

NEW YORK STATE DEPARTMENT OF HEALTH
STATE ENVIRONMENTAL QUALITY REVIEW
FINDINGS STATEMENT

Pursuant to the *State Environmental Quality Review Act ("SEQRA")*, codified at Article 8 of the New York *Environmental Conservation Law ("ECL")*, and its implementing regulations, promulgated at Part 617 of Title 6 of the *New York Codes, Rules and Regulations ("N.Y.C.R.R.")*, and the *SEQRA* regulations of the New York State Department of Health ("NYSDOH") at Part 97 of Title 10 of the *N.Y.C.R.R.*, which collectively contain the requirements for the *State Environmental Quality Review ("SEQR")* process, the New York State Department of Health ("NYSDOH"), as lead agency, makes the following findings.

Date: December 10, 2014

Title of Action: Jewish Home Lifecare, Manhattan
Replacement Nursing Facility Project

Description of Proposed Action and Proposed Project

Proposed Action. The New York State Department of Health ("NYSDOH") has received a request from Jewish Home Lifecare, Manhattan ("JHL"), a member of the Jewish Home Lifecare System, for authorization to construct a replacement nursing facility (the "Proposed Project"). For purposes of *State Environmental Quality Review ("SEQR")*, the Proposed Action would consist of NYSDOH's approval of a construction application filed pursuant to Section 2802 of the *Public Health Law ("PHL")* that would authorize JHL's plan to construct a new, 414-bed, as-of-right facility at 125 West 97th Street in Manhattan's Upper West Side neighborhood (the "Project Site"). Following the construction of the new facility, JHL would close the current location of its Manhattan Division, which is a 514-bed nursing facility located at 120 West 106th Street in the borough of Manhattan, New York County, New York.

Proposed Project. The Proposed Project would result in the construction of a new Leadership in Energy & Environmental Design ("LEED")-certified replacement nursing facility with 100 fewer beds than the current location. Upon completion of the Proposed Project, the total NYSDOH-certified bed complement at JHL would be reduced from 514 beds to 414 beds.

More specifically, the Proposed Project would result in the construction of a new, 20-story (plus cellar floor), approximately 376,000-gross-square-foot (“gsf”) building on the Project Site, which is an approximately 31,804-square-foot (“sf”) vacant lot that was formerly occupied by an 88-space, surface accessory parking lot.¹ The proposed building would have three access areas: (1) a public pedestrian entrance on West 97th Street with access to the reception, main lobby, and resident and family areas, for residents, visitors, staff, and the general public; (2) a public vehicular entrance on the north side of the building to the same areas via a covered, semicircular driveway for patient drop off and pick up, including ambulette and taxi access, utilizing the existing driveway along the eastern end of the Project Site for access from West 97th Street; and (3) loading and service access on West 97th Street. The ground-floor level would include an approximately 8,700-gsf landscaped area along the west side of the Project Site, of which about 1,850 gsf would be covered by the building above. This area would be accessible for JHL residents, visitors, and employees, as well as Park West Village (“PWV”) residents, who would access it using a keycard.

The Proposed Project also would comply with the street tree planting requirements of the *Zoning Resolution of the City of New York (“Zoning Resolution”)* for the zoning lot, and would replace trees removed from the Project Site during construction. As part of the Builders Pavement Plan (“BPP”) and Forestry Application, as currently contemplated, approximately 3 existing street trees would be removed and 5 would be protected along the West 97th Street frontage of the Project Site. Approximately 18 trees would be planted along the boundary of the zoning lot, including along West 97th Street, West 100th Street, and Columbus Avenue, and additional trees would be planted off-site at the direction of the New York City Department of Parks and Recreation (“NYCDPR”). The size and species of the proposed replacement trees would be determined by NYCDPR. Sixteen trees that are currently located on the Project Site would be removed during the construction of the Proposed Project, and new trees would be planted within the PWV property.

The proposed nursing care facility would provide for an innovative model of long-term care called The Green House[®] model. The Green House model is based on the creation of a small home environment that allows enhanced interaction between residents and more focused attention and care between residents and staff. The model also allows for greater independence. The model is based on small “homes” consisting of a maximum of 12 elders and staff members organized so that each individual home functions independently with a self-managed work team, providing the full range of personal care and clinical services of a nursing home. The Proposed Project would include a total of 414 beds, with 264 long-term-care beds located on the 9th floor through the 19th floor. Each floor would contain two “Green House” homes with 12 beds each, complete with living and dining areas, a kitchen, private bedrooms and bathrooms with showers, and staff

¹ In summer 2014, independent of the Proposed Action and Proposed Project, the current Park West Village (“PWV”) property owner completed construction of a replacement parking lot in the PWV complex north of the Project Site, and users of the former surface parking lot at the Project Site have received substitute parking at the replacement lot or elsewhere within PWV.

support areas. Another 150 post-acute (short-term rehabilitation) beds would be located on the 4th floor through the 8th floor, along with community dining and decentralized therapy and activity space. The remaining floors would contain shared common areas, administrative offices, and service and support areas. The building would have 1 cellar level and 1 mechanical story, and would include an approximately 1,950-gsf rooftop garden for JHL residents and their visitors, as well as the ground-floor level landscaped area described above. The proposed building would be up to approximately 275 feet in height.

The Proposed Project would utilize the shared Park West Drive to access a new private loop roadway that would be constructed on the Project Site to allow for pick-up and drop-off activity at the proposed JHL facility. Park West Drive, the north-south access road within the PWV complex that was modified in summer 2014 as part of the PWV property owner's planning for the complex, would continue to function as a discontinuous, two-way access road. Signage would prohibit JHL traffic from exiting Park West Drive at West 100th Street; all traffic exiting the proposed building would be directed onto West 97th Street.

The Proposed Project would employ approximately 625 full-time-equivalent ("FTE") employees at the proposed facility. The new facility would decertify 100 beds from the current complement of 514 beds, for a new total reduced bed count of 414. Construction of the Proposed Project is expected to begin in early 2015 and would last approximately 30 months. It is expected that construction would be completed in a single phase, by mid-2018, and that occupants would move into the new facility over the course of approximately 4 to 10 months.

Project Site

The Proposed Project would be located on Block 1852, Lot 5 located at 125 West 97th Street in the borough of Manhattan, New York County, New York. The approximately 0.73±-acre Project Site is located on the southern portion of the superbblock bounded by West 100th Street to the north, West 97th Street to the south, Columbus Avenue to the east, and Amsterdam Avenue to the west. The Project Site is currently vacant except for a trash removal area that serves the neighboring PWV residential complex.²

² The dumpsters in the trash removal area located on the currently vacant Project Site would be relocated behind the 792 and 784 Columbus Avenue PWV buildings prior to the construction of the Proposed Project.

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Introduction

1. This *Findings Statement* for the JHL Replacement Nursing Facility Project has been prepared in compliance with the *State Environmental Quality Review Act* (“*SEQRA*”), which is codified at Article 8 of the *New York Environmental Conservation Law* (“*ECL*”), as well as the implementing regulations, promulgated at Part 617 of Title 6 of the *New York Codes, Rules and Regulations* (“*N.Y.C.R.R.*”) and the *SEQRA* regulations of the NYSDOH at Part 97 of Title 10 of the *N.Y.C.R.R.* Collectively, these provisions of law and regulation set forth the requirements for the *State Environmental Quality Review* (“*SEQR*”) process for the Proposed Action. The environmental review of the Proposed Project followed *SEQRA*, and the 2012 *City Environmental Quality Review* (“*CEQR*”) Technical Manual³ was generally used as a guide with respect to environmental analysis methodologies and impact criteria for evaluating the effects of the Proposed Project, unless NYSDOH determined otherwise.
2. The Proposed Project was also reviewed in conformance with *New York State Historic Preservation Act of 1980* (“*SHPA*”), especially the implementing regulations of Section 14.09 of the *Parks, Recreation, and Historic Preservation Law* (“*PRHPL*”), as well as with *State Smart Growth Public Infrastructure Policy Act* (“*SSGPIPA*”).
3. This *SEQR Findings Statement*, issued in accordance with 6 *N.Y.C.R.R.* § 617.11(d): (a) considers the relevant environmental impacts disclosed in the *FEIS*; (b) weighs and balances the relevant environmental impacts with applicable social, economic and other essential considerations; (c) provides the rationale for the agency’s decision; (d) certifies that the *SEQR* requirements (as specified in 6 *N.Y.C.R.R.* § 617) have been met; and (e) certifies that, consistent with social, economic and other essential factors, and considering the available reasonable alternatives, the Proposed Project is one that avoids or minimized adverse environmental impacts to the maximum extent practicable, and that adverse environmental impacts would be avoided or minimized to the maximum extent practicable by incorporating, as conditions to the decision, those mitigation measures identified as practicable.

SEQR Process

4. Upon receipt of a request from JHL to construct a replacement nursing facility, NYSDOH determined that it should assume lead agency status and conduct a coordinated review among the involved agencies. Based on an initial evaluation of the Proposed Project, NYSDOH made a preliminary determination that the Proposed Project is a Type I action pursuant to 6 *N.Y.C.R.R.* 617.4(b)(6)(v) of the *SEQR* implementing regulation pertaining to Article 8 of the *ECL* and 10 *N.Y.C.R.R.* 97.14(b)(1)(v) of NYSDOH’s regulations implementing *SEQR*.

³ The City of New York, Mayor’s Office of Environmental Coordination, *City Environmental Quality Review Technical Manual*, 2012 Edition, Revised June 5, 2013.

5. On May 22, 2013, JHL submitted an *Environmental Assessment Statement* (“EAS”) to NYSDOH that formally commenced the SEQR process for the Proposed Project. In accordance with SEQR, NYSDOH issued the EAS and a lead agency request letter to the involved agencies and interested parties on June 5, 2013. There being no objections, NYSDOH assumed the lead agency role on July 5, 2013.

6. NYSDOH, as SEQR lead agency, determined that the Proposed Project may result in one or more significant adverse environmental impacts and issued a *Positive Declaration Notice of Intent to Prepare a Draft Environmental Impact Statement Determination of Significance* (“Positive Declaration”) on June 5, 2013. The *Positive Declaration* discussed the rationale for the preparation of a DEIS. The *Draft Scoping Document* for the DEIS was distributed on June 5, 2013, to the involved agencies and interested parties for review and comment.

7. Notice of the *Positive Declaration* and *Draft Scoping Document* was first published in the New York State Department of Environmental Conservation’s (“NYSDEC’s”) *Environmental Notice Bulletin* (“ENB”) on June 12, 2013, and the Notice of Public Scoping Meeting was published in the June 28, 2013, edition of the *New York Daily News*. The Scoping Meeting was subsequently postponed at the request of the community and a second notice of the *Positive Declaration* and *Draft Scoping Document* was published in the ENB on July 10, 2013; a Notice of Public Scoping Meeting was published in the July 29, 2013 edition of the *New York Daily News*. The Scoping Meeting was postponed a second time, and the final notice of the *Positive Declaration* and *Draft Scoping Document* was published in the ENB on August 7, 2013; a Notice of Public Scoping Meeting was published in the August 17, 2013 edition of the *New York Daily News*.

8. A public scoping meeting was held for the Proposed Project at 6:30 p.m. on September 17, 2013, at Public School 163 (“P.S. 163”) in Manhattan, allowing all involved agencies, interested parties and members of the public an opportunity to provide oral comments on the scope of the DEIS. The comment period for the *Draft Scoping Document* was extended beyond the customary 10-calendar-day period, and written comments were accepted through October 4, 2013. After all comments were considered, NYSDOH prepared and issued a *Final Scoping Document* on January 28, 2014. The DEIS was prepared in accordance with the *Final Scoping Document* and issued for public review on March 21, 2014. A *Combined Notice of Completion of the Draft Environmental Impact Statement and Notice of Public Hearing* was published in the March 26, 2014, edition of the *New York Daily News*, and in NYSDOH’s ENB on April 2, 2014.

9. The DEIS, prepared in accordance with the *Final Scoping Document*, is a comprehensive document that accomplished the following: the systematic consideration of the potential environmental effects of the Proposed Action and Proposed Project, and evaluation of reasonable alternatives, and the identification of reasonable and practicable mitigation measures to reduce or eliminate the significant adverse environmental impacts of the Proposed Project. Accepted methodologies and procedures that have been used in the past in New York

City and are consistent with *SEQR* have been utilized as a general guide for evaluating the potential environmental impact of the Proposed Project.

10. Two public hearings were held for the Proposed Project at Public School 163 ("P.S. 163"), at 6:30 p.m. on May 7, 2014 and 6:30 p.m. on May 8, 2014, allowing all involved agencies, interested parties, and members of the public an opportunity to provide oral and written comments on the *DEIS*. Written comments on the *DEIS* were accepted through the close of the public comment period, which ended on Monday, May 19, 2014.
11. After the close of the public comment period on the *DEIS*, NYSDOH prepared the *Final Environmental Impact Statement ("FEIS")*. The *FEIS* summarizes and responds to all substantive comments received during the public comment period. NYSDOH issued the *FEIS* on November 14, 2014, accompanied by a *Notice of Completion of Final Environmental Impact Statement*. The *FEIS* was distributed to other agencies, interested parties and all persons on NYSDOH's mailing list for the Proposed Project. The *FEIS* identified significant adverse impacts with respect to traffic and noise during the construction period, and proposed mitigation measures are summarized in the Executive Summary of the *FEIS*.
12. During the preparation of the *DEIS* and the *FEIS*, NYSDOH coordinated with the relevant environmental and regulatory agencies with jurisdiction over issues of concern regarding the Proposed Project. Representatives of these and other federal, state, and local agencies have been involved throughout the Proposed Project's environmental review process. With respect to historic resources, the Proposed Project was reviewed in conformance with *SHPA* in consultation with the New York State Office of Parks, Recreation and Historic Preservation ("OPRHP"), especially the implementing regulations of Section 14.09 of *PRHPL*.
13. This *SEQR Findings Statement* constitutes the completion of the environmental review process for the Proposed Project. The *FEIS* and its appendices, which are incorporated by reference in its entirety into this *SEQR Findings Statement*, provide the information and analyses upon which the determinations set forth herein are based.

