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Construction

Construction activities, although temporary in nature, can sometimes result in significant adverse impacts. A project's construction activities may affect a number of technical areas analyzed for the operational period, such as air quality, noise, and traffic. This chapter assesses the potential for the Proposed Actions to result in significant adverse impacts during construction.

Introduction

This chapter provides an assessment of the potential for construction of the Proposed Actions to result in significant adverse impacts during the construction period. The Proposed Actions would facilitate two new mixed-use buildings on two Development Sites in the Hell's Kitchen neighborhood of Manhattan Community District 4. Development Site 1 is located at 629 West 54th Street (Manhattan Block 1102, Lot 11) and Development Site 2 is located at 801 Eleventh Avenue (Manhattan Block 1103, Lot 36). The Applicants would construct a 42-story, mixed use residential and commercial building on Development Site 1 and a 38-story, mixed-use residential and commercial building on Development Site 2 (the Proposed Projects). The proposed building on Development Site 1 would include 617 residential dwelling units (DUs) and 113,990 square feet (sf) of commercial auto dealership space, and the proposed building on Development Site 2 would include 477 residential DUs and 85,760 sf of commercial auto dealership space.

For environmental analysis of operational conditions resulting from the Proposed Actions, two reasonable worst-case development scenarios (RWCDSs) – a Maximum Commercial Scenario and a Maximum Residential Scenario – were analyzed to provide a conservative baseline. However, construction activities, schedule, and equipment would be functionally the same for the Proposed Projects, Maximum Commercial Scenario, and Maximum Residential Scenario. Therefore, this analysis of potential impacts during project construction does not need to consider the differences between the RWCDSs described above.

Principal Conclusions

The Proposed Actions would result in significant adverse traffic and noise impacts as a result of construction activities.

Governmental oversight of construction in New York City is extensive and involves a number of City, State, and Federal agencies, each with specific areas of responsibility. Construction at the development sites would be subject to government regulations and oversight described below in Construction Regulations and General Practices and would employ the general construction practices described below. Construction of the Proposed Projects would also comply with the requirements of the New York City Noise Control Code.

Transportation

The Proposed Actions would result in significant adverse traffic and noise impacts as a result of construction activities.

Traffic

Activities related to construction would generate construction worker and delivery trips. To assess the potential for construction traffic impacts that may result from construction of the Proposed Projects, 11 key intersections in the study area were analyzed. Construction activities would be highest during the third quarter of 2028 (Q3 2028) and would generate approximately 205 construction worker auto trips and 24 construction truck trips during the AM construction peak hour, and 205construction worker auto trips and six construction truck trips during the PM construction peak hour. Construction trucks would be required to use New York City Department of Transportation (NYCDOT)-designated truck routes to travel to the Project Area and would then use local streets to access the construction site entrances.

Significant construction traffic impacts were identified at two of the eleven intersections analyzed during the AM construction peak hour and five intersections during the PM construction peak hour. Traffic improvement measures that could mitigate significantly impacted intersections are detailed in **Chapter 18, Mitigation**.

Parking

Construction workers would generate an estimated maximum daily parking demand of 228 spaces during the Q3 2028 peak quarter. This parking demand could be accommodated by off-street parking supply within a one-quarter mile radius of the Project Area. A parking utilization survey was conducted, and it is anticipated that there would be approximately 1,198 spaces available during the weekday midday period in the future condition which would be sufficient to accommodate the construction worker parking demand.

Transit and Pedestrians

Based on modal split information from a 2006 survey of construction workers for the New York Times Building in Midtown Manhattan, it is anticipated that approximately 71 percent of construction workers would commute to the Project Area by public transportation. During Q3 2028 when construction worker volumes would be highest, approximately 1,605 construction workers would be

expected to be working on the site, of which approximately 1,141 workers would be expected to use public transportation or walk to travel to the construction sites. It is expected that the majority of construction workers (90 percent) would arrive during the AM construction peak hour and depart during the PM construction peak hour, and they would generate approximately 1,027 construction worker trips by public transportation or walking during the AM and PM construction peak hours. These construction-related transit trips would occur outside of the peak periods of transit ridership and would be distributed to the nearby transit facilities. Construction-related transit trips would also be notably lower than during the operational peak hours. Therefore, the effects of construction-related transit trips on transit would be more moderate and are likely to be confined to the same or fewer locations as compared to the Proposed Projects' operational condition. As such, construction activities would not result in significant adverse transit impacts.

In total, construction-related activities would generate 1,445 pedestrian trips (transit trips plus auto-to-walk trips between the parking facilities and the construction sites) during the AM and PM construction peak hours. These construction worker trips would be distributed throughout the roadway network's pedestrian elements – sidewalk, crosswalks and corner reservoir areas – and would be assigned similarly to the project-generated operational trips – i.e., along similar routes to the same neighborhood parking garages, bus stops and subway station. In comparison, the Proposed Projects would generate approximately 1,352 pedestrian trips during the AM operational peak hour and 1,847 pedestrian trips during the PM operational peak hour. The construction-related pedestrian trips would occur outside of the commuter peak hours. Therefore, similar to the operational analysis, construction activities would not result in significant pedestrian impacts.

Air Quality

Measures required to reduce pollutant emissions during construction include all applicable laws, regulations, and the City's building codes. These include dust suppression measures, idling restriction, and the use of ultra-low sulfur diesel (ULSD) fuel and best available tailpipe reduction technologies. With the implementation of these emission reduction measures, the dispersion modeling analysis of construction-related air emissions for both on-site and on-road sources determined that particulate matter ($PM_{2.5}$ and PM_{10}), annual-average nitrogen dioxide (NO_2), and carbon monoxide (CO) concentrations would be below their corresponding *de minimis* thresholds or National Air Quality Ambient Standards (NAAQS), respectively. Therefore, construction of the Proposed Projects would not result in significant adverse air quality impacts during construction.

Noise

Construction of the phased development would involve standard construction activities and practices for buildings in New York City. Foundation/excavation and superstructure/exterior phases of construction are typically when the noisiest activities occur. The interior phases of construction typically involve minimal exterior equipment and substantially quieter noise conditions. The Development Site is near existing residential and commercial land uses. Based on the proximity of these noise-sensitive land uses, there is the potential for construction to cause significant adverse noise impacts.

Construction noise from mobile sources has been evaluated from 6:00 AM to 7:00 AM, when construction traffic would be greatest since this is the period that most worker vehicles and trucks arrive at the Development Site. This is a period prior to construction activities and noise from

stationary construction equipment would occur. Construction noise from mobile sources would not increase by 3 dBA or more and there would be no significant adverse noise impact due to construction mobile sources.

Construction noise from stationary sources has been evaluated for five different phases of construction. There would be two development sites with similar construction duration. For each phase of the construction at the development sites (i.e., Development Site 1 and Development Site 2) there would be demolition, excavation/foundation, superstructure/exterior, and interior finish phases of construction of the proposed buildings.

The potential for significant adverse construction noise impact depends on the intensity and duration of construction activities. If construction noise levels would occur continuously for 24 months or more, a detailed construction noise analysis is warranted and there is a potential for significant adverse noise impact. Construction noise occurring for shorter durations would not typically result in significant adverse noise impact unless there is a higher intensity of noise. For example, construction may cause significant adverse impact if exterior noise levels would increase by 15 dBA or more for 12 consecutive months or more or 20 dBA or more for a period of 3 consecutive months or more. These criteria apply to residential, community facility, and commercial office spaces, but do not apply to retail spaces. The chapter also investigates interior L_{10} noise levels to compare with the CEQR interior noise guideline of 45 dBA (L_{10}) for residential and community facility uses and interior noise guideline of 50 dBA (L_{10}) for commercial office uses in order to determine if a receptor would experience significant adverse construction noise impact and if potential mitigation at the receptor is needed.

Construction noise impacts would occur at the existing commercial building at 619 West 54th Street (R32) located east of Development Site 1. No construction noise impact would occur at other receptors analyzed. In total, construction activities would cause exterior and interior noise impacts on one commercial office receptor.

With the adherence to existing construction noise regulations and the implementation of a Construction Noise Mitigation Plan, as required by the New York City Noise Code, including an 8-foot construction noise barrier, construction noise would be reduced but would still exceed the thresholds for significant construction noise impact prior to mitigation.

Vibration

Construction activities have the potential to generate ground-borne vibration that can potentially cause structural or architectural damage or annoy people in nearby vibration-sensitive spaces, such as residences. The most substantial sources of construction vibration are equipment associated with the excavation and foundation phase, such as pile drivers, drill rigs, bulldozers, and jack hammers.

There are no buildings within the Project Area listed by the New York City Landmarks Preservation Commission (LPC) or the State and/or National Register of Historic Places (S/NR) which would require special protections from potential damage due to vibration. There is the potential for construction vibration from some construction equipment, such as pile drivers, to cause annoyance in nearby residences. However, these construction activities would only occur for limited periods of time at any particular location and there would be no significant adverse impact as a result of construction vibration.

Other Technical Areas

Land Use and Neighborhood Character

While construction of the new buildings under the Proposed Actions would cause temporary disruption, particularly related to noise, it is expected that such effects in any given area would be relatively short in duration, even under the worst-case construction sequencing and, therefore, would not create a neighborhood character impact. Therefore, no significant adverse construction impacts to land use and neighborhood character are expected.

Socioeconomic Conditions

Construction could, in some instances, temporarily affect pedestrian and vehicular access on street frontages immediately adjacent to the development sites. Long-term lane and/or sidewalk closures are not expected during construction and therefore, would not restrict access to any existing or planned retail businesses. Utility service would also be maintained to all businesses, although there may be very short-term interruptions. Overall, construction resulting from the Proposed Actions is not expected to result in any significant adverse impacts on surrounding businesses.

Community Facilities

The construction site would be surrounded by construction fencing and barriers that would limit the potential for impacts of construction on nearby community facilities. Construction of the proposed buildings would not block or restrict access to any facilities in the area and would not affect emergency response times of the New York City Police Department (NYPD) and New York City Fire Department (FDNY) given the geographic distribution of the police and fire facilities and their respective coverage areas. Therefore, no construction impacts would be expected to community facilities as a result of the Proposed Actions.

Open Space

As described in **Chapter 5, Open Space** there are no existing publicly accessible open spaces on the development sites. While DeWitt Clinton Park is located directly south of Development Site 1, access to this publicly accessible open space would not be impeded during construction. In addition, measures would be implemented to control air emissions, dust, noise, and vibration on the construction site. Therefore, no construction impacts on open space would be expected as a result of the Proposed Actions.

Historic and Cultural Resources

As discussed in **Part II, Technical Analyses** of the EAS, the Project Area has no archaeological significance is not located within 400 feet of existing historic and cultural resources. Therefore, construction would not affect any archaeological or architectural resources.

Natural Resources

The development sites do not contain and are not adjacent to any natural resources, as defined in the *2021 CEQR Technical Manual*. Therefore, no significant adverse impacts related to natural resources would occur during construction of the Proposed Projects.

Hazardous Materials

As discussed in greater detail in **Chapter 8, Hazardous Materials**, the potential for significant adverse impacts related to hazardous materials resulting from the Proposed Actions would be avoided through the placement of institutional controls such as an (E) designation on the development sites.

Methodology

This construction assessment follows the guidelines set forth in the *2021 City Environmental Quality Review (CEQR) Technical Manual* and the Final Scope of Work. As discussed in **Chapter 1, Project Description** and above, the Proposed Projects would be constructed following demolition of the existing buildings on both Development Sites. Demolition and construction activities would happen concurrently at both Development Sites over a total period of 36 months. The Proposed Projects would be fully operational by the end of 2029, the build year.

Because construction activities would exceed a two-year period and would involve the simultaneous construction of multiple buildings, an assessment of the potential for construction activities to result in adverse environmental effects was warranted to examine the potential construction effects in the areas of transportation, air quality, and noise and vibration.

Construction Regulations and General Practices

Construction Oversight

Governmental oversight of construction in New York City is extensive and involves a number of City, State, and Federal agencies, each with specific areas of responsibility, as follows.

- The New York City Department of Buildings (DOB) has primary oversight of construction. DOB oversees compliance with the New York City Building Code to ensure that buildings are structurally, electrically, and mechanically safe. In addition, DOB enforces safety regulations to protect both workers and the general public during construction. Areas of oversight include installation and operation of equipment such as cranes and lifts, sidewalk sheds, safety netting, and scaffolding.
- The New York City Department of Environmental Protection (DEP) enforces the New York City Noise Code, reviews and approves any needed Remedial Action Plans (RAPs) and associated Construction Health and Safety Plans (CHASPs) as well as the removal of fuel tanks and abatement of hazardous materials. DEP also regulates water disposal into the sewer system and reviews and approves any rerouting of wastewater flow.
- The New York City Fire Department (FDNY) has primary oversight of compliance with the New York City Fire Code and the installation of tanks containing flammable materials.
- The New York City Department of Transportation Office of Construction Mitigation and Coordination (DOT OCMC) reviews and approves any traffic lane and sidewalk closures.
- New York City Transit (NYCT) is responsible for bus stop relocations and subsurface construction within 200 feet of a subway, if needed.

- The New York City Landmarks Preservation Commission approves studies and testing to prevent loss of archaeological resources and to prevent damage to architectural resources.
- The New York State Department of Environmental Conservation (NYSDEC) regulates disposal of hazardous materials, and construction, operation, and removal of bulk petroleum and chemical storage tanks. NYSDEC also regulates discharge of water into rivers and streams.
- The New York State Department of Labor (DOL) licenses asbestos workers.
- The New York State Department of Transportation (NYSDOT) reviews and approves any traffic lane closures on its roadways, should any be necessary.
- The U.S. Environmental Protection Agency (EPA) has wide-ranging authority over environmental matters, including air emissions, noise, hazardous materials, and the use of poisons, however, much of its responsibility is delegated to the state level.
- The Occupational Safety and Health Administration (OSHA) sets standards for work site safety and construction equipment.

Construction Hours

New York City regulates the hours of construction work through the New York City Noise Control Code, as amended in December 2005 and effective July 1, 2007. Construction is limited to weekdays between the hours of 7:00 AM and 6:00 PM, and noise limits are set for certain specific pieces of construction equipment. The City may permit work outside of these hours to accommodate: (1) emergency conditions; (2) public safety; (3) construction projects by or on behalf of City agencies; (4) construction activities with minimal noise impacts; and (5) undue hardship resulting from unique site characteristics, unforeseen conditions, scheduling conflicts, and/or financial considerations. The DOB issues these work permits, and for new building construction, like the projected development, approval of a noise mitigation plan from the DEP under the City's Noise Code is also required.

In New York City, construction work typically occurs on weekdays and begins at 7:00 AM, with most workers arriving between 6:00 AM and 7:00 AM. Work typically ends at 3:00 PM or 3:30 PM, with some exceptions when certain critical tasks (e.g., finishing a concrete pour for a floor deck, completing the drilling of piles, or completing the bolting of a steel frame erected that day) require that the workday be extended beyond normal work hours. Any extended workdays generally last until approximately 5:30 PM or 6:00 PM and do not include all construction workers on-site, but only those involved in the specific task requiring additional work time. For work outside of normal construction hours, work permits are obtained from DOB prior to such work commencing. The numbers of workers and pieces of equipment in operation for work outside normal hours is generally limited to those needed to complete the authorized task. Overall, the level of activity for any work outside of normal construction hours is less than a normal workday.

Construction Practices

Access, Deliveries and Staging Area

Access to construction sites is controlled. Work areas are fenced off, and limited access points for workers and construction-related trucks are provided. Typically, worker vehicles are not allowed into the construction area, and workers or trucks without a need to be on the site are not allowed entry. After work hours, the gates are closed and locked. Security guards may patrol the construction site after work hours and over weekends to prevent unauthorized access.

Material deliveries to the site are controlled and scheduled. To aid in adhering to the delivery schedules, as is normal for building construction in New York City, flaggers are employed at each of the construction site's access points. Flaggers are typically supplied by either the subcontractor on-site at the time or by the construction manager. The flaggers control trucks entering and exiting the project site so that they would not interfere with one another. In addition, they provide an additional traffic aid as trucks enter and exit the on-street traffic streams.

Lane and Walkway Closures

Temporary curb-lane and sidewalk closures are typical for construction projects in New York City. To manage such closures, a Maintenance and Protection of Traffic (MPT) plan is developed consistent with DOT requirements. DOT OCMC reviews and approves MPT plans, and the implementation of the closures is also coordinated with DOT OCMC. In general, construction managers for major projects on adjacent sites also coordinate their activities to avoid delays and inefficiencies.

Public Safety

A variety of measures are employed to ensure public safety during construction at sites within New York City. Examples include the use of sidewalk bridges to provide overhead protection for pedestrians passing by the construction site and the employment of flaggers to control trucks entering and exiting the construction site, to provide guidance to pedestrians, and/or to alert or slow down the traffic. Other safety measures include following DOB requirements during the installation and operation of tower cranes to ensure safe operation of the equipment and the installation of safety nettings on the sides of the project as the superstructure advances upward to prevent debris from falling to the ground. These safety measures are required as part of a Site Safety Plan reviewed and approved by DOB.

Rodent Control

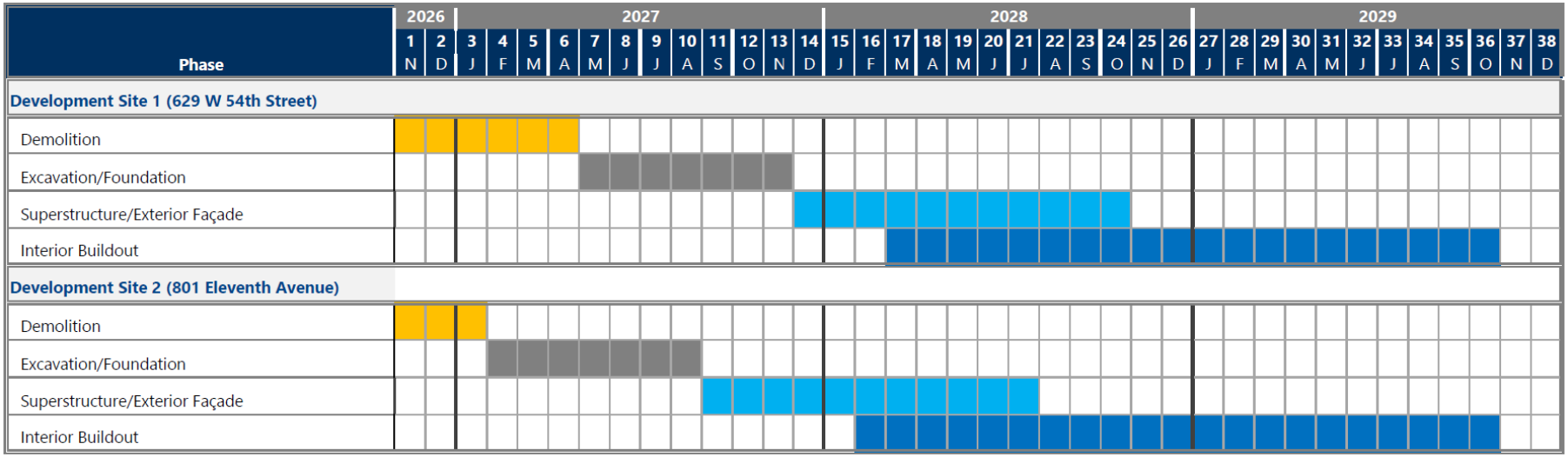
Construction projects in New York City typically include provisions for a rodent (i.e., mouse and rat) control program with provisions for this formalized in construction contracts for the development. Rodent control programs are typically carried out throughout construction, beginning with surveying and baiting appropriate areas prior to construction and providing for proper site sanitation and maintenance during construction. Signage is posted, and coordination is conducted with appropriate public agencies. Only EPA- and NYSDEC-registered rodenticides are permitted, and the contractor is required to implement the rodent control program in a manner that is not hazardous to the general public, domestic animals, and non-target wildlife.

Construction Description

Construction Schedule

Figure 16-1 shows the anticipated construction schedule for the Proposed Projects as well as the sequencing of construction stages as currently anticipated. The details of the construction schedule are described further below.

Figure 16-1 Conceptual Construction Schedule



For conservative analysis purposes it is assumed that no construction would occur on-site in absence of the Proposed Actions. Construction of the Proposed Projects would be subject to government regulations and oversight detailed above and would employ the general construction practices described above.

Construction on both Development Sites would take place over a 36-month period beginning in May 2026 and ending in April 2029. On Development Site 1, the construction period would begin with a six-month demolition phase where the existing building on the site would be removed. Next, the site would be excavated and the foundation would be put in place over the next seven months. Construction of the superstructure and exterior façade of the building would begin after completion of the foundation and take place over the next 11 months. Interior buildout would begin three months after the superstructure and exterior façade, lasting 20 months. On Development Site 2, construction would begin with a three-month demolition phase, followed by seven months of excavation and foundation work. Construction of the superstructure and exterior façade would take place over the next 11 months. Interior buildout would begin five months after the superstructure and exterior façade, lasting 21 months.

