# 23

## **Conceptual Analysis**

This EIS includes a conceptual analysis to assess potential environmental impacts that could result if a special permit is applied for and obtained to build a hotel within an M1 zoning district. Approval of such a special permit would be subject to discretionary approval, and any environmental impacts associated with such action would be assessed and disclosed pursuant to a separate, project-specific environmental review.

#### Introduction

To disclose the possible environmental impacts of a new hotel development in a M1 zoning district, analyses were conducted on a conceptual basis as discussed in this chapter. The selected conceptual analysis location was used to illustrate the consequences of a CPC special permit being granted on a site that the DCP believes could meet the findings of the special permit that would be created by the proposed action. If a site did not meet the findings, the application would not receive the special permit and the hotel development would not be built.

The With-Action condition for the proposed action includes a conceptual hotel development that could be built under the proposed CPC special permit. This conceptual analysis cannot attempt to analyze every possible scenario under which a

CPC special permit could be granted, since too many variations and possibilities exist. However, this analysis does present a reasonable conservative development scenario by means of which the technical analyses may be conducted. This conceptual development serves as representative future of a new hotel development by CPC special permit in M1 zoning districts. Since the proposed action proposes a restriction on current zoning regulations, a hotel development would be allowed as-of-right in the future without the proposed action condition. However, for the purpose of a conservative environmental analysis, the site is assumed to remain in its existing condition under the No-Action condition.

## **Principal Conclusions**

The proposed action would create a new special permit to allow new hotels within M1 districts. The conceptual analysis, conducted on a representative conceptual development site to determine the potential for significant adverse impacts that could result from a new hotel development pursuant to the special permit, identified significant adverse impacts with respect to historic resources, air quality, and hazardous materials.

Because the potential for significant adverse impacts is dependent on site-specific conditions, it is difficult, in the absence of specific applications, to predict the full scope of potential impacts. It's not possible to predict whether discretionary actions would be pursued on any one site in the future, and each action would require its own ULURP approvals. Any time a discretionary action is applied for, including the special permit created under this proposed action, it would be subject to its own environmental review.

## **Conceptual Development Site**

A development site was identified for purposes of the conceptual analysis based on existing trends and reasonable projections for the future. The selected site is located at 6 East 17<sup>th</sup> Street (Manhattan Block 844, Lot 35, **Figure 23-1**) between Fifth Avenue and Union Square West in the Union Square area of Manhattan. The site is in an M1-5M zoning district and is currently used as a parking lot, with a lot area of 9,200 sf. There would be no change to site between the existing and No-Action conditions. Under the With-Action condition, a 95-foot-tall, 46,000-square-foot hotel would be developed on the site, which would contain 139 rooms with a FAR of 5.0.

AFFECTED AREA vhb. 400 Tax Lots Union Square Manhattan Conceptual Site

Figure 23-1 Manhattan Conceptual Site Location Map

Table 23-1 No-Action vs. With-Action Condition - Conceptual Development Site

		No-Action			With-Action				
Borough and Neighborhood (Block, Lot)	Zoning District	Description	Size (sf)	Height (feet)	FAR	Number of Rooms	Hotel Size (sf)	Hotel Height (feet)	FAR
6 East 17 <sup>th</sup> St (MN Bl: 844, L: 35)	M1-5M	Public parking lot	9,200	N/A	N/A	139	46,000	95	5

## **Technical Analysis**

Although it is impossible to predict the precise impacts that would be realized by the utilization of the proposed M1 hotels special permit, a conceptual analysis is provided below for the purpose of understanding the probably range of impacts that may result with the proposed special permit. In general, the conclusions of this analysis are generally representative of a typical hotel development that could be located throughout M1 districts citywide; however, any future hotel development proposed in an M1 district would, under the proposed action, undergo their own discretionary review process at which time specific impacts would be assessed and disclosed.

## **Land Use, Zoning and Public Policy**

## **Existing Conditions**

The conceptual development site is located in an M1-5M district. M1 districts are often buffers between heavier manufacturing districts (M2 or M3) and adjacent residential or commercial districts. M1 districts typically include light industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities. Offices, hotels and most retail uses are also permitted. M1-5M (where the site is located) and M1-6M districts (by special permit) and M1-D districts (by authorization or certification) are the only manufacturing districts in which residences are permitted.

