Emergency Action Plan

for

Phase I of Deconstruction Operations

at

130 Liberty Street

New York, NY

Prepared for Lower Manhattan Development Corporation One Liberty Plaza, 20th Floor New York, NY 10006



Prepared by Gilbane Building Company 125 Maiden Lane, 16th Floor New York, NY 10038



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SECTION 1 INTRODUCTION

The site is occupied by a 40 story, approximately 1.4 million square foot office building located at 130 Liberty Street (Building). Interior and exterior portions of the Building were severely damaged and/or impacted as a result of the collapse of the World Trade Center Towers. The Lower Manhattan Development Corporation (LMDC) took ownership of the Building in September of 2004 and hired Gilbane Building Company to perform the deconstruction of the Building.

The deconstruction of the Building shall be performed in two phases – Phase I is almost wholly limited to non-structural, interior building deconstruction tasks. Removal of the structure is to be undertaken in Phase II. This Emergency Action Plan (EAP) has been developed for Phase I activities only. All Phase II activities, including emergency preparedness, will be developed and documented in a future Phase II Deconstruction Plan. Phase I activities are further sub-divided into two phases – Phase IA and Phase IB. In Phase IA dust cleaning, abatement of identified asbestos containing building materials (ACBMs) and associated "soft strip" will be performed. Phase IB will then involve the removal of the remaining "soft strip" materials and the gut out of the interior of the building. Complete detail of the work is contained in the overall Phase I Deconstruction Plan for 130 Liberty Street.

SECTION 2 PURPOSE

This EAP is designed to lessen the impact of any emergency that might occur during the Phase I deconstruction process through proper planning and the establishment of a suitable response structure. The Plan designates the appropriate personnel responsible for implementing and monitoring the EAP and identifies who may need to be contacted in the event of an emergency. It outlines the education and training required by all on-site personnel so that all understand the requirements and expectations of the EAP.

This EAP will apply to all contractors working on the site (e.g. Abatement Subcontractor, Environmental Consultant, Demolition Subcontractor, Mechanical Subcontractor, Electrical Subcontractor, etc.), their employees and any visitors to the site.

SECTION 3 LOCATION OF PLAN

A copy of this EAP will be provided to LMDC, all Gilbane employees working at the Building, and all subcontractors working on the site. It will be posted at all field offices, the Building Security Desk and at the entrance to the personnel decontamination unit located in cellar "A" as indicated in Figure 2 of Section 6 (Asbestos Abatement Plan) of the Phase I Deconstruction Plan.

Any questions concerning this plan should be directed to John Graves, Gilbane's Emergency Coordinator, 646-773-0691.

This EAP will be revised as necessary during the course of the project. All revisions will be conveyed to all on-site personnel and to LMDC for distribution as appropriate.

SECTION 4 GILBANE EMERGENCY COORDINATOR

John Graves, Gilbane's Senior General Superintendent has been designated as the Gilbane Emergency Coordinator. John Graves holds a current New York City Site Safety Manager (NYCSSM) license and has a great deal of training and experience in the execution of similar work in New York City. His contact number, 646-773-0691 (as indicated in Attachment A) is the primary Gilbane emergency contact phone number. The Gilbane Emergency Coordinator's base of operations will be the Gilbane field office (trailer).

In the event that John Graves is not on site, an alternate Gilbane Emergency Coordinator will be designated and will be responsible for ensuring proper implementation of this EAP. The name and contact information of the alternate Gilbane Emergency Coordinator will be provided to LMDC and all Subcontractor Emergency Coordinators.

The Gilbane Emergency Coordinator has overall responsibility for this EAP and will ensure that all required activities of the EAP are met. He has the lead role in directing all responses to circumstances covered under this EAP. Further, the Gilbane Emergency Coordinator will be the liaison to the First Responder agencies for pre-planning collaboration, regular contact throughout the work, notifications and coordinating Gilbane's support of any agency response to an emergency. Further details of the responsibilities of this role are outlined throughout this EAP.

SECTION 5 PRE -EMERGENCY RESPONSE ACTIVITIES

5.1 <u>Pre-Planning</u>

The following actions below will be implemented prior to the initiation of the Phase I deconstruction activities to minimize the potential for incident occurrence and to ensure proper preparation for emergency response if needed.