Demolition

During each phase, the first step would be disconnection of existing utilities and demolition of the existing buildings to clear the sites. Asbestos abatement would be the first part of demolition. These specialty tasks are strictly regulated in New York City to protect the health and safety of the construction workers and the public, including nearby residents and workers. Depending on the extent of the asbestos, either the whole building or portions of the building would be closed off by containment barriers made of either plastic or wood to prevent asbestos from leaving the containment area. Specially trained workers in protective clothing use hand tools to remove the asbestos. These asbestos containing materials are sealed in bags and taken to licensed landfills for disposal. While the asbestos is being abated, air monitoring is performed by a licensed, third-party inspector. After abatement is complete, an independent third-party inspector would certify that the building is asbestos free, and general demolition would begin. Depending on the amount of asbestos to be removed, about one or two closed or tarped truckloads of bagged materials could be removed per day.

The next step in general demolition is to remove any economically salvageable materials. Much of the reclaiming of salvageable materials is done onsite, and the materials are transported to recycling centers. Typical demolition requires solid temporary walls and overhead protection around the building to prevent accidental dispersal of building materials into areas accessible to the general public. In addition, dust suppression measures, such as wetting of materials, are used. An exposure assessment would be performed to determine appropriate dust control measures to manage any lead-based paint. After the structure is demolished, excavators or front-end loaders are used to load the debris into dump trucks. The demolition debris is taken to landfills for disposal. Depending on the size of the building demolished, about two to four truckloads of debris could be removed per hour. The general demolition is expected to last six months on Development Site 1 and three months on Development Site 2.

Excavation and Foundation

Excavation and Foundation is the next phase of construction. Regarding excavation activities, where necessary, sheeting is installed to stabilize soil around the excavation area and excavators are then

used to excavate soil. The soil is loaded onto dump trucks with front-end loaders for transport to a licensed disposal facility or for reuse on any portion of the development sites that needs fill.

Water from rain and snow collected in the excavation area during construction would be removed as necessary using a dewatering pump. If dewatering is required, testing would be performed to ensure compliance with DEP sewer discharge permit/approval requirements and, if necessary, pretreatment would be conducted prior to discharge to the sewer.

Alongside excavation, construction of the new building's foundation and below-grade elements begins. Foundation work for the development sites would include pile driving and columns and concrete walls would be built to the grade level. As part of the foundation construction, concrete would be poured starting in select areas.

Superstructure and Exterior Façade Construction (Core and Shell)

Construction of the core and shell involves construction of the building's framework, core, and exterior. The superstructure is the building's framework (beams and columns) and floor decks. Construction of the core, or interior structure, includes construction of the building's elevator shafts; vertical risers for mechanical, electrical, and plumbing systems; electrical and mechanical equipment rooms; core stairs; and restroom areas. Construction of the exterior involves the installation of the façade (exterior walls, windows, and cladding and the roof).

During this stage concrete plank and block would be installed or all concrete would be poured for the core and the superstructure. The podium for each building would be cast in place or steel. An electric hoist would be installed and operated to facilitate these activities, including the delivery of various materials to the site. A sidewalk shed would also be installed along the curb edge around the site.

Equipment used during this stage typically includes air compressors, generators, delivery and concrete trucks, concrete pumps, concrete trowels, welding equipment, and a variety of handheld tools. Space for concrete and spray fireproofing operations and other deliveries would be provided within the sites with access to Development Site 1 from W 54th and W 55th Streets and access to Development Site 2 from W 55th and W 56th Streets, depending on the construction phase. Mobile cranes would also be brought into the site, and temporary construction elevators (hoists) would also be constructed for the delivery of materials and vertical movement of workers when necessary. Superstructure activities would also require the use of forklifts, concrete mixers, rebar benders, asphalt laying equipment, welders, and a variety of trucks. Both Development Sites would require one concrete tower crane (stationary jumping mast) during this phase.

Interiors and Finishing

Interior fit-out activities include the construction of interior partitions, installation of lighting fixtures and interior finishes (i.e., flooring, painting, etc.); mechanical and electrical work; and lobby finishes. In addition, final cleanup and touchup of the proposed buildings and final building systems (i.e., electrical system, fire alarm, plumbing, etc.) testing and inspections are part of this stage of construction.

Equipment used during interior construction typically includes exterior hoists, compressors, delivery trucks, and a variety of small hand-held tools. Both Development Sites would require one concrete tower crane (stationary jumping mast) during this phase. This stage of construction is typically the

quietest and does not generate fugitive dust since this work occurs within the building with the façades substantially complete.

This stage of construction is also when the construction protection measures (fencing, sidewalk enclosures, bridges, temporary sidewalks, remaining scaffolding, etc.) around the construction site would be removed. This stage of construction would also include punch list completion activities, which are typically small tasks that were not completely finished, and project commissioning to ensure compliance with contract requirements.

Number of Construction Workers and Material Deliveries

Construction is labor intensive, and the number of workers varies with the general construction task and/or building size. Likewise, material deliveries and removals generate truck trips, and the number also varies depending on the task and/or the building size. **Table 16-1** shows the estimated number of daily workers and trucks to the development sites per quarter (i.e., three-month period) of each calendar year for the duration of construction activities. These represent the average number of daily workers and trucks within each quarter.

During construction, the average number of workers would be approximately 376 workers per day at Development Site 1 and 333 workers per day at Development Site 2, and the average across both Development Sites would be 709 workers per day. The average daily workers would reach a peak of 888 workers per day on Development Site 1 and 717 workers per day on Development Site 2 (1,605 total workers) occurring in the third quarter of 2028.

An average of 22 trucks per day is anticipated at Development Site 1 and an average of 20 trucks per day is anticipated at Development Site 2, a total of 42 average trucks per day across both sites. A maximum for Development Site 1 of 36 trucks per day is anticipated during the second quarter of 2028, while a maximum of 31 trucks per day for Development Site 2 would occur in the first quarter of 2028. The quarterly peak for total average daily truck trips across both sites would occur during the second quarter of 2028, with an average of 65 trucks per day across both sites.

Table 16-1 Average Number of Daily Construction Workers and Trucks by Quarter

Year	2026	2027				2028			
Quarter	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Development Site 1 (629 West 54th Street)									
Workers	65	110	68	148	125	302	793	888	630
Trucks	13	11	30	30	15	27	36	34	21
Development Site 2 (801 Eleventh Avenue)									
Workers	28	30	45	80	149	257	625	717	617
Trucks	13	27	27	9	21	31	29	20	15
Total									
Workers	93	140	113	228	274	559	1,418	1,605	1,247
Trucks	13	38	57	39	36	58	65	54	36

Source: New Line Structures (2025)

Assessment of Project Construction

In accordance with the *CEQR Technical Manual* guidelines, this preliminary assessment evaluates the effects associated with the Proposed Projects' construction related activities on sensitive receptors located near the area of construction.

Land Use and Neighborhood Character

While construction of the new buildings under the Proposed Actions would cause temporary disruption, particularly related to traffic and noise, it is expected that such effects in any given area would be relatively short in duration and therefore would not create a neighborhood character impact. Therefore, no significant adverse construction impacts to land use and neighborhood character are expected.

Socioeconomic Conditions

Construction could, in some instances, temporarily affect pedestrian and vehicular access on street frontages immediately adjacent to the development sites; however, long-term lane and/or sidewalk closures are not expected during construction and therefore, would not restrict access to any existing or planned retail businesses. Utility service would also be maintained to all businesses, although there may be very short-term interruptions. Overall, construction of the Proposed Projects is not expected to affect surrounding businesses or to result in any significant adverse impacts on socioeconomic conditions.

Community Facilities

The construction sites would be surrounded by construction fencing and barriers that would limit the potential for impacts of construction on nearby community facilities. Construction of the proposed buildings would not block or restrict access to facilities in the area and would not affect emergency response times of the New York City Police Department (NYPD) and New York City Fire Department (FDNY) given the geographic distribution of the police and fire facilities and their respective coverage areas. Therefore, construction impacts are not expected to result in any significant adverse impacts on community facilities.

Open Space

As described in **Chapter 5, Open Space** there are no existing publicly accessible open spaces on the development sites. While Dewitt Clinton Park is located directly south of Development Site 1, access to this publicly accessible open space would not be impeded during construction. In addition, measures would be implemented to control air emissions, dust, noise, and vibration on the construction sites. Therefore, no significant adverse construction impacts to open space are expected.

Historic and Cultural Resources

As discussed in **Part II, Technical Analyses** of the EAS, the Project Area has no archaeological significance and is not located within 400 feet of existing historic and cultural resources. Therefore, construction would not affect any archaeological or architectural resources.

Natural Resources

The development sites do not contain and are not adjacent to any natural resources, as defined in the *CEQR Technical Manual*. Therefore, no significant adverse impacts related to natural resources would occur during construction of the Proposed Projects.

Hazardous Materials

As discussed in greater detail in **Chapter 8, Hazardous Materials**, the potential for significant adverse impacts related to hazardous materials resulting from the Proposed Project would be precluded through the development and implementation of a RAP and CHASP during redevelopment. These measures would be memorialized through the assignment of an (E)-Designation on the development sites to ensure investigation, mitigation, and remediation of any hazardous materials would be completed in a safe, and comprehensive manner.

Water and Sewer Infrastructure

The Project Area is not adjacent to any water resources. Therefore, construction of the Proposed Projects would not have an impact on water quality. During construction, the Applicants would comply with all applicable regulations governing on-site stormwater management and disposal into the sewer system, including the NYC Construction Code, NYC Plumbing Code, Unified Stormwater Rule (USWR), and Local Law 97 of 2017. As described in **Chapter 9, Water and Sewer Infrastructure**, the incorporation of the appropriate sanitary flow and stormwater source control storm management practices would reduce the overall volume of sanitary sewer discharge and stormwater runoff as well as the peak stormwater runoff rate from the development sites. As such, construction associated with the Proposed Actions is not expected to result in a significant adverse impact on the City's water and sewer infrastructure.

Transportation

Construction activity would extend from 2026 through 2029 and would generate construction worker and truck traffic. Because of the length of duration of these activities, an evaluation of construction sequencing and worker and truck projections were completed in order to identify potential construction traffic impacts. Construction-related vehicle trips would be higher than the Proposed Projects' operational trips during the AM and PM peak hours. Therefore, construction trip projections were developed and assigned through the study area through key access routes to the Project Site, and a detailed traffic analysis was performed for 11 key intersections.

Construction activities would generate transit or walk trips which would occur outside the commuter peak hours and would be distributed to nearby transit facilities. Construction-related transit trips would be notably lower than during the operational peak hours; therefore, construction transit impacts are likely to be confined to the same or fewer locations as compared to the operational condition. Similarly, construction-related pedestrian trips would occur outside the commuter peak hours and are expected to be lower than the operational conditions; therefore significant pedestrian impacts are not anticipated similar to the findings for the operational analysis.

Construction Worker Modal Splits

The number of projected construction vehicles per day were developed for the construction quarters using modal split information based on the 2006 survey of construction workers for the New York Times Building in Midtown Manhattan. It is anticipated that construction workers would primarily travel to the development sites via public transportation (approximately 71 percent), with a smaller percentage of construction workers expected to travel to the development sites via auto (approximately 29 percent with an average auto occupancy of 2.04 workers per auto).

Construction Peak Quarter and Peak Hour of Construction

Based on the above mode share and vehicle occupancy assumptions, the peak quarter for construction activities was identified. As shown in **Table 16-2**, the peak quarter of construction activity would occur during the third quarter of 2028 (Q3 2028) and construction activities would generate approximately 563 daily vehicle trips (671 daily PCE trips[1]).

Table 16-2 Average Number of Daily Construction PCE Trips by Quarter

Year	2026	2027				2028				2029			
Quarter	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Auto Trips	26	40	32	64	78	158	402	456	352	380	250	148	86
Truck Trips	50	75	112	77	71	115	129	107	72	58	58	54	51
Vehicle Trips	76	115	144	141	149	273	531	563	424	438	308	202	137
PCE Trips	126	189	256	218	219	387	660	671	497	496	366	257	187

Traffic Analysis

Peak Hour Construction Worker Vehicle and Truck Trips

Construction activities would be expected to occur on weekdays beginning at 7:00 AM and ending at 3:00 PM or 3:30 PM. Auto trips by construction workers would typically occur during the hours before and after the daily work shift. Construction truck trips would typically be distributed throughout the day depending upon the specific types of construction activities taking place; most trucks would remain in the area for short durations. Each worker vehicle would arrive in the morning and depart in the afternoon, and each truck delivery was assumed to result in one "in" trip and one "out" trip during the same hour.

The estimated daily vehicle trips for the peak quarter of construction traffic were distributed throughout the workday based on projected arrival/departure patterns of construction workers, and the projected pattern of truck deliveries based on the types of construction activities that would occur during the peak quarters for the Proposed Project. For construction workers, typical arrival patterns show that most arrivals (approximately 90 percent) occur during the 6:00 AM to 7:00 AM hour (the hour before the beginning of a regular day shift) and the same percentage of departure trips occurs

[1] Since larger vehicles such as trucks typically make up a significant portion of construction traffic, a passenger car equivalent factor is applied to these vehicles to account for their size difference. It is assumed that truck trips would be comprised of trucks with three axles which per the *CEQR Technical Manual* is equivalent to two passenger cars.

during the end of the shift (the 3:00 PM to 4:00 PM hour). For trucks, deliveries are usually spread throughout the day, but the peak activity (approximately 25 percent) is anticipated to occur during the 6:00 AM to 7:00 AM hour.

The estimated number of vehicle trips generated by construction activities during the Q3 2028 peak quarter would be 229 vehicle trips (253 PCEs) during the AM peak hour (6:00 AM to 7:00 AM) and 211 vehicle trips (217 PCEs) during the PM peak hour (3:00 PM to 4:00 PM). The peak construction hourly trip projections for this peak quarter are summarized in **Table 16-3**.

Table 16-3 Construction Vehicle Trips by Hour (Q3 2028)

	Auto Trips		Truck Trips		Total Vehicle Trips			Total PCE Trips		
Hour	In	Out	In	Out	In	Out	Total	In	Out	Total
6 AM – 7 AM	205	0	12	12	217	12	229	229	24	253
7 AM – 8 AM	23	0	6	6	29	6	35	35	12	47
8 AM – 9 AM	0	0	6	6	6	6	12	12	12	24
9 AM – 10 AM	0	0	6	6	6	6	12	12	12	24
10 AM – 11 AM	0	0	5	5	5	5	10	10	10	20
11 AM – 12 PM	0	0	5	5	5	5	10	10	10	20
12 PM – 1 PM	0	0	5	5	5	5	10	10	10	20
1 PM – 2 PM	0	0	3	3	3	3	6	6	6	12
2 PM – 3 PM	0	6	3	3	3	9	12	6	12	18
3 PM – 4 PM	0	205	3	3	3	208	211	6	211	217
4 PM – 5 PM	0	17	0	0	0	17	17	0	17	17

The AM construction peak hour increment of 207 vehicle trips (231 PCE trips) would be higher than the 161 operational vehicle trips (173 PCE trips) that would be generated by the Proposed Projects during the AM operational peak hour. Similarly, the PM construction peak hour would generate 188 vehicle trips (194 PCE trips) which would be higher than the Proposed Projects increment of 139 vehicle trips (135 PCE trips) during the operational PM peak hour. **Table 16-4** shows the comparison of vehicle trip increments during the construction peak quarter's peak hours and the Proposed Projects' operational peak hours.

Table 16-4 Vehicle Trips Comparison – Construction vs. Operational Conditions

	Construction Peak Hour Trips		Operational Peak Hour Trips	
	6 AM – 7 AM	3 PM – 4PM	8 AM – 9 AM	5 PM – 6 PM
Autos	205	205	75	79
Taxis	0	0	74	64
Trucks	24	6	12	-4
Total Vehicle Trips	**229**	**208**	**161**	**139**
PCE Trips	**253**	**217**	**173**	**135**

Construction Traffic Volumes and Levels of Service

Construction-generated trips were assigned through the surrounding street network based on expected routes to and from the development sites. Construction activities would result in an

increment of construction-related vehicle trips above the CEQR threshold of 50 trips per hour during either the AM or PM construction peak hours (or both) at the intersections listed below. Therefore, a traffic analysis was conducted at these intersections to assess their potential for significant traffic impacts.

- Twelfth Avenue at West 54th Street (AM peak hour)
- Twelfth Avenue at West 55th Street (AM and PM peak hours)
- Twelfth Avenue at West 56th Street (AM peak hour)
- Twelfth Avenue at West 57th Street (AM and PM peak hours)
- Eleventh Avenue at West 54th Street (PM peak hour)
- Eleventh Avenue at West 55th Street (PM peak hour)
- Eleventh Avenue at West 56th Street (PM peak hour)
- Eleventh Avenue at West 57th Street (AM and PM peak hours)
- Tenth Avenue at West 54th Street (PM peak hour)
- Tenth Avenue at West 55th Street (AM peak hour)
- Tenth Avenue at West 57th Street (AM peak hour)

Existing Conditions

The existing conditions traffic volumes for the AM and PM construction peak hours are shown in **Figure 16-2** Figure **16-3**. Each of the eleven intersections analyzed were found to operate at overall acceptable levels of service during the AM and PM construction peak hours. Of the approximately 46 movements analyzed during the AM construction peak hour, two movements operate at unacceptable levels of service (i.e., LOS E or F). Of the 47 movements analyzed during the PM construction peak hour, eight movements operate at unacceptable levels of service. Detailed traffic levels of service are provided in **Table 16-5**.

