

Las Raices

Draft Environmental Impact Statement (DEIS)

CEQR No. 20HPD002M

Lead Agency:
New York City Department of Housing Preservation and Development

May 14, 2021

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Draft Environmental Impact Statement (DEIS)

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Borough of Manhattan

CEQR No: 20HPD002M

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Lead Agency: New York City Department of Housing Preservation and Development

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The DEIS is available for review on the website of the New York City Department of Housing Preservation and Development:
<https://www1.nyc.gov/site/hpd/services-and-information/environmental-review.page>

A public hearing on the Draft Environmental Impact Statement (DEIS) will be held at a later date to be announced. Advance notice will be given of the time and place of the hearing. Written comments on the DEIS are requested and will be received and considered by the Lead Agency until the 10th calendar day following the close of the public hearing.

TABLE OF CONTENTS

Executive Summary	ES-1
I. Introduction	ES-1
II. Background and Existing Conditions	ES-1
Project Area	ES-1
III. Description of the Proposed Action	ES-2
IV. Purpose and Need for the Proposed Action	ES-2
V. Description of the Proposed Project	ES-3
VI. Analysis Framework for Environmental Review	ES-4
Analysis Year	ES-4
Future without the Proposed Action (No-Action Condition)	ES-4
Future with the Proposed Actions (With-Action Condition)	ES-4
Possible Effects of the Proposed Action	ES-5
VII. Probable Impacts of the Proposed Action	ES-5
Land Use, Zoning and Public Policy	ES-5
Open Space	ES-6
Shadows	ES-7
Transportation	ES-7
Air Quality	ES-8
Noise	ES-9
Public Health	ES-10
VIII. Mitigation	ES-10
IX. Alternatives	ES-11
No-Action Alternative	ES-11
No Significant Adverse Impact Alternative	ES-11
X. Unavoidable Adverse Impacts	ES-11
XI. Growth Inducing Aspects of the Proposed Actions	ES-12
XII. Irreversible and Irretrievable Commitments of Resources	ES-13
 Chapter 1: Project Description	 1-1
I. Introduction	1-1
II. Existing Conditions	1-1
III. The Proposed Action	1-2
IV. Description of the Proposed Project	1-3
V. Purpose and Need for the Proposed Action	1-4
VI. Analysis Framework	1-4
Future without the Proposed Action (No-Action Condition)	1-4
Future with the Proposed Actions (With-Action Condition)	1-5
Possible Effects of the Proposed Action	1-5
Required Approvals	1-5
Uniform Land Use Review Procedure (ULURP)	1-5
City Environmental Quality Review (CEQR)	1-6
 Chapter 2: Land Use, Zoning, and Public Policy	 2-1
I. Introduction	2-1
II. Principal Conclusions	2-2
III. Methodology	2-2
Analysis Year	2-3
Study Area Definition	2-3
Data Sources	2-4
IV. Existing Conditions	2-4
Land Use	2-4
Zoning	2-6

	Public Policy	2-11
V.	The Future Without the Proposed Action	2-15
	Land Use	2-15
	Zoning	2-16
	Public Policy	2-16
VI.	The Future With the Proposed Action	2-16
	Proposed Action	2-16
	Land Use	2-17
	Zoning	2-18
	Public Policy	2-18
Chapter 3: Open Space		3-1
I.	Introduction	3-1
II.	Principal Conclusions	3-1
III.	Methodology	3-3
	Open Space Study Area	3-3
	Analysis Framework	3-4
	Impact Assessment	3-5
	East Harlem Rezoning FEIS Analysis	3-5
IV.	Existing Conditions	3-6
	Demographic Characteristics of the Study Area	3-6
	Inventory of Open Space Resources in the Study Area	3-7
	Assessment of Open Space Adequacy	3-19
V.	The Future Without the Proposed Actions (No-Action)	3-20
	Study Area Population	3-20
	Open Space Resources	3-20
	Assessment of Open Space Adequacy	3-20
VI.	The Future With the Proposed Actions (With-Action)	3-22
	Development Sites Population	3-22
	Direct Effects Analysis	3-23
	Indirect Effects Analysis	3-24
Chapter 4: Shadows		4-1
I.	Introduction	4-1
II.	Principal Conclusions	4-1
III.	Methodology	4-1
IV.	Preliminary Screening	4-3
	Tier 1 Screening Assessment	4-4
	Tier 2 Screening Assessment	4-4
	Tier 3 Screening Assessment	4-5
V.	Detailed Analysis of Shadow Impacts	4-6
	Detailed Shadow Analysis	4-6
	Resources Affected by Project-Generated Shadows	4-7
Chapter 5: Transportation		5-1
I.	Introduction	5-1
II.	Principal Conclusions	5-1
III.	Preliminary Analysis Methodology	5-1
IV.	Level 1 Screening Assessment	5-2
	Transportation Planning Factors	5-2
	Trip Generation	5-3
Chapter 6: Air Quality		6-1
I.	Introduction	6-1
II.	Principal Conclusions	6-2
	HVAC Analysis	6-2

	Industrial Source Analysis.....	6-2
	Large Emission Source Analysis.....	6-2
	Updated Project Dimensions	6-3
III.	Methodology	6-3
	HVAC Analysis.....	6-3
	Industrial Source Analysis.....	6-3
	Large Emission Source Analysis.....	6-3
IV.	Analysis.....	6-3
	HVAC Large Emission Source Analysis	6-3
	Large Emission Source Analysis.....	6-5
V.	Results	6-14
	HVAC Analysis.....	6-14
	Large Emission Source Analysis.....	6-15
VI.	Summary	6-18
	HVAC Analysis.....	6-18
	Large Emission Source Analysis.....	6-18
Chapter 7: Noise	7-1	
I.	Introduction	7-1
II.	Principal Conclusions.....	7-1
III.	Noise Fundamentals	7-2
	A-Weighted Sound Level (dBA).....	7-2
	Community Response to Changes in Noise Levels	7-3
	Noise Descriptors Used in Impact Assessment	7-3
	Applicable Noise Codes and Impact Criteria	7-5
IV.	Noise Prediction Methodology	7-7
	General Methodology	7-7
	Proportional Modeling	7-7
	Train Noise Modeling	7-9
V.	Existing Conditions	7-12
	Selection of Noise Receptor Locations	7-12
	Noise Monitoring	7-13
	Equipment Used During Noise Monitoring.....	7-14
	Existing Noise Levels at Noise Receptor Locations.....	7-15
VI.	Future Without the Proposed Action (No-Action)	7-17
	No-Action L _{dn} Noise Levels.....	7-18
	No-Action Train Noise Levels	7-18
VII.	Future With the Proposed Action (With-Action)	7-18
	With-Action L _{dn} Noise Levels.....	7-19
	With-Action Train Noise Levels	7-20
VIII.	Attenuation Requirements	7-20
	CEQR	7-20
	HUD	7-21
IX.	Other Noise Concerns	7-22
	Mechanical Equipment.....	7-22
	Aircraft Noise	7-22
Chapter 8: Public Health	8-1	
I.	Introduction	8-1
II.	Principal Conclusions.....	8-1
III.	Preliminary Screening	8-2
Chapter 9: Neighborhood Character	9-1	
I.	Introduction	9-1
II.	Principal Conclusions.....	9-2
III.	Methodology	9-2

IV.	Study Area.....	9-3
	Preliminary Assessment	9-3
	Defining Features	9-3
	Assessment of the Potential to Affect the Defining Features of the Neighborhood	9-5
Chapter 10: Mitigation.....		10-1
I.	Introduction	10-1
II.	Principal Conclusions.....	10-1
	Open Space and Shadows.....	10-1
III.	Open Space and Shadows.....	10-2
Chapter 11: Alternatives.....		11-1
I.	Introduction	11-1
II.	Principal Conclusions.....	11-1
	No-Action Alternative	11-1
	No Significant Adverse Schools Impact Alternative	11-1
III.	No-Action Alternative	11-2
	Shadows	11-2
IV.	No Significant Adverse Schools Impact Alternative	11-2
	Shadows	11-3
Chapter 12: Unavoidable Adverse Impacts.....		12-1
I.	Introduction	12-1
II.	Shadows and Open Space.....	12-1
Chapter 13: Growth-Inducing Aspects of the Proposed Action		13-1
Chapter 14: Irreversible and Irretrievable Commitment of Resources		14-1
Chapter 15: Response to Comments on the DEIS		15-1
I.	Introduction	15-1
II.	List of Elected Officials, Organizations, and Individuals that Commented on the Draft Scope of Work	15-1
	Elected Officials	15-1
	Organizations and Interested Public	15-1
III.	Comments and Responses on the Draft Scope of Work.....	15-2
APPENDICES		
Appendix A:	WRP Consistency Assessment Form and Flood Evaluation Worksheet	
Appendix B:	Agency Correspondence	
Appendix C:	Transportation Planning Factors Memo	
Appendix V:	Comments Received on the DSOW	

LIST OF TABLES

ES-1	Project Site- Existing Conditions	ES-2
ES-2	Proposed Project.....	ES-3
1-1	Project Site-Existing Conditions	1-2
1-2	Summary of Required Approvals	1-2
1-3	Proposed Project.....	1-3
1-4	Comparison of 2023 No-Action and With-Action Conditions	1-3
2-1	Primary and Secondary Study Area Zoning Districts	2-6
2-2	Comparison of 2021 No-Action and With-Action Scenarios	2-18
3-1	Existing Population and Age Distribution in the 1/2-mile Study Area	3-7
3-2	Inventory of Existing Open Space and Recreational Resources in Study Area.....	3-10
3-3	Adequacy of Open Space Resources: Existing Conditions	3-19
3-4	No-Action Developments	3-21
3-5	No-Action Open Space Study Area Population	3-21
3-6	No-Action Alternatives to Open Space Resources	3-22
3-7	Adequacy of Open Space Resources: No-Action Condition	3-22
3-8	With-Action Open Space Study Area Population	3-23
3-9	Adequacy of Open Space Resources: With-Action Condition	3-24
3-10	Adequacy of Open Space Resources: No-Action vs With-Action Conditions	3-25
4-1	Development Sites Warranting Preliminary Shadows Analyses	4-4
4-2	Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 1 and 2 Screening	4-5
4-3	Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 3 Screening	4-5
4-4	Duration of Shadows on Sunlight-Sensitive Resources (Increment Compared to No-Action)	4-6
5-1a	Transportation Planning Factors: Development Site A	5-4
5-1b	Transportation Planning Factors: Development Site B	5-5
5-1c	Transportation Planning Factors: Development Site C	5-6
5-1d	Transportation Planning Factors: Development Site D	5-7
5-2a	Development Site A: Summary of Incremental Peak Hour Travel Demand	5-8
5-2b	Development Site B: Summary of Incremental Peak Hour Travel Demand	5-8
5-2c	Development Site C: Summary of Incremental Peak Hour Travel Demand	5-8
5-2d	Development Site D: Summary of Incremental Peak Hour Travel Demand	5-8
6-1	Applicable National Ambient Air Quality Standards and CEQR Threshold Values	6-9
6-2	Estimated Pollutant Emission Rates with Natural Gas Under Air State Facility Permit	6-13
6-3	Estimated Pollutant Emission Rates with Fuel Oil ULSD Under Air State Facility Permit.....	6-13
6-4	Modeling Parameters for Analysis	6-14
6-5	Summary of Results of the Metropolitan Hospital Air State Facility Emissions Analysis	6-17
7-1	Common Noise Levels	7-3
7-2	Average Ability to Perceive Changes in Noise Levels.....	7-3
7-3	Noise Exposure Guidelines for Use In City Environmental Impact Review.....	7-6
7-4	Required Attenuation Values to Achieve Acceptable Interior Noise Levels.....	7-6
7-5	HUD Acceptability Standards for Noise	7-6
7-6	Reference SEL's at 50 feet from Track and 50 mph, One Vehicle	7-9
7-7	FTA Forecasted Noise Levels for Receptor Locations on Park Avenue and 122nd Street	7-10
7-8	Computation of Noise Exposure at 50 feet for Fixed-Guideway General Assessment	7-11
7-9	Existing Noise Levels (in dBA) at the Development Sites.....	7-16
7-10	2023 No-Action Noise Levels (dBA) at the Development Sites	7-17
7-11	2023 With-Action Noise Levels (dBA) at the Development Site	7-19
7-12	Window/Wall Attenuation Requirements for Development Sites A, B, C & D.....	7-21

LIST OF FIGURES

	Following Page
1-1	Project Location of all Development Sites1-1
1-2a	Development Site A Existing Conditions1-2
1-2b	Development Site B Existing Conditions1-2
1-2c	Development Site C Existing Conditions1-2
1-2d	Development Site D Existing Conditions1-2
1-3a	Development Site A First Floor Plan and Building Section1-4
1-3b	Development Site B First Floor Plan and Building Section1-4
1-3c	Development Site C First Floor Plan and Building Section1-4
1-3d	Development Site D First Floor Plan and Building Section1-4
2-1a	Land Use: Development Site A2-4
2-1b	Land Use: Development Site B2-4
2-1c	Land Use: Development Site C2-4
2-1d	Land Use: Development Site D2-4
2-2a	Zoning Map: Development Site A2-8
2-2b	Zoning Map: Development Site B2-8
2-2c	Zoning Map: Development Site C2-8
2-2d	Zoning Map: Development Site D2-8
2-3	Coastal Zone Boundary2-21
2-4	100-Year & 500-Year Floodplain2-24
2-5	100-Year Floodplain: Development Site A2-24
2-6	100-Year Floodplain: Development Site B2-24
2-7	100-Year Floodplain: Development Site C2-24
2-8	500-Year Floodplain: Development Site C2-24
2-9	Development Site A: 1% Floodplain2-25
2-10	Development Site A: Illustrative Section in Relation to DFE2-25
2-11	Development Site B: 1% Floodplain2-25
2-12	Development Site B: Illustrative Section in Relation to DFE2-26
2-13	Development Site C: 1% Floodplain2-26
2-14	Development Site C: Illustrative Section: Building Features & 1% Floodplain2-26
3-1	Open Space Study Area3-3
3-2	Open Space Resources3-9
3-3	No-Action Developments Map3-20
4-1a	Tier 1 and Tier 2 Shadows Screening Assessment: Proposed Development Site A4-4
4-1b	Tier 1 and Tier 2 Shadows Screening Assessment: Proposed Development Site B4-4
4-1c	Tier 1 and Tier 2 Shadows Screening Assessment: Proposed Development Site C4-4
4-1d	Tier 1 and Tier 2 Shadows Screening Assessment: Proposed Development Site D4-4
4-2a	Tier 3 Screening Development Site A4-5
4-2b	Tier 3 Screening Development Site A4-5
4-2c	Tier 3 Screening Development Site B4-5
4-2d	Tier 3 Screening Development Site B4-5
4-2e	Tier 3 Screening Development Site C4-5
4-2f	Tier 3 Screening Development Site C4-5
4-2g	Tier 3 Screening Development Site D4-5
4-2h	Tier 3 Screening Development Site D4-5
4-3a	Blake Hobbs Playground Incremental Shadows on December 214-16
4-3b	Blake Hobbs Playground Incremental Shadows on December 214-16
4-4a	P.S. 155 Playground Incremental Shadows on March 21/September 214-16
4-4b	P.S. 155 Playground Incremental Shadows on March 21/September 214-16

4-4c	P.S. 155 Playground Incremental Shadows on December 21	4-16
4-4d	P.S. 155 Playground Incremental Shadows on December 21	4-16
4-5a	Pleasant Village Community Garden Map of Sunlight-Sensitive Features	4-16
4-5b	Pleasant Village Community Garden – Site Photos	4-16
4-6a	Pleasant Village Community Garden Incremental Shadows on March 21/September 21	4-16
4-6b	Pleasant Village Community Garden Incremental Shadows on March 21/September 21	4-16
4-6c	Pleasant Village Community Garden Incremental Shadows on May 6/August 6	4-16
4-6d	Pleasant Village Community Garden Incremental Shadows on May 6/August 6	4-16
4-6e	Pleasant Village Community Garden Incremental Shadows on June 21	4-16
4-6f	Pleasant Village Community Garden Incremental Shadows on December 21	4-16
4-6g	Pleasant Village Community Garden Incremental Shadows on December 21	4-16
4-7a	Jackie Robinson Community Garden Map of Sunlight-Sensitive Features	4-16
4-7b	Jackie Robinson Community Garden – Site Photos	4-16
4-8a	Jackie Robinson Community Garden Incremental Shadows on March 21/September 21	4-16
4-8b	Jackie Robinson Community Garden Incremental Shadows on March 21/September 21	4-16
4-8c	Jackie Robinson Community Garden Incremental Shadows on May 6/August 6	4-16
4-8d	Jackie Robinson Community Garden Incremental Shadows on May 6/August 6	4-16
4-8e	Jackie Robinson Community Garden Incremental Shadows on June 21	4-16
4-8f	Jackie Robinson Community Garden Incremental Shadows on June 21	4-16
4-8g	Jackie Robinson Community Garden Incremental Shadows on December 21	4-16
4-8h	Jackie Robinson Community Garden Incremental Shadows on December 21	4-16
6-1	Boiler Screen for Residential Development with a Natural Gas Boiler	6-3
6-2	Metropolitan Hospital Complex	6-6
6-3	View of Hospital Stack from Natural Gas-Firing Boilers and Site A	6-8
7-1a	Noise Monitoring Location: Development Site A	7-13
7-1b	Noise Monitoring Location: Development Site B	7-13
7-1c	Noise Monitoring Location: Development Site C	7-13
7-1d	Noise Monitoring Location: Development Site D	7-13
7-2	Building Attenuation Requirements: Development Site D	7-21
11-1	Jackie Robinson Community Garden Incremental Shadow Coverage on March 21/September 21	11-3
11-2	Jackie Robinson Community Garden Incremental Shadow Coverage on May 6/August 6	11-3
11-3	Jackie Robinson Community Garden Incremental Shadow Coverage on June 21	11-3
11-4	Jackie Robinson Community Garden Incremental Shadow Coverage on December 21	11-3

I. INTRODUCTION

The New York City Department of Housing Preservation and Development (NYC HPD), the applicant, on behalf of Las Raices East Harlem LLC, the Project Sponsor, is requesting the discretion action that would facilitate the development of four new affordable housing developments “the proposed project” on four separate development sites in the East Harlem neighborhood of Manhattan, Community District 11 (CD 11). The proposed project would be facilitated by disposition of City-owned property through the Uniform Land Use Review Procedure (“the proposed action”).

The proposed project would develop six tax lots grouped into four Development Sites (named A through D for identification purposes) with a total of four buildings containing a total of approximately 81 affordable dwelling units (DUs) (plus two superintendent’s units for a total of 83 units) and approximately 10,740 gross square feet (gsf) of community facility space. All six lots are City-owned and would be conveyed by HPD to the Project Sponsor as a result of the proposed action. Construction of the proposed project is expected to be completed in 2023.

This Executive Summary provides a detailed description of the proposed action, including project background, project purpose and need, site description, project description, the approvals required, and the public review process for the proposed action. It also summarizes the Environmental Impact Statement (EIS) analyses that examine the potential for the proposed action to result in significant adverse environmental impacts in any technical area of the 2020 *City Environmental Quality Review (CEQR) Technical Manual*.

II. BACKGROUND AND EXISTING CONDITIONS

Project Area

The project area is comprised of six tax lots, which are grouped into four Development Sites in East Harlem (see **Table ES-1**). Development Site A (Block 1674, Lot 104) has a lot area of approximately 1,898 square feet (sf) and is currently vacant. Development Site A has approximately 25 feet of frontage along the north side of East 102nd Street between Second and First Avenues. Development Site A is zoned C1-5/R8A.

Development Site B (Block 1688, Lot 34) has a lot area of approximately 2,523 sf and is currently vacant. Development Site B has approximately 25 feet of frontage along the south side of East 117th Street between Second and First Avenues. Development Site B is zoned R7B.

Development Site C (Block 1815, Lots 5 and 6) has a lot area of approximately 4,827 sf. Development Site C, which is a portion of the Pleasant Village Community Garden, has approximately 47.84 feet of frontage along the north side of East 118th Street between Pleasant Avenue and a cul-de-sac where the street terminates. Development Site C is zoned R7B. Pleasant Village Community Garden also includes adjoining land with frontage on Pleasant Avenue; that

adjoining community garden area is not part of the development site and would not be directly affected by the proposed action. The community garden on the development site operates under a temporary license agreement with HPD that permits the community garden to use this site on an interim basis until HPD is ready to move forward with its redevelopment.

Table ES-1: Project Site - Existing Conditions

Development Site	Block	Lot	Address	Zoning District	Land Use	Lot Area (SF)
A	1674	104	303 East 102nd Street	C1-5/R8A	Vacant	1,898
B	1688	34	338 East 117th Street	R7B	Vacant	2,523
C	1815	5 & 6	505 East 118th Street	R7B	Community Garden	4,827
D	1771	1 & 2	1761 Park Avenue	M1-6/R10 (MIH)	Community Garden	4,583
Total						13,831

Development Site D (Block 1771, Lots 1 and 2) has a lot area of approximately 4,583 sf. Development Site D, which is a portion of the Jackie Robinson Community Garden, has approximately 50.92 feet of frontage along the east side of Park Avenue between East 122nd and East 123rd Streets and 91.94 feet of frontage on the north side of East 122nd Street extending east from its intersection with Park Avenue. Development Site D is zoned M1-6/R10 (MIH). The community garden on the development site operates under a temporary license agreement with HPD that permits the community garden to use this site on an interim basis until HPD is ready to move forward with its redevelopment.

III. DESCRIPTION OF THE PROPOSED ACTION

HPD is seeking the approval of a discretionary action and the Project Sponsor will seek financing from HPD that would facilitate the development of four buildings containing approximately 81 affordable housing DUs (plus two superintendent's units for a total of 83 units and 10,740 gsf of community facility space in the East Harlem neighborhood of Manhattan. The buildings would not provide accessory or public parking. The discretionary action consists of the disposition of City-owned property for each of the four sites through the Uniform Land Use Review Procedure (ULURP). In addition to the ULURP approval, the Project Sponsor will seek construction financing from HPD at a later date.

IV. PURPOSE AND NEED FOR THE PROPOSED ACTION

The proposed project would create new affordable housing development on vacant and underutilized lots in an area where a strong demand for affordable housing exists. In addition, the proposed project would bring further redevelopment and improvement to the neighborhood.