The site, which currently contains a publicly-accessible (paid) surface parking lot, is located in a fully-developed, medium-density neighborhood. There are a variety of land uses within a 400-foot radius of the project site including commercial (office and retail), mixed commercial and residential, and multi-family (walkup and elevator) residential uses. There are also a few manufacturing/industrial and institutional uses on the area but, by and large, the area is a mixed commercial and residential neighborhood. Union Square Park, a large and heavily used public park is one block to the east of the site. The site is located at the southwestern tip of an M1-5M district and is surrounded on three sides (east, west and south) by multiple C6 zoning districts, which allow for a wide range of high-bulk commercial uses such as corporate headquarters, large hotels, department stores and entertainment facilities, and high-rise mixed-use buildings. Residential uses are allowed in these districts and

have medium- to high-density residential district equivalents (R7 to R10). Hotels are allowed as-of-right in the M1-5M district, and in surrounding zoning districts within the study area.

The site is not located within a coastal zone nor is located within a Business Improvement District (BID) (although it is located just west of the 14<sup>th</sup> Street BID). Citywide public policies that are relevant to the site include:

- One New York: The Plan for a Strong and Just City (OneNYC) Citywide sustainability plan focusing on growth, equity, environmental sustainability, and resiliency.
- > 10-Point Industrial Action Plan, aims to support industrial job growth in Industrial Business Zones (IBZs), New York City's most active manufacturing districts.

#### **No-Action Condition**

In the No-Action condition, the conceptual development site would remain in its condition as a surface parking lot. No other changes to land use, zoning or public policy are anticipated under the No-Action condition.

#### With-Action Condition

In the With-Action condition, the conceptual site would be developed as a hotel through a special permit. Even though it is located within an M1 district, this site could be considered an appropriate site for hotel development, as it is located near Union Square, an area with a mixed-use character, and would not likely cause land use conflicts. A hotel use appears to be compatible with, and complimentary, to the surrounding commercial and residential uses, and is allowed as-of-right under No-Action conditions. There is at least one hotel located within a block of the site, so there is already a precedent for such uses.

Other than the use itself, which would no longer be allowed as-of-right in the M1-5M district, the conceptual development would comply with the underlying zoning regulations including those dictating FAR, height and setback requirements (as discussed below in "Urban Design and Visual Resources").

Hotel development pursuant to a special permit in an M1 district would support the 10-Point Industrial Action Plan policy initiative, as one of the stated action items was to create a new special permit, to preserve opportunities for industrial and manufacturing businesses in those zones. Similarly, as described in **Chapter 2**, "**Land Use Zoning and Public Policy**" the proposed action would require specific site considerations of the appropriateness of hotel development in M1 districts in the context of ensuring that neighborhoods are well served, thereby supporting the goals of OneNYC. Additionally, any site located in the New York City Coastal Zone would be required as part of its environmental review to evaluate the project's consistency with the Waterfront Revitalization Program.

Therefore, with the provisions described above, a new hotel development seeking a special permit to operate in an M1 district under the proposed action that was able to meet all the findings of this special permit would not result in a significant adverse impact to land use, zoning and public policy.

#### Socioeconomic Conditions

The proposed action would require a special permit for a hotel development in an M1 district, which by definition do not permit residences (except for conversion in limited districts (M1-5M and M1-6M). This would ensure that direct or indirect residential displacement would generally not occur. Even though, the conceptual site is located in an M1-5M which does allow, under certain conditions, conversion of existing buildings to residential uses, the site has no existing building and would have none under the No-Action condition. Therefore, there is would be no potential for direct or indirect residential displacement to occur under the With-Action condition.

The proposed action would also not have the potential to result in direct business and institutional displacement as under the No-Action condition, as a parking lot, there would only be a few employees, and the number of employees added by a hotel of this size (139 rooms) would be below the minimum threshold for analysis. Furthermore, any hotel development approved by special permit would also not be likely to result in trends that make it difficult for businesses to remain in the area or result in other indirect business displacement. This would be supported by the finding of the special permit—to review the potential for conflict between potential uses on the lot and existing uses in the surrounding area. In terms of adverse effects on specific industries, this too would not be likely as any Special Permit would be for one hotel development which alone would not be likely to affect a specific industry. For the reasons cited above, it's not expected that an environmental review of a hotel development on the conceptual site or any individual hotel development applying for special permit under the proposed action would result in significant adverse socioeconomic impacts. In the unlikely event that such impacts were anticipated they would be disclosed and mitigation measures would be considered.

