

<b>SITE CONDITION: CRITICAL</b>
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## Block 1997 Lot 48



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### LOCATION, USE, ZONING, AND OWNERSHIP

Lot 48 is located at 622 West 131<sup>st</sup> Street between Broadway and Twelfth Avenues. The 2,498-sf lot accommodates two three-story buildings with a total building area of 6,744 gsf. The north building fronts on West 131<sup>st</sup> Street (see photo A), while the south building is located in the rear of the lot (see photo B, rear of south building). The Department of Finance RPAD Master File indicates the buildings were constructed in 1910 with no subsequent recorded alterations. The AKRF report noted that descriptive information about the north building is included in the 1909 Sanborn map, indicating that the building was likely constructed prior to

1909. Earth Tech surveyed the property (February 2008) and found that a door east of the north building leads to a walkway that allows access to the south building. The Pentecostal Church of God (International Movement) occupies the ground floor of the south building while the upper floors are occupied by non-conforming residential uses. Non-conforming residential uses also occupy the entire north building. Earth Tech reviewed the NYC Department of Finance Automated City Register Information System (ACRIS) and found that the Pentecostal Church of God (International Movement) acquired Lot 48 on August 8, 1997. Columbia University is in contract to acquire the lot from the Pentecostal Church. At the time of the AKRF report Lot 48 was zoned M1-2, however, it has since been designated C6-1 as part of the Special Manhattanville Mixed Use District (MMU) rezoning (effective December 19, 2007).

### PHYSICAL AND STRUCTURAL CONCERNS

As evaluated by Thornton Tomasetti, and later reported by AKRF, the building is in critical condition due to a combination of structural damage, deficient interior and exterior building conditions, other health and safety concerns and hazardous site conditions.

During the inspection by Earth Tech on February 27<sup>th</sup>, 2008, no interim or permanent repairs to correct or mitigate the reported instances of structural damage, distress or instability were found where inspection was possible. The previously noted deficiencies

in the north building, including: water leakage from a broken sewer pipe in the basement (see photo C and photo D); microbial growth and mold on the basement walls (see photo E); the timber entrance stairs leading to the second floor are tilted significantly (see photo F); wide cracks and separation in the north wall of the north building near the downspout pipe (see photo G), remained evident. The reported deficiencies in the south building also remained evident, including: a collapsed ceiling and hanging insulation in the basement (see photo H); a timber joist is cut and has lost its support (see photo I); several timber joists in the south building basements have rotated (see photo J); one of the columns is enclosed by a CMU wall, probably to provide an additional support to the timber beam (see photo K); extensive water damage and water stains in the entrance stair well leading to the second floor (see photo L); the walkway from north building to south building is sloped causing water to flow into the buildings from sidewalk (see photo M),.

Since the previous inspection there are no significant changes in the physical condition of the buildings and Earth Tech concurs with the assessment by Thornton and Tomasetti and AKRF as to the poor condition of the building's physical and structural system.

## HEALTH AND SAFETY CONCERNS

Earth Tech concurs with the health and safety concerns noted in the AKRF report. No visible subsequent repairs have been done to the building structure or finishes. Earth Tech did not survey the residential units in either building; Earth Tech was not provided access to the roofs of both buildings.

At the time of the Earth Tech survey, several health and safety hazards were noted, including:

- The exit passageway from the South building leading to West 131<sup>st</sup> Street has a gate, blocked with a keyed deadbolt lock; no panic exit hardware is provided. This passageway also serves as a fire exit from adjacent building on Lot 47. This is an obstructed exit passageway violation and a safety hazard (photos N and O).
- The sidewalk and curb on West 131<sup>st</sup> Street in front of the building is in poor condition and a hazard to pedestrians (photo P).
- The awning above the entrance is hanging in a tilted position and might be hazardous to pedestrians (see photo Q).
- Stairs going to basements in both buildings do not meet code and are both damaged, a safety hazard (see photo R).
- The basement in the North building (boiler room) was flooded with what appeared to be sewer waste coming up from the floor drain; an active health hazard that needs to be corrected (see photos S and D).
- Stairs to upper floors in both North and South buildings do not meet code requirements, with miscellaneous violations (see photos T, U, V, and W).
- Second exit door from the main prayer hall is obstructed with band equipment and flower arrangement; no panic exit hardware is provided; - a safety hazard (see photo X).

- Brick imitation shingles on western façade of the North building, along with remaining sign letters, are severely damaged, peel off in many locations, and might be hazardous to pedestrians if they collapse (see photo Y).

## **BUILDING CODE VIOLATIONS**

Earth Tech reviewed DOB Building Information System files and confirms the AKRF report findings of three open building code violations for Lot 48. There were no additional violations issued subsequent to the release of the AKRF report.

The AKRF report indicated that Lot 48 has three open building code violations. One hazardous violation, which was considered to be of high severity, was issued by ECB in 2002 for failure to maintain the boiler, and for a boiler that was installed, altered, repaired or used without a permit. Another violation related to the boiler was issued by DOB in 2003. The most recent violation, which was issued in 2005 and was considered to be of high severity by ECB, was for the total obstruction to an exit passageway, citing a keyed deadbolt locked gate with no panic device or thumb latch. No additional information is provided about the violations in the DOB Building Information System.

## **UNDERUTILIZATION**

There was no Underutilization section write-up completed in the AKRF report for Block 1997 Lot 48 but Appendix A Table A-2 reports the site utilization data. Subsequent to the release of the AKRF report, Lot 48 was rezoned from an M1-2 (FAR 2.0) to C6-1 (FAR 6.0) district (effective December 19, 2007). Earth Tech confirms the AKRF utilization findings under the prior M1-2 designation including lot area (2,498 sf), maximum allowable floor area (4,996 zsf), and a 135 percent site utilization with the existing 6,744-gsf building. The site was overbuilt by 1,748 sf.

Under the new C6-1 designation (FAR 6.0) there is now a maximum allowable floor area potential of 14,988 zsf. Therefore, with an existing 6,744-gsf building, Lot 48 utilizes only 45 percent of its development potential under C6-1.

## **ENVIRONMENTAL ISSUES**

The AKRF report indicated that no Phase I or Phase II investigations were conducted for this site. Earth Tech reviewed Appendix F.1 and confirms that most environmental issues documented in the appendix as part of the Preliminary Environmental Site Assessment (PESA) were reported in the AKRF report.

Environmental issues identified for Lot 48 include: former use as an auto repair shop, and potential former gasoline UST. Reconnaissance notes indicated that a fill cap and vent pipes were also found on the site.

