New York City Environmental Quality Review Act (CEQR)

Final Scope of Work for a Draft Environmental Impact Statement

1460-1480 SHERIDAN BOULEVARD

CEQR NUMBER: 22DCP178X
CROTONA, BRONX



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07 April 2023

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A. Comments Received on the Draft Scope of Work
B. Transcript of Oral Comments on Draft Scope of Work
C. Transportation Demand Factors Memorandum
D. Air Quality Protocol Memorandum
E. Noise Protocol Memorandum

FINAL SCOPE OF WORK FOR A DRAFT ENVIRONMENTAL IMPACT STATEMENT

1460-1480 Sheridan Boulevard | CEQR Number: 22DCP178X | 07 April 2023

1. Introduction

This ~~Draft~~ Final Scope of Work (the "~~Draft~~ Final Scope") outlines the technical areas to be analyzed in the preparation of an Environmental Impact Statement (EIS) for the "Proposed Actions," which include zoning map and text amendments, a waterfront zoning authorization, and ~~a~~ waterfront zoning certifications from the City Planning Commission (CPC), as well as discretionary financing for affordable housing from the New York City Department of Housing Preservation and Development (HPD) and waterfront actions from the New York State Department of Environmental Conservation (NYSDEC) and the US Army Corps of Engineers (USACE). The Proposed Actions are classified as a Type I action, and coordinated review with HPD, NYSDEC, and USACE will be required.

The Applicant, Westfarms Realty LLC and 1480 Sheridan Realty LLC – two entities under control of Simone Development – seek approval of the Proposed Actions to facilitate the redevelopment of an area along the Bronx River in the Crotona Park East neighborhood of Community District 9, the Bronx (see Figures 1, 2, and 3). The mixed-use waterfront project would build upon recent improvements to Starlight Park, Concrete Plant Park, and Sheridan Boulevard, as well as the *Southern Boulevard Neighborhood Study* published by the New York City Department of City Planning (DCP).

The Proposed Rezoning Area – the area that would be rezoned with the Proposed Actions – is the portion of Bronx Block 3017 bound by Sheridan Boulevard, the prolongation of the southern streetline of East 172nd Street, the western pierhead and bulkhead line of the Bronx River, the Amtrak right-of-way, and a line ~~270~~ 300 feet from Westchester Avenue. The Proposed Rezoning Area comprises Block 3017, Lots 29, 60, 65, 68, and 74, and portions of Lots 6 and 28. This Final ~~Draft~~ Scope outlines the analysis methods to be employed in an EIS to disclose the projected worst-case effects that could reasonably be expected to occur if the Proposed Actions are adopted.

The Proposed Actions would facilitate development of the Applicant's "Proposed Development," three buildings totaling 866,017 gross square feet (gsf) across Lots 74 (1460 Sheridan Boulevard, "Projected Development Site 1") and Lot 29 (1480 Sheridan Boulevard, "Projected Development Site 2"). Projected Development Site 1 would be developed with a 24-story (225-foot-tall plus a 15-foot-tall mechanical bulkhead), 263,862-gsf building containing approximately 304 dwelling units (DUs), all of which would be affordable units. Up to 5,000 gsf would be developed as ground floor retail. Projected Development Site 2 would be developed with two 24-story (225-foot-tall plus a 15-foot-tall mechanical bulkhead) buildings totaling 602,155 gsf, including up to 16,229 gsf of retail and 666 affordable DUs. Projected Development Site 2 would also contain up to 100 accessory parking spaces reserved for residents of the Proposed Development.

Projected Development Sites 1 and 2 are wholly owned by the Applicant and all DUs on the Applicant's sites would be affordable. On these two sites, the Applicant would develop a minimum 40-foot-wide shore public walkway along the Bronx River. On Projected Development Site 1, an upland connection would be provided along the site's southern boundary. On Projected Development Site 2, upland connections would be provided in the general area of the prolongation of Jennings Street and along a proposed privately owned publicly accessible open space on Projected Development Site 2.

At its northern end, the shore public walkway on Projected Development Site 1 would abut Starlight Park, a recently improved NYC Parks-operated park that spans across both sides of the Bronx River. In total, the Proposed Development would add ~~56,123 square feet (sf) (1.29 acres)~~1.38 acres of new publicly accessible open space on privately owned land~~, including 35,869 sf of waterfront open space (comprising shore public walkways, upland connections, and supplement public access areas) along the west shore of the Bronx River and a 20,254 sf publicly accessible open space~~. The new open space would include 0.408 acres on Projected Development Site 1 (0.338 acres of waterfront public access areas (WPAAs) – which comprise shore public walkways and upland connections – and 0.070 acres of additional open space) and 0.971 acres on Projected Development Site 2 (0.47 acres of WPAA and 0.501 acres of additional open space). Amenities would include a shore public walkway for walking and biking, upland connections, and additional open space areas. The open space would be activated by retail uses that would front along the WPAAs.

In addition to the Applicant's sites, the Proposed Rezoning Area includes "Potential Development Site A," which comprises Lots 60, 65, and 68 of the project block. These three lots are not controlled or owned by the Applicant but have the potential to be merged into one zoning lot and redeveloped with adoption of the Proposed Actions. Potential Development Site A would be developed with a mixed-use building with a seven-story base and two towers rising to 24 stories (225-foot-tall plus 15-foot-tall bulkhead). The approximately 380,025-gsf building would comprise 349,422 gsf of residential space, 3,493 gsf of ground floor retail, and 27,110 sf of accessory parking. The building would provide 349 DUs, 88-105 of which would be permanently affordable pursuant to MIH.[1] The remaining DUs would be market rate units. In accordance with R7-3/C2-4 zoning requirements, 140 parking spaces would be provided. A 40-foot-wide shore public walkway would be developed along Potential Development Site A's frontage along the

[1] The City's MIH Program has four MIH "Options" that each require a minimum percentage of housing units be designated as "affordable." The required affordable housing units must be provided to households with an average Area Median Income (AMI) that is dependent on the MIH Option selected. Required affordable housing under Options 1, 2, or 3 must be provided at an average below the New York City AMI. See https://www1.nyc.gov/assets/housing/downloads/pdf/mih-fact-sheet.pdf

Bronx River in accordance with the underlying zoning requirements of Zoning Resolution (ZR) Article VI, Chapter 2.

Figure 1: Regional Location Map



Figure 2: Site Location Map

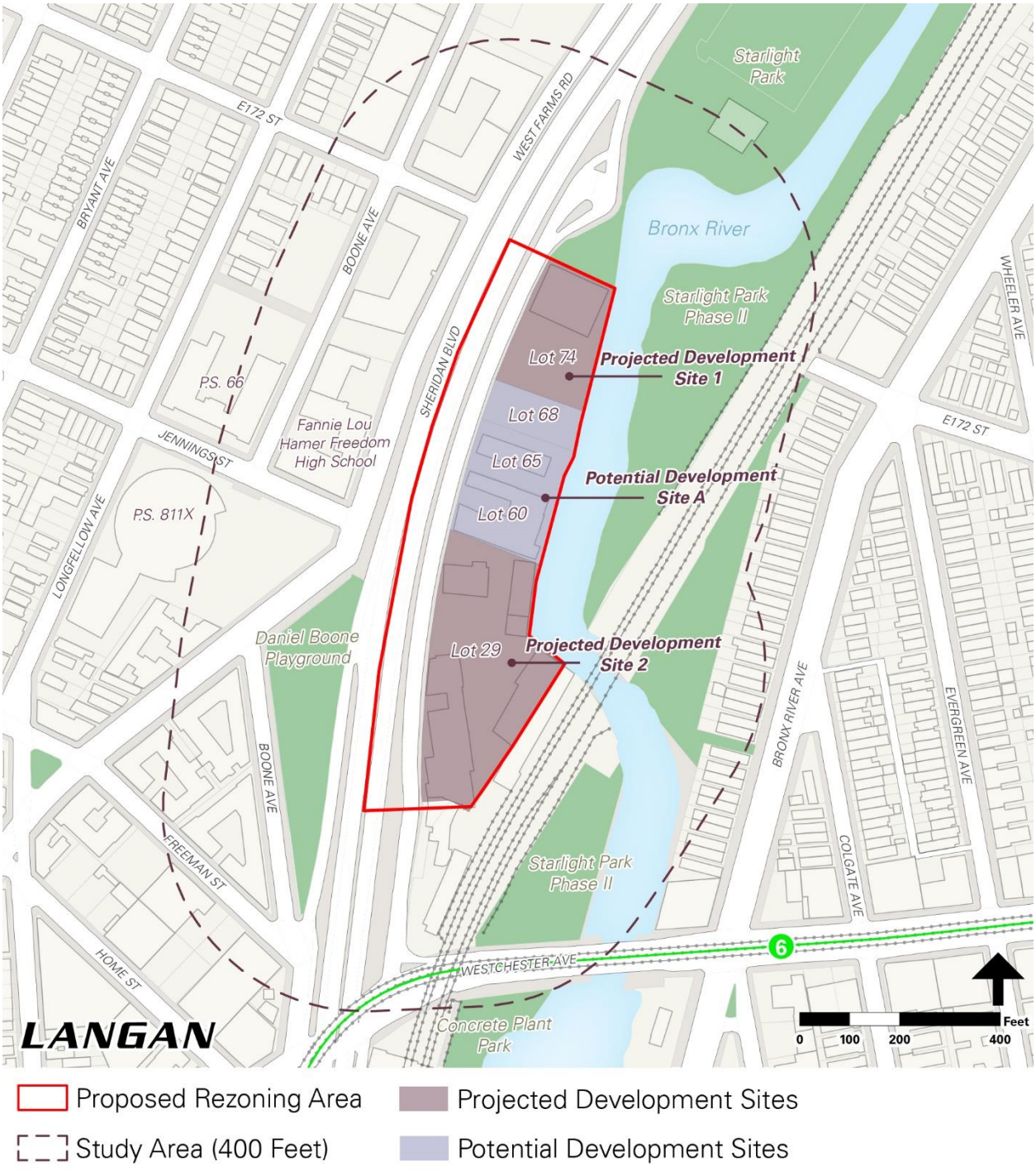


Figure 3: Aerial Map



The Proposed Actions are classified as Type I pursuant to Title 6 of the New York Codes, Rules and Regulations (NYCRR) Section 617 because the Proposed Actions would allow more 250 DUs in an area that is contiguous to a publicly owned parkland. DCP will serve as the Lead Agency on behalf on the CPC. Type I actions require an environmental review to be completed to inform the decision makers the potential consequences of their decisions pursuant to the State Environmental Quality Review Act (SEQRA). DCP, acting on behalf of the CPC, is the Lead Agency for the environmental review. SEQRA allows a local government to promulgate its own procedures provided they are no less protective of the environment, public participation, and judicial review than provided by SEQRA. The City of New York exercised this prerogative by promulgating its own procedures, known as City Environmental Quality Review (CEQR), to take into account the circumstances of New York City's urban environment.

An Environmental Assessment Statement (EAS) and Positive Declaration were issued on May 13, 2022 by DCP, as lead agency. DCP has determined that the Proposed Actions may result in significant adverse environmental impacts and directed that an EIS be prepared.

2. Project Description and Proposed Actions

To facilitate the Proposed Development, the Applicant seeks zoning map and text amendments, a zoning authorization, zoning certifications, discretionary financing for affordable housing, and waterfront actions. Specifically, the Applicant proposes the following discretionary actions (the Proposed Actions):

1. A zoning map amendment to rezone the Proposed Rezoning Area from M1-1 to an R7-3 district with a C2-4 commercial overlay;
2. A zoning text amendment to ZR Appendix F (Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas) to establish the Proposed Rezoning Area as a Mandatory Inclusionary Housing (MIH) area. At this time, the Applicant is proposing MIH Options 1, 2, and 3;
3. A CPC authorization(s) pursuant to ZR Section 62-822 to modify requirements for the locations of waterfront public access areas and visual corridors. The CPC authorization(s) would modify the locational requirements of ZR Section 62-56 to allow visual corridors through the proposed publicly accessible private open space to be modified to accommodate the Proposed Development; and
4. Affordable housing financing from the Department of Housing Development and Preservation (HPD) to develop two buildings with fully affordable residential components on the Applicant's sites. At this time, the Applicant intends to apply for HPD's "Mix & Match" program.

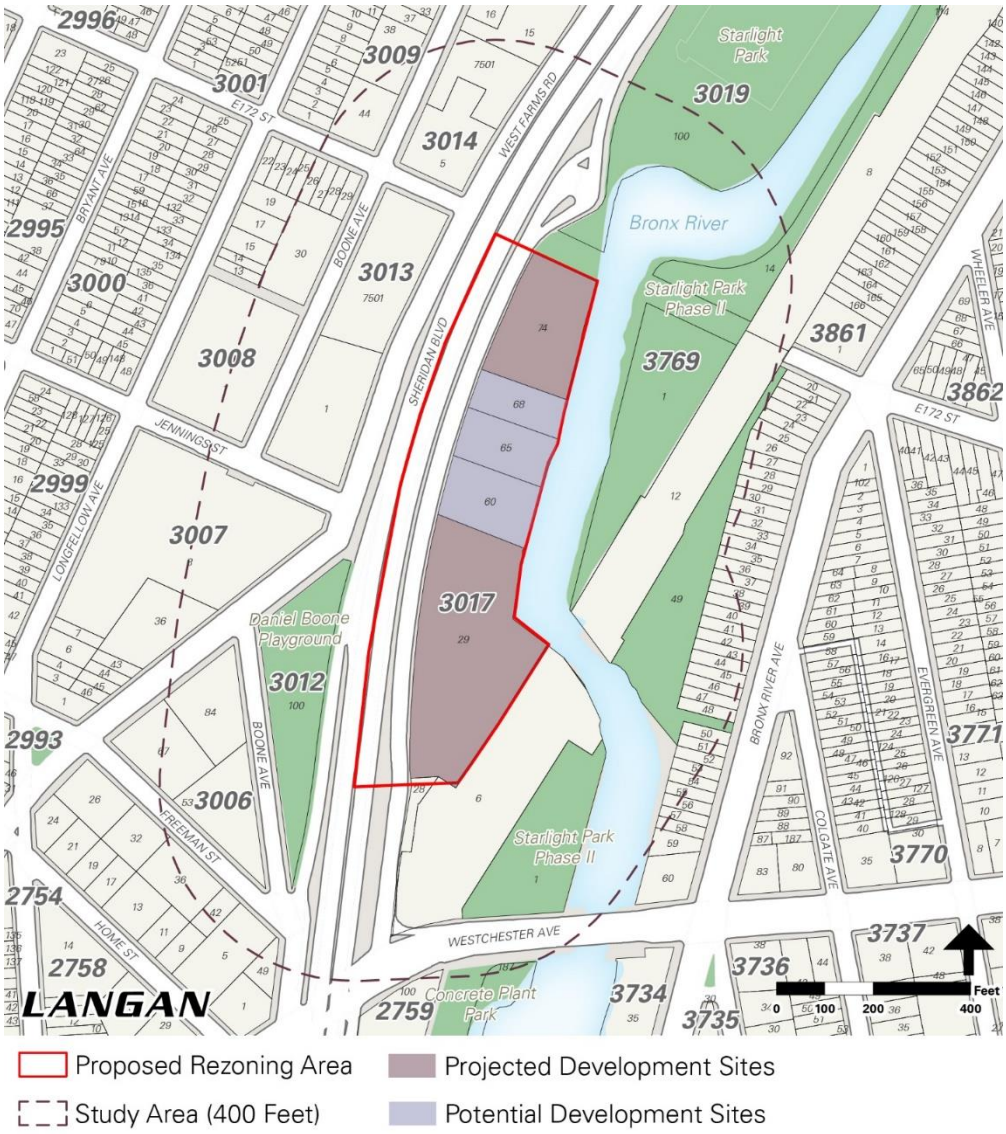
The Proposed Development would require discretionary waterfront actions from State and Federal agencies. A Joint Application will be made to NYSDEC and USACE to address these waterfront actions. The Proposed Development would also require waterfront zoning certifications (non-discretionary, ministerial actions by the CPC) pursuant to ZR Section 62-81 to demonstrate compliance with applicable waterfront zoning regulations.

Proposed Rezoning Area

The Proposed Rezoning Area is bound by Starlight Park to the north, the Bronx River and the Amtrak right-of-way to the east, a line ~~270~~300 feet north of Westchester Avenue to the south, and the centerline of Sheridan Boulevard to the west. The Proposed Rezoning

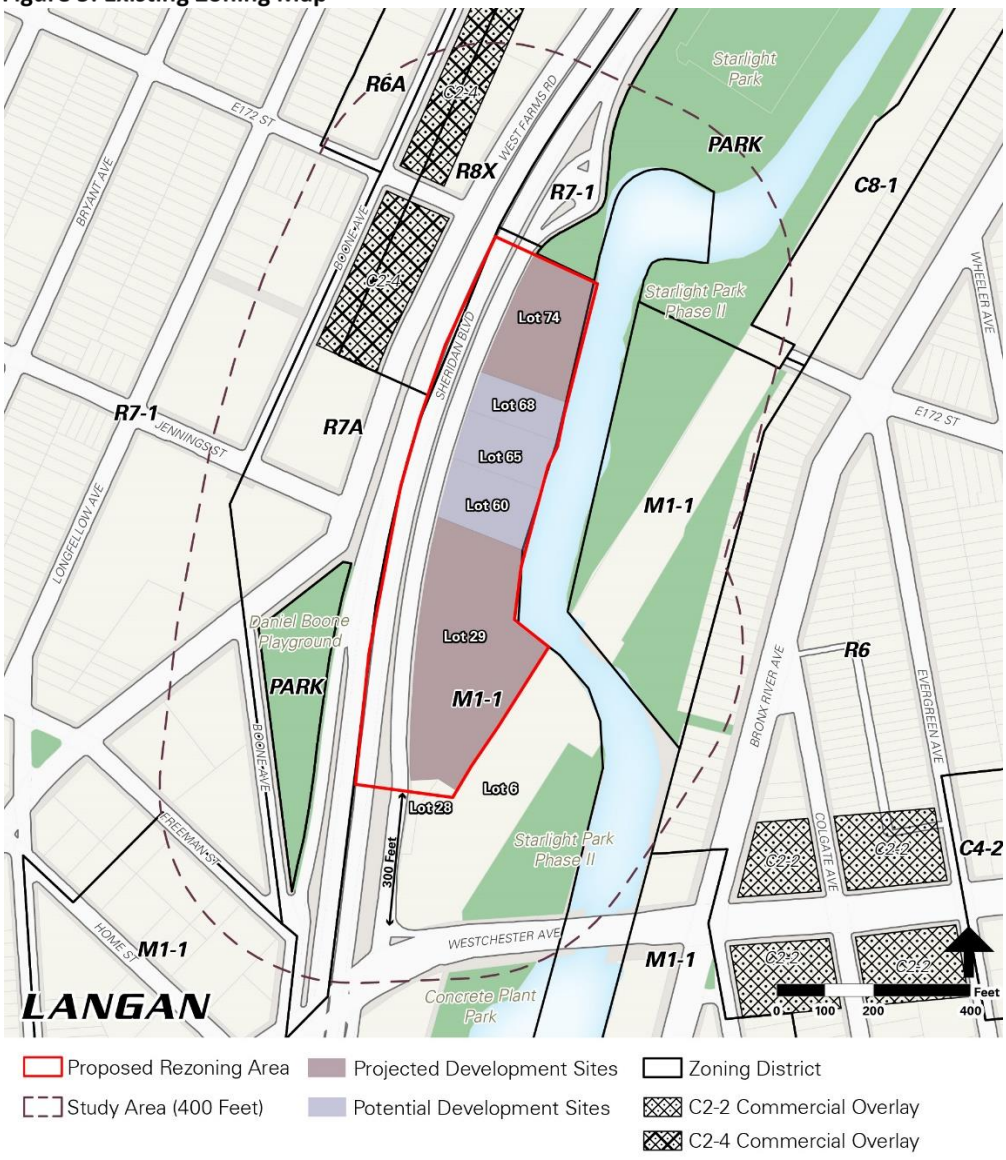
Area contains Bronx Block 3017, Lots 29, 60, 65, 68, and 74, and portions of Lots 6 and 28 (see Figure 4).

Figure 4: Tax Map



The Proposed Rezoning Area is currently an M1-1 zoning district (see Figure 5). M1-1 zoning districts are light manufacturing districts that allow light industrial uses and some commercial and community facility uses. Residential uses are not allowed as-of-right. Commercial and industrial uses are allowed up to a floor area ratio (FAR) of 1.0, and community facilities are allowed up to an FAR of 2.4. The Proposed Rezoning Area is in a Transit Zone, a FRESH Zone, and the New York City Coastal Zone Boundary.

Figure 5: Existing Zoning Map



Note: This graphic was updated for the Final Scope of Work.

The Proposed Rezoning Area is on a waterfront block adjacent to the Bronx River. Per the New York City Department of Parks and Recreation (NYC Parks), the once neglected Bronx River is New York City's only freshwater river. Community efforts, starting in the 1970s, have led to restoration of the river, improvement in water quality, and the creation of a system of waterfront parks.[2] The Bronx River Greenway is an effort led by the Bronx River Alliance in coordination with NYC Parks, and its mission is to develop open spaces, restore existing parks, and integrate them into a continuous series of parks and trails along the river.[3]

Per NYSDEC, the open waters of the Bronx River adjacent to the Proposed Rezoning Area are mapped as Tidal Wetlands, and are classified as Littoral Zone wetlands. NYSDEC regulates wetland-adjacent areas and typically requires a high percentage of pervious

[2] "The Bronx River Greenway: Then and Now." NYC Parks. https://www.nycgovparks.org/highlights/bronx-river-greenway/then-and-now

[3] Bronx River Alliance website. Last accessed 25 August 2021. https://bronxriver.org/about/greenway

surfaces to help absorb rainfall and reduce runoff. The preliminary Flood Insurance Rate Map (pFIRM) published by the Federal Emergency Management Agency (FEMA) shows the majority of the Proposed Rezoning Area is within the 100-year floodplain (Zone AE), with portions in the 500-year floodplain and other portions in an area of minimal flood hazard chance.

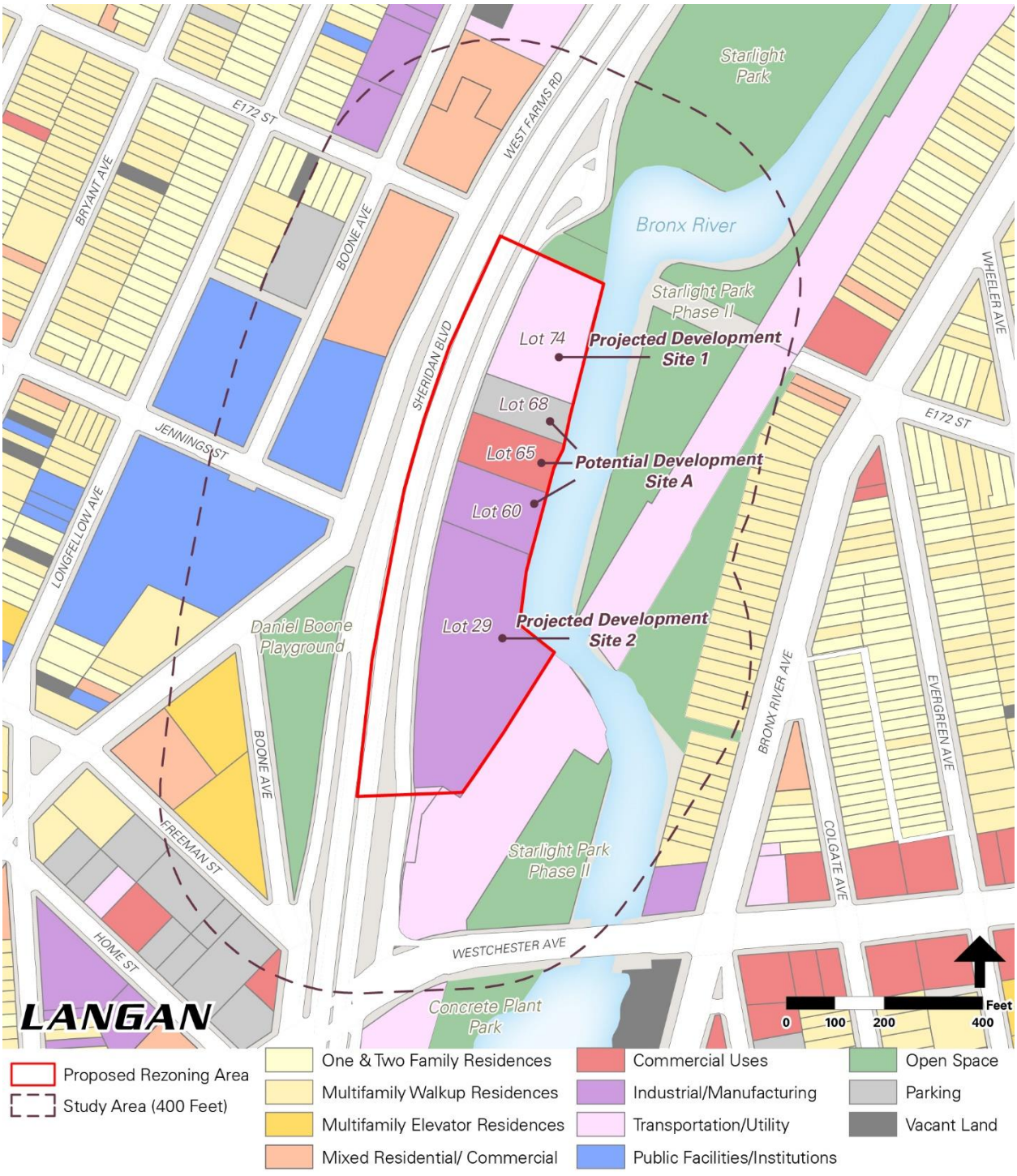
To the west of the Proposed Rezoning Area is Sheridan Boulevard. This street was the subject of a recent capital improvement project completed by New York State Department of Transportation (NYSDOT) in 2022~~December 2019~~. This project transformed the former Sheridan Expressway into a pedestrian-friendly boulevard and provided improved pedestrian connections to the Bronx River waterfront and Starlight Park from upland areas. The improvements resulted in signalized intersections and pedestrian crosswalks at Sheridan Boulevard's intersections with East 172nd Street (near Projected Development Site 1) and Jennings Street (near Projected Development Site 2). Improvements were also made to the Sheridan Boulevard service road (Edgewater Road), which installed a dedicated bicycle lane, reconfigured traffic lanes, and normalized the geometry of the intersections between this service road and Sheridan Boulevard.

To the north of the Proposed Rezoning Area, the de-mapped portion of East 172nd Street between Sheridan Boulevard and the Bronx River is under the jurisdiction of NYC Parks. This area is used by NYC Parks for parking, a boat launch, kayaks and other storage. To the north and east is Starlight Park, a ~~13~~ 17.06-acre City park operated by NYC Parks. The portion of the park north of East 172nd Street was upgraded under a recent NYC Parks capital improvement project that installed a turf field, playgrounds, picnic area, basketball courts, kayak launch, and the Bronx River House, an environmental learning center and boathouse and the headquarters of the Bronx River Alliance. On the south side of the Bronx River and to the southeast of the Proposed Rezoning Area beyond the Amtrak right-of-way, Phase II of Starlight Park ~~is undergoing construction and is anticipated to be~~ was completed in ~~summer~~ 2022. Phase II connects Starlight Park to Concrete Plant Park across Westchester Avenue. NYC Parks transformed Concrete Plant Park from a concrete plant into a waterfront City park in 2009. Both Concrete Plant Park and Starlight Park are part of the Bronx River Greenway system.

To the south of the Proposed Rezoning Area is an active auto repair facility on Lot 28 and an active Amtrak rail line on Lot 6. Lot 6 is an approximately 97,985-sf lot that is used as right-of-way for the Amtrak rail line, and Lot 28 is approximately 8,500 sf. Portions of these lots are within the Proposed Rezoning Area, but they are not included as development sites based on CEQR guidelines. Lot 6 is utilized for the Amtrak right-of-way, a use that is expected to continue under the Proposed Actions. Lot 28 is a small irregularly shaped lot, which limits its development potential, and it is not expected to be affected by the Proposed Actions.

The Proposed Rezoning Area is approximately 0.3 miles from the No. 6 subway line at the Whitlock Avenue station, and is proximate to local bus routes along Westchester Avenue, East 174th Street, and West Farms Road. The surrounding area contains a mix of open spaces (Daniel Boone Playground, Starlight Park, and Concrete Plant Park), institutional, transportation/utility, and mixed residential and commercial uses (see Figure 6).

Figure 6: Land Use Map



Development Sites

The Reasonable Worst Case Development Scenario (RWCDS) for this project established that two projected development sites and one potential development site would result from the Proposed Actions. The two projected development sites are owned by the Applicant. Projected Development Site 1 (1460 Sheridan Boulevard) is a 41,408-square-foot (sf) corner lot that contains a one-story, approximately 14,000-gsf automobile mechanic training facility. Projected Development Site 2 (1480 Sheridan Boulevard) is a 97,892-sf lot containing an open parking facility, ~~five~~ four connected one-story ~~associated~~ accessory office buildings and one garage totaling approximately 25,197 gsf of building area. The buildings on Projected Development Site 2 are accessory to the parking facility.

Projected Development Sites 1 and 2 are separated by three intervening tax lots that comprise Potential Development Site A – Lots 68, 65 and 60. Lot 68 is a 14,411-sf lot used as an open truck parking facility. Lot 65 is an approximately 19,070-sf lot improved with a 26,353-gsf three-story hotel that was developed in 2007. Lot 60 is an approximately 23,495-sf lot improved with a 16,398-gsf one-story vacant industrial building.

Proposed Rezoning Area History

Historically, the Proposed Rezoning Area was home to industrial and transportation-related uses. Projected Development Site 1 was occupied by several railroad companies, including a powerhouse and other supportive operational facilities during the first half of the 20th century. The current building on this site was constructed in 1965, and the site was used as an iron works facility starting in the 1970s.

Projected Development Site 2 was occupied by a coal and lumberyard during the first half of the 20th century, and later used for concrete slab manufacturing, welding, and automobile repair uses. The existing buildings on Projected Development Site 2 were constructed in 1924.

The industrial building on Lot 60 was constructed in 1929. It was used for steel storage and welding.

The hotel on Lot 65 was constructed in 2007. In December 2018, the M1 Hotels Text Amendment was adopted by the New York City Council. This amendment introduced a requirement to obtain a CPC special permit before a new hotel can be constructed in M1 districts. The hotel on Lot 65 was constructed before the M1 Hotel Zoning Text Amendment was approved, and is a legally compliant use. In December 2021, City Council adopted the Citywide Hotels Text Amendment, which requires CPC approval for new and enlarged hotels and motels in many areas throughout the city.

Per the 1901 Sanborn Map, Lots 65 and 68 were previously used as a coal yard.

The existing M1-1 district mapped over the Proposed Rezoning Area has been in place since the passage of the 1961 Zoning Resolution. The zoning lots in the Proposed Rezoning Area have not been the subject of any site-specific discretionary land use actions from the CPC or the NYC Board of Standards and Appeals.

Relevant Planning Initiatives

Bronx River Greenway Plan

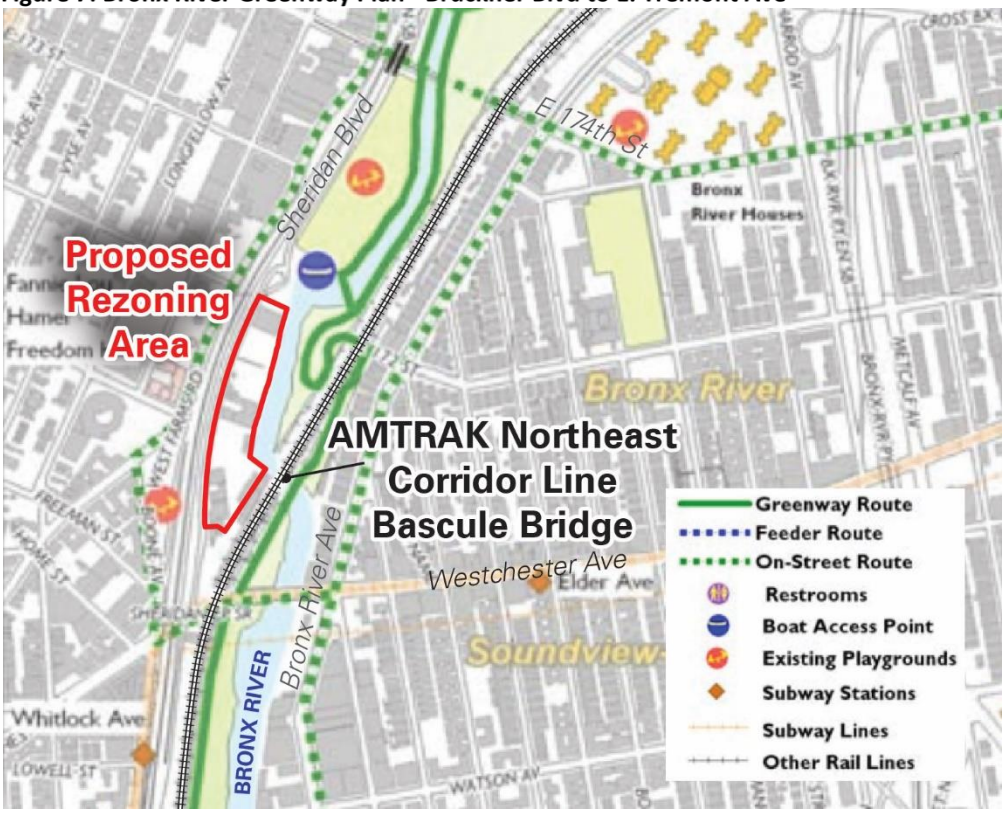
In June 2006, the Bronx River Alliance released the *Bronx River Greenway Plan*. The plan affirmed the Alliance's collective vision for the Bronx River Greenway and provides a

framework to guide its realization. The plan represents years of collaboration by the Alliance and its partners, including NYC Parks and NYSDOT.

The principal goal of the *Bronx River Greenway Plan* is to guide the development of a 23-mile continuous bike and pedestrian path that extends north from the Bronx into Westchester County. The plan also provides guidelines for maintenance, operations, programming, and the incorporation of ecological principles.

As shown in Figure 7 near the easternmost point of the Proposed Rezoning Area, the Bronx River Greenway Plan envisioned a greenway route crossing the river to the east of the Amtrak Bridge. The plan envisioned a second crossing north of East 172nd Street. The plan did not identify the Proposed Rezoning Area as part of the greenway route or as a feeder route to the greenway.

Figure 7: Bronx River Greenway Plan - Bruckner Blvd to E. Tremont Ave



Note: This graphic was updated for the Final Scope of Work
Source: Bronx River Greenway Plan

Sheridan Expressway – Hunts Point Land Use and Transportation Study

The *Sheridan Expressway-Hunts Point Land Use and Transportation Study*, released in December 2013, was a joint effort of NYC Department of Transportation (NYC DOT), DCP, the NYC Economic Development Corporation (EDC), and HPD. The plan focused on rezoning to encourage a mix of uses along the waterfront, increasing pedestrian access to the Bronx River and waterfront amenities, improving pedestrian safety at dangerous intersections, and creating over 1,600 linear feet of publicly accessible waterfront along the Bronx River, including a connected greenway from Starlight Park to Concrete Plant Park. The plan also focused on reconfiguring the limited-access Sheridan Expressway, which was completed in 2018 (see "Sheridan Boulevard Improvements" below).

Southern Boulevard Neighborhood Planning Study

In 2016, DCP – in consultation with other city agencies and Councilmember Rafael Salamanca – initiated the *Southern Boulevard Neighborhood Planning Study*. The goal of the first public meeting was to present past plans, identify key stakeholders and their organizational missions, and to allow community members a forum to share ideas for a planning process for Southern Boulevard, which is located approximately six blocks west of the Proposed Rezoning Area. The study has engaged community residents and stakeholders in a ground-up comprehensive neighborhood study around Southern Boulevard since 2016. High-level goals for the study are:

- To preserve and invest in existing community assets;
- To address longstanding health and economic inequities in the community by focusing on root causes;
- To ensure that the neighborhood is a great place for young people to grow up and for seniors to age in place; and
- To connect people to each other, resources, opportunities, and assets.[4]

The Southern Boulevard Neighborhood Planning Study concluded public engagement in 2019 but remains ongoing.

Sheridan Boulevard Improvements

In 2018, NYSDOT approved a plan to transform the Sheridan Expressway from an interstate highway to a pedestrian-friendly boulevard. This transformation was intended to allow a safer direct pedestrian connection to the Bronx River waterfront and Starlight Park from upland areas. The improvements resulted in signalized intersections and pedestrian crosswalks at Sheridan Boulevard's intersections with East 172nd Street (near Projected Development Site 1) and Jennings Street (near Projected Development Site 2). Improvements were also made to the Sheridan Boulevard service road (Edgewater Road), which installed a dedicated bicycle lane, reconfigured traffic lanes, and normalized the geometry of the intersections between this service road and Sheridan Boulevard.

Penn Station Access

In September 2021, the Federal Transit Administration (FTA) issued a Finding of No Significant Impact (FONSI) for the Penn Station Access project, which includes four new stations in the East Bronx with Metro-North service to Penn Station, Westchester County, and Connecticut. Other key project elements include rehabilitating the existing Amtrak Bridge over the Bronx River just east of the Proposed Rezoning Area and constructing a new single-track railroad bridge immediately north of the existing bridge to accommodate additional passenger tracks. Construction began in December 2022 and ~~T~~the overall duration of the repair of the existing bridge would likely be approximately 24 months, and construction of the new bridge is anticipated to take approximately 12 months. ~~Pursuant to the environmental review documents for this project, the anticipated start date of construction has not yet been announced.~~

[4] Southern Boulevard One Page Study Description published by DCP. Last accessed 25 August 2021. https://www1.nyc.gov/assets/planning/download/pdf/plans-studies/southern-blvd/southern-boulevard-description.pdf?r=1

3. Proposed Development

The Applicant proposes to demolish the existing buildings on Projected Sites 1 and 2 to allow development of one mixed-use building on Projected Development Site 1 ("Building 1"), and two mixed-use buildings ("Building 2" and "Building 3") on Projected Development Site 2. The buildings would contain ground floor and cellar retail uses and a fully affordable residential component. The Applicant would also undertake waterfront and open space improvements on Projected Development Sites 1 and 2 by constructing approximately ~~56,123 sf (1.29 acres)~~ 1.38 acres of publicly accessible open space comprising a minimum 40-foot-wide shore public walkway, upland connections, and a publicly accessible open space. The Proposed Development would provide up to 970 DU, all of which would be permanently affordable. The floor area by use in the Proposed Development is shown in Table 1~~Table 1~~.

Table 1: Proposed Development - Floor Area by Use

	GSF by Use				Programming		
Building	**Residential**	**Retail**	**Parking**	**Total**	**Bldg Height (ft)***	**Parking Spaces**	**DU**
Projected Development Site 1							
Bldg 1	258,862	5,000		263,862	240	0	304
Projected Development Site 2							
Bldg 2	292,920	9,209	10,000	312,129	240	100	345
Bldg 3	273,006	7,020	10,000	290,026	240		321
TOTAL	**824,788**	**21,229**	**20,000**	**866,017**	**Max. 240**	**100**	**970**

* The building height includes 15-foot-tall mechanical bulkheads on each building.

Projected Development Site 1 would be developed with a 24-story, 240-foot-tall (225 feet plus a 15-foot-tall mechanical bulkhead), 263,862-gsf building containing approximately 304 affordable DU. A minimum 40-foot-wide shore public walkway would be developed along the site's waterfront, and a 35-foot-wide waterfront public access would be provided along the site's southern boundary between Sheridan Boulevard and the shore public walkway. The site would contain approximately 14,705~~15,002~~ sf of waterfront open space (see Appendix A of the EAS for the proposed site plans). The shore public walkway on Projected Development Site 1 would abut Starlight Park. Up to 5,000 gsf of retail would be developed at ground floor and at the cellar level along the shore public walkway.

Public open space along the northern lot line of Projected Development Site 1 would also be provided and a pedestrian connection from Sheridan Boulevard to Starlight Park is proposed. This new direct connection would create an entry into the Proposed Rezoning Area's proposed open space network, allowing for continuous public access from Starlight Park to the proposed shore public walkway. Consultation with NYC Parks regarding the design of this pedestrian connection is ongoing, and final design will require approval from NYC Parks.

Projected Development Site 2 would be developed with two 24-story, 240-foot-tall (225 feet plus 15-foot-tall mechanical bulkhead) buildings totaling 602,155 gsf. Combined, the two buildings would contain up to 16,229 gsf of retail, ~~and~~ 706 affordable DU (565,926 residential gsf), and 100 accessory parking spaces (approximately 20,000 gsf) across the two buildings. Building 2 would contain 9,209 gsf of retail~~,~~ and 345 affordable DU (292,920 gsf residential)~~, and 100 accessory parking spaces (approximately 20,000 gsf)~~. Building 3 would contain 7,020 gsf of retail and 321 affordable DU (273,006 residential gsf).

A minimum 40-foot-wide shore public walkway would be developed along Projected Development Site 2's waterfront. An upland connection would be developed along Projected Development Site 2's northern lot line between Sheridan Boulevard and the Bronx River; the proposed CPC authorization pursuant to ZR Section 62-822 would allow the flexibility to align the required 50-foot-wide visual corridor and upland connection along this northern lot line instead of along the prolongation of Jennings Street. The area between Buildings 2 and 3 would be improved with a publicly accessible open space that would contain an amphitheater and other passive recreational uses. This space would provide a second public access area between Sheridan Boulevard and the Bronx River waterfront on Projected Development Site 2. The waterfront open space would comprise approximately 20,473~~867~~ sf. In addition to the waterfront open space, the Applicant also proposes approximately 24,907~~0,254~~ sf publicly accessible open space. Drawings of the Proposed Development are provided in Appendix A of the EAS.

All dwelling units on the Applicant-owned sites would be affordable to low-income households (for CEQR purposes, defined as households earning 80 percent or less than the AMI). Sites within the Transit Zone do not require parking for affordable units reserved for low-income households, however the Proposed Development would provide up to 100 accessory parking spaces on Projected Development Site 2. The Proposed Development would be funded in part by discretionary affordable housing financing from HPD.

4. Purpose and Need

The Proposed Actions would help achieve a larger vision for the neighborhood – established in DCP's *Southern Boulevard Neighborhood Study*, the Bronx River Alliance's *Bronx River Greenway Plan*, and the *Sheridan Expressway-Hunts Point Land Use and Transportation Study* – by revitalizing a section of the Bronx River waterfront with mixed-use development comprising affordable residential, retail, and open space uses. The Proposed Actions would achieve these larger policy goals by reconnecting upland areas to existing waterfront spaces – including Starlight Park and Concrete Plant Park – and by providing project-generated waterfront open space through a series of public access areas. The existing manufacturing district would be rezoned to a mixed-use district to allow for residential and commercial development at a similar scale to recent development in the area such as the Compass Residences affordable housing complex (on West Farms Road) across Sheridan Boulevard from the Proposed Rezoning Area. The proposed zoning map and text amendments would allow the site planning and massing of the projected buildings to respond to the surrounding waterfront and urban context, and support a superior site plan with better urban design. The proposed authorization would allow an upland connection to align with the northern boundary of Projected Development Site 2 (rather than Jennings Street) to allow more efficient development.

The Proposed Actions would also introduce new affordable residential units in the Proposed Rezoning Area, in accordance with the goals of citywide public policies such as *OneNYC 2050*, *Housing New York 2.0*, and the New York City Waterfront Revitalization Program, as well as more localized policies such as the *Southern Boulevard Neighborhood Study*, and the *Sheridan Expressway-Hunts Point Land Use and Transportation Study*.

5. Analysis Framework

The *2021 CEQR Technical Manual* will serve as guidance on the methodologies and impact criteria to evaluate the potential environmental effects of the Proposed Actions.

Consistent with the guidelines set forth in the *CEQR Technical Manual,* existing conditions will be described. Conditions will then be forecast to the future analysis year absent the Proposed Actions (the "No-Action Condition"). The With-Action Condition assumes the Proposed Actions would be adopted and the development sites would be redeveloped and fully occupied by the analysis (build) year. The With-Action Condition will be compared to the No-Action Condition to determine the project "increment." The increment will be used to determine the incremental effects of the Proposed Actions over the No-Action Condition. The CEQR process will determine whether the Proposed Actions have potential to result in significant adverse impacts, as defined in the *CEQR Technical Manual* (and pursuant to both Title 62 of the Rules of the City of New York and Part 617 of the New York Codes, Rules and Regulations). Collectively, the existing, No-Action, and With-Action conditions are referred to as the RWCDS.

As described in Section 2, "Project Description," the Proposed Development requires actions from the CPC. The Applicant would also seek affordable housing financing from HPD (and potentially other affordable housing agencies) for Projected Development Sites 1 and 2, as well as waterfront actions from NYSDEC and USACE.

The RWCDS established for the Proposed Actions includes both the Applicant's Proposed Development on Projected Development Sites 1 and 2, as well as Potential Development Site A. Because the Proposed Actions would allow residential use and increase the permissible underlying FAR, the Proposed Actions may incentivize new development on the non-Applicant owned sites in the Proposed Rezoning Area. The RWCDS established that Lots 60, 65, and 68 could potentially be merged into one zoning lot to form Potential Development Site A. There are currently no plans for development on Potential Development Site A. Pursuant to CEQR guidelines, Potential Development Site A will not be included in density-related technical assessment areas, including energy, water and sewer infrastructure, solid waste and sanitation services, transportation, construction, and the indirect effects of socioeconomic conditions, community facilities, and open space.

No-Action Condition

In the No-Action Condition, existing conditions in the Proposed Rezoning Area would remain. A one-story, approximately 14,000-gsf automobile mechanic training facility would remain on Projected Development Site 1, and an open parking facility would remain on Projected Development Site 2. Potential Site A would remain improved as a hotel, an open truck parking facility, and a vacant industrial building. The existing uses conform to the use requirements of M1 districts (the existing hotel was developed prior to the adoption of the M1 Hotels Text Amendment in 2018, and therefore is a grandfathered use).

With-Action Condition

In the With-Action Condition, the Proposed Actions would be adopted, and the existing industrial buildings on the Applicant's sites would be demolished and replaced with the Proposed Development. On Potential Development Site A, if redeveloped, this site would also be demolished and redeveloped into a mixed-use waterfront building.

The With-Action Condition assumes the Applicant would construct the Proposed Development, which would nearly maximize the allowable bulk and height of the proposed R7-3/C2-4 zoning district. In the With-Action Condition, Projected Development Site 2 would remain underbuilt by 34,255 zoning sf (zsf), or approximately six percent of

the proposed zoning capacity of R7-3/C2-4. Maximizing the bulk for this site would require a more expensive building configuration than is proposed. To maximize the bulk allowed by the proposed zoning, two towers atop the seven-story base of Building 3 would have to be developed, leading to added costs that cannot be borne for the proposed affordable housing development; accordingly, only one tower is currently proposed. In a two-tower (maximum capacity) scenario, a second building core would be required, with redundancy in vertical circulation and reduced floor area efficiency, making it prohibitively expensive for the proposed fully affordable housing development. Therefore, the Proposed Development is the worst case development scenario for the Applicant's sites.

Projected Development Sites 1 and 2

In the With-Action Condition, Projected Development Sites 1 and 2 would be developed with the Proposed Development, as described above.

Potential Development Site A

The RWCDS established that in the With-Action Condition, Lots 60, 65, and 68 could reasonably be merged into one zoning lot and redeveloped. For analysis purposes, the EIS will analyze a hypothetical development scenario whereby Potential Development Site A would be developed with a 24-story, 240-foot-tall, 380,025-gsf building in the With-Action Condition. The building would have a seven-story base, above which two towers would rise to a roof height of 225 feet (an overall height of 240 feet when including a 15-foot-tall mechanical bulkhead). The building would comprise 349,422 gsf of residential space, 3,493 gsf of ground floor retail, and 27,110 gsf of accessory parking. The building would provide 349 DUs, 88-105 of which would be permanently affordable pursuant to MIH. The remaining DUs would be market rate units. Following the underlying R7-3/C2-4 zoning requirements, 140 parking spaces would be provided at the ground floor of the building. A dwelling unit factor of 1,000 sf per unit was assumed at Potential Development Site A.

While there are no specific development plans for Potential Development Site A, if redeveloped, Potential Development Site A's waterfront would be improved with a minimum 40-foot-wide shore public walkway. Based on the underlying waterfront area requirements in an R7-3/C2-4 district, a public access area or visual corridor on this site would not be required through this potential development site to the shore public walkway along the waterfront.