Figure 16-2 Year 2024 Existing Traffic Volumes – AM Construction Peak Hour

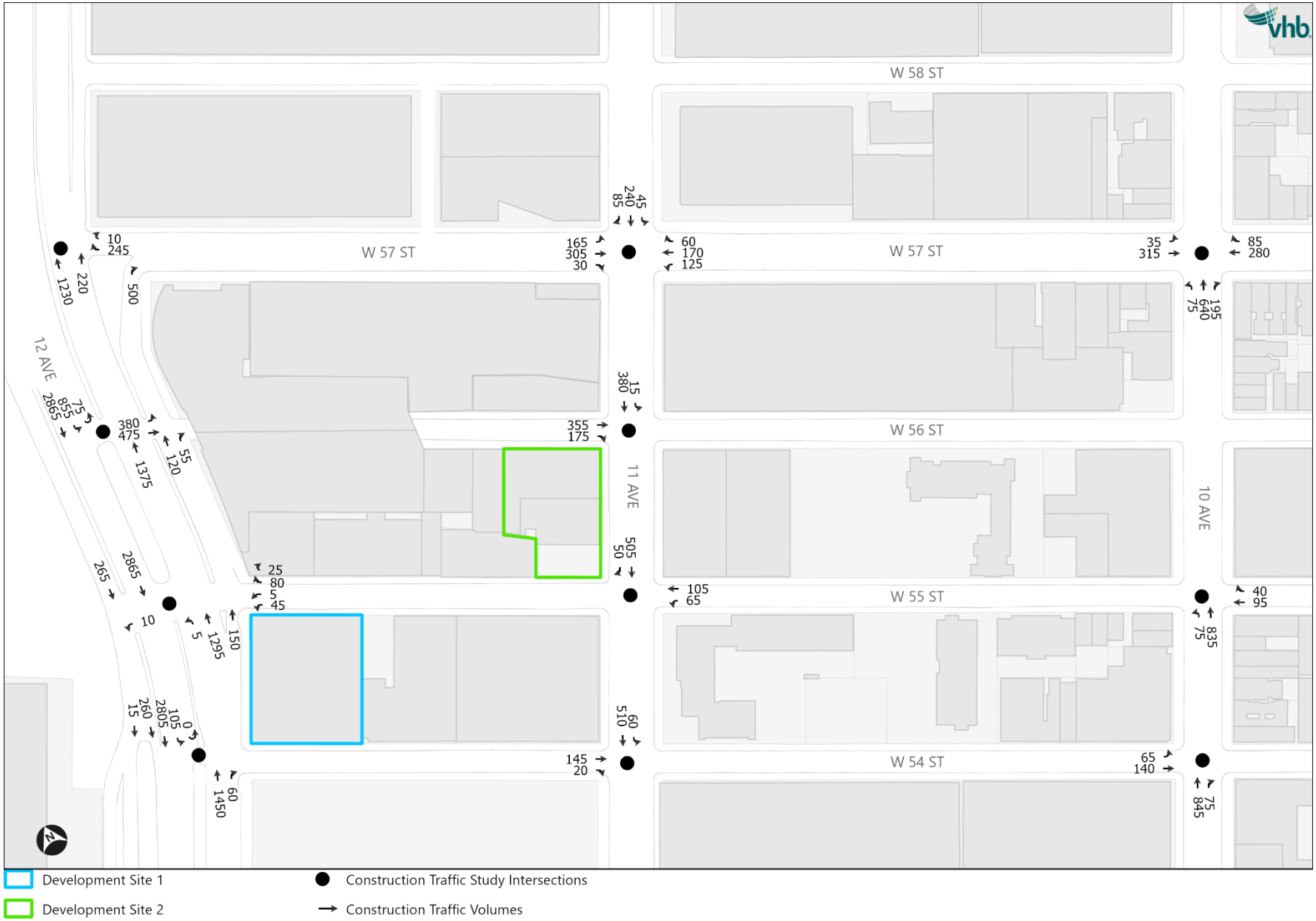


Figure 16-3 Year 2024 Existing Traffic Volumes – PM Construction Peak Hour

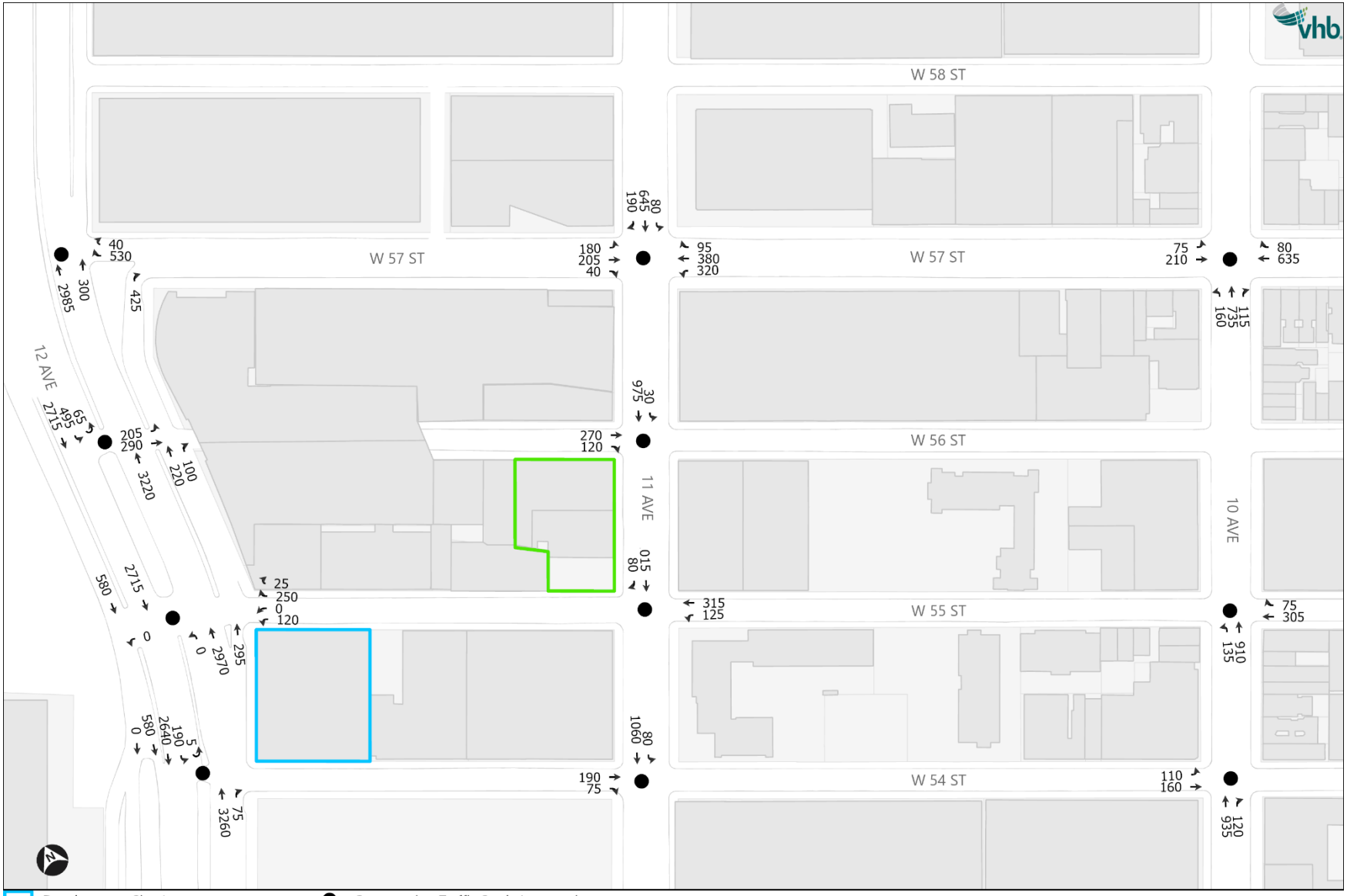


Table 16-5 Year 2024 Existing Traffic Level of Service

Intersection & Approach		AM Peak Hour Mvt	AM V/C	AM Ctrl Delay[1]	AM LOS	PM Peak Hour Mvt	PM V/C	PM Ctrl Delay[1]	PM LOS
Twelfth Avenue and West 57th Street									
Twelfth Avenue	NB	T	0.48	3.4	A	T	0.82	2.2	A
		R	0.38	3.9	A	R	0.38	1.7	A
	SB	T	0.60	0.4	A	T	0.52	0.3	A
West 57th Street	WB	R	0.26	30.7	C	R	0.87	66.6	E
Twelfth Avenue Northbound Service Road (stop-controlled)	NB	R	-	12.7	B	R	-	11.3	B
Overall Intersection[2]		-	-	**3.7**	**A**	-	-	**7.2**	**A**
Twelfth Avenue and West 56th Street									
Twelfth Avenue	NB	T	0.62	21.2	C	T	0.89	7.6	A
	SB	UL	0.77	38.5	D	UL	0.93	77.9	E
		T	0.54	0.3	A	T	0.51	0.3	A
Twelfth Avenue Northbound Service Road	NB	TR	0.30	19.8	B	TR	0.34	3.6	A
West 56th Street	EB	LT	0.61	2.8	A	LT	0.64	3.7	A
Overall Intersection[2]		-	-	**11.8**	**B**	-	-	**10.0**	**A**
Twelfth Avenue and West 55th Street									
Twelfth Avenue	NB	L	0.08	63.4	E	L	0.00	0.0	A
		T	0.39	5.1	A	T	0.82	3.3	A
		R	0.20	5.1	A	R	0.35	2.8	A
	SB	T	0.91	32.0	C	T	0.88	31.3	C
Twelfth Avenue Southbound Service Road	SB	T	0.34	16.9	B	T	0.72	28.4	C
West 55th Street	WB	LT	0.24	53.5	D	LT	0.55	62.3	E
		R	0.33	54.3	D	R	0.81	73.7	E
West 55th Street Service Road Access	WB	L	0.02	1.0	A	L	0.00	0.0	A
Overall Intersection[2]		-	-	**23.3**	**C**	-	-	**20.6**	**C**

Table 16-5 Year 2024 Existing Traffic Level of Service

		AM Peak Hour				PM Peak Hour			
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**
Twelfth Avenue and West 54th Street									
Twelfth Avenue	NB	TR	0.47	10.9	B	TR	0.94	27.0	C
	SB	L	0.33	70.4	E	L	0.60	67.9	E
		T	0.76	1.1	A	T	0.72	1.3	A
Twelfth Avenue Southbound Service Road	SEB	T	0.24	1.0	A	T	0.54	1.3	A
Overall Intersection[2]		-	-	**6.1**	**A**	-	-	**15.9**	**B**
Eleventh Avenue and West 57th Street									
Eleventh Avenue	SB	L	0.13	22.3	C	L	0.27	24.5	C
		TR	0.29	18.9	B	TR	0.74	26.8	C
West 57th Street	EB	L	0.52	25.1	C	L	0.70	38.2	D
		TR	0.52	28.5	C	TR	0.38	26.4	C
	WB	L	0.49	11.8	B	L	0.95	32.1	C
		TR	0.36	25.7	C	TR	0.74	37.2	D
Overall Intersection[2]		-	-	**23.0**	**C**	-	-	**30.8**	**C**
Eleventh Avenue and West 56th Street									
Eleventh Avenue	SB	LT	0.18	9.1	A	LT	0.42	9.7	A
West 56th Street	EB	TR	0.71	32.0	C	TR	0.50	27.3	C
Overall Intersection[2]		-	-	**22.3**	**C**	-	-	**14.9**	**B**
Eleventh Avenue and West 55th Street									
Eleventh Avenue	SB	T	0.22	11.3	B	T	0.40	5.5	A
		R	0.13	15.9	B	R	0.19	9.0	A
West 55th Street	WB	L	0.23	29.3	C	L	0.48	27.3	C
		T	0.34	31.0	C	T	0.91	49.2	D
Overall Intersection[2]		-	-	**16.1**	**B**	-	-	**16.8**	**B**
Eleventh Avenue and West 54th Street									
Eleventh Avenue	SB	LT	0.12	3.0	A	LT	0.44	3.5	A
West 54th Street	EB	TR	0.47	30.6	C	TR	0.79	44.4	D
Overall Intersection[2]		-	-	**9.7**	**A**	-	-	**11.9**	**B**

Table 16-5 Year 2024 Existing Traffic Level of Service

Intersection & Approach		AM Peak Hour Mvt	AM V/C	AM Ctrl Delay[1]	AM LOS	PM Peak Hour Mvt	PM V/C	PM Ctrl Delay[1]	PM LOS
Tenth Avenue and West 57th Street									
Tenth Avenue	NB	L	0.44	26.8	C	L	0.93	65.4	E
		T	0.42	4.0	A	T	0.43	3.3	A
		R	0.47	6.4	A	R	0.57	12.3	B
West 57th Street	EB	LT	0.48	35.4	D	L	0.84	83.7	F
		-	-	-	-	T	0.52	29.7	C
	WB	TR	0.51	23.0	C	TR	0.85	34.1	C
Overall Intersection[2]		-	-	**16.6**	**B**	-	-	**26.0**	**C**
Tenth Avenue and West 55th Street									
Tenth Avenue	NB	L	0.16	6.8	A	L	0.38	8.4	A
		T	0.51	7.5	A	T	0.57	7.9	A
West 55th Street	WB	TR	0.39	24.9	C	TR	0.92	55.2	E
Overall Intersection[2]		-	-	**10.0**	**A**	-	-	**20.4**	**C**
Tenth Avenue and West 54th Street									
Tenth Avenue	NB	TR	0.56	18.6	B	TR	0.60	19.2	B
West 54th Street	EB	LT	0.17	16.4	B	LT	0.67	20.7	C
Overall Intersection[2]		-	-	**18.2**	**B**	-	-	**19.5**	**B**

[1] Control delay is measured in seconds per vehicle.
[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.

Construction No-Action Condition

An annual growth rate of 0.25 percent per year was assumed (years 2024 to 2028) per the *CEQR Technical Manual* to estimate the background volumes for the 2028 No-Action condition. Vehicle trips for No-Action background development sites discussed in **Chapter 10, Transportation,** expected to be developed in the area and completed by the year 2028, were assigned to the roadway network. There are no known roadway improvement projects within the study that are expected to be completed by 2028.

The No-Action condition traffic volumes for the AM and PM construction peak hours are shown in **Figure 16-4** and **Figure 16-5**. Under future No-Action condition, the eleven analysis intersections are expected to operate at overall acceptable level of services in during the AM and PM construction peak hours. Of the 46 movements analyzed during the AM construction peak hour, three movements would operate at unacceptable levels of service. Of the 47 movements analyzed during the PM construction peak hour, eight movements would operate at unacceptable levels of service, in the same as in existing conditions. Detailed traffic levels of service are provided in **Table 16-6**.

Figure 16-4 Year 2028 No-Action Traffic Volumes – AM Construction Peak Hour

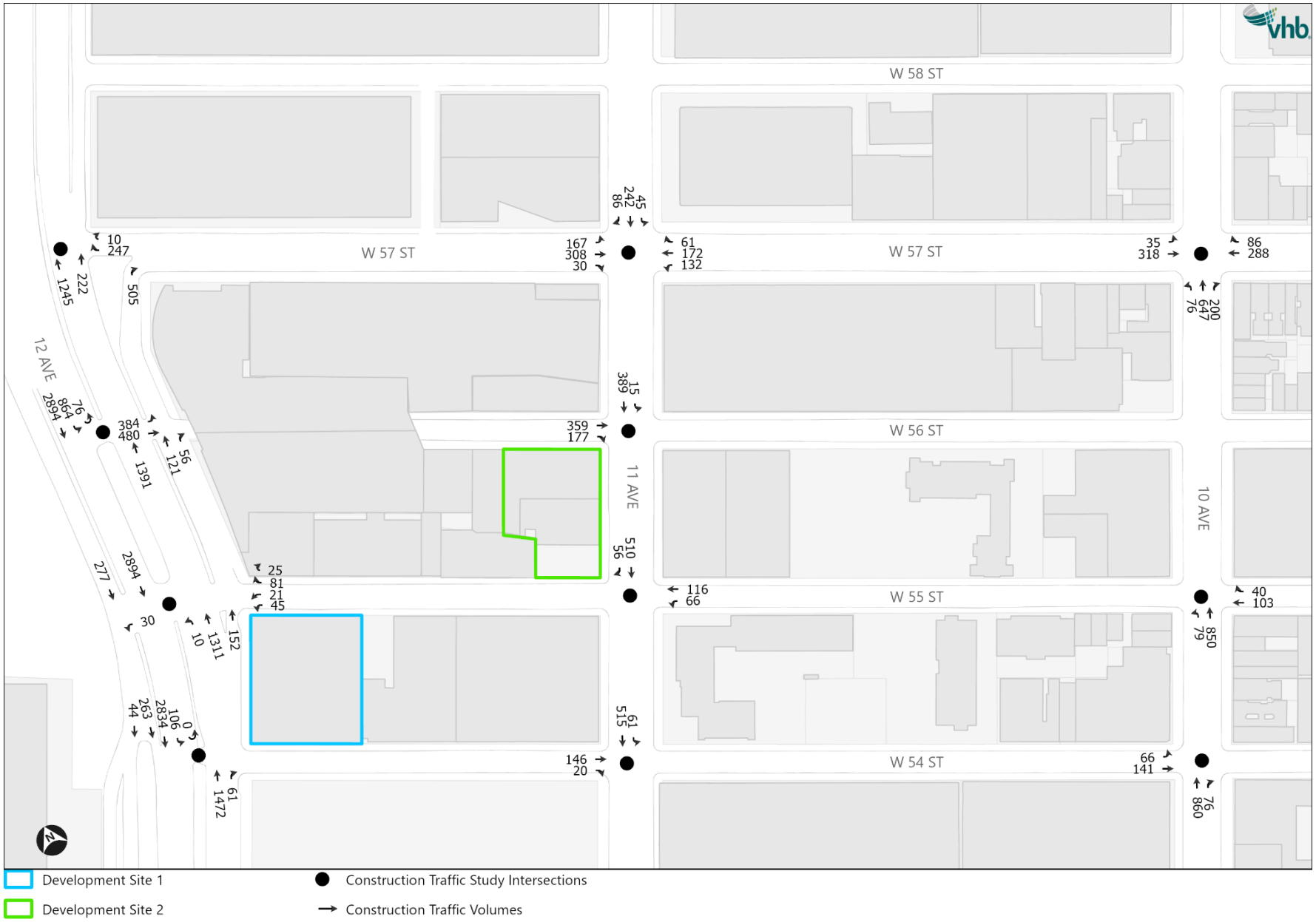


Figure 16-5 Year 2028 No-Action Traffic Volumes – PM Construction Peak Hour

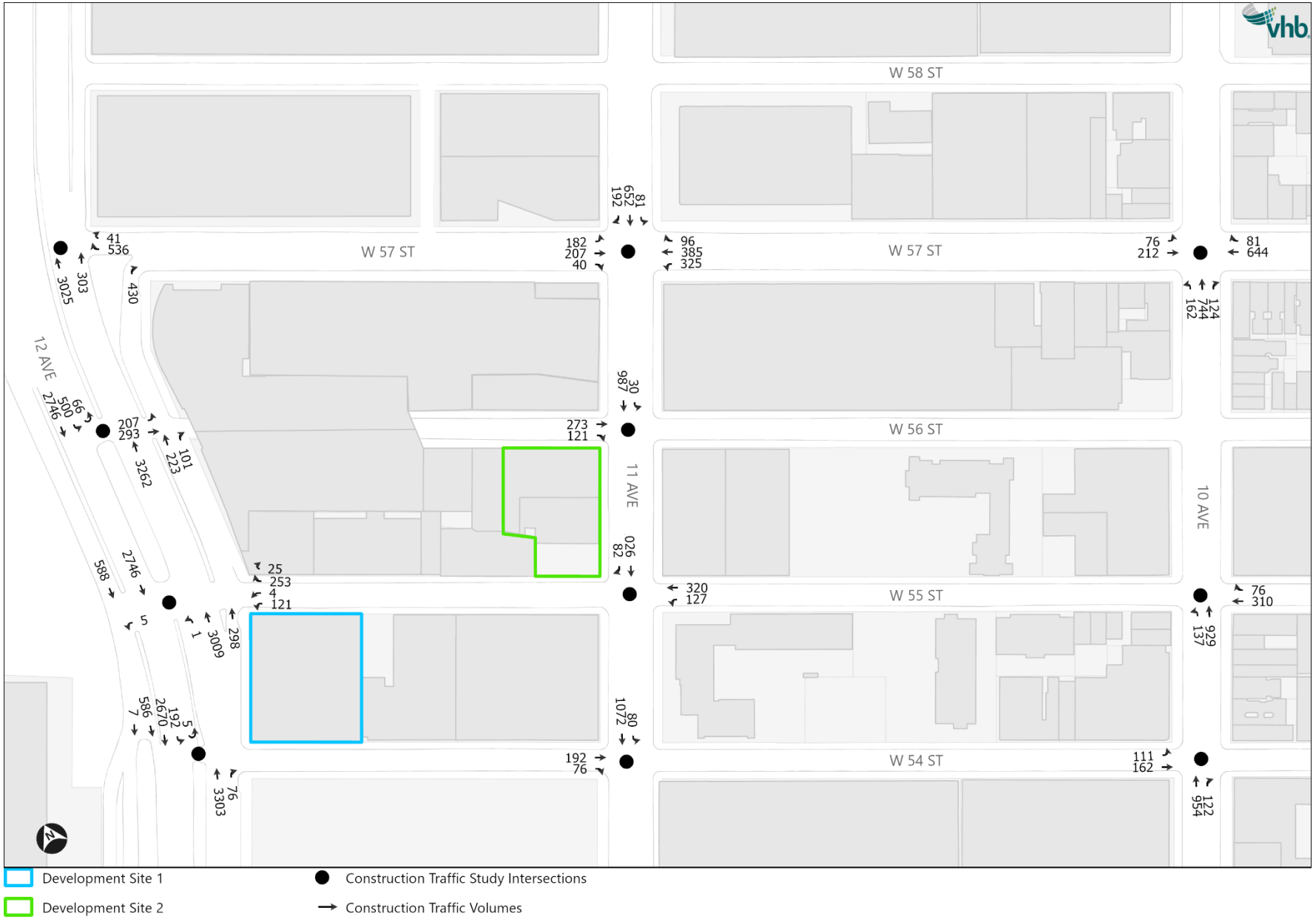


Table 16-6 Year 2028 No-Action Traffic Level of Service

Intersection & Approach		AM Peak Hour Mvt	AM V/C	AM Ctrl Delay[1]	AM LOS	PM Peak Hour Mvt	PM V/C	PM Ctrl Delay[1]	PM LOS
Twelfth Avenue and West 57th Street									
Twelfth Avenue	NB	T	0.48	3.4	A	T	0.83	2.3	A
		R	0.39	4.0	A	R	0.38	1.7	A
	SB	T	0.61	0.4	A	T	0.53	0.3	A
West 57th Street	WB	R	0.27	30.8	C	R	0.88	67.4	E
Twelfth Avenue Northbound Service Road (stop-controlled)	NB	R	-	12.8	B	R	-	11.3	B
Overall Intersection[2]		-	-	**3.8**	**A**	-	-	**7.3**	**A**
Twelfth Avenue and West 56th Street									
Twelfth Avenue	NB	T	0.63	21.4	C	T	0.90	8.0	A
	SB	UL	0.78	38.9	D	UL	0.94	79.4	E
		T	0.54	0.3	A	T	0.51	0.3	A
Twelfth Avenue Northbound Service Road	NB	TR	0.30	21.7	C	TR	0.35	3.8	A
West 56th Street	EB	LT	0.61	2.8	A	LT	0.64	3.6	A
Overall Intersection[2]		-	-	**12.0**	**B**	-	-	**10.2**	**B**
Twelfth Avenue and West 55th Street									
Twelfth Avenue	NB	L	0.18	65.0	E	L	0.02	55.0	D
		T	0.40	5.1	A	T	0.83	3.4	A
		R	0.20	5.1	A	R	0.36	2.9	A
	SB	T	0.92	32.8	C	T	0.89	31.9	C
Twelfth Avenue Southbound Service Road	SB	T	0.35	17.2	B	T	0.73	28.9	C
West 55th Street	WB	LT	0.32	55.3	E	LT	0.57	63.3	E
		R	0.33	54.3	D	R	0.83	75.5	E
West 55th Street Service Road Access	WB	L	0.07	0.3	A	L	0.01	0.9	A
Overall Intersection[2]		-	-	**23.8**	**C**	-	-	**21.0**	**C**

