURFACE OR JOINT TO BE ABATED.

AT THE BEGINNING OF EACH SHIFT, AN AREA SAMPLE SHALL BE TAKEN ON THE SCAFFOLDING TO OBTAIN AT LEAST 1 SAMPLE. INDEPENDENT THIRD PARTIES SHALL PERFORM AIR SAMPLING.

NYCHA REQUESTS TO WAIVE THIS SECTION: 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.

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.

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.

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.

IF VISIBLE EMISSIONS ARE NOTED OR IF AIR SAMPLES ARE AT OR ABOVE 0.01F/CC, WORK IS REQUIRED TO BE STOPPED AND ABATEMENT PROCEDURES SHALL BE ALTERED SO AS TO REDUCE THE AIRBORNE FIBER LEVELS. WORK SHALL NOT RESUME UNTIL NYCDEP IS NOTIFIED.

EXHIBIT D

NYC DEP

59-17 JUNCTION BLVD.

CORONA, NEW YORK 11373-5107

RE: VARIANCE REQUEST FOR EXTERIOR WATERPROOFING TAR FROM SPANDREL BEAM AREAS OF THE BUILDING FAÇADE ASSOCIATED WITH BRICK REMOVAL AND REPLACEMENT.

THE NEW YORK CITY HOUSING AUTHORITY (THE AUTHORITY) HAS CONTRACTED OUT TO HAVE REPAIRS TO THE DAMAGED BRICK FAÇADE OF THE BUILDINGS. THE ASBESTOS WORK INVOLVES THE REMOVAL OF EXPANSION JOINT AND COPING STONE JOINT CAULKING, PARTIAL REMOVAL OF WINDOW CAULKING, AND THE POSSIBLE DISTURBANCE OF THE WATERPROOFING TAR FROM THE SPANDREL BEAM AREA. THE AUTHORITY BELIEVES THAT THIS WORK CAN BE SAFELY PERFORMED WITHOUT RISK TO HEALTH FROM ASBESTOS EXPOSURE BY FOLLOWING THE EC ATTACHMENT WITH A REQUEST FOR RELIEF FROM WINDOW PLASTICIZATION AND AIR SAMPLING ON THE INTERIOR SIDE OF THE BUILDING DURING ABATEMENT.

THE SCOPE OF WORK (PER BUILDING) SHALL INCLUDE THE FOLLOWING:

REMOVAL OF VERTICAL EXPANSION JOINT CAULK (ACM) ??????????SF

REMOVAL OF PARAPET WALL COPING STONE JOINT CAULK (ACM) ATTACHMENT C

REMOVAL OF WINDOW CAULK (ACM) WHERE DAMAGED BRICKS ARE REMOVED.

REMOVAL OF DAMAGED BRICKS (AT SPANDREL BEAMS) AND POSSIBLE WATERPROOFING TAR (ACM) DISTURBANCE.

REMOVAL OF DAMAGED BRICKS (AT WINDOW LINTELS) AND POSSIBLE WATERPROOFING TAR (ACM) DISTURBANCE.

DURING THE REMOVAL PROCESS THERE WILL BE NO PASSAGEWAY BETWEEN THE OUTSIDE OF THE BUILDING AND THE INTERIOR OF THE APARTMENTS. THEREFORE, THE FOLLOWING PROCEDURES WILL BE FOLLOWED AS SET FORTH IN THE EC ATTACHMENT, WHICH APPLIES TO VARIANCE FROM TITLE 15, CHAPTER I, OF THE RULES OF THE CITY OF NEW YORK:

SECTION 1-41 (C) - DURING ABATEMENT AIR SAMPLING INSIDE WORK AREA.

SECTION 1-41 (D) - NO POST ABATEMENT CLEARANCE AIR MONITORING.

SECTION 1-81 (M) - PARTIAL PLASTICIZATION OF THE WORK AREA.

SECTION 1-82 (A) & 1-83 (A) - REMOTE DECONTAMINATION FACILITIES.

SECTION 1-91 - NO NEGATIVE AIR.

