

Table 9-1

**Projected and Potential Development and Enlargement Sites Included in the
Hazardous Materials Assessment**

Site	Block	Lot(s)	Status
Development 1	227	63, 69, 70, 76, 80	Applicant's projected development site
Development 2	491	3	Applicant's projected development site
Development 3	579	60, 68, 70, 74	Applicant's projected development site
Development 4	598	42, 48	Applicant's projected development site
Development 5	477	35, 42, 44, 76	Projected development site
Development 6	580	52	Projected development site
Development 7	580	19	Projected development site
Development 8	597	10	Projected development site
Development 9	597	1	Projected development site
Development 10	579	1-3, 44	Projected development site
Development 11	579	5	Projected development site (conversion and enlargement)
Development 12	579	35	Projected development site
Development 13	477	57, 64, 66	Projected development site
Development 14	580	11	Projected development site
Development 15	578	75	Projected development site
Development 16	505	14	Projected development site
Development 17	597	5	Projected development site
Development 18	491	7502	Projected development site (conversion)
Development 19	597	39	Projected development site (conversion and enlargement)
Development 20	597	46	Potential development site (conversion and enlargement)
Development 21	597	7	Potential development site (conversion and enlargement)
Development 22	477	72-75	Potential development site
Development 23	578	77-79	Potential development site
Development 24	580	60	Potential development site (conversion and enlargement)
Enlargement 1	579	47	Applicant's projected enlargement site
Enlargement 2	505	1	Projected enlargement site
Enlargement 3	597	45	Projected enlargement site
Enlargement 4 ¹	505	16	Potential enlargement site
Enlargement 5	505	26	Potential enlargement site
Enlargement 6	597	32	Potential enlargement site
Enlargement 7	597	33	Potential enlargement site
Enlargement 8	597	50	Potential enlargement site
Enlargement 9	597	52	Potential enlargement site
Enlargement 10	597	51	Potential enlargement site
Enlargement 11	491	1	Potential enlargement site
Enlargement 12	491	26	Potential enlargement site
Enlargement 13	491	27	Potential enlargement site
Enlargement 14	578	70	Potential enlargement site
Enlargement 15	597	37	Potential enlargement site

Note: See Chapter 1, "Project Description," for more information on the projected and potential development sites.

¹ As discussed in the Foreword of the FEIS, since the issuance of the DEIS, a developer has purchased Block 505, Lot 16 (Potential Enlargement Site 4) and intends to utilize the available development rights as part of the adjacent One SoHo Square project. A light and air easement has been provided to the existing building on Lot 16; therefore, an enlargement is not expected to occur there in the future.

**Table 14-10
Proposed (E) Designations**

Site	Block	Lot(s)	Proposed Restriction
Projected Development Site 1	226 227	463, 69, 70, 76, 80	No operable windows or air intakes on the northern, western, and southern facades between a height of 265 feet and 290 feet above grade
Projected Development Site 2	491	2-3	Natural gas, stack location and low NO _x burners
Projected Development Site 3	579	60, 68, 70, 74	Con Edison Steam
Projected Development Site 4	598	42, 48	Natural gas; No operable windows or air intakes on the northern, eastern, and southern facades between a height of 255 feet and 300 feet above grade
Projected Development Site 5	477	35, 42, 44, 76	Natural gas and low NO _x burners
Projected Development Site 6	580	52	Con Edison Steam; no operable windows or air intakes on the northern, eastern, and western facades above a height of 470 160 feet above grade
Projected Development Site 8	597	10	Con Edison Steam
Projected Development Site 11	579	5	Natural gas, stack location and low NO _x burners
Projected Development Site 12	579	35	Natural gas, stack location and low NO _x burners
Projected Development Site 14	580	11	Con Edison Steam
Projected Development Site 15	578	75	Natural gas, stack location and low NO _x burners
Projected Development Site 16	505	14	Natural gas, stack location and low NO _x burners; no operable windows or air intakes on the northern, eastern, and southern facades above a height of 170 feet above grade
Projected Development Site 18	491	7502	Natural gas
Projected Development Site 19	598 597	5839	No operable windows or air intakes on the northern, eastern, and western facades between a height of 265 feet and 280 feet above grade
Potential Development Site 20	597	46	Natural gas, stack location and low NO _x burners
Potential Development Site 22	477	72 to 75	Natural gas, stack location and low NO _x burners
Potential Development Site 23	578	77 to 79	Natural gas, stack location and low NO _x burners
Potential Development Site 24	580	60	No operable windows or air intakes on the northern, eastern, and western facades between a height of 160 and 260 feet above grade
Projected Enlargement Site 1	579	47	Natural gas
Projected Enlargement Site 2	505	1	Natural gas, stack location and low NO _x burners; no operable windows or air intakes on the northern, eastern, and southern facades between a height of 475 and 230 245 to 320 feet above grade
Projected Enlargement Site 3	597	45	Natural gas, stack location and low NO _x burners
Potential Enlargement Site 4	505	46	Stack must meet DOB Code restrictions on placement
Potential Enlargement Site 5	505	26	Natural gas, stack location and low NO _x burners
Potential Enlargement Site 6	597	32	Stack must meet DOB Code restrictions on placement
Potential Enlargement Site 7	597	33	Stack must meet DOB Code restrictions on placement
Potential Enlargement Site 8	597	50	Stack must meet DOB Code restrictions on placement
Potential Enlargement Site 9	597	52	Stack must meet DOB Code restrictions on placement; no operable lot line windows on the western façade
Potential Enlargement Site 10	597	51	Natural gas, stack location and low NO _x burners
Potential Enlargement Site 11	491	1	Natural gas, stack location and low NO _x burners
Potential Enlargement Site 12	491	26	Natural gas and stack location
Potential Enlargement Site 13	491	27	Natural gas, stack location and low NO _x burners
Potential Enlargement Site 14	578	70	Natural gas, stack location and low NO _x burners
Potential Enlargement Site 15	597	37	Natural gas and low NO _x burners; no operable lot line windows on the eastern façade

For those sites which have a proposed (E) designation restricting fuel type, stack location, stack height, and/or requiring the use of low NO_x burners, an alternate method of demonstrating that there would be no potential for significant adverse impacts would be by utilizing Con Edison steam for heating.

The text of the proposed air quality (E) designations is set forth in **Appendix 5**.

Potential Development Site 24), **Figure 5-3** (Projected Enlargement Site 2 ~~and Projected Development Site 16~~), and **Figure 5-4** (Projected Development Site 1). An (E) designation would be assigned to these sites as part of the Proposed Action to enforce the restrictions on these projected and potential sites, as discussed in Section B of this appendix.

B. PROPOSED TEXT FOR SITES REQUIRING AIR QUALITY (E) DESIGNATIONS

As discussed in Chapter 14, "Air Quality", the stationary source analysis determined that at certain projected and potential development or enlargement sites, environmental requirements would be necessary to ensure that emissions from the sites' heat and hot water systems would not result in a significant adverse impact and/or to ensure that emissions from nearby existing sources of emissions would not result in a significant adverse impact on the development site. At these sites, (E) designations (E-288) would be mapped as part of the Proposed Action to ensure that the developments would not result in any significant air quality impacts from heat and hot water systems emissions due to individual or groups of development sites.

To the extent permitted under Section 11-15 of the Zoning Resolution, the requirements of the (E) designations may be modified, or determined to be unnecessary, based on new information or technology, additional facts or updated standards that are relevant at the time the site is ultimately developed.