V. DESCRIPTION OF THE PROPOSED PROJECT

The proposed action would facilitate the development of four buildings containing approximately 81 affordable housing DUs (plus two superintendent's units for a total of 83 units and 10,740 gsf of community facility space in the East Harlem neighborhood of Manhattan. The buildings would not provide accessory or public parking. The proposed development for each site is described in detail below and shown in **Table ES-2**.

Table ES-2: Proposed Project

Development Site A									
Block	Lot	Address	Proposed Height (including mechanical bulkhead)	Stories	Residential GSF	Total DUs	Community Facility GSF	Mechanical GSF	Total Proposed GSF
1674	104	303 East 102nd Street	62'-8"	5	5,471	6	2,497	1,008	8,976
Development Site B									
Block	Lot	Address	Proposed Height	Stories	Residential GSF	Total DUs	Community Facility GSF	Mechanical GSF	Total Proposed GSF
1688	34	338 East 117th Street	62'-2"	5	7,571	7	-	735	8,306
Development Site C									
Block	Lots	Address	Proposed Height	Stories	Residential GSF	Total DUs	Community Facility GSF	Mechanical GSF	Total Proposed GSF
1815	5 & 6	505 East 118th Street	70'-2"	6	16,208	18	-	1,102	17,310
Development Site D									
Block	Lots	Address	Proposed Height	Stories	Residential GSF	Total DUs	Community Facility GSF	Mechanical GSF	Total Proposed GSF
1771	1 & 2	1761 Park Avenue	142'	13	44,598	52	8,243	2,829	55,670
Total					73,848	83	10,740	5,674	90,262

Development Site A

Development Site A would include a five-story (approximately 53'-8" to roof; 62'-8" to mechanical bulkhead/solar panels) residential and community facility building located at 303 East 102nd Street. The building at Development Site A would be approximately 8,976 gsf and include 5,471 gsf of residential space (6 DUs), 2,497 gsf of community facility space, and a one level cellar for community facility and mechanical use. Development Site A would include a green roof, solar panels and a rainwater collection system. The rear yard of Development Site A would be available to building residents. It would be completed and occupied in 2023.

Development Site B

Development Site B would include a five-story (approximately 53'-2" feet to roof; 62'-2" feet to mechanical bulkhead/solar panels) residential building located at 338 East 117th Street. It would be approximately 8,306 gsf and include approximately 7,571 gsf of residential space (7 DUs). Development Site B would not include a cellar. The rear yard of Development Site B would be available to building residents. Development Site B would include a green roof, solar panels and a rainwater collection system. It would be completed and occupied in 2023.

Development Site C

Development Site C would include one six-story (approximately 62' to roof; 70'-2" feet to mechanical bulkhead/solar panels) residential building located at 505 East 118th Street. It would be approximately 17,310 gsf and would include approximately 16,208 gsf of residential space (18 DUs). Development Site C would not include a cellar. The rear yard of Development Site C would be available to residents as well as a rooftop terrace. Development Site C would include a green roof, solar panels and a rainwater collection system. It would be completed and occupied in 2023.

Development Site D

Development Site D would include one 13-story (approximately 134' to roof; 142' to mechanical bulkhead/solar panels) residential and community facility building located at 1791 Park Avenue. It would be approximately 55,670 gsf and would include approximately 44,598 gsf of residential space (52 DUs) and 8,243 gsf of community facility space on the ground floor. Development Site D would include one level for mechanical use. Development Site D would include a green roof, solar panels and a rainwater collection system. There would be an outdoor green wall adjacent to the Jackie Robinson Community Garden and a rooftop terrace available to building residents. It would be completed and occupied in 2023.

VI. ANALYSIS FRAMEWORK FOR ENVIRONMENTAL REVIEW**Analysis Year**

All of the proposed buildings are expected to be completed and occupied by 2023. As such, the environmental review will use a 2023 analysis year.

The Future Without the Proposed Action (No-Action Condition)

In the 2023 future without the proposed action, it is expected that there would be no new development on the Development Sites and all six tax lots would remain as vacant or as portions of community gardens operating under temporary license agreements on an interim basis until HPD is ready to move forward with their redevelopment.

The Future with the Proposed Action (With-Action Condition)

As discussed above under "The Description of the Proposed Project", the proposed action would facilitate the development of four buildings that would include a total of approximately 81 affordable DUs (plus two superintendent's units for a total of 83 units) and approximately 10,740

gsf of community facility space. The Proposed Project is expected to take approximately 23 months to construct and would be completed and fully occupied in 2023.

Possible Effects of the Proposed Actions

The incremental difference between the No-Action condition and the With-Action condition on the Proposed Development Sites provides the basis by which the potential environmental effects are evaluated in the EIS. Therefore, the EIS analyzes an incremental net increase of 83 dwelling units (approximately 73,848 gsf), approximately 10,740 gsf of community facility and a net reduction of approximately 6,971 sf of temporary community garden space. Also, the EIS analyzes the incremental change from sites with no buildings to new buildings as described above, with foundations and, on two sites, cellars. Refer to **Table ES-3**.

Table ES-3: Comparison of 2023 No-Action and With-Action Conditions

Use	Existing / No-Action	With-Action1	Increment
Residential (Affordable)	0 gsf 0 DUs	73,848 gsf 81 DUs (+2 super's DUs)	+73,848 gsf +81 DUs (+2 super's DUs)
Community Facility	0 gsf	10,740 gsf	+10,740 gsf
Temporary Garden Space	6,971 sf	0 sf	- 6,971 sf
Population/Employment2	Existing/No- Action	With-Action	Increment
Residents	0 residents	198 residents	+198 residents
Workers	0 workers	35 workers	+35 workers

Notes:

¹All figures are approximate and subject to change.

²Assumes 1 worker per 25 DUs and 3 workers per 1,000 gsf of community facility

VII. PROBABLE IMPACTS OF THE PROPOSED ACTIONS

Land Use, Zoning, and Public Policy

No significant adverse impacts on land use, zoning, or public policy, as defined by the guidance for determining impact significance set forth in the *CEQR Technical Manual*, are anticipated in the future with the proposed action in the project area (the primary study area) or within a 400-foot radius (secondary study area). The proposed development resulting from the proposed action would not directly displace any land uses so as to adversely affect surrounding land uses, nor would it generate land uses that would be incompatible with land uses, zoning, or public policies in the secondary study area. The proposed action would not substantially hinder the achievement of any Waterfront Revitalization Program (WRP) policy and the analysis found the project consistent with the WRP policies.

The proposed action, with these beneficial elements, would not result in any significant adverse impacts to land use, zoning, or public policy.

Open Space

The proposed action would result in a direct significant adverse open space impact, due to project-generated incremental shadows on Jackie Robinson Community Garden, as identified in the shadows analysis in **Chapter 4, “Shadows.”** Apart from this, the proposed action would not result in any other significant adverse open space impacts. According to the *CEQR Technical Manual*, a proposed action may result in a significant adverse impact on open space resources if (a) there would be direct displacement/alteration of existing open space within the study area that has a significant adverse effect on existing users (*Direct Effect*); or (b) it would reduce the open space ratio and consequently overburden existing facilities or further exacerbate deficiency in open space (*Indirect Effect*). The *CEQR Technical Manual* also states “if the area exhibits a low open space ratio indicating a shortfall of open space, even a small decrease in the ratio as a result of the action may cause an adverse effect.” A five percent or greater decrease in the open space ratio is considered “substantial,” and a decrease of less than one percent is generally considered to be insignificant unless open space resources are extremely limited. The open space study area analyzed in this chapter is located in an area that is considered neither “well-served” nor “under-served” by open space as defined in the *CEQR Technical Manual Appendix: Open Space Maps*.

In New York City, local open space ratios vary widely, and the median ratio at the Citywide Community District level is 1.5 acres of open space per 1,000 residents. As a planning goal, a ratio of 2.5 acres per 1,000 residents represents an area well-served by open spaces, and is consequently used as an optimal benchmark for residential populations in large-scale plans and proposals. Ideally, this would comprise 0.50 acres of passive open space and 2.0 acres of active open space per 1,000 residents.

Direct Effects

According to the *CEQR Technical Manual*, a proposed action may result in a significant adverse direct impact on open space resources if there would be direct displacement/alteration of existing open space within the study area and would have a significant adverse effect on existing users, or an imposition of noise, air pollution emissions, odors, or shadows on public open space that may alter its usability. However, the proposed action would not result in any direct air quality or noise effects to area open spaces.

As discussed below, while the direct effects open space assessment shows that the proposed action would result in the displacement of two existing community gardens located on Development Site C (Pleasant Village Community Garden) and Development Site D (Jackie Robinson Community Garden), portions of the community gardens would remain. Pleasant Village Community Garden would remain on the 0.38-acre Lot 2. Jackie Robinson Community Garden would remain on the 0.05-acre Lot 5. Furthermore, the displacement of these community gardens is consistent with the terms of the temporary license agreements under which they have operated as interim facilities until they would be developed pursuant to HPD plans. In addition, these gardens have limited public hours and as such are not accounted for in the quantitative analysis pursuant to CEQR guidance and therefore, their elimination would not affect open space ratios calculated for the indirect effects analysis. Additionally, there are several community gardens in the surrounding area, as documented in this chapter. Therefore, the direct displacement of portions of Pleasant Village Community Garden and Jackie Robinson Community Garden would not constitute a direct significant adverse open space impact.

As discussed in **Chapter 4, “Shadows,”** the proposed action would result in significant adverse impacts related to shadows on one open space resource: the Jackie Robinson Community Garden. The lead agency, in consultation with the NYC Department of Parks and Recreation (DPR), has determined that this also constitutes a significant adverse open space impact due to the direct effects of project-generated incremental shadows. The shadows analysis concludes that given the duration and extent of incremental shadow, the use and character of the community garden could be altered and the health of trees, flowers, and other plantings could be affected adversely by new project-generated shadows.

Indirect Effects

According to the *CEQR Technical Manual*, a proposed action may result in a significant adverse indirect impact on open space resources if it would reduce the open space ratio and consequently result in the overburdening of existing facilities or further exacerbating a deficiency in open space. The proposed action would introduce a net increase of an estimated 198 new residents over the No-Action condition, which does not exceed the 200-resident CEQR screening threshold. However, an open space analysis was conducted for the residential (1/2-mile) study area due to the closeness of the project to the threshold combined with the sensitivity of open space concerns for the proposed action. The quantitative assessment shows that the proposed action would result in the study area’s open space ratio decreasing by approximately 0.1 percent. This change in the study area’s open space ratio would be below the CEQR impact threshold of one percent for areas that are extremely lacking in open space, as indicated by very low open space ratios, and therefore, would not result in significant adverse impacts.

Shadows

The proposed action would result in significant adverse impacts related to shadows. On the March 21/September 21, May 6/August 6, and June 21 representative analysis days, portions of the Jackie Robinson Community Garden would receive less than four- to six-hours of direct sunlight. Given the variety of plants, trees, and flowers in the garden, including those that produce food such as fruit-bearing trees, the reduction in direct sunlight due to project-generated incremental shadows would significantly impact the health of these species, and the viability of the vegetation in the garden would potentially be threatened and could result in significant adverse shadow impacts. Therefore, project-generated incremental shadows on Jackie Robinson Community Garden as a result of the proposed action would be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

Transportation

A detailed transportation analysis was conducted and determined that the proposed action would not result in significant adverse transportation impacts. Each of the Development Sites would generate significantly less than *CEQR Technical Manual* analysis threshold of 50 vehicle trips during each of the analysis peak hours. Similarly, the Development Sites would each generate fewer than 200 subway and bus trips during each of the analysis peak hours. Therefore, further quantified traffic and transit analyses are not warranted. As per the *CEQR Technical Manual*, a detailed parking assessment is not needed if the threshold for traffic analysis is not exceeded.

Additionally, the Development Sites would generate less than 200 pedestrian trips during each analysis peak hour, therefore no significant impacts.

Air Quality

HVAC Analysis

The proposed sites are located more than 400 feet from one another and therefore, could not impact each other. As such, no project-on-project analysis was warranted. However, each building's HVAC system individually could impact nearby taller existing buildings. Therefore, a project-on-existing analysis was conducted. A screening-level analysis determined that, with the LDA requirements, the potential HVAC impacts of the proposed development on these nearby taller buildings would not be significant.

Industrial Source Analysis

A review of the NYCDEP database identified four (4) possible nearby existing industrial facilities. The permits for these facilities are PR008416, PB001011, PB046511, and PB517103. A review of these permits determined that the first three of these permits are for minor combustion installations or emergency generators. As such, these permits are not for industrial sources with toxic air pollutants. In addition, the fourth permit (Permit # PB517103) is for a dry-cleaning facility and, based on recent NYCDEP recommendations, dry cleaning facilities with 4th-generation emission control equipment are currently heavily regulated and do not require an air quality analysis. Based on this review, it was concluded that there are no industrial sources with toxic air emissions within 400 feet of the study area that have the potential to significantly impact the proposed developments and, as such, no industrial source analysis is warranted.

Large Emission Source Analysis

The analysis conducted employed the procedures and methodologies prescribed in the *CEQR Technical Manual* to determine whether the impacts of nearby large emission source emissions on the proposed developments could be significant. Potential impacts of the NO₂, PM_{2.5}, PM₁₀, and SO₂ emissions from Metropolitan Hospital's boilers on Site A with both natural gas and fuel oil were estimated, and the results compared with the 24-hour/annual PM_{2.5} CEQR significant impact criteria and applicable National Ambient Air Quality Standards (NAAQS) (i.e., the 1-hour/annual NO₂, 1-hour SO₂, and 24-hour PM₁₀ NAAQS). The result of dispersion analysis for both types of fuels is that PM_{2.5} impacts are less than CEQR significant impact criteria, and total PM_{2.5}, PM₁₀, NO₂, and SO₂ concentrations are below the applicable NAAQS. Therefore, it is concluded that Metropolitan Hospital's boiler emissions, firing either natural gas or fuel oil #2, would not significantly impact the proposed development.

Updated Project Dimensions

Subsequent to the completion of the air quality analysis, the dimensions of the buildings were modified slightly. With one exception, the differences in building heights between those evaluated in this report and the final design are less than 1 inch. The only exception is Site D, which was 134-feet tall but is now 142-feet tall. However, Site D was and still is taller than the nearby existing buildings and would therefore not cause any significant air quality impacts. As such, the small

changes in building heights in the final design would not measurably affect the results of this analysis.

Noise

In the future with the proposed actions, the predicted peak period L_{10} values at the receptor locations would range from a minimum of 58.82 dBA to a maximum of 83.02 dBA. When compared to the future without the proposed action, the relative increases in noise levels are expected to be well below 3.0 dBA at all analyzed receptor locations. Therefore, no significant adverse mobile source noise impacts due to action-generated vehicular traffic would occur.

Based on predicted future With-Action exterior noise levels and *CEQR Technical Manual* criteria, With-Action noise levels at Receptor Locations 1 and 2 would remain in the “Marginally Acceptable” CEQR Noise Exposure category and Receptor Location 3 would remain in the “Acceptable” CEQR Noise Exposure category, and, as such, no special noise attenuation measures beyond standard construction practices would be required for residential or community facility uses on any of the frontages at Development Sites A, B or C in order to achieve the required residential or community facility interior noise level of 45 dBA or lower. However, Receptor Locations 4 and 5 would fall in the “Clearly Unacceptable” and “Marginally Unacceptable” CEQR Noise Exposure categories, respectively, and, as such, would require a minimum of 40 dBA attenuation on any western-facing (Park Avenue) frontages and a minimum of 36 dBA attenuation on any southern-facing (East 122nd Street) frontages at Development Site D.

Furthermore, as the maximum predicted L_{dn} noise levels at Receptor Location 2 (Development Site B) would fall within the “Normally Unacceptable” category defined by the U.S. Department of Housing and Urban Development (HUD), a minimum of 25 dBA of attenuation is needed along any northern-facing (East 117th Street) frontages at Development Site B. Additionally, as the maximum predicted L_{dn} noise levels at Receptor Locations 4 and 5 (Development Site D) would both fall within the “Unacceptable” category defined by HUD, a minimum of 36 dBA and 31 dBA of attenuation would be needed along any western- (Park Avenue) and southern-facing (East 122nd Street) frontages at Development Site D, respectively.¹

Both the CEQR and HUD noise attenuation measures would be required through provisions contained in the Land Disposition Agreement (LDA) between HPD and the project sponsor.² With implementation of the attenuation levels discussed below, the Proposed Project would not result in any significant adverse noise impacts related to noise attenuation.

¹ It should be noted that the HUD attenuation requirement described above would only be required in the event the Proposed Project include federal sources of funding. In addition, any CEQR attenuation requirements exceeding those required by HUD at a particular receptor would supersede the HUD requirement as it would satisfy both the CEQR and HUD requirements at that receptor. Therefore, in regards to Development Site D, the CEQR requirement for both the western (40 dBA) and southern (36 dBA) frontages would supersede the HUD requirements for those same frontages (36 dBA and 31 dBA, respectively).

² Absent the federal sources of funding, the Proposed Project would only be required to provide the noise attenuation levels pursuant to CEQR.

Public Health

The proposed action is not expected to result in unmitigated significant adverse impacts in the following technical areas that contribute to public health: operational air quality, construction-related air quality, operational noise, water quality, or hazardous materials. The proposed action could result in unmitigated significant adverse shadows and open space related impacts. Therefore, a preliminary assessment of public health was conducted. As detailed therein, while the proposed action would result in significant adverse unmitigated impacts related to shadows on one open space, the potential for these impacts to occur is expected to be limited and would not significantly affect public health. Therefore, no significant adverse public health impacts are expected as a result of the proposed action.

Neighborhood Character

The proposed action would not result in significant adverse impacts associated with neighborhood character. The proposed action would permit the development of affordable housing at four development sites in East Harlem, which would remain underutilized absent the proposed action. The proposed project would support the City's goals of promoting affordable housing development by maximizing the use of vacant and underutilized land.

As described in the EIS and summarized herein, the proposed action would not result in significant adverse impacts in the areas of land use, zoning, and public policy; socioeconomic conditions; historic and cultural resources; urban design and visual resources; or noise. The significant adverse shadows impacts that would occur as a result of the proposed action would not affect any defining feature of neighborhood character, nor would a combination of moderately adverse effects (related to any of the above-mentioned technical analysis areas) affect such a defining feature. Although significant adverse impacts would occur with respect to shadows and open space, the impact would not result in significant change to one of the determining elements of neighborhood character. In addition, while incremental vehicle volumes introduced as a result of the proposed action would increase noise levels adjacent to the development sites, the increases would not be perceptible to individuals (i.e., would be less than 3.0 dBA) and therefore, would not alter the character of the surrounding neighborhood.

VIII. MITIGATION

Incremental shadows cast by the Proposed Project would be substantial enough in extent and/or duration to significantly affect the Jackie Robinson Community Garden on all four of the representative analysis days. Incremental shadow durations would range from 2 hours and 22 minutes on December 21 to 5 hours and 40 minutes on June 21. As disclosed in **Chapters 3 and 4, "Open Space" and "Shadows,"** respectively, this would constitute a shadows impact on an open space resource.

The *CEQR Technical Manual* identifies several measures that could mitigate significant adverse shadow impacts on open spaces, including modifying the height, shape, size or orientation of a proposed development in order to eliminate or reduce the extent and duration of incremental shadow on the resource; relocating sunlight-sensitive features within an open space to avoid sunlight loss; relocating or replacing vegetation; undertaking additional maintenance to reduce the likelihood of species loss; and sharing spaces such as building roofs or rear yards. Potential

mitigation measures for the shadows and open space impacts are being explored by the Applicant in consultation with the New York City Department of Parks and Recreation (DPR), and will be refined between the DEIS and FEIS. If feasible mitigation measures are identified, the impacts would be considered partially mitigated. As the significant adverse shadows impact would not be fully mitigated, the proposed actions would result in unmitigated significant adverse shadows impacts to this resource. Generally, shadows impacts (including those on open spaces) that result from the proposed actions have been found to be unavoidable if modifying the building envelope is infeasible.

IX. ALTERNATIVES

No-Action Alternative

The No-Action Alternative examines future conditions within the development sites, but assumes the absence of the proposed action (i.e., the discretionary approval proposed as part of the proposed action would not be adopted). Under the No-Action Alternative by 2023, existing land uses within the development sites would remain unchanged. It is anticipated Development Sites A and B would remain vacant and Development Sites C and D would remain as portions of Pleasant Village Community Garden (Development Site C) and Jackie Robinson Community Garden (Development Site D) operating under temporary license agreements with HPD that permits community garden groups to use these sites on an interim basis until HPD is ready to move forward with their redevelopment. Redevelopment of the development sites would not be possible without the disposition of City-owned property. The technical chapters of this EIS have described the No-Action Alternative as “the Future Without the Proposed Action.”

The significant adverse impacts anticipated for the proposed action would not occur under the No-Action Alternative. However, the No-Action Alternative would not meet the goals of the proposed action. The benefits expected to result from the proposed action – including promoting affordable housing development by maximizing the use of vacant City-owned land and encouraging the continued economic development of East Harlem – would not be realized under this alternative, and the No-Action Alternative would fall short of the objectives of the proposed action.

No Significant Adverse Impacts Alternative

The No Significant Adverse Impacts Alternative examines a scenario in which the density and other components of the proposed action are changed specifically to avoid the significant adverse impacts associated with the proposed action. There is the potential for the Proposed Project to result in unmitigated significant adverse impacts related to shadows. Overall, in order to eliminate all unmitigated significant adverse impacts, the Proposed Project would have to be modified to a point where the principal goals and objectives would not be realized.

X. UNAVOIDABLE ADVERSE IMPACTS

As discussed in **Chapter 4, “Shadows,”** the proposed action would result in a significant adverse shadow impact on Jackie Robinson Community Garden, which is also an open space impact. On

the March 21/September 21, May 6/August 6, and June 21 representative analysis days, portions of the Jackie Robinson Community Garden would receive less than four- to six-hours of direct sunlight daily, i.e., the minimum necessary for the survival of sunlight-sensitive vegetation, which would result in significant adverse impacts.

The *CEQR Technical Manual* identifies potential mitigation strategies for incremental shadow impacts on open space resources which may include, but are not limited to, relocating, replacing or monitoring vegetation for a set period of time; undertaking additional maintenance to reduce the likelihood of species loss; or providing for replacement facilities on another nearby site. Other potential mitigation strategies include the redesign or reorientation of the open space site plan to provide for replacement facilities, vegetation, or other features. Feasible and practical measures to reduce the project's shadow impacts will continue to be explored in consultation with the New York City Department of Parks and Recreation (DPR) between the DEIS and FEIS. If feasible mitigation measures are identified, the impacts would be considered partially mitigated. As the significant adverse shadows and open space impacts would not be fully mitigated, the proposed actions would result in unmitigated significant adverse shadows impacts to this resource.