ATTACHMENT EC - CONDITION 2

ATTACHMENT EC - CONDITION 8

WE WILL ADHERE TO ATTACHMENT EC, EXCEPT FOR CONDITIONS 2 & 8 AND THE FOLLOWING SPECIAL CONDITIONS.

NOTE:

- A. Any broken apartment windows or apartment windows that cannot be properly closed, will be sealed on the exterior side with 2 layers of 6 mil poly.
- B. Any window mounted air conditioners or fans will be removed from the windows and the window closed prior to waterproofing tar removal. Where an air conditioning unit or fan can not be removed, the window will be sealed with 2 layers of 6 mil poly. These requirements will assure that there is no passageway from the exterior to the apartment interior.
- C. Stairwell windows will be closed and sealed on the interior side with 2 layers of 6-mil poly.
- D. Continuous air sampling shall be maintained through out the work. If any air samples exceed 0.01 f/cc, all work will stop and the DEP will be immediately notified.

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.

REQUIREMENTS FOR DISTURBANCE OF ACM EXTERIOR WATERPROOFING TAR FROM SPANDREL BEAM AREAS OF THE BUILDING FAÇADE

- A. All windows and other openings within 20' of the affected ACM shall be fully closed or otherwise sealed with 2 layers of 6- mil plastic. This includes openings on the same floor and also openings on immediately adjacent floors above and below.
- B. THE AUTHORITY REQUESTS TO WAIVE THIS SECTION: The inside frames of the windows and other openings within the affected adjacent interior space shall be fully plasticized with 1 sheet of 6-mil plastic. The seal shall be airtight between the window (or other opening) and the building interior.
- C. Any scaffolding erected shall be constructed, maintained, and operated in accordance with the applicable Federal, State, and City Rules and Regulations.
- D. 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 1 layer of 6-mil plastic from 1' up the building exterior wall to the edge of the sidewalk tunnel or at least 5' away, whichever is greater. It shall cordoned off with clearly identifiable asbestos hazard tape. This space (except the DECON) shall be re-plasticized at the end of each shift.
- E. 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.
- F. The elevated platform shall be at least 1' 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 2' on 3 sides. The plastic on the side facing the façade shall be attached directly to the building just below the surface or joint to be abated.
- G. At the beginning of each shift, an area sample shall be taken on the scaffolding to obtain at least 1 sample. Independent third parties shall perform air sampling.
- H. THE AUTHORITY REQUESTS TO WAIVE THIS SECTION: 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.
- I. Personnel performing the work shall be NYS/NYC certified asbestos handlers. A NYS/NYC Certified Asbestos Handler/Supervisor shall be in the workplace at all times during the ACM exterior waterproofing tar abatement. The Asbestos Handler/Supervisor shall establish and maintain a log as that term is defined at 15 RCNY § 1-02.
- J. Each abatement team shall be equipped with appropriate tools, rags, a portable supply of amended water, and a HEPA vacuum. After the ACM exterior waterproofing tar is adequately wetted, it shall be stripped using hand tools, with the ACM exterior waterproofing tar being directly bagged or dropped into a flexible catch basin and promptly bagged. The stripped surface shall then be HEPA vacuumed, and then wet-wiped, to remove any loose debris still in place. Abated surfaces will be coated with a transparent encapsulant.
- K. Upon completion of brick removal, if ACM tar adhered to bricks on spandrel beam and window lintel areas cannot be stripped off, entire brick shall be encapsulated and disposed of as ACM. Remaining ACM on spandrel beams and window lintels shall be encapsulated.
- L. Upon completion of the stripping and/or brick removal, 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.
- M. If visible emissions are noted or if air samples are at or above 0.01f/cc, work is required to be stopped, and abatement procedures shall be altered so as to reduce the airborne fiber levels. Work shall not resume until NYCDEP is notified.

THIS PROTOCOL MUST BE CLEARLY DISPLAYED AT THE WORK SITE PRIOR TO ANY ABATEMENT ACTIVITIES.

END OF SECTION 02 82 14