

Technical Memorandum for the Willets Point Development Plan FGEIS
CEQR Number 07DME014Q, Technical Memorandum 005
May 10, 2021

A. INTRODUCTION

On September 12, 2008, the Office of the Deputy Mayor for Economic Development issued a Notice of Completion for the *Willets Point Development Plan Final Generic Environmental Impact Statement* (FGEIS). The Willets Point Development Plan, with subsequent modifications as described below, was approved by the New York City Planning Commission (CPC) and New York City Council on September 24, 2008 and November 13, 2008, respectively, and is referred to herein as “the Approved Plan.” Under the Approved Plan, the approximately 61-acre Willets Point Development District (District) will be redeveloped with up to 8.94 million gross square feet of residential, retail, hotel, convention center, entertainment, commercial office, community facility, open space, and parking uses. The Approved Plan changed the underlying zoning of the District from an M3-1 district (and a small area zoned R3-2) to a C4-4 district, and created an Urban Renewal Plan (URP) and a zoning Special District (i.e., the Special Willets Point District). The Special Willets Point District includes urban design regulations, addressing such elements as the location of uses, building heights and setbacks, street hierarchies, streetscape design, and other site planning and design provisions. Currently, the City of New York seeks to facilitate the development of an initial 6-acre portion of the Willets Point Development Plan (“Phase 1”), which portion is the subject of this Technical Memorandum.

As described in the New York State Department of Environmental Conservation’s (NYSDEC) SEQRA regulations 6 NYCRR §617.9(a)(7)(i)(a), (b), and (c), and the 2020 *CEQR Technical Manual*, the lead agency may require the preparation of a supplemental EIS if there are significant adverse environmental impacts not addressed or inadequately addressed in the EIS that arise from changes proposed for the project; newly discovered information; or a change in circumstances related to the project. This Technical Memorandum describes a proposed modification to the phasing under which the Approved Plan would be constructed, changes to the project’s schedule, and changes in background conditions and analysis methodologies under the *City Environmental Quality Review (CEQR) Technical Manual*, in order to assess whether the project as currently envisioned would result in any new or different significant adverse environmental impacts not previously identified and addressed in the FGEIS or subsequent environmental review, and to assist the lead agency in determining whether the preparation of a supplemental EIS would be required.

As demonstrated below, this Technical Memorandum concludes that there would be no significant adverse impacts not previously identified in the FGEIS or subsequent environmental review in any of the analyzed CEQR technical areas as a result of the proposed modification.

B. BACKGROUND

After the issuance of the FGEIS, the CPC proposed several modifications to the Special Willets Point District zoning regulations. These modifications were described, and their potential for significant adverse environmental impacts examined, in a Technical Memorandum dated September 23, 2008 (TM001), which found that there were no additional impacts anticipated to result from the modifications that had not been disclosed in the FGEIS. The CPC voted in favor of the Willets Point Development Plan with those modifications on September 24, 2008.

Following the CPC vote, new information became available related to: District business relocation; Phase II Environmental Site Investigations (ESIs) in the District; the amount of affordable housing to be provided

in the District; and projected school and day care populations. This information was described, and its potential to result in significant adverse environmental impacts not previously identified was examined, in a Technical Memorandum dated November 12, 2008 (TM002). That Technical Memorandum concluded that none of the newly available information would lead to significant adverse environmental impacts that were not previously identified and addressed in the FGEIS. The City Council voted to approve the Willets Point Development Plan with the CPC modifications on November 13, 2008. As noted above, the Approved Plan changed the underlying zoning of the District from an M3-1 district (and a small area zoned R3-2) to a C4-4 district, and created a URP and the Special Willets Point District.

In 2009, the City considered the effect of the economic downturn on the Willets Point project. The City anticipated that economic conditions at that time would make it challenging for developers to finance the acquisition and remediation of the entire District at one time and prior to any development, as envisioned in the Approved Plan and described in the FGEIS. In a Technical Memorandum dated November 23, 2009 (TM003), an “Adjusted Plan” for Willets Point was analyzed. The Adjusted Plan assumed the same overall development program at full buildout in 2017 as the Staged Acquisition Alternative analyzed in the FGEIS (with revisions described in the prior technical memoranda), but anticipated a smaller development footprint during the first phase of development, with approximately 70 percent as much floor area in the initial phase compared to the Staged Acquisition Alternative. In the Adjusted Plan, remediation and development of the initial portion of the District would proceed first, by 2013, followed by remediation and development of the remaining portion of the District by 2017. TM003 concluded that there were no additional impacts anticipated to result from the Adjusted Plan that had not been disclosed in the FGEIS.

In a Technical Memorandum dated February 10, 2011 (TM004), the City considered an “Updated Plan” for Willets Point. The Updated Plan would have developed the District with the same gross floor area and mix of uses as the Approved Plan (with subsequent revisions described in the prior technical memoranda), and would have had the same controls on floor area ratios set forth in the provisions of the Special District zoning text that had been approved by CPC and the City Council. Similar to the Adjusted Plan analyzed in TM003 as well as the Staged Acquisition Alternative analyzed in the FGEIS, the Updated Plan anticipated a smaller development footprint and less overall development in the first phase. With the Updated Plan (as with the FGEIS Staged Acquisition Alternative and the Adjusted Plan), development activities would have proceeded incrementally, with the necessary remediation, grading, infrastructure improvements, and construction activities associated with the buildings in the southwestern portion of the District occurring first, and construction activities on the remainder of the District following. TM004 concluded that there were no additional impacts anticipated to result from the Updated Plan that had not been disclosed in the FGEIS.

The City subsequently revised and reissued a Request for Qualifications and Request for Proposals (RFPs) for the redevelopment of an initial 23-acre portion of the District, and in 2012, the Queens Development Group, LLC (QDG) was selected as the City’s designated developer for that first phase of the Willets Point Development Plan. QDG’s development plan included development of this initial 23-acre portion of land within the District (the District Portion), as well as land adjacent to CitiField stadium, outside the District (the Willets West Portion). In 2013, a Supplemental EIS (SEIS) was prepared to assess the potential effects of QDG’s development, and approvals relating to this development were granted by the City Planning Commission and the City Council in 2013. The SEIS assumed that the District would be developed in three phases. Phase 1A, anticipated to be completed by 2018, comprised the remediation and development of a small portion of the District along 126th Street with a hotel and retail space, with the remainder of the 23-acre City-owned portion of the District to be used as an interim surface parking/recreational area.¹ Phase

¹ Phase 1A also anticipated the development of Willets West on the parking lot west of CitiField.

1B—anticipated to be completed ten years after Phase 1A (by 2028)—comprised the development of the interim surface parking/recreational area created during Phase 1A with residential, retail, community facility, and public school uses, along with parking and more than six acres of new public open space.² In Phase 2, the remainder of the District was assumed to be built out substantially as described in the FGEIS, with a total of approximately 8.94 million square feet of development. As with Phase 1B, Phase 2 was anticipated to be completed incrementally over four years, with full buildout expected to be completed by 2032. Subsequently, in 2017, the Willets West Portion of the 2013 plan was invalidated by the New York State Court of Appeals due to the fact that the Willets West Portion was located on mapped parkland without proper authorization of parkland alienation to facilitate the plan. However, the court did not invalidate the analysis, methodology or conclusions of the SEIS that accompanied the 2013 approvals. Some of the data prepared for that SEIS has been used in this Technical Memorandum, as it reflects more recent conditions and analysis assumptions and methodologies than the FGEIS and subsequent technical memoranda. (See **Figure 1** for a comparison of the area of the first phase of District development in the FGEIS Staged Acquisition Alternative, subsequent technical memoranda, and the FSEIS.)

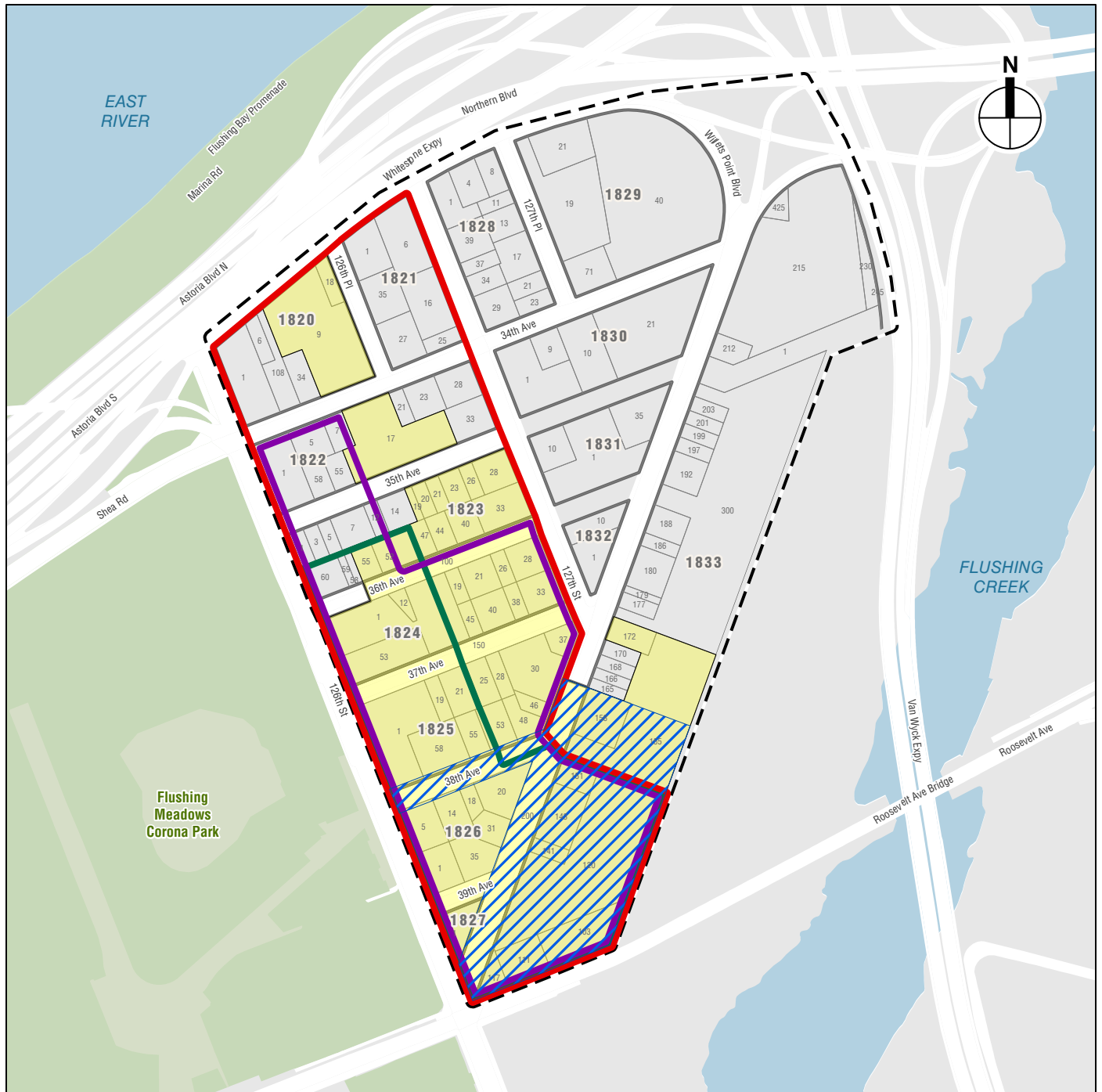
Since the completion of the FGEIS and subsequent environmental review, additional visioning of the District’s future development has taken place. Among these efforts is the formation, in 2018, by the Queens Borough President and local City Councilperson, of a Willets Point Task Force to define a vision for the future of a portion of the District, identify community priorities, and produce recommendations for the 17 acres of City-owned land in the District outside the Phase 1 site area. That effort produced two illustrative scenarios. The first illustrative scenario was the creation of a high-density, mixed-use district similar to the development anticipated in the FGEIS and subsequent environmental review (“Mixed-use Scenario”); the second illustrative scenario reimagined this portion of the District as hub for a new soccer stadium, as well as residential, open space, and retail uses (“Soccer Scenario”).

The details of these potential redevelopment visions for this 17-acre portion of the District are conceptual in nature and will need to be further refined; it is also possible that another development scenario might be pursued that combines elements of these two scenarios and/or introduces other elements. Should the Soccer Scenario be pursued, it is anticipated to require discretionary actions and thus additional environmental review. Should the Mixed-use Scenario be pursued, it might also require discretionary actions, or might be built as-of-right pursuant to the zoning regulations adopted in 2008. No other visioning or planning has been conducted for the remaining 38 acres of the District, which remain in private ownership. Thus, in summary, potential development plans for the portions of the District beyond the six acres to be developed in Phase 1 are still under consideration. Regardless of the selected scenario, the City would prioritize community engagement and commit to further visioning workshops to refine and advance a conceptual vision into a specific plan, which will take time and extensive stakeholder coordination.

PROJECT STATUS

Since approval of the project in 2008, the City has undertaken a number of measures that support the goals of the Willets Point Development Plan. In addition to the designation of QDG as the developer for the first phase of the Willets Point Development Plan, these include measures related to site acquisition, business relocation support, development of the connections to the Van Wyck Expressway, and ongoing infrastructure work. The New York City Economic Development Corporation (NYCEDC), on behalf of the City, has executed agreements for approximately 20 acres of property located in the District, resulting in acquisition and/or site control. In total, over 165 businesses have relocated across the City-owned 23 acres

² Phase 1B also anticipated the development of new structured parking facilities at the CitiField South Lot and Lot D, to replace the CitiField parking spaces displaced by the Willets West development and located within the District in Phase 1A.



- 2008 FGEIS Staged Acquisition Alternative
- 2009 TM003
- 2011 TM004
- 2013 FSEIS Phase 1A/1B
- 2021 Phase 1 Site (TM005)
- Special Willets Point District
- 1 Tax Lot Boundary
- 1 Tax Block Boundary

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First Phase of District Development
Figure 1

since 2012. All acquisitions were negotiated. The City's Department of Housing Preservation and Development (HPD) is managing the City-owned properties within the District. Businesses on some of the acquired properties are continuing to operate either as direct tenants of the City or through leaseback arrangements with the former property owners.

NYCEDC also has contracted with Cornerstone Group, a business relocation expert, to provide relocation assistance and advisory services to impacted businesses in Willets Point. Cornerstone Group has been engaged in outreach to tenant businesses since January 2018. Over 80 businesses received approximately \$14 million in supplementation benefits such as reimbursements for moving expenses, assistance in identifying relocation sites, training in partnership with LaGuardia Community College, and other co-relocation benefits since 2012. Many businesses (approximately 50) relocated their business within Queens (for example, in Maspeth, Jamaica, and other locations), with others relocating elsewhere in the five boroughs. Through a partnership with La Guardia Community College, workers in the SPWD were provided access to free educational/ESL, vocational, ESL and GED coursework, job placement and immigration counseling services.

In 2012, the City completed a first phase of new sanitary and storm water sewers that provide new public sanitary sewer service to support the redevelopment of the District and adjacent areas and replace an inadequately sized storm water sewer and outfall to help alleviate chronic flooding that occurs in the District and adjacent areas. The City-owned portion of the District has been entered into NYSDEC's Brownfield Cleanup Program (BCP). In 2019, the City and QDG completed clearing a portion of the District and performed Interim Remedial Measures under NYSDEC's BCP. The City is working closely with NYSDEC on the Remedial Action Work Plan (RAWP) to mobilize contractors for full-scale remediation as early as summer 2021. Infrastructure build-out and vertical construction would follow. Development activities for buildout of the remainder of the District are presently anticipated to proceed incrementally, with the necessary associated site acquisition, remediation, grading, and infrastructure improvements occurring in advance of building construction.

The new connection to the Van Wyck Expressway is subject to federal approval of the Freeway Access Modification Report (AMR). A Finding of No Significant Impact was issued and the AMR was approved in April 2012, and the City has committed to provide capital funds for its construction. For purposes of this analysis, it is anticipated that development of the remainder of the District, could begin as early as 2029 and would be complete by 2039. Completion of the Van Wyck Expressway ramps is targeted for 2032, after the Phase 1 development but before construction of the full buildout of the District. In the FSEIS, it was similarly anticipated that the Van Wyck Expressway ramps would come online before the later phases of development (Phase 1B and Phase 2/full buildout of the District).

C. DESCRIPTION OF PROPOSED MODIFICATION

At this time, the City is considering a proposed modification to the Approved Plan. Similar to the Staged Acquisition Alternative analyzed in the FGEIS, the subsequent Adjusted and Updated Plans analyzed in TM003 and TM004, and the phased development of the District analyzed in the FSEIS, the proposed modification assumes the same gross floor area and mix of uses in the District as the Approved Plan with revisions described in the prior environmental review; however, a 6-acre portion at the southwest corner of the District would be developed first, by 2030, with the remainder of the District to be remediated and built out by 2039.

The proposed program for the first phase of development—referred to here as Phase 1—would include approximately 813,112 gsf of residential use (1,100 units), 24,666 gsf of retail, 3,397 sf of community facility use, a 650-seat K-8 public school, and approximately 1 acre of publicly-accessible open space (see

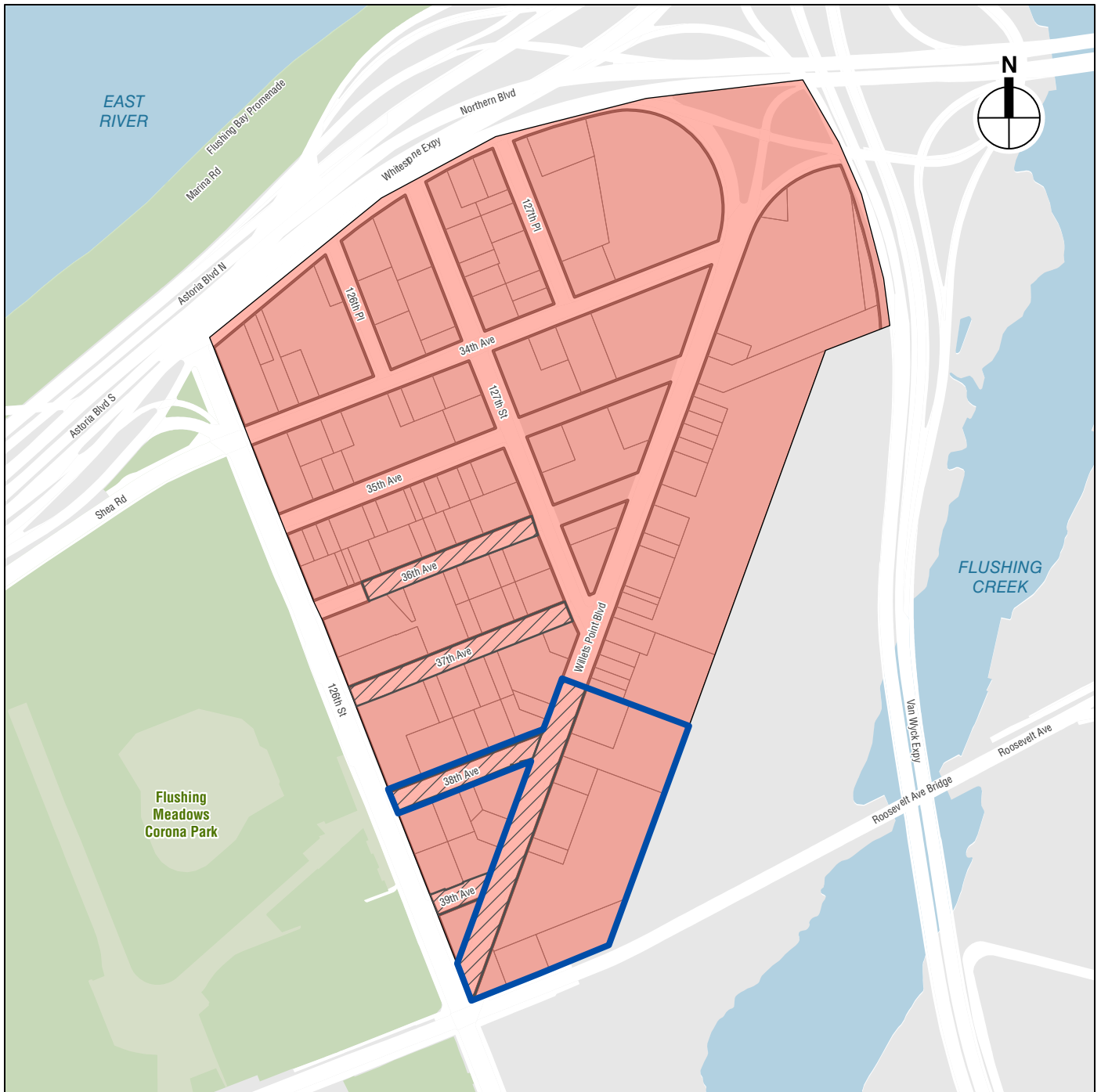
Figures 2 and 3). All of the proposed residential units would be affordable; a portion of the units (approximately 220) would be for senior use. See **Table 1** below. The Phase 1 development would be located on two parcels totaling 312,420 sf at the southwest corner of the District. Three buildings would be developed; two 12-story buildings with ground-floor retail and affordable housing above, connected at the ground floor, and a public school building, assumed to be approximately 6 stories in height. The senior housing component of the development would be located in a 9-story section of the northern mixed-use building. The one acre of publicly-accessible open space is required by zoning and would be located southwest of the proposed buildings, at the corner of 126th Street (also known as Seaver Way) and Roosevelt Avenue. A proposed perimeter street would extend along the eastern edge of the proposed development (“eastern perimeter street”), turning west to separate the mixed-use buildings from the proposed school (“service street”), and then angling again to connect with 126th Street/Seaver Way (“connector street”). The Phase 1 development requires a CPC Chairperson certification that: all streets comply with Zoning Regulation (ZR) Section 124-31; all streets are constructed to grades acceptable to the New York City Department of Buildings (DOB) and the New York City Department of Transportation (DOT); all publicly-accessible open space complies with ZR Section 124-40; and the development pursuant to the certification does not preclude future phases of Special Willets Point District development from complying with these regulations. It is assumed that Phase 1 of the Willets Point Development Plan would be constructed starting in 2023. Essential predevelopment and site prep activities, including remediation and infrastructure work, would begin in 2021 and 2023, respectively, and would be completed before construction of the proposed buildings.

For the purposes of this Technical Memorandum, it is assumed that the remainder of the District would be built out consistent with existing zoning for the area and substantially as anticipated and analyzed in the FGEIS and subsequent environmental reviews, including a new connection between the Van Wyck Expressway and the District. The maximum permitted development within the District remains at 8.94 million gsf. At full buildout, the District is anticipated to include up to 5.85 million sf of residential use (approximately 5,500 units, of which at least 1,815 would be affordable); up to 1.7 million sf of retail; approximately 500,000 sf of office use; up to 400,000 sf of convention center use; up to 560,000 sf of hotel use (approximately 700 rooms); up to 150,000 sf of community facility use; approximately 230,000 sf of public school use; and a minimum of 8 acres of publicly-accessible open space. See **Table 1** and **Figure 4**.

Development activities for buildout of the remainder of the District are anticipated to proceed incrementally, with the necessary associated site acquisition, remediation, grading, and infrastructure improvements occurring in advance of building construction. As described above, 38 acres of the 61-acre District remain in private ownership, and the City does not anticipate obtaining additional ownership of land in 2021. It is anticipated that development of the remainder of the District, including the Van Wyck Expressway ramps, could begin as early as 2029 and would be complete by 2039. Completion of the Van Wyck Expressway ramps is targeted for 2032. Any proposed development plan for some or all of the remainder of the District that is inconsistent with existing zoning or different from the development plan assumed in the FGEIS and subsequent environmental review, would likely be subject to additional environmental review and, possibly, further discretionary actions at that time.

PROJECT PURPOSE AND NEED

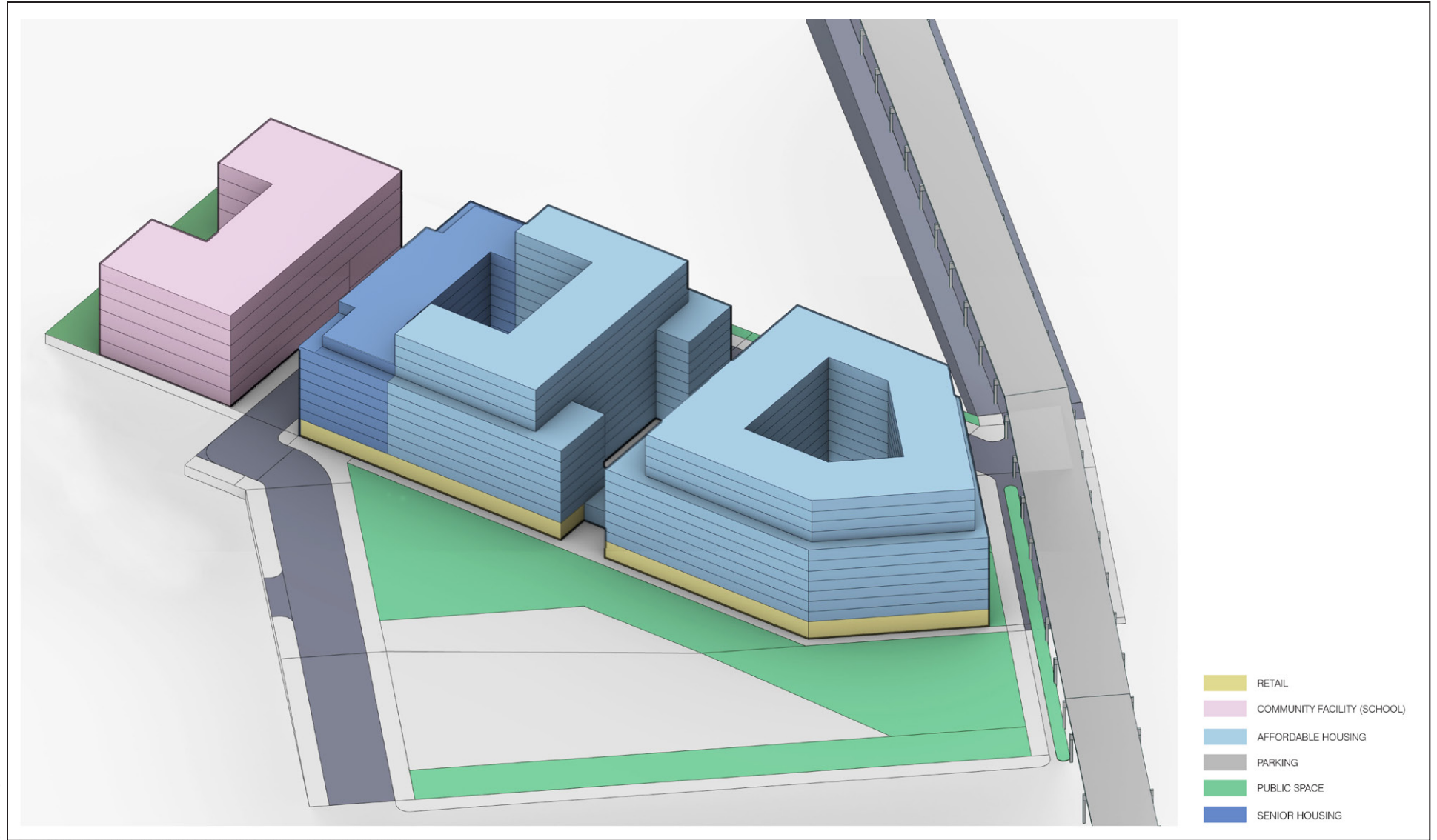
The Approved Plan was designed to further a number of redevelopment goals for the Willets Point area. The Approved Plan evolved from the Downtown Flushing Development Framework, a land use and economic planning strategy developed between 2002 and 2004 by the Downtown Flushing Task Force. The Task Force outlined several redevelopment goals for the Willets Point District that were adopted for the Approved Plan. In addition, the Approved Plan aimed to achieve the following goals, which are consistent with the vision of the Downtown Flushing Development Framework:



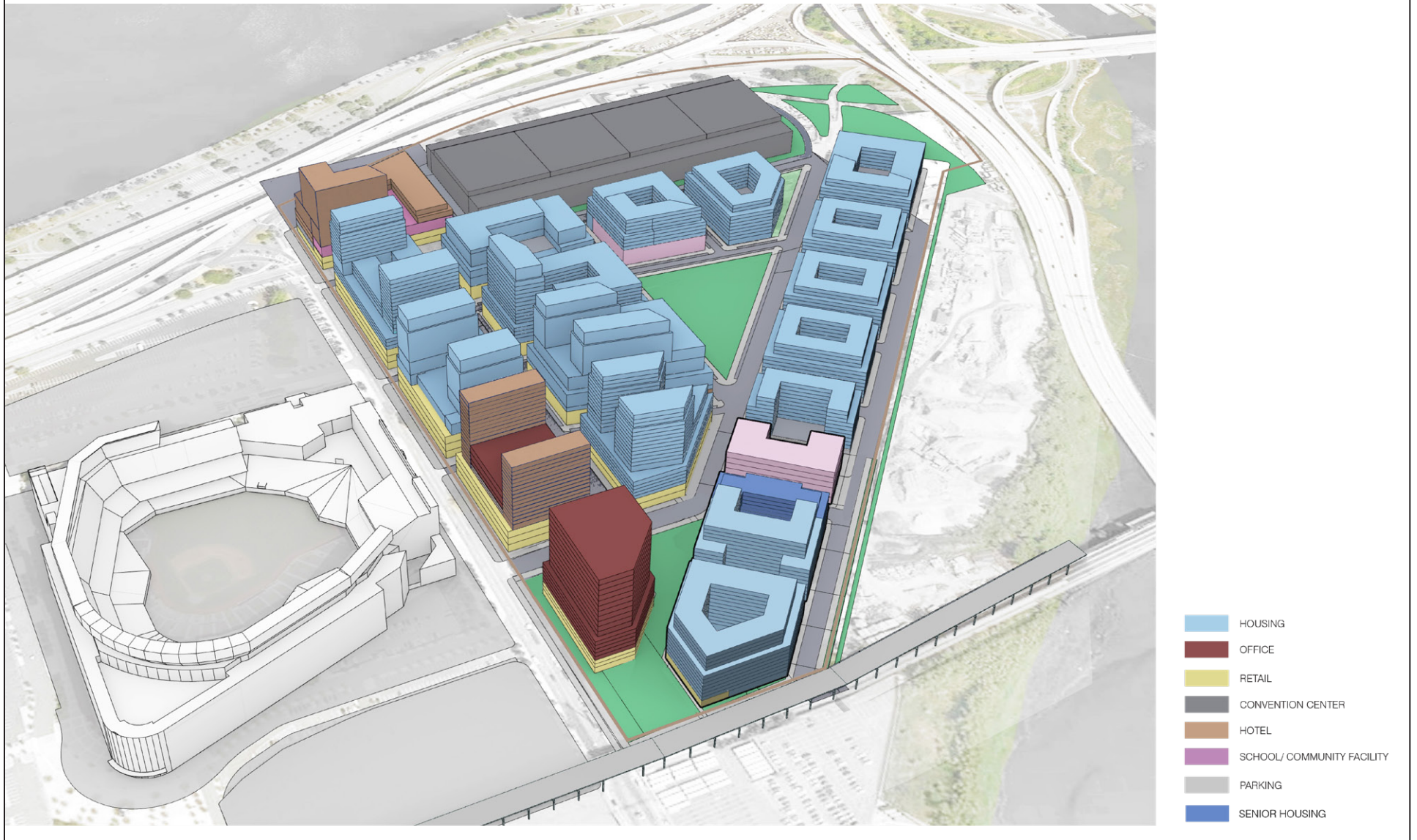
- Special Willets Point District
- Phase 1 Site
- Demapped Street
- Tax Block Boundary
- Tax Lot Boundary

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Phase 1 Site in the Special Willets Point District



NOTE: FOR ILLUSTRATIVE PURPOSES ONLY



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**Table 1:
Willets Point Development Program with Proposed Modification**

Use	Phase 1	Remainder of District	FSEIS Phase 1A/1B	Total at Full Buildout*
Residential	813,112 gsf (1,100 units total / 220 senior)	4,686,888 gsf (4,400 units)	2,490,000 gsf (2,490 units)	5,500,000 gsf (5,500 units)
Affordable	1,100 units (100 percent of total)	715	872 units (35 percent of total)	1,815 units [¶] (33 percent of total)
Retail	24,666 gsf	1,675,334 gsf	905,000 gsf	1,700,000 gsf
Office	0	500,000 gsf	500,000 gsf	500,000 gsf
Hotel	0	560,000 gsf (700 rooms)	395,000 gsf (490 rooms)	560,000 gsf (700 rooms)
Convention Center	0	400,000 gsf	400,000 gsf	400,000 gsf
Community Facility	3,397 gsf	146,603 gsf	25,000 gsf	150,000 gsf
Public School (K-8)	127,760 gsf [¶] (650 seats)	102,240 gsf	105,000 gsf	230,000 gsf (Approx. 1,540 seats) [°]
Parking Spaces	310 (accessory)	Approx. 6,390	Approx. 2,775	Approx. 6,700
Publicly Accessible Open Space	1 acre (approx.. 45,611)	7	6 acres	Minimum 8 acres
Total	968,935 gsf	8,071,065 gsf	4,820,000 gsf	8,940,000 gsf[°]
Notes: *Total program for the District is as noted in the FGEIS. Subsequent technical memoranda increased the assumed square footage for the school use from 130,000 gsf to 230,000 gsf. The FSEIS also assumed the same total program for the District, with one exception; the retail use would have been lower by 400,000 gsf in the District to account for the development of the Willets West portion of the program, west of CitiField. 300,000 gsf was assumed to be developed instead as additional residential use, for a total of 5,850,000 gsf (5,850 units), and 100,000 gsf was allocated to public school use, consistent with the square footage assumptions in TM003. The total floor area permitted in the District would remain at 8,940,000 gsf. [¶]Seat capacity of proposed school is used for the analyses in this Technical Memorandum. The projected square footage of the proposed school is subject to change, and may be lower or higher than estimated here. The total floor area permitted in the District would remain at 8,940,000 gsf. [°]The capacity of the proposed school was anticipated to meet the project-generated shortfall in school seats. The FGEIS analyzed a 130,000 sf, 850-seat school based on student generation rates available at that time; as noted above, subsequent environmental review, including the FSEIS, assumed a larger capacity school (230,000 sf / approx. 1,540 seats) at full buildout, based on updated student generation rates from the New York City School Construction Authority (SCA). The total floor area permitted in the District would remain at 8,940,000 gsf. ** The total number of proposed parking spaces would be determined based on anticipated project-generated demand per zoning requirements. Parking floor area is exempt from the gross floor area calculations, per the zoning regulations applicable to the Special Willets Point District. [°]Based on commitments made in 2008; may increase, subject to availability of affordable housing subsidy. It is also anticipated that additional development on Lots B and D would occur, as described and analyzed in the FGEIS. The anticipated development program for Lots B and D has not changed since the FGEIS, and is anticipated to occur at full buildout. It is not included in the development program outlined above.				

- Provide a substantial number of new housing units to help meet the growing demand for housing in Queens and the City as a whole;
- Ensure that District housing would be affordable to a mix of incomes;
- Provide a world-class example of superior urban design, with a focus on green building and sustainable design practices; and
- Strengthen the role of Flushing and Corona as commercial centers in northern Queens, while helping to meet the demand for office space in Queens and the City as a whole.

The modification to the Approved Plan described in this Technical Memorandum is intended to further these redevelopment goals. The affordable housing component of the Willets Point redevelopment has been prioritized to occur in the first phase of development, to help address the critical shortage of affordable housing in the City. Like the Approved Plan, the modification described in this Technical Memorandum represents a critical step in achieving these redevelopment goals for the Willets Point District. While the proposed modification facilitates the development of Phase 1 of the District, the Phase 1 development would not differ substantially from what was approved in 2008, would represent the implementation of the first portion of the 2008 vision for the District, and would occur within the area previously identified for the first phase of redevelopment.

D. ANALYSIS FRAMEWORK

CHANGES IN BACKGROUND CONDITIONS AND BUILD YEAR

As noted above, this Technical Memorandum assumes a build year of 2030 for the Phase 1 development and 2039 for full buildout of the District. In connection with the preparation of this Technical Memorandum, background conditions anticipated for completion by the Project's build year have been updated. Updates to the No Build list were made through review of publicly available information and consultation with DCP. See **Table 2** and **Figure 5**.

Table 2:
Projects Planned for Study Area by 2039

Map No.	Project	Build Years	Description
1	LaGuardia Air Train	2026, 2031	AirTrain to LaGuardia Airport. Revamped LIRR Mets-Willets Point Station to provide connection to LGA and transfers to 7 train and LIRR.
2	SFWD Proposed Development Site 1 (Block 4963/Lots 7, 8, 9)	2025	458,604 gsf residential (546 units), 168,989 gsf retail, 146,100 gsf hotel (353 rooms), 180,835 gsf office, 4,300 gsf community facility, 510 parking spaces, 42,869 sf (0.98 acres) waterfront access
3	SFWD Proposed Development Site 2 (Block 4963, Lot 65)	2025	398,646 gsf residential (368 units), 54,304 gsf retail, 350,873 gsf hotel (301 rooms), 13,505 gsf community facility, 318 parking spaces, 34,810 sf (0.79 acres) waterfront access
4	SFWD Proposed Development Site 3 (Block 4963, Lot 85)	2025	490,570 gsf residential (507 units), 58,383 gsf retail, 217,615 gsf hotel (225 rooms), 202,806 gsf office, 1,674 gsf community facility, 539 parking spaces, 41,800 sf (0.96 acres) waterfront access
5	SFWD Proposed Development Site 4 (Block 4963, Lots 212 and 249)	2025	226,995 gsf (304 units, 61 affordable), 17,135 gsf retail, 2,434 gsf community facility, 166 parking spaces, 15,440 sf (0.356 acres) waterfront access
6	LIRR Stormwater Outfall into Flushing Creek	2022-2023	New stormwater outfall into Flushing Creek for disposal of runoff from Mets-Willets Point LIRR Station
7	36-18 Main Street (Block 4971/ Lot 16)	2025	12-story complex with 14,327 sf retail, 150 hotel rooms, 50,444 sf medical space, and 346 parking spaces
8	NYCDEP Combined Sewer Overflow Long Term Control Plan for Flushing Bay	2050	25 million gallon Combined Sewer Overflow Storage Tunnel, seasonal disinfection at the Flushing Bay Combined Sewer Overflow Retention Tank and Diversion Chamber and at a Combined Sewer Overflow Outfall
9	Porpoise Bridge (Tidal Gate Bridge)	2024	NYCDDC rehabilitation of bridge structure and replacement of existing floodgates.
10	Olmsted Center Reconstruction	2020	NYC Parks reconstruction of the Olmsted Center

**Table 2 (cont'd):
Projects Planned for Study Area by 2039**

Map No.	Project	Build Years	Description
11	World's Fair Marina – Piers 1 and 3	Est. start 2021	NYC Parks reconstruction of piers and floating docks
12	LaGuardia Airport: Runway 4 Localizer Antenna Platform	2024	New platform to be constructed adjacent to existing Runway 22 deck in Flushing Bay, to allow for relocation of Runway 4 localizer antenna array
13	The Farrington, 134-37 35th Avenue (Block 4949/ Lot 31)	2025	201,840 sf mixed-use development, 83,982 sf of hotel space (176 rooms); 16,774 sf community facility, 101,084 sf of residential space (89 condos), 186 parking spaces
14	134-03 35th Avenue (Block 4949/ Lot 46)	2025	16-story mixed-use development, 130 dwelling units, 14,182 sf retail, 208 hotel rooms, 17,388 sf community facility space, 196 parking spaces.
15	34-09 College Point Boulevard (Block 4945/ Lot 34)	2025	3-story commercial storage building, w 105,377 sf of commercial space
16	132-25 41st Avenue (Block 5037/ Lot 101)	2025	5-story, mixed-use building w/8 residential units and 1,644 sf community facility space.
17	36-45 Prince Street (Block 4971/Lot 1)	2025	5-story 8,151 sf mixed-use building w 4,125 sf residential (6 DUs), 3,578 sf commercial (office), and 448 sf community facility space.
18	131-10 Avery Avenue (Block 5076/ Lot 61)	2025	7-story, 50,621 sf building w 40,338 sf community facility and 10,283 sf retail
19	Tangram, 133-31 39th Avenue and 133-12 37th Avenue (Block 4972/Lots 65, 66, and 67)	2025	4-building mixed-use development, w 375 residential units, 75,764 sf office space, 224,985 sf retail, 1,434 sf community facility, 378 hotel rooms, and 1,147 parking spaces.
20	131-72 40th Road (Block 5060/ Lot 37)	2025	6-story, 59,502 sf ambulatory diagnostic and treatment health care facility
21	132-32 41st Avenue (Block 5039/ Lot 18)	2025	5-story mixed-use building with 5,495 sf residential (8 DUs) and 1,970 sf community facility use
22	132-03 41st Road (Block 5039/ Lot 1)	2025	6-story mixed-use building w 6,923 sf residential (8 DUs) and 2,289 sf community facility uses
23	LaGuardia Airport: Central Terminal Building (CTB)/Terminal B Program	2022	Construction of new 1.5 million sf CTB/Terminal B. Includes redesign of terminal airside apron, landside roadways, and West Parking Garage
24	LaGuardia Airport: East Side Reconfiguration	2026	Demolition of existing Terminals C and D and construction of a new consolidated single Terminal C headhouse with four concourses and 37 gates. Includes roadway improvements and expansion of the East Garage
25	Flushing Point Plaza, 131-02 40th Road (Block 5066/ Lot 150)	2025	550,465 sf, three 19-story building development w 275,600 sf residential space (278 DU), 259,479 sf hotel, 1,497 sf community facility, 507 parking spaces
26	134-16 36th Road (Block 4970/ Lot 25)	2025	6-story mixed-use building w 16,972 sf residential (26 DUs), 18,083 sf commercial, and 706 sf community facility
27	132-53 41st Avenue (Block 5037/ Lot 89)	2025	6-story mixed-use building w 10,907 sf residential (14 DUs) and 3,375 sf of community facility space.
28	132-55 41st Avenue (Block 5037/ Lot 88)	2025	5-story mixed-use building w 5,384 sf residential (7 DUs) and 1,447 sf community facility space
29	133-20 41st Road (Block 5042/ Lot 19)	2025	10-story 31,075 sf medical facility w 23,619 sf of community facility use and 30 parking spaces.
30	133-24 41st Road (Block 5042/ Lot 22)	2025	9-story 14,399 sf medical building with 11,996 sf of medical offices (community facility use).

**Table 2 (cont'd):
Projects Planned for Study Area by 2039**

Map No.	Project	Build Years	Description
31	Whitestone Lanes, 30-05 Farrington Street (Block 4370/ Lot 15)	2025-2030	10-story building w 377,000 sf residential (361 DUs, 73 affordable) and 155 parking spaces
32	147-14 Northern Boulevard (Block 5016/ Lot 27)	2025-2030	Two 11-story buildings w 410 DUs (112 DUs will be mix of AIRS and affordable), 36,000 sf retail, and 10,500 sf adult day care
33	Passarelle Bridge Reconstruction	2026	Relocation of the Passerelle Bridge within Flushing Meadows Corona Park, east of the existing alignment. Associated with LGA AirTrain project.
34	Flushing Bay Promenade—Candela Structures/Boat Basin Place Intersections	2026	NYC Parks improvements to Candela structures and Flushing Bay Promenade intersections at Boat Basin Place
35	World's Fair Marina Operations Relocation	2026	Relocation of the Marina Operations Site further to the east along Flushing Bay Promenade. Associated with the LGA AirTrain project.
Sources: Air Train DEIS, Special Flushing Waterfront District EAS, Queens DCP.			

E. ANALYSIS OF PROPOSED MODIFICATION

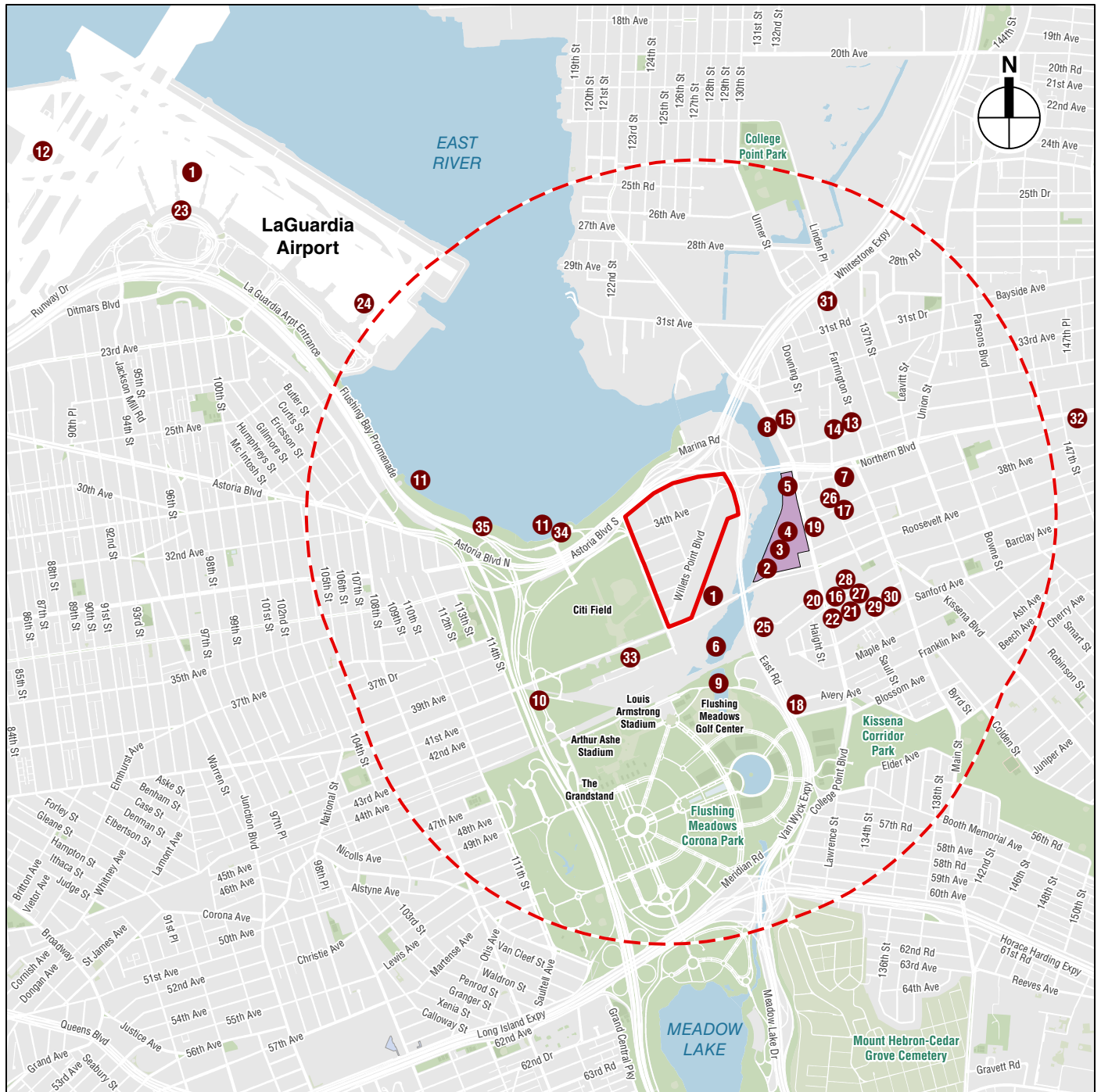
LAND USE, ZONING AND PUBLIC POLICY

This analysis assesses whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse impacts on land use, zoning and public policy that were not addressed in the FGEIS or subsequent environmental review. Neither the FGEIS, subsequent technical memoranda, nor the FSEIS identified a significant adverse impact related to land use, zoning and public policy.

With the Proposed Phase 1 Modification, development would be completed in the southwest corner of the District by 2030. The proposed program for Phase 1 would include approximately 813,112 gsf of residential use (1,100 units), 24,666 gsf of retail, 3,397 sf of community facility use, a 650-seat K-8 public school, and approximately 1 acre of publicly-accessible open space. All of the proposed residential units would be affordable; a portion of the units would be for senior use. The remainder of the District would continue to contain automotive and industrial uses until construction and full buildout of the District by 2039. At full buildout, by 2039, the full development program analyzed under the Approved Plan would be completed, including residential, retail, office, convention center, hotel, and community facility (including school) uses, as well as parking and publicly-accessible open space (see **Table 1** above).

Existing land uses within the District remain substantially the same as described in the FGEIS. As described above, NYCEDC has executed agreements for approximately 20 acres of property located in the District, resulting in acquisition and/or site control, and over 165 businesses have relocated from the City-owned portion of the District since 2012. The City owns the Phase 1 site.

As analyzed in previous environmental review, improvements to drainage and sanitary sewers, streets, and pedestrian amenities, remediation of hazardous materials conditions, and filling of the area to raise it above the floodplain all would be completed first at the Phase 1 site, by 2030, and later in the northern and eastern portions of the District, by 2039. Until properties within the northern and eastern portions of the District are acquired and site work to prepare the properties for redevelopment commences—between 2030 and some time before 2039—the residential and school uses in the Phase 1 site would exist in proximity to any automotive and industrial uses that remain in the northern and eastern portions of the District.



- Special Willets Point District
- Study Area (One-mile boundary)
- Special Flushing Waterfront District
- 1 No Action Project

0 2,000 FEET

As discussed above and shown in **Table 2**, an updated No Build list has been prepared for this analysis. As in the FGEIS, the no build projects will introduce a mix of primarily residential, hotel, commercial office, and community facility uses. They will also make a number of improvements to the area's infrastructure, including bridges, the World's Fair Marina, the Flushing Bay Promenade, the Passerelle Ramp at Flushing Meadows Corona Park, LaGuardia Airport, and stormwater outfalls and CSOs, and bring new public access to the Flushing Creek waterfront. Therefore, the study area would have the same general land use characteristics as analyzed in the FGEIS, and the new development will create new activity within the study area and would complement the various uses to be developed in the District under the Approved Plan. Should the LaGuardia AirTrain project be developed, it is possible that during construction of the Phase 1 development, CitiField parking spaces displaced during AirTrain construction would be relocated elsewhere in the Project Area, as well as for temporary MTA bus storage and parking during construction of the AirTrain operations, maintenance, and storage facility planned to be located just south of the District along Roosevelt Avenue.

In terms of zoning, there are no proposed changes to the zoning of the District or surrounding area; the only required action to implement the first phase of the District's development (Phase 1) is a CPC Chairperson certification that: all streets comply with Zoning Regulation (ZR) Section 124-31; all streets are constructed to grades acceptable to DOB and DOT; all publicly-accessible open space complies with ZR Section 124-40; and the development pursuant to the certification does not preclude future phases of Special Willets Point District development from complying with these regulations.

Like the Approved Plan, the Plan with the Proposed Modification would be consistent with and supportive of the goals of OneNYC (which began as PlaNYC 2030 in 2007), particularly in regard to sustainability. As with the Approved Plan, in the future with the Proposed Modification the City would require future development in the District to achieve Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND) certification. Furthermore, as previously analyzed, the Plan with the Proposed Modification would require the developer(s) to consider the most up-to-date information on the effects of climate change in the City, and implement adaptation strategies where appropriate and feasible.

The Plan with the Proposed Modification would support OneNYC's land use goals by creating new residential development, all of which would be reserved for affordable housing in Phase 1. The Plan with the Proposed Modification would redevelop an underutilized area, would result in a transit-oriented development, and would provide facilities to promote cycling; therefore, it would be consistent with OneNYC's transportation goals. The Plan with the Proposed Modification would support OneNYC's open space goals by creating a minimum of 8 acres of publicly accessible open space at full buildout, including one acre of open space to be developed in Phase 1. Environmental remediation would take place across the District, albeit incrementally, as part of the Plan with the Proposed Modification. Therefore, the Plan with the Proposed Modification would support OneNYC's goal to clean up contaminated land in New York. Like the Approved Plan, the Plan with the Proposed Modification would eliminate potentially polluting septic fields, and stormwater would be pre-treated prior to discharge. The Plan with the Proposed Modification is expected to result in improved stormwater quality and, consequently, improved water quality in Flushing Bay, and all large construction equipment would use ultra-low sulfur diesel fuel (ULSD) and would utilize the best available technology (BAT) for reducing the emission of pollutants; therefore, the Plan with the Proposed Modification would be consistent with OneNYC's water and air quality goals.

The Plan with the Proposed Modification also would be consistent with the City's *Housing New York 2.0* plan—issued in 2014, after the FGEIS and subsequent environmental review—which sets a goal of building or preserving 300,000 units of high-quality affordable housing in all five boroughs by 2026. The 1,100 units of affordable housing to be created in Phase 1 would help address the City's pressing need for affordable housing.

An analysis of the Proposed Modification's consistency with the WRP is provided in **Appendix A**. As detailed in **Appendix A**, the analysis concludes that the Plan with the Proposed Phase 1 Modification would be consistent with policies set forth in the WRP for promoting development that is appropriate to this waterfront location; balancing economic development with environmental conservation in the Coastal Zone; and encouraging revitalization of a waterfront area that is consistent with local objectives.

In summary, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the proposed Phase 1 modification would not result in any significant adverse impacts to land use, zoning and public policy, consistent with the findings of the FGEIS and subsequent environmental review.

SOCIOECONOMIC CONDITIONS

This analysis assesses whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse impacts on socioeconomic conditions that were not addressed in the FGEIS or subsequent environmental review.

The FGEIS concluded that the Approved Plan would not result in significant adverse impacts due to changes in socioeconomic conditions. Neither subsequent technical memoranda nor the FSEIS identified a significant adverse impact related to socioeconomic conditions. As detailed below, the Proposed Modification, when accounting for changes in background conditions and the anticipated Build years, and updates to analysis methodologies, also would not result in any significant adverse socioeconomic impacts. The economic benefits of the Plan—although delayed—would still be realized incrementally under the first phase of development, and substantially realized at full buildout.

At full buildout, with the Proposed Modification the District is assumed to be developed within the same geographic area as previously analyzed. Therefore, by full buildout, the Proposed Modification would result in the same direct residential and business displacement as analyzed in the FGEIS. As with the Approved Plan, upon full buildout the Proposed Modification would directly displace one residential unit (one household)³, and an estimated 260 business and 1,711 employees across 61 acres. Although the change in the Build years could delay the displacement of some businesses and employees from the District, it would not result in different socioeconomic effects at full buildout. The District's businesses were determined not to be of substantial economic value to the region or City as defined under CEQR because the District's businesses are not unique; similar services and products were, and continue to be, provided throughout Queens, the City, and the region. Furthermore, the schedule change would not affect the NYCEDC commitments to business relocation support or the worker assistance programs described above.

At full buildout, with the Proposed Modification the District is assumed to be developed with the same program and maximum gross floor area as previously analyzed. Therefore, the potential indirect (or secondary) socioeconomic effects of the Proposed Modification would be similar to those identified for the full buildout condition analyzed in the FGEIS. Specific to potential indirect residential displacement, as with the Approved Plan, the Proposed Modification at full build-out would introduce approximately 5,500 new residential units, including approximately 1,815 affordable units. This would continue to represent a substantial new population who, in the aggregate, would be expected to have a higher average income than the existing study area population. However, as with the Approved Plan, the District is geographically separated from populations at risk of displacement, limiting the potential to influence residential trends in

³ Based on the latest U.S. Census American Community Survey (ACS) data, there are no longer any residents living in the District.

surrounding areas; recent and planned residential developments such as Flushing Commons have a greater influence on residential market trends. Finally, the provision of approximately 1,815 units of affordable housing—the majority of which, unlike the Approved Plan, would be introduced before market-rate housing—would ensure that a substantial portion of the new population would have incomes that more closely reflect the existing incomes in the study area.

With respect to potential indirect business displacement, as with the Approved Plan, the Proposed Modification would introduce new residents, workers, and visitors to the District who would alter existing economic patterns within the District, but those changes would not lead to substantial indirect business displacement within the broader study area. Existing local retail establishments in the study area would continue to be more convenient to study area residents outside of the District, while the District new residents, workers, and visitors would shop and dine primarily at retail establishments within the District. As with the Approved Plan, the Proposed Modification would represent a continuation of existing trends toward development or retail, office, hotel, and residential uses in the study area, rather than the introduction of a new trend that would change existing economic patterns in the surrounding area.

In general, the analyses presented in the FGEIS—preliminary assessments of direct residential displacement and indirect business displacement due to increased rents, as well as detailed assessments of direct business displacement, indirect business displacement due to competition, indirect residential displacement, and adverse effects on specific industries—are consistent with the requirements of the 2020 *CEQR Technical Manual*. As described in prior environmental review, the 2010 *CEQR Technical Manual* included updated thresholds for when a detailed analysis of indirect business displacement due to competition is necessary; these updated thresholds are retained in the 2020 *CEQR Technical Manual*. According to the 2010 and 2020 *CEQR Technical Manual*, if the capture rate for a certain category of retail goods would exceed 100 percent, a detailed assessment of indirect business displacement due to competition may be warranted. The FGEIS identified a capture rate for the building materials and garden supplies retail category exceeding 100 percent. However, the FGEIS included a detailed analysis of the potential for market saturation in this category and noted that high capture rates are typical for this category because the sales figures most likely include sales to small contractors as well as individual households. Furthermore, the retail program assessed in the FGEIS was designed to provide a conservative assessment of the Approved Plan's potential socioeconomic impacts, and a home improvement store would not necessarily locate in the District. Therefore, use of the current *CEQR Technical Manual* methodology would not change the FGEIS conclusion that the project would not result in significant adverse impacts with respect to indirect business displacement due to competition.

In summary, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the proposed Phase 1 modification would not result in any significant adverse socioeconomic impacts, consistent with the findings of the FGEIS and subsequent environmental review.

COMMUNITY FACILITIES AND SERVICES

This analysis assesses whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse impacts on community facilities and services that were not addressed in the FGEIS or subsequent environmental review.

The FGEIS concluded that the Approved Plan would not result in significant adverse impacts on public schools, libraries, or health care facilities, but could result in a significant adverse impact on day care facilities. To mitigate the potential impact on day care facilities, the FGEIS detailed that the New York City Economic Development Corporation (EDC) would require, as part of the developer's agreement, that a

future developer consult with the New York City Administration for Children's Services (ACS) to determine the appropriate way to meet demand for day care services generated by development in the District.⁴ The FGEIS did not include a detailed analysis of police and fire protection services as the Approved Plan would not displace any police or fire facilities. Although the *CEQR Technical Manual* does not require an analysis of emergency response times, the FGEIS provided information on the adequacy of emergency response times to the District. The FSEIS included a detailed analysis of potential indirect effects on police and fire services. Subsequent environmental review did not identify any significant adverse impacts on community facilities beyond those disclosed in the FGEIS, with the exception of libraries, which were identified as an impact of the full buildout of the District in the FSEIS.

The proposed Phase 1 modification would not physically affect or displace any police, fire, or hospitals and health care facilities. At full buildout, the District is assumed to be developed with the same program and maximum gross floor area as previously analyzed. Therefore, there would be no new demand at full buildout in 2039 for police or fire services or health care facilities, compared to what was analyzed in the FGEIS and subsequent environmental review for the full buildout of the District.

As detailed in prior environmental review, the District is served by the 110th Precinct of the NYPD, located at 94-41 43rd Avenue in Elmhurst, and is also close to the 109th Precinct, located at 37-05 Union Street in Flushing. As noted in an FDNY comment letter dated April 28, 2021 (see **Appendix D**), the District is located within FDNY's 52nd Battalion, and Engine Company 273's firehouse, located at 40-18 Union Street in Flushing, is the geographically closest FDNY emergency response facility to the District. Units responding to a fire are not limited to ones closest to it, however. Normally, a total of three engine companies and two ladder companies respond to each call. Each FDNY squad is capable of operating as an engine, ladder, or rescue company, making them versatile for incident commanders. Each squad is also part of the FDNY HazMat Response Group and has a HazMat Tech Unit within each company. FDNY can call on units in other parts of the City as needed, and FDNY has a total of 217 firehouses and 40 EMS stations City-wide. Unless otherwise assigned, personnel and equipment from Engine Company 273 and surrounding firehouses would be available to respond to emergencies within the District; if those resources are deployed elsewhere, additional resources would be dispatched as needed.

There are two types of ambulances in the City—911 providers, and those providing inter-facility transport. Municipal FDNY and hospital-based ambulances are the sole providers of 911 services, and they operate that system under contract with FDNY. In addition to FDNY ambulances, the District is served by ambulances operated by Flushing Hospital and the New York Hospital of Queens.