Permitting Requirements

It is anticipated that tidal wetlands and protection of waters permits from the New York State Department of Environmental Conservation (NYSDEC) will be required for new development on the Projected Development Sites, in addition to Section 10/404 Nationwide Permits Nos. 7 and 13 from the U.S. Army Corps of Engineers (USACE). The Proposed Actions will also require a Municipal Separate Storm Sewer System (MS4) permit and State Pollutant Discharge Elimination System (SPDES) permit from NYSDEC. Stormwater management practices during construction and post construction will be reviewed by NYCDEP and NYSDEC to ensure compliance with the Unified Stormwater Rule. These permits will be required separate from the Joint Application with NYSDEC and USACE.

Increment

Compared to the No-Action Condition, the With-Action Condition would result in larger building envelopes and an increment of 826,820 gsf on the Projected Development Sites. The increment established in the RWCDS is shown in Table 2~~Table 2~~.

Table 2: Project Increment by Use

	No-Action	With-Action	Increment
Projected Development Sites			
DU	0	970	970
Affordable (≤80% AMI)	*0*	*970*	*970*
Affordable (>80% AMI)	*0*	*0*	*0*
Market-Rate	*0*	*0*	*0*
Residents	0	2,735	2,735
Employees	22	105	83
Waterfront Public Open Space (sf)	0	35,178	35,178
Projected Development Site 1	*0*	*14,705*	*14,705*
Projected Development Site 2	*0*	*20,473*	*20,473*
Other Publicly Accessible Open Space (Site 2)	0	24,907	24,907
Total Project-Generated Open Space	**0**	**60,085**	**60,085**
Parking Spaces	425	100	-325
Residential gsf	0	824,788	824,788
Retail gsf	0	21,229	21,229
Industrial gsf	39,197	0	-39,197
Enclosed Parking gsf	0	20,000	20,000
Open Parking sf*	6,000	0	-6,000
Total gsf – Projected Development Sites	**39,197**	**866,017**	**826,820**
Potential Development Site A			
DU	0	349	349
Parking Spaces	50	140	90
Residential gsf	0	349,422	349,422
Retail gsf	26,353	3,493	-22,860
Industrial gsf	16,398	0	-16,398
Enclosed Parking gsf	0	27,110	27,110
Open Parking sf*	10,000	0	-10,000
Total gsf – Potential Development Site A	**42,751**	**380,025**	**337,274**

* Open uses are excluded from gsf calculations.

Analysis (Build) Year

The analysis year established for this project is 20282~~2031~~, the year when new development generated by the Proposed Actions would be complete and fully occupied. Construction of the Proposed Development would begin after the Proposed Actions have been approved and required permits obtained. Assuming 24 months for CEQR and ULURP, and additional time following these approvals for HPD financing administration, environmental remediation, Department of Buildings (DOB) submissions, and NYSDEC permits, construction is expected to commence in 2025. Construction of Building 1 on Projected Development Site 1 (1460 Sheridan Boulevard) would begin first, followed by the construction of Building 2 on Projected Development Site 2 (1480 Sheridan

Boulevard). Construction of Building 3 on Projected Development Site 2 would commence in 2026. Assuming some concurrent construction and approximately 24 months of construction per each building, the Proposed Development would be complete and fully occupied in 2028.

Construction on Potential Development Site A, if redeveloped, would begin in 2028, and would take approximately 30 months to complete. The build year of 20282031 only encompasses the construction of ~~both~~ the projected ~~and potential~~ development sites.

6. City Environmental Quality Review and Scoping

City Environmental Quality Review

The Proposed Actions require environmental review pursuant to SEQRA and CEQR procedures. DCP is the CEQR Lead Agency on behalf of the CPC.

The Proposed Actions are considered Type I pursuant to 6 NYCRR Part 617.4(b)(5)(v) and are subject to environmental review in accordance with SEQRA and CEQR guidelines. An EAS was completed on May 13, 2022 that analyzed the Proposed Actions' potential to generate significant adverse impacts (as defined in the *CEQR Technical Manual*). On May 13, 2022, DCP issued a Positive Declaration, a formal determination that the Proposed Actions may have a significant adverse impact on the environment and thus warrants the preparation of an EIS.

Scoping

The CEQR scoping process is intended to focus the EIS on those issues that are most pertinent to the Proposed Actions. At the same time, the process allows other agencies and the public a voice in framing the scope of the EIS. This ~~Draft~~ Final Scope sets forth the analyses and methodologies proposed ~~for~~ that will be used to prepare the EIS. During the scoping period, those interested in reviewing the Draft Scope ~~may~~ were able to do so and provide comments in writing to the Lead Agency or verbally at a public scoping meeting ~~to be~~ that was held virtually on June 13, 2022 on the NYC Engage platform. A summary of comments received during the public comment period and responses to those comments are provided in Appendix A.

Comments received during the Draft Scope's public meeting and written comments received through 5:00 pm, Thursday, June 23 ~~will be~~ were considered and incorporated as appropriate into ~~a~~ this Final Scope of Work ("Final Scope"). DCP in its capacity as lead agency ~~will oversee~~ oversaw the preparation of the Final Scope, which ~~will~~ incorporates all relevant comments on the Draft Scope and revised the extent or methodologies of the studies, as appropriate, in response to comments made during scoping. A Draft Environmental Impact Statement (DEIS) will be prepared in accordance with the Final Scope and in conformance with all applicable laws and regulations, including SEQRA (Article 8 of the New York State Environmental Conservation Law) and its implementing regulations found at 6 NYCRR Part 617, New York City Executive Order No. 91 of 1977, as amended, and the Rules of Procedure for CEQR, found at Title 62, Chapter 5, of the Rules of the City of New York.

Once the lead agency is satisfied that the DEIS is complete, the document will be made available for public review and comment. A public hearing will be held on the DEIS in conjunction with the CPC hearing on the land use applications to afford all interested parties the opportunity to submit oral and written comments. The record will remain open

for 10 days after the public hearing to allow additional written comments on the DEIS. A Final EIS (FEIS) will be prepared that will respond to all substantive comments on the DEIS, along with any revisions to the technical analyses necessary to respond to those comments. The FEIS will then be used by decision makers to evaluate CEQR findings, which will address project impacts and proposed mitigation measures in deciding whether to approve the requested discretionary actions with or without modifications.

7. Proposed Scope of Work for the EIS

The environmental review provides a means for decision-makers to systematically consider environmental effects along with other aspects of project planning and design, to evaluate reasonable alternatives, and to identify, and mitigate where practicable, any significant adverse environmental impacts.

The first step in preparing the EIS document is the public scoping process. Scoping is the process of focusing the environmental impact analysis on the key issues that are to be studied in the EIS. The first step in preparing the EIS document is the public scoping process. Scoping is the process of focusing the environmental impact analysis on the key issues that are to be studied in the EIS.

Based on the EAS, the Proposed Actions do not meet the criteria warranting analysis of solid waste and sanitation services, and energy, and no significant adverse impacts to solid waste and sanitation services, and energy would occur with the Proposed Actions. The EIS will include detailed analysis in the technical areas where the Proposed Actions would potentially result in significant adverse impacts, based on the findings of the EAS. The scope of work and the proposed impact assessment criteria below are based on the methodologies and guidance set forth in the 2021 *CEQR Technical Manual*.

The EIS will contain:

- A description of the Proposed Development and its environmental setting;
- A statement of the potential environmental impacts of the Proposed Actions, including its short- and long-term effects and typical associated environmental effects;
- An identification of any potential significant adverse impacts that cannot be avoided if the Proposed Actions are approved;
- A discussion of reasonable alternatives to the Proposed Development;
- A description of irreversible and irretrievable commitments of resources that would be involved in the Proposed Development should it be implemented; and
- A description of mitigation proposed to minimize any significant adverse impacts.

The specific CEQR technical areas and tasks to be included in the EIS are described below.

Task 1: Project Description

The first chapter of the EIS will introduce the reader to the Proposed Actions and set the context of the environmental review. This chapter is basic to understanding the Proposed Actions and its impacts, and gives the public and decision-makers a context from which to evaluate the Proposed Development. The chapter will contain:

- a narrative of the Proposed Rezoning Area and its history;
- a purpose and need statement;

- a description of the Proposed Actions, the Proposed Development, and the CEQR analysis framework; and
- a discussion of the roles of involved public agencies, procedures to be followed, and the role of the EIS in the CEQR process.

Task 2: Land Use, Zoning, and Public Policy

Land Use and Zoning

The Proposed Actions include zoning map and text amendments, a waterfront zoning authorization, ~~a~~ waterfront zoning certifications, and discretionary funding for affordable housing~~, and waterfront actions.~~ These actions would result in changes to current land uses and bulk regulations in the Proposed Rezoning Area and ~~400-foot~~ one-quarter mile ~~(approximately 1,320 feet)~~ Study Area. The land use and zoning assessment will:

1. Describe land uses and development trends in the Study Area that could potentially be affected by the Proposed Actions; and
2. Describe zoning in the Study Area and the type of development that the zoning typically yields in new developments.

Public Policy

The public policy assessment will be prepared to determine the potential for the Proposed Actions to alter or conflict with applicable public policies and plans. The public policy assessment will:

1. Describe public policies that may be applicable to the Proposed Rezoning Area; and
2. Determine whether the Proposed Actions are compatible with those conditions and policies, and whether the Proposed Actions have the potential to adversely affect or conflict with the goals of the relevant public policies.

Because the Proposed Rezoning Area is within the Coastal Zone Boundary, a Waterfront Revitalization Plan (WRP) consistency assessment will be provided in the EIS. A Consistency Assessment Form (CAF) and supporting materials will be appended to the EIS.

Task 3: Socioeconomic Conditions

As defined in the *CEQR Technical Manual,* the socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area, regardless of whether the changes result in other environmental impacts under CEQR. A socioeconomic assessment considers whether a proposed project could result in significant adverse impacts on the socioeconomic character of an area due to:

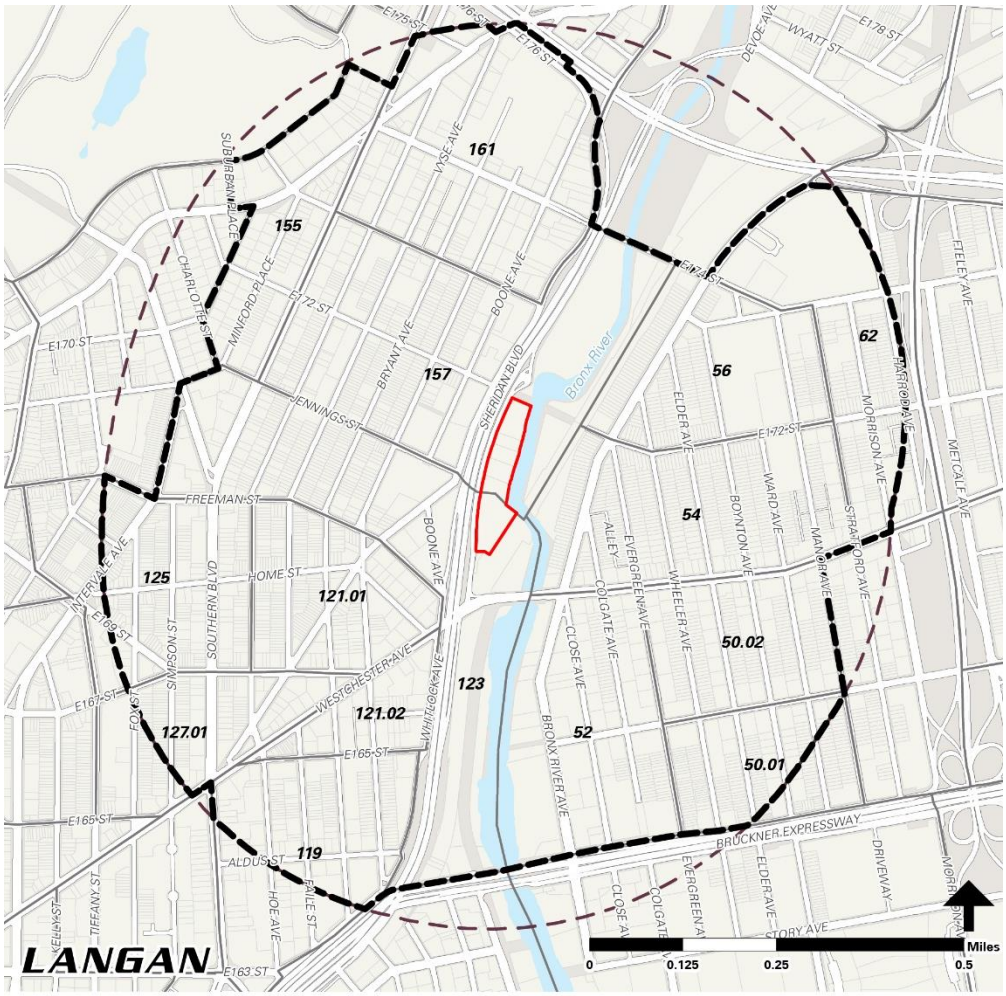
1. the direct displacement of the residential population;
2. the indirect displacement of the residential population within a study area;
3. direct displacement of existing businesses on a project site;
4. indirect displacement of existing businesses within a study area; or
5. adverse effects on specific industries.

The Proposed Actions would not directly displace more than 500 residents or more than 100 employees, and assessment is not anticipated in the areas of residential or business direct displacement. The Proposed Actions would not result in 200,000 square feet or more of commercial space, and the Proposed Actions are not anticipated to warrant an assessment in indirect business displacement. Additionally, the Proposed Actions are not anticipated to adversely affect conditions in a specific industry. Because the Proposed Actions would introduce more than 200 residential units, a socioeconomics conditions assessment focusing on indirect residential displacement will be presented in the EIS.

Indirect Residential Displacement

Indirect displacement is defined in the *CEQR Technical Manual* as "the involuntary displacement of residents, businesses, or employees that results from a change in socioeconomic conditions created by a proposed project." The objective of indirect residential displacement assessment is to determine whether the Proposed Actions may either introduce or accelerate a trend of changing socioeconomic conditions that may potentially displace a vulnerable population, most notably renters living in privately-held units unprotected by regulation such as rent control, rent stabilization, or other government program. The Socioeconomic Conditions Study Area will include all 2020 Census Tracts where 50 percent or more of the tract's area is within one half-mile of the Project Area (see Figure 8).

Figure 8: Socioeconomics Conditions Study Area



The potential for indirect displacement depends not only on the characteristics of the imposed project but also on the characteristics of a study area. The characteristics to be disclosed in the indirect residential displacement analysis will include:

- Total population by Census Tract, the Bronx, and New York City. In addition, demographic data from the larger Public Use Microdata Area (PUMA) 3705 (generally comprising Bronx Community Districts 3 and 6) or 3709 (generally comprising Bronx Community 9) will also be considered;
- Housing values and rent. This assessment may use information received from real estate brokers active in the study area, in addition to review of online market data for current and recent rental listings in the study area and surrounding environs. Real estate brokers may also be asked about local activity related to conversion of rental units to condominium or cooperative ownership units;
- Estimates of the number of housing units not subject to rent control. This assessment will use data published by the U.S. Census Bureau related to the total number of rental units in the study area and will identify existing and protected rental units. Based on real estate market data, this assessment will also project the number of total number

of rental units and number of protected rental units in future No-Action and With-Action conditions; and

- Household income. Median household income and the percentage of population living below the poverty line will be identified based on data from the U.S. Census.

After identifying these characteristics, the socioeconomic analysis will comprise four general components:

1. Determine if the Proposed Actions would add new population with higher average incomes than existing and projected average incomes in the study area;
2. Determine if the increase in population due to the Proposed Actions is large enough, relative to the size of the population expected to live in the study area without the Proposed Actions, to affect the local residential real estate market for rental properties. If the population increase is five percent or greater, then further analysis will be needed;
3. Consider whether the study area has experienced a readily observable trend toward increasing rents and the likely effect of the Proposed Actions on such trends; and
4. Determine whether the low-income renter population in the Study Area (for this assessment defined as households with incomes at 80 percent or less of the AMI) exceeds the supply of protected rental units in the study area and, if so, estimate the population that is potentially vulnerable to displacement due to increasing rents.

Per the *CEQR Technical Manual*, if the population that is vulnerable to displacement due to increasing rents exceeds five percent of a study area, a significant adverse impact may occur. If the project would result in significant adverse socioeconomic impacts, the EIS would identify measures to avoid, minimize, or mitigate such adverse impacts.

Task 4: Community Facilities and Services

Per the *CEQR Technical Manual*, community facilities are defined as public or publicly funded schools, childcare centers, libraries, health care facilities, and fire and police protection. A project can affect community facility services when it physically displaces or alters a community facility, or if a project causes a change in population that may affect the services delivered by a community facility. New workers tend to create limited demands for community facilities and services, while new residents create more substantial and permanent demands.

The projected development sites would add 970 affordable DUs to the Proposed Rezoning Area, an increase of 970 DUs over the No-Action Condition. As described in the EAS, this increase is expected to warrant a detailed analysis of elementary and intermediate schools, childcare facilities, and libraries. The Proposed Actions are not expected to warrant detailed analyses of potential impacts on high schools, police/fire stations, or health care services.

Public Schools

The following tasks will be undertaken per CEQR guidelines to assess the Proposed Actions' potential effects to public schools:

- The study area for the elementary and intermediate schools analysis will be the school "Sub-District" in which the project is located. The Proposed Rezoning Area is wholly in Community School District (CSD) 12, Subdistrict 2;

- Public elementary and intermediate schools within CSD 12, Subdistrict 2 will be identified and mapped. Existing capacity, enrollment, and utilization data for all public elementary, intermediate, and high schools within their Study Area will be provided for the current (or most recent) school year per the *CEQR Technical Manual*;
- Using future enrollments, including those associated with larger future developments within the affected subdistrict, projected growth will be identified in the No-Action Condition using SCA's *Projected New Housing Starts* per CEQR guidelines. Plans to alter school capacity – either through administrative actions on behalf of the New York City Department of Education (DOE) or because of the construction of new school space prior to the 2028~~2031~~ analysis year – will also be identified or incorporated into the analyses. Planned new capacity projects from the DOE's latest available Five Year Capital Plan will not be included in the quantitative analysis unless the projects have commenced site preparation or construction. They may, however, be included in a qualitative discussion;
- The With-Action Condition will be analyzed by adding project-generated elementary and intermediate school students to the enrollment that would occur in the No-Action Condition. Impacts will be assessed based on the difference between the future With-Action projections and the future No-Action projections (at the subdistrict level for elementary and intermediate schools) for enrollment, capacity, and utilization in the project analysis (build) year; and
- Following the impact criteria described in the *CEQR Technical Manual*, a determination of whether the Proposed Actions would result in significant adverse impacts to elementary and intermediate schools will be made. A significant adverse impact may result if the Proposed Actions would result in:
  - A utilization rate of the elementary or middle schools that is equal to or greater than 100 percent in the With-Action Condition; and
  - 100 or more new students generated from the proposed development past the 100 percent utilization rate.

If impacts are identified, potential mitigation measures will be explored in consultation with the SCA and the Department of Education (DOE). The number of school seats needed to mitigate any identified impacts, as well as the timing when impacts would occur will be disclosed.

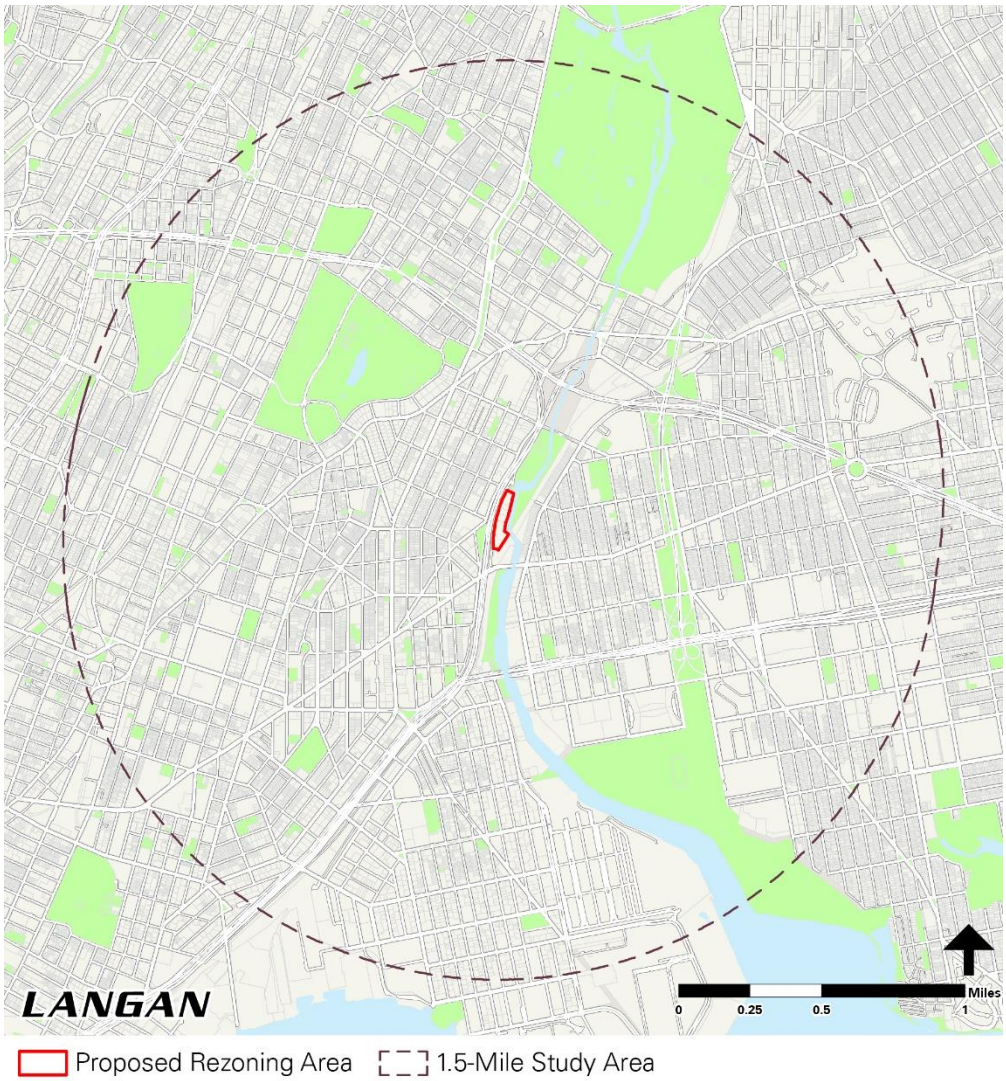
Childcare Facilities

The following tasks will be undertaken to assess the Proposed Actions' potential effects to publicly funded childcare facilities:

- Existing publicly funded childcare centers within a 1.5-mile radius of the Project Area - shown in Figure 9 – will be identified. Each facility will be described in terms of its location, capacity (number of slots), enrollment, and utilization, as reported by the DOE's Division of Early Childhood Education;
- For the No-Action Condition, information will be obtained for planned capacity changes to childcare programs or facilities in the area, including the closing or expansion of existing facilities or the establishment of new facilities. Any expected increase in the No-Action population of children eligible for publicly funded childcare will be discussed as potential additional demand for publicly funded childcare slots. The potential effects of No-Action population increases on demand for childcare services and planned capacity changes in the Study Area will be assessed;

- The potential effects of the incremental project-generated children that are eligible for publicly funded childcare resulting from the Proposed Actions will be added to the No-Action demand to estimate the demand for publicly funded childcare that would result in the With-Action Condition. The demand will be compared to the capacity, and the resulting capacity (or deficiency) and the study area's utilization rate will be reported; and
- A determination of whether the Proposed Actions would result in significant adverse impacts to childcare services will be made in accordance with the impact criteria described in the *CEQR Technical Manual*. Per the manual, a significant adverse impact may result if the Proposed Actions would result in both of the following:
  - A collective utilization rate of the group child care centers in the Study Area that is greater than 100 percent in the With-Action Condition; and
  - An increase of five percent or more in the collective utilization rate of childcare centers in the Study Area between the No-Action and With-Action conditions.

Figure 9: Childcare Study Area



Libraries

The following tasks will be undertaken to assess the Proposed Actions' potential effects to libraries:

- The local public library branch(es) within a 0.75-mile radius of the Proposed Rezoning Area will be identified as those that likely serve the Proposed Rezoning Area. The libraries within this study area will be geographically represented on map;
- Existing libraries within the Study Area will be described in terms of their information services and user population. Details on library branch operations will be based on publicly available information or consultation with New York Public Library officials;
- Projections of population changes in the Libraries Study Area and information on any planned changes in library services or facilities that would occur absent the Proposed Actions will be described, and the effects of these changes on library services will be assessed to establish the No-Action Condition. Based on information gathered during existing conditions research, holdings per resident in the No-Action Condition will be estimated;
- The effects of the project-generated incremental population on the library's ability to provide information services to its users will be assessed. Holdings per resident in the With-Action Condition will be estimated and compared to holdings per resident under the No-Action Condition; and
- The resulting metrics will be compared to CEQR impact criteria pertaining to libraries. Per the *CEQR Technical Manual*, a significant adverse impact may occur if the Proposed Actions would:
    - increase a library branch's Study Area (0.75-mile radius) population by five percent or more over the No-Action Condition; and
    - the Lead Agency, in coordination with New York Public Library, determines that the population increase introduced by the Proposed Actions would impair the delivery of library services in the Study Area.

Task 5: Open Space

Per the *CEQR Technical Manual*, an assessment of potential effects on open space resources are typically required if a Proposed Development would have the potential to result in either direct or indirect effects on open spaces. Direct effects may occur when the Proposed Development would encroach on, or cause a loss of, open space. Indirect effects may occur when the population generated by the Proposed Development overtaxes the capacity of existing open spaces so that their service to the future population of the affected area would be substantially or noticeably diminished.

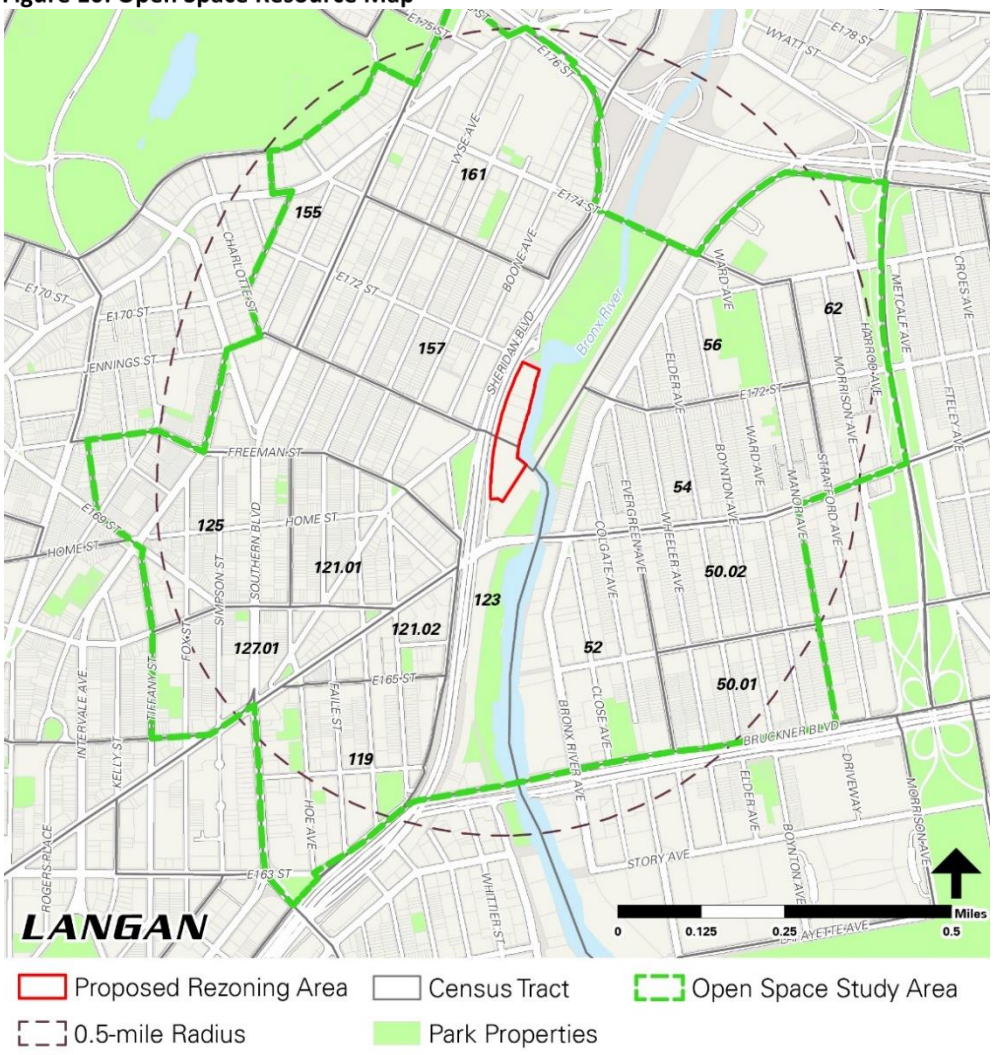
The open space analysis will involve the following:

- The project will be reviewed to determine if it is located in an area of the City within a Walk to a Park Service Area, which describes areas that are within a walking distance of a park;
- A study area comprising the 2020 census tracts with 50 percent or more of their area within one half-mile of the Proposed Rezoning Area will be identified. Figure 10 shows that 2020 Census Tracts 50.01, 50.02, 52, 54, 56, 62, 119, 121.01, 121.02, 123, 125, 127.01, 155, 157, and 161 have more than 50 percent of their area within one half-mile of the Proposed Rezoning Area;

- Inventory the open space resources in the Open Space Study Area. These include, but are not necessarily limited to NYC Parks-operated parks, Privately Owned Public Spaces (POPS), and publicly accessible open areas on private properties;
- The existing, No-Action, and With-Action populations in the Open Space Study Area will be determined using population reported in the 2020 Census;
- The study area's open space ratio (OSR) – the acreage of open space per 1,000 residents – will be calculated for existing, No-Action, and With-Action conditions;
- The study area population by age group as reported in the 2020 Census will be described;
- The availability and quality of open space programming of open space for age groups will be described; and
- Illustrate the proposed connection to Starlight Park.

If the project would result in a significant adverse open space impact (i.e., would result in conflicts in open space use or result in a user group being underserved), the EIS would investigate measures to avoid, minimize, or mitigate adverse impacts to open space.

Figure 10: Open Space Resource Map



Note: This graphic was updated for the Final Scope of Work.

Task 6: Shadows

The Proposed Actions would allow development of buildings greater than 50 feet in height that would be near sunlight-sensitive resources, and therefore the Proposed Actions have the potential to result in significant adverse shadow impacts. The EIS will assess the potential for the Proposed Actions to shade nearby sunlight-sensitive uses. The EIS will disclose the potential shadow effects likely to result from the Proposed Development. Specifically, the following tasks will be undertaken:

- A shadow screening analysis will be performed per CEQR guidelines to determine whether the Proposed Development's shadow may reach any sunlight-sensitive resources at any point throughout the year; and
    - A Tier 1 Screening Assessment will be conducted to determine the Shadows Study Area based on the maximum building height on the development sites. Per CEQR guidance, the Shadow Study Area will comprise the area that is within a buffer equal to 4.3 times the height of a structure. Based on the RWCDS's maximum building height (including bulkhead) of 240 feet, a Shadows Study Area comprising the area within 1,032 feet of the development sites will be established. Within this radius, sunlight-sensitive resources will be identified. A base map that illustrates the locations of the projected and potential development sites in relation to sunlight-sensitive resources will be created;
    - A Tier 2 Screening Assessment will be conducted if a sunlight-sensitive resource is within the Shadows Study Area. The Tier 2 assessment will determine the area that cannot be shaded by new buildings on the development sites, which, per CEQR guidance, is the area that is beyond 108 degrees from true north in New York City; and
    - A Tier 3 Screening Assessment will be conducted if a sunlight-sensitive resource is within the area that could be potentially shaded by new buildings on the development sites. A three-dimensional computer modeling program will be used to determine if project-generated shadow can reach sunlight-sensitive resources in the absence of intervening buildings on four representative analysis days per CEQR guidance: the summer solstice (June 21st), the winter solstice (December 21st), the equinox (March 21st or September 21st), and midway between the equinox and summer solstice (May 6th or August 6th). The times and durations of project-generated shadow that would occur on each sunlight-sensitive resource in the Shadows Study Area absent intervening buildings will be reported.
- If the Tier 1 through Tier 3 screenings cannot eliminate the possibility that project-generated shadow could result in significant adverse shadows impacts, then a detailed shadow analysis will be prepared to determine the extent and duration of the incremental shadow resulting from the Proposed Actions when accounting for intervening buildings. The detailed analysis, if required, will include the following tasks:
    - Graphics comparing shadows that would result from the No-Action and With-Action conditions will be prepared to demonstrate – on approximately an hourly basis – the incremental shadow that would occur from the Proposed Actions. For each sunlight-sensitive resource, the analysis will examine the analysis days where the Tier 1 through Tier 3 screenings could not rule out the possibility of significant adverse shadows impacts;

- A summary table listing the entry and exit times and total duration of incremental shadow on each applicable representative day for each affected resource will be provided; and
- An assessment of the significance of any shadow impacts on sunlight-sensitive resources, following the impact criteria described in the *CEQR Technical Manual*. This will include possible shadow impacts on migratory fish in the Bronx River such as alewife, blueback herring, and American eel.

Task 7: Historic and Cultural Resources

Architectural resources generally include historically important buildings, structures, objects, sites, and districts including:

- Buildings and properties designated as a New York City Landmark (NYCL) or historic district by the New York City Landmarks Preservation Commission (LPC), or buildings and properties calendared for NYCL consideration;
- Properties listed on the State/National Register of Historic Places (S/NR) or contained within a district listed on or formally determined eligible for S/NR listing;
- Properties recommended by the New York State Board for listing on the S/NR, National Historic Landmarks (NHL) designated by the U.S. Secretary of the Interior; and
- Properties not identified by one of the programs listed above, but that meet their eligibility requirements by the New York State Historic Preservation Office (SHPO).

Historic and cultural resources within 400 feet of the Proposed Rezoning Area will be documented and a qualitative discussion on the effects of the Proposed Actions on these resources will be provided.

Archaeological Resources

The Proposed Development would involve ground disturbance, and the development sites are in a general area classified by SHPO as "archaeologically sensitive." A site-specific Request for Environmental Review was submitted to LPC for consultation on the potential for the development sites to contain architectural or archaeological historic and cultural resources. Based on correspondence from LPC dated 23 November 2021, the development sites do not have the potential to contain archaeological resources of significance.

Architectural Resources

As described in the EAS, LPC correspondence dated 23 November 2021 noted that there are no architectural resources on the development sites. However, LPC noted that within 400 feet of the Proposed Rezoning Area, the IRT No. 6 Subway Truss Bridge is a historic resource that is eligible for listing on the S/NR. The historical significance of this resource will be described along with any direct (physical alteration) or indirect (contextual) effects that may result from the Proposed Actions.

Task 8: Urban Design and Visual Resources

Urban design is the totality of components that may affect a pedestrian's experience of public space. An assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical

alteration beyond that allowed by existing zoning. When an action would potentially obstruct view corridors, compete with icons in the skyline, or would result in substantial alterations to the streetscape of the neighborhood by noticeably changing the scale of buildings, a more detailed analysis of urban design and visual resources is typically appropriate.

As the Proposed Actions would change the permissible bulk envelope in the Proposed Rezoning Area, a preliminary assessment of urban design and visual resources will be provided in the EIS.

The Urban Design Study Area will be coterminous with the Study Area used for the land use, zoning, and public policy analysis (delineated by a ~~400-foot~~ quarter-mile radius from the Proposed Rezoning Area boundary), in accordance with the *CEQR Technical Manual*. For visual resources, the view corridors within the Study Area from which such resources are publicly viewable will be identified. The preliminary assessment will be based on *CEQR Technical Manual* methodologies and include the following:

- Based on field visits, the urban design and visual resources of the Proposed Rezoning Area and Study Area will be described using text, photographs, and other graphic material, as necessary, to identify critical features, use, bulk, form, and scale;
- In coordination with Task 2, "Land Use, Zoning, and Public Policy," the changes expected in the urban design and visual character of the Study Area due to known development projects in the No-Action Condition will be described;
- A description of potential changes that could occur to the urban design of the Study Area because of the Proposed Actions will be provided. The analysis will focus on general building types that can reasonably be expected to develop at the development sites with adoption of the Proposed Actions. The assessment will describe resulting street wall heights, setbacks, and building envelopes. Photographs and graphic material, including massing diagrams, will be used to assess the potential effects on urban design and visual resources in the Study Area in accordance with CEQR impact criteria; and
- If a detailed analysis is warranted, the analysis would describe potential changes that could occur to urban design and visual resources in the With-Action Condition compared to No-Action Condition. Changes that could negatively affect a pedestrian's experience of the area would be identified.

Task 9: Natural Resources

The *CEQR Technical Manual* states that a natural resources assessment should be prepared if there is the presence of a natural resource on or near the site of the project and the proposed project has the potential to cause disturbance of that resource. The *CEQR Technical Manual* defines natural resources as:

- the city's biodiversity (plants, wildlife and other organisms);
- any aquatic or terrestrial areas capable of providing suitable habitat to sustain the life processes of plants, wildlife, and other organisms; and
- any areas capable of functioning in support of the ecological systems that maintain the city's environmental stability.

The Proposed Rezoning Area is next to the Bronx River, a natural resource as defined in Chapter 11, Section 100 of the *CEQR Technical Manual*, and a natural resources

assessment will be provided in the EIS. This section of the EIS will evaluate the presence of natural resources and the potential impact the Proposed Actions may have on such communities. The assessment will describe existing regulatory context, wildlife, vegetation, geology and soils, ground and surface water, water quality and aquatic resources, wetlands, and rare, threatened, or endangered species. Consultations will be made to local, state, and federal agencies for further input on the natural resources near the Proposed Rezoning Area. The assessment will provide information on any in-water construction methods that would be utilized for the Proposed Development, as well as a description of the condition of the bulkhead structures and shoreline adjacent to the Bronx River.

The assessment will contain the following sub-tasks:

- Request information on any rare, special concern, threatened, endangered, or candidate species in the Proposed Rezoning Area or Study Area, as well as any unique association or habitat communities from the U.S. Fish and Wildlife Service (USFWS) New York Field Office, the New York Natural Heritage Program, and the National Oceanic and Atmospheric Administration (NOAA)- National Marine Fisheries Service (Northeast Region);
- With-Action analysis of how the Proposed Development will affect aquatic biota in the existing conditions section. This will include a focus on migratory fish such as alewife, blueback herring, and American eel;
- Include information on all NYSDEC mapped tidal wetlands, including both the nearby Intertidal marsh (IM) described in the southeast, and Littoral Zone (LZ) spanning the entire river;
- Examine the environmental systems that support the natural resources in the Proposed Rezoning Area and surrounding 0.5-mile Study Area; and
- Describe the construction activities associated with the Proposed Actions and analyze their interaction with the resource itself and the environmental systems that support it.

Task 10: Hazardous Materials

The potential for significant impacts from hazardous materials occurs when hazardous materials exist on a site and an action could increase pathways to their exposure to humans and the environment. Significant adverse hazardous materials impacts may also occur if an action would introduce new activities or processes using hazardous materials. Potential routes of exposure to hazardous materials can include direct contact, such as contact between contaminated soil and skin (dermal contact), breathing of VOCs or chemicals associated with suspended soil particles (inhalation), or swallowing soil or water (ingestion)

The hazardous materials section of the EIS will examine the potential for the Proposed Actions to result in significant hazardous materials impacts, as defined in the *CEQR Technical Manual*. The EIS will include a discussion of the development site's history and current environmental conditions. The EIS will also summarize the findings of a Phase I Environmental Site Assessment (ESA) conducted for the Applicant-owned development sites, and will include any necessary recommendations for additional testing or other activities that would be required either prior to or during construction and/or operation of the project. The appropriate remediation measures specific to the future uses of the site, including any New York City Department of Environmental Protection (DEP)

recommendations, will be provided in the EIS. If necessary, measures to avoid or reduce potential significant adverse impacts – such as an E-Designation – will be identified and discussed in the EIS.

Potential Development Site A

Potential Development Site A is not under control of the applicant. To preclude the potential for significant adverse impacts related to hazardous materials, an E-Designation would be placed on Potential Development Site A with adoption of the Proposed Actions. If warranted, the E-Designation will likely require that potential hazardous materials on this site would be addressed in coordination with the New York City Mayor's Office of Environmental Remediation (OER) during any future redevelopment involving soil disturbance of this site.

Task 11: Water and Sewer Infrastructure

The water and sewer infrastructure assessment is important to ensure the City's systems have adequate capacity to accommodate land use or density changes. For new development, it is critical to avoid environmental health problems such as sewer back-ups, street flooding, or pressure reductions.

The Proposed Actions would increase demand for water and sewer infrastructure services, including demand for water and wastewater treatment services. The estimated water usage, sewage generation, and stormwater discharge rates associated with the Proposed Actions will be evaluated to determine that the capacity of the network is sufficient. The effects of the Proposed Actions will be compared to CEQR impact criteria to determine if the Proposed Actions would result in any significant adverse impacts, as defined in the *CEQR Technical Manual*. The following tasks will be completed to determine if the Proposed Actions have the potential to result in significant adverse water and sewer infrastructure impacts:

Water Supply

- The existing water distribution system serving the Proposed Rezoning Area will be described based on information obtained from Bureau of Water Supply and Wastewater Collection at the New York City Department of Environmental Protection (DEP);
- The existing water demand generated on the projected development sites will be estimated;
- Water demand generated by the projected development sites identified in the RWCDS will be estimated for the No-Action and With-Action conditions; and
- The effects of the incremental demand on the City's water supply system will be assessed per the *CEQR Technical Manual* to determine if there would be significant adverse impacts to water supply or pressure. The incremental water demand will be the difference between the water demand on the projected development sites in the With-Action Condition and the demand in the No-Action Condition.

Wastewater and Stormwater Infrastructure

- The appropriate Study Area for the assessment would be established per CEQR guidelines and in consultation with DEP;

- The existing stormwater drainage system and surfaces at the projected development sites will be described, and the amount of stormwater generated on these sites will be estimated using DEP's volume calculation worksheet;
- Existing sewer system serving the Proposed Rezoning Area will be described based on records obtained from DEP;
- Changes to the stormwater drainage plan, sewer system, and surface area expected in the No-Acton and With-Action conditions will be described;
- Projected stormwater generation from the projected development sites will be estimated and evaluated against CEQR impact criteria; and
- Sanitary sewer demands that could be generated for the projected development sites will be estimated and compare to CEQR impact criteria.

Per the *CEQR Technical Manual* and in consultation with DEP, a more detailed assessment may be required if increased sanitary or stormwater discharges from the projected development sites are predicted to affect the capacity of the existing sewer system, exacerbate combined sewer overflow (CSO) volumes/frequencies, or contribute greater pollutant loadings in stormwater discharged to receiving water bodies. Based on correspondence with the NYC Department of Environmental Protection (DEP) on the Proposed Development, a hydraulic analysis of the existing sewer system will likely be required prior to the submittal of the Site Connection Proposal to determine if the system is capable of supporting the Proposed Actions and the related increase in wastewater flow.

Task 12: Transportation

The objective of a transportation analysis is to determine whether a proposed action may have a potentially significant adverse impact on traffic operations and mobility, public transportation facilities and services; pedestrian elements and flow; safety of roadway users (pedestrians, bicyclists and vehicles); and parking. The *CEQR Technical Manual* describes a two-tier screening process to determine if quantified analyses of transportation conditions are warranted. The preliminary assessment begins with a trip generation analysis (Level 1) to estimate person and vehicle trips that would result from the Proposed Actions.

Per the *CEQR Technical Manual*, a project that is expected to result in fewer than 50 peak-hour vehicle trips and fewer than 200 peak-hour transit or pedestrian trips does not warrant further quantified analyses. When these thresholds are exceeded, detailed trip assignments (Level 2) are performed to estimate the incremental trips at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the Proposed Actions could generate 50 or more peak-hour vehicle trips at an intersection, 200 or more peak-hour subway trips at a station, 50 or more peak-hour bus trips in one direction along a bus route, 50 or more peak-hour trips on the Citywide Ferry Service, or 200 or more peak-hour pedestrian trips traversing a pedestrian element, then further quantified analyses of transportation conditions may be warranted to assess transportation conditions in the Study Area.

Based on ~~a preliminary travel demand assessment~~ the approved Travel Demand Factors (TDF) memorandum, the Proposed Development's residential and retail trip generation would exceed CEQR thresholds during the weekday AM, midday, PM, and Saturday midday peak hours for detailed transportation analyses. Therefore, quantified analyses will be required to assess the potential impacts of project-generated trips on key traffic

intersections, pedestrian locations, nearby transit services, the area's parking resources, and vehicular and pedestrian safety. If the project would result in a significant adverse impact to transportation, the EIS would identify measures to avoid, minimize, or mitigate such adverse impacts. Specific tasks to be undertaken as part of the Transportation assessment are as follows:

Travel Demand Screening Assessment

The transportation analysis will use the RWCDS to assess potential transportation impacts of the Proposed Actions. Travel demand estimates for the Proposed Actions have been prepared based on trip generation, modal split, and vehicle occupancy assumptions from standard sources such as the *CEQR Technical Manual*, U.S. Census data, approved studies, and other references. The trip estimates (Level-1 screening assessment) are summarized by peak hour, mode of travel, and person versus vehicle trips. Based on the Level-1 screening, a Level-2 screening assessment is not warranted for Citywide Ferry Service.

The trip estimates for other travel modes identify the number of peak-hour person trips made by transit and the numbers of pedestrian trips traversing the area's sidewalks, corner reservoirs, and crosswalks. The results of these estimates have been summarized in the ~~draft Travel Demand Factors (TDF)~~ TDF memorandum that was ~~is being~~ finalized September 23, 2022 in coordination with DCP and DOT. In addition to trip estimates, detailed vehicle, pedestrian and transit trip assignments are being prepared to validate the intersections and pedestrian/transit elements locations where quantified analyses will be undertaken.

Traffic

A traffic study area has been defined in coordination with DOT. The traffic study area includes intersections closest to the project site as well as key intersections at the portals, which would experience major project-generated traffic volumes. The traffic study area includes the following intersections:

- Sheridan Boulevard and East 173rd Street;
- Sheridan Boulevard and Edgewater Road (at East 172nd Street);
- Sheridan Boulevard and Edgewater Road (at Jennings Street);
- Westchester Avenue and Edgewater Road/Northbound Sheridan Expressway Off-Ramp; and
- Westchester Avenue and Whitlock Avenue.

Data Collection

Pursuant to a data collection program developed, in consultation with the lead agency and NYCDOT that considers any potential traffic abnormalities associated with the ongoing COVID-19 pandemic, a data collection program will be conducted for traffic analysis locations. This will include a mix of automatic traffic recorder (ATR) machine counts, manual intersection turning movement counts, along with vehicle classification counts and travel time studies (speed runs) during the weekday AM, midday, and PM, and Saturday midday peak hours. The ATR counts will be conducted at key roadways for a continuous (9-day) period to identify temporal and daily traffic variations. In addition, travel time (speed run) data will be collected during the relevant peak hours to provide operational inputs for mobile source Air Quality analysis. The data will be normalized to establish estimated current conditions. Information pertaining to street widths, traffic

flow directions, lane markings, parking regulations, and bus stop locations at study area intersections will be inventoried and traffic control devices (including signal timings) in the study area will be recorded and verified with official signal timing data from DOT.

Existing Traffic Analysis

Balanced peak hour baseline traffic volume networks will be prepared to conduct capacity analysis of study area intersections. The capacity analysis will be conducted using the *2000 Highway Capacity Manual* (HCM) methodology with DOT's approved version of Highway Capacity Software (HCS) or Synchro software. The existing volume-to-capacity (v/c) ratios, delays, and levels of service (LOS) for the weekday AM, midday, and PM and Saturday midday peak hours will be calculated.

No-Action Condition Analysis

No-Action traffic volumes will be calculated in accordance with *CEQR Technical Manual* guidelines. This will be accomplished by incorporating the background growth to existing traffic volumes, and accounting for any incremental changes in traffic volumes resulting from future planned developments in the study area. Trip estimates for future projects will be determined using the approved set of travel demand factors and other appropriate references. In addition, geometric changes that could be implemented independent of the Proposed Development would be incorporated into the No-Action traffic analysis. The No-Action v/c ratios, delays, and LOS at the study area intersections will be calculated.

With-Action Condition Analysis

Traffic impact analysis for the Proposed Development will be conducted by adding project-generated trips onto the No-Action traffic network. Physical and operational changes resulting from the Proposed Development will also be incorporated into the analyses. The potential traffic impacts will be evaluated in accordance with *CEQR Technical Manual* criteria. If any significant adverse traffic impacts are identified, mitigation measures will be recommended to mitigate such impacts.

Parking

Parking surveys will be performed within a ¼-mile study area to record on- and off-street parking supply and utilization. Parking accumulation estimates for the Proposed Actions will be developed to identify peak parking periods and 24-hour in/out activities for any proposed on-site parking facilities. Project-generated parking demand projections will be compared to the available supply in the study area to determine if project-generated demand could result in a potential for parking shortfall. The effects of on-street parking spaces displacement resulting from traffic mitigation measures will also be addressed.