- Prior to the commencement of work activities, the Gilbane Emergency Coordinator will meet with appropriate representative from the FDNY, NYPD and OEM to:
 - o present and discuss the EAP
 - discuss any required collaborative preparation (practice drills, etc.)
 - ensure they are informed regarding existing building conditions as well as the potential for the removal of contaminated victims during Phase IA
- A complete set of Building drawings will be available within the Gilbane field office, Gilbane Jersey City District Office and LMDC office located at 1 Liberty Plaza for use in an emergency situation. Note: Gilbane will ensure drawings indicate the location of all elevator operations and panels as well as all Fire Department connections.

- All Subcontractors will provide to Gilbane the names, contact information and any required training documentation for the individuals they propose to fulfill the roles of the subcontractor Emergency Coordinator (and substitutes).
- A schedule for regular emergency preparedness meetings will be established by the Gilbane Emergency Coordinator. Attendance by all Subcontractor Emergency Coordinators is required. The LMDC and First Responder agencies shall be informed of the meeting schedule in advance so they have the opportunity to attend as desired.
- Emergency points of contact list will be posted within the Gilbane Field Office (see Appendix A) and at the entrance to the personnel decontamination unit.
- Site evacuation maps will be posted throughout the facility for emergency evacuation (see Appendix D).
- First aid kit(s) will be placed within the Gilbane field office and the Building Security Checkpoint Desk.
- Rally points or meeting places have been established and are shown on the evacuation map (see Appendix C).
- Gilbane will ensure that that all subcontractors have placed at least one (1) fire extinguisher, if applicable, within their on-site field office trailer.
- Gilbane will ensure fire extinguishers will be strategically positioned at designated locations within the Building as required by governing regulations. Note: all portable fire extinguishers shall be inspected periodically and maintained in accordance with Maintenance and Use of Portable Fire Extinguishers, NFPA No. 10A-1970.
- Gilbane will ensure that a system is in place to track site personnel and visitors to provide an accurate site head count at any moment in time.
- An audible evacuation signal compliant with the most stringent regulatory requirements will be established and tested daily with documentation of each test recorded within the project log by the Gilbane Emergency Coordinator.
 - two (2) long blasts of the site air horn will sound through a temporary radio communication system to be installed and maintained by the Demolition Subcontractor. To ensure the evacuation alarm is audible throughout the Building, a loudspeaker will be strategically positioned on each floor.
 - This audible evacuation signal will be tested daily by the Gilbane Emergency Coordinator or his designee and the performance of this test documented in the project log
 - at the conclusion of the test each day, all Subcontractor Emergency Coordinators will poll their personnel to ensure the alarm was audible in all locations and report back to Gilbane's Emergency Coordinator
 - o corrective measures, if necessary, will be implemented immediately
- All communications systems will be tested prior to the commencement of any work activities.

5.2 <u>Training</u>

5.2.1 Gilbane Emergency Coordinator

Gilbane's designated Emergency Coordinator shall hold a NYCSSM license.

5.2.2 Subcontractor Emergency Coordinators

Prior to Phase I deconstruction activities, all subcontractors working on the site will identify an Emergency Coordinator and one alternate who will be responsible for the performance of emergency preparedness responsibilities as outlined herein, including coordinating the emergency evacuation of their personnel. In addition, the subcontractor emergency coordinator will be required to assist the Gilbane Emergency Coordinator with the dissemination of information relating to an emergency.

All designated Subcontractor Emergency Coordinators shall have successfully completed the OSHA 30 hour course and must provide Gilbane with proof of this certification.

All subcontractors working on the site shall have a minimum of one (1) Red Cross Certified First Aid trained individual on the site at all times. A list of names with copies of their certifications must be provided to Gilbane at time of mobilization.

In addition, on a daily basis, each Subcontractor Emergency Coordinator will be required to designate one foreman and/or superintendent per floor to serve as an evacuation coordinator. In the event of an evacuation, this evacuation coordinator will be responsible for ensuring the complete evacuation of their personnel from the floor for which they have responsibility. This evacuation coordinator will be required to maintain a head count of the personnel under their supervision. No additional training beyond the procedures outlined within this EAP will be required.