XI. GROWTH-INDUCING ASPECTS OF THE PROPOSED ACTIONS

The term “growth-inducing aspects” generally refers to “secondary” impacts of a proposed action that trigger further development outside the directly affected area. The *CEQR Technical Manual* indicates that an analysis of the growth-inducing aspects of a proposed action is appropriate when the project: (1) adds substantial new land use, residents, or new employment that could induce additional development of a similar kind or of support uses, such as retail establishments to serve new residential uses; and/or (2) introduces or greatly expands infrastructure capacity (e.g., sewers, central water supply).

The goal of the proposed action, as noted in **Chapter 1, “Project Description,”** is to create opportunities for new affordable housing development on vacant lots in an area where a strong demand for affordable housing exists.

As detailed in **Chapter 1, “Project Description,”** the incremental change between the No-Action and With- Action conditions that would result from the proposed actions would be a net increase of 83 dwelling units and approximately 10,740 gsf of community facility space.

The projected increase in residential population is likely to increase the demand for neighborhood services, ranging from community facilities to local goods and services retail. This would enhance the growth of local commercial corridors in the area. The proposed action could also lead to additional growth in the City and State economies, primarily due to employment and fiscal effects during construction on the development sites and operation of these developments after their completion. However, this secondary growth would be expected to occur incrementally throughout the region and is not expected to result in any significant impacts in any particular area or at any particular site.

The proposed action would result in more intensive land uses on the development sites. However, it is not anticipated that the proposed action would generate significant secondary impacts resulting in substantial new development in nearby areas. As the surrounding areas have a well-established

residential market and a critical mass of non-residential uses, including retail, public facilities and institutions, and community facility uses, the proposed action would not create the critical mass of uses or populations that would induce additional development outside the development sites. Moreover, the proposed action does not include the introduction of new infrastructure or an expansion of infrastructure capacity that would result in indirect development. Therefore, the proposed action would not induce significant new growth in the surrounding area.

XII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Resources, both natural and man-made, would be expended in the construction and operation of developments projected to occur as a result of the proposed action. These resources include the building materials used in construction; energy in the form of gas and electricity consumed during construction and operation of project-generated development by various mechanical and processing systems; and the human effort (time and labor) required to develop, construct, and operate various components of project-generated development. These are considered irretrievably committed because their reuse for some other purpose would be highly unlikely.

The proposed developments under the proposed action also constitutes a long-term commitment of land resources, thereby rendering land use for other purposes highly unlikely in the foreseeable future. However, the land use change that would occur as a result of the proposed action would be compatible in terms of use and scale with existing conditions and trends in the area as a whole. None of the development sites possess any natural resource values, and the sites are in large part developed or have been previously developed. It is noted that funds committed to the design, construction/renovation, and operation of proposed developments under the proposed action would not be available for other projects. However, this is not a significant adverse fiscal impact or a significant adverse impact on City resources.

In addition, the public services provided in connection with the proposed developments under the proposed action (e.g., police and fire protection, public education, open space, and other city resources) also constitute resource commitments that might otherwise be used for other programs or projects. However, the proposed action would enliven the area and produce economic growth that would generate substantial tax revenues providing a new source of public funds that would offset these expenditures.

The commitments of resources and materials are weighed against the benefits of the proposed action. The proposed action would promote new permanently affordable residential development, encourage mixed-use development on key corridors, enhance and revitalize major thoroughfares through new economic development, and protect neighborhood character.

I. INTRODUCTION

This environmental impact statement (EIS) considers the discretionary action requested by the New York City Department of Housing Preservation and Development (NYC HPD), the applicant, on behalf of Las Raices East Harlem LLC, the Project Sponsor, that would facilitate the development of four new affordable housing developments “the proposed project” on four separate development sites in the East Harlem neighborhood of Manhattan, Community District 11 (CD 11). The proposed project would be facilitated by disposition of City-owned property through the Uniform Land Use Review Procedure (“the proposed action”).

The proposed project would develop six tax lots grouped into four Development Sites (named A through D for identification purposes) with a total of four buildings containing a total of approximately 81 affordable dwelling units (DUs) (plus two superintendent’s units for a total of 83 units) and approximately 10,740 gross square feet (gsf) of community facility space. All six lots are City-owned and would be conveyed by HPD to the Project Sponsor as a result of the proposed action. Construction of the Proposed Project is expected to be completed in 2023.

II. EXISTING CONDITIONS

The project area is comprised of six tax lots, which are grouped into four Development Sites in East Harlem (see **Figure 1-1** and **Table 1-1**). Development Site A (Block 1674, Lot 104) has a lot area of approximately 1,898 square feet (sf) and is currently vacant. Development Site A has approximately 25 feet of frontage along the north side of East 102nd Street between Second and First Avenues. Development Site A is zoned C1-5/R8A.

Development Site B (Block 1688, Lot 34) has a lot area of approximately 2,523 sf and is currently vacant. Development Site B has approximately 25 feet of frontage along the south side of East 117th Street between Second and First Avenues. Development Site B is zoned R7B.

Development Site C (Block 1815, Lots 5 and 6) has a lot area of approximately 4,827 sf. Development Site C, which is a portion of the Pleasant Village Community Garden, has approximately 47.84 feet of frontage along the north side of East 118th Street between Pleasant Avenue and a cul-de-sac where the street terminates. Development Site C is zoned R7B. Pleasant Village Community Garden also includes adjoining land with frontage on Pleasant Avenue; that adjoining community garden area is not part of the development site and would not be directly affected by the proposed action. The community garden on the development site operates under a temporary license agreement with HPD that permits the community garden to use this site on an interim basis until HPD is ready to move forward with its redevelopment.

Project Location of all Development Sites

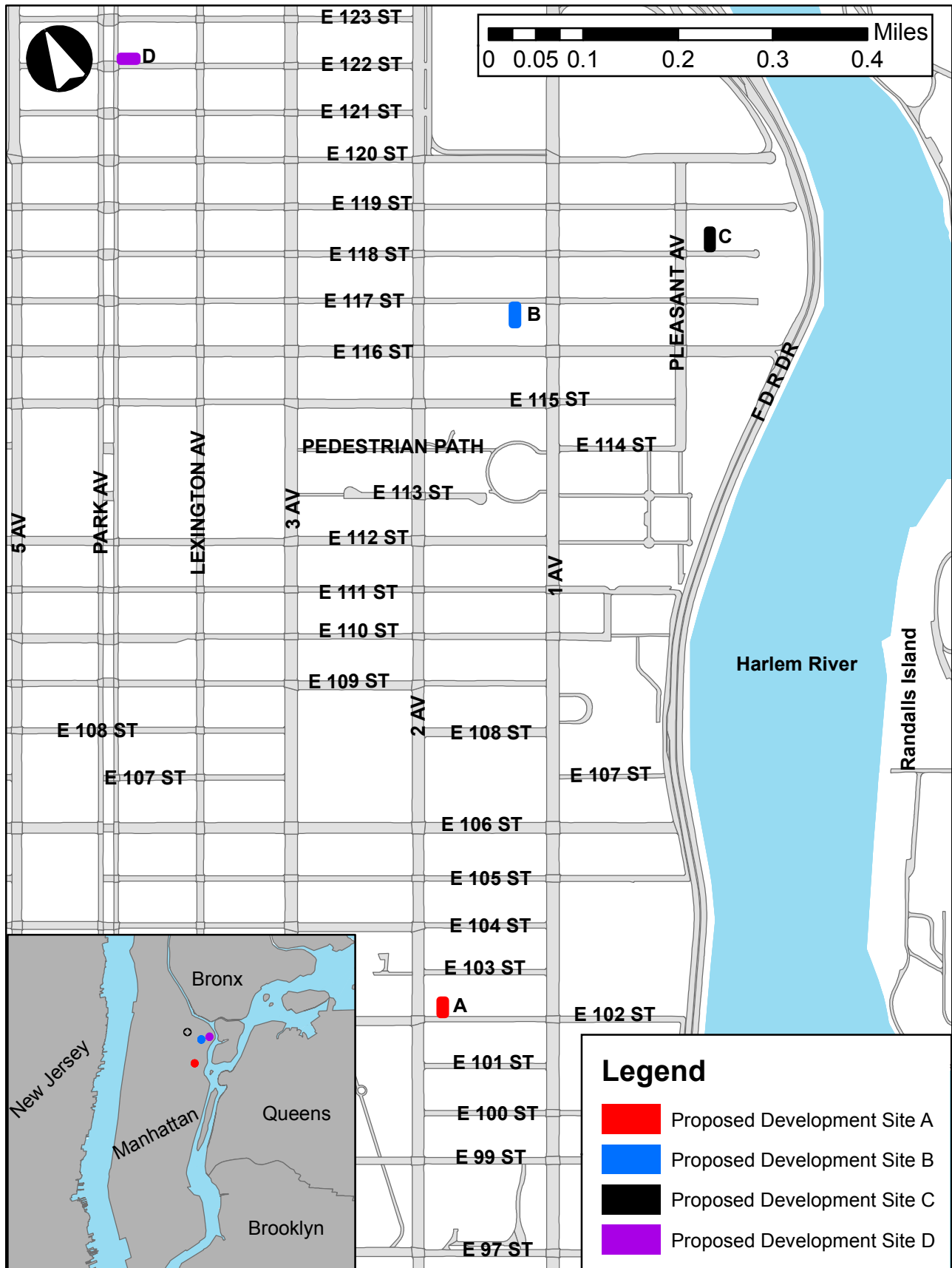


Table 1-1: Project Site - Existing Conditions

Development Site	Block	Lot	Address	Zoning District	Land Use	Lot Area (SF)
A	1674	104	303 East 102 nd Street	C1-5/R8A	Vacant	1,898
B	1688	34	338 East 117 th Street	R7B	Vacant	2,523
C	1815	5 & 6	505 East 118 th Street	R7B	Community Garden	4,827
D	1771	1 & 2	1761 Park Avenue	M1-6/R10 (MIH)	Community Garden	4,583
Total						13,831

Development Site D (Block 1771, Lots 1 and 2) has a lot area of approximately 4,583 sf. Development Site D, which is a portion of the Jackie Robinson Community Garden, has approximately 50.92 feet of frontage along the east side of Park Avenue between East 122nd and East 123rd Streets and 91.94 feet of frontage on the north side of E. 122nd Street extending east from intersection with Park Avenue. Development Site D is zoned M1-6/R10 (MIH). The community garden on the development site operates under a temporary license agreement with HPD that permits the community garden to use this site on an interim basis until HPD is ready to move forward with its redevelopment. **Figure 1-2a through Figure 1-2d** shows the existing site conditions for all four Development Sites.

III. THE PROPOSED ACTION

HPD is seeking the approval of a discretionary action and the Project Sponsor will seek financing from HPD that would facilitate the development of four buildings containing approximately 81 affordable housing DUs (plus two superintendent's units for a total of 83 units and 10,740 gsf of community facility space in the East Harlem neighborhood of Manhattan. The buildings would not provide accessory or public parking. The discretionary action consists of the disposition of City-owned property for each of the four sites through the Uniform Land Use Review Procedure (ULURP). In addition to the ULURP approval, the Project Sponsor will seek construction financing from HPD at a later date.

The required approvals for the Proposed Project are described below and summarized in **Table 1-2**. The proposed development for each site is described in detail below and summarized in **Table 1-3**, and **Figures 1-3a to 1-3d** present plans and sections for each site.

Table 1-2: Summary of Required Approvals

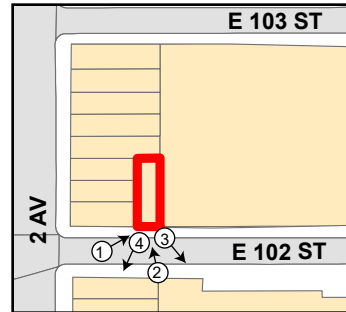
Type of Action	Applicant	Brief Description
Disposition of City-owned Property	HPD	Disposition of City-owned property (6 tax lots) to a developer designated by HPD
HPD Financing	Project Sponsor	HPD construction financing will be sought for affordable housing developments



1) Looking northeast from midblock of E 102nd Street between 1st and 2nd Avenues



2) Looking north from midblock of E 102nd Street between 1st and 2nd Avenues



3) Looking southeast from Development Site toward E 102nd Street and 1st Avenue



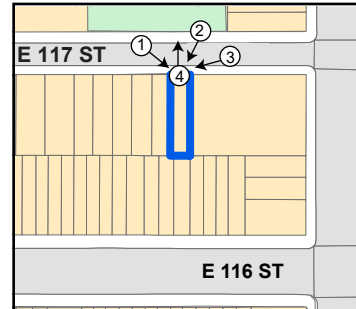
4) Looking southwest from the Development Site toward E 102nd Street and 2nd Avenue



1) Looking southeast from midblock toward Development Site B



2) Looking southwest from midblock of E 117th Street towards Development Site B



3) Looking southwest from sidewalk toward Development Site B



4) Looking north away from Development Site B



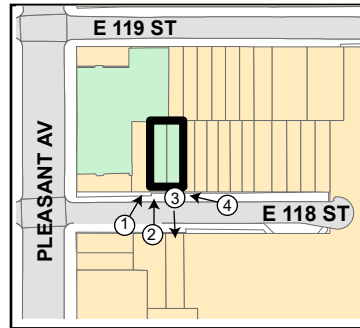
1) Looking northeast on E 118th Street towards Development Site C



2) Looking north at Development Site C from E 118th Street



3) Looking south away from Development Site C on E 118th



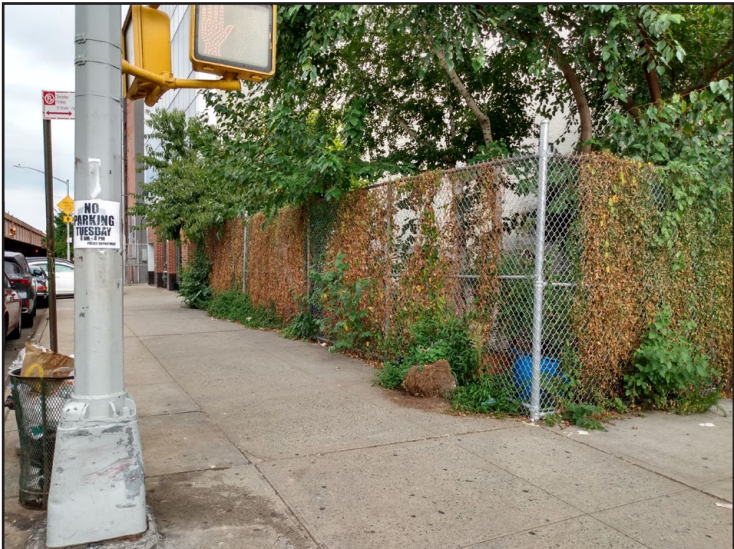
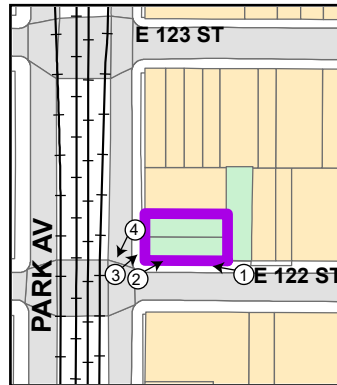
4) Looking northwest on E 118th Street towards Development Site C



1) Looking west on E 1122nd Street towards Development Site D



2) Looking west at Development Site C from the corner of E 122nd Street and Park Avenue



3) Looking northeast towards Development Site D from the corner of E 122nd Street and Park Avenue



4) Looking south on Park Avenue from the corner of E 122nd Street

IV. DESCRIPTION OF THE PROPOSED PROJECT

Table 1-3: Proposed Project

Development Site A									
Block	Lot	Address	Proposed Height (including mechanical bulkhead)	Number of Stories	Residential GSF	Total DUs	Community Facility GSF	Mechanical GSF	Total Proposed GSF
1674	104	303 East 102 nd Street	62'-8"	5	5,471	6	2,497	1,008	8,976
Development Site B									
Block	Lot	Address	Proposed Height	Stories	Residential GSF	Total DUs	Community Facility GSF	Mechanical GSF	Total Proposed GSF
1688	34	338 East 117 th Street	62'-2"	5	7,571	7	-	735	8,306
Development Site C									
Block	Lots	Address	Proposed Height	Stories	Residential GSF	Total DUs	Community Facility GSF	Mechanical GSF	Total Proposed GSF
1815	5 & 6	505 East 118 th Street	70'-2"	6	16,208	18	-	1,102	17,310
Development Site D									
Block	Lots	Address	Proposed Height	Stories	Residential GSF	Total DUs	Community Facility GSF	Mechanical GSF	Total Proposed GSF
1771	1 & 2	1761 Park Avenue	142'	13	44,598	52	8,243	2,829	55,670
Total					73,848	83	10,740	5,674	90,262

Development Site A

Development Site A would include a five-story (approximately 53'-8" to roof; 62'-8" to mechanical bulkhead/solar panels) residential and commercial building located at 303 East 102nd Street (see **Figure 1-3a**). The building at Development Site A would be approximately 8,976 gsf and include 5,471 gsf of residential space (6 DUs), 2,497 gsf of community facility space, and a one level cellar for community facility and mechanical use. Development Site A would include a green roof, solar panels and a rainwater collection system. The rear yard of Development Site A would be available to building residents. It would be completed and occupied in 2023.

Development Site B

Development Site B would include a five-story (approximately 53'-2" feet to roof; 62'-2" feet to mechanical bulkhead/solar panels) residential building located at 338 East 117th Street. It would be approximately 8,306 gsf and include approximately 7,571 gsf of residential space (7 DUs) (see **Figure 1-3b**). Development Site B would not include a cellar. The rear yard of Development Site B would be available to building residents. Development Site B would include a green roof, solar panels and a rainwater collection system. It would be completed and occupied in 2023.

Development Site C

Development Site C would include one six-story (approximately 62' to roof; 70'-2" feet to mechanical bulkhead/solar panels) residential building located at 505 East 118th Street. It would be approximately 17,310 gsf and would include approximately 16,208 gsf of residential space (18 DUs) (see **Figure 1-3c**). Development Site C would not include a cellar. The rear yard of Development Site C would be available to residents as well as a rooftop terrace. Development Site C would include a green roof, solar panels and a rainwater collection system. It would be completed and occupied in 2023.

Development Site D

Development Site D would include one 13-story (approximately 134' to roof; 142' to mechanical bulkhead/solar panels) residential and community facility building located at 1791 Park Avenue. It would be approximately 55,670 gsf and would include approximately 44,598 gsf of residential space (52 DUs) and 8,243 gsf of community facility space on the ground floor (see **Figure 1-3d**). Development Site D would include one level for mechanical use. Development Site D would include a green roof, solar panels and a rainwater collection system. There would be an outdoor green wall adjacent to the Jackie Robinson Community Garden and a rooftop terrace available to building residents. It would be completed and occupied in 2023.

V. PURPOSE AND NEED FOR THE PROPOSED ACTION

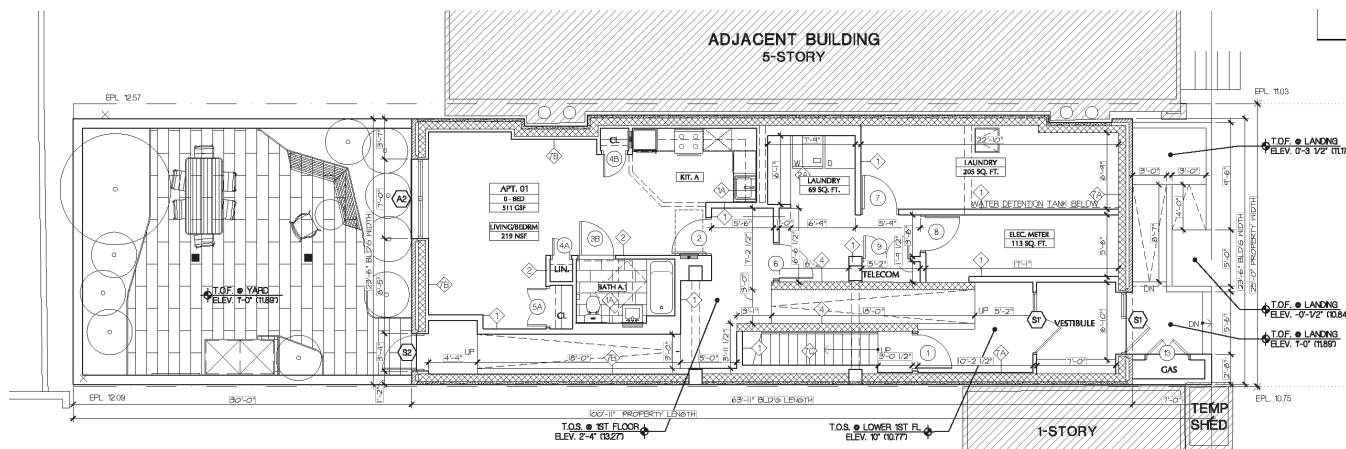
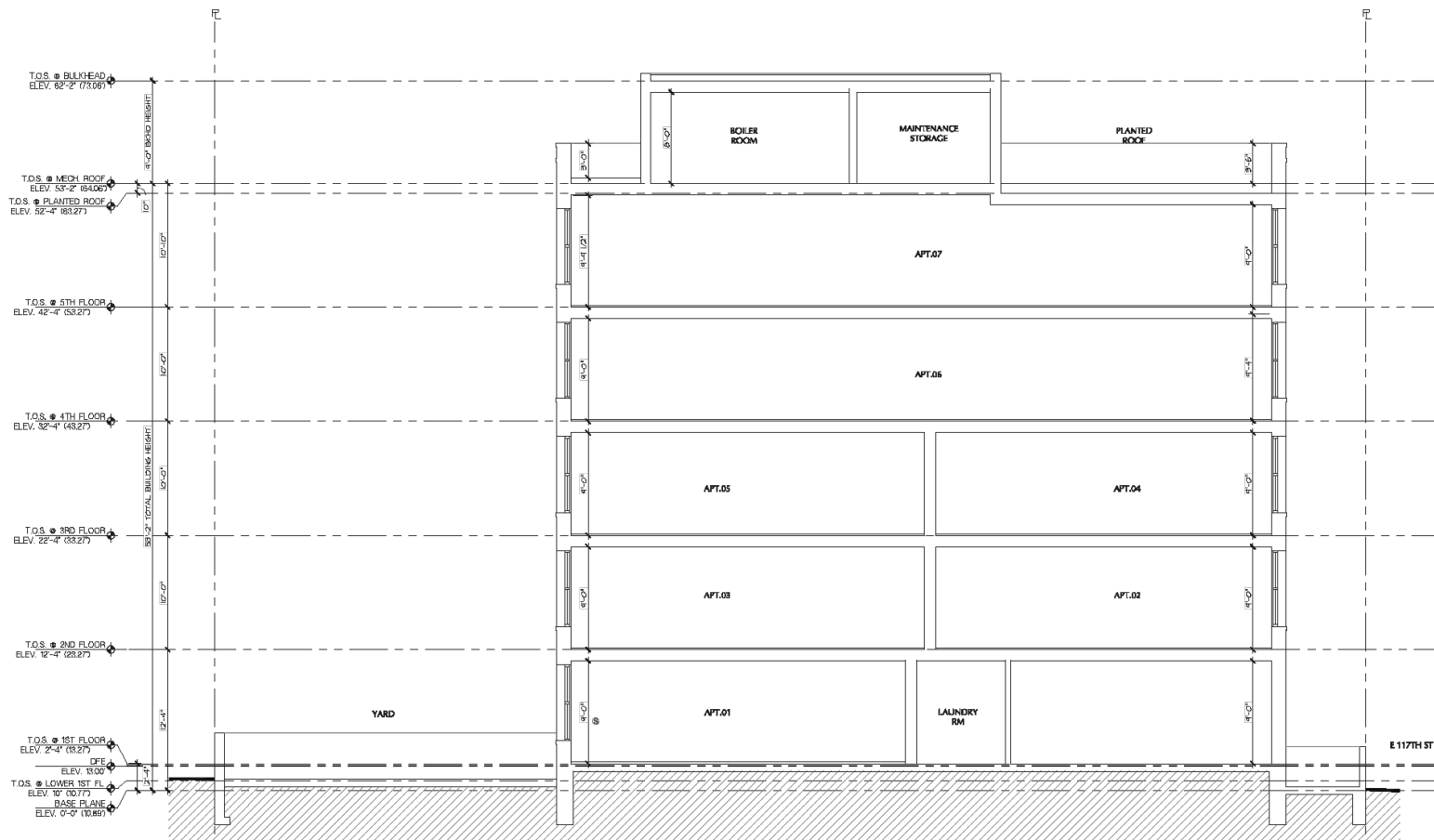
The Proposed Project would create new affordable housing development on vacant and underutilized lots in an area where a strong demand for affordable housing exists. In addition, the Proposed Project would bring further redevelopment and improvement to the neighborhood.