## **Community Facilities and Services**

The conceptual hotel development would not physically displace or alter any community facilities or services ("direct effect") nor would it cause a change in populations that may affect services delivered (an "indirect effect"). Therefore, the conceptual hotel development seeking a special permit to operate in an M1 district under the proposed action would not result in a significant adverse impact to community facilities or services.

## **Open Space**

The conceptual development would not create any direct open space impacts and, more generally, special permit applications for hotels would not be likely to generate direct impacts (though without project-specific details it is impossible rule out conclusively any direct impacts). Additionally, the conceptual development would not exceed the threshold for any indirect impacts as it would generate well below 500 workers and no residents. Therefore, there would be no direct or indirect open space impacts as a result of the conceptual development. Furthermore, it is not expected that an environmental review of any individual hotel would result in significant adverse open space impacts. In the unlikely event that such impacts were anticipated they would be disclosed and mitigation measures would be considered.

#### **Shadows**

A shadows assessment considers projects that result in new shadows long enough to reach a sunlight-sensitive resource. A shadow assessment is required only if the project would: (a) result in new structures (or additions to existing structures including the addition of rooftop mechanical equipment) of 50 feet or more, or (b) be located adjacent to, or across the street from, a sunlight-sensitive resource. Since the conceptual site would result in an increment of 95 feet, a shadows assessment was conducted.

#### Tier 1 and Tier 2 Shadows Assessment

Under the With-Action condition, the conceptual site would be improved with a 95-foot-tall hotel – a 95-foot incremental increase in height over the No-Action condition. The site is located in the Union Square Historic District. In addition, there are two sunlight-sensitive resources located within the shadow study area (one historic landmark, which is wholly within the area that would not receive shadows from the site) (**See Figure A.8-1 in Appendix A.8**). Because there is a portion of one of the sunlight-sensitive resources—Union Square Park—that could receive shadows cast from the conceptual site, a Tier 3 analysis was conducted.

#### **Tier 3 Shadows Assessment**

The Tier 3 Screening assessment identified the possibility that shadows from the conceptual development would reach a small portion of the northwest corner of Union Square Park on the June analysis day (Appendix A.8, Figures A.8-2-A.8-3). This northern perimeter of the park is occupied by a greenmarket operating between 8 AM to 6 PM on Monday, Wednesday, Friday, and Saturday year-round. However, this potential shadow would be very small in area and would occur at the very end of the analysis day and reach the resource at approximately 6:01 PM. Therefore, further analysis was not warranted for Union Square Park, and there would be no potential for a shadows impact as a result of the conceptual development.

Although the conceptual site as analyzed for this conceptual analysis did not have the potential for a significant adverse shadows impact, the potential for such impacts cannot be ruled out for a new hotel development at another location within M1 districts. As such, any application for a special permit hotel development would need to assess and, if warranted, disclose significant adverse shadows impact to the public under and pursuant to a separate environmental review.

#### **Historic and Cultural Resources**

#### **Archaeological Resources**

The conceptual hotel development is not located in an area of archeological concern and does not have the potential to result in significant adverse impacts to archaeological resources even if it results in deeper in-ground disturbance. Other potential hotel development sites may be located in areas of archeological concern and it is not possible absence a specific special permit application to conclude where and to what extent additional in-ground disturbance might occur. As such, the possibility of significant impacts on archaeological resources cannot be eliminated. The potential for these impacts would need to be analyzed and disclosed at the time of application for a special permit.

#### **Architectural Resources**

The conceptual site is a vacant site and is not a designated landmark, but it is located in the LPC-designated Ladies Mile Historic District. Privately owned properties that are New York City Landmarks or in New York City Historic Districts would continue to be protected under the New York City Landmarks Law that requires LPC review and approval before any alteration or demolition can occur. However, impacts to eligible historical resources that are not protected by local, state or national designations may be affected by hotel developments subject to a CPC special permit. Therefore, the potential for significant adverse impacts on historic resources cannot be ruled out. Any potential impacts would be identified and disclosed at the time of discretionary review pursuant to a separate environmental review.

