Chapter 17: Alternatives

A. INTRODUCTION

The purpose of an analysis of alternatives to the proposed project, as set forth in the 2012 *CEQR Technical Manual*, is to provide the decision makers with the opportunity to consider practicable alternatives that are consistent with the project's purpose, and that could potentially reduce or eliminate significant adverse environmental impacts identified in this SEIS.

Consideration of a No Action Alternative is mandated by the State Environmental Quality Review Act (SEQRA) and CEQR, and is intended to provide the lead and involved agencies with an assessment of the consequences of not selecting the proposed actions. Consistent with these requirements, this chapter examines a No Action Alternative (the "future without the proposed project") to the proposed project. The technical chapters presented in this SEIS have described the future without the proposed project, and have used it as the basis to assess the potential impacts and associated mitigation for the proposed project. Under the No Action Alternative, the proposed project would not be built, the mid- and western portions of the block would be developed with a commercial building that would comply with existing zoning and approvals for the project block, and the existing mini-storage facility would remain as in existing conditions.

CEQR also recommends the examination of alternatives that would substantively reduce or eliminate impacts of a proposed action while meeting the goals and objectives of a proposed action. As the proposed project could result in significant adverse impacts to air quality, a No Impact Alternative is considered.

B. SUMMARY OF 2001 FEIS FINDINGS

The 2001 *FEIS* considered three alternatives: a No Action Alternative, in which the 2001 existing uses would have remained on the project block (and was the same as the "Future without the Proposed Project" in the 2001 *FEIS*); an As-of-Right Alternative, in which development conforming to the project block's then M2-3 zoning would have been constructed; and a Rezoning Only Alternative, in which development would have occurred under a proposed rezoning, without special permits for general large-scale bulk modifications and public parking garages. The alternatives analyzed in the 2001 *FEIS* would have resulted in impacts similar to or lesser than the proposed development presented in that document.

C. NO ACTION ALTERNATIVE

For the currently proposed project, the No Action Alternative would mean that the proposed residential building with commercial, community facility, and parking uses would not be constructed. Instead, development on the projected development sites would be within the envelope of the development analyzed in the 2001 *FEIS*, but with a smaller commercial building containing approximately 331,300 gsf of office use, 67,500 gsf of retail use and 239 public

parking spaces on projected development site 1. In the No Action Alternative, there would be no change in the assumed development of projected development site 2; the existing mini-storage building would remain. As described Chapter 1, "Project Description," the assumption regarding projected development site 1 is based on the fact that the applicant has applied for a building permit for such a building (the permitted building). The permitted building can be constructed under the land use approvals granted in 2001 without further discretionary approvals or actions. It would be smaller than that which is permitted under current zoning, and, accordingly, assuming that development on projected development site 1 as a basis for comparing the impacts of the proposed project to the future without the proposed project is more conservative than using the more fully built out development scenario that was analyzed in the 2001 *FEIS.*

As with the proposed project, this alternative would not result in adverse impacts on land use, zoning, and public policy, socioeconomic conditions, community facilities, open space, shadows, historic and cultural resources, urban design and visual resources, natural resources, hazardous materials, water and sewer infrastructure, solid waste and sanitation services, energy, transportation, greenhouse gases, noise, public health, neighborhood character, and construction impacts. This alternative would not result in a significant air quality impact.

LAND USE, ZONING AND PUBLIC POLICY

Under the No Action Alternative, the project site would be developed with new construction of approximately 331,300 gsf of office use and 67,500 gsf of retail uses and 239 public parking spaces on projected development site 1. The permitted building would be five stories tall (95 feet) with office uses and ground floor retail. Parking would be accessed from a midblock access drive that would extend between West 57th and West 58th Streets and from an additional midblock entrance along West 58th Street. Under the No Action Alternative, the mini-storage facility on projected development site 2 would remain as in existing conditions.

As with the proposed project, there would be no significant adverse impacts with respect to land use, zoning, or public policy. However, the No Action Alternative development would not maximize the allowable floor area, height, or bulk under the 2001 zoning and approvals because there has been no demonstrated market at this location for either commercial or light manufacturing development of the size permitted each under the those 2001 approvals. The No Action development building would result in a smaller office and retail building than permitted under the 2001 approvals and analyzed in the 2001 *FEIS.*

SOCIOECONOMIC CONDITIONS

Like the proposed project, the No Action Alternative would not result in either direct or indirect business or residential displacement impacts, and would not have any adverse effects on specific industries.