The requirements of the (E) designations resulting from the air quality analyses would be as follows:

PROPOSED ACTION

Projected Development Sites:

Block ~~226~~**227**, Lots ~~63, 69, 70, 76, 80~~ † (Projected Development Site 1)

To preclude the potential for significant adverse air quality impacts from the heating and hot water systems boilers at 75 Varick Street, no operable windows or air intakes on the northern, western, and southern facades of Block ~~226~~**227**, Lot ~~s 63, 69, 70, 76, 80~~ † would be permitted between a height of 265 feet and 290 feet above grade.

Block 491, Lot 3 (Projected Development Site 2)

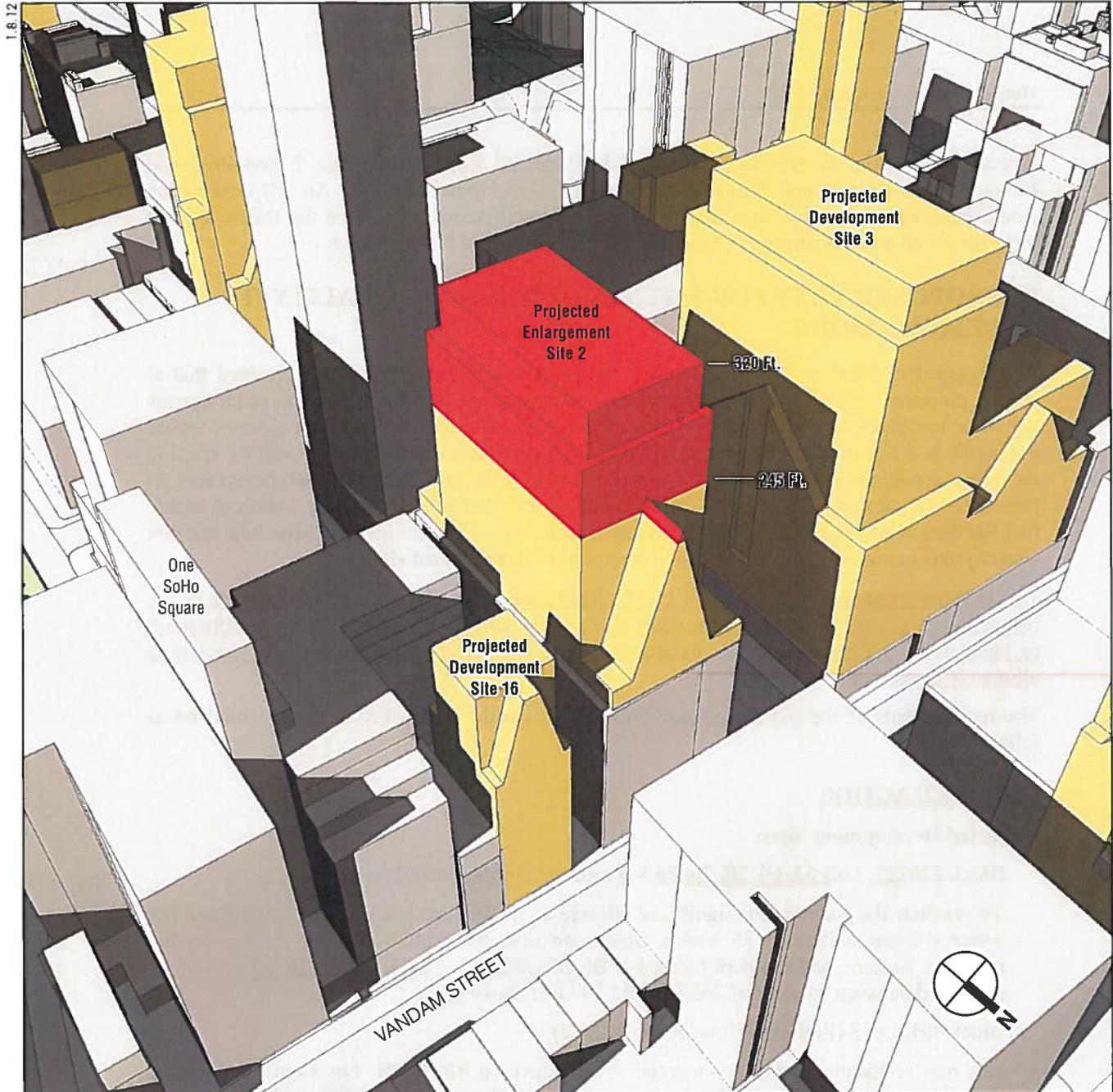
Any new residential and/or commercial development on Block 491, Lot 3 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and fire only natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 110 feet away from the lot line facing Dominick Street.

Block 579, Lots 60, 68, 70, 74 (Projected Development Site 3)

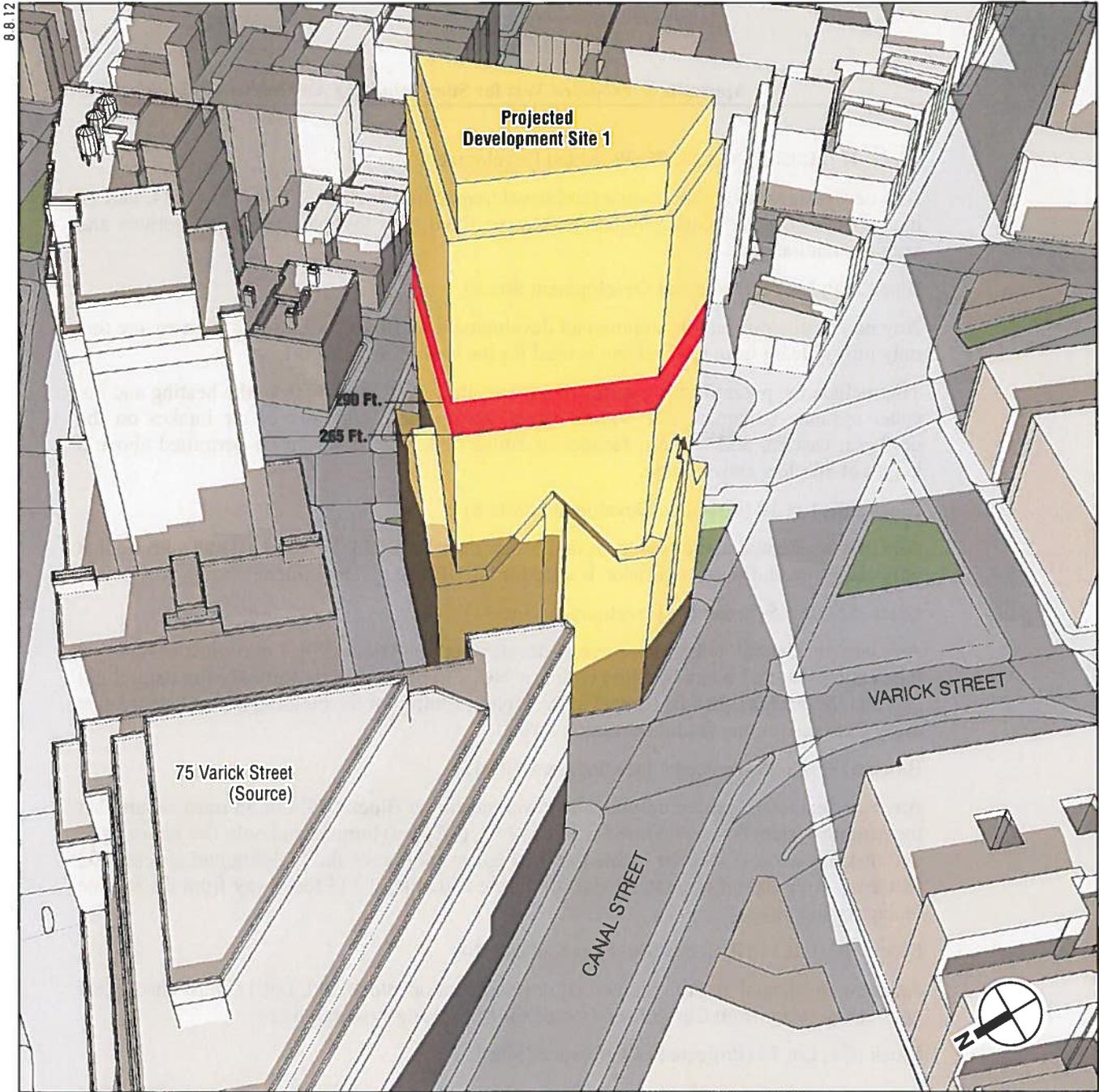
Any new residential and/or commercial development on Block 579, Lots 60, 68, 70, and 74 must ensure that only utility steam from Con Edison is used for the heating system boilers.