VI. ANALYSIS FRAMEWORK

In order to assess the potential effects of the Proposed Project, the “Future without the proposed action (No-Action Condition)” and “Future with the Proposed Action (With-Action Condition)” are analyzed for an analysis year, or “Build Year” of 2023. The future With-Action condition identifies the amount, type, and location of development that is expected to occur by 2023 as a result of the proposed action. The future No-Action condition identifies similar development projections for 2023 absent the proposed action. The incremental difference between the With-Action and No-Action conditions serve as the basis for impact analyses in this EIS.

Future without the Proposed Action (No-Action Condition)

In the 2023 future without the proposed action, it is expected that there would be no new development on the Development Sites and all six tax lots would remain as vacant or as portions of community gardens operating under temporary license agreements on an interim basis until HPD is ready to move forward with their redevelopment.





Future with the Proposed Action (With-Action Condition)

As discussed above under “The Description of the Proposed Project”, the proposed action would facilitate the development of four buildings that would include a total of approximately 81 affordable DUs (plus two superintendent’s units for a total of 83 units) and approximately 10,740 gsf of community facility space. The Proposed Project is expected to take approximately 23 months to construct and would be completed and fully occupied in 2023. The net increment of approximately 83 dwelling units and approximately 10,740 gsf of community facility space represents the basis for environmental analyses in this EIS.

Possible Effects of the Proposed Action

The incremental difference between the No-Action condition and the With-Action condition on the Proposed Development Sites provides the basis by which the potential environmental effects are evaluated in the EIS. Therefore, the EIS analyzes an incremental net increase of 83 dwelling units (approximately 73,848 gsf), approximately 10,740 gsf of community facility and a net reduction of approximately 6,971 sf of temporary community garden space. Also, the EIS analyzes the incremental change from sites with no buildings to new buildings as described above, with foundations and, on two sites, cellars.

Table 1-4: Comparison of 2023 No-Action and With-Action Conditions

Use	Existing / No-Action	With-Action ¹	Increment
Residential (Affordable)	0 gsf 0 DUs	73,848 gsf 81 DUs (+2 super’s DUs)	+73,848 gsf +81 DUs (+2 super’s DUs)
Community Facility	0 gsf	10,740 gsf	+10,740 gsf
Temporary Garden Space	6,971 sf	0 sf	- 6,971 sf
Population/Employment ²	Existing/No-Action	With-Action	Increment
Residents	0 residents	198 residents	+198 residents
Workers	0 workers	35 workers	+35 workers

Notes:

¹All figures are approximate and subject to change.

²Assumes 1 worker per 25 DUs and 3 workers per 1,000 gsf of community facility

VII. REQUIRED APPROVALS

The disposition of City-owned property is an action subject to public review under ULURP, Section 200 of the City Charter, as well as the City Environmental Quality Review (CEQR) procedures. In addition to the ULURP approval, the Proposed Project will seek construction financing from HPD at a later date. The ULURP and CEQR review processes are described below.

Uniform Land Use Review Procedure (ULURP)

The City’s ULURP process, mandated by Sections 197-c and 197-d of the New York City Charter, is designed to allow public review of ULURP applications at four levels: Community Board,

Borough President, the City Planning Commission (CPC), and the City Council. The procedure has mandated time limits for review at each stage to ensure a maximum review period of approximately seven months.

The process begins with certification by DCP that the ULURP application is complete. The application is then referred to the relevant Community Board (in this case Manhattan Community Board (CB) 11). The Community Board has up to 60 days to review and discuss the proposal, hold a public hearing, and adopt an advisory resolution on the ULURP application. The Borough President then has up to 30 days to review the application and provide a recommendation. CPC then has up to 60 days, during which time a public hearing is held on the ULURP application and the Draft EIS (DEIS). Comments made at the DEIS public hearing and subsequent comment period (the record for commenting remains open for ten days after the hearing to receive written comments) are incorporated into a Final EIS (FEIS). The FEIS must be completed at least ten days before CPC makes its decision on the application. The CPC may approve, approve with modifications or deny the application. If the ULURP application is approved, or approved with modifications, it moves forward to the City Council for review. The City Council has 50 days to review the application and during this time will hold a public hearing on the proposed action, through its Land Use Subcommittee. The Council may approve, approve with modifications or deny the application. If the Council proposes a modification to the proposed action, the ULURP review process stops for 15 days, providing time for a CPC determination on whether the proposed modification is within the scope of the environmental review and ULURP review. If it is, then the Council may proceed with the modification; if not, then the Council may only vote on the actions as approved by the CPC. Following the Council's vote, the Mayor has five days in which to veto the Council's actions. The City Council may override the mayoral veto within 10 days.

City Environmental Quality Review (CEQR)

CEQR is a process by which agencies review discretionary actions for the purpose of identifying the effects those actions may have on the environment. The City of New York established CEQR regulations in accordance with the New York State Environmental Quality Review Act (SEQRA). Pursuant to the SEQRA (Article 8 of the Environmental Conservation Law) and its implementing regulations found at 6 NYCRR Part 617, New York City has established rules for its own environmental quality review in Executive Order 91 of 1977, as amended, and 62 RCNY Chapter 5, the Rules of Procedure for CEQR. The environmental review process provides a means for decision-makers to systematically consider environmental effects along with other aspects of project planning and design, to propose reasonable alternatives, and to identify, and when practicable mitigate, significant adverse environmental effects. CEQR rules guide environmental review, as follows:

- *Establish a Lead Agency.* Under CEQR, the “lead agency” is the public entity responsible for conducting environmental review. In accordance with CEQR rules (62 RCNY §5-03), HPD is serving as the CEQR lead agency for environmental review and will coordinate the review of the proposed action.
- *Environmental Review and Determination of Significance.* The lead agency determines whether the proposed action may have a significant impact on the environment. To

- do so, HPD, in this case, evaluated an Environmental Assessment Statement (EAS) dated February 16, 2021 for the proposed action. Based on information contained in the EAS, and as the proposed action is classified as a “Type I Action,” HPD determined that the proposed action may have a significant adverse impact on the environment, as defined by statute, and issued a Positive Declaration on February 17, 2021, requiring that an EIS be prepared in conformance with all applicable laws and regulations.
- *Scoping.* Along with its issuance of a Positive Declaration, HPD issued a Draft Scope of Work for the EIS, dated February 17, 2021, marking the beginning of the comment period on the Draft Scope. “Scoping,” or creating the scope of work, is the process of identifying the environmental impact analysis areas, the methodologies to be used, the key issues to be studied, and creating an opportunity for the public to comment on the intended effort. CEQR requires a public scoping meeting as part of the process. A public scoping meeting was held on March 31, 2021, online via Zoom. The public review period for agencies and the public to review and comment on the Draft Scope of Work was open through the close of business on April 12, 2021. Modifications to the Draft Scope of Work for the project’s EIS were made as a result of public and interested agency input during the scoping process. A Final Scope of Work document for the proposed action was issued on May 17, 2021.
 - *Draft Environmental Impact Statement (DEIS).* The DEIS was prepared in accordance with the Final Scope of Work, and followed the methodologies and criteria for determining significant adverse impacts in the *CEQR Technical Manual*. The lead agency reviewed all aspects of the document, calling on other City and state agencies to participate where the agency’s expertise is relevant. Once the lead agency is satisfied that the DEIS is complete, it issues a Notice of Completion and circulates the DEIS for public review.
 - *Public Review.* Publication of the DEIS and issuance of the Notice of Completion signal the start of the public review period. During this time, which must extend for a minimum of 30 days, the public has the opportunity to review and comment on the DEIS either in writing or at a public hearing convened for the purpose of receiving such comments. When the CEQR process is coordinated with another City process that requires a public hearing, such as ULURP, the hearings may be held jointly. The lead agency must publish a notice of the hearing at least fourteen (14) days before it takes place, and must accept written comments for at least ten (10) days following the close of the hearing. All substantive comments received at the hearing become part of the CEQR record and must be summarized and responded to in the FEIS.
 - *Final Environmental Impact Statement (FEIS).* After the close of the public comment period for the DEIS, the FEIS is prepared. The FEIS must incorporate relevant comments on the DEIS, either in a separate chapter or in changes to the body of the text, graphics and tables. Once the lead agency determines the FEIS is complete, it issues a Notice of Completion and circulates the FEIS.

- *Findings.* To document that the responsible public decision-makers have taken a hard look at the environmental consequences of a proposed project, any agency taking a discretionary action regarding a project must adopt a formal set of written findings, reflecting its conclusions about the significant adverse environmental impacts of the project, potential alternatives, and potential mitigation measures. The findings may not be adopted until ten (10) days after the Notice of Completion has been issued for the FEIS. Once findings are adopted, the lead and involved agencies may take their actions (or take “no action”). This means that the CPC must wait at least ten days after the FEIS is complete to take action on a given application.

I. INTRODUCTION

This chapter examines the proposed action’s compatibility and consistency with land use patterns in the surrounding area, ongoing development trends, land use and zoning policies, as well as other public policies. This assessment provides a description of the existing land use, zoning, and public policy conditions in the primary and secondary study areas, which are defined as the locations where the direct and indirect effects of the proposed action, respectively, may occur. The assessment also forecasts land use, zoning, and public policy conditions in the future without the proposed action (the “No-Action” condition). The No-Action condition is determined by identifying developments and other relevant changes anticipated to occur by the completion of the proposed development, which is expected to be 2023. The No-Action condition serves as the baseline condition against which the proposed action’s incremental changes are measured. Finally, the assessment forecasts land use, zoning, and public policy conditions with the completion of the proposed developments in the future with the proposed action (the “With-Action” condition) and makes a determination as to the potential for significant adverse impacts on land use, zoning, and public policy.

As described in Chapter 1, “Project Description,” the proposed action consists of one discretionary approval necessary to facilitate the proposed developments, the disposition of City-owned property.

These approvals would facilitate the development of four development sites. 303 East 102nd Street would contain a five-story, approximately 62 feet and 8 inches-tall residential and community facility building with approximately 8,976 gross square feet (gsf), including 5,471 gsf of residential space and 2,497 gsf of community facility space (“Development Site A”). 338 East 117th Street would contain a five-story, approximately 62 feet and 2 inches-tall residential building with approximately 8,306 gsf (“Development Site B”). 505 East 118th Street would contain a six-story, approximately 70 feet and two inches-tall residential building with approximately 17,310 gsf (“Development Site C”). 1761 Park Avenue would contain a 13-story, approximately 142-foot tall residential and commercial building with approximately 55,670 gsf, including 44,598 gsf of residential space and 8,243 gsf of community facility space (“Development Site D”).

In the future without the proposed action, it is anticipated that the development sites would remain as their existing uses. Development Site A would remain a vacant lot. Development Site B would remain a vacant lot. Development Site C would remain a portion of the Pleasant Village Community Garden. Development Site D would remain a portion of the Jackie Robinson Community Garden. These would remain interim community gardens under HPD jurisdiction operating pursuant to temporary license agreements with the intent that they would be eventually redeveloped for affordable housing.

Under With-Action conditions, with the proposed developments on the development sites instead of the No-Action development, the incremental change in development would be as follows:

+10,740 gsf of community facility space and +73,889 gsf of residential space, resulting in 83 dwelling units (DUs). There also would be incremental changes in building volumes and on-site excavation as there would be no buildings on the sites under No-Action conditions. The net incremental difference between the With-Action and No-Action serves as the basis for the environmental impact analyses.

The assessment provided in this chapter concludes that the proposed action would be compatible with and supportive of land use, zoning and public policies in the area. As shown in the analysis presented in this chapter, the proposed action would not result in significant adverse impacts related to land use, zoning, and public policy.

II. PRINCIPAL CONCLUSIONS

No significant adverse impacts on land use, zoning, or public policy, as defined by the guidance for determining impact significance set forth in the *2020 City Environmental Quality Review (CEQR) Technical Manual*, are anticipated in the future with the proposed action in the project area (the primary study area) or within a 400-foot radius (secondary study area). The proposed development resulting from the proposed action would not directly displace any land uses so as to adversely affect surrounding land uses, nor would it generate land uses that would be incompatible with land uses, zoning, or public policies in the secondary study area. The proposed action would not substantially hinder the achievement of any Waterfront Revitalization Program (WRP) policy and the analysis found the project consistent with the WRP policies.

The proposed action, with these beneficial elements, would not result in any significant adverse impacts to land use, zoning, or public policy.

III. METHODOLOGY

The purpose of this chapter is to examine the effects of the proposed action and determine whether or not it would result in any significant adverse impacts on land use, zoning, or public policy. The analysis methodology is based on the guidelines of the *CEQR Technical Manual* and examines the proposed action's consistency with land use patterns and development trends, zoning regulations, and other applicable public policies.

According to the *CEQR Technical Manual*, a detailed assessment of land use, zoning, and public policy may be appropriate when a change in land use and zoning would occur and a preliminary assessment cannot succinctly describe land use conditions in the study area. The proposed action involves a disposition that would facilitate new development but would not result in changes to permitted densities, uses, or bulk. However, a detailed assessment is needed to sufficiently inform other detailed technical reviews warranted for the proposed action and determine whether changes in land use could affect conditions analyzed in those technical areas. Therefore, this chapter includes a detailed analysis that involves a thorough description of existing land uses within the directly affected area and the broader study area. Following the guidelines of the *CEQR Technical Manual*, the detailed analysis describes existing and anticipated future conditions to a level

necessary to understand the relationship of the proposed action to such conditions, assesses the nature of any changes on these conditions that would be created by the proposed action, and identifies those changes, if any, that could be significant or adverse.

Analysis Year

The analysis year is the anticipated completion date of 2023 for each Development Site. Therefore, the future No-Action condition accounts for land use and development projects, initiatives, and proposals that are expected to be completed by 2023.

Study Area Definition

In order to identify and assess the direct and indirect effects of the proposed action, this analysis has defined two study areas within which the proposed action would have the potential to affect land use or land use trends. Following guidance provided in the *CEQR Technical Manual*, these include a primary study area, consisting of the project area (Development Sites A, B, C and D), which would be affected directly by the proposed action, and a secondary study area which encompasses properties that have the potential to experience indirect impacts as a result of the proposed action. According to the *CEQR Technical Manual*, the appropriate size of the secondary study area for land use, zoning, and public policy is related to the type and size of the proposed development, as well as the location and context of the area that could be affected by the project. Study area boundaries vary according to these factors, with suggested study areas ranging from 400 feet for a small project to 0.5 miles for a very large project. Given the geographic scope of the proposed action, affecting four small sites, each less than a full block, and the scale of the proposed development relative to the density of the surrounding area, a 400-foot radius of each Development Site has been selected as the secondary study area as it is considered unlikely that the proposed action would have indirect effects beyond a 400-foot radius for each Development Site.

Development Site A

The 400-foot radius study area for Development Site A is generally bound by East 104th Street on the north, 1st Avenue on the east, East 100th Street on the south, and the midblock area located between 2nd and 3rd Avenues on the west. Refer to **Figure 2-1a**.

Development Site B

The 400-foot radius study area for Development Site B is generally bound by the midblock area located between East 119th and East 118th Streets on the north, 1st Avenue on the east, East 115th Street on the south, and 2nd Avenue on the west. Refer to **Figure 2-1b**.

Development Site C

The 400-foot radius study area for Development Site C is generally bound by East 120th Street on the north, FDR Drive on the east, midblock between East 117th and East 116th Streets on the south,

and the midblock area located between 1st and Pleasant Avenues on the west. Refer to **Figure 2-1c**.

Development Site D

The 400-foot radius study area for Development Site D is generally bound by East 124th Street on the north, Lexington Avenue on the east, midblock between East 121st and East 120th Streets on the south, and the midblock area located between Madison and Park Avenues on the west. Refer to **Figure 2-1d**.

Data Sources

Existing land uses in the study area were identified through review of a combination of sources including field surveys and the City's Primary Land Use Tax Lot Output (PLUTO™) data files for 2020 and websites, such as NYC Open Accessible Space Information System (OASIS, www.oasisnyc.net) and NYCityMap (<http://gis.nyc.gov/doitt/nycitymap/>), and the 2017 *East Harlem Rezoning FEIS* (CEQR #17DCP048M). New York City Zoning Maps and the Zoning Resolution of the City of New York were consulted to describe existing zoning districts in the study areas and provided the basis for the zoning evaluation of the future No-Action and future With-Action conditions. Relevant public policy documents, recognized by the New York City Department of City Planning (DCP) and other City agencies, were utilized to describe existing public policies pertaining to the study areas.

IV. EXISTING CONDITIONS

Land Use

Primary Study Area and Secondary Study Area/400-foot Radius Study Area

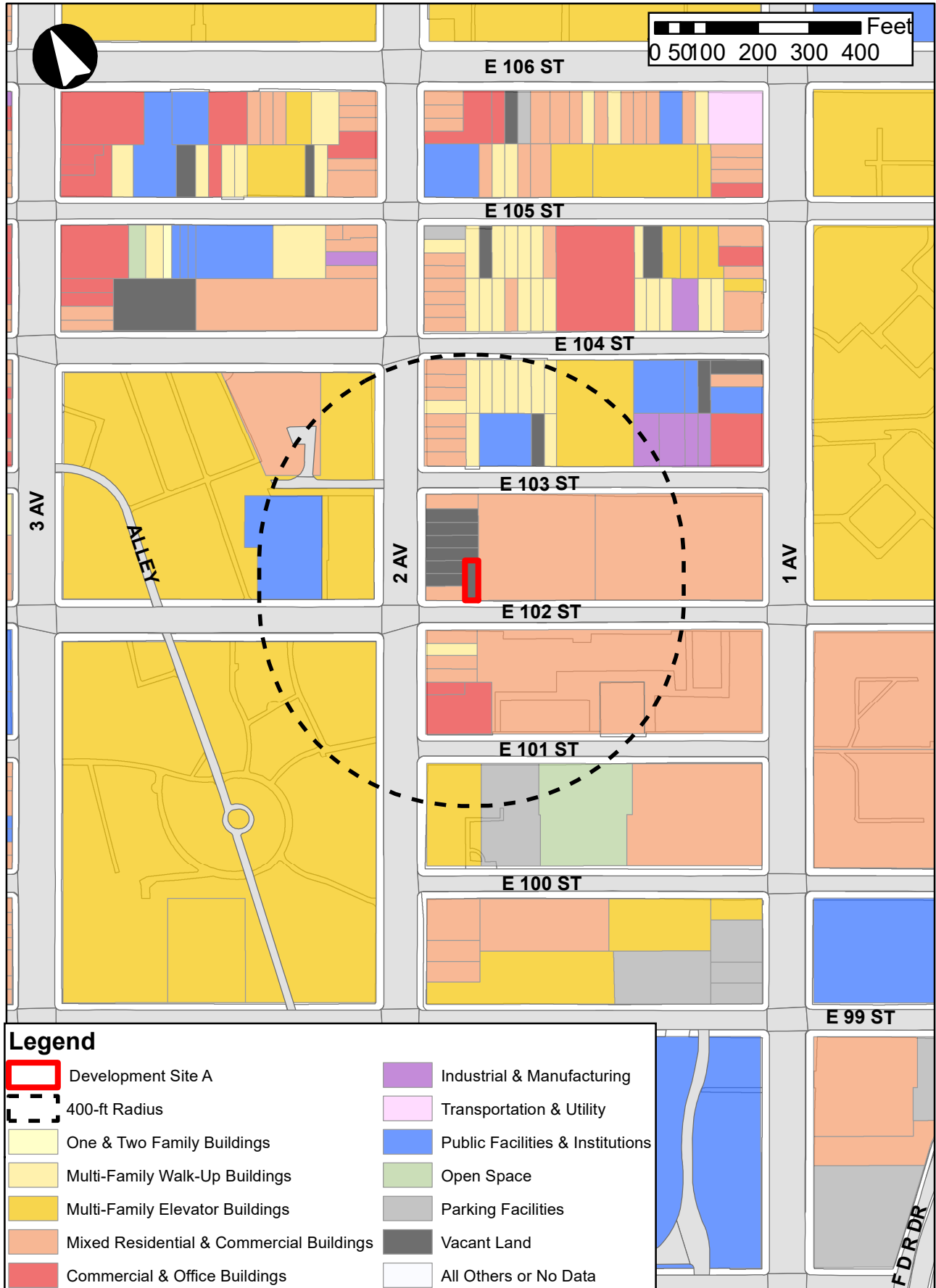
As indicated above, developments sites have the potential to experience direct impacts as a result of the proposed action and the 400-foot radius study area (see **Figure 2-1a to 2-1d**) encompasses properties that have the potential to experience indirect impacts as a result of the proposed action.