5.2.3 All Site Personnel

Prior to the start of on-site activities, all site personnel will be required, at a minimum, to attend the following site specific safety orientations:

- Gilbane on-site Construction Safety orientation
- Gilbane Health and Safety Plan orientation
- Gilbane Emergency Action Plan orientation
- Job Hazard Analysis (JHA) specific training to be provided by the applicable trade subcontractor

All such training will be documented by applicable training provider; signed copies of all orientation attendance sheets, EAP acknowledgement forms and HASP acknowledgment forms must be provided to Gilbane and will be maintained on site within the Gilbane field office.

If site conditions warrant a modification to the EAP, all personnel working on the site will be informed of these changes either at a general site safety orientation conducted by Gilbane or at the individual subcontractors' required weekly toolbox talks. All personnel will be required to sign an attendance sheet acknowledging the EAP modification.

5.3 <u>Emergency Response Coordination</u>

The Gilbane Emergency Coordinator will be responsible for coordinating all on-site emergency response actions. Depending upon the nature of the emergency, this coordination may involve the individual subcontractors' designated emergency coordinator or any First Responders (e.g. FDNY, etc.)

As part of pre-planning activities Gilbane will meet with FDNY prior to the commencement of any Phase I related work. By providing this information prior to the commencement of work activities, FDNY is able to address any special PPE requirements necessary for conducting emergency rescue services within the Building.

The Gilbane Emergency Coordinator will obtain Site Personnel logs from each Subcontractor Emergency Coordinator on a daily basis by 7:30am. These will be updated throughout the day as personnel arrive at or leave the site. These logs will be used by the Gilbane Emergency Coordinator in the event of an emergency to account for all trade personnel.

SECTION 6 EMERGENCY RESPONSE MEASURES

This section describes the actions that will be taken in the event of an on-site emergency to minimize the effect of that "event" or emergency on on-site personnel, the neighboring community and the environment.

6.1 <u>Reporting Emergencies</u>

All site personnel, upon discovering an emergency situation, shall immediately notify any other personnel in the immediate area and notify the Gilbane Emergency Coordinator who will determine the appropriate emergency response.

In the event of an emergency requiring implementation of this EAP, the Gilbane Emergency Coordinator shall immediately notify LMDC. LMDC, at its discretion, will be responsible for any community notifications. Refer to Appendix A for a copy of the point of contact flow chart.

6.2 <u>Building Evacuation</u>

Any explosion, regardless of size or type, any structural failure, unmanageable fires and certain power failures will require a complete building evacuation.

6.3 Designated Assembly Area

In the event of an evacuation the designated assembly points are:

- #1 In vicinity of loading dock for Marriott Courtyard located on Albany Street
- #2 On Liberty Street between NYFD Fire Station (Firehouse Number 10) and the World Café

During the EAP orientation, all personnel will be instructed to locate and assemble in a manner that will not impede the operations of any business or agency in the area (World Café, the Marriott or Fire Station #10).

No visitors or trade personnel shall leave the assembly point until directed by the Gilbane Emergency Coordinator. Following an evacuation, nobody shall be allowed to re-enter the Building until cleared by appropriate First Responder, Safety, Agency or technical personnel investigating the impact of the incident to the Building. The Gilbane Emergency Coordinator will provide the all clear to the Subcontractor Emergency Coordinators once it is safe to return to normal work operations.

6.4 <u>Site Evacuation Process</u>

The Gilbane Emergency Coordinator will be responsible, in conjunction with the applicable Subcontractor Emergency Coordinators, to initiate the following procedures.

The Gilbane Emergency Coordinator will:

- Call 911
- Signal the audible evacuation alarm (two (2) long blasts of the site air horn will sound through the Buildings temporary radio communication system).
- Contact all Subcontractor Emergency Coordinators via cellular phone and/or site radio system to inform them of the nature and location of the emergency and the actions being initiated including whether it is safe for personnel evacuating the Building to decontaminate.
- Retrieve the daily Visitor Logs and daily Site Personnel Log
- Designate a Gilbane employee to account for all logged visitors at the assembly points
- Support and coordinate with First Responders as directed/requested

The Subcontractor Emergency Coordinator will:

- Secure all manpower (e.g. safely stop work)
- Secure all operating equipment
- Assist in the removal of personnel under their supervision from the Building (the designated evacuation coordinators shall perform a sweep to ensure that everyone has left their floor of responsibility before exiting the floor themselves)
- If conditions allow, ensure all personnel properly decontaminate

- Ensure personnel under their control proceed to the closest assembly point and remain there to await further direction
- Conduct a head count of their personnel at each location

6.5 <u>Surrounding Community Notification</u>

The Gilbane Emergency Coordinator will immediately notify LMDC of an emergency situation resulting in the implementation of any aspect of this EAP. Unless exigent circumstances dictate otherwise and appropriate First Responders have already assumed control of the emergency and evacuation of the surrounding community, LMDC will determine and implement appropriate notification to the community. The Gilbane Emergency Coordinator will advise, cooperate, participate, assist and provide support as requested by LMDC in community notification efforts.