## **Urban Design and Visual Resources**

The street network in the 400-foot area surrounding the conceptual development site is an irregular, interrupted grid pattern. Land uses surrounding the site are primarily commercial and mixed-use developments, with some residential buildings, public facilities, and industrial uses. Union Square Park is located a block east of the site.

M1-5M districts allow an FAR of 5.0. As stated above, building height and setbacks are controlled by a sky exposure plane which may be penetrated by a tower in certain districts. Although new industrial buildings are usually low-rise structures that fit within sky exposure plane, commercial and community facility buildings can be constructed as towers in M1-3 through M1-6 districts.

The maximum allowable height of a front wall in an M1-5 district is 85 feet or 6 stories, whichever is less, after an initial setback distance of 20 feet on a narrow street or 15 feet on a wide street. The sky exposure plane begins at 85 feet. In addition, a tower may occupy 50 percent of the lot area of a zoning lot that is 10,500 square feet or less. Parking is not required in M1-5 districts.

The site is located in a medium-density neighborhood. Under existing conditions, there are a variety of building types surrounding the area, such as four-story mixed-use buildings and approximately 250-foot commercial/office buildings. There are a mix of building heights around the site. Most of the buildings are between 50 to 100 feet tall, and there are some buildings near the site that are over 100 feet tall – i.e. the commercial buildings located on the same block as the site are over 150 feet tall and the commercial/office building on the southwest corner of West 17<sup>th</sup> Street and 5<sup>th</sup> Avenue is approximately 250 feet tall<sup>1</sup>. Most buildings have a high lot coverage and are built near the street line.

Union Square Park is located one block east of the site, bounded by East 17<sup>th</sup> Street to the north, East 14<sup>th</sup> Street to the south, Union Square East, and Union Square West.

In addition to the park, the following visual resources have been identified:

- > The Union Building is an 11-story architecturally significant Moorish style mixeduse building;
- The Bank of Metropolis is a 16-story architecturally significant Neo-Renaissance mixed-use building.

Under the No-Action condition there would be no change to the existing street pattern or streetscape and the site would remain as a parking lot. There would be no changes to open space or visual resources.

In the With-Action condition, the existing street pattern would remain the same. The conceptual site would be expected to be developed pursuant to existing zoning regulations, with new buildings constructed to similar heights and bulks as other recently developed buildings.

The development would be a 95-foot-tall, 46,000-square-foot hotel 139 rooms. The With-Action FAR would be 5.0, consistent with district regulations. The With-Action condition would result in an incremental increase of 95 feet in height over the No-Action condition. However, as shown in **Figure A.8-6** in **Appendix A.8**, the development would be consistent in appearance with other buildings within the immediate area.

There would be no changes to open space, visual corridors, or visual resources. From a pedestrian standpoint, buildings would continue to be built at or near the street line. Therefore, it is not expected that a new hotel development seeking a special permit to operate in an M1 district under the proposed action that was able to meet

<sup>&</sup>lt;sup>1</sup> Building heights obtained from New York City Department of Information Technology & Telecommunications via NYC Open Data.

all the findings of this special permit would have the potential for significant adverse impacts to urban design.

#### **Natural Resources**

The proposed action would create a special permit for hotels within M1 zones, except for areas that are airport property or non-residential areas adjacent to airports. Natural resources are not likely to be found in M1 districts and the likelihood of impacts would be similar to that discussed for the proposed action's prototypical analysis. The proposed action would not eliminate and/or change the existing State or local protections. Although without a specific project, the potential for significant adverse impacts cannot conclusively be eliminated, it's not expected that an environmental review of any individual hotel facility would result in significant adverse natural resource impacts. In the unlikely event that such impacts were anticipated they would be disclosed and mitigation measures would be considered pursuant to a separate environmental review.