DIRECT RESIDENTIAL DISPLACEMENT

Like the proposed project, the No Action Alternative would not directly displace any residents from the project block, and would not result in any significant adverse impacts due to direct residential displacement

INDIRECT RESIDENTIAL DISPLACEMENT

Neither the No Action alternative nor the proposed project would result in significant adverse impacts due to indirect residential displacement. The No Action Alternative would not introduce any affordable housing units to the project site. With the proposed project, it is anticipated that up to 151 residential units, or 20 percent of the units on projected development site 1, would be affordable units.[1] So while neither the No Action Alternative nor the proposed project would result in significant adverse indirect residential displacement impacts, the No Action Alternative would not meet the proposed project's goal of providing new residential uses, including affordable housing units.

DIRECT BUSINESS AND INSTITUTIONAL DISPLACEMENT

Compared with the proposed project, the No Action Alternative would not displace the mini-storage business currently located on projected development site 2, which is estimated to contain approximately 7 employees. This number of employees is well below the 2012 *CEQR Technical Manual* threshold of 100 employees that would require an assessment of direct business displacement, and its displacement would not constitute a significant adverse impact. Therefore, neither the No Action Alternative nor the proposed project would result in significant adverse impacts due to direct business and institutional displacement.

INDIRECT BUSINESS AND INSTITUTIONAL DISPLACEMENT

Like the proposed project, the No Action Alternative would not result in any significant adverse impacts due to indirect business or institutional displacement. As compared with the proposed project, the No Action Alternative would introduce more commercial office uses and a similar amount of retail space, but these uses would not be new types of economic activities in the study area, nor would they be expected to alter or accelerate an ongoing trend to alter existing economic patterns. Therefore, like the proposed project, the No Action Alternative would not result in any significant adverse impacts due to indirect business or institutional displacement.

ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

Like the proposed project, the No Action Alternative would not result in any significant adverse impacts due to adverse effects on specific industries. Similar to the proposed project, the No Action Alternative would not significantly affect business conditions in any specific industry or any category of businesses, nor would it indirectly reduce employment or impair the economic viability of any specific industry or category of business.

COMMUNITY FACILITIES AND SERVICES

As with the proposed project, the No Action Alternative would not result in any significant adverse impacts with regard to library services, police services, fire protection, and emergency medical services. The No Action alternative would not have any residential uses, and would not create any demand on public elementary and intermediate schools.

[1] The proposed actions are being requested to facilitate the applicant's proposed project, in which it intends to include up to 151 affordable units.

OPEN SPACE

Similar to the proposed project, the No Action Alternative would not alter or displace any existing public open space resources. Unlike the proposed project, the No Action Alternative would not introduce any new residents to the project block, and therefore would not affect open space conditions within the residential open space study area (defined as the area within approximately a ½ mile of the project block). As with the proposed project, the residential study area would continue to have insufficient amounts of open space to meet the City's open space planning guidelines of 2.5 total acres of open space and 2.0 acres of active open space per 1,000 residents.

The No Action Alternative would introduce more commercial office space and more workers to the project block than the proposed project. Because it would introduce more workers to the project block, it would place greater demands on passive open spaces within a ¼ mile of the project site than the proposed project. However, neither the No Action Alternative nor the proposed project would result in significant adverse impacts on open space.

SHADOWS

The 95-foot No Action building would cast very limited and brief shadows on the Route 9A bikeway and Hudson River Park early in the mornings of the May 6/August 6 and June 21 analysis, and a small area of new shadow on the Hudson River on the morning of the December 21 analysis day. It would not cast new shadows on any sun-sensitive resources on the March 21/September 21 analysis day. Compared with the proposed project, the No Action alternative would not cast new shadows on any other sun-sensitive resources, including the Parcel "O" Plaza, as discussed in Chapter 6, "Shadows." However, as with the proposed project, the incremental shadow resulting from the No Action development would not result in any significant adverse impacts on any sun-sensitive resources.

HISTORIC AND CULTURAL RESOURCES

As described in Chapter 7, "Historic Resources," the project block is not considered to be sensitive for archaeological resources. Therefore, as with the proposed project, the No Action Alternative would not result in any significant adverse impacts to archaeological resources.