Table 16-6 Year 2028 No-Action Traffic Level of Service

Intersection & Approach		AM Peak Hour Mvt	AM V/C	AM Ctrl Delay[1]	AM LOS	PM Peak Hour Mvt	PM V/C	PM Ctrl Delay[1]	PM LOS
Twelfth Avenue and West 54th Street									
Twelfth Avenue	NB	TR	0.47	11.0	B	TR	0.96	28.6	C
	SB	L	0.34	70.3	E	L	0.61	67.6	E
		T	0.76	1.1	A	T	0.73	1.3	A
Twelfth Avenue Southbound Service Road	SEB	T	0.25	2.1	A	T	0.55	1.4	A
Overall Intersection[2]		-	-	**6.2**	**A**	-	-	**16.8**	**B**
Eleventh Avenue and West 57th Street									
Eleventh Avenue	SB	L	0.13	22.3	C	L	0.28	24.6	C
		TR	0.29	18.9	B	TR	0.74	27.0	C
West 57th Street	EB	L	0.53	25.4	C	L	0.71	39.0	D
		TR	0.52	28.6	C	TR	0.39	26.5	C
	WB	L	0.52	12.7	B	L	0.97	36.7	D
		TR	0.36	26.2	C	TR	0.75	37.6	D
Overall Intersection[2]		-	-	**23.2**	**C**	-	-	**31.8**	**C**
Eleventh Avenue and West 56th Street									
Eleventh Avenue	SB	LT	0.19	9.4	A	LT	0.43	9.8	A
West 56th Street	EB	TR	0.72	32.3	C	TR	0.51	27.4	C
Overall Intersection[2]		-	-	**22.6**	**C**	-	-	**15.0**	**B**
Eleventh Avenue and West 55th Street									
Eleventh Avenue	SB	T	0.22	11.2	B	T	0.40	5.6	A
		R	0.14	16.2	B	R	0.20	9.1	A
West 55th Street	WB	L	0.24	29.1	C	L	0.49	27.6	C
		T	0.37	31.6	C	T	0.93	52.8	D
Overall Intersection[2]		-	-	**16.4**	**B**	-	-	**17.7**	**B**
Eleventh Avenue and West 54th Street									
Eleventh Avenue	SB	LT	0.23	3.0	A	LT	0.45	3.5	A
West 54th Street	EB	TR	0.47	30.6	C	TR	0.79	44.9	D
Overall Intersection[2]		-	-	**9.7**	**A**	-	-	**12.0**	**B**

Table 16-6 Year 2028 No-Action Traffic Level of Service

Intersection & Approach		AM Peak Hour Mvt	AM V/C	AM Ctrl Delay[1]	AM LOS	PM Peak Hour Mvt	PM V/C	PM Ctrl Delay[1]	PM LOS
Tenth Avenue and West 57th Street									
Tenth Avenue	NB	L	0.45	26.7	C	L	0.94	66.9	E
		T	0.43	4.0	A	T	0.43	3.3	A
		R	0.48	6.5	A	R	0.62	14.3	B
West 57th Street	EB	LT	0.49	35.7	D	L	0.87	91.3	F
		-	-	-	-	T	0.53	30.1	C
	WB	TR	0.52	23.2	C	TR	0.86	35.1	D
Overall Intersection[2]		-	-	**16.7**	**B**	-	-	**26.8**	**C**
Tenth Avenue and West 55th Street									
Tenth Avenue	NB	L	0.17	6.8	A	L	0.39	8.5	A
		T	0.52	7.5	A	T	0.58	7.9	A
West 55th Street	WB	TR	0.41	25.4	C	TR	0.94	58.0	E
Overall Intersection[2]		-	-	**10.1**	**B**	-	-	**21.1**	**C**
Tenth Avenue and West 54th Street									
Tenth Avenue	NB	TR	0.57	18.7	B	TR	0.61	19.4	B
West 54th Street	EB	LT	0.50	16.6	B	LT	0.68	21.2	C
Overall Intersection[2]		-	-	**18.3**	**B**	-	-	**19.8**	**B**

[1] Control delay is measured in seconds per vehicle.
[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.

Construction With-Action Condition

Construction activities would generate 205 construction worker auto trips and 24 construction truck trips during the AM construction peak hour, and 205 construction worker auto trips and six construction truck trips during the PM construction peak hour. Construction trucks would be required to use NYCDOT-designated truck routes to get to the project area and would then use local streets to access the construction site.

The projected construction-related vehicle trips during the AM and PM construction peak hours are shown in **Figure 16-6** and **Figure 16-7**. The Construction With-Action condition traffic volumes for the AM and PM construction peak hours are shown in **Figure 16-8** and **Figure 16-9**. As indicated in **Table 16-1** and **Table 16-8,** two of the eleven analysis intersections would be significantly impacted during the AM construction peak hour, and five of the eleven analysis intersections would be significantly impacted during the PM construction peak hour. The following intersections would be significantly impacted:

› Twelfth Avenue and West 57th Street (PM peak hour)

- Twelfth Avenue and West 55th Street (AM and PM peak hours)
- Eleventh Avenue and West 57th Street (PM peak hour)
- Eleventh Avenue and West 56th Street (AM and PM peak hours)
- Eleventh Avenue and West 55th Street (PM peak hour)

Detailed descriptions of the No-Action and With-Action Construction conditions traffic levels of service are presented in **Table 16-1** and **Table 16-8**, and traffic improvement measures that could mitigate significantly impacted intersections are detailed in **Chapter 18, Mitigation.**

Figure 16-6 Year 2028 Construction Trip Increment– AM Peak Hour

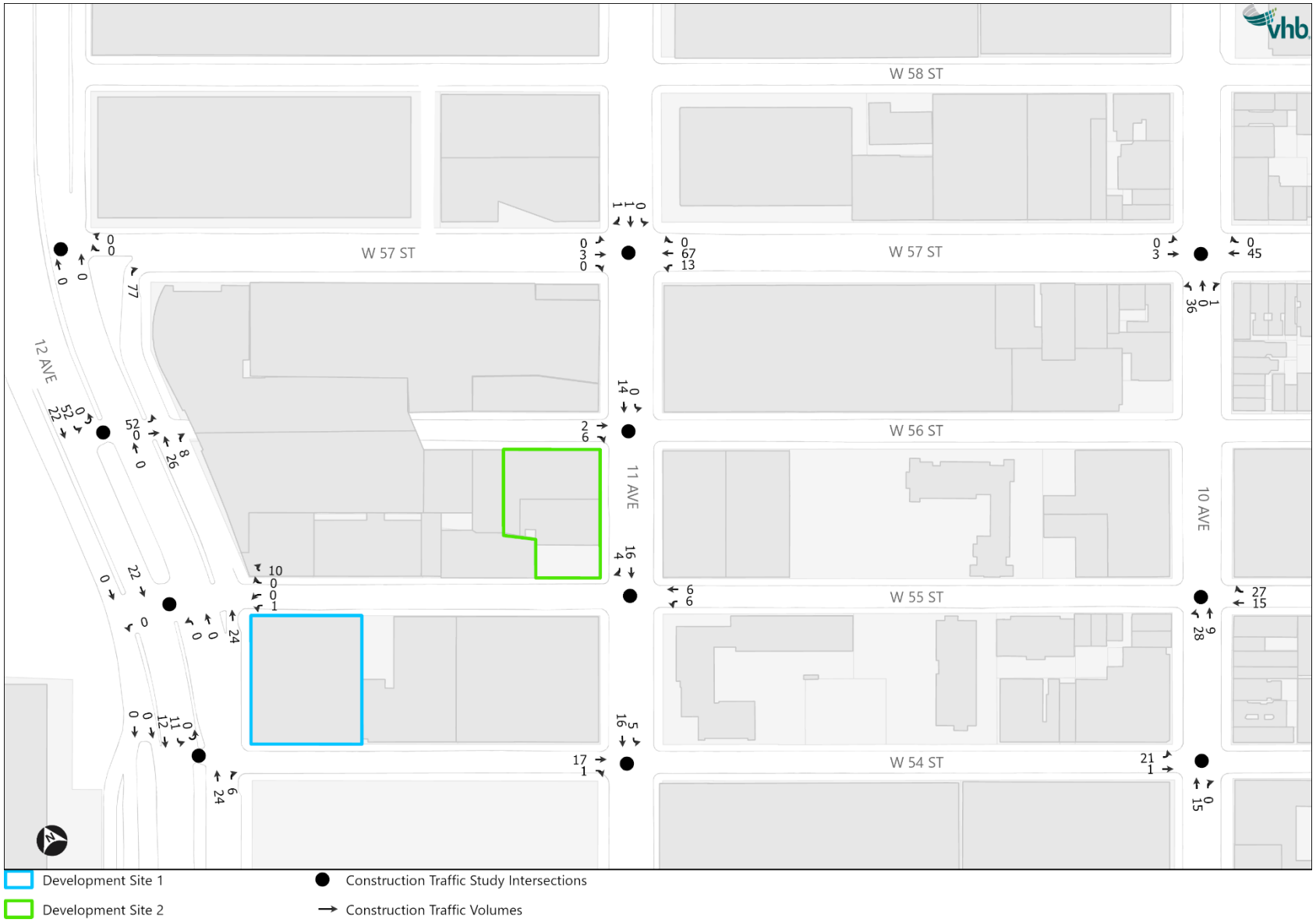


Figure 16-7 Year 2028 Construction Trip Increment– PM Peak Hour

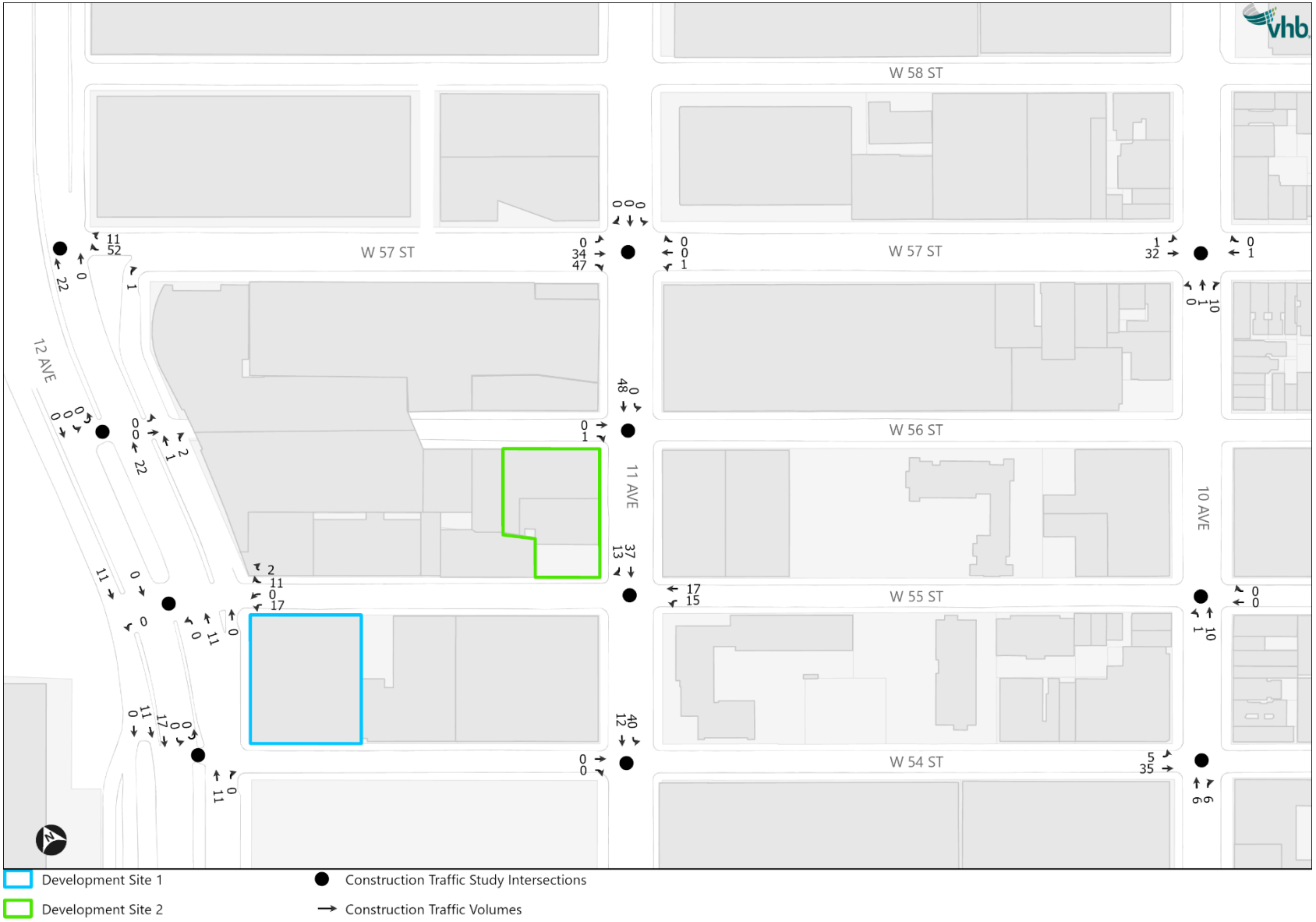


Figure 16-8 Year 2028 Construction With-Action Traffic Volumes – AM Peak Hour

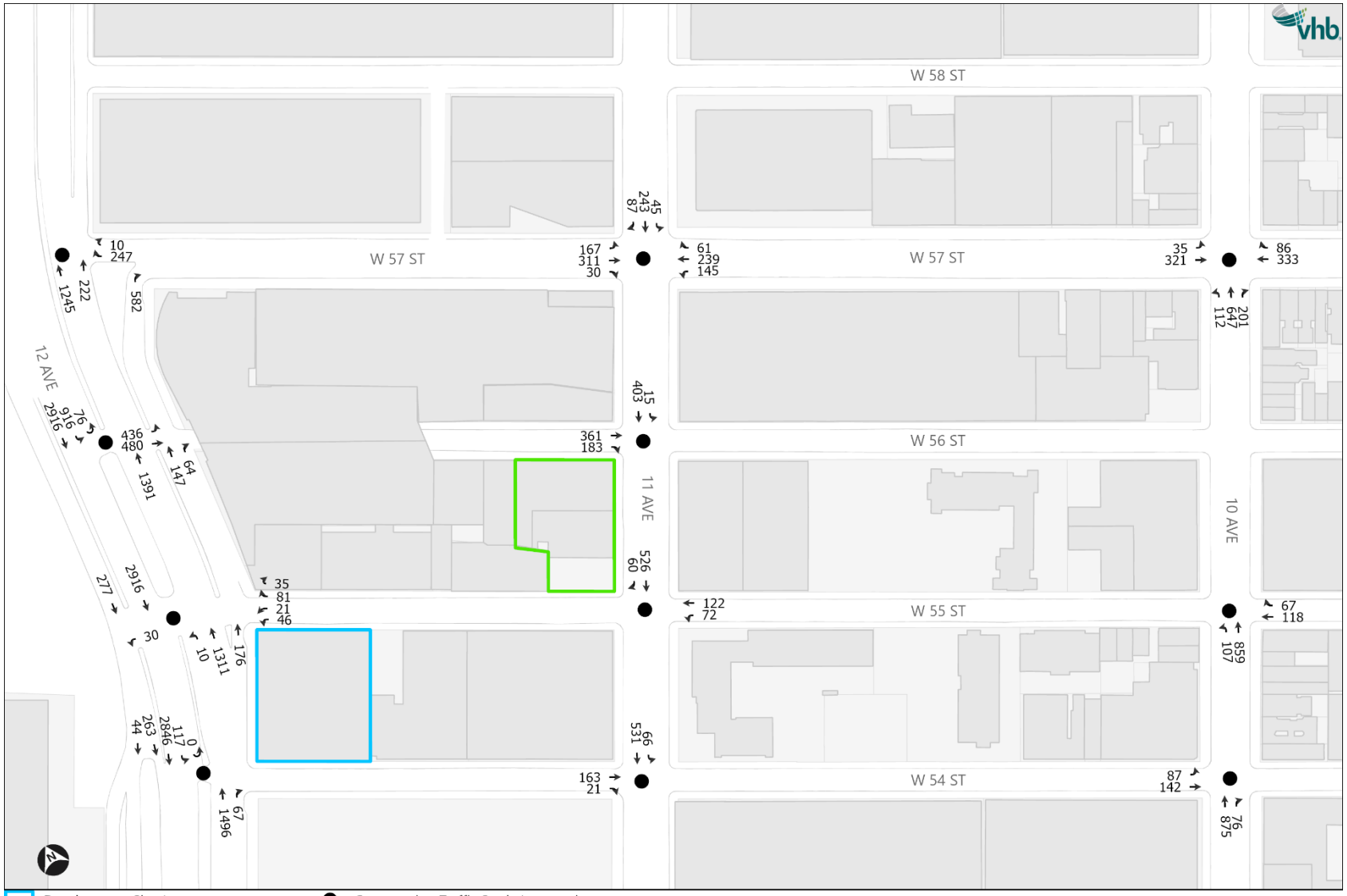


Figure 16-9 Year 2028 Construction With-Action Traffic Volumes – PM Peak Hour

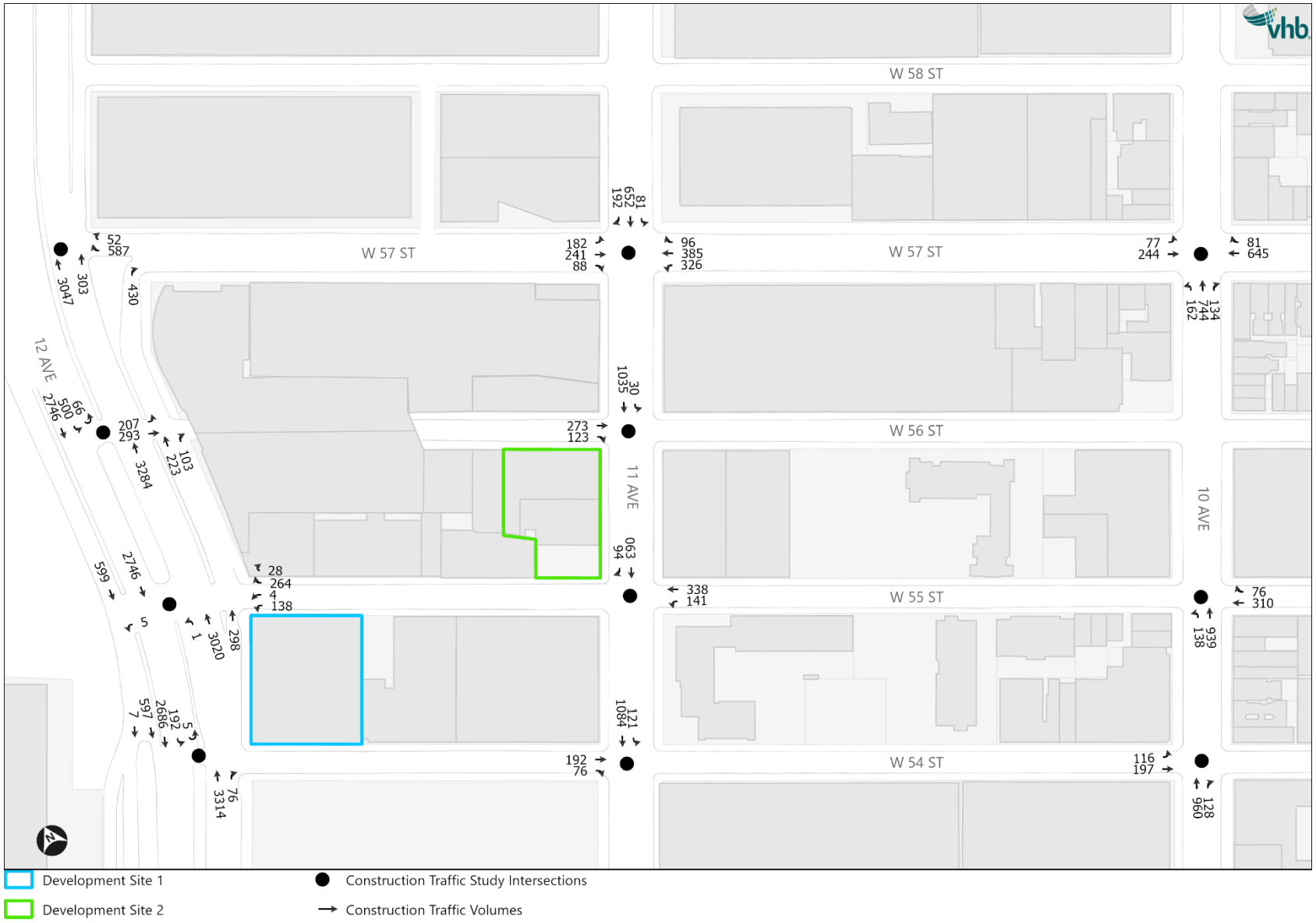


Table 16-7 Year 2028 No-Action vs. With-Action Traffic Levels of Service – AM Construction Peak Hour