#### **Hazardous Materials**

The conceptual site is located in the Union Square neighborhood of Manhattan and consists of one parcel utilized as a surface parking lot. A review of Sanborn Fire Insurance Maps and historic aerial photographs revealed the site was previously improved with four (4) mixed-use buildings as early as 1903. Between 1950 and 1971, the structures were presumably demolished, and the site was utilized as a surface parking lot. Based on the presence of historical structures, urban fill may be present. Furthermore, Sanborn Fire Insurance Maps indicate the presence of a former gasoline filling station nearby to the south that operated from as early as 1920 through at least 1950. These features, along with the overall density of the surrounding areas in Manhattan, have the potential to have impacted subsurface conditions at the conceptual site. A review of regulatory agency databases indicated numerous hazardous waste generators and shipments of hazardous waste, as well as NYSDEC spill incidents (including leaking tanks) are present within the surrounding areas. Furthermore, potentially hydraulically upgradient dry cleaning facilities were also identified in the EDR database report. These listings could have the potential to have impacted subsurface conditions at the site.

In general, the development of hotels in M1 districts does have the potential for significant adverse impacts with respect to hazardous materials. However, the impacts are impossible to define in detail absence a specific special permit application. An applicant would also have to prescribe to any E-designation on the parcel, if applicable. This would be reinforced by environmental review that would accompany the special permit which would consider the need to undertake environmental remediation on the lot. Analysis would be conducted at the time of special permit application and any possible impacts would be disclosed pursuant to a separate environmental review. If hazardous materials impacts were to be identified as part of that environmental review, the impact could be avoided by the adoption of an E-designation at the time the hotel special permit was approved.

#### **Water and Sewer Infrastructure**

The conceptual development site would be a 46,000-square-foot hotel with 139 rooms in a M1-5M zoning district. Under the No-Action condition, the site would remain in its current state as a 9,200-square-foot parking lot. Therefore, the increment of analysis is 36,800 sf of development.

#### **Water Supply**

The development is not anticipated to have an exceptionally large demand for water (e.g. those that are projected to use more than one million gallons per day such as power plants, very large cooling systems or large developments) and is not located in an area that experiences low water pressure (e.g. areas at the end of the water supply distribution system such as Rockaway Peninsula and Coney Island). Therefore, per CEQR guidelines, no further analysis of water supply is warranted.

#### **Wastewater and Stormwater Conveyance and Treatment**

The site is located in a combined sewer area and would not facilitate the incremental development of 1,000 residential units or 250,000 sf of commercial space or more in Manhattan above the No-Action condition. The conceptual site does not involve development on a site of more than five acres where the amount of impervious surface would increase, nor would it involve development on a site of one acre or larger where the amount of impervious surface would increase, located within the Jamaica Bay watershed or in certain specific drainage areas, including the Bronx River, Coney Island Creek, Flushing Bay, and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, and Westchester Creek. Furthermore, it does not involve the construction of a new stormwater outfall that requires federal and/or state permits. Therefore, no further analysis of wastewater and stormwater conveyance and treatment is warranted.

Based on the above assessment, the conceptual development does not have the potential for significant adverse impacts on water supply or wastewater and stormwater conveyance and treatment and no further analysis is necessary. An analysis would be conducted at the time of special permit application and any possible impacts would be disclosed pursuant to a separate environmental review.

#### **Solid Waste and Sanitation Services**

The conceptual development would generate approximately 3,903 pounds per week (52 employees x 75 pounds per week). Based on this solid waste generation, the development would not result in a net increase of more than 50 tons of solid waste per week. Therefore, the conceptual hotel development seeking a special permit to operate in an M1 district under the proposed action would not result in any significant adverse impacts to solid waste and sanitation services.

## **Energy**

The conceptual development would generate an incremental increase of 9,949,800 Mbtu. This amount would not result in a substantial net increase of energy demand compared to overall demand city-wide and would not result in any significant adverse energy impacts.

## **Greenhouse Gas Emissions and Climate Change**

The conceptual development would not constitute development greater than 350,000 square feet on a single development site or involve other energy intense projects at the site, and consequentially, a GHG consistency assessment is not warranted. It also would not be inconsistent with the City's emissions reduction goals, as defined in the CEQR Technical Manual, or fundamentally change the City's solid waste management system. Also, as described above in "Energy," the conceptual development would not result in significant adverse impacts on energy demand. Therefore, there would be no would be no significant adverse GHG emissions or climate change impacts as a result of the conceptual development. Analysis, if warranted, would be conducted at the time of special permit application and any possible impacts would be disclosed pursuant to a separate environmental review.