Transit

The Proposed Development is served by New York City Transit (NYCT) subway, including the No. 2 and 5 subway lines at Freeman Street Station and the No. 6 subway line at Whitlock Avenue Station. In addition, the Proposed Development is served by seven local bus routes (Bx4/Bx4A, Bx5, Bx11, Bx19, Bx27, Bx35 and Bx36) operated by MTA/NYCT that are accessible at bus stops near the Proposed Rezoning Area. The transit trips generated by the Proposed Development will likely exceed CEQR Level 1 thresholds (200 or more peak-hour transit riders).

For subway, one subway station would likely exceed CEQR Level 2 thresholds (200 or more peak hour subway riders). Therefore, a detailed analysis of stairway and fare control elements at the Freeman Street subway station will be undertaken. In addition, the No. 2 subway line is expected to experience 200 or more peak-hour subway riders and therefore, a subway line-haul analysis would be required. To establish the baseline conditions, existing data at the nearest stairways and control elements at the subway station will be collected following the CEQR guidelines for the weekday AM and PM periods—the peak hours of typical commuter activities for subway service. For the subway line-haul analysis, subway peak load point data will be obtained from NYCT, supplemented by additional window loading surveys, if necessary, to evaluate subway line-haul capacities.

Based on the availability of several bus route options in the study area, bus trip levels are not anticipated to exceed the CEQR Level 2 thresholds (50 peak hour bus riders on a single direction of a single route) for detailed bus analysis. However, a qualitative assessment of available bus route options in the study area will be conducted as part of the overall transportation analyses.

Pedestrians

Pedestrian analysis will be conducted for pedestrian elements (including sidewalks, crosswalks and corner reservoirs to be selected in coordination with DOT), for the weekday AM, midday, and PM and Saturday midday peak periods. Project-generated pedestrian trips will be assigned to pedestrian facilities adjacent to the project site as well as along primary routes to and from the area's transit facilities. The pedestrian analysis will be conducted for Existing, No-Action and With-Action conditions. If needed, measures will be recommended to mitigate any potential significant adverse pedestrian impacts.

Vehicular and Pedestrian Safety

Accident data for the study area intersections and other nearby sensitive locations from the most recent three-year period has been obtained from NYC DOT. The data has been summarized by accident-type on a yearly basis to determine if any of the study area locations may be classified as a high pedestrian/bicycle accident location per *CEQR Technical Manual* criteria. All intersections within a ¼-mile of the Proposed Rezoning Area along Westchester Avenue – a *Vision Zero Priority Corridor* – are classified as high pedestrian/bicycle accident locations per *CEQR Technical Manual* criteria. Measures at these intersections will be recommended to alleviate potential safety issues.

Task 13: Air Quality

Per *CEQR Technical Manual* guidelines, an air quality analysis is conducted to assess the effect of a proposed action on ambient air quality (i.e., the quality of the surrounding air), or effects on a proposed project because of ambient air quality. Air quality can be affected by mobile sources (such as pollutants produced by motor vehicles) and by stationary sources (such as pollutants produced by stationary industrial facilities).

Stationary Industrial and Large or Major Source Emissions

The Clean Air Tracking System (CATS) maintained by DEP will be reviewed to identify potential sources of emissions from manufacturing/industrial operations within 400 feet of the Proposed Rezoning Area. A preliminary review indicates there are no large or major sources within 1,000 feet of the Proposed Rezoning Area, and a large or major source

analysis is not anticipated to be required. A preliminary review of CATS found industrial source emissions permits within 400 feet of the Proposed Rezoning Area that may require refined air quality dispersion analyses. A site visit will be completed to identify industrial facilities that may operate without a permit (i.e. automotive spray painting booths). If any such sources are identified, an industrial source air quality assessment will be conducted following the *CEQR Technical Manual* guidance. If required, dispersion will be modeled using either the AERSCREEN or the AERMOD programs published by the Environmental Protection Agency (EPA).

Stationary Source Emissions from HVAC Systems

Emissions from the HVAC systems of project-generated buildings may affect air quality levels at nearby existing or future land uses. The effects of these emissions would be a function of fuel type, boiler capacity and type, stack height and location, building dimension, and location relative to a nearby sensitive receptor sites. An HVAC screening would be completed for each building following the guidance provided in the *CEQR Technical Manual*, including for project-on-project effects and project-on-existing effects. If the screening cannot rule out the potential for significant adverse air quality impacts, detailed dispersion analysis of impacts of the HVAC emissions will be conducted using the EPA's AERSCREEN or AERMOD modeling software in accordance with CEQR guidance. Because Potential Development Site A is not owned by the Applicant, it will be conservatively assumed that the HVAC system is powered by natural gas and an HVAC system air quality impact analysis for Potential Development Site A will be required. For the Applicant-owned Projected Development Sites, the use of electric-powered heat and hot water systems is proposed, and this commitment to electric power will be specified in an E-Designation. Therefore, the HVAC system air quality impact analysis is not required for the Projected Development Sites.

Mobile Source Emissions

The Proposed Actions ~~are expected to~~would generate traffic volumes that exceed the heavy duty vehicle-equivalent thresholds listed in Chapter 17, Section 210 of the *CEQR Technical Manual*, and a mobile source assessment will be conducted for particulate matter ($PM_{2.5}$ and PM_{10}) following the guidance established in the *CEQR Technical Manual*. A screening will be conducted to determine the intersections that are most sensitive to air quality conditions. Based on the vehicular assignments in the TDF, the intersection of Sheridan Boulevard, Edgewater Road, and ~~Jennings Street~~East 172nd Street will be used as the representative worst-case intersection to conduct detailed air quality modeling in accordance with CEQR guidance.

The project-generated traffic would not exceed the *CEQR Technical Manual* threshold of 170 incremental auto trips at any intersection, and detailed analysis of carbon monoxide (CO) emissions would not be warranted per CEQR guidance. The Proposed Actions ~~are anticipated to~~ would result in an enclosed parking facility containing more than 85 spaces, the CEQR threshold, and a parking facility air quality assessment will therefore be required for the Proposed Actions. For the parking garage assessment, hourly vehicular in/out trips will be obtained from the traffic analysis for the garage with the highest number of peak hour in and out vehicular trips. CO and PM engine emission factors will be computed using the assumed build year of 2028~~2031~~. The inputs and use of MOVES will incorporate the most current guidance available from NYSDEC and EPA.

Task 14: Greenhouse Gas (GHG) Emissions and Climate Change

As described in the *CEQR Technical Manual,* the GHG Emissions and Climate Change assessment consists of two steps, which include estimating the project's emissions and examining the project in terms of the qualitative goals for reducing GHG emissions**.** The operational and mobile source emissions generated by the Proposed Actions will be estimated using Table 15-1 of the *CEQR Technical Manual*. The EIS will then qualitatively assess the project in terms of the qualitative goals for reducing GHG emissions. Once the emissions are estimated, the project's consistency with the City's GHG reduction goal will be assessed following the guidance of the *CEQR Technical Manual*. If the project would result in a significant adverse GHG Emissions and Climate Change impact, the EIS would identify measures to avoid, minimize, or mitigate such adverse impact.

Task 15: Noise

The noise assessment will analyze the potential noise effects associated with the Proposed Actions. The Proposed Actions would introduce new noise-sensitive receptors to the Proposed Rezoning Area, consisting of residential and open space uses.

The noise analysis will establish the ambient noise levels and determine the level of building attenuation required to satisfy applicable CEQR interior noise criteria. For this project, noise assessment is expected to be warranted in the areas of both stationary and mobile sources.

Stationary noise sources do not move in relation to a noise-sensitive receptor. Typical stationary noise sources of concern include machinery or mechanical equipment, such as those associated with a building's HVAC system. Project-generated development would introduce new stationary noise sources such as mechanical equipment, and therefore a stationary source assessment will be provided. The EIS will assess project-generated stationary noise sources and noise generated by nearby stationary noise sources.

Mobile noise sources move in relation to receptors. The mobile source screening assessment will address potential noise impacts associated with vehicular traffic generated by the Proposed Actions. Mobile noise assessment will be completed using proportional modeling of passenger-car-equivalents using traffic data analyzed in the Transportation assessment. This traffic data will be used to calculate the Existing, No-Action and With-Action noise levels and determine if attenuation is warranted in specific locations per CEQR guidance. Noise generated by the nearby elevated subway lines and open Metro-North Hells Gate line will also be considered.

Noise survey locations will be selected by examining the projected development sites' location and the location of the dominant sources of ambient noise. Existing noise levels will be determined at each representative location by performing field measurements and noise calculations. Noise levels will be adjusted as appropriate to match existing traffic conditions represented in the Transportation assessment. No.6 subway noise is calculated based on noise measurement from previous project and noise reduction using source-receptor distance. The measured noise levels will be used to determine minimum window/wall attenuation requirements to satisfy CEQR interior noise level criteria. If warranted, required window/wall sound attenuation would be defined and mandated through an E-Designation placed on the development sites. If the project would result in a significant adverse noise impact, the EIS would identify measures to avoid, minimize, or mitigate such adverse impacts.

Task 16: Public Health

As stated in the *CEQR Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on public health may occur because of a proposed project, and if so, to identify measures to mitigate such effects.

When no significant unmitigated adverse impact is found in other CEQR analysis areas – such as air quality, water quality, hazardous materials, or noise – a public health analysis is not warranted. If unmitigated adverse impacts are found in any of these technical areas and the Lead Agency determines that a public health assessment is warranted, an analysis will be provided for the specific technical area or areas in accordance with CEQR guidelines. If the project would result in a significant adverse public health impacts, the EIS will identify measures to avoid, minimize, or mitigate such adverse impacts.

Task 17: Neighborhood Character

The character of a neighborhood is established by numerous factors, including land use patterns, the characteristics of its population and economic activities, the scale of its development, the design of its buildings, the presence of notable landmarks, and a variety of other physical features that include noise levels, traffic, and pedestrian patterns. Most of these elements will be covered in other EIS chapters but salient points from those analyses will be summarized. Specific tasks to analyze the Proposed Actions' effects on neighborhood character will include:

- Drawing on other EIS sections, the predominant factors that contribute to defining the character of the neighborhood will be described;
- Based on planned development projects, public policy initiatives, and planned public improvements, the changes that can be expected in the character of the neighborhood will be summarized;
- The Proposed Action's effects on neighborhood character relative to the No-Action Condition will be assessed and summarized;

If the preliminary assessment determines that the Proposed Actions would affect neighborhood character, a detailed analysis would be conducted in accordance with the *CEQR Technical Manual* guidelines.

Task 18: Construction

The EIS will present the overall construction duration across the development sites. Information will be provided on the applicable oversight and regulations for various aspects of construction. Information on how New York City regulates construction hours will be described. The EIS will include a discussion of the construction period, equipment, and phasing. Because of the duration and location of construction, the potential for construction-period impacts in the areas of land use, transportation, air quality, noise, historic resources, and hazardous materials will be assessed per the guidance set forth in the *CEQR Technical Manual*. Quantitative transportation, air quality and noise impact analyses will be undertaken and compared to the relevant CEQR impact criteria. If the

project would result in a significant adverse construction impacts, the EIS will identify measures to avoid, minimize, or mitigate such adverse impacts.

Task 19: Mitigation

In the CEQR technical areas where significant impacts are identified, measures to mitigate those impacts will be described. These measures will be developed and coordinated with the Lead Agency and other responsible City and State agencies as necessary. If identified impacts cannot be mitigated, they will be described as unmitigated and unavoidable adverse impacts (see "EIS Summary Chapters" below).

Task 20: Alternatives

The purpose of an alternatives analysis is to examine reasonable and practicable options to avoid or reduce project-related significant adverse impacts while achieving the stated goals and objectives of the Proposed Development. Alternatives must be feasible and consider the objectives and capabilities of the project sponsor. Typically, alternatives to a proposed project are identified as project-generated impacts and clarified during the preparation of the EIS.

The EIS will identify a No-Action Alternative, which assumes that the Proposed Actions would not be approved. In addition, if unmitigated significant adverse impacts are identified during the preparation of the EIS, a No-Unmitigated Adverse Impacts Alternative will be included to describe the project modifications that would be needed to avoid significant adverse impacts. Additional alternatives to the Proposed Actions may also be considered and evaluated pursuant to *CEQR Technical Manual* guidelines.

Task 21: EIS Summary Chapters

Per *CEQR Technical Manual* guidelines, the EIS will include the following three summary chapters:

- Unavoidable Adverse Impacts—This chapter will summarize any significant adverse impacts that are unavoidable regardless of the mitigation employed (or if mitigation is not feasible);
- Growth-Inducing Aspects of the Proposed Actions — This chapter will qualitatively describe the potential for the Proposed Actions to trigger or unlock additional development; and
- Irreversible and Irretrievable Commitments of Environmental Resources — This chapter will summarize the Proposed Actions and their impacts in terms of the loss of resources (loss of vegetation, use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long-term.

Task 22: Executive Summary

The executive summary will use relevant material from the body of the EIS to describe the Proposed Actions, their significant and adverse environmental impacts, measures to mitigate those impacts, and alternatives to the Proposed Development.

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1460 - 1480 Sheridan Boulevard Rezoning
Final Scope of Work (FSOW)
Comments Received on the Draft Scope of Work

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RESPONSE TO COMMENTS ON THE DRAFT SCOPE OF WORK

1. Introduction

This document summarizes and responds to comments on the Draft Scope of Work (DSOW), issued on May 12, 2022 for the proposed 1460-1480 Sheridan Boulevard project (the "Proposed Actions"). Oral and written comments were received during the virtual public meeting held by the New York City Department of City Planning (DCP) on June 13, 2022. Written comments were accepted through the duration of the public comment period, which ended at 5:00 pm on Thursday June 23, 2022. The oral comments received on the Draft Scope of Work are summarized below. A Final Scope of Work was issued on April 7, 2023, incorporating comments received on the DSOW where relevant and appropriate.

Section 2 below lists the elected officials, organizations, and individuals that provided relevant comments on the DSOW. Section 3 contains a summary of and response to relevant comments. Comments are organized by subject matter and convey the substance of the issue but are not necessarily quoted verbatim. The comments and responses in Section 3 correspond to the commenters numbered in Section 2. A transcript of oral statements delivered at the virtual public meeting is provided in Appendix B. This Response to Comments on the Draft Scope of Work parallels the chapter structure of the DSOW.

2. List of Elected Officials, Organizations, and Individuals who Commented on the Draft Scope of Work

Elected Officials

1. None

Organizations

2. Sinade Wadsworth, Carpenter's Union; oral statement delivered at public scoping meeting and written submission dated June 13, 2022

Interested Public

3. None

3. Comments and Responses on the Draft Scope of Work

The numbers in the parentheses following comments in this section correspond with commenters as numbered in Section 2.

Project Description

Comment 1: The project should include a commitment to labor standards and apprenticeship opportunities. (2)

Response 1: Comment noted. This comment is not related to the subject of environmental review.

Comment 2: The Applicant should engage local stakeholders before the project is approved. (2)

Response 2: Comment noted. This comment is not related to the subject of environmental review.

B

1460 - 1480 Sheridan Boulevard Rezoning
Final Scope of Work (FSOW)
Transcript of Oral Comments on Draft Scope of Work

LANGAN

Scoping Meeting Comments Transcript

June 13, 2022 – 2:00 PM

Sinade Wadsworth

Hello, good afternoon everyone. My name is Sinade Wadsworth. I am one of the business representatives for the New York City District Council of Carpenters. I represent 20,000 plus members and we would like to take this opportunity to share our opposition for this project. As a Bronx resident and Community Board 9 member, coming out of this pandemic, the Bronx deserves better opportunities. Simone Development has not committed to responsible development. None of their projects include labor standards, and don't provide apprenticeship opportunities for underserved young adults who desperately need careers in this very moment. I hope that labor standards be included in this project and that Simone Development engage with local stakeholders before this project is approved. Thank you so much. Again my name is Sinade Wadsworth and I am a representative for the New York City District Council of Carpenters.

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1460 - 1480 Sheridan Boulevard Rezoning
Final Scope of Work (FSOW)
Transportation Demand Factors (TDF) Memorandum

LANGAN

LANGAN

Technical Memorandum

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
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To: Shakil Ahmed – Director, Traffic Engineering & Planning (NYC DOT)

From: Brian Weinberg, PE

CC: Adnan Pasha, PE, Rachel Belsky – Langan

Date: 22 June 2022 (Revised: 23 September 2022)

Re: Travel Demand Factors (TDF) Memorandum
1460-1480 Sheridan Boulevard Rezoning
Bronx, NY
Langan Project No.: 17062201

1.0 INTRODUCTION

The objective of a transportation analysis is to determine whether a proposed action could result in significant adverse impacts on traffic operations; public transportation facilities and services; pedestrian elements and flow; roadway user safety (pedestrians, bicyclists, and vehicles); and on-and-off-street parking. This Travel Demand Factors (TDF) Memorandum provides a discussion of planning assumptions for undertaking transportation analyses for the 1460-1480 Sheridan Boulevard Rezoning project ("the project").

2.0 ANALYSIS FRAMEWORK

To assess the potential effects of the Proposed Actions, it is necessary to determine the development that could occur in the Rezoning Area (Bronx Block 3017, Lots 29, 60, 65, 68 and 74). Development sites within the Rezoning Area have been divided into two categories: Projected Development Sites and Potential Development Sites.

Projected Development Sites include Block 3017, Lot 74 ("Projected Development Site 1"), and Block 3017, Lot 29 ("Projected Development Site 2"). A single Potential Development Site consists of Block 3017, Lots 30, 65 and 68 ("Potential Development Site A"). The Proposed Actions would allow the Applicant to develop the "Proposed Development," which consists of Projected Development Sites 1 and 2.

A Reasonable Worse Case Development Scenario (RWCDS) for the Future With-Action Condition ("With-Action Condition") was developed for the year 2028, when the project is expected to be completed and operational. For analysis purposes, it is assumed that in the With-Action Condition, the existing industrial buildings on the Applicants' sites would be demolished and replaced with the Proposed Development. Furthermore, it is assumed that the existing conditions in the Rezoning Area would remain in effect in the Future No-Action Condition ("No-Action Condition") and no trip reduction credit was applied for conservative analysis purposes.

In the With-Action Condition, the Projected Development Sites would provide 970 Dwelling Units (DU) of residential use, approximately 21,229 gsf of local retail use and approximately 1.28 acres of open space use. This development program was used to prepare the travel demand factors and trip distribution for the Proposed Actions as discussed in the proceeding sections.

3.0 TRANSPORTATION SCREENING ASSESSMENT

The *2021 City Environmental Quality Review Technical Manual* ("*CEQR Technical Manual")* describes a two-tier screening process to determine if quantified analyses of transportation conditions are warranted. The preliminary assessment begins with a trip generation analysis (Level 1) to estimate person and vehicle trips that would result from the Proposed Actions. According to the *CEQR Technical Manual*, a project that is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips does not warrant further quantified analyses. When these thresholds are exceeded, detailed trip assignments (Level 2) are performed to estimate the trips at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the Proposed Actions could generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour passengers at a subway station or on a subway line, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a pedestrian element, then further quantified analyses of transportation conditions may be warranted to assess transportation conditions in the study area.

3.1 Level 1 (Trip Generation) Screening Assessment

A Level 1 screening assessment was conducted in accordance with CEQR guidelines to determine if the With-Action Condition would exceed CEQR thresholds for conducting quantified transportation analyses. To undertake this assessment, a trip generation analysis was conducted for the weekday AM, midday, PM and Saturday midday peak hours. Trip estimates were developed for the residential, local retail and open space components for the With-Action Condition.

Trip Generation Analysis

Travel Demand Factors for residential, local retail and open space uses are summarized in Table 1. These factors are based on information provided in the *CEQR Technical Manual*, *U.S. Census Bureau's 2015–2019 American Community Survey (ACS)* database, the *1965 Lafayette Avenue EAS* (CEQR No. 17DCP172X) and the *Lower Concourse North FGEIS* (CEQR No. 16DME012X).

Residential

Daily person trip generation rates of 8.18 person trips per dwelling unit (DU) for weekday and 9.08 person trips per DU for Saturday were obtained from the *CEQR Technical Manual.* Temporal distributions of 9.3 percent for the weekday AM peak hour, 5.6 percent for the weekday midday

peak hour, 8.5 percent for the weekday PM peak hour, and 8.4 percent for the Saturday midday peak hour; and directional distributions for the weekday AM, midday, PM and Saturday midday peak hours were also obtained from the *CEQR Technical Manual.*

Modal splits of 19.7 percent by auto, 1.4 percent by taxi, 56.8 percent by subway, 13.6 percent by bus, 1.1 percent by railroad, 0.4 percent by bicycle and 7.1 percent by walk were based on *U.S. Census Bureau 2015-2019 ACS Journey to Work (JTW)* data for the study area Census Tracts. Vehicle occupancies of 1.19 per auto and 1.40 per taxi were obtained from *U.S. Census Bureau 2015-2019 ACS JTW* data and from the *1965 Lafayette Avenue EAS*, respectively.

For truck deliveries, daily trip generation rates of 0.06 trips per DU for weekday and 0.02 trips per DU for Saturday were obtained from the *CEQR Technical Manual*. Temporal and directional distribution factors for truck deliveries were also obtained from the *CEQR Technical Manual*.

Local Retail

Daily person trip generation rates of 329 person trips per 1,000 gsf for weekday and 358 person trips per 1,000 gsf for Saturday were obtained from the *CEQR Technical Manual*. Temporal distributions of 4.8 percent for the weekday AM peak hour, 8.0 percent for the weekday midday peak hour, 10.9 percent for the weekday PM peak hour, and 11.7 percent for the Saturday peak hour; and directional distributions for the weekday AM, midday, PM and Saturday midday peak hours were also obtained from the *CEQR Technical Manual*.

Modal splits of 11.0 percent by auto, 3.0 percent by subway, 2.0 percent by bus, and 84.0 percent by walk; and vehicle occupancies of 2.10 per auto and 2.10 per taxi were based on guidance from the New York City Department of Transportation (NYC DOT).

For truck deliveries, daily trip generation rates of 0.35 trips per 1,000 gsf for weekday and 0.04 trips per 1,000 gsf for Saturday were obtained from *the CEQR Technical Manual*. Temporal and directional distribution factors for truck deliveries were also obtained from the *CEQR Technical Manual*.

Open Space

Daily person trip generation rates of 139 person trips per acre for weekday and 196 person trips per acre for Saturday were obtained from the *CEQR Technical Manual*. Temporal distributions of 3.0 percent for the weekday AM peak hour, 14.0 percent for the weekday midday peak hour, 14.0 percent for the weekday PM peak hour, and 16.0 percent for the Saturday peak hour; and directional distributions for the weekday AM, midday, PM and Saturday midday peak hours were also obtained from the *CEQR Technical Manual*.

Modal splits of 12.0 percent by auto, 5.0 percent by subway, 5.0 percent by bus, and 78.0 percent by walk; and vehicle occupancies of 2.80 per auto and 2.80 per taxi were obtained from the *Lower Concourse North FGEIS*.

Per the *Lower Concourse North FGEIS*, open space does not generate any delivery trips.

Table 1. Transportation Planning Assumptions

Use	Residential				Retail				Open Space			
	970 DUs				21,229 gsf				1.28 acres			
Total Daily Person Trip	(1)				(1)				(1)			
	Weekday		**SAT**		**Weekday**		**SAT**		**Weekday**		**SAT**	
	8.18		9.08		329		358		139		196	
	Trips/DU				Trips/KSF				Trips/acre			
Trip Linkage	0				0				0			
	0%		0%		0%		0%		0%		0%	
Net Daily Person Trip	**Weekday**		**SAT**		**Weekday**		**SAT**		**Weekday**		**SAT**	
	8.18		9.08		329.00		358.00		139.00		196.00	
	Trips/DU				Trips/KSF				Trips/acre			
Temporal	(1)				(1)				(1)			
	AM	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**
	9.3%	5.6%	8.5%	8.4%	4.8%	8.0%	10.9%	11.7%	3%	14%	14%	16%
Direction	(1)				(1)				(1)			
In	22%	50%	62%	55%	52%	50%	50%	50%	59%	55%	55%	55%
Out	78%	50%	38%	45%	48%	50%	50%	50%	41%	45%	45%	45%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Modal Split	(3)				(4)				(5)			
	AM	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**
Auto	19.7%	19.7%	19.7%	19.7%	11.0%	11.0%	11.0%	11.0%	12.0%	12.0%	12.0%	12.0%
Taxi	1.4%	1.4%	1.4%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Subway	56.8%	56.8%	56.8%	56.8%	3.0%	3.0%	3.0%	3.0%	5.0%	5.0%	5.0%	5.0%
Bus	13.6%	13.6%	13.6%	13.6%	2.0%	2.0%	2.0%	2.0%	5.0%	5.0%	5.0%	5.0%
Railroad	1.1%	1.1%	1.1%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bicycle	0.4%	0.4%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Walk	7.1%	7.1%	7.1%	7.1%	84.0%	84.0%	84.0%	84.0%	78.0%	78.0%	78.0%	78.0%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Vehicle Occupancy	(2)(3)				(4)				(5)			
	AM	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**
Auto	1.19	1.19	1.19	1.19	2.10	2.10	2.10	2.10	2.80	2.80	2.80	2.80
Taxi	1.40	1.40	1.40	1.40	2.10	2.10	2.10	2.10	2.80	2.80	2.80	2.80
Daily Delivery Trip Generation Rate	(1)				(1)				(5)			
	Weekday		**SAT**		**Weekday**		**SAT**		**Weekday**		**SAT**	
	0.06		0.02		0.35		0.04		0		0	
	Delivery Trips/DU				Delivery Trips/KSF				Delivery Trips/acre			
Delivery Temporal	(1)				(1)				(5)			
	AM	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**
	12%	9%	2%	9%	8%	11%	2%	11%	0%	0%	0%	0%
Delivery Direction	(1)				(1)				(5)			
In	50%	50%	50%	50%	50%	50%	50%	50%	0%	0%	0%	0%
Out	50%	50%	50%	50%	50%	50%	50%	50%	0%	0%	0%	0%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**0%**	**0%**	**0%**	**0%**

Notes:

(1) *2021 CEQR Technical Manual*

(2) *1965 Lafayette Avenue EAS* (CEQR No. 17DCP172X)

(3) *U.S. Census Bureau 2015-2019 American Community Survey 5-Year Journey to Work* Data (weighted average of Census Tracts 52, 54, 56, 123 & 157 of Bronx County, NY)

(4) Local Retail modal split and vehicle occupancy provided by NYC DOT

(5) *Lower Concourse North FGEIS* (CEQR No. 16DME012X)

Project-Generated Trips

Trip generation for the Proposed Development is summarized in Table 2. Based on this summary, the Proposed Actions would result in approximately 1,079, 1,028, 1,461 and 1,669 person trips and approximately 161, 118, 166 and 186 vehicle trips during the weekday AM, midday, PM and Saturday midday peak hours, respectively.

Traffic

As presented in Table 2, the Proposed Actions would result in approximately 161, 118, 166 and 186 vehicle trips during the weekday AM, midday, PM and Saturday midday peak hours, respectively. The vehicle trips during the weekday AM, midday, PM and Saturday midday peak hours would exceed the CEQR Level 1 trip generation threshold (50 peak hour vehicle trip-ends). Therefore, a Level 2 screening assessment for project-generated vehicle trips was conducted for these four peak hours.

Transit

The Proposed Development is currently served by four (4) New York City Transit (NYCT)/MTA bus routes, which include the Bx4, Bx4A, Bx11, and Bx27. Note that on June 26, 2022, the Bronx Local Bus Network Redesign ("the Bronx Redesign") will be implemented by the MTA/NYCT. Beginning on this date, the Bx11 route will no longer serve the Project Site. However, the Bx35 route will be re-routed within the study area to the same general vicinity as the previous Bx11 route. Figure 1 shows the routing of the Bx4, Bx4A, Bx27 and Bx35 bus routes which will serve the Project Site after implementation of the Bronx Redesign. The Proposed Development is also served by three (3) NYCT/MTA subway lines, which include the No. 6 subway line, located approximately 0.2 miles to the south at the Whitlock Avenue Station, and the No. 2 and 5 subway lines, both located approximately 0.5 miles and 0.8 miles to the west at the Freeman Street Station and 174th Street Station, respectively.

As shown in Table 2, the Proposed Actions would result in approximately 429, 270, 407 and 449 subway trips; 107, 73, 108 and 120 bus trips; and 8, 5, 8 and 8 railroad trips during the weekday AM, midday, PM and Saturday midday peak hours, respectively. The quantities of bus and railroad trips during the four analysis peak hours are below the CEQR Level 1 threshold of 200 peak hour rail or bus trips. Therefore, further detailed analysis of railroad and bus transit conditions is not warranted, and the Proposed Actions would not result in a significant adverse railroad or bus transit impact. The subway trips during the weekday AM, midday, PM and Saturday midday analysis peak hours would exceed the CEQR Level 1 threshold of 200 peak hour subway trips. Therefore, a Level 2 screening assessment for the project-generated subway trips was conducted for these four peak hours.

Pedestrian

As shown in Table 2, the Proposed Actions would result in approximately 1,079, 1,028, 1,461 and 1,669 person trips during the weekday AM, midday, PM and Saturday midday peak hours, respectively. The person trips during the weekday AM, midday, PM and Saturday midday analysis peak hours would exceed the CEQR Level 1 threshold (200 peak hour pedestrian trips). Therefore, a Level 2 screening assessment for the project-generated pedestrian trips was conducted for these four peak hours.

Table 2. Transportation Demand Forecast, Project-Generated Trips

			Person Trips								Vehicle Trips			
Use	**Peak Hour**	**In/Out**	**Auto**	**Taxi**	**Subway**	**Bus**	**Railroad**	**Bicycle**	**Walk**	**Total**	**Auto**	**Taxi**	**Delivery**	**Total**
Residential	Weekday AM	In	32	2	92	22	2	1	12	162	27	7	3	37
		Out	113	8	327	78	7	2	41	576	95	7	3	106
		Total	**145**	**10**	**419**	**100**	**8**	**3**	**52**	**738**	**122**	**14**	**7**	**143**
	Weekday Midday	In	44	3	126	30	3	1	16	222	37	4	3	44
		Out	44	3	126	30	3	1	16	222	37	4	3	44
		Total	**87**	**6**	**252**	**60**	**5**	**2**	**32**	**444**	**73**	**9**	**5**	**87**
	Weekday PM	In	82	6	238	57	5	2	30	418	69	7	1	76
		Out	50	3	146	35	3	1	18	256	42	7	1	49
		Total	**133**	**9**	**383**	**91**	**8**	**2**	**48**	**674**	**111**	**13**	**1**	**125**
	Saturday	In	80	5	231	55	5	1	29	407	67	7	1	75
		Out	66	4	189	45	4	1	24	333	55	7	1	63
		Total	**146**	**10**	**420**	**100**	**8**	**3**	**53**	**740**	**122**	**14**	**2**	**138**
Retail	Weekday AM	In	19	0	5	3	0	0	146	174	9	0	0	9
		Out	18	0	5	3	0	0	135	161	8	0	0	9
		Total	**37**	**0**	**10**	**7**	**0**	**0**	**282**	**335**	**18**	**0**	**1**	**18**
	Weekday Midday	In	31	0	8	6	0	0	235	279	15	0	0	15
		Out	31	0	8	6	0	0	235	279	15	0	0	15
		Total	**61**	**0**	**17**	**11**	**0**	**0**	**469**	**559**	**29**	**0**	**1**	**30**
	Weekday PM	In	42	0	11	8	0	0	320	381	20	0	0	20
		Out	42	0	11	8	0	0	320	381	20	0	0	20
		Total	**84**	**0**	**23**	**15**	**0**	**0**	**639**	**761**	**40**	**0**	**0**	**40**
	Saturday	In	49	0	13	9	0	0	373	445	23	0	0	23
		Out	49	0	13	9	0	0	373	445	23	0	0	23
		Total	**98**	**0**	**27**	**18**	**0**	**0**	**747**	**889**	**47**	**0**	**0**	**47**
Open Space	Weekday AM	In	0	0	0	0	0	0	2	3	0	0	0	0
		Out	0	0	0	0	0	0	2	2	0	0	0	0
		Total	**1**	**0**	**0**	**0**	**0**	**0**	**4**	**5**	**0**	**0**	**0**	**0**
	Weekday Midday	In	2	0	1	1	0	0	11	14	1	0	0	1
		Out	1	0	1	1	0	0	9	11	0	0	0	0
		Total	**3**	**0**	**1**	**1**	**0**	**0**	**19**	**25**	**1**	**0**	**0**	**1**
	Weekday PM	In	2	0	1	1	0	0	11	14	1	0	0	1
		Out	1	0	1	1	0	0	9	11	0	0	0	0
		Total	**3**	**0**	**1**	**1**	**0**	**0**	**19**	**25**	**1**	**0**	**0**	**1**
	Saturday	In	3	0	1	1	0	0	17	22	1	0	0	1
		Out	2	0	1	1	0	0	14	18	1	0	0	1
		Total	**5**	**0**	**2**	**2**	**0**	**0**	**31**	**40**	**2**	**0**	**0**	**2**
Total	Weekday AM	In	52	2	98	26	2	1	160	340	36	7	4	47
		Out	131	8	332	81	7	2	178	739	103	7	4	114
		Total	**183**	**10**	**429**	**107**	**8**	**3**	**338**	**1,079**	**139**	**14**	**8**	**161**
	Weekday Midday	In	76	3	135	36	3	1	261	515	52	4	3	59
		Out	76	3	135	36	3	1	259	513	52	4	3	59
		Total	**152**	**6**	**270**	**73**	**5**	**2**	**520**	**1,028**	**104**	**9**	**6**	**118**
	Weekday PM	In	126	6	250	65	5	2	360	813	89	7	1	97
		Out	94	3	158	43	3	1	347	648	63	7	1	70
		Total	**220**	**9**	**407**	**108**	**8**	**2**	**707**	**1,461**	**152**	**13**	**1**	**166**
	Saturday	In	132	5	246	65	5	1	420	874	91	7	1	99
		Out	117	4	203	55	4	1	411	796	79	7	1	87
		Total	**248**	**10**	**449**	**120**	**8**	**3**	**831**	**1,669**	**170**	**14**	**2**	**186**

Note: In and Out volumes may not sum to Total volumes due to rounding.

3.2 Level 2 (Project-Generated Trip Assignment) Screening Assessment

A Level 2 screening assessment involves the assignment of project-generated trips to the study area street network, pedestrian elements, and transit facilities, and the identification of specific locations where the increase in demand may potentially exceed *CEQR Technical Manual* analysis thresholds. If these thresholds are exceeded, quantitative analyses would be warranted to identify any adverse impacts that result from the Proposed Actions.

Traffic

Multiple routes from nearby major arterial and collector roads are available to access/egress the Proposed Development, which has frontage along Edgewater Road. For the Level 2 screening assessment, project-generated vehicle trips were assigned through various intersections in the study area based on the *CEQR Technical Manual* guidelines, prevailing travel patterns, and the existing roadway configuration. Traffic assignments for autos, taxis and deliveries for individual development program components are discussed as follows:

Auto

Residential vehicular trips were assigned based on guidance from *U.S. Census Bureau JTW Origin/Destination (O/D)* patterns and direct routes to/from the site. The Proposed Development's on-site parking garage is proposed on Projected Development Site 2. For conservative analysis purposes, Projected Development Site 1's trips were assigned to the east curb of Edgewater Road at the site frontage and Projected Development Site 2's trips were assigned to the on-site garage.

Vehicular trips for the Local Retail component were assigned to the study area roadways based on direct routes to/from the site and prevailing travel patterns. For conservative analysis purposes, all auto trips were assigned to the east curb of Edgewater Road at the respective sites' frontage.

Taxi

Taxi trips generated by Projected Development Sites 1 and 2 were assigned to pick-up/drop-off fares along the east curb of Edgewater Road at each site's frontage, respectively. Overall, the taxi trips were distributed to the study area streets/roadways following the same general distribution pattern as the residential auto trips.

Deliveries

Delivery trips to/from the Proposed Development were assigned via NYC DOT-designated truck routes via Sheridan Boulevard. Conservatively, delivery vehicles were assigned to Projected Development Sites 1 and 2 via the same points of access/egress used for the auto assignments.

Using these distribution patterns, the project-generated peak hour vehicle trips were assigned to the study area intersections for the weekday AM, midday, PM and Saturday midday peak hours (see Appendix A – Figures A-1 through A-24).

Based on these assignments, the following four (4) intersections could experience 50 or more peak hour vehicle trips during at least one of the four peak hours, and were selected for detailed traffic analysis.

1. Sheridan Boulevard and East 173rd Street;
2. Sheridan Boulevard, Edgewater Road and East 172nd Street;
3. Sheridan Boulevard, Edgewater Road and Jennings Street; and,
4. Edgewater Road and Westchester Avenue.

In addition, per *CEQR Technical Manual* guidelines, intersections that may be problematic from the safety viewpoint (a.k.a. "high-crash locations") regardless of the Level 2 threshold were also selected for detailed traffic analysis based on the following criteria:

- Locations with five or more pedestrian/bicyclists injury crashes with trips assigned to them within ¼-mile of the site in any consecutive 12 months of the most recent 3-year period.

As identified in the *2019 Vision Zero Bronx Pedestrian Safety Action,* Westchester Avenue is a Vision Zero "Priority Corridor." The intersections along the Vision Zero Priority Corridor within ¼-mile of the Project Site are as follows:

1. Bryant Avenue and Westchester Avenue;
2. Longfellow Avenue, East 167th Avenue and Westchester Avenue;
3. Home Street and Westchester Avenue;
4. Whitlock Avenue and Westchester Avenue;
5. Bronx River Avenue, Close Avenue and Westchester Avenue;
6. Colgate Avenue and Westchester Avenue;
7. Evergreen Avenue and Westchester Avenue; and,
8. Wheeler Avenue and Westchester Avenue.

Based on the above criteria, the Whitlock Avenue and Westchester Avenue intersection is categorized as a high-crash location under *CEQR Technical Manual* criteria and was additionally selected for detailed traffic analysis. Detailed information on the selection of high-crash locations and supplemental assessment is provided in Appendix B.

In summary, based on the above criteria identified for Level 2 trip assignments and high-crash locations, a total of five (5) intersections were selected for detailed traffic analysis (see Figure 2).

Pedestrian

For the Level 2 screening assessment, the pedestrian trips were assigned based on the location of specific development sites and key transportation elements including transit stations/stops in the study area. Pedestrian assignments for the residential and retail development components are discussed by mode.

Auto

For conservative analysis purposes, auto person trips were distributed to routes to and from nearby on-street parking areas leading to Projected Development Sites 1 and 2.

Taxis

Taxi person trips generated by Projected Development Sites 1 and 2 were assigned to pick-up/drop-off points along the east sidewalk of Edgewater Road along each site's frontage, respectively. The pedestrians were assigned to the respective site entrances to access and egress the Proposed Development.

Bus Service

Project-generated bus person trips were assigned to bus routes that will serve the Project Site after implementation of the Bronx Redesign. Bus commuters using the Bx35 route would use the proposed bus stop along the east side of West Farms Road between Boone Avenue and Jennings Street. Bus commuters using the Bx4, Bx4A and Bx27 routes would use the stops along Westchester Avenue between Bryant Avenue and Home Street. These commuters would use the sidewalks, crosswalks, and corners on Sheridan Boulevard, Edgewater Road, West Farms Road, and Westchester Avenue to access/egress the Proposed Development.

Subway Service

Subway commuters using the No. 6 subway line would use the Whitlock Avenue Station. Subway commuters using the Nos. 2 or 5 subway lines would use the Freeman Street and 174th Street stations. Railroad commuters were assumed to take the subway to/from railroad stations. These commuters would use the sidewalks, crosswalks, and corners along the most direct routes to/from the subway stations to access/egress the Proposed Development.

Local Walk Trips

Local walk trips to and from the Proposed Development were based on adjacent land uses, the existing roadway network, and prevailing travel patterns.

Using these distribution patterns, the project-generated peak hour pedestrian trips were assigned to the study area sidewalks, crosswalks, and corners for the weekday AM, midday, PM and Saturday midday peak hours (see Appendix C – Figures C-1 through C-32). Based on these assignments, the following 30 elements could experience 200 or more pedestrian trips during at least one of the four peak hours and were selected for detailed analysis (see Figures 3 through 5).

1. North Crosswalk of Edgewater Road and Westchester Avenue;
2. North Crosswalk of Whitlock Avenue and Westchester Avenue;
3. East Crosswalk of Whitlock Avenue and Westchester Avenue;
4. South Crosswalk of Edgewater Road and Jennings Street;
5. North Crosswalk of Edgewater Road and Jennings Street;
6. South Crosswalk of Sheridan Boulevard and Jennings Street;
7. North Crosswalk of Sheridan Boulevard and Jennings Street;
8. North Crosswalk of Longfellow Avenue and Freeman Street;
9. Northeast Corner of Edgewater Road and Westchester Avenue;
10. Northwest Corner of Edgewater Road and Westchester Avenue;
11. Northeast Corner of Whitlock Avenue and Westchester Avenue;
12. Southeast Corner of Whitlock Avenue and Westchester Avenue;
13. Northwest Corner of Whitlock Avenue and Westchester Avenue;
14. Northwest Corner of West Farms Road and Freeman Street;
15. Northeast Corner of Longfellow Avenue and Freeman Street;
16. Northwest Corner of Longfellow Avenue and Freeman Street;
17. North Sidewalk of Westchester Avenue between Whitlock Avenue and Edgewater Road;
18. East Sidewalk Edgewater Road between Westchester Avenue and Jennings Street;
19. East Sidewalk of Edgewater Road between Jennings Street and East 172nd Street;
20. East Sidewalk of Edgewater Road between East 172nd Street and East 173rd Street;
21. North Sidewalk of Jennings Street between Boone Avenue and West Farms Road;
22. West Sidewalk of West Farms Road between Jennings Street and Boone Avenue;
23. East Sidewalk of West Farms Road between Jennings Street and Boone Avenue;
24. West Sidewalk of West Farms Road between Boone Avenue and Freeman Street;
25. East Sidewalk of West Farms Road between Boone Avenue and Freeman Street;
26. North Sidewalk of Freeman Street between West Farms Road and Longfellow Avenue;
27. North Sidewalk of Freeman Street between Bryant Avenue and Longfellow Avenue;
28. North Sidewalk of Freeman Street between Vyse Avenue and Bryant Avenue;
29. North Sidewalk of Freeman Street between Hoe Avenue and Vyse Avenue; and,

30. North Sidewalk of Freeman Street between Freeman Street Subway Station and Hoe Avenue.

Additional corner and crosswalk locations near the Proposed Development may experience 200 or more pedestrian trips during at least one of the four peak hours. However, these elements are part of unsignalized intersections; and therefore, would not require quantitative analyses based on the CEQR and Highway Capacity Manual (HCM) methodologies.

Transit

Subway and railroad trips were distributed evenly to the three subway lines in close proximity of the Proposed Development: the No. 6 subway line at the Whitlock Avenue Station and the Nos. 2 and 5 subway lines at the Freeman Street and 174th Street stations. Projected Development Site 1 is approximately equidistant from the Freeman Street and 174th Street stations; and therefore, the Site 1 subway trips destined for the Nos. 2 and 5 lines were distributed evenly between the two subway stations. Projected Development Site 2 is closer to the Freeman Street Station; and therefore, the Site 2 subway trips destined for the Nos. 2 and 5 lines were assigned to the Freeman Street Station. Note that the No. 5 subway line operates with peak direction express service in the Bronx on weekdays from East 180th Street to 3rd Avenue-149th Street during morning rush hours and from 3rd Avenue-149th Street to East 180th Street during evening rush hours. Therefore, the Manhattan-bound subway trips in the weekday AM peak hour and the Bronx-bound subway trips in the weekday PM peak hour, which would have been assigned to the No. 5 line, were instead assigned to the No. 2 line traveling in the same direction during the weekday AM and PM peak hours, respectively.

Using these distribution patterns, the peak hour project-generated subway trips were assigned to the subway stations and lines for the weekday AM, midday, PM and Saturday midday peak hours (see Appendix C – Figures C-5 through C-8 and Table 3). Based on these assignments, the Freeman Street Subway Station could experience 200 or more peak hour project-generated subway trips during the weekday AM, PM and Saturday midday peak hours and was selected for detailed subway station analysis. In addition, the No. 2 subway line could experience 200 or more peak hour project-generated subway trips during the weekday AM and PM peak hours and was selected for detailed subway line-haul analysis.

Table 3. Subway Station and Line Trip Assignment Summary

	Peak Hour			
Subway Station	**Weekday AM**	**Weekday Midday**	**Weekday PM**	**Saturday Midday**
174th Street Station	45	28	43	47
No. 2 Subway Line	39	14	34	24
No. 5 Subway Line	7	14	9	24
Freeman Street Station	246	155	234	258
No. 2 Subway Line	209	78	186	129
No. 5 Subway Line	37	78	47	129
Whitlock Avenue Station	146	92	138	152
No. 6 Subway Line	146	92	138	152
Total Subway Trips	438	275	415	457
Total No. 2 Subway Line Trips	248	92	221	152
Total No. 5 Subway Line Trips	44	92	56	152
Total No. 6 Subway Line Trips	146	92	138	152

4.0 CONCLUSION

Based on the Level 1 and Level 2 screening analyses, the Proposed Actions would exceed the *CEQR Technical Manual* screening assessment thresholds for vehicle, pedestrian and subway transit trips at select locations. Detailed traffic and pedestrian analyses will be conducted during the weekday AM, midday, PM and Saturday midday peak hours; detailed subway station analyses will be conducted during the weekday AM, PM and Saturday midday peak hours; and detailed subway line-haul analyses will be conducted during the weekday AM and PM peak hours at the specified locations to identify the potential for significant adverse traffic, pedestrian and subway impacts (and associated improvements) resulting from the Proposed Actions.