Block 598, Lots 42, 48 (Projected Development Site 4)

To preclude the potential for significant adverse air quality impacts from the heating and hot water systems boilers at 345 Hudson Street, no operable windows or air intakes on the northern, eastern, and southern facades of Block 598, Lots 42, 48 would be permitted between a height of 255 feet and 300 feet above grade.



 Area where no operable windows or air intakes would be permitted (North, east, and south facades on Projected Enlargement Site 2)



 Area where no operable windows or intakes would be permitted (North, west and south facades on Projected Development Site 1)

Appendix 5: Proposed Text for Sites Requiring Air Quality (E) Designations

Block 477, Lots 35, 42, 44, 76 (Projected Development Site 5)

Any new residential and/or commercial development on Block 477, Lots 35, 42, 44, and 76 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas.

Block 580, Lot 52 (Projected Development Site 6)

Any new residential and/or commercial development on Block 580, Lot 52 must ensure that only utility steam from Con Edison is used for the heating system boilers.

To preclude the potential for significant adverse air quality impacts from the heating and hot water systems boilers at 201 Varick Street, no operable windows or air intakes on the northern, eastern, and western facades of Block 580, Lot 52 would be permitted above a height of 160 feet above grade.

Block 597, Lot 10 (Projected Development Site 8)

Any new residential and/or commercial development on Block 597, Lot 10 must ensure that only utility steam from Con Edison is used for the heating system boilers.

Block 579, Lot 5 (Projected Development Site 11)

Any new residential and/or commercial development on Block 579, Lot 5 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas and that the stack(s) shall be located at the highest rooftop of the building and at least 55 feet away from the lot line facing Dominick Street.

Block 579, Lot 35 (Projected Development Site 12)

Any new residential and/or commercial development on Block 579, Lot 35 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 100 feet away from the lot line facing Hudson Street and at least 135 feet away from the lot line facing Spring Street.

Block 580, Lot 11 (Projected Development Site 14)

Any new residential and/or commercial development on Block 580, Lot 11 must ensure that only utility steam from Con Edison is used for the heating system boilers.

Block 578, Lot 75 (Projected Development Site 15)

Any new residential and/or commercial development on Block 578, Lot 75 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 70 feet away from the lot line facing Dominick Street.

Block 505, Lot 14 (Projected Development Site 16)

Any new residential and/or commercial development on Block 505, Lot 14 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and fire only natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 45 feet away from the lot line facing Varick Street.

~~To preclude the potential for significant adverse air quality impacts from the heating and hot water systems boilers at 233 Spring Street, no operable windows or air intakes on the~~

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~~northern, eastern, and southern facades of Block 505, Lot 14 would be permitted above a height of 170 feet above grade.~~

Block 491, Lot 7502 (Projected Development Site 18)

Any new residential and/or commercial development on Block 491, Lot 7502 must ensure that only natural gas is used as fuel for the heating system boilers.

Block ~~598~~597, Lot ~~583~~9 (Projected Development Site 19)

To preclude the potential for significant adverse air quality impacts from the heating and hot water systems boilers at 345 Hudson Street, no operable windows or air intakes on the northern, eastern, and western facades of Block ~~598~~597, Lot ~~583~~9 would be permitted between a height of 265 feet and 280 feet above grade.

Potential Development Sites:

Block 597, Lot 46 (Potential Development Site 20)

Any new residential and/or commercial development on Block 597, Lot 46 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 45 feet away from the lot line facing Greenwich Street and at least 95 feet away from the lot line facing Vandam Street.

Block 477, Lots 72, 73, 74, 75 (Potential Development Site 22)

Any new residential and/or commercial development on Block 477, Lots 72, 73, 74, and 75 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 70 feet away from the lot line facing Avenue of Americas.

Block 578, Lots 77, 78, 79 (Potential Development Site 23)

Any new residential and/or commercial development on Block 578, Lots 77, 78, and 79 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 65 feet away from the lot line facing Dominick Street, and at least 60 feet away from the lot line facing Varick Street.

Block 580, Lot 60 (Potential Development Site 24)

To preclude the potential for significant adverse air quality impacts from the heating and hot water systems boilers at 201 Varick Street, no operable windows or air intakes on the northern, eastern, and western facades of Block 580, Lot 60 would be permitted between a height of 160 feet and 260 feet above grade.

Projected Enlargement Sites:

Block 579, Lot 47 (Projected Enlargement Site 1)

Any new residential and/or commercial development on Block 579, Lot 47 must ensure that only natural gas is used as fuel for the heating system boilers.

Block 505, Lot 1 (Projected Enlargement Site 2)

Any new residential and/or commercial development on Block 505, Lot 1 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas,

Appendix 5: Proposed Text for Sites Requiring Air Quality (E) Designations

and that the stack(s) shall be located at the highest rooftop of the building and at least 170 feet away from the lot line facing Spring Street.

To preclude the potential for significant adverse air quality impacts from the heating and hot water systems boilers ~~at the proposed No Action enlargement at 233 Spring Street~~ 161 Avenue of the Americas (referred to as One SoHo Square), no operable windows or air intakes on the northern, eastern, and southern facades of Block 505, Lot 1 would be permitted between a height of ~~175 feet and 230~~ 245 to 320 feet above grade.

Block 597, Lot 45 (Projected Enlargement Site 3)

Any new residential and/or commercial development on Block 597, Lot 45 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 70 feet away from the lot line facing Hudson Street and at least 45 feet away from the lot line facing Vandam Street.

Potential Enlargement Sites:

~~Block 598, Lots 42 and 48 (Potential Enlargement Site 4)~~

~~Any new residential and/or commercial development on Block 598, Lots 42 and 48 must ensure that fossil fuel fired equipment meets applicable Department of Building Code provisions regarding the placement of exhausts to ensure they are equal to or taller than operable windows or air intakes on adjacent buildings.~~

Block 505, Lot 26 (Potential Enlargement Site 5)

Any new residential and/or commercial development on Block 505, Lot 26 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 80 feet away from the lot line facing Spring Street.

Block 597, Lot 32 (Potential Enlargement Site 6)

Any new residential and/or commercial development on Block 597, Lot 32 must ensure that fossil fuel-fired equipment meets applicable Department of Building Code provisions regarding the placement of exhausts to ensure they are equal to or taller than operable windows or air intakes on adjacent buildings.

Block 597, Lot 33 (Potential Enlargement Site 7)

Any new residential and/or commercial development on Block 597, Lot 33 must ensure that fossil fuel-fired equipment meets applicable Department of Building Code provisions regarding the placement of exhausts to ensure they are equal to or taller than operable windows or air intakes on adjacent buildings.

Block 597, Lot 50 (Potential Enlargement Site 8)

Any new residential and/or commercial development on Block 597, Lot 50 must ensure that fossil fuel-fired equipment meets applicable Department of Building Code provisions regarding the placement of exhausts to ensure they are equal to or taller than operable windows or air intakes on adjacent buildings.