Intersection & Approach		2028 No-Action Mvt	V/C	Ctrl Delay[1]	LOS	2028 With-Action Mvt	V/C	Ctrl Delay[1]	LOS
Twelfth Avenue and West 57th Street									
Twelfth Avenue	NB	T	0.48	3.4	A	T	0.48	3.4	A
		R	0.39	4.0	A	R	0.39	3.9	A
	SB	T	0.61	0.4	A	T	0.62	0.5	A
West 57th Street	WB	R	0.27	30.8	C	R	0.27	30.8	C
Twelfth Avenue Northbound Service Road (stop-controlled)	NB	R	-	12.8	B	R	-	14.5	B
Overall Intersection[2]		-	-	**3.8**	**A**	-	-	**4.1**	**A**
Twelfth Avenue and West 56th Street									
Twelfth Avenue	NB	T	0.63	21.4	C	T	0.63	21.0	C
	SB	UL	0.78	38.9	D	UL	0.82	40.9	D
		T	0.54	0.3	A	T	0.54	0.3	A
Twelfth Avenue Northbound Service Road	NB	TR	0.30	21.7	C	TR	0.37	21.6	C
West 56th Street	EB	LT	0.61	2.8	A	LT	0.65	2.9	A
Overall Intersection[2]		-	-	**12.0**	**B**	-	-	**12.4**	**B**
Twelfth Avenue and West 55th Street									
Twelfth Avenue	NB	L	0.18	65.0	E	L	0.18	64.6	E
		T	0.40	5.1	A	T	0.40	5.1	A
		R	0.20	5.1	A	R	0.23	5.3	A
	SB	T	0.92	32.8	C	T	0.93	33.4	C
Twelfth Avenue Southbound Service Road	SB	T	0.35	17.2	B	T	0.35	17.2	B
West 55th Street	WB	LT	0.32	55.3	E	LT	0.32	55.4	E
		R	0.33	54.3	D	R	0.65	69.8	E
West 55th Street Service Road Access	WB	L	0.07	0.3	A	L	0.07	0.3	A
Overall Intersection[2]		-	-	**23.8**	**C**	-	-	**24.6**	**C**

Table 16-7 Year 2028 No-Action vs. With-Action Traffic Levels of Service – AM Construction Peak Hour

		2028 No-Action				2028 With-Action			
Intersection & Approach		**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**	**Mvt**	**V/C**	**Ctrl Delay[1]**	**LOS**
Twelfth Avenue and West 54th Street									
Twelfth Avenue	NB	TR	0.47	11.0	B	TR	0.48	11.1	B
	SB	L	0.34	70.3	E	L	0.37	70.9	E
		T	0.76	1.1	A	T	0.77	1.1	A
Twelfth Avenue Southbound Service Road	SEB	T	0.25	2.1	A	T	0.25	2.1	A
Overall Intersection[2]		-	-	**6.2**	**A**	-	-	**6.4**	**A**
Eleventh Avenue and West 57th Street									
Eleventh Avenue	SB	L	0.13	22.3	C	L	0.13	22.3	C
		TR	0.29	18.9	B	TR	0.30	18.9	B
West 57th Street	EB	L	0.53	25.4	C	L	0.57	28.7	C
		TR	0.52	28.6	C	TR	0.53	28.7	C
	WB	L	0.52	12.7	B	L	0.58	12.6	B
		TR	0.36	26.2	C	TR	0.45	27.3	C
Overall Intersection[2]		-	-	**23.2**	**C**	-	-	**23.9**	**C**
Eleventh Avenue and West 56th Street									
Eleventh Avenue	SB	LT	0.19	9.4	A	LT	0.19	10.1	B
West 56th Street	EB	TR	0.72	32.3	C	TR	1.45	245.8	F
Overall Intersection[2]		-	-	**22.6**	**C**	-	-	**144.6**	**F**
Eleventh Avenue and West 55th Street									
Eleventh Avenue	SB	T	0.22	11.2	B	T	0.23	10.1	B
		R	0.14	16.2	B	R	0.15	15.6	B
West 55th Street	WB	L	0.24	29.1	C	L	0.26	28.9	C
		T	0.37	31.6	C	T	0.39	31.3	C
Overall Intersection[2]		-	-	**16.4**	**B**	-	-	**15.6**	**B**

Table 16-7 Year 2028 No-Action vs. With-Action Traffic Levels of Service – AM Construction Peak Hour

Intersection & Approach		2028 No-Action Mvt	V/C	Ctrl Delay[1]	LOS	2028 With-Action Mvt	V/C	Ctrl Delay[1]	LOS
Eleventh Avenue and West 54th Street									
Eleventh Avenue	SB	LT	0.23	3.0	A	LT	0.24	3.2	A
West 54th Street	EB	TR	0.47	30.6	C	TR	0.52	31.8	C
Overall Intersection[2]		-	-	**9.7**	**A**	-	-	**10.5**	**B**
Tenth Avenue and West 57th Street									
Tenth Avenue	NB	L	0.45	26.7	C	L	0.66	37.9	D
		T	0.43	4.0	A	T	0.43	4.8	A
		R	0.48	6.5	A	R	0.49	7.4	A
West 57th Street	EB	LT	0.49	35.7	D	LT	0.50	36.1	D
	WB	TR	0.52	23.2	C	TR	0.58	24.4	C
Overall Intersection[2]		-	-	**16.7**	**B**	-	-	**18.5**	**B**
Tenth Avenue and West 55th Street									
Tenth Avenue	NB	L	0.17	6.8	A	L	0.23	7.2	A
		T	0.52	7.5	A	T	0.53	7.7	A
West 55th Street	WB	TR	0.41	25.4	C	TR	0.54	28.5	C
Overall Intersection[2]		-	-	**10.1**	**B**	-	-	**11.4**	**B**
Tenth Avenue and West 54th Street									
Eleventh Avenue	NB	TR	0.57	18.7	B	TR	0.58	18.8	B
West 54th Street	EB	LT	0.50	16.6	B	LT	0.56	17.7	B
Overall Intersection[2]		-	-	**18.3**	**B**	-	-	**18.6**	**B**

[1] Control delay is measured in seconds per vehicle.
[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.
Denotes a significantly impacted movement

Table 16-8 Year 2028 No-Action vs. With-Action Traffic Levels of Service – PM Construction Peak Hour

Intersection & Approach		2028 No-Action Mvt	V/C	Ctrl Delay[1]	LOS	2028 With-Action Mvt	V/C	Ctrl Delay[1]	LOS
Twelfth Avenue and West 57th Street									
Twelfth Avenue	NB	T	0.83	2.3	A	T	0.84	2.3	A
		R	0.38	1.7	A	R	0.38	1.7	A
	SB	T	0.53	0.3	A	T	0.53	0.3	A
West 57th Street	WB	R	0.88	67.4	E	R	0.98	83.1	F
Twelfth Avenue Northbound Service Road (stop-controlled)	NB	R	-	11.3	B	R	-	11.3	B
Overall Intersection[2]		-	-	**7.3**	**A**	-	-	**9.2**	**A**
Twelfth Avenue and West 56th Street									
Twelfth Avenue	NB	T	0.90	8.0	A	T	0.91	7.7	A
	SB	UL	0.94	79.4	E	UL	0.94	79.4	E
		T	0.51	0.3	A	T	0.51	0.3	A
Twelfth Avenue Northbound Service Road	NB	TR	0.35	3.8	A	TR	0.35	3.6	A
West 56th Street	EB	LT	0.64	3.6	A	LT	0.64	3.6	A
Overall Intersection[2]		-	-	**10.2**	**B**	-	-	**10.1**	**B**
Twelfth Avenue and West 55th Street									
Twelfth Avenue	NB	L	0.02	55.0	D	L	0.02	55.1	E
		T	0.83	3.4	A	T	0.84	3.5	A
		R	0.36	2.9	A	R	0.36	2.9	A
	SB	T	0.89	31.9	C	T	0.89	31.9	C
Twelfth Avenue Southbound Service Road	SB	T	0.73	28.9	C	T	0.75	29.6	C
West 55th Street	WB	LT	0.57	63.3	E	LT	0.64	66.9	E
		R	0.83	75.5	E	R	1.57	335.3	F
West 55th Street Service Road Access	WB	L	0.01	0.9	A	L	0.01	0.9	A
Overall Intersection[2]		-	-	**21.0**	**C**	-	-	**33.8**	**C**

Table 16-8 Year 2028 No-Action vs. With-Action Traffic Levels of Service – PM Construction Peak Hour

Intersection & Approach		2028 No-Action Mvt	V/C	Ctrl Delay[1]	LOS	2028 With-Action Mvt	V/C	Ctrl Delay[1]	LOS
Twelfth Avenue and West 54th Street									
Twelfth Avenue	NB	TR	0.96	28.6	C	TR	0.96	29.0	C
	SB	L	0.61	67.6	E	L	0.61	67.6	E
		T	0.73	1.3	A	T	0.73	1.4	A
Twelfth Avenue Southbound Service Road	SEB	T	0.55	1.4	A	T	0.56	1.4	A
Overall Intersection[2]		-	-	**16.8**	**B**	-	-	**16.9**	**B**
Eleventh Avenue and West 57th Street									
Eleventh Avenue	SB	L	0.28	24.6	C	L	0.28	24.6	C
		TR	0.74	27.0	C	TR	0.74	27.0	C
West 57th Street	EB	L	0.71	39.0	D	L	0.71	39.0	D
		TR	0.39	26.5	C	TR	0.52	29.0	C
	WB	L	0.97	36.7	D	L	1.04	55.9	E
		TR	0.75	37.6	D	TR	0.75	37.6	D
Overall Intersection[2]		-	-	**31.8**	**C**	-	-	**34.8**	**C**
Eleventh Avenue and West 56th Street									
Eleventh Avenue	SB	LT	0.43	9.8	A	LT	0.45	11.0	B
West 56th Street	EB	TR	0.51	27.4	C	TR	1.03	79.2	E
Overall Intersection[2]		-	-	**15.0**	**B**	-	-	**30.7**	**C**
Eleventh Avenue and West 55th Street									
Eleventh Avenue	SB	T	0.40	5.6	A	T	0.42	4.9	A
		R	0.20	9.1	A	R	0.23	8.8	A
West 55th Street	WB	L	0.49	27.6	C	L	0.54	29.3	C
		T	0.93	52.8	D	T	0.97	62.1	E
Overall Intersection[2]		-	-	**17.7**	**B**	-	-	**19.5**	**B**
Eleventh Avenue and West 54th Street									
Eleventh Avenue	SB	LT	0.45	3.5	A	LT	0.47	3.8	A
West 54th Street	EB	TR	0.79	44.9	D	TR	0.79	44.9	D
Overall Intersection[2]		-	-	**12.0**	**B**	-	-	**11.9**	**B**

Table 16-8 Year 2028 No-Action vs. With-Action Traffic Levels of Service – PM Construction Peak Hour

Intersection & Approach		2028 No-Action Mvt	V/C	Ctrl Delay[1]	LOS	2028 With-Action Mvt	V/C	Ctrl Delay[1]	LOS
Tenth Avenue and West 57th Street									
Tenth Avenue	NB	L	0.94	66.9	E	L	0.94	66.7	E
		T	0.43	3.3	A	T	0.43	3.3	A
		R	0.62	14.3	B	R	0.67	16.8	B
West 57th Street	EB	L	0.87	91.3	F	L	0.88	92.5	F
		T	0.53	30.1	C	T	0.60	34.7	C
	WB	TR	0.86	35.1	C	TR	0.86	35.1	D
Overall Intersection[2]		-	-	**26.8**	**C**	-	-	**27.6**	**C**
Tenth Avenue and West 55th Street									
Tenth Avenue	NB	L	0.39	8.5	A	L	0.38	8.4	A
		T	0.58	7.9	A	T	0.59	7.9	A
West 55th Street	WB	TR	0.94	58.0	E	TR	0.94	57.6	E
Overall Intersection[2]		-	-	**21.1**	**C**	-	-	**20.9**	**C**
Tenth Avenue and West 54th Street									
Eleventh Avenue	NB	TR	0.61	19.4	B	TR	0.62	19.6	B
West 54th Street	EB	LT	0.68	21.2	C	LT	0.76	27.8	C
Overall Intersection[2]		-	-	**19.8**	**B**	-	-	**21.6**	**C**

[1] Control delay is measured in seconds per vehicle.
[2] Overall intersection v/c ratio is the critical lane groups' v/c ratio.
[3] Changes in delay at this intersection are due to mitigation proposed at a nearby intersection.
Denotes a significantly impacted movement

Deliveries

Construction trucks would be required to use NYCDOT-designated truck routes, including Twelfth Avenue, Eleventh Avenue, Tenth Avenue, and West 57th Street, and service the construction sites at the designated loading zones. For Development Site 1, the construction loading and service areas are expected to be along West 54th Street and West 55th Street, while for Development Site 2, the loading and service areas are expected to be along West 55th Street and West 56th Street.

Curb Lane Closures and Staging

During construction, travel or parking lane closures may be required for construction staging or for protection of pedestrian traffic. On West 55th Street, construction activities from Development Site 1

may temporarily reduce the westbound approach to Twelfth Avenue from three travel lanes to two travel lanes and temporarily close the bike and parking lanes in this section. On West 54th Street in front of Development Site 1, construction activities may temporarily reduce the eastbound approach from Twelfth Avenue from two travel lanes to one travel lane and temporarily close the bike and parking lanes in this section. Construction activities at Development Site 2 may result in temporary closures of parking lanes along the three sides of the site (West 55th Street, West 56th Street and Eleventh Avenue) but it is expected that the number of travel lanes would be maintained. It is anticipated that temporary sidewalk closures or narrowing may be required to the extent practicable during specific periods of construction. Sidewalk and lane closures will be finalized as the MPT plans are developed and reviewed with NYCDOT. All lane and sidewalk closures during construction will require DOT OCMC's review and approval.

Parking

Construction workers would generate an estimated maximum daily parking demand of 228 spaces during the Q3 2028 peak quarter. This parking demand could be accommodated by off-street parking supply within a one-quarter mile radius of the development sites. A parking utilization survey was conducted, and it is anticipated that there would be approximately 1,198 spaces available during the weekday midday period in the future condition which would be sufficient to accommodate the construction worker parking demand.

Transit and Pedestrians

Based on survey data collection during construction of the New York Times Building in 2006, it is anticipated that approximately 71 percent of construction workers would commute to the development sites by public transportation. During the Q3 2028 peak quarter when construction worker volumes would be highest, construction would be expected to generate 1,605 daily construction workers; 1,141 workers would be expected to use public transportation or walk to travel to the construction sites. It is expected that the majority of construction workers (90 percent) would arrive during the AM construction peak hour and depart during the PM construction peak hour, and they would generate approximately 1,027 construction worker trips by public transportation or walking during the AM and PM construction peak hours. These construction-related transit trips would occur outside of the peak periods of transit ridership and would be distributed to the nearby transit facilities. Construction-related transit trips would also be notably lower than during the operational peak hours. Therefore, the effects of construction-related transit trips on transit would be more moderate and are likely to be confined to the same or fewer locations as compared to the Proposed Projects' operational condition. As such, construction activities would not result in significant adverse transit impacts.

Construction activities may result in closures of the sidewalks along the West 54th Street, West 55th Street and 12th Avenue frontages of Development Site 1 and the West 55th Street, West 56th Street and 11th Avenue frontages of Development Site 2. However, pedestrian walkways would be provided to maintain pedestrian access on these affected sections. The walkways would be at least five feet wide and would be adequate to accommodate the modest to moderate pedestrian activities in this area.

In total, construction-related activities would generate 1,445 pedestrian trips (transit trips plus auto-walk trips between the parking facilities and the construction sites) during the AM and PM construction peak hours. These construction worker trips would be distributed throughout the

roadway network's pedestrian elements – sidewalk, crosswalks and corner reservoir areas – and would be assigned similarly to the project-generated operational trips – e.g., along similar routes to the same neighborhood parking garages, bus stops and subway station. In comparison, the Proposed Actions would generate approximately 1,352 pedestrian trips during the AM operational peak hour and 1,842 pedestrian trips during the PM operational peak hour. The construction-related pedestrian trips would occur outside of the commuter peak hours. Therefore, similar to the operational analysis, it is expected that construction activities would not result in significant adverse pedestrian impacts.

Air Quality

Introduction

Emissions from on-site construction equipment, on-road construction vehicles, and dust generating construction activities all have the potential to affect air quality. The analysis of potential construction air quality impacts included both on-site and on-road sources of air emissions, and the combined impact of both sources, where applicable.

In general, much of the heavy equipment used in construction is powered by diesel engines that have the potential to produce relatively high levels of nitrogen oxides (NOx) and particulate matter (PM) emissions. Fugitive dust generated by construction activities is also a source of PM. Gasoline engines produce relatively high levels of carbon monoxide (CO). Since the EPA mandates the use of ULSD fuel for all highway and non-road diesel engines, sulfur oxides (SOx) emitted from the Proposed Actions' construction activities would be negligible. Therefore, the pollutants analyzed for the construction period are NO_2, particles with an aerodynamic diameter of less than or equal to 10 micrometers (PM_{10}), particles with an aerodynamic diameter of less than or equal to 2.5 micrometers ($PM_{2.5}$), and CO. These pollutants and averaging periods are shown in **Table 16-9**.

Table 16-9 Pollutants for Analysis and Averaging Periods

Pollutant	Averaging Period
$PM_{2.5}$	24-hour
	Annual
PM_{10}	24-hour
NO_2	Annual
CO	1-hour
	8-hour

Pollutants of Concern: $PM_{2.5}$, PM_{10}, NO_2 and CO

Concentrations were predicted using dispersion models to determine the potential for air quality impacts during on-site construction activities and due to construction-generated traffic on local roadways. Concentrations for each pollutant of concern due to construction activities at each sensitive receptor were predicted during the most representative worst-case time period. The potential for significant adverse impacts were determined by comparing modeled short-term PM_{10}, annual NO_2, and short-term CO concentrations to the NAAQS, and modeled short-term and annual $PM_{2.5}$ increments to applicable *de minimis* thresholds.

The detailed approach for assessing the effect of construction activities resulting from the Proposed Actions on air quality is discussed further below.

Air Quality Analysis Methodologies

On-Site and Off-Site Construction Impacts

Based on a conceptual construction schedule developed for each phase of the project, the highest peak emissions months from construction of two Development Sites were modeled for each applicable pollutant to estimate short-term impact and the highest rolling average annual emissions were used to estimate annual impact. Short-term impacts of construction were estimated for $PM_{2.5}$, PM_{10} and CO; and long-term impacts of construction were estimated for annual $PM_{2.5}$ and NO_2.

A dispersion analysis—which considers the PM_{10}, $PM_{2.5}$, NO_x, and CO emissions from on-site sources (construction equipment, fugitive dust and trucks idling, loading and unloading and entering the site)—was performed to determine potential air quality effects during the peak emission construction phase.

The effects of the trucks approaching and departing the site on public or internal roadways were also included in the emission calculations for the analysis. For the dispersion analysis, roadway access (including the construction trucks and workers trips) was included as area sources, representing the approach and departure from the site. Additionally, impacts of construction traffic emissions at intersections and streets within the Proposed Project area were considered separately using *CEQR Technical Manual* screening methodologies (see the **Off-Site Construction Impacts** subsection).

The following sections provide additional details relevant to the construction air quality analysis methodology. For a review of the applicable regulations, standards and criteria, and benchmarks for stationary and mobile source air quality analyses, refer to **Chapter 11, Air Quality**.

The analysis was performed following EPA and *CEQR Technical Manual* procedures and analytical tools. The estimated emission rates were then used as an input to the air quality dispersion model to determine potential impacts.

Emission Estimation Process

The construction analyses used an emission estimation method, and a modeling approach previously developed for evaluating air quality impacts of construction projects in New York City. Because the level and types of construction activities would vary from month to month, the approach includes a determination of the worst-case emission period based on an estimated monthly construction work schedule, the number of on-site construction equipment types and rated horsepower of each unit, quantities of materials to be excavated, and number of trucks arriving, working, and leaving the site.

The worst-case short-term emissions (e.g., maximum monthly emissions) and the maximum annual emissions (based on a 12-month rolling average) were determined based on the construction schedule activities and equipment projected to be required for the construction period. The assessment considered several main phases of construction: excavation/foundation, superstructure, exterior construction, interior fit-out, elevators and site work.

Emissions Reduction Measures Considered

Measures would be taken to reduce pollutant emissions during construction in the future with the Proposed Actions in accordance with the Air Emissions Reduction Program discussed above.

Engine Exhaust Emissions Estimation Process

The sizes, types, and number of units of construction equipment were estimated based on the construction activity schedule developed for the Proposed Actions. Emission rates for NO_2, CO, PM_{10}, and $PM_{2.5}$ from truck engines were developed using the EPA Motor Vehicle Emission Simulator (MOVE4) emission model. Emission factors for NO_2, CO, PM_{10}, and $PM_{2.5}$ from on-site construction engines were developed using the NONROAD emission module included in the MOVES4 emission model.

Fugitive Sources Emission Estimation Process

In addition to engine emissions, dust emissions from operations (e.g., excavation and transferring of excavated materials into dump trucks) were calculated based on EPA procedures delineated in AP-42 Table 13.2.3-1. Since construction is required to follow the New York City Air Pollution Control Code regarding construction-related dust emissions, a 50 percent reduction in particulate emissions from fugitive dust was conservatively assumed in the calculation (dust control methods such as wet suppression would often provide at least a 50 percent reduction in particulate emissions).

Impact Assessment

Off-Site Construction Impacts

As outlined in the *CEQR Technical Manual*, in this area of the city, actions that would result in the generation of 170 or more peak-hour vehicle trips at an intersection may cause adverse air quality impacts and require a detailed air quality analysis for carbon monoxide (CO).