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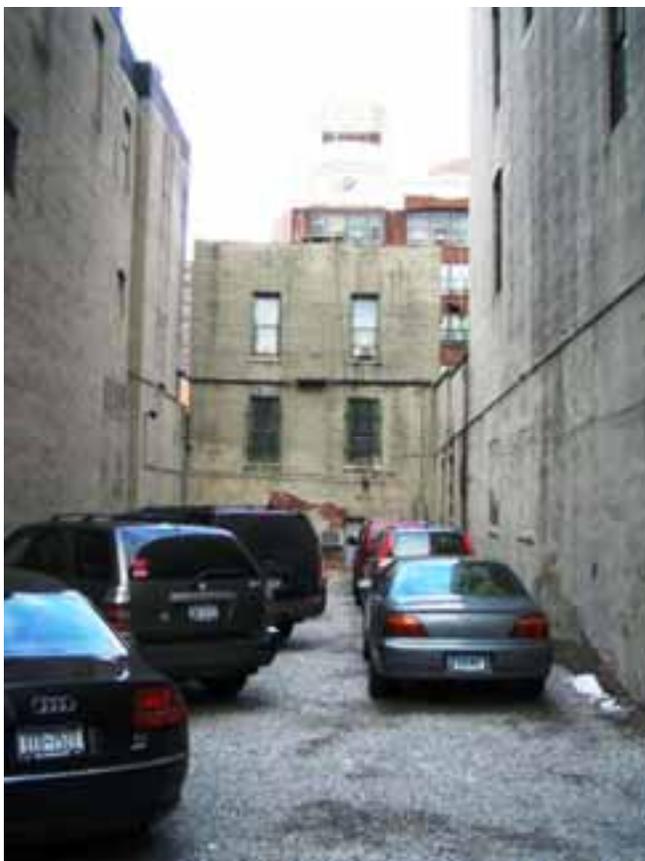
## **SUMMARY EVALUATION**

Earth Tech's inspection of the site confirmed the deficiencies noted by Thornton Tomasetti and the AKRF reports. These deficiencies included a variety of structural damage, deficient interior and exterior building conditions, other health and safety concerns, and hazardous site conditions. More specifically, these deficiencies included: water leakage from a broken sewer pipe in the basement; microbial growth and mold on the basement walls; tilted entrance stairs; wide cracks and separation in the north wall of the north building; a collapsed ceiling and hanging insulation in the basement of the south building; weakened timber joists; and extensive water damage and stains in the entrance stair well. Numerous health and safety concerns were identified, including: blocked exit passages and gates; damaged and inadequate stairs; a basement flooded with what appeared to be sewer waste from the floor drain; a damaged awning and sign and the sidewalk and curb are in poor condition and a potential hazard to pedestrians. Additional environmental concerns stem from the former use of the site as an auto repair shop, and a potential former gasoline UST (Earth Tech noted a fill cap and vent pipes were also found on the site). As a result of its inspection and findings, Earth Tech confirms the site as being in critical condition.