SECTION 7 RESPONSE TO SPECIFIC EMERGENCY EVENTS

Unplanned events that may occur during Phase I of the deconstruction project, which may not be all encompassing, but represent "events" related to similar projects include:

- Fire or explosion
- Power failure
- Structural failure
- Unplanned, sudden or non-sudden release of hazardous waste or constituents
- Worker injury or illness
- Falling or dropped building debris

7.1. <u>Fire or Explosion</u>

In the event of an explosion or a fire, the Gilbane Emergency Coordinator shall immediately:

- Determine if the fire is manageable. If so, coordinate with trade contractor personnel in an attempt to extinguish the fire with available fire extinguishing equipment (dependent upon trade contractor training). Fire extinguisher training requirements are addressed on page 6 (Section 1.04B) of the Asbestos Abatement Plan found within Section 6 of the Phase I Deconstruction Plan.
- If the fire is unmanageable, immediately call 911 and initiate Building evacuation procedures.
- If street closures may be warranted, contact NYC Department of Transportation for determination.

7.2 <u>Power Failure</u>

In the event of a power failure, the Gilbane Emergency Coordinator shall immediately:

- Coordinate with the Abatement Subcontractor Emergency Coordinator to initiate containment isolation activities (e.g. both the Personnel and Waste Load Out Decontamination units must be immediately sealed to prevent a fiber release).
- Coordinate with the Abatement Subcontractor Emergency Coordinator to initiate back-up power generation. The Abatement Subcontractor will have on-site a portable generator capable of operating an elevator and all negative air machines operating prior to the power failure.
- All containment isolation barriers are to remain secure until the required negative pressure has been re-established.

7.3 <u>Structural Failure</u>

In the event of a structural failure, the Gilbane Emergency Coordinator shall immediately:

- Call 911
- Initiate Building evacuation procedures
- Contact NYC Department of Buildings.

7.4 <u>Unplanned Release of Hazardous/Regulated Waste</u>

In the event of an unplanned release of a hazardous and/or regulated waste, the Gilbane Emergency Coordinator shall, in conjunction with the responsible party, the Environmental Consultant, and others as appropriate shall make a determination whether to implement a Building evacuation or control and remediate the release. No untrained personnel shall attempt to remediate any release of hazardous/regulated wastes. Specific procedures for remediating any releases are addressed in the Abatement Subcontractor Corporate Safety Manual found within Section 4 of the Phase I Deconstruction Plan.

For any releases of hazardous/regulated wastes to the exterior of the Building, the Gilbane Emergency Coordinator shall be immediately contacted by the Environmental Consultant or responsible party and shall assist LMDC with any appropriate responses (as determined by LMDC or any First Responders).

If exterior ambient air monitoring detects any potential contaminants of concern (COPC) [as identified within the Initial Building Characterization Study Report] above established action levels, all work within the Building will stop until a cause of the release has been determined and corrective measures have been undertaken.

7.5 <u>Medical Emergency and Rescue</u>

Potential injuries that may result in a medical emergency include:

- Slips, trips, falls
- Trauma injuries caused by being struck by heavy equipment, electrocution, lacerations, eye injuries, building components, waste containers, etc.
- Burns from electrical, fire or explosion
- Electrical contact
- Heat stress/stroke
- Chemical exposures
- Cardiac emergencies
- Respiratory emergencies

Gilbane and its subcontractors will respond to minor injuries requiring first aid only; major injuries or requirements for search and rescue will be handled by First Responders.

If a worker is showing signs of distress or obvious injury or illness, the applicable trade Subcontractor Emergency Coordinator shall immediately notify the Gilbane Emergency Coordinator and provide the following information:

- Location of victim
- Nature of Emergency
- Whether the victim is conscious
- Specific details regarding the injury or illness

The Gilbane Emergency Coordinator will suspend work within the immediate area until the emergency situation has been corrected. If possible the subcontractors' first aid attendant shall treat the injured employee as necessary until a decision is made to seek outside medical assistance or remove the victim from the Building.