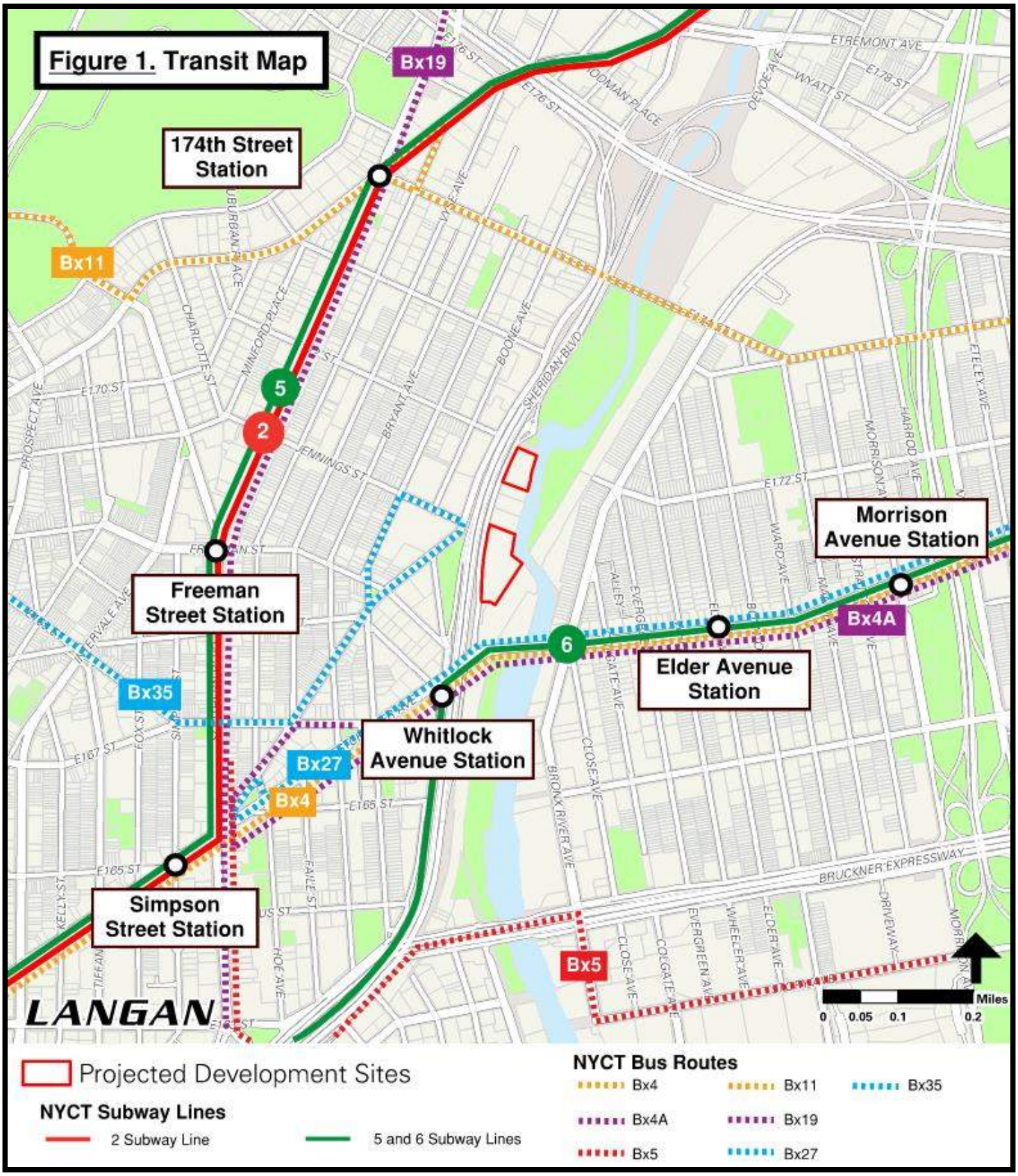

Figure 1. Transit Map
174th Street Station
Freeman Street Station
Simpson Street Station
Whitlock Avenue Station
Elder Avenue Station
Morrison Avenue Station
Bx19
Bx11
Bx35
Bx27
Bx4
Bx4A
Bx5
5
2
6
LANGAN
Miles
0
0.05
0.1
0.2
Projected Development Sites
NYCT Subway Lines
2 Subway Line
5 and 6 Subway Lines
NYCT Bus Routes
Bx4
Bx11
Bx35
Bx4A
Bx19
Bx5
Bx27

Figure 2. Detailed Traffic Analysis Locations

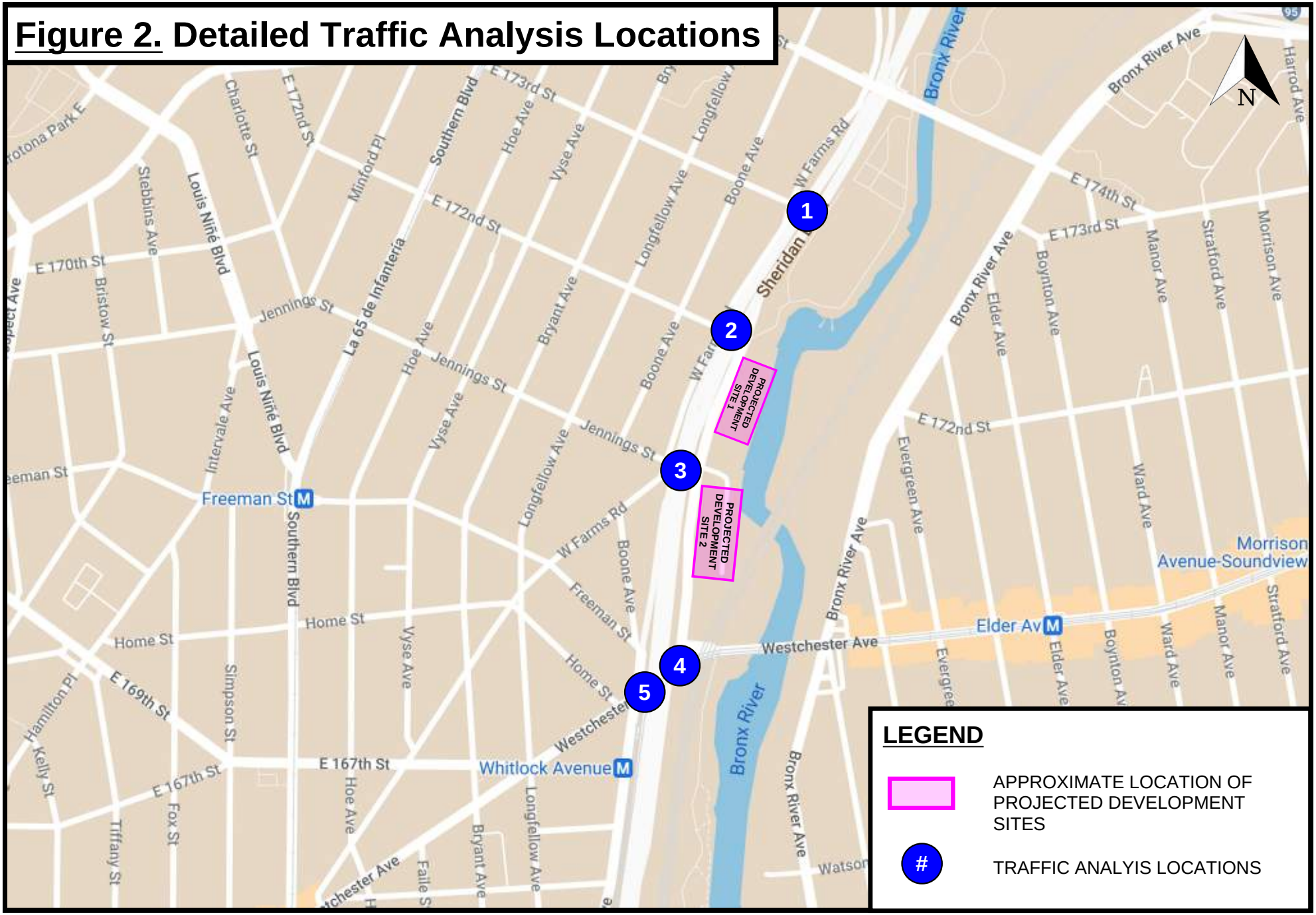


Figure 3. Detailed Pedestrian Analysis Locations

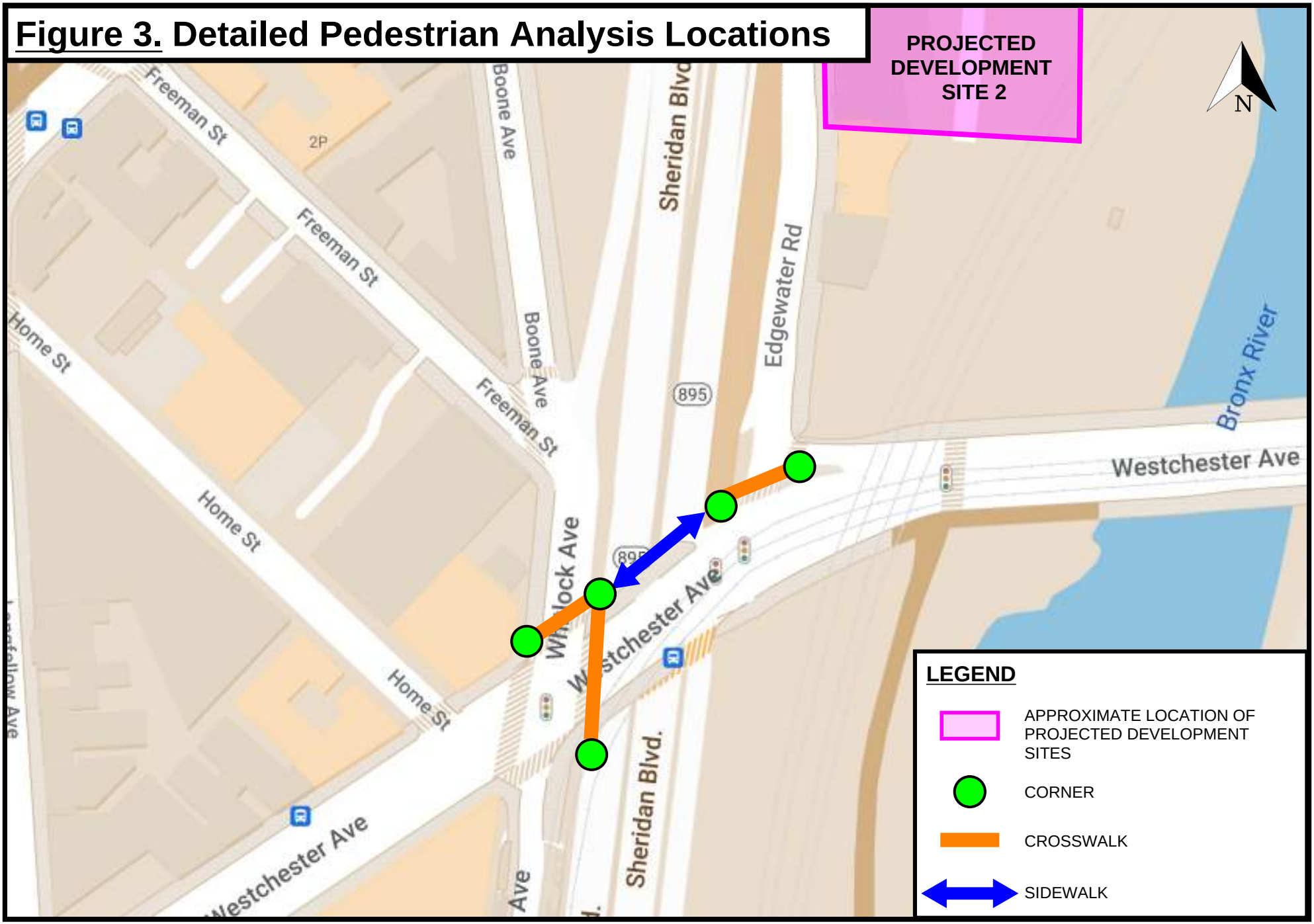


Figure 4. Detailed Pedestrian Analysis Locations

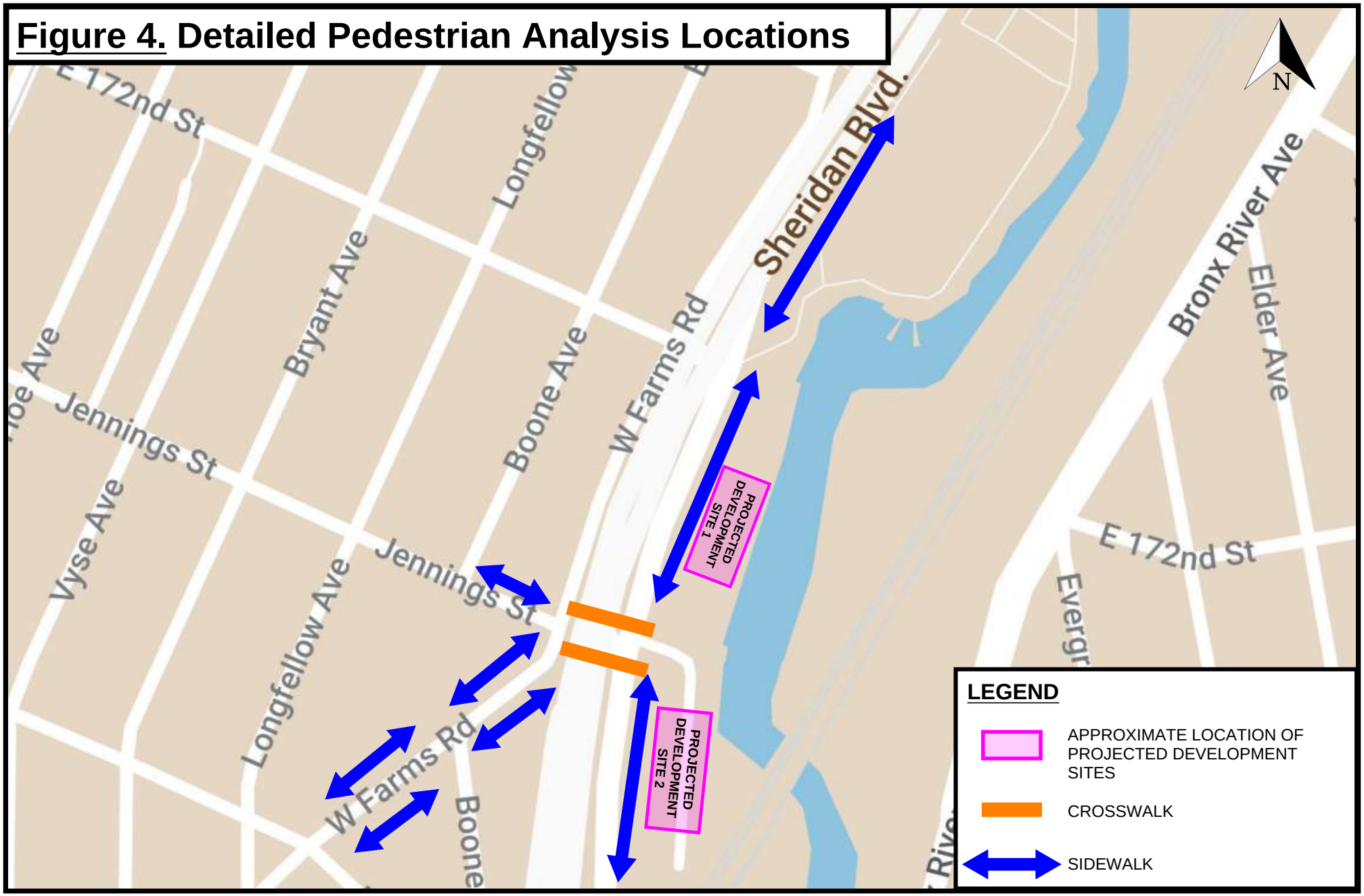
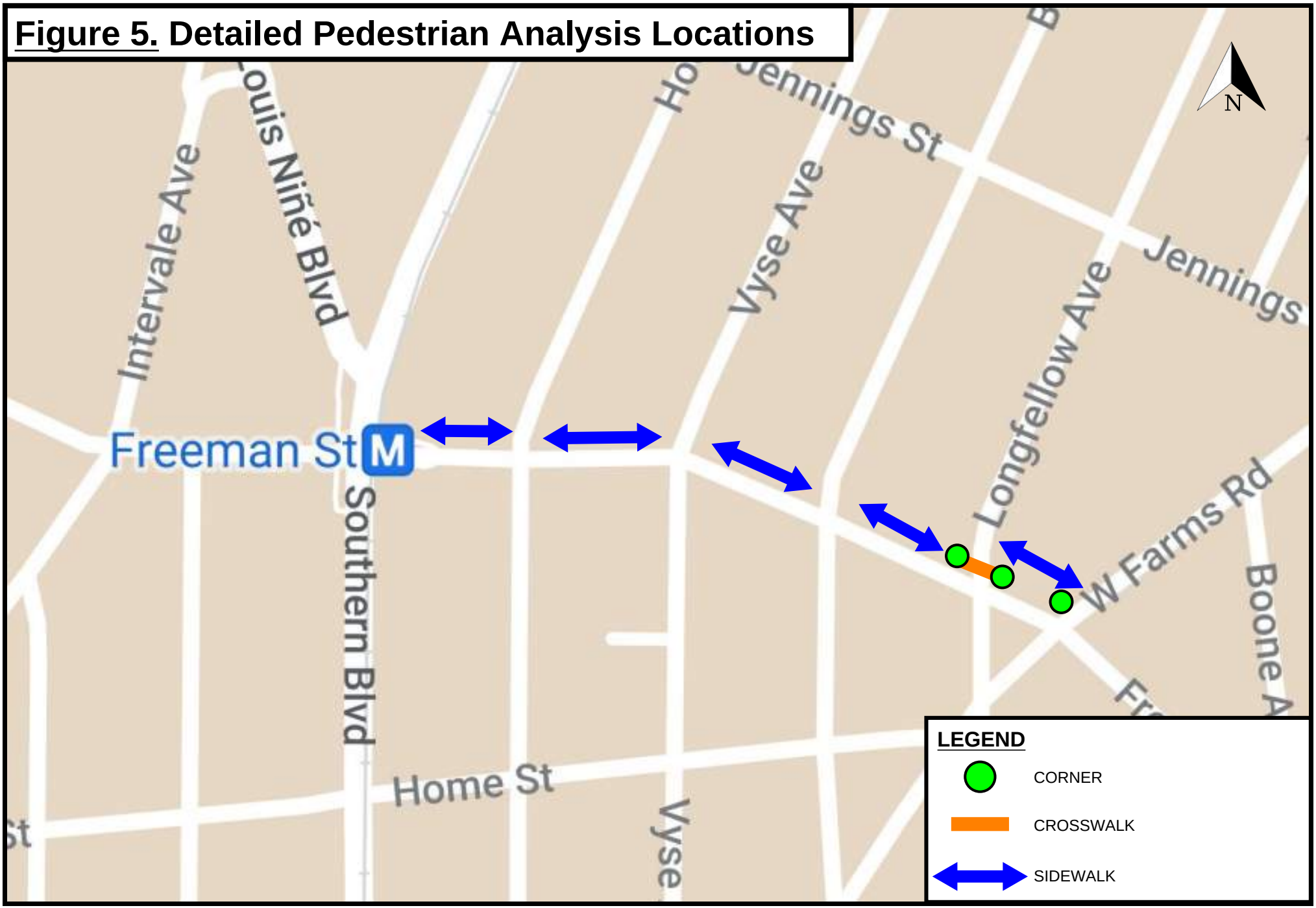