Development Site A

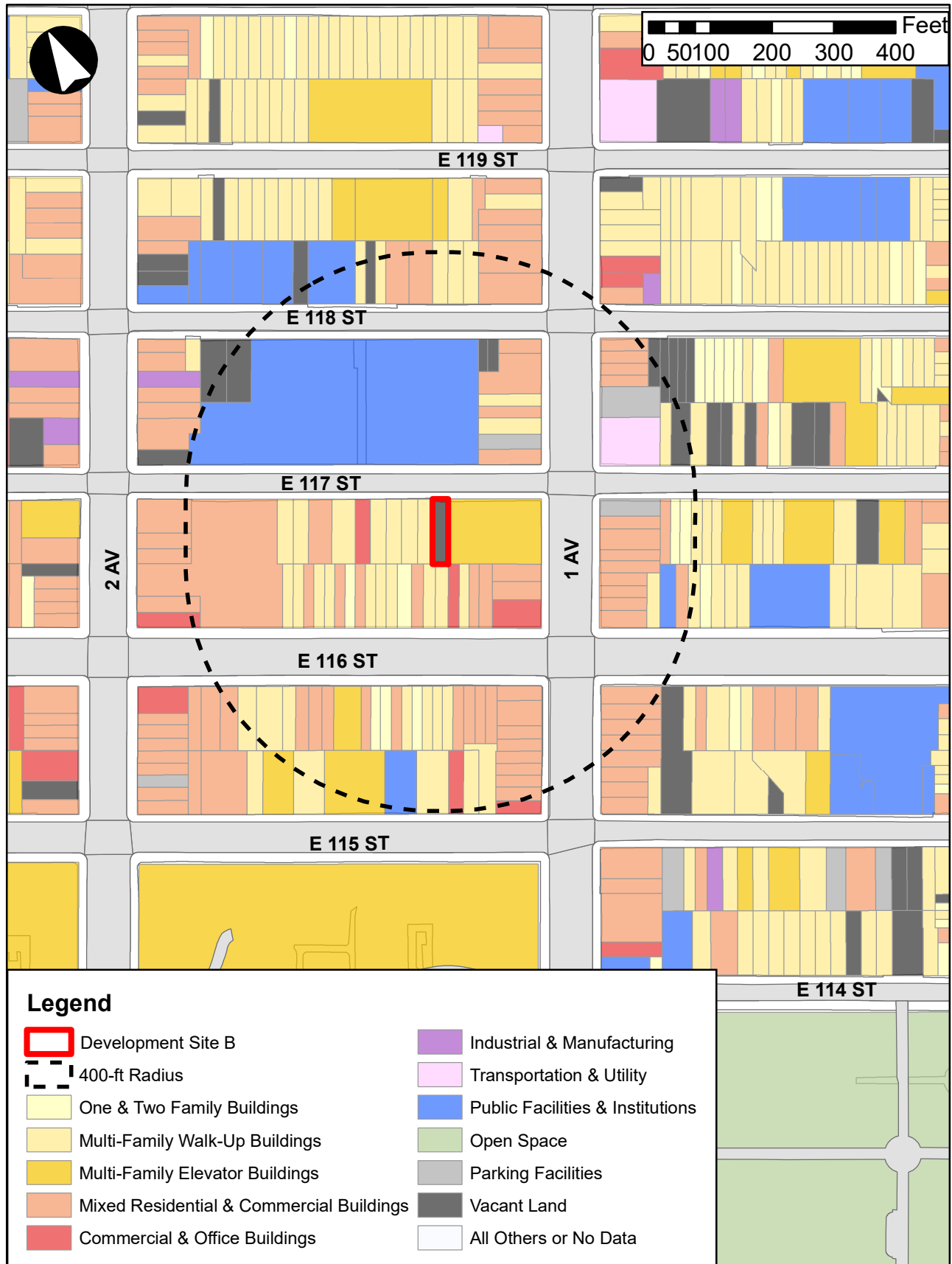
Development Site A (Block 1674, Lot 104) is a vacant lot owned by NYC Housing Preservation and Development (HPD). It is a rectangular-shaped interior lot with frontage on East 102nd Street.

Predominant land uses within a 400-foot radius of Development Site A include residential, institutional, open space, commercial and some vacant land as well. The majority of residential buildings are mixed use and multi-family walk-up buildings. Notable uses include PS 38 Roberto Clemente Learning Complex and Blake Hobbs Playground, both located to the west of Development Site A and Hobbs Court, an affordable housing development, located directly east of Development Site A. The New York City Housing Authority (NYCHA)'s George Washington Houses are also located west and south west of the Development Site. In addition, NYCHA's

Land Use: Development Site A



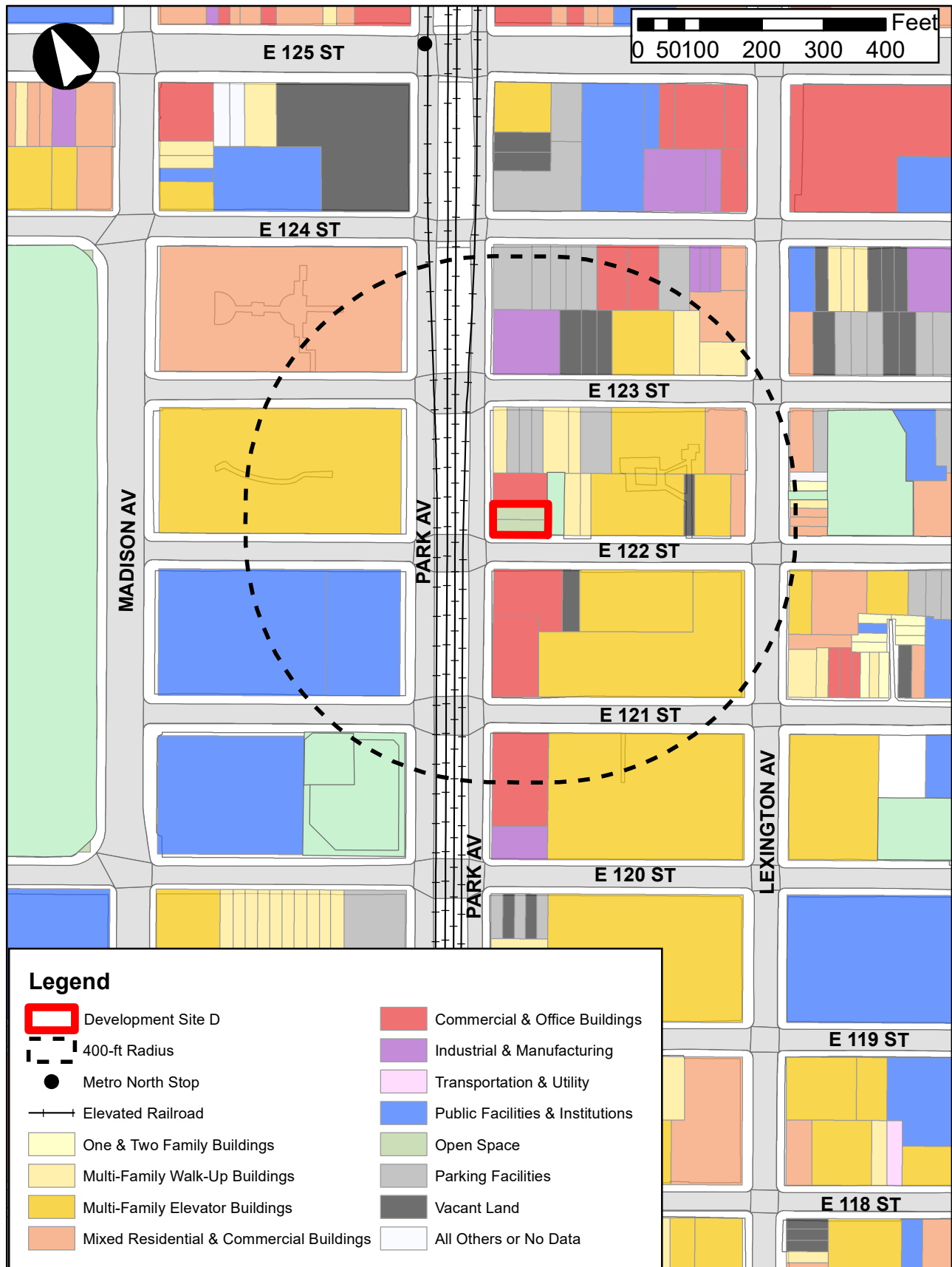
Land Use: Development Site B



Land Use: Development Site C



Land Use:Development Site D



MetroNorth Plaza buildings are located to the south and its East River Houses are located one block east of the site. The 103rd Street station for the New York City Transit (NYCT) 6 subway line is located 0.3 miles east from Development Site A and the 96th Street Station for the 4/5/6 lines is located 0.5 miles southeast from the site. The M15 NYCT bus route serves Development Site A along First and Second Avenues. There is also a Citi Bike Station located 0.1 miles north of Development Site A.

Development Site B

Development Site B (Block 1688, Lot 34) is a vacant lot owned by the NYC Department of Citywide Administrative Services (DCAS). It is a rectangular-shaped interior lot with frontage on East 117th Street.

Predominant land uses within a 400-foot radius of Development Site B include residential, institutional, and some commercial uses as well. The majority of residential buildings are multi-family mixed-use buildings. Notable land uses include PS 155 William Paca School and PS 155 Playground located directly to the north of Development Site B across East 117th Street. NYCHA's Edward Corsi Houses are located to the west of the site. The 116th Street station for the New York City Transit (NYCT) 6 subway line is located 0.5 miles west of Development Site B. There are several NYCT bus routes serving Development Site B including the M116 (along East 116th Street) and M15 /M15-Select Bus Service (SBS) (along First and Second Avenues).

Development Site C

Development Site C (Block 1815, Lots 5 and 6) is a portion of the Pleasant Village Community Garden owned by NYC HPD. It is a rectangular-shaped interior lot with frontage on East 118th Street.

Predominant land uses within a 400-foot radius of Development Site C include residential, institutional, open space, and commercial uses. The majority of residential buildings are multi-family walk-up buildings. Notable land uses include the East River Plaza shopping mall, located to the east and southeast of Development Site C. East River Plaza is a large shopping center with various retailers and its associated parking garage. There are no pedestrian entrances to the shopping center or vehicular entrances to the parking garage on East 118th Street. Both pedestrian and vehicular entrances can be found one block south on East 117th Street. Located on the same block, PS 206 and PS 112 and their associated playground is located one block north of the site. The 116th Street station for the New York City Transit (NYCT) 6 subway line is located 0.6 miles west of Development Site C. The M116 NYCT bus route (along E. 116th Street) serves Development Site C. There is also a Citi Bike Station located one block north of Development Site C on the corner of Pleasant Avenue and East 120th Street.

Development Site D

Development Site D (Block 1771, Lots 1 and 2) is a portion of the Jackie Robinson Community Garden owned by NYC HPD. It is a rectangular-shaped corner lot with frontage on both Park Avenue and East 122nd Street.

Predominant land uses within a 400-foot radius of Development Site D include residential, institutional, open space and some commercial uses as well. The majority of residential buildings are multi-family walk-up buildings. The Henry J. Carter Specialty Hospital and Nursing Facility is located one block southwest of Development Site D. The elevated Metro-North rail line is located to the west of Development Site D in the Park Avenue mapped street right-of-way. Marcus Garvey Park is located just outside the 400-foot radius two blocks to the west. The 125th Street station for the New York City Transit (NYCT) 4/5/6 subway lines is located just outside the 400-foot radius of Development Site D at the intersection of Lexington Avenue and East 125th Street. The Metro North 125th Street Station is also located just outside the 400-foot radius of Development Site D at the intersection of East 125th Street and Park Avenue. There are several NYCT bus routes serving Development Site D including the M1 (along Madison Avenue), M101 and M103 (along Lexington Avenue).

Zoning

Development Site A is zoned C1-5/R8A, Development Sites B and C are zoned R7B, and Development Site D is zoned M1-6/R10 and is in a Mandatory Inclusionary Housing Area (MIHA); refer to **Figures 2-2a** through **2-2d**, respectively. **Table 2-1** lists and describes the zoning districts located within 400-foot radius study area for each Development Site and provides information about the maximum permitted FAR by use in each zoning district.

Table 2-1: Primary and Secondary Study Area Zoning Districts

District	Definition/General Use	Maximum FAR
Commercial Overlays		
C1-5 (Overlay)	C1 commercial overlays are mapped in residential districts. C1-5 overlays permit neighborhood retail uses, such as grocery stores, restaurants and beauty parlors. Generally, the lower the numerical suffix, the greater the off-street parking requirement.	R: Same as underlying R zone C: 2.0 CF: Same as underlying R zone M: Not permitted
C2-4 (Overlay)	C2-4 overlays are mapped in residential districts and permit a slightly wider range of retail uses than C1 overlays, such as funeral homes and repair services.	R: Same as underlying R zone C: 2.0 CF: Same as underlying R zone M: Not permitted
C2-5 (Overlay)	C2-5 overlays are mapped in residential districts and permit a slightly wider range of retail uses than C1 overlays, such as funeral homes and repair services.	R: Same as underlying R zone C: 2.0 CF: Same as underlying R zone M: Not permitted

Residential Districts		
R7A	R7A are contextual districts with mandatory quality housing regulations. R7A districts permit buildings of up to 85 feet in height, with a street minimum and maximum base height between 40 and 65 feet. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program.	R: 4.0-4.6 C: Not permitted CF: 4.0 M: Not permitted
R7B	R7B are contextual districts with mandatory quality housing regulations. R7B districts permit buildings of up to 75 feet in height, with a street minimum and maximum base height between 40 and 65 feet. Buildings must have interior amenities for the residents pursuant to the Quality Housing Program.	R: 3.0 C: Not permitted CF: 3.0 M: Not permitted
R7D	R7D are contextual districts with mandatory quality housing regulations. R7D districts promote new contextual development along transit corridors. Buildings must have interior amenities for the residents pursuant to the Quality Housing Program. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program, where applicable.	R: 4.2-5.6 C: Not permitted CF: 4.2 M: Not permitted
R7X	R7X districts are governed by contextual Quality Housing bulk regulations but the substantially higher floor area ratio (FAR) and maximum building height typically produce taller, bulkier buildings than in R7A and R7B districts. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program.	R: 5.0 C: Not permitted CF: 5.0 M: Not permitted
R7-2	R7-2 districts are medium-density apartment house districts. The height factor regulations encourage lower apartment buildings on smaller zoning lots and, on larger lots, taller buildings with less lot coverage. As an alternative, developers may choose the optional Quality Housing regulations to build lower buildings with greater lot coverage. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program, where applicable.	R: 3.44 C: Not permitted CF: 6.5 M: Not permitted <u>QH:</u> R: 3.44-4.0; CF: 4.8
R8	R8 districts have mid-high rise apartment buildings. The height factor regulations encourage taller buildings set back from the street on large zoning lots. As an alternative, developers may choose the optional Quality Housing or height factor regulations. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program, where applicable.	R: 0.94-6.02 C: Not permitted CF: 6.5 M: Not permitted <u>QH:</u> R: 6.02-7.2; C: 0.0 CF: 4.8; M: 0.0
R8A	R8A are contextual quality housing districts that typically produce high lot coverage apartment buildings. The Quality Housing regulations are mandatory in R8A districts, with building heights limited to 120 feet. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program, where applicable.	R: 6.02-7.20 C: Not permitted CF: 6.5 M: Not permitted
R9A	R9A are contextual quality housing districts that typically produce high lot coverage apartment buildings. The Quality Housing regulations are mandatory in R9A districts, with building heights limited to 145 feet. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program, where applicable.	R: 7.52-8.50 C: Not permitted CF: 7.5 M: Not permitted
R10	R10 is a high-density residential district. Developers may choose between Quality Housing or tower regulations. Quality Housing regulations produce large, high lot coverage builds with a maximum height of 185 feet. Tower regulations allow a building to penetrate the sky exposure plane. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program.	R: 10.00-12.00 C: Not permitted CF: 10.0 M: Not permitted

Commercial Districts		
C4-4	C4 districts are mapped in regional commercial centers that are located outside of the central business districts. C4-4 districts are mapped in more densely built areas. Typical uses include department stores, theaters, commercial and office uses.	R: 3.44-4.0 C: 3.4 CF: 4.48-6.5 M: Not permitted
C6-4	C6 districts permit a wide range of high-bulk commercial uses requiring a central location, such as, corporate headquarters, large hotels, department stores, and entertainment facilities.	R: 10.0-12.00 C: 10.0 CF: 10.0-12.00 M: Not permitted
Mixed-Use Districts		
M1-6/R10	M1-6/R10 districts permit residential and community facility uses within Use Groups 1-4, and commercial and manufacturing uses within Use Groups 5 to 15 and 17. Pairing a light manufacturing-high performance district with a height density residential district. Height is governed by the Quality Housing or Tower regulations. Within the secondary study area, the entire M1-6/R10 zoning district is located in a MIHA, therefore the max residential FAR is 12.0.	R: 10.0-12.00 (MIH) C: 10.0 CF: 10.0 M: 10.0

Notes: CF: community facility; R: residential; C: commercial; M: manufacturing; QH: Quality Housing Regulations

Primary Study Area

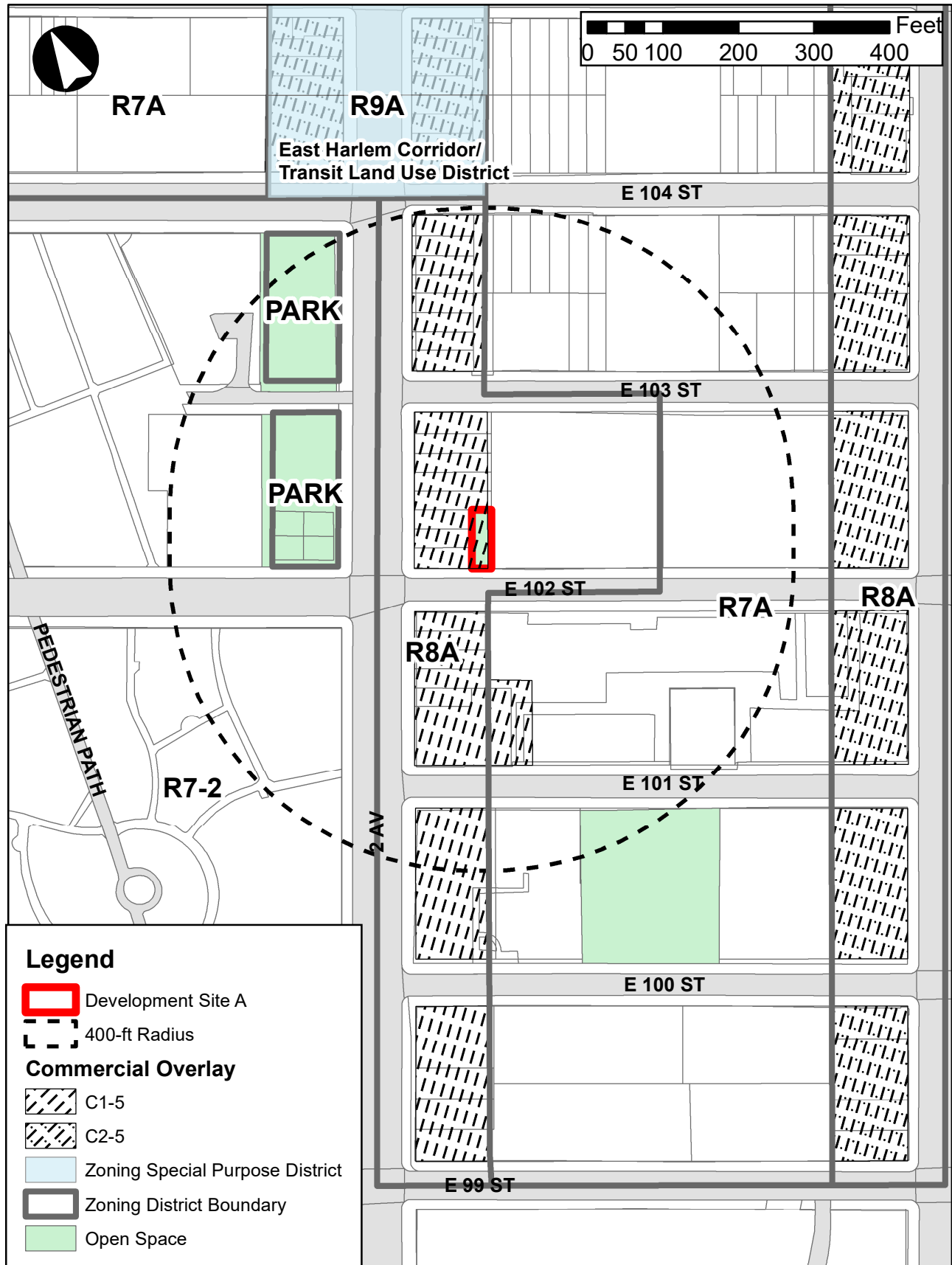
As discussed above, Development Site A is zoned C1-5/R8A, Development Sites B and C are zoned R7B, and Development Site D is zoned M1-6/R10 (MIH), refer to **Figure 2-2a**. Several of these study area zoning districts are contextual zones where the Quality Housing program regulations are mandatory, as indicated by an A, B, D, or X suffix (e.g., R8A). As such, these districts are governed by street wall and maximum height regulations designed to maintain the scale and form of the city's traditional moderate- and high-density neighborhoods or where redevelopment would create a uniform context. The Quality Housing Program also requires amenities relating to interior space, recreation areas and landscaping. These Quality Housing regulations are optional in non-contextual R6 through R10 districts (e.g., R8).