With regard to architectural resources, the No Action Alternative, similar to the proposed project, would result in construction within 90 feet of the Consolidated Edison Power House (S/NR-eligible, NYCL-pending). Both the No Action Alternative and the proposed project would comply with New York City Landmarks Preservation Commission (LPC) *Guidelines for Construction Adjacent to Historic Landmarks* as well as the guidelines set forth in section 523 of the *CEQR Technical Manual* and the procedures set forth in New York City Department of Buildings (DOB) *Technical Policy and Procedure Notice* (TPPN) #10/88. Therefore, the Consolidated Edison Power House would not be expected to be adversely affected by the No Action Alternative or the proposed project's construction-related activities. In addition, neither the No Action Alternative nor the proposed project would result in any significant contextual impacts to architectural resources.

URBAN DESIGN AND VISUAL RESOURCES

As with the proposed project, a new building would be constructed on projected development site 1 with the No Action Alternative. The No Action Alternative would result in a five story (95

feet) tall building with office, retail, and parking uses. The mini-storage facility on projected development site 2 would remain in its current form and use. Therefore, with the No Action Alternative, a smaller office and retail building than permitted under the 2001 approvals and analyzed in the 2001 *FEIS* would be constructed.

As with the proposed project and the 2001 *FEIS* development, the No Action Alternative would not result in any changes to natural features, open spaces, or streets in the study area. Like proposed project and the 2001 *FEIS* development, the No Action Alternative would alter the visual character of the surrounding area, but this character is already changing through the various recently developed residential towers and new institutional buildings and buildings currently under construction. The No Action Alternative—like the proposed project and the 2001 *FEIS* development—would change projected development site 1 from its current vacant status, enlivening the site with new buildings and users, although the mix of uses would be different. No private, outdoor open space for residents would be provided on the project site in the No Action Alternative. From certain vantage points within Hudson River Park, the full bulk of the Consolidated Edison Power House would no longer be visible beyond the development on projected development site 1; however, views to this resource would still be available from other locations within the park. Neither the No Action Alternative nor the proposed project would result in any significant adverse impacts on urban design and visual resources.

HAZARDOUS MATERIALS

The No Action Alternative would require a similar amount of subsurface disturbance to the proposed project. Development of the site in accordance with the measures and programs specified in the 2001 *FEIS* as modified by the existing RAWPs for projected development site 1 would avoid the potential for any significant adverse impacts.

For the remainder of Projected Development Site 1 (i.e., the parking area on Lot 36 west-adjacent to Manhattan Mini-Storage) and Projected Development Site 2 (including the Manhattan Mini-Storage building), all interior work and any required demolition would be in compliance with applicable regulatory requirements relating to, for example, asbestos-containing materials, lead-based paint, PCBs, mercury and other waste disposal. But, unlike the proposed project, an RAWP would not be required for subsurface disturbance, as there would be no (E) designation recorded against the project site. However, applicable regulatory requirements, e.g., those relating to petroleum tanks/spills and waste disposal, as well as the measures specified in the 2001 *FEIS*, would still be followed to avoid any significant adverse impacts related to hazardous materials.

TRANSPORTATION

The No Action Alternative itself would result in commercial office and retail, medical office, and parking uses on projected development site 1. The existing mini-storage use would remain on projected development site 2. There would also be increased volumes from background growth and other proposed development projects in the vicinity of the project site. The No Action Alternative would result in constrained movements (operations at mid-Level of Service [LOS] D or worse) at the same locations as the proposed project. However, as with the proposed project, the No Action Alternative would not result in any significant adverse traffic impacts.

Under the No Action Alternative, there would be 239 new public parking spaces on the project block, compared with 285 accessory parking spaces in the proposed project. As with the proposed project, the existing 100 space accessory parking garage in The Helena would remain,

for a total of 385 accessory spaces on the project block. Like the proposed project, the No Action Alternative would not result in any significant adverse parking impacts.

As with the proposed project, the No Action Alternative would experience minimal deterioration in levels of service. All pedestrian elements would operate at mid-LOS D or better, with many operating at LOS A and B. Like the proposed project, the No Action Alternative would not result in any significant adverse transit or pedestrian impacts.

AIR QUALITY

The No Action Alternative would result in increased traffic compared to existing conditions. As with the proposed project, the No Action Alternative would not result in any significant increase in traffic and would therefore not result in any significant adverse air quality impact from mobile sources of emissions at intersections in the study area. Under the No Action Alternative, there would be 239 new public parking spaces on the project block, compared with 285 accessory parking spaces in the proposed project. Like the proposed project, the No Action Alternative would not result in any significant adverse air quality impacts from parking facilities.