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Photograph 1997-48-A



Photograph 1997-48-B



Photograph 1997-48-C



Photograph 1997-48-D



Photograph 1997-48-E



Photograph 1997-48-F



**Photograph 1997-48-G**



**Photograph 1997-48-H**



Photograph 1997-48-I



Photograph 1997-48-J



**Photograph 1997-48-K**



**Photograph 1997-48-L**



Photograph 1997-48-M



Photograph 1997-48-N



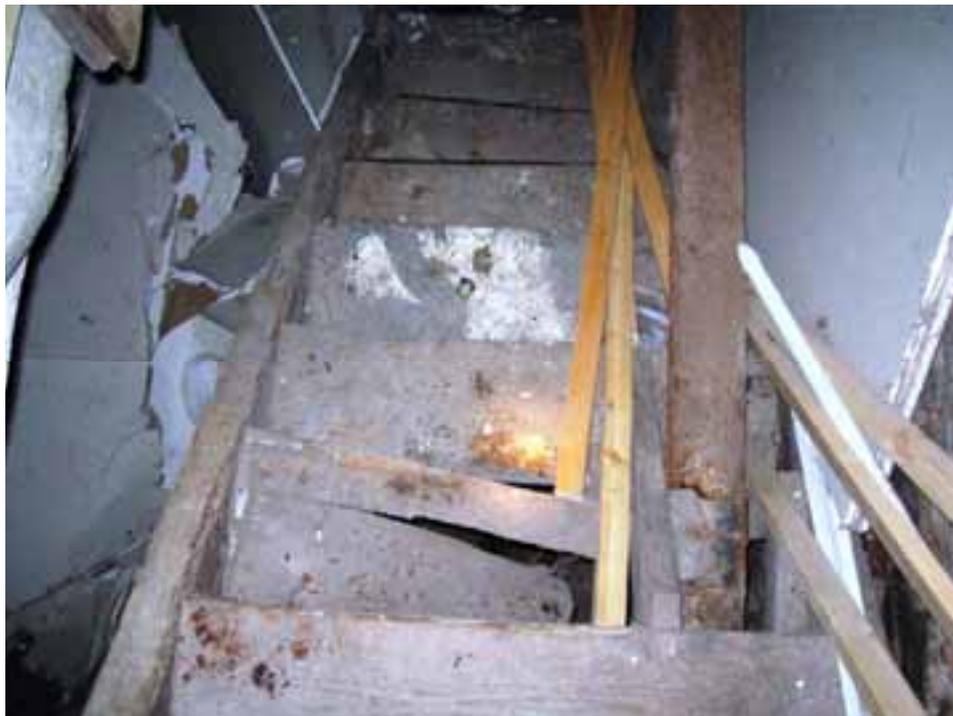
Photograph 1997-48-O



Photograph 1997-48-P



**Photograph 1997-48-Q**



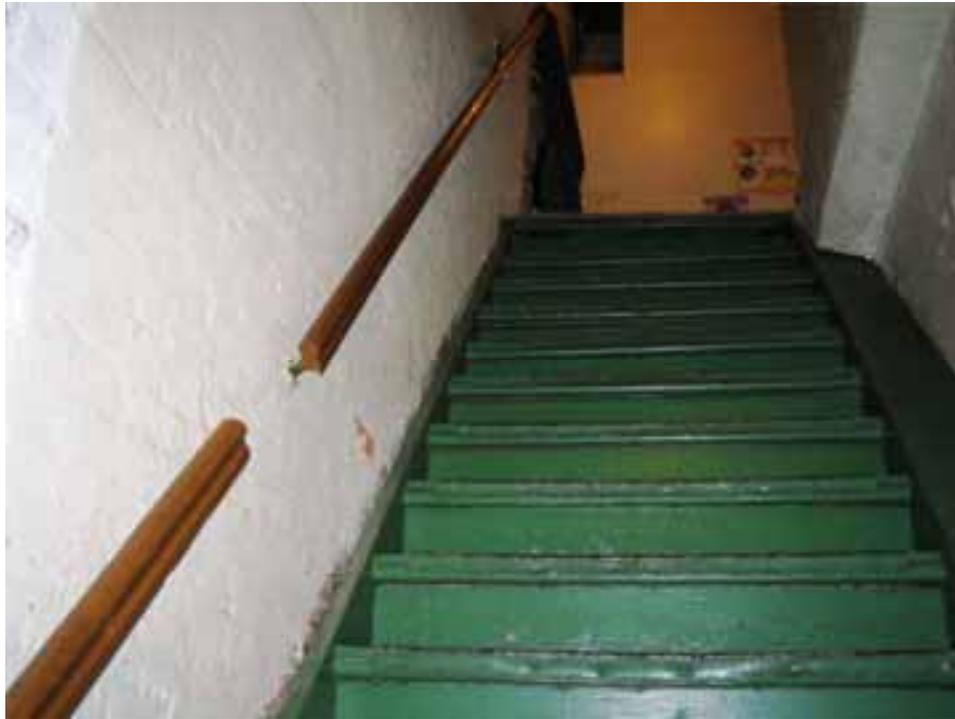
**Photograph 1997-48-R**



Photograph 1997-48-S



Photograph 1997-48-T



**Photograph 1997-48-U**



**Photograph 1997-48-V**



Photograph 1997-48-W



Photograph 1997-48-X



Photograph 1997-48-Y

<b>SITE CONDITION: FAIR</b>
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## Block 1997 Lot 49



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### LOCATION, USE, ZONING, AND OWNERSHIP

Lot 49 is located at 624 West 131st Street between Twelfth Avenue and Broadway (see photo A). The 7,494-sf lot contains a one-story 7,494-gsf brick building that, according to the Department of Finance RPAD Master File, was constructed in 1951 with no subsequent recorded alterations. Earth Tech reviewed the NYC Department of Finance Automated City Register Information System (ACRIS) and found that the property was acquired by the Trustees of Columbia University from Daniel Salmon in March 2000. The site is leased to a tenant who operates a building contracting business. At the time of the AKRF report, Lot 49 was

zoned M1-2; however it has since been designated C6-1 as part of the Special Manhattanville Mixed Use District (MMU) rezoning (effective December 19, 2007).

### PHYSICAL AND STRUCTURAL CONCERNS

As evaluated by Thornton Tomasetti and later reported by AKRF, the building is in fair condition, due to some localized structural distress and exterior building conditions.

At the time this site was inspected by Earth Tech on April 10, 2008, no interim or permanent repairs to correct or mitigate the reported instances of structural damage, distress or instability were found where inspection was possible. The basement and west portion of building was not available for inspection because the tenant did not grant access.

The exterior brick wall on the north side shows a wide stepped crack at both ends (see photos A and B). The stepped crack at the west end above the window extends to the top of the parapet and bricks are significantly displaced along the crack (see photo C). The concrete floor shows wide random cracks and several small spalls (see photo D). There is water infiltration and damage with paint peel off and water stains on the interior of the north wall (See photo E). The water appears to be infiltrating through the stepped crack at the east end (See photo F). The concrete roof planks and steel beams are in good condition but appear to be carrying excessive load (see photos G and H).

Since the previous inspection there are no significant changes in the physical condition of the building and Earth Tech concurs with assessment by Thornton Tomasetti and AKRF as to the fair condition of the building's physical and structural systems.

## HEALTH AND SAFETY CONCERNS

Earth Tech was granted only a partial survey of the building by the owner because the tenant did not grant access to the basement and west portion of the building.

AKRF reported a single safety concern for this property: *“There are dislodged CMU blocks on the exterior wall... This condition is a safety concern, as it may have the potential to compromise the structural capacity”*. Earth Tech concurs with this statement. The sidewalk, reported by AKRF to be *“in fair condition... with cracking and small spalls observed”*, has been recently repaired (See photo I).

Earth Tech observed several additional deficiencies posing health and safety concerns:

- One of the two fire exit doors on the north side does not have appropriate exit hardware; moreover, there is a secure lock with a push button to open it. If someone doesn't know the routine to open it, the door will remain locked (See photo J). This is a fire safety concern (note that Earth Tech was not able to survey the second means of egress from this building).
- Peeling paint, typically associated with water damage, was observed in one location (north wall) (see photo K).
- The occupant has come up with some creative material storage solutions under the roof slab (see photo L, M and N). However, these may present a safety concern for employees and visitors.
- There is a self-built storage mezzanine. The ladder suggests that employees access this space (see photo O). However, without a railing or parapet this violates the building code and presents a safety hazard.

## BUILDING CODE VIOLATIONS

Earth Tech reviewed DOB Building Information System files and confirms the AKRF report findings of eleven open building code violations for Lot 49. Earth Tech found two additional violations issued subsequent to the release of the AKRF, resulting in a total of 13 open violations for the property to date.

The AKRF report noted that Lot 49 had eleven open building code violations. Ten of the violations were issued by DOB between 1994 and 2005, citing the building's boiler. Earth Tech found two additional boiler related DOB violations issued in January 2006 and January 2007. One other violation was issued by ECB in 1989 for failure to file an annual boiler report. No additional information is provided by the DOB Building Information System.

## **UNDERUTILIZATION**

Subsequent to the release of the AKRF report, Lot 49 was rezoned from an M1-2 (FAR 2.0) to C6-1 (FAR 6.0) district (effective December 19, 2007). Earth Tech confirms the AKRF utilization findings under the prior M1-2 designation including lot area (7,494 sf), maximum allowable floor area (14,988 zsf), and a 50 percent site utilization with the existing 7,494-gsf building.

Under the new C6-1 designation (FAR 6.0) there is now a maximum allowable floor area potential of 44,964 zsf. Therefore, with an existing 7,494-gsf building, Lot 49 utilizes only 17 percent of its development potential under C6-1.

## **ENVIRONMENTAL ISSUES**

The AKRF report indicated that a Phase I investigation was conducted on Lot 49. All hazardous material and environmental contamination issues relevant to the site should have been identified in the FEIS Appendix F.1: Environmental Issues in Project Area. A Subsurface (Phase II) investigation was not conducted as part of this study, however AKRF notes that as part of a Phase II investigation in March 2003, the excavation of test pits was overseen by AKRF to locate and remove a UST, but no tank was found.

Earth Tech reviewed Appendix F.1 and confirms that most environmental issues documented in the FEIS were included in the AKRF report. Environmental issues identified by the Phase I include: former use as a garage and auto parking, and a former gasoline UST. Additional information provided in the appendix but not included in the AKRF report includes historic uses as a refrigeration plant, and weighing facility. Site reconnaissance notes indicated that a fill pipe and tank filling gauge were observed on the site as well as three large weighing scales.