As detailed in prior environmental review, the Approved Plan would generate additional traffic on roads throughout the area, including the possible routes used by NYPD, FDNY, and EMS vehicles to access the District. While traffic at certain intersections near the District in the future with the Approved Plan may result in slower access for emergency services vehicles, for the reasons detailed below response times are not expected to significantly change in the future with the Approved Plan. When responding to emergencies, NYPD, FDNY, and EMS vehicles are not bound by standard traffic controls or rules and are capable of adjusting to congestion encountered en route to their destinations and are therefore less affected than other vehicles by such congestion. In addition, emergency services vehicles have access to enhanced sirens and lights that enable them to safely navigate through congested areas. These vehicles would be able to access the District as they do other areas throughout New York City. FDNY is experienced with the logistical issues of providing support for single and simultaneous events occurring at CitiField, Flushing-Meadows Corona Park, and the USTA National Tennis Center. As noted in the agency's comment letter dated April

⁴ Per the 2020 *CEQR Technical Manual*, this would now be coordinated with the New York City Department of Education. What was formerly analyzed as publicly-financed child care is now analyzed as publicly-financed early childhood programs.

28, 2021, FDNY continually evaluates and addresses the operational and logistical needs for firefighting and emergency medical personnel, equipment, and other resources City-wide. As the District's redevelopment moves forward, and as additional information becomes available, FDNY would review the updated plans and make recommendations as appropriate.

Because the NYPD and FDNY would continue to reevaluate staffing and resource needs and would continue to have the ability to adjust to congestion en route to emergencies, response times are not expected to significantly change in the future with the Approved Plan. Furthermore, the proposed development would meet all relevant New York City fire safety standards, and the Plan includes significant infrastructure improvements for the District, including road grading and paving and improvements to City water service, including fire hydrants. As such, the Plan (with or without the Proposed Modification) would bolster FDNY's firefighting ability within the District. EMS units are assigned a permanent cross-street location where they await a service call. If warranted by demand, the FDNY could assign an EMS unit within the District to provide services to the new population.

The Proposed Phase 1 Modification would not result in any changes to the local or internal District street network, or notable increases in traffic, in comparison to the previously analyzed first phase of District development. Therefore, no significant effects on emergency vehicle response times would be expected.

The updated information on background conditions presented above could affect the analyses of public schools, publicly-funded early childhood programs, and libraries. Therefore, this section presents updated analyses of public schools, publicly-funded early childhood programs, and libraries. As discussed below, the updated analyses find that, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the proposed Phase 1 modification would not result in any significant adverse impacts to public schools, libraries, publicly-funded child care facilities, police services, fire services, or health care facilities, beyond those already disclosed in the FGEIS and subsequent environmental review.

PUBLIC SCHOOLS

The updated information on background conditions and anticipated Build years was reviewed to determine whether the potential effects on public schools of the Approved Plan with the proposed Phase 1 modification would remain consistent with the conclusions in the FGEIS and subsequent environmental review. The analysis was also updated to account for current information on school enrollment and enrollment projections, and to reflect current *CEQR Technical Manual* guidance on public school analysis methodology. School enrollment data and enrollment projections for up to 10 years into the future are regularly updated by the New York City School Construction Authority (SCA). This analysis uses the most recent data available, which includes school enrollment for the 2019-2020 school year and enrollment projections for the 2027-2028 school year. (The FGEIS analysis used data on school enrollment for the 2005-2006 school year, and enrollment projections for the 2016-2017 school year.)

The FGEIS analyzed potential impacts on public elementary and intermediate schools within three study areas: 1) a one-mile radius surrounding the District; 2) Subdistrict 2 (referred to as Zone 2 in the FGEIS) of Community School District (CSD) 25; and 3) CSD 25 as a whole. The analysis of high schools considered the potential for impacts at the borough level. The FGEIS concluded that because the Approved Plan would provide a public school with sufficient capacity to offset the project-generated demand for school seats, it would not result in any significant adverse impacts to public schools in these study areas. Under the 2020 *CEQR Technical Manual*, the study area used for the determination of impacts on elementary and intermediate schools is the subdistrict of the school district in which the project is located, and potential impacts on high schools are analyzed at the borough level. Therefore, this analysis considers the potential for impacts to elementary and intermediate schools in Subdistrict 2 of CSD 25 and high schools in Queens.

According to the guidance of the 2020 *CEQR Technical Manual*, a significant adverse impact may occur if a project would result in both 1) a utilization rate of the elementary and/or intermediate schools in the subdistrict study area that is equal to or greater than 105 percent in the future with the proposed project; and 2) an increase of five percent or more in the collective utilization rate between the future without and the future with the proposed project. SCA's Projected Public School Ratio is used to calculate the minimum number of residential units that could yield at least 50 elementary/middle school students or 150 high school students, depending on the Community School District of the project area. Senior housing units are excluded from this calculation. The current student generation rates for CSD 25 are 0.22 elementary school students per unit, 0.07 intermediate school students per unit, and 0.1 high school students per unit. Using these student generation rates, the Approved Plan with the proposed Phase 1 modification would be expected to generate 194 elementary students, 62 intermediate students, and 88 high school students by 2030 (Phase 1 completion), and 1,162 elementary students, 370 intermediate students, and 528 high school students by 2039 (full buildout of District). Therefore, the analysis below considers elementary and intermediate schools for Phase 1, and elementary, intermediate, and high school students for full buildout of the District.

Table 3 provides updated information on the elementary, intermediate, and high schools that serve the project area and provides the most current enrollment and capacity data for these schools. Since the completion of the FGEIS, one new elementary school and a new intermediate and high school (P.S. 244 and the East-West School of International Studies, respectively) have opened in the study area. Seven elementary schools and 3 intermediate schools serve Subdistrict 2/CSD 25; of the numerous high schools in Queens, 5 facilities are located within one mile of the District. Elementary schools in Subdistrict 2/CSD 25 are currently operating at 113 percent utilization, and intermediate schools are currently operating at 107 percent utilization. High schools in Queens are currently operating at 113 percent utilization.

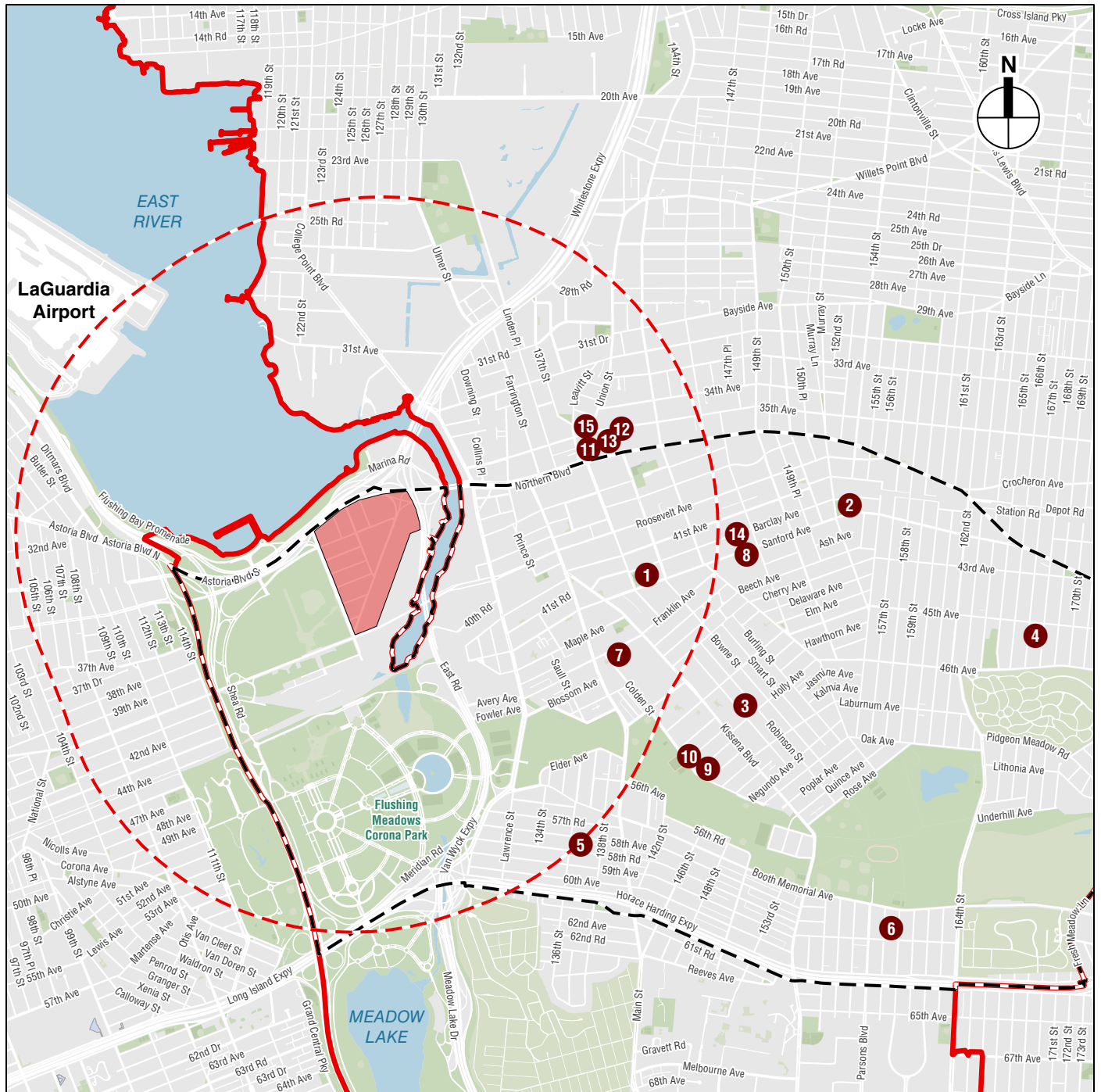
Table 3:
Public School Enrollment, Capacity, and Utilization: Existing Conditions

Map No. ¹	Name	Address	Enrollment	Target Capacity	Available Seats	Utilization
Elementary Schools in Subdistrict 2/CSD 25						
1	P.S. 20 (John Bowne)	142-30 Barclay Avenue	1,190	1,146	-44	104%
2	P.S. 22 (Thomas Jefferson)	153-33 Sanford Avenue	864	620	-244	139%
3	P.S. 24 (Andrew Jackson)	45-57 Union Street	1,085	1,162	77	93%
4	P.S. 107 (Thomas A. Dooley)	167-02 45th Avenue	936	990	54	95%
5	P.S. 120 (Queens)	58-01 136th Street	913	761	-152	120%
6	P.S. 163 (Flushing Heights)	159-01 59th Avenue	807	596	-211	135%
7	P.S. 244 (Active Learning Elementary)	137-20 Franklin Avenue	475	252	-223	188%
Elementary Schools Subdistrict 2 Total			6,270	5,527	-743	113%
Intermediate Schools in Subdistrict 2/CSD 25						
8	J.H.S. 189 (Daniel Carter Beard)	144-80 Barclay Avenue	735	856	121	86%
9	I.S. 237	46-21 Colden Street	1,355	1,124	-231	121%
10	East-West School of International Studies	46-21 Colden Street	666	594	-72	112%
Intermediate Schools Subdistrict 2 Total			2,756	2,574	-182	107%
High Schools in Queens*						
11	Veritas Academy	35-01 Union Street	608	375	-233	162%
12	Queens High School for Language Studies	35-01 Union Street	447	407	-40	110%
13	Flushing High School	35-01 Union Street	1,483	1,196	-287	124%
14	Flushing International High School	144-80 Barclay Avenue	449	493	44	91%
15	Queens Academy High School	138-11 35th Avenue	393	276	-117	142%
High Schools Queens Total			76,614	68,053	-8,561	113%

Notes: ¹ See Figure 6.

*Individual facility information provided only for high schools within 1 mile of the District.

Source: CEQR App 2021:DCP; DOE *Utilization Profiles: Enrollment/Capacity/Utilization*, 2019-2020.



- Special Willets Point District
- One-mile boundary
- Community School District (CSD) 25
- CSD 25, Subdistrict 2
- 1 Public School

0 2,000 FEET

Table 4 shows school enrollment, capacity, and utilization in the 2030/2039 No Action condition. The SCA enrollment projections currently extend through 2028; therefore, the 2028 projections form the baseline enrollment for both the 2030 No Action condition and the 2039 No Action condition. As noted above, the students introduced by anticipated residential projects in the schools' study area (derived from SCA Capital Planning Division's *Projected New Housing Starts*) are added to this baseline projected enrollment using the SCA student numbers for Subdistrict 2/CSD 25. DOE's 2020-2024 Five-Year Capital Plan Proposed Amendment (November 2020) identifies seven capacity-increasing projects within CSD 25 (not including additions to existing schools outside Subdistrict 2); however, since sites for these projects have not yet been identified, and the selected sites may not be located within Subdistrict 2, these projects are not included in the 2030/2039 No Action and With Action condition calculations.

Table 4:
Estimated Public School Enrollment, Capacity, and Utilization,
2030/2039 No Action Scenario

Study Area	Projected Enrollment in 2030/2039	Students Introduced by Residential Projects in the No Action Condition (2030/2039)	Total 2030/2039 Enrollment	Capacity	Available Seats	Utilization
Elementary Schools						
Subdistrict 2/ CSD 25	9,704	793	10,497	5,471	-5,026	192%
Intermediate Schools						
Subdistrict 2/ CSD 25	4,511	269	4,780	2,242	-2,538	213%
High Schools						
Queens	69,724	3,717	73,441	67,385	-6,056	109%
Sources: CEQR App 2021:DCP; DOE <i>Enrollment Projections 2018–2028 by Statistical Forecasting</i> ; DOE, <i>Projected New Housing Starts as Used in Enrollment Projections, 2018-2027</i> ; DOE, <i>Utilization Profiles: Enrollment/Capacity/Utilization, 2017–2018</i> ; DOE 2020-2024 Five-Year Capital Plan Proposed Amendment.						

Table 5 shows school enrollment, capacity, and utilization in the 2030 With Action condition. As detailed above, the Phase 1 development to be completed by 2030 would include a 650-seat school to meet the needs of the new District population, which would increase school capacity within Subdistrict 2.⁵ The program for the school would be developed by SCA and DOE at the time of its design; however, for the purposes of this analysis, it is conservatively assumed that approximately 2/3 of the school seats to be developed in the District would be elementary seats and 1/3 would be intermediate seats, based on a typical seat distribution for a K-8 school.

As shown in **Table 5**, elementary and intermediate schools in Subdistrict 2 would continue to operate with seat shortfalls in both the 2030 No Action and With Action condition; however, the 650-seat public school to be constructed in the Phase 1 development would serve to improve overall utilization rates within Subdistrict 2. Elementary school utilization rates within Subdistrict 2 would decrease from 192 percent in the 2030 No Action condition to 181 percent in the 2030 With Action condition (a 10.45 percent decrease in utilization), and intermediate school utilization rates would decrease from 213 percent in the 2030 No Action condition to 196 percent in the 2030 With Action condition (a 17.17 percent decrease in utilization). Therefore, the Approved Plan with the proposed Phase 1 modification would not result in a significant

⁵ The FGEIS assumed that all of the school seats to be created in the District would be elementary seats, based on the need for elementary seats identified in that analysis. Because this analysis identifies a need for both elementary and intermediate seats within Subdistrict 2/CSD 25, it is assumed that the District schools would include seats at both levels. The SCA and Department of Education (DOE) will develop a program for the proposed schools at the time of their design. This program could include either elementary or intermediate seats, depending on current need. Based on a typical seat distribution for a K-8 school, this analysis assumes that approximately 2/3 of the school seats to be developed in the District would be elementary seats, and 1/3 would be intermediate seats.

adverse schools impact in the 2030 With Action condition, as the utilization rates would decrease compared to the 2030 No Action condition.

Table 5:
Estimated Public School Enrollment, Capacity, and Utilization,
2030 With Action Scenario

Study Area	No Action Enrollment	Students Introduced by the Proposed Actions	Total 2030 With Action Enrollment	Capacity	Available Seats	Utilization	Change in Utilization Compared with 2030 No Action
Elementary Schools							
Subdistrict 2/ CSD 25	10,497	194	10,691	5,893	-4,798	181%	-10.45%
Intermediate Schools							
Subdistrict 2/ CSD 25	4,780	62	4,842	2,470	-2,372	196%	-17.17%
Sources: CEQR App 2021:DCP; DOE <i>Enrollment Projections 2018–2027</i> ; DOE, <i>Utilization Profiles: Enrollment/Capacity/Utilization, 2017–2018</i> ; DOE <i>2020–2024 Five-Year Capital Plan Proposed Amendment</i> .							

It appears likely that the residential units proposed to be constructed in Phase 1 could be completed and occupied in advance of the completion of the Phase 1 public school, although both components are projected for completion by 2030. Based on the current construction schedule for Phase 1, the non-senior residential buildings would be completed first, with the senior residential building following; therefore, it is possible that the non-senior residential buildings could be completed up to 30 months before the Phase 1 public school is ready for occupancy in 2030. In such a scenario, the elementary and intermediate students generated by the non-senior Phase 1 residential development—up to 194 elementary students, and 62 intermediate students—would be anticipated to attend nearby schools as directed by DOE during this temporary condition, and would attend the District school upon its completion. In this temporary condition without the Phase 1 public school, elementary school utilization rates within Subdistrict 2 would increase from 192 percent in the No Action condition, to 195 percent (a 3.55 percent change in the utilization rate), and intermediate school utilization rates within Subdistrict 2 would increase from 213 percent in the No Action condition to 216 percent (a 2.77 percent change in the utilization rate). Therefore, during this temporary condition, while the utilization rate of public elementary and intermediate schools in the subdistrict would be greater than 105 percent, there would not be an increase of five percent or more in the collective utilization rate, and thus this scenario would not meet both criteria for identification of a significant adverse school impact according to the guidance of the 2020 *CEQR Technical Manual*. Furthermore, this scenario assumes all residential units would be fully occupied upon completion of the Phase 1 buildings, which is unlikely to be the case; rather, it is more likely that occupancy of the residential buildings would increase gradually over time. Upon completion of the Phase 1 public school in 2030, the public school needs of the new Phase 1 District population would be met on-site, while providing additional Subdistrict 2 capacity, as described above.

Table 6 shows school enrollment, capacity, and utilization in the 2039 With Action condition. As detailed above, the Phase 1 development to be completed by 2030 would include construction of a 650-seat school to meet the needs of the new District population, which would increase school capacity within Subdistrict 2. Additional school capacity also would be developed within the District by 2039 at full buildout of the Approved Plan, to meet the needs of the new District population. As detailed above, the most current DOE capital plan does not identify any planned elementary or intermediate schools to be sited specifically within CSD 25/Subdistrict 2 or planned high schools in Queens that are expected to be complete by 2039; however, future capital plans may include additional schools, if needed, to service the area.

Table 6:
Estimated Public School Enrollment, Capacity, and Utilization,
2039 With Action Scenario

Study Area	No Action Enrollment	Students Introduced by the Proposed Actions	Total 2039 With Action Enrollment	Capacity	Available Seats	Utilization	Change in Utilization Compared with 2039 No Action
Elementary Schools							
Subdistrict 2/ CSD 25	10,497	1,162	11,662	6,471	-5,191	180%	-11.65%
Intermediate Schools							
Subdistrict 2/ CSD 25	4,780	370	5,152	2,782	-2,370	185%	-28.01%
High Schools							
Queens	73,441	528	73,969	67,385	-6,584	110%	0.77%
Sources: CEQR App 2021:DCP; DOE <i>Enrollment Projections 2018–2027</i> ; DOE, <i>Utilization Profiles: Enrollment/Capacity/Utilization, 2017–2018</i> ; DOE <i>2020–2024 Five-Year Capital Plan Proposed Amendment</i> .							

As shown in **Table 6**, elementary and intermediate schools in Subdistrict 2 and high schools in Queens would continue to operate with seat shortfalls in both the 2039 No Action and With Action condition; however, the public school capacity to be constructed within the District would serve to improve overall utilization rates within Subdistrict 2. Elementary school utilization rates within Subdistrict 2 would decrease from 192 percent in the 2039 No Action condition, to 180 percent in the 2039 With Action condition (an 11.65 percent decrease in utilization), and intermediate schools utilization rates would decrease from 213 percent in the 2039 No Action condition to 185 percent in the 2039 With Action condition (a 28.01 percent decrease in utilization). Therefore, the Approved Plan with the proposed Phase 1 modification would not result in a significant adverse schools impact in the 2039 With Action condition, as the utilization rates would decrease compared to the 2039 No Action condition.

SCA has not yet designed the Phase 1 school or its points of pickup and dropoff; thus, site circulation plans for the school are not yet available for analysis. However, the private streets adjacent to the Phase 1 school would be designed to DOT standards, and it is anticipated that, prior to the opening of the school, SCA and DOT School Safety would coordinate the implementation of any markings, signals, or signage-based safety treatments that are determined to be warranted to ensure safe student and pedestrian circulation in the area surrounding the school.

LIBRARIES

The updated information on background conditions and anticipated Build years was reviewed to determine whether the potential for effects on libraries in the future with the Proposed Modification would remain consistent with the conclusions in the FGEIS and subsequent environmental review.

As detailed above, the FGEIS and subsequent technical memoranda concluded that the Approved Plan would not result in a significant adverse impact on libraries. The FSEIS concluded that the full buildout of the District would result in a significant adverse impact on libraries.

Existing Conditions

The Queens Public Library (QPL) currently comprises 65 locations (two new locations have been added since the FGEIS, as well as an Adult Learning Center) and serves approximately 2.3 million residents (an increase of approximately 87,388 residents since the FGEIS). In 2018, the QPL system circulated more than 12,400,000 books, periodicals, and digital materials (“holdings”); welcomed more than 11,400,000 visitors; served more than 940,000 active cardholders; provided more than 3,000,000 computer sessions

and nearly 500,000 wireless internet connections; and offered more than 80,000 classes, workshops, cultural events, and activities.⁶ It should be noted that residents can go to any QPL branch and order books from any of the other library branches.

Consistent with the FGEIS and subsequent environmental review, the Flushing Library of the QPL system is the only public library located within 3/4-mile radius around the District (see **Figure 7**). Since the FGEIS, the Flushing Library catchment area has decreased to 76,965 residents (previously 79,326). Flushing Library has 530,000 holdings.⁷ Thus, the Flushing Library contains approximately 4.68 holdings per resident, which is smaller than the borough-wide average of 5.4 (an increase from 3.1 volumes per resident in the FGEIS) holdings per resident.

Future Without the Proposed Modification

In the future without the Proposed Modification, 17 No Build projects would add approximately 3,147 housing units to the 3/4-mile library catchment area by 2030. Based on the average household size of 2.80 for Community District 7, these developments would add approximately 8,812 new residents to Flushing Library's catchment area. The QPL system currently has no plans to expand service in the study area. Therefore, in the 2030 No Action condition, the Flushing Library branch would continue to have approximately 530,000 holdings, and the study area would have approximately 4.20 holdings per resident, compared with 4.68 holdings per resident in the existing condition (see **Table 7**). No additional residential development projects are anticipated for development within the library catchment area by the 2039 Build year; therefore, this analysis uses the same population and holdings per resident information for the 2030 and 2039 No Action conditions.

**Table 7: Library Study Area
Residents and Holdings**

	2030/2039 Future Without the Proposed Modification	2030 Future With the Proposed Modification	2039 Future With the Proposed Modification	2030 Population Increase over No Action	2039 Population Increase over No Action
Study Area Residents	85,783	88,863	101,183	3.69%	17.95%
Flushing Library Holdings to Resident Ratio	4.20	4.05	3.56		

Source: 2013 FSEIS; 2015-2019 American Community Survey 5-Year Estimates.

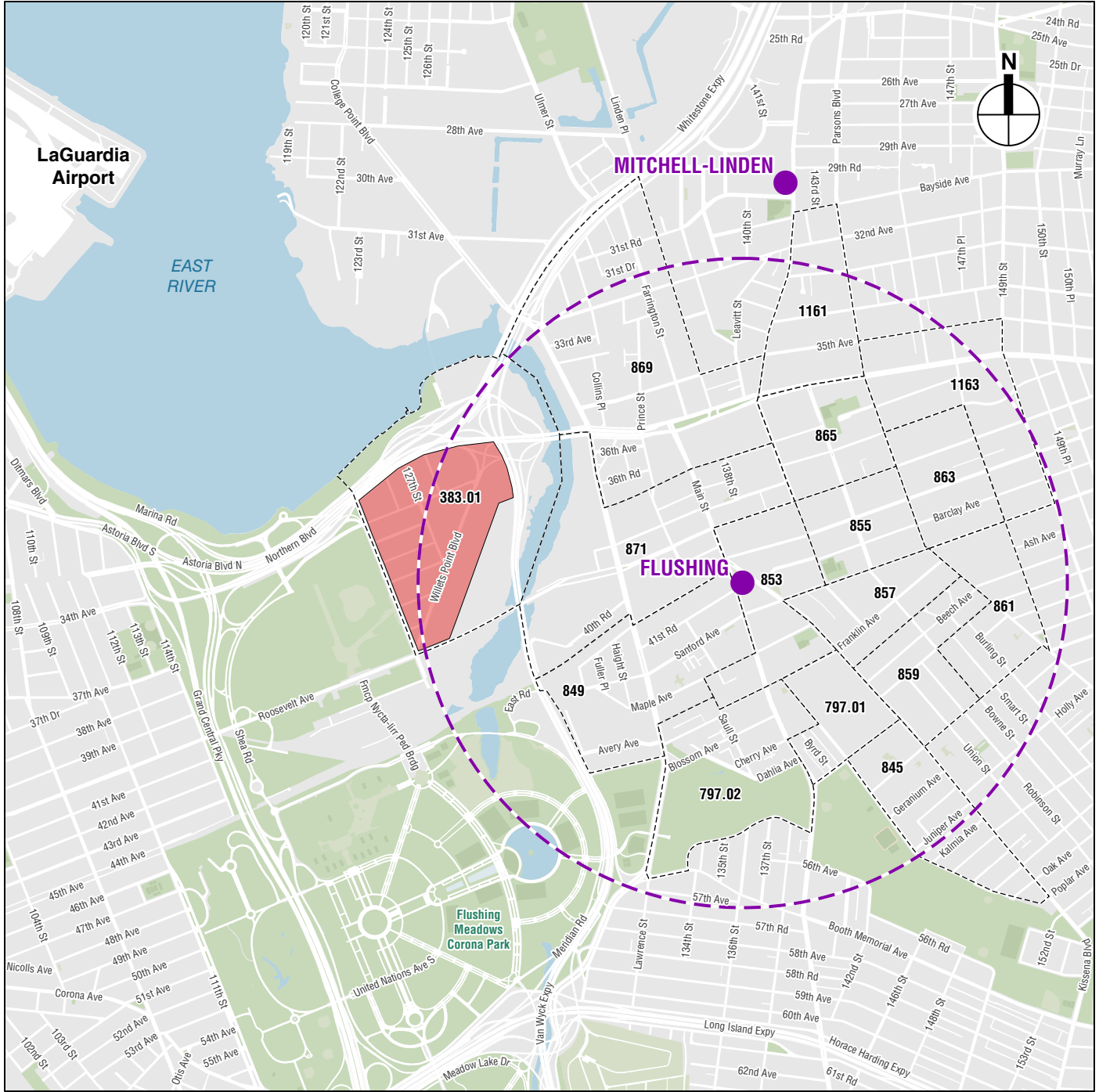
Future With the Proposed Modification

As noted above, the Phase 1 development would result in approximately 1,100 new housing units within the District. Using an average household size of 2.80 persons (the average household size for Queens Community District 7), the Phase 1 development would result in approximately 3,080 new residents, bringing the total population of the study area to 88,863 residents. The additional population represents an increase of approximately 3.59 percent over the 2030 No Action condition (see **Table 7**). The holdings-to-resident ratio within the study area would be 4.05, which remains smaller than the present borough-wide holdings-to-resident ratio of 5.4 holdings per resident.

In 2039, the Plan with the Proposed Modification would introduce approximately 5,500 new housing unit to the District, which would result in approximately 15,400 new residents, bringing the total population of

⁶ <https://www.queenslibrary.org/about-us/queens-public-library-overview/fast-facts>

⁷ 2013 FSEIS.



- Special Willets Point District*
- Library Catchment Area*
- Census Tract*
- Public Library*

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the area to residents. The holdings-to-resident ratio within the study area would be 4.05, which would be smaller than the present borough-wide holdings-to-resident ratio of 5.4 holdings per resident (see **Table 7**).

The additional population in the 2039 future with the Proposed Modification represents an increase of more than 5 percent over the 2039 future without the Proposed Modification. The FGEIS also identified that the Approved Plan would result in population increases of more than 5 percent over the No Action condition. The FGEIS determined that although the population increase would be greater than 5 percent, the change would not impair the delivery of library services within the study area.

Study area residents would continue to have access to the entire QPL system through the inter-library loan system and could have holdings delivered directly to their nearest library branch. Residents would also have access to libraries near their place of work. Furthermore, it is anticipated the trend toward increased electronic research, the SimplyE mobile application, and the interlibrary loan system would make space for increased patron capacity and programs to serve population growth. As described above, study area residents also would continue to have access to the nearby Mitchell-Linden Library branch, which is located just outside the 3/4-mile study area.

In summary, the updated analysis finds that, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the proposed Phase 1 modification would not result in any significant adverse impacts to libraries that were not already identified in the FGEIS and subsequent environmental review.

EARLY CHILDHOOD PROGRAMS

The updated information on background conditions and anticipated Build years was reviewed to determine whether the potential for effects on early childhood programs in the future with the Proposed Phase 1 Modification would remain consistent with the conclusions in the FGEIS and subsequent environmental review. The analysis was also updated to reflect current *CEQR Technical Manual* guidance on early childhood programs analysis methodology.

As detailed above, the FGEIS concluded that the Approved Plan could result in a significant adverse impact on day care facilities (now referred to as early childhood programs). Possible mitigation measures included adding capacity to existing facilities, or providing a new day care facility within or near the area surrounding the District; however, as detailed in the FGEIS, it was not possible to know exactly which type of mitigation would be most appropriate and when, because several factors may limit the number of children in need of publicly funded day care slots. Therefore, to mitigate the potential impact on day care facilities, the FGEIS detailed that NYCEDC would require, as part of the developer's agreement, that a future developer consult with the New York City Administration for Children's Services (ACS) to determine the appropriate way to meet demand for day care services generated by development in the District. The FGEIS noted that the developer of Phase 1A/1B would 1) consult with ACS to determine whether adding capacity to existing facilities or providing a new child care facility within or near the area surrounding the District would be the appropriate way to meet the project-generated demand for child care services, and 2) would, as directed by ACS, add capacity to existing facilities or provide a new child care facility within or near the area surrounding the District. The FGEIS noted that NYCEDC would require, as part of the developer's agreement, that the designated developer of the full District buildout similarly consult with ACS to determine the appropriate way to meet the demand for child care services generated by the full buildout of the District, and would add capacity to existing facilities or provide a new child care facility within or near the area surrounding the District, as directed by ACS.

Under current *CEQR Technical Manual* methodology, if a proposed project would add more than 20 (previously 50) eligible children to the study area's early childhood program facilities; a detailed analysis

of the proposed project's impact on those facilities is warranted. The threshold is based on the number of low- and moderate-income units within a proposed project, which in Queens is 139 units (previously 278). The Proposed Modification would create approximately 880 non-senior affordable housing units in Phase 1 (by 2030) and up to 1,595 non-senior affordable housing units at full buildout of the District, which would generate approximately 123 and 223 children, respectively, under the age of 13 (previously 12) who could be eligible for publicly funded early childhood programs.

Early childhood programs comprise EarlyLearn NYC (Child Care and Head Start programs), 3-K, and Pre-K for All. While 3-K and Pre-K programs are free for all three- and four-year-old children in New York City, there are eligibility requirements for children to enroll in EarlyLearn Child Care and Early Head Start programs. Publicly financed child care services are available for income-eligible children up to the age of 13. In order for a family to receive subsidized child care services, the family must meet specific financial and social eligibility criteria that are determined by federal, state, and local regulations. As described in the 2020 *CEQR Technical Manual*, the City's affordable housing market is pegged to the Area Median Income (AMI) rather than the Federal Poverty Level (FPL). For the purposes of CEQR analysis, the number of housing units expected to be subsidized and targeted for incomes of 80 percent AMI or below are used as a proxy for eligibility for publicly funded child care services.

According to the *CEQR Technical Manual's* current methodology for early childhood program analyses, in general the locations of publicly funded group early childhood programs within 1.5 miles of a project site (previously 1-mile) should be shown, reflecting the fact that the centers closest to a given site are more likely to be subject to increased demand. Current enrollment data for the early childhood programs closest to the District were gathered from DOE. Child care enrollment in the Future without the Proposed Modification (2030 and 2039) was estimated by multiplying the number of new affordable housing units expected in the study area by the CEQR multipliers for estimating the number of children under age six eligible for publicly funded child care services. For Queens, the multiplier estimates 0.140 public child care-eligible children under age six per affordable housing unit. The child care-eligible population expected to be introduced to the District by the Plan with the Proposed Modification was also estimated using the *CEQR Technical Manual* child care multipliers.

EXISTING CONDITIONS

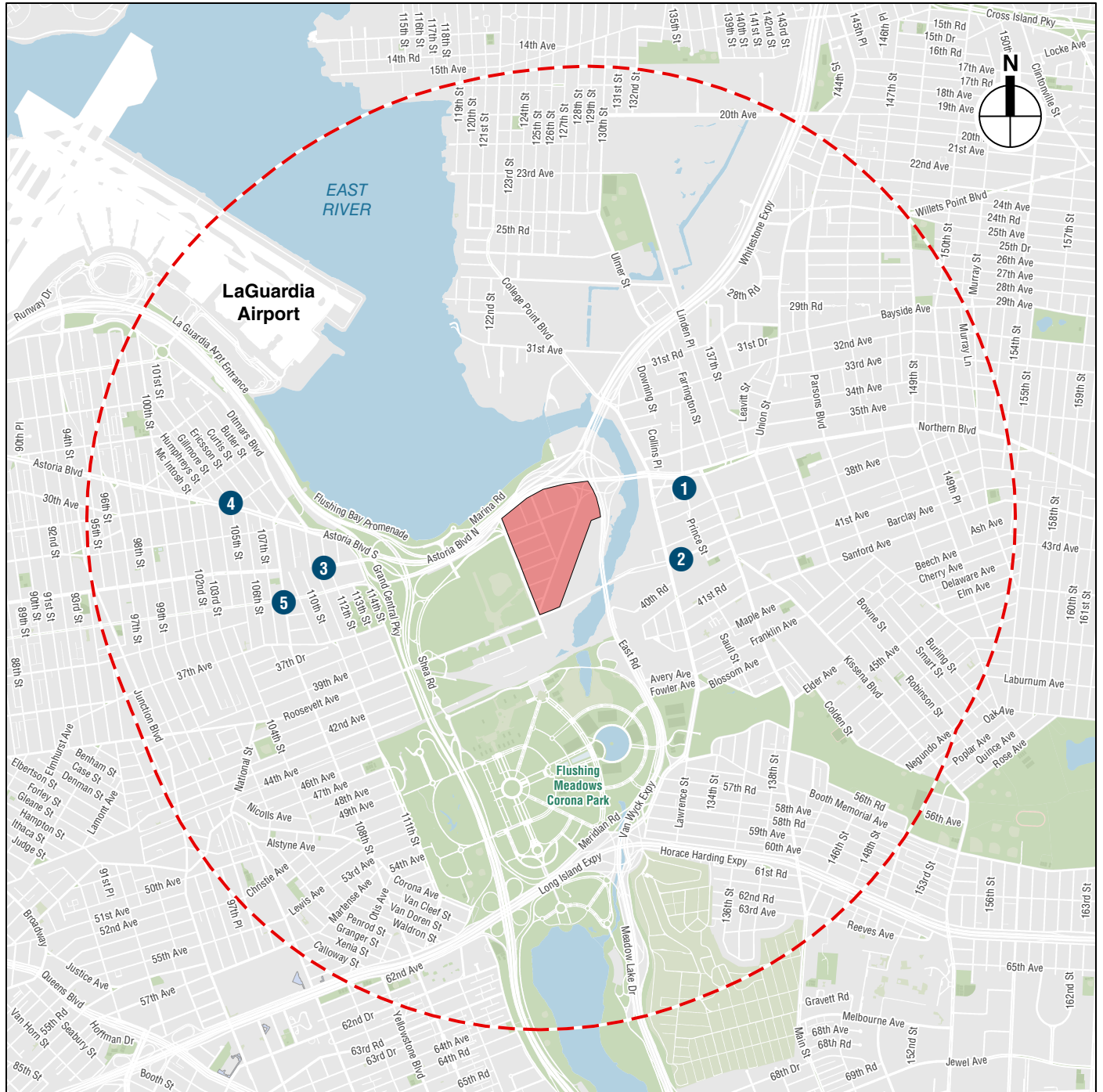
There are currently five publicly funded early childhood programs within the study area (see **Figure 8**). The group child care and Head Start facilities currently have a total capacity of 403 slots and have a deficit of 34 slots (108 percent utilization). **Table 8** shows the current capacity and enrollment for these facilities. Family-based early childhood programs and informal care arrangements provide additional slots in the study area, but these slots are not included in the quantitative analysis.

**Table 8:
Publicly Funded Early Childhood Programs Serving the Study Area**

Map No. ¹	Contractor Name	Address	Enrollment	Capacity	Available Slots	Utilization Rate
1	Flushing DCC Inc.	36-06 Prince Street	35	35	0	100%
2	League for Better Com Life	133-16 Roosevelt Avenue	59	52	-7	88%
3	Sheltering Arms D C Services, Inc.	111-12 Northern Boulevard	135	109	-26	81%
4	St. Christopher-Ottillie	29-49 Gilmore Street	60	60	0	100%
5	The Child Center of NY Inc.	34-10 108th Street	148	147	-1	99%
Total			437	403	-34	108%

Note: See **Figure 8**.

Source: NYC DOE Division of Early Childhood Education, April 2019.



- Special Willets Point District
- Study Area (1.5-mile boundary)
- 1 Early Childhood Program

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FUTURE WITHOUT THE PROPOSED MODIFICATION

By 2030, No Build projects in the child care study area will introduce approximately 329 new affordable housing units and approximately 47 children under age 6 who would be eligible for publicly-funded child care programs, based on current CEQR generation rates.⁸⁸ No additional residential development projects are anticipated for development by the 2039 Build year; therefore, this analysis uses the same program and enrollment/capacity information for the 2030 and 2039 No Action conditions.

FUTURE WITH THE PROPOSED MODIFICATION

The Phase 1 development is estimated to introduce approximately 1,100 affordable housing units to the District, of which 220 would be for senior use. In order to ensure a reasonably conservative analysis, it is assumed that all of the non-senior affordable housing units would meet the financial and social eligibility criteria for publicly funded child care, even though—according to the *CEQR Technical Manual*—children from households earning above 80 percent AMI would not be eligible for publicly funded child care services. Based on the current *CEQR Technical Manual* child care multipliers, the Phase 1 development would result in approximately 123 children under the age of six who would be eligible for publicly funded child care programs. As detailed in **Table 9**, in the 2030 future with the Proposed Modification, early childhood programs in the study area would operate at 150.70 percent utilization with a deficit of 204 slots.

Table 9:
Estimated Public Child Care Facility Enrollment, Capacity, and Utilization

	Enrollment	Capacity	Available Slots	Utilization Rate	Change in Utilization
2030/2039 Future Without the Proposed Modification	484	403	-81	120.16%	-
2030 Future With the Proposed Modification	607	403	-204	150.70%	30.54%
2039 Future With the Proposed Modification	830	403	-427	205.96%	85.79%

Sources: NYC DOE Division of Early Childhood Education, April 2019.

At full buildout, the District is estimated to include approximately 1,595 affordable housing units. Based on the current *CEQR Technical Manual* child care multipliers, at full buildout the Plan with the Proposed Modification would result in approximately 223 children under the age of six who would be eligible for publicly funded child care programs. As detailed in **Table 9**, in the 2039 Future with the Proposed Modification, early childhood programs in the study area would operate at 205.96 percent utilization with a deficit of 427 slots.

The *CEQR Technical Manual* guidelines indicate that a demand for slots greater than the remaining capacity of early childhood programs and an increase in demand of 5 percentage points of the study area capacity could result in a significant adverse impact. In the 2030 and 2039 future with the Proposed Modification, early childhood programs in the study area would operate over capacity and would exhibit an increase in the utilization rate of more than 5 percentage points as compared with the future without the Proposed Modification. Therefore, consistent with the findings of the FGEIS, the Plan with the Proposed Modification would be expected to result in a significant adverse impact on publicly-funded child care services (early childhood programs).

To fully mitigate this impact, it is expected that the measures identified in the FGEIS and noted above would be implemented. Possible mitigation measures include adding capacity to existing facilities, or

⁸⁸ Affordable units reflect units between extremely low income to moderate income (80 percent AMI or below). If income rate was not able to be determined, all units were considered affordable.

providing a new facility within or near the area surrounding the District. Because several factors may limit the number of children in need of publicly funded child care services (early childhood programs), the developer of Phase 1 and the future developer(s) for full buildout of the District would consult with the DOE to determine the appropriate way to meet demand for early childhood programs generated by development in the District and would, as directed by DOE, add capacity to existing facilities or provide a new facility within or near the area surrounding the District.

In summary, the updated analysis find that, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the proposed Phase 1 Modification would not result in any significant adverse impacts to publicly-funded child care services (early childhood programs) beyond those already identified in the FGEIS and subsequent environmental review.

OPEN SPACE

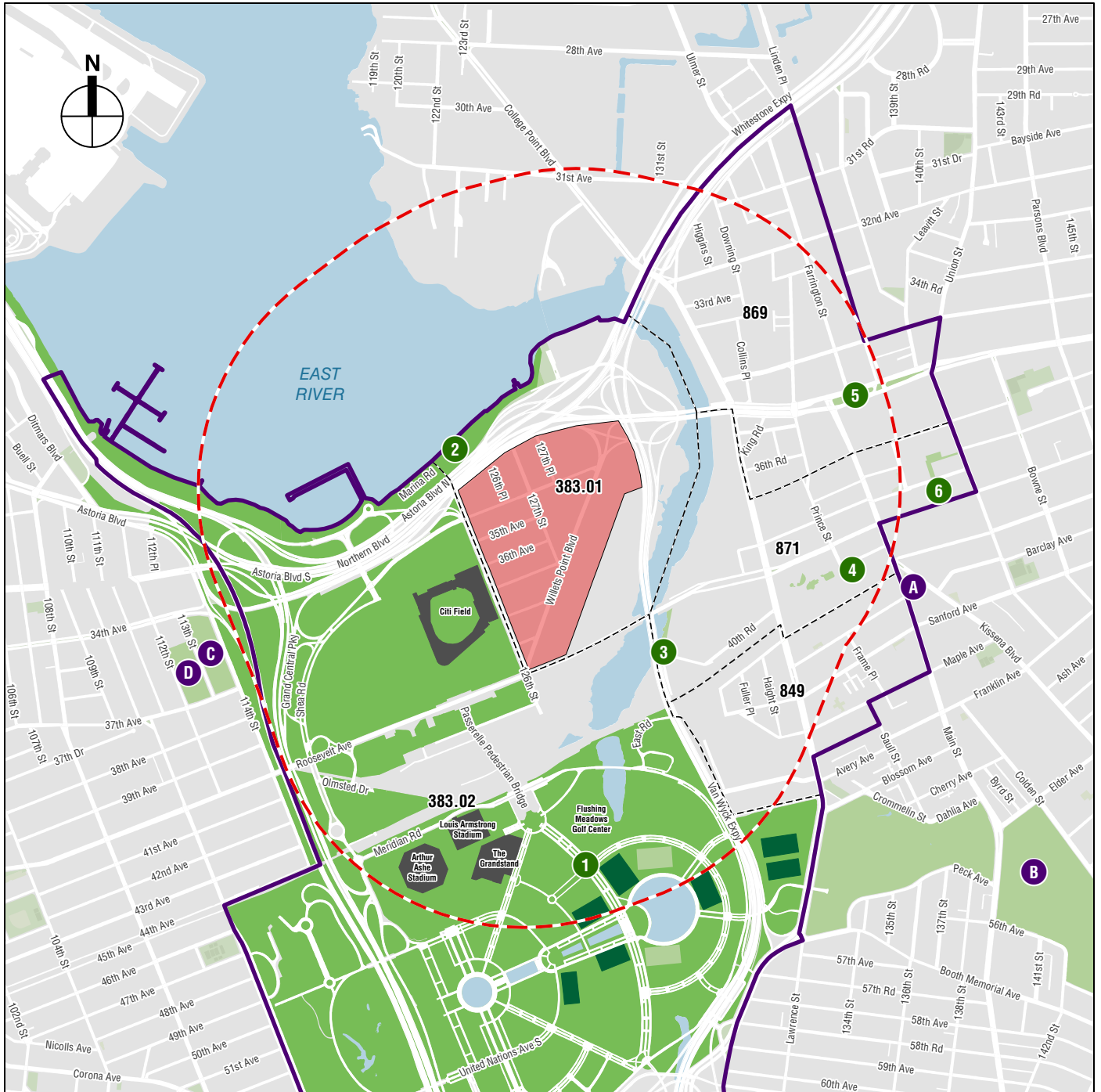
This analysis assesses whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse open space impacts that were not addressed in the FGEIS or subsequent environmental review.

The FGEIS concluded that the Approved Plan would not result in significant adverse open space impacts. In the future with the Approved Plan, the area surrounding the District would continue to have adequate active and passive open space resources, and although open space ratios would decline, for the most part the open space ratios would exceed existing City guidelines. The total open space ratios would be well above City goals. In addition, the quantitative analyses in the FGEIS did not consider the extensive open space resources just beyond the study area boundaries, particularly the numerous active recreational amenities in the remaining portions of Flushing Meadows-Corona Park. Neither subsequent technical memoranda nor the FSEIS identified a significant adverse impact related to open space. The 2020 *CEQR Technical Manual* guidelines indicate that an open space assessment is warranted when a proposed project results in the physical loss of an open space or introduces 200 or more residents or 500 or more workers to an area that is neither underserved nor well-served by open space. The proposed Phase 1 modification would result in a new resident population within the District by 2030 that would meet the residential assessment threshold. Therefore, a detailed assessment was undertaken that considers updated information on background conditions and anticipated Build years.

EXISTING CONDITIONS

Since the FGEIS, the residential population within the ½-mile open space study area has increased by approximately 79 percent. The study area currently has an estimated population of 11,323.⁹ In addition, one new open space has been developed within the study area since the FGEIS—Sky View Parc SPW (shore public walkway). Sky View Parc SPW is a 0.67-acre walkway adjacent to Flushing Creek, associated with the mixed-use residential and retail development that is bounded by 40th Road to the south, College Point Boulevard to the east, Roosevelt Avenue to the north, and Flushing Creek to the west. The open space is accessible by 40th Road and contains benches, lighting, landscaped vegetation, and upland connections. Sky View Parc SPW is assumed to be 15 percent active open space and 85 percent passive open space, based on Parks analysis of how this space operates. The study area currently includes seven public open spaces, which total 79.75 acres. Of this total, 39.49 acres are active space and 40.26 acres are passive (see **Table 10** and **Figure 9**).

⁹ Includes census tracts with 50 percent or more of their area within 1/2-mile of the project area (Census Tracts 869, 383.01, 383.02, 871, and 849). Based on 2015–2019 5-Year estimates American Community Survey (ACS) U.S. 2010 Census data.



- Special Willets Point District
- Half-mile Boundary
- Open Space Study Area
- 383.01 Census Tract

Open Space Resource

- 1 Open Space Study Area
- A Outside Open Space Study Area

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Open Space Study Area and Resources

Figure 9

**Table 10:
2021 Open Space Inventory**

Map No.	Name	Owner	Features	Size (acres)	Acres of Active Open Space	Acres of Passive Open Space	Condition/Utilization ¹
1/2-Mile Residential Study Area							
1	Flushing Meadows-Corona Park ²	NYC Parks	benches, paved walkways, lawns, tennis courts, soccer fields, fountain, ice rink, pitch and put	55.08	27.54	27.54	Fair/Heavy
2	Flushing Bay Promenade ²	NYC Parks	benches, paved walkway, kayak launch	22.69	11.35	11.35	Good/Moderate
3	Sky View Parc SPW ²	BRE SkyView Retail Owner, LLC	Benches, lighting, landscaped vegetation, and upland connections	0.67	0.10	0.57	Good/Low ³
4	Bland Playground	NYC Parks	basketball courts, handball courts, benches, swings, jungle gyms, fountain (for children's play)	0.55	0.50	0.05	Good/Heavy
5	Daniel Carter Beard Mall	NYC Parks	Benches	0.66	0.00	0.66	Fair/Light
6	Lippman Arcade	NYCDOT	Pedestrian walkway, trees, seating	0.10	0.00	0.10	Good/Heavy
Residential Study Area Total				79.75	39.49	40.26	
Outside Residential Study Area (Not Included in Quantitative Analysis)							
1 / 2	Flushing Meadows-Corona Park ⁴ / Flushing Bay Promenade ⁴	NYC Parks	benches, paved walkways, lawns, tennis courts, soccer fields, fountain, ice rink, pitch and put, kayak launch	819.92	409.96	409.96	Fair/Heavy (FMCP) Good/Moderate (FBP)
A	Flushing Branch Library	Queens Library	stairway (suitable for sitting)	0.02	0.00	0.02	Good/Heavy
B	Kissena Corridor Park	NYC Parks	wide variety of active and passive amenities	100.87	50.44	50.44	Good/Moderate
C	Hinton Park	NYC Parks	game tables, benches, baseball diamonds, play areas	3.73	3.36	0.37	Very Good/Moderate
D	Louis Armstrong Playground	NYC Parks	play areas, basketball courts	1.90	1.90	0.00	Very Good/Moderate
Notes: NYC Parks-New York City Department of Parks and Recreation, NYCDOT – New York City Department of Transportation ¹ Recent condition and utilization data is as reported in the 2013 FSEIS. ² The total listed acreage for Flushing Meadows-Corona Park is 897.69, inclusive of the Flushing Bay Promenade. The acreages listed above in the “1/2-Mile Residential Study Area” section are the portions of these two resources that are located within the study area and are accounted for in the quantitative analysis. Large portions of both resources lie directly outside the open space study area but are not accounted for in the quantitative analysis. ³ Condition and utilization data is as reported from NYC Parks, April 2021. ⁴ This is the portion of Flushing Meadows-Corona Park (inclusive of the Flushing Bay Promenade) that lies outside the 1/2-Mile Residential Study Area. Sources: NYC Parks, 2008 FGEIS, 2013 FSEIS, ² Special Flushing Waterfront District EAS (CEQR No. 20DCP083Q)							

As detailed in **Table 11** below, with a residential population of 11,323 and a total of 79.75 acres of open space, the study area has a total open space ratio of 7.04 acres per 1,000 residents. This is higher than the City's planning guideline of 2.5 acres of combined active and passive open space per 1,000 residents as well as the City-wide median of 1.5 acres per 1,000 residents. The study area's passive open space ratio is 3.56 acres per 1,000 residents, which is above the City's planning goals of 0.5 acres per 1,000 residents. The active open space ratio for the study area is now 3.49, which remains above the City's open space guidelines of 2.0 acres.

Consistent with the FSEIS analysis framework, while the boundaries of census tract 383.02 cover the entire Flushing Meadows-Corona Park and extend from Northern Boulevard to the Van Wyck Expressway, to ensure a conservative analysis the residential study area includes only the open space acreage within the park that falls within a ½-mile radius of the District. As such, the residential study area's southern boundary is located at approximately United Nations Avenue North and the Herbert Hoover Promenade within Flushing Meadows-Corona Park and does not extend to the southern edge of tract 383.02.

As stated in the FGEIS, there are many open space resources just beyond the study area boundary that are not included in the quantitative analysis but are likely utilized by the resident population. In particular, these include the remainder (819.92 acres) of the 897.69-acre Flushing Meadows-Corona Park, which draws visitors throughout New York City.¹⁰ The approximately 100.87-acre Kissena Corridor Park is located just outside the open space study area to the east. This large destination park would provide additional active and passive open space resources to residents in the study area. Even though these resources are located just beyond the ½-mile study area boundary, residents would be able to easily utilize them due to their proximity to the study area and direct connections to the portion of Flushing Meadows-Corona Park located within the study area boundaries.

2030 FUTURE WITHOUT THE PROPOSED MODIFICATION

As noted in **Table 2** above, 15 new developments within the ½-mile open space study area that would include new dwelling units and therefore generate new residents are currently planned for completion by 2030. These projects will add approximately 7,487 new residents to the study area, bringing the estimated residential population to 18,810. There are also two planned projects in the study area that will create new open space, and two projects that will improve existing open space by 2030. These are described below.

The sites projected to be developed under the proposed Special Flushing Waterfront District project will incorporate approximately 3.14 acres of new publicly accessible open space along the east side of Flushing Creek. The anticipated amenities include seating, landscaping, and walking and running paths. The new open space will be split evenly among passive and active uses, with each providing 1.57 acres along Flushing Creek. The Flushing Commons project will add approximately 1.52 acres of passive open space to the open space study area. The main portion of this space will be an elliptical green with a terraced lawn, formal plaza, trees, tables and chairs, additional seating, and a water feature. Three open pedestrian passageways will also lead into the central open space.

NYC Parks proposes to reconstruct Bland Playground by 2023. The reconstruction will not change the acreage of this resource, but will enhance its amenities. The Candela structures (white shade structures constructed for the 1964-1965 World's Fair) located along the Flushing Bay Promenade and adjacent intersections will be restored by 2030. Piers 1 and 3 at the World's Fair Marina also will be reconstructed

¹⁰ This acreage includes the entirety of Flushing Meadows-Corona Park and the Flushing Bay Promenade, and may include open space and recreational resources that are open to the public for a fee such as Citi Field, Arthur Ashe and Louis Armstrong Stadium, Queens Botanical Gardens, and the Queens Zoo, among others. This acreage also includes open space that are publicly accessible although typically not utilized, such as conservation lands and landscaped buffers along the parkways. Approximately 55.08 acres of Flushing Meadows-Corona Park and 22.69 acres of Flushing Bay Promenade are counted in the quantitative analysis.

by 2030. The project includes the reconstruction of piers and floating docks, in deeper, calmer water; pedestrian crossing improvements; creating capacity for concessions, site furnishings, restrooms, kayak rental, and boat refueling; and providing secure pier and dock areas with amenities for fishing, event charter boats, and permittee boaters. In addition, several changes to the study area's open spaces are anticipated in connection with the LGA Access Improvement Project. These include the relocation of the World's Fair Marina operations, to a site further east along the Flushing Bay waterfront, and replacement of the existing Passerelle Bridge east of its existing location. No change in the acreage of these resources is assumed for the purposes of this analysis.

With the addition of the new open space acreage anticipated to be developed in the study area by 2030, the total amount of open space would increase to 84.41 acres, of which 41.06 would be active and 43.35 would be passive. **Table 11** below provides detail on the open space ratios that would be expected in the 2030 Future without the Proposed Modification.

**Table 11:
Study Area Population and Open Space Ratios**

Population	Open Space Acreage			Open Space Ratios— acres per 1,000 People		
	Total	Active	Passive	Total	Active	Passive
2021 Existing Conditions						
11,323	79.75	39.49	40.26	7.04	3.49	3.56
2030 Future Without the Proposed Modification						
18,810	84.41	41.06	43.35	4.49	2.18	2.31
2030 Future With the Proposed Modification						
21,890	85.41	41.06	44.35	3.90	1.88	2.03
2039 Future Without the Proposed Modification						
18,810	84.41	41.06	43.35	4.49	2.18	2.31
2039 Future With the Proposed Modification						
37,290	92.41	42.66	49.75	2.48	1.14	1.33
Notes: City Open Space Guidelines (acres per 1,000 people): 2.50 (Total), 2.00 (Active), 0.50 (Passive)						

2030 FUTURE WITH THE PROPOSED MODIFICATION

By 2030, the proposed Phase 1 development would introduce a new population of 3,080 residents to the District. Therefore, the study area's population would increase to approximately 21,890 residents (see **Table 11** below). The proposed Phase 1 development also would create one acre of new passive open space within the District. The total open space acreage would increase to 85.41 acres in the study area, which would result in a total open space ratio of 3.90 acres of open space per 1,000 residents.

2039 FUTURE WITHOUT THE PROPOSED MODIFICATION

No additional residential development projects or changes to the study area's open space inventory are anticipated for development by the 2039 Build year; therefore, this analysis uses the same population and open space acreage information for the 2030 and 2039 No Action conditions.

2039 FUTURE WITH THE PROPOSED MODIFICATION

By 2039, the full buildout of the District would introduce a new population of approximately 15,400 residents to the District. Therefore, the study area's population would increase to approximately 37,290 residents (see **Table 11**). At full buildout of the District, a total of eight acres of new open space will have been created within the District. As described in the FGEIS, the new open space would include an approximately two-acre park programmed primarily for active recreational use, which would be centrally

located within the District. The remainder of the new open space (6.4 acres of the total 8 acres) was assumed to be programmed primarily for passive use. The new open space within the District would serve the range of user groups introduced by the Plan. In addition, the FGEIS notes that NYCEDC would encourage future developer(s) to incorporate ground-level active open space and other recreational resources, such as rooftop and interior programming of recreational amenities, into the project design. While these recreational amenities may be available only to tenants and residents of the site, and thus have not been included in the quantitative analysis, they would help offset the burden on public passive and active open space resources resulting from the introduction of new users to the District. The total open space acreage would increase to 92.41 acres in the study area, which would result in a total open space ratio of 2.48 acres of open space per 1,000 residents (see **Tables 11 and 12**).

Table 12:
2030/2039 Future With the Proposed Modification,
Open Space Ratios Summary

Ratio	City Guideline	Open Space Ratios			Percent Change No Action to With Action Condition
		Existing Conditions	Future without the Proposed Modification	Future with the Proposed Modification	
2030 Build Year (Phase 1)					
Total/Residents	2.50	7.04	4.49	3.90	-13.06%
Active/Residents	2.00	3.49	2.18	1.88	-14.06%
Passive/Residents	0.50	3.56	2.31	2.03	-12.10%
2039 Build Year (Full District Buildout)					
Total/Residents	2.50	7.04	4.49	2.48	-44.79%
Active/Residents	2.00	3.49	2.18	1.14	-47.60%
Passive/Residents	0.50	3.56	2.31	1.33	-42.13%
Notes: Ratios in acres per 1,000 people.					

According to the *CEQR Technical Manual*, a project may result in a significant adverse open space impact if the project would reduce the open space ratio by more than 5 percent in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents. While the open space ratios would decline by 2030 and 2039 in the Future With the Proposed Modification, as with the Future Without the Proposed Modification (see **Table 12**), the study area is not currently and would not be below the median community district open space ratio in the 2030 Future With the Proposed Modification or the 2039 Future With the Proposed Modification. At full buildout of the District in the 2039 Future with the Proposed Modification, the active open space ratio would be below the City's active open space guideline, as projected in the FGEIS, and the total open space ratio would be very slightly below the City's total open space guideline (2.48 vs. 2.50). The decreases in ratios between the No Build and Build conditions in the 2039 Future With the Proposed Modification, at full buildout of the District, would be similar to those projected in the FGEIS.

The open spaces to be created within the District are intended to serve the needs of its new residential and worker populations, and the demand created by the project-generated population would remain the same. The Special Willetts Point District's regulations ensure that the required public access areas are developed in conjunction with the surrounding development by stipulating the dimensions of public access areas that must be provided along with certain developments. As noted in the FGEIS, in order to maintain programming and design flexibility, the open space planning (for the seven acres of the planned open space to be developed at full buildout of the District, not including the one acre to be developed in Phase 1) is currently only conceptual; specific details of the open space elements will be dependent on the developers' response to the City's RFP process, and the design, programming, and quality of those future open spaces would be subject to further review once the RFP responses are reviewed and a developer designated.

Therefore, it is possible that the planned open space may include more active programming than is anticipated in this analysis. In addition, bicycle lanes would be required on connector streets within the redeveloped District, and would connect to the area-wide bicycle and greenway network, providing new recreational cycling opportunities for area residents and visitors that are not accounted for in the quantitative analysis above. Furthermore, as noted above, the vast majority of the most significant open space in Queens—819.92 acres of the 897.6-acre Flushing Meadows-Corona Park—and the 100.87-acre Kissena Corridor Park are not included in the quantitative analysis. As detailed in the FGEIS, the active recreational resources within Flushing Meadows-Corona Park located just beyond the ½-mile study area boundary would help to provide District residents, workers, and residents with active recreational opportunities. The Kissena Corridor Park, a large destination park, also would provide additional active and passive open space resources to residents in the study area. Even though these resources are located just beyond the ½-mile study area boundary, residents would be able to easily utilize them due to their proximity to the study area and direct connections to the portion of Flushing Meadows-Corona Park located within the study area boundaries. As detailed in the FGEIS, these additional resources would alleviate any potential significant adverse open space impacts. In summary, the updated analyses find that, accounting for the changes in background conditions and the anticipated Build years—and with the proposed creation of new open space within the District, and the adjacent availability of the 100.87-acre Kissena Corridor Park and the 819.92-acre portion of the 897.69-acre Flushing Meadows-Corona Park that is not included in the quantitative analysis—the Approved Plan with the proposed Phase 1 modification would not result in any significant adverse impacts to open space, consistent with the findings of the FGEIS and subsequent environmental review.