Other Actions and Approvals

14. The Proposed Project requires NYSDOH approval of a construction application pursuant to Section 2802 of the *PHL* (Certificate of Need Project #121075 C). There are no other discretionary actions subject to *SEQR* associated with the Proposed Project.
15. A New York City Planning Commission ("CPC") certification pursuant to Section 22-42, "Certification of Certain Community Facility Uses," of the *Zoning Resolution* was approved on March 26, 2012. Section 22-42 of the *Zoning Resolution* requires that, prior to any development, enlargement, extension or change in use involving a nursing home or health-related facility in a residence district, the CPC must certify to the New York City Department of Buildings ("NYCDOB") that none of the findings set forth in Section 22-42 of the *Zoning*

Resolution exist in the Community District within which such use is to be located. If any of the findings are found to exist, a special permit pursuant to Section 74-90 of the *Zoning Resolution* is required for the development, extension or enlargement or change of use. The findings that would trigger a special permit are: (1) that the ratio between the number of existing and approved beds for nursing homes compared with the population of the Community District is relatively high compared with other Community Districts; (2) there is a scarcity of land for general community purposes within the Community District; and (3) the incidence of nursing home construction in the past 3 years warrants review. CPC determined that none of these findings exist in Community District 7 and issued the certification. A foundation permit was obtained from NYCDOB on October 23, 2013 (NYCDOB Permit Number 120797888-01-EQ-FN).

Need and Public Purpose for the Proposed Project

16. JHL is a member of Jewish Home Lifecare System (the “System”), which operates a geographically-diverse continuum of services for the elderly and disabled in the New York metropolitan area, covering the boroughs of Manhattan, the Bronx, Staten Island, Queens, and Brooklyn, and the counties of Westchester, Rockland, Nassau and Suffolk. The System serves nearly 12,000 individuals per year. The existing nursing facility, located at 120 West 106th Street in Manhattan, is operating in outdated buildings constructed between 1898 and 1964. These buildings are at the end of their useful lives and operate at approximately 65 percent efficiency. The existing facility presents physical challenges that negatively impact residents’ quality of life, mobility, privacy, and independence; the buildings operate inefficiently, are antiquated and require major infrastructure replacement.
17. JHL’s Proposed Project would result in a modern nursing care facility of 414 beds on the Project Site, and would permanently decertify 100 beds from the current complement of 514 NYSDOH-certified beds at JHL’s existing facility. The Proposed Project would enable JHL to continue serving residents of the community and the borough in a new, state-of-the-art facility.
18. The proposed facility would provide an innovative model of long-term care called “the Green House” model. The Green House design would create a small home environment that allows more enhanced, interaction, more focused attention and care between residents and staff and allow for greater independence. The model is based on small “homes” consisting of a maximum of 12 elders and staff members organized so that each individual home functions independently with a self-managed work team, providing the full range of personal care and clinical services of a nursing home.
19. The Green House Project is a national organization that sets forth operational and architectural standards necessary for a project to be considered a Green House building, and reviews local Green House projects according to these design and quality criteria. According to these requirements, each floor of the proposed building would include two Green House homes,

with 12 elders each, living in private rooms. The rooms would be organized adjacent to the hearth area — which would include the living room, dining room, and kitchen — with short corridors. Each home would also include fenced outdoor space, significant window areas in all common areas, and visual sight lines from the kitchen to the majority of the hearth area, bedrooms, and outdoor space. Each private bedroom would contain a private, full bathroom and natural light. The new, LEED-certified facility would be groundbreaking as the first true urban Green House model nursing facility to be developed in New York City and New York State and one of the first nationwide. The facility also would accommodate the significant shift that is occurring from long-term care to short-stay, post-acute rehabilitation, with 36 percent of the beds in the proposed facility dedicated to post-acute (short-term rehabilitation) care. The Proposed Project would result in infill development in a dense urban setting with a diverse mixture of uses and proximity to multiple subway and bus lines.

Discussion of Impacts of the Proposed Project

20. Based on the Proposed Project described above, the impact thresholds presented in the *CEQR Technical Manual*, and the oral and written comments received during the public scoping process and the public hearings on the *DEIS*, the *FEIS* assessed the potential of the Proposed Project to result in significant adverse impacts to the following areas: Land Use, Zoning, and Public Policy; Shadows; Historic and Cultural Resources; Hazardous Materials; Water and Sewer Infrastructure; Transportation; Air Quality; Greenhouse Gas Emissions; Noise; Public Health; Neighborhood Character; Construction; Mitigation; and Alternatives.
21. Based on the impact guidance thresholds in the *CEQR Technical Manual*, a screening level analysis was prepared for each of the following technical areas as part of the *EAS* completed for the Proposed Project: Socioeconomic Conditions, Community Facilities and Services, Open Space, Urban Design and Visual Resources, Natural Resources, Solid Waste and Sanitation Services, and Energy. These technical areas were not analyzed in detail in the *FEIS* because it was determined that they did not meet the *CEQR Technical Manual* guidance thresholds for further analysis, and the Proposed Project would not result in any significant adverse impacts (as those terms are used under the *CEQR Technical Manual*) in these areas.

Land Use

22. The Proposed Project would result in a new land use on the Project Site, but would be in keeping with residential uses in the 400-foot study area surrounding the Project Site, and would be compatible with community facility uses — including the William F. Ryan Community Health Center located at 110 West 97th Street and P.S. 163 Alfred E. Smith School — as well as commercial uses. The Proposed Project would not alter the mix of uses in the study area, which include residential uses as well as community facilities. Accordingly, the study area would continue to include a mix of residential, commercial, community facility, parking, and open space uses. Therefore, it is concluded that the Proposed Project would not result in any significant adverse impacts related to land use.

Zoning

23. The Proposed Project would not alter the existing zoning of the Project Site or study area, and would comply with the *Zoning Resolution* in all respects. The Proposed Project would result in the construction of an as-of-right building that is consistent with and permitted under existing zoning. In addition, the Proposed Project would comply with Section 22-42, "Certification of Certain Community Facility Uses," of the *Zoning Resolution*, which requires that, prior to any development, enlargement, extension or change in use involving a nursing home or health-related facility in a residence district, CPC must certify to NYCDOB that none of the findings set forth in Section 22-42 of the *Zoning Resolution* exist in the Community District within which such use is to be located. CPC determined that none of the findings existed for Community District 7 and the certification was approved on March 26, 2012. Therefore, it is concluded that the Proposed Project would not result in any significant adverse impacts related to zoning.

Public Policy

24. The Mayor's Office of Long Term Planning and Sustainability's document, *PlaNYC: A Greener, Greater New York* has sustainability goals in several areas that are relevant to the Proposed Project, including air quality, water quality and land use, open space, natural resources, and transportation. The Proposed Project was found to be consistent with these PlaNYC objectives. Overall, the new facility would incorporate sustainable design elements and systems; would result in infill development in a dense urban setting with a diverse mixture of uses and proximity to existing mass transit; would be designed with a commitment to Leadership in Energy and Environmental Design ("LEED") certification; and would provide bicycle storage, showers, and changing rooms within the proposed building. JHL currently operates a shuttle bus for patient transport and would continue to do so at the new location.
25. The purpose of *SSGPIPA* is to maximize the social, economic, and environmental benefits from public infrastructure development through minimizing unnecessary costs of sprawl development. A Smart Growth Impact Statement Assessment Form ("SGISAF") was completed for the Proposed Project. Based on the SGISAF assessment, the Proposed Project would be generally consistent with *SSGPIPA* and would generally support the ten relevant smart growth criteria established by the legislation. Based on the information above, it is concluded that the Proposed Project would not result in any significant adverse impacts related to public policy.

Shadows

26. The Proposed Project would result in an approximately 275-foot-tall nursing care facility on the Project Site. A detailed shadows analysis showed that Happy Warrior Playground and Saint Michael's Church, two sunlight-sensitive resources, would receive project-generated incremental shadow. Happy Warrior Playground would receive 2¼ hours of incremental

shadow in the morning of the March 21/September 21 analysis day (i.e., in the early spring and fall), and about 4½ hours of new shadow in the morning and early afternoon of the December 21 analysis day (i.e., in winter). Incremental shadow on the windows of Saint Michael's Church would occur for about 10 minutes on the December 21 analysis day, only.

27. The analysis indicated that the new shadows cast by the proposed building would not reach any areas of Happy Warrior Playground that contain trees or other vegetation in early spring and fall, and could not affect the trees in winter when they have no leaves. New shadow would fall on the asphalt play area on the March 21/September 21 and December 21 analysis periods, however, large areas of sunlight would remain on portions of the playground during these periods.
28. The new shadows would not be expected to significantly alter the public's use of the Happy Warrior Playground, and the 10 minutes of increased shadow on the windows of Saint Michael's Church that would occur during winter would be too limited in duration and size to cause an adverse impact to the stained glass. Therefore, it is concluded that the Proposed Project would not be expected to result in significant adverse shadow impacts to these resources, or any other resources.

Historic and Cultural Resources

29. The Proposed Project was reviewed in conformance with *SHPA*, especially the implementing regulations of Section 14.09 of the *PRHPL*. Pursuant to *SHPA* and the implementing regulations of Section 14.09 of the *PRHPL*, NYSDOH submitted the Proposed Project to OPRHP for review and comment (OPRHP Project №. 13PR02920). In a letter dated December 13, 2013, OPRHP determined that the Proposed Project would not result in an impact upon cultural resources in or eligible for inclusion in the State and/or National Registers of Historic Places ("S/NR"). NYSDOH has similarly determined that the Proposed Project would have no significant adverse impacts upon cultural resources.
30. There are no known or potential architectural resources on the Project Site, and none of the known or potential architectural resources identified in the study area are located within 90 feet of the Project Site. Consequently, the proposed redevelopment of the Project Site would not have an effect on any on-site architectural resources, and no such resources could be potentially physically affected during construction-period activities on the Project Site.
31. Three known architectural resources exist within and immediately adjacent to the study area, including the former East River Savings Bank, Trinity Lutheran Church of Manhattan, and St. Michael's Church. In addition, three buildings in the surrounding area have been identified as potential architectural resources, including the Church of the Holy Name of Jesus, a 3-story building at 766 Amsterdam Avenue, and a group of four 5-story flats at 768-774 Amsterdam Avenue. The Proposed Project would not isolate any of these architectural resources from its setting or visual relationship with the streetscape, or otherwise adversely alter a historic property's setting or visual prominence. The proposed building would be of a comparable

height, bulk, and footprint to other structures in the surrounding area and the proposed institutional/community facility use of the building is comparable to the use of many of the historic buildings in the study area.

32. The Proposed Project would not introduce incompatible visual, audible, or atmospheric elements to a resource's setting and would not eliminate or screen significant publicly-accessible views of any architectural resource. The Proposed Project would also not cast any incremental shadows on the stained-glass windows of Trinity Lutheran Church or the Holy Name of Jesus Church. While incremental shadows would be cast on a small portion of the stained glass windows of St. Michael's Church, the shadows would be too limited in duration and size to adversely affect this sun-sensitive feature of the architectural resource.
33. The Proposed Project could potentially be visible from the two potential architectural resources facing Amsterdam Avenue (766 and 768-744 Amsterdam Avenue), and the upper floors of the development could potentially be visible from the sidewalks adjacent to the other known and potential resources in the study area. This potential limited visibility would not be anticipated to adversely affect these resources, as they have limited visual relationships with the Project Site, and as discussed above, the height and bulk of the Proposed Project would be of a comparable height, bulk, and footprint to other modern structures in the surrounding area.
34. The Proposed Project would not obstruct significant views of any architectural resource or adversely alter the visual setting of any architectural resources in the study area. Overall, the Proposed Project would not be expected to result in any significant adverse impacts to architectural resources on the Project Site or in the study area.