Like the proposed mixed-use building on projected development site 1, the No Action Alternative's commercial and retail development would have heating, ventilation and air conditioning (HVAC) systems that would use natural gas. The No Action development would have a smaller development size as compared to projected development site 1 analyzed for the proposed project and would therefore have lower pollutant emissions. However, since it would be shorter in height compared to projected development site 1, restrictions for the placement of exhaust stacks for fossil fuel-fired HVAC systems would potentially be necessary to ensure there would be no significant adverse air quality impacts at nearby sensitive receptor locations. The proposed restrictions on the community facility portion of projected development site 1 and projected development 2 regarding the placement of exhaust stacks for fossil fuel-fired HVAC systems would not be required under the No Action Alternative.

GREENHOUSE GAS EMISSIONS

Overall, the No Action Alternative would result in less development, and would use less energy than the proposed project. However, since greenhouse gas (GHG) emissions are a global problem, not a local one, this does not imply that there would be less emissions. Ultimately, residential uses similar to those in the proposed project may be developed in areas not as well served by transit, with an unknown level of energy efficiency. The No Action commercial development on-site is expected to include efficient heating, ventilation, and cooling systems and undergo commissioning to ensure proper operation resulting in energy efficient use of the systems, and would benefit from the same transit available to the proposed project. However, unlike the proposed project, development under the No Action Alternative would not benefit from the advantages of mixed-use development. As is the case with any as-of-right development in the city, it would not undergo detailed analysis aimed at reducing energy use and GHG emissions, but would be required to meet current building energy code, and would be treated as any existing building under future efforts by the City to meet the PlaNYC energy and GHG goals.

NOISE

Under the No Action Alternative, as with the proposed project, traffic on roadways near the proposed project site, which is the dominant source of noise at the project site, would increase,

and consequently noise levels at and adjacent to the project site would be comparable to those in the No Action condition. In order to preclude the potential for significant adverse noise impacts, the 2001 *FEIS* identified a closed window condition with a minimum of 35 dB(A) window/wall attenuation to maintain an interior noise level of 45 dB(A) for residential uses uses. For a commercial development, the requirement would be 30 dB(A) of attenuation in order to maintain an interior noise level of 50 dB(A). An (E) designation was placed on the site to reflect these requirements. Development under the No Action Alternative would be required to satisfy these requirements.

PUBLIC HEALTH

Neither the No Action Alternative nor the proposed project would result in potentially significant adverse impacts on public health.

NEIGHBORHOOD CHARACTER

Like the proposed project, the No Action Alternative would result in beneficial effects to neighborhood character by enlivening the project site with new uses. However, unlike the proposed project, the No Action Alternative would not introduce residential uses (including affordable housing) or community facility uses to the project block, nor would it replace the existing mini-storage use on projected development site 2. As a result, the No Action Alternative would result in lesser improvements to neighborhood character compared to conditions without the proposed project. Overall, neither the proposed project nor the No Action Alternative would result in any significant adverse impacts to neighborhood character.

CONSTRUCTION IMPACTS

As with the proposed project, the No Action Alternative would not result in any significant adverse impacts with respect to construction. Overall, construction would take place over a period of 25 months for the No Action Alternative, compared with 42 months with the proposed project. While excavation and foundation work for the No Action Alternative and the proposed project would be the same, the subsequent tasks, superstructure, exteriors, and interiors would be shorter for the No Action Alternative. Because construction activities would be of a shorter duration and intensity under the No Action Alternative (and demolition, excavation, and foundations for the No Action Alternative would take approximately 13 months, less than the 2012 *CEQR Technical Manual* threshold of 24 months requiring detailed analysis), like the proposed project, the No Action Alternative would not result in significant adverse impacts with respect to construction-related transportation, air quality and noise.

With regard to architectural resources, the No Action Alternative, similar to the proposed project, would result in construction within 90 feet of the Consolidated Edison Power House (S/NR-eligible, NYCL-pending). Both the No Action Alternative and the proposed project would comply with LPC *Guidelines for Construction Adjacent to Historic Landmarks* as well as the guidelines set forth in section 523 of the *CEQR Technical Manual* and the procedures set forth in DOB's TPPN #10/88. Therefore, the Consolidated Edison Power House would not be expected to be adversely affected by the No Action Alternative or the proposed project's construction-related activities. In addition, neither the No Action Alternative nor the proposed project would result in any significant contextual impacts to architectural resources.