For $PM_{2.5}$, the screening procedure outlined in the *CEQR Technical Manual* is based on determining whether the projected number of peak hourly vehicle trips at an intersection exceeds thresholds based on heavy-duty diesel vehicle (HDDV) equivalents. The thresholds are as follows:

- 12 or more HDDV for paved roads with average daily traffic fewer than 5,000 vehicles;
- 19 or more HDDV for collector roads;
- 23 or more HDDV for principal and minor arterials; or
- 23 or more HDDV for expressways and limited access roads.

To determine whether any of these thresholds are exceeded, the worksheet referenced in Section 201 of the *CEQR Technical Manual* is utilized to calculate the equivalent number of HDDV equivalents at intersections in the traffic study area. The worksheet uses vehicle classification information based on the traffic data collected for the project and assigns these classifications to vehicle categories using a table referenced in the *CEQR Technical Manual*. Roadway classifications are determined by corridor at each intersection, based on NYCDOT functional class criteria and generated truck trips and worker trips during construction phase.

Based on the screening analysis, the projected vehicle trips generated during construction of the Proposed Projects would not exceed the CO threshold of 170 vehicles in a peak hour at any

intersection. The maximum hourly traffic incremental increase due to construction of the Proposed Projects would likewise not exceed the PM emission screening thresholds discussed above.

Therefore, no mobile source intersection analysis of CO or PM emissions is required, and construction of the Proposed Projects would not have a significant impact on air quality from mobile sources at any intersection during the construction.

On-Site Construction Impacts

Dispersion Modeling – Source Simulation

Potential impacts from the Proposed Actions' construction sources were evaluated using a refined dispersion model, the EPA/AMS AERMOD dispersion model. AERMOD is a state-of-the-art dispersion model, applicable to rural and urban areas, flat and complex terrain, surface and elevated releases, and multiple sources (including point, area, and volume sources). AERMOD is a steady-state plume model that incorporates current concepts about flow and dispersion in complex terrain and includes updated treatments of the boundary layer theory, understanding of turbulence and dispersion, and handling of terrain interactions.

Receptor Locations

Receptors were placed at locations that would be publicly accessible, at residential and other sensitive uses at both ground-level and elevated locations (e.g., residential windows), at adjacent sidewalk locations, at publicly accessible open spaces, and at completed and occupied buildings within the Project Area where applicable. In addition, a ground level receptor grid was placed to enable extrapolation of concentrations throughout the study area at locations more distant from construction activities.

Meteorological Data

All analyses were conducted using five consecutive years of meteorological data (2017 to 2021) provided by NYSDEC. Surface data were obtained from LaGuardia Airport and upper air data were obtained from Brookhaven station, New York.

Background Concentrations

To estimate the maximum expected total pollutant concentrations, the calculated impacts from the emission sources must be added to a background value that accounts for existing pollutant concentrations from other sources. The background levels are based on concentrations monitored from the representative monitoring stations and are consistent with the background concentrations to be used for the operational air quality analysis (See **Table 10-2** in **Chapter 10, Air Quality**.

Potential CO and $PM_{2.5}$ impacts are also assessed on an incremental basis and compared with the respective CO or $PM_{2.5}$ *de minimis* criteria. Based on the background concentrations, the 8-hour CO *de minimis* is 3.8 ppm, 24-hour $PM_{2.5}$ *de minimis* is 7.7 $\mu g/m^3$.

Potential Impacts from Proposed Project Construction

This section provides a summary of the construction air quality results from the construction activities of the Proposed Project.

Table 16-10 presents the highest predicted total concentration (including background for appropriate pollutants) due to construction activities of the Proposed Project, including the on-site sources (construction equipment, unpaved dust, and activities) and sources adjacent to the site (construction trucks and fugitive dust on paved road).

As indicated in **Table 16-10,** the highest predicted total concentrations of 1-hour CO, 8-hour CO, annual NO_2, and 24-hour PM_{10} would not result in any concentrations that exceed the NAAQS. The highest predicted 8-hour CO concentration is well below the City's *de minimis* criteria. The highest predicted 24-hour and annual $PM_{2.5}$ incremental concentration would not exceed the City's *de minimis* criteria of 7.7 µg/m^3 and 0.3 µg/m^3 respectively.

Table 16-10 Highest Predicted Total Concentrations for Construction Activities

Pollutant	Averaging Period	Highest Modeled Concentration	Background Concentration	Total Concentration	NAAQS/De Minimis
CO	1-Hour[1]	8.85 ppm	1.7 ppm	10.55 ppm	35 ppm
	8-Hour[1]	2.27 ppm	1.4 ppm	3.67 ppm	9 ppm/3.8 ppm
NO_2	Annual[1]	1.8 ppb	16.9 ppb	18.7 ppb	53 ppb
PM_{10}	24-Hour	5.6 µg/m^3	37 µg/m^3	42.6 µg/m^3	150 µg/m^3
$PM_{2.5}$	24-Hour[2]	3.28 µg/m^3	---	3.28 µg/m^3	7.7 µg/m^3
	Annual[3]	0.23 µg/m^3	---	0.23 µg/m^3	0.3 µg/m^3

Notes:

[1] CO and NO_2 concentrations can be converted from ppm/ppb to µg/m^3 based on 1 ppm = 1145 µg/m^3 for CO and 1 ppb=1.88 µg/m^3 for NO_2.

[2] The 24-hour $PM_{2.5}$ background concentration is used to develop the *de minimis* criteria.

[3] Annual $PM_{2.5}$ impacts with discrete receptors modeling are compared with the $PM_{2.5}$ *de minimis* criteria of 0.3 µg/m^3, without considering the annual background.

The results of this quantitative analysis indicate that construction of the Proposed Projects would not result in any concentrations of NO_2, PM_{10}, and CO that exceed the NAAQS. In addition, the maximum predicted incremental concentrations of $PM_{2.5}$ would not exceed the City's *de minimis* criteria. No significant adverse air quality impacts are anticipated from the off-site mobile source emissions due to construction. Therefore, no significant adverse air quality impacts are expected from construction-related sources, and no further analysis is warranted.

Noise

Construction activities have the potential to affect the noise conditions of receptors near the development sites. Construction noise can vary widely depending on the phase of construction (e.g., demolition, excavation, foundation, steel, and concrete erection, mechanical and interior fit out) and the specific equipment and methods being used. The most significant construction noise sources at a construction site are generally back-up alarms, and equipment such as excavators, drill rigs, and cranes. The noisiest phase of construction is typically during demolition, excavation, and foundation work. The superstructure phase of construction can also have higher noise levels associated with concrete trucks and cranes. Similar to air emissions, interior fit out typically results in lower noise emissions, since it requires fewer pieces of heavy-duty diesel equipment.

Pursuant to Section 310 of the Construction chapter of the *CEQR Technical Manual*:

> *"For stationary sources, construction noise, generated by pile driving, truck traffic, blasting, demolition, etc., is generally analyzed in detail only when it affects a sensitive receptor over a long period of time. The determination whether it is sufficient to conduct a qualitative analysis or whether a quantitative analysis is required cannot be made based solely on the duration of the construction period and should take into account such factors as the location of the project site in relation to existing residential uses or other sensitive receptors, the intensity of the construction activity, and the extent to which the project incorporates commitments to appropriate noise control measures."*

The determining factors identified in Section 310 are assessed below.

For the Proposed Projects, the overall construction period would be approximately 36 months; including the demolition, excavation/foundation, superstructure, superstructure/interior fit-out overlapping, superstructure/façade/interior fit-out overlapping, façade/interior fit-out overlapping, and interior fit-out phases. In addition, these relatively intense construction activities would be sequenced to minimize the impact, meaning the noisiest activities would be spread across the development sites at different times during the total construction period.

Noise Reduction Measures

Noise from construction activities and some construction equipment is regulated by the New York City Noise Control Code and by the EPA. The New York City Noise Control Code limits construction activities to weekdays between the hours of 7:00 AM and 6:00 PM, sets noise limits for specific pieces of construction equipment, and requires the implementation of a Construction Noise Mitigation Plan. The Construction Noise Mitigation Plan outlines project-specific noise control measures and identifies applicable noise source and noise path controls. Source noise controls are designed to mitigate noises at their origin, while path noise controls focus on the available route(s) between a noise source and any receptors.

In terms of source controls (i.e., reducing noise levels at the source or during the most sensitive time periods), the following measures, under New York regulations, would be implemented:

- The contractor would self-certify that all construction tools and equipment have been maintained to not generate excessive or unnecessary noise and that the noise emissions would not exceed the levels specified in Subchapter 5 of the NYC Noise Control Code and Table 22-1 of the *CEQR Technical Manual*.
- Where feasible, practical, and safe, the use of back-up alarms would be minimized and/or quieter back-up alarms would be installed in accordance with OSHA standards.
- Vehicles would not be allowed to idle more than three minutes, in accordance with New York City Administrative Code §24-163.
- The contractor would implement a training program to inform workers of methods that can minimize construction noise.

In terms of path controls (e.g., placement of equipment, implementation of barriers or enclosures between equipment and sensitive receptors), the following measures, included under New York regulations, for construction would be implemented:

- When the DOB regulations require a perimeter barrier or "construction fence" and the site is within 200 feet of a receptor, the barrier shall be constructed in a specific manner (as described in the New York City Noise Code) to provide sufficient sound attenuation. Section 3307.7 of the New York City Building Code requires that a solid 8-foot-tall wall made of wood or other suitable material is installed where a new building is being constructed, or a building is being demolished to grade. The project would include an 8-foot-tall perimeter wall surrounding the Development Site.
- Where logistics allow, noisy equipment, such as cranes, concrete pumps, concrete trucks, and delivery trucks, could be located away from and shielded from sensitive receptor locations.
- Should noise complaints occur during construction, the contractor would use path noise control measures such as temporary noise barriers, jersey barriers and/or portable noise enclosures for small equipment.

Construction Noise Criteria

The construction noise analysis methodology involves identifying noise-sensitive receptors, including residential, commercial office spaces, and community facilities near the development sites assessing the potential for construction noise impacts due to mobile sources (i.e., construction trucks and construction worker vehicles), and assessing potential stationary construction noise impacts by evaluating the noise emissions during each month of construction, identifying the loudest periods for each phase (i.e., demolition, excavation/foundation, superstructure, facade and interior fit-out), predicting construction noise levels at each receptor location, assessing potential impacts according to applicable construction noise impact criteria, and evaluating whether noise mitigation is warranted, feasible, and effective.

The noise impact criteria described in Chapter 19, Section 410 of the *CEQR Technical Manual* serve as a screening-level threshold for potential construction noise impacts. As described in Chapter 19 (Noise), Section 410, there would be a potential for significant noise impact from operational conditions and more detailed assessment would be needed if ambient sound levels increase by 3 to 5 dBA (L_{eq}) or more depending on the baseline L_{eq} noise levels. The significance of construction noise effects depends on the intensity and duration of construction activities. If construction of a proposed project would not result in any exceedances of these criteria at a given receptor, then that receptor would not have the potential to experience a construction noise impact. However, if construction would result in exceedances of these noise impact criteria, then further consideration of the intensity and duration of construction noise is warranted at that receptor to determine significant adverse construction noise impact.

The detailed construction noise analysis evaluates the specific activities, types of equipment, duration of activities, and locations of nearby sensitive receptors. Based on the results of the detailed analysis, there would be a significant adverse noise impact if construction noise due to the Proposed Projects exceeds the following:

- Noise levels (L_{eq}) would increase by 15 dBA or more for 12 consecutive months or more or 20 dBA or more for three consecutive months or more.
- For receptor that represent interior spaces, interior noise levels (L_{10}) would exceed 45 dBA for residential and community facility spaces and 50 dBA for commercial office spaces as a result of above significant noise increases (15 dBA and 20 dBA or above) for a prolonged period of time (i.e., at least 12 consecutive months and 3 consecutive months, respectively), thus considered significant.

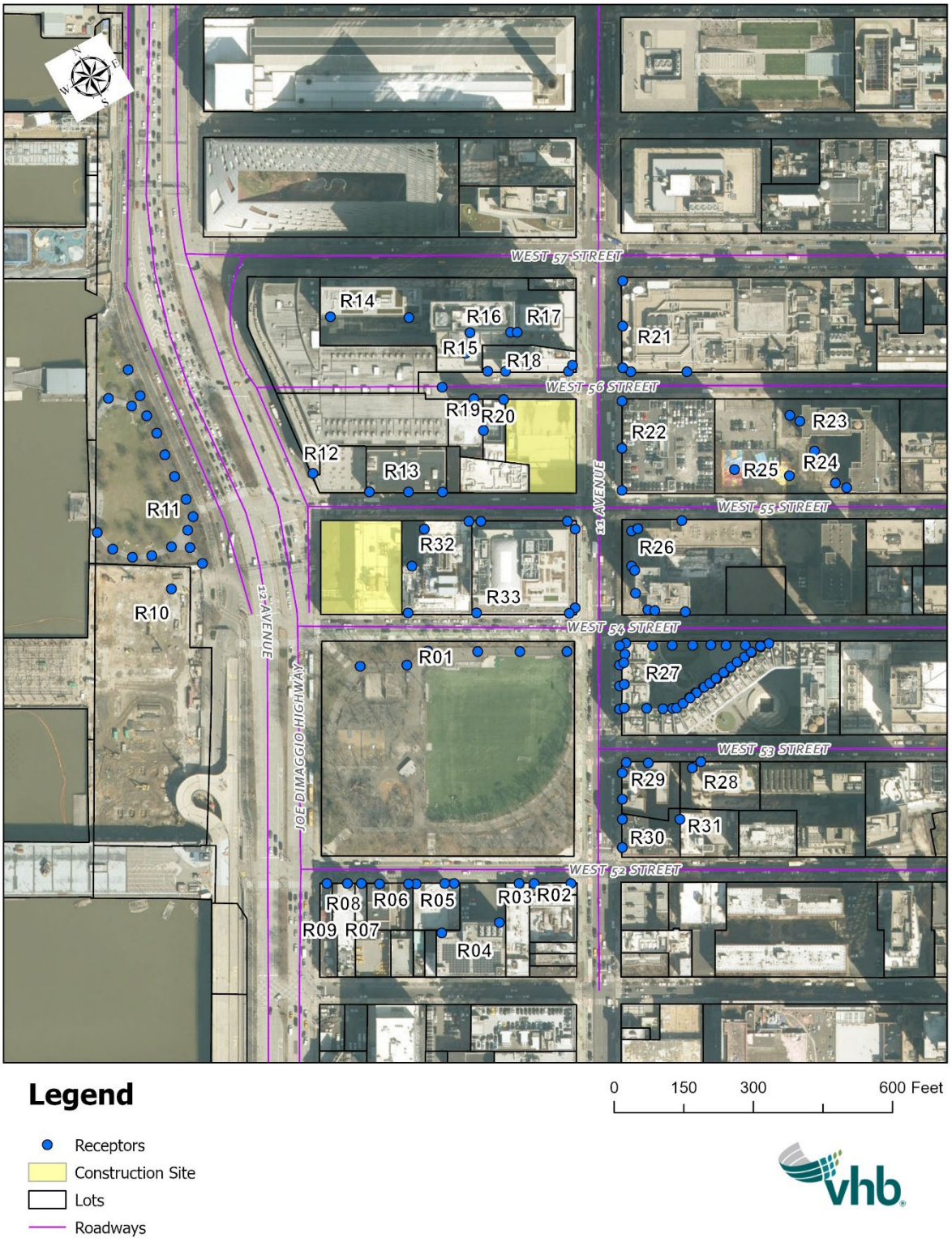
Construction Noise Receptors

The development sites are near existing residential and commercial land uses. Based on the proximity of these noise-sensitive land uses, there is the potential for construction noise levels to exceed the CEQR screening criteria. As shown in **Figure 16-10** and **Table 16-11,** the study area for construction noise includes 33 buildings (or building façades) with residential, commercial office, community facility or open space uses. Receptors were included on the closest location of each building, or building façade, to the development sites and on each floor of the buildings. Multiple receptors were included for any sensitive receptors immediately adjacent to the development sites where there is the greatest potential for construction noise impacts.

The outdoor-to-indoor noise reduction of the receptor buildings has been estimated based on a visual survey of the buildings' facades. Buildings with certain windows and AC conditions were assessed using the following window/wall reduction assumptions:

- 25 dBA of attenuation for any single glazed window/wall condition;
- 28 dBA of attenuation for any insulated glass window with through-window AC unit ;
- 30 dBA of attenuation for insulated window with through-wall AC unit;
- 32 dBA of attenuation for insulated window with central AC.

Figure 16-10 Construction Noise Receptor Locations



Source: VHB, 2025

Table 16-11 Receptors and Land Uses

Receptors	Address	Block	Lot	Land Use
R01	DeWitt Clinton Park	1100	1	Open Space/Recreational
R02	735 11th Avenue	1099	36	Residential
R03	605 West 51st Street	1099	27	Commercial Office
R04	609 West 51st Street	1099	21	Commercial Office
R05	612 West 52nd Street	1099	43	Parking Facilities*
R06	620 West 52nd Street	1099	47	Commercial Office
R07	628 West 52nd Street	1099	51	Residential and Commercial
R08	631 West 51st Street	1099	12	Industrial*
R09	634 West 52nd Street	1099	54	Residential and Commercial
R10	755 12th Avenue	1109	100	Transportation & Utility*
R11	Hudson Park	1109	10	Open Space/Recreational
R12	650 West 57th Street	1103	44	Transportation & Utility
R13	625 West 55th Street	1103	15	Commercial Office
R14	620 West 57th Street	1104	31	Residential
R15	Rooftop	1104	31	Open Space
R16	602 West 57th Street	1104	31	Residential
R17	827 11th Avenue	1104	31	Residential
R18	611 West 56th Street	1104	7501	Residential
R19	614 West 56th Street	1103	41	Commercial Office
R20	610 West 56th Street	1103	39	Commercial Office
R21	530 West 57th Street	1085	1	Commercial Office
R22	802 11th Avenue	1084	1	Commercial Office
R23	525 West 55th Street	1084	9	Residential
R24	Playground	1084	9	Open Space/Recreational
R25	Basketball Court	1084	9	Open Space/Recreational
R26	778 11th Avenue	1083	1	Residential and Commercial
R27	770 11th Avenue	1082	7501	Residential and Commercial
R28	540 West 53rd Street	1081	7503	Residential/Commercial
R29	554 West 53rd Street	1081	60	Residential
R30	555 West 52nd Street	1081	70	Residential/Commercial
R31	549 West 52nd Street	1081	80	Commercial Office
R32	619 West 54th Street	1102	18	Commercial
R33	787 11th Avenue	1102	7501	Commercial

*These receptors are not considered as sensitive noise receptors pursuant to *CEQR Technical Manual* guidance.
Source: VHB, 2025

Construction Noise Assessment Methodology

The detailed construction noise analysis includes both mobile and stationary construction noise sources. Stationary sources are based on typical equipment used during all phases of construction including demolition, excavation/foundation, superstructure/exterior facade, and interiors. There would be overlapping construction activities during superstructure and Interior activities.

Construction mobile sources include worker vehicles and trucks. Construction noise has been evaluated for the construction mobile source peak period from 6:00 AM to 7:00 AM. During this period, there would be no construction noise from stationary sources.

Construction Mobile Source Noise Assessment

The construction mobile source noise assessment evaluated sections of roadway along West 54th Street, West 55th Street, West 56th Street, Eleventh Avenue, and Twelfth Avenue during the 6:00 to 7:00 AM period. Traffic data was collected along with the noise measurement.

The potential for construction mobile sources to increase ambient sound conditions has been determined based on proportional modeling of noise PCEs. If construction mobile sources would result in a doubling or more of PCEs, it would result in a 3 dBA or greater increase in noise levels. If PCEs would not double during construction, there would not be a significant adverse vehicular noise impact, and no further mobile source noise analysis is warranted. The *CEQR Technical Manual* describes the process to determine PCEs. Vehicle classes are defined to have the following PCEs based on typical vehicles speeds:

- Each automobile or light truck: 1 noise PCE
- Each medium truck: 13 noise PCEs
- Each bus: 18 noise PCEs
- Each heavy truck: 47 noise PCEs

Increases in noise due to construction mobile sources are calculated using the following equation:

$$Sound\ Level\ Increase\ (Leq) = 10 * \log\left(\frac{Existing\ and\ Construction\ PCEs}{Existing\ PCEs}\right)$$

As described in the **Construction Transprtation** section, the peak construction vehicle trips during the peak construction quarter (Q3 of 2028) would include 183 automobiles and 12 delivery trips in the 6:00 AM to 7:00 AM period. These vehicle trips would all be distributed within the Project Area to enter the two construction sites.

As shown in **Table 16-12,** noise from construction mobile sources between 6:00 AM and 7:00 AM would increase up to 2.9 dBA compared to the existing condition. As the construction mobile source noise levels would not increase by 3 dBA or more, there would be no significant adverse noise impact.