Hazardous Materials

35. The potential for hazardous materials effects was based on a *Phase I Environmental Site Assessment ("ESA")* prepared by Ethan C. Eldon Associates, Inc. in May 2011. An updated regulatory database evaluation was undertaken by AKRF, Inc. in January 2014 and a *Subsurface (Phase II) Investigation* was performed in September 2013 by AKRF, Inc. The *Phase I ESA* was performed in accordance with the American Society for Testing and Materials ("ASTM") *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (E 1527-05). The Phase II investigation was conducted in accordance with a work plan approved by NYSDOH.
36. In general, AKRF concluded that, based on their experience at numerous New York City properties, the detected levels of metals and compounds in soil (and groundwater) samples were consistent with those typically found in the kinds of fill material encountered in the borings, which included brick and other building materials. Several volatile organic compounds ("VOCs"), semivolatile organic compounds ("SVOCs"), metals, and pesticides were detected in exceedance of conservative NYSDEC Subpart 375 Unrestricted Use Soil Cleanup Objectives ("USCOs"), which assume long-term exposure to unpaved soils. In

particular, the VOCs, benzene, ethylbenzene, m&p-xylene, and o-xylene were detected in soil sample WC-7 bottom at concentrations ranging from 120 to 9,700 micrograms per kilogram (“µg/kg”), all of which exceeded USCOs but were below Restricted Residential Use Soil Cleanup Objectives (“RRSCOs”). The RRSCOs are a more appropriate (but still highly conservative) comparison as they assume multifamily residences with some potential for soil contact. In reality, long-term exposure to existing soils does not currently occur and would not occur with the anticipated use of the Project Site in which all existing soil not removed by excavation would be beneath a building, paving or new imported soils used for landscaping.

37. Certain SVOCs — (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenz(a,h)anthracene, and ideno(1,2,3-cd)pyrene) and metals (arsenic, barium, lead, and mercury) — exceeded the RRSCOs. In particular, lead levels in 3 of the 38 soil samples exceeded 1,000 parts per million (“ppm”) with a maximum of 3,850 ppm, and the overall average lead level was 290 ppm. The average lead level in the samples from the top 6 inches of tree pits was 304 ppm (maximum 681 ppm). These findings do not indicate a “soil-lead hazard” defined by the United States Environmental Protection Agency (“USEPA”) at 40 *Code of Federal Regulations (“CFR”) 745.65(c)* as, “bare soil on residential real property or on the property of a child-occupied facility that contains total lead equal to or exceeding 400 parts per million in a play area or average of 1,200 parts per million of bare soil in the rest of the yard based on soil samples.” Additional information on lead and the potential for exposure to lead is discussed below in “Public Health.” NYSDEC noted in 2 letters dated August 6, 2014 and September 24, 2014, respectively, that the subject site does not pose a significant threat to public health or the environment based on the lead concentrations present and, therefore, no remediation of lead contamination is required.
38. The potential for impacts related to hazardous materials can generally occur when elevated levels of hazardous materials (i.e., above guidance values) exist on a site and an action would create pathways (particularly during construction) for exposure, to either humans or the environment; or when an action would introduce new activities or processes using hazardous materials and the risk of human or environmental exposure would be increased.
39. The Proposed Project would involve subsurface disturbance for the construction of the proposed new building and outdoor improvements. Soil that would be disturbed by the Proposed Project would include widespread historical fill materials (with lead levels typical of those found in such materials — see “Public Health,” below), limited petroleum-contaminated soil, for which Spill No. 1306324 has been reported to the NYSDEC, and some soil exceeding the hazardous waste threshold for barium (“Ba”) content. The barium level in one sample (132 milligrams per liter [“mg/L”]) collected beneath the paving, analyzed by the toxicity characteristic leaching procedure (“TCLP”), exceeded the USEPA Hazardous Waste threshold (100 mg/L). Bricks, paint, tiles, glass, and rubber can contain elevated levels of barium and the detected levels are likely associated with existing urban fill material.

40. Implementation of the Proposed Project would disturb these materials, potentially increasing pathways for human exposure. Potential impacts would be avoided by implementing the following measures as a part of construction of the Proposed Project: A NYSDOH- and NYSDEC-approved Remedial Action Plan (“RAP”) and associated Construction Health and Safety Plan (“CHASP”) have been prepared and would be implemented during the subsurface disturbance associated with the Proposed Project. During subsurface disturbance, excavated soil would be handled and disposed of in accordance with applicable regulatory requirements and the requirements of the receiving facility. Spill No. 1306324 would be remediated in accordance with NYSDEC requirements sufficient to close the spill. If dewatering is required, it would be performed in accordance with New York City Department of Environmental Protection (“NYCDEP”) sewer use requirements. These requirements require testing to ensure contaminated groundwater is treated before it can be discharged to the sewer system. If treatment is required, it would occur in enclosed containers with any residuals disposed of off-site in accordance with the same regulatory requirements as the excess soil.
41. Once operational, the Proposed Project would use a variety of chemical products related to day-to-day functions and would produce regulated medical waste (“RMW”). To ensure the safety of workers, residents, and the general public, management of RMW would be undertaken in compliance with applicable federal and state regulatory requirements, including those related to generator permits, storage, signage, employee training, recordkeeping and reporting, and offsite transportation/disposal.
42. With the above measures in place during construction, it is concluded that significant adverse impacts related to hazardous materials would not be expected due to construction or operation of the Proposed Project.

Water and Sewer Infrastructure

43. *Water Supply.* The Project Site is located in a part of New York City served by a combined sewer system that collects both sanitary sewage and storm water. Flow is conveyed to the North River Wastewater Treatment Plant (“WWTP”). The maximum permitted capacity for the North River WWTP is 170 million gallons per day (“mgd”). The average monthly flow during the 12-month period, October 2012 through September 2013, was approximately 113 mgd, well below the maximum permitted level. The Proposed Project would generate an estimated total water demand of 117,509 gallons per day (“gpd”) on the New York City water supply system, and it is expected that there would be adequate water service to meet this incremental demand. Therefore, it is concluded that the Proposed Project would have no significant adverse impacts on the city’s water supply.
44. *Sanitary Sewage.* The Proposed Project would generate an estimated 53,587 gpd of sanitary sewage. This volume would represent slightly less than 0.05 percent of the average daily flow of 113 million gallons per day (“mgd”) at the North River Waste Water Treatment Plant (“WWTP”), and would not result in an exceedance of the plant’s permitted capacity, which is

170 mgd. In addition, this amount would not be a net new increase in sewer demand because JHL currently generates a comparable amount at its existing West 106th Street campus, where sewage is also conveyed to the WWTP. Therefore, it is concluded that the Proposed Project would not create a significant adverse impact on the city's sanitary sewage treatment system.

45. *Storm Water.* The overall volume of storm water runoff and the peak storm water runoff rate from the Project Site is anticipated to increase slightly, since a large portion of the Project Site would be covered by impervious building rooftop instead of the current partially pervious pavement. Under the most extreme rainfall scenario analyzed in the *FEIS*, nearly 50,000 gallons of storm water would be generated on the Project Site, as compared to the existing and No-Build conditions.
46. Best Management Practices (“BMPs”) required as a part of the NYCDEP site connection approval process would be designed to offset the increase in the overall volume of storm water runoff from the Project Site. In addition to required measures to reduce water consumption and sanitary sewer discharges (such as low-flow fixtures), such measures would include controlled drainage on the roof and first floor garden levels and plantings throughout the Project Site. With the incorporation of selected BMPs, the overall volume of sanitary sewer discharge and storm water runoff and the peak storm water runoff rate would be reduced to allowable flow requirements. Therefore, it is concluded that there would not be any significant adverse impacts on storm water conveyance infrastructure.

Transportation

47. *Traffic Flow and Operating Conditions.* (Note: Traffic volumes and parking conditions were updated in June 2014, after the issuance of the *DEIS*, because the current owner of PWV relocated the 88-space parking lot used by the residents.) The traffic study found that the Proposed Project would add vehicle trips to the study area, and the increase in vehicles trips would result in significant adverse traffic impacts at the signalized intersections of West 97th Street and Amsterdam Avenue (Level of Service E [“LOS E”]) and West 97th Street and Columbus Avenue (LOS F) during the weekday a.m., weekday midday, and weekday p.m. peak hours, respectively. The significant adverse impacts at the two intersections could be fully mitigated with standard mitigation measures, such as signal retiming and phasing changes. The specific measures that would be feasible to mitigate the significant adverse impacts at these intersections are discussed below under “Mitigation.” These measures would be subject to the review and approval by the New York City Department of Transportation (“NYCDOT”).
48. *Parking Conditions.* The parking study found that the Proposed Project would generate demand for no more than 66 parking spaces, and that there is sufficient off-street parking within a one-quarter-mile radius of the Project Site to accommodate the parking demand generated by the Proposed Project. Therefore, it is concluded that there would be no significant adverse impacts on parking in the area.

49. *Transit.* The transit criteria specified in the *CEQR Technical Manual* and thresholds used by New York City Metropolitan Transportation Authority (“MTA”) agencies were used to determine which subway and bus routes in the study area would be analyzed in the *FEIS*. According to the criteria, if a Proposed Project is projected to result in fewer than 200 peak-hour subway passengers assigned to a single subway station or on a single subway line, and fewer than 50 bus passengers assigned to a single bus line (in one direction), further transit analyses are not typically required, as the Proposed Project is considered unlikely to create a significant subway or bus transit impact. A preliminary screening assessment determined that the subway trips and bus trips generated by the Proposed Project would not exceed these respective thresholds, and further analyses were not conducted for any peak period. Therefore, it is concluded that the Proposed Project would not result in significant adverse impacts to transit.
50. *Pedestrians.* Based on criteria specified in the *CEQR Technical Manual*, projected pedestrian volume increases of more than 200 pedestrians per hour at any sidewalk, crosswalk, or intersection corner would be considered a location with the potential for significant impacts and would require a detailed analysis. A preliminary screening assessment determined that the Proposed Project would generate fewer than 200 pedestrians per hour during each of the three peak hours, and as such, a detailed pedestrian analysis was not conducted for any peak period. Therefore, it is concluded that the Proposed Project would not result in significant adverse pedestrian-related impacts.
51. *Vehicular and Pedestrian Safety.* Accident data obtained for the two signalized study intersections between January 2011 and December 2013 indicated that the intersection of West 97th Street and Columbus Avenue met the criteria for a high pedestrian/bicycle crash location. The Proposed Project would increase the level of vehicular activity at this intersection during the weekday a.m., weekday midday, and weekday p.m. peak hours. NYCDOT has implemented a range of significant pedestrian and bicycle safety improvements on Columbus Avenue, including at this intersection. Additional safety improvements proposed for this intersection include extending the Leading Pedestrian Interval (“LPI”) across Columbus Avenue, installing “Turning Vehicles Yield to Pedestrians” signage on the southbound and westbound approaches, and installing “Signal Ahead” warning signs ahead of the westbound approach. NYCDOT has reviewed these proposed safety measures as well as an area-wide safety study developed by Community Board 7 with the aim of reducing accidents involving pedestrians and bicyclists. NYCDOT could implement some or all elements of these measures to further improve bicycle and pedestrian safety at this location.
52. To improve pedestrian safety in front of the loading dock of the proposed building during operation of the Proposed Project, JHL would staff a dock master at all times when the loading dock would be operational. The dock master would temporarily stop pedestrians on the sidewalk when trucks are backing in or exiting the loading dock and would only allow the truck to proceed when the truck’s path is clear of pedestrians.

Air Quality

53. *Mobile Sources.* The maximum hourly incremental traffic from the Proposed Project would not exceed the *CEQR Technical Manual* carbon monoxide (“CO”) screening threshold of 170 peak-hour trips at nearby intersections in the study area, nor would the Proposed Project exceed the particulate matter (“PM”) emission screening threshold discussed in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual* guidance. As such, a quantified assessment of on-street, mobile-source emissions was not warranted. Therefore, it is concluded that the Proposed Project would neither result in significant adverse impacts from mobile source air toxics nor contravene any National or New York State Ambient Air Quality Standards.
54. *Stationary Sources.* A stationary source screening analysis was performed to evaluate the potential for significant adverse impacts to air quality from operation of the heating, ventilation and air conditioning (“HVAC”) system at the Proposed Project. The primary pollutant of concern would be nitrogen dioxide (“NO₂”) from the combustion of natural gas fuel. The analysis determined that the use of natural gas would not result in any significant stationary source air quality impacts. The Proposed Project would also include one 1,250-kilowatt (“KW”), diesel, emergency generator located on the roof of the proposed building, south of the HVAC system. The proposed generator would be tested at regular intervals to ensure its availability and reliability in the event of an actual emergency. The proposed generator would not be operated continuously and would not constitute a significant long-term source of air pollution. Therefore, it is concluded that the Proposed Project would neither result in any significant adverse stationary source air quality impacts nor contravene any National or New York State Ambient Air Quality Standards.

Greenhouse Gas Emissions

55. A greenhouse gas (“GHG”) emissions analysis determined that the construction and operation of the Proposed Project would result in an increase in GHG emissions from direct as well as indirect sources. Water vapor, carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), and ozone (O₃) are the primary greenhouse gases in the earth’s atmosphere. Direct emissions from stationary sources generally result from the combustion of fossil fuels for heat, hot water, steam generation, on-site generation of electricity, or industrial processes. Indirect GHG emissions would include the emissions resulting from the off-site production of electricity and the vehicle trips to and from the Project Site. Using a conservative carbon-intensity rate to estimate the increase in carbon dioxide-equivalent (denoted as “CO₂e”) GHG emissions, it is projected that the Proposed Project would result in an increase of approximately 6,059 metric tons of CO₂e emissions per year, including 3,617 mtons from building operations and 2,443 mtons from mobile sources.
56. The Proposed Project is intending to achieve certification under the U.S. Green Building Council’s (“USGBC”) Leadership in Energy and Environmental Design (“LEED”)® rating system. Energy measures to be implemented under LEED are expected to reduce energy

expenditure by at least 10 percent, and might be as much as 20 percent; this would reduce the total GHG emissions. Measures that would be implemented to limit GHG emissions, would involve various design features that would result in development that is consistent with the city's emissions reduction goal as demonstrated by the PlaNYC goals of: (1) building efficient buildings; (2) using clean power; (3) transit-oriented development and sustainable transportation; (4) reducing construction operation emissions; and (5) using building materials with low carbon intensity. Based on these project components and efficiency measures, it is concluded that the Proposed Project would be consistent with the city's emissions reduction goal, as defined in the *CEQR Technical Manual*.