SHADOWS

This analysis assesses whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse shadows impacts that were not addressed in the FGEIS or subsequent environmental review. Neither the FGEIS, subsequent technical memoranda, nor the FSEIS, identified a significant adverse impact related to shadows. The shadows analysis in the FGEIS conservatively modeled the footprint of the entire Willetts Point Development District at the maximum height allowed under the Federal Aviation Authority (FAA) limits throughout the District. Maximum heights sloped upwards across the District from 94 feet above sea level along the northern edge nearest LaGuardia Airport to 175 feet above sea level in the southeastern portion of the district and 232 feet above sea level in the southwestern portion of the district. The FAA limits continue to be applicable to development within the District, and this analysis conservatively assumes that the buildings in Phase 1 and at full buildout of the District could be built to the maximum height and bulk allowed under zoning and FAA limits. Therefore, no additional new shadows beyond those described in the FGEIS would occur.

Like the Approved Plan, the Plan with the Proposed Modification could result in incremental shadows on portions of three sunlight-sensitive resources: the Flushing Bay Promenade, the waters of Flushing Bay, and Flushing River; incremental shadows also could potentially fall on the public access areas along the Flushing River waterfront that would be created by mixed-use No Build projects. Incremental shadow would not eliminate all direct sunlight from any of these resources at any time of year. The FGEIS and subsequent environmental review did not identify the incremental shadow on these resources as a significant adverse effect. Changes in background conditions and the anticipated Build years, and the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would not be expected to affect this conclusion.

In summary, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the proposed Phase 1 modification would not result in any significant adverse shadow impacts, consistent with the findings of the FGEIS and subsequent environmental review.

HISTORIC AND CULTURAL RESOURCES

This analysis considers whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse impacts to historic and cultural resources that were not addressed in the FGEIS or subsequent environmental review.

The FGEIS concluded that the Approved Plan would result in an unavoidable significant adverse impact to historic resources. As part of the FGEIS, the former Empire Millwork Corporation Building at 128-50 Willets Point Boulevard within the District was determined to be eligible for listing on the State and National Registers of Historic Places (S/NR) by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). Due to site planning goals and engineering concerns in the District, including the need to raise the District above the 100-year floodplain level, the Approved Plan anticipated that all buildings within the District, including the former Empire Millwork Corporation Building, would be demolished. Measures to partially mitigate this impact, which could include recordation of the building through a Historic American Buildings Survey (HABS)-level photographic documentation and accompanying narrative, would be developed in consultation with OPRHP. The FGEIS also noted that NYCEDC would encourage future developers to retain part or all of the building as part of their formal request for proposals (RFP) process. As part of the FGEIS, the New York City Landmarks Preservation Commission (LPC) and OPRHP also determined that the District is not sensitive for archaeological resources. Subsequent environmental review did not identify any significant adverse impacts on historic and cultural resources beyond those disclosed in the FGEIS.

As LPC and OPRHP previously determined that the District is not sensitive for archaeological resources, the proposed Phase 1 modification, changes in background conditions, and change in the Build years would not have a significant adverse impact on archaeological resources.

The former Empire Millwork Corporation Building is still extant within the District. As with the Approved Plan, it is anticipated that the Willets Point Plan with the proposed modification could potentially entail the demolition of the S/NR-eligible former Empire Millwork Corporation Building at full buildout of the District. No change to the mitigation measures identified in the FGEIS is currently contemplated. With the proposed Phase 1 modification, the initial development phase would be limited to the southwestern portion of the District, and the former Empire Millwork Corporation Building (located in the northeastern portion of the District) would not need to be demolished until sometime closer to the 2039 Build year for full buildout. Therefore, there may be no effect on this building during the first phase of development, and mitigation measures may not be required at that time. The preferred alternative for the Van Wyck Expressway ramp configuration would not adversely affect the former Empire Millwork Corporation Building; however, in the event that the Federal Highway Administration (FHWA) and the New York State Department of Transportation (NYSDOT) ultimately select a ramp configuration other than the preferred alternative, demolition of the former Empire Millwork Corporation Building may be required sometime before 2032, when the ramps are targeted for completion. The changes in background conditions described above would not change the FGEIS conclusions concerning the project's impacts with respect to historic and cultural resources.

In summary, the updated analyses find that with the mitigation measures noted above in place, and accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the

proposed Phase 1 modification would not result in any significant adverse impacts to historic and cultural resources beyond those disclosed in the FGEIS and subsequent environmental review.

URBAN DESIGN AND VISUAL RESOURCES

This analysis considers whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse impacts to urban design and visual resources that were not addressed in the FGEIS or subsequent environmental review.

The FGEIS concluded that the Approved Plan would not result in any significant adverse impacts to urban design and visual resources. The Approved Plan would alter the urban design of the District, resulting in new buildings of various heights and new public open spaces; introducing active uses that would increase the vitality of the District and increase pedestrian traffic to the District and the surrounding area; and improving the appearance of the District by providing new streets and streetscape elements, such as street trees and lighting. The Approved Plan would not adversely impact any visual resources in the surrounding area, including Flushing Bay, the Flushing Bay Promenade, Flushing Meadows-Corona Park, and the 1964 World's Fair structures. Neither subsequent technical memoranda nor the FSEIS identified a significant adverse impact related to urban design and visual resources.

As with the Approved Plan, the Plan with the Proposed Modification would redevelop underutilized sites in the District with new buildings. As with the Approved Plan, the new buildings would be subject to the special district text and height limits due to the District's proximity to LaGuardia Airport. The buildings to be constructed in Phase 1 would bring new affordable housing, public school and ground-floor retail uses to the District, as well as new public open space. No changes to the current zoning of the District would be required. In keeping with the Approved Plan, the Plan with the Proposed Modification would improve the appearance of the District by replacing vacant land and recently demolished structures with new buildings with active uses and by providing a new street and streetscape elements, which would contribute to a new pedestrian-scaled street network. As analyzed in the FGEIS Staged Acquisition Alternative and subsequent technical memoranda, the phased development of the District would improve urban design and general appearance of the southwest portion of the District by 2030; there would be a noticeable contrast between the redeveloped portion of the District and any areas where existing uses remain. Any unoccupied parcels surrounding the Phase 1 site would serve as a buffer between the new and existing uses between the completion of Phase 1 and the incremental acquisition and development of remaining parcels for the full buildout of the District. The Phase 1 development would introduce new streets, streetscape elements, and active uses to the southwest portion of the District, increasing the vitality of the District. Therefore, the proposed Phase 1 development would contribute to the transformation of the District into a mixed-use area with affordable housing, a new public school, and ground-floor and by creating a pedestrian-friendly environment. The full complement of anticipated changes to the urban design of the District would be achieved in 2039 at full buildout.

The Phase 1 site would grade down from the Connector Street to the existing grade at 126th Street, and would meet the existing Roosevelt Avenue bridge at the proposed new Roosevelt Avenue curb cut. No connection would be made to the former Willets Point Boulevard at the northern edge of the Phase 1 site during the first phase of development, and the site would dead end and buffer down to the existing grade without vehicular or pedestrian access. Streets in the northern and eastern portions of the District would remain at their existing grade through completion of Phase 1 in 2030.

As described above, the only required action to implement the first phase of the District's development is a CPC Chairperson certification that: all streets comply with Zoning Regulation (ZR) Section 124-31; all

streets are constructed to grades acceptable to DOB and DOT; all publicly-accessible open space complies with ZR Section 124-40; and the development pursuant to the certification does not preclude future phases of Special Willets Point District development from complying with these regulations.

Under the Plan with the Proposed Modification, at full buildout the District would be developed with the same gross floor area and mix of uses as assumed for the Approved Plan (with subsequent revisions described in the prior technical memoranda) and would have the same controls on floor area ratios as set forth in the provisions of the special district zoning text. Specific plans have not yet been formulated for the remainder of the District; therefore, the illustrative diagrams provided in the FGEIS are still considered to represent the potential maximum development of the Plan with the Proposed Modification, as well as the Approved Plan. As described above, the District's zoning regulations would continue to guide design elements such as the placement of uses within the District, building heights and setbacks, street hierarchies, streetscape design, signage, maximum building dimensions, and basic site planning and design provisions. Regulations also would continue to mandate the development of a minimum of eight acres of publicly-accessible open space within the District. Furthermore, the City would continue to require any future development in the District to achieve LEED-ND certification.

Like the Approved Plan, the Plan with the Proposed Modification would not have a significant adverse impact on visual resources. Both the Approved Plan and the Plan with the Proposed Modification would create structures that are taller than what currently exists within the District; however, neither the Approved Plan nor the Plan with the Proposed Modification would adversely affect views to or from Flushing Bay, the Flushing Bay Promenade, or views to the 1964 World's Fair structures in Flushing Meadows-Corona Park, some of which are being restored or altered in the future without the project.

In summary, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the proposed Phase 1 modification would not result in any significant adverse impacts to urban design and visual resources, consistent with the findings of the FGEIS and subsequent environmental review.

NATURAL RESOURCES

The FGEIS concluded that the Approved Plan would not result in significant adverse natural resources impacts. Neither subsequent technical memoranda nor the FSEIS identified a significant adverse impact related to natural resources. As detailed below, the Proposed Modification—accounting for changes in background conditions and the anticipated Build years—also would not result in any significant adverse natural resources impacts.

Like the Approved Plan, and Plan with the Proposed Modification would be consistent with federal, state and citywide policies for the conservation and improvement of natural resources. As detailed above, in 2012, the City completed a first phase of new sanitary and storm water mains that provide new public sanitary sewer service to support the redevelopment of the District and adjacent areas and replace an inadequately sized storm water sewer and outfall to help alleviate chronic flooding that occurs in the District and adjacent areas. Like the Approved Plan, the Plan with the Proposed Modification would pre-treat stormwater prior to discharge, and is expected to result in improved stormwater quality and, consequently, improved water quality in Flushing Bay.

In summary, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the proposed Phase 1 modification would not result in any significant adverse impacts to natural resources, consistent with the findings of the FGEIS and subsequent environmental review.

HAZARDOUS MATERIALS

This analysis considers whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse hazardous materials impacts that were not addressed in the FGEIS or subsequent environmental review.

The FGEIS identified the potential for contamination within the District due to current and past usage, based on soil and groundwater sampling from public streets within the District. Therefore, E-designations were placed on all privately-owned properties in the District. The E-designations require that, prior to the New York City Department of Buildings (DOB) issuing permits associated with redevelopment, the property owner conduct Phase I and Phase II ESAs, and remediation where appropriate, to the satisfaction of the New York City Department of Environmental Protection (DEP) pursuant to Section 11-15 of the Zoning Resolution—Environmental Requirements. The E-designations also require mandatory construction-related health and safety plans (HASPs), which are subject to review and approval by DEP. As properties are acquired by the City, the FGEIS anticipated that a Restrictive Declaration would be placed on them, which would supersede the E-designation, but require implementation of the same measures. While it was not anticipated that private properties would be redeveloped on an individual basis, if such redevelopment were to occur, it would be subject to the E-designations, which would ensure that remediation would take place under New York City Office of Environmental Remediation (OER) oversight. Subsequent environmental review did not identify any significant adverse hazardous materials impacts beyond those disclosed in the FGEIS.

The City-owned portion of the District—which includes the area to be developed in Phase 1—has been entered into NYSDEC’s BCP. In 2019, the City and QDG completed clearing a portion of the District and performed Interim Remedial Measures under NYSDEC’s BCP. Remediation work within this portion of the District is ongoing. The City is working closely with NYSDEC on the Remedial Action Work Plan (RAWP) to mobilize contractors for full-scale remediation of the Phase 1 site as early as summer 2021. Like the Approved Plan, the Plan with the Proposed Modification would utilize E-designations, Restrictive Declarations, and/or other enforcement and oversight mechanisms to ensure that there would be no significant adverse impacts with respect to hazardous materials.

As with the Staged Acquisition Alternative assessed in the FGEIS and the Adjusted Plan and Updated Plan assessed in previous technical memoranda, remediation activities would occur incrementally under the Willets Point Plan with the proposed Phase 1 modification. E-designations for properties in the northern and eastern portions of the District would remain in place for a longer duration as compared with the Approved Plan, since they would be developed later under this scenario. With the updated Build years, remediation is also expected to occur later than previously analyzed. Thus, certain safeguards may be required to ensure that existing hazardous materials contamination on the eastern and northern portions of the District would not migrate to the southwestern portion of the District subsequent to the remediation of these properties. These safeguards could include installation of sheeting or low permeability barriers along the boundaries of the remediated portions of the District. Mitigation measures to be undertaken as part of the remediation of the District are anticipated to be similar under the Approved Plan and the Willets Point Plan with the proposed Phase 1 modification.

As noted above, the program for the first phase of development in the District has been revised compared to what was analyzed in the FGEIS and supplemental environmental review. However, the uses to be developed within the District, during Phase 1 and at full buildout, would be as previously analyzed. The Proposed Phase 1 Modification described above would not change the FGEIS conclusion that the project would not result in significant adverse environmental impacts with respect to hazardous materials.

In summary, the updated analyses find that with the measures noted above in place, and accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the Proposed Phase 1 Modification would not result in any significant adverse hazardous materials impacts beyond those disclosed in the FGEIS and subsequent environmental review.

WATER AND SEWER INFRASTRUCTURE

This analysis assesses whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse impacts to water and sewer infrastructure that were not addressed in the FGEIS or subsequent environmental review.

The FGEIS did not identify the potential for a significant adverse impact on water and sewer infrastructure. The FGEIS concluded that although the Approved Plan would generate new demands on infrastructure, the municipal systems serving the District and surrounding area—as enhanced as part of the Plan—would have adequate capacity to meet the needs of the Approved Plan. This conclusion did not change in subsequent technical memoranda, although specific anticipated enhancements were modified based on analysis and discussion with DEP. The 2013 FSEIS carried through the same assumptions regarding anticipated enhancements as the FGEIS, and did not identify any significant adverse impacts related to infrastructure.

INFRASTRUCTURE IMPROVEMENTS

As described above, in 2012 the City completed a first phase of new sanitary and storm water sewers that provide new public sanitary sewer service to support the redevelopment of the District and adjacent areas and replace an inadequately sized storm water sewer and outfall to help alleviate chronic flooding that occurs in the District and adjacent areas.

Consultation with DEP concerning the water supply system serving the District is ongoing. In order not to impact the water supply system for the District, the existing 72-inch precast concrete pipe would need to be replaced with a new 72-inch steel water main, subject to the determination of DEP. The distribution water mains in the District would need to be upgraded to support the full buildout of the District. Any upgrades would be in conformance with an amended drainage plan (ADP) for the District to be approved by DEP. Upgrades to the system have not been identified as necessary for the proposed Phase 1 development.

In order to implement the Plan with the Proposed Modification, some of the infrastructure required to support the development of the entire District—as discussed in the prior environmental review—would be needed in the first phase of development, including new stormwater and sanitary sewers. New local water supply distribution lines and sanitary sewer infrastructure would be developed within the new private streets by the designated developer to support the new development on the Phase 1 site, and uses in the remainder of the District would continue to be served by existing supply lines until the time that this area is developed. Stormwater and sanitary sewer infrastructure constructed in Phase 1 would be sized in accordance with an ADP to be approved by DEP. Similar to the Approved Plan, with the Proposed Modification the infrastructure in the District would be built as private infrastructure, constructed to meet DEP standards. Since the development of the Plan for the District would include separate storm sewers, stormwater runoff would not contribute to flow being directed to the Bowery Bay Waste Water Treatment Plant (WWTP).

WATER SUPPLY

Water demand would be less in Phase 1 than for the full build-out of the Approved Plan, since the amount of development anticipated would be just a portion of the overall development expected for the District. Based on the current *CEQR Technical Manual* water usage rates, the Phase 1 development would consume approximately 492,078 gallons per day (gpd), of which approximately 327,360 gpd would be for domestic consumption and would become sanitary sewage, and the remainder of which would be for air conditioning. Full buildout of the District would consume approximately 3,806,200 gallons per day (gpd), of which approximately 2,269,400 gpd would be for domestic consumption and would become sanitary sewage, and the remainder would be for air conditioning (see **Table 13**). This would be less than the 4,357,430 gpd of water consumption estimated in the FGEIS. As with the Approved Plan, demand for water in the future with the Proposed Modification would not overburden the City's water supply system or significantly affect the water supply infrastructure outside the District.

Table 13:
Water Consumption

Land Use	Area/Units	Water Supply Demand (gpd)	Wastewater Generation (gpd)
Phase 1			
Residential	813,112 sf (1,100 DU)	452,829	314,600
School	127,760 sf (650 seats)	28,219	6,500
Retail	24,666 sf	10,113	5,920
Community Facility	3,397 sf	917	340
Total Water Demand			492,078
Total Wastewater Generation			327,360
Full Buildout of District			
Residential	5,500,000 sf (5,500 DU)	2,508,000	1,573,000
School	230,000 sf (1,540 seats)	54,500	15,400
Retail	1,700,000 sf	697,000	408,000
Commercial/Office	500,000 sf	135,000	50,000
Hotel ¹	560,000 sf (700 rooms)	263,200	168,000
Convention Center	400,000 sf	108,000	40,000
Community Facility ²	150,000 sf	40,500	15,000
Total Water Demand			3,806,200
Total Wastewater Generation			2,269,400
Notes: Totals may not sum due to rounding. Consumption rates from <i>CEQR Technical Manual</i> Table 13-2, "Water Usage and Sewage Generation Rates for Use in Impact Assessment," unless otherwise noted. ¹ Assumes two occupants per hotel room. ² Assumes same rate as commercial/office.			

WASTEWATER AND STORMWATER MANAGEMENT

As part of the FGEIS, a detailed analysis of the projected flows to the combined sewer/regulator system within the Bowery Bay WWTP as a result of the Approved Plan was prepared.¹¹ The model simulations of sanitary flow presented in the FGEIS indicated there would be no significant increase in the volume or frequency of CSO events as a result of the Approved Plan. As the Proposed Modification would result in

¹¹ As the District is redeveloped, the existing system will be upgraded to a separate storm and sanitary sewer system.

development of a portion of the District by 2030 with substantially similar uses as previously analyzed, and would include the same sewer infrastructure improvements, the Proposed Modification is not expected to significantly increase the volume or frequency of CSO events.

The maximum permitted capacity for the Bowery Bay WWTP is 150 million gallons per day (mgd), and the average monthly flow to the WWTP is 111 mgd¹², which is well below the maximum permitted capacity. As detailed in **Table 13**, the sanitary sewage generated by the proposed Phase 1 development would be approximately 327,360 gallons per day (gpd). This incremental increase in sewage generation would be approximately 0.3 percent of the average daily flow at the Bowery Bay WWTP and would not result in an exceedance of the plant's permitted capacity. The anticipated sanitary sewage generated at full buildout of the District would be approximately 2,269,400 gpd, or approximately 2 percent of the average daily flow at the Bowery Bay WWTP. This incremental increase in sewage generation would not result in an exceedance of the plant's permitted capacity. Therefore, based on measured existing flow to the Bowery Bay WWTP and the projected wastewater flows, the Bowery Bay WWTP would have the capacity to handle wastewater flows at full buildout of the District; however, as outlined in its comment letter dated May 4, 2021, DEP has concluded that the Bowery Bay WWTP will need to be evaluated to determine if it can handle the wastewater flows at full buildout of the District.

By 2039, the effects of the Plan with the Proposed Modification on sanitary sewage would be the same as described in the FGEIS for the Approved Plan; neither would have a significant adverse impact on the sanitary sewer system.

As described above, with both the Approved Plan and the Plan with the Proposed Modification, construction of a new stormwater conveyance system within the District would be required. The developer(s) of the District would be required to prepare a site stormwater management plan, to be reviewed and approved by DEP, that would specify Best Management Practices and sustainable design features that the project would include. With the Proposed Modification, the stormwater conveyance system and stormwater management plan would be implemented in the southwestern portion of the District by 2030 and in the remainder of the District by 2039. For the Phase 1 site, on-site stormwater management facilities will restrict discharges to the city sewers in accordance with DEP and NYSDEC regulations for both water quality and quantity. Stormwater management features also would be planned as part of the Phase 1 open spaces.

Site grades for the Phase 1 site would be designed to comply with New York City Building Code requirements and would direct stormwater runoff to on-site storm inlets to prevent sheet flow onto adjacent properties or into the city right-of-way. Flooding may continue in the remainder of the District until implementation of the District-wide stormwater management features that would be in place by 2039; however, notwithstanding the grade changes that would exist between the Phase 1 site and the remainder of the District between the completion of the proposed Phase 1 development in 2030 and full buildout of the District in 2039, adverse flooding impacts would not be expected to occur in the remainder of the District as a result of the first phase of development. The Phase 1 site would be served by the new stormwater conveyance system, which would control runoff and street flooding to the remainder of the District and thus would prevent adverse effects on adjoining properties outside the Phase 1 site.

In summary, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the Proposed Phase 1 Modification would not result in any significant adverse impacts to infrastructure, consistent with the findings of the FGEIS and subsequent environmental review.

¹² 12-month period through March 2017, the most recent available data.

SOLID WASTE AND SANITATION SERVICES

The updated information on background conditions and anticipated Build years was reviewed to determine whether the potential for effects on solid waste and sanitation services in the future with the Proposed Modification would remain consistent with the conclusions in the FGEIS and subsequent environmental review.

The FGEIS and subsequent environmental review did not identify the potential for a significant adverse effect on solid waste and sanitation services. In the future with the Proposed Modification, the municipal solid waste and sanitation services that serve the District would continue to have adequate capacity to meet the projected increases in demand. As with the Approved Plan, local improvements in City services would be undertaken to address the needs of the project in the future with the Proposed Modification. Both the Approved Plan and the Plan with the Proposed Modification would displace two waste transfer businesses from the District—Crown Container, a non-putrescible solid waste transfer station (NPSW) and Tully Environmental, a putrescible solid waste transfer station (PSW)—but this displacement would not have a significant adverse impact on the waste and sanitation services in Queens or in New York City. Tully Environmental is permitted to handle up to 900 tons of PSW per day, while Crown Container is permitted to handle up to 281 tons of NPSW per day (for reference, the current City transfer station capacity is 18,442 tons of PSW and 16,013 tons of NPSW).¹³ The change in the Build years could delay this displacement, and the displacement would not occur for the Phase 1 development; however, it would still be projected to occur at full buildout of the District, as previously assumed and analyzed. DSNY understands the City intends to assist these two businesses. However, should they decide to close instead, the potential loss of these two facilities would not be expected to constitute a significant adverse impact on commercial waste transfer capacity in the City and region. The North Shore Marine Transfer Station (MTS)—which opened subsequent to the FGEIS in 2015, to the east of the District in the College Point section of Queens—also provides additional waste processing capacity (approximately 3,672 tons per day under normal conditions, with an average throughput of 2,200 tpd of DSNY waste).¹⁴

The Phase 1 development would be expected to generate approximately 26.8 tons per week of solid waste, and the full buildout of the District would be expected to generate approximately 342 tons per week, consistent with the solid waste generation presented in the FGEIS. The City's Commercial Waste Zone (CWZ) Program, pursuant to Local Law 199 of 2019, will be fully implemented by the time Phase 1 would be constructed. This change to the City's waste system would affect the retail uses of Phase 1, but not the residential and public school uses, which would be served by DSNY. Under the CWZ system, commercial waste would be collected by a choice of three carting firms assigned to the respective CWZ, pursuant to multi-year contracts overseen by DSNY. The CWZ system will improve efficiency, reduce truck traffic associated with commercial waste carting, facilitate commercial waste recycling, and standardize contracts.

Solid waste generated by the proposed residential and community facility uses would be collected by DSNY trucks and would be served by existing DSNY collection routes. As a general practice, DSNY adjusts its operations to service the community. Both the Phase 1 development and full buildout of the District would be subject to mandatory recycling requirements for paper, metals, construction waste, aluminum foil, and metal, glass, and plastic containers.

The 2020 *CEQR Technical Manual* requires that for projects resulting in the development of more than either 500 residential units or 100,000 square feet of commercial space, the proposed location and method of storage of refuse and recyclables prior to collection should be disclosed. In addition, new buildings with

¹³ DSNY; https://dsny.cityofnewyork.us/wp-content/uploads/2017/12/about_swmp_attach9_0815.pdf

¹⁴ FSEIS; <https://www1.nyc.gov/assets/brooklyn/b6/downloads/pdf/Presentations/SWANA%20SWM-Presentation%20-final.pdf>

300 or more residential units should provide containerized waste storage for collection or explain why this is not feasible. If the use of compactors, dumpsters and/or “roll on/roll off” refuse containers are proposed, they should be discussed; or, if it is anticipated that refuse and/or recyclables would be set out for collection (i.e., large piles of bags), the expected location, square footage, volume and duration of such piles should be discussed, along with their effects upon traffic, pedestrians, public health, and community character. As a developer for the District has not yet been selected beyond Phase 1, the specific location and method of storage of refuse and recyclables prior to collection for the full buildout of the District is not available at this time. It is expected that the buildings would have interior areas for refuse collection with loading docks and compactors. At this time, the proposed location and method of storage of refuse and recyclables prior to collection has not been finalized for the Phase 1 development; however, the designated developer for the proposed Phase 1 development is evaluating a number of options, including containerized collection and consolidated pick-ups. If containerized collection is pursued, it is anticipated that the location of the containers would be located as close to the site perimeter as feasible. The use of compactor containers and/or dumpsters is being considered to minimize or avoid bag placement at the sidewalks prior to curbside pick-up collection. It is possible that some or all of the proposed buildings may participate in DSNY’s voluntary organic waste collection program. Adequate turning radii will be provided for the trucks serving these buildings. Commercial waste from the retail portion of Phase 1 would be collected by commercial carters via containers or pursuant to a schedule that would limit the time refuse and recyclables could be set out in bags on the sidewalk for collection, under applicable regulations.

In summary, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the proposed Phase 1 Modification would not result in any significant adverse impacts to solid waste and sanitation services, consistent with the findings of the FGEIS and subsequent environmental review.

ENERGY

This analysis assesses whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse energy impacts that were not addressed in the FGEIS or subsequent environmental review.

The FGEIS and subsequent environmental review did not identify the potential for a significant adverse impact on energy. The FGEIS assumed that to provide the needed energy service to the District, upgrades to electrical and gas transmission lines, and additional facilities serving the District would be needed. Within the Willets Point Development District and adjoining streets, gas mains, service lines, and metering would need to be reconstructed as part of the Approved Plan. Improvements to the local distribution grid may also be required, such as an electrical substation and primary feeder cables. The Special District regulations allow for the provision of a new cogeneration facility and/or substation, provided they would primarily serve the District. If proposed, these uses would be subject to separate environmental and public review processes. The FGEIS also assumed that Con Edison would continue with electrical distribution improvement programs in the Queens area and trends toward sustainability would lead to greater energy efficiency in the City. The FGEIS noted that the City would require any future development in the District to achieve LEED-ND certification, and the proposed school would be built according to the New York City Green Schools Guide, published by the New York City School Construction Authority in March 2007, which guides the sustainable design, construction, and operation of new schools, modernization projects, and school renovations in New York City. Although these and other energy efficiency and sustainability measures to reduce energy consumption were proposed in the FGEIS, the beneficial effect of these measures was not quantified.

Like the Approved Plan, the Plan with the Proposed Modification would increase demands on electricity and gas. However, relative to the capacity of these systems and the current levels of service within New York City, these increases in demand would not be significant in either instance. Like the Approved Plan, in the future with the Plan with the Proposed Modification, it is expected that improvements would be made to the local electric and gas distribution grids that would ensure proper service to the District.

Using the *CEQR Technical Manual's* current guidance for predicting a project's energy usage, the annual energy demand for the Phase 1 development would be approximately 141,410 million British Thermal Units (BTUs), and the annual energy demand for the full buildout of the District would be approximately 1,476,706 million BTUs. In comparison, the FGEIS analysis estimated the annual energy demand of the full buildout of the District to be 1,176,686 million BTUs. Although the updated energy consumption rates predict a higher level of energy consumption, this increase would not be significant relative to the capacity of the energy system and current levels of service within New York City. Furthermore, as assumed for the Approved Plan, under the Plan with the Proposed Modification the City would require any future development in the District to achieve LEED-ND certification, and the proposed school would be build according to the latest Green Schools Guide (currently 2019). To the extent Local Law 86 of 2005 (see New York City Charter section 224.1) applies to any portion of the District's development, the City also would ensure that the designated developer(s) comply with the requirements thereof. These measures would decrease overall energy demand in the District. The changes in background conditions would not change the FGEIS conclusion that the Plan would not result in significant adverse environmental impacts with respect to energy.

In summary, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the proposed Phase 1 Modification would not result in any significant adverse impacts to energy, consistent with the findings of the FGEIS and subsequent environmental review.

TRANSPORTATION

The transportation analyses presented below assess whether changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would create significant adverse transportation impacts or mitigation needs beyond those identified during prior environmental review. These analyses entail a comprehensive review of traffic, transit, pedestrians, vehicular and pedestrian safety, and parking conditions based on data approved for use by DOT and New York City Transit (NYCT). These data include readily available data sources, such as DOT's Traffic Information Management System (TIMS) database, previous Willets Point environmental review documents, and recently approved environmental review documents for the LaGuardia AirTrain project and the Special Flushing Waterfront District development.

For the Plan analyzed in the FGEIS (subsequently the Approved Plan), 29 intersections were analyzed for potential traffic impacts. The time periods studied included the weekday AM, midday, PM, and Saturday midday peak hours for non-game day conditions, and the weekday PM pre-game, Saturday pre-game, and Saturday post-game peak hours for game-day conditions. Up to 24 of the 29 study area intersections during the non-game day peak hours and up to 25 of the 29 study area intersections during game-day peak hours were identified to incur significant adverse traffic impacts. Traffic improvement measures were proposed to mitigate the predicted impacts to the extent practicable. Due to the magnitude of traffic volumes projected to be generated by the Approved Plan, impacts at more than half of the impacted intersections during each of the analysis peak hours were found to be either partially mitigated or unmitigated. As part of the FGEIS approvals, the lead agency committed to undertake a traffic monitoring plan (TMP) at full buildout of the Plan. The scope of this TMP, which would be reviewed and approved by DOT, is likely to include an origin-destination survey

of trips made to/from the destination retail component of the Plan and collecting traffic and pedestrian data at all FGEIS-identified impacted locations and other locations deemed warranted by DOT. Using the collected data, intersection capacity/level of service and signal progression analyses would be prepared to determine whether actual future conditions have, in fact, resulted in significant adverse traffic impacts and verify the need for mitigation measures identified in the FGEIS or similar measures identified through the TMP.

Regarding transit, the FGEIS identified significant adverse impacts for a street-level stairway at the Mets-Willets Point subway station and line-haul conditions on two local bus routes. Mitigation measures, such as widening the impacted stairway and increasing bus service frequencies, were identified to address each of these impacts, with implementation to be coordinated with the Metropolitan Transportation Authority (MTA) and NYCT.

The FGEIS also identified that significant adverse pedestrian impacts would occur at several area crosswalks. The extent of widening needed to fully mitigate the predicted impacts at these crosswalks was identified. However, due to certain physical constraints, some of these impacts may be only partially mitigated or remain unmitigated.

Since the publication of the FGEIS, other project-related changes were assessed in several technical memoranda, which did not identify any additional transportation impacts.

The analyses presented below concludes that neither the changes in background conditions, nor the anticipated Build years for the Approved plan, nor the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in significant adverse transportation impacts or mitigation needs beyond those identified in the FGEIS. The corresponding detailed analysis results are summarized in **Appendix B**.

TRAVEL DEMAND PROJECTIONS

The proposed Phase 1 development program is summarized in **Table 14**. Trip generation factors for the proposed Phase 1 development program were developed based on information from the 2020 *CEQR Technical Manual*, U.S. Census Data, the FSEIS¹⁵, other approved EASs and EISs, and the DOT's trip generation surveys—as summarized in **Table 15**.

Residential

The daily person trip generation rate and temporal distribution are from DOT's residential trip generation surveys. The directional distribution is from the FSEIS. Journey-to-Work (JTW) data for the 2015-2019 U.S. Census Bureau American Community Survey (ACS) for Queens Census tracts 381, 383.01, 383.02, 399, 401, 403, 415, 849, 853, 855, 857, 865, 869, and 871 (same tracts used in the FSEIS) were applied to estimate residential modal splits and vehicle occupancies. The daily delivery trip rate and temporal and directional distributions are from the *CEQR Technical Manual*.

¹⁵ Subsequent to the approval of the Willets Point Development Plan in 2008, a Supplemental EIS was prepared to evaluate a plan that included development of land adjacent to CitiField stadium (the Willets West Portion), as well as development within the District. As detailed above, in 2017 the Willets West portion of the plan analyzed in the SEIS was invalidated by the New York State Court of Appeals; however, the court did not invalidate the analysis, methodology, or conclusions of the SEIS that accompanied the 2013 approvals. Some of the SEIS travel demand assumptions were used in the transportation planning assumptions discussed below, as they reflect more recent conditions, analysis assumptions, and methodologies than the FGEIS and subsequent technical memoranda.

Table 14:
Proposed Phase 1 Development Program

Use	Future With Action Development
Residential (DU)	1,100
Local Retail (GSF)	24,666
Public School (Grades K-8)	
Primary School (K-5) Students	430
Intermediate School (6-8) Students	220
Parents	194
Staff	65
Community Facility (GSF)	3,397
Open Space (Acres) ¹	1.0
Accessory Parking (Spaces)	310

Notes: ¹ Similar to the previous environmental reviews, the open space associated with the development planned for the District is assumed to be ancillary and not result in additional trip generation.

Table 15:
Travel Demand Assumptions

Use	Community Facility				Residential				Local Retail			
Total Daily Person Trip	(3)				(7)				(1)			
	Weekday		Saturday		Weekday		Saturday		Weekday		Saturday	
	34.0		34.0		8.180		9.08		205.0		240.0	
	Trips / KSF				Trips / DU				Trips / KSF			
Trip Linkage	0%				0%				25%			
Net Daily Person trip	Weekday		Saturday		Weekday		Saturday		Weekday		Saturday	
	34.0		34.0		8.180		9.08		153.8		180.0	
	Trips / KSF				Trips / DU				Trips / KSF			
Temporal	AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
	(3)				(7)				(1)			
	7.2%	7.1%	8.3%	14.1%	9%	6%	8%	8%	3%	19%	10%	10%
Direction	(3)				(3)				(3)			
In	94%	45%	42%	49%	20%	51%	65%	57%	50%	50%	50%	55%
Out	6%	55%	58%	51%	80%	49%	35%	43%	50%	50%	50%	45%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Modal Split	(3)				(2,3)				(3)			
	AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
Auto	13.0%	13.0%	13.0%	13.0%	26.0%	26.0%	26.0%	34.0%	15.0%	15.0%	15.0%	15.0%
Taxi	0.5%	0.5%	0.5%	0.5%	1.0%	1.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
Subway	26.0%	26.0%	26.0%	26.0%	45.0%	45.0%	45.0%	25.0%	5.0%	5.0%	5.0%	5.0%
Bus	5.0%	5.0%	5.0%	5.0%	11.0%	11.0%	11.0%	4.0%	10.0%	10.0%	10.0%	10.0%
Walk	55.5%	55.5%	55.5%	55.5%	17.0%	17.0%	17.0%	36.0%	70.0%	70.0%	70.0%	70.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicle Occupancy	(3)				(2)				(3)			
	Weekday/Saturday				Weekday/Saturday				Weekday/Saturday			
Auto	1.50				1.51				2.00			
Taxi	1.50				1.51				2.00			
Daily Delivery Trip Generation Rate	(3)				(1)				(1)			
	Weekday		Saturday		Weekday		Saturday		Weekday		Saturday	
	0.38		0.00		0.06		0.02		0.35		0.04	
	Delivery Trips / KSF				Delivery Trips / DU				Delivery Trips / KSF			
Delivery Temporal	AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
	(3)				(1)				(1)			
	6.0%	11.0%	1.0%	0.0%	12%	9%	2%	9%	8%	11%	2%	11%
Delivery Direction	(3)				(1)				(1)			
In	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Out	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

**Table 15 (cont'd):
Travel Demand Assumptions**

Use	Primary School Students (K-5)				School Parents (Grades K-5 Only)				School Faculty/Staff				Intermediate School Students (6-8)			
Total Daily Person Trip	(1)				(1)				(1)				(1)			
	Weekday 2.0		Saturday N/A		Weekday 4.0		Saturday N/A		Weekday 2.0		Saturday N/A		Weekday 2.0		Saturday N/A	
Temporal	Trips / Person				Trips / Person				Trips / Person				Trips / Seat			
	AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
	(1)				(1)				(1)				(1)			
	49.5%	49.5%	0.0%	N/A	49.5%	49.5%	0.0%	N/A	40.0%	40.0%	0.0%	N/A	49.5%	49.5%	0.0%	N/A
Direction	(5)				(5)				(5)				(5)			
In	100%	0%	0%	N/A	50%	50%	50%	N/A	100%	0%	0%	N/A	100%	0%	0%	N/A
Out	0%	100%	100%	N/A	50%	50%	50%	N/A	0%	100%	100%	N/A	0%	100%	100%	N/A
Total	100%	100%	100%	N/A	100%	100%	100%	N/A	100%	100%	100%	N/A	100%	100%	100%	N/A
Modal Split	(5,9)				(5,6,9)				(4)				(8,9)			
	AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
Auto	21.2%*	21.2%*	21.2%*		0.0%	0.0%	0.0%		48.0%	48.0%	48.0%		9.8%*	9.8%*	9.8%*	
Taxi	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		1.0%*	1.0%*	1.0%*		0.0%	0.0%	0.0%	
Subway	5.9%	5.9%	5.9%		10.0%	10.0%	10.0%		20.0%	20.0%	20.0%		22.7%	22.7%	22.7%	
Bus	6.7%	6.7%	6.7%	N/A	12.0%	12.0%	12.0%	N/A	16.0%	16.0%	16.0%	N/A	22.5%	22.5%	22.5%	N/A
School Bus	21.2%*	21.2%*	21.2%*		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		7.0%*	7.0%*	7.0%*	
Walk	45.0%	45.0%	45.0%		78.0%	78.0%	78.0%		15.0%	15.0%	15.0%		38.0%	38.0%	38.0%	
Total	100%	100%	100%		100%	100%	100%		100%	100%	100%		100%	100%	100%	
Vehicle Occupancy	(5)								(4)				(5)			
	Weekday								Weekday				Weekday			
Auto	1.28								1.13				1.28			
Taxi	1.28								1.13				1.28			
School Bus	17								NA				17.0			
Daily Delivery Trip Generation Rate	(3)								(3)				(3)			
	Weekday 0.04		Saturday N/A						Weekday 0.04		Saturday N/A		Weekday 0.04		Saturday N/A	
	Delivery Trips / Person								Delivery Trips / Person				Delivery Trips / Seat			
Delivery Temporal	AM	MD	PM	SAT					AM	MD	PM	SAT	AM	MD	PM	SAT
	(3)								(3)				(3)			
	9.7%	7.8%	5.1%	N/A	9.7%	7.8%	5.1%	N/A	9.7%	7.8%	5.1%	N/A				
Delivery Direction	(3)								(3)				(3)			
In	50%	50%	50%						50%	50%	50%		50%	50%	50%	
Out	50%	50%	50%	N/A					50%	50%	50%	N/A	50%	50%	50%	N/A
Total	100%	100%	100%	N/A					100%	100%	100%	N/A	100%	100%	100%	N/A
Sources:																
(1) 2020 CEQR Technical Manual																
(2) U.S. Census Bureau, ACS 2015-2019 Five-Year Estimates - Journey-to-Work (JTW) Data for Census Tracts 381, 383.01, 383.02, 399, 401, 403, 415, 849, 853, 855, 857, 865, 869, and 871																
(3) Willets Point FSEIS (2013)																
(4) U.S. Census Bureau, ACS 2012-2016 Five-Year Estimates - Reverse Journey-to-Work (RJTW) Data																
(5) SCA P.S. 303 EAS (2016)																
(6) Assumes 1 parent for every 1.28 students taking subway, bus, and walk modes to the school and the same temporal distribution as students																
(7) Based on DOT's Trip Generation Surveys																
(8) SCA I.S. 125 Addition EAS (2018)																
(9) Modal split adjustments were made based on the seats that would be generated based on the proposed Phase 1 residences.																
*Both inbound and outbound vehicle trips take place during the same peak hour																

Local Retail

The daily trip generation and delivery vehicle trip generation rates for the local neighborhood retail component of the proposed Phase 1 development program, which is intended to serve new residents of the District, are from the *CEQR Technical Manual*. In line with the FSEIS, a 25-percent linked trip credit was applied to the local retail trip generation estimates. The temporal and directional distributions are from the *CEQR Technical Manual* and the FSEIS, respectively. The modal splits and vehicle occupancies are from the FSEIS.

Community Facility

The daily person trip generation rates, temporal distributions, modal splits, vehicle occupancies, and directional distributions for this use are from the FSEIS.

Public School (K-8)

Travel demand assumptions for the proposed Phase 1 public school are from the *CEQR Technical Manual* and other previously-approved school projects. At the request of DOT, the dismissal trips were conservatively overlaid on top of the weekday midday peak hour. The latest school seat generation rates for the proposed Phase 1 residential units (880 units, after excluding the 220 units reserved for senior housing) were factored into the modal splits for students. Based on the above, the proposed Phase 1 residential units would generate approximately 194 Grade K-5 students and 62 Grade 6-8 students, approximately 45 percent and 28 percent of the school's populations, respectively. Accordingly, the Grade K-5 walk-only modal split for students was assumed to be 45 percent (all of which are assumed to come from within the District) and the Grade 6-8 walk-only modal split for students was assumed to be 38 percent (28 percent from within the District, and the remaining 10 percent from Corona and Flushing). It should be noted that upon the full buildout of the District, the school is anticipated to be populated with students from within the District, and the number of trips into and out of the District assumed for this analysis would be substantially reduced. The school trip generation factors are further described below.

Students

The daily person trip generation rate and temporal distribution for all grades (K-8) are from the *CEQR Technical Manual*. The directional distributions and vehicle occupancies for all grades are from the 2016 *SCA P.S. 303 EAS*. The daily delivery trip rate and temporal and directional distributions for all grades are from the FSEIS. The modal splits are from the 2016 *SCA P.S. 303 EAS* for Grades K-5 and the 2018 *SCA I.S. 125 Addition EAS* for Grades 6-8. Both inbound and outbound vehicle trips are assumed to take place during the same peak hour.

Parents

The daily person trip generation rate and temporal distribution for parents are from the *CEQR Technical Manual*. In line with typical SCA elementary school assumptions, it is anticipated that one parent would accompany every 1.28 students travelling by transit or walking to the school (for Grades K-5 only). The directional distribution is from the 2016 *SCA P.S. 303 EAS*.

Faculty and Staff

The daily person trip generation rate and temporal distribution are from the *CEQR Technical Manual*. Vehicle occupancies and modal splits are based on Reverse Journey-to-Work (RJTW) data from the 2012-2016 U.S. Census Bureau ACS.

Open Space

In the FGEIS and the FSEIS, the open space associated with the development planned for the District was assumed to be ancillary and not result in additional trip generation. In order to be consistent with the prior environmental review of the Plan, trip generation estimates for the open space component were similarly not included in this Technical Memorandum.

As summarized in **Table 16**, in the future with the proposed Phase 1 development program (2030 With Action condition), a total of 2,012, 2,349, 1,110, and 1,259 person trips would be generated during the weekday AM, midday, PM, and Saturday peak hours, respectively. Approximately 378, 374, 169, and 228 vehicle trips would be generated during the same respective peak hours.

Table 16:

Trip Generation Summary: Future With the Proposed Phase 1 Development Program

Program	Peak Hour	In/Out	Person Trip							Vehicle Trip				
			Auto	Taxi	Subway	Bus	School Bus	Walk	Total	Auto	Taxi	Delivery	School Bus	Total
Net Increments	AM	In	188	3	181	133	105	505	1,115	142	6	5	6	159
		Out	177	6	314	100	0	300	897	202	6	5	6	219
		Total	365	9	495	233	105	805	2,012	344	12	10	12	378
	Midday	In	127	3	162	89	0	450	831	162	5	4	6	177
		Out	260	4	241	174	105	734	1,518	182	5	4	6	197
		Total	387	7	403	263	105	1,184	2,349	344	10	8	12	374
	PM	In	152	5	222	70	0	213	662	97	5	1	0	103
		Out	96	3	125	47	0	177	448	60	5	1	0	66
		Total	248	8	347	117	0	390	1,110	157	10	2	0	169
	Saturday	In	193	5	128	42	0	339	707	123	5	1	0	129
		Out	148	3	98	34	0	269	552	93	5	1	0	99
		Total	341	8	226	76	0	608	1,259	216	10	2	0	228

CEQR TRANSPORTATION ANALYSIS SCREENING

The *CEQR Technical Manual* identifies procedures for evaluating a proposed project's potential impacts on traffic, transit, pedestrian, and parking conditions. This methodology begins with the preparation of a trip generation analysis to determine the volume of person and vehicle trips associated with the proposed project. The results are then compared with the *CEQR Technical Manual*-specified thresholds (Level 1 screening analysis) to determine whether a Level 2 screening analysis is warranted. If a proposed project would result in 50 or more peak hour vehicle trips, 200 or more peak hour transit trips (200 or more peak hour transit riders at any given subway station, 200 or more peak hour trips on a subway line in one direction, or 50 or more peak hour trips on a particular bus route in one direction), and/or 200 or more peak hour pedestrian trips, a Level 2 screening analysis is undertaken. For the Level 2 screening analysis, project-generated trips would be assigned to specific intersections, transit routes, and pedestrian elements. If the results of this analysis show that a proposed project would generate 50 or more peak hour vehicle trips through an intersection, 200 or more peak hour subway passengers at any given station, 200 or more peak hour subway passengers on a subway line in one direction, 50 or more peak hour riders on a bus route in a single direction, or 200 or more peak hour pedestrian trips per pedestrian element (i.e., sidewalks, corner reservoirs, and crosswalks), further quantified analyses may be warranted to evaluate the potential for significant adverse traffic, transit, pedestrian, vehicular and pedestrian safety, and parking impacts.

Level 1 Screening

Traffic

As shown in **Table 16**, the incremental trips generated in the Phase 1 With Action condition would be 378, 374, 169, and 228 vehicle trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. Since the incremental vehicle trips would be greater than 50 vehicles during the weekday AM, midday, PM, and Saturday peak hours, a Level 2 screening assessment (presented in the section below) was conducted to determine if a quantified traffic analysis is warranted.

Transit

Mass transit options serving the District include the NYCT No. 7 subway line, which operates above Roosevelt Avenue with a stop at the Mets-Willetts Point subway station; the MTA Bus Company Q19 and

Q66, and NYCT Q48 bus routes, which travel along Northern Boulevard and Roosevelt Avenue, respectively. As detailed in **Table 16**, the incremental transit trips generated by the proposed Phase 1 program would be 495, 403, 347, and 226 person trips by subway, and 233, 263, 117, and 76 person trips by bus during the weekday AM, midday, PM, and Saturday peak hours, respectively. Since the incremental subway trips would be greater than 200 during all peak hours, a Level 2 screening assessment (presented in the section below) was conducted to determine if quantified subway station and line-haul analyses are warranted. Since the incremental bus trips would be greater than 50 during all peak hours, a Level 2 screening assessment was conducted to determine if a quantified bus line-haul analysis is warranted.

Pedestrians

As shown in **Table 16**, the incremental pedestrian trips would be greater than 200 during all peak hours. A Level 2 screening assessment (presented in the section below) was conducted to determine if there is a need for additional quantified pedestrian analyses.

Parking

The proposed Phase 1 program would include 310 accessory parking spaces on-site within a structured facility, as required by zoning. For the purposes of this Technical Memorandum, all vehicle trips were assigned to the on-site accessory parking garage. The anticipated on-site parking demand and the adequacy of the parking supply is detailed below in “Parking.”

Level 2 Screening

As part of the Level 2 screening assessment, project-generated trips were assigned to specific intersections and pedestrian elements near the Phase 1 site. As previously stated, further quantified analyses to assess the potential impacts of the proposed Phase 1 development program on the transportation system would be warranted if the trip assignments were to identify key intersections incurring 50 or more peak hour vehicle-trips or pedestrian elements incurring 200 or more peak hour pedestrian-trips. Similarly, for transit elements, the projected trips were considered in determining the likely transit facilities requiring a detailed analysis of potential impacts.

Site Access and Egress

As part of the proposed Phase 1 development, a new, unmapped road network is proposed. A new unmapped roadway, “Eastern Perimeter Street,” would be constructed and connect to Roosevelt Avenue, at approximately 320 feet to the east of 126th Street. Eastern Perimeter Street would be a two-way roadway for much of its length but convert to a one-way street upon its approach to Roosevelt Avenue, with only the right-turn out movement permitted at the Roosevelt Avenue and Eastern Perimeter Street intersection. The demapped Willets Point Boulevard, 38th Avenue, and 39th Avenue would be replaced by another new unmapped roadway, “Connector Street.” This street would connect perpendicularly to 126th Street at approximately 45 feet south of demapped 38th Avenue. Connector Street would also form the northern boundary of the Phase 1 site. It would intersect with Service Street, also unmapped, on its eastern end. Service Street, which separates the proposed sites of the Phase 1 public school and residential buildings, would intersect with Eastern Perimeter Street on its southeastern end. Pedestrians would access the Phase 1 site from the north side of Roosevelt Avenue (to the east of 126th Street) and from the east side of 126th Street (to the north of Roosevelt Avenue). The on-site parking facility would be accessed from Eastern Perimeter Street between the intersection of Roosevelt Avenue and Eastern Perimeter Street and the intersection of Eastern Perimeter Street and Service Street. All new, proposed streets are required by zoning.

Traffic

As shown in **Table 16**, incremental vehicle trips resulting from the proposed Phase 1 development program would exceed the CEQR Level 1 screening threshold during the weekday AM, midday, PM, and Saturday peak hours. The volume of vehicular traffic generated by the proposed Phase 1 development program was

assigned to the roadway network using regional and local origin/destination patterns attributed to the proposed land use types. Similar to the travel demand assumptions, vehicle trip assignments generally reflect those used in the FSEIS. Traffic assignments for autos, taxis, and deliveries for the various development uses are discussed below. Auto trips were assigned to the Phase 1 site and assumed to park on-site.

Residential

For residential auto trips, approximately 29 percent of the trips were assigned to the west along local roadways such as Roosevelt Avenue and Northern Boulevard, and along the Grand Central Parkway. Approximately 21 percent of the trips were assigned to the east via the Grand Central Parkway, Northern Boulevard, and Roosevelt Avenue. Auto trips traveling to the north (approximately 10 percent) were assigned to the Whitestone Expressway and College Point Boulevard, and trips traveling to the south (approximately 40 percent) were assigned to the Van Wyck Expressway, College Point Boulevard and Main Street. The vast majority of the northbound and southbound trips (46 percent) were assigned to the highway network (Van Wyck Expressway and Whitestone Expressway). Reverse trips are expected to return along the same general routes on which they departed.

Local Retail

Local retail land uses are expected to serve the surrounding neighborhoods and were mostly assigned along local roadways (58 percent), although, due to the number of highway options in the area, a sizeable portion of trips were assigned along the highways (42 percent). Local retail trips traveling to the Phase 1 site from the east (38 percent) and from the west (36 percent) were assigned along Northern Boulevard, Roosevelt Avenue, and the Grand Central Parkway. Approximately 18 percent of the auto trips were assigned from the south via the Van Wyck Expressway and eight percent of the auto trips were assigned from the north via the Whitestone Expressway. Departing local retail and community facility trips were generally assigned along the same routes as arrivals.

Public School

Student drop-off trips were assigned to the Phase 1 site from local roadways serving surrounding neighborhoods. School “in” trips were assigned as follows: approximately 47 percent along eastbound Northern Boulevard and Roosevelt Avenue; and approximately 53 percent along westbound Roosevelt Avenue and Northern Boulevard. It was assumed that many of the drop-off trips would proceed to places to work; therefore, school “out” trips were partly assigned according to commuter patterns.

For school staff auto trips, approximately 25 percent of the trips were expected to arrive from the west and 25 percent of the trips were expected to arrive from the east; these trips were assigned along Roosevelt Avenue, Northern Boulevard, and the Grand Central Parkway. School staff auto trips from the north and south were assigned to the Phase 1 site via the Van Wyck Expressway from the south (33 percent) and Whitestone Expressway from the north (17 percent).

Community Facility

The community facility and recreational facilities are expected to serve surrounding neighborhoods, and therefore trips were assigned to the Phase 1 site from local roadways, similar to the school student trips.

Deliveries

Trucks were assigned along DOT-designated truck routes, including the Van Wyck and Whitestone Expressways, the LIE, Northern Boulevard, Astoria Boulevard, Roosevelt Avenue, and College Point Boulevard (trucks are not allowed on the GCP). Overall on the highways, approximately 10 to 15 percent of all truck trips were assigned to the Van Wyck Expressway (south of the LIE), approximately 10 to 15

percent were assigned to the Whitestone Expressway, and approximately 20 to 25 percent were assigned to each the eastbound and westbound LIE (these trucks would access the project area along the Van Wyck Expressway). For local streets, about 10 to 15 percent were assigned to Astoria Boulevard (entering the Phase 1 site vicinity via Northern Boulevard), about 2 to 10 percent were assigned to each eastbound and westbound Northern Boulevard, and about one to five percent were assigned to Roosevelt Avenue and College Point Boulevard.

Summary

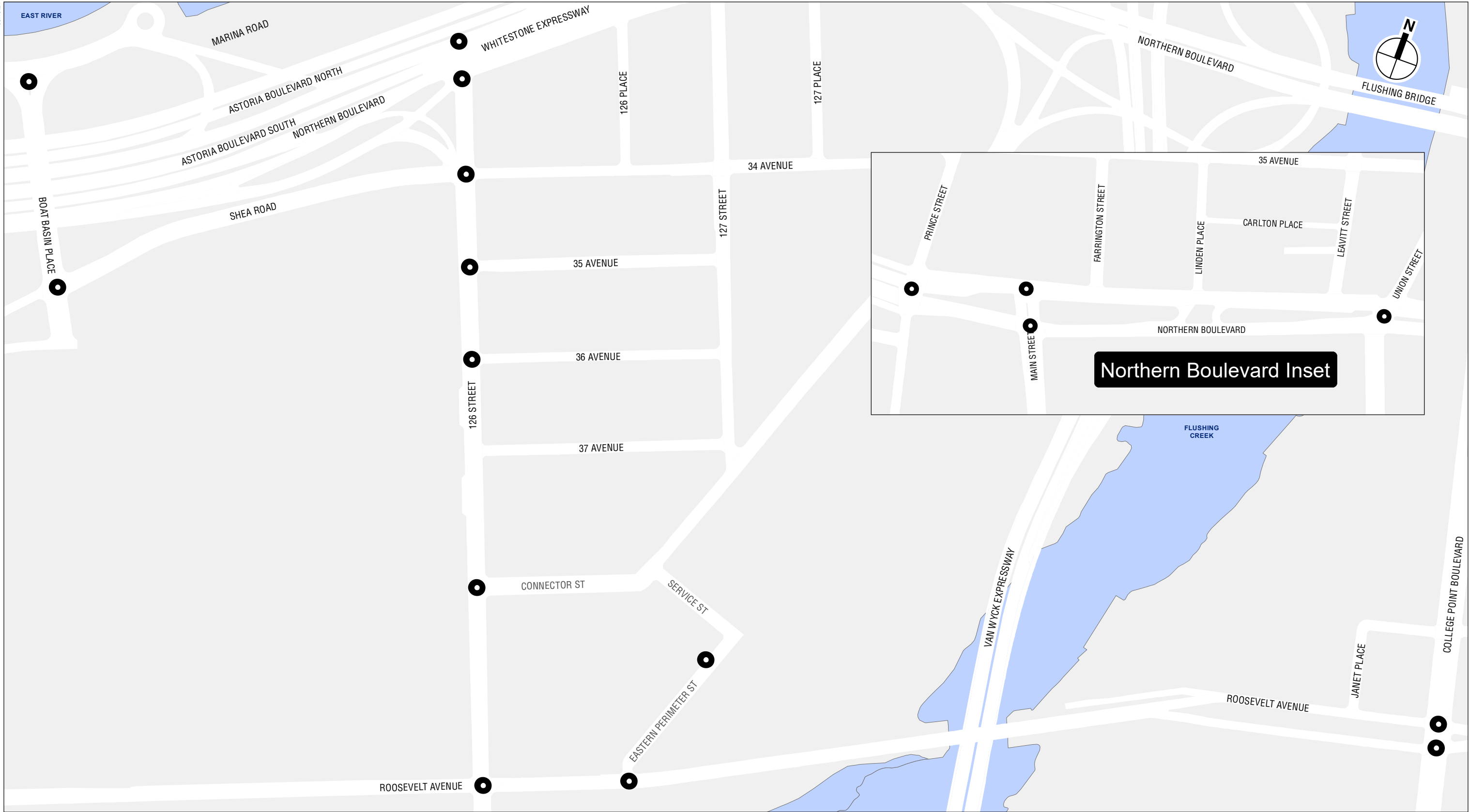
Based on the volume of vehicle trips generated by the proposed Phase 1 development program and the distribution of those trips, traffic assignment maps were prepared for the four traffic analysis peak hours and are shown in **Appendix B**. In consultation with DOT, the following 17 intersections were selected for detailed analysis, as shown in **Figure 10**:

1. Northern Boulevard Westbound and 126th Street;
2. Northern Boulevard Eastbound and 126th Street;
3. Shea Road and Boat Basin Road;
4. 126th Street and Shea Road/34th Avenue;
5. Marina Road and Boat Basin Road;
6. 126th Street and 35th Avenue;
7. 126th Street and 36th Avenue;
8. 126th Street and 38th Avenue (becomes Connector Street in future Phase 1 With Action condition);
9. Roosevelt Avenue and 126th Street;
10. Roosevelt Avenue and Eastern Perimeter Street (future Phase 1 With Action condition);
11. Westbound Roosevelt Avenue and College Point Boulevard;
12. Eastbound Roosevelt Avenue and College Point Boulevard;
13. Eastern Perimeter Street and Project Site Driveway (future Phase 1 With Action condition);
14. Northern Boulevard and Prince Street;
15. Westbound Northern Boulevard and Main Street;
16. Eastbound Northern Boulevard and Main Street; and
17. Northern Boulevard and Union Street.

Transit

As summarized in **Table 16**, incremental subway and bus trips resulting from the proposed Phase 1 development program would exceed the CEQR Level 1 screening threshold during all peak hours. However, since peak hours for transit use are typically the weekday AM and PM peak hours, the other peak hours were not considered. Since all of the subway trips would access/egress the Phase 1 site via the Mets-Willets Point subway station, quantified analyses of affected elements at this station and subway line-haul for the No. 7 line for the weekday AM and PM peak hours would be warranted. The same control areas and circulation elements that were analyzed previously at the No. 7 Mets-Willets Point subway station were analyzed in this Technical Memorandum.

As discussed above, the Phase 1 site is served by the Q19, Q48, and Q66 bus routes. The Q19 and Q66 bus routes operate along Northern Boulevard and the Q48 bus route operates along Roosevelt Avenue. The Q19 operates between Flushing and Astoria with approximately 15 to 20 minute headways, the Q48 operates between Flushing and LaGuardia Airport with approximately 15 to 20 minute headways, and the Q66 operates between Flushing and Long Island City with approximately 4 to 5 minute headways. As was done in the FSEIS, it was assumed that 40 percent of the bus trips would originate/terminate in Flushing and 60 percent of the bus trips would originate/terminate in Corona, resulting in 15 percent of the bus trips assigned to the Q19, 15 percent of the bus trips assigned to the Q48, and 70 percent of the bus trips assigned to the



 Traffic Analysis Location

0 400 FEET

Q66. Based on that distribution of the projected bus trips, it was determined that a quantified bus line-haul analysis would be warranted for the Q66 bus route only.

Pedestrians

As shown in **Table 16**, the projected peak hour incremental pedestrian trips would exceed the *CEQR* analysis threshold of 200 pedestrians during all peak hours. Level 2 pedestrian trip assignments were individually developed for all the proposed uses, as shown in **Appendix B** and discussed below. In the FSEIS, varying internal capture percentages were assumed for walk-only trips by land use. This internal capture represents trips that would originate/terminate within the District without traversing any publicly owned pedestrian elements, resulting in only a percentage of the person trips being assigned throughout the pedestrian network. The same internal capture percentages assumed in the FSEIS were assumed in this Technical Memorandum for consistency and are described in greater detail below.