Development of the site under the No Action Alternative would be performed in accordance with the measures and programs specified in the 2001 *FEIS* as modified by the existing RAWPs

for projected development site 1, and therefore would avoid the potential for any significant adverse impacts. For the remainder of projected development site 1 (i.e., the parking area on Lot 36 west-adjacent to Manhattan Mini-Storage) and projected development site 2 (including the Manhattan Mini-Storage building), all interior work and any required demolition would be in compliance with applicable regulatory requirements relating to, for example, asbestos-containing materials, lead-based paint, PCBs, mercury and other waste disposal. But, unlike the proposed project, an RAWP would not be required for subsurface disturbance. However, applicable regulatory requirements, e.g., those relating to petroleum tanks/spills and waste disposal, would still be followed to avoid any significant adverse impacts related to hazardous materials.

Under the No Action Alternative, construction would, in some instances, temporarily affect pedestrian and vehicular access on street frontages immediately adjacent to the project site. However, as with the proposed project, lane and/or sidewalk closures are not expected to occur in front of entrances to any existing retail businesses or frontages, and construction activities would not obstruct major thoroughfares used by customers or businesses. In addition, throughout construction of the No Action Alternative, access to surrounding residences, businesses, and institutions in the area would be maintained. Therefore, as with the proposed project, the No Action Alternative would not result in any significant adverse construction-related impacts to socioeconomic conditions and land use and neighborhood character.

D. NO IMPACT ALTERNATIVES

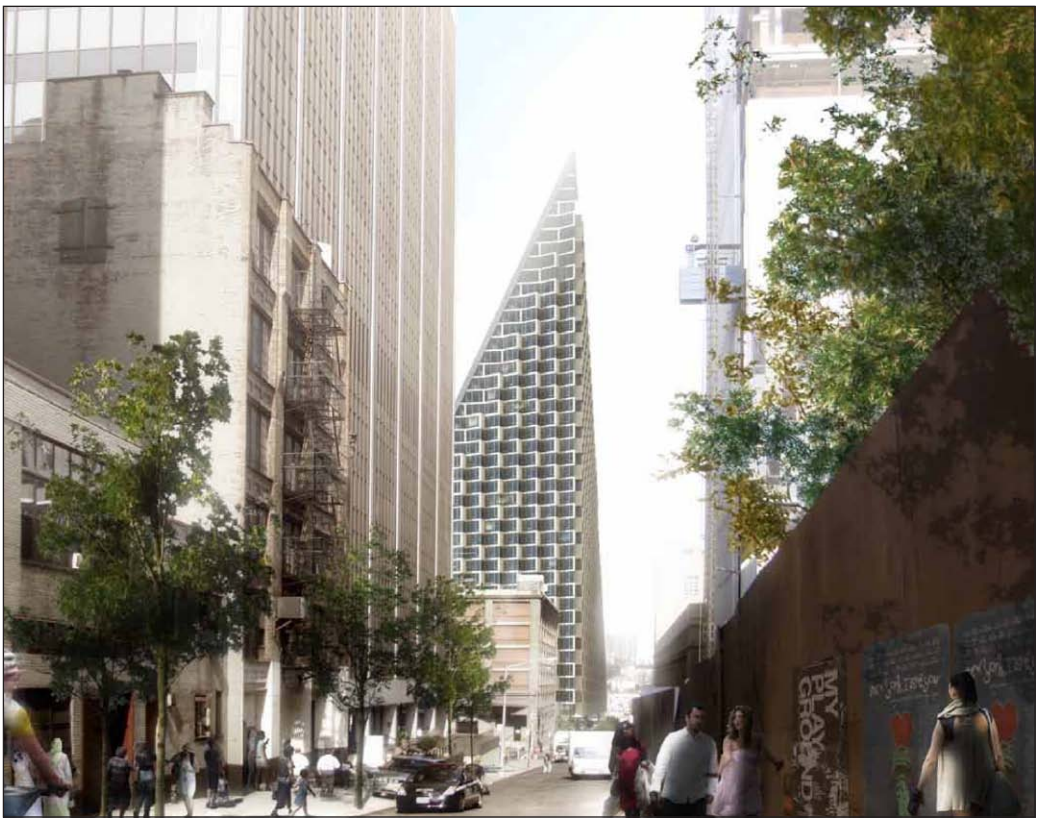
As described in Chapter 11, "Air Quality," and Chapter 20, "Mitigation Measures," potential significant adverse air quality impacts were identified in the DSEIS with the proposed project. Therefore, a wind tunnel analysis ~~will be~~ was performed to confirm whether the proposed project would result in a significant adverse air quality impact. ~~In addition, building design options will be examined for air quality impacts between the DSEIS and the FSEIS.~~ The wind tunnel modeling examined three building designs: 1) a building design with a closed condition on the top 77 feet of the building, which was initially analyzed in the DSEIS; 2) an open design with structural elements on the south façade, and louvers on the north and east façades (referred to as "Option A" in Chapter 11, "Air Quality"), which was selected as the design for the proposed project; and 3) a design which would have on the top 77 feet portion of the building a more open design with structural elements on the south, north and east façades (Option B). **Figures 17-1** and **17-2** show views of Option A and Option B, respectively, while Figure 1-9 of Chapter 1, "Project Description", shows a more detailed view of the top section of Option A. The proposed development program would not change with the alternative building design options, and as with the proposed project, this alternative would not result in adverse impacts on land use, zoning, and public policy, socioeconomic conditions, community facilities, open space, shadows, historic and cultural resources, urban design and visual resources, natural resources, hazardous materials, water and sewer infrastructure, solid waste and sanitation services, energy, transportation, greenhouse gases, noise, public health, neighborhood character, and construction impacts.