Noise

57. *Mobile Sources.* A mobile-source noise analysis was conducted for the operation of the Proposed Project. Future noise levels with the Proposed Project were calculated at two mobile source noise analysis receptor sites, including one on the south side of the Project Site and one on the north side of the Project Site. The results of the analysis indicated that the increase in $Leq(1)$ noise levels (i.e., "equivalent sound level") would be less than 1.0 dBA, which would be imperceptible according to *CEQR Technical Manual* guidance criteria.⁴ Hence, operation of the Proposed Project is not expected to result in a significant increase in mobile-source noise levels at nearby noise receptor locations.
58. *Stationary Sources.* The building mechanical systems (i.e., heating, ventilation, and air conditioning systems) would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the *New York City Noise Control Code* and Section MC 926 of the *New York City Department of Buildings Code*) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, operation of the Proposed Project is not expected to result in significant adverse stationary-source noise impacts.
59. The projected exterior noise levels at the Project Site are less than those for which the *CEQR Technical Manual* specifies a required level of window/wall attenuation. The proposed building would be constructed using standard construction methods, including acoustically-rated windows and air conditioning as an alternate means of ventilation, which would result in acceptable interior noise levels at the Proposed Project. Therefore, it is concluded that operation of the Proposed Project would not result in any significant adverse noise impacts. The effects of construction of the Proposed Project on community noise levels are discussed below under "Construction."

⁴ In order to establish a uniform noise measurement that simulates people's perception of loudness and annoyance, the decibel measurement is weighted to account for those frequencies most audible to the human ear. This is known as the A-weighted sound level, or "dBA," and it is the descriptor of noise levels most often used for community noise.

Neighborhood Character

60. A neighborhood character analysis examined the principal characteristics of the neighborhood surrounding the Project Site, including the streets within the neighborhood, and assessed the Proposed Project's potential to result in impacts to neighborhood character. Neighborhood character is typically considered to be a combination of various elements that give neighborhoods their distinct "personality," which may include aspects of socioeconomic conditions, land use, urban design and visual resources, noise, or other social or physical characteristics that help to define a community. Although the new building would represent a physical change to the Project Site, the type of use would not be new to the area and the proposed change would result in a building that would be compatible with the existing land use and urban design characteristics of the surrounding neighborhood.
61. The Proposed Project is expected to result in significant adverse traffic impacts at the West 97th Street and Amsterdam Avenue intersection and at the West 97th Street and Columbus Avenue intersection. However, all of the impacts could be mitigated with signal-timing and phasing changes. The neighborhood character of the study area is partly defined by the existing high level of vehicular traffic, particularly on Columbus Avenue and Amsterdam Avenue, and West 96th Street. Therefore, the increased traffic resulting from the Proposed Project does not represent a significant alteration of this character-defining feature.
62. According to the *CEQR Technical Manual*, even if a project does not have the potential to result in a significant adverse impact to neighborhood character in a certain technical area, additional analysis of neighborhood character may be warranted based on the potential for a project to result in a combination of moderate effects in more than one technical area. A "moderate" effect is generally defined as an effect considered reasonably close to the significant adverse impact threshold for a particular technical analysis area. The Proposed Project would not result in moderate effects that would be reasonably close to the impact thresholds in the other technical areas. Therefore, it is concluded that the Proposed Project would not result in any significant adverse impacts on the neighborhood character of the Project Site and the study area.

Construction

63. *Hazardous Materials.* The potential presence of hazardous materials at the Project Site was evaluated based on a *Phase I Environmental Site Assessment ("ESA")* prepared in accordance with American Society for Testing and Materials ("ASTM") Standard E1527-05 in May 2011 (updated with evaluation of a new regulatory database in January 2014) and a *Subsurface (Phase II) Investigation* in September 2013, conducted in accordance with a work plan approved by NYSDOH. The *Phase I ESA* found no evidence of Recognized Environmental Conditions ("RECs"), and the laboratory analytical data of the *Phase II investigation* indicated that detected levels of soil contaminants in soil (and groundwater) samples were consistent with those typically found in the types of fill material encountered in the borings, which

included brick and other building materials. Several VOCs, SVOCs, metals, and pesticides were detected in exceedance of conservative NYSDEC Subpart 375 Unrestricted Use Soil Cleanup Objectives (“USCOs”), which assume long-term exposure to unpaved soils. Only certain SVOCs and metals exceeded Subpart 375 Soil Cleanup Objectives for Restricted Residential use (“RRSCOs”), which assume site use as multifamily residences with some potential for soil contact. Lead levels in 3 of the 38 soil samples exceeded 1,000 ppm with a maximum of 3,850 ppm and an average lead level for all sampling of 290 ppm. The average lead level in the samples from the top 6 inches of tree pits was 304 ppm (maximum 681 ppm). These findings do not indicate a “soil-lead hazard” defined by USEPA to mean: “bare soil on residential real property or on the property of a child-occupied facility that contains total lead equal to or exceeding 400 parts per million in a play area or average of 1,200 parts per million of bare soil in the rest of the yard based on soil samples.”⁵

64. The Proposed Project would involve subsurface disturbance for the construction of the proposed new building and outdoor improvements. Soil that would be disturbed by the Proposed Project would include widespread historical fill materials that contain elevated levels of lead, limited petroleum-contaminated soil (in the southeastern corner of the Project Site) for which Spill No. 1306324 has been reported to NYSDEC, and some soil exceeding the hazardous waste threshold for barium content. The Proposed Project would disturb these materials, potentially increasing pathways for human exposure. However, impacts would be avoided by implementing the various measures identified under “Construction Impact Avoidance Measures” below.
65. *Transportation – Traffic.* Construction is anticipated to commence in early 2015 and would last approximately 30 months. The peak period of construction activity in terms of number of workers is projected to be during 2016. This period of peak of activity would result in 123 passenger-car-equivalent (“PCE”) trips during the weekday a.m. and 101 PCE trips during the weekday p.m. construction peak hours. (Construction workers would be expected to park in off-site parking facilities.) A significant adverse traffic impact is expected at the intersection of West 97th Street and Amsterdam Avenue during the construction p.m. peak hour. The westbound through-right-lane group would deteriorate from LOS E from an average delay of 67.9 seconds and v/c ratio of 1.01 to LOS F with an average delay of 87.4 seconds and v/c ratio of 1.08. This significant adverse impact could be fully mitigated with standard mitigation measures, such as signal retiming. The proposed mitigation at this location is further described under “Mitigation of Construction Impacts” below. Mitigation measures would be subject to review and approval by NYCDOT.
66. At the unsignalized driveway intersection of Park West Drive and West 97th Street, southbound Park West Drive would operate at worse than mid-LOS D during the weekday construction p.m. peak hour. Although this approach would experience some delay, this increase would only affect 1 vehicle anticipated to use this approach during this peak hour.

⁵ 40 Code of Federal Regulations (“CFR”) 745.65(c).

This increase in delay would not be considered a significant adverse impact since the minor street volume is below the minimum criteria (less than 90 PCEs) as defined by the *CEQR Technical Manual* guidance for a significant impact for unsignalized intersections.

67. *Transportation – Transit.* The Project Site is served by 5 subway lines and 4 bus routes. During the peak construction period, the total estimated number of peak-hour transit trips would be approximately 190 trips during the a.m. peak hour (167 subway/rail, 23 bus) and 190 trips during the p.m. peak hour (167 subway/rail, 23 bus). The increase in trips would be fewer than 200 trips on any one subway route and fewer than 50 trips on any one bus route during the peak construction period. Therefore, it is concluded that no construction-related transit impacts would be expected during the peak-construction period.

68. *Transportation – Pedestrians.* New pedestrian trips generated during the construction period would consist of construction workers who would park in off-site parking facilities, as well as those who take transit or walked to the construction site. Based on pedestrian trip assignment, fewer than 200 new peak-hour pedestrian trips would be added to any one pedestrian element during the construction period. During construction, a portion of the northern sidewalk along West 97th Street between Amsterdam Avenue and Columbus Avenue would be used for construction activity. A pedestrian walkway with a total width of 8 feet would be provided at this location. A sidewalk analysis performed according to guidelines provided in the latest *CEQR Technical Manual* determined that the reduction in sidewalk space would not cause in a significant impact during construction. Therefore, it is concluded that no construction-related pedestrian impacts would be expected during the peak construction period.

69. *Transportation – Parking.* If a curb-lane closure is required, approximately 10 parking spaces would be temporarily lost. These parking spaces would be restored once construction activities no longer require a curb-lane closure. During the peak construction period, a total of 441 parking spaces would be available at existing off-site parking facilities within a one-quarter-mile radius of the Project Site. Based on the projected peak-construction trip estimates for 2016, the peak-construction-worker parking demand would be 101 spaces. The construction worker parking demand would be accommodated within off-site parking facilities that have adequate capacity to meet the projected demand. Therefore, it is concluded that no construction-related parking impacts would be expected.

70. *Air Quality.* Emissions from on-site construction equipment and on-road construction-related vehicles, as well as dust-generating construction activities, have the potential to affect air quality. Measures would be taken to reduce pollutant emissions during construction in accordance with all applicable laws, regulations, and building codes. These would include emission control measures, dust suppression measures, and idling restriction for on-road vehicles. In addition to the required laws and regulations, the Proposed Project would commit to implementing an emissions reduction program for all construction activities, including diesel equipment reduction, the use of ultra-low-sulfur diesel (“ULSD”), best available tailpipe reduction technologies, and utilization of newer equipment. With the implementation

of these emission reduction measures, a detailed analysis of construction emissions determined that fine particulate matter ("PM_{2.5}"), coarse dust particles ("PM₁₀"), annual-average nitrogen dioxide ("NO₂"), and carbon monoxide ("CO") concentrations would be below their corresponding *de minimis* thresholds or National Ambient Air Quality Standards ("NAAQS"), respectively. The maximum predicted 24-hour and annual average PM_{2.5} incremental concentrations would be 5.0 micrograms per cubic meter ("µg/m³") and 0.26 µg/m³, respectively, below the applicable *de minimis* threshold values of 5.5 µg/m³ and 0.30 µg/m³. The maximum predicted 24-hour average PM₁₀ concentration would be 60.5 µg/m³, well below the applicable NAAQS value of 150 µg/m³. The maximum predicted annual average NO₂ concentration would be 50.6 µg/m³, well below the applicable NAAQS value of 100 µg/m³. The maximum predicted 1-hour and 8-hour average CO concentrations would be 30.1 µg/m³ and 8.8 µg/m³, respectively, below the applicable NAAQS values of 35 ppm and 9 ppm. Therefore, it is concluded that the construction of the Proposed Project would not result in significant adverse air quality impacts due to construction sources.

71. *Noise*. Impacts on community noise levels during construction would include noise from the operation of construction equipment and noise from construction and delivery vehicles traveling to and from the site. Noise and vibration levels at a given location are dependent on the type and quantity of construction equipment being operated, the acoustical utilization factor of the equipment (i.e., the percentage of time a piece of equipment is operating), the distance from the construction site, and any shielding effects (from structures such as buildings, walls, or barriers). Noise levels caused by construction activities would vary widely, depending on the stage of construction (i.e., structure rehabilitation, interior fit out, etc.) and the location of the construction activities relative to noise-sensitive receptor locations. The most significant construction noise sources are expected to be the operation of pile driver, tower crane, pavement breakers, and concrete pumps, as well as movements of trucks to and from the Project Site.
72. The results of detailed construction analyses indicate that elevated noise levels are predicted to occur for 2 or more years directly outside 6 of the 48 receptor locations analyzed. Affected locations include residential areas adjacent to the Proposed Project. The affected residential buildings have double-glazed windows and air-conditioning which greatly reduce the predicted outdoor noise levels so that these locations would be expected to experience interior L₁₀₍₁₎ values less than 45 dBA, which are deemed acceptable according to *CEQR Technical Manual* noise impact criteria. However, two of the affected buildings (784 Columbus Avenue and 122 West 97th Street) have outdoor balconies, which would not experience attenuation provided by the windows and alternate means of ventilation that exist at the interior of the buildings. During the loudest periods of construction, noise level increases resulting from construction at these balconies would range from 13.9 to 18.8 dBA, with absolute noise levels up to 87.7 dBA. Consequently, balconies on various floors may experience significant adverse noise impacts due to construction for certain portions of the construction period.