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Block 597, Lot 52 (Potential Enlargement Site 9)

No operable lot line windows on the western facade of Block 597, Lot 52 would be permitted.

Any new residential and/or commercial development on Block 597, Lot 52 must ensure that fossil fuel-fired equipment meets applicable Department of Building Code provisions regarding the placement of exhausts to ensure they are equal to or taller than operable windows or air intakes on adjacent buildings.

Block 597, Lot 51 (Potential Enlargement Site 10)

Any new residential and/or commercial development on Block 597, Lot 51 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 20 feet away from the lot line facing Hudson Street.

Block 491, Lot 1 (Potential Enlargement Site 11)

Any new residential and/or commercial development on Block 491, Lot 1 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 45 feet away from the lot line facing Dominick.

Block 491, Lot 26 (Potential Enlargement Site 12)

Any new residential and/or commercial development on Block 491, Lot 26 must ensure that only natural gas is used as fuel for the heating system boilers.

Block 491, Lot 27 (Potential Enlargement Site 13)

Any new residential and/or commercial development on Block 491, Lot 27 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 25 feet away from the lot line facing Dominick Street.

Block 578, Lot 70 (Potential Enlargement Site 14)

Any new residential and/or commercial development on Block 578, Lot 70 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 25 feet away from the lot line facing Hudson Street.

Block 597, Lot 37 (Potential Enlargement Site 15)

Any new residential and/or commercial development on Block 597, Lot 37 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas.

No operable lot line windows on the eastern facade of Block 597, Lot 37 would be permitted.

PROPOSED ACTION WITH THE PROPOSED CPC MODIFICATIONS

Projected Development Sites:

Block 226227, Lots 63, 69, 70, 76, 80 ± (Projected Development Site 1)

Appendix 5: Proposed Text for Sites Requiring Air Quality (E) Designations

To preclude the potential for significant adverse air quality impacts from the heating and hot water systems boilers at 75 Varick Street, no operable windows or air intakes on the northern, western, and southern facades of Block 226227, Lots 63, 69, 70, 76, 80 ± would be permitted between a height of 265 feet and 290 feet above grade.

Block 491, Lot 3 (Projected Development Site 2)

Any new residential and/or commercial development on Block 491, Lot 3 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and fire only natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 110 feet away from the lot line facing Dominick Street.

Block 579, Lots 60, 68, 70, 74 (Projected Development Site 3)

Any new residential and/or commercial development on Block 579, Lots 60, 68, 70, and 74 must ensure that only utility steam from Con Edison is used for the heating system boilers.

Block 598, Lots 42, 48 (Projected Development Site 4)

To preclude the potential for significant adverse air quality impacts from the heating and hot water systems boilers at 345 Hudson Street, no operable windows or air intakes on the northern, eastern, and southern facades of Block 598, Lots 42, 48 would be permitted between a height of 255 feet and 300 feet above grade.

Block 477, Lots 35, 42, 44, 76 (Projected Development Site 5)

Any new residential and/or commercial development on Block 477, Lots 35, 42, 44, and 76 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas.

Block 580, Lot 52 (Projected Development Site 6)

Any new residential and/or commercial development on Block 580, Lot 52 must ensure that only utility steam from Con Edison is used for the heating system boilers.

To preclude the potential for significant adverse air quality impacts from the heating and hot water systems boilers at 201 Varick Street, no operable windows or air intakes on the northern, eastern, and western facades of Block 580, Lot 52 would be permitted above a height of 160 feet above grade.

Block 597, Lot 10 (Projected Development Site 8)

Any new residential and/or commercial development on Block 597, Lot 10 must ensure that only utility steam from Con Edison is used for the heating system boilers.

Block 579, Lot 5 (Projected Development Site 11)

Any new residential and/or commercial development on Block 579, Lot 5 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas and that the stack(s) shall be located at the highest rooftop of the building and at least 55 feet away from the lot line facing Dominick Street.

Block 579, Lot 35 (Projected Development Site 12)

Any new residential and/or commercial development on Block 579, Lot 35 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 100

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feet away from the lot line facing Hudson Street and at least 135 feet away from the lot line facing Spring Street.

Block 580, Lot 11 (Projected Development Site 14)

Any new residential and/or commercial development on Block 580, Lot 11 must ensure that only utility steam from Con Edison is used for the heating system boilers.

Block 578, Lot 75 (Projected Development Site 15)

Any new residential and/or commercial development on Block 578, Lot 75 must ensure that the and only natural gas is used as fuel for the heating system boilers.

Block 505, Lot 14 (Projected Development Site 16)

Any new residential and/or commercial development on Block 505, Lot 14 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and fire only natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 45 feet away from the lot line facing Varick Street.

Block 491, Lot 7502 (Projected Development Site 18)

Any new residential and/or commercial development on Block 491, Lot 7502 must ensure that only natural gas is used as fuel for the heating system boilers.

Block ~~598~~597, Lot ~~583~~9 (Projected Development Site 19)

To preclude the potential for significant adverse air quality impacts from the heating and hot water systems boilers at 345 Hudson Street, no operable windows or air intakes on the northern, eastern, and western facades of ~~598~~597, Lot ~~583~~9 would be permitted between a height of 265 feet and 280 feet above grade.

Potential Development Sites:

Block 597, Lot 46 (Potential Development Site 20)

Any new residential and/or commercial development on Block 597, Lot 46 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 45 feet away from the lot line facing Greenwich Street and at least 95 feet away from the lot line facing Vandam Street.

Block 477, Lots 72, 73, 74, 75 (Potential Development Site 22)

Any new residential and/or commercial development on Block 477, Lots 72, 73, 74, and 75 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas.

Block 578, Lots 77, 78, 79 (Potential Development Site 23)

Any new residential and/or commercial development on Block 578, Lots 77, 78, and 79 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building, and at least 60 feet away from the lot line facing Varick Street.

Block 580, Lot 60 (Potential Development Site 24)

Appendix 5: Proposed Text for Sites Requiring Air Quality (E) Designations

To preclude the potential for significant adverse air quality impacts from the heating and hot water systems boilers at 201 Varick Street, no operable windows or air intakes on the northern, eastern, and western facades of Block 580, Lot 60 would be permitted between a height of 160 feet and 260 feet above grade.

Projected Enlargement Sites:

Block 579, Lot 47 (Projected Enlargement Site 1)

Any new residential and/or commercial development on Block 579, Lot 47 must ensure that only natural gas is used as fuel for the heating system boilers.

Block 505, Lot 1 (Projected Enlargement Site 2)

Any new residential and/or commercial development on Block 505, Lot 1 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 170 feet away from the lot line facing Spring Street.

To preclude the potential for significant adverse air quality impacts from heating and hot water systems boilers at the proposed No Action enlargement at 161 Avenue of the Americas (One SoHo Square), no operable windows or air intakes on the northern, eastern, and southern facades of Block 505, Lot 1 would be permitted between a height of 260 to 290 feet above grade.

Block 597, Lot 45 (Projected Enlargement Site 3)

Any new residential and/or commercial development on Block 597, Lot 45 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 70 feet away from the lot line facing Hudson Street and at least 45 feet away from the lot line facing Vandam Street.

Potential Enlargement Sites:

Block 505, Lot 26 (Potential Enlargement Site 5)

Any new residential and/or commercial development on Block 505, Lot 26 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 80 feet away from the lot line facing Spring Street.

Block 597, Lot 32 (Potential Enlargement Site 6)

Any new residential and/or commercial development on Block 597, Lot 32 must ensure that fossil fuel-fired equipment meets applicable Department of Building Code provisions regarding the placement of exhausts to ensure they are equal to or taller than operable windows or air intakes on adjacent buildings.