OPEN OR LOUVERED DESIGN AT THE TOP OF THE BUILDING OPTIONS

To avoid potential significant adverse impacts from the plume dispersion of the Consolidated Edison Power House boiler stack, alternative building configurations have been considered and ~~will be~~ were analyzed between the DSEIS and FSEIS for projected development site 1. These include design options that would allow air to flow through the top of the building on projected



View from Hudson River Park

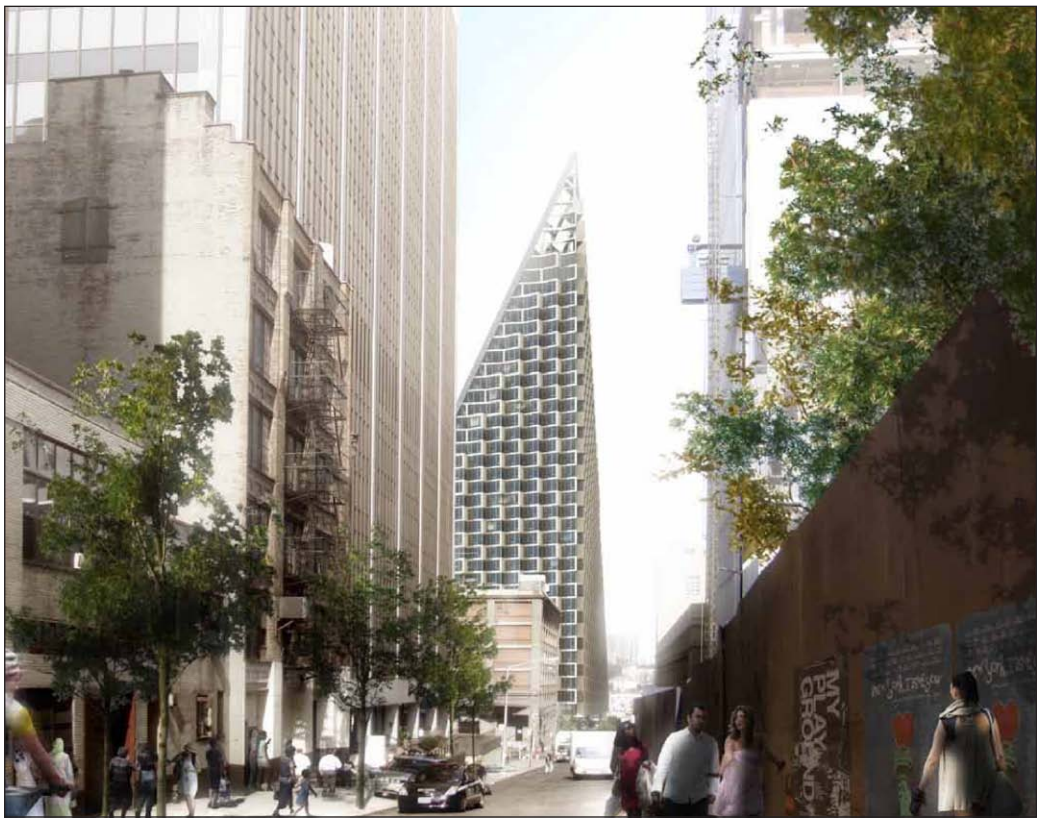


View along West 58th Street

Option A
Figure 17-1



View from Hudson River Park



View along West 58th Street

Option B
Figure 17-2

development site 1, reducing the potential effects on plume dispersion from the Consolidated Edison Power House boiler stack. **Figure 17-1** shows one option (Option A), which would have on the top 77 feet portion of the building an open design with structural elements on the south façade, and louvers on the north and east façades. A second option (Option B) is presented in **Figure 17-2**, which is very similar to Option A except instead of louvers it would be open on all sides with structural elements. ~~These design options will be analyzed in the wind tunnel between the DSEIS and FSEIS.~~ As discussed in Chapter 1, "Project Description," Option A has been selected as the design for the proposed project.

In addition to the building design options, the proposed project analyzed in the DSEIS ~~will be~~ was analyzed in the wind tunnel ~~between the DSEIS and FSEIS~~. The results of the wind tunnel analysis, which are presented in Chapter 11, "Air Quality", demonstrate that the effect on plume dispersion from the Consolidated Edison Power House due to projected development site 1 would not result in any significant adverse air quality impacts under any of the building configurations analyzed. Consequently, no mitigation measures are necessary. Therefore, any of the building configurations for projected development site 1 analyzed are considerable feasible.

~~If it found that this and/or any of the building design options would result in no significant adverse air quality impacts, any of these building design options could be selected, and air quality impacts would be considered fully mitigated.~~

~~In the event that exceedances are still projected, a reduced building height option, described below, which would fully mitigate the significant adverse impacts (as described below), would be selected and implemented.~~

REDUCED HEIGHT BUILDING