Figure 5. Detailed Pedestrian Analysis Locations



APPENDIX A

TRAFFIC DISTRIBUTION

FIGURE A-1: PROJECTED DEVELOPMENT SITE-1
INBOUND AUTO

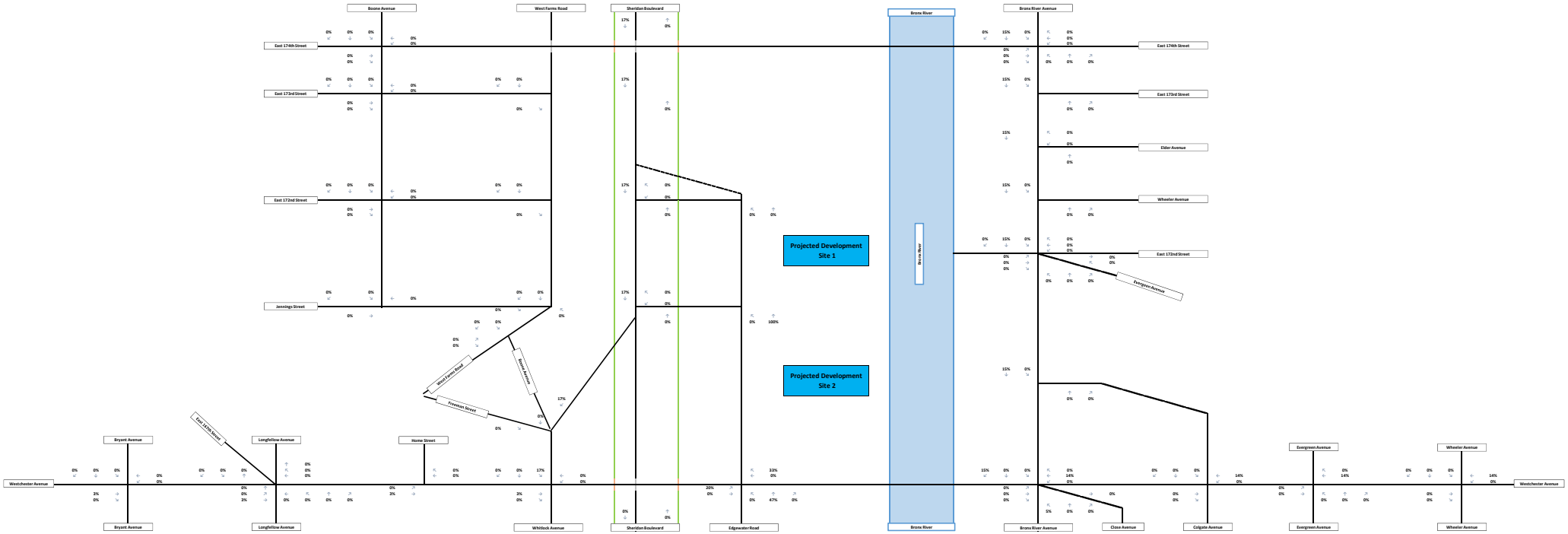


FIGURE A-2: PROJECTED DEVELOPMENT SITE-2
INBOUND AUTO

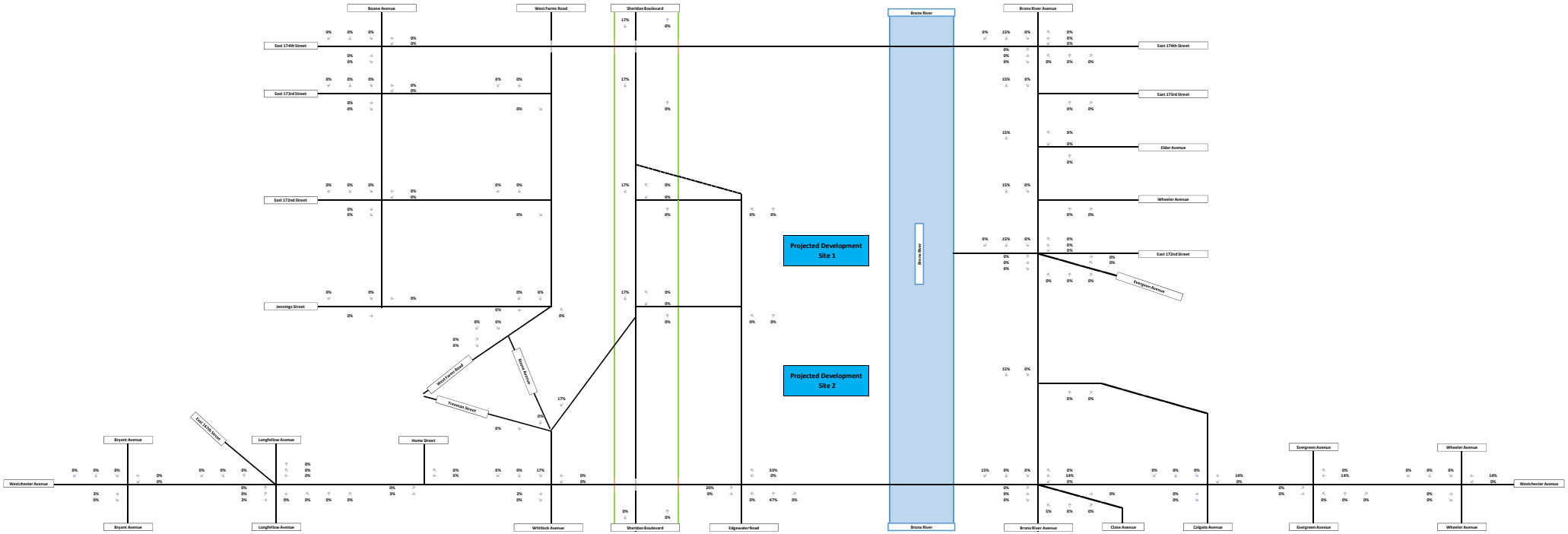


FIGURE A-3: PROJECTED DEVELOPMENT SITE-1
OUTBOUND AUTO

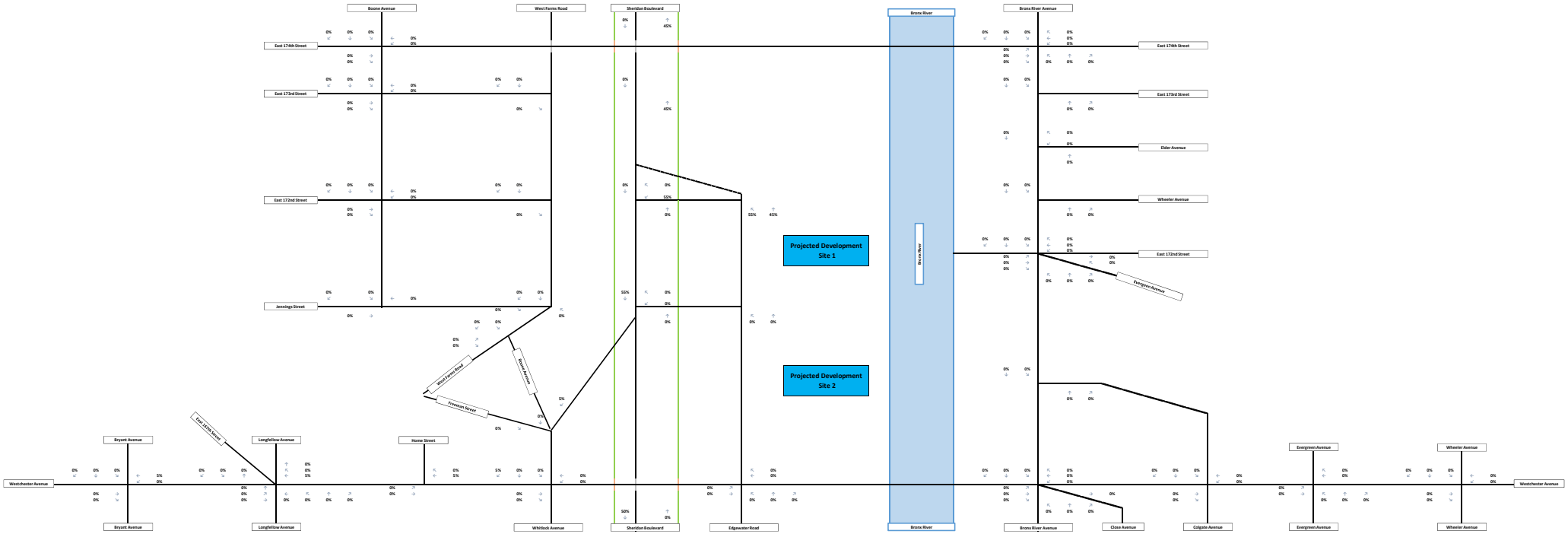


FIGURE A-4: PROJECTED DEVELOPMENT SITE-2
OUTBOUND AUTO

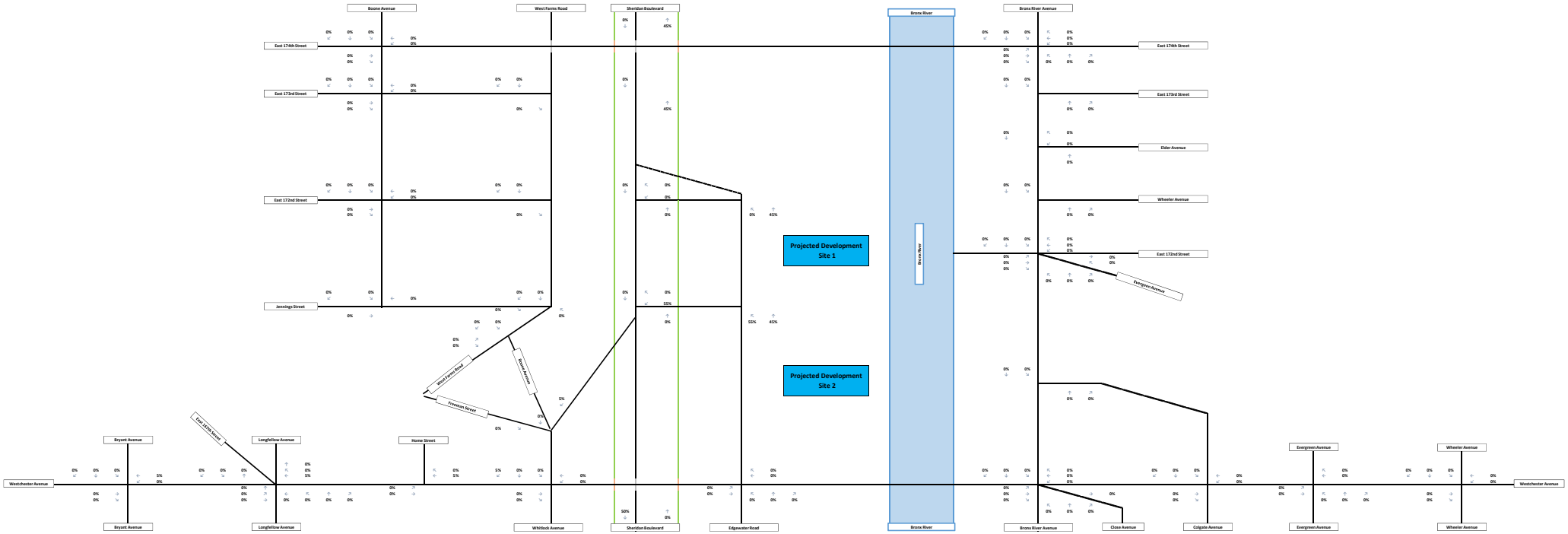


FIGURE A-5: PROJECTED DEVELOPMENT SITE-1
INBOUND TAXI

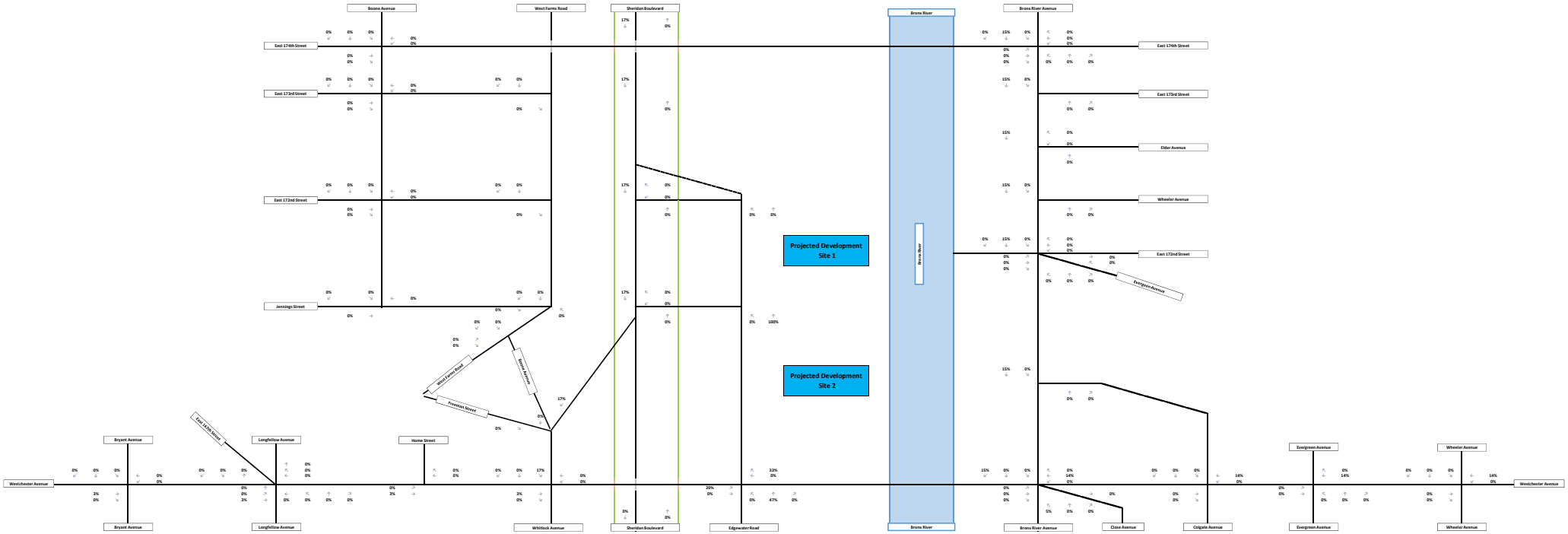


FIGURE A-6: PROJECTED DEVELOPMENT SITE-2
INBOUND TAXI

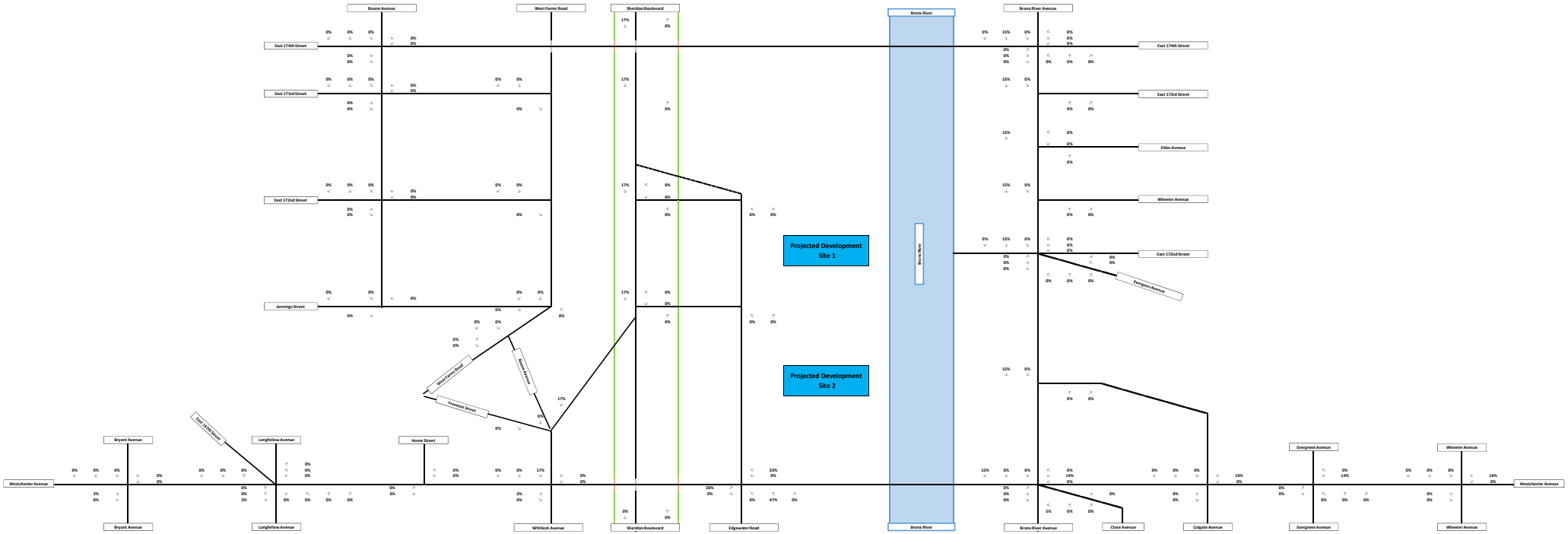


FIGURE A-7: PROJECTED DEVELOPMENT SITE-1
OUTBOUND TAXI

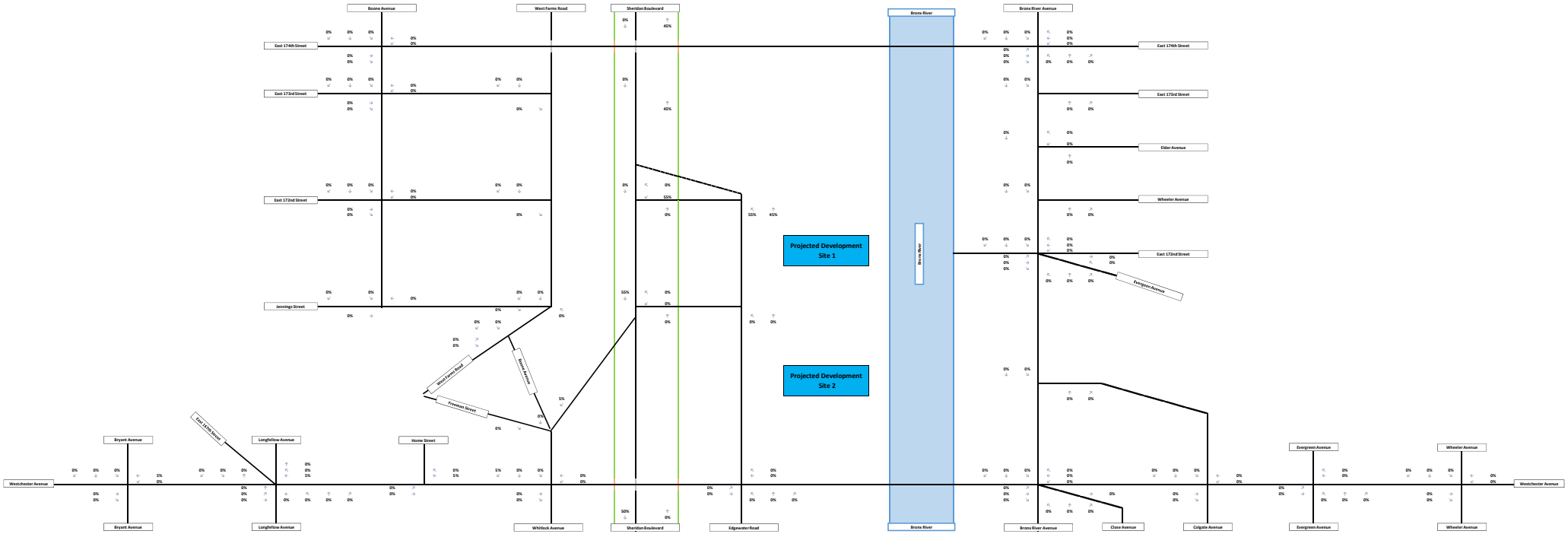


FIGURE A-8: PROJECTED DEVELOPMENT SITE-2
OUTBOUND TAXI

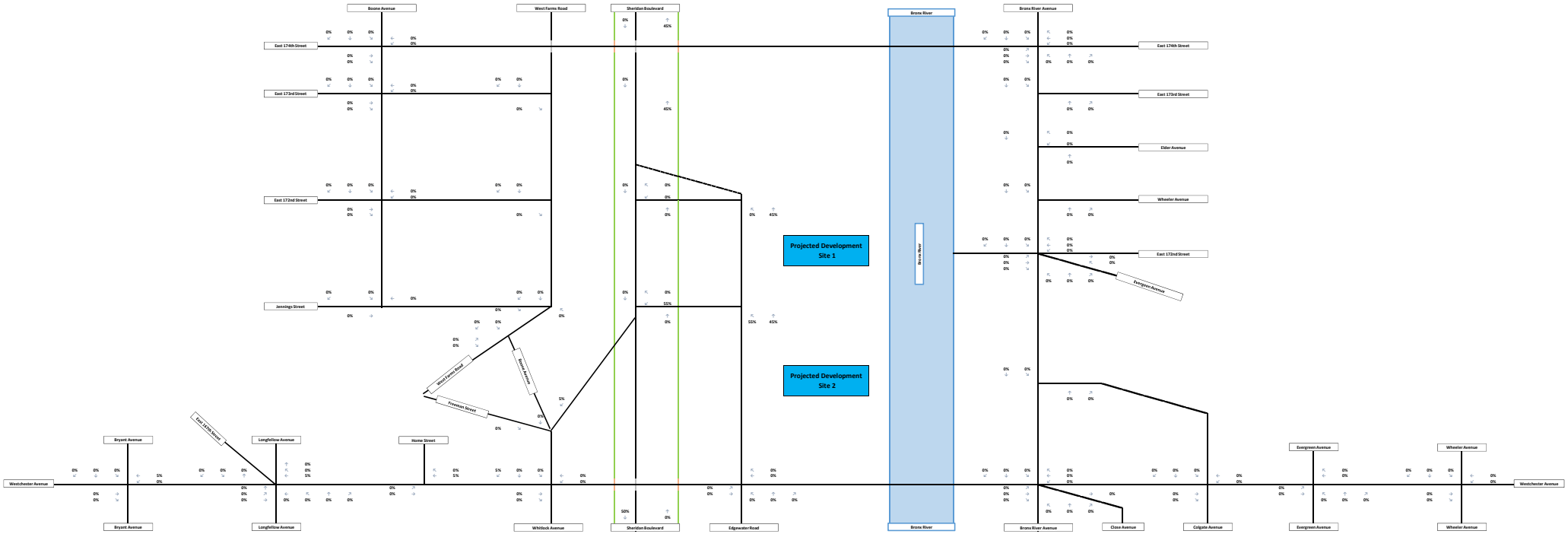


FIGURE A-9: PROJECTED DEVELOPMENT SITE-1
INBOUND DELIVERY

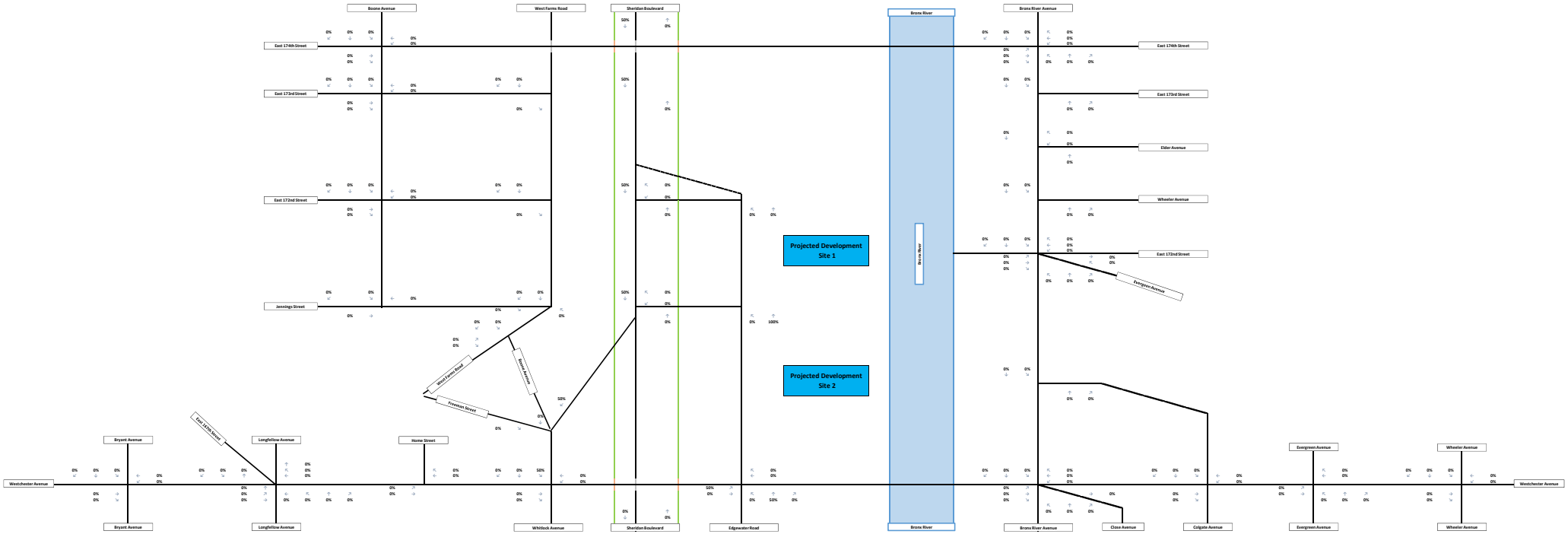


FIGURE A-10: PROJECTED DEVELOPMENT SITE-2
INBOUND DELIVERY

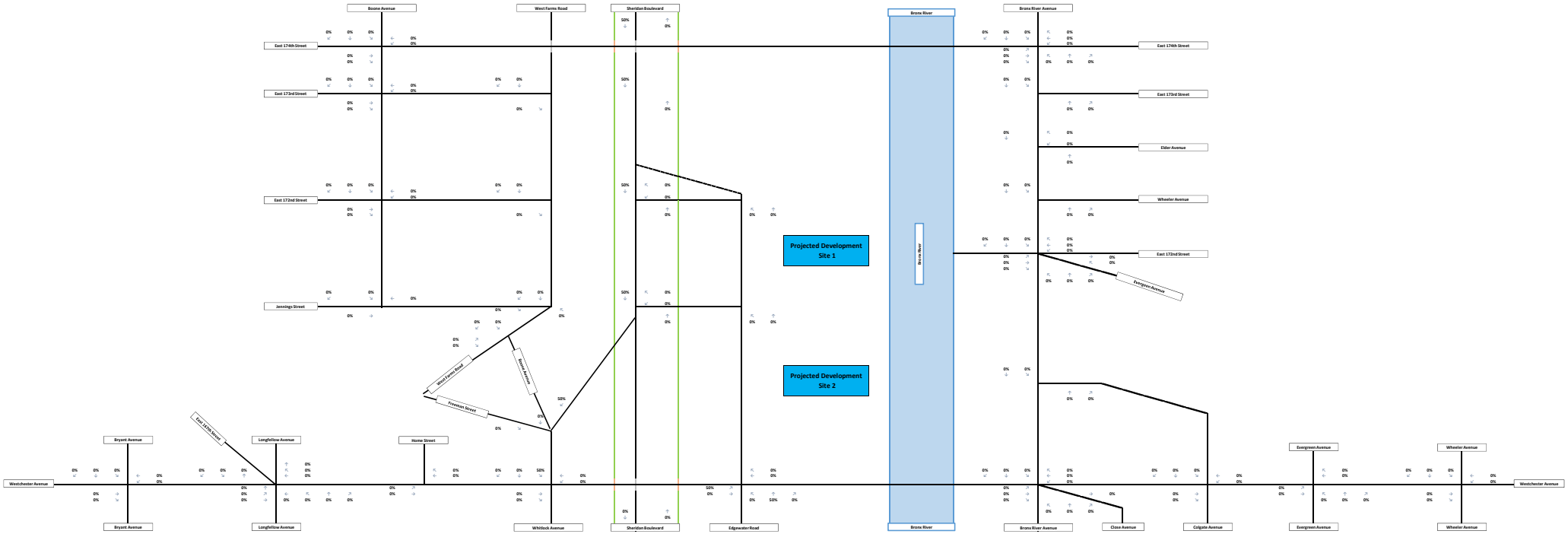


FIGURE A-11: PROJECTED DEVELOPMENT SITE-1
OUTBOUND DELIVERY

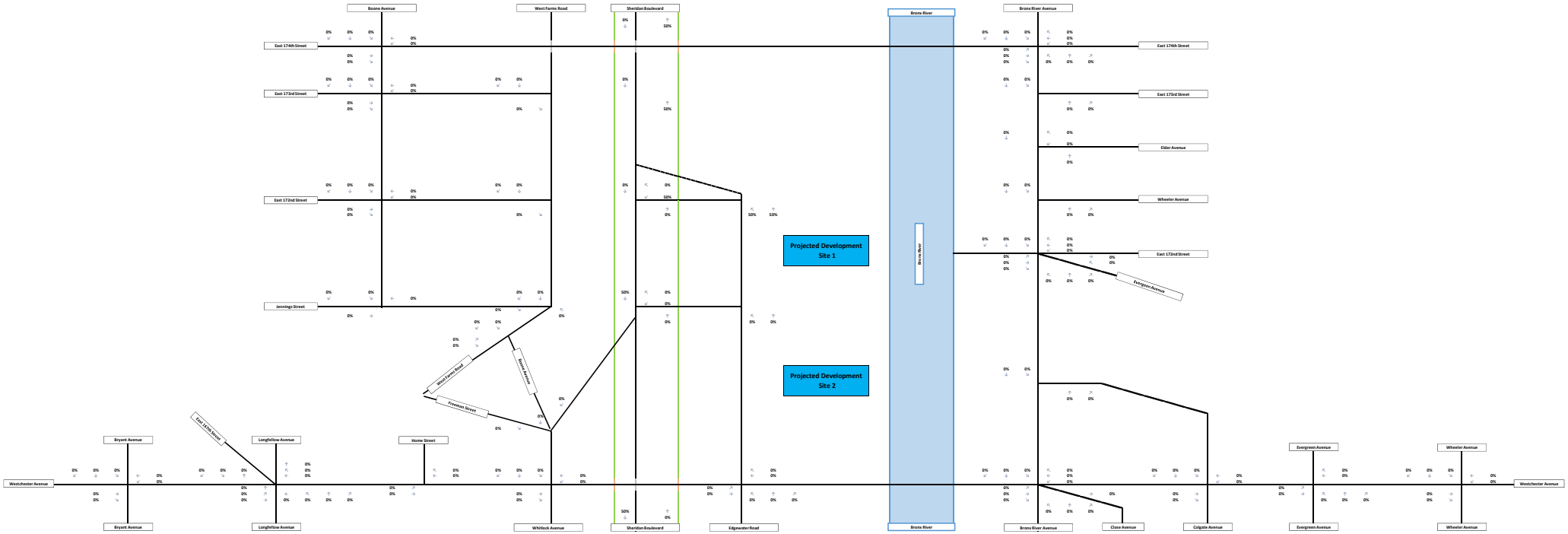


FIGURE A-12: PROJECTED DEVELOPMENT SITE-2
OUTBOUND DELIVERY

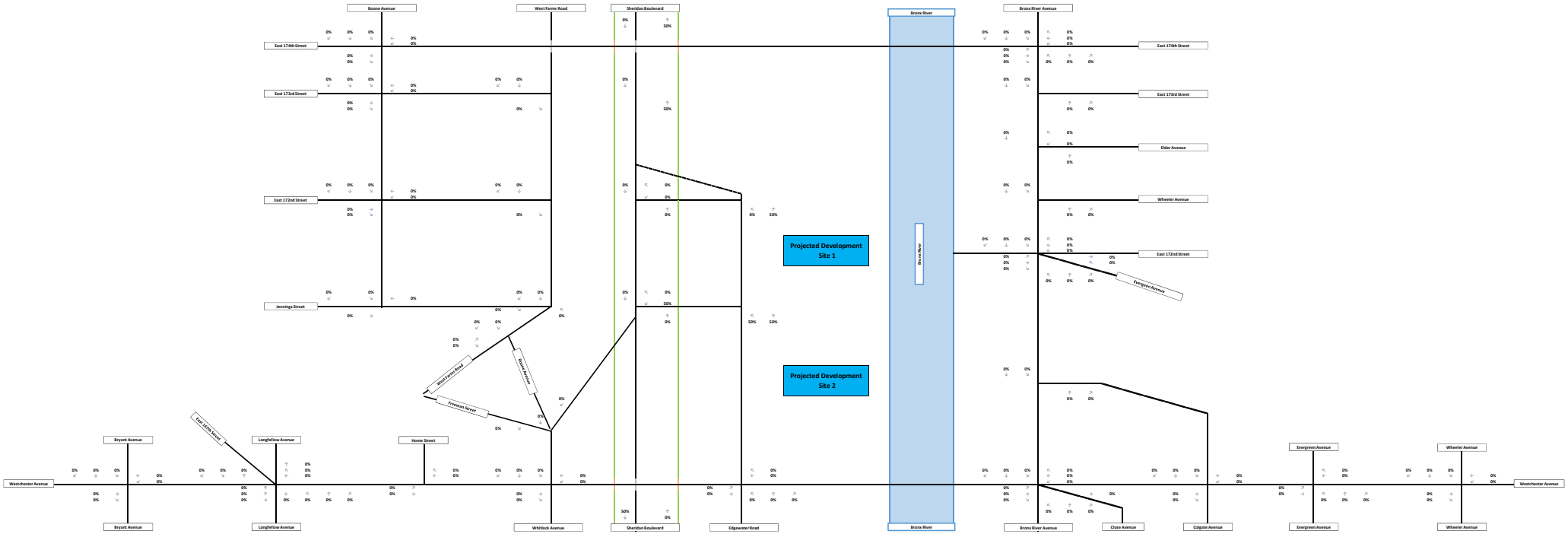


FIGURE A-13: PROJECTED DEVELOPMENT SITE-1 TRAFFIC ASSIGNMENTS
WEEKDAY AM PEAK HOUR

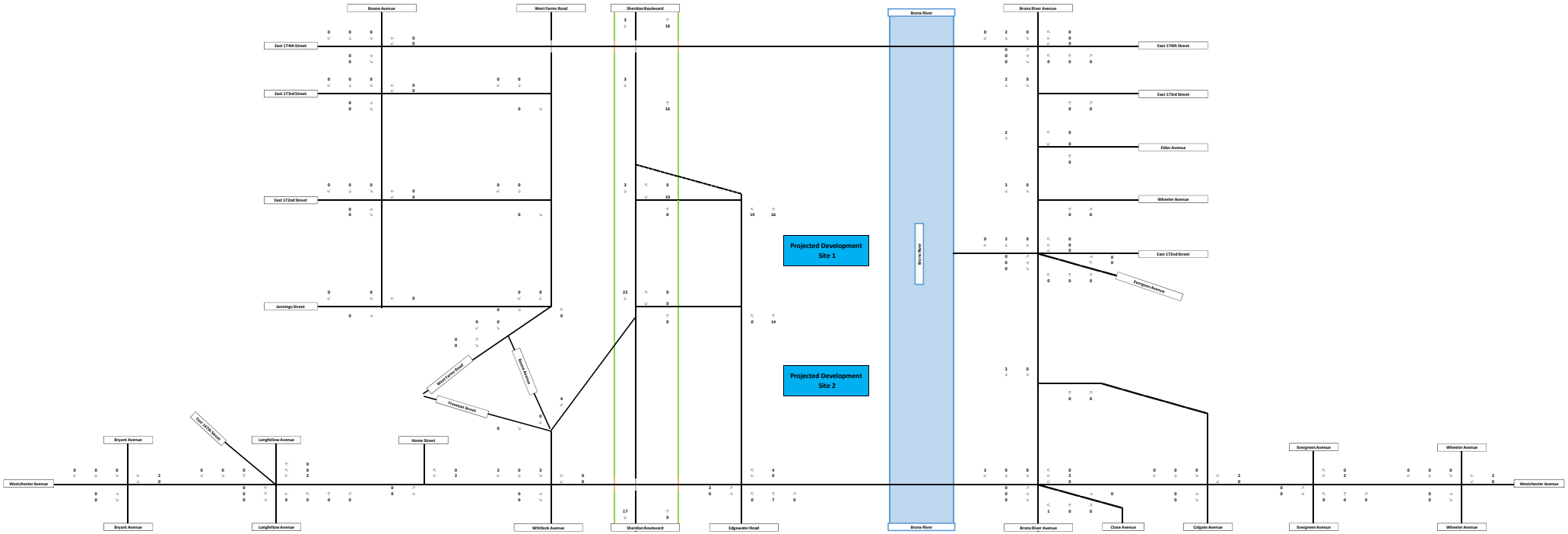


FIGURE A-14: PROJECTED DEVELOPMENT SITE-1 TRAFFIC ASSIGNMENTS
WEEKDAY MIDDAY PEAK HOUR

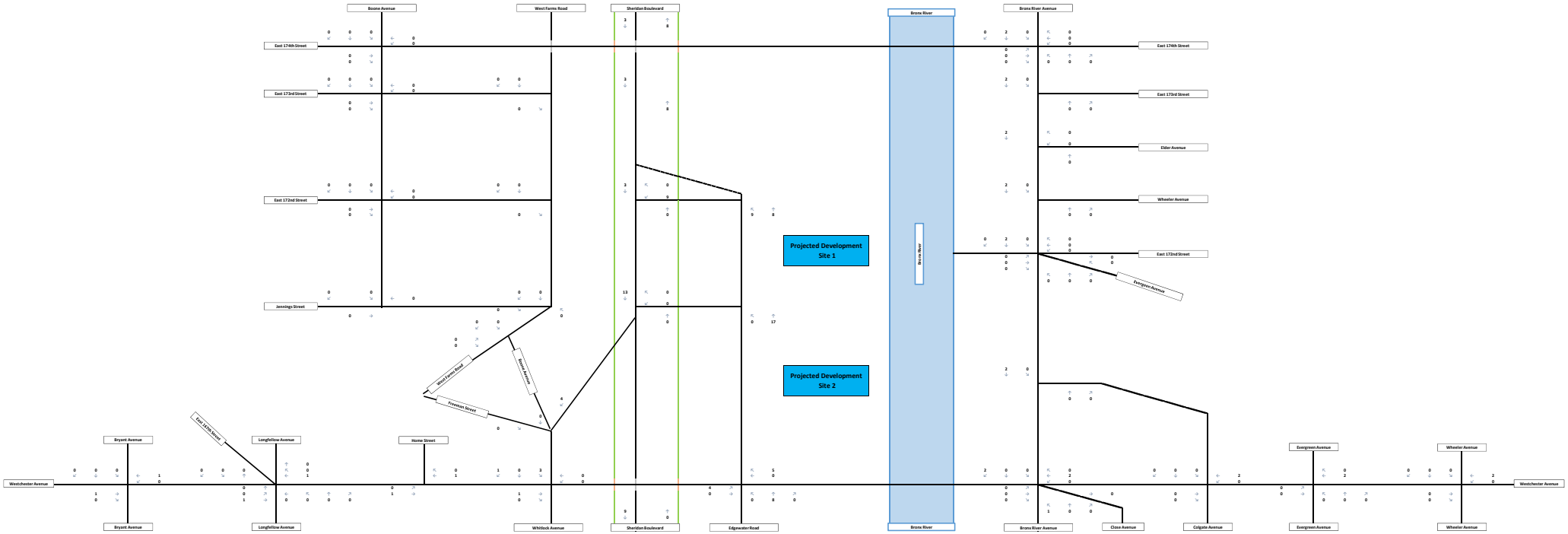


FIGURE A-15: PROJECTED DEVELOPMENT SITE-1 TRAFFIC ASSIGNMENTS
WEEKDAY PM PEAK HOUR

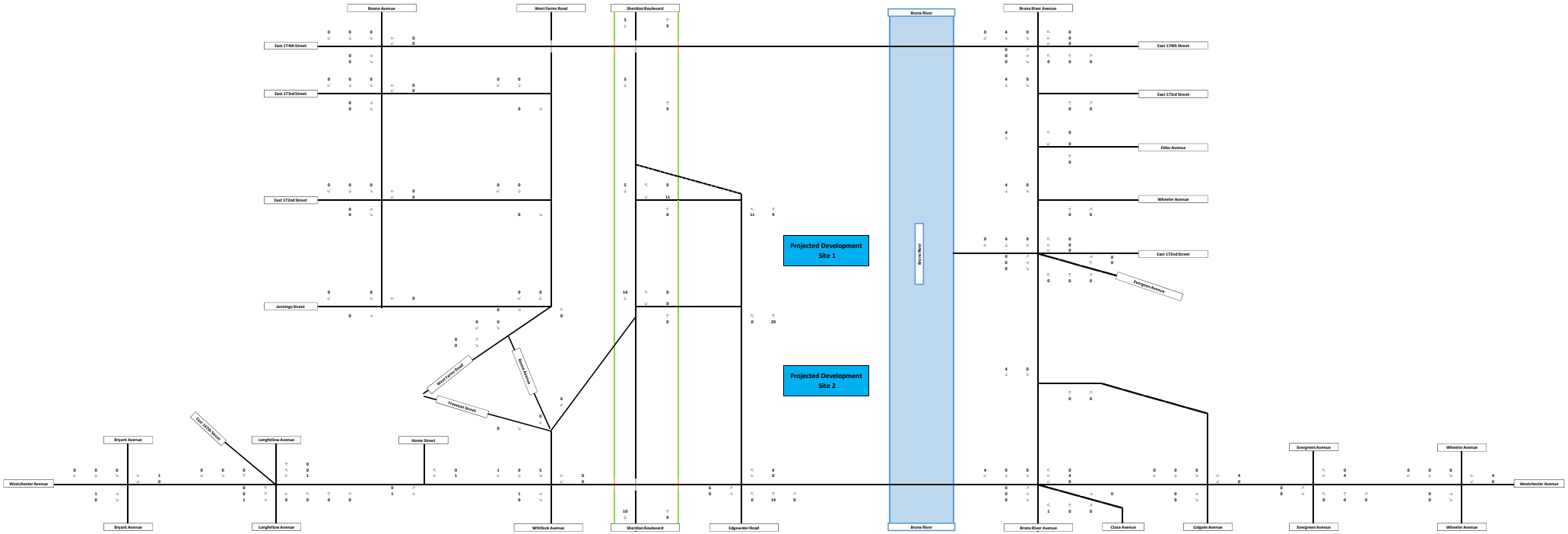


FIGURE A-16: PROJECTED DEVELOPMENT SITE-1 TRAFFIC ASSIGNMENTS
SATURDAY MIDDAY PEAK HOUR

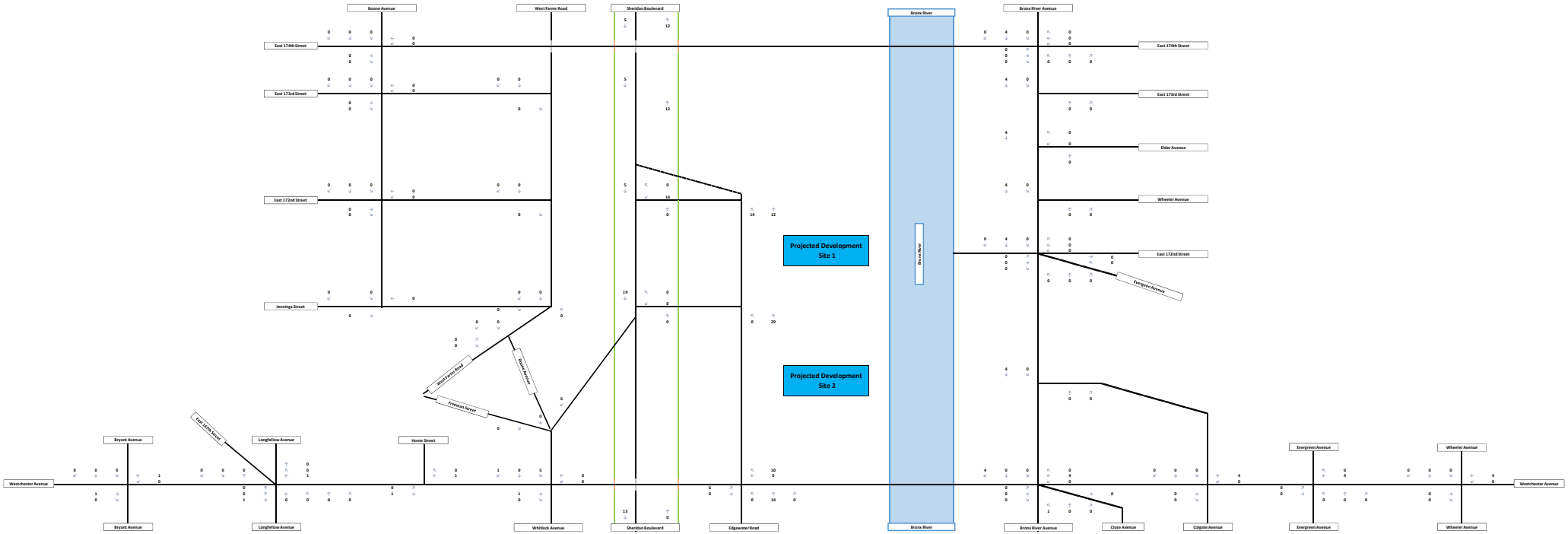


FIGURE A-17: PROJECTED DEVELOPMENT SITE-2 TRAFFIC ASSIGNMENTS
WEEKDAY AM PEAK HOUR

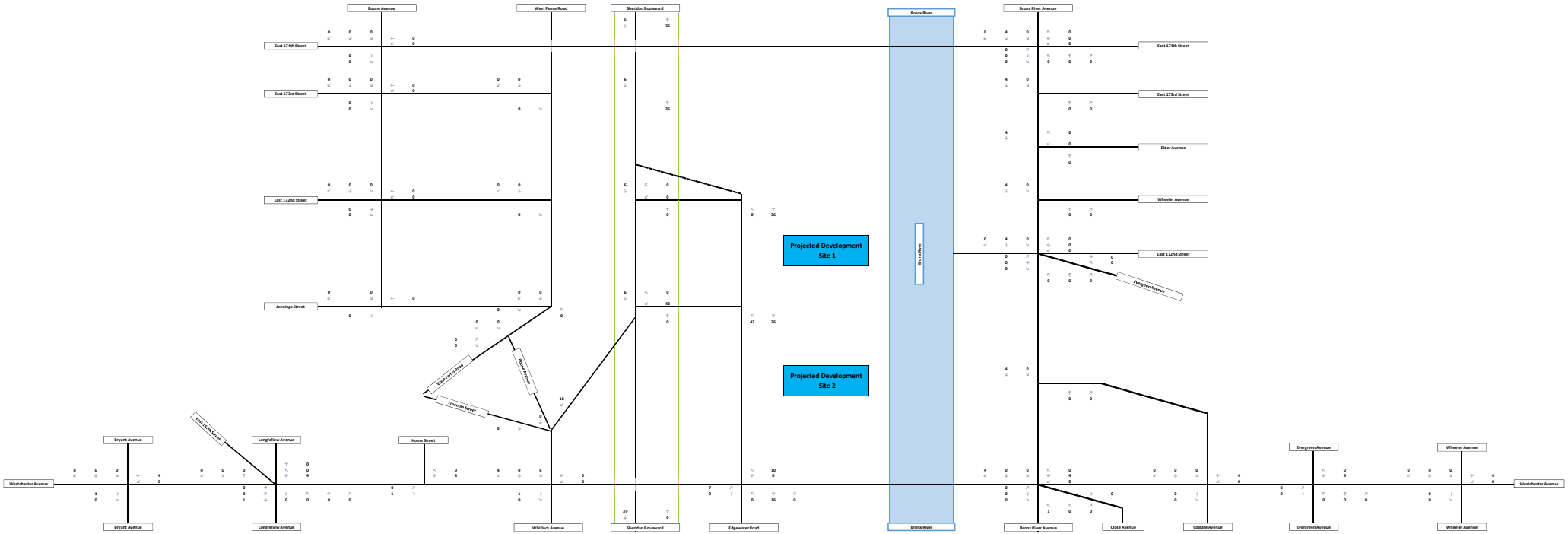


FIGURE A-18: PROJECTED DEVELOPMENT SITE-2 TRAFFIC ASSIGNMENTS
WEEKDAY MIDDAY PEAK HOUR

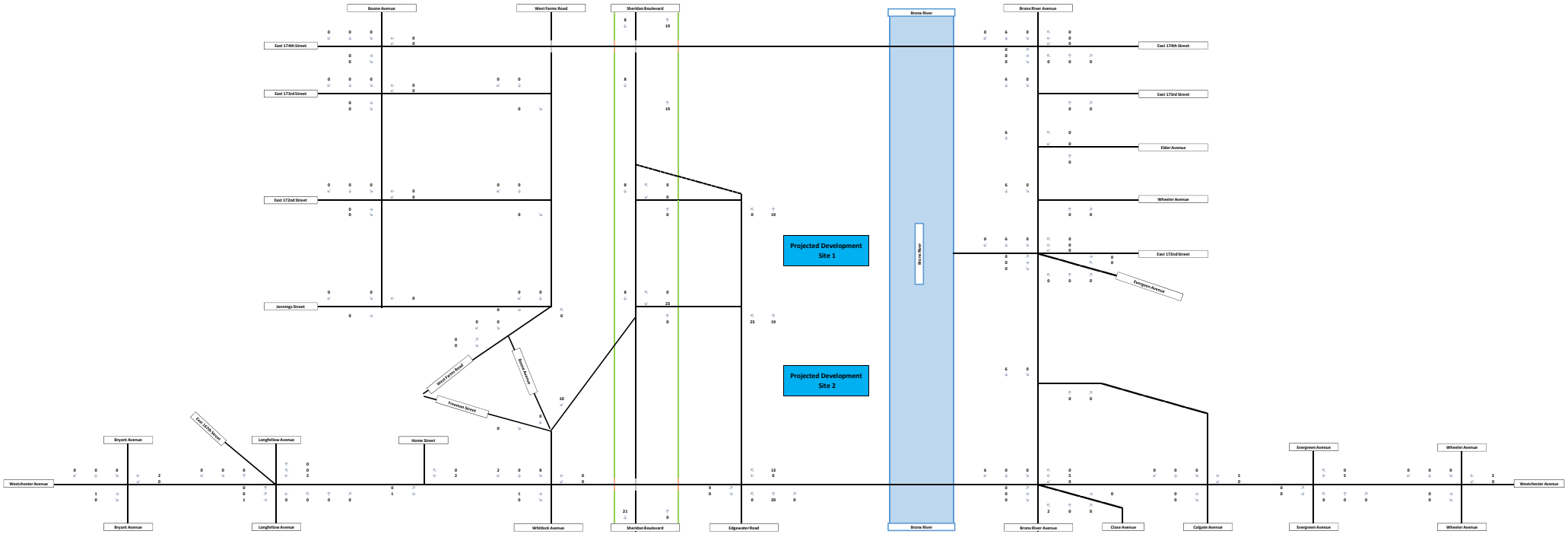


FIGURE A-19: PROJECTED DEVELOPMENT SITE-2 TRAFFIC ASSIGNMENTS
WEEKDAY PM PEAK HOUR

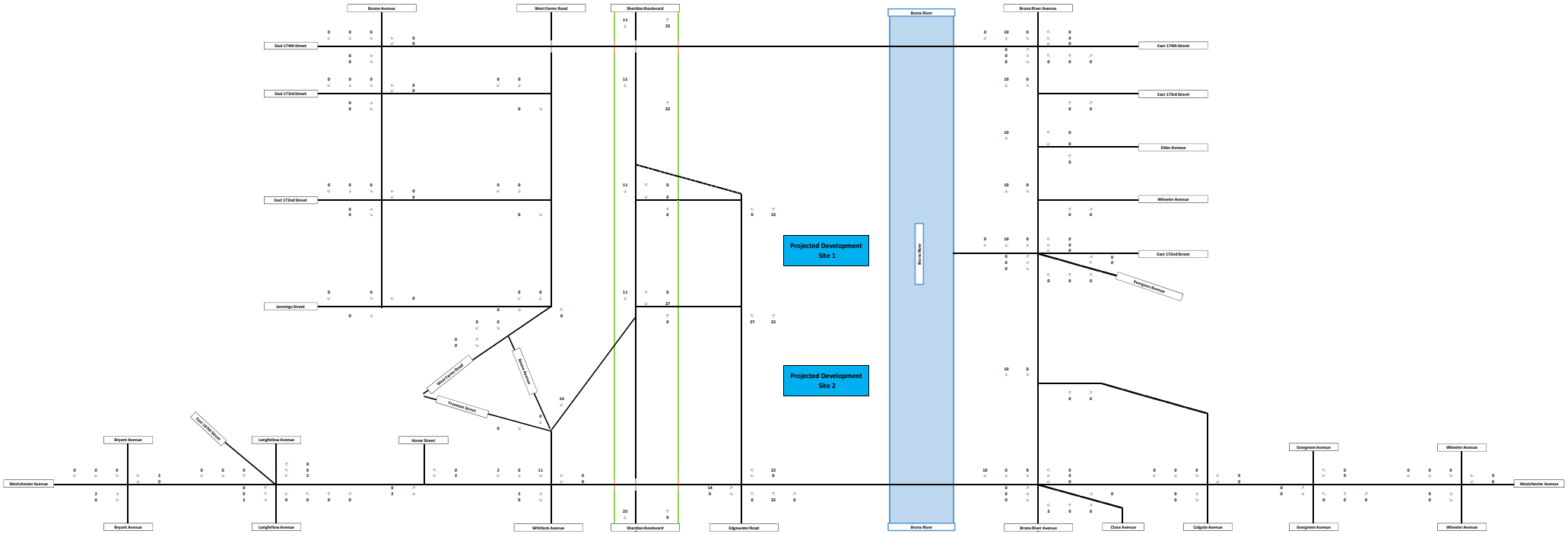


FIGURE A-20: PROJECTED DEVELOPMENT SITE-2 TRAFFIC ASSIGNMENTS
SATURDAY MIDDAY PEAK HOUR

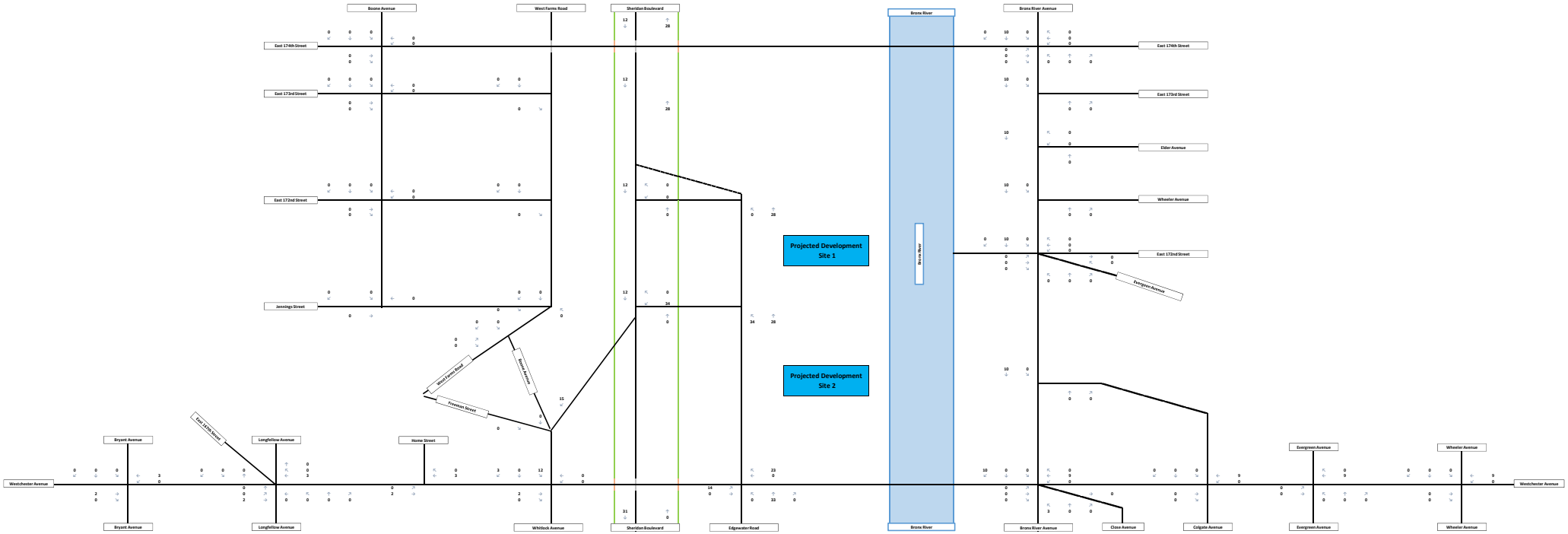


FIGURE A-21: PROPOSED DEVELOPMENT - TOTAL TRAFFIC ASSIGNMENTS
WEEKDAY AM PEAK HOUR

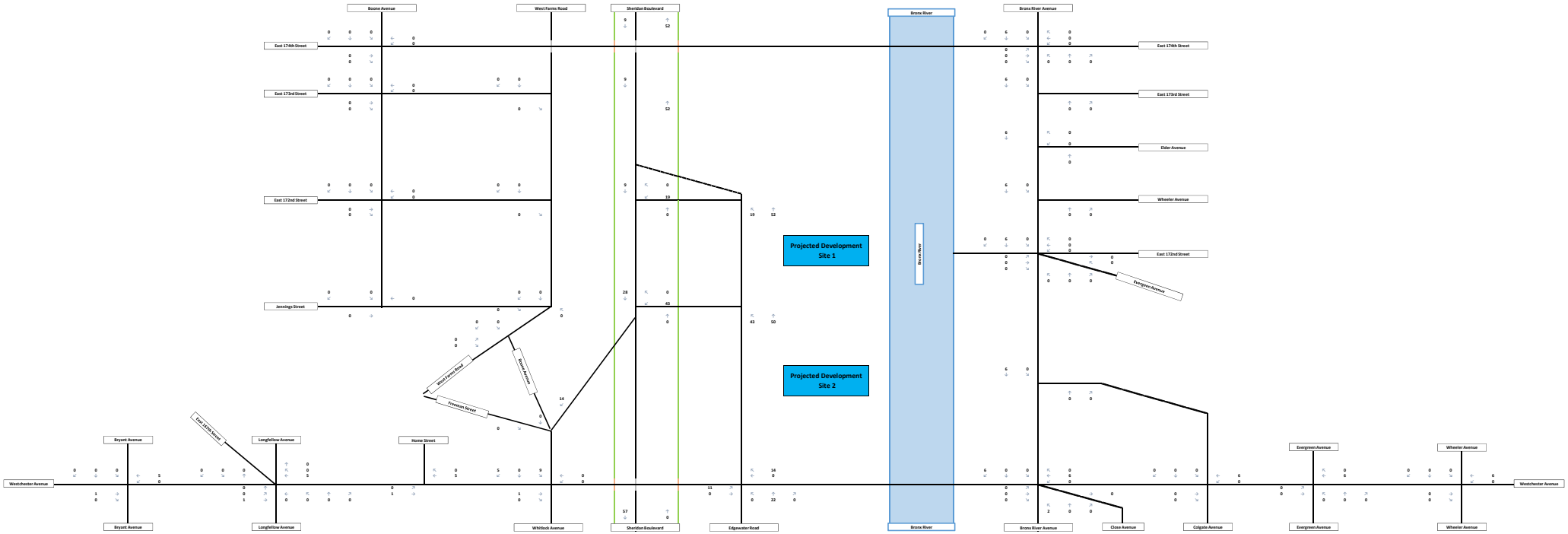


FIGURE A-22: PROPOSED DEVELOPMENT - TOTAL TRAFFIC ASSIGNMENTS
WEEKDAY MIDDAY PEAK HOUR

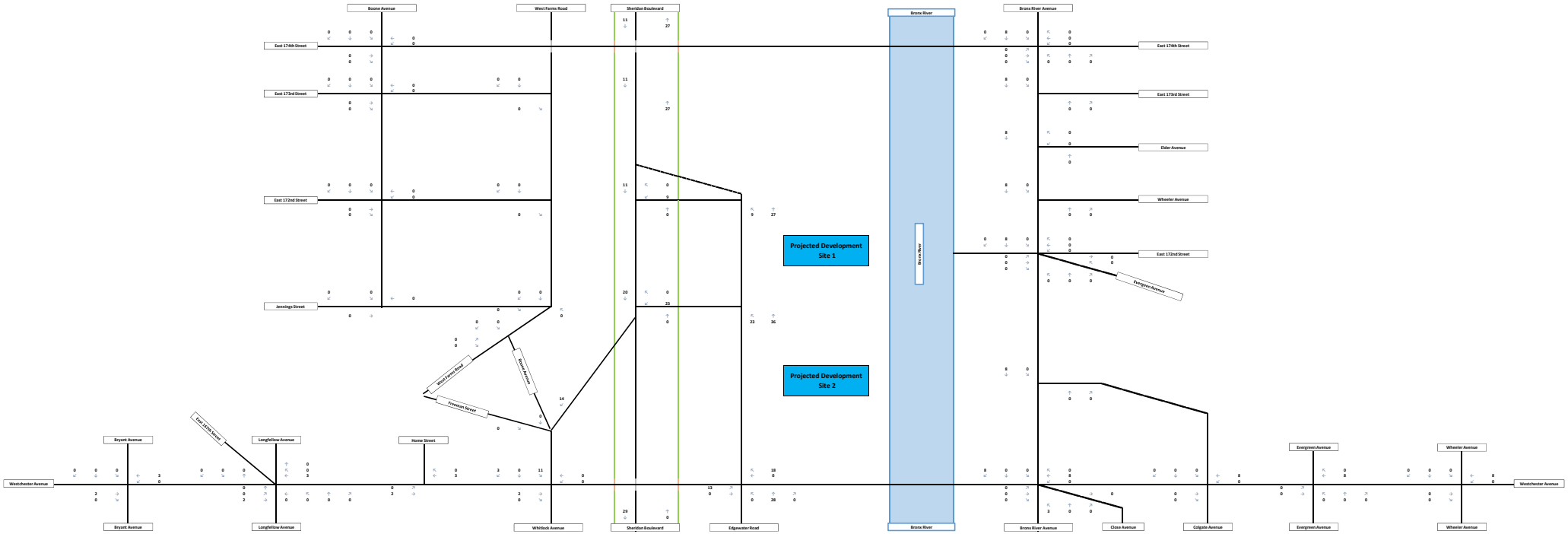


FIGURE A-23: PROPOSED DEVELOPMENT - TOTAL TRAFFIC ASSIGNMENTS
WEEKDAY PM PEAK HOUR

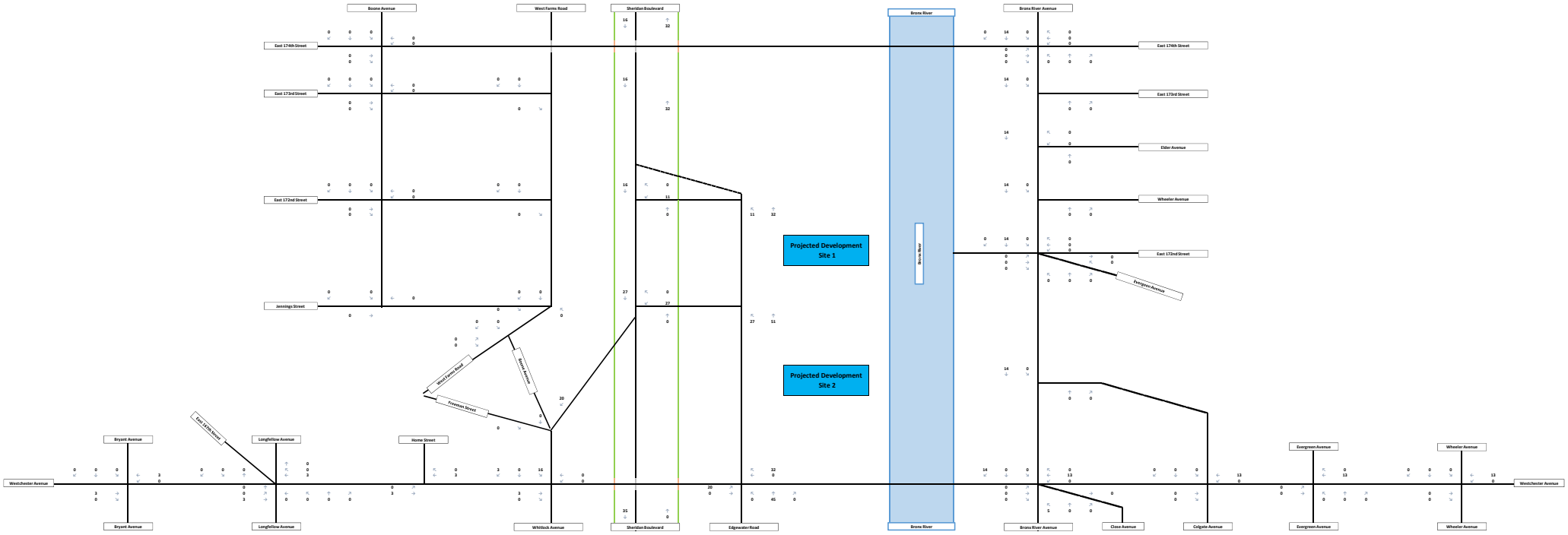
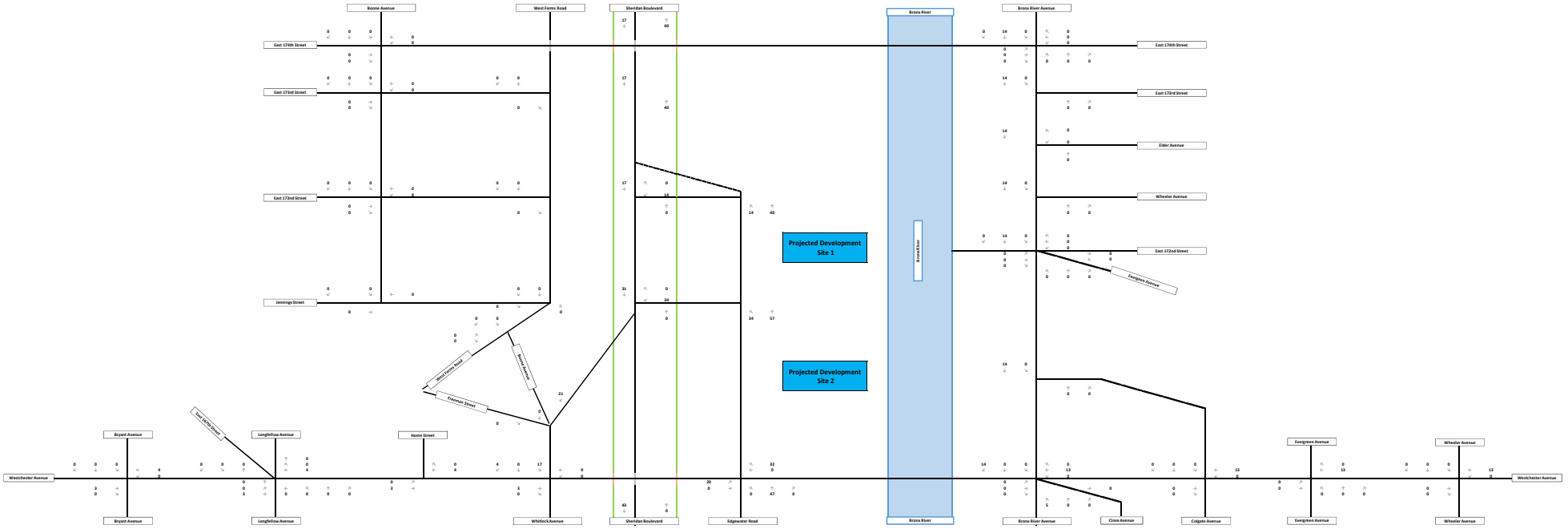


FIGURE A-24: PROPOSED DEVELOPMENT - TOTAL TRAFFIC ASSIGNMENTS
SATURDAY MIDDAY PEAK HOUR



APPENDIX B

CRASH ANALYSIS

Crash Data Analysis

Crash data was obtained from NYC DOT for the January 1, 2017 to December 31, 2019 period (the most recent three year period available) for the eighteen (18) intersection located within 0.25 miles of the project site that have project-generated trips assigned to them. The data identifies the total number of reportable (involving a fatality, injury, or more than $1,000 in property damages) and non-reportable crashes, as well as the total number of crashes involving injuries to pedestrians or bicyclists. Table 1 provides a summary of these crashes by year and location.

Table 1. Preliminary Crash Data Analysis Summary

		Pedestrian Injury Crashes			Bicycle Injury Crashes			Total Bicycle + Pedestrian Injury Crashes Combined			Total Crashes (Reportable + Non-Reportable)		
ID	**Intersection Name**	**2017**	**2018**	**2019**	**2017**	**2018**	**2019**	**2017**	**2018**	**2019**	**2017**	**2018**	**2019**
1	Sheridan Boulevard and East 173rd Street	0	0	0	0	0	0	0	0	0	0	0	0
2	Sheridan Boulevard, Edgewater Road and East 172nd Street	0	0	0	0	0	0	0	0	0	0	0	0
3	Sheridan Boulevard, Edgewater Road and Jennings Street	0	0	0	0	0	0	0	0	0	0	0	0
4	Southbound Sheridan Boulevard Off-Ramp, Boone Avenue, Freeman Street and Whitlock Avenue	1	0	1	0	0	0	1	0	1	1	2	9
5	Bronx River Avenue and East 173rd Street	0	0	0	0	0	0	0	0	0	2	0	0
6	Bronx River Avenue and Elder Avenue	0	0	0	0	0	0	0	0	0	3	1	0
7	Bronx River Avenue and Wheeler Avenue	0	0	0	0	0	0	0	0	0	1	0	0
8	Bronx River Avenue, East 172nd Street and Evergreen Avenue	0	0	0	0	1	0	0	1	0	1	5	0
9	Bronx River Avenue and Colgate Avenue	0	0	0	0	0	0	0	0	0	3	2	1
10	Bryant Avenue and Westchester Avenue	0	0	1	1	0	0	1	0	1	1	3	2
11	Longfellow Avenue, Westchester and East 167th Avenue	1	1	0	0	0	0	1	1	0	1	3	0
12	Home Street and Westchester Avenue	0	0	0	0	0	0	0	0	0	1	2	1
13	Whitlock Avenue and Westchester Avenue	3	5	1	1	1	0	4	6	1	18	23	5
14	Edgewater Road, Northbound Sheridan Boulevard Off-Ramp and Westchester Avenue	1	0	0	1	2	0	2	2	0	12	15	10
15	Bronx River Avenue, Close Road and Westchester Avenue	1	0	1	1	2	0	2	2	1	24	17	17
16	Colgate Avenue and Westchester Avenue	1	1	2	1	0	0	2	1	2	5	3	3
17	Evergreen Avenue and Westchester Avenue	1	0	1	0	0	0	1	0	1	6	2	4
18	Wheeler Avenue and Westchester Avenue	0	1	0	0	0	0	0	1	0	2	8	4
	Total	**9**	**8**	**7**	**5**	**6**	**0**	**14**	**14**	**7**	**81**	**86**	**56**

Note: Intersections shown in gray shading are located along the Westchester Avenue Vision Zero "Priority Corridor" within ¼-mile of the Project Site.

We reviewed the Vision Zero corridors/intersections, Senior Pedestrian Focus Areas (SPFAs) and Truck Priority Safety Corridors. There are no Senior Pedestrian Focus Areas (SPFAs) and Truck Priority Safety Corridors in the ¼-mile radius from the Project Development Sites. There is a Vision Zero Priority Corridor within ¼-mile radius from the Project Development Sites and it is shown in Figure 1 below.

Figure 1. Vision Zero Priority Corridor Map



APPENDIX C

PEDESTRIAN DISTRIBUTION

FIGURE C-1: PROJECTED DEVELOPMENT SITE-1
INBOUND BUS

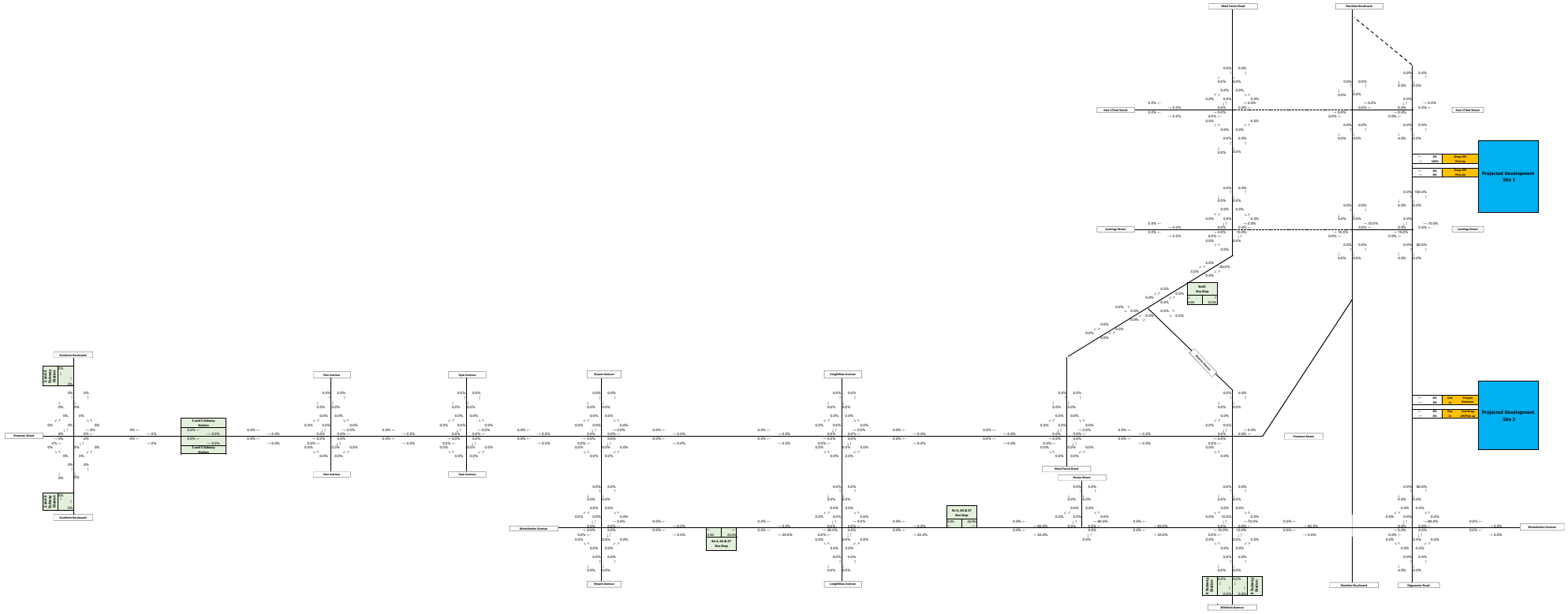

Projected Development Site 1
Projected Development Site 2
Bus Stop
Bus Stop
Bus Stop

FIGURE C-2: PROJECTED DEVELOPMENT SITE-2
INBOUND BUS

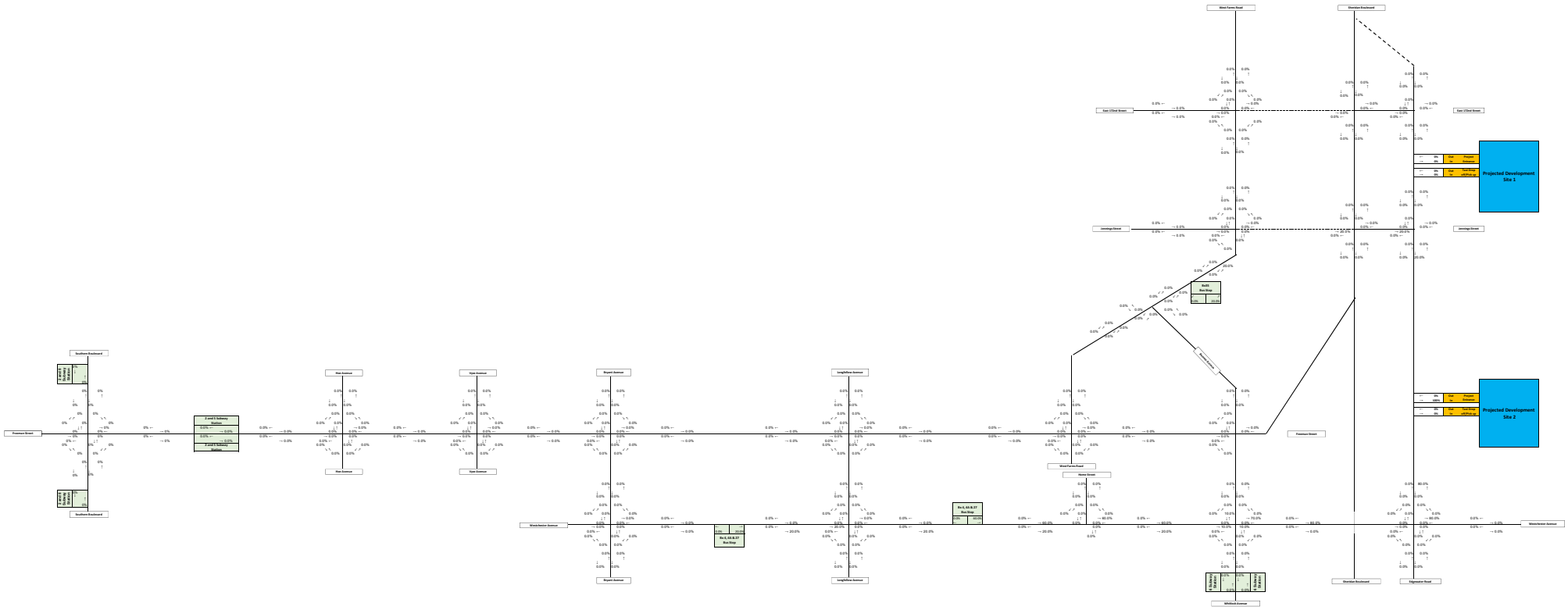

Projected Development Site 1
Projected Development Site 2
Bus Stop
Bus Stop
Bus Stop