## **SUMMARY EVALUATION**

AKRF reported the building as in fair condition. Earth Tech's inspection of the site (the basement and west portion of building were not available for inspection) confirms the rating of the site as fair. The exterior brick wall on the north side has wide stepped cracks, with significantly displaced bricks. The concrete floor shows wide random cracks and small spalls. There is water infiltration and paint peel off on the interior of the north wall. Some material storage under the roof slab may present a safety concerns. Since the previous inspection there are no significant changes in the physical condition of the building and Earth Tech maintains the sites overall condition rating as fair.



Photograph 1997-49-A



Photograph 1997-49-B



**Photograph 1997-49-C**



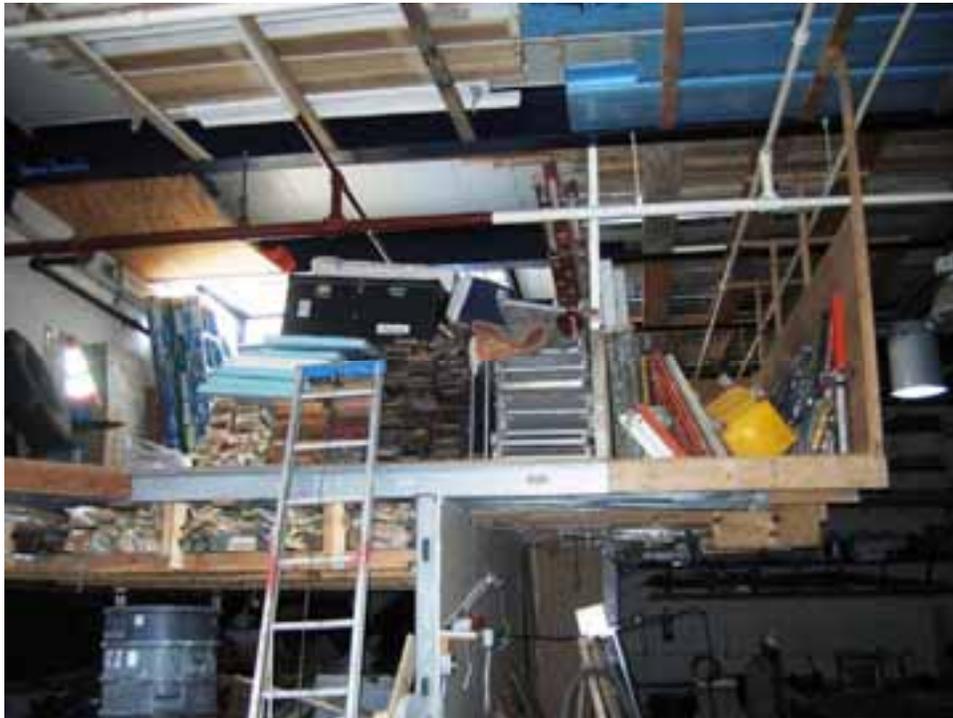
**Photograph 1997-49-D**



Photograph 1997-49-E



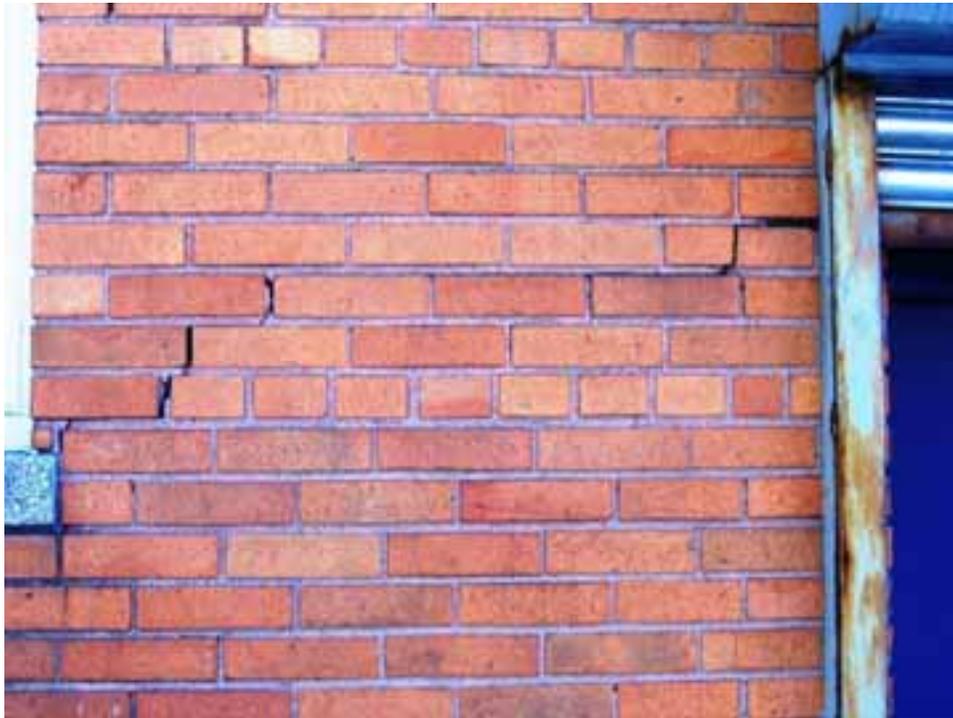
Photograph 1997-49-F



Photograph 1997-49-G



Photograph 1997-49-H



Photograph 1997-49-I



Photograph 1997-49-J



Photograph 1997-49-K



Photograph 1997-49-L



Photograph 1997-49-M



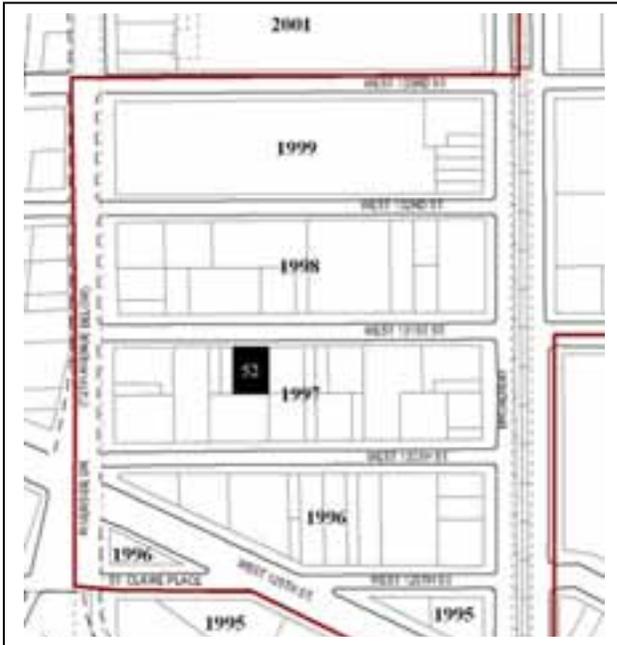
Photograph 1997-49-N



**Photograph 1997-49-O**

<b>SITE CONDITION: POOR</b>
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## Block 1997 Lot 52