As discussed in Chapter 11, "Air Quality," ~~the~~ an air quality stationary source ~~analyses~~ analysis performed in the DSEIS concluded that the proposed project would potentially result in significant adverse air quality impacts (affecting $PM_{2.5}$~~,~~ and SO_2 ~~and NO_2~~ concentrations) on Riverside Center Building 5. ~~This impact,~~ These potential impacts would be the result of the proposed project's mixed use building (on projected development site 1) affecting the dispersion of the exhaust plume from the adjacent Consolidated Edison Powerhouse boiler stack. ~~As~~ The DSEIS concluded that as a result, higher concentrations of pollutants ~~may~~ could occur on the Riverside Center Building 5.

An analysis was performed in the DSEIS to determine whether the impacts described above can be mitigated by reducing the height of projected development site 1. The analysis was otherwise identical to the one presented in Chapter 11, "Air Quality," including emissions from both of the Consolidated Edison Power House sources and the proposed project's HVAC system. Using the AERMOD model, a building with a maximum overall height of 394 feet (77 feet lower than the height evaluated for the proposed project) resulted in predicted pollutant concentrations from the Consolidated Edison Power House that are identical to the No Build condition at existing and proposed developments. **Figure 17-3** shows the reduced height projected development site 1.[1]

As ~~shown in **Table 17-1**~~ presented in the DSEIS, the maximum predicted pollutant concentrations with the reduced height building using the EPA AERMOD dispersion model were determined to be ~~are~~ below their respective standards for the NO_2, SO_2 and PM_{10} NAAQS. Therefore, no significant adverse air quality impacts are predicted for these pollutant standards. ~~As shown in the table, at~~ At

[1] Note that there are no SO_2 emissions from the proposed project's HVAC system, since the system would use natural gas, which does not contain sulfur.



View from Hudson River Park



View along West 58th Street

Reduced Height
Figure 17-3

this reduced height, the proposed project would not affect plume dispersion from the Consolidated Edison Power House; therefore, potential air quality impacts would be fully mitigated. However, as noted earlier, based upon wind tunnel analyses conducted subsequent to the certification of the DSEIS, mitigation is not required. The wind tunnel modeling that was conducted between the DSEIS and FSEIS determined that the proposed project and/or any of the alternative building configurations analyzed, which do not involve building height reductions, would not result in any significant adverse air quality impacts.