The Gilbane Emergency Coordinator will be responsible for calling 911 and will inform the First Responders whether asbestos abatement activities are currently taking place within the Building.

Upon arrival at the Building, FDNY will make a decision to enter into the project area or request that the applicable Subcontractor Emergency Coordinator and personnel remove the victim from the Building. In addition, the extent of emergency decontamination performed shall depend on the severity of the injury or illness and the nature of the contamination. If the injury or illness is such that emergency decontamination cannot be performed safely, the victim shall be given necessary first-aid treatment and wrapped in a blanket prior to transportation to emergency medical services.

7.6 Falling or Dropped Building Components

This section will address procedures that must be followed in the event that any building component(s), construction material(s), equipment, etc. has either unintentionally been dropped, falls or has the potential to fall from the building:

- The applicable Subcontractor Emergency Coordinator must immediately notify the Gilbane Emergency Coordinator either verbally or via cellular telephone.
- The Gilbane Emergency Coordinator shall immediately contact LMDC via cellular phone and verbally inform them of the situation as well as the corrective measures.
- If necessary, the Gilbane Emergency Coordinator will contact appropriate First Responders (call 911) and NYC Department of Buildings.
- If necessary, the Gilbane Emergency Coordinator will contact NYC Department of Transportation and Port Authority of New York and New Jersey to determine whether sidewalk or street closures are warranted.

7.6.1 **Protective Measures in Place**

The following protective measures are currently being utilized at the site to reduce risks associated with the potential for building components to drop/fall from the Building.:

- Plywood construction fence to restrict site access
- Sidewalk closures and/or installation of overhead protection
- 24/7 security guards on-site (fire watch activities, general site security around the Building perimeter, Building access)
- Survey of building exterior and selective removal of spandrel glass in danger of falling from building

The Gilbane Emergency Coordinator (or other GBCo designee) will be responsible for ensuring these protective measures remain intact and implementing any corrective measures.

SECTION 8 EAP INVESTIGATION AND REPORT

The Gilbane Emergency Coordinator in conjunction with the involved trade contractor shall commence an investigation immediately after stabilization of the emergency. Gilbane standard protocols for accident investigation, as outlined within Section 4 (Gilbane Subsection) of the Deconstruction Plan, shall be followed. The details of the investigation procedures are contained within. Gilbane will cooperate and assist any agency also investigating the incident.

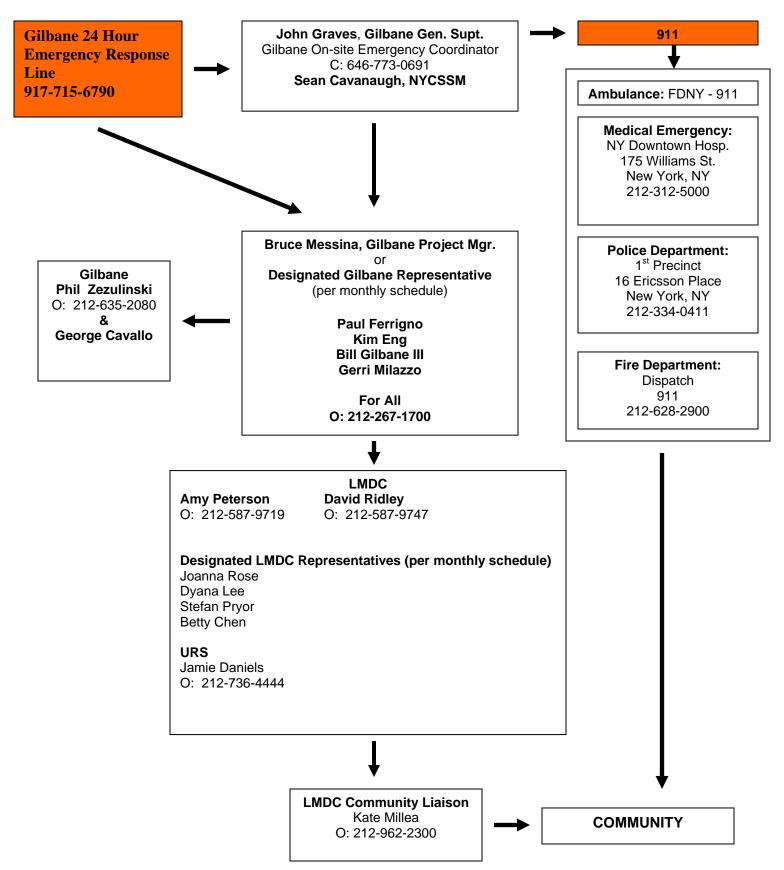
Within twenty-four (24) hours of the emergency a review meeting will be held. This review meeting will include an evaluation of the emergency, response to the emergency action and,