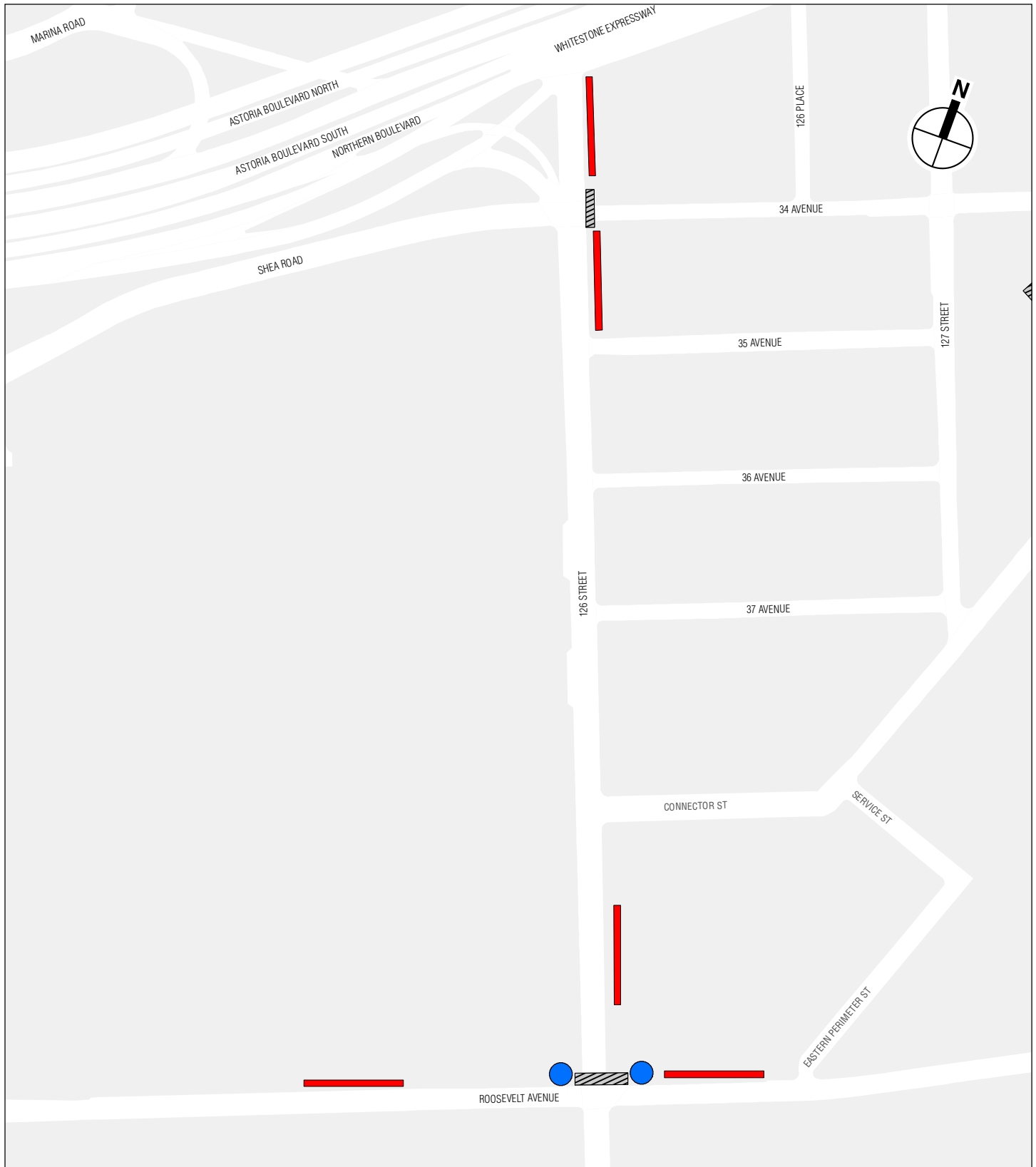
- Auto and Taxi Trips – Auto trips would park in the accessory parking garage on-site, and taxi patrons would get dropped off and picked up within the District adjacent to the proposed building entrances. Therefore, no person trips associated with the auto and taxi modes would traverse any of the pedestrian elements included for analysis.
- City Bus and Subway Trips – City bus riders would take buses stopping on Northern Boulevard and Roosevelt Avenue and would get on and off at bus stops nearest to the Phase 1 site. Subway riders were assigned to the No. 7 subway line at the Mets-Willets Point Station. As was done in the FSEIS, no internal capture percentage was assumed for bus and subway trips, and all transit trips were assigned to the pedestrian network.
- Walk-Only Trips – Pedestrian walk-only trips were developed by distributing project-generated person trips to area pedestrian facilities (i.e., sidewalks, corner reservoirs, and crosswalks) based on population origin-destination data as well as the land use characteristics of the surrounding neighborhood. As described above, consistent with the FSEIS, the following walk-only internal capture percentages were assumed, resulting in only a percentage of the person trips being assigned throughout the pedestrian network:
 - Residential – 90 percent (10 percent of the trips assigned to the pedestrian network)
 - Local Retail – 85 percent (15 percent of the trips assigned to the pedestrian network)
 - Community Facility – 100 percent (0 percent of the trips assigned to the pedestrian network)
 - Primary School Students and Parents – 100 percent (0 percent of the trips assigned to the pedestrian network)
 - Intermediate School Students – 74 percent (26 percent of the trips assigned to the pedestrian network)
 - K-8 School Staff – 0 percent (100 percent of the trips assigned to the pedestrian network)

Based on the detailed assignment of pedestrian trips, 5 sidewalks, 2 corner reservoirs, and 2 crosswalks were selected for detailed analysis for the weekday AM, midday, PM, and Saturday peak hours, as summarized in **Table 17** and depicted in **Figure 11**.

TRAFFIC

Existing Conditions

The primary traffic study area was defined as Northern Boulevard to the north, College Point Boulevard to the east, Roosevelt Avenue to the south, and 126th Street to the west. Traffic analysis locations within this primary traffic study area included intersections along Roosevelt Avenue and 126th Street near the District and other intersections adjacent to or approaching the District. Three additional intersections were identified within a secondary study area further away from the District, along Northern Boulevard to the east at Prince,



-  Crosswalk
-  Corner
-  Sidewalk

0 400 FEET

Selected Pedestrian Analysis Locations
Figure 11

Main and Union Streets within the Downtown Flushing area. Upon consultation with DOT, a total of 15 existing intersections were identified for analysis under existing and No Action conditions. Two additional intersections (i.e., Roosevelt Avenue at Eastern Perimeter Street and Eastern Perimeter Street at Project Site Driveway), to be constructed as part of the proposed Phase 1 development, were analyzed under With Action condition, bringing the total number of With Action intersections to 17. The locations of these study area intersections are detailed above and shown in **Figure 10**.

Table 17:

Pedestrian Level 2 Screening Analysis Results—Selected Analysis Locations

Pedestrian Elements	Incremental Pedestrian Trips				Selected Analysis Locations
	Weekday			Saturday	
	AM	Midday	PM		
Roosevelt Avenue and 126th Street					
North Sidewalk along Roosevelt Avenue between 126th Street and Grand Central Parkway	532	444	362	247	✓
South Sidewalk along Roosevelt Avenue between 126th Street and Grand Central Parkway	28	27	15	18	
North Sidewalk along Roosevelt Avenue between 126th Street and Van Wyck Expressway	301	263	204	142	✓
South Sidewalk along Roosevelt Avenue between 126th Street and Van Wyck Expressway	9	31	14	16	
East Sidewalk along 126th Street between Roosevelt Avenue and Connector Street	471	483	301	219	✓
Northeast Corner	570	506	394	282	✓
Northwest Corner	574	478	384	268	✓
North Crosswalk	553	463	374	253	✓
East Crosswalk	17	43	20	23	
South Crosswalk	8	12	6	7	
West Crosswalk	21	15	10	9	
Northern Boulevard and 126th Street					
South Sidewalk along Northern Boulevard between 126th Street and 126th Place	102	105	52	33	
East Sidewalk along 126th Street between Northern Boulevard and 34th Avenue	191	211	96	65	✓
Southeast Corner	193	208	96	66	*
East Crosswalk	90	103	43	30	
South Crosswalk	1	0	1	3	
34th Avenue and 126th Street					
East Sidewalk along 126th Street between 34th Avenue and Connector Street	191	211	96	65	✓
Northeast Corner	191	211	96	65	*
Southeast Corner	191	211	96	65	*
East Crosswalk	191	211	96	65	✓
Notes:					
✓ Denotes pedestrian elements selected for detailed analysis.					
* Denotes pedestrian elements expected to incur 200 or more peak hour project-generated trips but not included for analysis, consistent with the analysis scope from the FSEIS.					

The primary sources of existing volume data were the *LaGuardia Airport Access Improvement Draft EIS* (which examined the LGA AirTrain), the *Special Flushing Waterfront District EAS* (for the intersection of Roosevelt Avenue and College Point Boulevard), and additional 2017 counts provided by DOT along Northern Boulevard in Flushing. The LGA AirTrain EIS and Special Flushing Waterfront District EAS existing conditions volume data generally reflect a combination of year 2018 and 2019 data that have been approved for use in this study by DOT. Available traffic count data prior to 2018 were increased to 2018 using standard CEQR growth rates. The updated existing conditions scenario represents a 2018 base year. The peak traffic analysis hours as identified by those sources were weekdays 8:00 to 9:00 AM, 12:00 to 1:00 PM, 5:00 to 6:00 PM, and Saturdays 1:00 to 2:00 PM for typical weekdays and Saturdays without Mets games or other events at CitiField. Project-generated traffic would be substantially lower during weeknight and weekend games, so game-day conditions were screened out from further analyses, as described later in this Technical Memorandum.

The District is served regionally by major highways such as the Grand Central Parkway (GCP), the Van Wyck Expressway (VWE), and the Whitestone Expressway (WE), plus the Long Island Expressway (LIE) which leads to the GCP and the VWE, and by major roadway arterials such as Northern Boulevard and

more local streets such as Roosevelt Avenue and College Point Boulevard. Roosevelt Avenue and 126th Street are the streets that border the District and serve it directly.

Existing peak hour volume maps for the four peak hours analyzed are provided in **Appendix B**. Northern Boulevard is a major east-west commuter arterial, especially in the weekday AM and PM peak hours; between Prince Street and Union Street, Northern Boulevard carries six to eight lanes of traffic and up to 2,325 vehicles per hour (vph) in the peak direction during the weekday AM peak hour, and up to 1,820 vph in the peak direction during the weekday PM peak hour. Roosevelt Avenue, adjacent to the District, is another east-west street that generally serves more local traffic and carries at most two lanes of traffic past the District; it has moderately high traffic volumes (approximately 1,225 to 1,255 vph during the weekday AM and Saturday peak hours, 975 vph during the weekday midday peak hour, and 1,375 vph during the weekday PM peak hour). 126th Street, on the west side of the District, carries two lanes of traffic per direction as a local, modest carrier (approximately 455 vph during the weekday AM peak hour, vph, 615 vph during the weekday midday peak hour, 720 vph during the weekday PM peak hour, and 680 vph during the Saturday peak hour).

Existing levels of service at the traffic analysis locations were assembled primarily from the LGA AirTrain EIS incorporating adjustments that had been made at the time by DOT and from new analyses. All analyses were modeled using a calibrated Synchro model. A summary of the findings is provided in **Tables 18 and 19** below, while the detailed analysis results are provided in **Appendix B**.

Table 18:
Existing Traffic Level of Service Summary – Overall Intersections

	Weekday			Saturday Peak Hour
	AM Peak Hour	Midday Peak Hour	PM Peak Hour	
Intersections at Overall LOS A/B/C	12	12	12	11
Intersections at Overall LOS D	2	3	3	4
Intersections at Overall LOS E	1	0	0	0
Intersections at Overall LOS F	0	0	0	0
Note: Includes the 15 analyzed intersections (11 signalized and 4 unsignalized). All 4 unsignalized intersections operate at acceptable LOS during all four traffic analysis hours.				

Table 19:
Existing Traffic Level of Service Summary – Traffic Movements

	Weekday			Saturday Peak Hour
	AM Peak Hour	Midday Peak Hour	PM Peak Hour	
Traffic Movements at LOS A/B/C and Acceptable LOS D	48	53	51	49
Traffic Movements at Unacceptable LOS D	6	2	3	6
Traffic Movements at LOS E	5	3	3	2
Traffic Movements at LOS F	3	4	5	5
Number of Individual Traffic Movements	62	62	62	62
Note: Number of movements may vary between peak hours due to turn prohibitions, parking regulations, and the presence of de facto left turn movements. Traffic movement with delays less than or equal to 45 seconds for signalized movements, and less than or equal to 30 seconds for unsignalized movements, are considered to be operating at acceptable levels of service.				

The summary overview of existing conditions indicates that:

- In the weekday AM peak hour, one intersection – Northern Boulevard and Union Street – operates at overall LOS E. “Overall” LOS E or F means that serious congestion exists – either one specific traffic

movement has severe delays or two or more of the specific traffic movements at the intersection are at LOS E or F with significant delays (the overall intersection level of service is a weighted average of all individual traffic movements). Fourteen individual traffic movements out of 62 movements analyzed operate at unacceptable LOS D, LOS E, or LOS F (e.g. left turns from one street to another, through traffic on one street passing through the intersection, etc).

- In the weekday midday peak hour, no intersections operate at overall LOS E or F, and nine individual traffic movements operate at unacceptable LOS D, LOS E, or LOS F.
- In the weekday PM peak hour, no intersections operate at overall LOS E or F, and 11 individual traffic movements operate at unacceptable LOS D, LOS E, or LOS F.
- In the Saturday peak hour, no intersections operate at overall LOS E or F, 13 individual traffic movements operate at unacceptable LOS D, LOS E, or LOS F.

Traffic movements based on existing conditions, operating at unacceptable levels of service, are listed below.

126th Street and Eastbound Northern Boulevard

- Eastbound Northern Boulevard through movement (weekday PM)

126th Street and Shea Road/34th Avenue

- Westbound 34th Avenue shared left-through-right movement (Saturday)
- Southeastbound Whitestone Expressway Off-Ramp shared-left-through-right movement (weekday AM, midday, PM, and Saturday)

Roosevelt Avenue and 126th Street

- Northbound 126th Street shared left-through-right movement (weekday midday)
- Southbound 126th Street left turn movement (weekday midday, PM, and Saturday)
- Southbound 126th Street shared through-right movement (weekday PM)

Roosevelt Avenue Westbound and College Point Boulevard

- Northbound College Point Boulevard left turn movement (weekday AM)
- Southbound College Point Boulevard shared through-right movement (weekday AM)

Northern Boulevard and Prince Street

- Eastbound Northern Boulevard left turn movement (weekday AM, midday, PM, and Saturday)
- Westbound Northern Boulevard left turn movement (weekday AM, midday, PM, and Saturday)
- Westbound Northern Boulevard Service Road shared through-right movement (weekday midday, PM, and Saturday)
- Northbound Prince Street shared left-through-right movement (weekday AM, midday, PM, and Saturday)
- Southbound Prince Street shared left-through-right movement (weekday AM, midday, PM, and Saturday)

Westbound Northern Boulevard and Main Street

- Westbound Northern Boulevard through movement (Saturday)

Eastbound Northern Boulevard and Main Street

- Northbound Main Street through movement (weekday AM and Saturday)

- Northbound Main Street right turn movement (weekday AM, midday, PM, and Saturday)

Northern Boulevard and Union Street

- Eastbound Northern Boulevard left turn movement (weekday AM and Saturday)
- Eastbound Northern Boulevard shared through-right movement (weekday AM, midday, PM, and Saturday)
- Westbound Northern Boulevard left turn movement (weekday AM)
- Westbound Northern Boulevard shared through-right movement (weekday AM)

Marina Road and Boat Basin Place

- Northbound Boat Basin Place left turn movement (weekday AM)

The 2018 existing conditions volumes along Northern Boulevard are comparable to those from the FGEIS in both peak directions during the weekday AM and PM peak hours. Volumes traveling in both directions along Roosevelt Avenue are also comparable to those from the FGEIS. Volumes traveling in both directions along 126th Street are modestly higher during the weekday AM and Saturday peak hours, and considerably higher in the weekday midday and PM peak hours, when compared to the FGEIS existing conditions volumes. The results of the 2018 existing conditions analysis indicate comparable level of service conditions at intersections also analyzed in the FGEIS existing conditions analysis.

Future Without the Proposed Modification

The analysis of projected future No Action condition includes an annual growth rate of a half-percent of background traffic for the first five years from existing conditions plus a quarter-percent per year after the first five years up through the proposed Phase 1 development's build year of 2030. It also includes traffic expected to be generated by the recently-approved LGA AirTrain project, the recently-approved Special Flushing Waterfront District development, projected future development projects contained in both the LGA AirTrain EIS and Special Flushing Waterfront District development, and traffic generated by the 147-14 Northern Boulevard development as identified by DCP. An identification of these background projects is presented above in **Figure 4**, and a description of their programs is presented in **Table 2** at the beginning of Section D, "Analysis Framework." Overall, excluding the LGA AirTrain and other terminal redevelopment projects at the airport, the total of these No Action developments would add approximately 5.5 million sf of space primarily northeast of the District. Trip generation and assignment information were obtained from the LGA AirTrain EIS as well as the Special Flushing Waterfront District EAS, and these vehicle trips were assigned to the local and regional street network within the study area.

In addition to these expected development projects, the future No Action condition, as well as the future With Action condition that follows, includes one transportation and roadway improvement project identified by DOT that is expected to be implemented by 2030. DOT has proposed the pilot implementation of an exclusive busway along Main Street south of Northern Boulevard. In the southbound direction, the busway has been implemented from 37th Avenue to 40th Road. In the northbound direction, the busway will be implemented from Sanford Avenue to Northern Boulevard. Vehicles would be allowed local access and would be required to make the next available turn off the busway. To provide a conservative analysis, it was assumed that all through traffic along Main Street would be diverted within the study area, using acceptable turns along Northern Boulevard at Prince and Union Streets to complete their trips.

The LGA AirTrain, the Special Flushing Waterfront District development project, and the other projected No Action developments, in total, are expected to generate an estimated 255 vph in the peak direction along Northern Boulevard in the weekday AM peak hour, and 130 vph in the peak direction in the weekday PM peak hour. Roosevelt Avenue would carry approximately 520 additional vph in both directions during the

weekday AM peak hour, approximately 355 to 375 additional vph in both directions during the weekday midday and PM peak hours, and approximately 230 additional vph in both directions during the Saturday peak hour. 126th Street would carry approximately 80 to 90 additional vph in both directions during the weekday AM, PM, and Saturday peak hours, and approximately 120 additional vph in both directions during the weekday midday peak hour.

No Action traffic volume maps are presented in **Appendix B**. These volumes were used to determine level of service results shown in the detailed level of service tables in **Appendix B** and in the summary **Tables 20 and 21** below.

A summary overview of 2030 No Action condition indicates that:

- In the weekday AM peak hour, four intersections would operate at overall LOS E or F compared to one in the existing conditions. Sixteen movements would operate at unacceptable LOS D, E, or F, compared to fourteen in the existing conditions.
- In the weekday midday peak hour, four intersections would operate at overall LOS E or F, compared to none in the existing conditions. Nineteen movements would operate at unacceptable LOS D, E, or F, compared to nine in the existing conditions.
- In the weekday PM peak hour, three intersections would operate at overall LOS E or F, compared to none in the existing conditions. Nineteen movements would operate at unacceptable LOS D, E, or F, compared to 11 in the existing conditions.
- In the Saturday peak hour, four intersections would operate at overall LOS E or F, compared to none in the existing conditions. Nineteen movements would operate at unacceptable LOS D, E, or F, compared to 13 in the existing conditions.

The majority of traffic movements would continue to operate at acceptable levels of service. At Northern Boulevard and Main Street, northbound Main Street movements would improve from LOS E or F to acceptable levels of service due to diversions expected to occur as a result of the Main Street busway project. However, the additional vehicle trips generated by the Special Flushing Waterfront District, as well trips diverting due to the Main Street busway closures, would result in a number of poorly performing movements at the intersections of Northern Boulevard and Prince Street and Northern Boulevard and Union Street. The following intersections would have at least one movement operating at unacceptable levels of service during at least one peak hour. Traffic movements expected to operate at unacceptable levels of service are listed below:

126th Street and Eastbound Northern Boulevard

- Eastbound Northern Boulevard through movement (weekday PM)

126th Street and Shea Road/34th Avenue

- Eastbound Shea Road right turn movement (weekday midday)
- Westbound 34th Avenue shared left-through-right movement (Saturday)
- Southeastbound Whitestone Expressway Off-Ramp shared-left-through-right movement (weekday AM, midday, PM, and Saturday)

Roosevelt Avenue and 126th Street

- Northbound 126th Street shared left-through-right movement (weekday midday, PM and Saturday)
- Southbound 126th Street left turn movement (weekday midday, PM, and Saturday)
- Southbound 126th Street shared through-right movement (weekday AM, midday, and PM)

Table 20:

2018 Existing vs. 2030 No Action Traffic Levels of Service – Overall Intersections

	2018 Existing				2030 No Action			
	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday Peak Hour	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday Peak Hour
Intersections at Overall LOS A/B/C	12	12	12	11	10	9	9	8
Intersections at Overall LOS D	2	3	3	4	1	2	3	3
Intersections at Overall LOS E	1	0	0	0	2	0	1	1
Intersections at Overall LOS F	0	0	0	0	2	4	2	3
Note: Includes the 15 analyzed intersections (11 signalized and 4 unsignalized). All 4 unsignalized intersections would operate at acceptable LOS during all four traffic analysis hours.								

Table 21:

2018 Existing vs. 2030 No Action Traffic Levels of Service – Traffic Movements

	2018 Existing				2030 No Action			
	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Weekday Saturday Peak Hour	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Weekday Saturday Peak Hour
Traffic Movements at LOS A/B/C and Acceptable LOS D	48	53	51	49	47	46	45	46
Traffic Movements at Unacceptable LOS D	6	2	3	6	4	4	5	3
Traffic Movements at LOS E	5	3	3	2	3	7	5	3
Traffic Movements at LOS F	3	4	5	5	9	8	9	13
Number of individual traffic movements	62	62	62	62	63	65	64	65
Note: * Number of movements may vary between peak hours due to turn prohibitions, parking regulations, and the presence of de facto left turn movements.								

Roosevelt Avenue Westbound and College Point Boulevard

- Northbound College Point Boulevard left turn movement (weekday AM, midday, PM, and Saturday)
- Southbound College Point Boulevard shared through-right movement (weekday AM, midday, PM, and Saturday)

Roosevelt Avenue Eastbound and College Point Boulevard

- Southbound College Point Boulevard through movement (weekday midday and PM)

Northern Boulevard and Prince Street

- Eastbound Northern Boulevard left turn movement (weekday AM, midday, PM, and Saturday)
- Eastbound Northern Boulevard Service Road shared through-right movement (weekday PM and Saturday)
- Westbound Northern Boulevard left turn movement (weekday AM, midday, PM, and Saturday)
- Westbound Northern Boulevard through movement (Saturday)
- Westbound Northern Boulevard Service Road shared through-right movement (weekday AM, midday, PM, and Saturday)
- Northbound Prince Street shared left-through-right movement (weekday AM, midday, PM, and Saturday)
- Southbound Prince Street shared left-through-right movement (weekday AM, midday, PM, and Saturday)

Westbound Northern Boulevard and Main Street

- Westbound Northern Boulevard through movement (weekday AM, midday, and Saturday)

Eastbound Northern Boulevard and Main Street

- Eastbound Northern Boulevard through movement (weekday PM)
- Northbound Main Street right turn movement (weekday midday, PM, and Saturday)

Northern Boulevard and Union Street

- Eastbound Northern Boulevard left turn movement (weekday AM, midday, and Saturday)
- Eastbound Northern Boulevard shared through-right movement (weekday AM and PM)
- Eastbound Northern Boulevard through movement (weekday midday and Saturday)
- Eastbound Northern Boulevard de facto right turn movement (weekday midday and Saturday)
- Westbound Northern Boulevard left turn movement (weekday AM)
- Westbound Northern Boulevard shared through-right movement (weekday AM, midday, PM, and Saturday)
- Southbound Union Street through movement (weekday AM)

Marina Road and Boat Basin Place

- Northbound Boat Basin Place left turn movement (weekday AM and PM)

Future With the Proposed Modification

The Proposed Phase 1 Modification would generate a total of 376 vph during the weekday AM peak hour, 368 vph during the weekday midday peak hour, 165 vph during the weekday PM peak hour, and 225 vph during the Saturday peak hour. Changes to the surrounding roadway network would include the demapping of 38th Avenue to create a new two-way roadway, Connector Street. Connector Street would intersect with 126th Street and create the northern boundary of the development. Additionally, a new street, Eastern Perimeter Street, would be constructed and connect to Roosevelt Avenue east of 126th Street. Eastern Perimeter Street would be a two-way roadway north of the development access, with right turn “out” only

movements permitted at Roosevelt Avenue (i.e., southbound left turns out from the District onto eastbound Roosevelt Avenue would be prohibited, as would eastbound left turns into the District from eastbound Roosevelt Avenue).

These vehicle trips were assigned through the regional and local roadway network described above and would result in generally modest traffic volume increases to individual intersections within the traffic study area. The With Action volume maps are presented in **Appendix B**. Level of service results are shown in the detailed level of service tables presented in **Appendix B** and summary **Tables 22-23** that follow immediately below.

Table 22:
2030 No Action vs. 2030 With Action Traffic Levels of Service – Overall Intersections

	2030 No-Action				2030 With-Action			
	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday Peak Hour	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday Peak Hour
Intersections at Overall LOS A/B/C	10	9	9	8	11	10	9	10
Intersections at Overall LOS D	1	2	3	3	2	2	5	2
Intersections at Overall LOS E	2	0	1	1	1	1	1	2
Intersections at Overall LOS F	2	4	2	3	3	4	2	3
Number of significantly impacted intersections	-	-	-	-	4	6	4	4
Note: Includes the 17 analyzed intersections (11 signalized and 6 unsignalized). The two proposed intersections of Eastern Perimeter Street at Roosevelt Avenue and at the Project entrance would be unsignalized in the With Action condition.								

Table 23:
2030 No Action vs. 2030 With Action Traffic Levels of Service – Traffic Movements

	2030 No-Action				2030 With-Action			
	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Weekday Saturday Peak Hour	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Weekday Saturday Peak Hour
Traffic Movements at LOS A/B/C and Acceptable LOS D	47	46	45	46	50	50	49	50
Traffic Movements at Unacceptable LOS D	4	4	5	3	6	2	6	4
Traffic Movements at LOS E	3	7	5	3	2	9	4	3
Traffic Movements at LOS F	9	8	9	13	10	9	10	13
Number of significantly impacted movements	-	-	-	-	6	10	5	6
Number of individual traffic movements	63	65	64	65	68	70	69	70
Note: * Number of movements may vary between peak hours due to turn prohibitions, parking regulations, and the presence of de facto left turn movements.								

The summary overview of the 2030 With Action condition indicates that:

- In the weekday AM peak hour, four intersections would operate at overall LOS E or F, similar to the No Action condition. Eighteen movements would operate at unacceptable LOS D, E, or F, compared to 16 movements in the No Action condition.
- In the weekday midday peak hour, five intersections would operate at overall LOS E or F, compared to four in the No Action condition. Twenty movements would operate at unacceptable LOS D, E, or F, compared to 19 movements in the No Action condition.
- In the weekday PM peak hour, three intersections would operate at overall LOS E or F, similar to the No Action condition. Twenty movements would operate at unacceptable LOS D, E, or F, compared to 19 movements in the No Action condition.
- In the Saturday peak hour, five intersections would operate at overall LOS E or F, compared to four in the No Action condition. Twenty movements would operate at unacceptable LOS D, E, or F, compared to 19 movements in the No Action condition.

Traffic movements that operate at unacceptable levels of service under the No Action condition would continue to do so under the With Action condition; additional movements that would be expected to operate at unacceptable levels of service as a result of the Proposed Modification are listed below:

126th Street and Shea Road/34th Avenue

- Eastbound Shea Road right turn movement (weekday AM, PM and Saturday)

Roosevelt Avenue and 126th Street

- Southbound 126th Street left turn movement (weekday AM)

Marina Road and Boat Basin Place

- Northbound Boat Basin Place left turn movement (weekday midday)

Of the 17 intersections analyzed, the Proposed Modification would result in significant adverse traffic impacts at four intersections (at six movements) during the weekday AM peak hour, six intersections (at ten movements) during the weekday midday peak hour, four intersections (at five movements) during the weekday PM peak hour, and four intersections (at six movements) during the Saturday peak hour. Although the increase in traffic volumes at individual intersections in 2030 as a result of the Proposed Modification are expected to be relatively modest, significant traffic impacts are expected during one or more peak hours due to prevailing traffic congestion at key intersections and volume increments from background developments and diversions created by the Main Street busway in the No Action condition. The significantly impacted traffic movements are identified below:

126th Street and Shea Road/34th Avenue

- Eastbound Shea Road right turn movement (weekday midday, PM, and Saturday)
- Southeastbound Whitestone Expressway Off-Ramp (weekday midday, PM, and Saturday)

Roosevelt Avenue and 126th Street

- Northbound Northern Boulevard shared left-through-right movement (weekday midday and Saturday)
- Southbound Northern Boulevard left turn movement (weekday midday, PM, and Saturday)

Roosevelt Avenue Westbound and College Point Boulevard

- Northbound College Point Boulevard left turn movement (weekday AM and midday)
- Southbound College Point Boulevard shared through-right movement (weekday AM, midday, PM, and Saturday)

Northern Boulevard and Prince Street

- Westbound Northern Boulevard Service Road shared through-right movement (weekday AM, midday, PM, and Saturday)

Westbound Northern Boulevard and Main Street

- Westbound Northern Boulevard through movement (weekday AM and midday)

Northern Boulevard and Union Street

- Eastbound Northern Boulevard shared through-right movement (weekday AM)
- Eastbound Northern Boulevard through movement (weekday midday)
- Westbound Northern Boulevard shared through-right movement (weekday AM and midday)

Table 24 below compares the significant impacts from the Proposed Modification with those movements impacted in the FGEIS. As shown in the table, the Proposed Modification would result in both fewer significantly impacted intersections and movements compared to impacts disclosed in the FGEIS. In addition, almost all intersections showing significant impacts in 2030 under the Proposed Modification also showed significant impacts under the full District buildout condition analyzed in the FGEIS. Only one intersection during one time period—Northern Boulevard and Main Street during the midday peak hour—would result in a traffic impact during the same time period where there was none identified in the FGEIS. This is due to changes in background traffic and other No Action projects since the completion of the FGEIS in 2008. In addition, the FGEIS identified impacts at this intersection during the PM and Saturday peak hours, which do not show significant impacts in 2030 under the Proposed Modification. Therefore, the temporal shift of impacts at this analysis location between the FGEIS and the current analysis is considered to be within the scope of the previous disclosures. In general, it can be concluded that the proposed Phase 1 development would result in significant impacts to intersection operations that would be lesser than or within the scope of the impacts disclosed for the full District buildout analyzed in the FGEIS.

Mitigation

Table 25 summarizes the significant traffic impacts anticipated in the 2030 With Action condition, and whether they could be fully mitigated. Details of the intersection capacity analyses and all traffic mitigation measures (e.g. signal timing changes) are summarized in **Appendix B**. The major overall finding of the traffic mitigation analysis is that the majority of the intersections analyzed would either not be significantly impacted or could be fully mitigated with readily implementable traffic improvement measures, i.e., signal timing changes. These measures represent some of the standard traffic capacity improvements that are typically implemented by DOT and are consistent with those recommended in the FGEIS.

As shown in **Table 25**, two of the 17 intersections would remain unmitigated during the weekday AM, midday, and Saturday peak hours, and one intersection would remain unmitigated during the weekday PM peak hour.

Table 24:
2030 With Action Impact Summary and Comparison to FGEIS

Intersection	Weekday AM Peak Hour		Weekday Midday Peak Hour		Weekday PM Peak Hour		Saturday Peak Hour	
	2030 With Action	FGEIS	2030 With Action	FGEIS	2030 With Action	FGEIS	2030 With Action	FGEIS
126th St and Westbound Northern Blvd		NB-L WB-T		NB-L NB-R WB-T		NB-L NB-R WB-T		NB-L NB-R WB-T
126th St and Eastbound Northern Blvd								
126th St and Shea Rd/34th Ave		SB-LTR EB-LTR WB-LTR	EB-R SEB-LTR	NB-LTR SB-LTR (GCP Ramp) SB-LTR (Northern Blvd Ramp) EB-LTR WB-LTR	EB-R SEB-LTR	NB-LTR SB-LTR (GCP Ramp) SB-LTR (Northern Blvd Ramp) EB-LTR WB-LTR	EB-R SEB-LTR	NB-LTR SB-LTR (GCP Ramp) SB-LTR (Northern Blvd Ramp) EB-LTR WB-LTR
Roosevelt Ave and 126th St		SB-LTR EB-DefL	NB-LTR SB-L	NB-TR SB-DefL SB-TR EB-DefL WB-LTR	SB-L	NB-DefL NB-TR SB-DefL SB-TR EB-DefL WB-LTR	NB-LTR SB-L	SB-DefL EB-LTR WB-LTR
Roosevelt Ave Westbound and College Point Blvd	NB-L SB-TR	NB-L SB-R	NB-L SB-TR	NB-L SB-R	SB-TR	NB-L SB-R EB-LTR	SB-TR	NB-L SB-R
Roosevelt Ave Eastbound and College Point Blvd								
Northern Blvd and Prince St	WB-TR (Service Rd)	EB-L WB-T	WB-TR (Service Rd)	EB-L	WB-TR (Service Rd)	EB-L EB-T WB-L	WB-TR (Service Rd)	WB-T WB-TR (Service Rd)
Westbound Northern Blvd and Main St	WB-T	WB-T	WB-T			WB-T EB-TR		WB-T EB-TR
Eastbound Northern Blvd and Main St								
Northern Blvd and Union St	EB-TR WB-TR	SB-LTR WB-L WB-TR	EB-T WB-TR	EB-L WB-L		EB-L EB-T		SB-LTR WB-TR
Marina Road and Boat Basin Place		NB-L		NB-L		NB-L		NB-L
Number of significantly impacted intersections	4	8	6	7	4	8	4	8
Number of significantly impacted movements	6	16	10	19	5	25	6	21
Note: The intersections of 126th Street and Northern Blvd, Roosevelt Avenue and College Point Blvd and Northern Blvd and Main Street were analyzed as single intersections in the FGEIS, compared to a split intersection configuration in the current analysis for the Proposed Modification. In addition, some differences in results between the analysis of the Proposed Modification and the FGEIS are expected due to differences between the analysis tools used; the current results were generated using Synchro HCM outputs, versus HCS for the FGEIS.								

Table 25:
2030 With Action Traffic Impact Mitigation Summary

Intersections	Weekday AM Peak Hour	Weekday Midday Peak Hour	Weekday PM Peak Hour	Saturday Peak Hour
No significant impact	13	11	13	13
Impact could be fully mitigated	2	4	3	2
Unmitigated Impact	2	2	1	2

126TH STREET

126th Street and Shea Road/34th Avenue

This intersection would be significantly impacted during the weekday midday, PM, and Saturday peak hours and could be mitigated in the three peak hours by shifting four seconds of green time from the northbound/south phase to the eastbound/westbound and southeastbound phases.

ROOSEVELT AVENUE

Roosevelt Avenue and 126th Street

This intersection would be significantly impacted during the weekday midday, PM, and Saturday peak hours. The intersection could be mitigated in the three peak hours by shifting two seconds of green time from the eastbound/westbound phase to the northbound/southbound phase during the weekday midday and Saturday peak hours, and shifting one second during the weekday PM peak hour.

Roosevelt Avenue Westbound and College Point Boulevard

This intersection would be significantly impacted during the weekday AM, midday, PM, and Saturday peak hours. The intersection could be mitigated in the weekday AM peak hour by shifting two seconds of green time from the eastbound/westbound phase to the northbound/southbound and northbound left-through/southbound phases. During the weekday PM peak hour, one second of green time would be shifted from the eastbound/westbound phase to the northbound/southbound phase. Impacts during the weekday midday and Saturday peak hours could not be mitigated.

NORTHERN BOULEVARD

Northern Boulevard and Prince Street

This intersection would be significantly impacted during the weekday AM, midday, PM, and Saturday peak hours; these impacts could not be mitigated.

Westbound Northern Boulevard and Main Street

This intersection would be significantly impacted during the weekday AM and midday peak hours and could be mitigated by shifting one second of green time from the northbound/southbound phase to the westbound left-through/southbound phase. The midday peak hour impact was not previously identified by the 2008 FGEIS, but as noted can be fully mitigated with the one second signal timing change. Also, as noted earlier, the 2008 FGEIS identified impacts during the PM and Saturday peak hours, which do not show significant impacts under the Proposed Modification.

Northern Boulevard and Union Street

This intersection would be significantly impacted during the weekday AM and midday peak hours. Impacts during the weekday midday peak hour could be mitigated by shifting one second of green time from the northbound through-right/southbound through-right phase to the eastbound/westbound phase.

A comparison of the mitigation measures required for both the Proposed Modification and the FGEIS is provided below in **Table 26**. Overall, given the lesser number of impacted movements under the Proposed Modification, more intersections were able to be mitigated than in the FGEIS. Furthermore, intersections unable to be mitigated under the Proposed Modification were also unmitigatable in the FGEIS, with the exception of Northern Boulevard and Prince Street during the weekday midday peak hour.

In general, the current detailed analysis effort, which examines a much smaller scope of development than the full buildout of the Approved Plan, shows that the proposed Phase 1 program would result in CEQR impacts at fewer individual lane groups and at fewer intersections than the FGEIS identified. There are no intersections which were previously unimpacted in the FGEIS that show impacts that could not be mitigated for the 2030 With Action condition. Furthermore, many locations that had unmitigatable impacts under the FGEIS either have no impacts under the current analysis or are able to be mitigated. Occasionally, an intersection that showed CEQR impacts for specific lane groups under the FGEIS shows different lane groups impacted under the current analysis. This is a function of different background existing traffic levels compared to the 2008 analysis, additional trips from the new No Action projects in the current analysis, and slightly different analysis tools (the 2008 analysis used HCS, whereas the current analysis uses HCM 2000 output from Synchro 11). Even in these cases, the magnitude and scale of the impacts in the current analysis are much less than identified in the FGEIS for the full buildout of the Approved Plan.

Only one intersection, Northern Boulevard and Prince Street, has an unmitigated CEQR impact under the current analysis that was previously mitigated in the FGEIS. At this location, the weekday midday analysis hour has an unmitigated impact, while in the FGEIS impacts for the midday analysis hour were mitigated by adjusting the signal timings. However, the overall impacts under the current analysis at this location are still less than under the FGEIS analysis. In the FGEIS, of the four analysis hours at this intersection, one had significant traffic impacts that were mitigated and the other three had impacts that were unmitigated. In the current analysis, of the four analysis hours at the same intersection, only two analysis hours have significant impacts that are unmitigated, while the other two analysis hours show no significant impacts. Therefore, it can be concluded that the current traffic analysis, with its reduced scope of development compared to what was analyzed under the FGEIS, falls within the impacts disclosed in that document. The proposed Phase 1 development would have the same or lesser impacts to traffic operations as was disclosed in the FGEIS, and these impacts are largely able to be mitigated with same amount and type of mitigation measures—or less mitigation—than that identified in the FGEIS.

Table 26:
Mitigation Summary and Comparison to 2008 FGEIS

Intersection	Weekday AM Peak Hour				Weekday Midday Peak Hour				Weekday PM Peak Hour				Saturday Peak Hour			
	Proposed Modification Impacts	2008 FGEIS Impacts	Mitigated In 2008 FGEIS	Mitigated In Proposed Modification	Proposed Modification Impacts	2008 FGEIS Impacts	Mitigated In 2008 FGEIS	Mitigated In Proposed Modification	Proposed Modification Impacts	2008 FGEIS Impacts	Mitigated In 2008 FGEIS	Mitigated In Proposed Modification	Proposed Modification Impacts	2008 FGEIS Impacts	Mitigated In 2008 FGEIS	Mitigated In Proposed Modification
126th St and Westbound Northern Blvd		NB-L WB-T	No			NB-L NB-R WB-T	No			NB-L NB-R WB-T	No			NB-L NB-R WB-T	No	
126th St and Eastbound Northern Blvd																
126th St and Shea Rd/34th Ave		SB-LTR EB-LTR WB-LTR	Partial		EB-R SEB-LTR	NB-LTR SB-LTR (GCP Ramp) SB-LTR (Northern Blvd Ramp) EB-LTR WB-LTR	No	Yes	EB-R SEB-LTR	NB-LTR SB-LTR (GCP Ramp) SB-LTR (Northern Blvd Ramp) EB-LTR WB-LTR	No	Yes	EB-R SEB-LTR	NB-LTR SB-LTR (GCP Ramp) SB-LTR (Northern Blvd Ramp) EB-LTR WB-LTR	No	Yes
Roosevelt Ave and 126th St		SB-LTR EB-DefL	No		NB-LTR SB-L	NB-TR SB-DefL SB-TR EB-DefL WB-LTR	No	Yes	SB-L	NB-DefL NB-TR SB-DefL SB-TR EB-DefL WB-LTR	No	Yes	NB-LTR SB-L	SB-DefL EB-LTR WB-LTR	No	Yes
Roosevelt Ave Westbound and College Point Blvd	NB-L SB-TR	NB-L SB-R	No	Yes	NB-L SB-TR	NB-L SB-R	No	Yes	SB-TR	NB-L SB-R EB-LTR	No	Yes	SB-TR	NB-L SB-R	No	Yes
Roosevelt Ave Eastbound and College Point Blvd																
Northern Blvd and Prince St	WB-TR (Service Rd)	EB-L WB-T	No	No	WB-TR (Service Rd)	EB-L	Yes	No		EB-L EB-T WB-L	No			WB-T WB-TR (Service Rd)	No	
Westbound Northern Blvd and Main St	WB-T	WB-T	No	Yes						WB-T EB-TR	No			WB-T EB-TR	No	
Eastbound Northern Blvd and Main St																
Northern Blvd and Union St	EB-TR WB-TR	SB-LTR WB-L WB-TR	No	No	EB-T WB-TR	EB-L WB-L	Partial	Yes		EB-L EB-T	No			SB-LTR WB-TR	No	
Marina Road and Boat Basin Place	NB-L	NB-L	Yes	Yes	NB-L	NB-L	Yes	Yes	NB-L	NB-L	Yes	Yes		NB-L	Yes	
Number of significantly impacted intersections	5	8			6	7			4	8			3	8		
Number of significantly impacted movements	7	16			10	19			5	25			5	21		
Number of fully mitigated intersections			1	3			2	5			1	4			1	3
Number of fully mitigated movements			1	4			2	9			1	5			1	5
Note: The intersections of 126th Street and Northern Blvd, Roosevelt Avenue and College Point Blvd and Northern Blvd and Main Street were analyzed as single intersections in the 2008 FGEIS, compared to a split intersection configuration in the current analysis for the Proposed Modification. In addition, some differences in results between the analysis of the Proposed Modification and the 2008 FGEIS are expected due to differences between the analysis tools used; the current results were generated using Synchro HCM outputs, versus HCS for the 2008 FGEIS.																

TRANSIT

As described above, quantified analyses of affected elements at the Mets-Willets Point Station (No. 7 train) were selected for analysis for the weekday AM and PM peak hours. Line-haul analyses for the No. 7 line and Q66 bus route were also conducted. Analyses were prepared pursuant to the methodologies presented in the 2020 *CEQR Technical Manual*.

Existing Conditions

Subway Service

Due to changes in travel patterns associated with the COVID-19 pandemic conditions, NYCT determined that new subway station counts should not be conducted at this time since field counts would not yield representative data. In lieu of collecting new data, NYCT has requested that available historical data be used and adjusted per the most recent available turnstile data to calculate representative baseline volumes. Based on this guidance, subway station data from the FSEIS were used to calculate the representative 2018 baseline volumes at the Mets-Willets Point subway station based on recent turnstile data supplied by NYCT.

These data show a 10-percent growth over the existing baseline presented in the FSEIS for station entries during the AM peak hour and station exits during the PM peak hour; station exits during the AM peak hour and station entries during the PM peak hour grew by 20 percent. Despite these increases, as shown in the detailed LOS tables presented in **Appendix B**, all analyzed circulation elements and control areas currently operate at LOS A during the weekday AM and PM peak hours.

Existing subway ridership information was obtained from NYCT. As shown in the detailed LOS table presented in **Appendix B**, the No. 7 express and local lines are currently operating within capacity in the peak direction during both peak hours. The No. 7 local line is operating at 79 percent capacity in the peak westbound direction during the weekday AM peak hour and 63 percent capacity in the peak eastbound direction during the weekday PM Peak hour. The No. 7 express line is operating at 94 percent capacity in the peak westbound direction during the weekday AM peak hour and 77 percent capacity in the peak eastbound direction during the weekday PM peak hour.

Based on information provided by NYCT, two additional No. 7 trains were added to service in the peak direction for both the AM and PM peak hours in April 2019. This increase in service was a result of the recently completed Communications Based Train Control (CBTC) signal system on the No. 7 line. The 2030 No Action and With Action conditions presented below includes the two additional No. 7 trains that were added to service in the peak direction for both the AM and PM peak hours.

Bus Service

Existing bus ridership information was obtained from NYCT. As shown in the detailed LOS table presented in **Appendix B**, the Q66 bus route is operating within capacity in both directions during the weekday AM and PM peak hours.

Future Without the Proposed Modification

Subway Service

The 2030 No Action condition was developed by increasing the existing subway station and subway line-haul levels by an annual background growth rate of 0.50 percent for years 2019 through 2023 and 0.25 percent for years 2024 through 2030. Subway increments from the LaGuardia AirTrain project were included in the No Action volumes for the vertical circulation elements and control area within the Mets-Willets Point Station. For the subway line-haul analysis, subway increments from both the LaGuardia AirTrain project and the Special Flushing Waterfront District development were included in the No Action volumes.

As shown in the detailed LOS tables presented in **Appendix B**, in the 2030 No Action condition, all analyzed circulation elements and control areas would continue to operate at LOS A during the weekday AM and PM peak periods. With regard to subway line-haul conditions, as summarized in **Appendix B**, the No. 7 express and local lines would continue to operate within capacity in the peak direction during both peak hours. Specifically, the two lines in the peak westbound direction during the weekday AM peak hour and in the peak eastbound direction during the weekday PM peak hour would continue operating at capacity levels similar to existing conditions.

Bus Service

Estimates of peak hour bus volumes in the No Action condition were developed using the same annual background growth as described for subway. As summarized in **Appendix B**, the Q66 bus route would continue to operate within the guideline capacity in both directions during the weekday AM and PM peak hours.

Future With the Proposed Modification

Subway Service

The proposed Phase 1 development incremental subway trips were assigned within the Mets-Willets Point Station and along the No. 7 line in the same manner as the FSEIS. The 2030 With Action volumes were developed by adding the project-generated incremental subway trips to the No Action volumes. As shown in the detailed LOS tables presented in **Appendix B**, in the 2030 With Action condition, all analyzed circulation elements and control areas would continue to operate at LOS A during the weekday AM and PM peak periods. Therefore, the proposed Phase 1 development would not result in any significant adverse subway station impacts.

With regard to subway line-haul conditions, as summarized in **Appendix B**, the No. 7 express and local lines would continue to operate within capacity in the peak direction during both peak hours. Specifically, the two lines in the peak westbound direction during the weekday AM peak hour and in the peak eastbound direction during the weekday PM peak hour would continue operating at capacity levels similar to the No Action condition. Accordingly, the proposed Phase 1 development would not result in any significant adverse subway line-haul impacts.

Bus Service

Similar to subway, the proposed Phase 1 development incremental bus trips were assigned along the Q66 bus route in the same manner as the FSEIS. Estimates of peak hour bus volumes in the 2030 With Action condition were developed using the same methodology as described for subway. As summarized in **Appendix B**, the Q66 bus route would operate above guideline capacity in the westbound direction during the weekday AM peak hour and within guideline capacity in the eastbound direction during the weekday AM peak hour and both directions during the weekday PM peak hour.

Per the *CEQR Technical Manual*, the increase in ridership in the westbound direction during the weekday AM peak hour would constitute a significant adverse bus line-haul impact. This impact could be mitigated by increasing the number of buses in the westbound direction during the weekday AM peak hour by one, from 14 to 15. This service adjustment is subject to NYCTs fiscal and operational constraints and, if implemented, is expected to take place over time.

The FGEIS similarly projected bus line-haul impacts along the Q66 bus route, which could be mitigated by increasing service by up to nine buses per hour per direction. Therefore, the proposed Phase 1 program would not result in any significant bus line-haul impacts that were not disclosed previously.

PEDESTRIANS

As described above, Level 1 and Level 2 screening analyses were prepared to identify the pedestrian elements that warrant detailed analysis. Based on the assignment of pedestrian trips, 5 sidewalks, 2 corner reservoirs, and 2 crosswalks were selected for detailed analysis for the weekday AM, midday, PM, and Saturday peak hours. Analyses were prepared pursuant to the methodologies presented in the *2020 CEQR Technical Manual*.

Existing Conditions

In March 2020, due to changes in travel patterns associated with the COVID-19 pandemic conditions, DOT determined that new pedestrian data should not be conducted since field counts would not yield representative data. In October 2020, DOT issued a set of guidance allowing data collection to resume in New York City. As part of that guidance, historical data would be used in conjunction with newly collected data to calculate representative pre-pandemic analysis baseline volumes. Per discussions with DOT, the background conditions of the Willets Point area remain largely unchanged since the completion of the FSEIS. Therefore, pedestrian data from the FSEIS were used to calculate the representative 2018 baseline volumes used in the existing analysis. In order to calculate the representative baseline volumes, the FSEIS data were grown by an annual background growth rate of 0.50 percent per year for the years 2013 through 2018 (in-line with the *CEQR Technical Manual*). Existing pedestrian volumes for all peak hours are shown in **Appendix B**. As shown in the detailed LOS tables presented in **Appendix B**, all sidewalk, corner reservoir, and crosswalk analysis locations operate at LOS A.

Future Without the Proposed Modification

The 2030 No Action condition pedestrian volumes were developed by increasing the existing pedestrian volumes by an annual background growth rate of 0.50 percent for years 2019 through 2023 and 0.25 percent for years 2024 through 2030. No Action pedestrian volumes for all peak hours are shown in **Appendix B**. As shown in the detailed LOS tables presented in **Appendix B**, in the No Action condition, all sidewalk, corner reservoir, and crosswalk analysis locations would continue to operate at LOS A.

Future With the Proposed Modification

The proposed Phase 1 development incremental pedestrian trips were added to the No Action volumes to generate the 2030 With Action pedestrian volumes for analysis. With Action pedestrian volumes for all peak hours are shown in **Appendix B**.

As part of the Phase 1 development, geometric changes would be implemented at the intersection of Roosevelt Avenue and 126th Street. These geometric modifications would result in differences between the No Action and With Action pedestrian analyses. The existing geometries and the proposed geometric modifications at this intersection are detailed below.

- As part of the 2018 DOT capital project, the north sidewalk of Roosevelt Avenue between 126th Street and the Van Wyck Expressway was reconstructed with a total width of 16 feet and narrowest clear path of 11 feet. After applying the standard shy distance of 2.5 feet, the existing effective width of 8.5 feet was assumed in the No Action condition. As part of the Phase 1 development, the north sidewalk would be reconstructed with a 19-foot sidewalk and a 5-foot sidewalk separated by a 5-foot bike lane, resulting in 24 feet of total sidewalk space. Since the future street furniture configurations are unknown at this time, the same 5-foot width reduction for the narrowest path as existing conditions was assumed. After accounting for this 5-foot width reduction and 2.5 feet of shy distance, the effective width of the north sidewalk would increase by eight feet from 8.5 feet to 16.5 feet. DOT will review the sidewalk design once EDC submits design drawings to DOT for review and approval as part of the design approval process; and

- The east sidewalk of 126th Street between Roosevelt Avenue and Connector Street is 16 feet wide with a narrow clear path of 11.5 feet. After applying the standard shy distance of 2.5 feet, the existing effective width of 9 feet assumed in the No Action condition. As part of the Phase 1 development, the east sidewalk would be reconstructed with a 15-foot sidewalk. Since the future street furniture configurations are unknown at the time, the same 4.5-foot width reduction for the narrowest path as existing conditions was assumed. After accounting for this 4.5-foot width reduction and 2.5 feet of shy distance, the effective width of the east sidewalk would decrease by one foot from 9 feet to 8 feet.

The With Action condition pedestrian analysis results are presented in **Appendix B**. As shown, all sidewalk, corner reservoir, and crosswalk analysis locations would operate at LOS A and B, and the proposed Phase 1 development would not result in any significant adverse pedestrian impacts.

VEHICULAR AND PEDESTRIAN SAFETY

Crash data were obtained for the study area intersections from DOT for the most recent three-year period for which such data are available (2016 through 2018). This information is based on data provided by NYSDOT, New York State Department of Motor Vehicles (NYSDMV), and the New York City Police Department (NYPD).

The crash data detail reported crashes (crashes resulting in death, injury, or property damage in excess of \$1,000), fatalities, injuries, and pedestrian and bicycle injuries annually. According to the *CEQR Technical Manual*, an intersection is considered a high-crash location when there are 48 or more total reportable and non-reportable crashes, or five or more pedestrian/bicyclist injury crashes in any consecutive 12 months during the most recent three-year period for which data are available.

Table 27 below presents a summary of total crashes at the study area intersections during the three-year period of 2016 through 2018, and also shows total fatalities, injuries, and pedestrian and bicycle crashes. Two intersections, Roosevelt Avenue at College Point Boulevard and Northern Boulevard at Union Street, are considered high-crash locations by the DOT criteria; these intersections have at least five pedestrian/bicyclist injury crashes within a consecutive 12-month period. Vehicular and pedestrian thresholds are not exceeded at any of the other analysis locations.

**Table 27:
Vehicle and Pedestrian Crash Summary**

Intersection		Total Crashes					Pedestrian Crashes			Bicycle Crashes		
North-South Roadway	East-West Roadway	2016	2017	2018	Total Fatalities	Total Injuries	2016	2017	2018	2016	2017	2018
126th Street	Shea Road/34th Avenue	11	4	29	0	21	0	0	0	0	0	0
126th Street	35th Avenue	1	0	0	0	0	0	0	0	0	0	0
126th Street	36th Avenue	1	2	1	0	1	0	0	0	0	0	0
126th Street	Roosevelt Avenue	8	7	8	0	20	0	2	0	3	1	1
College Point Boulevard	Roosevelt Avenue	9	9	30	0	30	2	0	4	1	1	2
Prince Street	Northern Boulevard	8	10	25	1	28	2	0	0	0	0	0
Main Street	Northern Boulevard	6	6	9	3	28	1	0	0	0	0	0
Union Street	Northern Boulevard	7	10	20	0	26	5	2	2	0	1	0
Denotes a high-crash location												
Source: NYSDOT/NYS DMV (2016-2018)												

During the three-year period mentioned above, a total of 48 crashes, 30 injuries, and 10 pedestrian/bicyclist-related crashes occurred at the intersection of Roosevelt Avenue and College Point Boulevard. Based on a review of the crash data, of the 10 pedestrian/bicyclist crashes that occurred from 2016 to 2018, six involved conflicts with turning vehicles, and five took place during dark conditions at night; no prevailing trends were identified as the primary causes for other crashes at this intersection. This intersection is signalized and operates in four phases with pedestrian countdown signals and high visibility crosswalks striped along each approach. Both Roosevelt Avenue and College Point Boulevard are two-way roadways with left turn prohibitions along southbound College Point Boulevard. Measures to improve pedestrian safety at this intersection could include the restriping of faded crosswalks and incorporating “LOOK” crosswalk markings to improve visibility for both pedestrians and motorists.

A total of 37 crashes, 26 injuries, and 10 pedestrian/bicyclist-related crashes occurred at the intersection of Northern Boulevard and Union Street from 2016 to 2018. Based on a review of the crash data, of the 10 pedestrian/bicyclist crashes that occurred from 2016 to 2018, four involved conflicts with turning vehicles, and two involved pedestrians crossing against the signal. Northern Boulevard and Union Street are two-way roadways with left turn prohibitions along Union Street. This intersection is signalized and operates in four phases (including a leading pedestrian interval phase and a protected left turn signal phase), pedestrian countdown signals on all corners, and high visibility crosswalks striped along each approach. In the fall of 2018, improvements such as the leading pedestrian interval and a median widening along Northern Boulevard were implemented. Furthermore, project-generated trips due to the Proposed Modification would travel as through movements to and from the District and should not result in an increase of turning vehicle conflicts at this intersection.

PARKING

Existing Conditions

A discussion of available off and on-street parking is provided in the FGEIS. Parking availability in 2018 has not changed significantly from the FGEIS existing conditions. Eight surveyed parking facilities open to the public were surveyed on non-game days, containing approximately 3,584 spaces. The highest occupancy level during a weekday non-game day is about 23 percent occurs during the hours of 11AM–12PM, and 1PM–2PM. During a Saturday non-game day, the highest occupancy level is approximately 10 percent during 11AM–12PM.

Within a quarter-mile radius of the study area, there are a mix of regulated and unregulated parking spaces. Many block lengths within the study area are not adequately maintained for on-street parking. Corridors surrounding the District, including 126th Street, Roosevelt Avenue, and internal avenues such as 36th Avenue, either do not provide legal parking spaces, or provide minimal parking capacity. Since the publication of the FGEIS, portions of Willets Point Boulevard, 37th Avenue, and 38th Avenue have been demapped from the roadway network, and the commercial uses along those streets and the parking demand associated with those uses have been removed. Overall, there are approximately 230-270 legal spaces available on-street (including unregulated blocks). During the weekday periods, the number of parked vehicles exceeded the capacity of spaces primarily due to the number of illegally parked vehicles along 126th Street. The number of parked vehicles remain below capacity during the hours surveyed for a Saturday non-game peak hour.

Future Without the Proposed Modification

Between 2018 and 2030, demand for on- and off-street parking is expected to increase due to background growth as well as the No Action developments listed in **Table 2**. Commercial uses along demapped streets portions of Willets Point Boulevard, 37th Avenue, and 38th Avenue would continue to not exist in the

future without the Proposed Modification. Given the limited legal capacity of on-street parking during the analysis peak hours, on-street parking utilization is expected to operate at or above 100 percent. Among the No Action projects examined for this analysis effort, none disclose a significant impact to local parking. The LGA AirTrain EIS did not examine the effects on local parking in detail. The Special Flushing Waterfront District EAS concluded that the additional parking capacity built out by that project's development program would result in a surplus of spaces compared to the demand generated, with a surplus of 234 parking spaces during the day and a surplus of 513 parking spaces overnight.

Future With the Proposed Modification

The proposed Phase 1 program would provide 310 on-site accessory parking spaces. In addition, 66 on-street parking spaces would also be accommodated along the curbside of new roadways within the District (i.e., Eastern Perimeter Street and Connector Street). Of these, approximately 12 parking spaces would be allocated for school employees adjacent to the proposed public school, as well as approximately 8 spaces with timed regulations immediately in front of the school (these regulations were assumed to be "No Standing 7AM – 4 PM Monday – Friday").

The peak weekday and Saturday project-generated parking demand was determined to be 396 spaces during the overnight hours, as shown below in **Tables 28 and 29**, when demand for residential parking would be the highest. Residential overnight parking demand was determined based on census data on vehicles rented in the surrounding areas.