Overall, because no significant adverse impacts were identified for any analysis area, a No Impact Alternative is no longer required as part of this FSEIS.

~~**Table 17-1**~~
~~**Future Maximum Predicted Concentrations from the Consolidated Edison Power House on Developments Within 400 feet of the Proposed Project**~~
~~**Reduced Height Building (µg/m3)**~~

~~Pollutant~~	~~Averaging Period~~	~~Concentration Due to Stack Emission~~	~~Maximum Background Concentration~~	~~Total Concentration~~	~~Standard~~
~~NO_2~~	~~Annual~~	~~1.9~~	~~67.7~~	~~69.6~~	~~100~~
	~~1-hour (1) (2)~~	~~40.3~~	~~126.1~~	~~166.4~~	~~188~~
~~SO_2~~	~~3-hour~~	~~607.9~~	~~183.2~~	~~791.1~~	~~1,300~~
	~~1-hour (3) (1)~~	~~102.7~~	~~78.5~~	~~181.2~~	~~196~~
~~PM_{10}~~	~~24-hour~~	~~12.6~~	~~63~~	~~75.6~~	~~150~~

~~**Note:**~~
~~(1) 1-Hour NO_2 concentrations were estimated using AERMOD PVMRM.~~
~~(2) Reported concentration is the maximum five-year average of the 98th percentile of daily maximum 1-hr modeled concentration added to the three-year average of the 98th percentile monitored background concentration~~
~~(3 1) Reported concentration is the maximum five-year average of the 99th percentile of daily maximum 1-hr modeled concentration added to the three-year average of the 99th percentile monitored background concentration. average combined concentration (Con Edison facility added to the ambient background).~~

~~The analysis also determined the maximum predicted increase in 24-hour and annual average $PM_{2.5}$ incremental concentrations on developments within 400 feet of the proposed project (see **Table 17-2**). On an annual basis, the maximum projected $PM_{2.5}$ increments would be below the applicable interim guidance criterion of 0.3 µg/m^3 for local impacts. As described in the Section D., *Air Quality Standards, Regulations and Benchmarks*, the city's interim guidance criteria for $PM_{2.5}$ states that 24-hour average $PM_{2.5}$ concentration increments that are predicted to be greater than 2 µg/m^3 but no greater than 5 µg/m^3 would be considered a significant adverse impact on air quality based on the magnitude, frequency, duration, location, and size of the area of the predicted concentrations. There are no receptor locations where the maximum predicted incremental concentrations of $PM_{2.5}$ would exceed 5 µg/m^3. As shown in **Table 17-2**, the maximum predicted 24-hour average $PM_{2.5}$ incremental concentration is 2.31 µg/m^3. The receptor location with the maximum continual 24-hour exposure was predicted on the south façade of Riverside Center Building 4, at an elevation of approximately 190 feet above grade. Two other receptor locations on the south façade of Riverside Center Building 4 (175 feet and 200 feet) and two locations on Riverside Center Building 3 were predicted to have a maximum predicted 24-hr average $PM_{2.5}$ incremental concentration of 2.1 µg/m^3 (225 feet and 240 feet). At each of these locations, exceedances were predicted with a maximum frequency of once per year, and only occurred in a maximum of two of the five years of data analyzed. Therefore, these 24-hour $PM_{2.5}$ concentrations are considered to be insignificant.~~

Based on the results of this analysis, the reduced height building would fully mitigate air quality impacts associated with the proposed project. If the proposed project and/or alternative configurations are not shown to mitigate the impact, the reduced height building would be implemented to ensure that there would be no significant adverse air quality impacts.

Table 17-2
Future Maximum Predicted $PM_{2.5}$ Increments from the Consolidated Edison Power House on Developments Within 400 feet of the Proposed Project
Reduced Building Height ($\mu g/m^3$)

Averaging Period	Maximum Increment	Incremental Threshold
24-Hour	2.31	5/2
Annual	0.03	0.30

Note: 24-hour $PM_{2.5}$ interim guidance criterion, > 2 $\mu g/m^3$ (5 $\mu g/m^3$ not-to-exceed value), depending on the magnitude, frequency, duration, location, and size of the area of the predicted concentrations.

✶