FIGURE C-3: PROJECTED DEVELOPMENT SITE-1
OUTBOUND BUS

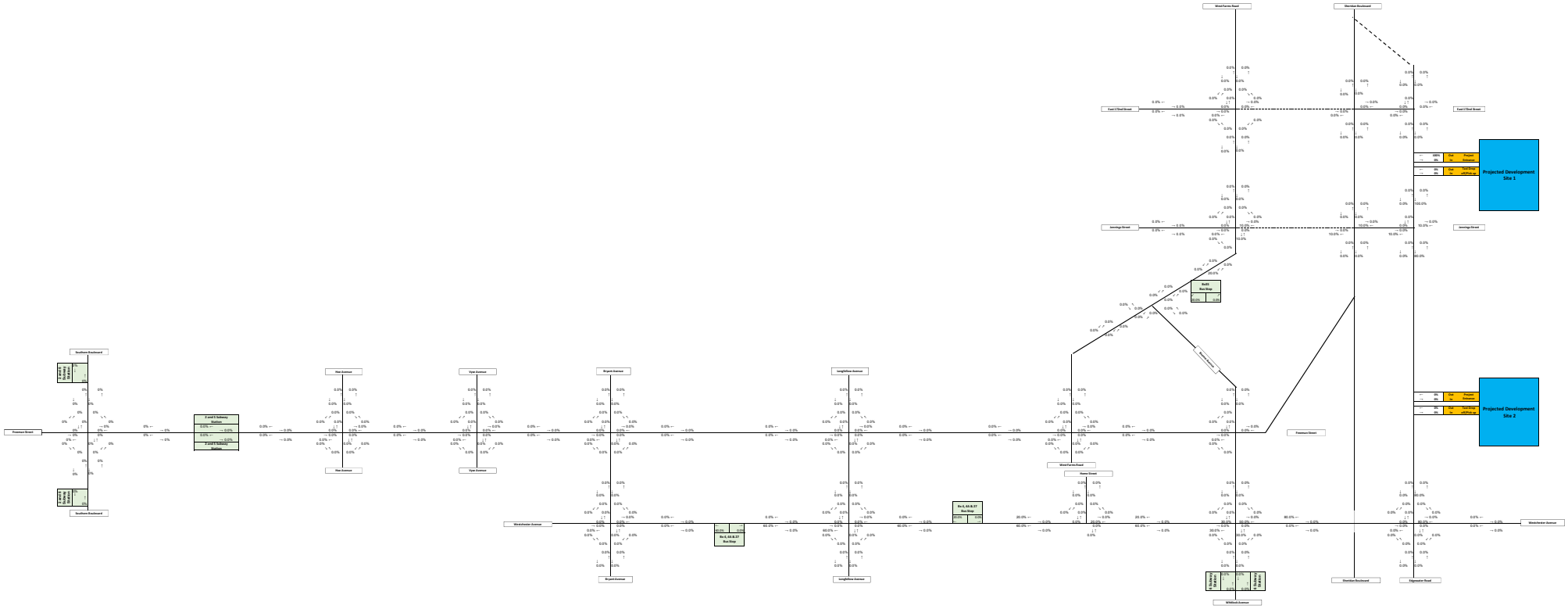


FIGURE C-4: PROJECTED DEVELOPMENT SITE-2
OUTBOUND BUS

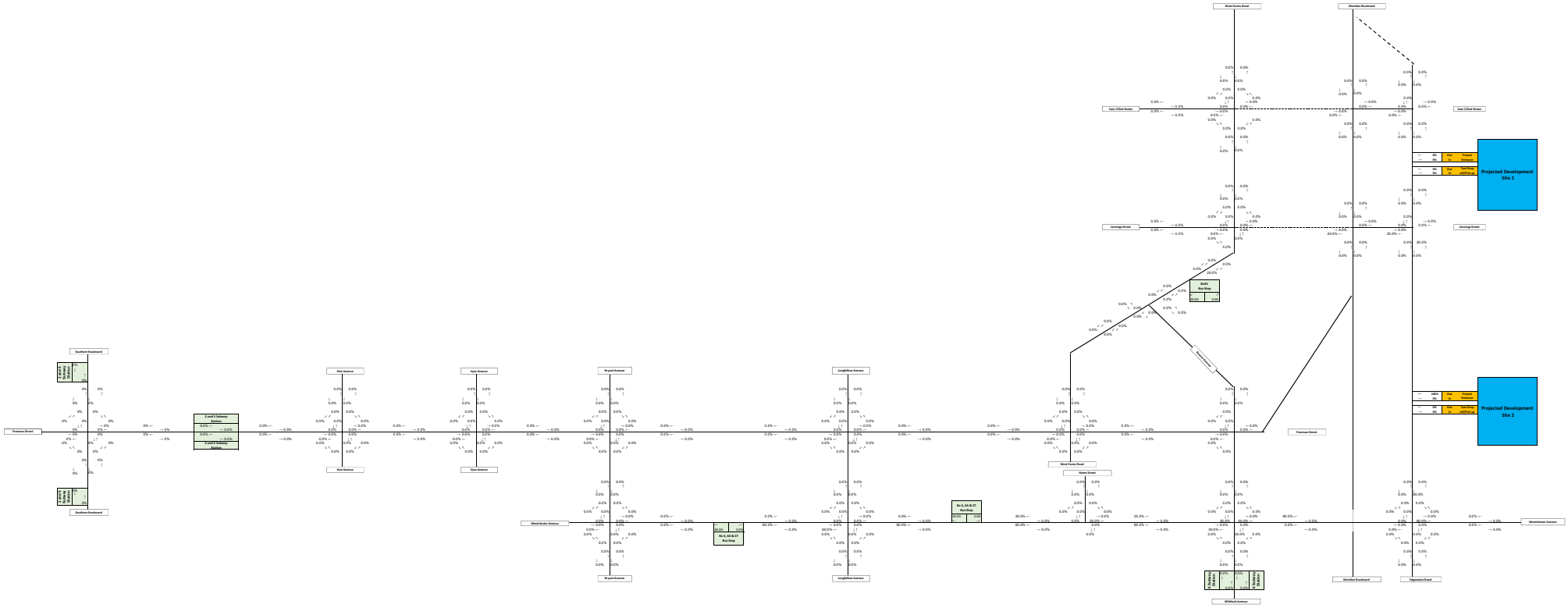

Projected Development Site 1
Projected Development Site 2
Bus Stop
Bus Stop
Bus Stop

FIGURE C-5: PROJECTED DEVELOPMENT SITE-1
INBOUND SUBWAY

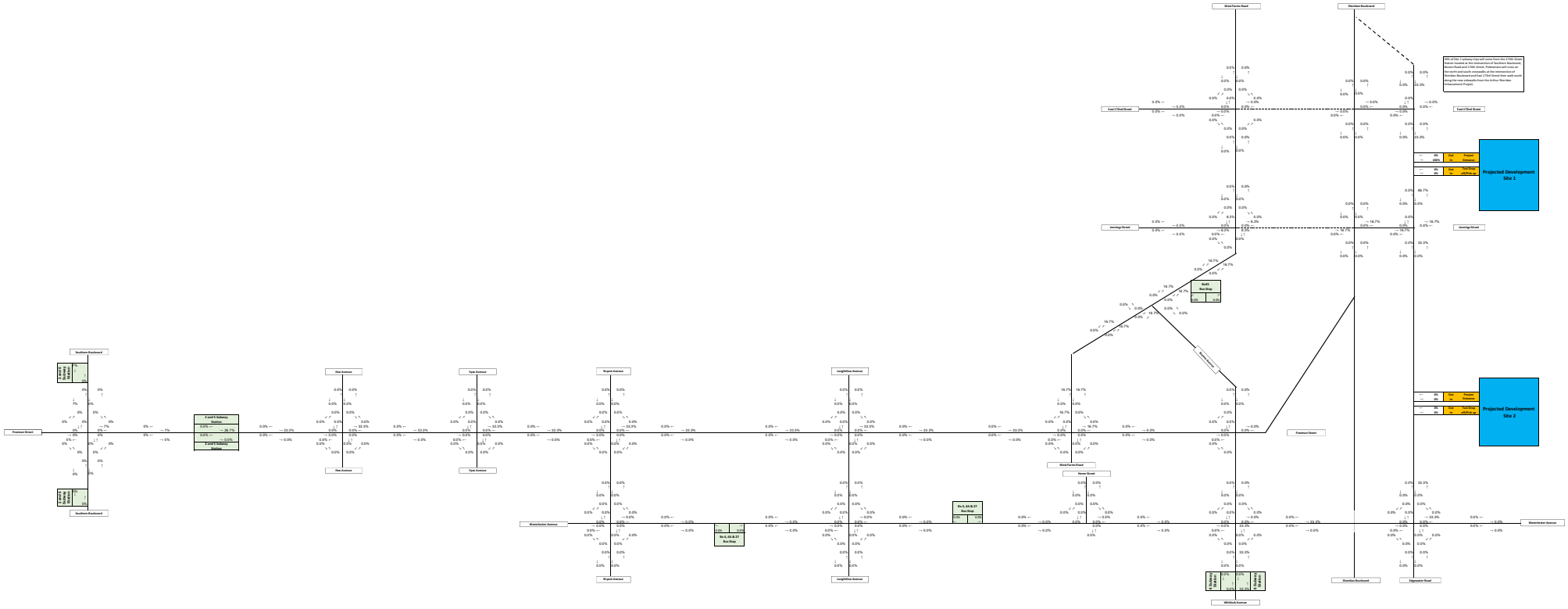


FIGURE C-6: PROJECTED DEVELOPMENT SITE-2
INBOUND SUBWAY

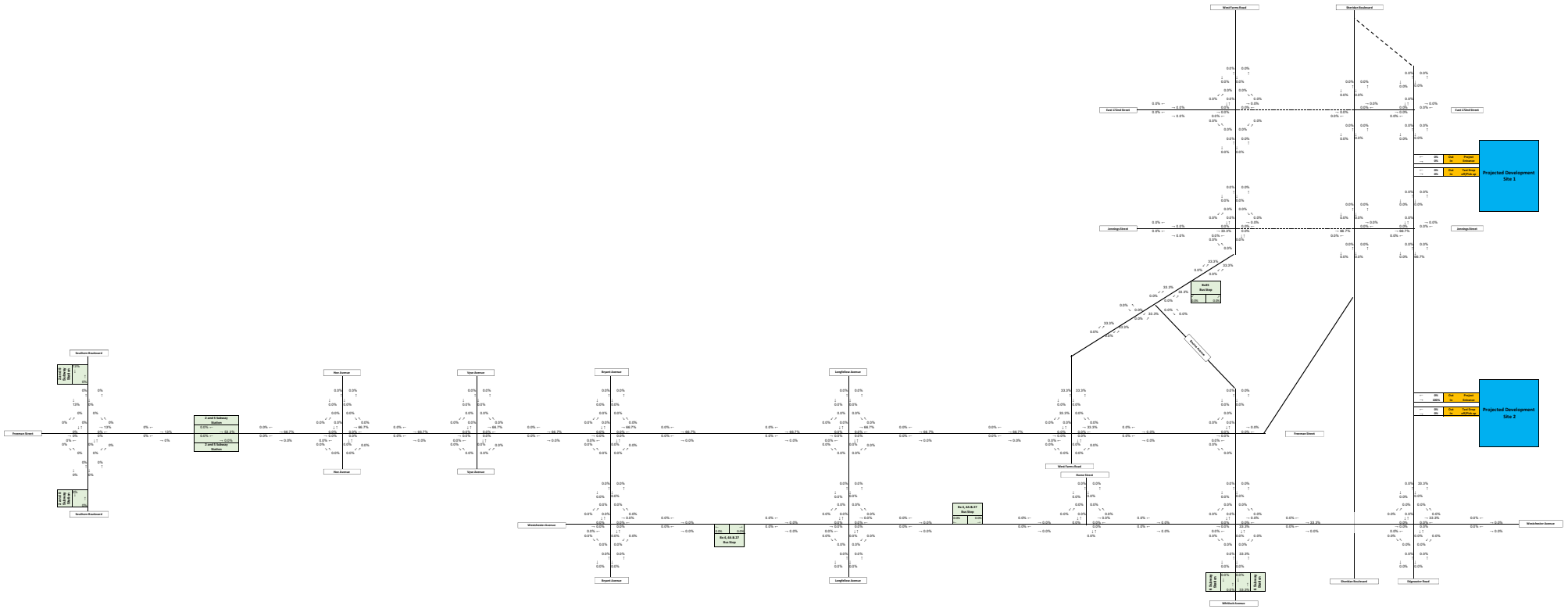


FIGURE C-7: PROJECTED DEVELOPMENT SITE-1
OUTBOUND SUBWAY

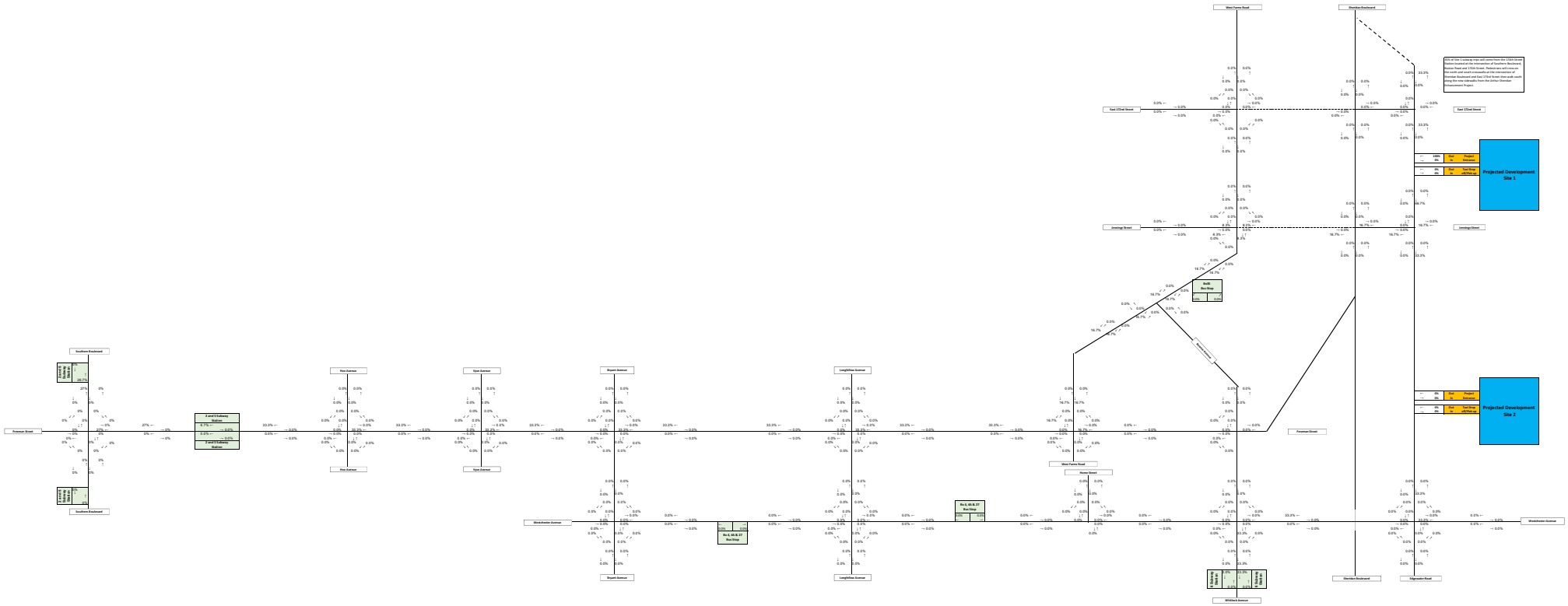


FIGURE C-8: PROJECTED DEVELOPMENT SITE-2
OUTBOUND SUBWAY

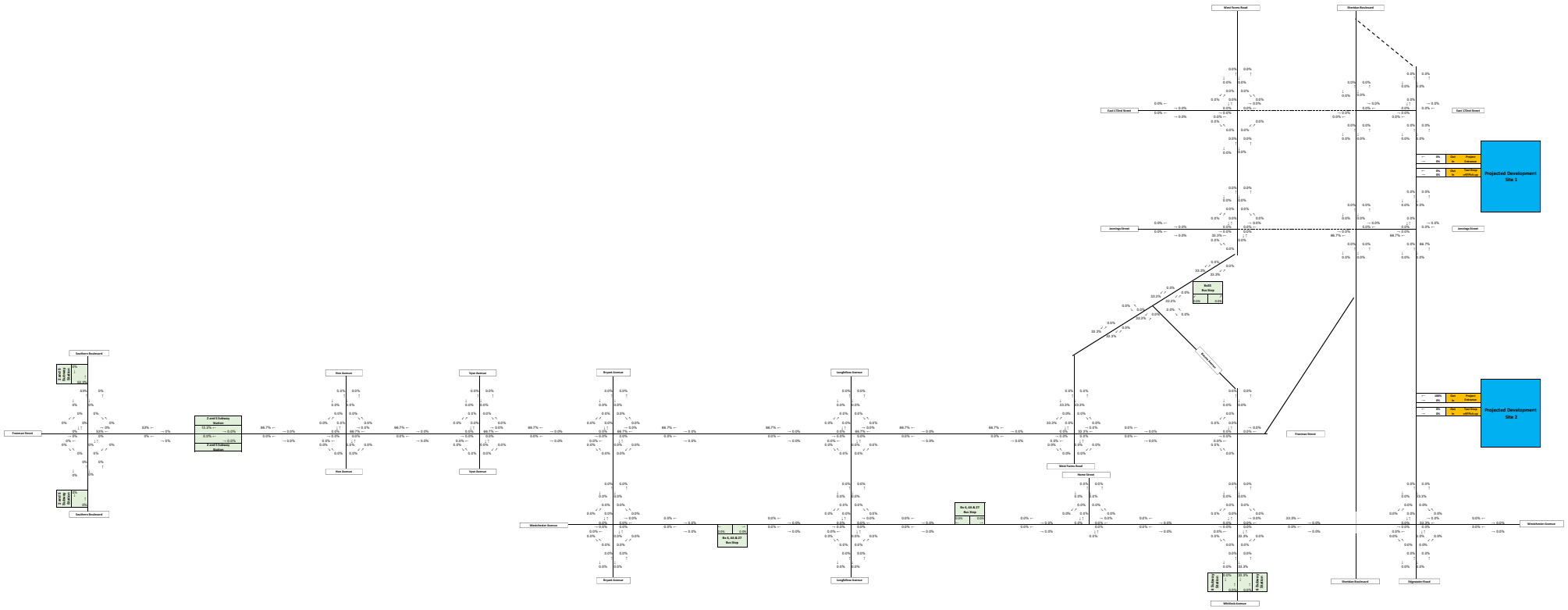


FIGURE C-9: PROJECTED DEVELOPMENT SITE-1
INBOUND AUTO

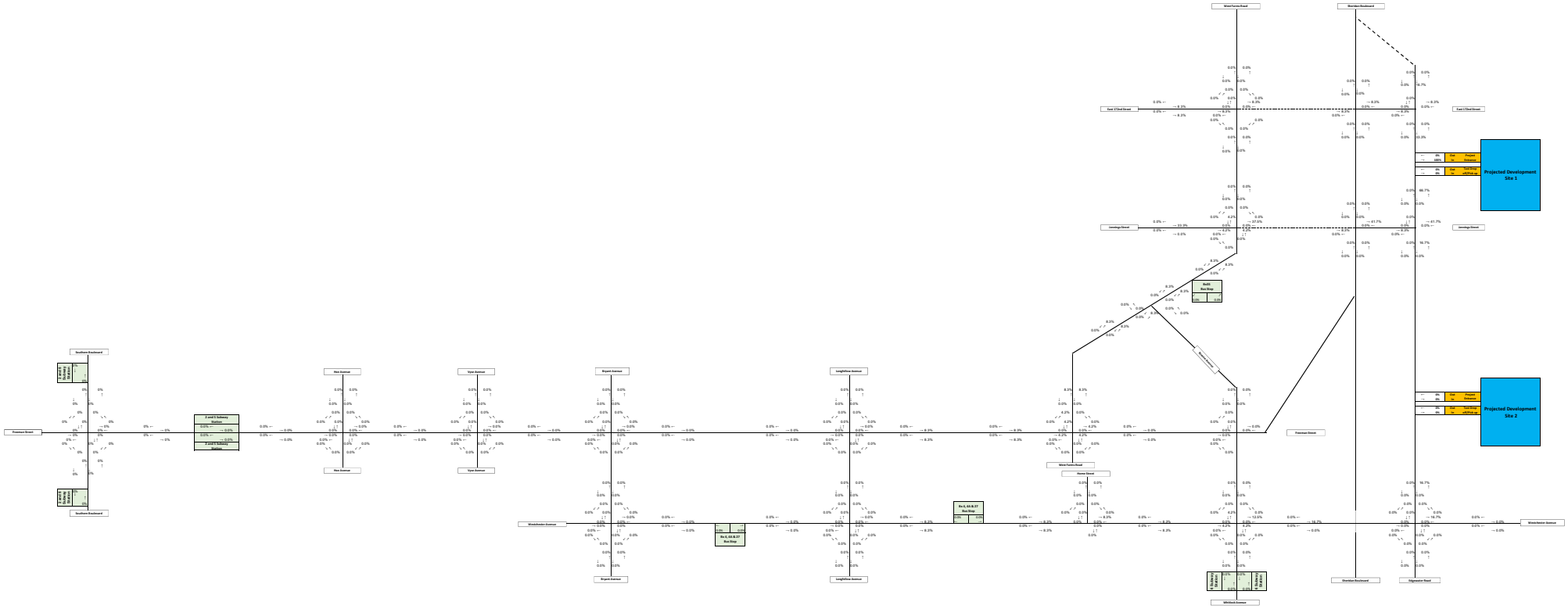


FIGURE C-10: PROJECTED DEVELOPMENT SITE-2
INBOUND AUTO

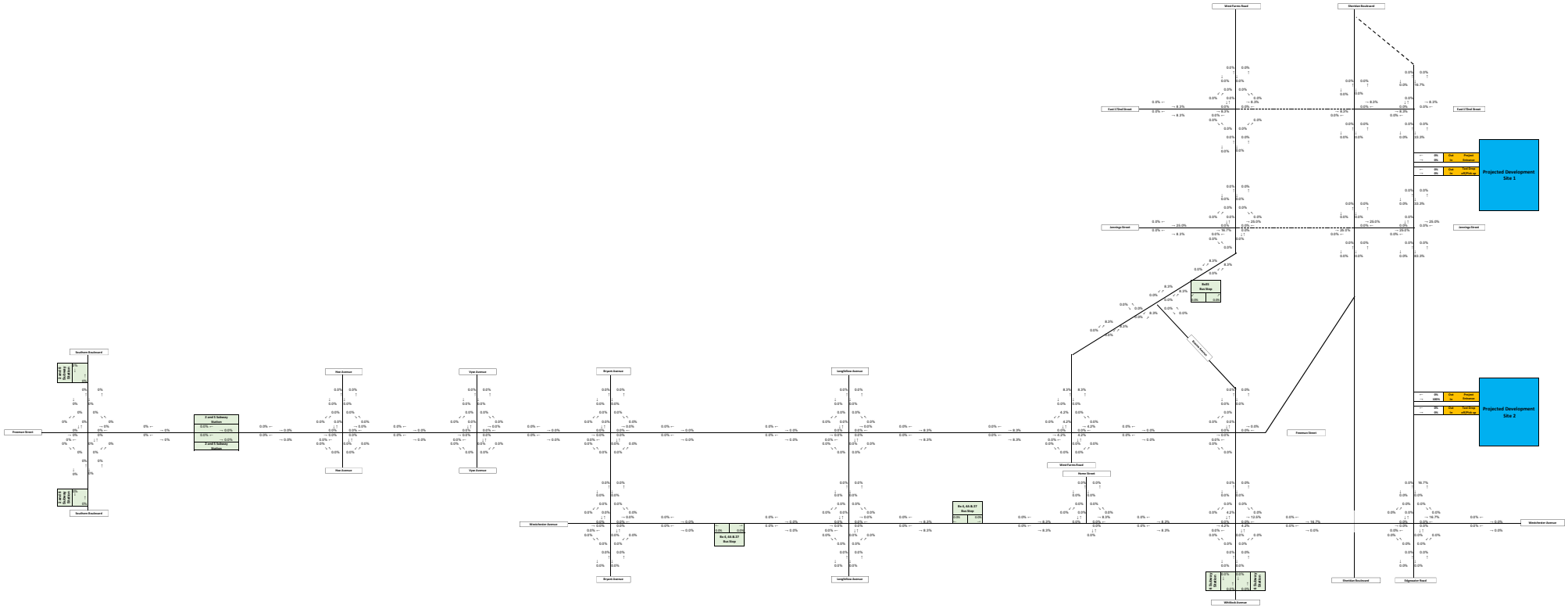

Projected Development Site 1
Projected Development Site 2
Bus Stop
Bus Stop
Bus Stop

FIGURE C-11: PROJECTED DEVELOPMENT SITE-1
OUTBOUND AUTO

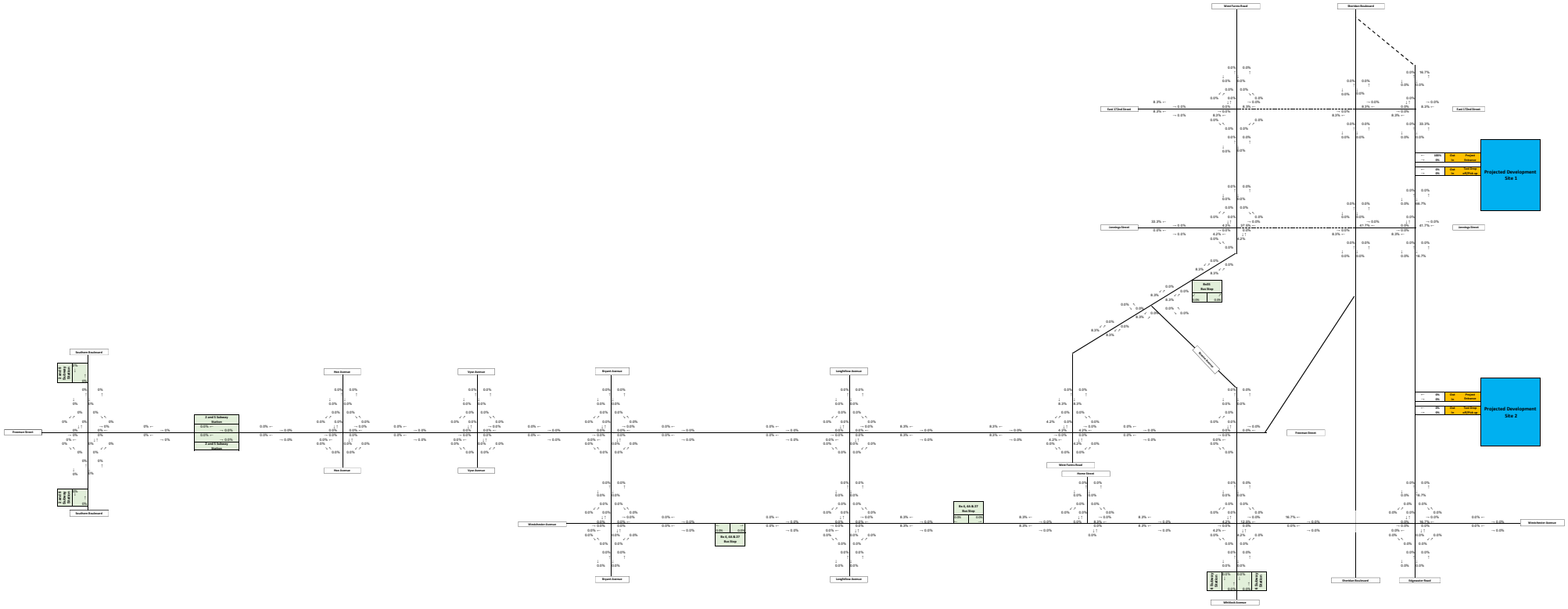


FIGURE C-12: PROJECTED DEVELOPMENT SITE-2
OUTBOUND AUTO

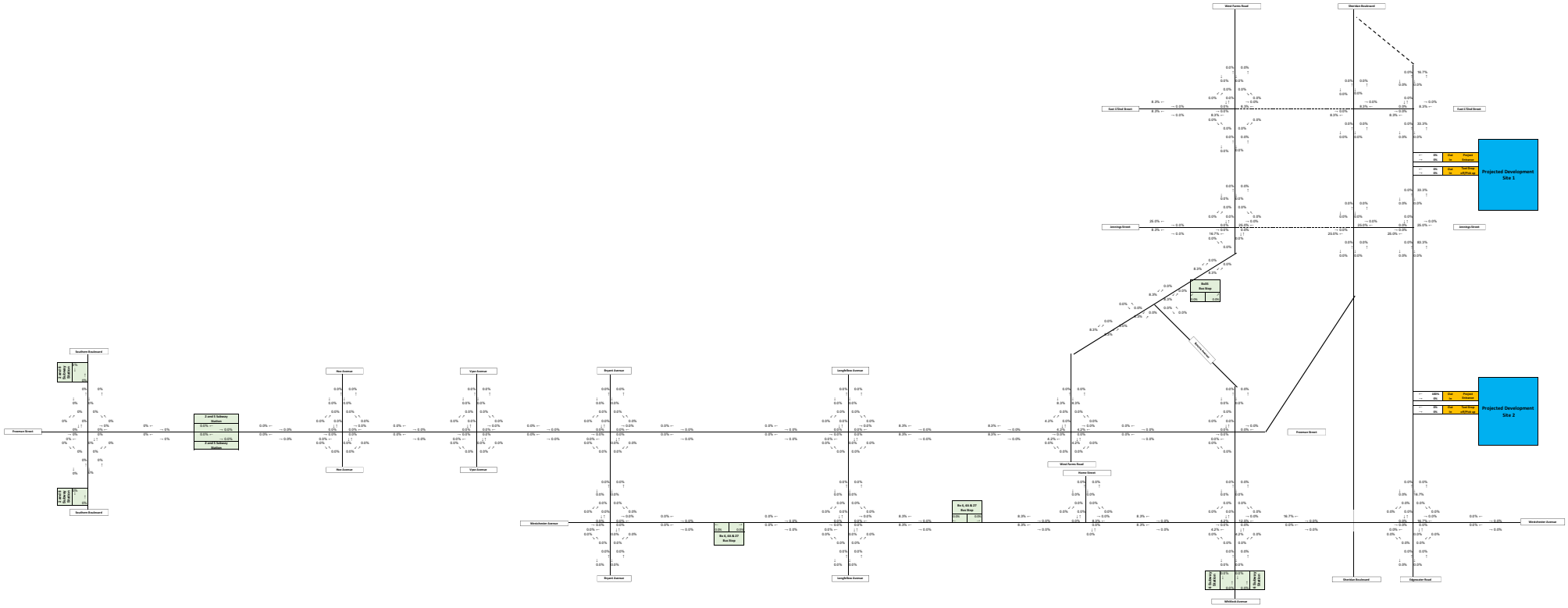


FIGURE C-13: PROJECTED DEVELOPMENT SITE-1
INBOUND TAXI

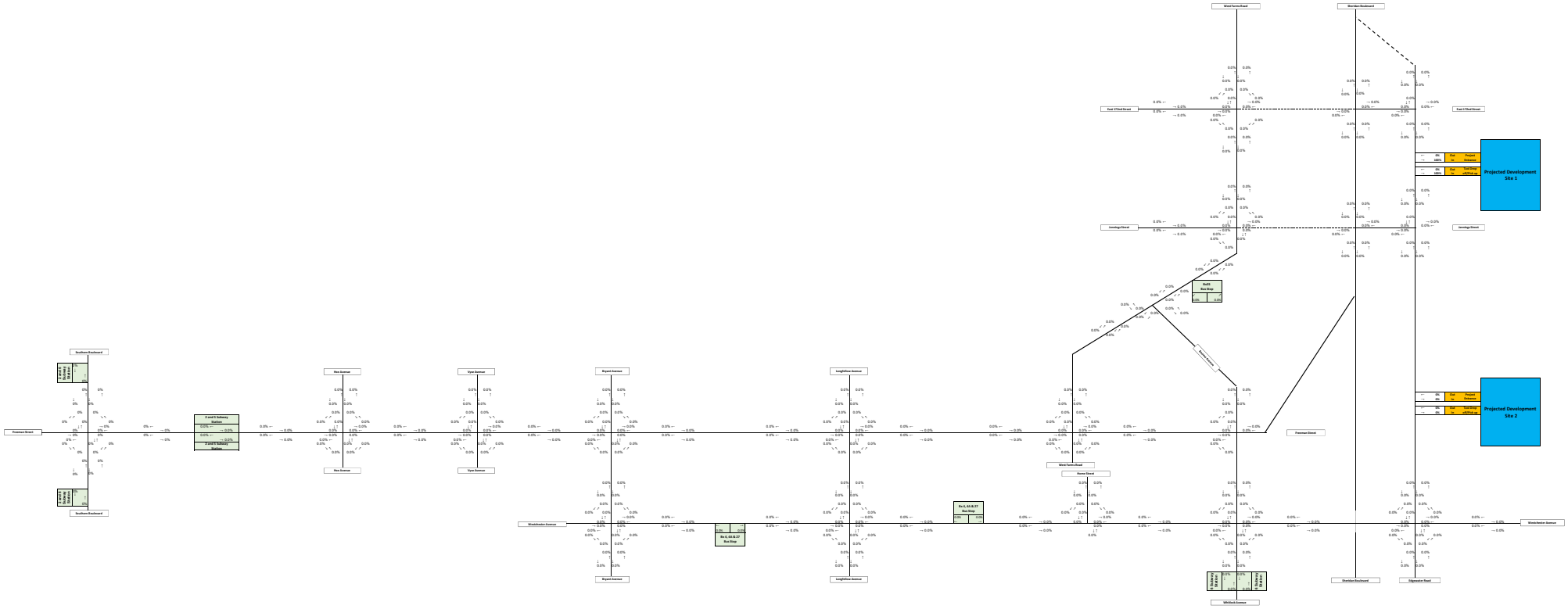


FIGURE C-14: PROJECTED DEVELOPMENT SITE-2
INBOUND TAXI

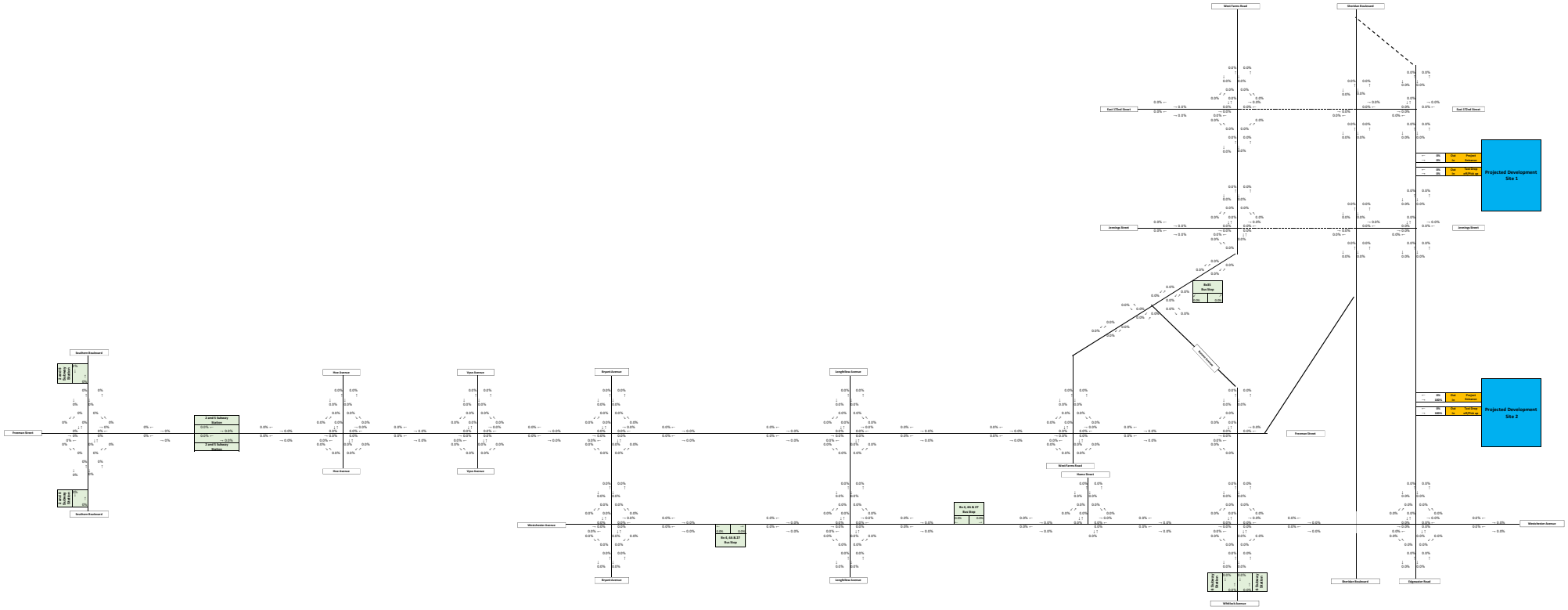


FIGURE C-15: PROJECTED DEVELOPMENT SITE-1
OUTBOUND TAXI

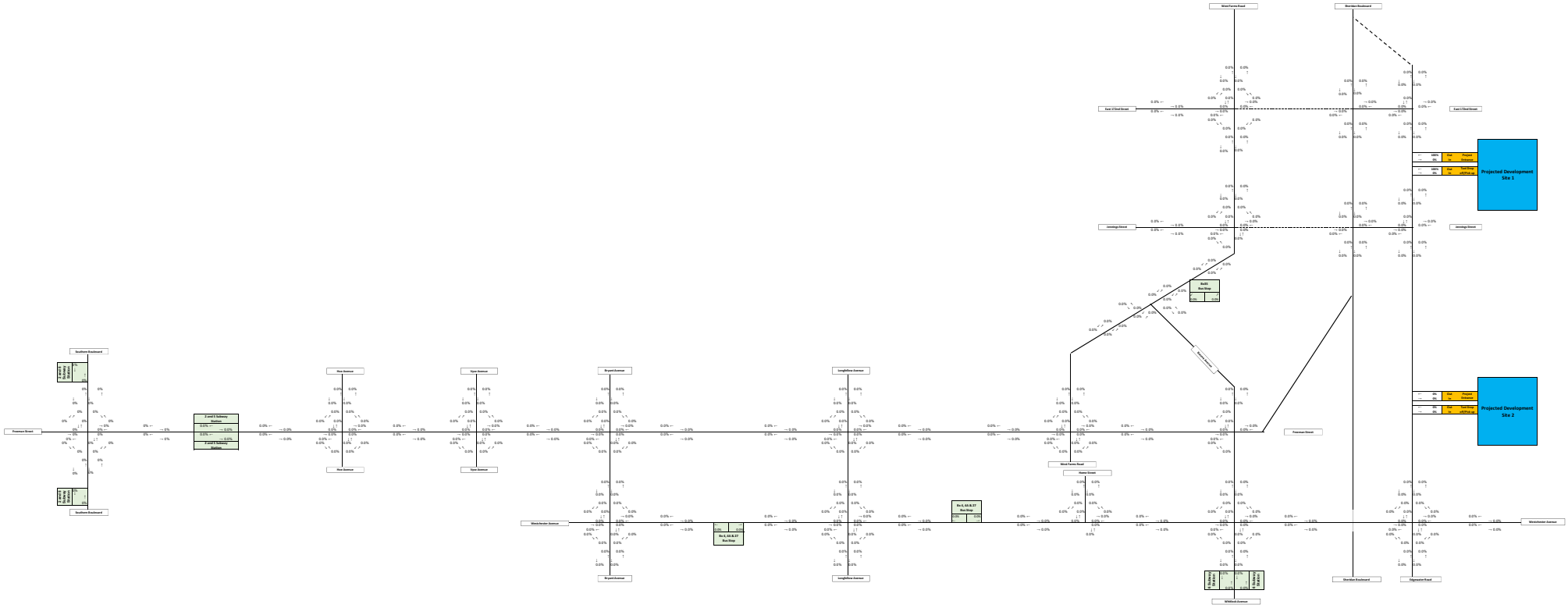


FIGURE C-16: PROJECTED DEVELOPMENT SITE-2
OUTBOUND TAXI

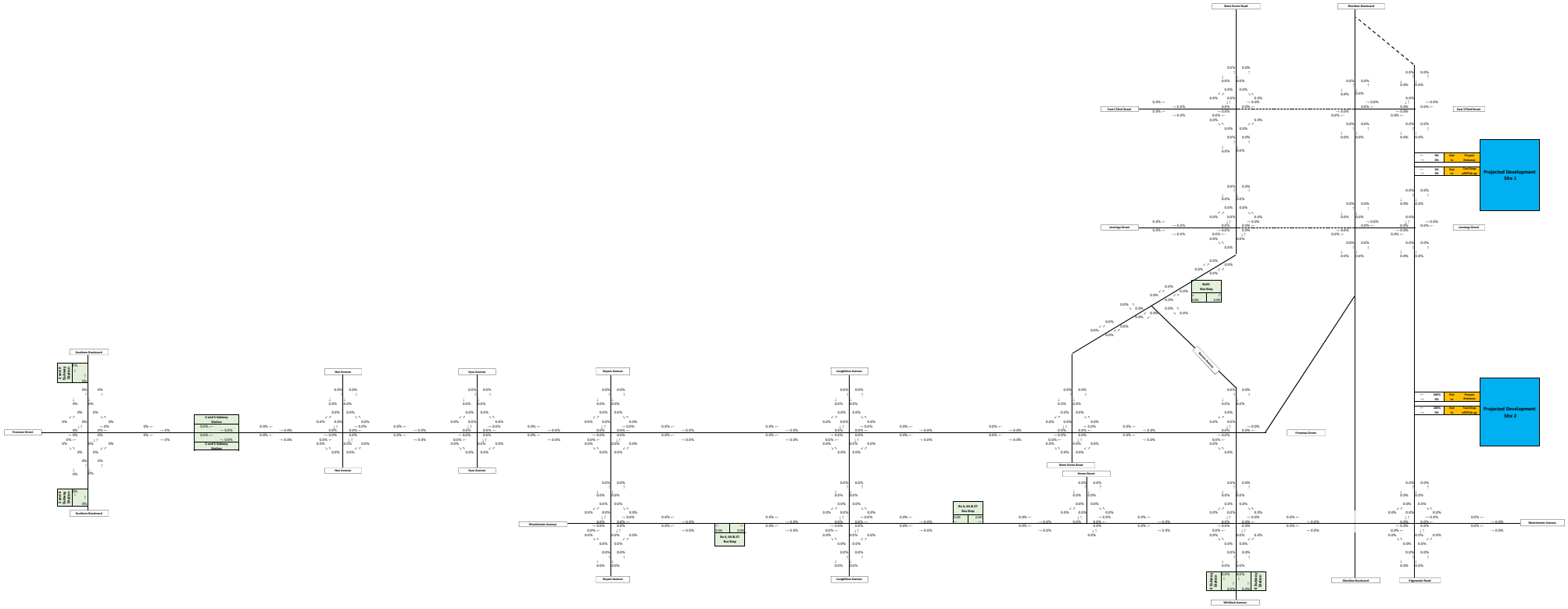


FIGURE C-17: PROJECTED DEVELOPMENT SITE-1
INBOUND WALK

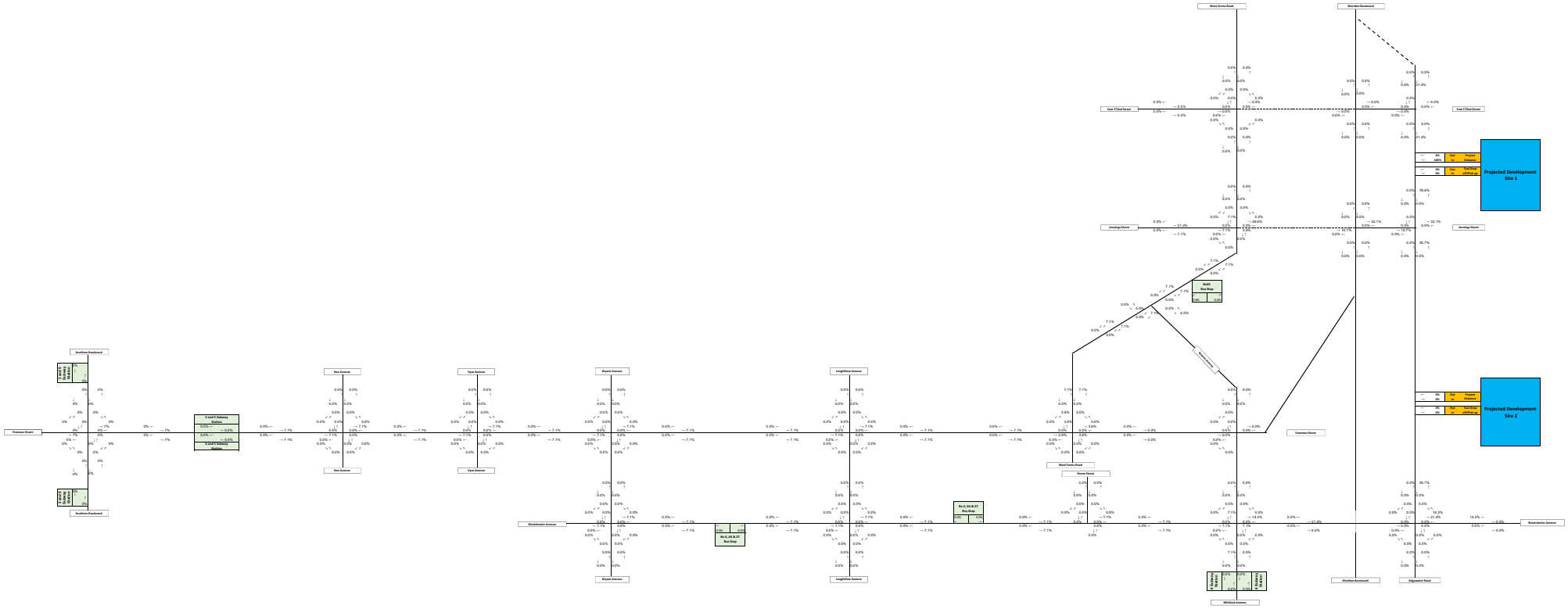


FIGURE C-18: PROJECTED DEVELOPMENT SITE-2
INBOUND WALK

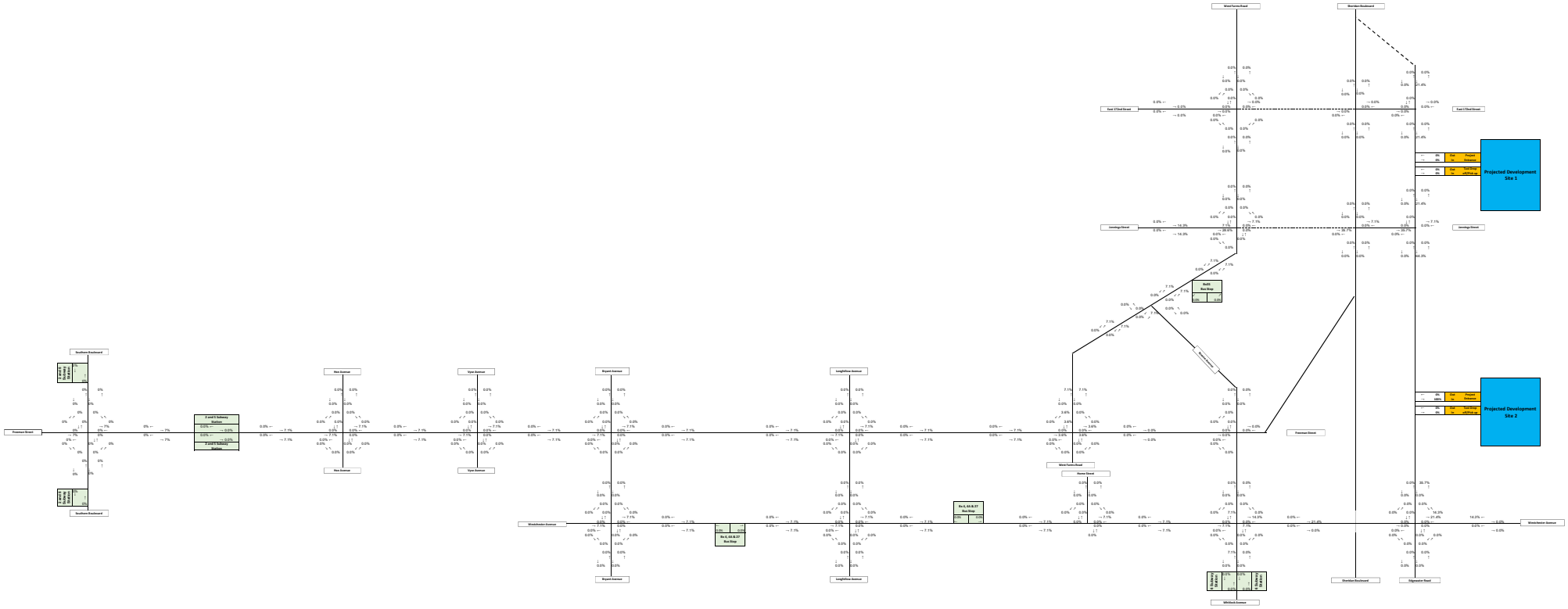


FIGURE C-19: PROJECTED DEVELOPMENT SITE-1
OUTBOUND WALK

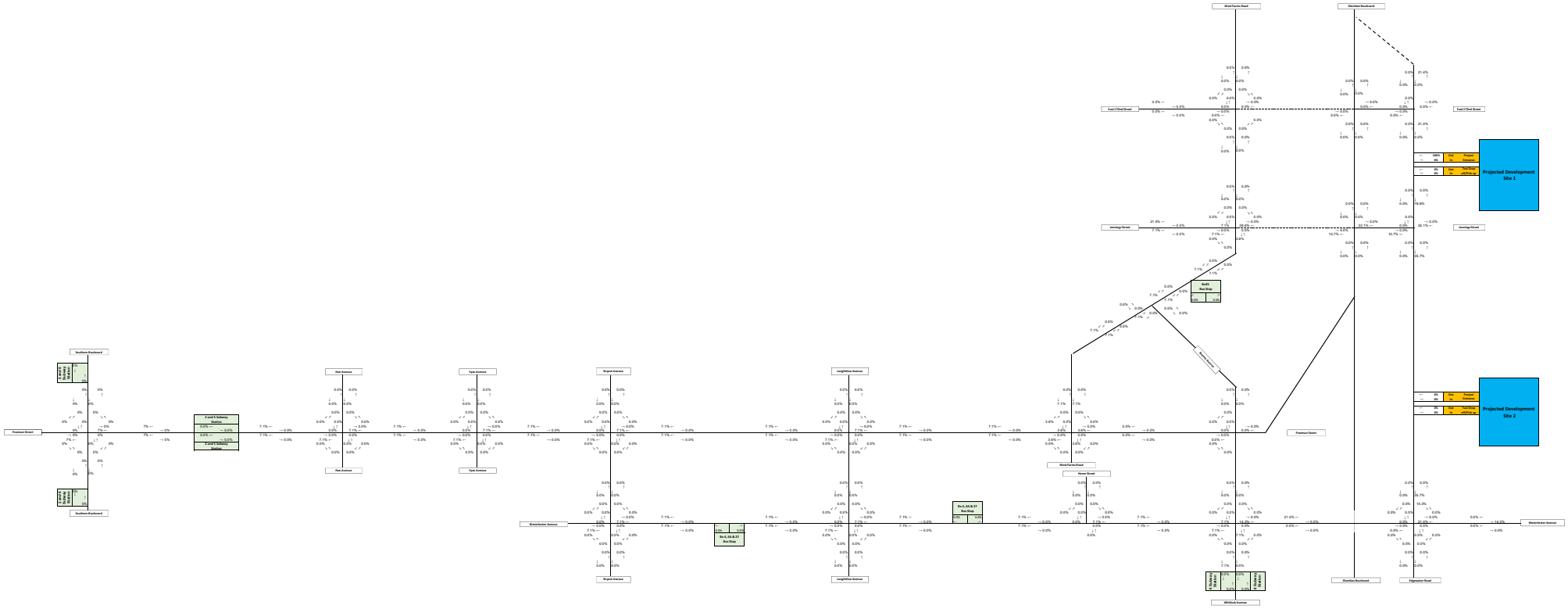


FIGURE C-20: PROJECTED DEVELOPMENT SITE-2
OUTBOUND WALK

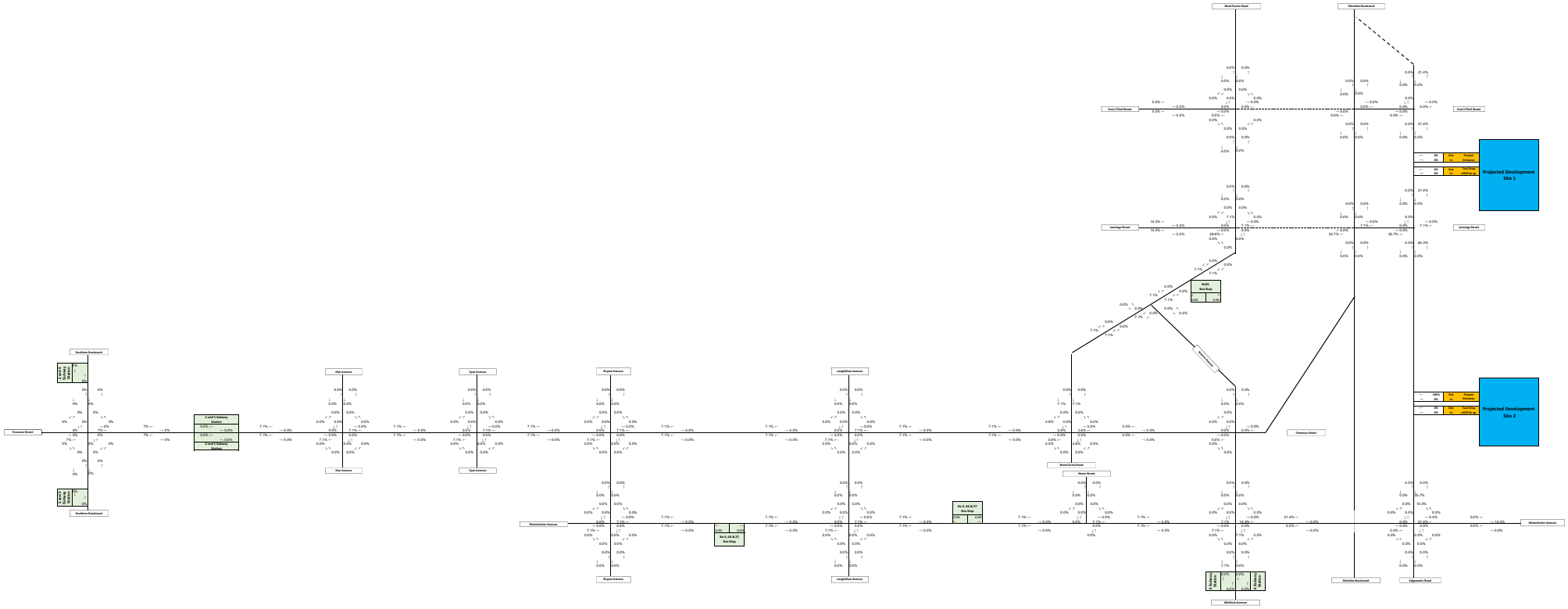

Projected Development Site 1
Projected Development Site 2
Bus Stop
Bus Stop
Bus Stop