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### LOCATION, USE, ZONING, AND OWNERSHIP

Lot 52 is located at 630-634 West 131<sup>st</sup> Street between Broadway and Twelfth Avenue. The 7,494-sf site contains a one-story 5,196-gsf building that, according to the Department of Finance RPAD Master File, was constructed in 1948 with no subsequent recorded alterations (see photo A). Earth Tech surveyed (February 2008) the property and found that eastern portion of the lot contains an auto repair shop; and the western portion of the lot contains a gated parking area (see photo B). AKRF noted that the building was

vacant at the time of their report. Earth

Tech checked the NYC Department of Finance Automated City Register Information System (ACRIS) and found that Lot 52 was acquired by The Trustees of Columbia University from Afong Realty Corp. on April 17, 2006 (date of deed transfer). At the time of the AKRF report, Lot 52 was zoned M1-2; however it has since been designated C6-1 as part of the Special Manhattanville Mixed Use District (MMU) rezoning (effective December 19, 2007).

### PHYSICAL AND STRUCTURAL CONCERNS

Based on visual observations during site inspections by Thornton Tomasetti in September 2006 and March 2007, this building and site, vacant at that time, was evaluated as being in poor condition overall, due to “structural distress and some substandard exterior and interior building conditions, and hazardous site conditions”.

This single-story building consists of brick masonry bearing walls that carry a roof deck of steel beams, timber joists and sheathing, and a concrete slab on grade. It currently houses an auto repair shop with some associated office space, and much of the interior surfaces are covered with finish materials. According to the condition rating system established by Thornton Tomasetti, all building elements described were evaluated as in fair to poor condition. In particular, the interior concrete slab on grade (wide cracks and spalls, see photo C), timber roof (water damage, see photo D), membrane roofing (ponding and deterioration), sidewalks (wide cracks and spalls), and concrete paved parking lot (wide cracks), rated poor. Subsequent to the 2006/2007 inspections, extensive, mainly cosmetic repairs were made such as new ceilings (see photo E),

repainting (see photo F), a new sidewalk, and roof membrane and coping repairs (see photo G).

When inspected on March 6, 2008, Earth Tech's observations were generally consistent with the conditions reported by Thornton Tomasetti. It should be noted that the recent repairs did not directly address the two standing and significant structural concerns:

- 1) Widespread, wide, restraint cracks (vertical and stepped) in the exterior brick walls (see photo H, I); and
- 2) Severe water damage to the timber roof.

No notable repairs to the exterior walls were observed. At the time the roof was inspected by Thornton Tomasetti, the building was vacant and much of the hung ceiling removed exposing the timber structure to inspection. The roof soffit is now almost completely covered with finish materials, but where visible, the timber roof appears water-damaged as reported by Thornton Tomasetti. The repairs to the roofing membrane and parapets may control water ingress for a time, but the grading of the roof's surface appears unchanged. Ponding of rainwater observed by Earth Tech is a continued problem and will eventually lead to renewed leaking and water damage.

Earth Tech concurs with the evaluation by Thornton Tomasetti for this building as in structurally poor condition. If extended service for this property is desired, positive measures should be taken to evaluate and correct its standing structural concerns.

## **HEALTH AND SAFETY CONCERNS**

AKRF report did not list any health and safety concerns for this building other than citing it as having "some substandard exterior and interior building conditions, and hazardous site conditions". The new tenant is an automotive repair shop (previously a restaurant supply warehouse). According to Columbia University personnel, repairs have recently been done by Columbia University to the building's structure and/or finishes, namely: roof membrane repairs (see photos G and J); ceiling and interior walls painted (see photo K); the overhead shutter door appears to be recently installed (see photo L). Portions of sidewalk appear to be recently replaced (see photo M).

Nonetheless, at the time of the Earth Tech survey, several health and safety hazards were noted:

- The fire exit door is missing the appropriate push bar hardware (see photo N).
- The tenant washes cars inside; on the day of the survey, Earth Tech observed stalled water on the floor in several locations, a sign of improper slab slope/drainage - a health and safety concern (see photos O and P).
- The tenant routinely parks cars on the sidewalk, which is a safety hazard to pedestrians (see photos A and B).

## **BUILDING CODE VIOLATIONS**

Earth Tech reviewed DOB Building Information System files and confirms the AKRF report findings of no open building code violations for Lot 52. Earth Tech found no additional open violations issued subsequent to the release of the AKRF report.

## **UNDERUTILIZATION**

Subsequent to the release of the AKRF report, Lot 52 was rezoned from an M1-2 (FAR 2.0) to C6-1 (FAR 6.0) district (effective December 19, 2007). Earth Tech confirms the AKRF utilization findings under the prior M1-2 designation including lot area (7,494 sf), maximum allowable floor area (14,988 zsf), and a 35 percent site utilization with the existing 5,196-gsf building.

Under the new C6-1 designation (FAR 6.0), there is now a maximum allowable floor area potential of 44,964 zsf. Therefore, with an existing 5,196-gsf building, Lot 52 utilizes only 12 percent of its development potential under C6-1.

## **ENVIRONMENTAL ISSUES**

The AKRF report indicated that Phase I and II investigations were conducted on Lot 52. All hazardous material and environmental contamination issues relevant to the site should have been identified in the FEIS in Appendix F.1: Environmental Issues in Project Area. The AKRF Subsurface (Phase II) investigation was included in Appendix F.2 of the FEIS.

Earth Tech reviewed Appendix F.1 and confirms that most environmental issues documented in the FEIS were included in the AKRF report. Environmental issues identified by the Phase I include: past use for auto service, former fuel oil storage tank, potential former gasoline storage tanks, and a fuel oil burner application. A fuel oil fill cap and vent pipe were also noted.

Earth Tech reviewed the Phase II report in Appendix F.2 of the FEIS and confirms that all findings were reported. The report indicated that sampling of groundwater for the Phase II investigation found concentrations of VOCs, SVOCs, and total and dissolved metals that exceeded groundwater standards. The report notes how these exceedances were likely related to urban fill, upgradient petroleum use, and/or a former manufactured gas plant site.