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if necessary, address the need to modify any emergency action protocols. The applicable trade contractors will be required to prepare a written analysis of the emergency as well as provide recommended corrective measures. The Gilbane Emergency Coordinator will use this information to prepare the report which shall be submitted to LMDC within forty-eight (48) hours of the review meeting. Implementation of any corrective measures shall take place immediately. LMDC will be informed of all investigation related events in advance so they have the opportunity to attend as they deem appropriate.

APPENDIX A

Emergency Response Communication Chart



APPENDIX B

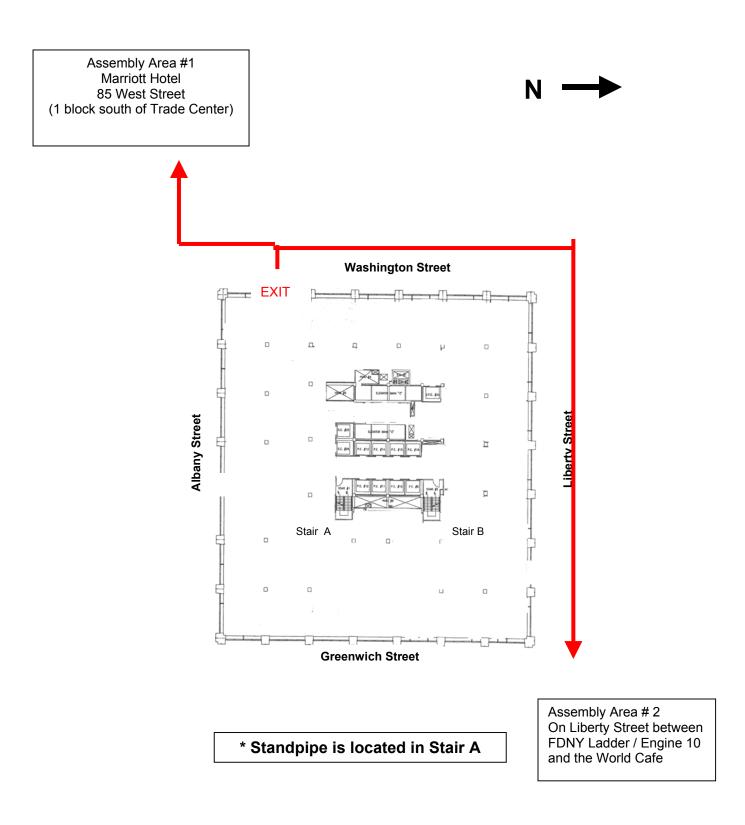
Emergency Phone Numbers for Local Authorities

911

MEDICAL EMERGENCY	POLICE DEPARTMENT	
NYU Downtown	1st Precinct	
69 Gold St # 15f	16 Ericsson Place	
New York, NY	New York, NY 10013	
212-312-5108	212-334-0611 or 911	
BURNS	US DEPARTMENT OF LABOR (OSHA)	
The NY HospitalCornell Medical Center	Gil Gillen	
525 East 68th Street	345 Hudson Street	
New York, NY	New York, NY 10014	
212-746-5454	212-352-6000	
EYE INJURY	DEPARTMENT OF BUILDINGS (NYC)	
New York Ear & Eye Infirmary	280 Broadway	
310 E. 14th Street	New York, NY 10014	
New York, NY	Emergency number: 212-566-5000 or 411	
212-598-1313		
NYC DEPARTMENT OF TRANSPORTATION	Patricia Lancaster, R.A. – Commissioner of Buildings	
Frank Hrubes	280 Broadway	
C: 347-245-0161	New York, NY 10007	
PORT AUTHORITY POLICE	212-566-5000 or 411	
Dispatch: 212-608-5111	ADM. CHIEF INSPE.: (B.E.S.T. SQUAD)	
AMBULANCE—FDNY	Rudy Hahn	
Telephone number: 911	210 Joralemon Street, Room 819	
FIRE DEPARTMENT EMERGENCY	Brooklyn, NY 11201	
Dispatch: 212-628-2900 or 911	718-802-3713 or 411	
USEPA	NYSDOL	
Pat Evangelista	Christopher Alonge	
212-637-4447	518-457-7201	
NYSDEC	NYCDEP	
Richard Fram	Krish Radhakrishnan	
718-482-4944	718-595-3721	