Block 597, Lot 33 (Potential Enlargement Site 7)

Any new residential and/or commercial development on Block 597, Lot 33 must ensure that fossil fuel-fired equipment meets applicable Department of Building Code provisions regarding the placement of exhausts to ensure they are equal to or taller than operable windows or air intakes on adjacent buildings.

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Block 597, Lot 50 (Potential Enlargement Site 8)

Any new residential and/or commercial development on Block 597, Lot 50 must ensure that fossil fuel-fired equipment meets applicable Department of Building Code provisions regarding the placement of exhausts to ensure they are equal to or taller than operable windows or air intakes on adjacent buildings.

Block 597, Lot 52 (Potential Enlargement Site 9)

No operable lot line windows on the western facade of Block 597, Lot 52 would be permitted.

Any new residential and/or commercial development on Block 597, Lot 52 must ensure that fossil fuel-fired equipment meets applicable Department of Building Code provisions regarding the placement of exhausts to ensure they are equal to or taller than operable windows or air intakes on adjacent buildings.

Block 597, Lot 51 (Potential Enlargement Site 10)

Any new residential and/or commercial development on Block 597, Lot 51 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 20 feet away from the lot line facing Hudson Street.

Block 491, Lot 1 (Potential Enlargement Site 11)

Any new residential and/or commercial development on Block 491, Lot 1 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 45 feet away from the lot line facing Dominick.

Block 491, Lot 26 (Potential Enlargement Site 12)

Any new residential and/or commercial development on Block 491, Lot 26 must ensure that only natural gas is used as fuel for the heating system boilers.

Block 491, Lot 27 (Potential Enlargement Site 13)

Any new residential and/or commercial development on Block 491, Lot 27 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 25 feet away from the lot line facing Dominick Street.

Block 578, Lot 70 (Potential Enlargement Site 14)

Any new residential and/or commercial development on Block 578, Lot 70 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas, and that the stack(s) shall be located at the highest rooftop of the building and at least 25 feet away from the lot line facing Hudson Street.

Block 597, Lot 37 (Potential Enlargement Site 15)

Any new residential and/or commercial development on Block 597, Lot 37 must ensure that the heating system boilers be fitted with low NO_x (30 ppm) burners and only fire natural gas.

No operable lot line windows on the eastern facade of Block 597, Lot 37 would be permitted.

Table 5-1
New and Enlarged Building Sources - Refined Modeling Results
Proposed Actions

Source	Block	Lots	Affected Site(s)	24-Hour PM _{2.5} Analysis (Interim Guidance Criteria: 2 µg/m ³ ; 5 µg/m ³ not-to-exceed value)					Annual PM _{2.5} Analysis (Interim Guidance Criteria = 0.30 µg/m ³)	Annual NO ₂ Analysis (NAAQS = 100 µg/m ³)	1-Hour NO ₂ Analysis (NAAQS = 188 µg/m ³)	
				Analysis Approach ⁵	Maximum Predicted Concentration (µg/m ³)	Maximum Annual Frequency >2 µg/m ³	Annual Average Frequency >2 µg/m ³ (Over 5 Years)	Proposed (E) Designation ⁶	Maximum Predicted Concentration (µg/m ³)	Maximum Predicted Concentration including Background (µg/m ³) ⁸	Maximum Predicted Concentration including Background (µg/m ³)	Proposed Additional (E) Designation ⁶
The values in this table are reflective of the implementation of the proposed (E) designations												
Projected 2 ⁴	491	3	Trump Soho Hotel	Tier 2	3.6	2	1.0	(a), (b)	0.09	68.6	172.7	(d)
Projected 5	477	35, 42, 44, 76	—	Tier 1	1.96	—	—	(a)	0.06	68.3	148.9	(d)
Projected 11	579	5	Projected 10, 12	Tier 2/Tier 4	2.41.96	2	0.6	(a), (b)	0.07	68.4	163.2	(d)
Projected 12	579	35	Projected 3, 10	Tier 2	3.0	1	0.6	(a), (b)	0.06	68.2	181.5	(d)
Projected 15	578	75	Existing Commercial Building	Tier 2/Tier 4	2.62.2	31	4.40.4	(a), (b)	0.09	68.6	154.3	(d)
Projected 16	505	14	Projected Enlargement 2	Tier 2	2.8	3	0.8	(a), (b)	0.10	68.7	184.9	(d)
Projected 18	491	7502	—	Tier 1	1.5	—	—	(a)	0.05	68.2	184.3 ⁷	—
Potential 20	597	46	Projected 19	Tier 2	3.3	2	1.0	(a), (b)	0.10	68.7	176.5	(d)
Potential 22	477	72, 73, 74, 75	Existing Hotel	Tier 2	3.6	6	3.4	(a), (b)	0.12	68.9	171.7	(d)
Potential 23	578	77, 78, 79	Existing Commercial Buildings	Tier 2/Tier 4	2.42.3	21	0.60.4	(a), (b)	0.06	68.3	153.6	(d)
Proj. Enlargement 1 ⁴	579	47	—	Tier 1	1.6	—	—	(a)	0.07	68.3	162.0 ⁷	—
Proj. Enlargement 2	505	1	Trump Soho Hotel	Tier 2/Tier 4	2.52.1	21	0.80.2	(a), (b)	0.05	68.2	153.5	(d)
Proj. Enlargement 3	597	45	Projected 19, Potential 20	Tier 2/Tier 4	2.82.7	62	4.80.6	(a), (b)	0.08	68.5	185.3	(d)
Pot. Enlargement 5	505	26	Existing Commercial Building	Tier 2/Tier 4	2.51.8	2	0.8	(a), (b)	0.07	68.4	180.0	(d)
Pot. Enlargement 10	597	51	Potential Enlargement 9	Tier 2	1.6	—	—	(a), (b), (c)	0.06	68.3	144.2	(d)
Pot. Enlargement 11	491	1	Projected 2	Tier 2	2.8	1	0.4	(a), (b)	0.10	68.7	172.1	(d)
Pot. Enlargement 12	491	26	—	Tier 1	1.9	—	—	(a)	0.02	67.9	169.8 ⁷	—
Pot. Enlargement 13	491	27	Projected 2	Tier 2	2.7	2	0.8	(a), (b)	0.07	68.4	142.6	(d)
Pot. Enlargement 14	578	70	Projected 15	Tier 2	1.9	—	—	(a), (b), (c)	0.03	68.0	153.1	(d)
Pot. Enlargement 15	597	37	Projected 19	Tier 2	2.3	1	0.4	(a)	0.09	68.6	183.4	(d)

Notes:

- ¹ SO₂ impacts were not analyzed since sites would be restricted to natural gas or Con Edison Steam under proposed (E) Designations.
- ² Potential Enlargement Sites 4, 6, 7, 8, and 9 where the provisions of the existing DOB Code are more stringent than the contemplated (E) Designation requirements are not included in this table.
- ³ The values for development sites (Projected Development Sites 3, 6, 8, and 14) with Con Edison steam restrictions are not shown in this table because with the Con Edison steam restriction, there would be no impact.
- ⁴ Applicant Site
- ⁵ 24-Hour PM_{2.5} Analysis Approach - Tier 1 approach is based on an annual energy consumption factor, which is then conservatively converted to a daily energy consumption rate assuming a 100 day heating season and includes emissions from the No Action scenario; Tier 2 approach is based on examination of the number of heating and cooling degree-days based on historical data available for New York City and excludes the incremental PM_{2.5} concentrations associated with the No Action scenario.
- ⁶ The values shown for Annual NO₂ Analysis are reflective of the implementation of fuel restriction and/or stack location restriction only and without the use of low NO_x burner.
- ⁷ The values shown for Development Site 18, Potential Enlargement 1, and Potential Enlargement 12 are reflective of the implementation of fuel restriction only and without the use of low NO_x burner.
- ⁸ Proposed (E) Designations:
 - (a) Fuel Type Restriction (Natural Gas)
 - (b) Stack Location Restriction
 - (c) Prohibition on Operable Windows on Certain Lot Line(s) at Affected Site
 - (d) Low NO_x (30 ppm) Burner Restriction