## **SUMMARY EVALUATION**

The AKRF and Thornton Tomasetti reports rated this site as in poor condition overall. Based on its own inspection and findings, Earth Tech maintains an overall rating of the site as in poor condition. Recent cosmetic repairs did not directly address the standing and significant structural concerns of widespread, wide cracks (both vertical and stepped) in the exterior brick walls, and severe water damage to the timber roof. Despite a new

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roof membrane, ponding of rainwater continues. Earth Tech identified additional health and safety concerns, including: a fire exit door without appropriate push bar hardware; pooled water from washing cars; and routine parking of cars on the sidewalk. Other environmental concerns result from the site's past use for auto service, including former fuel oil and gasoline storage tanks. A Phase II environmental investigation of groundwater found concentrations of VOCs, SVOCs, and total and dissolved metals that exceeded standards. For these reasons Earth Tech concurs with the rating for this site as in poor condition.

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**Photograph 1977-52-A**



**Photograph 1977-52-B**



**Photograph 1977-52-C**



**Photograph 1977-52-D**



**Photograph 1977-52-E**



**Photograph 1977-52-F**



**Photograph 1977-52-G**



**Photograph 1977-52-H**



Photograph 1977-52-I



Photograph 1977-52-J



Photograph 1977-52-K



Photograph 1977-52-L



Photograph 1977-52-M



Photograph 1977-52-N



Photograph 1977-52-O



Photograph 1977-52-P

<b>SITE CONDITION: POOR</b>
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## Block 1997 Lot 55



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### LOCATION, USE, ZONING, AND OWNERSHIP

Lot 55 is located at 636 West 131<sup>st</sup> Street between Broadway and Twelfth Avenue. The 2,498-sf lot accommodates a one-story 2,373-gsf brick masonry building that, according to the Department of Finance RPAD Master File, was constructed in 1920 with no subsequent recorded alterations (see photo A). Earth Tech surveyed the site (February 2008) and found the building to be occupied by an auto body shop. According to the NYC Department of Finance Automated City Register Information System (ACRIS) Lot 55 was acquired by The Trustees of Columbia University on March 3, 2005 (date of deed transfer). At the time of

the AKRF report, Lot 55 was zoned M1-2; however it has since been designated C6-1 as part of the Special Manhattanville Mixed Use District (MMU) rezoning (effective December 19, 2007).

### PHYSICAL AND STRUCTURAL CONCERNS

Based on visual observations during site inspections by Thornton Tomasetti in September 2006 and March 2007, this building and site, occupied at that time by its present tenants, was evaluated as being in poor condition overall, due to “structural distress and some substandard exterior, interior and site conditions”.

This single story building consists of brick masonry bearing walls that carry a single-span timber roof deck, a concrete slab on grade, and a small mezzanine and a utility vault beneath the sidewalk. It currently houses an auto repair shop with some associated office space and much of the interior surfaces throughout are covered with finish materials. According to the condition rating system established by Thornton Tomasetti, most of the building elements described were evaluated as fair to poor condition with the timber roof (water damage, see photo B), membrane roofing (ponding and deterioration, see photo C), sidewalk vault (water damaged timber ceiling structure, see photo D) and exterior masonry walls (wide cracks and disintegrated patches of brickwork, see photos E, F, and G), rated poor, and the sidewalks (wide cracks and spalls) as critical. Subsequent to the Thornton Tomasetti 2006/2007 inspections, some non-structural repairs were made, such

as new sidewalks (see photo H) and new membrane roofing (see photo I). A wooden rooftop shed reported by Thornton Tomasetti as on the verge of collapse was also removed.

When inspected on March 6, 2008, Earth Tech's observations were generally consistent with the conditions reported by Thornton Tomasetti. It should be noted that the recent repairs did not directly address the two standing and significant structural concerns: widespread, wide cracks (vertical, horizontal and stepped) and disintegrated patches of brickwork in the exterior walls; and severe water damage to the timber roof.

It was unclear what repairs, if any, had been made to the exterior walls. A vertical crack in the east wall was apparently patched but had re-cracked. The roof was mostly covered with finish materials when inspected by both Earth Tech and Thornton Tomasetti, but where visible at the mezzanine level, the timber roof appears water-damaged as was reported. Evidence of water damage, such as stained and/or deformed finish materials is present throughout the interior and it is very probable that the timber roof is damaged elsewhere. The replaced roofing membrane and parapets may control water ingress for a time. A wet ("active water leak"), damaged section of the roof reported by Thornton Tomasetti is now dry. The grading, however, of the roof's surface appears unchanged, and the ponding of rainwater or ponding stains observed by Earth Tech is a continued problem that will eventually lead to renewed leaking and water damage.

In view of the observed conditions and the building's age (more than 80 years) Earth Tech concurs with the evaluation by Thornton Tomasetti for this building as poor. Judging from our observations, we suspect that the results of an in-depth inspection of the roof structure might degrade this rating to critical. Unless such an inspection is conducted, the roof structure should be routinely inspected for signs of movement or instability while this building remains in service. If extended service for this property is desired, more positive measures should be taken to evaluate and, if necessary, correct its standing structural deficiencies.

## **HEALTH AND SAFETY CONCERNS**

Earth Tech concurs with the health and safety concerns noted in the AKRF report. At the time of the Earth Tech survey, several health and safety hazards were noticed:

- The exit door on the south side of the building opens into a fenced area haphazardly filled with discarded auto parts and debris (see photos J and K) obstructing egress through this door. It appears that a lintel, supporting the exterior plastered veneer above door, has collapsed at some unknown time and the façade veneer is currently supported (possibly, inadequately) by a metal angle (see photo L), this is a safety hazard.
- The stair leading to the sidewalk vault and basement does not have handrails see (photo M), a safety concern.

- In several locations, holes were cut out in original tin ceiling panels (possibly, a part of fireproofing assembly), reducing the protective quality of the ceiling (see photo N). Similar holes were observed in the cementitious plaster ceilings in the basement vault (see photo O).
- There are numerous signs of water damage, peeling paint and bacterial growth on walls and ceilings throughout the building (see photos P, Q, and R), a health concern. In two locations, yellow tarps are hung under the ceiling, apparently to mitigate active water leaks (see photos S and T). On the mezzanine level, one area of ceiling is severely damaged with exposed insulation, a potential health hazard (see photo B).
- On the day of the survey, Earth Tech observed what appeared to be food offerings on the floor at several location, and rice scattered throughout the building (see photos U and V), a sanitary hazard and health concern.
- The tenant routinely parks and services cars on the sidewalk (see photo W), a safety concern for pedestrians.

## **BUILDING CODE VIOLATIONS**

Earth Tech reviewed DOB Building Information System files and confirms the AKRF report findings of three open building code violations for Lot 55. Earth Tech found no additional open violations issued subsequent to the release of the AKRF report.

The AKRF report indicated that Lot 55 has three open building code violations. In 1991, DOB issued one violation for the boiler, and ECB issued one moderate severity violation for failure to maintain the boiler for leaking tubes. No additional information was provided in the DOB Building Information System for the above violations or for the third violation.