FIGURE C-21: PROJECTED DEVELOPMENT SITE-1 TRIP ASSIGNMENTS
WEEKDAY AM PEAK HOUR

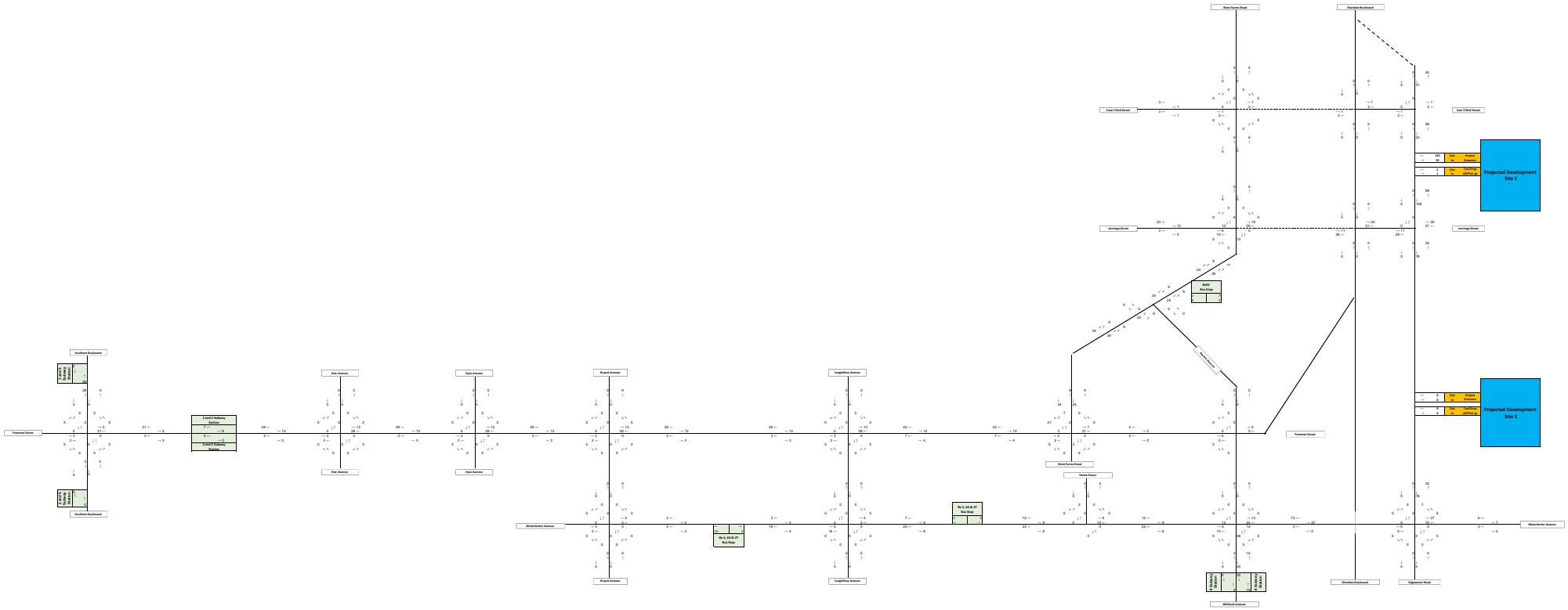


FIGURE C-22: PROJECTED DEVELOPMENT SITE-1 TRIP ASSIGNMENTS
WEEKDAY MIDDAY PEAK HOUR

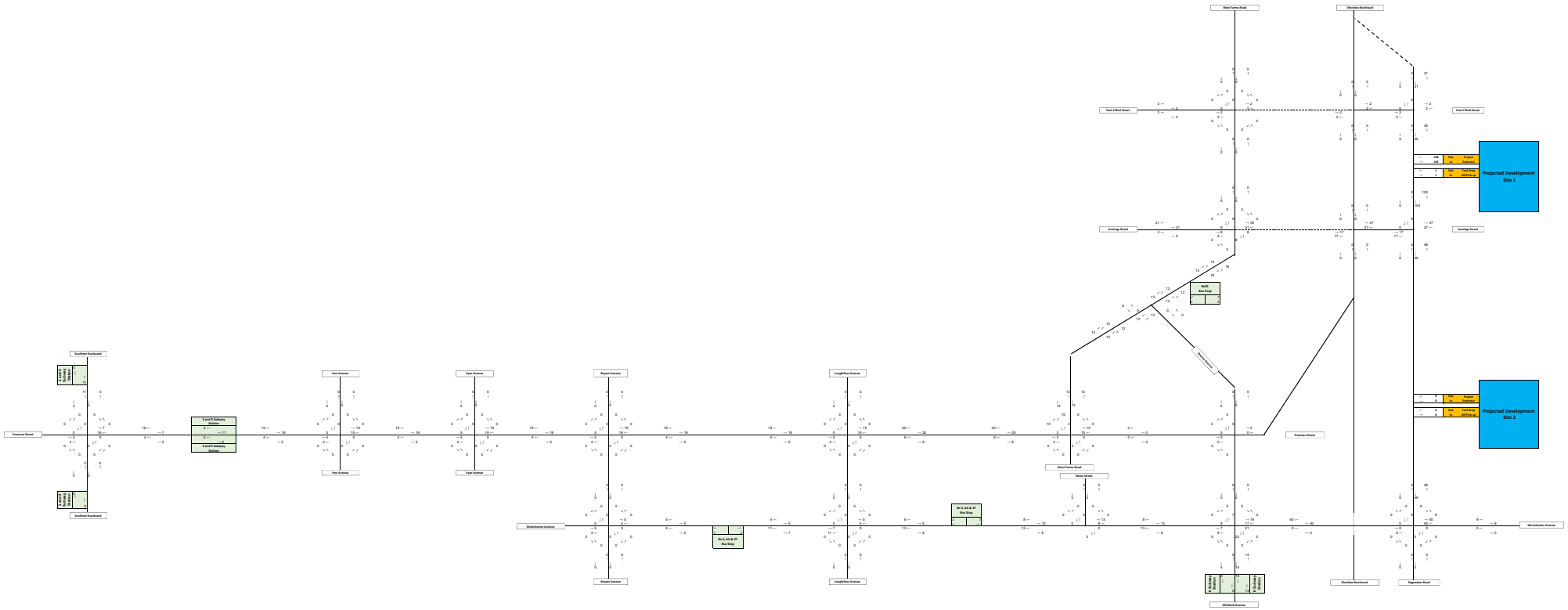


FIGURE C-23: PROJECTED DEVELOPMENT SITE-1 TRIP ASSIGNMENTS
WEEKDAY PM PEAK HOUR

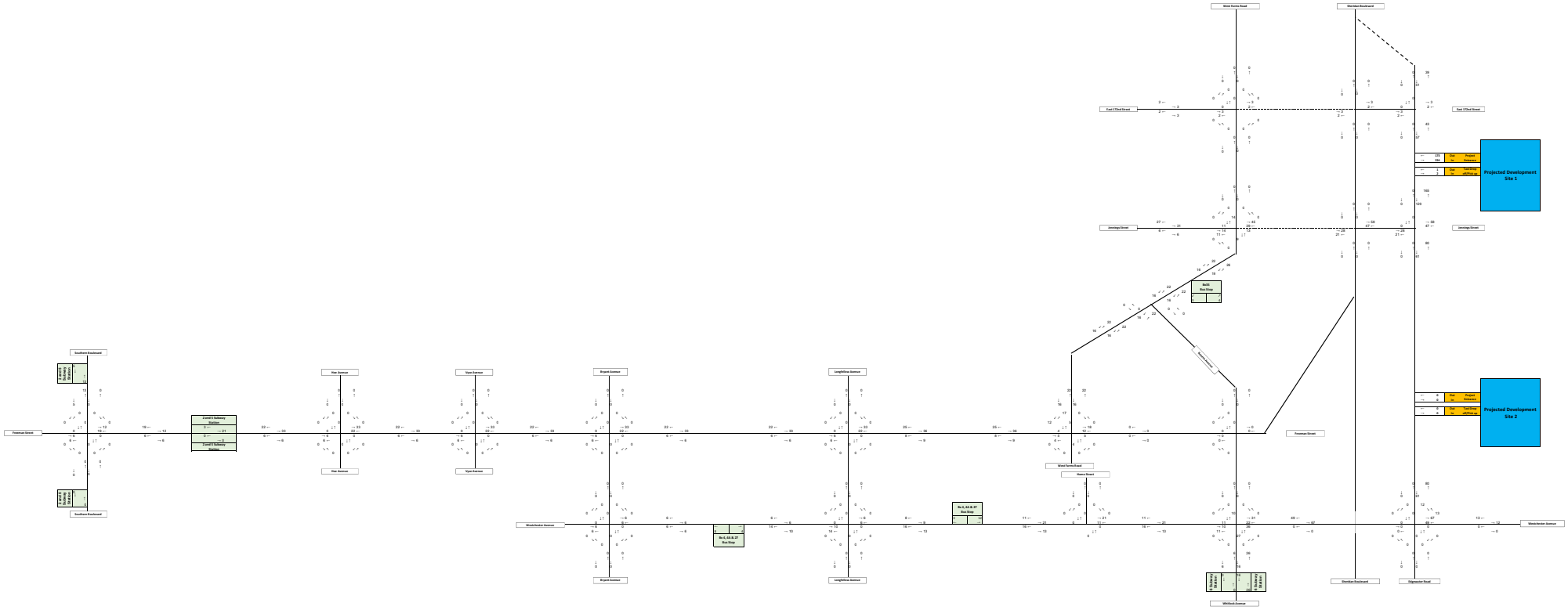


FIGURE C-24: PROJECTED DEVELOPMENT SITE-1 TRIP ASSIGNMENTS
SATURDAY MIDDAY PEAK HOUR

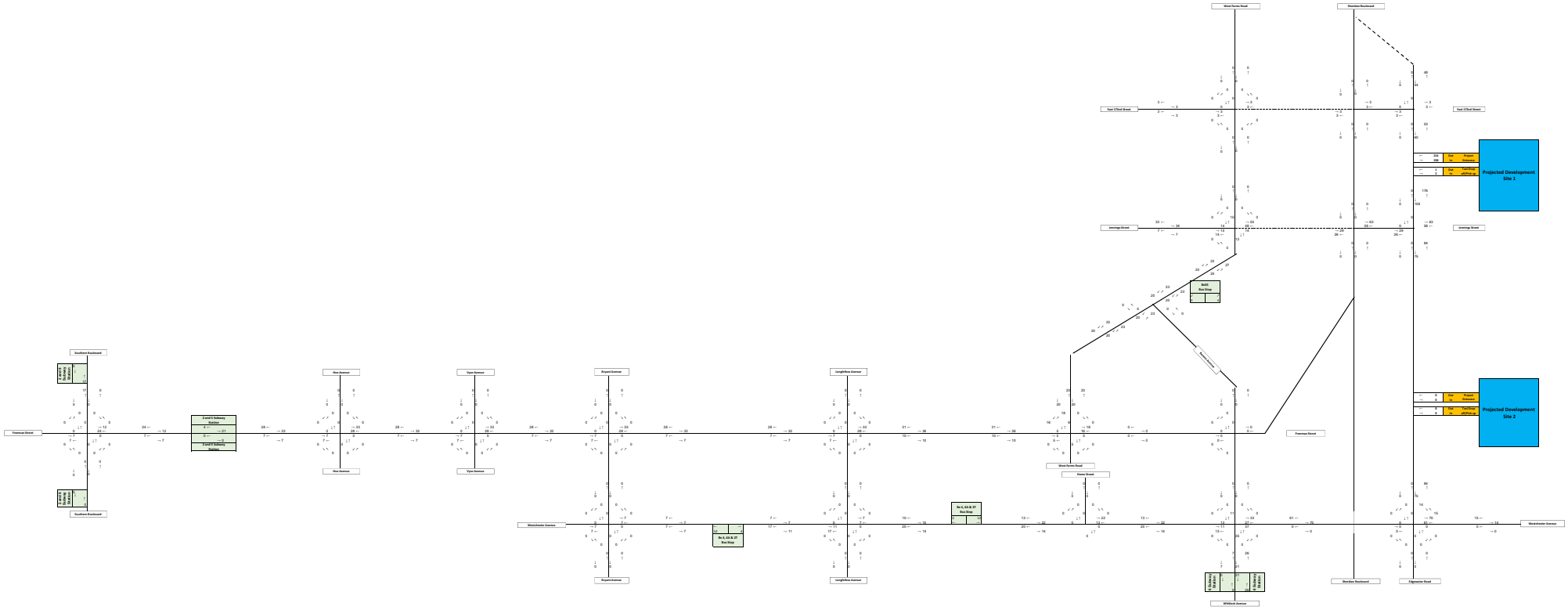


FIGURE C-25: PROJECTED DEVELOPMENT SITE-2 TRIP ASSIGNMENTS
WEEKDAY AM PEAK HOUR

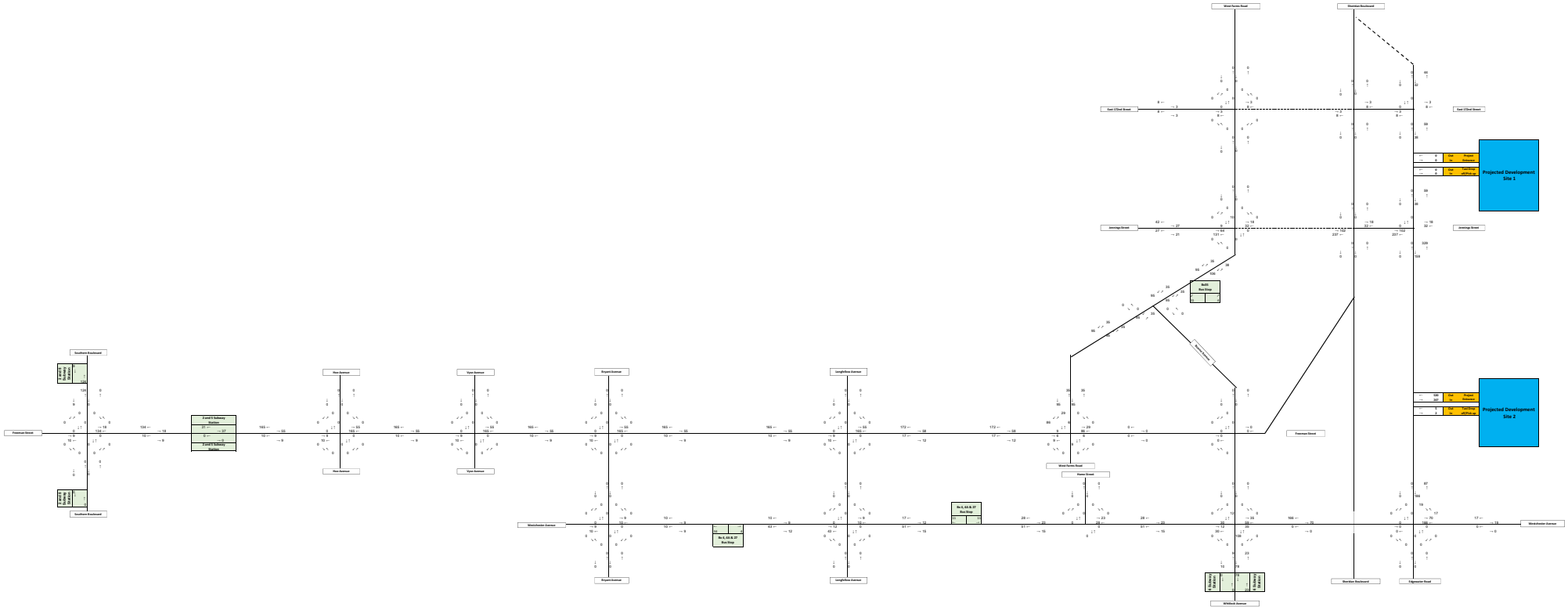


FIGURE C-26: PROJECTED DEVELOPMENT SITE-2 TRIP ASSIGNMENTS
WEEKDAY MIDDAY PEAK HOUR

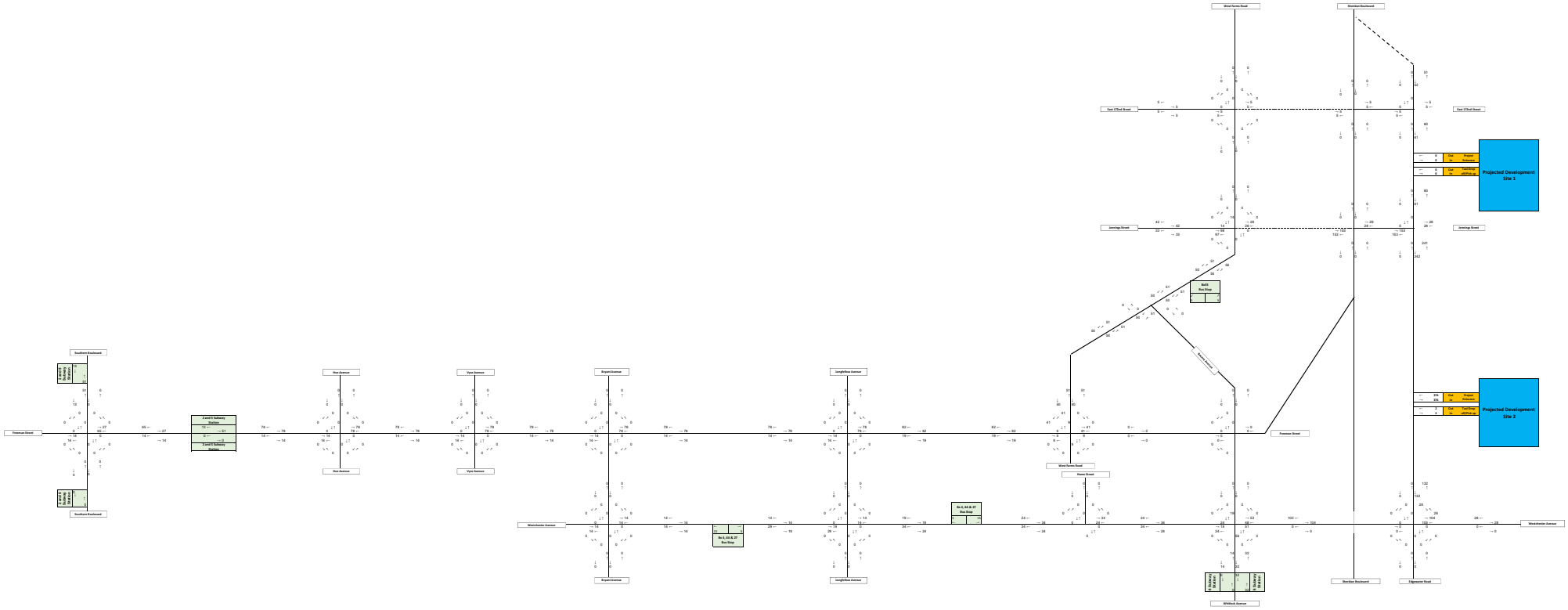


FIGURE C-27: PROJECTED DEVELOPMENT SITE-2 TRIP ASSIGNMENTS
WEEKDAY PM PEAK HOUR

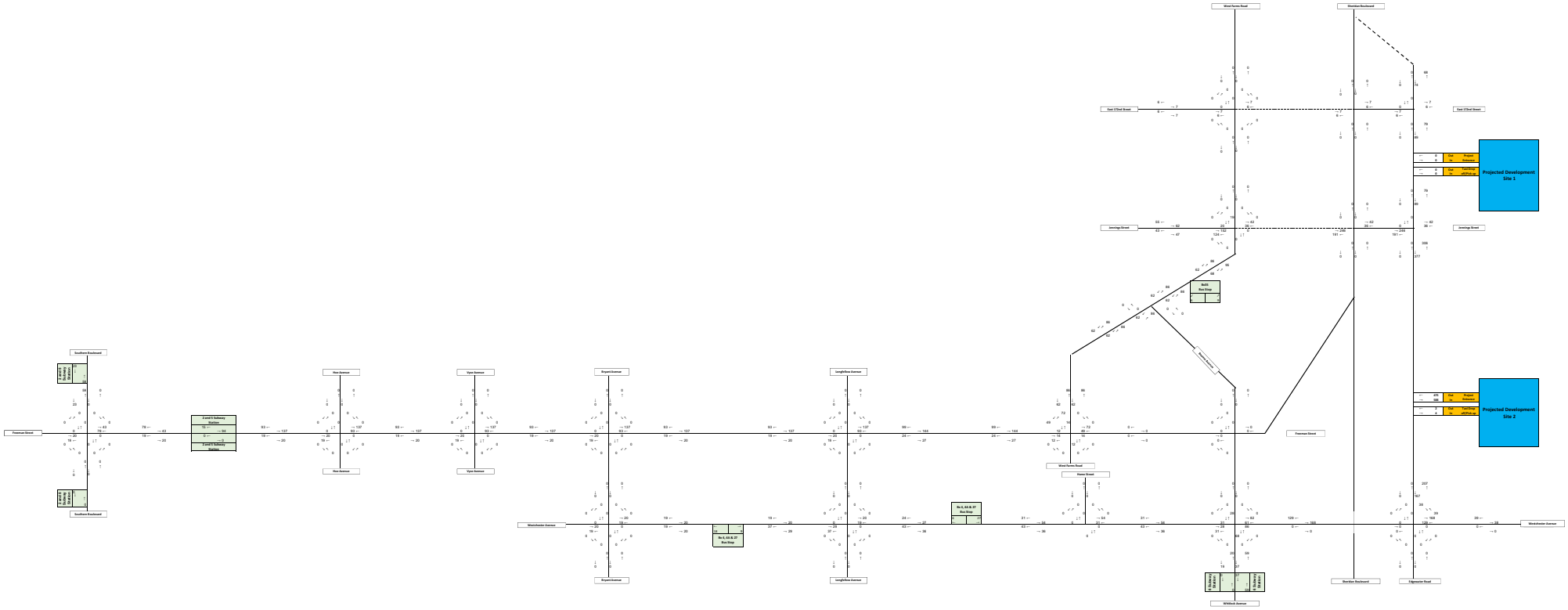


FIGURE C-28: PROJECTED DEVELOPMENT SITE-2 TRIP ASSIGNMENTS
SATURDAY MIDDAY PEAK HOUR

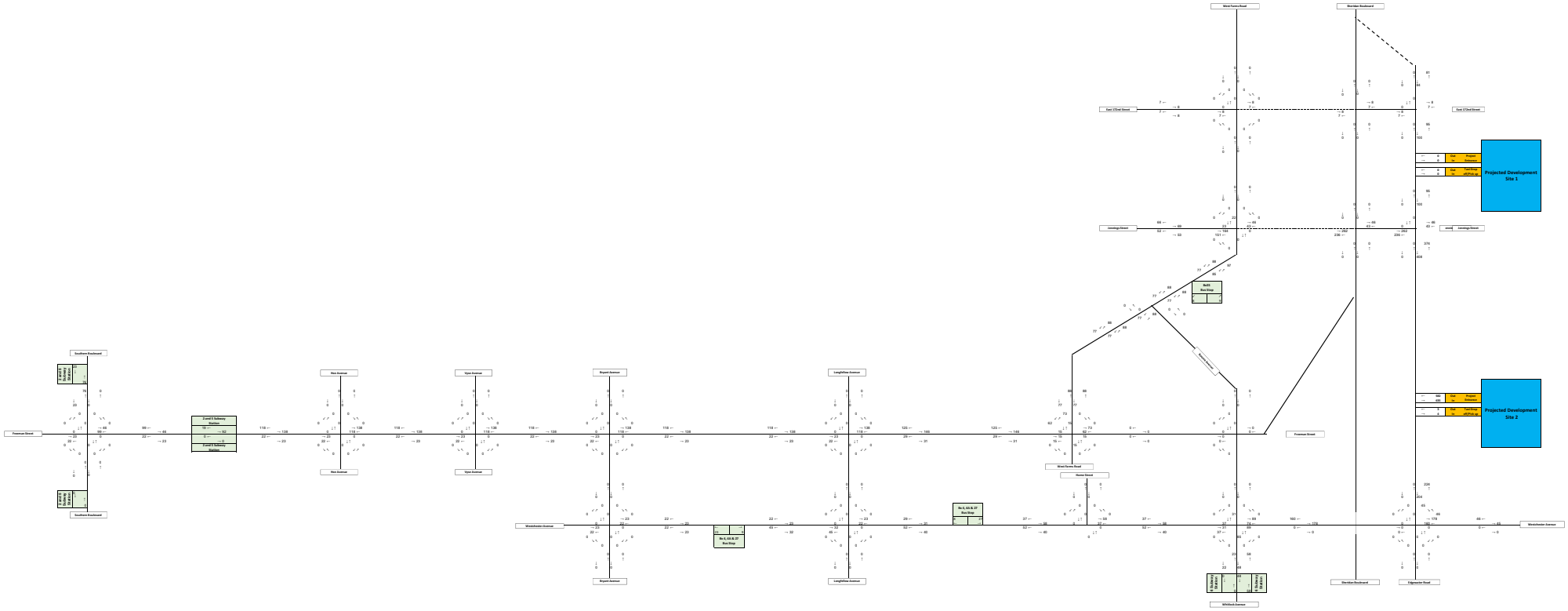


FIGURE C-29: TOTAL PROJECTED DEVELOPMENT SITES PEDESTRIAN TRIP ASSIGNMENTS
WEEKDAY AM PEAK HOUR

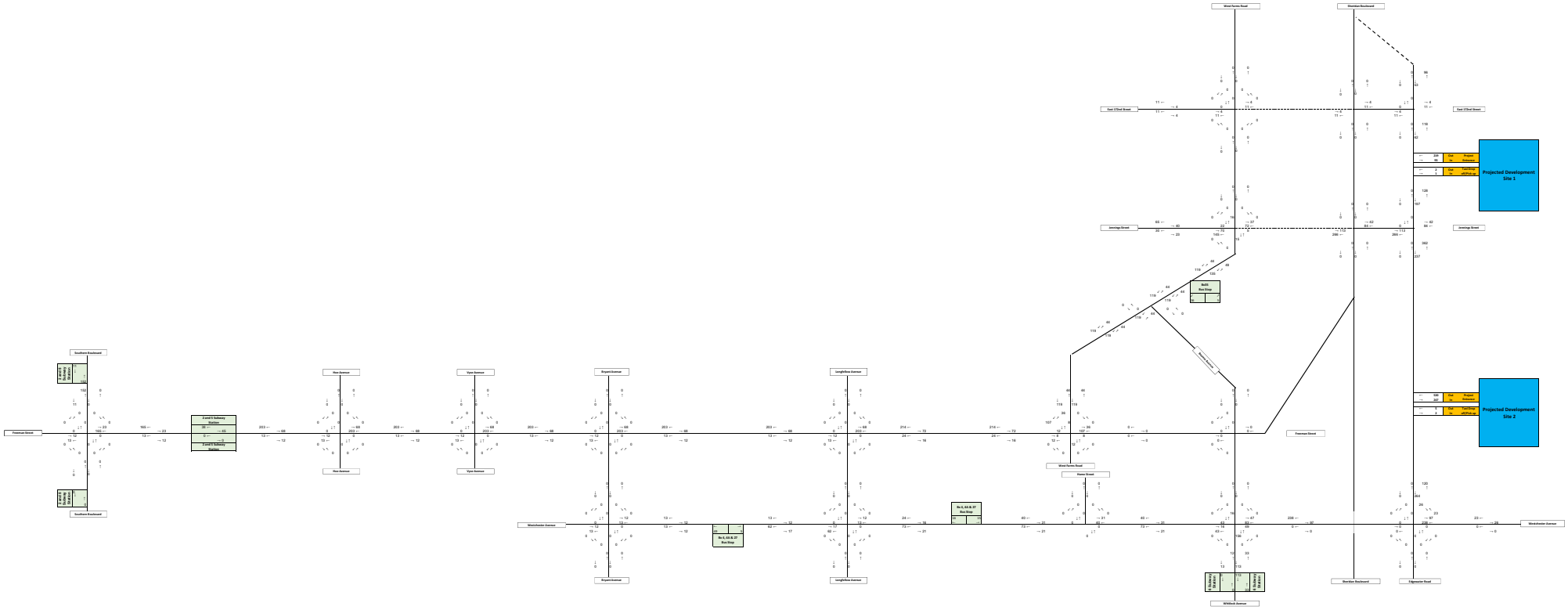


FIGURE C-30: TOTAL PROJECTED DEVELOPMENT SITES PEDESTRIAN TRIP ASSIGNMENTS
WEEKDAY MIDDAY PEAK HOUR

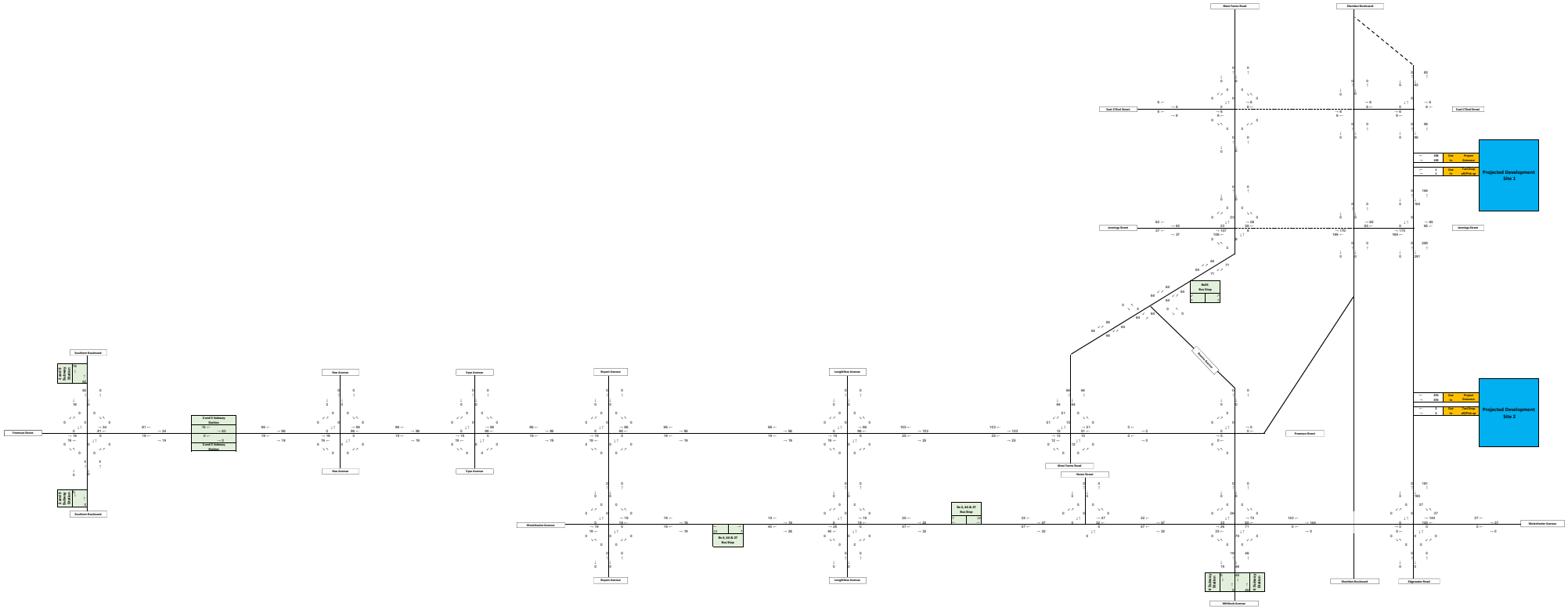


FIGURE C-31: TOTAL PROJECTED DEVELOPMENT SITES PEDESTRIAN TRIP ASSIGNMENTS
WEEKDAY PM PEAK HOUR

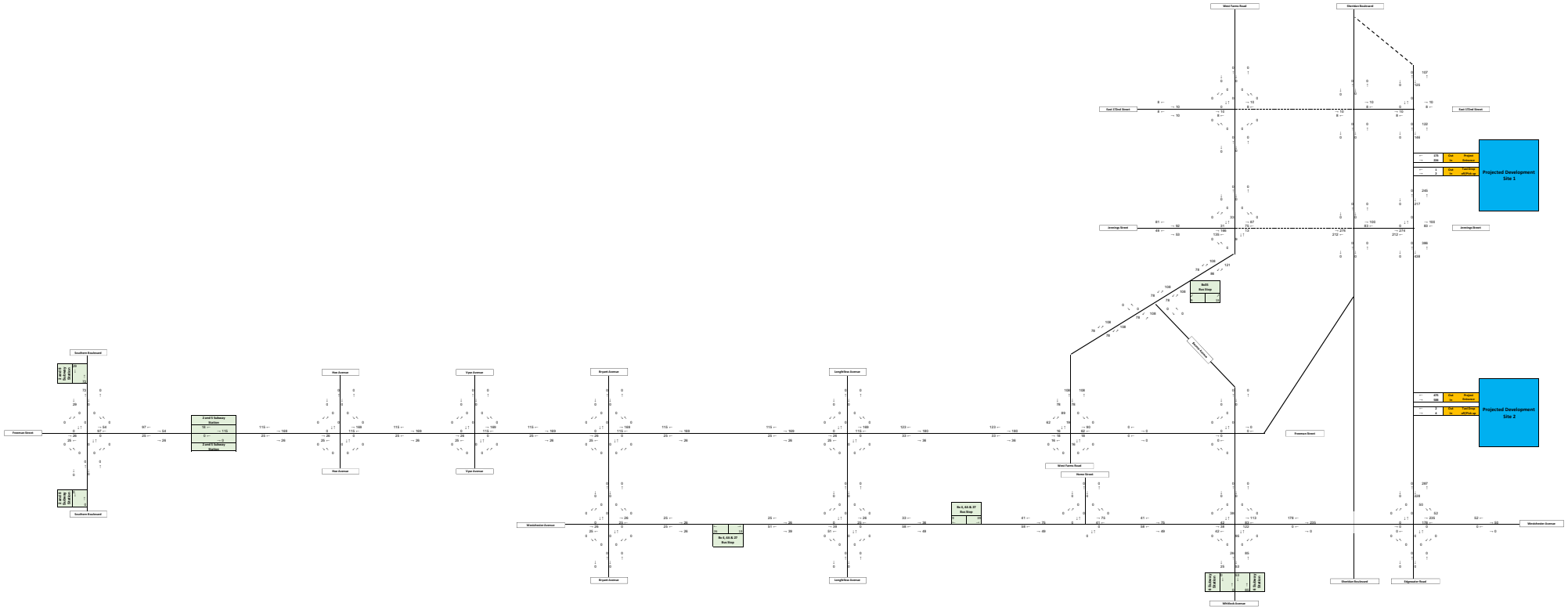
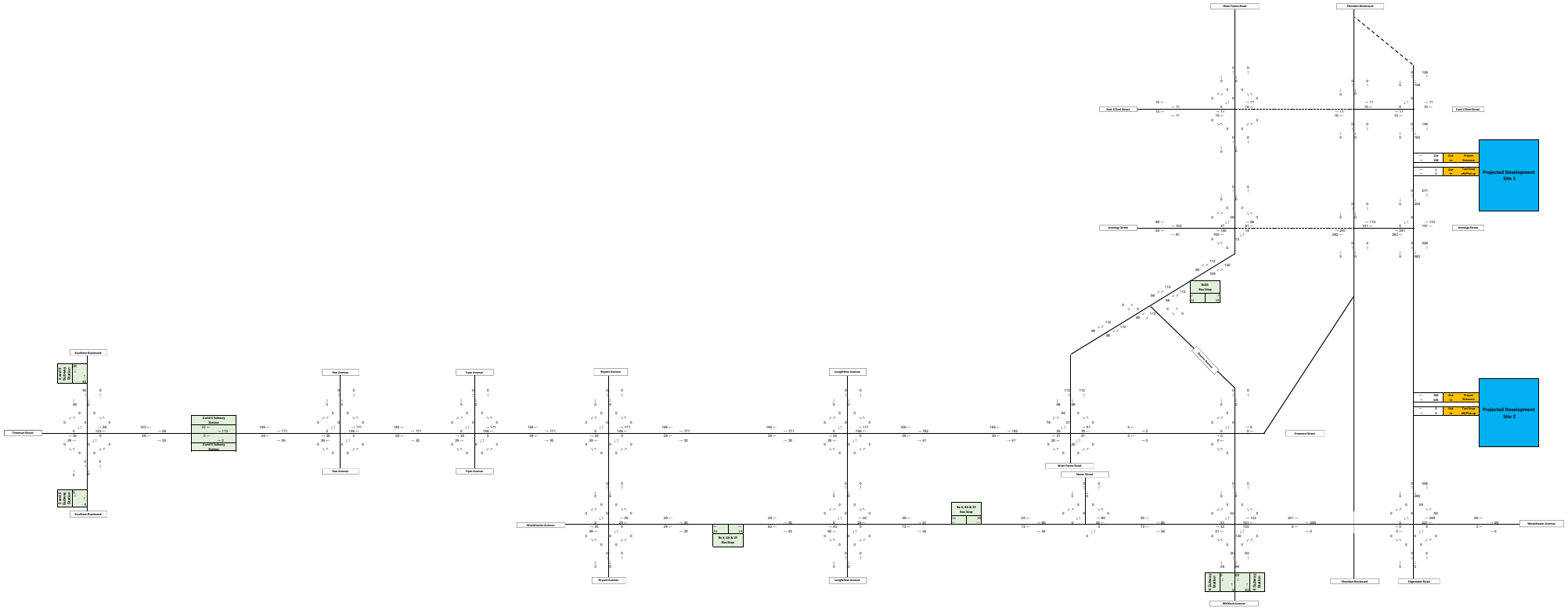


FIGURE C-32: TOTAL PROJECTED DEVELOPMENT SITES PEDESTRIAN TRIP ASSIGNMENTS
SATURDAY MIDDAY PEAK HOUR



D

1460 - 1480 Sheridan Boulevard Rezoning
Final Scope of Work (FSOW)
Air Quality Protocol Memorandum

LANGAN

LANGAN

Technical Memorandum

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.
21 Penn Plaza, 360 West 31st Street, 8th Floor New York, NY 10001 T: 212.479.5400 F: 212.479.5444

To: Stacey Barron, Yinqing Liu, Mauricio Garcia – NYC Department of City Planning

From: Stephanie Friel – Langan

CC: A. Paty-Diaz, C. Delgado – NYC Department of City Planning
R. Belsky, M. Stember-Young – Langan

Date: 07 April 2023

Re: Air Quality Protocol Memorandum
1460-1480 Sheridan Boulevard
Crotona Park East, New York
Langan Project No.: 170622001

INTRODUCTION AND PURPOSE

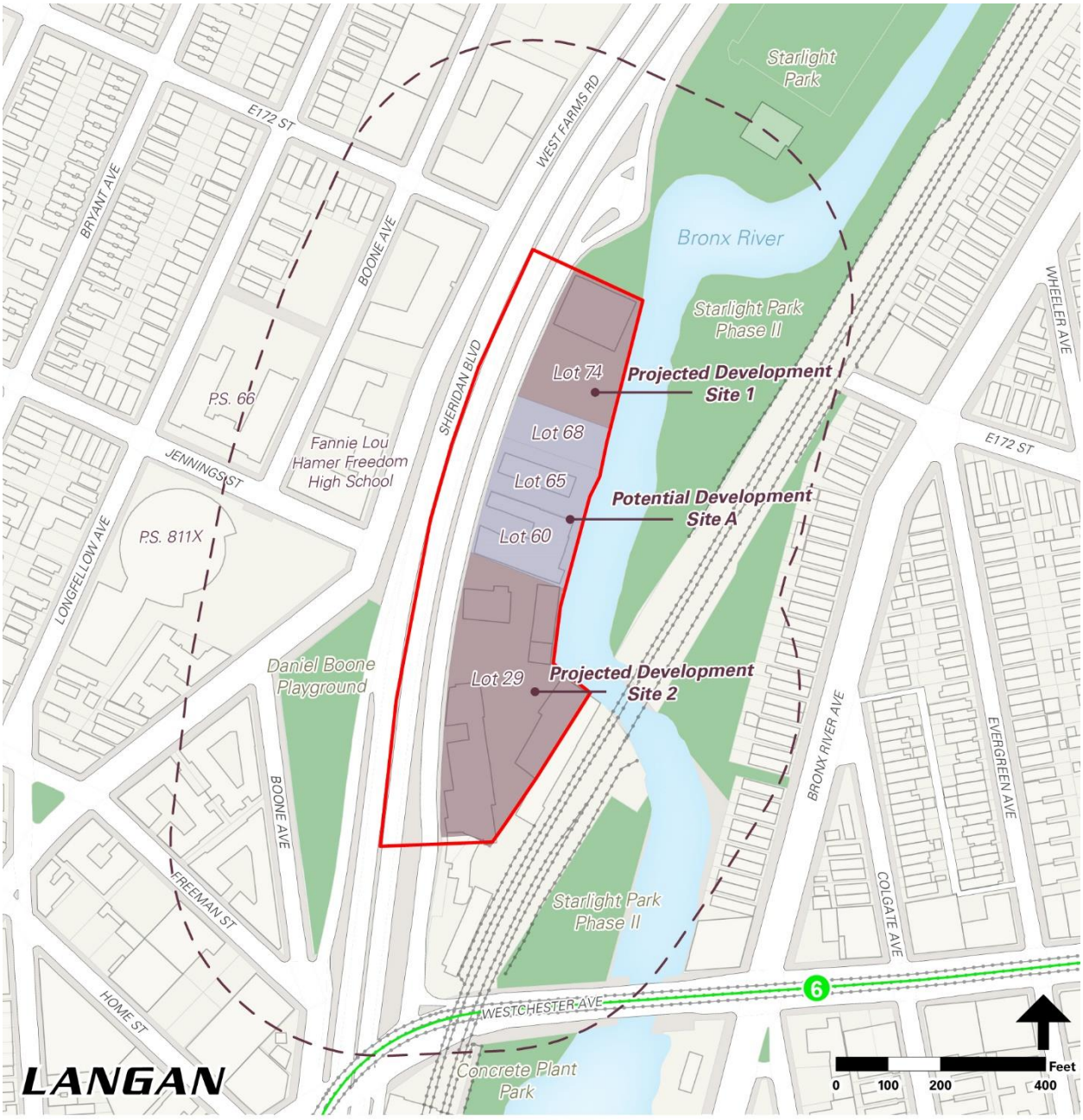
The memorandum describes our air quality analysis approach pursuant to City Environmental Quality Review (CEQR) for two proposed affordable housing developments at 1460 (Block 3017, Lot 74 - "Projected Development Site 1") and 1480 Sheridan Boulevard (Block 3017, Lot 29 - "Projected Development Site 2"). The Applicant – Westfarms Realty LLC and 1480 Sheridan Realty LLC – seeks the Proposed Actions: zoning map and text amendments from the City Planning Commission (CPC); affordable housing financing from the New York City Department of Housing, Preservation, and Development (HPD); and waterfront actions from the New York State Department of Environmental Conservation (DEC). The Department of City Planning (DCP) is the lead agency for City Environmental Quality Review (CEQR) on behalf of the CPC. The Proposed Actions would enable waterfront improvements and mixed-use buildings with fully affordable residential components and a small amount of retail.

This memorandum describes the proposed methodology to evaluate the potential for significant adverse air quality impacts that may result from the Proposed Actions, as required by the 2021 *CEQR Technical Manual*.

PROJECT DESCRIPTION

The Proposed Rezoning Area comprises Bronx Block 3017, Lots 29, 60, 65, 68, and 74 and is in the Crotona Park East neighborhood of the Bronx, New York. As shown in Figure 1, the Proposed Rezoning Area is bound by the prolongation of the southern streetline of East 172nd Street to the north, the Bronx River and the Amtrak right-of-way to the east, a line 300 feet north of Westchester Avenue to the south, and the centerline of Sheridan Boulevard to the west.

Figure 1: Project Site Location Map and Development Sites



The Proposed Rezoning Area contains two projected development sites, both of which are owned by the Applicant. The existing building on Projected Development Site 1 would be demolished and the site would be developed with a 24-story 240-foot-tall (225 feet plus a 15-foot-tall mechanical bulkhead), 263,862-gsf building containing approximately 304 dwelling units, all of which would be affordable units. Up to 5,000 gsf would be developed as ground floor retail. On Projected Development Site 2, the existing buildings would be demolished and the site would be developed with two 24-story, 240-foot-tall (225-foot-tall plus 15-foot-tall mechanical bulkhead) buildings totaling 602,155 gsf, including up to 16,229 gsf of retail and 666 dwelling units. Building 2 would contain 312,129 gsf of floor area (10,000 gsf of parking and 302,129 gsf of uses that would be served by the building's heating ventilation and air conditioning [HVAC] and hot water systems), and Building 3 would contain 300,026 gsf (10,000 gsf of enclosed parking and 280,026 gsf of uses that would be served by the building's HVAC and hot water systems).

Lots 60, 65, and 68 were identified as a "Potential Development Site A." If redeveloped, the existing buildings on this site would be demolished to allow a 24-story, 240-foot-tall (225-foot-tall plus 15-foot-tall bulkhead) mixed-use building comprising residential uses above ground floor retail and accessory parking.

The Proposed Project would introduce new buildings that would generate emissions from HVAC and hot water systems at multiple buildings clustered within 400 feet of each other. Therefore, project-on-existing and project-on-project stationary source analysis is warranted, including an analysis of potential effects of emissions from multiple buildings.