Table 5-2
Existing Building Sources - Refined Modeling Results

Source	Source Block	Source Lot	Affected Site	Affected Site Maximum Development Height (feet)	Proposed (E) Designations - Elevations where Operable Window or Air Intake are not Permitted (feet)	24-Hour PM _{2.5} Analysis (Maximum Predicted Conc. (µg/m ³)) <Interim Guidance Criteria: 2 µg/m ³ ; 5 µg/m ³ not-to-exceed value>	24-Hour PM _{2.5} Analysis Maximum Annual Frequency >2 µg/m ³	24-Hour PM _{2.5} Analysis Annual Average Frequency >2 µg/m ³ (Over 5 Years)	Annual PM _{2.5} Analysis Maximum Predicted Conc. (µg/m ³) <Interim Guidance Criteria = 0.3 µg/m ³ >	1-Hour NO ₂ Analysis Maximum Predicted Conc. (µg/m ³) <NAAQS = 188 µg/m ³ >	Annual NO ₂ Analysis Maximum Predicted Conc. (µg/m ³) <NAAQS = 100 µg/m ³ >	1-Hour SO ₂ Analysis Maximum Predicted Conc. (µg/m ³) <NAAQS = 196 µg/m ³ >
The values shown in this table are with the implementation of the proposed (E) designations.												
Existing Source (75 Varick St)	226	1	Projected 1 ¹	430	265 to 290 (North, West, and South Facades)	2.2	1	0.2	0.11	176.5	69.7	79.7
Existing Source (345 Hudson St)	598	58	Projected 4 ¹	320	255 to 300 (North, East, and South Facades)	2.1	1	0.2	0.05	156.9	68.6	79.6
Existing Source (201 Varick St)	581	1	Projected 6	185	160 and up (North, East, and West Facades)	0.7	-	-	0.07	162.7	69.9	102.7
Existing Source (233 Spring St)	505	36	Projected 16	185	170 and up (North, East, and South Facades)	0.7	-	-	0.07	124.6	68.2	124.1
Existing Source (345 Hudson St)	598	58	Projected 19	320	265 to 280 (North, East, and West Facades)	1.6	-	-	0.04	154.5	68.4	79.3
Existing Source (201 Varick St)	581	1	Potential 24	320	160 to 260 (North, East, and West Facades)	1.6	-	-	0.11	176.3	69.9	133.7
Existing Source No Action Enlargement (233 Spring St One SoHo Square (161 Avenue of the Americas))	505	31,35 36	Projected Enlargement 2	320	175 to 230 245 to 320 (North, East, and South Facades)	4-51.4	-	-	0.13-0.28	172.6-187.9	68.6-69.7	182.5-194.2
Notes:												
¹ Applicant Site												

**Table 5-3
New and Enlarged Building Sources - Refined Modeling Results^{1,2,3}
Proposed Actions with the Potential CPC Modifications**

Source	Block	Lots	Affected Site(s)	24-Hour PM _{2.5} Analysis (Interim Guidance Criteria: 2 µg/m ³ ; 5 µg/m ³ not-to-exceed value)				Proposed (E) Designation	Annual PM _{2.5} Analysis (Interim Guidance Criteria = 0.30 µg/m ³)	Annual NO ₂ Analysis (NAAQS = 100 µg/m ³)	1-Hour NO ₂ Analysis (NAAQS = 188 µg/m ³)	
				Analysis Approach	Maximum Predicted Concentration (µg/m ³)	Maximum Annual Frequency >2 µg/m ³	Annual Average Frequency >2 µg/m ³ (Over 5 Years)		Maximum Predicted Concentration (µg/m ³)	Maximum Predicted Concentration including Background (µg/m ³)	Maximum Predicted Concentration including Background (µg/m ³)	Proposed Additional (E) Designation
The values in this table are reflective of the implementation of the proposed (E) designations												
Projected 2 ⁴	491	3	Trump Soho Hotel, Projected 5	Tier 2	3.7	2	1.0	(a), (b)	0.09	68.6	173.9	(d)
Projected 5	477	35, 42, 44, 76	=	Tier 1	1.8	=	=	(a)	0.06	68.3	154.9	(d)
Projected 11	579	5	=	Tier 2	1.96	=	=	(a), (b)	0.07	68.4	163.2	(d)
Projected 12	579	35	Projected 3, 15	Tier 2	2.7	1	0.4	(a), (b)	0.06	68.3	176.2	(d)
Projected 15	578	75	=	Tier 2	1.9	=	=	(a)	0.05	68.2	184.2 ⁷	=
Projected 16	505	14	Projected Enlargement 2	Tier 2	2.8	3	0.8	(a), (b)	0.10	68.7	184.9	(d)
Projected 18	491	7502	=	Tier 1	1.5	=	=	(a)	0.05	68.2	184.3 ⁷	=
Potential 20	597	46	Projected 19	Tier 2	3.3	2	1.0	(a), (b)	0.10	68.7	176.5	(d)
Potential 22	477	72, 73, 74, 75	Existing Hotel	Tier 2	2.0	1	0.2	(a)	0.08	68.5	164.1	(d)
Potential 23	578	77, 78, 79	Projected 15	Tier 2	2.1	1	0.2	(a), (b)	0.04	68.2	176.3	(d)
Proj. Enlargement 1 ⁴	579	47	Projected 3	Tier 2	2.5	1	0.2	(a)	0.05	68.2	174.8 ⁷	=
Proj. Enlargement 2	505	1	Trump Soho Hotel	Tier 2	2.1	1	0.2	(a), (b)	0.05	68.2	162.6	(d)
Proj. Enlargement 3	597	45	Potential 20	Tier 2	2.7	2	0.6	(a), (b)	0.08	68.5	185.3	(d)
Pot. Enlargement 5	505	26	=	Tier 2	1.8	=	=	(a), (b)	0.07	68.4	180.0	(d)
Pot. Enlargement 10	597	51	Potential Enlargement 9	Tier 2	1.6	=	=	(a), (b), (c)	0.06	68.3	144.2	(d)
Pot. Enlargement 11	491	1	Projected 2	Tier 2	2.8	1	0.4	(a), (b)	0.10	68.7	172.1	(d)
Pot. Enlargement 12	491	26	=	Tier 1	1.9	=	=	(a)	0.02	67.9	169.8 ⁷	=
Pot. Enlargement 13	491	27	Projected 2	Tier 2	2.7	2	0.8	(a), (b)	0.07	68.4	142.6	(d)
Pot. Enlargement 14	578	70	Projected 15	Tier 2	1.9	=	=	(a), (b), (c)	0.03	68.0	153.1	(d)
Pot. Enlargement 15	597	37	Projected 19	Tier 2	2.3	1	0.4	(a)	0.09	68.6	183.4	(d)