## **UNDERUTILIZATION**

Subsequent to the release of the AKRF report, Lot 55 was rezoned from its previous split zoned M1-2 (FAR 2.0) districts to a C6-1 (FAR 6.0) district (effective December 19, 2007). Earth Tech confirms the AKRF utilization findings under the prior M1-2 designation, including lot area (2,498-sf), maximum allowable floor area (4,996-zsf), and a 47 percent site utilization with the existing 2,373-gsf building.

Under the new C6-1 designation (FAR 6.0), there is now a maximum allowable floor area potential of 14,988-zsf. Therefore, with an existing 2,373-gsf total building area, Lot 55 utilizes only 16 percent of its development potential under C6-1.

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## **ENVIRONMENTAL ISSUES**

The AKRF report indicated that a Phase I investigation was conducted on Lot 55. All hazardous material and environmental contamination issues relevant to the site should have been identified in the FEIS in Appendix F.1: Environmental Issues in Project Area. There was no Subsurface (Phase II) investigation conducted for this site.

Earth Tech reviewed Appendix F.1 and confirms that most environmental issues documented in the FEIS were included in the AKRF report. Environmental issues identified by the Phase I include: former and current use as an auto repair shop with a spray booth and paint storage room, a possible former gasoline UST, possible fuel oil storage tank, waste oil AST, liquid waste drums, and hydraulic car lifts.

Additional issues that were not mentioned in the AKRF report include: observed 5-gallon oil canisters, sidewalk access to a potential tank, fuel oil vents, and two 55-gallon drums. Two active DOB violations citing the boiler and previous use as a garage were also noted in the appendix.

## **SUMMARY EVALUATION**

Despite the recent cosmetic repairs made to this building, two standing and significant structural concerns remain evident: widespread, wide cracks (vertical, horizontal and stepped) and disintegrated patches of brickwork in the exterior walls; and severe water damage to the timber roof. The replaced roofing membrane and parapets may control water ingress temporarily but the poor grading of the roof continues to create ponding and will eventually lead to renewed leaking and water damage. Earth Tech concurs with the Thornton Tomasetti findings of the building as in poor structural condition and suspects that an in-depth inspection of the roof structure might degrade this rating to critical. Additional health and safety concerns were noted by Earth Tech, including: debris obstructed fire exit; unsafe basement stair; ceiling holes that reduce its fire rating; peeling paint and mold throughout the building; exposed insulation; and sidewalk parking of automobiles. Additional environmental concerns associate with the site's former and current use as an auto repair shop with a spray booth and paint storage room, a possible former gasoline UST, possible fuel oil storage tank, a waste oil AST, liquid waste drums, and hydraulic car lifts. As a result of its inspection and findings, Earth Tech maintains the overall site rating as in poor condition.

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Photograph 1997-55-A



Photograph 1997-55-B



**Photograph 1997-55-C**



**Photograph 1997-55-D**



**Photograph 1997-55-E**



**Photograph 1997-55-F**



Photograph 1997-55-G



Photograph 1997-55-H



Photograph 1997-55-I



Photograph 1997-55-J



**Photograph 1997-55-K**



**Photograph 1997-55-L**



Photograph 1997-55-M



Photograph 1997-55-N



**Photograph 1997-55-O**



**Photograph 1997-55-P**



Photograph 1997-55-Q



Photograph 1997-55-R



**Photograph 1997-55-S**



**Photograph 1997-55-T**



Photograph 1997-55-U



Photograph 1997-55-V



Photograph 1997-55-W

<b>SITE CONDITION: FAIR</b>
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## Block 1997 Lot 56



Source: MapPluto copyrighted by the New York City Department of City Planning, 2007

### LOCATION, USE, ZONING, AND OWNERSHIP

Lot 56 is located at 638 West 131st Street between Twelfth Avenue and Broadway. The 2,498-sf lot contains a four-story 9,499-gsf brick building. According to the Department of Finance RPAD Master File, it was constructed in 1920 and subsequently altered in 1997 (See photo A). Earth Tech surveyed the property (April 2008) and found the ground floor occupied by a construction and management services company that uses the space for storage; the upper three floors are vacant. Earth Tech reviewed the NYC Department of Finance Automated City Register Information System (ACRIS) and found that Lot 56 was acquired by The

Trustees of Columbia University from Three Boroughs, LLC on February 4, 2005 (date of deed transfer). At the time of the AKRF report, Lot 56 was zoned M1-2; however it has since been designated C6-1 as part of the Special Manhattanville Mixed Use District (MMU) rezoning (effective December 19, 2007).

### PHYSICAL AND STRUCTURAL CONCERNS

As evaluated by Thornton Tomasetti, and later reported by AKRF, the building was in fair condition due to localized structural distress and some substandard exterior and site conditions.

At the time this site was inspected by Earth Tech on April 7, 2008. Several interim or permanent repairs to correct or mitigate the previously reported instances of structural damage, distress or stability in the building interior were found, including:

1. Sidewalk repairs were done along the north sidewalk and the previously poor condition rating is upgraded to good (see photo L).
2. The condition of the floor slab on the third floor was in fair condition. The concrete slab had a concrete leveling layer placed then painted (see photos B and C).
3. Lintel above doorway to roof has been repaired (see photo H).

4. Cracked glass pane has been replaced on the roof skylight but elements continue to be corroded (see photo J).

The condition of the first floor units could not be inspected by Earth Tech because of an inability to gain access, and the condition of the slabs on the fourth floors could not be determined because it was covered with hardwood and plywood flooring; some areas of the hardwood flooring need replacement (see photos D and E). The deficiencies and structural damage observed by Earth Tech are generally consistent with the findings by Thornton Tomasetti and AKRF, and Earth Tech notes the following deficiencies:

1. Some timber treads in the stairwell are slightly sloped, and the timber railings and wood floored landings show signs of long-term degradation from old age (see photo I).
2. The interior faces of the brick masonry walls have minor water stains (see photos F and G).
3. Minor cracking and flaking paint on the north facade (see photo K).
4. The third floor ceiling has some locations with water damage (see photos M and N).
5. Cracks in masonry exterior wall above third floor windows (see photos O and P).
6. Crack in interior third floor wall (see photo Q).

Since the previous inspection there are no significant changes in the physical conditions of the building and Earth Tech concurs with the assessment by Thornton Tomasetti and AKRF as to the fair condition of the building's physical and structural systems.

## HEALTH AND SAFETY CONCERNS

Earth Tech surveyed the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> floors and the roof of this property. No access to the 1<sup>st</sup> floor tenant space was provided.