Table 28:
2030 With Action Generated Parking Demand - Weekday

Time	Residential	Local Retail	Community Facility	School Staff	Total	Capacity	Spaces Available
12 AM - 1 AM	396	0	0	0	396	376	-20
1 AM - 2 AM	396	0	0	0	396	376	-20
2 AM - 3 AM	396	0	0	0	396	376	-20
3 AM - 4 AM	396	0	0	0	396	376	-20
4 AM - 5 AM	396	0	0	0	396	376	-20
5 AM - 6 AM	396	0	0	0	396	376	-20
6 AM - 7 AM	396	0	0	0	396	376	-20
7 AM - 8 AM	347	0	0	4	351	368	17
8 AM - 9 AM	264	0	1	26	291	368	77
9 AM - 10 AM	202	1	1	26	230	368	138
10 AM - 11 AM	165	3	1	26	195	368	173
11 AM - 12 PM	152	3	1	26	182	368	186
12 PM - 1 PM	154	3	1	26	184	368	184
1 PM - 2 PM	154	3	1	26	184	368	184
2 PM - 3 PM	154	3	1	26	184	368	184
3 PM - 4 PM	155	3	1	5	164	368	204
4 PM - 5 PM	177	3	0	3	183	376	193
5 PM - 6 PM	214	3	0	0	226	376	159
6 PM - 7 PM	261	3	0	0	264	376	112
7 PM - 8 PM	315	3	0	0	318	376	58
8 PM - 9 PM	340	2	0	0	342	376	34
9 PM - 10 PM	360	0	0	0	360	376	16
10 PM - 11 PM	381	0	0	0	381	376	-5
11 PM - 12 AM	396	0	0	0	396	376	-20

Table 29:
2030 With Action Generated Parking Demand – Saturday

Time	Residential	Local Retail	Community Facility	School Staff	Total	Capacity	Spaces Available
12 AM - 1 AM	396	0	0	0	396	376	-20
1 AM - 2 AM	396	0	0	0	396	376	-20
2 AM - 3 AM	396	0	0	0	396	376	-20
3 AM - 4 AM	396	0	0	0	396	376	-20
4 AM - 5 AM	396	0	0	0	396	376	-20
5 AM - 6 AM	396	0	0	0	396	376	-20
6 AM - 7 AM	385	0	0	0	385	376	-9
7 AM - 8 AM	349	0	0	0	349	376	27
8 AM - 9 AM	304	1	0	0	305	376	71
9 AM - 10 AM	248	4	0	0	252	376	124
10 AM - 11 AM	181	14	0	0	195	376	181
11 AM - 12 PM	108	14	0	0	122	376	254
12 PM - 1 PM	29	17	0	0	46	376	330
1 PM - 2 PM	55	21	0	0	76	376	300
2 PM - 3 PM	85	24	0	0	109	376	267
3 PM - 4 PM	117	27	0	0	144	376	232
4 PM - 5 PM	148	24	0	0	172	376	204
5 PM - 6 PM	179	24	0	0	203	376	173
6 PM - 7 PM	226	21	0	0	247	376	129
7 PM - 8 PM	289	18	0	0	307	376	69
8 PM - 9 PM	343	12	0	0	355	376	21
9 PM - 10 PM	396	0	0	0	396	376	-20
10 PM - 11 PM	396	0	0	0	396	376	-20
11 PM - 12 AM	396	0	0	0	396	376	-20

The proposed Phase 1 program would provide 310 on-site parking spaces, resulting in a shortfall of 20 parking spaces during both the weekday and Saturday overnight periods. However, the modest amount of remaining overnight parking demand can be accommodated by nearby off-street parking facilities, such as the Skyview parking lot, which would also be available during game days. Additionally, as noted above, the full buildout of the Special Flushing Waterfront District (which is located within a half-mile radius of the Phase 1 development) would have an overnight surplus of 513 parking spaces, easily capable of absorbing the small shortfall projected due to the proposed Phase 1 program.

GAME-DAY CONDITIONS

The detailed traffic, transit, and pedestrian analyses described above were conducted for typical weekday AM, midday, PM, and Saturday midday/afternoon conditions but were not conducted for game-day conditions at CitiField, for the reasons explained below.

Primarily, the two peak hours in which the highest volumes of vehicular and pedestrian traffic are generated by the proposed Phase 1 program are the weekday AM and midday/afternoon peak hours, when school arrivals and departures would be highest. The vast majority of weekday games occur at night, generally with 7 PM start times and with most baseball fans arriving between 5:30 PM and 7 PM, well after school activities have been completed; there are a negligible number of ballgames at CitiField that start at 1 PM or at 4 PM. For weekend games, whether they are day games or night games, schools are for the most part closed.

For traffic, given that the detailed non-game-day analyses of four peak hour conditions has shown that none of the four hours reveal new significant impacts nor mitigation needs for an initial development that is approximately 10 percent of full buildout, the same 10 percent buildout would not be expected to create substantially different findings on game days especially when the major generator, i.e., the school, would

not be in session. Therefore, this additional game-day analysis is not needed to conclude that the proposed Phase 1 development would not create significant impacts nor mitigation needs beyond those depicted in the FGEIS.

Similarly, the proposed Phase 1 development would generate substantially fewer transit and pedestrian trips under game-day conditions compared to non-game-day conditions. The FGEIS did not disclose significant adverse transit or pedestrian impacts during game-day periods beyond those expected during non-game-day periods. Therefore, game-day conditions of the Phase 1 development would also not result in any significant transit or pedestrian impacts that were not identified above for non-game-day conditions of the Phase 1 development.

2039 WITH AND WITHOUT THE PROPOSED MODIFICATION

The sections above determined that the proposed Phase 1 development would not create significant adverse transportation impacts nor mitigation needs that would be beyond those identified in the FGEIS. The analyses demonstrated, as expected, that the proposed Phase 1 development would generate far fewer impacts and create the need for much less mitigation on its six acre site than what was projected in the FGEIS for the full buildout of the 61-acre District.

The changes to the proposed program and Build year for the first phase of development in the District discussed in this Tech Memo would not preclude the rest of the District from being developed with a program of substantially the same size (8.94 million gsf) and mix of land uses as that envisioned as part of the Approved Plan analyzed in the FGEIS and in subsequent environmental review. Upon full buildout of the District in 2039 in compliance with the Approved Plan, the range of impacts previously identified, as well as the measures previously proposed, where feasible, to mitigate those impacts, are not expected to differ substantially from those identified in the FGEIS.

As described above, since the completion of the FGEIS and subsequent environmental review, additional visioning of the District's future development has taken place, and potential development plans for the portions of the District beyond the six acres to be developed in Phase 1 are still under consideration. Should the full buildout of the District be undertaken for a modified plan that differs substantially in its size or mix of land uses from that analyzed in the FGEIS, it is likely that such a modified plan would require further discretionary approvals and further environmental review in conjunction with those approvals. While there are currently no detailed plans for modifications to the approvals assessed in the FGEIS, at such time that details of such a modified plan are known, subsequent environmental review would be undertaken to fully assess its impacts with respect to Transportation.

AIR QUALITY

This section considers whether the updated information on background conditions and anticipated Build years for the Plan with the Proposed Modification would result in any significant adverse air quality impacts that were not addressed in the FGEIS or subsequent environmental review.

The FGEIS assessed mobile and stationary sources of air pollutant emissions, including emissions from vehicle trips generated by the Approved Plan, emissions of vehicles traveling along the elevated portion of Northern Boulevard adjacent to the District, emissions from vehicles utilizing the proposed parking facilities, emissions from the District's heating, ventilation, and air conditioning (HVAC) systems, and emissions from existing industrial sources. The FGEIS concluded that overall there would be no potential for significant adverse air quality impacts, provided that there would be restrictions on fuel type and stack placement for the HVAC systems that were recorded as E-designations for the District, which would be superseded by a Restrictive Declaration as properties are acquired by the City.

MOBILE SOURCES

The analysis conducted for the FGEIS concluded that there would be no significant adverse air quality impacts from mobile sources. Since approval of the FGEIS, updates to the *CEQR Technical Manual* phased in the use of a newer mobile source emissions model, MOVES2014b (MOTOR Vehicle Emission Simulator), released by the Environmental Protection Agency (EPA). The 2020 *CEQR Technical Manual* also includes updated guidance on applying vehicle classification data for mobile source air quality studies. This new guidance on vehicle classification recommends mapping the vehicle classification counts collected to the relative breakdown of vehicle categories defined in the MOVES model based on New York State vehicle registration data. However, since the emissions used in the FGEIS were based on fleet-wide vehicle emissions for 2017, it is expected that for the Phase 1 development's Build year of 2030, as well as the 2039 Build year for the full buildout of the District, vehicle emissions rates would be considerably lower due to the phasing in of more stringent fuel standards for newly manufactured vehicle engines and sufficient time for the vehicle fleet turnover with improved technology, which would be improvements irrespective of the emissions model and assumptions for vehicle classifications used.

The incremental traffic volumes that would be generated as a result of the Phase 1 development would be substantially lower than the increments analyzed in the FGEIS. This, coupled with the reduction in vehicle engine emissions discussed earlier, would result in lower project-generated and background vehicles emissions. Since the locations analyzed in the FGEIS were locations where the greatest traffic volumes would be generated by the Approved Plan, the Plan with the Proposed Modification would not result in any significant adverse impacts from mobile sources on air quality.

ANALYSIS OF THE ELEVATED NORTHERN BOULEVARD

The FGEIS included an assessment of the mobile source emissions along the elevated sections of Northern Boulevard on the District because sensitive uses were proposed within 200 feet of the elevated roadway. That analysis concluded that there would be no potential for significant adverse impacts from the elevated Northern Boulevard on development in the District. The buildings that would be developed in Phase 1 would be more than 200 feet away of the elevated highway. The pollutant levels that would be expected from the elevated Northern Boulevard at full buildout of the District would also be lower than the pollutant levels reported in the FGEIS, because in 2039, emissions from vehicles would be lower from cleaner fleets due to engine technology and more stringent standards for vehicles that would be in the fleet, as described previously. Therefore, there would be no potential for significant adverse impacts on air quality from emissions along the elevated section of Northern Boulevard in the future with the Proposed Modification.

PARKING FACILITIES

The FGEIS evaluated concentrations of carbon monoxide (CO) with the operation of the conceptual garage for the convention center, which was projected to have the highest parking usage rates with the full buildout within the District, as well as the anticipated parking on Lot D and existing parking on Lot C. The analysis concluded that none of the parking facilities in the District would have the potential for significant air quality impacts on surrounding uses.

As described above, since approval of the FGEIS, subsequent updates to the *CEQR Technical Manual* have included the use of the EPA MOVES model. The changes also included consideration of particulate matter (PM) as a pollutant of concern for automobile parking garages. However, the Phase 1 development would include 310 accessory parking spaces, which is a small portion of the expected parking capacity analyzed in the FGEIS. In addition, the emissions used in the FGEIS were based on vehicle emissions generated for the 2017 Build year. In 2030 and 2039, vehicle emissions are expected to be substantially lower, as discussed

above. Given the parking capacity associated with the Phase 1 development, it is not expected to affect the conclusions presented in the FGEIS.

To assess PM concentrations associated with the conceptual garage at full buildout in 2039, an analysis of emissions from the parking demand for the convention center was performed for particles with an aerodynamic diameter of less than or equal to 2.5 micrometers (PM_{2.5}), based on the projected demand and traffic used in the FGEIS and methodology set forth in the *CEQR Technical Manual*. The maximum predicted incremental 24-hour PM_{2.5} concentration for the conventional center with the full buildout is 0.49 µg/m³, which is well below the 24-hour PM_{2.5} *de minimis* criterion of 8.5 µg/m³ (half the difference between the background concentration of 18.1 µg/m³, measured at the Queens College II Station, and the 24-hour National Ambient Air Quality Standard of 35 µg/m³), and the maximum predicted annual average PM_{2.5} incremental concentration is determined to be 0.08 µg/m³, which is below the annual PM_{2.5} *de minimis* criterion of 0.3 µg/m³. Since the parking garage for the convention center under the worst-case assumptions would not result in significant air quality impacts, it is concluded that other garages that would be constructed under the Plan, with a smaller capacity and fewer peak hour trips, would also not result in significant air quality impacts.

HVAC SYSTEMS

At full buildout, the District is assumed to be developed with the same program and maximum gross floor area as previously analyzed. No changes are proposed to the zoning Special District regulations regarding building heights and setbacks.

To account for a range of possible development sizes and locations, the air quality analysis presented in the FGEIS used conservative assumptions regarding the gross square feet and stack heights analyzed. The FGEIS used screening procedures to evaluate potential air quality impacts from fossil fuel-fired heating, ventilation, and air conditioning (HVAC) systems for the following uses proposed within the District: convention center; tower building (height greater than 120 feet); and midrise buildings with a height between 80 feet and 120 feet. The resulting air quality E-designation established fuel restrictions, as well as stack height and setback restrictions based on each building type. Since the Proposed Modification would not have an effect on the HVAC system analysis presented in the FGEIS, these restrictions would apply to the development under the Proposed Modification. Therefore, like the Approved Plan, the Plan with the Proposed Modification would not have the potential for a significant impact on air quality.

INDUSTRIAL SOURCES

With the Proposed Modification, the Phase 1 development would be completed in the southwest corner of the District by 2030. Existing industrial uses were reviewed to evaluate the potential for significant adverse air quality impacts on sensitive uses in the Phase 1 development. A search of federal, state, and city permit data within the 400-foot study area (as referenced in the *CEQR Technical Manual*) was conducted using the New York City Department of Environmental Protection Clean Air Tracking System (CATS) database and the EPA Envirofacts database. No permitted sources of emissions were identified within 400 feet of the portion of the District that would be developed by 2030. Furthermore, in 2039 at full buildout of the District, there would be no remaining industrial uses in the District, and therefore there would be no potential for industrial source-related air quality impacts on the new uses in the District. Therefore, there would be no potential for industrial source-related impacts with the Proposed Modification.

In summary, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the Proposed Phase 1 Modification would not result in any significant adverse air quality impacts that were not identified in the FGEIS and subsequent environmental review.

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

GHGs are those gaseous constituents of the atmosphere, from both natural and anthropogenic (i.e., resulting from the influence of human beings) emission sources, that absorb infrared radiation (heat) emitted from the earth's surface, the atmosphere, and clouds. This property causes the general warming of the earth's atmosphere, or the "greenhouse effect." Guidance for conducting a greenhouse gas (GHG) emissions analysis under CEQR was developed subsequent to the FGEIS. This guidance is presented in Chapter 18 of the 2020 *CEQR Technical Manual*.

A detailed assessment of the potential for GHG emissions from the full buildout of the District was provided in TM004, Appendix E, "Greenhouse Gas Emissions and Climate Change." As discussed in that analysis, specific measures to reduce GHG emissions are included as part of the Special District zoning regulations, or would be considered through the commitment to attain the LEED for neighborhood development (LEED-ND) rating. In summary, the site location, the dense, mixed-use design, the commitments to achieve energy efficiency, and other measures incorporated in the Plan would result in lower GHG emissions than would otherwise be achieved by similar residential and commercial uses, and would be consistent with the City's citywide GHG reduction goal. The development that would occur in Phase 1 would result in lower GHG emissions than the full buildout of the District. The FSEIS also included an analysis of greenhouse gas emissions and climate change, and did not identify a significant adverse impact. In addition, since the preparation of these environmental reviews, as part of the City's implementation of strategies aimed at achieving the OneNYC GHG reduction goals, in 2016 the City adopted a more stringent building energy code, which substantially increased the energy efficiency required of new buildings. Therefore, the Plan with the Proposed Modification would support the goal identified in the *CEQR Technical Manual* of building efficient buildings.

A discussion of early integration of climate change consideration was included in the FGEIS, and strategies to increase climate resilience and adaptive management were discussed. Updated information relevant to that discussion also was provided in TM004, Appendix E, "Greenhouse Gas Emissions and Climate Change" and the FSEIS.

In April 2019, New York State enacted the Climate Leadership and Community Protection Act to achieve the GHG reductions goals established in the New York State Energy Plan as well as establishing a new long-term goal to reduce statewide GHG by 100 percent, compared with 1990 levels by 2050. The legislation charges New York State Climate Action Council with establishing statewide GHG emission limits and agency regulations to reduce emissions, increase investments in renewable energy sources, and ensure that significant portions of investments are made in disadvantaged communities. Pursuant to these requirements, the Climate Action Council will prepare and approve a scoping plan outlining recommendations for attaining the GHG emission limits and reduction goals. A final scoping plan is anticipated to be approved by 2022.

In May 2019, the New York City Council enacted Local Law 97 of 2019—the Climate Mobilization Act. For most buildings that exceed 25,000 gsf (excluding electricity/steam generation facilities, rent-regulated accommodations, places of public worship, and city-owned properties), the City has established annual building emission limits beginning in 2024 and would require the owner of a covered building to submit annual reports demonstrating the building is in compliance with the current GHG emission limits. For buildings not covered under the GHG emissions limits, owners may either demonstrate compliance with the current limits or implement specified energy conservation measures where applicable.

As detailed local climate change projections become available and are adopted into the City's infrastructure design criteria, such criteria would be incorporated into the development program. The City's agreement with the developer would require the preparation of an engineering study prior to commencement of

construction that would assess the feasibility of implementing adaptation strategies for climate change impacts into the design of the development program in light of the most current climate change projections. Based on that engineering study, the City would require the developer to implement the adaption strategies determined to be practicable. Furthermore, under both the Approved Plan and the Plan with the Proposed Modification, the developer would be required to submit to the City, prior to the placement of fill, an assessment of the appropriate grade for the District in light of all available information concerning potential sea level rise and other changes due to climate change. If appropriate and if warranted by data available at that time, the City would have the authority to require an increase in the proposed grade of the District at that time or the use of other measures to protect infrastructure from potential sea level rise.

In summary, the updated analyses find that, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the Proposed Phase 1 Modification would not result in any significant adverse greenhouse gas emissions and climate change impacts, consistent with the findings of the FGEIS and subsequent environmental review.

NOISE

This analysis considers whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse noise impacts that were not addressed in the FGEIS or subsequent environmental review.

The noise analyses included in the FGEIS and subsequent environmental review concluded that the traffic generated by the Approved Plan would be expected to result in a significant increase in noise levels only at the World's Fair Marina Park north of the District, and only during the Saturday midday time period. In addition, to meet CEQR interior noise level requirements, the analyses prescribed between 31 and 37 dB of building attenuation for buildings within the District. The FSEIS did not identify any significant adverse impacts related to noise.

Under the Plan with the Proposed Modification, at full buildout the District would be developed with the same gross floor area and mix of uses as assumed for the Approved Plan (with subsequent revisions described in the prior environmental review). Consequently, traffic volumes and associated noise levels under the Plan with the Proposed Modification would also be comparable to those under the Approved Plan. As with the Approved Plan, the full buildout of the District in the future with the Proposed Modification is projected to result in a doubling of traffic volumes on a roadway adjacent to an existing noise sensitive receptor at the World's Fair Marina Park north of the District during the Saturday midday time period. Therefore, based on CEQR noise analysis criteria and consistent with the conclusions of the FGEIS for the Approved Plan, this doubling of traffic would constitute a significant increase in noise levels as a result of the Proposed Modification in 2030. The Piers 1 and 3 associated with World's Fair Marina Park are expected to be reconstructed (see No Build Project #11 above); the reconstruction will be complete prior to 2030, when the significant noise level increase would occur. Thus, the Proposed Modification would not result in any significant adverse noise impacts beyond those disclosed in the FGEIS and subsequent environmental review. Furthermore, even with the elevated noise levels at the park, noise levels there would be comparable to other parks in New York City.

The minimum required window/wall attenuation to meet CEQR interior noise level criteria for different locations within the District is shown in Table 17 of TM004. Since noise levels at full buildout of the Plan with the Proposed Modification in 2039 are expected to be similar to those predicted for the future with the Approved Plan in 2022, these values would also be the minimum required window/wall attenuation to meet CEQR interior noise level criteria under the Plan with the Proposed Modification. The buildings

proposed to be built by 2030 under Phase 1 would have a direct line of sight to the existing industrial uses assumed to remain in the District between 2030 and 2039, and thus would require additional attenuation. The specific requirements for window/wall attenuation are shown in TM004, Appendix C, Table C-1. Based on the predicted exterior noise levels, these levels of attenuation are expected to be sufficient to ensure acceptable interior noise levels, based upon CEQR criteria. These attenuation requirements would be enforced by the existing E-designations on the District.

In summary, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the Proposed Phase 1 Modification would not result in any significant adverse noise impacts beyond those identified in the FGEIS and subsequent environmental review.

PUBLIC HEALTH

This analysis considers whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse public health impacts that were not addressed in the FGEIS or subsequent environmental review.

Neither the FGEIS, subsequent technical memoranda, nor the FSEIS, identified a significant adverse impact related to public health. Like the Approved Plan, the Plan with the Proposed Phase 1 Modification is not expected to result in significant adverse impacts to public health. As described above, like the Approved Plan, the Plan with the Proposed Modification would utilize E-designations, Restrictive Declarations, and/or other enforcement and oversight mechanisms to ensure that there would be no significant adverse impacts with respect to hazardous materials, indoor noise, and air quality (specifically associated with the heating, ventilation, and air conditioning system). The preparation and enforcement of a HASP is expected to prevent any significant adverse impacts from hazardous materials. The installation of a vapor control systems would prevent vapors from any volatile organic compounds (VOCs) that may remain in the soil after remediation from entering the buildings and harming public health. Air emissions from construction equipment and trucks would be reduced to minimum levels by the enforcement of Local Law 77 of 2003, which requires measures to reduce emissions of diesel particulate matter (DPM) from construction activities associated with certain City projects, and which is applicable for this project.

In summary, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the Proposed Phase 1 Modification would not result in any significant adverse public health impacts, consistent with the findings of the FGEIS and subsequent environmental review.

NEIGHBORHOOD CHARACTER

This analysis assesses whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse impacts to neighborhood character that were not addressed in the FGEIS or subsequent environmental review.

The FGEIS concluded that the Approved Plan would not result in significant adverse impacts to neighborhood character. Neither subsequent technical memoranda nor the FSEIS identified a significant adverse impact related to neighborhood character. Like the Approved Plan, the Plan with the Proposed Modification would dramatically change neighborhood character in the District by full build-out. The new, active mix of residential, retail/entertainment, office, open space, hotel and conference center, and community facility uses would represent an improvement to the character of the area. Development would

be scaled to enhance pedestrian activity, with prescribed streetwall heights and locations, mandatory pedestrian circulation space, and other design elements to enhance building façades. The Special District regulations also mandate the provision of street trees, adequate sidewalks, and planted medians, and the development of a minimum of eight acres of publicly accessible open space. As with the Approved Plan, the Plan with the Proposed Modification would include environmental remediation, grading and elevating the District above the floodplain, the installation of new sanitary and storm sewer lines, and the creation of a new connection to the Van Wyck Expressway. The proposed residential, commercial office, retail, hotel, community facility, open space, and parking uses would be consistent with the uses and character in the surrounding area, particularly those within the dense commercial center of Downtown Flushing. The new No Build projects discussed above are also bringing additional residential, hotel, commercial office, and community facility uses to the surrounding area, and making improvements to the area's infrastructure, including bridges, the World's Fair Marina, and new public access to the Flushing Creek waterfront.

As with the Approved Plan, traffic, transit, pedestrian and noise conditions would be adversely affected with the Plan with the Proposed Modification, but not (particularly with the mitigation measures proposed) to the degree that neighborhood character would experience significant adverse impacts. With the Proposed Modification, until properties within the northern and eastern portions of the District are acquired and site work to prepare the properties for redevelopment commences—between 2030 and some time before 2039—the residential and school uses in the Phase 1 site would exist in proximity to any automotive or industrial uses that remain in the northern and eastern portions of the District. As described above, NYCEDC has executed agreements for approximately 20 acres of property located in the District, resulting in acquisition and/or site control, and over 165 businesses have relocated from the City-owned portion of the District since 2012. Any unoccupied parcels would serve as a buffer between the new and existing uses between the completion of Phase 1 and the incremental acquisition and development of remaining parcels for the full buildout of the District.

Some of the neighborhood character benefits of the Plan—including District-wide infrastructure improvements, pedestrian amenities, streetscape amenities, and improved urban design—would not exist at the end of the first phase of development, but would be realized at full buildout of the District. The neighborhood character benefits that are expected to be generated by 2030 with the proposed Phase 1 development include the one acre of new public open space, new pedestrian and streetscape amenities, active ground-floor uses, and improved urban design within the Phase 1 site. The proposed Phase 1 development would establish a new sense of place within the District and create a foundation for the larger evolution of neighborhood character anticipated in the District by full buildout.

In summary, accounting for the changes in background conditions and the anticipated Build years, the Approved Plan with the proposed Phase 1 modification would not result in any significant adverse impacts to neighborhood character, consistent with the findings of the FGEIS and subsequent environmental review.

CONSTRUCTION

This analysis considers whether any changes in background conditions or the anticipated Build years for the Approved Plan, or the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, would result in any significant adverse construction impacts that were not identified in the FGEIS or subsequent environmental review.

The FGEIS concluded that the Approved Plan would result in significant adverse construction impacts due to construction-related traffic. As detailed in the FGEIS, significant adverse construction traffic impacts could occur at some of the study area intersections through which construction-related traffic would travel, albeit expected at notably lower magnitudes than the operational impacts. Where impacts during

construction could occur, the FGEIS noted that measures recommended to mitigate impacts associated with the Approved Plan could be implemented early to aid in alleviating congested traffic conditions. However, where unmitigable operational traffic impacts were identified, the FGEIS also noted the potential for such impacts to occur during construction. Construction of the full buildout of the Approved Plan also would entail the demolition of the former Empire Millwork Corporation Building (see “Historic and Cultural Resources” above; this resource lies outside the Phase 1 site). The FSEIS also identified significant adverse impacts related to historic and cultural resources and construction-related traffic.

As described above, it is assumed that essential pre-development and site prep activities for Phase 1, including remediation and infrastructure work, would begin in 2021 and 2023, respectively, and would be completed before construction of the proposed Phase 1 buildings. As described above, the City-owned portion of the District has been entered into NYSDEC’s BCP, and the City is working closely with NYSDEC on the RAWP to mobilize contractors for full-scale remediation as early as summer 2021. This work is occurring irrespective of and with independent utility to the proposed Phase 1 development. Construction of the proposed Phase 1 buildings would commence in 2023. It is anticipated that each of the three affordable housing buildings would require approximately 30 months to complete, and that construction activities for the two non-senior housing buildings would overlap. Construction of the proposed Phase 1 school would start after on-site infrastructure is complete, and the proposed school is anticipated to be ready for occupancy in 2030. Development activities for buildout of the remainder of the District are anticipated to proceed incrementally, with the necessary associated site acquisition, remediation, grading, and infrastructure improvements occurring in advance of building construction. As described above, 38 acres of the 61-acre District remain in private ownership, and the City does not anticipate obtaining additional ownership of land in 2021. It is anticipated that development of the remainder of the District, including the Van Wyck Expressway ramps, could begin as early as 2029 and would be complete by 2039. Completion of the Van Wyck Expressway ramps is targeted for 2032, after the Phase 1 development but before construction of the full buildout of the District. Therefore, it is possible that there would be some overlap of construction activities for the Expressway ramps and the end of the construction period for the Phase 1 senior housing building and school, which is not expected to be the peak period for construction equipment and worker trips. In the FSEIS, it was similarly anticipated that the Van Wyck Expressway ramps would come online before the later phases of development (Phase 1B and Phase 2/full buildout of the District).

In the FGEIS Staged Acquisition Alternative, subsequent technical memoranda, and the FSEIS, construction activities associated with buildings in the southwestern portion of the District have been assumed to occur first, with construction on the remainder of the District following. The Plan with the Proposed Modification carries forward this assumption, but anticipates a smaller development footprint and less overall development in the first phase, compared to what was analyzed in prior environmental review. (See **Figure 1** above.) The Plan with the Proposed Modification would involve the same types of construction activities as described in the FGEIS and subsequent environmental review, and would comply with the same laws, codes, and other rules and regulations. Any noise or air quality effects from construction are expected to be temporary; however, measures to control air emissions and noise would be implemented as previously assumed. Although the intensity of construction activity for full buildout of the District is anticipated to be as previously analyzed, the intensity of construction activity could be somewhat less during the proposed Phase 1 program since this phase is less than assumed in the past for the first phase of District redevelopment. The peak daily construction worker and truck trips under the Plan with the Proposed Modification are estimated to be 750 workers and 175 deliveries respectively, much less than the 2,625 workers per day and 608 deliveries per day as analyzed in the FGEIS.

Overall, the potential for construction impacts associated with the Plan with the Proposed Modification would be the same as disclosed in the FGEIS and subsequent environmental review. No significant adverse

construction impacts related to land use, socioeconomic conditions, neighborhood character, community facilities, natural resources, hazardous materials, transit and pedestrians, noise, or air quality are expected. The potential for construction-related impacts to historic resources under the Plan with the Proposed Modification would be similar to the construction impacts identified in the FGEIS.

As described above, the FGEIS concluded that the Approved Plan would result in significant adverse construction impacts due to construction-related traffic. Where impacts during construction could occur, the FGEIS noted that measures recommended to mitigate impacts associated with the Approved Plan could be implemented early to aid in alleviating congested traffic conditions. However, where unmitigable operational traffic impacts were identified, the FGEIS also noted the potential for such impacts to occur during construction. The potential for construction related traffic impacts under the Plan with the Proposed Modification would be similar or less than the construction impacts identified in the FGEIS. A traffic monitoring program would be implemented during construction of the Phase 1 development. The monitoring program would identify the peak quarter of construction in the anticipated Phase 1 construction schedule; determine the actual volume of construction-related vehicular traffic in passenger car equivalents; and determine whether the traffic mitigation measures identified above for the operational conditions of the Phase 1 development would be needed to preclude significant adverse traffic impacts from occurring at those locations identified as impacted under the operational analysis. EDC or the developer will be responsible for all costs associated with the construction traffic monitoring program, and any subsequent recommended measures. Where unmitigable operational traffic impacts have been projected for Phase 1, these intersections are assumed to continue to be unmitigable during the construction period, as identified in the FGEIS. In summary, accounting for the changes in background conditions and the anticipated Build years, as well as the difference between the proposed Phase 1 development program and the programs assessed for the first phase of development in the District during prior environmental review, the Plan with the Proposed Modification would not be expected to result in any significant adverse construction impacts beyond those disclosed in the FGEIS and subsequent environmental review.

F. CONCLUSION

In summary, neither the proposed Phase 1 modification described above, nor the changes in background conditions and the anticipated Build years, would not result in any significant adverse impacts not previously identified in the FGEIS and subsequent environmental review.



Hilary Semel
Assistant to the Mayor

May10, 2021
Date

*

Appendix A

WRP Materials

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM

Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the [New York City Waterfront Revitalization Program](#) (WRP) which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: New York City Economic Development Corporation

Name of Applicant Representative: Brooke Wieczorek

Address: One Liberty Plaza, 14th Floor, New York, NY 10006

Telephone: 718-510-6405 Email: bwieczorek@edc.nyc

Project site owner (if different than above): The City of New York

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The City is considering a proposed modification to the approved Willets Point Development Plan (the Approved Plan). The proposed modification assumes that a 6-acre portion of the Special Willets Point District would be remediated and developed first, by 2030 (Phase 1), with the remainder of the District to be remediated and built out by 2039. The proposed program for Phase 1 would include approximately 813,112 gsf residential (1,100 units), 24,666 gsf retail, 3,397 gsf community facility use, a 650-seat K-8 public school, and approximately 1 acre of public open space. The Phase 1 development requires a CPC Chair certification.

2. Purpose of activity

The modification to the Approved Plan is intended the further the original redevelopment goals for the Willets Point area. The affordable housing component of the Willets Point redevelopment has been prioritized to occur in the first phase of development to help address the critical shortage of affordable housing in the city.

C. PROJECT LOCATION

Borough: Queens Tax Block/Lot(s): Block 1833, Lots 103, 111, 117, 120, 141, 143, 151, 158
Street Address: (con't) Lot 155 (portion), Lot 158; Block 1826, Lot 200 (portion) Special Willets Point District
Name of water body (if located on the waterfront): _____

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☒ Yes ☐ No

☐ City Map Amendment	☐ Zoning Certification	☐ Concession
☐ Zoning Map Amendment	☐ Zoning Authorizations	☐ UDAAP
☐ Zoning Text Amendment	☐ Acquisition – Real Property	☐ Revocable Consent
☐ Site Selection – Public Facility	☐ Disposition – Real Property	☐ Franchise
☐ Housing Plan & Project	☒ Other, explain: <u>Chair Certification</u>	
☐ Special Permit		

(if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Board of Standards and Appeals ☐ Yes ☒ No

☐ Variance (use)	
☐ Variance (bulk)	
☐ Special Permit	

(if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

☐ Legislation	☐ Funding for Construction, specify: _____
☐ Rulemaking	☐ Policy or Plan, specify: _____
☐ Construction of Public Facilities	☐ Funding of Program, specify: _____
☐ 384 (b) (4) Approval	☐ Permits, specify: _____
☐ Other, explain: _____	

State Actions/Approvals/Funding

☐ State permit or license, specify Agency: _____	Permit type and number: _____
☐ Funding for Construction, specify: _____	
☐ Funding of a Program, specify: _____	
☐ Other, explain: _____	

Federal Actions/Approvals/Funding

☐ Federal permit or license, specify Agency: _____	Permit type and number: _____
☐ Funding for Construction, specify: _____	
☐ Funding of a Program, specify: _____	
☐ Other, explain: _____	

Is this being reviewed in conjunction with a [Joint Application for Permits?](#) ☐ Yes ☒ No

E. LOCATION QUESTIONS

1. Does the project require a waterfront site? ☐ Yes ☒ No
2. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters? ☐ Yes ☒ No
3. Is the project located on publicly owned land or receiving public assistance? ☒ Yes ☐ No
4. Is the project located within a FEMA 1% annual chance floodplain? (6.2) ☒ Yes ☐ No
5. Is the project located within a FEMA 0.2% annual chance floodplain? (6.2) ☐ Yes ☒ No
6. Is the project located adjacent to or within a special area designation? See [Maps – Part III](#) of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).
 - ☐ Significant Maritime and Industrial Area (SMIA) (2.1)
 - ☒ Special Natural Waterfront Area (SNWA) (4.1)
 - ☐ Priority Maritime Activity Zone (PMAZ) (3.5)
 - ☐ Recognized Ecological Complex (REC) (4.4)
 - ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (2.2, 4.2)

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder or Not Applicable (N/A). For more information about consistency review process and determination, see **Part I** of the [NYC Waterfront Revitalization Program](#). When assessing each policy, review the full policy language, including all sub-policies, contained within **Part II** of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).

For those policies checked Promote or Hinder, provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.

		Promote	Hinder	N/A
I	Support and facilitate commercial and residential redevelopment in areas well-suited to such development.	☒	☐	☐
I.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☐	☐	☒
I.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☐	☐	☒
I.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☒	☐	☐
I.4	In areas adjacent to SMIA's, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☐	☐	☒
I.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☒	☐	☐

		Promote	Hinder	N/A
2	Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.	☐	☐	☒
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☐
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☐
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☐	☐	☐
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☐	☐	☐
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☐	☐	☐
3	Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.	☐	☐	☒
3.1.	Support and encourage in-water recreational activities in suitable locations.	☐	☐	☐
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☐	☐	☐
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☐	☐	☐
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☐	☐	☐
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☐	☐	☐
4	Protect and restore the quality and function of ecological systems within the New York City coastal area.	☒	☐	☐
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☒	☐	☐
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☒
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☒
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☒
4.5	Protect and restore tidal and freshwater wetlands.	☐	☐	☒
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☐	☐	☒
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	☐	☐	☒
4.8	Maintain and protect living aquatic resources.	☐	☐	☒

		Promote	Hinder	N/A
5	Protect and improve water quality in the New York City coastal area.	☒	☐	☐
5.1	Manage direct or indirect discharges to waterbodies.	☐	☐	☒
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☐	☐	☒
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☐	☐	☒
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☐	☐	☒
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☒	☐	☐
6	Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.	☒	☐	☐
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☐	☐	☒
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in <i>New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms</i>) into the planning and design of projects in the city's Coastal Zone.	☒	☐	☐
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☐	☐	☒
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☒
7	Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.	☐	☐	☒
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☐	☐	☐
7.2	Prevent and remediate discharge of petroleum products.	☐	☐	☐
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☐	☐	☐
8	Provide public access to, from, and along New York City's coastal waters.	☐	☐	☒
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☐	☐	☐
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☐	☐	☐
8.3	Provide visual access to the waterfront where physically practical.	☐	☐	☐
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☐	☐	☐

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☐	☐	☐
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☐	☐	☐
9	Protect scenic resources that contribute to the visual quality of the New York City coastal area.	☐	☐	☒
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☐	☐	☐
9.2	Protect and enhance scenic values associated with natural resources.	☐	☐	☐
10	Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.	☐	☐	☒
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☐	☐	☐
10.2	Protect and preserve archaeological resources and artifacts.	☐	☐	☐

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: New York City Economic Development Corporation / Brooke Wieczorek

Address: One Liberty Plaza, 14th Floor, New York, NY 10006

Telephone: 718-510-6405

Email: bwieczorek@edc.nyc

Applicant/Agent's Signature: Brooke Wieczorek

Date: 4/6/21

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the [NYS Department of State Office of Planning and Development](#) and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning

Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State

Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☐ Copy of original signed NYC Consistency Assessment Form
- ☐ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☐ Environmental Review documents
- ☐ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☐ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

A. INTRODUCTION

OVERVIEW

Since the completion of the FGEIS, New York City's Waterfront Revitalization Program (WRP) has been revised and updated. In 2013, the New York City Council approved revisions to the WRP based on the new long-term waterfront goals established in *Vision 2020: the New York City Comprehensive Waterfront Plan* (2011) as well as other planning efforts undertaken at the time. In 2016, the revisions to the WRP were approved by the New York State Secretary of State to be incorporated into the New York State Coastal Management Program (CMP).

These revisions refined the policies to more accurately address the City's coastal conditions and encourage new opportunities for public access to the waterfront. In addition, the policies now better address risks related to climate change and sea level rise by using climate change and sea level rise projections in the planning and design of projects. Other changes of note include updates to reflect the most recent FEMA Preliminary Flood Insurance Rate Maps (pFIRMS) from 2015; adjustments to the boundaries of the Significant Maritime and Industrial Areas and Special Natural Waterfront Areas special area designations; and the addition of three new special area designations: Recognized Ecological Complexes (RECs), Priority Marine Activity Zones (PMAZ), and the West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA). However, the update to the WRP did not substantially alter the policies or structure of the program.

PRINCIPAL CONCLUSIONS

This analysis concludes that the Plan with the Proposed Phase 1 Modification would be consistent with the City's WRP policies and standards. The Phase 1 development would result in the construction of approximately 813,112 gsf of residential use (1,100 units), 24,666 gsf of retail, 3,397 sf of community facility use, a 650-seat K-8 public school, and approximately 1 acre of publicly accessible open space by 2030. It is assumed that the remainder of the District would be built out by 2039 consistent with existing zoning for the area and substantially as anticipated and analyzed in the FGEIS and subsequent environmental reviews. This analysis concludes that the Plan with the Proposed Modification would be consistent with policies set forth in the WRP for promoting development that is appropriate to this waterfront location; balancing economic development with environmental conservation in the Coastal Zone; and encouraging revitalization of a waterfront area that is consistent with local objectives.

B. CONSISTENCY OF THE PROPOSED MODIFICATION WITH THE WATERFRONT REVITALIZATION PROGRAM POLICIES

The majority of the WRP policy evaluations presented in the FGEIS remain applicable to the Plan with the Proposed Modification, and thus are not addressed in this technical memorandum. There

are five policies (WRP Policies 1.3, 1.5, 4.1, 5.5, and 6.2) that require an updated assessment, or are new or refined and thus were not previously addressed in the FGEIS. An assessment of the Plan with the Proposed Modification's consistency with these policies is provided below.

Policy 1: Support and facilitate commercial and residential development in areas well suited to such development.

Policy 1.3 Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.

Similar to the FGEIS, public facilities in the District are adequate to handle the demands of development in the future with the Proposed Modification. As detailed in the "Community Facilities and Services" section of this technical memorandum, to mitigate the potential impact on day care facilities identified for both the Approved Plan and the Plan with the Proposed Modification, the New York City Economic Development Corporation (EDC) would require, as part of the developer's agreement, that a future developer consult with the New York City Administration for Children's Services (ACS) to determine the appropriate way to meet demand for day care services generated by development in the District.

The District would continue to be well-served by roadways and mass transit, and the connection between the District and the Van Wyck Expressway is anticipated to be complete by 2032.

In 2012, the City completed the first phase of new sanitary and stormwater mains that provide new public sanitary sewer service to support the redevelopment of the District and adjacent areas, and to replace an inadequately sized stormwater sewer and outfall to help alleviate chronic flooding that occurs in the District and adjacent areas. The City-owned portion of the District has been entered into NYSDEC's Brownfield Cleanup Program. In 2019, the City and QDG completed clearing a portion of the District and performed Interim Remedial Measures under NYSDEC's Brownfield Cleanup Program. The City is working closely with DEC on the Remedial Action Work Plan (RAWP) to mobilize contractors for full-scale remediation as early as Summer 2021. Infrastructure build-out and vertical construction would follow. Development activities for build-out of the remainder of the District are presently anticipated to proceed incrementally, with the necessary associated site acquisition, remediation, grading, and infrastructure improvements occurring in advance of building construction.

Therefore, the Plan with the Proposed Modification would promote this policy.

Policy 1.5 Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.

The Plan with the Proposed Modification has considered potential risks related to coastal flooding. Residential living areas would be located on the second floor and above of the proposed buildings, while cellars would be dedicated to parking and mechanical systems, and ground floors would include retail, community facility, residential amenities, and common courtyard space. Although the cellar and ground floors would include project features that are considered critical and vulnerable features¹ under the WRP's Climate Change Adaptation Guidance, the Plan with the

¹ Vulnerable features are "project features that have the potential to incur significant damage if flooded. Examples include any form of enclosed space within a building, including residential, commercial, industrial, or community facility land uses; enclosed parking structures; storage areas..." Critical features are "project features that if damaged would have severe impacts on the project and its ability to function as designed. Examples include electrical utilities,

Proposed Modification would comply with all applicable requirements set forth in the Special Willets Point District, Appendix G of the New York City Building Code, and Article VI, Chapter 4 (Special Regulations Applying in Flood Hazard Areas) regarding the lowest floor elevation, which would be at or above the base flood elevation (BFE). As with the Approved Plan, the Plan with the Proposed Modification would include approximately one to seven feet of fill that would substantially raise the elevation of the entire site, which is currently substantially below flood elevations and is prone to frequent flooding. Specifically, the site elevation would be raised to +17.6 feet NAVD88, which is above the 1 percent annual chance floodplain (BFE of +12 feet NAVD88). The Phase 1 project site would be graded to ensure that the lowest floors of the proposed residential buildings would be above the BFE, and the buildings would be constructed at design elevations higher than the raised site elevation. The FGEIS also accounted for the subsequent changes to the FEMA flood maps and confirmed that the commitments for the District would reflect changes to the floodplain elevations.

In addition, the Plan with the Proposed Modification would be developed in consideration of the *Willets Point Design Guidelines*, issued by EDC in 2011, which include Principle 1.5: Sustainable Water Management. This principle outlines strategies for building specific (e.g., encourage efficient use of potable water and reuse of high quality treated wastewater), supply and sanitary (e.g., maximize water quality improvements through the discharge of treated wastewater to a stormwater network of wetlands leading to Flushing Bay), and overall on-site stormwater management strategies (e.g., bio-swales and green-roofs).

With these proposed measures, the Plan with the Proposed Modification would promote this policy.

Policy 4: Protect and restore the quality and function of ecological systems within the New York City Coastal Area.

Policy 4.1 Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.

The Special Willets Point District is surrounded by the East River/Long Island Sound (III) Special Natural Waterfront Area. There is no in-water work associated with the Plan with the Proposed Modification, and it would not result in direct or indirect disturbance of the shoreline vegetation along Flushing Creek, east of the District. Like the Approved Plan, the Plan with the Proposed Modification would be consistent with federal, state, and citywide policies for the conservation and improvement of natural resources. Previous upgrades made to the sanitary and stormwater mains in the District and adjacent areas, and the replacement of an inadequately sized stormwater outfall, would continue to treat and store stormwater in the District before it is discharged to Flushing Bay or Flushing Creek. Like the Approved Plan, the Plan with the Proposed Modification would pre-treat stormwater prior to discharge, and is expected to result in improved stormwater quality and, consequently, improved water quality in Flushing Bay.

Therefore, the Plan with the Proposed Modification would promote this policy.

Policy 5: Protect and improve water quality in the New York City Coastal Area.

building heating and cooling systems, telephone and data connection and distribution rooms, and other supporting and related building technology and utility spaces (NYC WRP Climate Change Adaptation Guidance, March 2017)."

Policy 5.5 Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.

As stated above, the Plan with the Proposed Modification would be required to comply with all applicable requirements set forth in the Special Willets Point District, Appendix G of the New York City Building Code, and Article VI, Chapter 4 (Special Regulations Applying in Flood Hazard Areas) as well as the *Willets Point Design Guidelines* (2011), which includes Principle 1.5: Sustainable Water Management.

Therefore, the Plan with the Proposed Modification would promote this policy.

Policy 6: Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.

Policy 6.2 Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms) into the planning and design of projects in the city's Coastal Zone.

Guidance provided by DCP² recommends a detailed methodology to determine consistency with Policy 6.2 for developments like the Plan with the Proposed Modification. A summary of this process is provided below.

1. Identify vulnerabilities and consequences: assess the project's vulnerabilities to future coastal hazards and identify what the potential consequences may be.

a. Complete the Flood Evaluation Worksheet.

The information in the following subsections is based on the results of the completed worksheet, which is provided in **Attachment 1**.

b. Identify any project features that may be located below the elevation of the 1 percent floodplain over the lifespan of the project under any sea level rise scenario.

The lifespan of buildings (commercial, residential, etc.) is generally considered to be about 80 years; mechanical, electrical, and plumbing equipment located within the buildings typically have a lifespan of 50 years. The New York City Panel on Climate Change (NPCC) projected that sea levels are likely to increase by up to 10 inches by the 2020s, 30 inches by the 2050s, and up to 75 inches by 2100 under the "High Scenario" projections. Under current conditions, the entire Phase 1 site is within the existing 1 percent annual chance floodplain, except for a small area in the eastern portion of the site that is within the 0.2 percent annual chance floodplain. The Phase 1 site has a base flood elevation (BFE) of +12 feet NAVD88 and falls within Zone AE (an area of high flood risk subject to inundation by the 1 percent annual chance flood event). NPCC projections indicate that the floodplain elevation for the Phase 1 site could reach +12.83 feet in the 2020s, and up to +18.25 feet by 2100.

North of the Phase 1 site, the District is mostly within the 1 percent annual chance floodplain but has a BFE of +13 feet NAVD88 within Zone AE. For this portion of the District, the floodplain elevation could reach +13.83 feet in the 2020s and up to +19.25 feet by 2100. The area approximately bounded by 34th Avenue to the south, 126th Place to the west, and 129th Street to

² NYC Department of City Planning. *The New York City Waterfront Revitalization Program: Climate Change Adaptation Guidance*. November 2018.

the east is within the current 0.2 percent annual chance floodplain. For the purposes of this evaluation, only the Phase 1 buildings have been designed to an extent that allows evaluation under Policy 6.2, and future building details for the northern portion of the District are not addressed further.

For the Plan with the Proposed Modification, approximately one to seven feet of fill would be used to elevate the site grade above the current floodplain elevation. The proposed Phase 1 buildings closest to Roosevelt Avenue, which would contain residential and retail uses, would be constructed at an elevation of +19 feet NAVD88, about 5 feet above the design flood elevation (DFE) of +14 feet NAVD88. Below-grade parking space within these buildings, which would also contain some electrical and mechanical equipment, would be constructed below the current floodplain elevation and would remain within the floodplain in the future. The proposed school building would be constructed at an elevation of +17 feet NAVD88. Under projected conditions, the Phase 1 residential buildings would remain above the floodplain elevation through the end of their design life in 2100. The proposed Phase 1 school building would be within the floodplain by the end of the century.

c. Identify any vulnerable, critical, or potentially hazardous features that may be located below the elevation of Mean Higher High Water (MHHW) over the lifespan of the project under any sea level rise scenario.

Based on the range of sea level rise predictions described above, MHHW at the NOAA Station nearest the District (currently +4.05 feet NAVD88 at NOAA Station #8516990 at Willets Point) could range up to +10.30 feet by the end of the century. Under these projections, none of the project features would be within range of MHHW.

d. Describe how any additional coastal hazards are likely to affect the project, both currently and in the future, such as waves, high winds, or debris.

Wave action hazards (i.e., Zone VE or Coastal A Zone) have not been designated for the District. Therefore, storm impacts due to waves, high winds, or debris are not expected to affect the project features.

2. Identify adaptive strategies: assess how the vulnerabilities and consequences identified in Step 1 are addressed through the project's design and planning.

a. For any features identified in Step 1(b), describe how any flood damage reduction elements incorporated into the project, or any natural elevation on the site, provide any additional protection. Describe how would any planned adaptive measures protect the feature in the future from flooding?

As discussed above, the proposed Phase 1 residential buildings closest to Roosevelt Avenue would be constructed about five feet above the DFE of +14 feet NAVD88, at a ground floor elevation of +19 feet NAVD88, and would remain above projected floodplain elevations throughout their design life through the end of the century. Ground floor uses would include retail, community facility, residential amenities, and common courtyard space; residential units would be located on the second floor and above. Although critical infrastructure (i.e., electrical, plumbing, mechanical equipment) may be installed in the cellars of the new buildings, all equipment would be constructed in compliance with Article VI, Chapter 4 (Special Regulations Applying in Flood Hazard Areas) and Appendix G of the New York City Building Code. Uses of the below-grade space in these buildings would otherwise be limited to storage and parking only. The proposed school building would be below the floodplain elevation sometime around 2100 under the High

Willeys Point Development Plan

Scenario projections. If deemed necessary based on future conditions, dry flood proofing measures could be incorporated at vulnerable points in the building. Specific measures would include aluminum shielding and/or flood gates at entryways, or other flood protection measures that would be appropriate with the final design of the building. As the design advances for the full build-out, similar considerations would be included in the designs for buildings in the northern portion of the District.

b. For any features identified in Step 1(c), describe how any flood damage reduction elements incorporated into the project, or any natural elevation on the site, provide any additional protection. Describe how would any planned adaptive measures protect the feature in the future from flooding?

As described above in Step 1(c), none of the project features would be below the projected MHHW elevation by 2100.

c. Describe any additional measures being taken to protect the project from additional coastal hazards such as waves, high winds, or debris.

As noted in 1(d), the District, including the Phase 1 site, is not within a wave impact zone in the City's designated flood hazard area. Therefore, no specific measures are required.

d. Describe how the project would affect the flood protection of adjacent sites, if relevant.

Because the floodplain within New York City is controlled by astronomic tide and meteorological forces (e.g., nor'easters and hurricanes) and not by fluvial flooding, the Plan with the Proposed Modification would not have the potential to adversely affect the floodplain or result in increased coastal flooding at adjacent sites or within the District, including the Phase 1 Site. Due to its position along Flushing Bay and Flushing Creek, Willets Point has historically experienced flooding, and as a result, the City has upgraded stormwater mains and outfalls in the District and in adjacent areas to accommodate the proposed development. While the development would raise the ground elevation through the placement of fill onsite, this is not expected to result in increased flood risk for adjacent locations.

3. Assess policy consistency: conclude whether the project is consistent with Policy 6.2 of the Waterfront Revitalization Program.

The majority of the District, including the Phase 1 Site, is located within the current 1 percent annual chance floodplain. To account for the risk of flooding in the future, the proposed buildings in the Phase 1 site would be constructed above the floodplain elevation. Similarly, as the design advances for the full build-out, the floodplain elevation in the remainder of the District would be factored into building designs. Under the High Scenario projections, the proposed Phase 1 residential buildings would remain above the floodplain elevation through the end of the century (five feet above the DFE), and the proposed school building would only be within the floodplain towards the end of its 80-year design life (three feet above the DFE). At this time, flood protection measures could be retroactively installed at the ground floor entryways as necessary. All buildings and critical infrastructure would be constructed in compliance with Article VI, Chapter 4 (Special Regulations Applying in Flood Hazard Areas) and Appendix G of the New York City Building Code. Other uses of the below-grade space in the proposed Phase 1 residential buildings would be limited to storage and parking, minimizing the risk of flooding. Similar measures would be incorporated throughout the District as the full build-out design is advanced.

Therefore, with these measures in place, the Plan with the Proposed Modification would promote Policy 6.2.

NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Worksheet

COMPLETE INSTRUCTIONS ON HOW TO USE THIS WORKSHEET ARE PROVIDED IN THE "CLIMATE CHANGE ADAPTATION GUIDANCE" DOCUMENT AVAILABLE AT www.nyc.gov/wrp

Enter information about the project and site in highlighted cells in Tabs 1-3. Tab 4, "Summary Charts" contains primary results. Tab 5, "0.2%+SLR" produces charts to be used for critical infrastructure or facilities. Tab 6, "Calculations" contains background computations. Appendix A contains tide elevations for station across the city to be used for the elevation of MHHW if a site survey is not available. Non-highlighted cells have been locked.

Background Information	
Project Name	Willels Point Development Plan, Phase 1 Site
Location	Willels Point, New York City
Type(s)	☒ Residential, Commercial, Community Facility ☐ Parkland, Open Space, and Natural Areas ☐ Tidal Wetland Restoration ☐ Critical Infrastructure or Facility ☐ Industrial Uses ☐ Over-water Structures ☐ Shoreline Structures ☐ Transportation ☐ Wastewater Treatment/Drainage ☐ Coastal Protection
Description	Development of three buildings in southwest corner of Special Willels Point District, including two 12-story buildings with ground floor retail and affordable housing above and connected at the ground floor, and a 6-story public school building. The residential component would include senior housing in a 9-story section of the northern mixed-use building. Parking would be provided below-grade.
Planned Completion Date	2030
Expected Project Lifespan	80 years

The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance document was developed by the NYC Department of City Planning. It is a guidance document only and is not intended to serve as a substitute for actual regulations. The City disclaims any liability for errors that may be contained herein and shall not be responsible for any damages, consequential or actual, arising out of or in connection with the use of this information. The City reserves the right to update or correct information in this guidance document at any time and without notice.

For technical assistance on using this worksheet, email wrp@planning.nyc.gov, using the message subject "Policy 6.2 Worksheet."

Last update: Sept. 7, 2018

Establish current tidal and flood heights.

	FT (NAVD88)	Feet	Datum	Source
MHHW	4.05	4.05	NAVD88	<i>Appendix A, Willets Point Station 8516990</i>
1% flood height	12.00	12.00	NAVD88	<i>NYC Flood Hazard Mapper</i>
Design flood elevation	14.00	14.00	NAVD88	<i>Willets Point Phase 1 Preliminary Design</i>
<i>As relevant:</i>				
0.2% flood height	-->			

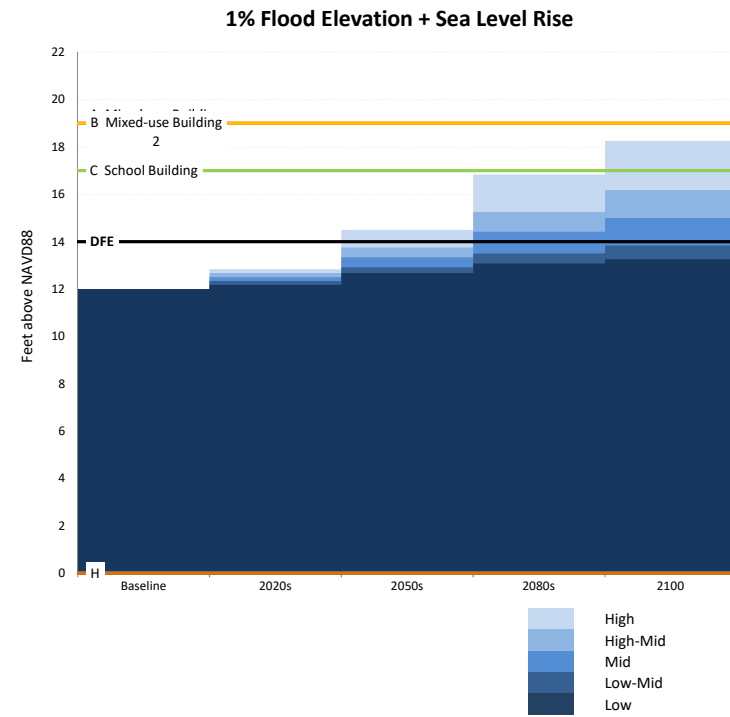
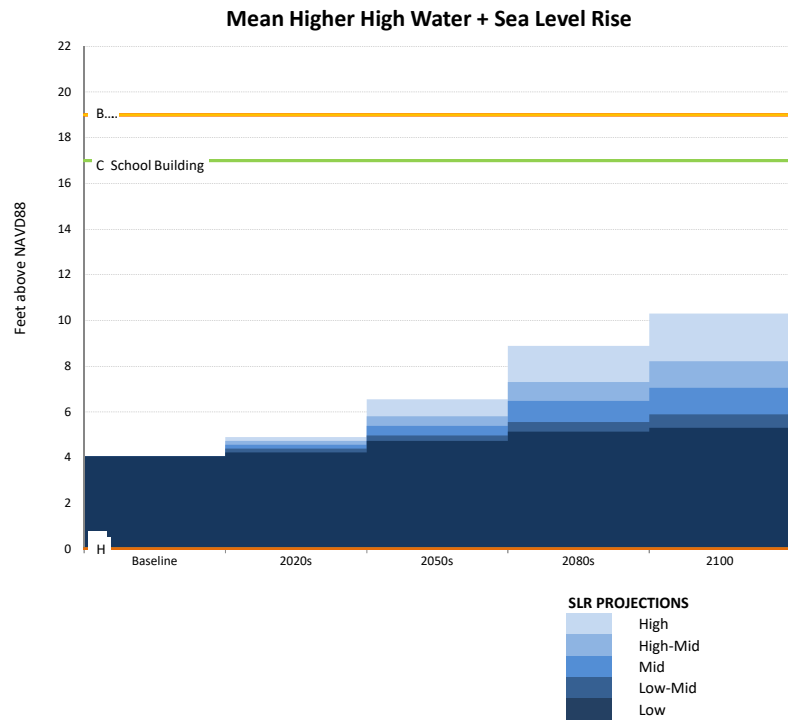
Data will be converted based on the following datums:

Datum	FT (NAVD88)
NAVD88	<i>0.00</i>
NGVD29	<i>-1.10</i>
Manhattan Datum	<i>1.65</i>
Bronx Datum	<i>1.51</i>
Brooklyn Datum (Sewer)	<i>0.61</i>
Brooklyn Datum (Highway)	<i>1.45</i>
Queens Datum	<i>1.63</i>
Richmond Datum	<i>2.09</i>

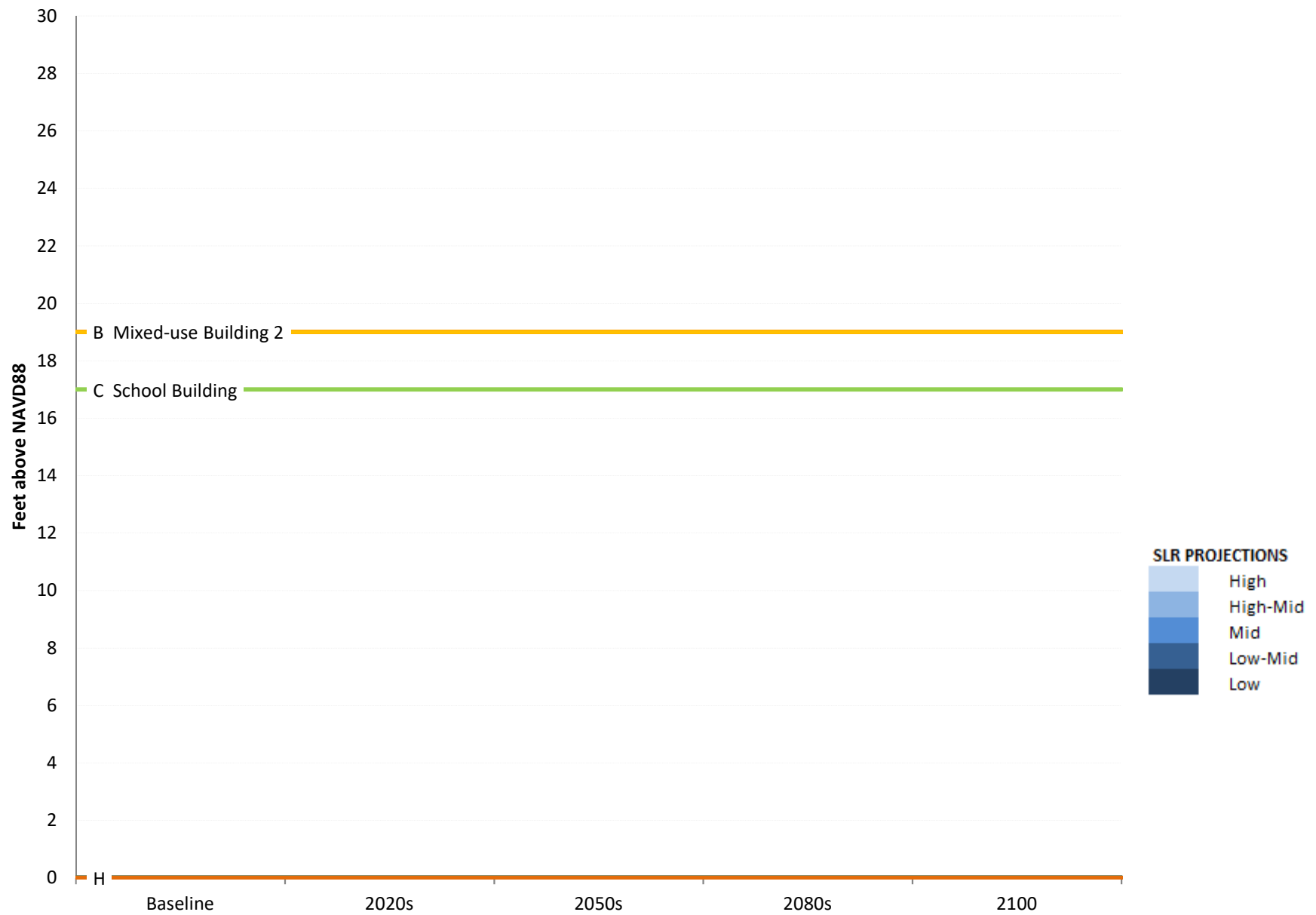
Describe key physical features of the project.