73. The results of detailed construction analyses also indicated that the east and south façades of the immediately adjacent P.S. 163 would experience noise levels that exceed *CEQR Technical Manual* noise level impact criteria during some construction activities. Construction noise levels would exceed the *CEQR Technical Manual* noise level impact criteria at certain times during the excavation and foundation activities (3 months), superstructure construction (6 months), and when two construction stages overlap, each of which would last for a limited duration (2 months for exterior façade construction/interior fit-out activities and 3 months for interior fit-out activities/site work).
74. During the excavation/foundation stage of construction, the maximum increase in hourly noise levels would range from 5.0 dBA to 17.5 dBA, with absolute noise levels up to 77.2 dBA. During superstructure construction, the maximum increase in hourly noise levels would range from 3.9 dBA to 9.9 dBA, with absolute noise levels up to 71.7 dBA. The higher end of the expected increases in maximum 1-hour noise levels would potentially occur during the excavation and foundation activities, and the portion of superstructure construction that would take place when the lower floors are being constructed. As the work progresses in height to the upper floors of the Proposed Project, noise levels would be expected to decrease with the greater distance to the noise sources. During the overlap periods of the construction schedule when more than one stage of construction would occur simultaneously, the maximum increase in hourly noise levels would range from 3.4 dBA to 7.5 dBA, with absolute noise levels up to 71.8 dBA. The interior fit-out stage of construction, when it would not overlap with other construction stages, would result in noise levels that do not exceed the *CEQR Technical Manual* noise level impact criteria. This stage of construction would be the longest, and would last 7 months without overlap. During this time, the maximum increase in hourly noise levels would range from 0.1 dBA to 1.1 dBA, which would be considered imperceptible, with absolute noise levels up to 65.4 dBA. These noise level increments, resulting from construction, refer to the increases predicted to occur at various locations of the school during the single loudest hour throughout each phase of construction. The peak 1-hour noise level is the metric recommended by the *CEQR Technical Manual* for construction noise analysis, but noise levels typically fluctuate throughout the day and from day to day during each construction phase, and would not be sustained at these maximum values.
75. Additionally, top floor windows of the lunch/play room along the west façade of P.S. 163 would experience noise levels that exceed *CEQR Technical Manual* noise level impact criteria during the peak hour of the excavation/foundation stage of construction (3 months), and the peak hour of the overlap between the exterior façade and interior fit-out stages of construction (2 months). However, for each of these construction stages, noise levels during the hours when dominant pieces of equipment such as the hydraulic break ram, crane, impact pile driver, or concrete vibrator are not operating, noise levels at these locations would not experience noise levels in excess of *CEQR Technical Manual* noise level impact criteria.
76. In response to public comment, the *FEIS* construction analysis added discrete noise analysis locations directly outside of the P.S. 163 trailers. The detailed construction noise analysis at

the trailers showed lower noise level increments there than at the P.S. 163 main building. The maximum predicted construction noise increment was 7.3 dBA, and noise resulting from construction was predicted to exceed *CEQR Technical Manual* impact criteria only during the excavation and foundation work (3 months) and overlap between exterior façade and interior finishing work (2 months). Maximum exterior $L_{10(1)}$ noise levels at the trailers would not exceed 70 dBA, which would be considered “marginally acceptable” according to *CEQR Technical Manual* noise exposure criteria. With approximately 25 dBA of window/wall attenuation provided by the trailers’ façades and windows, interior noise levels inside the trailers during construction would be less than the 45 dBA threshold considered acceptable for classroom use. Noise levels expected to result from the construction of the Proposed Project would be comparable to those from any typical construction site in New York City involving construction of a new building with concrete slab floors and foundation.

77. Potential disruptions to P.S. 163 resulting from elevated noise levels generated by construction would be expected to be comparable to those that would occur adjacent to a typical New York City construction site during the limited portions of the construction period when the loudest activities would occur. While there would be periods of the construction when P.S. 163 would experience elevated noise level increments exceeding the *CEQR Technical Manual* impact criteria, these exceedances would occur intermittently for no more than 9 consecutive months and no more than 14 total months. This period of time would be less than 24 or more consecutive months (i.e., the *CEQR Technical Manual* definition of “long-term” construction). Cumulative noise levels at the school during the loudest periods of construction would be expected to range from the low- to the high-70s dBA. Noise levels of this magnitude are similar to noise levels experienced on busy New York City streets.

78. *Vibration.* Use of construction equipment that would have the most potential to exceed the 65 vibration decibels (“VdB”) criterion within a distance of 230 feet of sensitive receptor locations (e.g., equipment used during pile driving) would be perceptible and annoying. For limited time periods, perceptible vibration levels may be experienced by occupants and visitors to all of the buildings and locations on and immediately adjacent to the Project Site. However, the operations that would result in these perceptible vibration levels would only occur for limited periods of time at any particular location. Therefore, it is concluded that the Proposed Project is not expected to result in significant adverse construction impacts with respect to vibration.

79. *Open Space.* There are no existing recreational open spaces within the Project Site, and no recreational open space resources would be used for staging or other construction activities. There are several recreational open spaces on the Project Site superblock, including Happy Warrior Playground, located adjacent to P.S. 163 and northwest of the Project Site, and the landscaped open space areas serving the PWV buildings, located to the north and east of the Project Site. Construction activities may generate noise that could impair the enjoyment of these nearby open spaces, but such noise effects would be temporary and of short duration. The construction hours would typically be from 7:00 a.m. to 3:30 p.m. on weekdays so these

open spaces would not be affected by the construction of the Proposed Project after 3:30 p.m. on weekdays and on most weekends. Construction activities would be conducted with the care mandated by the close proximity of an open space to the Project Site. Construction on the Project Site would include noise control measures as required by the *New York City Noise Control Code* and air emissions control measures, including compliance with the *New York City Air Pollution Control Code*, which regulates construction-related dust emissions (see Construction Mitigation below). In addition, the Proposed Project is committed to employing a wide variety of measures that exceed code requirements and standard construction practices to minimize the disruption to the community during construction. Therefore, it is concluded that the construction of the Proposed Project would not result in any significant adverse impacts on open space.

80. *Historic and Cultural Resources.* There are no known or potential architectural or archaeological resources on the Project Site, and none of the known or potential architectural resources in the study area are located within 90 feet of the Project Site. Hence, the proposed redevelopment of the Project Site would not have a direct or indirect effect on any on-site architectural or archaeological resources. As previously indicated, the OPRHP determined that the Proposed Project would not result in an impact upon cultural resources in or eligible for inclusion in the S/NR. NYSDOH has similarly determined that the Proposed Project would have no significant adverse impacts upon cultural resources during construction. Therefore, it is concluded that no such resources would be physically affected during construction-period activities on the Project Site.

Construction Impact Avoidance Measures

81. *Schedule.* Construction of the Proposed Project is expected to begin in early 2015 and would last approximately 30 months. Excavation and foundation activities would begin in early 2015 and would take approximately 3 months to complete. Superstructure construction would commence in Month 4 of construction and would be completed by Month 9 of construction. Exterior façade work would begin in Month 10 of construction and would be completed by Month 14 of construction. Interior fit-out work is expected to begin in Month 13 of construction and would take approximately 13 months to complete. Site work would begin in Month 22 of construction and would take approximately 3 months to complete. Finally, commissioning would commence in Month 26 of construction and would be completed by Month 30 of construction.
82. *Perimeter Safety.* The Project Site is located on the southern portion of the superblock bounded by West 100th Street to the north, West 97th Street to the south, Columbus Avenue to the east, and Amsterdam Avenue to the west. P.S. 163 is located on this block immediately to the west of the Project Site, and 2 PWV residential buildings are located to the immediate north and east of the Project Site, respectively. For pedestrian safety purposes, flaggers would be employed adjacent to the Project Site to provide guidance to pedestrians and to alert or slow down the traffic and provide safe pedestrian access to P.S. 163 or nearby residences. In

addition, to ensure the safety of the students, teachers, administrative personnel, and others traveling to and from P.S. 163, the construction manager would coordinate construction activities with New York City Department of Education ("NYCDOE") and with the P.S. 163 principal on an on-going basis. Further, JHL would work with the school community to reschedule or avoid particularly noisy construction activities that occur for a limited period of time (such as pile driving activities) during yearly state testing periods. A protected, 8-foot-wide pedestrian pathway within the width of the existing West 97th Street sidewalk south of the Project Site would always be maintained. Flaggers would also be employed at each of the gates to control trucks entering and exiting the Project Site. NYCDOB oversees the installation and operation of the tower crane to ensure safe operation of the equipment. The tower crane would be bolted to a slab at its base and additional anchor points would be installed on the side of the building as the tower crane progresses upwards to ensure its steadiness. In addition, to ensure safe operation of the tower crane, the crane would be programmed to limit its swing such that no loads or any part of the crane would hang over the nearby P.S. 163. Further, during severe wind conditions, as mandated by NYCDOB, the tower crane would cease operations, carry no load, and would be under a weathervane condition so as to prevent it from resisting the prevailing winds and risking a potential snap or collapse. When the crane is under a weathervane condition, the boom of the crane would be positioned such that it would not hang over any nearby buildings, including P.S. 163.

83. Although the Building Code does not require a sidewalk bridge to be installed on the pedestrian pathway between P.S. 163 and the Project Site, since the project building would be located more than 20 feet away from this pathway, a sidewalk bridge would be erected to provide overhead protection between P.S. 163 and the Project Site when construction commences. In addition, a 16-foot-high noise barrier would be installed on the west side of the Project Site facing P.S. 163 and 10-foot cantilevered fences with sound absorptive material mounted in the inner surface would be installed around the remaining perimeter of the construction site during construction to provide noise shielding. A 16-foot-high sidewalk bridge/construction shed would also be erected to the immediate north, east, and south of the Project Site when superstructure construction commences to provide overhead protection for pedestrians and vehicles passing through these areas respectively. While project-specific construction details are still being developed, the construction managers would use a continuous vertical and horizontal netting slab-to-slab system that exceeds code requirements to capture construction debris and minimize any off-site deposition. In addition, a safety cocoon would be erected on the sides of the building covering the top 3 floors during concrete pours to ensure the safety of the workers and prevent debris from falling to the ground. As currently envisioned, the safety cocoon on the west side of the proposed building facing P.S. 163 would be constructed from plywood or other solid materials while the safety cocoons on the remaining sides of the proposed building would be composed of safety netting. All NYCDOB safety requirements would be followed and construction activities associated with the Proposed Project would be conducted with the care mandated by the close proximity of sensitive receptor locations to the Proposed Project. To avoid any temporary traffic disruptions in the surrounding area, construction deliveries would be made outside of the

school commuting traffic peak hours to the extent practicable while school is in session. Control measures would be implemented during construction to minimize air quality and noise disruptions to the school users.

84. *Hazardous Materials.* A NYSDOH- and NYSDEC-approved RAP and associated CHASP have been prepared for implementation during the subsurface disturbance associated with the Proposed Project. The RAP addresses requirements for the identified petroleum contamination, barium in soils and historical fill material as well as soil stockpiling, soil disposal and transportation; dust control; quality assurance; and contingency measures, should petroleum storage tanks or additional contamination be encountered. The RAP includes the requirement for a vapor barrier surrounding the new building's cellar slab and sidewalls to prevent vapor intrusion. The RAP also requires a 2-foot cap of clean imported soil in areas not covered by buildings or paving. The CHASP identifies potential hazards that may be encountered during construction and specifies appropriate health and safety measures to be undertaken to ensure that subsurface disturbance is performed in a manner protective of workers, the community, and the environment (such as dust control, personal protective equipment for construction workers, dust and VOCs monitoring, and emergency response procedures). The CHASP includes the requirements for implementation of a Community Air Monitoring Plan ("CAMP") and Fugitive Dust and Particulate Monitoring in accordance with the requirements established in the May 2010 NYSDEC Division of Environmental Remediation ("DER")-10 Appendices 1A and 1B during soil disturbance. The DER-10 requirements for dust control measures would include real-time monitoring to ensure 15-minute average respirable dust levels stay below 150 $\mu\text{g}/\text{m}^3$. No reliable technology exists for real-time measurement of airborne lead, but airborne lead levels can be estimated from the known proportion of lead present in the Project Site's soil because any airborne lead would be attached to dust particles in approximately the same proportion as the lead is present in the soil. The measures required by the RAP and CHASP would control and limit the potential for airborne exposure to dust and lead and the associated respirable dust monitoring would be more than sufficient to ensure that the level of lead would not violate the NAAQS.⁶
85. During subsurface disturbance, excavated soil would be handled and disposed of in accordance with applicable regulatory requirements (e.g., NYSDEC Part 360 regulations for Solid Waste Management Facilities and Parts 370-374 for hazardous wastes and federal requirements 49 *CFR* Parts 170-180 for transporting hazardous materials) and the requirements of the receiving facility, which may well be in another state (e.g., New Jersey, *New Jersey Administrative Code ("N.J.A.C.")* 7:26 Solid Waste Regulations). As in the future without the Proposed Project, Spill No. 1306324 would be remediated in accordance with NYSDEC requirements.

⁶ The NAAQS for lead, which provides "public health protection, including protecting the health of 'sensitive' populations such as asthmatics, children, and the elderly," as well as "public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings" is 0.15 $\mu\text{g}/\text{m}^3$ of lead (calculated as a rolling 3-month average).