Development Site A

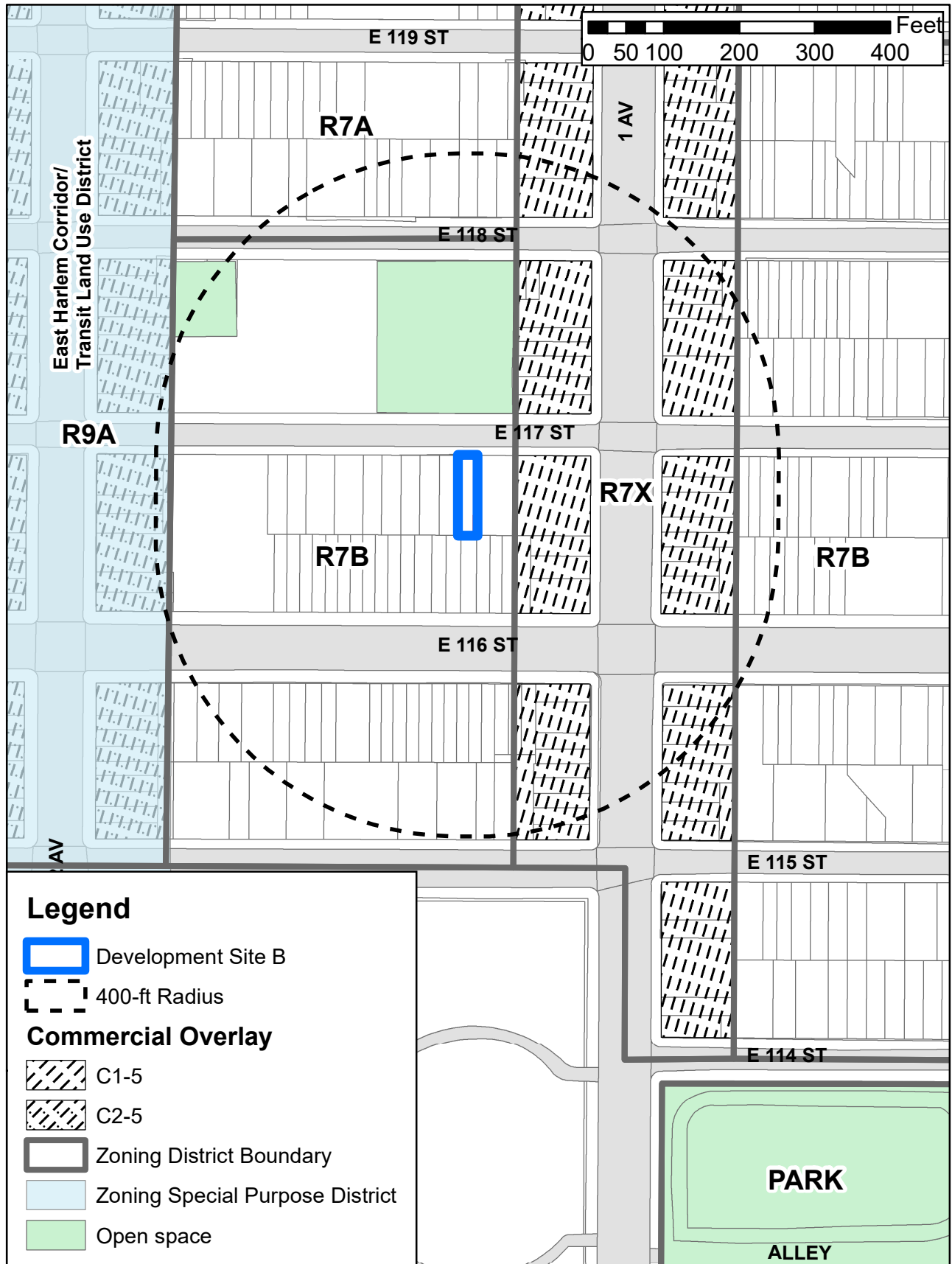
Development Site A is zoned C1-5/R8A. R8A residential districts promote new contextual development in the City's established neighborhoods and allow a maximum floor area ratio (FAR) of 6.02. When a C1-5 commercial overlay is mapped in an R8A district, the ground floor of a building may be occupied by retail uses, such as shops and services, to maintain the vitality of the street and serve the local community.

Quality Housing bulk regulations, mandatory in R8A districts, produce roughly up to 12-to-14-story buildings set at or near the street line. The base height of a new building must be 60 to 85 feet before setback, rising to a maximum building height of 120 feet. Limitations on the base height and maximum building height of new buildings ensure compatibility with existing buildings on the street. Interior amenities for building residents pursuant to the Quality Housing Program are required. Off-street parking, is required for 12 percent of a building's dwelling units for income-restricted units, or can be waived if the zoning lot is 10,000 square feet or less or if 15 or fewer parking spaces are required. Development Site A is located in the transit zone, in this zone,

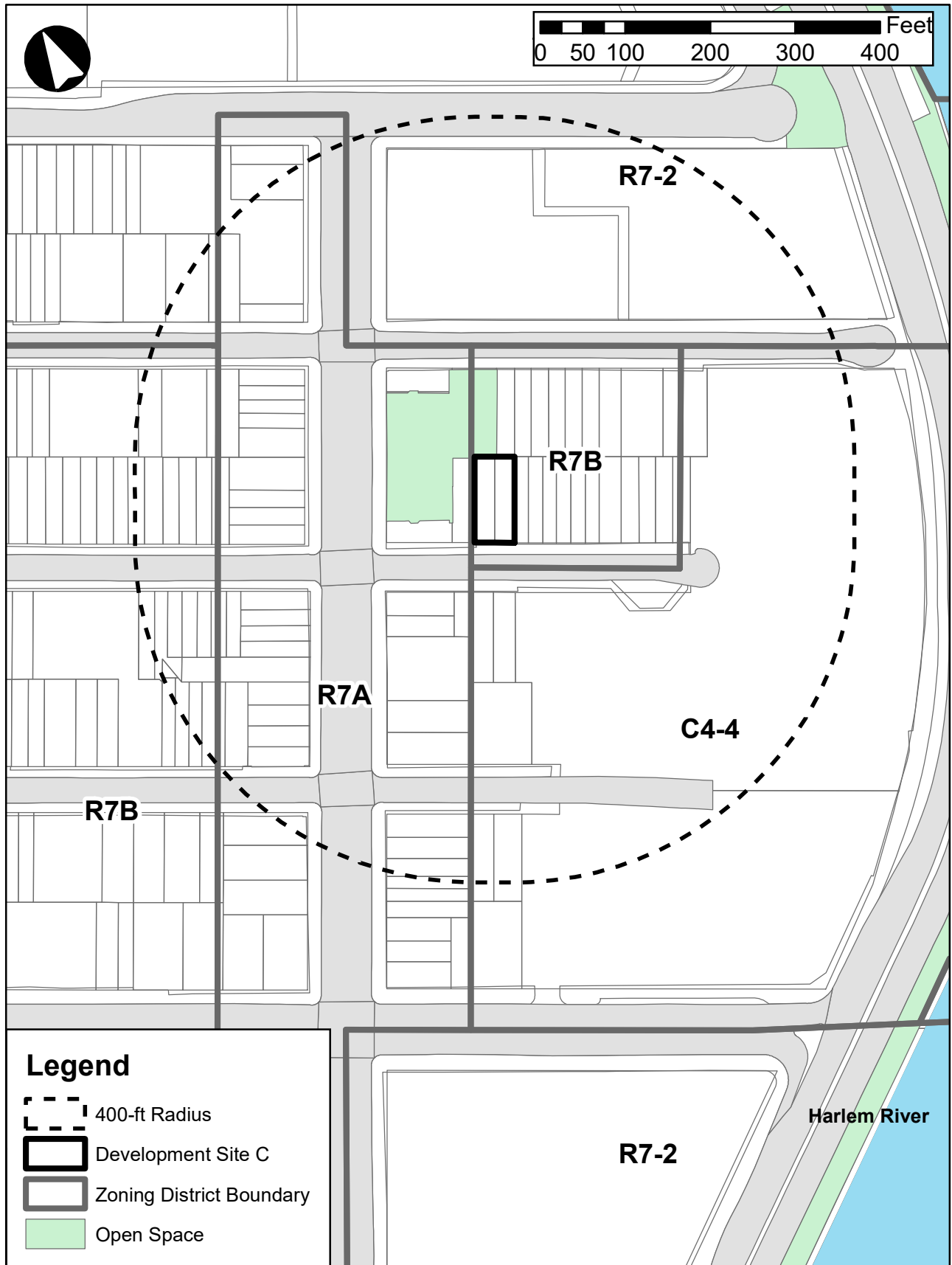
Zoning Map: Development Site A



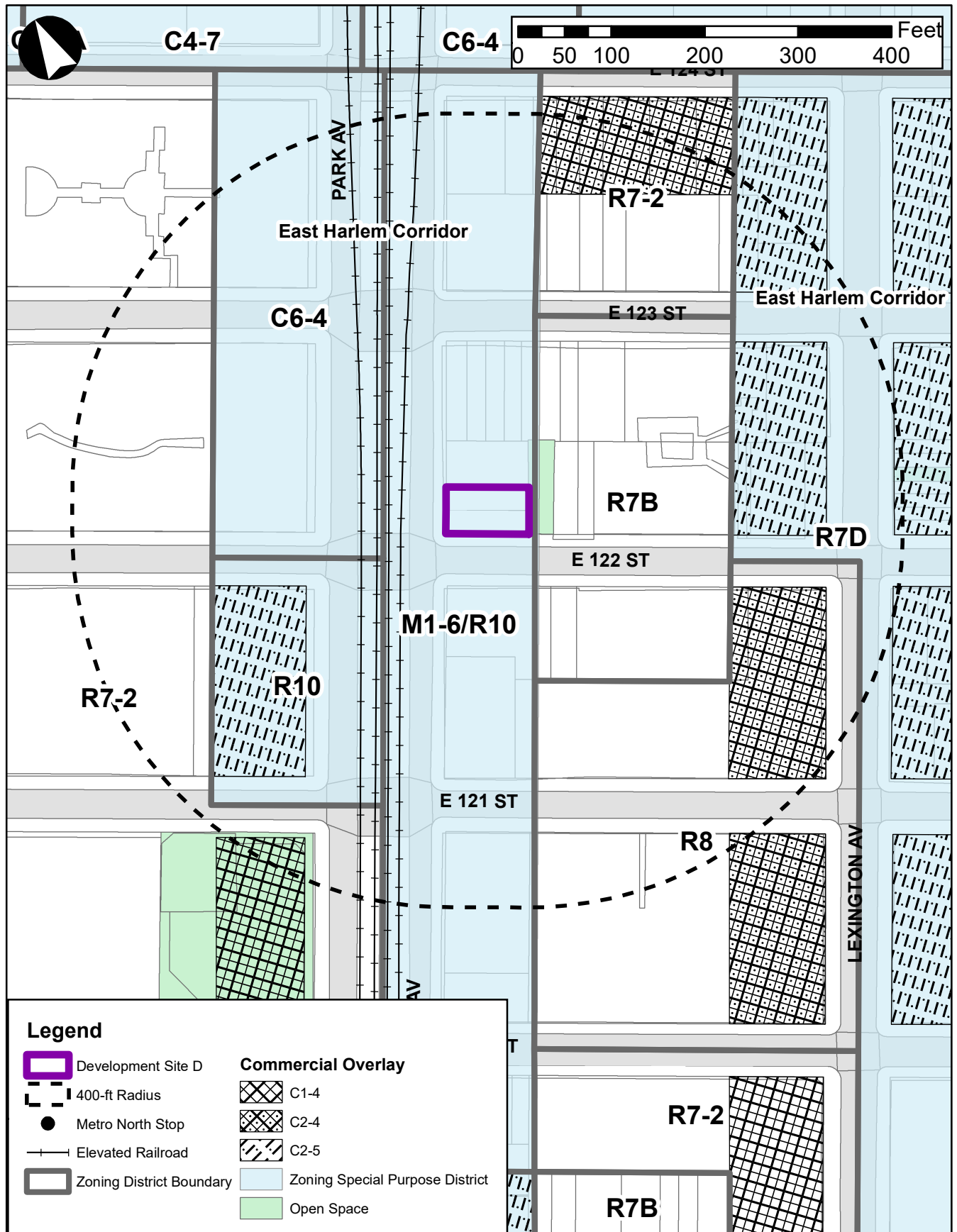
Zoning Map: Development Site B



Zoning Map: Development Site C



Zoning Map: Development Site D



affordable housing developments can request a waiver from City Planning Commission (CPC) to reduce or eliminate parking requirements for sites. Accessory parking would not be provided for the proposed development, as the site would require less than 15 parking spaces.

The C1-5 district is mapped as a commercial overlay within the R8A residential district. Mapped along streets that serve local retail needs, they are found extensively throughout the city's lower- and medium-density areas and occasionally in higher-density districts.

Typical retail uses include neighborhood grocery stores, restaurants and beauty parlors. In mixed buildings, commercial uses are limited to one or two floors and must always be located below the residential use. When mapped in R6 through R10 districts, the maximum commercial FAR is 2.0 for a C1-5 overlay.

Development Sites B and C

Development Sites B and C are zoned R7B, which is a contextual residential district where the Quality Housing bulk regulations are mandatory. These regulations produce high lot coverage, six- or seven-story apartment buildings rather than the typical neighborhood brownstones present in some areas. Designed to be compatible with older buildings found in more traditional neighborhoods, R7B districts are mapped in the East Village, Upper Manhattan, and sections of Queens and Brooklyn.

The maximum permitted FAR in R7B districts is 3.0. The base height of a new building must be 40 to 65 feet before setback, rising to a maximum building height of 75 feet. To preserve the traditional streetscape, curb cuts are prohibited on zoning lots with frontages less than 40 feet. The front wall of a new building, on any lot up to 50 feet wide, must be as deep as one adjacent front wall but no deeper than the other. R7B buildings must have interior amenities for the residents pursuant to the Quality Housing Program. Off-street parking, is required for 25 percent of a building's dwelling units for income-restricted units, or can be waived if five or fewer spaces are required. As noted above the transit zone parking regulations are applicable to affordable housing developments. Accessory parking would not be provided, as both Site B and C would require less than five parking spaces each.

Development Site D

Development Site D is zoned M1-6/R10 and is in a Mandatory Inclusionary Housing Area (MIHA). MIHAs allow a higher permitted FAR than in non MIHAs but includes a requirement that a share of new housing be permanently affordable when land use actions create significant new housing potential, either as part of a City land use proposal or a private land use application. The Mandatory Inclusionary Housing (MIH) program consists of two main alternatives: Option 1: 25 percent of residential floor area must be affordable housing units affordable to households with income at a weighted average of 60 percent of area median income (AMI), with 10 percent affordable to households within an income band of 40 percent of AMI; or Option 2: 30 percent of residential floor area must be affordable housing units affordable to households with income at a weighted average of 80 percent of AMI. In combination with these two alternatives, two other options may be utilized. A "Deep Affordability Option" also may be

utilized provided that 20 percent of residential floor area contains housing units affordable to households with income at a weighted average of 40 percent of AMI. A “Workforce Option” may also be utilized provided that 30 percent of residential floor area contains housing units affordable to households with income at a weighted average of 115 percent of AMI, with 5 percent of residential floor area kept affordable to households within an income band of 70 percent of AMI and another 5 percent of residential floor area affordable to households within an income band of 90 percent of AMI. Other restrictions apply to the Deep Affordability and Workforce Options. The CPC and ultimately the City Council determine the requirements applicable to each MIH-designated area. The proposed for Development Site D includes Program Option 1 and the Deep Affordability Option.

Optional Quality Housing bulk regulations in R10 districts produce large, high lot coverage buildings set at or near the street line to maintain the traditional high street walls found along major streets and avenues. The base height of a new building must be 125 to 155 feet before setback, rising to a maximum building height of 215 feet. Interior amenities for building residents pursuant to the Quality Housing Program are required. Off-street parking is required for 12 percent of income-restricted dwelling units. As noted above the transit zone parking regulations are applicable to affordable housing developments. Accessory parking would not be provided, as the site would require less than 15 parking spaces.

The M1-6 district is mapped alongside the R10 residential. M1 districts are often buffers between M2 or M3 districts and adjacent residential or commercial districts. M1 districts typically include light industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities. M1 districts also permit offices, and most retail uses. No parking is required for the M1-6 district. M1-6/R10 districts permit residential and community facility uses within Use Groups 1-4, and commercial and manufacturing uses within Use Groups 6-15 and 17 at a maximum FAR of 10.0 in a mixed-use building.

Development Site D also falls in the Special East Harlem Corridors District (EHC). The EHC is intended to encourage and guide the development of East Harlem as a dynamic mixed-use neighborhood by permitting the expansion and development of residential, commercial, community facility and light manufacturing uses in appropriate areas. It also encourages the development of permanently affordable housing. The EHC, which is discussed in more detail below, includes minimum requirements for non-residential uses in certain areas, unique height and setback controls and ground floor requirements to improve walkability. The entire EHC District is located within a MIHA.

Primary and Secondary Study Area

Commercial Overlays

Within the Secondary Study Areas of the Development Sites, there are multiple commercial overlays. Development Site A has a C1-5 commercial overlay on it, as discussed above. Within 400-feet of Development Site B is an R7X district with a C1-5 commercial overlay. Within 400-feet of Development Site D there are multiple commercial overlays. To the southwest of

Development Site D is an R10 district with a C2-5 overlay. To the north of Development Site D is an R7-2 district with a C2-4 overlay.

East Harlem Rezoning

The 2017 East Harlem Rezoning was created to facilitate the development of affordable housing, create new commercial and manufacturing space to support job creation, and preserve existing neighborhood character. The rezoning area is generally bound by East 104th Street to the south, East 132nd Street to the north, Park Avenue to the west and Second Avenue to the east. Development Site D falls within the East Harlem Rezoning Area.

Special East Harlem Corridors (EHC District)

The Special East Harlem Corridors District (EHC) was created as part of the broader East Harlem Neighborhood Initiative to facilitate the development of affordable housing, preserve existing neighborhood character, improve the pedestrian experience, and enable new commercial and manufacturing space to support job creation. The Special District regulations, which aim to facilitate the creation of affordable housing and strengthen the role of East Harlem as a major transit hub and job center, apply only to the area's major avenues and crosstown streets and include minimum requirements for non-residential uses in certain areas, unique height and setback controls and ground floor requirements to improve walkability. The EHC District is also a MIHA.

Transit Land Use District

The Special Transit Land Use District (TA) relates development along Second Avenue to its future subway line. In place of sidewalk obstructions that impede pedestrian circulation, the special district requires builders of developments adjoining planned subway stations to reserve space in their projects, by providing an easement, for public access to the subway or other subway-related uses. The district is mapped at locations along Second Avenue between Chatham Square in Chinatown and East 126th Street in Harlem.

Public Policy

In addition to zoning, officially adopted and promulgated public policies also describe the intended use applicable to an area or particular site(s) in New York City. These include Urban Renewal Plans, 197-a Plans, Industrial Business Zones (IBZs), the New York City Comprehensive Waterfront Plan, the Criteria for the Location of City Facilities ("Fair Share" criteria), Solid Waste Management Plan, Business Improvement Districts ("BIDs"), the New York City Landmarks Law, the Waterfront Revitalization Program ("WRP"), and OneNYC. Some of these policies have regulatory status, while others describe general goals. They can help define the existing and future context of the land use and zoning of an area.

Public Policies Applicable to the Project Area and/or the Study Area

The project area is located within the boundaries of the *Harlem-East Harlem Urban Renewal Plan*, the *East Harlem Neighborhood Plan*, the *Statement of District Needs and Community Board Budget Requests for CB 11*, the *Manhattan Community Board 11 (CB 11) draft 197-a Plan area*,

Housing New York 2.0, One New York: The Plan for a Strong and Just City and the NYC Coastal Zone, thereby making it subject to the Waterfront Revitalization Program (WRP).

Community District 11 197-A Plan

CB 11 issued New Directions, a draft land use plan prepared pursuant to Section 197-a of the City Charter in 1996. Such “197-a plans” are a means for local community members to establish goals for land use decisions and policies in their neighborhoods and must be adopted by the City Planning Commission (CPC) and City Council before attaining formal advisory authority.

Although the New Directions draft 197-a plan was never formally adopted, it provided a planning framework for the community district. The plan’s objectives included: to provide quality economic and community development; to provide decent and affordable housing; to provide accessible health, quality education, recreational and cultural services, and safe streets; to maintain current public services; and to enforce delivery and maintenance of public services by the City of New York.

East Harlem Neighborhood Plan

In February 2016, a Steering Committee comprised of project partners CB 11, Council Speaker Melissa Mark-Viverito, Manhattan Borough President Gale Brewer, Community Voices Heard, and other member organizations, issued the *East Harlem Neighborhood Plan*. It was prepared as a holistic community-based plan in anticipation of the City-led area-wide rezoning of East Harlem and identified goals for the community. Furthermore, it presented a list of objectives and recommendations for realizing the goals intended to shape the City’s rezoning proposal. The objectives addressed arts and culture; open space and recreation; schools and education; pre-K, daycare and afterschool; NYCHA; housing preservation; small business workforce and economic development; affordable housing development; zoning and land use; transportation, environment and energy; safety; and health and seniors.

Statement of District Needs and Community Board Budget Requests for Manhattan Community Board 11

Community Boards issue an annual *Statement of District Needs and Community Board Budget Requests* and submit the document to the City, as required by the City Charter. These documents can play an important role in consultations of community boards with agencies, elected officials, and other key stakeholders on a broad range of local planning and budget priorities. These tools also provide a valuable public resource for neighborhood planning and research purposes and are used by a wide audience seeking information about New York City’s diverse communities.

The most recent *Statement* by CB 11 for Fiscal Year 2021 identifies the three most pressing issues facing East Harlem as affordable housing, land use trends, and unemployment. Concerns and recommendations identified that are of relevance to the proposed project include using zoning to foster increased economic activity that can provide jobs for local residents, reiterating the East Harlem Neighborhood Plan’s call for increased permanent affordable housing, including units for

very low income households, and creating open space along with new developments. The Statement does not address specific development sites.

Harlem-East Harlem Urban Renewal Plan (HEHURP)

The *HEHURP* seeks to accomplish the following: redevelop the area in a comprehensive manner; remove blight and maximize appropriate land use; remove or rehabilitate substandard and unsanitary structures; remove impediments to land assemblage and orderly development; strengthen the tax base of the City by encouraging development and employment opportunities in the area; provide new housing of high quality and/or rehabilitated housing of upgraded quality; provide appropriate community facilities, parks and recreational uses, retail shopping, public parking, and private parking; and provide a stable environment within the area that will not be a blighting influence on surrounding neighborhoods. Design objectives of the plan are to develop the area in a manner compatible with the surrounding neighborhood in terms of scale and materials and to reinforce the existing urban street character. Development Sites B and C fall within the boundary of the Harlem-East Harlem Urban Renewal Plan. Development Sites B and C are not identified sites for redevelopment through *HEHURP*.