Feature (enter name)	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
A Mixed-use Building 1	☒ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2100	19.0	Feet	NAVD88	19.0	19.0	15.0	#VALUE!
Twelve-story building closest to Roosevelt Avenue. Ground floor would include retail space, residential amenities, and some housing units..									
B Mixed-use Building 2	☒ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2100	19.0	Feet	NAVD88	19.0	19.0	15.0	#VALUE!
Twelve-story building located between first residential building and school building, connected to Building 1 at the ground floor. Ground floor would include retail space, residential amenities, and some housing units including senior housing.									
C School Building	☒ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	2100	17.0	Feet	NAVD88	17.0	17.0	13.0	#VALUE!
Six-story school building with outdoor playground space									
D	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
E	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
F	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
G	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
H	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									

Assess project vulnerability over a range of sea level rise projections.



0.2% Flood Elevation + Sea Level Rise



	SLR (ft)					
	Low	Low-Mid	Mid	High-Mid	High	
Baseline	0.00	0.00	0.00	0.00	0.00	2014
2020s	0.17	0.33	0.50	0.67	0.83	2020s
2050s	0.67	0.92	1.33	1.75	2.50	2050s
2080s	1.08	1.50	2.42	3.25	4.83	2080s
2100	1.25	1.83	3.00	4.17	6.25	2100

MHHW+SLR (ft above NAVD88)

	Low	Low-Mid	Mid	High-Mid	High
Baseline	4.05	4.05	4.05	4.05	4.05
2020s	4.22	4.38	4.55	4.72	4.88
2050s	4.72	4.97	5.38	5.80	6.55
2080s	5.13	5.55	6.47	7.30	8.88
2100	5.30	5.88	7.05	8.22	10.30

1%+SLR (ft above NAVD88)

	Low	Low-Mid	Mid	High-Mid	High
Baseline	12.00	12.00	12.00	12.00	12.00
2020s	12.17	12.33	12.50	12.67	12.83
2050s	12.67	12.92	13.33	13.75	14.50
2080s	13.08	13.50	14.42	15.25	16.83
2100	13.25	13.83	15.00	16.17	18.25

0.2%+SLR (ft above NAVD88)

	Low	Low-Mid	Mid	High-Mid	High
Baseline	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2020s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2050s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2080s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2100	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

	0	1
A Mixed-use Building 1	19	19
B Mixed-use Building 2	19	19
C School Building	17	17
D	0	0
E	0	0
F	0	0
G	0	0
H	0	0
DFE	14.00	14.00

SLR (in)					
Low	Low-Mid		Mid	High-Mid	High
	0	0	0	0	0
	2	4	6	8	10
	8	11	16	21	30
	13	18	29	39	58
	15	22	36	50	75



NOAA Tide Station Data*(to be used only when a site survey is unavailable)*

Station ID	Station Name	Source MHHW (Feet, NAVD88)*	Adjusted MHHW (Feet, NAVD88)*
8518687	Queensboro Bridge	2.27	2.60
8530095	Alpine	2.11	2.44
8516614	Glen Cove	3.72	4.05
8516990	Willetts Point	3.72	4.05
8518639	Port Morris	3.33	3.66
8518699	Williamsburg Bridge	2.14	2.47
8518750	The Battery	2.28	2.61
8531680	Sandy Hook	2.41	2.74
8518490	New Rochelle	3.71	4.04
8531545	Keyport	2.66	2.99
8516891	Norton Point	2.08	2.41
8517201	North Channel	2.72	3.05
8517137	Beach Channel	2.10	2.43
8517756	Kingsborough	2.13	2.46
8519436	Great Kills	2.22	2.55
8531142	Port Reading	2.82	3.15
8519483	Bergen Point	2.56	2.89
8519050	USCG	2.28	2.61
8518902	Dyckman St	2.01	2.34
8517251	Worlds Fair Marina	3.59	3.92
8518668	Horns Hook	2.54	2.87
8518643	Randalls Island	2.60	2.93
8518526	Throggs Neck	3.68	4.01

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-20

Source
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
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NOAA Tides and Currents

01 tidal epoch.





Appendix B

Transportation

Traffic

Traffic Tables

TABLE B.1
Willets Point Development Plan - Technical Memorandum 005
2018 EXISTING CONDITION

INTERSECTION & APPROACH		Weekday AM Peak Hour				Weekday Midday Peak Hour				Weekday PM Peak Hour				Saturday Peak Hour			
		Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS
SIGNALIZED INTERSECTIONS																	
Shea Road and Boat Basin Place																	
Shea Road	WB	LTR	0.16	25.0	C	LTR	0.18	25.2	C	LTR	0.29	26.3	C	LTR	0.22	25.5	C
Boat Basin Place	NB	LTR	0.04	7.0	A	LTR	0.05	7.1	A	LTR	0.05	7.1	A	LTR	0.04	7.0	A
	SB	LTR	0.27	8.6	A	LTR	0.23	8.3	A	LTR	0.25	8.4	A	LTR	0.18	7.9	A
Overall Intersection	-	-	11.7	B	-	-	12.6	B	-	-	14.4	B	-	-	13.9	B	
126th Street and Westbound Northern Boulevard																	
Westbound Northern Boulevard	WB	T	0.77	13.2	B	T	0.59	10.1	B	T	0.56	9.5	A	T	0.59	9.9	A
126th Street	NB	L	0.18	3.9	A	L	0.20	3.0	A	L	0.25	6.6	A	L	0.25	2.0	A
Overall Intersection	-	-	12.7	B	-	-	9.4	A	-	-	9.2	A	-	-	9.0	A	
126th Street and Eastbound Northern Boulevard																	
Eastbound Northern Boulevard	EB	T	0.23	32.9	C	T	0.22	32.8	C	T	0.59	46.7	D	T	0.22	32.8	C
Grand Central Parkway Off-Ramp	EB	T	0.59	32.5	C	T	0.62	33.3	C	T	0.65	27.5	C	T	0.64	33.9	C
126th Street	NB	T	0.19	10.9	B	T	0.22	31.6	C	T	0.27	26.9	C	T	0.26	32.8	C
	R		0.29	12.2	B	R	0.32	34.0	C	R	0.33	28.2	C	R	0.26	33.2	C
Overall Intersection	-	-	27.8	C	-	-	33.1	C	-	-	32.5	C	-	-	33.5	C	
126th Street and Shea Road/34th Avenue																	
Shea Road	EB	LT	0.22	39.8	D	LT	0.33	42.0	D	LT	0.29	41.0	D	LT	0.23	39.7	D
	R		0.22	39.3	D	R	0.28	40.5	D	R	0.25	40.0	D	R	0.26	40.2	D
34th Avenue	WB	LTR	0.34	42.9	D	LTR	0.35	42.7	D	LTR	0.23	39.7	D	LTR	0.45	45.3	D
126th Street	NB	LTR	0.17	37.7	D	LTR	0.27	17.9	B	LTR	0.33	26.4	C	LTR	0.25	15.1	B
Eastbound Northern Boulevard Off-Ramp	SB	LTR	0.17	20.1	C	LTR	0.15	19.8	B	LTR	0.28	21.8	C	LTR	0.22	20.8	C
Whitestone Expressway Off-Ramp	SEB	LTR	0.44	46.0	D	LTR	0.76	61.1	E	LTR	0.85	68.1	E	LTR	0.85	67.1	E
Overall Intersection	-	-	37.0	D	-	-	36.4	D	-	-	40.1	D	-	-	38.7	D	
Roosevelt Avenue and 126th Street																	
Roosevelt Avenue	EB	LTR	0.47	17.4	B	LTR	0.35	13.9	B	LTR	0.53	16.0	B	LTR	0.39	14.8	B
	WB	LTR	0.48	11.2	B	LTR	0.27	8.5	A	LTR	0.52	11.4	B	LTR	0.33	9.0	A
126th Street	NB	LTR	0.09	31.3	C	LTR	0.55	47.1	D	LTR	0.21	33.3	C	LTR	0.22	37.1	D
	SB	L	0.44	42.4	D	L	0.77	50.5	D	L	0.79	70.0	E	L	1.05	97.8	F
	SB	TR	0.31	39.6	D	TR	0.48	33.8	C	TR	0.39	51.6	D	TR	0.43	33.5	C
Overall Intersection	-	-	18.8	B	-	-	22.6	C	-	-	26.4	C	-	-	31.3	C	
Roosevelt Avenue Westbound and College Point Boulevard																	
Roosevelt Avenue Westbound	WB	LTR	0.33	32.3	C	LTR	0.33	24.0	C	LTR	0.34	33.0	C	LTR	0.37	24.6	C
College Point Boulevard	NB	L	0.70	51.5	D	L	0.50	30.1	C	L	0.49	40.0	D	L	0.57	32.5	C
	TR		0.23	3.5	A	TR	0.32	3.4	A	TR	0.38	7.7	A	TR	0.38	4.9	A
	SB	TR	0.87	46.3	D	TR	0.74	34.0	C	TR	0.75	43.0	D	TR	0.82	38.0	D
Overall Intersection	-	-	33.8	C	-	-	20.8	C	-	-	26.9	C	-	-	22.6	C	
Roosevelt Avenue Eastbound and College Point Boulevard																	
Roosevelt Avenue Eastbound	EB	LTR	0.43	5.6	A	LTR	0.50	12.1	B	LTR	0.75	24.8	C	LTR	0.62	16.3	B
College Point Boulevard	NB	TR	0.40	18.8	B	TR	0.57	20.8	C	TR	0.56	25.8	C	TR	0.65	22.3	C
	SB	T	0.67	6.9	A	T	0.71	9.8	A	T	0.76	11.8	B	T	0.73	10.4	B
Overall Intersection	-	-	11.3	B	-	-	15.1	B	-	-	21.3	C	-	-	17.1	B	
Northern Boulevard and Prince Street																	
Northern Boulevard	EB	L	1.02	118.2	F	L	0.91	84.5	F	L	1.04	105.9	F	L	1.03	113.9	F
	T		0.64	19.5	B	T	0.59	24.2	C	T	0.80	29.8	C	T	0.70	26.8	C
Northern Boulevard Eastbound S.R.	EB	TR	0.45	18.2	B	TR	0.60	29.0	C	TR	0.57	27.6	C	TR	0.72	34.4	C
Northern Boulevard	WB	L	0.82	79.5	E	L	0.80	88.2	F	L	0.69	81.3	F	L	0.85	74.2	E
	T		0.92	18.0	B	T	0.85	20.8	C	T	0.68	19.3	B	T	1.03	38.4	D
Northern Boulevard Westbound S.R.	WB	TR	0.97	34.6	C	TR	1.02	60.0	E	TR	1.00	64.3	E	TR	1.04	51.7	D
Prince Street	NB	LTR	0.98	108.0	F	LTR	0.93	84.1	F	LTR	1.02	105.7	F	LTR	0.99	95.6	F
	SB	LTR	1.00	91.8	F	LTR	0.89	65.2	E	LTR	1.00	88.1	F	LTR	0.97	82.6	F
Overall Intersection	-	-	34.8	C	-	-	38.8	D	-	-	46.6	D	-	-	47.2	D	

(1) Control delay is measured in seconds per vehicle.

(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.

TABLE B.1
Willets Point Development Plan - Technical Memorandum 005
2018 EXISTING CONDITION

Intersection & Approach		Weekday AM Peak Hour				Weekday Midday Peak Hour				Weekday PM Peak Hour				Saturday Peak Hour				
		Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	
Signalized Intersections																		
Westbound Northern Boulevard and Main Street																		
Northern Boulevard	WB	L	0.12	13.2	B	L	0.10	13.3	B	L	0.13	13.1	B	L	0.12	14.5	B	
		T	0.98	42.2	D	T	0.86	27.9	C	T	0.64	19.8	B	T	1.00	47.4	D	
Main Street	NB	L	0.49	4.6	A	L	0.36	2.3	A	L	0.34	2.5	A	L	0.49	3.5	A	
Overall Intersection		-	-	36.1	D	-	-	24.0	C	-	-	17.2	B	-	-	40.5	D	
Eastbound Northern Boulevard and Main Street																		
Northern Boulevard	EB	T	0.82	16.5	B	T	0.65	10.8	B	T	0.85	9.0	A	T	0.78	11.7	B	
		R	0.64	15.2	B	R	0.73	17.0	B	R	0.62	7.7	A	R	0.94	33.0	C	
Main Street	NB	T	0.76	49.2	D	T	0.61	40.8	D	T	0.52	39.1	D	T	0.72	45.7	D	
		R	0.83	62.2	E	R	0.98	88.2	F	R	1.05	102.5	F	R	1.05	105.4	F	
	SB	T	0.14	20.1	C	T	0.10	18.5	B	T	0.14	19.7	B	T	0.12	42.3	D	
Overall Intersection		-	-	21.4	C	-	-	24.8	C	-	-	21.9	C	-	-	30.6	C	
Northern Boulevard and Union Street																		
Northern Boulevard	EB	L	0.70	46.7	D	L	0.70	34.0	C	L	0.55	27.2	C	L	0.86	54.8	D	
		TR	1.03	70.9	E	TR	0.88	43.9	D	TR	0.96	53.4	D	TR	0.96	52.4	D	
	WB	L	0.74	47.9	D	L	0.52	26.1	C	L	0.56	30.2	C	L	0.68	39.6	D	
		TR	1.05	72.7	E	TR	0.74	36.1	D	TR	0.73	35.6	D	TR	0.82	38.9	D	
Union Street	NB	TR	0.41	29.0	C	TR	0.39	28.7	C	TR	0.42	29.2	C	TR	0.48	30.3	C	
	SB	TR	0.73	37.2	D	TR	0.48	30.5	C	TR	0.53	31.3	C	TR	0.51	31.0	C	
Overall Intersection		-	-	61.0	E	-	-	36.7	D	-	-	40.5	D	-	-	42.5	D	
Unsignalized Intersections																		
Marina Road and Boat Basin Place																		
Marina Road	EB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
		WB	LT	-	6.2	A	LT	-	7.2	A	LT	-	7.5	A	LT	-	6.8	A
Boat Basin Place	NB	L	-	48.6	E	L	-	19.1	C	L	-	29.2	D	L	-	15.9	C	
		R	-	8.5	A	R	-	8.6	A	R	-	8.6	A	R	-	8.5	A	
Overall Intersection		-	-	4.9	A	-	-	6.7	A	-	-	8.3	A	-	-	6.1	A	
126th Street and 35th Avenue																		
35th Avenue	WB	LR	-	11.2	B	LR	-	13.2	B	LR	-	14.3	B	LR	-	14.9	B	
		NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A
		SB	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0	A
Overall Intersection		-	-	0.5	A	-	-	1.6	A	-	-	0.7	A	-	-	1.3	A	
126th Street and 36th Avenue																		
36th Avenue	WB	LR	-	10.5	B	LR	-	10.7	B	LR	-	12.8	B	LR	-	12.4	B	
		NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A
		SB	LT	-	0.5	A	LT	-	2.9	A	LT	-	2.9	A	LT	-	1.6	A
Overall Intersection		-	-	0.4	A	-	-	1.8	A	-	-	2.1	A	-	-	1.4	A	
126th Street and 38th Avenue																		
38th Avenue	WB	LR	-	0.0	A	LR	-	0.0	A	LR	-	0.0	A	LR	-	0.0	A	
		NB	TR	-	0.0	A	R	-	0.0	A	R	-	0.0	A	R	-	0.0	A
		SB	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0	A
Overall Intersection		-	-	0.0	A	-	-	0.0	A	-	-	0.0	A	-	-	0.0	A	

(1) Control delay is measured in seconds per vehicle.

(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.

TABLE B.2
Willets Point Development Plan - Technical Memorandum 005
2030 NO ACTION CONDITION

Intersection & Approach		Weekday AM Peak Hour				Weekday Midday Peak Hour				Weekday PM Peak Hour				Saturday Peak Hour			
		Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS
Signalized Intersections																	
Shea Road and Boat Basin Place																	
Shea Road	WB	LTR	0.17	25.1	C	LTR	0.20	25.3	C	LTR	0.31	26.5	C	LTR	0.23	25.6	C
Boat Basin Place	NB	LTR	0.05	7.1	A	LTR	0.05	7.1	A	LTR	0.06	7.1	A	LTR	0.05	7.0	A
	SB	LTR	0.34	9.2	A	LTR	0.31	8.9	A	LTR	0.31	8.9	A	LTR	0.22	8.2	A
Overall Intersection	-	-	11.9	B	-	-	12.5	B	-	-	14.3	B	-	-	13.6	B	
126th Street and Westbound Northern Boulevard																	
Westbound Northern Boulevard	WB	T	0.83	15.6	B	T	0.68	11.7	B	T	0.63	10.6	B	T	0.66	11.1	B
126th Street	NB	L	0.19	4.9	A	L	0.22	3.6	A	L	0.26	6.8	A	L	0.26	2.3	A
Overall Intersection	-	-	15.1	B	-	-	10.9	B	-	-	10.2	B	-	-	10.1	B	
126th Street and Eastbound Northern Boulevard																	
Eastbound Northern Boulevard	EB	T	0.25	33.1	C	T	0.24	32.9	C	T	0.63	47.6	D	T	0.24	32.9	C
Grand Central Parkway Off-Ramp	EB	T	0.66	34.4	C	T	0.69	35.5	D	T	0.70	29.2	C	T	0.71	36.1	D
126th Street	NB	T	0.20	12.6	B	T	0.23	32.9	C	T	0.28	32.0	C	T	0.28	34.6	C
	R	0.31	14.1	B	R	0.34	35.4	D	R	0.35	33.7	C	R	0.27	34.9	C	
Overall Intersection	-	-	29.5	C	-	-	34.7	C	-	-	34.7	C	-	-	35.2	D	
126th Street and Shea Road/34th Avenue																	
Shea Road	EB	LT	0.24	40.1	D	LT	0.35	42.5	D	LT	0.30	41.3	D	LT	0.25	40.1	D
	R	0.39	42.8	D	R	0.54	47.2	D	R	0.43	44.0	D	R	0.44	44.0	D	
34th Avenue	WB	LTR	0.36	43.3	D	LTR	0.36	43.0	D	LTR	0.24	39.9	D	LTR	0.48	46.2	D
126th Street	NB	LTR	0.18	36.1	D	LTR	0.30	17.1	B	LTR	0.36	31.3	C	LTR	0.27	14.9	B
Eastbound Northern Boulevard Off-Ramp	SB	LTR	0.18	20.2	C	LTR	0.16	19.9	B	LTR	0.30	22.0	C	LTR	0.24	21.0	C
Whitestone Expressway Off-Ramp	SEB	LTR	0.55	49.2	D	LTR	0.93	83.1	F	LTR	0.96	86.1	F	LTR	0.96	86.5	F
Overall Intersection	-	-	38.4	D	-	-	44.0	D	-	-	47.5	D	-	-	45.4	D	
Roosevelt Avenue and 126th Street																	
Roosevelt Avenue	EB	LTR	0.67	21.8	C	LTR	0.55	16.5	B	LTR	0.77	22.7	C	LTR	0.54	16.1	B
	WB	LTR	0.59	12.3	B	LTR	0.39	9.6	A	LTR	0.75	17.5	B	LTR	0.41	9.9	A
126th Street	NB	LTR	0.26	34.5	C	LTR	2.39	691.8	F	LTR	0.62	48.1	D	LTR	1.26	193.4	F
	SB	L	0.47	44.7	D	L	0.77	46.2	D	L	0.92	87.4	F	L	1.13	122.6	F
	SB	TR	0.53	45.7	D	TR	0.85	50.9	D	TR	0.63	59.5	E	TR	0.66	39.3	D
Overall Intersection	-	-	22.1	C	-	-	117.7	F	-	-	33.7	C	-	-	52.3	D	
Roosevelt Avenue Westbound and College Point Boulevard																	
Roosevelt Avenue Westbound	WB	LTR	0.44	34.1	C	LTR	0.50	26.5	C	LTR	0.45	35.1	D	LTR	0.49	26.4	C
College Point Boulevard	NB	L	1.10	123.5	F	L	1.07	91.5	F	L	0.87	57.1	E	L	0.94	57.6	E
	TR	0.34	7.5	A	TR	0.50	6.4	A	TR	0.53	10.8	B	TR	0.49	6.7	A	
	SB	TR	1.15	118.2	F	TR	1.37	205.3	F	TR	1.34	200.1	F	TR	1.21	136.5	F
Overall Intersection	-	-	76.4	E	-	-	97.2	F	-	-	93.9	F	-	-	64.0	E	
Roosevelt Avenue Eastbound and College Point Boulevard																	
Roosevelt Avenue Eastbound	EB	LTR	0.59	15.4	B	LTR	0.68	13.3	B	LTR	0.92	30.6	C	LTR	0.75	18.8	B
College Point Boulevard	NB	TR	0.50	20.3	C	TR	0.75	24.8	C	TR	0.70	29.1	C	TR	0.77	25.3	C
	SB	T	0.87	7.3	A	T	1.11	60.9	E	T	1.17	88.9	F	T	0.99	15.5	B
Overall Intersection	-	-	14.3	B	-	-	34.2	C	-	-	49.8	D	-	-	20.4	C	
Northern Boulevard and Prince Street																	
Northern Boulevard	EB	L	1.72	393.2	F	L	1.72	387.6	F	L	1.59	327.5	F	L	1.54	312.0	F
	T	0.68	20.5	C	T	0.63	25.2	C	T	0.85	32.0	C	T	0.75	28.2	C	
Northern Boulevard Eastbound S.R.	EB	TR	0.56	21.3	C	TR	0.82	42.2	D	TR	0.86	45.7	D	TR	0.88	49.2	D
Northern Boulevard	WB	L	0.85	71.1	E	L	0.84	75.7	E	L	0.72	69.4	E	L	0.89	70.7	E
	T	0.96	15.4	B	T	0.93	24.2	C	T	0.73	22.0	C	T	1.08	59.4	E	
Northern Boulevard Westbound S.R.	WB	TR	1.16	89.4	F	TR	1.24	136.7	F	TR	1.19	124.1	F	TR	1.21	119.0	F
Prince Street	NB	LTR	4.00	1419.3	F	LTR	2.50	735.2	F	LTR	2.22	606.2	F	LTR	2.17	585.1	F
	SB	LTR	1.04	102.4	F	LTR	0.91	68.2	E	LTR	1.03	94.4	F	LTR	0.99	86.0	F
Overall Intersection	-	-	150.8	F	-	-	134.9	F	-	-	126.8	F	-	-	116.3	F	

(1) Control delay is measured in seconds per vehicle.

(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.

TABLE B.2
Willetts Point Development Plan - Technical Memorandum 005
2030 NO ACTION CONDITION

Intersection & Approach		Weekday AM Peak Hour				Weekday Midday Peak Hour				Weekday PM Peak Hour				Saturday Peak Hour			
		Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS
Signalized Intersections																	
Westbound Northern Boulevard and Main Street																	
Northern Boulevard	WB	L	0.12	11.8	B	L	0.11	13.4	B	L	0.13	12.7	B	L	0.12	13.6	B
		T	1.11	79.9	E	T	1.03	56.0	E	T	0.77	22.6	C	T	1.13	90.9	F
Main Street	NB	L	0.27	3.4	A	L	0.18	1.8	A	L	0.18	2.0	A	L	0.25	2.2	A
Overall Intersection		-	-	73.4	E	-	-	51.8	D	-	-	21.0	C	-	-	83.6	F
Eastbound Northern Boulevard and Main Street																	
Northern Boulevard	EB	T	0.98	27.9	C	T	0.84	14.0	B	T	1.08	48.9	D	T	0.97	21.7	C
		R	0.32	11.9	B	R	0.36	10.4	B	R	0.33	4.6	A	R	0.47	10.8	B
Main Street	NB	TR	0.48	39.3	D	T	0.29	33.1	C	T	0.26	34.1	C	T	0.35	34.1	C
		-	-	-	-	R	0.65	52.5	D	R	0.71	56.9	E	R	0.69	53.9	D
	SB	T	0.14	41.7	D	T	0.11	42.1	D	T	0.14	40.8	D	T	0.13	42.4	D
Overall Intersection		-	-	28.4	C	-	-	17.9	B	-	-	45.8	D	-	-	23.8	C
Northern Boulevard and Union Street																	
Northern Boulevard	EB	L	0.73	51.6	D	L	0.91	76.2	E	L	0.69	41.3	D	L	0.99	93.7	F
		TR	1.22	143.4	F	T	1.03	77.6	E	TR	1.20	133.1	F	T	1.08	92.9	F
		-	-	-	-	DefR	1.43	247.4	F	-	-	-	-	DefR	1.50	279.1	F
	WB	L	0.77	52.7	D	L	0.54	28.9	C	L	0.60	33.4	C	L	0.71	41.5	D
		TR	1.27	162.1	F	TR	1.03	70.8	E	TR	0.94	49.4	D	TR	1.07	85.6	F
Union Street	NB	T	0.54	33.0	C	T	0.50	30.5	C	T	0.66	37.3	D	T	0.64	34.7	C
		R	0.59	31.7	C	R	0.70	38.1	D	R	0.70	38.1	D	R	0.78	43.9	D
	SB	T	1.00	75.6	E	T	0.60	33.6	C	T	0.74	41.1	D	T	0.61	33.9	C
	R	0.32	23.5	C	R	0.25	22.9	C	R	0.24	22.0	C	R	0.28	23.3	C	
Overall Intersection		-	-	122.4	F	-	-	82.2	F	-	-	75.7	E	-	-	96.8	F
Unsignalized Intersections																	
Marina Road and Boat Basin Place																	
Marina Road	EB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A
		WB	LT	-	6.8	A	LT	-	7.7	A	LT	-	7.9	A	LT	-	7.1
Boat Basin Place	NB	L	-	86.7	F	L	-	28.5	D	L	-	48.3	E	L	-	19.2	C
		R	-	8.6	A	R	-	8.7	A	R	-	8.6	A	R	-	8.5	A
Overall Intersection		-	-	6.4	A	-	-	8.1	A	-	-	10.4	B	-	-	6.6	A
126th Street and 35th Avenue																	
35th Avenue	WB	LR	-	11.9	B	LR	-	14.7	B	LR	-	15.7	C	LR	-	16.6	C
		NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0
126th Street	SB	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0	A
Overall Intersection		-	-	0.4	A	-	-	1.5	A	-	-	0.7	A	-	-	1.4	A
126th Street and 36th Avenue																	
36th Avenue	WB	LR	-	10.8	B	LR	-	11.2	B	LR	-	13.6	B	LR	-	13.2	B
		NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0
126th Street	SB	LT	-	0.4	A	LT	-	2.5	A	LT	-	2.7	A	LT	-	1.5	A
Overall Intersection		-	-	0.4	A	-	-	1.6	A	-	-	1.9	A	-	-	1.3	A
126th Street and 38th Avenue																	
38th Avenue	WB	LR	-	0.0	A	LR	-	0.0	A	LR	-	0.0	A	LR	-	0.0	A
		NB	TR	-	0.0	A	R	-	0.0	A	R	-	0.0	A	R	-	0.0
126th Street and 38th Avenue	SB	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0	A
Overall Intersection		-	-	0.0	A	-	-	0.0	A	-	-	0.0	A	-	-	0.0	A

(1) Control delay is measured in seconds per vehicle.

(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.

TABLE B.3
Willetts Point Development Plan - Technical Memorandum 005
2030 WITH ACTION CONDITION - PHASE 1

INTERSECTION & APPROACH		Weekday AM Peak Hour				Weekday Midday Peak Hour				Weekday PM Peak Hour				Saturday Peak Hour			
		Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS
SIGNALIZED INTERSECTIONS																	
Shea Road and Boat Basin Place																	
Shea Road	WB	LTR	0.34	27.1	C	LTR	0.31	26.6	C	LTR	0.35	27.0	C	LTR	0.29	26.3	C
Boat Basin Place	NB	LTR	0.05	7.1	A	LTR	0.05	7.1	A	LTR	0.06	7.1	A	LTR	0.05	7.1	A
	SB	LTR	0.38	9.6	A	LTR	0.35	9.3	A	LTR	0.35	9.3	A	LTR	0.27	8.6	A
Overall Intersection	-	-	14.5	B	-	-	14.3	B	-	-	14.9	B	-	-	14.5	B	
126th Street and Westbound Northern Boulevard																	
Westbound Northern Boulevard	WB	T	0.85	16.4	B	T	0.71	12.3	B	T	0.65	11.0	B	T	0.69	11.7	B
126th Street	NB	L	0.30	7.6	A	L	0.29	4.3	A	L	0.29	6.6	A	L	0.30	3.6	A
Overall Intersection	-	-	15.8	B	-	-	11.3	B	-	-	10.5	B	-	-	10.7	B	
126th Street and Eastbound Northern Boulevard																	
Eastbound Northern Boulevard	EB	T	0.25	33.1	C	T	0.24	32.9	C	T	0.63	47.6	D	T	0.24	32.9	C
Grand Central Parkway Off-Ramp	EB	T	0.66	34.4	C	T	0.69	35.5	D	T	0.70	29.2	C	T	0.71	36.1	D
126th Street	NB	T	0.31	36.3	D	T	0.31	32.7	C	T	0.31	36.6	D	T	0.32	34.3	C
	R	0.49	41.8	D	R	0.54	40.6	D	R	0.42	39.8	D	R	0.32	35.1	D	
Overall Intersection	-	-	35.3	D	-	-	35.3	D	-	-	35.8	D	-	-	35.2	D	
126th Street and Shea Road/34th Avenue																	
Shea Road	EB	LT	0.24	40.1	D	LT	0.35	42.4	D	LT	0.30	41.3	D	LT	0.25	40.1	D
	R	0.55	47.2	D	R	0.72	56.2	E	R	0.60	49.6	D	R	0.67	52.6	D	
34th Avenue	WB	LTR	0.36	43.3	D	LTR	0.36	43.0	D	LTR	0.24	39.9	D	LTR	0.48	46.2	D
126th Street	NB	LTR	0.44	33.5	C	LTR	0.53	22.5	C	LTR	0.44	31.7	C	LTR	0.40	18.0	B
Eastbound Northern Boulevard Off-Ramp	SB	LTR	0.22	20.8	C	LTR	0.21	20.6	C	LTR	0.33	22.6	C	LTR	0.27	21.6	C
Whitestone Expressway Off-Ramp	SEB	LTR	0.63	52.1	D	LTR	1.02	103.5	F	LTR	1.03	102.8	F	LTR	1.05	108.5	F
Overall Intersection	-	-	38.3	D	-	-	48.5	D	-	-	52.2	D	-	-	51.8	D	
Roosevelt Avenue and 126th Street																	
Roosevelt Avenue	EB	LTR	0.74	25.2	C	LTR	0.62	18.6	B	LTR	0.79	23.8	C	LTR	0.56	16.8	B
	WB	LTR	0.65	12.9	B	LTR	0.44	10.2	B	LTR	0.79	19.2	B	LTR	0.43	10.1	B
126th Street	NB	LTR	0.27	34.9	C	LTR	2.55	765.6	F	LTR	0.62	48.5	D	LTR	1.27	198.4	F
	SB	L	0.52	46.5	D	L	0.85	54.2	D	L	0.95	92.4	F	L	1.18	138.0	F
	SB	TR	0.57	46.9	D	TR	0.89	55.2	E	TR	0.63	59.2	E	TR	0.66	38.0	D
Overall Intersection	-	-	23.9	C	-	-	125.6	F	-	-	35.3	D	-	-	55.1	E	
Roosevelt Avenue Westbound and College Point Boulevard																	
Roosevelt Avenue Westbound	WB	LTR	0.45	34.3	C	LTR	0.51	26.7	C	LTR	0.46	35.1	D	LTR	0.49	26.4	C
College Point Boulevard	NB	L	1.15	141.1	F	L	1.13	113.5	F	L	0.88	57.9	E	L	0.95	59.8	E
	TR	0.35	7.4	A	TR	0.50	6.3	A	TR	0.53	10.7	B	TR	0.49	6.7	A	
	SB	TR	1.17	127.4	F	TR	1.41	221.7	F	TR	1.35	206.0	F	TR	1.22	142.8	F
Overall Intersection	-	-	83.2	F	-	-	106.7	F	-	-	96.5	F	-	-	66.8	E	
Roosevelt Avenue Eastbound and College Point Boulevard																	
Roosevelt Avenue Eastbound	EB	LTR	0.61	16.9	B	LTR	0.70	13.7	B	LTR	0.93	31.5	C	LTR	0.76	19.0	B
College Point Boulevard	NB	TR	0.50	20.4	C	TR	0.76	25.2	C	TR	0.71	29.2	C	TR	0.77	25.4	C
	SB	T	0.87	7.4	A	T	1.11	60.9	E	T	1.17	88.8	F	T	0.99	15.4	B
Overall Intersection	-	-	14.8	B	-	-	34.2	C	-	-	50.0	D	-	-	20.4	C	
Northern Boulevard and Prince Street																	
Northern Boulevard	EB	L	1.72	393.2	F	L	1.72	387.6	F	L	1.59	327.5	F	L	1.54	312.0	F
	T	0.69	20.7	C	T	0.64	25.4	C	T	0.85	32.2	C	T	0.75	28.3	C	
Northern Boulevard Eastbound S.R.	EB	TR	0.56	21.3	C	TR	0.82	42.2	D	TR	0.86	45.7	D	TR	0.88	49.2	D
Northern Boulevard	WB	L	0.85	71.0	E	L	0.84	74.5	E	L	0.72	69.1	E	L	0.89	70.7	E
	T	0.97	16.1	B	T	0.94	24.8	C	T	0.73	22.2	C	T	1.08	60.7	E	
Northern Boulevard Westbound S.R.	WB	TR	1.19	100.7	F	TR	1.28	152.2	F	TR	1.20	129.2	F	TR	1.22	124.0	F
Prince Street	NB	LTR	4.00	1419.3	F	LTR	2.50	735.2	F	LTR	2.22	606.2	F	LTR	2.17	585.1	F
	SB	LTR	1.04	102.4	F	LTR	0.91	68.2	E	LTR	1.03	94.4	F	LTR	0.98	83.2	F
Overall Intersection	-	-	151.2	F	-	-	135.8	F	-	-	127.2	F	-	-	116.9	F	

(1) Control delay is measured in seconds per vehicle.

(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.

TABLE B.3
Willetts Point Development Plan - Technical Memorandum 005
2030 WITH ACTION CONDITION - PHASE 1

Intersection & Approach		Weekday AM Peak Hour				Weekday Midday Peak Hour				Weekday PM Peak Hour				Saturday Peak Hour			
		Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS
Signalized Intersections																	
Westbound Northern Boulevard and Main Street																	
Northern Boulevard	WB	L	0.12	11.8	B	L	0.11	13.4	B	L	0.13	12.7	B	L	0.12	13.6	B
		T	1.12	85.4	F	T	1.05	61.4	E	T	0.77	22.7	C	T	1.13	92.5	F
Main Street	NB	L	0.27	3.4	A	L	0.18	1.8	A	L	0.18	2.0	A	L	0.25	2.2	A
Overall Intersection		-	-	78.5	E	-	-	56.8	E	-	-	21.1	C	-	-	85.1	F
Eastbound Northern Boulevard and Main Street																	
Northern Boulevard	EB	T	0.99	30.0	C	T	0.85	14.2	B	T	1.08	49.9	D	T	0.98	22.2	C
		R	0.32	11.9	B	R	0.36	10.3	B	R	0.33	4.7	A	R	0.47	10.9	B
Main Street	NB	TR	0.48	39.3	D	T	0.29	33.1	C	T	0.26	34.1	C	T	0.35	34.1	C
		-	-	-	-	R	0.65	52.5	D	R	0.71	56.9	E	R	0.69	53.9	D
	SB	T	0.14	41.7	D	T	0.11	42.1	D	T	0.14	40.8	D	T	0.13	42.4	D
Overall Intersection		-	-	30.1	C	-	-	18.0	B	-	-	46.6	D	-	-	24.2	C
Northern Boulevard and Union Street																	
Northern Boulevard	EB	L	0.73	51.6	D	L	0.91	76.3	E	L	0.69	42.1	D	L	0.99	93.7	F
		TR	1.23	149.8	F	T	1.05	84.7	F	TR	1.20	135.0	F	T	1.09	95.6	F
		-	-	-	-	DefR	1.43	247.4	F	-	-	-	-	DefR	1.50	279.1	F
	WB	L	0.77	52.8	D	L	0.55	29.7	C	L	0.60	33.5	C	L	0.71	42.6	D
		TR	1.28	168.8	F	TR	1.05	77.7	E	TR	0.94	50.3	D	TR	1.08	87.4	F
Union Street	NB	T	0.54	33.0	C	T	0.50	30.5	C	T	0.66	37.3	D	T	0.64	34.7	C
		R	0.59	31.7	C	R	0.70	38.1	D	R	0.70	38.1	D	R	0.78	43.9	D
	SB	T	1.00	75.6	E	T	0.60	33.6	C	T	0.74	41.1	D	T	0.61	33.9	C
	R	0.33	23.6	C	R	0.26	23.0	C	R	0.24	22.0	C	R	0.28	23.3	C	
Overall Intersection		-	-	127.2	F	-	-	86.0	F	-	-	76.7	E	-	-	98.0	F
Unsignalized Intersections																	
Marina Road and Boat Basin Place																	
Marina Road	EB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A
		WB	LT	-	7.1	A	LT	-	7.9	A	LT	-	8.2	A	LT	-	7.3
Boat Basin Place	NB	L	-	130.6	F	L	-	39.9	E	L	-	73.0	F	L	-	24.1	C
		R	-	8.6	A	R	-	8.7	A	R	-	8.6	A	R	-	8.5	A
Overall Intersection		-	-	7.7	A	-	-	9.4	A	-	-	12.6	B	-	-	7.1	A
126th Street and 35th Avenue																	
35th Avenue	WB	LR	-	15.5	C	LR	-	20.3	C	LR	-	18.0	C	LR	-	20.9	C
		NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0
126th Street	SB	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0	A
Overall Intersection		-	-	0.4	A	-	-	1.5	A	-	-	0.7	A	-	-	1.4	A
126th Street and 36th Avenue																	
36th Avenue	WB	LR	-	12.8	B	LR	-	13.0	B	LR	-	15.1	C	LR	-	15.2	C
		NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0
126th Street	SB	LT	-	0.3	A	LT	-	2.4	A	LT	-	2.5	A	LT	-	1.4	A
Overall Intersection		-	-	0.3	A	-	-	1.4	A	-	-	1.8	A	-	-	1.2	A
(New Intersection)																	
126th Street and 38th Avenue/Connector Street																	
38th Avenue	WB	LR	-	13.4	B	LR	-	15.0	B	LR	-	10.8	B	LR	-	11.1	B
		NB	TR	-	0.0	A	R	-	0.0	A	R	-	0.0	A	R	-	0.0
126th Street and 38th Avenue	SB	LT	-	4.5	A	LT	-	4.3	A	LT	-	3.7	A	LT	-	4.1	A
Overall Intersection		-	-	4.3	A	-	-	3.9	A	-	-	1.7	A	-	-	2.4	A
(New Intersection)																	
Roosevelt Avenue and Eastern Perimeter Street																	
Roosevelt Avenue	EB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A
		WB	T	-	0.0	A	T	-	0.0	A	T	-	0.0	A	T	-	0.0
Eastern Perimeter Street	SB	R	-	12.3	B	R	-	10.7	B	R	-	11.5	B	R	-	10.9	B
Overall Intersection		-	-	0.0	A	-	-	0.0	A	-	-	0.0	A	-	-	0.0	A
(New Intersection)																	
Eastern Perimeter Street and Project Site Driveway																	
Project Site Driveway	EB	LR	-	10.7	B	LR	-	10.5	B	LR	-	9.2	A	LR	-	9.5	A
		Eastern Perimeter Street	SB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	TR	-
Overall Intersection		-	-	6.3	A	-	-	5.5	A	-	-	3.6	A	-	-	4.1	A

(1) Control delay is measured in seconds per vehicle.

(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.

TABLE B.4
Willets Point Development Plan - Technical Memorandum 005
2030 NO ACTION vs WITH ACTION CONDITION - WEEKDAY AM PEAK HOUR

INTERSECTION & APPROACH	No Action Condition				With Action Condition				Mitigation				Mitigation Measures	
	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS		
SIGNALIZED INTERSECTIONS														
Shea Road and Boat Basin Place														
Shea Road	WB	LTR	0.17	25.1	C	LTR	0.34	27.1	C	LTR	0.34	27.1	C	
Boat Basin Place	NB	LTR	0.05	7.1	A	LTR	0.05	7.1	A	LTR	0.05	7.1	A	
	SB	LTR	0.34	9.2	A	LTR	0.38	9.6	A	LTR	0.38	9.6	A	
Overall Intersection	-	-	11.9	B	-	-	14.5	B	-	-	14.5	B		
126th Street and Westbound Northern Boulevard														
Westbound Northern Boulevard	WB	T	0.83	15.6	B	T	0.85	16.4	B	T	0.85	16.4	B	
126th Street	NB	L	0.19	4.9	A	L	0.3	7.6	A	L	0.3	7.6	A	
Overall Intersection	-	-	15.1	B	-	-	15.8	B	-	-	15.8	B		
126th Street and Eastbound Northern Boulevard														
Eastbound Northern Boulevard	EB	T	0.25	33.1	C	T	0.25	33.1	C	T	0.25	33.1	C	
Grand Central Parkway Off-Ramp	EB	T	0.66	34.4	C	T	0.66	34.4	C	T	0.66	34.4	C	
126th Street	NB	T	0.20	12.6	B	T	0.31	36.3	D	T	0.31	36.3	D	
	R		0.31	14.1	B	R	0.49	41.8	D	R	0.49	41.8	D	
Overall Intersection	-	-	29.5	C	-	-	35.3	D	-	-	35.3	D		
126th Street and Shea Road/34th Avenue														
Shea Road	EB	LT	0.24	40.1	D	LT	0.24	40.1	D	LT	0.24	40.1	D	
	R		0.39	42.8	D	R	0.55	47.2	D	R	0.55	47.2	D	
34th Avenue	WB	LTR	0.36	43.3	D	LTR	0.36	43.3	D	LTR	0.36	43.3	D	
126th Street	NB	LTR	0.18	36.1	D	LTR	0.44	33.5	C	LTR	0.44	33.5	C	
Eastbound Northern Boulevard Off-Ramp	SB	LTR	0.18	20.2	C	LTR	0.22	20.8	C	LTR	0.22	20.8	C	
Whitestone Expressway Off-Ramp	SEB	LTR	0.55	49.2	D	LTR	0.63	52.1	D	LTR	0.63	52.1	D	
Overall Intersection	-	-	38.4	D	-	-	38.3	D	-	-	38.3	D		
Roosevelt Avenue and 126th Street														
Roosevelt Avenue	EB	LTR	0.67	21.8	C	LTR	0.74	25.2	C	LTR	0.74	25.2	C	
	WB	LTR	0.59	12.3	B	LTR	0.65	12.9	B	LTR	0.65	12.9	B	
126th Street	NB	LTR	0.26	34.5	C	LTR	0.27	34.9	C	LTR	0.27	34.9	C	
	SB	L	0.47	44.7	D	L	0.52	46.5	D	L	0.52	46.5	D	
	SB	TR	0.53	45.7	D	TR	0.57	46.9	D	TR	0.57	46.9	D	
Overall Intersection	-	-	22.1	C	-	-	23.9	C	-	-	23.9	C		
Roosevelt Avenue Westbound and College Point Boulevard														
Roosevelt Avenue Westbound	WB	LTR	0.44	34.1	C	LTR	0.45	34.3	C	LTR	0.47	36.2	D	- Modify signal timing. Shift 2 sec of green time from EB/WB phase to NB/SB phase and NBLT/SB phase. [EB/WB green time shifts from 38 sec to 36 sec. NB/SB green time shifts from 43 sec to 44 sec. NBL/SB green time shifts from 13 sec to 14 sec.]
College Point Boulevard	NB	L	1.10	123.5	F	L	1.15	141.1	F	L	1.1	125.1	F	
	TR		0.34	7.5	A	TR	0.35	7.4	A	TR	0.34	7.1	A	
	SB	TR	1.15	118.2	F	TR	1.17	127.4	F	TR	1.15	115.5	F	
Overall Intersection	-	-	76.4	E	-	-	83.2	F	-	-	76.0	E		
Roosevelt Avenue Eastbound and College Point Boulevard														
Roosevelt Avenue Eastbound	EB	LTR	0.59	15.4	B	LTR	0.61	16.9	B	LTR	0.64	19.3	B	
College Point Boulevard	NB	TR	0.50	20.3	C	TR	0.5	20.4	C	TR	0.49	19.1	B	
	SB	T	0.87	7.3	A	T	0.87	7.4	A	T	0.85	6.9	A	
Overall Intersection	-	-	14.3	B	-	-	14.8	B	-	-	14.7	B		
Northern Boulevard and Prince Street														
Northern Boulevard	EB	L	1.72	393.2	F	L	1.72	393.2	F	L	1.72	393.2	F	- Unmitigatable - Delays changed due to mitigation measure at adjacent intersections
	T		0.68	20.5	C	T	0.69	20.7	C	T	0.69	20.7	C	
Northern Boulevard Eastbound S.R.	EB	TR	0.56	21.3	C	TR	0.56	21.3	C	TR	0.56	21.3	C	
Northern Boulevard	WB	L	0.85	71.1	E	L	0.85	71.0	E	L	0.85	70.6	E	
	T		0.96	15.4	B	T	0.97	16.1	B	T	0.97	16.8	B	
Northern Boulevard Westbound S.R.	WB	TR	1.16	89.4	F	TR	1.19	100.7	F	TR	1.19	101.4	F	
Prince Street	NB	LTR	4.00	1419.3	F	LTR	4.00	1419.3	F	LTR	4	1419.3	F	
	SB	LTR	1.04	102.4	F	LTR	1.04	102.4	F	LTR	1.04	102.4	F	
Overall Intersection	-	-	150.8	F	-	-	151.2	F	-	-	151.5	F		

(1) Control delay is measured in seconds per vehicle.

(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.

(3) Yellow shading denotes significant impact

(4) Northbound left movement passenger car equivalents (PCEs) at Marina Road and Boat Basin Place do not trigger CEQR Technical Manual thresholds at unsignalized intersections. Therefore, this movement is not considered to be a significant impact.

TABLE B.4
Willets Point Development Plan - Technical Memorandum 005
2030 NO ACTION vs WITH ACTION CONDITION - WEEKDAY AM PEAK HOUR

No Action Condition					With Action Condition				Mitigation				Mitigation Measures	
INTERSECTION & APPROACH	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS		
SIGNALIZED INTERSECTIONS														
Westbound Northern Boulevard and Main Street														
Northern Boulevard	WB	L	0.12	11.8	B	L	0.12	11.8	B	L	0.12	11.3	B	- Modify signal timing. Shift 1 sec of green time from NB/SB phase to WBLT/SB phase. [NB/SB green time shifts from 33 sec to 32 sec. WBLT/SB green time shifts from 10 sec to 11 sec.]
		T	1.11	79.9	E	T	1.12	85.4	F	T	1.1	78.5	E	
Main Street	NB	L	0.27	3.4	A	L	0.27	3.4	A	L	0.28	3.5	A	
Overall Intersection		-	-	73.4	E	-	-	78.5	E	-	-	72.2	E	
Eastbound Northern Boulevard and Main Street														
Northern Boulevard	EB	T	0.98	27.9	C	T	0.99	30.0	C	T	0.99	30	C	
		R	0.32	11.9	B	R	0.32	11.9	B	R	0.32	11.9	B	
Main Street	NB	TR	0.48	39.3	D	TR	0.48	39.3	D	TR	0.49	40.4	D	
		-	-	-	-	-	-	-	-	-	-	-	-	
	SB	T	0.14	41.7	D	T	0.14	41.7	D	T	0.14	41.3	D	
Overall Intersection		-	-	28.4	C	-	-	30.1	C	-	-	30.2	C	
Northern Boulevard and Union Street														
Northern Boulevard	EB	L	0.73	51.6	D	L	0.73	51.6	D	L	0.73	51.6	D	- Unmitigatable
		TR	1.22	143.4	F	TR	1.23	149.8	F	TR	1.23	149.8	F	
	WB	L	0.77	52.7	D	L	0.77	52.8	D	L	0.77	52.8	D	
		TR	1.27	162.1	F	TR	1.28	168.8	F	TR	1.28	168.8	F	
Union Street	NB	T	0.54	33.0	C	T	0.54	33.0	C	T	0.54	33	C	
		R	0.59	31.7	C	R	0.59	31.7	C	R	0.59	31.7	C	
	SB	T	1.00	75.6	E	T	1	75.6	E	T	1	75.6	E	
		R	0.32	23.5	C	R	0.33	23.6	C	R	0.33	23.6	C	
Overall Intersection		-	-	122.4	F	-	-	127.2	F	-	-	127.2	F	
UNSIGNALIZED INTERSECTIONS														
Marina Road and Boat Basin Place (4)														
Marina Road	EB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0	A	
		WB	LT	-	6.8	A	LT	-	7.1	A	LT	-	7.1	
Boat Basin Place	NB	L	-	86.7	F	L	-	130.6	F	L	-	130.6	F	
		R	-	8.6	A	R	-	8.6	A	R	-	8.6	A	
Overall Intersection		-	-	6.4	A	-	-	7.7	A	-	-	7.7	A	
126th Street and 35th Avenue														
35th Avenue	WB	LR	-	11.9	B	LR	-	15.5	C	LR	-	15.5	C	
126th Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0	A	
	SB	LT	-	0.0	A	LT	-	0.0	A	LT	-	0	A	
Overall Intersection		-	-	0.4	A	-	-	0.4	A	-	-	0.4	A	
126th Street and 36th Avenue														
36th Avenue	WB	LR	-	10.8	B	LR	-	12.8	B	LR	-	12.8	B	
126th Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0	A	
	SB	LT	-	0.4	A	LT	-	0.3	A	LT	-	0.3	A	
Overall Intersection		-	-	0.4	A	-	-	0.3	A	-	-	0.3	A	
(NEW INTERSECTION)														
126th Street and 38th Avenue/Connector Street														
38th Avenue	WB	LR	-	0.0	A	LR	-	13.4	B	LR	-	13.4	B	
126th Street and 38th Avenue	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0	A	
	SB	LT	-	0.0	A	LT	-	4.5	A	LT	-	4.5	A	
Overall Intersection		-	-	0.0	A	-	-	4.3	A	-	-	4.3	A	
(NEW INTERSECTION)														
Roosevelt Avenue and Eastern Perimeter Street														
Roosevelt Avenue	EB	T	-	-	-	T	-	0.0	A	T	-	0	A	
		WB	T	-	-	-	T	-	0.0	A	T	-	0	
Eastern Perimeter Street	SB	R	-	-	-	R	-	12.3	B	R	-	12.3	B	
Overall Intersection		-	-	-	-	-	-	0.0	A	-	-	0.0	A	
(NEW INTERSECTION)														
Eastern Perimeter Street and Project Site Driveway														
Project Site Driveway	EB	LR	-	-	-	LR	-	10.7	B	LR	-	10.7	B	
Eastern Perimeter Street	SB	TR	-	-	-	TR	-	0.0	A	TR	-	0	A	
Overall Intersection		-	-	-	-	-	-	6.3	A	-	-	6.3	A	

(1) Control delay is measured in seconds per vehicle.

(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.

(3) Yellow shading denotes significant impact

(4) Northbound left movement passenger car equivalents (PCEs) at Marina Road and Boat Basin Place do not trigger CEQR Technical Manual thresholds at unsignalized intersections. Therefore, this movement is not considered to be a significant impact.

(5)

TABLE B.5
Willetts Point Development Plan - Technical Memorandum 005
2030 NO ACTION vs WITH ACTION CONDITION - WEEKDAY MIDDAY PEAK HOUR

No Action Condition						With Action Condition				Mitigation				Mitigation Measures		
INTERSECTION & APPROACH	Mvt.	V/C	Control Delay	LOS		Mvt.	V/C	Control Delay	LOS		Mvt.	V/C	Control Delay		LOS	
SIGNALIZED INTERSECTIONS																
Shea Road and Boat Basin Place																
Shea Road	WB	LTR	0.20	25.3	C		LTR	0.31	26.6	C		LTR	0.31	26.6	C	
Boat Basin Place	NB	LTR	0.05	7.1	A		LTR	0.05	7.1	A		LTR	0.05	7.1	A	
	SB	LTR	0.31	8.9	A		LTR	0.35	9.3	A		LTR	0.35	9.3	A	
Overall Intersection	-	-	12.5	B		-	-	14.3	B		-	-	14.3	B		
126th Street and Westbound Northern Boulevard																
Westbound Northern Boulevard	WB	T	0.68	11.7	B		T	0.71	12.3	B		T	0.71	12.3	B	
126th Street	NB	L	0.22	3.6	A		L	0.29	4.3	A		L	0.29	4.3	A	
Overall Intersection	-	-	10.9	B		-	-	11.3	B		-	-	11.3	B		
126th Street and Eastbound Northern Boulevard																
Eastbound Northern Boulevard	EB	T	0.24	32.9	C		T	0.24	32.9	C		T	0.24	32.9	C	
Grand Central Parkway Off-Ramp	EB	T	0.69	35.5	D		T	0.69	35.5	D		T	0.69	35.5	D	
126th Street	NB	T	0.23	32.9	C		T	0.31	32.7	C		T	0.31	31.8	C	
		R	0.34	35.4	D		R	0.54	40.6	D		R	0.54	39.8	D	
Overall Intersection	-	-	34.7	C		-	-	35.3	D		-	-	35.0	D		
126th Street and Shea Road/34th Avenue																
Shea Road	EB	LT	0.35	42.5	D		LT	0.35	42.4	D		LT	0.32	40.1	D	- Modify signal timing. Shift 4 sec of green time from NB/SB phase to EB/WB phase and SEB phase. [NB/SB green time shifts from 54 sec to 50 sec. EB/WB green time shifts from 27 sec to 29 sec. SEB green time shifts from 24 sec to 26 sec.]
		R	0.54	47.2	D		R	0.72	56.2	E		R	0.67	51.1	D	
34th Avenue	WB	LTR	0.36	43.0	D		LTR	0.36	43.0	D		LTR	0.33	40.7	D	
126th Street	NB	LTR	0.30	17.1	B		LTR	0.53	22.5	C		LTR	0.58	24.9	C	
Eastbound Northern Boulevard Off-Ramp	SB	LTR	0.16	19.9	B		LTR	0.21	20.6	C		LTR	0.23	23.3	C	
Whitestone Expressway Off-Ramp	SEB	LTR	0.93	83.1	F		LTR	1.02	103.5	F		LTR	0.94	81.8	F	
Overall Intersection	-	-	44.0	D		-	-	48.5	D		-	-	43.7	D		
Roosevelt Avenue and 126th Street																
Roosevelt Avenue	EB	LTR	0.55	16.5	B		LTR	0.62	18.6	B		LTR	0.64	21.9	C	- Modify signal timing. Shift 2 sec of green time from EB/WB phase to NB/SB phase. [EB/WB green time shifts from 80 sec to 78 sec. NB/SB green time shifts from 30 sec to 32 sec.]
	WB	LTR	0.39	9.6	A		LTR	0.44	10.2	B		LTR	0.45	11.2	B	
126th Street	NB	LTR	2.39	691.8	F		LTR	2.55	765.6	F		LTR	2.2	605.9	F	
	SB	L	0.77	46.2	D		L	0.85	54.2	D		L	0.81	49.6	D	
	SB	TR	0.85	50.9	D		TR	0.89	55.2	E		TR	0.83	47.9	D	
Overall Intersection	-	-	117.7	F		-	-	125.6	F		-	-	103.9	F		
Roosevelt Avenue Westbound and College Point Boulevard																
Roosevelt Avenue Westbound	WB	LTR	0.50	26.5	C		LTR	0.51	26.7	C		LTR	0.51	26.7	C	- Unmitigatable
College Point Boulevard	NB	L	1.07	91.5	F		L	1.13	113.5	F		L	1.13	113.5	F	
	TR		0.50	6.4	A		TR	0.50	6.3	A		TR	0.5	6.3	A	
	SB	TR	1.37	205.3	F		TR	1.41	221.7	F		TR	1.41	221.7	F	
Overall Intersection	-	-	97.2	F		-	-	106.7	F		-	-	106.7	F		
Roosevelt Avenue Eastbound and College Point Boulevard																
Roosevelt Avenue Eastbound	EB	LTR	0.68	13.3	B		LTR	0.70	13.7	B		LTR	0.7	13.7	B	
College Point Boulevard	NB	TR	0.75	24.8	C		TR	0.76	25.2	C		TR	0.76	25.2	C	
	SB	T	1.11	60.9	E		T	1.11	60.9	E		T	1.11	60.9	E	
Overall Intersection	-	-	34.2	C		-	-	34.2	C		-	-	34.2	C		
Northern Boulevard and Prince Street																
Northern Boulevard	EB	L	1.72	387.6	F		L	1.72	387.6	F		L	1.72	387.6	F	- Unmitigatable
		T	0.63	25.2	C		T	0.64	25.4	C		T	0.64	25.4	C	
Northern Boulevard Eastbound S.R.	EB	TR	0.82	42.2	D		TR	0.82	42.2	D		TR	0.82	42.2	D	
Northern Boulevard	WB	L	0.84	75.7	E		L	0.84	74.5	E		L	0.84	75.2	E	
		T	0.93	24.2	C		T	0.94	24.8	C		T	0.94	25.7	C	
Northern Boulevard Westbound S.R.	WB	TR	1.24	136.7	F		TR	1.28	152.2	F		TR	1.28	153.2	F	
Prince Street	NB	LTR	2.50	735.2	F		LTR	2.50	735.2	F		LTR	2.5	735.2	F	
	SB	LTR	0.91	68.2	E		LTR	0.91	68.2	E		LTR	0.91	68.2	E	
Overall Intersection	-	-	134.9	F		-	-	135.8	F		-	-	136.2	F		

(1) Control delay is measured in seconds per vehicle.
(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.
(3) Yellow shading denotes significant impact.
(4) Northbound left movement passenger car equivalents (PCEs) at Marina Road and Boat Basin Place do not trigger CEQR Technical Manual thresholds at unsignalized intersections. Therefore, this movement is not considered to be a significant impact.