Notes:
¹ SO₂ impacts were not analyzed since sites would be restricted to natural gas or Con Edison Steam under proposed (E) Designations.
² Potential Enlargement Sites 6, 7, 8, and 9 where the provisions of the existing DOB Code are more stringent than the contemplated (E) Designation requirements are not included in this table.
³ The values for development sites (Projected Development Sites 3, 6, 8, and 14) with Con Edison steam restrictions are not shown in this table because with the Con Edison steam restriction, there would be no impact.
⁴ Applicant Site
⁵ 24-Hour PM_{2.5} Analysis Approach - Tier 1 approach is based on an annual energy consumption factor, which is then conservatively converted to a daily energy consumption rate assuming a 100 day heating season and includes emissions from the No Action scenario; Tier 2 approach is based on examination of the number of heating and cooling degree-days based on historical data available for New York City and excludes the incremental PM_{2.5} concentrations associated with the No Action scenario.
⁶ The values shown for Annual NO₂ Analysis are reflective of the implementation of fuel restriction and/or stack location restriction only and without the use of low NO_x burner.
⁷ The values shown for Development Site 18, Potential Enlargement 1, and Potential Enlargement 12 are reflective of the implementation of fuel restriction only and without the use of low NO_x burner.
⁸ Proposed (E) Designations:
 (a) Fuel Type Restriction (Natural Gas)
 (b) Stack Location Restriction
 (c) Prohibition on Operable Windows on Certain Lot Line(s) at Affected Site
 (d) Low NO_x (30 ppm) Burner Restriction

Table 5-4
Existing Building Sources - Refined Modeling Results
Proposed Actions with the Potential CPC Modifications

Source	Source Block	Source Lot	Affected Site	Affected Site Maximum Development Height (feet)	Proposed (E) Designations - Elevations where Operable Window or Air Intake are not Permitted (feet)	24-Hour PM _{2.5} Analysis (Maximum Predicted Conc. (ug/m ³)) <Interim Guidance Criteria: 2 ug/m ³ ; 5 ug/m ³ not-to-exceed value>	24-Hour PM _{2.5} Analysis Maximum Annual Frequency >2 ug/m ³	24-Hour PM _{2.5} Analysis Annual Average Frequency >2 ug/m ³ (Over 5 Years)	Annual PM _{2.5} Analysis Maximum Predicted Conc. (ug/m ³) <Interim Guidance Criteria = 0.3 ug/m ³ >	1-Hour NO ₂ Analysis Maximum Predicted Conc. (ug/m ³) <NAAQS = 188 ug/m ³ >	Annual NO ₂ Analysis Maximum Predicted Conc. (ug/m ³) <NAAQS = 100 ug/m ³ >	1-Hour SO ₂ Analysis Maximum Predicted Conc. (ug/m ³) <NAAQS = 196 ug/m ³ >
The values shown in this table are with the implementation of the proposed (E) designations.												
Existing Source (75 Varck St)	226	1	Projected 1 ¹	430	265 to 290 (North, West, and South Facades)	2.2	1	0.2	0.11	176.5	69.7	79.7
Existing Source (345 Hudson St)	598	58	Projected 4 ¹	290	255 to 290 (North, East, and South Facades)	1.5	-	-	0.05	156.9	68.8	79.1
Existing Source (201 Varck St)	581	1	Projected 6	185	160 and up (North, East, and West Facades)	0.7	-	-	0.07	162.7	69.9	102.7
Existing Source (345 Hudson St)	598	58	Projected 19	290	265 to 280 (North, East, and West Facades)	1.6	-	-	0.04	154.5	68.5	79.3
Existing Source (201 Varck St)	581	1	Potential 24	290	160 to 260 (North, East, and West Facades)	1.6	-	-	0.11	176.3	69.9	133.7
No Action Enlargement One SoHo Square (161 Avenue of the Americas)	505	31, 35, 36	Projected Enlargement 2	290	245 to 290 (North, East, and South Facades)	1.4	-	-	0.28	186.5	69.7	194.2

Notes:
¹ Applicant Site

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Noise

**Table 16-6
Required Attenuation at Noise Measurement Locations**

Receptor #	Location	Highest Calculated Build L ₁₀₍₁₎ Value	Minimum Required Attenuation
1	King Street between Greenwich and Hudson Streets	67.1	NA ¹
2	Greenwich Street between Charlton and King Streets	71.4	28
3	Charlton Street between Greenwich and Hudson Streets	67.4	NA ¹
4	Corner of Hudson and Spring Streets	77.1	33
5	Vandam Street between Hudson and Varick Streets	68.0	NA ¹
6	Varick Street between Vandam and Spring Streets	75.5	31
7	Spring Street between Varick and Hudson Streets	74.3	31
8	Dominick Street between Hudson and Varick Streets	68.3	NA ¹
9	Broome Street between Hudson and Varick Streets	67.6	NA ¹
10	Broome Street between Avenue of the Americas and Varick Street	69.3	NA ¹
11	Varick Street between Watts and Broome Streets	75.1	31
12	Watts Street between Avenue of the Americas and Varick Street	81.4	38
13	Avenue of the Americas between Broome and Watts Streets	77.0	33
14	Grand Street between Varick Street and Avenue of the Americas	70.2	28
15	Avenue of the Americas between Grand and Canal Streets	73.9	31
16	Canal Street between Avenue of the Americas and Varick Street	78.2	35
17	Varick Street between Canal and Grand Street	74.3	31
18	Corner of Spring and Greenwich Streets	74.7	31
19	Corner of Vandam Street and Avenue of the Americas	75.7	31
20	Corner of King and Varick Streets	78.1	35

Note:
 Attenuation values are shown for residential uses; retail and office uses would be 5 dBA less.
⁽¹⁾ "NA" indicates that the highest calculated L₁₀ is below 70 dBA. The CEQR Technical Manual does not specify minimum attenuation guidance for exterior L₁₀ values below this level.

Attenuation would be required at certain receptor locations due to the high existing background noise levels to achieve interior noise levels of 45 dBA or lower for residential uses and 50 dBA or lower for retail or office uses. Based on the values shown in **Table 16-6**, required attenuation levels were determined for all projected and potential development and enlargement sites. These values are shown in **Table 16-7**.

The required attenuation levels would be mandated by (E) designations (E-288) on all affected development and enlargement sites specifying the appropriate amount of window/wall attenuation. There are five levels of required noise attenuation depending upon the ambient noise levels, 28 dBA, 31 dBA, 33 dBA, 35 dBA, and 38 dBA. The text of the (E) designation for sites requiring 28 dBA would be as follows:

"To ensure an acceptable interior noise environment, the building façade(s) of future residential uses must provide a minimum of 28 dBA composite building façade attenuation with windows closed, in order to maintain an interior noise level of 45 dBA. The minimum required composite building façade attenuation for future commercial uses would be 5 dBA less than that for residential uses. To maintain a closed-window condition, an alternate means of ventilation that brings outside air into the building without degrading the acoustical performance of the building façade(s) must also be provided."

Table 16-7
Required Attenuation at Development Sites

Site Descriptor	Address	Block	Lots	Façade(s)	Representative Receptor Site	Minimum Required Attenuation ¹		
Applicant's Projected Development Sites								
Projected Site 1	417 Canal Street	227	63	All	16	35		
	74 Varick Street		69	South / East	16	35		
	76 Varick Street		70	North / West	17	31		
	11 Grand Street		76	West / South	17	31		
			76	North / East	14	28		
	87 Ave of the Americas		80	All	14	28		
Projected Site 2	114 Varick Street	491	3	All	6	31		
				North	15	31		
				East / West	15	31		
Projected Site 3	50 Vandam Street	579	60	All	5	NA		
				143 Varick Street	68	All	6	31
				137 Varick Street	70	All	6 / 7	31
				275 Spring Street	74	All	7	31
Projected Site 4	551 Greenwich Street	598	42	North / West	2	28		
				South / East	3	NA		
	561 Greenwich Street		48	North / East	1	NA		
Projected Enlargement Site 1	304 Hudson Street	579	47	South / West	2	28		
				North	4, 5	33 within 100' of Hudson St, 31 beyond 100' from Hudson St.		
				East	7	31		
				West	4	33		
Projected Site 5	94 Varick Street	477	35	South	4, 7	33 within 100' of Hudson St, 31 beyond 100' from Hudson St.		
				West / North / East	11	31		
				South	12	38 at elevations 0'-100', 35 at elevations above 100'		
				North / East	10	NA		
Projected Site 6	104 Varick Street	477	42	West / South	11	31		
				North / East	10	NA		
				West / South	11	31		
Projected Site 7	557 Broome Street	477	44	All	12	38 at elevations 0'-100', 35 at elevations above 100'		
				All	12	31		
Projected Site 8	66 Watts Street	477	76	All	12	31		
Projected Site 9	82 King Street	580	52	All	7	31		
Projected Site 10	163 Varick Street	580	19	All	20	35		
Projected Site 11	515 Greenwich Street	597	1	All	18	31		
				282 Hudson Street	1	All	4	33
				284 Hudson Street	2	All	4	33
				286 Hudson Street	3	All	4	33
Projected Site 12	49 Dominick Street	579	44	All	8	NA		
				All	8	NA		
Projected Site 13	290 Hudson Street	579	5	West/South	4	33		
				North / East	7	31		
Projected Site 14	Spring Street	579	35	North/East/West	7	31		
				South	8	NA		
Other Projected Development Sites								