Housing New York 2.0

In 2014, the De Blasio administration released *Housing New York: A Five-Borough, Ten-Year Housing Plan (Housing New York)*, a plan to build or preserve 200,000 affordable residential units by 2024. To achieve this goal, the plan aimed to double New York City Department of Housing Preservation and Development (HPD)'s capital budget, target vacant and underused land for new development, protect tenants in rent-regulated apartments, streamline rules and processes to unlock new development opportunities, contain costs, and accelerate affordable construction. The plan detailed the key policies and programs for implementation, including developing affordable housing on underused public and private sites. In 2017, the de Blasio administration released *Housing New York 2.0*, which builds on the foundation laid through *Housing New York* and extends the plan to accelerate the creation and preservation of 200,000 affordable homes two years ahead of schedule, by 2022, and reach a new goal of 300,000 affordable homes by 2026. The updated and expanded program also plans to preserve and create more accessible affordable housing for seniors and those with disabilities; to build new condos and co-ops for first-time homebuyers and help existing homeowners make needed repairs; to help non-profit and mission-based organizations acquire rent stabilized buildings and keep them affordable; to seize on advances in technology and innovative design to expand modular building and micro-units that can lower the cost of construction, building new homes faster, and respond to the city's changing demographics; and to unlock the potential of vacant lots by encouraging innovative proposals to build "tiny homes" and other infill housing on sites long considered too small or irregular, and developing more affordable housing on vacant land that is part of existing Mitchell-Lama or HUD-regulated complexes.

One New York: The Plan for a Strong and Just City (One NYC)

In April 2015, the de Blasio administration released *OneNYC*, a plan for growth, sustainability, resiliency, and equity. *OneNYC* is the update for the sustainability plan started under the Bloomberg administration, previously known as *PlaNYC 2030: A Greener, Greater New York*.

While *OneNYC* still centers on growth, sustainability, and resiliency, the de Blasio administration added equity as a core principle to address the high poverty rate and rising income inequality. The new plan also addresses pressing issues such as population growth, aging infrastructure, and global climate change.

Waterfront Revitalization Program

Legislative and Regulatory Background

The federal *Coastal Zone Management Act (CZMA)* of 1972 was enacted to support and protect the distinctive character of the waterfront and to set forth standard policies for reviewing proposed development projects along coastlines. The program responded to City, State, and Federal concerns about the deterioration and inappropriate use of the waterfront. In accordance with the CZMA, New York State adopted its own *Coastal Management Program (CMP)*, which provides for local implementation when a municipality adopts a local waterfront revitalization program, as is the case in New York City. The New York City WRP is the City's principal coastal zone management tool. The WRP was originally adopted in 1982 and approved by the New York State Department of State (NYSDOS) for inclusion in the New York State CMP. The WRP encourages coordination among all levels of government to promote sound waterfront planning and requires consideration of the program's goals in making land use decisions. NYSDOS administers the program at the State level, and DCP administers it in the City. The WRP was revised and approved by the City Council in October 1999. In August 2002, NYSDOS and federal authorities (i.e., the U.S. Army Corps of Engineers [USACE] and the U.S. Fish and Wildlife Service [USFWS]) adopted the City's ten WRP policies for most of the properties located within its boundaries.

In October 2013, the City Council approved revisions to the WRP in order to proactively advance the long-term goals laid out in *Vision 2020: The New York City Comprehensive Waterfront Plan*, released in 2011. The changes solidify New York City's leadership in the area of sustainability and climate resilience planning as one of the first major cities in the U.S. to incorporate climate change considerations into its Coastal Zone Management Program. They also promote a range of ecological objectives and strategies, facilitate interagency review of permitting to preserve and enhance maritime infrastructure, and support a thriving, sustainable working waterfront. The New York State Secretary of State approved the revisions to the WRP on February 3, 2016. The U.S. Secretary of Commerce concurred with the State's request to incorporate the WRP into the New York State CMP.

New York City Panel on Climate Change: Projections

In 2013, the New York City Panel on Climate Change (NPCC) released a report (*Climate Risk Information 2013: Observations, Climate Change Projections, and Maps*) outlining New York

City-specific climate change projections to help respond to climate change and accomplish PlaNYC goals. The NPCC report predicted future City temperatures, precipitations, sea levels, and extreme event frequency for the 2020s and 2050s. While the projections will continue to be refined in the future, current projections are useful for present planning purposes and to facilitate decision-making in the present that can reduce existing and near-term risks without impeding the ability to take more informed adaptive actions in the future. Specifically, the NPCC report predicts that mean annual temperatures will increase by 2 to 3°F and by 4 to 6.5°F by the 2020s and 2050s, respectively; total annual precipitation will rise by 0 to 10 percent and 5 to 15 percent by the 2020s and 2050s, respectively; sea level will rise by 4 to 11 inches and 11 to 31 inches by the 2020s and 2050s, respectively; and by the 2050s, heat waves and heavy downpours are very likely to become more frequent, more intense, and longer in duration. Coastal flooding is also very likely to increase in frequency, extent, and elevation.

Assessment

As Development Sites A, B, and C lie within the coastal zone, the proposed action must be assessed for its consistency with the policies of the City's WRP. A WRP consistency assessment is provided below under Section F, "Future With the Proposed Action." The WRP Consistency Assessment Form is provided in **Appendix A**.

V. FUTURE WITHOUT THE PROPOSED ACTION

Land Use

Primary Study Area

As discussed in Chapter 1, in the future without the proposed action, the No-Action scenario would retain the existing uses for each Development Site. Development Sites A and B would remain vacant lots. Development Sites C and D would remain as interim portions of their respective community gardens, under HPD jurisdiction operating pursuant to temporary license agreements with the intent that they would be eventually redeveloped for affordable housing.

Secondary Study Area/400-Foot Study Area

In total, there are four projects currently under construction within the 400 feet of the Development Sites. It is anticipated that these projects will be completed by the 2023 Build Year.

Within 400 feet of Development Site A, there are two projects that are anticipated to be complete by 2023. 1988-1996 Second Avenue will be a new development with approximately 102 dwelling units (DUs). 1998 Second Avenue will be a new development with approximately 185 DUs.

Within 400 feet of Development Site B, there is one anticipated development. 2282 Second Avenue is a new mixed-use development that will contain approximately 11 DUs and 1,823 gsf of local retail.

Within 400 feet of Development Site C, there is one anticipated development. 316 Pleasant Avenue is a new mixed-use development that will contain approximately 8 DUs and 734 gsf of community facility use.

There are no new developments anticipated within 400 feet of Development Site D. There are four anticipated developments just outside of the 400-foot radius. 1800 Park Avenue is anticipated to be a new mixed-use development with approximately 670 DUs, 73,460 gsf of retail space and 46,250 gsf of community facility space. 172 East 122nd Street is a new development with approximately 15 DUs. 2252 3rd Avenue is a new development with approximately 61 DUs. 2226 3rd Avenue is a new mixed-use development with approximately 82 DUs and 20,353 gsf of local retail space.

Zoning

Primary Study Area

In the future No-Action condition, no zoning changes specifically applicable to the project areas are anticipated. As such, it is anticipated that the existing zoning districts would be retained: C1-5/R8A for Development Site A; R7B for Development Sites B and C; and M1-6/R10 (MIH) for Development Site D.

Secondary Study Areas/400-Foot Study Area

There are currently no planned zoning map changes in the 400-foot study area in the future without the proposed action.

Public Policy

There are no anticipated changes to public policy in the study areas of all the Development Sites in the future without the proposed action

VI. FUTURE WITH THE PROPOSED ACTION

Proposed Action

In the future with the proposed action (the With-Action scenario), the disposition of City-owned property would facilitate development of the four Development Sites.

Site A

Site A (303 East 102nd Street) would contain a five-story, approximately 63-foot tall residential and commercial building with approximately 8,976 gsf, including 5,471 gsf of residential space, 6 DUs, 2,497gsf of community facility space and 1,008 gsf of mechanical space.

Site B

Site B (338 East 117th Street) would contain a five-story, approximately 62-foot tall residential building with approximately 8,306 gsf, including 7,571 gsf of residential space, 7 DUs and 735 gsf of mechanical space.

Site C

Site C (505 East 118th Street) would contain a six-story, approximately 70-foot tall residential building with approximately 17,310 gsf, including 16,208 gsf of residential space, 18 DUs and 1,102 gsf of mechanical space.

Site D

Site D (1761 Park Avenue) would contain a 13-story, approximately 142-foot tall residential and community facility building with approximately 55,670 gsf, including 44,598 gsf of residential space, 52 DUs, 8,243 gsf of community facility space and 2,829 gsf of mechanical space.

As described above, under the With-Action Scenario, the proposed developments collectively would include 73,848 gsf of residential space, and 10,740 gsf of community facility space. There would not be any accessory parking.

Land UsePrimary Study Area

Table 2-2 shows in the future with the proposed action, the proposed developments would result in net increases of approximately 73,848 gsf of residential space (83 DUs) and 10,740 gsf of community facility. There would be a net reduction of approximately 6,971 of temporary open space from portions of Pleasant Village and Jackie Robinson community gardens. Both community gardens are located on land owned by the New York City Department of Housing Preservation and Development (HPD). Pleasant Village and Jackie Robinson community gardens are operating under a temporary license agreement; the City-owned land occupied by the community gardens are not mapped as public parkland. The temporary license agreement states that the gardens may operate on an interim basis until HPD is prepared to redevelop the sites. The Proposed Developments would result in a population increase of 198 residents and 35 workers in association with the community facility space.

Secondary Study Area/400-Foot Study Area

No additional changes to land use are anticipated within the 400-foot study areas as a result of the proposed action, as ongoing trends would be expected to continue with or without the Proposed Developments and the proposed action would not be expected to induce any new development.

Assessment

The proposed action would not result in significant adverse impacts to land use on the development sites or in the 400-foot study areas. The proposed action would allow residential and community facility developments on the development sites in an area where there is a strong demand for these particular uses. Such uses and densities are considered compatible for this area as reflected in the existing zoning and the recently approved East Harlem Rezoning. Furthermore, the proposed developments would be built at a density and bulk compatible with the other properties in the area. As such, the proposed action would result in developments that would complement the land use character of the respective 400-foot study areas as a whole.

Table 2-2, Comparison of 2023 No-Action and With-Action Scenarios

Use	Existing / No-Action	With-Action ¹	Increment
Residential (Affordable)	0 gsf 0 DUs	73,848gsf 81 DUs (+2 super's DUs)	+73,848 gsf +81 DUs (+2 super's DUs)
Community Facility	0 gsf	10,740 gsf	+10,740 gsf
Population/Employment ²	Existing/No-Action	With-Action	Increment
Residents	0 residents	198 residents	+198 residents
Workers	0 workers	35workers	+35 workers

Notes:

¹ All figures are approximate and subject to change.

² Assumes 1 residential worker per 25 DUs and 3 community facility workers per 1,000 gsf community facility

Zoning

The proposed action consists of one discretionary approval necessary to facilitate the proposed developments, the disposition of City-owned property. Refer to Chapter 1, Section VII, "Required Approvals," for a detailed description.

Primary Study and Secondary Study Area/400-Foot Study Area

No changes to zoning on the development sites or within the 400-foot study area would occur as a result of the proposed action.

Assessment

The Proposed Project would be as-of-right under zoning and as such reflects the City's intended uses, bulk, and density for the development sites. Accordingly, the proposed action would not result in significant adverse impacts to zoning on the development sites or in the 400-foot study areas.

Public Policy

As discussed under “Existing Conditions,” all or parts of the project area and the larger study area fall within the geographic jurisdiction of several public policies. These policies include Harlem-East Harlem Urban Renewal Plan, the East Harlem Neighborhood Plan, the Statement of District Needs and Community Board Budget Requests for CB 11, the CB 11 draft 197-a Plan, One New York: The Plan for a Strong and Just City (One NYC) and the WRP. Policy assessments of each these are provided below.

CD 11 197-a Plan and East Harlem Neighborhood Plan

The Proposed Project is consistent with the goals of the 1996 draft *New Directions* 197-a Plan and the 2016 *East Harlem Neighborhood Plan*. These goals include the 197-a Plan’s call to provide quality economic and community development and decent and affordable housing in East Harlem. From the *East Harlem Neighborhood Plan*, the Proposed Project is consistent with the recommendation to “increase the amount of affordable housing with deep and varied levels of affordability in any new development” and “expand affordable housing tools and resources to increase affordable housing in new development.” The Proposed Project will develop 81 affordable housing units with varied levels of affordability, thus supporting the plan. As such, the Proposed Project would not alter or conflict with the draft 197-a Plan and the more recent *East Harlem Neighborhood Plan*, and no significant adverse impacts would result.

Statement of District Needs and Community Board Budget Requests for Manhattan Community Board 11

The Proposed Project is consistent with the *Statement of District Needs* in that it addresses pressing issues and priorities identified by CB 11. Specifically, the Proposed Project would provide 81 units of varied levels of affordable housing. The affordable housing on the development sites provided by the Proposed Project would be complementary to other efforts by the City, including, but not limited to, the City’s recent East Harlem Rezoning.

Harlem- East Harlem Urban Renewal Plan (HEHURP)

The *HEHURP* seeks to accomplish the following: redevelop the area in a comprehensive manner; remove blight and maximize appropriate land use; remove or rehabilitate substandard and unsanitary structures; remove impediments to land assemblage and orderly development; strengthen the tax base of the City by encouraging development and employment opportunities in the area; provide new housing of high quality and/or rehabilitated housing of upgraded quality; provide appropriate community facilities, parks and recreational uses, retail shopping, public parking, and private parking; and provide a stable environment within the area that will not be a blighting influence on surrounding neighborhoods. Design objectives of the plan are to develop the area in a manner compatible with the surrounding neighborhood in terms of scale and materials and to reinforce the existing urban street character. The affordable housing provided by the Proposed Project would be complementary to the *HEHURP*.

Housing New York 2.0

The Proposed Development would be consistent with the City's *Housing New York* plan, a five-borough, ten-year strategy to build and preserve affordable housing throughout New York City in coordination with strategic infrastructure improvements to foster a more equitable and livable New York City through an extensive community engagement process. The plan outlines more than 50 initiatives to support the administration's goal of building or preserving 300,000 units of high-quality affordable housing by 2026. The plan emphasizes affordability for a wide range of incomes, with the program serving households ranging from middle- to extremely low-income (under \$25,150 for a family of four). The plan, which was created through coordination with 13 agencies and with input from more than 200 individual stakeholders, outlines more than 50 initiatives that will accelerate affordable construction, protect tenants, and deliver more value from affordable housing. The plan intends to do this through five guiding policies and principles: fostering diverse, livable neighborhoods; preserving the affordability and quality of the existing housing stock; building new affordable housing for all New Yorkers; promoting homeless, senior, supportive, and accessible housing; and refining City financing tools and expanding funding sources for affordable housing. It is the Applicant and Sponsor's intention that the provision of the Proposed Development's approximately 81 affordable dwelling units would support the *Housing New York* plan.

One New York: The Plan for a Strong and Just City ("OneNYC")

The proposed action would be consistent with *OneNYC*, specifically Initiative 1 related to housing under, "Vision 1: Our Growing, Thriving City." Initiative 1 for Housing states, "Create and preserve 200,000 affordable housing units over ten years to alleviate New Yorkers' rent burden and meet the needs of a diverse population. Support efforts by the private market to produce 160,000 additional new units of housing over ten years to accommodate a growing population." The proposed action would facilitate the development of approximately 81 affordable dwelling units to the neighborhood. The addition of housing would help accommodate the growing, and increasingly rent-burdened, population in East Harlem. The Development Sites are also well served by public transportation, including the 96th, 103rd, 116th and 125th Street stations on the NYCT Lexington Avenue subway line (4, 5, and 6 trains). Although a completion date is not yet available, it is anticipated that in the future the Second Avenue Subway extension will include new stations at 106th Street/Second Avenue, 116th Street/Second Avenue, and 125th Street/Park Avenue. Additionally, the M15/M15 SBS, and M116 NYCT operate near Development Sites A, B, and C. The proximity to transit aligns with the goals of a supportive initiative that aim to, "Conduct collaborative, holistic neighborhood planning to support new mixed-income housing creative with supportive infrastructure and services."

The proposed action would be consistent with Initiative 1 by providing affordable housing in an area supported by many transit options and by using sustainable building design. Thus, the proposed action would support several of *PlaNYC*'s and *OneNYC*'s sustainability initiatives, as well as help support the City's gradual transition to a more sustainable city.

WRP Consistency Assessment

As Development Sites A, B, and C are located within the city's designated Coastal Zone (refer to **Figure 2-3**) the proposed action is subject to review for consistency with the policies of the WRP. The WRP includes policies designed to maximize the benefits derived from economic development, environmental preservation, and public use of the waterfront, while minimizing the conflicts among those objectives. The WRP Consistency Assessment Form (CAF) (see **Appendix A**) lists the WRP policies and indicates whether the proposed action would promote or hinder that policy, or if that policy would not be applicable.

Per the WRP CAF, the following policies warranted further assessment: 1; 1.1; 1.3; 1.5; 6; 6.2; 7; 7.1; 7.2 and 7.3. Therefore, these policies are addressed below.

Consistency with Applicable WRP Policies

POLICY 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development.

Although located in the coastal zone, the development sites are not waterfront sites, being located upland from the landward edge of the closest waterfront property, specifically the Harlem River. As such, the project areas are upland sites. They are well-suited to commercial and residential development as the Development Sites A, B and C and the surrounding areas are zoned with various residential districts (R7B, R8A, etc.) and in some locations commercial overlay districts (C1-5). The area is well-served by existing infrastructure and services, as noted above. The surrounding neighborhoods contain a mix of commercial, residential, and open space uses and have undergone a trend of new development, particularly since the adoption of the City's East Harlem Rezoning and related actions in 2017.

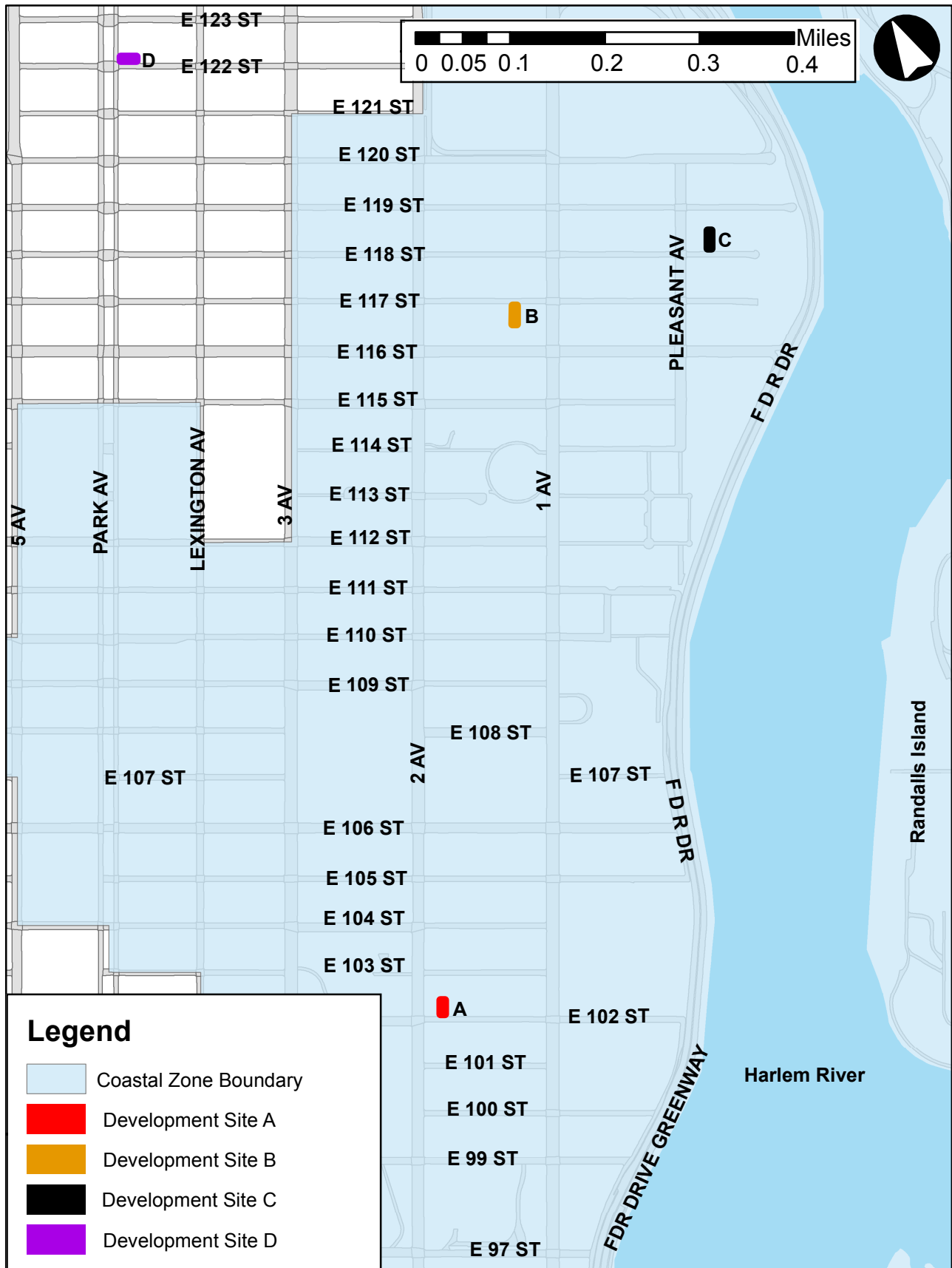
As such, the commercial and residential development that would be facilitated by the proposed action would occur in an area suitable for such development where strong demand for residential space exists and the City seeks to retain affordable housing.

Therefore, the proposed action would promote Policy 1.

Policy 1.1: *Encourage commercial and residential redevelopment in appropriate coastal zone areas.*

Development Sites A, B, and C are appropriate locations for residential development as they are zoned C1-5/R8A, R7B and R7B, respectively, and are served by existing infrastructure and public services. The study areas surrounding each Development Site are not located within a Significant Maritime and Industrial Area (SMIA), Special Natural Waterfront Area (SNWA), Priority Maritime Activity Zone (PMAZ), Recognized Ecological Complex (REC), or West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA), as defined in the WRP, and therefore are not located in a special area that may be inappropriate for the development of new residential uses.