## **Transportation**

The CEQR Technical Manual describes a two-step screening procedure for the preparation of a "preliminary analysis" to determine whether quantified operational analyses of transportation conditions are warranted. As discussed below, the preliminary analysis begins with a trip generation (Level 1) analysis to estimate the amount of person and vehicle trips generated by the proposed project. According to the CEQR Technical Manual, if the proposed project is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted.

When these thresholds are exceeded, detailed trip assignments (Level 2) are to be performed to estimate the incremental trips that could occur at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the proposed project would generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a sidewalk, corner area or crosswalk, further quantified operational analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, parking, and vehicular and pedestrian safety.

Using the travel demand factors presented in the Transportation Demand Factors technical memorandum provided in **Appendix A.6**, an estimate of the incremental net change of peak hour person and vehicle trips was prepared for this conceptual analysis based on the net increase of 139 hotel rooms between the No-Action and With-Action conditions. The resulting estimates of vehicle, transit, and pedestrian trips are presented in **Appendix A.6**. **Table 23-2** provides a summary of the incremental vehicle, subway/rail, bus, and pedestrian trips that would be generated by the Special Permit Scenario during the weekday AM, Midday, PM, and Saturday Midday peak hours.

Table 23-2 Summary of Incremental Trips Generated by the Conceptual **Hotel Development** 

		Weekday	Saturday	
Trip Type	AM	Midday	PM	Midday
Vehicle Trips	33	48	44	25
Subway/Rail Trips	20	37	34	22
Bus Trips	2	4	3	4
Pedestrian Trips	102	185	170	117

Note: Pedestrian trips include walk-only trips as well as the walk component of trips made by other modes.

As presented in Table 23-2, the conceptual hotel development would generate an incremental increase of 33, 48, 44, and 25 vehicle trips during the weekday AM, Midday, PM, and Saturday Midday peak hours, respectively. With regards to transit trips, there would be a net increase of 20, 37, 34, and 22 subway/rail trips during the weekday AM, Midday, PM, and Saturday Midday peak hours, respectively, and a net increase of 2, 4, 3, and 4 bus trips during the weekday AM, Midday, PM, and Saturday Midday peak hours, respectively. This development would generate an incremental increase of 102, 185, 170, and 117 pedestrian trips during the weekday AM, Midday, PM, and Saturday Midday peak hours, respectively.

According to CEQR Technical Manual criteria, if a proposed development is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. As shown above, the proposed development would generate less than 50 vehicle trips, 200 transit trips, and 200 pedestrian trips during all peak hours. As incremental trips generated by the conceptual hotel development would be less than the CEQR Technical Manual thresholds in all peak hours, detailed traffic, parking, transit, and pedestrian analyses are not warranted, as significant adverse transportation impacts are not anticipated.

Although the conceptual development site as analyzed for this conceptual analysis did not have the potential for a significant adverse transportation impact, the potential for such impacts cannot be ruled out for a new hotel development at another location within M1 districts. As such, any application for a special permit hotel development would need to assess and, if warranted, disclose significant adverse transportation impact to the public under and pursuant to a separate environmental review.

## **Air Quality**

Although it is impossible to predict the precise impacts that would be realized by the utilization of the proposed M1 hotels special permit because specific details are not available, based on the analysis presented below of the conceptual development site, potential for significant adverse impacts could occur absence placement of Edesignation on the site.

#### **Mobile Sources**

Based on the traffic screening criteria provided in the *CEQR Technical Manual*, the conceptual development site would not exceed the thresholds for requiring a mobile source air quality analysis, and therefore no further analysis is warranted.

#### **Stationary HVAC Emissions**

A new hotel development under the proposed special permit could result in significant adverse air quality impacts on existing sensitive land uses due to emission from the proposed heating, ventilation, and air conditioning (HVAC) system. The maximum building height for the conceptual development would be 95 feet and there are multiple adjacent existing buildings that are taller than the conceptual development. A refined air quality analysis was conducted to assess the potential impacts from emissions generated by the proposed HVAC system as the distance between source and receptor at this conceptual site is less than 30 feet.

The refined HVAC analysis was performed using the latest version of EPA's AERMOD dispersion model (version 16216), following the methodologies as described in **Chapter 15**, "**Air Quality**". Natural gas was assumed as the fuel type used for the proposed HVAC system. The results of the refined HVAC analysis are presented in Table 23-3 below.