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**Table 16-7 (cont'd)
Required Attenuation at Development Sites**

Site Descriptor	Address	Block	Lots	Façade(s)	Representative Receptor Site	Minimum Required Attenuation ¹
Other Projected Development Sites (cont'd)						
Projected Site 13	6th Avenue	477	57	All	13	33
	113 Ave of the Americas		64	All	13	33
	48 Watts Street		66	All	12	38 at elevations between 0' - 100', 35 at elevations between 101' - 200', and 31 at elevations above 200'
Projected Site 16	30 Vandam Street	505	14	All	19	31
Projected Site 17	523 Greenwich Street	597	5	All	18	31
Projected Site 18	145 Ave of the Americas	491	7502	All	13	33
Projected Site 19	537 Greenwich Street	597	39	All	2	28
Projected Enlargement Sites						
Enlargement Site 2	150 Varick Street	505	1	All	6	31
Enlargement Site 3	547 Greenwich Street	597	45	West / South	2	28
				North / East	3	NA
Potential Development Sites						
Development Site 21	100 Vandam Street	597	7	All	18	31
Development Site 22	58 Watts Street	477	72	All	12	38 at elevations 0'-100', 35 at elevations above 100'
	60 Watts Street		73	All	12	38 at elevations 0'-100', 35 at elevations above 100'
	62 Watts Street		74	All	12	38 at elevations 0'-100', 35 at elevations above 100'
	64 Watts Street		75	All	12	38 at elevations 0'-100', 35 at elevations above 100'
Development Site 24	183 Varick Street	580	60	All	20	35
Potential Enlargement Sites						
Enlargement Site 4	26 Vandam Street	505	46	All	49	34
Enlargement Site 5	169 Ave of the Americas	505	26	All	19	31
Enlargement Site 6	305 Spring Street	597	32	All	18	31
Enlargement Site 7	307 Spring Street	597	33	All	18	31
Enlargement Site 11	558 Broome Street	491	1	West / North	11	31
				East / South	10	NA
Enlargement Site 14	117 Varick Street	578	70	All	6 / 11	31
Enlargement Site 15	533 Greenwich Street	597	37	All	2	28
Notes: <u>As discussed in the Foreword of the FEIS, since the issuance of the DEIS, a developer has purchased Block 505, Lot 16 (Potential Enlargement Site 4) and intends to utilize the available development rights as part of the adjacent One SoHo Square project. A light and air easement has been provided to the existing building on Lot 16; therefore, an enlargement is not expected to occur there in the future, and no (E) designation is required on that property.</u> Projected Development Sites 8, 14, and 15, Potential Development Sites 20 and 23, and Potential Enlargement Sites 8, 9, 10, 12, and 13 would have no minimum required attenuation.						
¹ Attenuation values are shown for residential uses; retail and office uses would be 5 dBA less.						
² Development Site 13 could include buildings as tall as 320 feet, and would therefore require less attenuation at elevations above 100' due to lower noise levels at these higher elevations. Development Sites 5 and 22 could include buildings as tall as 120 feet, and would therefore require less attenuation at elevations above 100' due to lower noise levels at these higher elevations. Noise levels at the upper elevations were estimated based on a 3 dBA decrease in noise per doubling of distance from the roadway.						

For sites requiring 31 dBA noise attenuation, the following (E) designation noise text would apply:

“To ensure an acceptable interior noise environment, the building façade(s) of future residential uses must provide a minimum of 31 dBA composite building façade attenuation with windows closed, in order to maintain an interior noise level of 45 dBA. The minimum required composite building façade attenuation for future commercial uses would be 5 dBA less than that for residential uses. To maintain a closed-window condition, an alternate means of ventilation that

brings outside air into the building without degrading the acoustical performance of the building façade(s) must also be provided."

For sites requiring 33 dBA noise attenuation, the following (E) designation noise text would apply:

"To ensure an acceptable interior noise environment, the building façade(s) of future residential uses must provide a minimum of 33 dBA composite building façade attenuation with windows closed, in order to maintain an interior noise level of 45 dBA. The minimum required composite building façade attenuation for future commercial uses would be 5 dBA less than that for residential uses. To maintain a closed-window condition, an alternate means of ventilation that brings outside air into the building without degrading the acoustical performance of the building façade(s) must also be provided."

For sites requiring 35 dBA noise attenuation, the following (E) designation noise text would apply:

"To ensure an acceptable interior noise environment, the building façade(s) of future residential uses must provide a minimum of 35 dBA composite building façade attenuation with windows closed, in order to maintain an interior noise level of 45 dBA. The minimum required composite building façade attenuation for future commercial uses would be 5 dBA less than that for residential uses. To maintain a closed-window condition, an alternate means of ventilation that brings outside air into the building without degrading the acoustical performance of the building façade(s) must also be provided."

For sites requiring 38 dBA noise attenuation, the following (E) designation noise text would apply:

"To ensure an acceptable interior noise environment, the building façade(s) of future residential uses must provide a minimum of 38 dBA composite building façade attenuation with windows closed, in order to maintain an interior noise level of 45 dBA. To achieve 38 dBA of building attenuation, special design features that go beyond the normal double-glazed windows are necessary and may include using specially designed windows (i.e., windows with small sizes, windows with air gaps, windows with thicker glazing, etc.), and additional building attenuation. To maintain a closed-window condition, an alternate means of ventilation that brings outside air into the building without degrading the acoustical performance of the building façade(s) must also be provided. Alternate means of ventilation includes, but is not limited to, central air conditioning. The minimum required composite building façade attenuation for future commercial uses would be 5 dBA less than that for residential uses, in order to maintain an interior noise level of 50 dBA."

The attenuation of a composite structure is a function of the attenuation provided by each of its component parts and how much of the area is made up of each part. Normally, a building façade is composed of the wall, glazing, and any vents or louvers for HVAC systems in various ratios of area. Buildings proposed to be located on the (E) designated sites would be designed to provide a composite Outdoor-Indoor Transmission Class (OITC) rating greater than or equal to the attenuation requirements listed in **Table 16-7**. The OITC classification is defined by ASTM International (ASTM E1332-10) and provides a single-number rating that is used for designing a building façade including walls, doors, glazing, and combinations thereof. The OITC rating is designed to evaluate building elements by their ability to reduce the overall loudness of ground and air transportation noise.

By adhering to these design guidelines, the Proposed Action would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines of 45 dBA L₁₀ for residential uses and 50 dBA L₁₀ for commercial uses.

I. MECHANICAL EQUIPMENT

It is assumed that the building mechanical systems (i.e., HVAC systems) would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control