86. If dewatering is required (due to rainfall in the excavation area or if below-grade activities extend below groundwater levels), it would be performed in accordance with NYCDEP sewer use requirements. These requirements require testing to ensure contaminated groundwater is treated before it can be discharged to the sewer system. Although the data from the Phase II investigation suggests treatment would not be necessary, since dewatering can draw water from off-site areas, additional testing would be required as a part of the NYCDEP approval process. Were treatment to be required (such as settling or carbon filtration), it would be in enclosed containers with any residuals disposed off site in accordance with the same regulatory requirements as the excess soil. Water pumps would be used for task of dewatering.
87. With the implementation of the measures described above, the Proposed Project would not result in any significant adverse impacts related to hazardous materials during construction. Once excavation and foundation activities are complete, all of the disturbed contaminated soil would be removed from the Project Site and no further potential for future human exposure would occur. Therefore, it is concluded that the construction activities associated with the Proposed Project would not result in any significant adverse hazardous materials impacts.
88. *Noise.* Construction noise is regulated by the requirements of the *New York City Noise Control Code* (also known as Chapter 24 of the *Administrative Code of the City of New York*, or Local Law 113), the NYCDEP Notice of Adoption of Rules for Citywide Construction Noise Mitigation (also known as Chapter 28), and the USEPA's noise emission standards. These local and federal requirements mandate that specific construction equipment and motor vehicles meet specified noise emission standards; that construction activities be limited to weekdays between the hours of 7:00 a.m. and 6:00 p.m.; and that construction materials be handled and transported in such a manner as not to create unnecessary noise. For weekend and after hour work, permits would be required to be obtained, as specified in the *New York City Noise Control Code*.
89. Construction of the Proposed Project would include noise control measures as required by the *New York City Noise Control Code*, including both path and source controls. Even with these measures, the results of detailed construction analyses indicate that two residential buildings adjacent to the Proposed Project (784 Columbus Avenue and 122 West 97th Street) have outdoor balconies that would not experience attenuation provided by the windows and alternate means of ventilation that exist at the interior of the buildings. During the loudest periods of construction, noise level increases resulting from construction at these balconies would range from 13.9 to 18.8 dBA, with absolute noise levels up to 87.7 dBA. Consequently, balconies on various floors may experience significant noise impacts due to construction for limited portions of the construction period. While the balconies could still be enjoyed without the effects of construction noise outside of the hours that construction would occur (e.g. during late afternoon, nighttime, and on weekends), there would be no feasible or practicable way to mitigate the construction noise impacts. Therefore, it is concluded that these balconies would be considered to experience unmitigated significant noise impacts as a result of construction.

90. The results of the construction analyses indicate that the immediately adjacent P.S. 163 would experience noise levels that exceed *CEQR Technical Manual* noise level impact criteria during some of the construction activities, for a period of no more than 9 consecutive months (3 months of excavation and foundation work and 6 months of superstructure) and no more than 14 total months (3 months of excavation and foundation work, 6 months of superstructure, exterior façade construction with interior fit-out activities, and 3 months of interior fit-out activities with site work). Cumulative noise levels at the school during the loudest periods of construction would be expected to range from the low to high 70s dBA.
91. While not deemed a significant adverse construction noise impact under applicable *CEQR Technical Manual* criteria, the project sponsor has offered to provide acoustical interior windows for classrooms on the eastern façade of P.S. 163 facing the Project Site to reduce construction noise impacts on P.S. 163. The classrooms on the eastern façade of P.S. 163 currently have window air conditioning units, with the exception of six rooms, according to information provided by the New York City School Construction Authority (“NYCSCA”). The project sponsor would make window air conditioning units available for any classrooms that do not have functioning units in order to ensure an alternate means of ventilation for classrooms where acoustical interior windows are installed. With these acoustical interior windows and with window air conditioning units, the school’s façade is expected to provide approximately 25 to 30 dBA composite window/wall attenuation, compared to the 15 to 20 dBA attenuation of exterior noise levels that would occur absent installation of these windows. Based on the predicted L10(1) noise levels at P.S. 163 for each construction phase, the school’s interior noise levels would be below 45 dBA (i.e., the threshold considered acceptable according to *CEQR Technical Manual* criteria) throughout the construction period, with the exception of the loudest portions of excavation and foundation work, which would occur at certain discrete times during the approximately 3 months that this work would take place, and the loudest portions of superstructure work, which would occur at certain discrete times during the approximately 6 months that this work would take place. During these times within that 9-month window of the most intense construction activity, interior noise levels at P.S. 163 would reach the low 50s dBA.
92. The acoustical windows to be installed inside the classrooms located along the eastern façade of P.S. 163 must be approved by NYCDOE, in consultation with the NYCSCA. JHL has provided specifications for those acoustical windows to NYCDOE and NYCSCA and has proposed to have the work performed by the NYCSCA-approved contractor. However, installation of the acoustical windows and any window unit air conditioners must be approved by NYCDOE prior to installation. In the event that, despite JHL’s reasonable efforts to obtain such approval, NYCDOE fails to approve the installation of the acoustical windows, the window wall attenuation for the eastern façade would be reduced from approximately 25 to 30 dBA (that would be achieved with the acoustical windows and window air conditioning units in place) to 15 to 20 dBA window/wall attenuation that would be expected with only the existing single-paned windows in place. This would result in noise levels within the

classroom during certain construction periods to be approximately 10 to 15 dBA higher than would occur if the acoustical windows and air conditioning as proposed in the *FEIS* are installed.

93. The feasibility of installing central air conditioning at P.S. 163 was also considered as a means of providing acoustical attenuation during construction. After consultation with NYCSCA, it was determined that this would be very difficult, would take a great amount of time and would be extremely costly. The time needed to complete the design, approval and installation of a new HVAC system at P.S. 163 would not meet the construction schedule of the Proposed Project, and the cost of providing central air conditioning for the entire building is estimated at approximately \$8 to \$10 million. As such, this measure was determined to be infeasible.

Mitigation of Construction Impacts

94. *Traffic.* During the peak-construction period in 2016, a significant adverse traffic impact was identified at the West 97th Street and Amsterdam Avenue intersection during the weekday p.m. peak hour. Subject to review and approval by the relevant agencies, including NYCDOT, the significant adverse impact would be fully mitigated through the implementation of a reallocation of 2.0 seconds of green time from the northbound phase to the westbound phase.

Mitigation of Operational Impacts

95. *Transportation – Traffic Flow and Operating Conditions.* The Proposed Project would result in significant adverse traffic impacts at the intersections of West 97th Street with Columbus Avenue and West 97th Street with Amsterdam Avenue during the weekday a.m., weekday midday, and weekday p.m. peak hours, respectively. The impacts would be fully mitigated through the implementation of various measures such as revised signal timings. The proposed mitigation measures would require approval from divisions of NYCDOT and would be conducted in coordination with NYCDOT as development proceeds. The proposed mitigation measures are described below.
96. The West 97th Street and Amsterdam Avenue intersection would experience a significant impact in the westbound through/right-turn-lane group during all 3 peak hours analyzed. The significant adverse impacts would be fully mitigated through the implementation of a reallocation of 1.0 second of green time from the northbound phase to the westbound phase during the a.m., midday, and p.m. peak hours.
97. The West 97th Street and Columbus Avenue intersection would experience a significant impact in the westbound left-turn-lane group during all 3 peak hours and the westbound through/left-turn-lane group during the weekday a.m. peak hour. The significant adverse impacts would be fully mitigated through the implementation of a reallocation of 2.0 seconds of green time from the southbound phase to the westbound phase during the a.m. and midday

peak hours, respectively, and a reallocation of 1.0 second of green time from the southbound phase to the westbound phase during the p.m. peak hour.

98. *Transportation – Vehicular and Pedestrian Safety Assessments.* The intersection of West 97th Street and Columbus Avenue is classified as a high-pedestrian/bicycle-crash location due mainly to the number of pedestrian accidents that occurred when pedestrians were crossing with the signal. The Proposed Project would increase the level of vehicular activity at this intersection. NYCDOT has already implemented a range of significant pedestrian and bicycle safety improvements on Columbus Avenue, including at this intersection. Building on the improvements implemented by NYCDOT, additional safety improvements are proposed for this intersection including extending the LPI crossing Columbus Avenue from 7.0 to 9.0 seconds and installing “Turning Vehicles Yield to Pedestrians” signage on the southbound approach (at the northwest corner) and the westbound approach (at the southeast corner).

Unavoidable and Immitigable Adverse Environmental Impacts

99. *Construction Noise.* The approach and procedures for constructing the Proposed Project would be typical of the methods utilized in other construction projects throughout New York City. Since the Project Site is located close to an existing residential community and P.S. 163, JHL has committed to taking a proactive approach during construction, which would employ a wide variety of measures that exceed standard construction practices, to minimize construction noise and reduce potential off-site noise impacts. The additional noise control measures are designed to reduce the amount of noise experienced at nearby receptors by decreasing the amount of noise produced by on-site equipment and by shielding the receptors from the noise-producing activities and equipment. These additional measures would include alternate construction equipment and/or practices as well as additional or improved construction noise barriers.
100. Even with the implementation of a wide variety of measures that exceed code requirements and standard construction practices to minimize noise disruption to the community during construction activities, construction of the Proposed Project would result in significant adverse impacts with respect to noise. The noise analysis results showed that predicted noise levels would exceed the *CEQR Technical Manual* impact criteria during 2 or more years on 1 or more floors at 6 of the 48 receptor locations analyzed. During the loudest periods of construction, noise level increases at these locations would range from 13.9 to 18.8 dBA, with absolute noise levels up to 87.7 dBA. Affected locations include residential areas adjacent to the Proposed Project, including 784 Columbus Avenue (PWV Building east of Project Site), 122 West 97th Street (residential building south of Project Site), and 110 West 97th Street (residential building southeast of Project Site).
101. These buildings have double-glazed windows and alternate ventilation (i.e., air conditioners). For buildings with double-glazed windows and well-sealed, through-the-wall/sleeve/Packaged Terminal Air Conditioners (“PTACs”), interior noise levels would be approximately 25 to 30

dBa less than exterior noise levels. The typical attenuation provided by double-glazed windows and the alternate ventilation outlined above would be expected to result in interior noise levels during most of the construction period that are below 45 dBA L₁₀₍₁₎ (the *CEQR Technical Manual* acceptable interior noise level criteria). However, although these structures have double-glazed windows and alternate ventilation, during some limited time periods construction activities may result in interior noise levels that would be above the 45 dBA L₁₀₍₁₎ noise level recommended by the *CEQR Technical Manual* for these uses.

102. Two buildings — 784 Columbus Avenue and 122 West 97th Street — have outdoor balconies that would not experience the attenuation provided by the windows and alternate means of ventilation that exists at the interior of the buildings. During the loudest periods of construction, noise level increases resulting from construction at these balconies would range from 13.9 to 18.8 dBA, with absolute noise levels up to 87.7 dBA. Consequently, balconies on various floors may experience significant noise impacts due to construction for limited portions of the construction period. However, even during the portions of the construction period that would generate the most noise at these balconies, they could still be enjoyed without the effects of construction noise outside of the hours that construction would occur, e.g., during late afternoon, nighttime and on weekends. At these outdoor balconies, there would be no feasible or practicable mitigation to mitigate the construction noise impacts. Therefore, these balconies would be considered to experience unavoidable, unmitigated significant noise impacts as a result of construction.
103. The noise level increments at these balconies would be highest during excavation/foundation activities (3 months), superstructure construction (6 months), and when two construction stages overlap, each of which would last only for a limited duration (2 months for exterior façade construction/interior fit-out activities and 3 months for interior fit-out activities/site work). The interior fit-out stage of construction, when it would not overlap with other construction stages, would result in noise levels that slightly exceed the *CEQR Technical Manual* impact criteria. This stage of construction would be the longest, and would last 7 months without overlap.

Public Health

104. Public health in the context of *SEQR* is defined as the activities that society carries out in order to create and maintain an environment in which people can be healthy. Typically a public health analysis considers the topics of construction and operational air quality, construction and operational noise, water quality and hazardous materials. The *CEQR Technical Manual* defines as its goal with respect to public health “to determine whether adverse impacts on public health may occur as a result of a proposed project, and if so, to identify measures to mitigate such effects,” and requires a public health analysis only where a significant unmitigated adverse impact is found in other *CEQR* analysis areas. Given the extent of public concern over lead, in particular the potential for exposure to the community

during the construction of the Proposed Project, an assessment of public health was performed.

105. The public health assessment indicated that lead levels measured in 38 samples of the Project Site's soils averaged 290 ppm with 3 of the samples (approximately 8 percent) above 1,000 ppm with a maximum of 3,850 ppm. Lead levels in urban soils are typically highly variable, but concentrations in fill material typically fit a "lognormal distribution" in which levels 10 or more times above the average occur with some frequency. The measured average lead level of 290 ppm was consistent with NYSDEC Technical and Administrative Guidance Memorandum ("TAGM") #4046 which states that "average background lead levels in metropolitan or suburban areas or near highways typically range from 200 to 500 ppm." In letters dated August 6, 2014 and September 24, 2014, respectively, NYSDEC noted that the Project Site does not pose a significant threat to public health or the environment based on the lead concentrations present and, therefore, no remediation of lead contamination is required.

106. During soil disturbance associated with construction of the Proposed Project, NYSDEC's DER-10 requirements for dust control measures would include real-time monitoring to ensure that 15-minute average respirable dust levels stay below 150 micrograms per cubic meter (" $\mu\text{g}/\text{m}^3$ "). While no reliable technology exists for real-time measurement of airborne lead, airborne lead levels can be estimated from the known proportion of lead present in the Project Site's soil because any airborne lead would be attached to dust particles in approximately the same proportion as the lead is present in the soil.