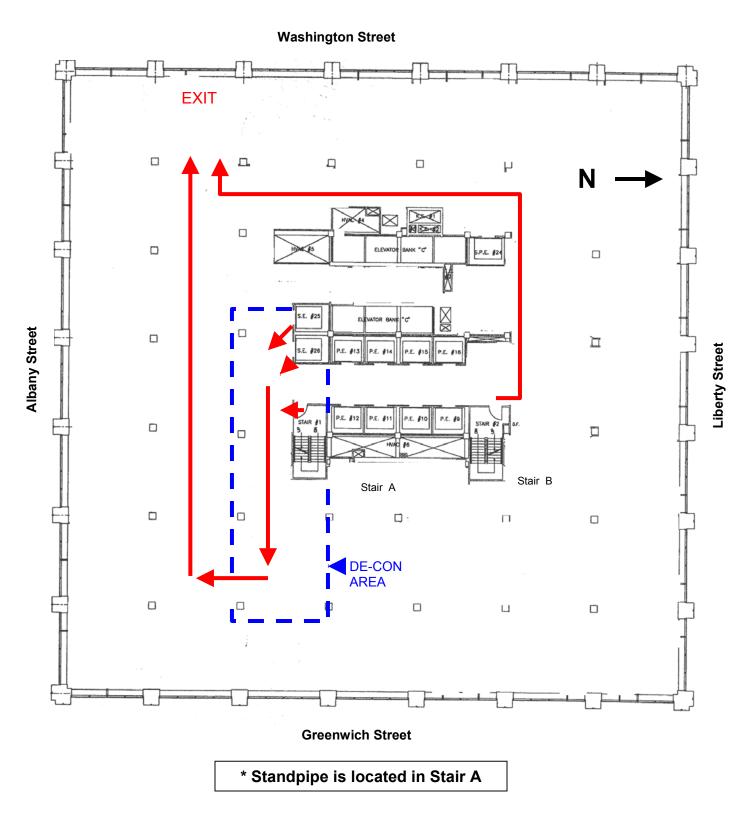
APPENDIX C

Evacuation Assembly Area

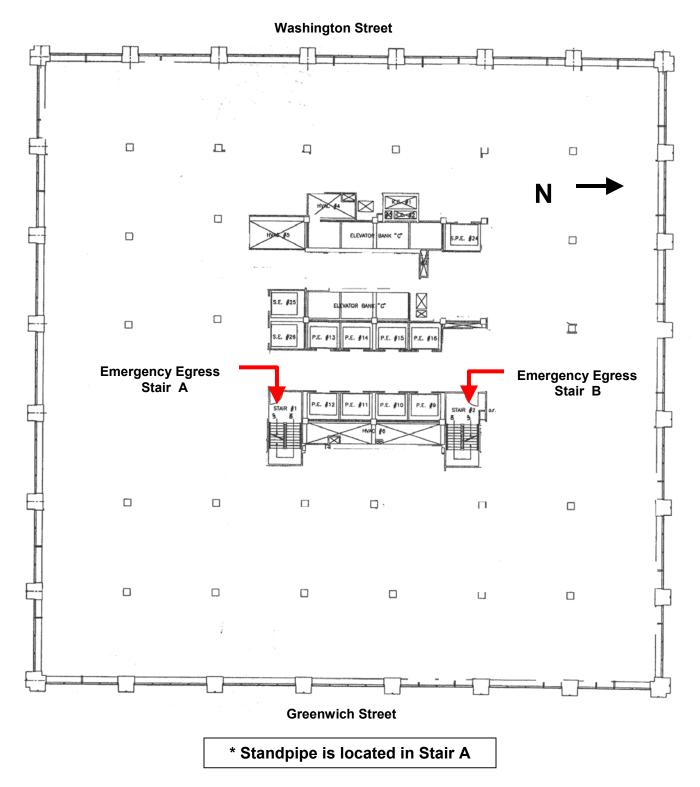


APPENDIX D

Emergency Egress from Building Ground Floor Layout

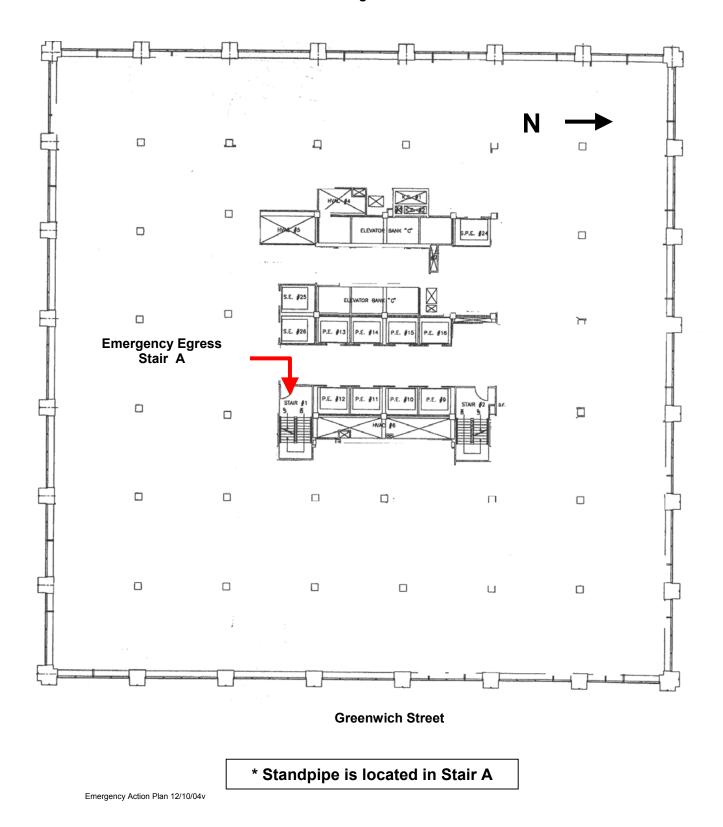


Emergency Egress from Building Typical Floor Layout - Floors 1 thru 24



Emergency Egress from Building Typical Floor Layout - Floors 25 thru 39

Washington Street



APPENDIX E

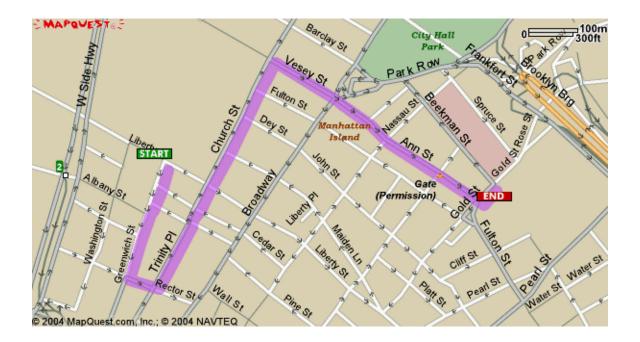
Hospital Directions With Route Map

Hospital Directions

When an injury occurs, the Gilbane Emergency Coordinator (or their designee) shall determine the response actions. If based on the severity of the injury, emergency response personnel shall not be summoned; the injured personnel should be taken to NYU Downtown Hospital, 69 Gold Street, # 15F, New York, NY. The hospital is approximately 0.9 miles from the site. The approximate travel time between 130 Liberty Street and NYU Downtown Hospital is 4 minutes, depending on the traffic. A map showing the route to the hospital is provided below. Directions to the hospital from the 130 Liberty Street are:

- 1. Start out going SOUTH on GREENWICH ST toward CEDAR ST
- 2. Turn LEFT onto RECTOR ST
- 3. Turn LEFT onto TRINITY PL
- 4. TRINITY PL becomes CHURCH ST
- 5. Turn RIGHT onto VESEY ST
- 6. VESEY ST becomes ANN ST
- 7. Turn LEFT onto GOLD ST

ROUTE TO THE HOSPITAL FROM 130 LIBERTY STREET



Start: 130 Liberty St New York, NY 10006-1101



End: NYU Downtown Hospital [212-312-5108] 69 Gold St # 15f New York, NY 10038