Table 16-12 Construction Mobile Source Analysis

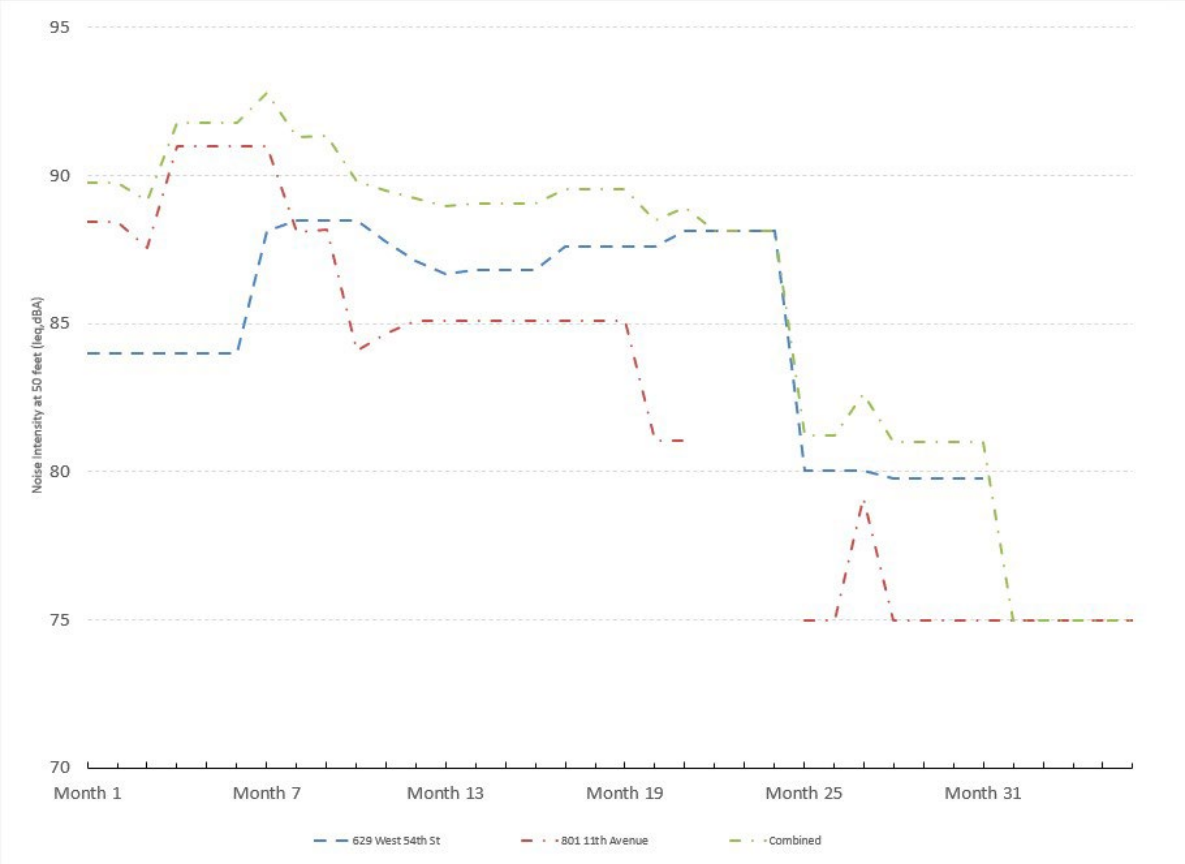
	Intersection	Existing PCEs (6:00 to 7:00 AM)	Construction PCEs (6:00 to 7:00 AM)	Construction Mobile Source Sound Increase (dBA)
1	West 56th Street near 11th Avenue	1,180	1,559	1.2
2	11th Avenue between West 55th Street and West 56th Street	2,611	3,120	0.8
3	West 55th Street near 11th Avenue	572	1,117	2.9
4	West 55th Street near 12th Avenue	737	1,300	2.5
5	West 54th Street near 12th Avenue	181	264	1.6
6	12th Avenue between West 54th Street and West 55th Street	7,901	8,128	0.1

Source: VHB, 2025.

Construction Stationary Source Noise Modeling

Construction schedule was assessed based on the anticipated construction equipment. **Figure 16-11** presents the cumulative sound emissions from stationary construction equipment during the peak noise month of each phase for the Construction Condition. The cumulative sound emissions represent the total energy-average (L_{eq}) level of all equipment operating at a distance of 50 feet. This sound emission is not the actual sound level that would exist at the development sites since actual equipment is distributed throughout the site, but the cumulative emissions level indicates which periods of construction are expected to be the loudest and which months should be used for analysis.

Figure 16-11 Cumulative Sound Emissions from Stationary Equipment during Each Month



Source: VHB, 2025

Construction noise from stationary sources has been evaluated for five different phases of construction. There would be two development sites with similar construction duration. For each phase of the construction at the development sites ((i.e., Development Site 1 and Development Site 2) there would be demolition, excavation/foundation, superstructure/exterior, and interior finish phases of construction of the proposed buildings. Construction noise from stationary sources has been evaluated for the following phases:

- Phase A: The demolition phase of both Development Sites 1 and 2. Demolition of Development Site 1 would take six months and demolition of Development Site 2 would take three months. Demolition/excavation noise has been evaluated during month 2, where demolition at the two sites would occur concurrently. The peak noise intensity would be in the high-80's dBA.
- Phase B: The excavation/foundation phase of both Development Sites 1 and 2. Excavation/Foundation of both sites would take seven months and show a peak noise intensity in the low-90's dBA. Excavation/Foundation noise has been evaluated for month 7, where excavation/foundation at the two sites would occur concurrently.
- Phase C: The superstructure phase of both Development Sites 1 and 2. The superstructure phase for each development site would take 11 months, with superstructure of Development Site 1 starting from Month 14, and superstructure of Development Site 2 starting on Month 11. The

peak noise intensity during this phase at the development sites would be in the high-80's dBA, and the noise has been evaluated for Month 14.

- Phase D: While the superstructure phase of both sites are still going on, the interior phase of Development Site 2 would start on Month 16 and last for 20 months, which shows a peak noise intensity in the low-90's dBA, and the noise has been evaluated for Month 19.
- Phase E: While the interior finish phase of Development Site 2 still going on, the interior finish phase of Development Site 1 would start on Month 17 and last for 19 months, which shows a peak noise intensity in the mid-80's dBA, and the noise has been evaluated for Month 27.

Table 16-13 presents the type of equipment, the maximum sound level at 50 feet, the utilization factors (percentage of time the equipment is operating at full power), and the number of each piece of equipment that is used during the loudest month of each phase of construction based on the *CEQR Technical Manual*. These equipment assumptions are based on conceptual site plans and construction schedules. Therefore, these represent a worst-case condition regarding the number of pieces of construction equipment and the duration of construction activities. This table does not include trucks at the development sites such as box trucks, pickup trucks, tractor trailers, packer trucks, container trucks, and dump trucks since they are not allowed to idle more than three minutes in accordance with New York City Administrative Code §24-163.

Existing Ambient Sound Levels

The measured sound levels are validated using CadnaA with the on-site traffic counts during the morning peak period, since the differences between the measured versus modeled noise levels are within +/- 3 dB(A). Measurements were conducted during the morning (8:00 AM to 9:00 AM) at six locations adjacent to the development sites.

The existing background sound levels at all receptor locations have been determined based on measurements conducted in the study area and Cadna-A modeling of the traffic noise conditions for the AM peak hour. See **Table 16-14** for a range of existing ambient noise levels at each receptor building.

Table 16-13 Sound Levels and Maximum Numbers of the Construction Equipment

Equipment[1]	Maximum Sound Level at 50 feet (dBA, L_{max})	Utilization Factor (%)	Number of Construction Pieces of Equipment				
			Phase A (Month 2)	Phase B (Month 7)	Phase C (Month 14)	Phase D (Month 19)	Phase E (Month 27)
Concrete Mixer Truck	85	0.4	0	2	4	3	0
Concrete Pump Truck	82	0.2	0	2	2	2	0
Crane	85	0.16	0	0	2	2	1
Bar Bender	80	0.2	0	0	2	2	0
Compressor (air)	80	0.4	4	6	1	2	1
Excavator	85	0.4	4	7	0	0	0
Front End Loader	80	0.4	0	0	0	0	0
Impact Pile Driver	95	0.2	0	2	0	0	0
Backhoe	80	0.4	3	3	0	0	0
Generator	82	0.5	4	6	3	3	1
Jackhammer	85	0.2	0	0	0	0	0
Vibratory Concrete Mixer	80	0.2	0	0	0	0	0
Welder	73	0.4	0	0	4	4	0
Hoist	75	0.5	0	0	4	5	4

Source: VHB, 2025.

[1] Since dump trucks and pickup trucks are not allowed to idle more than three minutes in accordance with New York City Administrative Code §24-163, they have been excluded from the construction noise predictions.

Table 16-14 Background Noise Level (dBA, L_{eq})

Receptors	Address	Block	Lot	Land Use	Background Noise Level (dBA, Leq)[1]
R01	DeWitt Clinton Park	1100	1	Open Space/Recreational	62.4-65.6
R02	735 11th Avenue	1099	36	Residential	62.4-63.3
R03	605 West 51st Street	1099	27	Commercial Office	62.4-62.4
R04	609 West 51st Street	1099	21	Commercial Office	62.4-62.4
R05	612 West 52nd Street	1099	43	Parking Facility*	62.4-62.4
R06	620 West 52nd Street	1099	47	Commercial Office	62.4-62.8
R07	628 West 52nd Street	1099	51	Residential and Commercial	63.1-63.9
R08	631 West 51st Street	1099	12	Industrial*	64.2-65.1
R09	634 West 52nd Street	1099	54	Residential and Commercial	67.7-68.5
R10	755 12th Avenue	1109	100	Transportation & Utility*	64.9-64.9
R11	Hudson Park	1109	10	Open Space/Recreational	62.4-67.7
R12	650 West 57th Street	1103	44	Transportation & Utility	62.4-68.2
R13	625 West 55th Street	1103	15	Commercial Office	63.9-65.3
R14	620 West 57th Street	1104	31	Residential	62.4-62.4
R15	602 West 57th Street	1104	31	Residential	62.4-62.5
R16	602 West 57th Street	1104	31	Residential	62.4-62.4
R17	827 11th Avenue	1104	31	Residential	62.4-62.4
R18	611 West 56th Street	1104	7501	Residential	62.4-65.3
R19	614 West 56th Street	1103	41	Commercial Office	62.4-63.1
R20	610 West 56th Street	1103	39	Commercial Office	62.6-63.2
R21	530 West 57th Street	1085	1	Commercial Office	62.4-68.1
R22	802 11th Avenue	1084	1	Commercial Office	67.3-68.9
R23	525 West 55th Street	1084	9	Residential	62.4-62.4
R24	Playground	1084	9	Open Space/Recreational	62.4-62.4
R25	Basketball Court	1084	9	Open Space/Recreational	62.4-62.4
R26	778 11th Avenue	1083	1	Residential and Commercial	62.4-65.8

Table 16-14 Background Noise Level (dBA, L_{eq})

Receptors	Address	Block	Lot	Land Use	Background Noise Level (dBA, Leq)[1]
R27	770 11th Avenue	1082	7501	Residential and Commercial	62.4-70.6
R28	540 West 53rd Street	1081	7503	Residential/Commercial	62.4-62.4
R29	554 West 53rd Street	1081	60	Residential	62.4-68.7
R30	555 West 52nd Street	1081	70	Residential/Commercial	67.5-68.4
R31	549 West 52nd Street	1081	80	Commercial Office	62.4-62.4
R32	619 West 54th Street	1102	18	Commercial	62.4-65.3
R33	787 11th Avenue	1102	7501	Commercial	62.4-67.6

1 The background noise level ranges represent the range from ground level to the highest building floors modeled for each façade of each receptor building.
* These recptors are not considered as sensitive receptors.

Construction Noise Impact Assessment

Construction noise has been modeled using the Cadna-A sound prediction model at 33 noise receptors (buildings or building façades) for the five phases of construction. The Cadna-A model implements the International Standards Organization standard 9613-2 "Outdoor Sound Propagation" which accounts for ground type, intervening objects such as buildings, sound reflections, and atmospheric conditions. The construction noise model assumes that the ground is acoustically hard (ground absorption coefficient of 0), that buildings have a brick façade with minimal acoustic absorption, and three orders of sound reflections.

Table 16-15 shows the estimated worst-case hourly noise levels at the nearby receptors of concern during each construction stage, while **Table 16-16** shows the increase in noise levels during construction by stage. **Table 16-17** shows the projected worst-case interior noise levels during each stage of construction at each nearby receptor.

Construction of the Proposed Projects would not involve any unusual or exceptional construction activities or practices for high-rise type buildings in New York City. As noted above, demolition, foundation/excavation, superstructure, facade, and interior fit-out work would occur over 36 months, beginning in Q2 of 2026.

Table 16-15 Worst-Case Construction Noise Levels by Phase (dBA, L_{eq})

Receptor	Address	Block	Lot	Background Noise Level (dBA, Leq)[1]	Phase A (Month 2)	Phase B (Month 7)	Phase C (Month 14)	Phase D (Month 19)	Phase E (Month 27)
R01	DeWitt Clinton Park	1100	1	62.4-65.6	65.4-72.6	66.8-78.1	65.8-73.2	65.9-74.6	64.8-71.4
R02	735 11th Avenue	1099	36	62.4-63.3	65.2-66.4	68.8-70.2	65.5-67.1	66.5-67.6	64.6-66.0
R03	605 West 51st Street	1099	27	62.4-62.4	65.2-65.7	68.9-69.8	65.5-65.7	66.6-67.0	64.7-65.3
R04	609 West 51st Street	1099	21	62.4-62.4	62.6-65.8	62.9-70	62.7-66.2	62.6-67.0	62.5-65.1
R05	612 West 52nd Street	1099	43	62.4-62.4	66.0-67.0	70.0-71.6	66.5-67.9	66.8-68.4	64.8-65.5
R06	620 West 52nd Street	1099	47	62.4-62.8	66.5-67.1	71.3-72.4	67.4-68.3	67.9-68.8	64.8-65.5
R07	628 West 52nd Street	1099	51	63.1-63.9	66.8-67.5	71.1-72.2	67.6-68.8	68.3-69.5	65.6-66.4
R08	631 West 51st Street	1099	12	64.2-65.1	67.5-68.2	71.5-72.6	68.0-69.1	68.7-69.8	66.3-67.0
R09	634 West 52nd Street	1099	54	67.7-68.5	69.7-70.5	72.7-73.7	70.0-70.9	70.6-71.4	68.8-69.6
R10	755 12th Avenue	1109	100	64.9-64.9	69.9-69.9	73.8-73.8	71.6-71.6	72.2-72.2	68.4-68.4
R11	Hudson Park	1109	10	62.4-67.7	67.6-71.1	71.3-75.7	69.0-73.4	69.8-73.9	66.1-70.0
R12	650 West 57th Street	1103	44	62.4-68.2	70.2-74.1	74.7-78.3	72.2-75.8	71.0-77.0	66.3-72.6
R13	625 West 55th Street	1103	15	63.9-65.3	72.3-78.1	76.8-83.8	70.8-77.3	71.8-78.8	69.3-75.8
R14	620 West 57th Street	1104	31	62.4-62.4	63.6-70.5	64.9-74.2	63.8-70.1	63.6-70.0	62.7-66.8
R15	606 West 57th Street	1104	31	62.4-62.5	69.4-76.4	72.3-79.2	68.1-74.8	67.2-73.5	64.6-68.7
R16	602 West 57th Street	1104	31	62.4-62.4	64.3-74.9	64.2-77.7	63.8-72.2	63.8-72.2	62.8-68.1
R17	827 11th Avenue	1104	31	62.4-62.4	63.9-74.0	64.2-77.3	63.5-71.3	63.4-71.3	62.8-67.5
R18	611 West 56th Street	1104	7501	62.4-65.3	71.6-80.6	74.9-83.1	70.7-79.1	70.3-78.1	67.0-72.8
R19	614 West 56th Street	1103	41	62.4-63.1	72.5-77.7	75.4-80.1	70.5-75.7	69.8-74.6	67.0-69.3
R20	610 West 56th Street	1103	39	62.6-63.2	72.9-78.1	75.3-80.7	71.8-75.5	70.9-74.7	66.9-70.1
R21	530 West 57th Street	1085	1	62.4-68.1	70.4-77.2	71.9-80.0	68.8-76.5	67.4-75.3	64.6-70.7
R22	802 11th Avenue	1084	1	67.3-68.9	74.9-79.3	77.6-82.7	77.1-80.3	75.0-78.6	70.2-72.2
R23	525 West 55th Street	1084	9	62.4-62.4	64.0-70.2	63.8-72.8	64.4-68.1	63.9-67.2	62.8-64.6
R24	Playground	1084	9	62.4-62.4	64.2-66.6	64.4-68.1	65.1-65.6	64.1-64.9	62.7-63.2
R25	Basketball Court	1084	9	62.4-62.4	63.2-66.8	64.6-68.7	64.1-65.8	63.7-64.6	62.8-63.2

Table 16-15 Worst-Case Construction Noise Levels by Phase (dBA, L_{eq})

Receptor	Address	Block	Lot	Background Noise Level (dBA, Leq)[1]	Phase A (Month 2)	Phase B (Month 7)	Phase C (Month 14)	Phase D (Month 19)	Phase E (Month 27)
R26	778 11th Avenue	1083	1	62.4-65.8	62.6-75.8	62.7-78.6	62.5-74.4	62.5-73.0	62.5-68.7
R27	770 11th Avenue	1082	7501	62.4-70.6	62.6-73.1	62.7-74.9	62.5-73.0	62.5-72.4	62.4-71.0
R28	540 West 53rd Street	1081	7503	62.4-62.4	62.5-64.5	63.1-65.4	63.1-63.9	63.1-64.6	62.4-63.4
R29	554 West 53rd Street	1081	60	62.4-68.7	63.9-70.7	65.4-72.8	64.4-70.7	64.9-70.8	63.9-69.7
R30	555 West 52nd Street	1081	70	67.5-68.4	69.0-70.2	70.8-72.1	69.0-70.3	69.2-70.4	68.3-69.3
R31	549 West 52nd Street	1081	80	62.4-62.4	62.5-64.2	62.7-65.3	62.5-63.9	62.5-64.7	62.4-63.7
R32	619 West 54th Street	1102	18	62.4-65.3	64.5-80.1	65.6-86.3	64.5-77.9	64.9-79.5	64.3-77.4
R33	787 11th Avenue	1102	7501	62.4-67.6	63.3-80.0	63.9-82.7	63.2-78.3	63.3-77.1	63.1-72.1

[1] The background noise level ranges represent the range from ground level to the highest building floors modeled for each façade of each receptor building.

Table 16-16 Worst-Case Construction Noise Levels, Increase by Phase (dBA, L_{eq})

Receptor	Address	Block	Lot	Background Noise Level (dBA, L_{eq})[1]	Phase A (Month 2)	Phase B (Month 7)	Phase C (Month 14)	Phase D (Month 19)	Phase E (Month 27)
R01	DeWitt Clinton Park	1100	1	61.9-65.6	8.5	13.5	8.6	10.2	7.1
R02	735 11th Avenue	1099	36	59.4-63.3	3.3	7.3	3.8	4.5	2.7
R03	605 West 51st Street	1099	27	59.0-59.7	3.3	7.4	3.3	4.6	2.9
R04	609 West 51st Street	1099	21	43.5-60.8	3.4	7.6	3.8	4.6	2.7
R05	612 West 52nd Street	1099	43	59.1-60.9	4.6	9.3	5.5	6.0	3.1
R06	620 West 52nd Street	1099	47	61.3-62.8	4.6	9.6	5.5	6.1	3.1
R07	628 West 52nd Street	1099	51	63.1-63.9	3.7	8.3	4.9	5.6	2.5
R08	631 West 51st Street	1099	12	64.2-65.1	3.4	7.5	4.0	4.7	2.2
R09	634 West 52nd Street	1099	54	67.7-68.5	2.0	5.2	2.4	2.9	1.1
R10	755 12th Avenue	1109	100	64.9-64.9	5.0	8.9	6.7	7.3	3.5
R11	Hudson Park	1109	10	61.5-67.7	5.7	11.1	7.6	8.5	4.1

Table 16-16 Worst-Case Construction Noise Levels, Increase by Phase (dBA, L_{eq})

Receptor	Address	Block	Lot	Background Noise Level (dBA, L_{eq})[1]	Phase A (Month 2)	Phase B (Month 7)	Phase C (Month 14)	Phase D (Month 19)	Phase E (Month 27)
R12	650 West 57th Street	1103	44	60.5-68.2	11.7	13.7	10.3	9.9	5.5
R13	625 West 55th Street	1103	15	63.9-65.3	13.4	19.1	12.4	13.9	11.1
R14	620 West 57th Street	1104	31	52.2-61.5	8.1	11.8	7.7	7.6	4.4
R15	602 West 57th Street	1104	31	51.4-62.5	14.0	16.8	12.4	11.2	6.4
R16	602 West 57th Street	1104	31	42.0-61.0	12.5	15.3	9.8	9.8	5.7
R17	827 11th Avenue	1104	31	40.2-59.0	11.6	15.0	8.9	8.9	5.1
R18	611 West 56th Street	1104	7501	54.9-65.3	16.6	19.3	14.8	13.9	8.6
R19	614 West 56th Street	1103	41	62.3-63.1	15.3	17.7	13.3	12.2	6.9
R20	610 West 56th Street	1103	39	62.6-63.2	15.5	18.1	12.9	12.1	7.5
R21	530 West 57th Street	1085	1	61.9-68.1	12.8	15.4	12.2	10.9	5.2
R22	802 11th Avenue	1084	1	67.3-68.9	11.9	15.3	12.8	11.1	4.8
R23	525 West 55th Street	1084	9	55.0-59.9	7.8	10.4	5.7	4.8	2.2
R24	Playground	1084	9	56.4-60.6	4.2	5.8	3.2	2.5	0.9
R25	Basketball Court	1084	9	58.5-60.2	4.4	6.3	3.4	2.2	0.8
R26	778 11th Avenue	1083	1	53.7-65.8	12.2	15.2	10.8	9.3	4.6
R27	770 11th Avenue	1082	7501	48.3-70.6	8.5	11.2	6.7	6.4	2.6
R28	540 West 53rd Street	1081	7503	53.7-58.8	2.1	3.0	1.5	2.2	1.0
R29	554 West 53rd Street	1081	60	57.6-68.7	2.3	5.1	2.8	3.5	2.1
R30	555 West 52nd Street	1081	70	67.5-68.4	1.9	4.1	1.9	2.2	1.1
R31	549 West 52nd Street	1081	80	47.8-56.4	1.8	2.9	1.5	2.3	1.3
R32	619 West 54th Street	1102	18	57.8-65.3	17.7	23.9	15.5	17.1	15.1
R33	787 11th Avenue	1102	7501	61.7-67.6	13.9	16.6	12.3	11.1	6.0

[1] The background noise level ranges represent the range from ground level to the highest building floors modeled for each façade of each receptor building.