107. Precautionary measures required by the NYSDOH- and NYSDEC-approved RAP/CHASP, such as wetting exposed soils to reduce the generation of dust and covering soil stockpiles and haul trucks, would control and limit the potential for airborne exposure to dust and lead. The associated respirable dust monitoring would ensure that the level of lead would not violate the NAAQS. With the implementation of the construction procedures described in "*Construction Impact Avoidance Measures*" above and with the air monitoring and dust control requirements set out in the May 2010 NYSDEC DER-10 (including Section 5.4 and Appendices 1A and 1B) during soil disturbance, it is concluded that the Proposed Project would not result in any significant adverse impacts from dust or lead on public health.

108. Significant adverse mobile or stationary source air quality impacts due to operation of the Proposed Project were not identified, nor were significant adverse mobile or stationary source noise impacts. However, construction of the Proposed Project would result in elevated noise levels that exceed *CEQR Technical Manual* noise level impact criteria during some limited portions of the construction periods. The construction noise analysis predicts that construction of the Proposed Project would result in noise level increments that exceed the *CEQR Technical Manual* impact criteria at certain times during the first 9 months of the construction period, consisting of no more than 14 total months. This would be less than the 2 or more years of sustained elevated noise levels that would be considered a significant adverse noise impact according to *CEQR Technical Manual* construction noise impact criteria. The construction noise analysis also predicts that absolute noise levels at the school's exterior

façade during the loudest periods of construction would be expected to range from the low to high 70s dBA. Noise levels of this magnitude are comparable to noise levels encountered on busy New York City streets and are not considered a significant adverse impact pursuant to *CEQR Technical Manual* impact criteria.

109. The project sponsor has offered to provide acoustical interior windows for classrooms on the eastern façade of P.S. 163 facing the Project Site and window air conditioning units for all classrooms along the eastern façade of P.S. 163 that currently do not have functioning window air conditioning units. This would reduce the school's interior noise levels to below 45 dBA, the threshold considered acceptable according to *CEQR Technical Manual* criteria, during construction, except for the loudest times within the 9-month window of the most intense construction activity, during which interior noise levels at P.S. 163 could reach a maximum of the low 50s dBA at certain discrete and limited times. The occurrence of this level of noise exposure at certain limited, episodic times would not likely result in significant adverse public health impacts. This would be less than the 2 or more years of sustained elevated noise levels that would be considered a significant adverse noise impact according to *CEQR Technical Manual* construction noise impact criteria.

110. Since the Project Site is located close to an existing residential community and P.S. 163, the Proposed Project would employ a wide variety of measures that exceed standard construction practices to minimize construction noise and reduce potential off-site noise impacts. The additional noise control measures would reduce the amount of noise experienced at nearby receptors (including residences, schools, and open spaces) by decreasing the amount of noise produced by on-site equipment and by shielding the receptors from the noise-producing activities and equipment. These additional measures include alternate construction equipment and/or practices as well as additional or improved construction noise barriers, as identified in *FEIS*. With implementation of the proposed protective measures and adherence to the applicable regulatory requirements, it is concluded that no significant adverse public health impacts would be expected under the Proposed Project.

Growth-Inducing Aspects

111. The Proposed Project would result in a new, more-intensive land use on the Project Site, but would be in keeping with residential uses in the study area, and would be compatible with existing community facility and commercial uses in the study area. In addition, the Proposed Project would result in the construction of a building that is consistent with and permitted under existing zoning. The area surrounding the Project Site is fully developed, and the level of development is controlled by zoning. As such, the Proposed Project would not "induce" new growth in the study area. The Proposed Project and related actions are specific to the Project Site only. The Proposed Project would utilize existing infrastructure, and the proposed actions would not result in any significant adverse impacts to water supply or wastewater and storm water infrastructure. Therefore, secondary growth is not expected to be induced as a result of the Proposed Project.

Irreversible and Irretrievable Commitment of Resources

112. There are a number of resources, both natural and built, that would be expended in the construction and operation of the Proposed Project. These resources would include the materials used in construction; energy in the form of gas and electricity consumed during construction and operation of the Proposed Project; and the human effort (i.e., time and labor) required to develop, construct, and operate various components of the Proposed Project. The resources are considered irretrievably committed because their reuse for some purpose other than for the Proposed Project would be unlikely. The land use changes associated with the development of the Project Site would be considered a resource loss. The Proposed Project would constitute an irreversible and irretrievable commitment of the Project Site as a land resource, thereby rendering land use for other purposes infeasible, at least in the near term.

Alternatives to the Proposed Project

113. The *FEIS* evaluated the potential environmental impacts of four alternatives: the No-Build Alternative, the West 106th Street Redevelopment Alternative, the Crane Relocation Alternative, and the No Significant Adverse Impacts Alternative.
114. *No-Build Alternative.* The No-Build Alternative is the Future without the Proposed Project that is described in each of the analysis sections of the *FEIS*. Under the No-Build Alternative, it is assumed that the Project Site would remain a vacant lot. JHL would maintain its existing 514 beds in three distinct buildings on the West 106th Street campus, and the existing facility would continue to operate inefficiently, housed in outdated buildings with a physical plant in need of major infrastructure replacement. Under the No-Build Alternative, no construction would occur on the Project Site. The Project Site would remain in its current state as a vacant lot.
115. The No-Build Alternative would not result in the additional vehicle trips or increased parking demand generated by the Proposed Project's construction activities, nor would it result in any air pollutant emissions or increased noise levels that would be associated with the construction of the Proposed Project. As such, the No-Build Alternative would not result in the significant adverse impacts to traffic and noise during the construction period. As with the Proposed Project, the No-Build Alternative would not result in potential significant adverse construction impacts with respect to air quality, historic and cultural resources, hazardous materials, open space, socioeconomic conditions, community facilities, and land use and neighborhood character.
116. Although the EIS assumes that the Project Site would remain in its current state for purposes of *SEQR* environmental impact assessment, it should be noted that, absent the Proposed Project, the current zoning would allow for other as-of-right redevelopment of the Project Site in the future. Any as-of-right development that could occur on the Project Site in the future (i.e., development that does not require a discretionary approval or permit from the city or a

state agency) would result in similar soil disturbance as the Proposed Project. While the petroleum spill would be remediated and applicable regulations for the handling and appropriate disposal of excavated and contaminated soil would be followed in the case of any as-of-right development on the Project Site, such development would not require the implementation of a NYSDOH-approved RAP or CHASP, including air monitoring.

117. Under the No-Build Alternative, JHL would not be able to achieve its goal of constructing the first true urban Green House-model nursing facility in New York City and New York State, and would continue to use the existing facilities, which have an institutional design, with long corridors that are not ideal for the wheelchair-bound.
118. *West 106th Street Redevelopment Alternative.* The West 106th Street Redevelopment Alternative considered a project that would involve the redevelopment of JHL's existing West 106th Street property with a new nursing care facility on the western portion of the site and a new residential development on the eastern portion of the site. A new nursing facility on this site would be smaller than the Proposed Project, able to accommodate only 303 beds — 111 fewer beds, or 27 percent less than the 414-bed Proposed Project. This alternative would be more costly to operate than the Proposed Project, would result in an inefficient facility that would not meet Green House design principles to the same extent as the Proposed Project, would result in significant disruption to the nursing care facility's operations as compared to the Proposed Project, and would continue to present physical challenges that would negatively impact residents' quality of life, mobility, privacy, and independence as well as significantly reduce the number of nursing home residents that could be served by a redeveloped facility. While this alternative would not result in any significant adverse impacts at the Project Site, the No-Build Alternative would not meet the established goals and objectives of the Proposed Project.
119. The West 106th Street site was recently rezoned from a R7-2 General Residence District to a R8A General Residence District along West 106th Street, and a R8B General Residence District along West 105th Street (ULURP No. 130208ZMM and CEQR No. 14DCP084M). A *Negative Declaration Notice of Determination of Nonsignificance* was issued by the CPC on December 13, 2013, and the ULURP application was approved on July 1, 2014. The West 106th Street Rezoning *EAS* considered a program comprising 507,649 gross square feet ("gsf") of residential space (up to 597 residential units), approximately 31,006 gsf of community facility space, and 208 accessory parking spaces.
120. The West 106th Street Redevelopment Alternative assumes redevelopment of the extant site under the new R8A and R8B zoning. Under this alternative, a new nursing care facility would be developed on one-third of the site (i.e., the westernmost 270 feet of frontage along West 106th Street). The R8A and R8B zoning would restrict the height of the building to a maximum of 120 feet, resulting in a 10-story, approximately 325,000-gsf building. Under the West 106th Street Redevelopment Alternative, the new nursing facility would accommodate a total of 303 beds — 111 fewer beds, or 27 percent less than the 414-bed Proposed Project. Of

the 303 beds, 189 would be long-term-care beds and 114 would be post-acute (short-term rehabilitation) beds. The remainder of the site to the west of the new nursing care facility would be sold to a developer for construction of a new residential development that would enable the applicant to raise the capital necessary to support the redevelopment of the JHL facility under this alternative.

121. Under the West 106th Street Redevelopment Alternative, a residential building of up to 260,000 zoning square feet ("zsf") (approximately 260 units) with a height of up to 120 feet could be developed. The residential building would be built to the front and side lot lines, and would have a 30-foot rear yard setback and a 60-foot rear yard equivalent along the West 105th Street line. The building could include 104 accessory parking spaces. As described below, the West 106th Street Redevelopment Alternative would have a build year of 2018.
122. Along West 97th Street, the environmental effects of this alternative would be the same as under the No-Build Alternative because this alternative would not involve any new development on the West 97th Street Project Site. Since this alternative would not involve any new development on the West 97th Street Project Site, unlike the Proposed Project, the West 106th Street Redevelopment Alternative would not result in significant adverse traffic impacts at the intersections of West 97th Street and Amsterdam Avenue and West 97th Street and Columbus Avenue. However, as discussed above, traffic improvement measures have been identified for the Proposed Project to address these potential significant adverse traffic impacts. In addition, as with the No-Build Alternative, any as-of-right development that could occur on the Project Site in the future (i.e., development that does not require a discretionary approval or permit from the city or a state agency) would result in similar soil disturbance as the Proposed Project. While the petroleum spill would be remediated and applicable regulations for the handling and appropriate disposal of excavated and contaminated soil would be followed in the case of any as-of-right development on the Project Site, such development would not require the implementation of a NYSDOH-approved RAP or CHASP, including air monitoring. Along West 106th Street, the environmental effects of this alternative would be similar to existing conditions.
123. Unlike the Proposed Project, the West 106th Street Redevelopment Alternative would result in disruption to the existing JHL residents. In order to facilitate construction of the new nursing care facility and the new residential development on the West 106th Street site, JHL would need to reduce the number of nursing home residents to 328, so that only a portion of the existing facility would be occupied. To construct this alternative the unoccupied portion of the existing facility would be demolished and the new nursing facility would be built on that site. Demolition of the existing facility would require approximately 6 to 8 months and construction of the new nursing facility would require approximately 24 to 30 months. Upon completion of the new nursing care facility, residents would be relocated to the new facility. As a result, this alternative would result in significant disruption to the nursing care facility's operations as compared with the Proposed Project. Although construction of the West 106th Street Redevelopment Alternative would not be directly adjacent to a public school, under this

alternative, a different sensitive population, residents of the nursing care facility, would be located immediately adjacent to ongoing construction activities while the new nursing care facility is completed. With the Proposed Project, nursing facility residents would be relocated from West 106th Street to West 97th Street once the new facility on West 97th Street is completed. Thus, there would be no interruption to the care of the nursing home residents and no construction activities would occur adjacent to the nursing care facility while it is occupied. Also, with the Proposed Project, JHL would not lose an additional 111 beds.

124. Consequently, the West 106th Street Redevelopment Alternative would neither be consistent with the goals nor the objectives of the Proposed Project. This alternative would not result in an efficient new nursing care facility to the same extent as the Proposed Project. Because of the smaller size of the facility under this alternative, the amount of common space, infrastructure, and support areas must, while reduced, would still be disproportionately sized for a smaller number of beds. This, in turn, makes the facility under this alternative more costly to operate, since fewer beds must support similar overhead cost. Moreover, the design of this alternative, with longer corridors than proposed under the Proposed Project, would result in greater inefficiencies for providing services to the residents and would hamper the independence of the residents. The new nursing care facility developed under the West 106th Street Redevelopment Alternative would not require any additional parking spaces.
125. Although a Green House-model facility could be constructed on the West 106th Street site, such a facility would only contain 156 beds, 258 fewer beds (62 percent less) than the Proposed Project, and would also be an economically inefficient facility that would not be viable to operate. The Green House Project is a national organization that sets forth operational and architectural standards necessary for a project's layout and design to be considered a Green House building, and reviews local Green House projects according to these design and quality standards. Unlike a traditional design with rooms located along a corridor, each Green House home must include a maximum of 12 elders living in private rooms only, organized adjacent to the hearth area — which includes the living room, dining room, and kitchen — with short corridors. Each home must also include fenced outdoor space, significant window areas in all common areas, and there must be visual sight lines from the kitchen to the majority of the hearth area, bedrooms, and outdoor space. Each private bedroom must contain a private, full bathroom and natural light. In a high-rise building, a Green House project may include one or more independent Green House homes per floor, but they must each have separate entries and no connections except for a shared elevator lobby or hallway. Due to the narrower floor plates on the West 106th Street site, the building design of the West 106th Street Redevelopment Alternative would have a more traditional, linear layout, with common spaces in one location and long double-loaded corridors to connect resident rooms to those common areas. To accommodate the maximum number of residents on floor plates with a limited amount of exterior window space, this alternative would include semiprivate long-term-care bedrooms, which are not permitted under the Green House model. In addition, these semiprivate rooms would not conform to the Green House-model design principles that require private rooms to be adjacent to the common spaces and sight lines

between these areas to be maintained, and they would not be able to provide a window for each resident. In contrast, the Proposed Project would provide private long-term-care bedrooms and, thus, every resident would have a dedicated bedroom window. With the Proposed Project, each 12-bed Green House home would have a porch. The West 106th Street Redevelopment Alternative would not be able to provide outdoor space for each home because it would further reduce the number of residents in the building, and would require longer travel distances between bedrooms and dining rooms, which serve as physical and psychological barriers for residents.