TABLE B.5
Willetts Point Development Plan - Technical Memorandum 005
2030 NO ACTION vs WITH ACTION CONDITION - WEEKDAY MIDDAY PEAK HOUR

INTERSECTION & APPROACH		No Action Condition				With Action Condition				Mitigation				Mitigation Measures
		Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	
SIGNALIZED INTERSECTIONS														
Westbound Northern Boulevard and Main Street														
Northern Boulevard	WB	L	0.11	13.4	B	L	0.11	13.4	B	L	0.11	12.9	B	- Modify signal timing. Shift 1 sec of green time from NB/SB phase to WBLT/SB phase. [NB/SB green time shifts from 37 sec to 36 sec. WBLT/SB green time shifts from 7 sec to 8 sec.]
		T	1.03	56.0	E	T	1.05	61.4	E	T	1.03	55.6	E	
Main Street	NB	L	0.18	1.8	A	L	0.18	1.8	A	L	0.19	1.9	A	
Overall Intersection		-	-	51.8	D	-	-	56.8	E	-	-	51.4	D	
Eastbound Northern Boulevard and Main Street														
Northern Boulevard	EB	T	0.84	14.0	B	T	0.85	14.2	B	T	0.85	14.2	B	
		R	0.36	10.4	B	R	0.36	10.3	B	R	0.36	10.3	B	
Main Street	NB	T	0.29	33.1	C	T	0.29	33.1	C	T	0.3	34	C	
		R	0.65	52.5	D	R	0.65	52.5	D	R	0.67	55.4	E	
	SB	T	0.11	42.1	D	T	0.11	42.1	D	T	0.11	41.8	D	
Overall Intersection		-	-	17.9	B	-	-	18.0	B	-	-	18.2	B	
Northern Boulevard and Union Street														
Northern Boulevard	EB	L	0.91	76.2	E	L	0.91	76.3	E	L	0.91	75.4	E	- Modify signal timing. Shift 1 sec of green time from NBTR/SBTR phase to EB/WB phase. [NBTR/SBTR green time shifts from 37 sec to 36 sec. EB/WB green time shifts from 43 sec to 44 sec.]
		T	1.03	77.6	E	T	1.05	84.7	F	T	1.03	76.6	E	
	DefR	1.43	247.4	F	DefR	1.43	247.4	F	DefR	1.38	226.7	F		
	WB	L	0.54	28.9	C	L	0.55	29.7	C	L	0.54	28.5	C	
		TR	1.03	70.8	E	TR	1.05	77.7	E	TR	1.03	69.6	E	
Union Street	NB	T	0.50	30.5	C	T	0.50	30.5	C	T	0.51	31.5	C	
		R	0.70	38.1	D	R	0.70	38.1	D	R	0.71	39.6	D	
	SB	T	0.60	33.6	C	T	0.60	33.6	C	T	0.61	34.8	C	
		R	0.25	22.9	C	R	0.26	23.0	C	R	0.26	23.7	C	
Overall Intersection		-	-	82.2	F	-	-	86.0	F	-	-	79.3	E	
UNSIGNALIZED INTERSECTIONS														
Marina Road and Boat Basin Place (4)														
Marina Road	EB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0	A	-
		LT	-	7.7	A	LT	-	7.9	A	LT	-	7.9	A	
Boat Basin Place	NB	L	-	28.5	D	L	-	39.9	E	L	-	39.9	D	
		R	-	8.7	A	R	-	8.7	A	R	-	8.7	A	
Overall Intersection		-	-	8.1	A	-	-	9.4	A	-	-	11.2	B	
126th Street and 35th Avenue														
35th Avenue	WB	LR	-	14.7	B	LR	-	20.3	C	LR	-	20.3	C	
126th Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
	SB	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0	A	
Overall Intersection		-	-	1.5	A	-	-	1.5	A	-	-	1.5	A	
126th Street and 36th Avenue														
36th Avenue	WB	LR	-	11.2	B	LR	-	13.0	B	LR	-	13.0	B	
126th Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
	SB	LT	-	2.5	A	LT	-	2.4	A	LT	-	2.4	A	
Overall Intersection		-	-	1.6	A	-	-	1.4	A	-	-	1.4	A	
(NEW INTERSECTION)														
126th Street and 38th Avenue/Connector Street														
38th Avenue	WB	LR	-	0.0	A	LR	-	15.0	B	LR	-	15.0	B	
126th Street and 38th Avenue	NB	TR	-	0.0	A	TR	-	0.0	A	R	-	0.0	A	
	SB	LT	-	0.0	A	LT	-	4.3	A	LT	-	4.3	A	
Overall Intersection		-	-	0.0	A	-	-	3.9	A	-	-	3.9	A	
(NEW INTERSECTION)														
Roosevelt Avenue and Eastern Perimeter Street														
Roosevelt Avenue	EB	T	-	-	-	T	-	0.0	A	T	-	0.0	A	
		WB	T	-	-	T	-	0.0	A	T	-	0.0	A	
Eastern Perimeter Street	SB	R	-	-	-	R	-	10.7	B	R	-	10.7	B	
Overall Intersection		-	-	-	-	-	-	0.0	A	-	-	0.0	A	
(NEW INTERSECTION)														
Eastern Perimeter Street and Project Site Driveway														
Project Site Driveway	EB	LR	-	-	-	LR	-	10.5	B	LR	-	10.5	B	
Eastern Perimeter Street	SB	TR	-	-	-	TR	-	0.0	A	TR	-	0.0	A	
Overall Intersection		-	-	-	-	-	-	5.5	A	-	-	5.5	A	

(1) Control delay is measured in seconds per vehicle.

(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.

(3) Yellow shading denotes significant impact.

(4) Northbound left movement passenger car equivalents (PCEs) at Marina Road and Boat Basin Place do not trigger CEQR Technical Manual thresholds at unsignalized intersections. Therefore, this movement is not considered to be a significant impact.

TABLE B.6
Willetts Point Development Plan - Technical Memorandum 005
2030 NO ACTION vs WITH ACTION CONDITION - WEEKDAY PM PEAK HOUR

INTERSECTION & APPROACH	No Action Condition				With Action Condition				Mitigation				Mitigation Measures	
	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS		
SIGNALIZED INTERSECTIONS														
Shea Road and Boat Basin Place														
Shea Road	WB	LTR	0.31	26.5	C	LTR	0.35	27	C	LTR	0.35	27.0	C	
Boat Basin Place	NB	LTR	0.06	7.1	A	LTR	0.06	7.1	A	LTR	0.06	7.1	A	
	SB	LTR	0.31	8.9	A	LTR	0.35	9.3	A	LTR	0.35	9.3	A	
Overall Intersection	-	-	14.3	B	-	-	14.9	B	-	-	14.9	B		
126th Street and Westbound Northern Boulevard														
Westbound Northern Boulevard	WB	T	0.63	10.6	B	T	0.65	11.0	B	T	0.65	11.0	B	
126th Street	NB	L	0.26	6.8	A	L	0.29	6.6	A	L	0.29	6.8	A	
Overall Intersection	-	-	10.2	B	-	-	10.5	B	-	-	10.5	B		
126th Street and Eastbound Northern Boulevard														
Eastbound Northern Boulevard	EB	T	0.63	47.6	D	T	0.63	47.6	D	T	0.63	47.6	D	- Modify signal timing. Shift 4 sec of green time from NB/SB phase to EB/WB phase and SEB phase. [NB/SB green time shifts from 54 sec to 50 sec. EB/WB green time shifts from 27 sec to 29 sec. SEB green time shifts from 24 sec to 26 sec.]
Grand Central Parkway Off-Ramp	EB	T	0.70	29.2	C	T	0.70	29.2	C	T	0.7	29.2	C	
126th Street	NB	T	0.28	32.0	C	T	0.31	36.6	D	T	0.31	37.6	D	
		R	0.35	33.7	C	R	0.42	39.8	D	R	0.42	40.8	D	
Overall Intersection	-	-	34.7	C	-	-	35.8	D	-	-	36.0	D		
126th Street and Shea Road/34th Avenue														
Shea Road	EB	LT	0.30	41.3	D	LT	0.30	41.3	D	LT	0.28	39.3	D	- Modify signal timing. Shift 4 sec of green time from NB/SB phase to EB/WB phase and SEB phase. [NB/SB green time shifts from 54 sec to 50 sec. EB/WB green time shifts from 27 sec to 29 sec. SEB green time shifts from 24 sec to 26 sec.]
		R	0.43	44.0	D	R	0.60	49.6	D	R	0.56	46.1	D	
34th Avenue	WB	LTR	0.24	39.9	D	LTR	0.24	39.9	D	LTR	0.23	38.0	D	
126th Street	NB	LTR	0.36	31.3	C	LTR	0.44	31.7	C	LTR	0.48	36.7	D	
Eastbound Northern Boulevard Off-Ramp	SB	LTR	0.30	22.0	C	LTR	0.33	22.6	C	LTR	0.36	25.5	C	
Whitestone Expressway Off-Ramp	SEB	LTR	0.96	86.1	F	LTR	1.03	102.8	F	LTR	0.95	80.7	F	
Overall Intersection	-	-	47.5	D	-	-	52.2	D	-	-	47.8	D		
Roosevelt Avenue and 126th Street														
Roosevelt Avenue	EB	LTR	0.77	22.7	C	LTR	0.79	23.8	C	LTR	0.8	24.6	C	- Modify signal timing. Shift 1 sec of green time from EB/WB phase to NB/SB phase. [EB/WB green time shifts from 75 sec to 74 sec. NB/SB green time shifts from 35 sec to 36 sec.]
	WB	LTR	0.75	17.5	B	LTR	0.79	19.2	B	LTR	0.81	19.8	B	
126th Street	NB	LTR	0.62	48.1	D	LTR	0.62	48.5	D	LTR	0.59	45.6	D	
	SB	L	0.92	87.4	F	L	0.95	92.4	F	L	0.92	81.9	F	
	SB	TR	0.63	59.5	E	TR	0.63	59.2	E	TR	0.61	53.8	D	
Overall Intersection	-	-	33.7	C	-	-	35.3	D	-	-	33.9	C		
Roosevelt Avenue Westbound and College Point Boulevard														
Roosevelt Avenue Westbound	WB	LTR	0.45	35.1	D	LTR	0.46	35.1	D	LTR	0.47	36.1	D	- Modify signal timing. Shift 1 sec of green time from EB/WB to NB/SB phase. [EB/WB green time shifts from 37 sec to 36 sec. NB/SB green time shifts from 37 sec to 38 sec.]
College Point Boulevard	NB	L	0.87	57.1	E	L	0.88	57.9	E	L	0.88	58.5	E	
	TR		0.53	10.8	B	TR	0.53	10.7	B	TR	0.52	10.5	B	
	SB	TR	1.34	200.1	F	TR	1.35	206.0	F	TR	1.31	190.0	F	
Overall Intersection	-	-	93.9	F	-	-	96.5	F	-	-	90.3	F		
Roosevelt Avenue Eastbound and College Point Boulevard														
Roosevelt Avenue Eastbound	EB	LTR	0.92	30.6	C	LTR	0.93	31.5	C	LTR	0.95	34.5	C	
College Point Boulevard	NB	TR	0.70	29.1	C	TR	0.71	29.2	C	TR	0.69	28.1	C	
	SB	T	1.17	88.9	F	T	1.17	88.8	F	T	1.14	74.9	E	
Overall Intersection	-	-	49.8	D	-	-	50.0	D	-	-	45.9	D		
Northern Boulevard and Prince Street														
Northern Boulevard	EB	L	1.59	327.5	F	L	1.59	327.5	F	L	1.59	327.5	F	- Unmitigatable
		T	0.85	32.0	C	T	0.85	32.2	C	T	0.85	32.2	C	
Northern Boulevard Eastbound S.R.	EB	TR	0.86	45.7	D	TR	0.86	45.7	D	TR	0.86	45.7	D	
Northern Boulevard	WB	L	0.72	69.4	E	L	0.72	69.1	E	L	0.72	69.1	E	
		T	0.73	22.0	C	T	0.73	22.2	C	T	0.73	22.2	C	
Northern Boulevard Westbound S.R.	WB	TR	1.19	124.1	F	TR	1.20	129.2	F	TR	1.2	129.2	F	
Prince Street	NB	LTR	2.22	606.2	F	LTR	2.22	606.2	F	LTR	2.22	606.2	F	
	SB	LTR	1.03	94.4	F	LTR	1.03	94.4	F	LTR	1.03	94.4	F	
Overall Intersection	-	-	126.8	F	-	-	127.2	F	-	-	127.2	F		

(1) Control delay is measured in seconds per vehicle.
(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.
(3) Yellow shading denotes significant impact.
(4) Northbound left movement passenger car equivalents (PCEs) at Marina Road and Boat Basin Place do not trigger CEQR Technical Manual thresholds at unsignalized intersections. Therefore, this movement is not considered to be a significant impact.

TABLE B.6
Willetts Point Development Plan - Technical Memorandum 005
2030 NO ACTION vs WITH ACTION CONDITION - WEEKDAY PM PEAK HOUR

No Action Condition					With Action Condition				Mitigation Measures				
INTERSECTION & APPROACH	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	
SIGNALIZED INTERSECTIONS													
Westbound Northern Boulevard and Main Street													
Northern Boulevard	WB	L	0.13	12.7	B	L	0.13	12.7	B	L	0.13	12.7	B
		T	0.77	22.6	C	T	0.77	22.7	C	T	0.77	22.7	C
Main Street	NB	L	0.18	2.0	A	L	0.18	2.0	A	L	0.18	2.0	A
Overall Intersection	-	-	21.0	C	-	-	21.1	C	-	-	21.1	C	
Eastbound Northern Boulevard and Main Street													
Northern Boulevard	EB	T	1.08	48.9	D	T	1.08	49.9	D	T	1.08	49.9	D
		R	0.33	4.6	A	R	0.33	4.7	A	R	0.33	4.7	A
Main Street	NB	T	0.26	34.1	C	T	0.26	34.1	C	T	0.26	34.1	C
		R	0.71	56.9	E	R	0.71	56.9	E	R	0.71	56.9	E
	SB	T	0.14	40.8	D	T	0.14	40.8	D	T	0.14	40.8	D
Overall Intersection	-	-	45.8	D	-	-	46.6	D	-	-	46.6	D	
Northern Boulevard and Union Street													
Northern Boulevard	EB	L	0.69	41.3	D	L	0.69	42.1	D	L	0.69	42.1	D
		TR	1.20	133.1	F	TR	1.20	135.0	F	TR	1.2	135.0	F
	WB	L	0.60	33.4	C	L	0.60	33.5	C	L	0.6	33.5	C
		TR	0.94	49.4	D	TR	0.94	50.3	D	TR	0.94	50.3	D
Union Street	NB	T	0.66	37.3	D	T	0.66	37.3	D	T	0.66	37.3	D
		R	0.70	38.1	D	R	0.70	38.1	D	R	0.7	38.1	D
	SB	T	0.74	41.1	D	T	0.74	41.1	D	T	0.74	41.1	D
		R	0.24	22.0	C	R	0.24	22.0	C	R	0.24	22	C
Overall Intersection	-	-	75.7	E	-	-	76.7	E	-	-	76.7	E	
UNSIGNALIZED INTERSECTIONS													
Marina Road and Boat Basin Place (4)													
Marina Road	EB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A
		WB	LT	-	7.9	A	LT	-	8.2	A	LT	-	8.2
Boat Basin Place	NB	L	-	48.3	E	L	-	73.0	F	L	-	73.0	E
		R	-	8.6	A	R	-	8.6	A	R	-	8.6	A
Overall Intersection	-	-	10.4	B	-	-	12.6	B	-	-	14.4	B	
126th Street and 35th Avenue													
35th Avenue	WB	LR	-	15.7	C	LR	-	18.0	C	LR	-	18.0	C
126th Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A
		SB	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0
Overall Intersection	-	-	0.7	A	-	-	0.7	A	-	-	0.7	A	
126th Street and 36th Avenue													
36th Avenue	WB	LR	-	13.6	B	LR	-	15.1	C	LR	-	15.1	C
126th Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A
		SB	LT	-	2.7	A	LT	-	2.5	A	LT	-	2.5
Overall Intersection	-	-	1.9	A	-	-	1.8	A	-	-	1.8	A	
(NEW INTERSECTION)													
126th Street and 38th Avenue/Connector Street													
38th Avenue	WB	LR	-	0.0	A	LR	-	10.8	B	LR	-	10.8	B
126th Street and 38th Avenue	NB	TR	-	0.0	A	TR	-	0.0	A	R	-	0.0	A
		SB	LT	-	0.0	A	LT	-	3.7	A	LT	-	3.7
Overall Intersection	-	-	0.0	A	-	-	1.7	A	-	-	1.7	A	
(NEW INTERSECTION)													
Roosevelt Avenue and Eastern Perimeter Street													
Roosevelt Avenue	EB	T	-	-	-	T	-	0.0	A	T	-	0.0	A
	WB	T	-	-	-	T	-	0.0	A	T	-	0.0	A
Eastern Perimeter Street	SB	R	-	-	-	R	-	11.5	B	R	-	11.5	B
Overall Intersection	-	-	-	-	-	-	-	0.0	A	-	-	0.0	A
(NEW INTERSECTION)													
Eastern Perimeter Street and Project Site Driveway													
Project Site Driveway	EB	LR	-	-	-	LR	-	9.2	A	LR	-	9.2	A
Eastern Perimeter Street	SB	TR	-	-	-	TR	-	0.0	A	TR	-	0.0	A
Overall Intersection	-	-	-	-	-	-	-	3.6	A	-	-	3.6	A

(1) Control delay is measured in seconds per vehicle.

(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.

(3) Yellow shading denotes significant impact.

(4) Northbound left movement passenger car equivalents (PCEs) at Marina Road and Boat Basin Place do not trigger CEQR Technical Manual thresholds at unsignalized intersections. Therefore, this movement is not considered to be a significant impact.

TABLE B.7
Willets Point Development Plan - Technical Memorandum 005
2030 NO ACTION vs WITH ACTION CONDITION - SATURDAY PEAK HOUR

Intersection & Approach		No Action Condition				With Action Condition				Mitigation				Mitigation Measures
		Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	
Signalized Intersections														
Shea Road and Boat Basin Place														
Shea Road	WB	LTR	0.23	25.6	C	LTR	0.29	26.3	C	LTR	0.29	26.3	C	
Boat Basin Place	NB	LTR	0.05	7.0	A	LTR	0.05	7.1	A	LTR	0.05	7.1	A	
	SB	LTR	0.22	8.2	A	LTR	0.27	8.6	A	LTR	0.27	8.6	A	
Overall Intersection	-	-	13.6	B	-	-	14.5	B	-	-	14.5	B		
126th Street and Westbound Northern Boulevard														
Westbound Northern Boulevard	WB	T	0.66	11.1	B	T	0.69	11.7	B	T	0.69	11.7	B	
126th Street	NB	L	0.26	2.3	A	L	0.30	3.6	A	L	0.3	3.6	A	
Overall Intersection	-	-	10.1	B	-	-	10.7	B	-	-	10.7	B		
126th Street and Eastbound Northern Boulevard														
Eastbound Northern Boulevard	EB	T	0.24	32.9	C	T	0.24	32.9	C	T	0.24	32.9	C	
Grand Central Parkway Off-Ramp	EB	T	0.71	36.1	D	T	0.71	36.1	D	T	0.71	36.1	D	
126th Street	NB	T	0.28	34.6	C	T	0.32	34.3	C	T	0.32	33.7	C	
		R	0.27	34.9	C	R	0.32	35.1	D	R	0.32	34.5	C	
Overall Intersection	-	-	35.2	D	-	-	35.2	D	-	-	35.0	C		
126th Street and Shea Road/34th Avenue														
Shea Road	EB	LT	0.25	40.1	D	LT	0.25	40.1	D	LT	0.23	38.1	D	- Modify signal timing. Shift 4 sec of green time from NB/SB phase to EB/WB phase and SEB phase. [NB/SB green time shifts from 54 sec to 50 sec. EB/WB green time shifts from 27 sec to 29 sec. SEB green time shifts from 24 sec to 26 sec.]
		R	0.44	44.0	D	R	0.67	52.6	D	R	0.62	48.5	D	
34th Avenue	WB	LTR	0.48	46.2	D	LTR	0.48	46.2	D	LTR	0.45	43.4	D	
126th Street	NB	LTR	0.27	14.9	B	LTR	0.40	18	B	LTR	0.43	19.5	B	
Eastbound Northern Boulevard Off-Ramp	SB	LTR	0.24	21.0	C	LTR	0.27	21.6	C	LTR	0.3	24.3	C	
Whitestone Expressway Off-Ramp	SEB	LTR	0.96	86.5	F	LTR	1.05	108.5	F	LTR	0.97	84.2	F	
Overall Intersection	-	-	45.4	D	-	-	51.8	D	-	-	45.1	D		
Roosevelt Avenue and 126th Street														
Roosevelt Avenue	EB	LTR	0.54	16.1	B	LTR	0.56	16.8	B	LTR	0.58	20	B	- Modify signal timing. Shift 2 sec of green time from EB/WB phase to NB/SB phase. [EB/WB green time shifts from 80 sec to 78 sec. NB/SB green time shifts from 30 sec to 32 sec.]
	WB	LTR	0.41	9.9	A	LTR	0.43	10.1	B	LTR	0.45	11.2	B	
126th Street	NB	LTR	1.26	193.4	F	LTR	1.27	198.4	F	LTR	1.15	147.6	F	
	SB	L	1.13	122.6	F	L	1.18	138.0	F	L	1.12	115.6	F	
	SB	TR	0.66	39.3	D	TR	0.66	38.0	D	TR	0.62	36.4	D	
Overall Intersection	-	-	52.3	D	-	-	55.1	E	-	-	47.3	D		
Roosevelt Avenue Westbound and College Point Boulevard														
Roosevelt Avenue Westbound	WB	LTR	0.49	26.4	C	LTR	0.49	26.4	C	LTR	0.49	26.4	C	- Unmitigatable
College Point Boulevard	NB	L	0.94	57.6	E	L	0.95	59.8	E	L	0.95	59.8	E	
	TR	0.49	6.7	A	TR	0.49	6.7	A	TR	0.49	6.7	A		
	SB	TR	1.21	136.5	F	TR	1.22	142.8	F	TR	1.22	142.8	F	
Overall Intersection	-	-	64.0	E	-	-	66.8	E	-	-	66.8	E		
Roosevelt Avenue Eastbound and College Point Boulevard														
Roosevelt Avenue Eastbound	EB	LTR	0.75	18.8	B	LTR	0.76	19.0	B	LTR	0.76	19	B	
College Point Boulevard	NB	TR	0.77	25.3	C	TR	0.77	25.4	C	TR	0.77	25.4	C	
	SB	T	0.99	15.5	B	T	0.99	15.4	B	T	0.99	15.4	B	
Overall Intersection	-	-	20.4	C	-	-	20.4	C	-	-	20.4	C		
Northern Boulevard and Prince Street														
Northern Boulevard	EB	L	1.54	312.0	F	L	1.54	312.0	F	L	1.54	312	F	- Unmitigatable
		T	0.75	28.2	C	T	0.75	28.3	C	T	0.75	28.3	C	
Northern Boulevard Eastbound S.R.	EB	TR	0.88	49.2	D	TR	0.88	49.2	D	TR	0.88	49.2	D	
Northern Boulevard	WB	L	0.89	70.7	E	L	0.89	70.7	E	L	0.89	70.7	E	
		T	1.08	59.4	E	T	1.08	60.7	E	T	1.08	60.7	E	
Northern Boulevard Westbound S.R.	WB	TR	1.21	119.0	F	TR	1.22	124.0	F	TR	1.22	124	F	
Prince Street	NB	LTR	2.17	585.1	F	LTR	2.17	585.1	F	LTR	2.17	585.1	F	
	SB	LTR	0.99	86.0	F	LTR	0.98	83.2	F	LTR	0.99	86	F	
Overall Intersection	-	-	116.3	F	-	-	116.9	F	-	-	117.0	F		

(1) Control delay is measured in seconds per vehicle.

(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.

(3) Yellow shading denotes significant impact.

(4) Northbound left movement passenger car equivalents (PCEs) at Marina Road and Boat Basin Place do not trigger CEQR Technical Manual thresholds at unsignalized intersections. Therefore, this movement is not considered to be a significant impact.

TABLE B.7
Willets Point Development Plan - Technical Memorandum 005
2030 NO ACTION vs WITH ACTION CONDITION - SATURDAY PEAK HOUR

No Action Condition					With Action Condition				Mitigation				Mitigation Measures	
INTERSECTION & APPROACH	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS	Mvt.	V/C	Control Delay	LOS		
SIGNALIZED INTERSECTIONS														
Westbound Northern Boulevard and Main Street														
Northern Boulevard	WB	L	0.12	13.6	B	L	0.12	13.6	B	L	0.12	13.6	B	
		T	1.13	90.9	F	T	1.13	92.5	F	T	1.13	92.5	F	
Main Street	NB	L	0.25	2.2	A	L	0.25	2.2	A	L	0.25	2.2	A	
Overall Intersection	-	-	83.6	F	-	-	85.1	F	-	-	85.1	F		
Eastbound Northern Boulevard and Main Street														
Northern Boulevard	EB	T	0.97	21.7	C	T	0.98	22.2	C	T	0.98	22.2	C	
		R	0.47	10.8	B	R	0.47	10.9	B	R	0.47	10.9	B	
Main Street	NB	T	0.35	34.1	C	T	0.35	34.1	C	T	0.35	34.1	C	
		R	0.69	53.9	D	R	0.69	53.9	D	R	0.69	53.9	D	
		SB	T	0.13	42.4	D	T	0.13	42.4	D	T	0.13	42.4	D
Overall Intersection	-	-	23.8	C	-	-	24.2	C	-	-	24.2	C		
Northern Boulevard and Union Street														
Northern Boulevard	EB	L	0.99	93.7	F	L	0.99	93.7	F	L	0.99	93.7	F	
		T	1.08	92.9	F	T	1.09	95.6	F	T	1.09	95.6	F	
		DefR	1.50	279.1	F	DefR	1.50	279.1	F	DefR	1.5	279.1	F	
	WB	L	0.71	41.5	D	L	0.71	42.6	D	L	0.71	42.6	D	
		TR	1.07	85.6	F	TR	1.08	87.4	F	TR	1.08	87.4	F	
		T	0.64	34.7	C	T	0.64	34.7	C	T	0.64	34.7	C	
Union Street	NB	R	0.78	43.9	D	R	0.78	43.9	D	R	0.78	43.9	D	
		T	0.61	33.9	C	T	0.61	33.9	C	T	0.61	33.9	C	
		R	0.28	23.3	C	R	0.28	23.3	C	R	0.28	23.3	C	
Overall Intersection	-	-	96.8	F	-	-	98.0	F	-	-	98.0	F		
UNSIGNALIZED INTERSECTIONS														
Marina Road and Boat Basin Place (4)														
Marina Road	EB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
		WB	LT	-	7.1	A	LT	-	7.3	A	LT	-	7.30	A
Boat Basin Place	NB	L	-	19.2	C	L	-	24.1	C	L	-	24.1	C	
		R	-	8.5	A	R	-	8.5	A	R	-	8.5	A	
Overall Intersection	-	-	6.6	A	-	-	7.1	A	-	-	8.5	A		
126th Street and 35th Avenue														
35th Avenue	WB	LR	-	16.6	C	LR	-	20.9	C	LR	-	20.9	C	
126th Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0.0	A	
		SB	LT	-	0.0	A	LT	-	0.0	A	LT	-	0.0	A
Overall Intersection	-	-	1.4	A	-	-	1.4	A	-	-	1.4	A		
126th Street and 36th Avenue														
36th Avenue	WB	LR	-	13.2	B	LR	-	15.2	C	LR	-	15.2	C	
126th Street	NB	TR	-	0.0	A	TR	-	0.0	A	TR	-	0	A	
		SB	LT	-	1.5	A	LT	-	1.4	A	LT	-	1.4	A
Overall Intersection	-	-	1.3	A	-	-	1.2	A	-	-	1.2	A		
(NEW INTERSECTION)														
126th Street and 38th Avenue/Connector Street														
38th Avenue	WB	LR	-	0.0	A	LR	-	11.1	B	LR	-	11.1	B	
126th Street and 38th Avenue	NB	TR	-	0.0	A	TR	-	0.0	A	R	-	0	A	
		SB	LT	-	0.0	A	LT	-	4.1	A	LT	-	4.1	A
Overall Intersection	-	-	0.0	A	-	-	2.4	A	-	-	2.4	A		
(NEW INTERSECTION)														
Roosevelt Avenue and Eastern Perimeter Street														
Roosevelt Avenue	EB	T	-	-	-	T	-	0.0	A	T	-	0.0	A	
		WB	T	-	-	-	T	-	0.0	A	T	-	0.0	A
Eastern Perimeter Street	SB	R	-	-	-	R	-	10.9	B	R	-	10.9	B	
Overall Intersection	-	-	-	-	-	-	0.0	A	-	-	0.0	A		
(NEW INTERSECTION)														
Eastern Perimeter Street and Project Site Driveway														
Project Site Driveway	EB	LR	-	-	-	LR	-	9.5	A	LR	-	9.5	A	
Eastern Perimeter Street	SB	TR	-	-	-	TR	-	0.0	A	TR	-	0.0	A	
Overall Intersection	-	-	-	-	-	-	4.1	A	-	-	4.1	A		

(1) Control delay is measured in seconds per vehicle.

(2) Overall intersection V/C ratio is the critical lane groups' V/C ratio.

(3) Yellow shading denotes significant impact.

(4) Northbound left movement passenger car equivalents (PCEs) at Marina Road and Boat Basin Place do not trigger CEQR Technical Manual thresholds at unsignalized intersections. Therefore, this movement is not considered to be a significant impact.

Traffic Figures

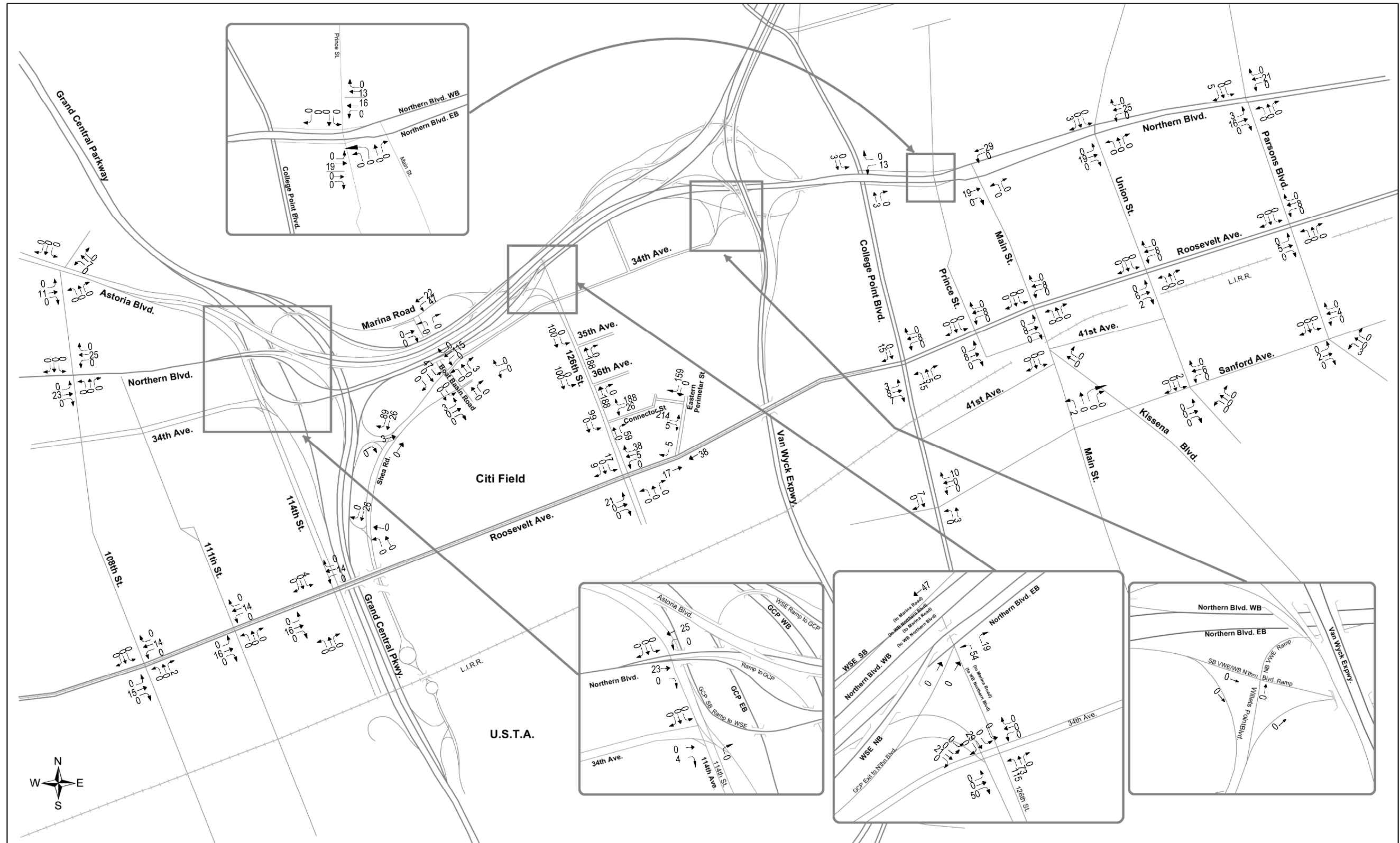


FIGURE B.1
PROJECT-GENERATED TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR
WILLETS POINT DEVELOPMENT PHASE 1
WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

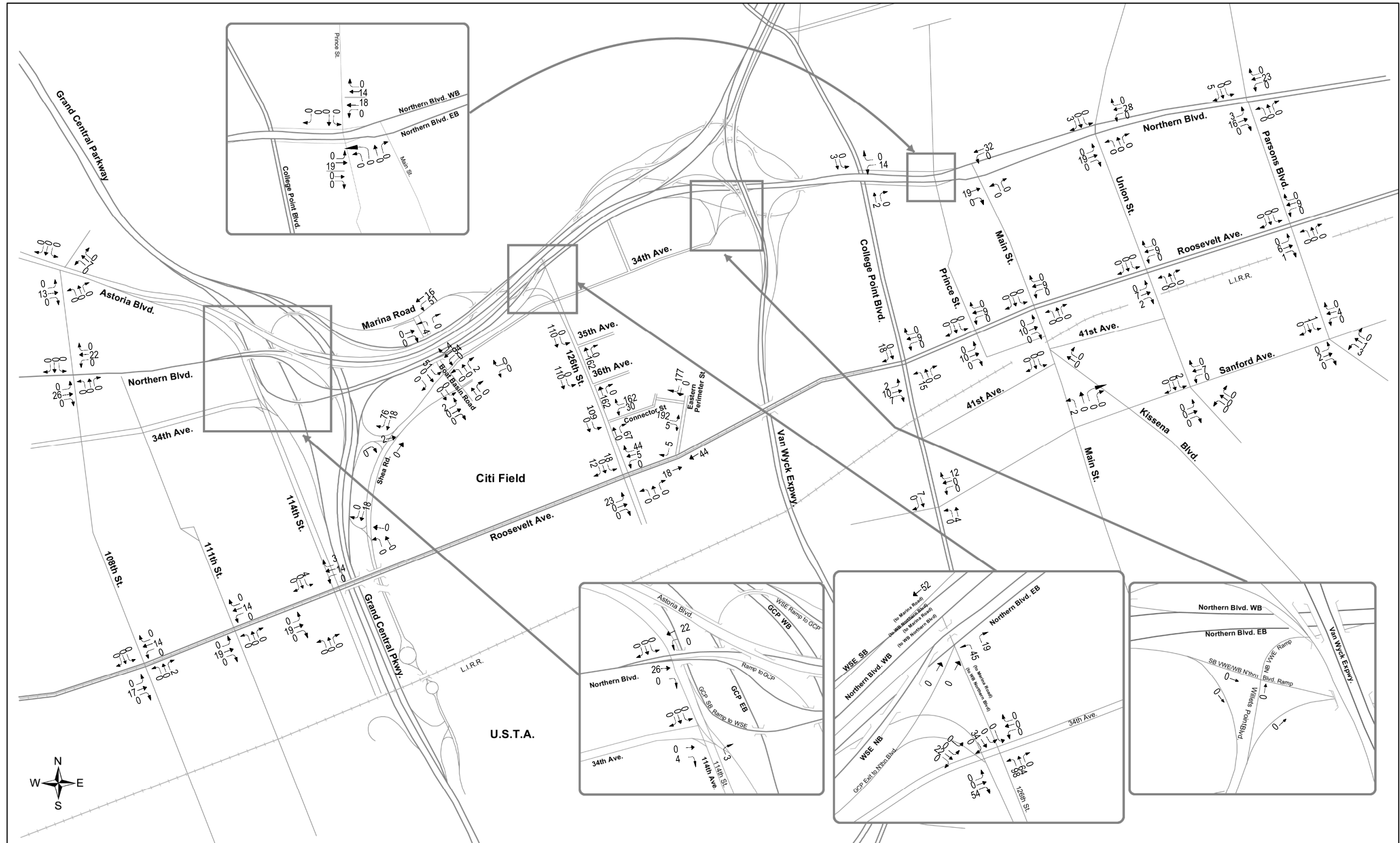


FIGURE B.2
PROJECT-GENERATED TRAFFIC VOLUMES
WEEKDAY MD PEAK HOUR
WILLETS POINT DEVELOPMENT PHASE 1
WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

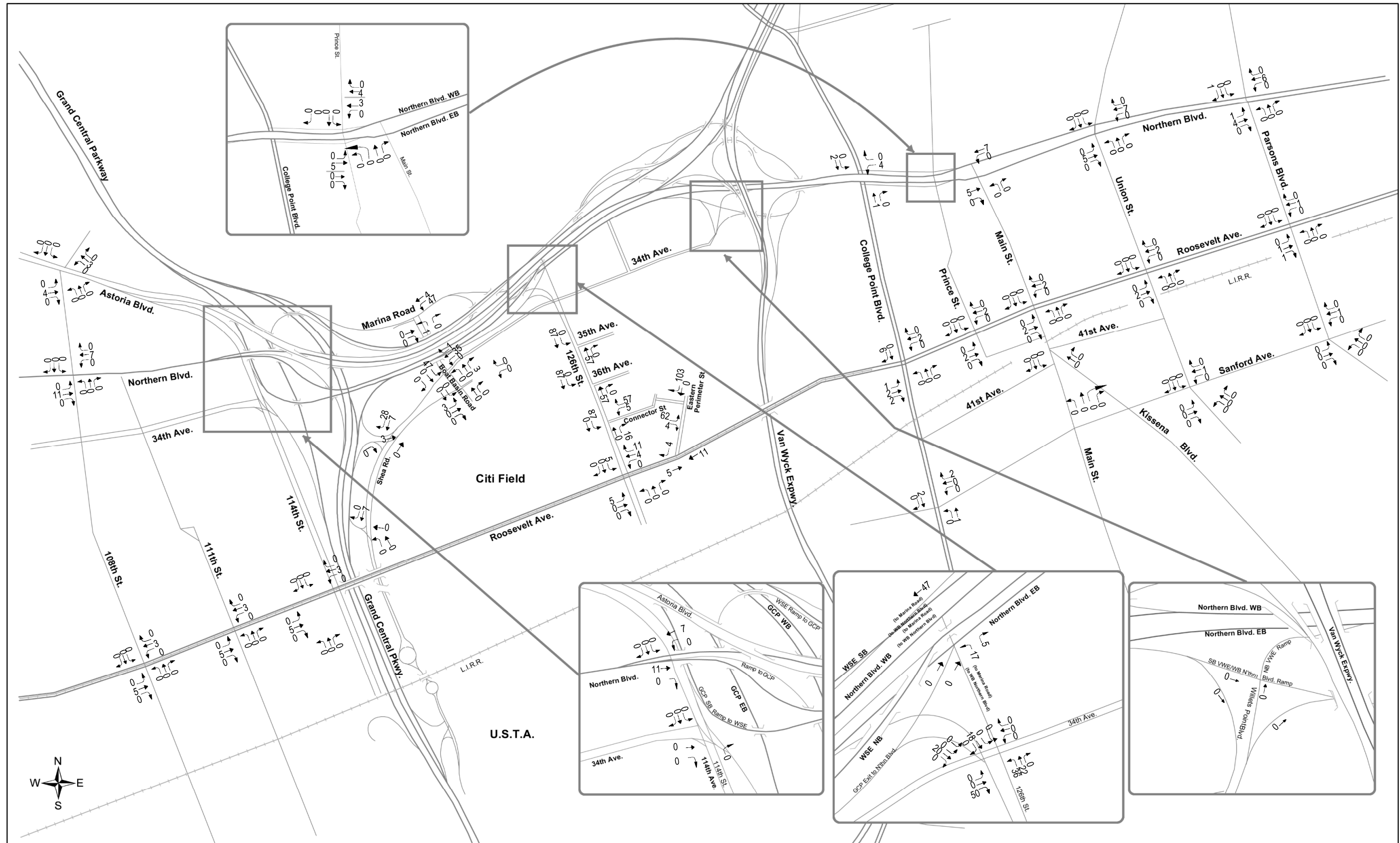


FIGURE B.3
PROJECT-GENERATED TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR
WILLETS POINT DEVELOPMENT PHASE 1
WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

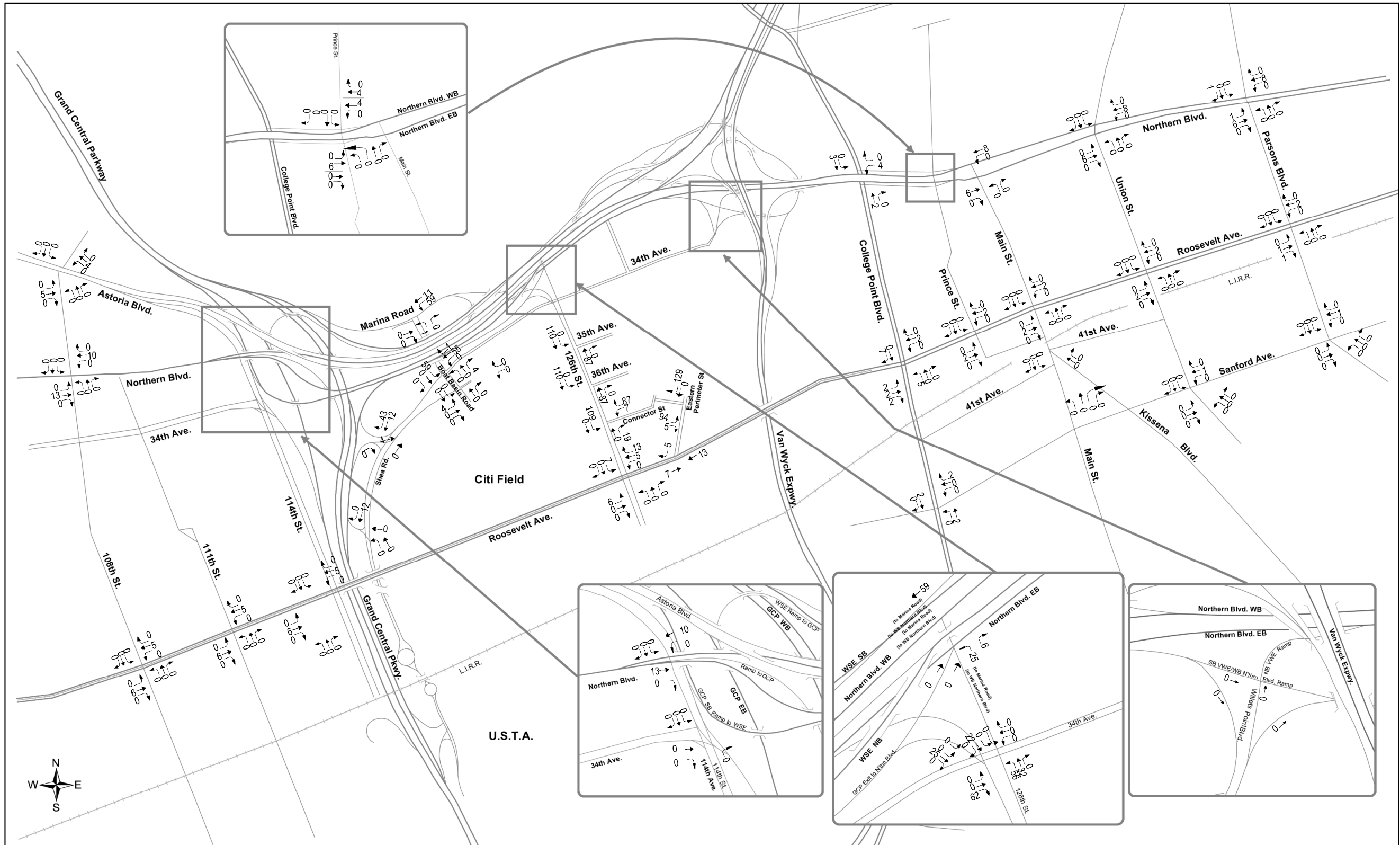


FIGURE B.4
PROJECT-GENERATED TRAFFIC VOLUMES
SATURDAY PEAK HOUR
WILLETS POINT DEVELOPMENT PHASE 1
WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

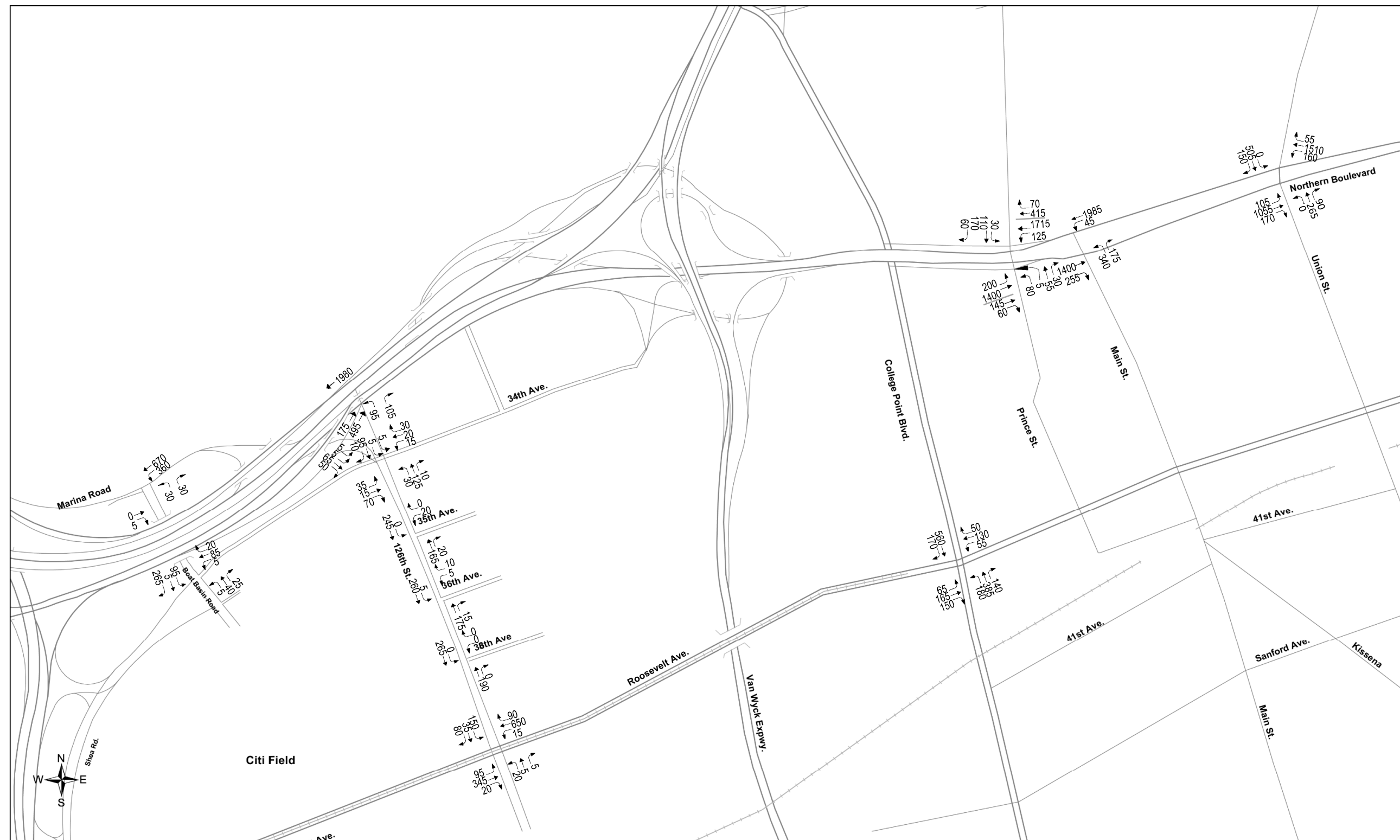


FIGURE B.5
EXISTING CONDITIONS TRAFFIC VOLUMES
WEEKDAY AM PEAK HOUR
WILLETS POINT DEVELOPMENT PHASE 1
WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

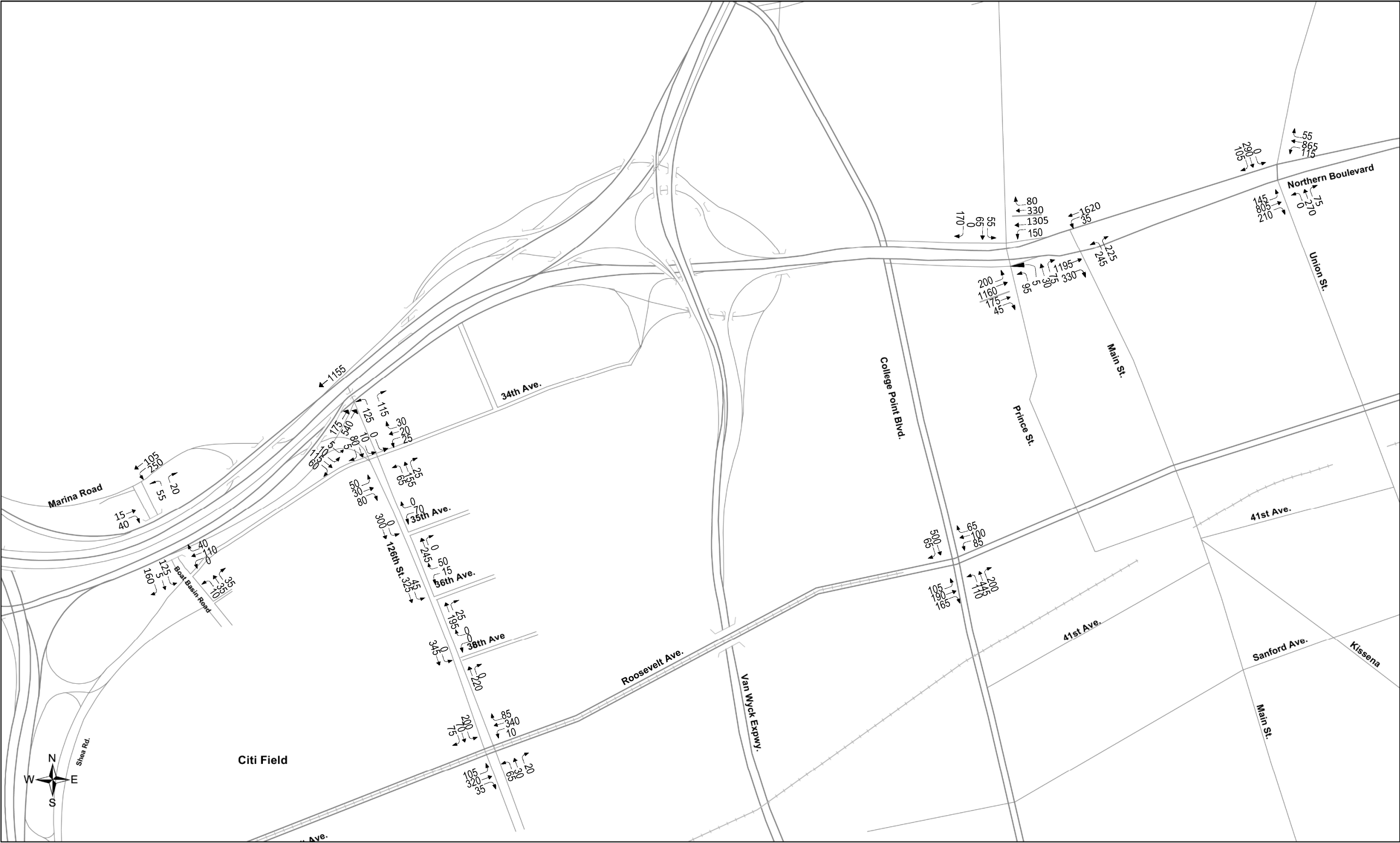


FIGURE B.6
 EXISTING CONDITIONS TRAFFIC VOLUMES
 WEEKDAY MD PEAK HOUR
 WILLETS POINT DEVELOPMENT PHASE 1
 WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

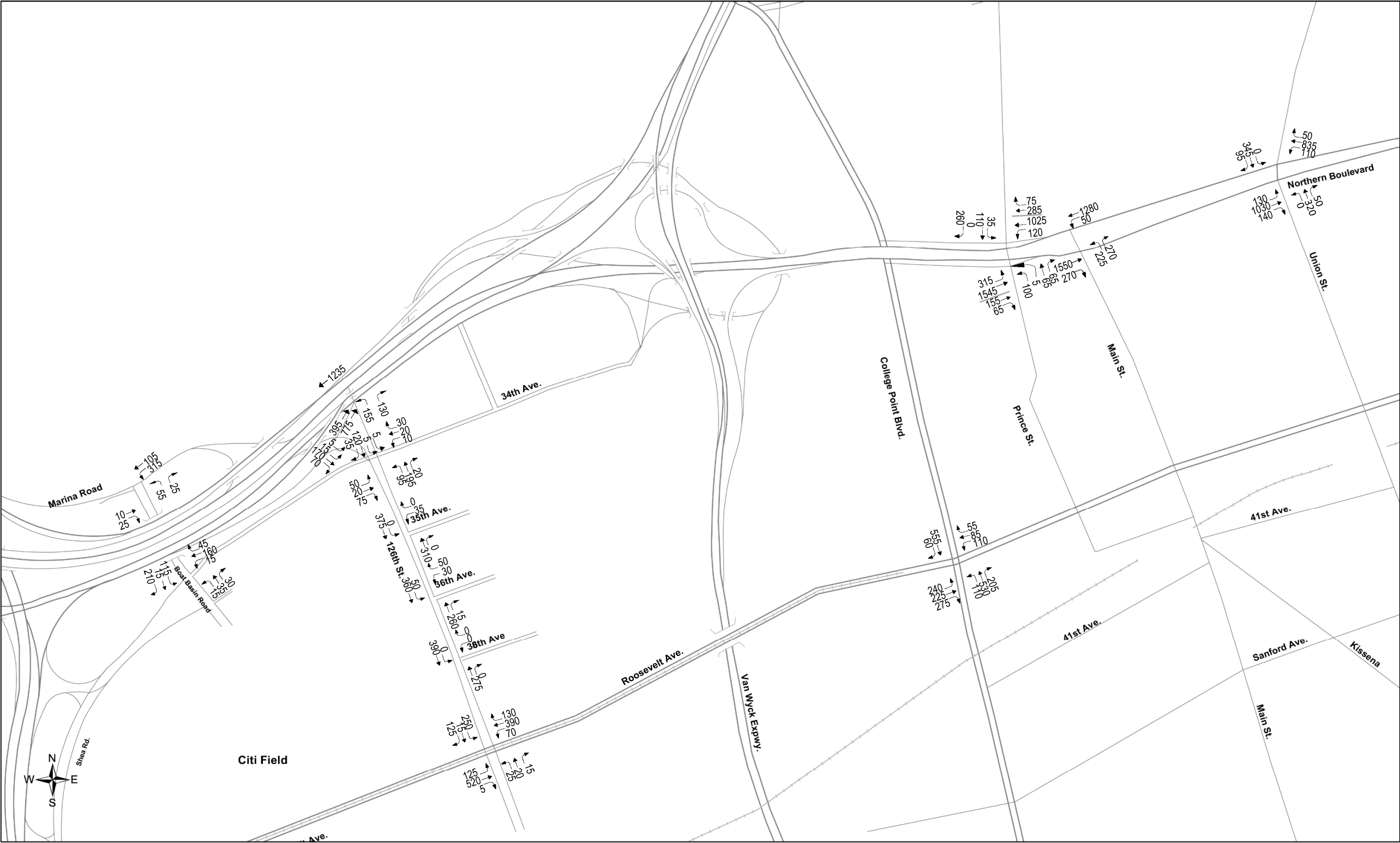


FIGURE B.7
 EXISTING CONDITIONS TRAFFIC VOLUMES
 WEEKDAY PM PEAK HOUR
 WILLETS POINT DEVELOPMENT PHASE 1
 WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

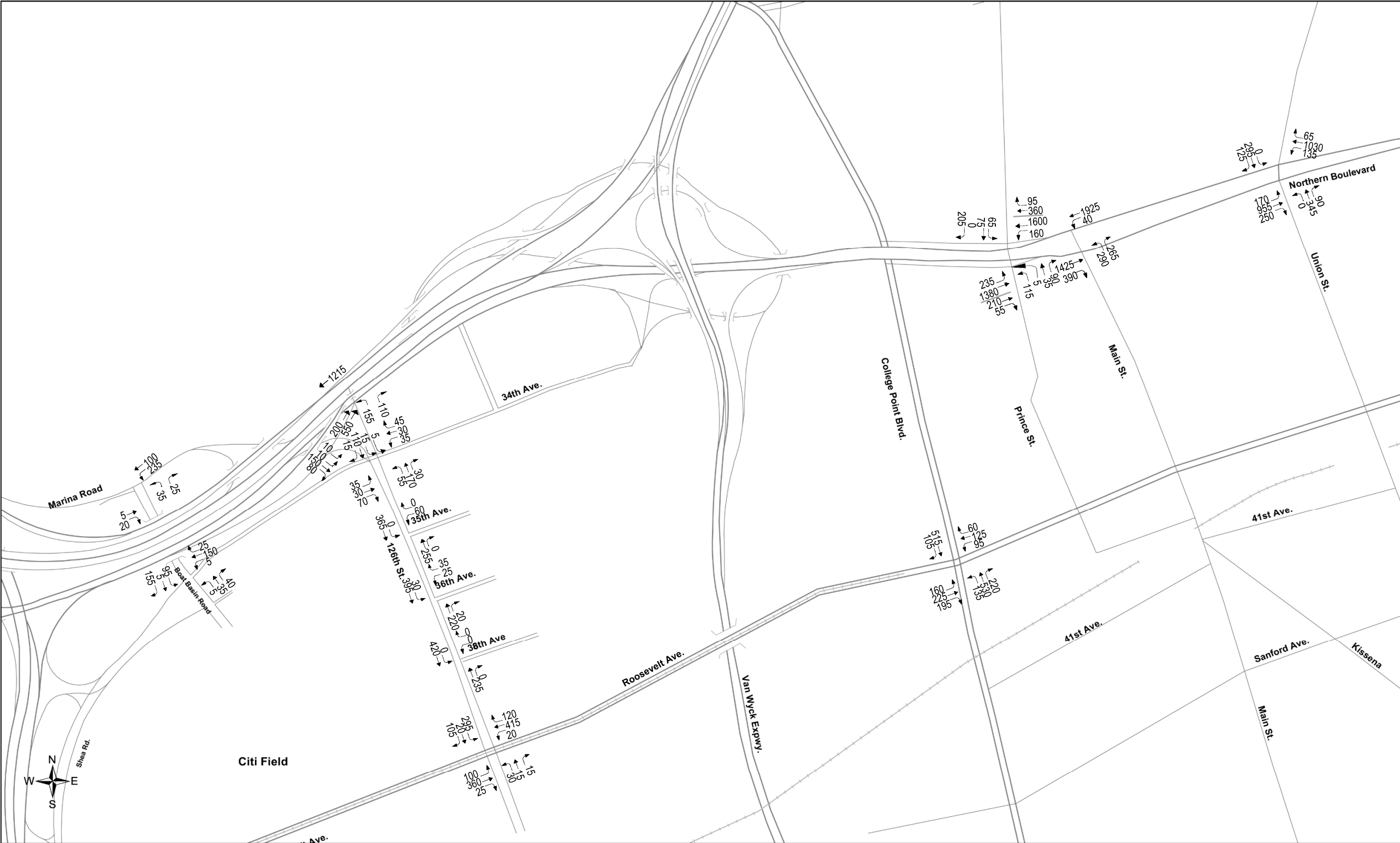


FIGURE B.8
EXISTING CONDITIONS TRAFFIC VOLUMES
SATURDAY PEAK HOUR
WILLETS POINT DEVELOPMENT PHASE 1
WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

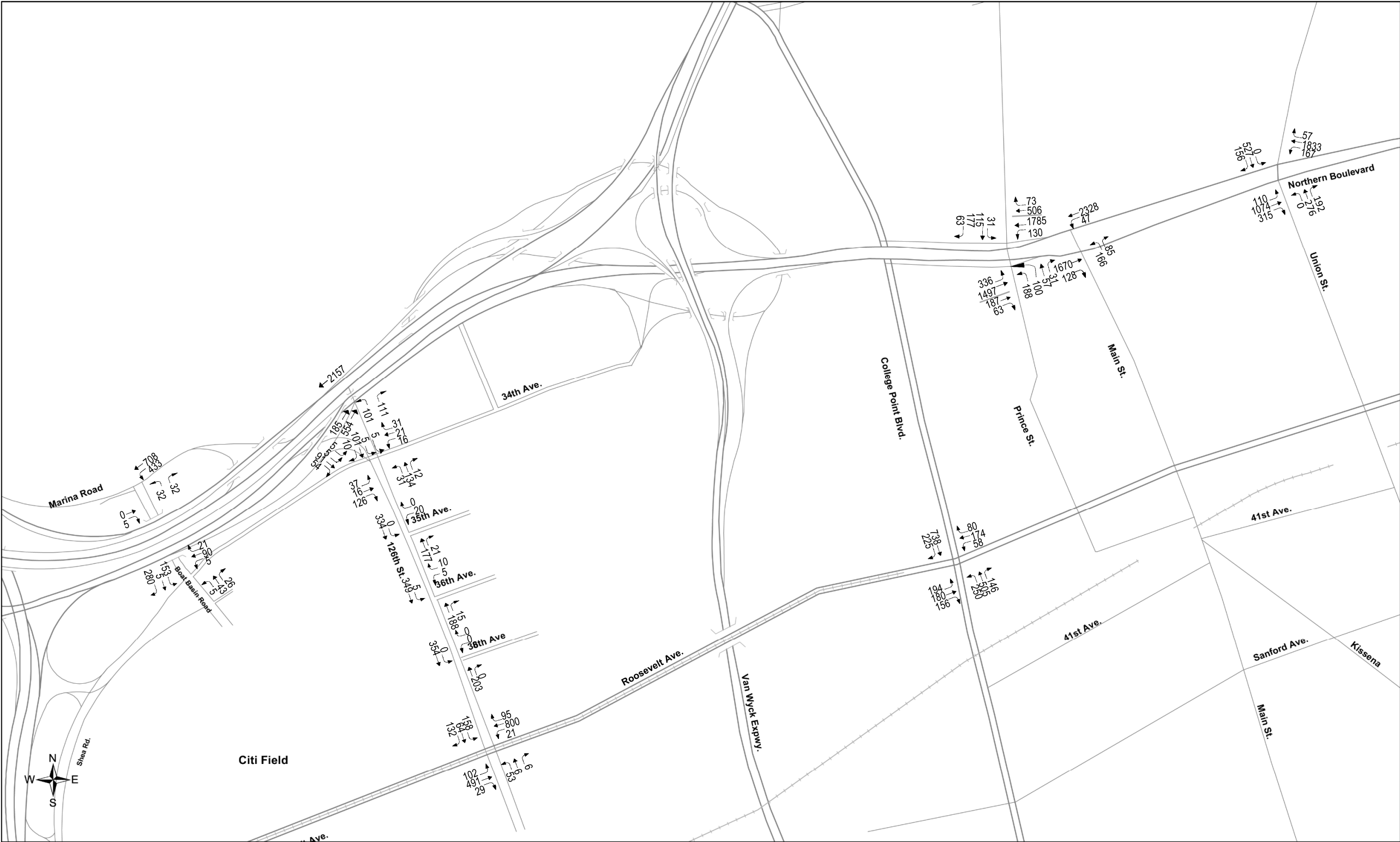


FIGURE B.9
 NO ACTION CONDITION TRAFFIC VOLUMES
 WEEKDAY AM PEAK HOUR
 WILLETS POINT DEVELOPMENT PHASE 1
 WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