The Proposed Project would not introduce a new industrial emissions source, and therefore project-on-existing and project-on-project industrial analysis is not warranted. Additionally, there are no large or major sources (Title V or State Air Facility) within 1,000 feet of the Proposed Project. The Proposed Project is within 400 feet of a potentially unregistered industrial source, located at 1476 Sheridan Boulevard (Block 3017, Lot 28); therefore, an existing-on-project industrial source analysis is warranted.

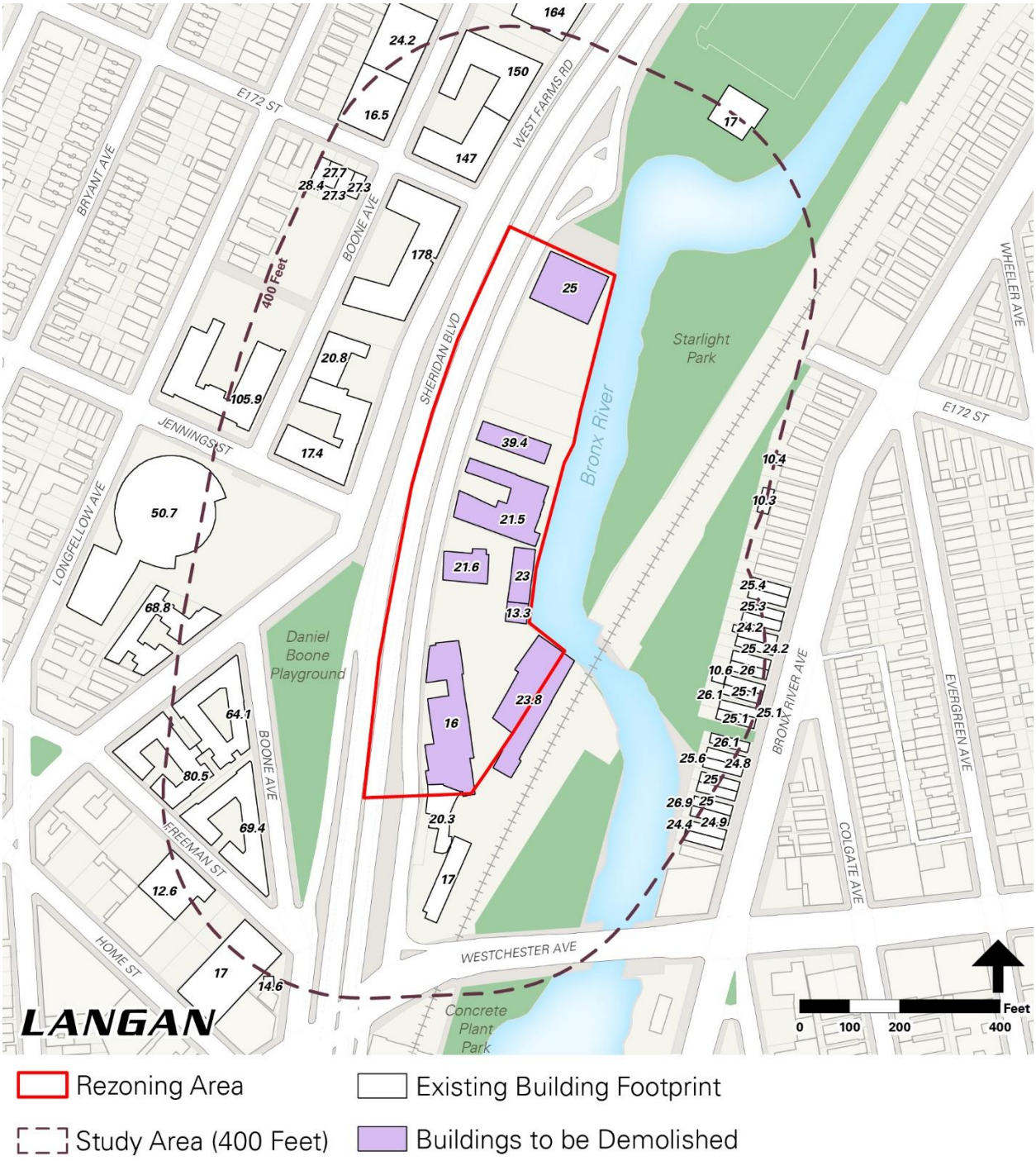
The Proposed Project would generate additional traffic on the surrounding streets, and a mobile source screening is warranted to determine if detailed analysis from roadway sources is required. Lastly, the Proposed Project would introduce a parking facility with more than 85 spaces, and a parking garage analysis is warranted.

PROJECT-GENERATED STATIONARY EMISSIONS

Project-on-Existing

Figure 2 shows the building heights within 400 feet of the development sites.

Figure 2: Existing Building Heights



Including Potential Development Site A, the RWCDS established that the Proposed Actions would allow up to four 240-foot-tall buildings (225 feet plus 15-foot-tall mechanical bulkheads) across the three development sites. The project-generated buildings would be the tallest buildings within 400 feet of the development sites. The tallest existing buildings within 400 feet of the development sites include 14- and 15-story buildings on the west side of Sheridan Boulevard, the tallest of which rises to a height of 178 feet[1]. Because the Proposed Actions would introduce four buildings that would rise to a roof height of 225 feet and there are no existing buildings of similar or greater height within 400 feet, the project-generated buildings would not result in a significant adverse air quality impact to existing receptors from project-generated stationary emissions.

Project-on-Project Preliminary Screening

Discrete Building Emissions

All project-generated buildings would use electricity, steam, or natural gas as a fuel source. The project-generated buildings and distance between the tower components of each building are shown in Figure 3. The proposed gsf by building is shown in Table 1.

Figure 3: Project-Generated Buildings

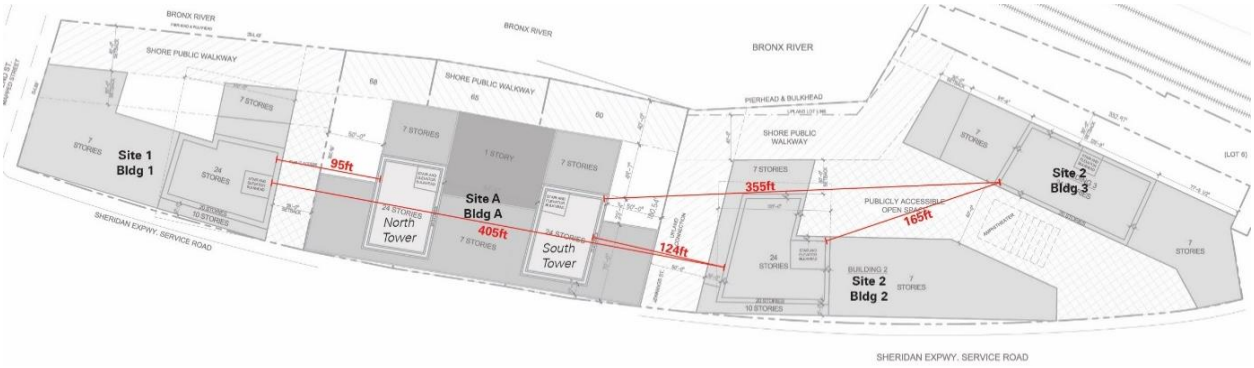


Table 1: Proposed GSF by Building

Building	GSF[1]	Height (ft)		
		Roof	Bulkhead	Stack Release*
1	263,862	225	240	243
A	352,915	225	240	243
2	302,129	225	240	243
3	280,026	225	240	243

* The stack would release a minimum of three feet above the roof height, per Building Code.

[1] Per Certificates of Occupancy issued by the Department of Buildings to Block 3013, Lot 7501 and Block 3013, Lots 7501 and 7502.

The Proposed Actions would allow four buildings with a roof height of 225 feet that would use either natural gas or electricity as a fuel source for HVAC and hot water systems.[2] Emissions would release at a height of at least 243 feet. Because the Proposed Actions would introduce multiple buildings of similar height, an assessment is warranted for potential project-on-project impacts.

Buildings 1, 2, and 3

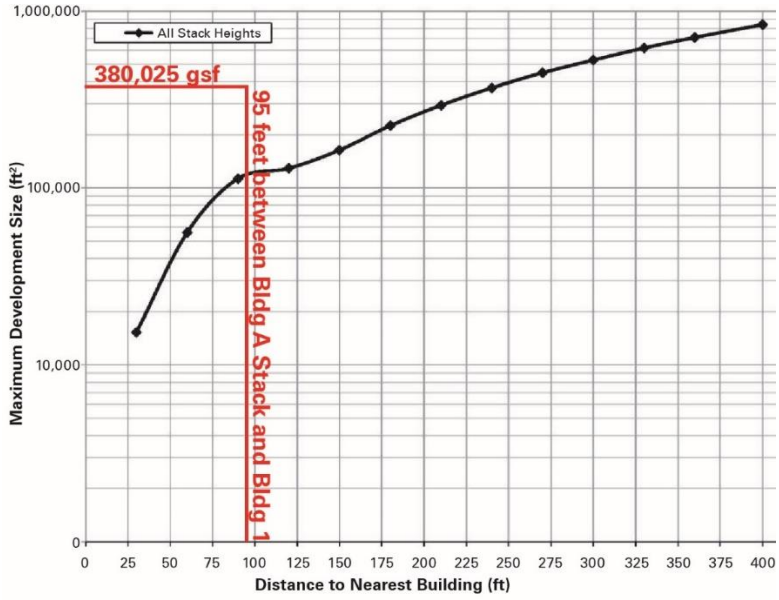
Buildings 1, 2, and 3 would have HVAC and hot water systems powered by electricity. Therefore, a detailed assessment of emissions generated by Buildings 1, 2, and 3 is not warranted.

Building A

The Applicant does not own Potential Development Site A, and the HVAC and hot water systems were conservatively assumed to be powered by natural gas for this building. At its closest point, the tower component of Building A (on Potential Development Site A) would be 95 feet from the façade of Building 1, and 135 feet from Building 2. Per Building Code, HVAC and hot water emissions stacks must be placed at least 10 feet from the roof's edge. When accounting for this setback, the stack on Potential Development Site A would be 105 feet from Building A – the nearest sensitive receptor – at its closest point. Figure 4 shows emissions form Potential Development Site A would fail the nomograph screening; therefore, a detailed air quality analysis of project-generated stationary sources from this site was warranted.

[2]On December 22, 2021, Mayor Bill de Blasio signed Intro 2317A. The law will sets restrictions on fossil fuel usage in newly constructed residential and commercial buildings by phasing in strict emissions limits beginning in 2023. Buildings of all sizes must be constructed fully electric by 2027. Source: December 22, 2021 City of New York Press Release

Figure 4: Nomograph Screening (Potential Development Site A)



Stack Location Specifications

As a conservative assumption, HVAC stacks for Building A will be placed on the towers – one stack on the North Tower and one stack on the South Tower.

Detailed Project-on-Project Analysis

While Building A would likely be required to use electric-powered heating, cooling, and hot water systems (because it would receive DOB approval after Intro 2317A would be phased in), the Applicant does not own Potential Development Site A, and, therefore, a detailed air quality assessment is warranted. Generic fuel consumption rates provided by the US Department of Energy and Environmental Protection Agency (EPA) AP-42 emission factors will be used to estimate worst-case conditions.

Emission Rates and Stack Parameters

As described above, emission rates were calculated using U.S. Department of Energy fuel consumption rates and EPA AP-42 emission factors. The following stack parameters were used per the New York City Department of Environmental Protection (NYC DEP) Boiler Database Review provided by Department of City Planning via email on March 14, 2023:

- Estimated Boiler Capacity: 7 million British Thermal Units per hour (MMBTU/hr)
- Exhaust velocity at all loads: 6.9 meter/sec
- Inner stack diameter: 0.46 meters
- Stack exhaust temperature: 426 °K

- Stack height: 3 feet above mechanical bulkhead level, which was assumed to be 10 feet above the roof

Stack Placement

To represent worst-case conditions, the sources for Potential Development Site A will conservatively be placed on each tower.

Methods to Estimate NO_2 Concentrations

AERMOD can produce detailed output data that can be analyzed at the hourly level required for the form of the one-hour standards. EPA has also developed guidance to estimate the NO_2/NO_x conversion ratio, applicable to heating and hot water systems, as discussed further below. The one-hour NO_2 concentration associated with the project's emissions will conservatively be estimated using AERMOD model's Tier 2 ARM2 option.

Meteorological Data

Analyses will be conducted using the latest five consecutive years of meteorological data (currently, 2017-2021). Surface data will be obtained from LaGuardia Airport, and upper air data will be obtained from Brookhaven station, New York. Meteorological data will be obtained by New York State Department of Environmental Conservation (NYSDEC)

Receptor Placement

Discrete receptors (i.e., locations at which concentrations are calculated) will be modeled along the façade of each building to represent sensitive locations such as operable windows and intake vents. Rows of receptors will be spaced in approximately 25-foot horizontal intervals, and at 10-foot vertical intervals.

Background Concentrations

The background concentrations values noted Table 2 will be added to the modeling results to estimate the total concentration for 1-hour and annual NO2, and 24-hour PM_{10}. Predicted values were compared to the NAAQS and CEQR *de minimis* criteria.

Table 2: Background Concentrations (µg/m³) Recorded at IS 52 and IS 74, The Bronx

Pollutant	Averaging Period	Calculation Method	Background Level (µg/m³)	NAAQS (µg/m³)
$PM_{2.5}$	24-hour	3-year average of 98th percentile for 2019, 2020 and 2021.	18.9 (IS 74)	35
	Annual	3-year average of annual mean for 2019, 2020 and 2021.	6.7 (IS 74)	12
NO_2	1-hour	3-year average of 98th percentile for 2019, 2020 and 2021.	77.4 (IS 52)	188
	Annual	Maximum annual average for 2019, 2020 and 2021.	28.59 (IS 52)	100

Resulting Concentrations

AERMOD will be run both with and without downwash for the pollutants of concern. The highest resulting concentrations at the receptors will be summarized, and will be compared to CEQR impact criteria: both NAAQS and CEQR *de minimis* thresholds. If one or more of the CEQR impact criteria are exceeded, stack locations will be relocated in increments of approximately five feet on the building rooftops, and the AERMOD model will be re-run (for both with and without downwash scenarios) with the new representative stack locations. This may include increasing the release height for each building, if warranted.

If no reasonable configuration of stack locations results in concentrations below impact criteria for all pollutants, the fuel source powering each buildings' heating, cooling, and hot water systems may be restricted to electric- or steam-powered systems. These restrictions would be memorialized in an E-Designation that would limit the fuel source type and the location or release height of the emissions stack on each building.

INDUSTRIAL SOURCES

Per the guidance established in the *CEQR Technical Manual*, analyses are required to assess whether the potential emissions from the nearby industrial source could be significant and adverse on the Proposed Project.

Clean Air Tracking System (CATS)

Based on a review of New York City Department of Environmental Protection (NYC DEP) Clean Air Tracking System (CATS), Table 3 identifies the permits within 400 feet of the Proposed Development (see Appendix A).

Table 3: Clean Air Tracking System (CATS) Search

BI	Lot	Address	Application	Type	Exp. Date
3007	8	1434 Longfellow Ave	PR009420	Engine/Generator	3/5/2023
3008	1	1001 Jennings St	CB288201	Boiler	12/24/2022

Per CEQR guidance, boilers, engines, and generators for residential or commercial uses pursuant to a NYCDEP air permit or registration do not have the potential to result in significant adverse impacts and, therefore, do not warrant further analysis.

Unregistered Industrial Facilities

Based on street-level imagery, it appears Block 3017, Lot 28 (1476 Sheridan Expressway) contains an autobody shop with an unregistered spray painting booth at HMT Auto Repair. Lot 28 does not have any active CATS permits and is adjacent to Projected Development Site 2.

A site visit conducted on 23 November 2021 confirmed this facility undertakes automotive-related spray painting. A representative at the facility noted the autobody shop largely does "touch ups," and that the shop will paint a full car approximately twice per month. The facility is ventilated by an exhaust located at the rear of the building, approximately 5-feet above the shop's floor level. The exhaust is located approximately 32 feet from the proposed eastern façade of the Building 3 on Projected Development Site 2, as shown in Figure and Photograph 1. The proximity of the unregistered spray-painting booth to the Proposed Rezoning Area warrants further analysis.

Figure 5: Location of Exhaust from Unregistered Industrial Facility



Source: Zoning and Land Use Map (ZoLa) maintained by DCP.

Photograph 1: Exhaust Location at HMT Auto Repair



Pollutants of Concern

Toxic Air Pollutants

Two factors are critical in estimating the potential impacts of the air emissions – pollutant toxicities and quantities emitted. Emissions from the equipment and operations at 1476 Sheridan Expressway were estimated based on a representative facility identified in the *139-01 Northern Boulevard Environmental Assessment Statement* (CEQR No. 07DCP029Q – aka the "Solow Report") and the *1220 Avenue P Rezoning EAS* (CEQR No. 19DCP109K).

Table 4 identifies the 12 pollutants to be included in the analysis. While no federal standards have been promulgated for toxic air pollutants, the Division of Air Recourses (DAR) of NYSDEC has issued guidance (DAR-1) that outlines the procedure for evaluating the emissions of the criteria and non-criteria (toxic) pollutants from process operations in New York State. DAR-1 establishes acceptable ambient levels for these pollutants based on human exposure criteria.

Table 4: Typical Composition of VOC Emissions from Auto Spray Paint Booths

			Sherwin William Paints		
		Rust-Oleum Primer	Twilight Blue	Black Sunfire	Composition Used in This Analysis
Chemical Name	CAS #	Weight % Less Than	% by Weight		
1,2,4-Trimethylbenzene	95-63-6				
Acetone*	67-64-1	10	42	43	43
Naphtha Light Aliphatic	64742-89-8	10			10
Naphtha Heavy Aromatic	64742-94-5	5			5
Ethanol	64-17-5		1	2	2
Ethyl 3-Ethoxyproprioante	763-69-9		9	9	9
Ethylbenzene	100-41-4	5			5
Methyl Ethyl Ketone	78-93-3		8	7	8
Butyl Acetate	123-86-4	5			5
Stoddard Solvents	8052-41-3	10			10
Toluene	108-88-3	10	9	8	10
Xylene	1330-20-7	10			10

To evaluate short-term and annual impacts of toxic air pollutants, DAR-1 has established short-term guideline concentrations (SGCs) and annual guideline concentrations (AGCs) for exposure limits. These are maximum allowable 1-hour and annual guideline concentrations, respectively, that are considered acceptable concentrations below which there should be no adverse health effects. The latest DAR-1 was published in February 2021 and some of the chemicals listed in Table 4 have been removed. The SGCs and AGCs associated with the chemicals have been updated. The latest DAR-1 will be used in the industrial source assessment.

Based on SGCs and AGCs, NYSDEC has developed methodologies that can be used to estimate the potential impacts of air toxic pollutants from single or multiple emission sources. If the concentration of any pollutant exceeds its applicable guideline value (either SGC or AGC), a more detailed analysis would be required. Otherwise, no further analysis is warranted. In this analysis, we will compare the results with each pollutant's respective SGC and AGC to determine whether the emissions generated from the industrial source has any potential to result in significant adverse air quality impacts along the façade of the Proposed Project.

To assess the carcinogenic pollutants, unit risk factors (based on the toxicity of each pollutant) are used. Based on the latest DAR-1 for carcinogens, the NYSDEC (as the EPA) does not consider an overall incremental cancer risk from a proposed action of less than ten-in-one million to be

significant for non-criteria air contaminants identified as carcinogens. For non-carcinogens, a Hazard Index (HI) that is calculated as the sum of Hazard Quotient of all non-carcinogen non-criteria air contaminant must be less than two. In the case where an air contaminant has both carcinogenic and non-carcinogenic health effects, the air contaminant will be evaluated for the potential carcinogenic risk only. If the total incremental cancer risk of the individual or combined carcinogenic pollutants is less than ten-in-a million, no significant air quality impacts are predicted to occur due to these pollutant releases. Because DAR-1 annual guideline concentrations for carcinogenic pollutants (AGC) are compiled on a one-per-million basis, the unit risk factors are already incorporated in these values and annual concentration could be compared directly to the AGC value.

To identify the inhalation health risk from air contaminants, the numerical risk or calculated risk must be determined. Risks that are calculated after air pollution control is applied are known as residual risk. The goal for the acceptable residual risk demonstration is to have the ambient air concentrations for all the air contaminants emitted from the process emission source be less than their respective AGC/SGCs. Residual risk can be expressed as the excess cancer risk, defined as a one-in-a-million chance, for people exposed to a carcinogen or as the hazard index (HI) for people exposed to non-carcinogens. For a cumulative annual cancer risk assessment, the cancer risk predicted for each individual air contaminant is added up to estimate the cumulative risk. This screening-level assessment for carcinogens is based on the individual contaminants in the mixture being additive. For a non-cancer health risk assessment, exposure lasting months, years, or a lifetime is established on an emission source or emission point basis. The risk is characterized as the sum of hazard quotients (HQ) of all non-carcinogenic air pollutants.

The acceptable residual risk management range for process emission source's and/or emission point's must be less than 10-in-a-million cancer risk for those non-criteria air contaminants identified as carcinogens or less than a HI of 2 for non-carcinogen non-criteria air contaminants. In the case where an air contaminant has both carcinogenic and noncarcinogenic health effects, the air contaminant will be evaluated for the potential carcinogenic risk only, as the published AGC is typically based on cancer risk.

Criteria Air Pollutants

The current edition (February 2021) of the DAR-1 separates criteria pollutants (i.e., pollutants for which national ambient air quality standards (NAAQS) have been established) specifically, particulate matter smaller than 2.5 microns ($PM_{2.5}$) and nitrogen dioxide (NO_2), from the list of toxic pollutants, even though criteria pollutants are also toxic based on health implications. This edition no longer includes short-term (1-hour SGC) and annual (AGC) guideline values for $PM_{2.5}$ or NO_2, because exposure guidelines are established in the NAAQS. As per the DAR-1 guidance, federal standards for $PM_{2.5}$ and NO_2 are not considered SGC or AGC, and are only included in the DAR-1 to facilitate screening or regulatory analysis. Following this revision of DAR-1 and guidance, if a $PM_{2.5}$ analysis from industrial sources is required, the cumulative short-term and annual $PM_{2.5}$ emission concentrations from all evaluated emission points will be compared to the 24-hour NAAQS of 35 ug/m^3 and the annual NAAQS of 12 ug/m^3. If a NO_2 analysis is required, the 1-hour NAAQS of 188 ug/m^3 and annual standard of 100 ug/m^3 will be applied.

Emission Data

As mentioned above, emission rates for toxic air pollutants and criteria pollutants were estimated based on a representative facility in the *139-01 Northern Boulevard Environmental Assessment Statement* (CEQR No. 07DCP029Q – the "Solow Report") and the *1220 Avenue P Rezoning EAS* (CEQR No. 19DCP109K). The HMT Auto Repair facility has the potential to emit toxic air pollutants and PM2.5 from the paint booth. Therefore, we propose to assess the potential impacts of toxic air pollutants and PM2.5.

Based on the Solow Report and the *1220 Avenue P Rezoning EAS*, the following assumptions are used to determine a RWCDS pollutant emission rate per DCP recommendations.

- Autobody paint spray booths typically operate from four to eight hours per day and 200 to 250 days per year. Four hours per day was used as a conservative assumption for predicting short-term (one-hour average) emission rate.

- Auto paint composition includes solids and volatile organic compounds (VOCs). A gallon of auto paint could weigh from six to 15 pounds (lbs), depending on the ingredients. In this assessment, a 10-lb average weight was used.

- Table 4 below shows the percentages by weight of various VOCs (mostly solvents) found in representative auto spray primers and paints. The percentages were obtained from Material Safety Data Sheets (MSDS) for one representative primer and two representative auto paints by major manufacturers. Some compounds are found in both primer and paint, while others are found only in one or the other. Acetone accounts for the largest percentage of the emissions (up to 43%), while the remaining compounds account for 1 to 11 percent of the paints and primers. As a conservative measure, the highest percentage shown for the VOC in Table 4 was used resulting in highest potential emissions of individual pollutants.

- In estimating PM emission rate, it is assumed that the paint booth would use an average of two quarts of auto paint per day, or 0.50 gallons (see Solow Report). Each gallon of paint weighs 10 lbs with 50 percent of solids. Thus, this paint booth consumes 2.5 lbs of solids daily (0.5 x 10 x .5). The amount of solids (i.e., PM2.5) emitted into the air depends on the transfer efficiency of the paint gun. EPA's AP-42, Section 4.2.2.8, discusses evaporation losses for automobile and light duty truck surface coating operations. According to AP-42, the average transfer efficiency of solvent borne spray is 40 percent, which means that 60 percent are likely emitted into the air. Although current technology may achieve a higher transfer efficiency of 80 percent or more with the use of high-pressure paint guns, the value of 40 percent transfer efficiency was used for this analysis as a conservative assumption. Therefore, 60 percent of solids, or 1.5 lbs per day, are emitted into the air (0.6 x 2.5). According to AP-42, Appendix B.1, 46.7 percent of total solids were assumed to be PM10, and 28.6 percent of total solids were assumed as PM2.5.

Table 5: Toxic Air Pollutant Emission Rates

CAS Number	Pollutant Name	Emission Rates Hourly g/sec	Emission Rates Annual g/sec	DAR-1 SGC ug/m³	DAR-1 AGC ug/m³
67-64-1	Acetone	4.20E-02	4.02E-05	180,000	30,000
64742-89-8	Naphtha Light Aliphatic	9.77E-03	9.35E-06	-	3,200
64742-94-5	Naphtha Heavy Aromatic	4.88E-03	4.67E-06	-	100
64-17-5	Ethanol	1.07E-02	1.03E-05	-	45,000
763-69-9	Ethyl 3-Ethoxyproprioanate	1.95E-03	1.87E-06	140	64
100-41-4	Ethylbenzene	8.97E-03	8.41E-06	-	1,000
78-93-3	Methyl Ethyl Ketone	4.88E-03	4.67E-06	13,000	5,000
123-86-4	Butyl Acetate	4.88E-03	4.67E-06	71,300	565
8052-41-3	Stoddard Solvents	7.81E-03	7.48E-06	-	900
108-88-3	Toluene	9.77E-03	9.35E-06	37,000	5,000
1330-20-7	Xylenes	1.07E-02	1.03E-05	22,000	100
NY075-00-5	PM10	2.88E-04	2.67E-05	150	-
NY075-02-5	PM2.5	4.71E-04	4.37E-05	35	12

Source: *1220 Avenue P Rezoning EAS* Estimated Emission Rates

Table 6: Criteria Pollutant Emission Rates

CAS Number	Pollutant Name	Emission Rate Hourly g/sec	Emission Rate Annual g/sec	NAAQS 1-hr ug/m³	NAAQS 24-hr ug/m³	NAAQS Annual ug/m³
NY075-00-5	PM10	2.88E-04	2.67E-05	-	150	-
NY075-02-5	PM2.5	4.71E-04	4.37E-05	-	35	12

Source: *1220 Avenue P Rezoning EAS* Estimated Emission Rates

Air Dispersion Modeling Methodology

As a first step in toxic air pollutant analysis, the *CEQR Technical Manual* recommends conducting a screening analysis using the pre-tabulated values from Table 17-3 of the manual, which are based on a generic emission rate of 1 gram per second. If the corresponding results show an exceedance of either the AGC or SGC, further analysis is warranted using EPA AERMOD. Based on the preliminary screening assuming a distance of approximately 30 feet, the estimated concentration of Ethyl 3-Ethoxyproprioanate does not screen out and further analysis is warranted.

AERMOD modeling will use a generic rate of 1 gram per second and predicted 1-hour and annual concentrations associated with an emission rate of 1 g/sec will be multiplied by the actual emission rate of each toxic pollutant to arrive at the actual 1-hour and annual pollutant concentrations.

The latest version of EPA's AERMOD dispersion model (version 21112) will be used for these analyses. Per CEQR guidance, analyses will be conducted assuming stack tip downwash, urban dispersion surface roughness length, elimination of calms, with and without the downwash effect. AERMOD's Building Profile Input Program (BPIP) algorithm will be used to account for downwash effect. Both with- and without-downwash results will be reported.

Background Concentrations

The background concentrations used in the air quality analysis will be based on concentrations recorded at a monitoring station representative of the county or from the nearest available monitoring station and in the statistical format of the NAAQS, as provided in the *CEQR Technical Manual*. For this project, the nearest monitoring station is IS 74 in the Bronx. This station provides representative background concentrations for $PM_{2.5}$. The background concentrations to be used are shown in Table 7.

Table 7: Background Concentrations (µg/m³) Recorded at IS 74, The Bronx

Pollutant	Averaging Period	Calculation Method	Background Level (µg/m³)	NAAQS (µg/m³)
$PM_{2.5}$	24-hour	3-year average of 98th percentile for 2019, 2020 and 2021	18.9	35
$PM_{2.5}$	Annual	3-year average of annual mean for 2019, 2020 and 2021	6.7	12

Meteorological Data

All analyses will be conducted using the latest five consecutive years of meteorological data (2017-2021) or free pre-processed AERMOD ready met data provided by DEC. Surface data will be obtained from LaGuardia Airport, and upper air data will be obtained from Brookhaven station, New York. These meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period.

Stack Locations

The exhaust location at 1476 Sheridan Boulevard will be modeled at a location approximately 5 feet above street level at the rear façade of the building (see Photograph 1). Coordinates will be approximated using Google Earth. The exhaust is approximately 32 feet from the proposed location of Building 3 on Projected Development Site 2 (see Figure).

Receptors Considered

The receptor network will consist of receptors located at spaced intervals along the sides of the Buildings 2 and 3 on Projected Development Site 2 from the ground floor to the upper level, and pedestrian-height receptors representing sidewalks. Receptors will be placed in 25-foot increments horizontally and 10-foot increments vertically, up to the bulkhead of the building. The receptor network will also include any terraces, operable windows, or air intakes, as applicable.

PROJECT-GENERATED MOBILE SOURCES

Mobile Source - Roadways

CO Emissions

As shown in the traffic assignment maps in Appendix B, the Proposed Actions would not generate 170 or more incremental trips at any intersection during any peak hour, and detailed roadway assessment for CO is not warranted.

PM Emissions

As shown in the mobile source screening in Appendix C, based on the traffic assignment maps in Appendix B, the Proposed Actions would exceed the screening criteria of Chapter 17, Section 210 of the *CEQR Technical Manual*. Therefore, detailed analysis of emissions from roadway sources is warranted. The intersections of Edgewater Road/ Sheridan Boulevard/East 172nd Street and Edgewater Road/Sheridan Boulevard/Jennings Street would selected as the representative worst-case intersection, per the intersection ranking completed in Appendix C.

To complete a detailed analysis of mobile source emissions, traffic volumes by vehicle type will be forecast to the project build year on an hourly basis for both No-Action and With-Action conditions. Both No-Action and With-Action delays will be calculated using speed runs collected for the transportation analysis. Using these delays, emissions factors would be calculated using AP-42 and the United States Environmental Protection Agency (EPA) Motor Vehicle Emission Simulator, or MOVES (version "MOVES3.0") for the 2028 build year. The resulting emissions would be input into AERMOD along with hourly traffic volumes for both No-Action and With-Action conditions. Trips will be assigned to each lane and turning movement per the transportation analysis. Receptors would be placed along the sidewalks.

Mobile Source – Parking Garage

The Proposed Actions would introduce a parking facility at Projected Development Site 2 with capacity for at least 100 vehicles. Because this parking facility would exceed 85 parking spaces, a parking facilities mobile source analysis is warranted.

For the parking garage assessment, hourly vehicular in/out trips will be obtained from the traffic analysis for the garage with the highest number of peak hour in and out trips. PM engine emission factors will be computed using the assuming a build year of 2028 – the project build year. The inputs and use of MOVES will incorporate the most current guidance available from New York State Department of Environmental Conservation (NYSDEC) and EPA.

Cumulative Roadway and Parking Garage Analysis

The emissions from the garage and roadway sources will be concurrently analyzed. The geometry and projected emissions for the proposed parking garage will be incorporated into the AERMOD model, where receptors will be placed along Edgewater Street.

For both No-Action and With-Action conditions, the resulting PM_{10} will be reported on a 24-hour basis, and the resulting $PM_{2.5}$ will be reported on both a 24-hour and annual basis. The resulting concentrations would be summarized and compared to NAAQS and CEQR *de minimis* criteria. Background pollutant concentrations will be obtained from the nearest monitoring station (see Table 2).

CONCLUSION

The project-generated buildings would be the tallest buildings within 400 feet of the Proposed Rezoning Area, and there is no potential for project-on-existing air quality impacts. When accounting for both discrete buildings and cumulative emissions, the Proposed Actions warrant E-Designations at the Applicant's sites (the projected development sites) that will specify HVAC and hot water systems must be powered by electricity or steam. Detailed dispersion modeling will be conducted for the Draft EIS. If warranted for Potential Development Site A, the DEIS will specify conditions – such as fuel source or stack location – that would preclude significant adverse air quality impacts from project-generated stationary emissions.

There are no registered industrial sources within 400 feet, or large/major sources within 1,000 feet, of the development sites. However, on Lot 28, there appears to be on unregistered autobody spray painting facility (HMT Auto Repair) that warrants detailed modeling. The facility exhausts to the rear of the building, at a height approximately 5 feet above street level. The exhaust is at least 32 feet from Projected Development Site 2. This source will be analyzed in the DEIS.

The project-generated vehicular traffic would exceed the screening thresholds outlined in Chapter 17, Section 210 of the *CEQR Technical Manual*. Therefore, detailed modeling of roadway sources will be analyzed from the intersections of Edgewater Road/Sheridan Boulevard/East 172nd Street and Edgewater Road/Sheridan Boulevard/Jennings Street. The roadway emissions would be concurrently analyzed along with the emissions from the proposed 100-space parking garage. The resulting concentrations at the representative receptors will be compared to CEQR impact criteria.

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1460 - 1480 Sheridan Boulevard Rezoning
Final Scope of Work (FSOW)
Noise Protocol Memorandum

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CERAMI

Memorandum

Date: December 3, 2021; Revised: March 3, 2023; Revised April 3, 2023

To: Department of City Planning

From: Trey Geier / Cerami

CC: Max Stember-Young / Langan Engineering and Environmental Services

Project Name: 1460-1480 Sheridan Boulevard – EIS - Noise Protocol

The purpose of this memorandum is to outline the noise monitoring and analysis approach for the 1460-1480 Sheridan Boulevard EIS.

Below is a summary of the selected noise monitoring locations and noise monitoring approach to determine existing ambient noise levels at the Project Site. The measured noise levels will be used in the noise analysis to determine what level of building attenuation is necessary to provide acceptable interior noise levels under guidelines set forth by the *2021 CEQR Technical Manual*. Noise levels will be assessed to existing and future conditions. Project-generated noise sources are anticipated to arise from buildings' mechanical equipment, and noise increases due to the Proposed Actions will be analyzed for project-on-existing effects.

Noise Receptor Locations

The elevated No. 6 Subway line, at grade Amtrak line, and motor-vehicle traffic are likely the dominant noise sources in most of the study area; stationary sources (e.g., building HVAC equipment) also contribute to noise levels.

Proposed noise monitoring locations were selected based on the following:

- The location of the Project Site
- Allowing for geographic coverage across the study areas to account for the ambient noise environment
- Existing land use patterns (e.g., near major roadways, existing railways, stationary noise sources)

Six monitoring sites are proposed for the noise analysis in the study area around the Project Site.

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Noise Monitoring/Prediction

Noise measurements will consist of:

Duration	# of Measurements	Notes
24-hour	3	Along Eastern boundary of the development sites
20-minutes	2	At streets level along Sheridan Boulevard
1-hour	1	At street level along Sheridan Boulevard at southern property line

All 20-minute and 1-hour measurements will be taken during peak weekday AM (8AM-9AM), midday (12PM-1PM), PM (4:30PM-5:30PM) traffic periods, as well as midday (12PM-1PM) on Saturday. Figure 1 shows the locations of the six noise receptor sites and Table 1 lists the noise monitoring sites, dominant noise sources at each location, the duration of noise monitoring, and monitoring locations.

Measurements will be performed using Sound Level Meter (SLM) Type 1 instruments according to ANSI Standard S1.4-1983 (R2006). The SLMs will be field calibrated with a calibrator that has a laboratory calibration date within one year of the date of the measurements. All measurement procedures will be based on the guidelines outlined in ANSI Standard S1.13-2005.

Noise measurements will include all vehicular traffic, air traffic, railway traffic, and stationary noise sources, and the recommended attenuation levels within the study area will take these sources into account in order to determine acceptable interior noise levels. Vehicle counts will be taken at spot measurements along the roadways and pictures will be taken of all monitoring setups in the field.

To validate the noise due to the elevated number 6 subway line, if elevated 24-hour measurements are not attainable, information gathered as part of the 1125 Whitlock Avenue EAS (CEQR No. 17DCP078X) may be used. Elevated readings of the number 6 subway line from 17DCP978X will be scaled to the approximate distance of the new development and used to project the expected L_{dn}.

E-Designation

The predicted future noise levels, specifically the maximum L_{10} and L_{dn} values, will be used to place an E-Designation, as necessary to meet the interior noise requirements of the *CEQR Technical Manual*. In addition to window/wall attenuation requirements, the E-Designation, if warranted, will include a requirement for an alternate means of ventilation so that a closed-window condition can be maintained. Building mechanical systems will be assumed to be designed to meet all applicable noise regulations to avoid producing levels that would result in any significant increase in ambient noise levels.

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Noise Receptor Site	Duration	Location
1	24-Hour	Elevated at North-East Façade along the Bronx River, with exposure and line-of-sight to Sheridan Boulevard and Amtrak rail lines.
2		Eastern property line along the Bronx River, with exposure and line-of-sight to Amtrak rail lines.
3		Elevated at Southern property line, with exposure and line-of-sight to Sheridan Boulevard, Amtrak and No. 6 rail lines.
4	20-Minute Spots	Set back from street in front of North-West property line, with exposure to Sheridan Boulevard and East 172nd Street.
5		Set back from street along Sheridan Boulevard, between Jennings Street and East 172nd Street.
6	1-Hour Spot	Set back from street along Sheridan Boulevard, across from Daniel Boone Playground.

Table 1. Noise Receptor Locations

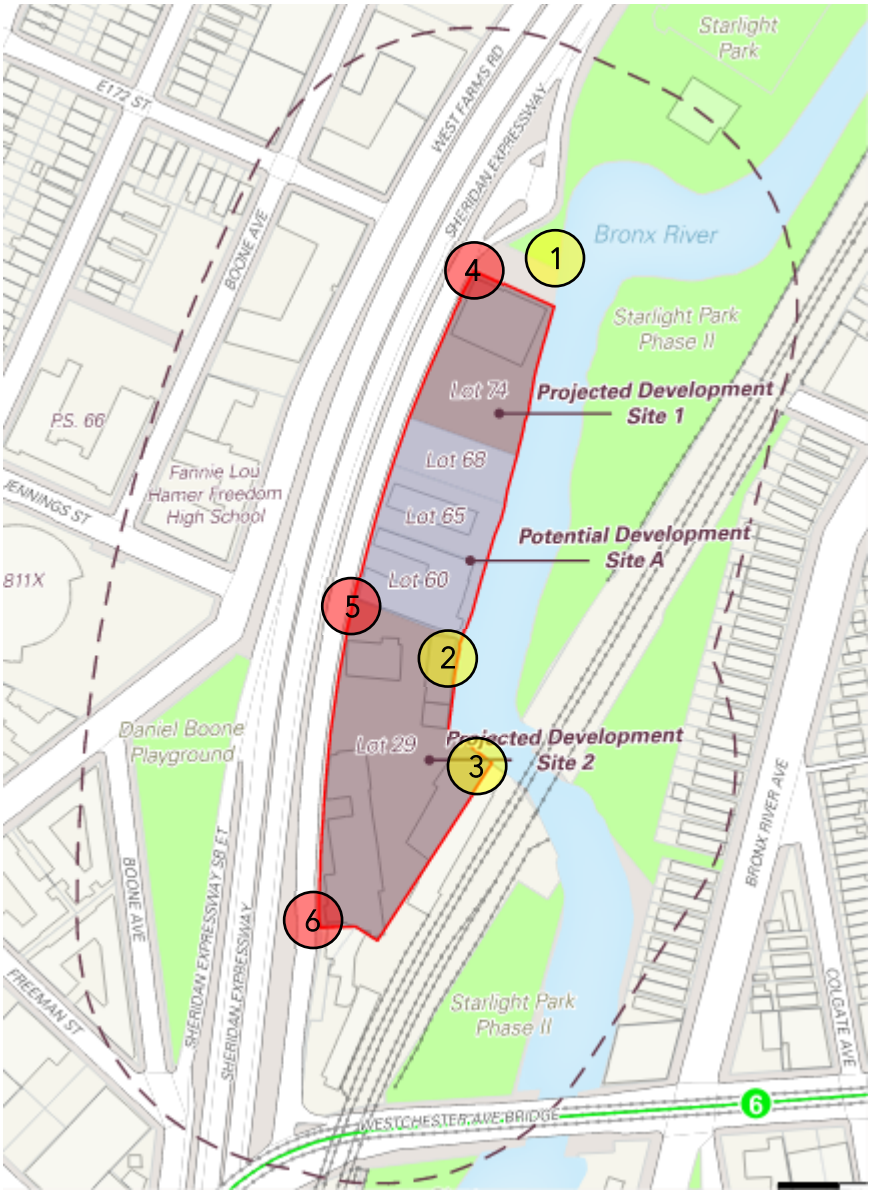


Figure 1. Proposed Monitoring Locations

CERAMI

Construction Noise Analysis

The noise levels generated by construction activity will be modeled using existing noise levels and the CadnaA modeling program. The modeling analysis will be calibrated using noise measurement data and traffic data collected during the noise monitoring. The construction-generated noise will be based on the construction site plan, phasing and equipment schedules (see Figure 2, Figure 3 and Figure 4). The equipment list in Figure 4 represents the construction equipment that will be used at each building, and that this list was provided by the Applicant's construction management team.

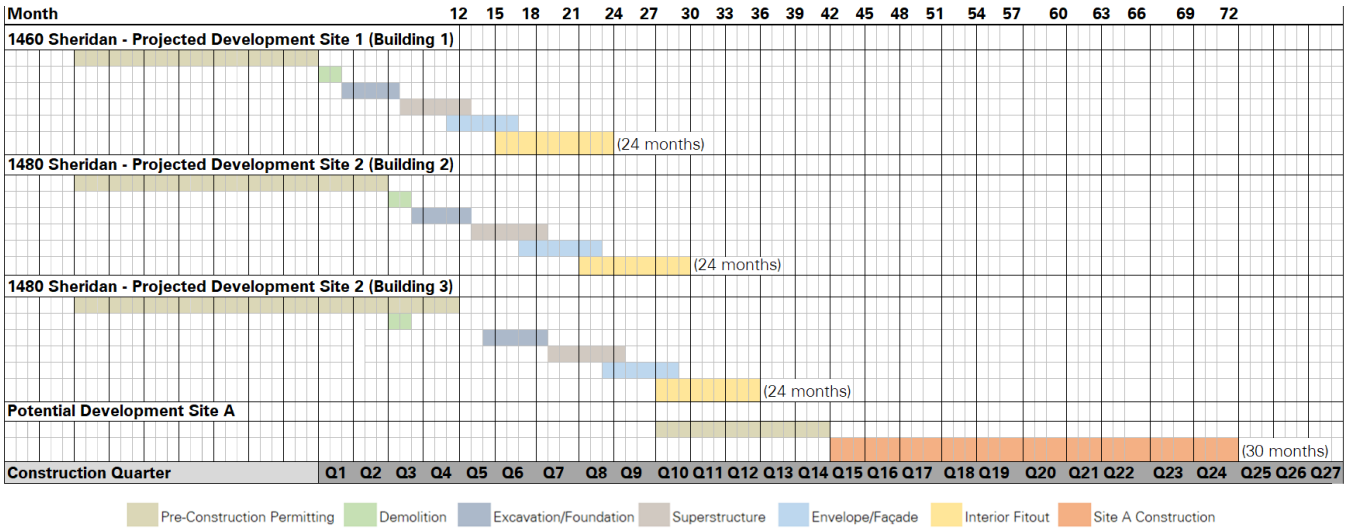


Figure 2. Draft Construction Schedule

Site 1 - Bldg 1
Demolition: Month 1 (April 2025) to Month 2 (May 2025)
Excavation/Foundation: Month 3 (June 2025) to Month 7 (October 2025)
Superstructure: Month 8 to Month 13
Envelope/Façade: Month 12 to Month 17
Interior Fit-out: Month 16 to Month 24

Site 2 - Bldg 2
Demolition: Month 7 to Month 8
Excavation/Foundation: Month 9 to Month 13
Superstructure: Month 14 to Month 19
Envelope/Façade: Month 18 to Month 23
Interior Fit-out: Month 22 to Month 30

Site 2 - Bldg 3
Demolition: Month 13 to Month 14
Excavation/Foundation: Month 15 to Month 19
Superstructure: Month 20 to Month 25
Envelope/Façade: Month 24 to Month 29
Interior Fit-out: Month 28 to Month 36

Figure 3. Draft Construction Phases

Phase	Demolition			Excavation & Foundation						Superstructure							Envelope/Façade							Interior Fitout											
	Number Used	Months		Number Used	Months					Number used	Months						Number Used	Months						Number Used	Months										
Equipment Usage (%) by Month		1	2		3	4	5	6	7		8	9	10	11	12	13		12	13	14	15	16	17		16	17	18	19	20	21	22	23	24
All Other Equipment > 5 HP																																		
Bar Bender				2	x	x	x	x	x	2	x	x	x	x	x	x																		
Compactor (ground)				1	x	x	x																											
Compressor (air, ≤ 350 cfm)																																		
Compressor (air, > 350 cfm)																																		
Concrete Mixer Truck				10	x	x	x	x	x	20	x	x	x	x	x	x																		
Concrete Pump Truck				1	x	x	x	x	x	1	x	x	x	x	x	x																		
Dozer																																		
Dump Truck	10	x	x	10	x	x																												
Excavator	2	x	x	2	x	x	x	x	x																									
Front End Loader	2	x	x	2	x	x	x	x	x																									
Generator (< 25 KVA, VMS signs)				2	x	x	x	x	x																									
Gradall																																		
Pumps				2	x	x	x	x	x																									
Impact Pile Driver				2		x	x																											
Slurry Plant																																		
Auger Drill Rig																																		
Soil Mix Drill Rig																																		
Pickup Truck																																		
Grader																																		
Paver																																		
Vacuum Street Sweeper																																		
Concrete Saw																																		
Crane										1	x	x	x	x	x	x	1	x	x	x	x	x	x											
Drum Mixer																																		
Dumpster/Rubbish Removal	2	x	x	2	x	x	x	x	x	2	x	x	x	x	x	x	2	x	x	x	x	x	x	4	x	x	x	x	x	x	x	x	x	x
Flat Bed Truck	1	x	x	1	x	x	x	x	x																									
Jackhammer																																		
Man Lift										2	x	x	x	x	x	x	2	x	x	x	x	x	x	2	x	x	x	x	x	x	x	x	x	x
Pneumatic Tools																																		
Ventilation Fan																																		
Welder / Torch																																		

Figure 4. Draft Construction Equipment Schedule (Per Building)

A mobile source analysis will be completed for construction traffic generated by workers and trucks. Sensitive receiving properties will be selected from the surrounding commercial office and residential properties, as well as public open spaces and community facilities such as Starlight Park, Concrete Plant Park and Fannie Lou Hamer High School. The existing hotel on Site A will be modeled as a sensitive receiver for the construction of all three buildings. Construction for Buildings 1, 2, and 3 on Project Development Site 1 and 2 will be staggered, starting and finishing approximately 6 months apart, in numerical order.

When Building 1 is completed, Building 2 will be in Interior Fit-out phase, Building 2 will be more than 400 feet away from Building 1; therefore, Building 1 will not be considered as a receptor for construction noise from Building 2. Similarly, when Building 2 is completed, Building 3 will be in Interior Fit-out phase; therefore, Building 2 will not be considered as a receptor for construction noise from Building 3. Building 1 will be completed while Building 3 is in Superstructure phase; however, Building 1 will not be considered as a receptor location for construction noise from Building 3 since it is more than 400 feet away from Building 3 and is not expected to experience significant adverse construction noise impact. There is no specific development for Site A and it is not under control of the Applicant. Construction of Site A is assume to commence at least six months after construction of Sites 1 and 2 are complete.

Significant adverse construction noise will be evaluated in accordance with CEQR as well as the following additional incremental impact criteria: a noise increase of 15dBA or more for a continuous period of 12 months or more; a noise increase of 20dBA or more for a continuous period of 3 months or more. If warranted, construction noise control recommendations will be provided. Also, in addition to construction impact criteria above,

determination of significant adverse construction noise impact would be considered based on New York City Noise Code Section 24-228.