126. Overall, this alternative would not be consistent with the goals and objectives of the Proposed Project because it would result in an inefficient facility that would not meet Green House design principles to the same extent as the Proposed Project. This alternative would also result in significant disruption to the nursing care facility's operations as compared to the Proposed Project. Moreover, unlike the Proposed Project, it is expected that this alternative would continue to present physical challenges that would negatively impact residents' quality of life, mobility, privacy, and independence as well as significantly reduce the number of nursing home residents that could be served by in a redeveloped facility.
127. *Crane Relocation Alternative.* During public review of the *DEIS*, commenters expressed concern about the proximity of the tower crane to P.S. 163 during construction. The following analysis presents an alternative in response to those public comments. The Crane Relocation Alternative would involve the development of the same Green House-model, replacement, nursing care facility as the Proposed Project on the Project Site, but would involve locating the tower crane southeast of the proposed building near West 97th Street during construction, as compared to locating the crane west of the proposed building for the Proposed Project. Tishman Construction Corporation, a construction management firm with considerable experience on construction projects of comparable size and complexity to the Proposed Project in New York City, closely examined the feasibility of the Crane Relocation Alternative and determined that although the Crane Relocation Alternative would result in a reduction in staging area at the associated southern portion of the Project Site along West 97th Street, this alternative would neither adversely affect the construction schedule and staging logistics, nor result in significant added construction costs for the Proposed Project. However, there would be additional material staging to the west of the proposed building under this alternative as a result of vacated space by the original location of the tower crane. In addition, the construction truck access point on the southeast portion of the Project Site would need to be relocated farther west under this alternative to accommodate the footprint of the tower crane. This would require the removal of approximately 2 additional existing street trees (for a total of 5 street trees along the West 97th Street frontage of the Project Site as compared to the Proposed Project). Further, there would be a decrease in the West 97th Street curb-lane staging area. However, construction-related truck deliveries to the Project Site would be highly regimented and scheduled to minimize any potential off-site queuing. In order for the boom of the tower crane to reach the farthest extents of the proposed building under this alternative, the

length of the boom would be longer than that originally contemplated for the Proposed Project.

128. Although the tower crane in the Crane Relocation Alternative would be located farther away from P.S. 163, the tower crane at this alternative placement would be located much closer to 784 Columbus Avenue (residential building within the PWV complex to the east of the Project Site) and 122 West 97th Street (residential building south of the Project Site across West 97th Street). As with the construction of the Proposed Project, the Crane Relocation Alternative would not compromise public safety in the surrounding area during construction. NYCDOB would oversee the installation and operation of the tower crane to ensure safe operation of the equipment and as with the construction of the Proposed Project, construction activities for the Crane Relocation Alternative would be undertaken with the care mandated by the close proximity of sensitive receptor locations to the Proposed Project. As with the Proposed Project, the tower crane under this alternative would be programmed to limit its swing such that no loads or any part of the crane would hang over the nearby P.S. 163 or nearby residential buildings. In addition, during severe wind conditions, the tower crane would cease operations, carry no load, and would be under a weathervane condition so as to prevent it from resisting the prevailing winds and risking a potential snap or collapse. This weathervane condition is a specific safety measure mandated by NYCDOB during severe weather conditions. The final determination of the crane location is subject NYCDOB and NYCDOT approval.

129. Operational Effects. The operational environmental effects of this alternative would be the same as under the Proposed Project because it would involve construction of the same Green House-model nursing facility. As the Crane Relocation Alternative would generate the same traffic as the Proposed Project, it would result in the same significant adverse traffic impacts at the intersections of West 97th Street and Amsterdam Avenue and West 97th Street and Columbus Avenue. However, traffic improvement measures have been identified for the Proposed Project to address these potential significant adverse traffic impacts; these same improvement measures would be implemented under the Crane Relocation Alternative.

130. Construction Effects. The Crane Relocation Alternative would generate the same construction traffic as the Proposed Project. Therefore, based on the illustrative construction schedule presented in Chapter 13, "Construction," as with the construction of the Proposed Project, the Crane Relocation Alternative would be expected to result in the potential for a significant adverse traffic impact at the West 97th Street and Amsterdam Avenue intersection during the Weekday p.m. peak hour of the peak-construction period. Subject to review and approval by NYCDOT, this potential significant adverse impact could be fully mitigated by shifting 2 seconds from the southbound phase to the westbound phase.

131. As discussed above, the tower crane would be located farther away from P.S. 163 under this alternative. As with the construction of the Proposed Project, the starting elevation of the tower crane under this alternative would be approximately 75 feet (taller than the nearby P.S.

163) and would rise as the building progresses upwards. Therefore, the receptors surrounding P.S. 163 and the P.S. 163 Annex east trailer would experience noise levels similar or less than those predicted for the Proposed Project. In contrast, the tower crane would be located much closer to 784 Columbus Avenue and 122 West 97th Street under the Crane Relocation Alternative as compared to the Proposed Project. In addition, these residential buildings are taller than the starting elevation of tower crane. Therefore, the buildings would experience an increase in noise levels under this alternative during superstructure activities as compared to those predicted for the Proposed Project until the crane is elevated well above the building lines. Similar to the Proposed Project, the balconies on various floors of these buildings may experience significant noise impacts under the Crane Relocation Alternative. However, as with the construction of the Proposed Project, it should be noted that even during the portions of the construction period that would generate the most noise at these balconies, the balconies could still be enjoyed without the effects of construction noise outside of the hours that construction would occur, e.g. during late afternoon, nighttime, and on weekends under the Crane Relocation Alternative. At these outdoor balconies, there would be no feasible or practicable mitigation to lessen the construction noise impacts. Therefore, as with the construction of the Proposed Project, these balconies would be considered to experience temporary unmitigated significant noise impacts as a result of construction activities under the Crane Relocation Alternative.

132. The operational environmental effects of this alternative would be the same as under the Proposed Project because it would involve construction of the same Green House-model nursing facility. While there may be slightly greater impacts related to loss of truck queuing on the curb lane and increased noise levels at the adjacent, elevated residential balconies, this alternative crane location would result in comparable construction effects as the Proposed Project. Overall, the Crane Relocation Alternative would be consistent with goals and objectives of the Proposed Project, but it would not avoid any of the Proposed Project's significant adverse impacts to construction traffic and noise and operational traffic.
133. *No Significant Adverse Impacts Alternative.* The No Significant Adverse Impacts Alternative considered a project that would avoid or minimize the significant adverse impacts identified with the Proposed Project in the areas of operational and construction traffic and construction noise. As discussed elsewhere in this EIS, the Proposed Project would result in the potential for significant adverse impacts in the areas of operational and construction traffic and construction noise. The Proposed Project would not result in any significant adverse impacts in the other technical areas assessed. The No Significant Adverse Impacts Alternative addresses operational or construction related impacts that could be minimized or eliminated. As this alternative would be smaller than the Proposed Project, its effects would be comparable or more limited in the technical areas for which the Proposed Project would not result in significant adverse impacts. In order to avoid the potential for significant adverse impacts, the program for the nursing care facility on the Project Site would have to be reduced to 57 beds. A nursing care facility of this size would not generate enough trips to result in a LOS deterioration that would result in a significant adverse impact at either of these intersections. However, a 57-bed alternative would not be consistent with the goals and

objectives of the Proposed Project, and would serve very few residents in the community and the borough. A facility under this alternative would be more costly to operate since fewer beds would support similar overhead cost. Further, the significant adverse traffic impacts that would result from the Proposed Project could be fully mitigated.

134. Both the temporary traffic impacts due to the construction of the Proposed Project and the temporary unmitigated noise impacts at residential balconies would be avoided if there were no construction on the Project Site. However, this would not meet the goal of the Proposed Project to provide a new, state-of-the-art facility using the innovative Green House model of long-term care nor would it be economically feasible. Any future development on the Project Site would result in temporary traffic and noise disruption to the surrounding community during construction.
135. As detailed above, neither the No-Build Alternative, the West 106th Street Redevelopment Alternative, nor the No Significant Adverse Impacts Alternative would meet JHL's goals and objectives for the Proposed Project. While the Crane Relocation Alternative would be consistent with goals and objectives of the Proposed Project, it would not avoid any of the Proposed Project's significant adverse impacts to traffic and construction traffic and noise. Therefore, there is no reasonable alternative to the Proposed Project that would substantively meet the goals and objectives of the Proposed Project while also avoiding a significant adverse impact to construction traffic and noise and operational traffic.

Selection of Preferred Alternative

136. There is no reasonable alternative to the Proposed Project that would substantively meet the goals and objectives of the Proposed Project while also avoiding a significant adverse impact to operational and construction traffic and construction noise. However, having considered the Crane Relocation Alternative, which would involve locating the tower crane south of the proposed building parallel to West 97th Street during construction and the evaluation of that alternative against locating the tower crane to the west of the proposed building as originally proposed, as well as the concern expressed by members of the public regarding the placement of the crane immediately adjacent to P.S. 163 under the Proposed Project, NYSDOH has designated the Crane Relocation Alternative as the preferred alternative for achieving the project's goals and objectives during construction. It is NYSDOH's judgment that the action chosen is the one that minimizes or avoids environmental impacts to the maximum extent practicable and that this *Findings Statement* articulates NYSDOH's balancing of adverse environmental impacts against the needs for and benefits of the Proposed Action.
137. Additionally, the measures for *Mitigation of Construction Impacts from Traffic*, the *Mitigation of Operational Impacts from Transportation – Traffic Flow Operating Conditions* and *Transportation – Vehicular and Pedestrian Safety Assessments*, as well as the *Construction Impact Avoidance Measures for Hazardous Material and Noise* identified herein

will be incorporated as conditions to NYSDOH's approval of the subject construction application.

138. As noted herein, the aforementioned construction noise impacts on P.S. 163 are not deemed a significant adverse noise impact pursuant to the *CEQR Technical Manual* guidelines because the impacts are properly considered short-term construction impacts. The *FEIS* concludes that proposed construction would cause elevated noise level increments exceeding *CEQR Technical Manual* impact criteria for no more than 9 consecutive months (14 months total), which is less than the 24 or more consecutive month period used under the *CEQR Technical Manual* to define a long-term construction impact. Nevertheless and as previously noted, NYSDOH finds that installation of the acoustical windows on the eastern façade of P.S. 163 and installation of window air conditioning units in the classrooms without functioning units is an appropriate measure to address the short-term construction noise impacts to P.S. 163 identified in the *FEIS*. However, in the event that NYCDOE fails to approve and schedule installation of the acoustical windows and new window unit air conditioners required pursuant to this *Findings Statement* in a reasonable period of time (approval and scheduling no later than 6 months following the issuance of these findings), despite JHL's reasonable efforts to obtain such approval, JHL may move forward with project construction without installation of the noise attenuating windows and window unit air conditioners. In such case, the short-term construction impacts identified in the *FEIS* without the noise attenuating windows in place would not be mitigated. NYSDOH finds that the benefits to be achieved with the proposed new nursing facility outweigh any such short-term, unmitigated, construction noise impacts on P.S. 163 and that it is not reasonable to require JHL to defer construction longer than 6 months to obtain such approval.

CERTIFICATION OF FINDINGS TO APPROVE/FUND/UNDERTAKE

Having considered the *Draft EIS* and *Final EIS*, including all comments submitted through the *SEQR* process and responses thereto, and having considered the preceding written facts and conclusions relied upon to meet the requirements of the *State Environmental Quality Review Act*, codified at Article 8 of the New York *Environmental Conservation Law*, and its implementing regulations, promulgated at Part 617 of Title 6 of the *N.Y.C.R.R.*, including 6 *N.Y.C.R.R.* § 617.11, and the *SEORA* regulations of the New York State Department of Health at Part 97 of Title 10 of the *N.Y.C.R.R.*, this *Findings Statement* certifies that:

1. The requirements of the *State Environmental Quality Review Act*, and its implementing regulations, 6 *N.Y.C.R.R.* Part 617, have been met and fully satisfied; and
2. Consistent with the social, economic and other essential considerations from among the reasonable alternatives thereto, the action approved is one which minimizes or avoids adverse environmental effects to the maximum extent practicable, including the impacts disclosed in the *FEIS* and set forth in this *Findings Statement*; and
3. Consistent with the social, economic and other essential considerations the significant adverse impacts of the proposed action revealed in the *FEIS*, through the *SEQR* process and set forth in this *Findings Statement*, have been minimized or avoided or minimized by incorporating as conditions to this decision those mitigative measures which were identified as practicable.

New York State Department of Health (NYSDOH)

(Name of Agency)



(Signature of Responsible Official)

James M. Clancy

(Name of Responsible Official)

Director, Center for Health Care Facility
Planning, Licensure and Finance

(Title of Responsible Official)

December 10, 2014

(Date)

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