Table 16-17 Worst-Case Construction Interior Noise Levels by Phase (dBA, L_{10})

Receptor	Address	Block	Lot	Background Noise Level (dBA, L_{eq})[1]	Phase A (Month 2)	Phase B (Month 7)	Phase C (Month 14)	Phase D (Month 19)	Phase E (Month 27)
R01	DeWitt Clinton Park	1100	1	62.4-65.6	N/A	N/A	N/A	N/A	N/A
R02	735 11th Avenue	1099	36	62.4-63.3	43.2-44.4	46.8-48.2	43.5-45.1	44.5-45.6	42.6-44.0
R03	605 West 51st Street	1099	27	62.4-62.4	43.2-43.7	46.9-47.8	43.5-43.7	44.6-45.0	42.7-43.3
R04	609 West 51st Street	1099	21	62.4-62.4	40.6-43.8	40.9-48.0	40.7-44.2	40.6-45.0	40.5-43.1
R05	612 West 52nd Street	1099	43	62.4-62.4	44.0-45.0	48.0-49.6	44.5-45.9	44.8-46.4	42.8-43.5
R06	620 West 52nd Street	1099	47	62.4-62.8	44.5-45.1	49.3-50.4	45.4-46.3	45.9-46.8	42.8-43.5
R07	628 West 52nd Street	1099	51	63.1-63.9	44.8-45.5	49.1-50.2	45.6-46.8	46.3-47.5	43.6-44.4
R08	631 West 51st Street	1099	12	64.2-65.1	45.5-46.2	49.5-50.6	46.0-47.1	46.7-47.8	44.3-45.0
R09	634 West 52nd Street	1099	54	67.7-68.5	37.7-38.5	40.7-41.7	38.0-38.9	38.6-39.4	36.8-37.6
R10	755 12th Avenue	1109	100	64.9-64.9	44.9-44.9	48.8-48.8	46.6-46.6	47.2-47.2	43.4-43.4
R11	Hudson Park	1109	10	62.4-67.7	N/A	N/A	N/A	N/A	N/A
R12	650 West 57th Street	1103	44	62.4-68.2	41.2-45.1	45.7-49.3	43.2-46.8	42.0-48.0	37.3-43.6
R13	625 West 55th Street	1103	15	63.9-65.3	45.3-51.1	49.8-56.8	43.8-50.3	44.8-51.8	42.3-48.8
R14	620 West 57th Street	1104	31	62.4-62.4	34.6-41.5	35.9-45.2	34.8-41.1	34.6-41.0	33.7-37.8
R15	606 West 57th Street	1104	31	62.4-62.5	40.4-47.4	43.3-50.2	39.1-45.8	38.2-44.5	35.6-39.7
R16	602 West 57th Street	1104	31	62.4-62.4	35.3-45.9	35.2-48.7	34.8-43.2	34.8-43.2	33.8-39.1
R17	827 11th Avenue	1104	31	62.4-62.4	34.9-45.0	35.2-48.3	34.5-42.3	34.4-42.3	33.8-38.5
R18	611 West 56th Street	1104	7501	62.4-65.3	42.6-51.6	45.9-54.1	41.7-50.1	41.3-49.1	38.0-43.8
R19	614 West 56th Street	1103	41	62.4-63.1	45.5-50.7	48.4-53.1	43.5-48.7	42.8-47.6	40.0-42.3
R20	610 West 56th Street	1103	39	62.6-63.2	45.9-51.1	48.3-53.7	44.8-48.5	43.9-47.7	39.9-43.1
R21	530 West 57th Street	1085	1	62.4-68.1	48.4-55.2	49.9-58.0	46.8-54.5	45.4-53.3	42.6-48.7
R22	802 11th Avenue	1084	1	67.3-68.9	47.9-52.3	50.6-55.7	50.1-53.3	48.0-51.6	43.2-45.2
R23	525 West 55th Street	1084	9	62.4-62.4	42.0-48.2	41.8-50.8	42.4-46.1	41.9-45.2	40.8-42.6
R24	Playground	1084	9	62.4-62.4	N/A	N/A	N/A	N/A	N/A
R25	Basketball Court	1084	9	62.4-62.4	N/A	N/A	N/A	N/A	N/A
R26	778 11th Avenue	1083	1	62.4-65.8	40.6-53.8	40.7-56.6	40.5-52.4	40.5-51.0	40.5-46.7

Table 16-17 Worst-Case Construction Interior Noise Levels by Phase (dBA, L_{10})

Receptor	Address	Block	Lot	Background Noise Level (dBA, L_{eq})[1]	Phase A (Month 2)	Phase B (Month 7)	Phase C (Month 14)	Phase D (Month 19)	Phase E (Month 27)
R27	770 11th Avenue	1082	7501	62.4-70.6	35.6-46.1	35.7-47.9	35.5-46.0	35.5-45.4	35.4-44.0
R28	540 West 53rd Street	1081	7503	62.4-62.4	33.5-35.5	34.1-36.4	34.1-34.9	34.1-35.6	33.4-34.4
R29	554 West 53rd Street	1081	60	62.4-68.7	41.9-48.7	43.4-50.8	42.4-48.7	42.9-48.8	41.9-47.7
R30	555 West 52nd Street	1081	70	67.5-68.4	40.0-41.2	41.8-43.1	40.0-41.3	40.2-41.4	39.3-40.3
R31	549 West 52nd Street	1081	80	62.4-62.4	40.5-42.2	40.7-43.3	40.5-41.9	40.5-42.7	40.4-41.7
R32	619 West 54th Street	1102	18	62.4-65.3	35.5-51.1	36.6-57.3	35.5-48.9	35.9-50.5	35.3-48.4
R33	787 11th Avenue	1102	7501	62.4-67.6	34.3-51.0	34.9-53.7	34.2-49.3	34.3-48.1	34.1-43.1

1 The background noise level ranges represent the range from ground level to the highest building floors modeled for each façade of each receptor building.

Building by Building Conclusions

- R01: These are the receptor associated with the open space at DeWitt Clinton Park which is located directly south of Development Site 1. Due to its proximity to major roadways, the background noise level at this receptor is relatively high (62.4 to 65.6 dBA). The future noise levels (L_{eq}) during construction would be up to 78.1 dBA, which would be an increase of up to 13.5 dBA. As such, construction associated with the Proposed Actions would not likely cause 15 dBA or more noise increase considered significant at this receptor. Therefore, the effects of construction noise associated with the Proposed Actions would not result in a significant adverse construction noise impact at R01.
- R02-R09: These are the receptors that represent the residential and commercial office buildings located south of DeWitt Clinton Park. The north façades were assessed for potential noise impacts from the construction of Development Site 1. Future noise levels (L_{eq}) during construction would range from 62.5 to 73.7 dBA, which would be an increase of up to 9.6 dBA. Therefore, the effects of construction noise associated with the Proposed Actions would not result in significant adverse construction noise impacts at R02-R09.
- R10: This receptor represents the Manhattan Cruise Terminal which is located on the west side of Twelfth Avenue directly west of Development Site 1. This receptor is not considered as sensitive receptor.
- R11: These are the receptors that represent the open space at Clinton Cove at Hudson River Park which is located west of Twelfth Avenue. Due to its proximity to major roadways, the background noise level at this receptor is relatively high (62.4 to 67.7 dBA). The future noise levels (L_{eq}) would range from 66.1 to 75.7 dBA, which would be an increase of up to 11.1 dBA. As such, construction associated with the Proposed Actions would not likely cause 15 dBA or more noise increase considered significant at this receptor. Therefore, the effects of construction noise associated with the Proposed Actions would not result in a significant adverse construction noise impact at R11.
- R12: This is the receptor that represents the office use of the Department of Sanitation facility at 650 West 57th Street. Future noise levels (L_{eq}) during construction would range from 66.3 to 78.3 dBA, which would be an increase of up to 13.7 dBA. Therefore, the effects of construction noise associated with the Proposed Actions would not result in significant adverse construction noise impacts at R12.
- R13: This is the receptor that represents the office building located on the north side of West 55th Street at 625 West 55th Street. The south façades were assessed for potential noise impacts from the construction of Development Site 1. Future noise levels (L_{eq}) during construction would range from 69.3 to 83.8 dBA, which would be an increase of up to 19.1 dBA. The duration of the noise increase of 15 dBA or more will last for seven months. Therefore, the effects of construction noise associated with the Proposed Actions at would not result in significant adverse construction noise impacts at R13.
- R14: This is the receptor that represents the residential building located on the north of Development Site 2 at 620 West 57th Street. The south façades were assessed for potential noise impacts from the construction of Development Sites 1 and 2. Future noise levels (L_{eq}) during construction would range from 62.7 to 74.2 dBA, which would be an increase of up to 11.8 dBA. Therefore, the effects of construction noise associated with the Proposed Actions at would not result in significant adverse construction noise impacts at R14.

- R15-R17: These are the receptors that represent the residential uses located north of Development Site 2 at 827 Eleventh Avenue. The south façades of the building were assessed for potential noise impacts from the construction of Development Site 2. Future noise levels (L_{eq}) would range from 62.8 to 79.2 dBA, which would be an increase of up to 16.8 dBA. The duration of the noise increase of 15 dBA or more will last for seven months. Therefore, the effects of construction noise associated with the Proposed Actions would not result in significant adverse construction noise impacts at R15-R17.
- R18: This is the receptor associated with the residential building located directly north of Development Site 2 at 611 West 56th Street. The south facade of the building was assessed for potential noise impacts from the construction of Development Site 2. Future noise levels (L_{eq}) would range from 67.0 to 83.1 dBA, which would be an increase of up to 19.3 dBA. The duration of noise level increases above 15 dBA would occur for a period of up to 10 months. Therefore, the effects of construction noise associated with the Proposed Actions would not result in a significant adverse construction noise impact at R18.
- R19: This is the receptor associated with the commercial buildings at 614 West 56th Street located directly west of Development Site 2. The northern and eastern façades of the building were assessed for potential noise impacts from the construction of Development Site 2. Future noise levels (L_{eq}) during construction would range from 67.0 to 80.1 dBA, which would be an increase of up to 17.7 dBA. The duration of noise level increases above 15 dBA would occur for a period of up to 10 months. Therefore, the effects of construction noise associated with the Proposed Actions would not result in significant adverse construction noise impacts at R19.
- R20: This is the receptor associated with the commercial buildings at 610 West 56th Street (R20) located immediately west of Development Site 2. The northern façades of the building were assessed for potential noise impacts from the construction of Development Site 2. Future noise levels (L_{eq}) during construction would range from 66.9 to 80.7 dBA, which would be an increase of up to 18.1 dBA. The duration of noise level increases above 15 dBA would occur for a period of up to 10 months. Therefore, the effects of construction noise associated with the Proposed Actions would not result in significant adverse construction noise impacts at R20.
- R21 and R22: These are the receptors associated with the commercial buildings at 530 West 57th Street (R21) and 802 11th Avenue (R22) located across 11th Avenue to the east of Development Site 2. The western and/or southern façades of these buildings were assessed for potential noise impacts from the construction of Development Site 2. The future noise levels at these receptors would range from 64.6 to 82.7 dBA, which would be an increase of up to 15.4 dBA. The duration of noise level increases above 15 dBA would occur for a period of up to seven months. Therefore, the effects of construction noise associated with the Proposed Actions would not result in significant adverse construction noise impacts at R21 and R22.
- R23-R25: These are the receptors associated with the residential and two outdoor playgrounds located at 525 West 55th Street. The western façade of the building was assessed for potential noise impacts from the construction of Development Site 2. The future noise levels during construction at two outdoor playgrounds (R24 and R25) would range from 62.7 to 68.7 dBA, which would be an increase up to 6.3 dBA. As such, construction associated with the Proposed Actions would not likely cause 15 dBA or more noise increase considered significant at this receptor. Therefore, the effects of construction noise associated with the Proposed Actions would not result in significant adverse construction noise impacts at R24 and R25. The future noise levels at the residential building (R23) would range from 62.8 to 72.8 dBA, which would be

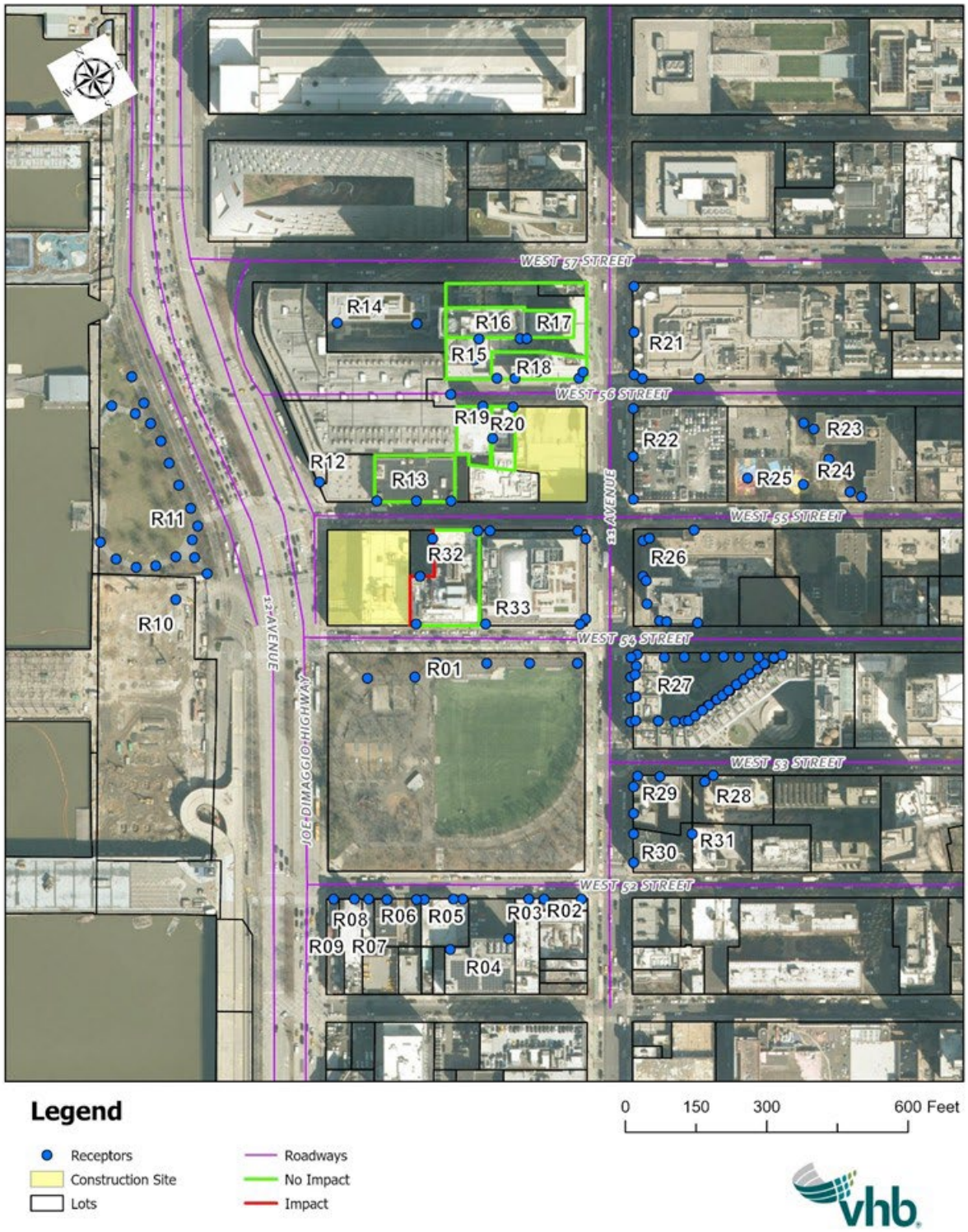
an increase of up to 10.4 dBA. Therefore, the effects of construction noise associated with the Proposed Actions would not result in significant adverse construction noise impacts at R23.

- R26, R27, and R29: These are the receptors associated with the first-row of residential buildings generally located east of Eleventh Avenue and south of West 55th Street, including: 778 Eleventh Avenue (R26), 770 Eleventh Avenue (R27), and 554 West 53rd Street (R29). The western, and/or northern façades of these buildings were assessed for potential noise impacts from the construction of Development Site 2. The future noise levels (L_{eq}) during construction would range from 62.4 to 78.6 dBA, which would be an increase up to 15.2 dBA. However, the duration of noise level increases above 15 dBA would only occur for a period of seven months. Therefore, construction noise associated with the Proposed Actions would not result in significant adverse construction noise impacts at R26, R27, and R29.
- R28, R30, and R31: These are the receptors associated with the residential buildings further away to the southeast. The western, and/or northern façades of these buildings were assessed for potential noise impacts from the construction of Development Site 2. The future noise levels during construction (L_{eq}) would range from 62.4 to 72.1 dBA, which would be an increase up to 4.1 dBA. Therefore, construction noise associated with the proposed actions would not result in significant adverse construction noise impacts at R28, R30, and R31.
- R32: This is the receptor associated with the commercial office building located east of Development Site 1 at 619 West 54th Street. The building's west, north, and south façades were assessed for potential noise impacts from the construction of Development Sites 1 and 2. Future noise levels (L_{eq}) during construction would range from 64.3 to 86.3 dBA, which would be an increase of up to 23.9 dBA. The duration of noise level increase above 20 dBA would occur for a period of seven months and the duration of noise level increase above 15 dBA would occur for a period of 33 months. Further, when assumed with 32 dBA of window/wall attenuation for insulated glass window and central air conditioning, interior noise levels would range from 35.3 to 57.3 dBA, which exceeds the interior noise level goal of 50 dBA for commercial office uses. Therefore, the effects of construction noise associated with the Proposed Actions would result in a significant adverse construction noise impact at R32.
- R33: This is the receptor associated with the commercial office building located east of Development Site 1 and south of Development Site 2 at 787 Eleventh Avenue. All of the building's façades were assessed for potential noise impacts from the construction of both Development Sites 1 and 2. Future noise levels (L_{eq}) would range from 63.1 to 82.7 dBA, which would be an increase of up to 16.6 dBA. However, the duration of noise level increases above 15 dBA would only occur for a period of seven months. Therefore, the effects of construction noise associated with the Proposed Actions would not result in a significant adverse construction noise impact at R33.

Conclusion

Construction noise levels would exceed the thresholds for exterior increase as well as the thresholds for acceptable interior noise levels for commercial office uses at one receptor building. As shown in **Figure 16-12**, construction noise impacts would occur at the existing commercial building at 619 West 54th Street (R32) located east of Development Site 1. No construction noise impact would occur at other receptors analyzed.

Figure 16-12 Construction Noise Impact



Source: VHB, 2025

With the adherence to existing construction noise regulations and the implementation of a Construction Noise Mitigation Plan, as required by the New York City Noise Code, including an 8-foot construction noise barrier, construction noise would still exceed the thresholds for significant construction noise impact.

See **Chapter 17, Mitigation** for further information on the construction noise control measures that would be needed to either fully or partially mitigate the identified construction noise impacts.

Vibration

Construction activities have the potential to generate ground-borne vibration that can potentially cause structural or architectural damage or annoy people in nearby vibration-sensitive spaces, such as residences. The most substantial sources of construction vibration are equipment associated with the excavation and foundation phase, such as pile drivers, drill rigs, bulldozers, and jack hammers.

There are no buildings within the Project Area listed by the New York City Landmarks Preservation Commission (LPC) or the State and/or National Register of Historic Places (S/NR) which would require special protections from potential damage due to vibration. There is the potential for construction vibration from some construction equipment, such as pile drivers, to cause annoyance in nearby residences. However, these construction activities would only occur for limited periods of time at any particular location and there would be no significant adverse impact as a result of construction vibration.