AKRF reported several health and safety concerns for this building:

- Earth Tech concurs with the reported inadequate means of egress through the fire escape on the south facade; the fire escape leads to the roof of the adjacent building on Lot 55, but no means of accessing a public way are provided from this roof (see photos R and S).
- Earth Tech could not verify the reported inadequacy of the 1<sup>st</sup> floor egress through the rear of the building (south side); see above.
- Earth Tech concurs with the reported building code violation of “a wall-mounted cabinet installed on the stairwell’s west wall” which reduces “the clear width in

*the passage between this cabinet and the door to less than the clear width of the flights of stairs and landings” (see photos T and U).*

Additionally, Earth Tech noted that:

- The stair flight from 4<sup>th</sup> floor to the roof has non-uniform steps and the railing abruptly ends half-way through the length of the flight; this is a code violation and a safety concern (see photos I and V).
- 3<sup>rd</sup> floor level is approximately 5 inches higher than the stair landing; this is a tripping hazard (see photo W).
- On the day of Earth Tech’s survey, a bicycle was stored on the stair landing on the 3<sup>rd</sup> floor, reducing the minimal clearance and obstructing the egress; this is a code violation and a safety concern (see photo X).
- The roof is used by tenants for recreational purposes. However, the parapets are much lower than 42” of height required by code; this is a code violation and a safety concern (see photos H and Y).

## **BUILDING CODE VIOLATIONS**

Earth Tech checked DOB Building Information System files and confirms the AKRF report findings of no open building code violations for Lot 56. Earth Tech found no additional open violations subsequent to the release of the AKRF report.

## **UNDERUTILIZATION**

There was no Underutilization section write-up completed in the AKRF report for Lot 56 but Appendix A Table A-2 reports the site utilization data. Subsequent to the release of the AKRF report, Lot 56 was rezoned from an M1-2 (FAR 2.0) to C6-1 (FAR 6.0) district (effective December 19, 2007). Earth Tech confirms the AKRF utilization findings under the prior M1-2 designation, including: lot area (2,498 sf), maximum allowable floor area (4,996 zsf), and a 190 percent site utilization with the existing 9,499-gsf building. Under the former zoning, the site was overbuilt by 4,503-sf.

Under the new C6-1 designation (FAR 6.0) there is now a maximum allowable floor area potential of 14,988 zsf. Therefore, with an existing 9,499-gsf building, Lot 56 utilizes only 63 percent of its development potential under C6-1.

## **ENVIRONMENTAL ISSUES**

The AKRF report indicated that a Phase I investigation was conducted on Lot 56. All hazardous material and environmental contamination issues relevant to the site should have been identified in the FEIS in Appendix F.1: Environmental Issues in Project Area. There was no Subsurface (Phase II) investigation conducted for this site.

Earth Tech reviewed Appendix F.1 and confirms that most environmental issues documented in the FEIS were included in the AKRF report. Environmental issues identified by the Phase I include: former use as an auto repair garage. No evidence of tanks or other environmental concerns was indicated in documentary research or during site inspection. Additional information included in the appendix but not in the AKRF report include historical uses as a residential dwelling, contractor, and a bologna factory.

## **SUMMARY EVALUATION**

AKRF reported the building as in fair condition. Earth Tech’s inspection of the building confirms the findings of Thornton Tomasetti and AKRF. Despite some recent repairs, including repair of sidewalks, and a doorway lintel, Earth Tech noted several building deficiencies, including: some stair treads slightly sloped with railings and landings showing long-term degradation; minor water stains on interior masonry walls; minor cracking and flaking paint on the north façade; cracks in exterior wall above third floor windows and interior wall. Earth Tech also noted several health and safety issues, including: inadequate emergency egress; non-uniform steps and missing railing on the steps to the roof; and inadequately sized roof parapets. For these reasons, Earth Tech maintains the site’s overall condition rating as fair.

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Photograph 1997-56-A



Photograph 1997-56-B



**Photograph 1997-56-C**



**Photograph 1997-56-D**



**Photograph 1997-56-E**



**Photograph 1997-56-F**



**Photograph 1997-56-G**



**Photograph 1997-56-H**



Photograph 1997-56-I



Photograph 1997-56-J



Photograph 1997-56-K



Photograph 1997-56-L



Photograph 1997-56-M



Photograph 1997-56-N



Photograph 1997-56-O



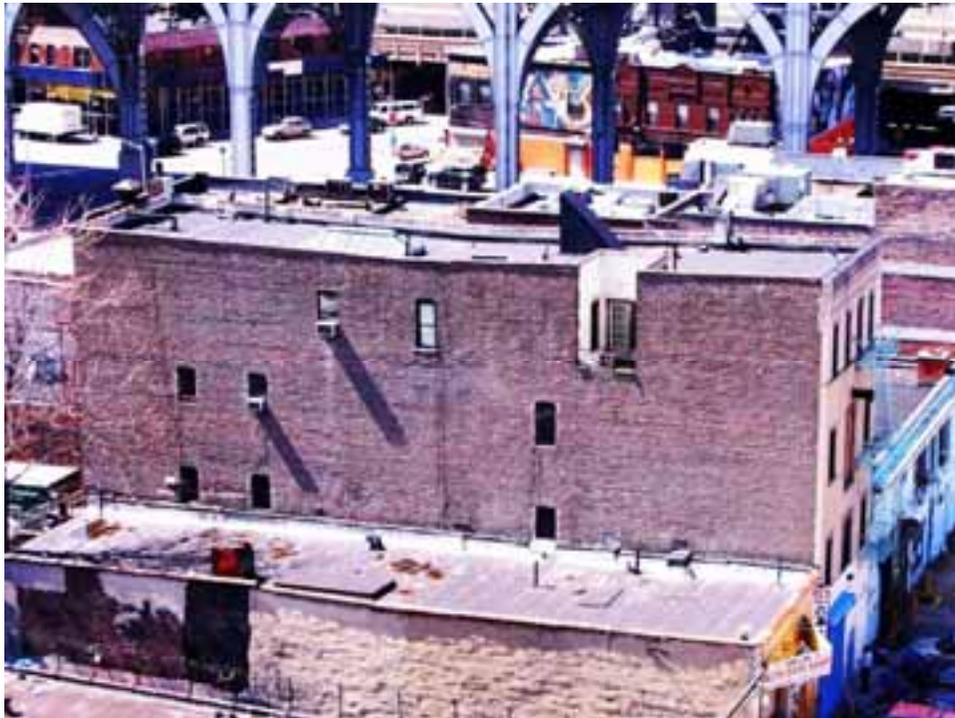
Photograph 1997-56-P



**Photograph 1997-56-Q**



**Photograph 1997-56-R**



Photograph 1997-56-S



Photograph 1997-56-T



Photograph 1997-56-U



Photograph 1997-56-V



**Photograph 1997-56-W**



**Photograph 1997-56-X**



**Photograph 1997-56-Y**