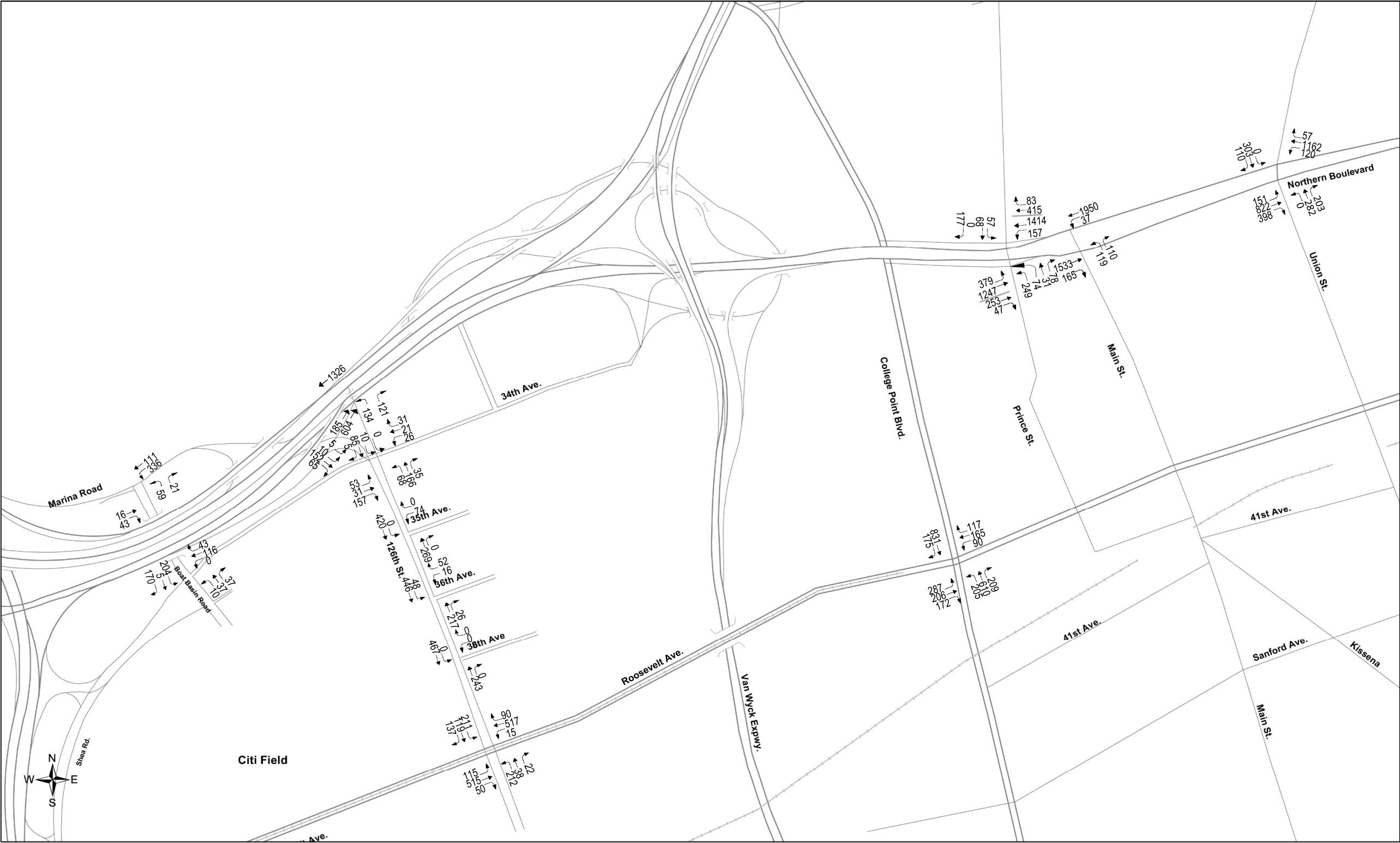


FIGURE B.10
 NO ACTION CONDITION TRAFFIC VOLUMES
 WEEKDAY MD PEAK HOUR
 WILLETS POINT DEVELOPMENT PHASE 1
 WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

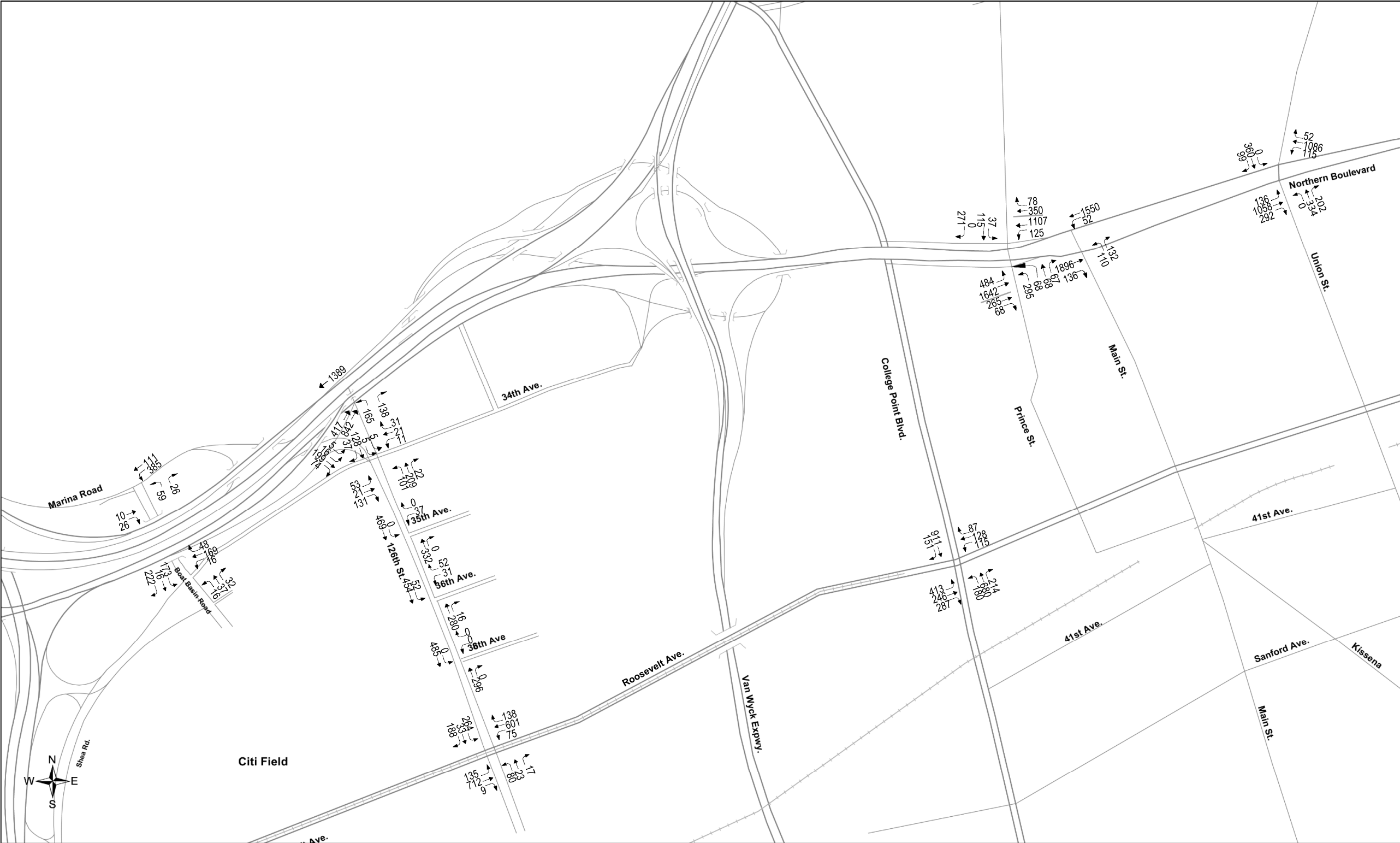


FIGURE B.11
NO ACTION CONDITION TRAFFIC VOLUMES
WEEKDAY PM PEAK HOUR
WILLETS POINT DEVELOPMENT PHASE 1
WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

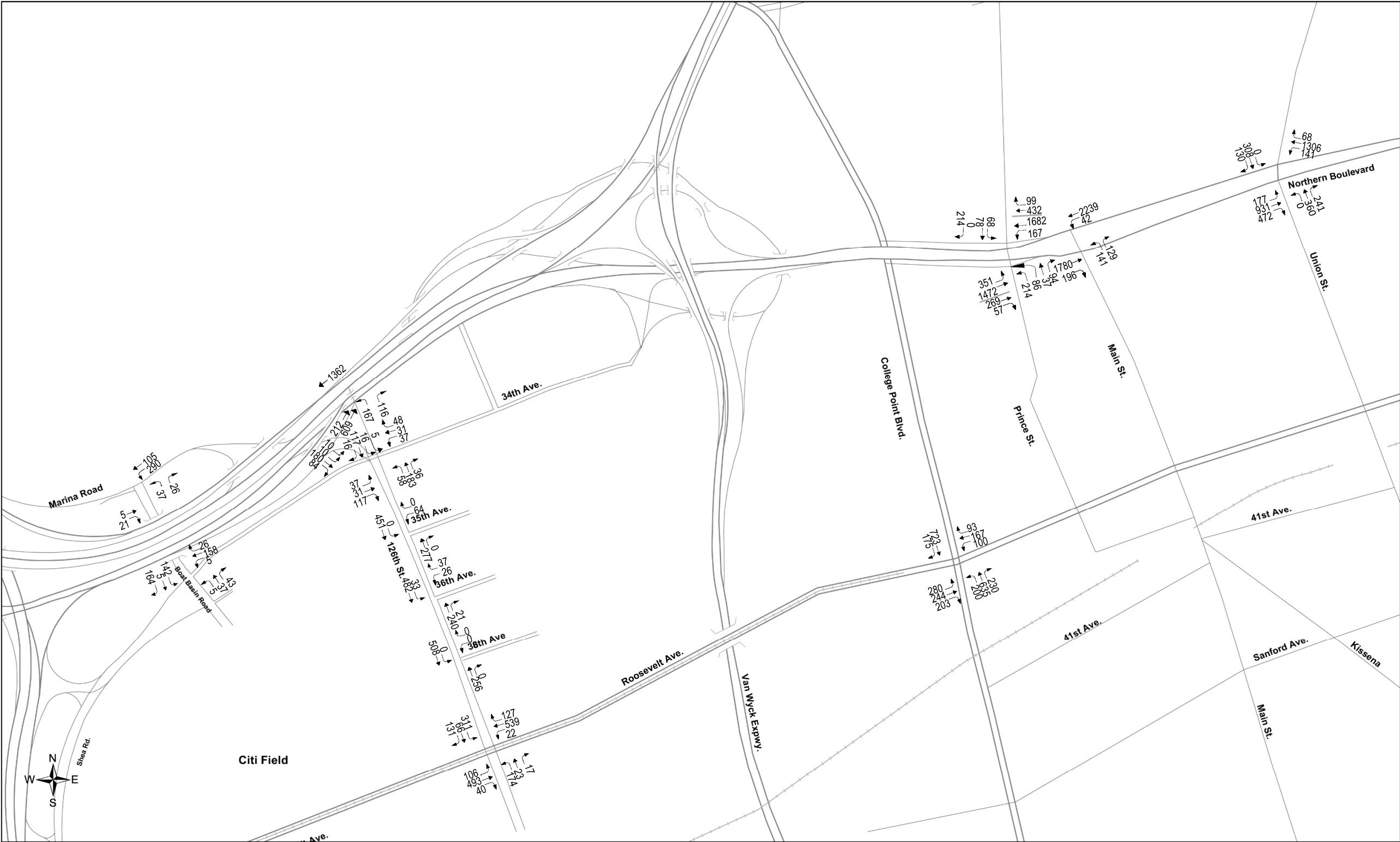


FIGURE B.12
NO ACTION CONDITION TRAFFIC VOLUMES
SATURDAY PEAK HOUR
WILLETS POINT DEVELOPMENT PHASE 1
WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

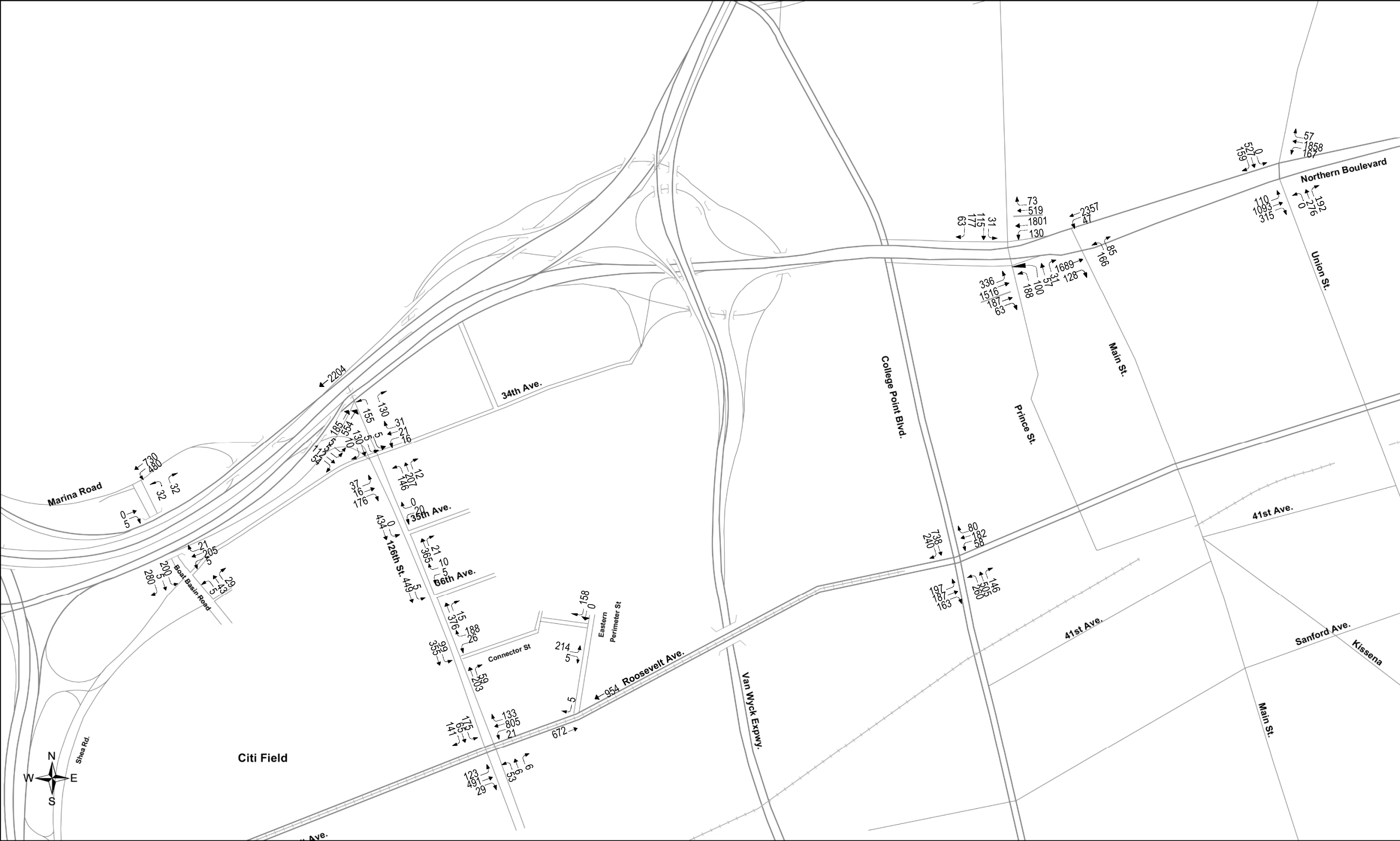


FIGURE B.13
 WITH ACTION CONDITION TRAFFIC VOLUMES
 WEEKDAY AM PEAK HOUR
 WILLETS POINT DEVELOPMENT PHASE 1
 WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

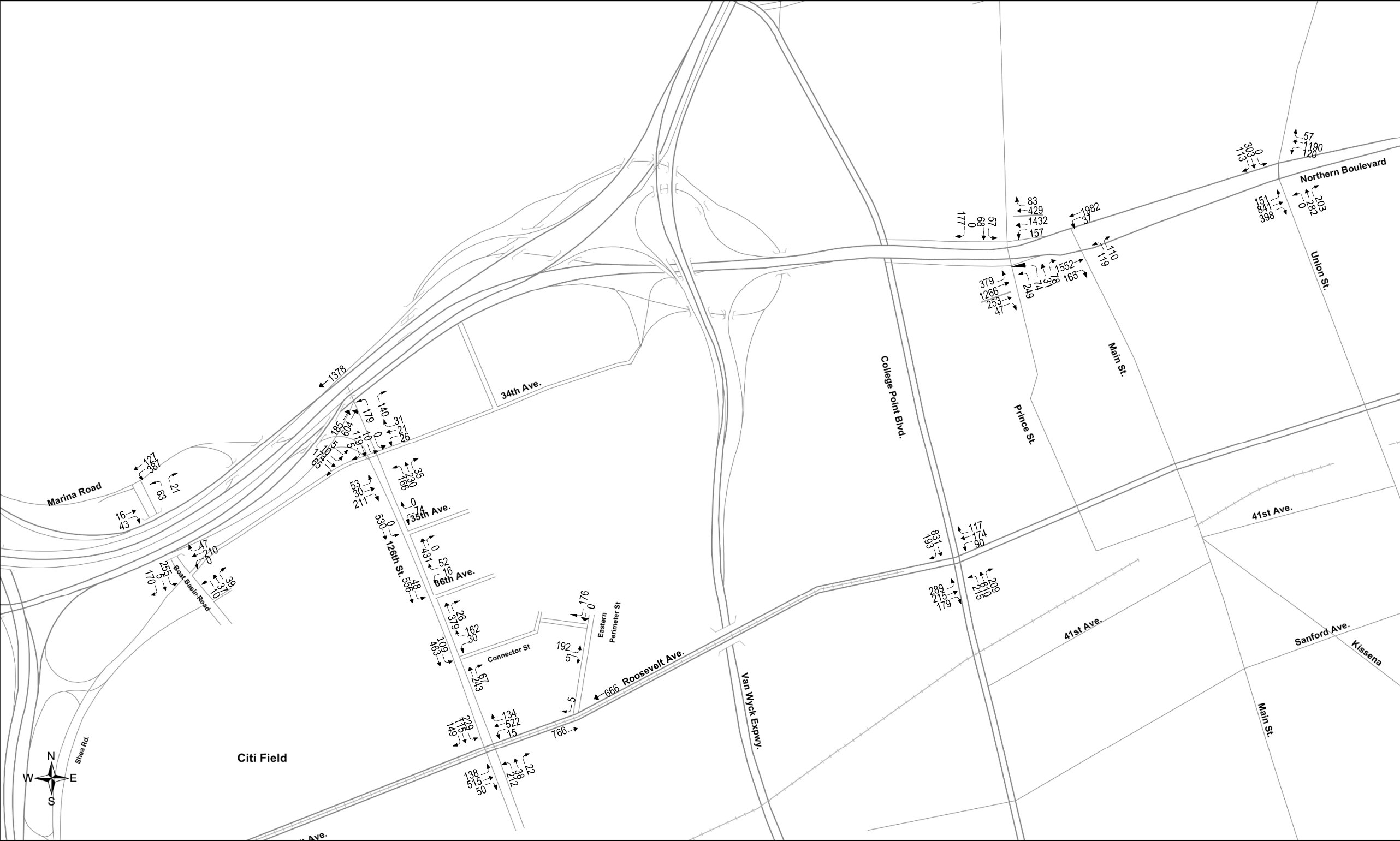


FIGURE B.14
WITH ACTION CONDITION TRAFFIC VOLUMES
WEEKDAY MD PEAK HOUR
WILLETS POINT DEVELOPMENT PHASE 1
WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

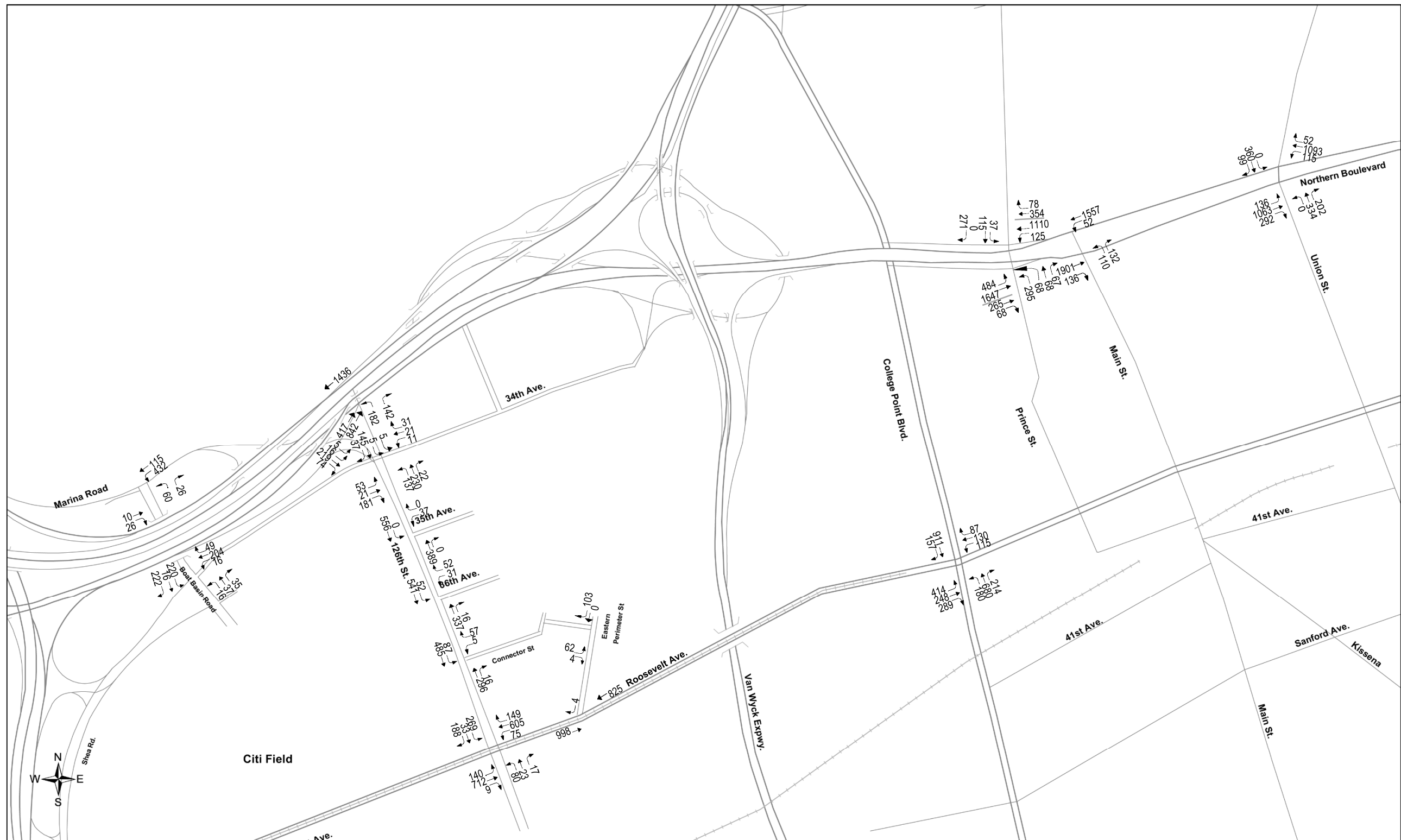


FIGURE B.15
 WITH ACTION CONDITION TRAFFIC VOLUMES
 WEEKDAY PM PEAK HOUR
 WILLETS POINT DEVELOPMENT PHASE 1
 WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

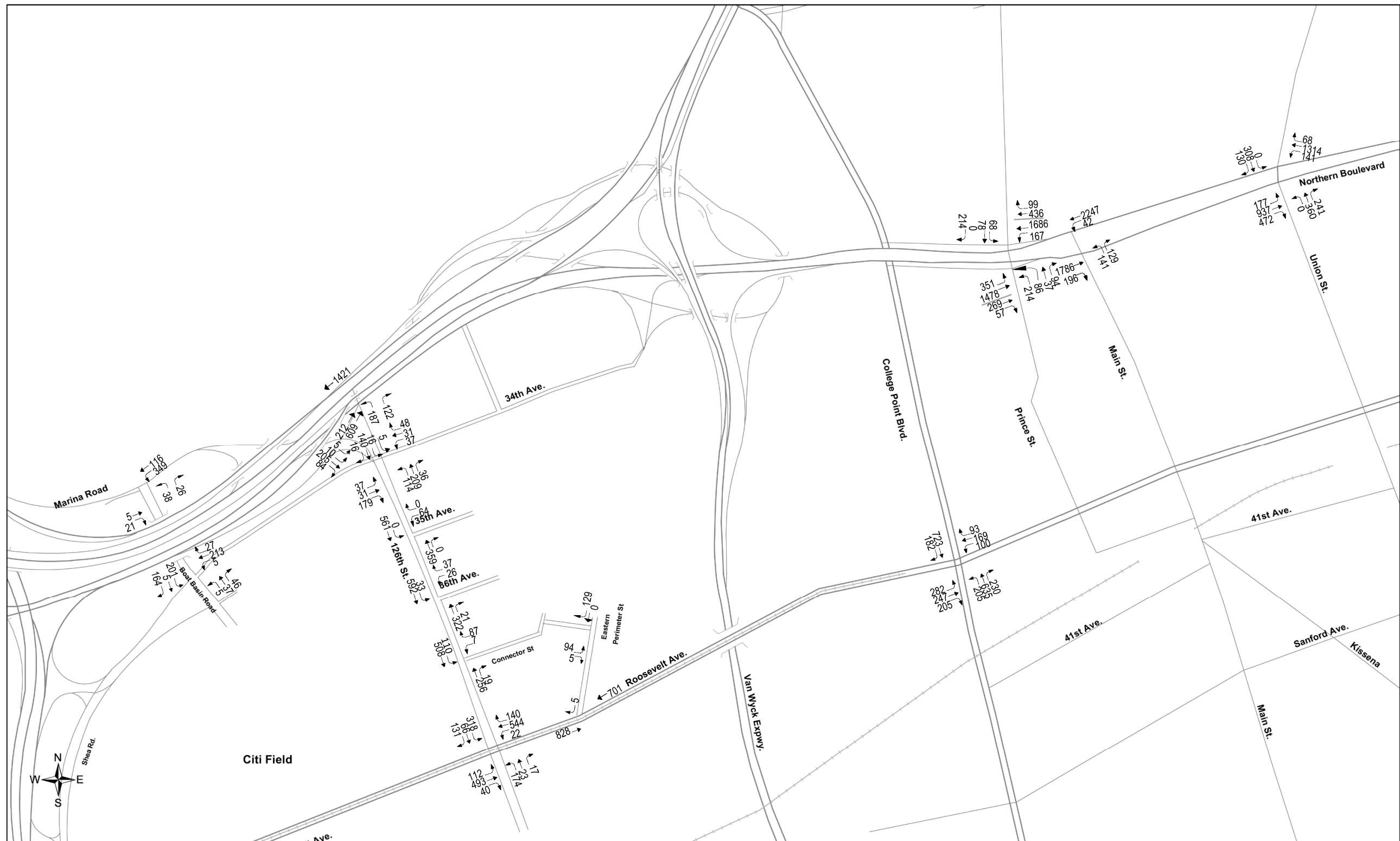


FIGURE B.16
WITH ACTION CONDITION TRAFFIC VOLUMES
SATURDAY PEAK HOUR
WILLETS POINT DEVELOPMENT PHASE 1
WILLETS POINT DEVELOPMENT PLAN - TECHNICAL MEMORANDUM 005

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Transit Tables

Subway Station Vertical Circulation Analysis

Table B-9

Subway Station Control Area Analysis

Table B-10

Peak Hour	Line	Direction	Maximum Load Point (leaving station)	Average Trains Per Hour	Cars Per Train	Total Number of Cars per Hour	Maximum Peak Hour Loading per Car	Passengers per Hour	Peak Hour Capacity	V/C Ratio
Weekday AM	7 - Express	Westbound	Woodside - 61 St	12.0	11	132.0	110	13,677	14,520	0.94
	7 - Local	Westbound	40th Street	15.0	11	165.0	110	14,396	18,150	0.79
Weekday PM	7 - Express	Eastbound	Queensboro Plaza	13.0	11	143.0	110	12,109	15,730	0.77
	7 - Local	Eastbound	Queensboro Plaza	14.0	11	154.0	110	10,727	16,940	0.63

Source: NYCT Average Subway Ridership Data from 2018

Table B-11
2018 Existing Conditions Bus Line-haul Analysis

Route: Direction	Max. Load Point	2018 Existing Hourly Volumes	Buses Per Hour	2018 Existing Passengers per Bus	Capacity per Bus	Capacity Shortfall
AM peak hour						
Q66: Eastbound	Northern Boulevard and 108th Street	473	14	34	54	No
Q66: Westbound	Northern Boulevard and 82nd Street	653	14	47	54	No
PM peak hour						
Q66: Eastbound	Northern Boulevard and 87th Street	422	10	43	54	No
Q66: Westbound	Main Street and Northern Boulevard	312	9	35	54	No
Source: NYCT Average Bus Ridership Data from 2015, grown to 2018 as per CEQR background growth guidelines						

Table B-12
2030 No Action Conditions
Subway Station Vertical Circulation Analysis

Mets-Willett Point No. 7 Train Station Vertical Circulation Elements		Actual Width (ft.)	Effective Width (ft.)	Peak Hour Volumes		Peak 15-Minute Volumes		Friction Factor	Surging Factor		V/C Ratio	Level of Service
				Into Station	Out from Station	Into Station	Out from Station		Into Station	Out from Station		
Weekday AM Peak Hour												
Street to Mezzanine												
S2/M2	Street Level Stair (North of Roosevelt Avenue, Facing East)	8.00	6.75	26	62	8	19	0.9	1.0	0.9	0.03	A
S3/M3	Street Level Stair (North of Roosevelt Avenue, Facing West)	8.00	6.50	44	100	14	31	0.9	1.0	0.9	0.06	A
M4A/M4B	Mezzanine Level Stair Connecting R532 free area and S2/S3 Stairs	12.75	11.50	70	162	22	51	0.9	1.0	0.9	0.05	A
Mezzanine to Platform												
P2	Platform Level Stair (Flushing-bound East)	10.08	8.83	11	167	3	52	0.9	1.0	0.8	0.06	A
P4	Platform Level Stair (Flushing-bound East)	9.92	8.67	4	195	1	61	1.0	1.0	0.8	0.06	A
P10	Platform Level Stair (Flushing-bound West)	9.58	8.33	3	162	1	51	1.0	1.0	0.8	0.06	A
P12	Platform Level Stair (Flushing-bound West)	9.83	8.58	4	177	1	55	1.0	1.0	0.8	0.06	A
R1	Manhattan-bound East Ramp	19.60	17.60	150	39	47	12	0.9	1.0	0.8	0.02	A
R2	Manhattan-bound West Ramp	17.60	15.60	352	26	110	8	0.9	1.0	0.8	0.04	A
Weekday PM Peak Hour												
Street to Mezzanine												
S2/M2	Street Level Stair (North of Roosevelt Avenue, Facing East)	8.00	6.75	83	53	26	17	0.9	1.0	0.9	0.05	A
S3/M3	Street Level Stair (North of Roosevelt Avenue, Facing West)	8.00	6.50	90	73	28	23	0.9	1.0	0.9	0.06	A
M4A/M4B	Mezzanine Level Stair Connecting R532 free area and S2/S3 Stairs	12.75	11.50	174	126	54	39	0.9	1.0	0.9	0.06	A
Mezzanine to Platform												
P2	Platform Level Stair (Flushing-bound East)	10.08	8.83	33	199	10	62	0.9	1.0	0.8	0.08	A
P4	Platform Level Stair (Flushing-bound East)	9.92	8.67	13	236	4	74	0.9	1.0	0.8	0.09	A
P10	Platform Level Stair (Flushing-bound West)	9.58	8.33	5	192	2	60	1.0	1.0	0.8	0.07	A
P12	Platform Level Stair (Flushing-bound West)	9.83	8.58	7	209	2	65	1.0	1.0	0.8	0.07	A
R1	Manhattan-bound East Ramp	19.60	17.60	51	192	16	60	0.9	1.0	0.8	0.03	A
R2	Manhattan-bound West Ramp	17.60	15.60	139	156	43	49	0.9	1.0	0.8	0.03	A

Table B-13
2030 No Action Conditions
Subway Station Control Area Analysis

Mets-Willet Point No. 7 Train Station Control Area Elements	Quantity	Capacity		Peak Hour Volumes		Peak 15-Minute Volumes		Friction Factor	Surging Factor for Exiting Patrons	V/C Ratio	Level of Service
		Into Station	Out from Station	Into Station	Out from Station	Into Station	Out from Station				
Weekday AM Peak Hour											
Mets - Willets Point (R532)											
Two-Way Turnstiles	5	2100	3225	458	668	143	209	0.90	0.80	0.17	A
Weekday PM Peak Hour											
Mets - Willets Point (R532)											
Two-Way Turnstiles	5	2100	3225	517	755	162	236	0.90	0.80	0.19	A

Table B-14

2030 No Action Condition Subway Line Haul Analysis

Peak Hour	Line	Direction	Maximum Load Point (leaving station)	Average Trains Per Hour	Cars Per Train	Total Number of Cars per Hour	Maximum Peak Hour Loading per Car	Passengers per Hour	Peak Hour Capacity	V/C Ratio
Weekday AM	7 - Express	Westbound	Woodside - 61 St	13.0	11	143.0	110	14,901	15,730	0.95
	7 - Local	Westbound	40th Street	16.0	11	176.0	110	15,123	19,360	0.78
Weekday PM	7 - Express	Eastbound	Queensboro Plaza	14.0	11	154.0	110	13,466	16,940	0.79
	7 - Local	Eastbound	Queensboro Plaza	15.0	11	165.0	110	11,328	18,150	0.62

Table B-15

2030 No Action Conditions Bus Line-haul Analysis

Route: Direction	Max. Load Point	2030 No Action Hourly Volumes	Buses Per Hour	2030 No Action Passengers per Bus	Capacity per Bus	Capacity Shortfall
AM peak hour						
Q66: Eastbound	Northern Boulevard and 108th Street	493	14	35	54	No
Q66: Westbound	Northern Boulevard and 82nd Street	681	14	49	54	No
PM peak hour						
Q66: Eastbound	Northern Boulevard and 87th Street	440	10	44	54	No
Q66: Westbound	Main Street and Northern Boulevard	326	9	36	54	No

Table B-16

**2030 With Action Conditions
Subway Station Vertical Circulation Analysis**

Mets-Willet Point No. 7 Train Station Vertical Circulation Elements		Actual Width (ft.)	Effective Width (ft.)	Peak Hour Volumes		Peak 15-Minute Volumes		Friction Factor	Surging Factor		V/C Ratio	Level of Service
				Into Station	Out from Station	Into Station	Out from Station		Into Station	Out from Station		
Weekday AM Peak Hour												
S2/M2	Street Level Stair (North of Roosevelt Avenue, Facing East)	8.00	6.75	145	131	45	41	0.9	1.0	0.9	0.10	A
S3/M3	Street Level Stair (North of Roosevelt Avenue, Facing West)	8.00	6.50	239	212	75	66	0.9	1.0	0.9	0.17	A
M4A/M4B	Mezzanine Level Stair Connecting R532 free area and S2/S3 Stairs	12.75	11.50	384	343	120	107	0.9	1.0	0.9	0.15	A
Mezzanine to Platform												
P2	Platform Level Stair (Flushing-bound East)	10.08	8.83	11	210	3	66	1.0	1.0	0.8	0.07	A
P4	Platform Level Stair (Flushing-bound East)	9.92	8.67	4	246	1	77	1.0	1.0	0.8	0.08	A
P10	Platform Level Stair (Flushing-bound West)	9.58	8.33	3	204	1	64	1.0	1.0	0.8	0.07	A
P12	Platform Level Stair (Flushing-bound West)	9.83	8.58	4	222	1	69	1.0	1.0	0.8	0.07	A
R1	Manhattan-bound East Ramp	19.60	17.60	244	39	76	12	0.9	1.0	0.8	0.04	A
R2	Manhattan-bound West Ramp	17.60	15.60	572	26	179	8	1.0	1.0	0.8	0.08	A
Weekday PM Peak Hour												
Street to Mezzanine												
S2/M2	Street Level Stair (North of Roosevelt Avenue, Facing East)	8.00	6.75	143	146	45	46	0.9	1.0	0.9	0.11	A
S3/M3	Street Level Stair (North of Roosevelt Avenue, Facing West)	8.00	6.50	155	202	48	63	0.9	1.0	0.9	0.13	A
M4A/M4B	Mezzanine Level Stair Connecting R532 free area and S2/S3 Stairs	12.75	11.50	299	348	93	109	0.9	1.0	0.9	0.14	A
Mezzanine to Platform												
P2	Platform Level Stair (Flushing-bound East)	10.08	8.83	33	252	10	79	0.9	1.0	0.8	0.10	A
P4	Platform Level Stair (Flushing-bound East)	9.92	8.67	13	298	4	93	1.0	1.0	0.8	0.10	A
P10	Platform Level Stair (Flushing-bound West)	9.58	8.33	5	243	2	76	1.0	1.0	0.8	0.08	A
P12	Platform Level Stair (Flushing-bound West)	9.83	8.58	7	265	2	83	1.0	1.0	0.8	0.09	A
R1	Manhattan-bound East Ramp	19.60	17.60	79	192	25	60	0.9	1.0	0.8	0.04	A
R2	Manhattan-bound West Ramp	17.60	15.60	237	156	74	49	0.9	1.0	0.8	0.07	A

Table B-17
2030 With Action Conditions
Subway Station Control Area Analysis

Mets-Willet Point No. 7 Train Station Control Area Elements	Quantity	Capacity		Peak Hour Volumes		Peak 15-Minute Volumes		Friction Factor	Surging Factor for Exiting Patrons	V/C Ratio	Level of Service
		Into Station	Out from Station	Into Station	Out from Station	Into Station	Out from Station				
Weekday AM Peak Hour											
Mets - Willets Point (R532)											
Two-Way Turnstiles	5	2100	3225	772	849	241	265	0.90	0.80	0.24	A
Weekday PM Peak Hour											
Mets - Willets Point (R532)											
Two-Way Turnstiles	5	2100	3225	642	977	201	305	0.90	0.80	0.24	A

Table B-18
2030 With Action Condition Subway Line Haul Analysis

Peak Hour	Line	Direction	Maximum Load Point (leaving station)	Average Trains Per Hour	Cars Per Train	Total Number of Cars per Hour	Maximum Peak Hour Loading per Car	Passengers per Hour	Peak Hour Capacity	V/C Ratio
Weekday AM	7 - Express	Westbound	Woodside - 61 St	13.0	11	143.0	110	15,131	15,730	0.96
	7 - Local	Westbound	40th Street	16.0	11	176.0	110	15,160	19,360	0.78
Weekday PM	7 - Express	Eastbound	Queensboro Plaza	14.0	11	154.0	110	13,629	16,940	0.80
	7 - Local	Eastbound	Queensboro Plaza	15.0	11	165.0	110	11,354	18,150	0.63

Table B-19
2030 With Action Conditions Bus Line-haul Analysis

Route: Direction	Max. Load Point	2030 With Action Hourly Volumes	Buses Per Hour	2030 With Action Passengers per Bus	Capacity per Bus	Capacity Shortfall
AM peak hour						
Q66: Eastbound	Northern Boulevard and 108th Street	577	14	42	54	No
Q66: Westbound	Northern Boulevard and 82nd Street	768	14	55	54	Yes
PM peak hour						
Q66: Eastbound	Northern Boulevard and 87th Street	482	10	49	54	No
Q66: Westbound	Main Street and Northern Boulevard	370	9	42	54	No

Pedestrians

Pedestrians Tables

Table B-20

[illegible]

Table B-21

Location	Corner	Weekday AM Peak Hour		Weekday Midday Peak Hour		Weekday PM Peak Hour		Saturday Peak Hour	
		SFP	LOS	SFP	LOS	SFP	LOS	SFP	LOS
Roosevelt Avenue and 126th Street	Northwest	1553.9	A	2094.8	A	2270.7	A	1023.7	A
	Northeast	1237.8	A	1442.9	A	2363.0	A	893.4	A

Note: SFP = square foot per pedestrian

Table B-22[illegible]

Table B-23

[illegible]

Table B-24

Location	Corner	Weekday AM Peak Hour		Weekday Midday Peak Hour		Weekday PM Peak Hour		Saturday Peak Hour	
		SFP	LOS	SFP	LOS	SFP	LOS	SFP	LOS
Roosevelt Avenue and 126th Street	Northwest	1502.2	A	2010.5	A	2201.3	A	990.2	A
	Northeast	1202.5	A	1388.0	A	2293.0	A	866.0	A

Note: SFP = square foot per pedestrian

Table B-25

[illegible]

Table B-26

[illegible]**Table B-27**

Location	Corner	Weekday AM Peak Hour		Weekday Midday Peak Hour		Weekday PM Peak Hour		Saturday Peak Hour	
		SFP	LOS	SFP	LOS	SFP	LOS	SFP	LOS
Roosevelt Avenue and 126th Street	Northwest	248.5	A	305.4	A	367.1	A	387.0	A
	Northeast	348.1	A	393.7	A	521.6	A	595.1	A
Note: SFP = square foot per pedestrian									

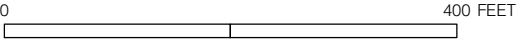
Table B-28

Location	Crosswalk	Crosswalk Length (ft)	Crosswalk Width (ft)	Two-way Peak Hour Volume	SFP	LOS
Weekday AM Peak Hour						
Roosevelt Avenue and 126th Street	North	53.0	11.0	601	60.9	A
34th Avenue and 126th Street	East	30.0	7.0	201	103.4	A
Weekday Midday Peak Hour						
Roosevelt Avenue and 126th Street	North	53.0	11.0	506	79.2	A
34th Avenue and 126th Street	East	30.0	7.0	224	81.2	A
Weekday PM Peak Hour						
Roosevelt Avenue and 126th Street	North	53.0	11.0	398	91.4	A
34th Avenue and 126th Street	East	30.0	7.0	117	152.7	A
Saturday Peak Hour						
Roosevelt Avenue and 126th Street	North	53.0	11.0	318	119.4	A
34th Avenue and 126th Street	East	30.0	7.0	90	193.2	A
Note: SFP = square feet per pedestrian.						

Pedestrians Figures



Phase 1 Generated Pedestrian Trips
Weekday AM Peak Hour
Figure B.17



Phase 1 Generated Pedestrian Trips
Weekday Midday Peak Hour
Figure B.18



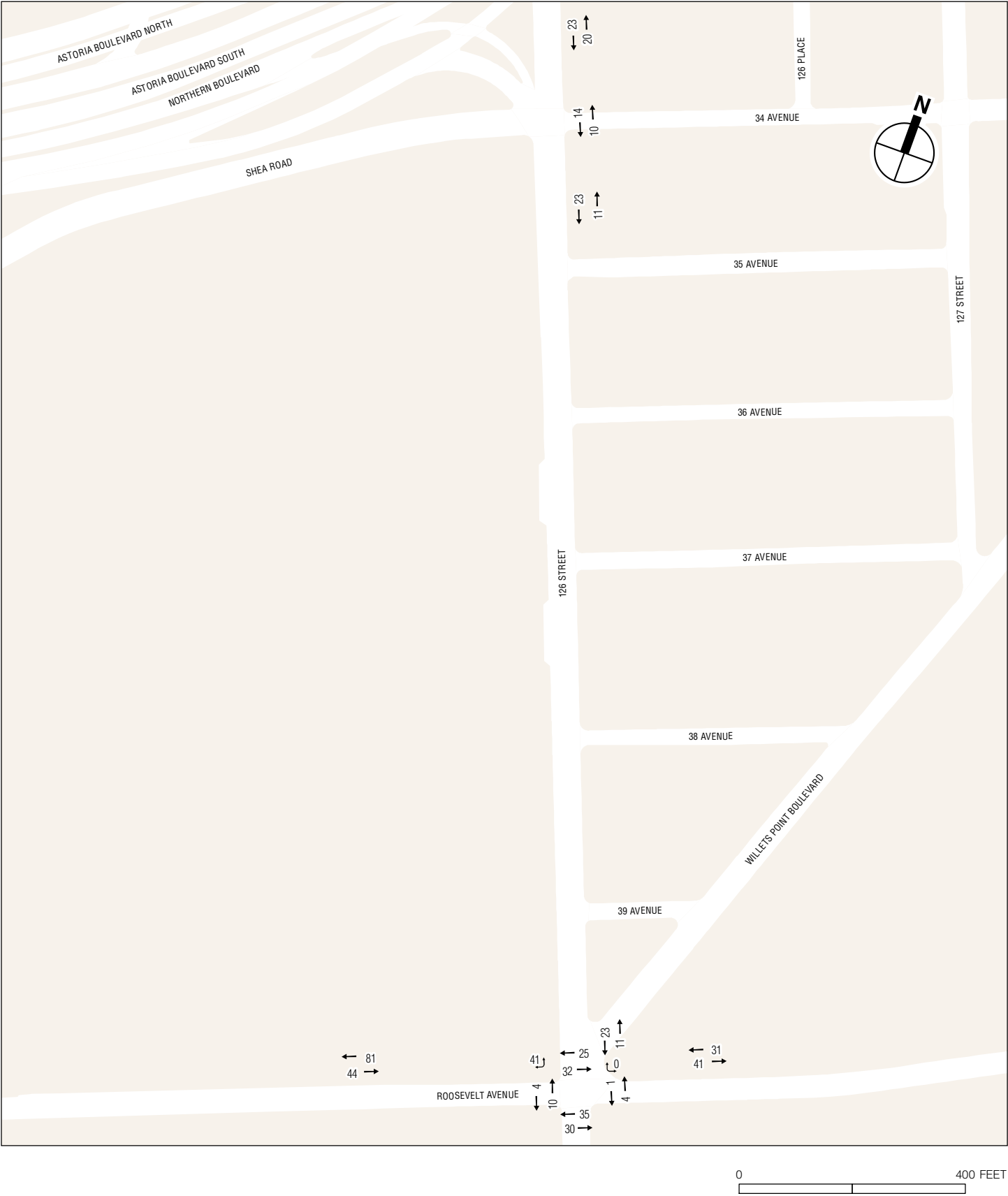
2018 Existing Condition Pedestrian Volumes
Weekday AM Peak Hour
Figure B.21



2018 Existing Condition Pedestrian Volumes
Weekday Midday Peak Hour
Figure B.22



2018 Existing Condition Pedestrian Volumes
Weekday PM Peak Hour
Figure B.23



2018 Existing Condition Pedestrian Volumes
Saturday Peak Hour
Figure B.24



2030 No Action Condition Pedestrian Volumes
Weekday AM Peak Hour
Figure B.25



2030 No Action Condition Pedestrian Volumes
Weekday Midday Peak Hour
Figure B.26



2030 No Action Condition Pedestrian Volumes
Weekday PM Peak Hour
Figure B.27



2030 No Action Condition Pedestrian Volumes
Saturday Peak Hour
Figure B.28



2030 With Action Condition Pedestrian Volumes
Weekday AM Peak Hour
Figure B.29



2030 With Action Condition Pedestrian Volumes
Weekday Midday Peak Hour
Figure B.30



2030 With Action Condition Pedestrian Volumes
Weekday PM Peak Hour

WILLETS POINT-PHASE 1

Figure B.31



2030 With Action Condition Pedestrian Volumes
Saturday Peak Hour
Figure B.32

Appendix C

Noise

As described in the “Noise” section of the Technical Memorandum, a number of locations within the District would require noise attenuation in order to avoid impacts from ambient noise. In order to avoid these impacts, an (E) designation would be mapped on these sites.

There are four levels of required noise attenuation depending upon the ambient noise levels: 31 dBA, 35 dBA, 36 dBA, and 37 dBA. The text for the (E) designation for sites requiring 31 dBA is as follows:

“In order to ensure an acceptable interior noise environment, future residential uses must provide a closed window condition with a minimum of 31 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 45 dBA, and future commercial uses must provide a closed window condition with a minimum of 26 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 50 dBA. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning sleeves or HUD approved fans.”

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

“In order to ensure an acceptable interior noise environment, future residential uses must provide a closed window condition with a minimum of 35 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 45 dBA, and future commercial uses must provide a closed window condition with a minimum of 30 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 50 dBA. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning sleeves or HUD approved fans.”

For sites requiring 36 dBA noise attenuation, the following (E) designation noise text would apply:

“In order to ensure an acceptable interior noise environment, future residential uses must provide a closed window condition with a minimum of 36 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 45 dBA, and future commercial uses must provide a closed window condition with a minimum of 31 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 50 dBA. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning sleeves or HUD approved fans.”

For sites requiring 37 dBA noise attenuation, the following (E) designation noise text would apply:

“In order to ensure an acceptable interior noise environment, future residential uses must provide a closed window condition with a minimum of 37 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 45 dBA, and future commercial uses must provide a closed window condition with a minimum of 32 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 50 dBA. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning sleeves or HUD approved fans.”

With the attenuation measures specified above, the proposed plan would not result in any significant adverse noise impacts, and would meet CEQR guidelines. The (E) designations for these sites affected by ambient noise are presented in Table A-1.

**Table C-4
Noise Attenuation (E) Designations**

Block	Lot	Governing Noise Site	Minimum Required Attenuation ¹
1820	1	4,5	35, 37 on north façade
1820	6	4	37
1820	9	6,4	31, 37 on North façade
1820	18	4	37
1820	34	6	31
1820	108	6,4	31, 37 on North façade
1821	1	4	37
1821	6	4	37
1821	16	6	31
1821	25	6	31
1821	27	6	31
1821	35	6	31
1822	1	5	35
1822	5	6	31
1822	7	6	31
1822	17	6	31
1822	21	6	31
1822	23	6	31
1822	28	6	31
1822	33	6	31
1822	55	6	31
1822	58	6	31
1823	1	5	37
1823	3	6	31

**Table C-4 (cont'd)
Noise Attenuation (E) Designations**

Block	Lot	Governing Noise Site	Minimum Required Attenuation
1823	5	6	31
1823	7	6	31
1823	12	6	31
1823	14	6	31
1823	19	6	31
1823	20	6	31
1823	21	6	31
1823	23	6	31
1823	26	6	31

1823	28	6	31
1823	33	6	31
1823	40	6	31
1823	44	6	31
1823	47	6	31
1823	52	6	31
1823	55	6	31
1823	58	6	31
1823	59	6	31
1823	60	5	35
1824	1	6,5	35
1824	12	6	31
1824	19	6	31
1824	21	6	31
1824	26	6	31
1824	28	6	31
1824	33	6	31
1824	38	6	31
1824	40	6	31
1824	45	6	31
1824	53	5	35
1825	1	5	35
1825	19	6	31
1825	21	6	31
1825	25	6	31
1825	28	6	31
1825	30	6	31
1825	37	6	31
1825	46	6	31
1825	48	6	31
1825	53	6	31
1825	55	6	31
1825	58	6	31
1826	1	5	35
1826	5	5	35
1826	14	6	31
1826	18	6	31
1826	20	7,6	31, 37 on South façade
1826	31	7	36
1826	35	7	36
1827	1	7	36
1828	1	4	37
1828	4	4	37
1828	8	4	37
1828	11	6	31
1828	13	6	31
1828	17	6	31

Table C-4 (cont'd)
Noise Attenuation (E) Designations

Block	Lot	Governing Noise Site	Minimum Required Attenuation
1828	21	6	31
1828	23	6	31
1828	29	6	31
1828	34	6	31
1828	37	6	31
1828	39	6	31
1829	19	6,4	31, 37 on North façade
1829	21	4	37

Willeys Point Development Plan

1829	40	6	31
1829	71	6	31
1830	9	6	31
1830	10	6	31
1830	21	6	31
1831	1	6	31
1831	10	6	31
1831	35	6	31
1832	1	6	31
1832	10	6	31
1833	103	7	36
1833	111	7	36
1833	117	7	37 ²
1833	120	6	31, 37 on west façade ²
1833	141	6	31, 37 on west façade ²
1833	143	6	31, 37 on west façade ²
1833	151	6	31, 37 on west façade ²
1833	155	6	31, 37 on north and west façades ²
1833	158	6	31, 37 on north and west façades ²
1833	165	6	31
1833	166	6	31
1833	168	6	31
1833	170	6	31
1833	172	6	31
1833	177	6	31
1833	179	6	31
1833	180	6	31
1833	186	6	31
1833	188	6	31
1833	192	6	31
1833	197	6	31
1833	199	6	31
1833	201	6	31
1833	203	6	31
1833	212	6	31
1833	215	6	31
1833	230	6	31
1833	300	6	31
1833	425	6	31
1833	1	6,7	31, 36 on South façade
Notes: ¹ Attenuation values shown assume a residential use; commercial office uses would require 5 dBA less attenuation. ² Due to line of sight between this location and existing industrial uses during the temporary condition between 2030 and 2039, a higher attenuation amount is required.			

*

Appendix D
Agency Correspondence



Vincent Sapienza P.E.
Commissioner

Angela Licata
Deputy Commissioner of
Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

MEMORANDUM

To: Ingrid Young
Mayor's Office of Environmental Coordination

From: Rasheed Lucas *RL*
Bureau of Environmental Planning & Analysis

Subject: CEQR # 07DME014Q
Willets Point Development
Borough of Queens

Date: May 6, 2021

The New York City Department of Environmental Protection has reviewed the infrastructure sections submitted on behalf of the above referenced project.

Please be advised of the following comments on Water and Sewer Infrastructure:

Sewer System:

1. The *Infrastructure* section of the Water and Sewer Infrastructure Chapter mentions new connections to the existing **combined** sewer. The existing and future sewer infrastructure in the Willets Point development will be a separate storm and sanitary system. Please specify which combined sewer this is referring to or correct the language to indicate the separate sewers.
2. The Bowery Bay Wastewater Treatment Plant has the capacity to handle the expected Phase 1 wastewater flows, but the treatment plant will need to be evaluated to determine if it can handle the Full Buildout wastewater flows.
3. DEP is currently coordinating the sewer infrastructure upgrades for the Phase 1 development with EDC and the consultant. Additional comments regarding the sewer upgrades may be provided in the future as the designs are developed and finalized.

Water System:

1. In order not to impact the water supply system for the District, the existing 72-inch Precast Concrete Pipe would need to be replaced with a new 72 inch steel water main. Please refer to the revised language in the *Infrastructure* section of the Water and Sewer Infrastructure Chapter in the enclosed technical memo.
2. The distribution water mains in the District will need to be upgraded to support the full buildout of the development.

C: Jannine McColgan, P.E.
Mark Safari, P.E.
Frank Kulcsar, P.E.
Frank Loncar, P.E.
Sham Hemraj, P.E.
Steve Carrea, P.E.
Guo Zhan Wu, P.E.
Shofiqule Azam, P.E.
Selim Andrawis, P.E.
Ketki Patel, P.E.
Lixin Cheng, P.E.
Andy Lu, P.E.
Mark Page
Terrell Estes
Mitchell Wimbish



FDNY

www.nyc.gov/fdny

JOHN J. HODGENS

ACTING CHIEF OF FIRE OPERATIONS

Room 7W-1

VIA EMAIL

Ms. Ingrid Young
Senior Project Manager
Mayor's Office of Environmental Coordination
100 Gold Street, 2nd Floor
New York, NY 10007
IYoun@moec.nyc.gov

April 28, 2021

RE: Proposed Willets Point Development project

Dear Ms. Young:

In January 2021, the New York City Fire Department's ("FDNY" or "Department") City Planning Unit held a virtual meeting with staff members from the New York City Economic Development Corporation (NYCEDC). This meeting was held to discuss the proposed development outlined in the Technical Memorandum for the Willets Point Development Plan Final Generic Environmental Impact Statement (FGEIS) for City Environmental Quality Review (CEQR) Number 07DME014Q, Technical Memorandum 005, draft of March 30, 2021. The Department's City Planning Unit is presently reviewing the impact of this proposed development on FDNY response times and resources.

The FDNY has a total of 217 firehouses and 40 EMS stations Citywide. In addition, the Department has agreements with several private hospitals whose ambulances are also dispatched to 911 emergencies, Citywide. The proposed Willets Point development area is located within the FDNY's 52nd Battalion. Engine 273's firehouse, located at 40-18 Union Street, Flushing New York, 11354, is the geographically closest agency emergency response facility to the proposed development area. Unless otherwise assigned, personnel and equipment from that firehouse, and surrounding firehouses, would be available to respond to emergencies at the proposed development site. If those resources are deployed elsewhere, additional resources would be dispatched as needed.

The Department continually evaluates and addresses the operational and logistical needs for firefighting and emergency medical personnel, equipment, and other resources Citywide. Under all circumstances, emergency calls to the City's 911 system are triaged by agency personnel who then dispatch first responders accordingly. As the proposed development project moves forward, and as additional information on the overall scope of the project becomes available, FDNY will review the updated plans and make recommendations as appropriate.

RE: Proposed Willets Point Development project
April 28, 2021

If you or your staff have any questions, feel free to contact Captain Kevin Molloy of the agency's City Planning Unit at Kevin.Molloy@fdny.nyc.gov or at FireOps@fdny.nyc.gov.

Very truly yours,

John J Hodgens

JOHN J. HODGENS

Acting Chief of Fire Operations



May 7, 2021

Ingrid Young
Senior Project Manager
Mayor's Office of Environmental Coordination
100 Gold Street, 2nd Floor
New York, New York 10038

Vincent Sapienza, P.E.
Commissioner

**Re: Willets Point Development Plan
CEQR # 07-DME-014Q**

Angela Licata
*Deputy Commissioner of
Sustainability*

59-17 Junction Blvd.
Flushing, NY 11373

Dear Ms. Young:

The New York City Department of Environmental Protection, Bureau of Environmental Planning and Analysis (DEP) has reviewed the Air Quality and Construction chapters of the March 30, 2021 Technical Memorandum and support materials. Under the Approved Plan, the approximately 61-acre Willets Point Development District (District) will be redeveloped with up to 8.94 million gross square feet of residential, retail, hotel, convention center, entertainment, commercial office, community facility, open space, and parking uses. The Approved Plan changed the underlying zoning of the District from an M3-1 district (and a small area zoned R3-2) to a C4-4 district and created an Urban Renewal Plan (URP) and a zoning Special District (i.e., the Special Willets Point District). Currently, the City of New York seeks to facilitate the development of an initial 6-acre portion of the Willets Point Development Plan ("Phase 1"), which portion is the subject of this Technical Memorandum. The proposed program for the first phase of development - Phase 1—would include approximately 813,112 gsf of residential use (1,100 units), 24,666 gsf of retail, 3,397 sf of community facility use, a 650-seat K-8 public school, and approximately 1 acre of publicly-accessible open space. The project is located at Willets Point, Queens, New York.

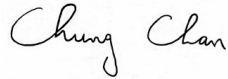
Per OEC request, we have reviewed mentioned above materials and have the following comments:

Air Quality

Based on the air quality assessment for the Proposed Modification, there is no potential for significant impacts from HVAC systems, on the proposed project. The Proposed Modification for Phase 1 does not change the E-designation for a stack height of 70.1 meters. In addition, the Proposed Modification for Phase 1 does not change the E-designation for exhaust stack setback of at least 140 feet for development involving convention center, hotel, etc. and 120 feet for development other than convention center, hotel, etc. Therefore, with the Proposed Modification, there is no potential for air quality impacts from HVAC systems on the proposed project.

If you have any questions, you may contact Michelle Noralez-Brown at micbrown@dep.nyc.gov.

Sincerely,

A handwritten signature in black ink that reads "Chung Chan". The signature is written in a cursive, flowing style.

Chung Chan,
Director
Air Quality and Noise Review and Planning