Table 25-5 Summary of Kelineo HVAC Analysis for Conceptual Site	Table 23-3	Summary of	Refined HVAC A	<b>Analysis for Conceptual Si</b>	te
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Pollutant		oncentration g/m³)	Maximum Concentration <sup>2</sup>	NAAQS	De	Pass / Fail	
	Downwash	No Downwash	(µg/m³)		Minimis		
1-hr NO <sub>2</sub> <sup>1</sup>	303.1	355.9	355.9	188	-	Fail	
24-hr PM <sub>2.5</sub>	14.7	34.34	34.34	-	7.25	Fail	
Annual PM <sub>2.5</sub>	0.48	1.23	1.23	-	0.3	Fail	

#### Notes:

- 1) Hourly NO<sub>2</sub> background concentration was added to the modeled 1-hour NO<sub>2</sub> concentration to predict the total maximum 1-hour NO<sub>2</sub> concentration.
- 2) Maximum concentration represents the higher pollutant level predicted from "Downwash" and "No Downwash" options.

Based on the HVAC analysis for the conceptual site, the predicted 1-hour  $NO_2$  concentration, and the 24-hour and annual  $PM_{2.5}$  concentrations were above the NAAQS or the City's *de minimis* criteria, therefore, there would be a significant adverse air quality impact from the fossil fuel-fired HVAC system.

Given the above analysis, significant adverse air quality impacts could result from a new hotel development and, therefore would need be assessed and disclosed to the public pursuant to a separate environmental review. If air quality impacts were to be identified as part of that environmental review, the impact could be avoided by the adoption of an E-designation at the time the hotel special permit was approved.

#### **Noise**

It is impossible to predict the precise impacts that would be realized by the utilization of the proposed M1 hotels special permit because project specific details are not available at this time. Therefore, the potential for noise impacts would need to be considered at the time of application for a special permit as part of its discretionary review process. The applicant would also have to prescribe to any Edesignation on the parcel, if applicable.

Any significant adverse noise impacts that could result from a hotel development subject to the proposed special permit would be assessed and disclosed to the public under and pursuant to a separate environmental review. If noise impacts were to be identified as part of that environmental review, the impact could be avoided by the adoption of an E-designation at the time the hotel special permit was approved.

#### **Public Health**

Based on the findings of this conceptual analysis, it is not anticipated that adverse significant impacts would result from a new hotel development with regards to hazardous materials, air quality and noise as the adoption of E-designations as part of those proposals would forestall any impacts related to those impact categories. Therefore, there would be no potential for adverse significant impacts to public health as a result of the proposed action.

## **Neighborhood Character**

New hotel developments would be unlikely to result in adverse impacts to neighborhood character, since in part they are allowed as-of-right in the future without the proposed action. Additionally, such developments would need to meet the findings of the special permit such that any approved development would not have the potential for conflict between the hotel use on the parcel and existing uses in the surrounding area. Therefore, it is not anticipated that significant adverse impacts to neighborhood character would be realized as a result of the granting of a hotel special permit.

#### Construction

The conceptual development (and similar types of hotel developments of similar size) is not expected to result in construction activities where the duration of construction would be over two years. Based on *CEQR Technical Manual guidelines*, where the duration of construction is expected to be short-term (less than two years) a construction analysis is not warranted. Therefore, based on the screening analysis, the conceptual development is not anticipated to result in significant adverse construction impacts.

Although the conceptual site did not have the potential for a significant adverse construction impacts, the potential for such impacts cannot be ruled out for another new hotel development within M1 districts. As such, an assessment would be

conducted at the time of special permit application and disclosed pursuant to a separate environmental review.

## **Conclusion**

The conceptual analysis, conducted on a representative conceptual development site to determine the potential for significant adverse impacts that could result from a new hotel development pursuant to the special permit, identified the potential for significant adverse impacts with respect to historic resources, air quality, and hazardous materials.

Because the potential for significant adverse impacts is dependent on site-specific conditions, it is difficult, in the absence of specific applications, to predict the full scope of potential impacts. As such, it is not possible to predict whether discretionary actions would be pursued on any one site in the future, and each action would require its own ULURP approvals. Any time a discretionary action is applied for, including the special permit created under this proposed action, it would be subject to its own environmental review.