Coastal Zone Boundary



Additionally, Development Sites A, B, and C are located approximately 0.28, 0.32, and 0.12 miles respectively, from the shoreline, and therefore are not suitable for water-dependent or maritime uses. For these reasons, the proposed action would promote Policy 1.1 of the WRP and would facilitate commercial and residential development in an area 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.*

As previously indicated, the development sites, and the balance of the study areas, are fully developed and are adequately served by local infrastructure. As described throughout this EIS, the density of the proposed developments is compatible with the capacity of surrounding transportation facilities and essential community services. It is anticipated that the mix of uses and scale of the proposed developments would not overburden the area and the project areas would continue to be adequately served by the existing local infrastructure.

As discussed above in Existing Conditions, there are several public transportation options in the areas surrounding Development Site A, B and C. In addition, the Project Area is served by existing sewer and water mains and energy infrastructure. The proposed buildings would be built with green roofs to help minimize the effects of the proposed project on water and sewer mains.

Overall, the proposed developments, by facilitating redevelopment in an area served by existing public facilities and infrastructure, would promote Policy 1.3.

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*

See response to Policy 6.2 below.

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.*

See response to Policy 6.2 below.

Policy 6.2: *Integrate consideration of the latest New York City projections of climate change and sea level rise (as published by the New York City Panel on Climate Change or any successor thereof) into the planning and design of projects in the City's Coastal Zone.*

As outlined in *The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance* document, for site-specific actions that include (or would facilitate the development of) new vulnerable, critical, or potentially hazardous features, the detailed methodology approach should be utilized to assess a project or action's consistency with Policy 6.2 of the WRP. The detailed Policy 6.2 methodology assessment is provided below.

Flood Insurance Rate Maps and Base and Design Flood Elevations

The Federal Emergency Management Agency (FEMA) issued updated Preliminary Flood Insurance Rate Maps (PFIRMs) for New York City dated 1/30/2015. These were intended to replace the currently effective FIRMs issued by FEMA in 1983 with revisions dated 2007. However, the City filed a technical appeal of the PFIRMs and FEMA subsequently announced that it agreed with the City's findings, and would work with the City to revise the PFIRMs and issue new maps in the coming years that better reflect current flood risk. They identify the 100-year (1-percent annual chance) floodplain with the 100-year flood water levels projected to reach the specified base flood elevations. They also identify the 500-year (with an annual probability of flooding between 0.2 percent and 1 percent) floodplain. FEMA does not identify the base flood elevation for the 500-year floodplain. Areas within the 100-year floodplain are subject to NYC Building Code and FEMA flood-resistant construction requirements. These include requirements that all habitable space be located above the design flood elevation (DFE); permitted uses below the DFE include parking, storage, and access areas.

There are two types of 100-year floodplains; "V" zones with the added hazard of high-velocity wave action with a projected wave height of 3 feet or more and "A" zones, which are projected to be inundated with the 100-year flood but without wave action from waves of 3 feet or more. The PFIRMs also introduced a new area defined as the "Coastal A Zone" designated by a boundary called the Limit of Moderate Wave Action (LiMWA). This zone is the portion of an A Zone, also referred to as the "Coastal AE Zone", where moderate wave action with projected wave heights between 1.5 and 3 feet is expected during the base flood event. The City of New York has adopted the base flood elevations¹ specified in either the PFIRMs or the currently effective FIRMs as revised in 2007, with the more restrictive of the two, i.e., having a higher base flood elevation, applicable until new effective FIRMs are available for the purposes of determining compliance with all flood-proofing requirements and for establishing base plane elevations for new buildings to measure their compliance with zoning building height requirements.²

Development Sites A, B and C's Location in PFIRM 100-year Floodplain

Based on available survey information, Development Sites A, B and C currently have an elevation of approximately 12 feet above the North American Vertical Datum of 1988 (NAVD 88).

As defined in both 2015 PFIRM and the 2007 effective FIRM, parts of Development Site A and B are within the 100-year floodplain and designated an "AE" zone with a BFE of 12' NAVD 88. Development Site C is currently located outside the 100-year floodplain but beginning in the 2020s the site is located within the 100-year floodplain. This indicates an area of high flood risk. As portions of Development Site A and B are located within the boundary of the 100-year floodplain, the City's Building Code and FEMA special requirements for the 100-year floodplain are applicable. In the case of Development Sites A, B and C, the base plane used for measuring building height for zoning purposes may be set at the BFE, i.e., 12' NAVD 88, rather than the average

¹ PFIRM elevations are measured in feet above the North American Vertical Datum of 1988 (NAVD 88).

² See "Coastal Climate Resilience: Designing for Flood Risk", Department of City Planning, City of New York, June 2013, for additional information. Online at: http://www1.nyc.gov/assets/planning/download/pdf/plans-studies/sustainable-communities/climate-resilience/designing_flood_risk.pdf

ground elevation and the DFE is measured as the being 1 foot above the BFE, i.e., 13' NAVD 88. Refer to **Figure 2-4**, which shows the boundaries of the 100-year and 500-year floodplains in relation to the development sites.

As noted above in the “Existing Conditions” section discussing the WRP, the NPCC predicts that mean annual temperatures will increase by 2 to 3°F and by 4 to 6.5°F by the 2020s and 2050s, respectively; total annual precipitation will rise by 0 to 10 percent and 5 to 15 percent by the 2020s and 2050s, respectively; sea level will rise by 4 to 11 inches and 11 to 31 inches by the 2020s and 2050s, respectively; and by the 2050s, heat waves and heavy downpours are very likely to become more frequent, more intense, and longer in duration. Coastal flooding is also very likely to increase in frequency, extent, and elevation. Based on these projections, all of Development Site A and B and most of Development Site C will be located within the 100-year floodplain by the 2020s (see **Figures 2-5, 2-6 and 2-7**, respectively), but BFEs are not indicated in the NPCC prediction. All of Development Site C will be located within the 100-year floodplain by the 2050s. The NPCC recommends assessing the impacts of projected sea level rise on the lifespan of projects. Because of limitations in the accuracy of flood projections, the NPCC recommends that these 2020s and 2050s maps not be used to judge site-specific risks and advises that they are subject to change.

Development Site C Location in PFIRM 500-year Floodplain

Based on available survey information, Development Site C currently has an elevation of approximately 12 feet above the North American Vertical Datum of 1988 (NAVD 88).

As shown in **Figure 2-8**, most of Development Site C is within the 500-year floodplain. This indicates an area of moderate to low-risk flood hazard, also known as a Non-Special Flood Hazard Area. FEMA does not specify base flood elevations for the shaded X zones. As Development Site C is located outside the boundary of the 100-year floodplain, the City’s Building Code and FEMA special requirements for the 100-year floodplain are not applicable.

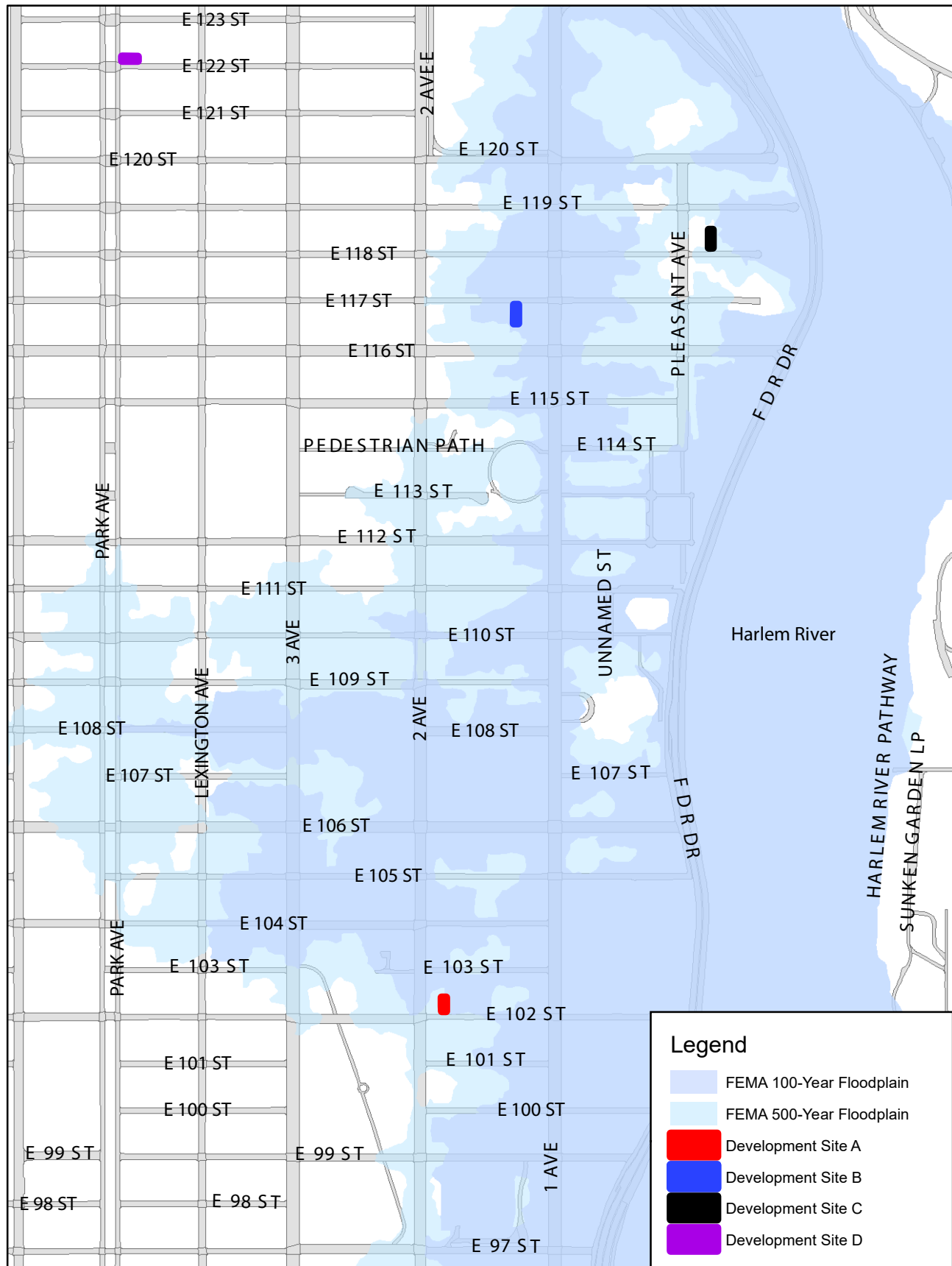
Based on the NPCC projections discussed above in “Development Sites A and B’s Location in PFIRM 100-year Floodplain,” all of Development Site C will be located within the 500-year floodplain by the 2020s and by the 2050s portions of it will be within the 100-year floodplain, but base flood elevations are not indicated in the NPCC prediction (see **Figure 2-7 and 2-8**).

Detailed Assessment

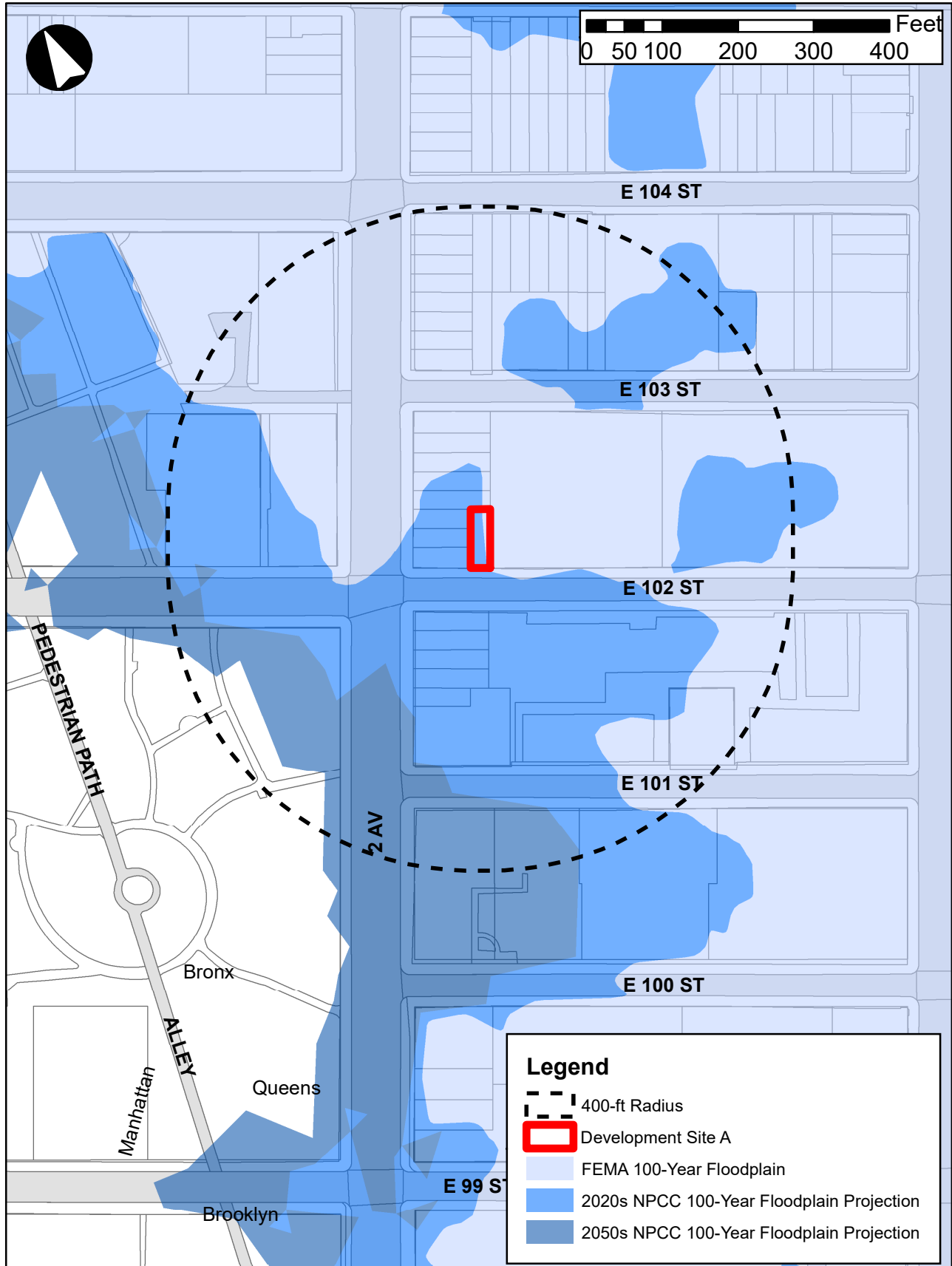
Pursuant to guidance issued by DCP, an assessment of consistency with Policy 6.2 has been prepared consistent with the detailed methodology identified therein. There are three basic steps required under this methodology: (1) identify vulnerabilities and consequences; (2) identify adaptive strategies; and (3) assess policy consistency.

Identify Vulnerabilities and Consequences

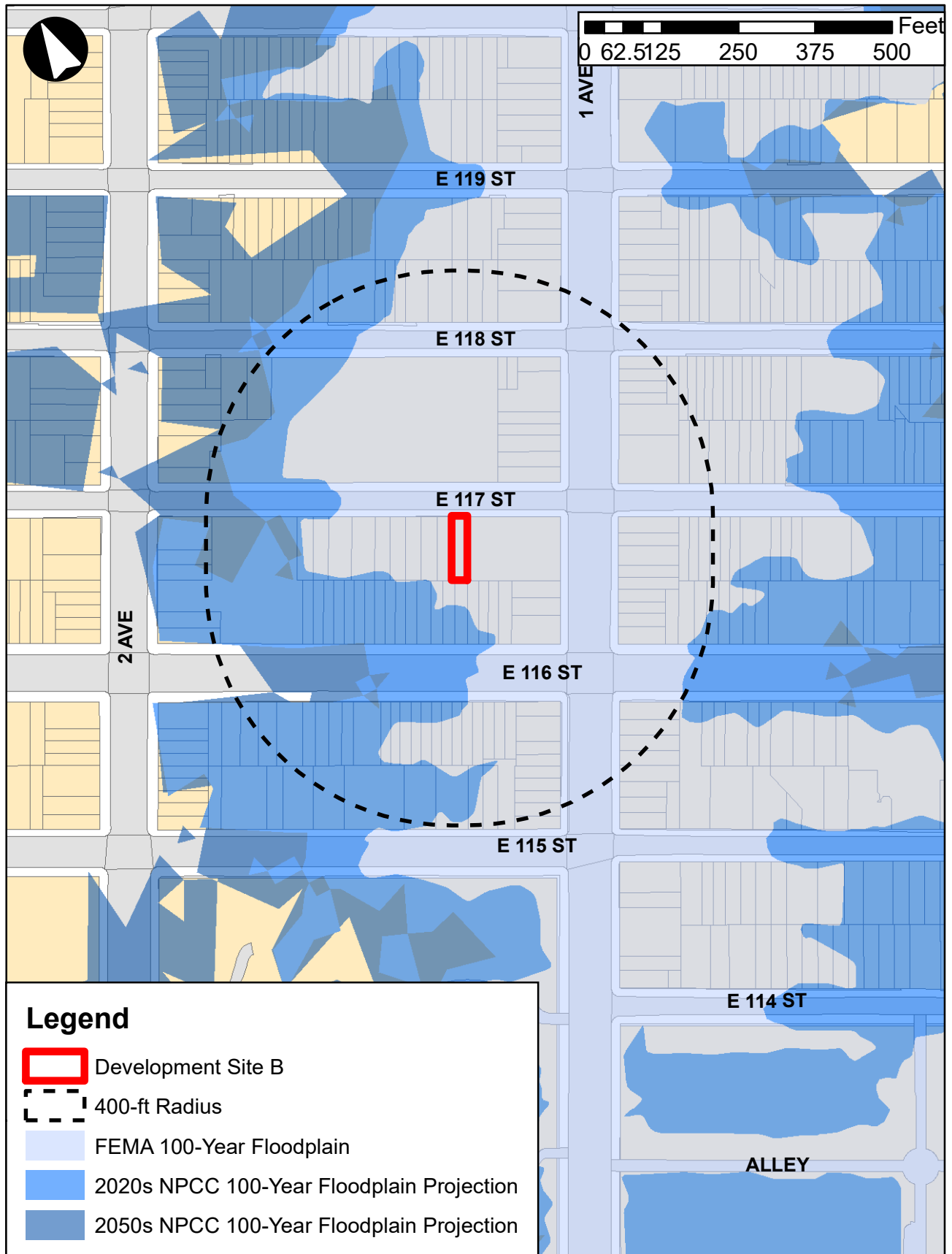
For this assessment, building features are defined in one of four categories: (1) *vulnerable*: project features that have the potential to incur significant damage if flooded; (2) *critical*: project features that if damaged would have severe impacts on the project and its ability to function as designed;



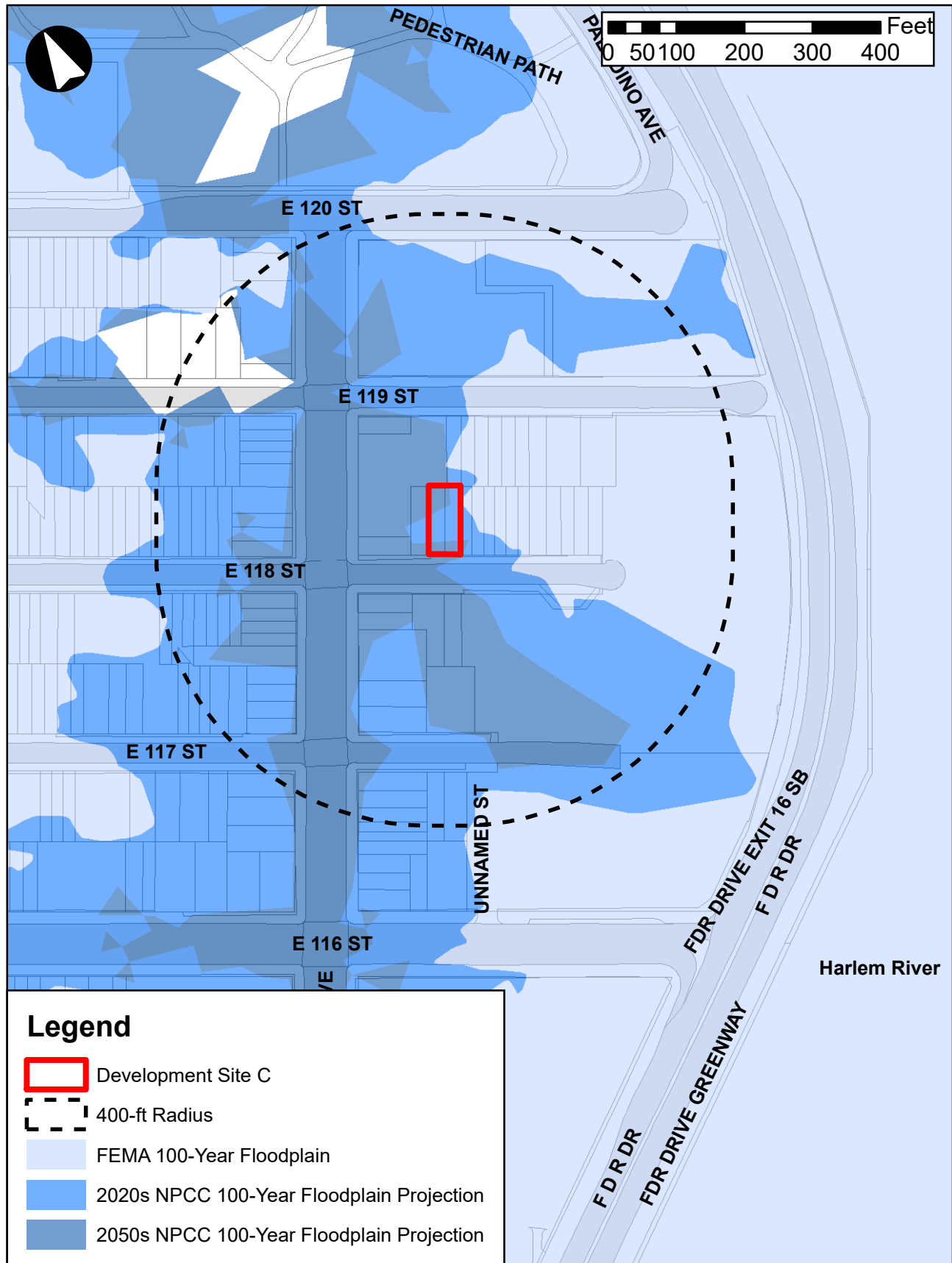
100-Year Floodplain: Development Site A

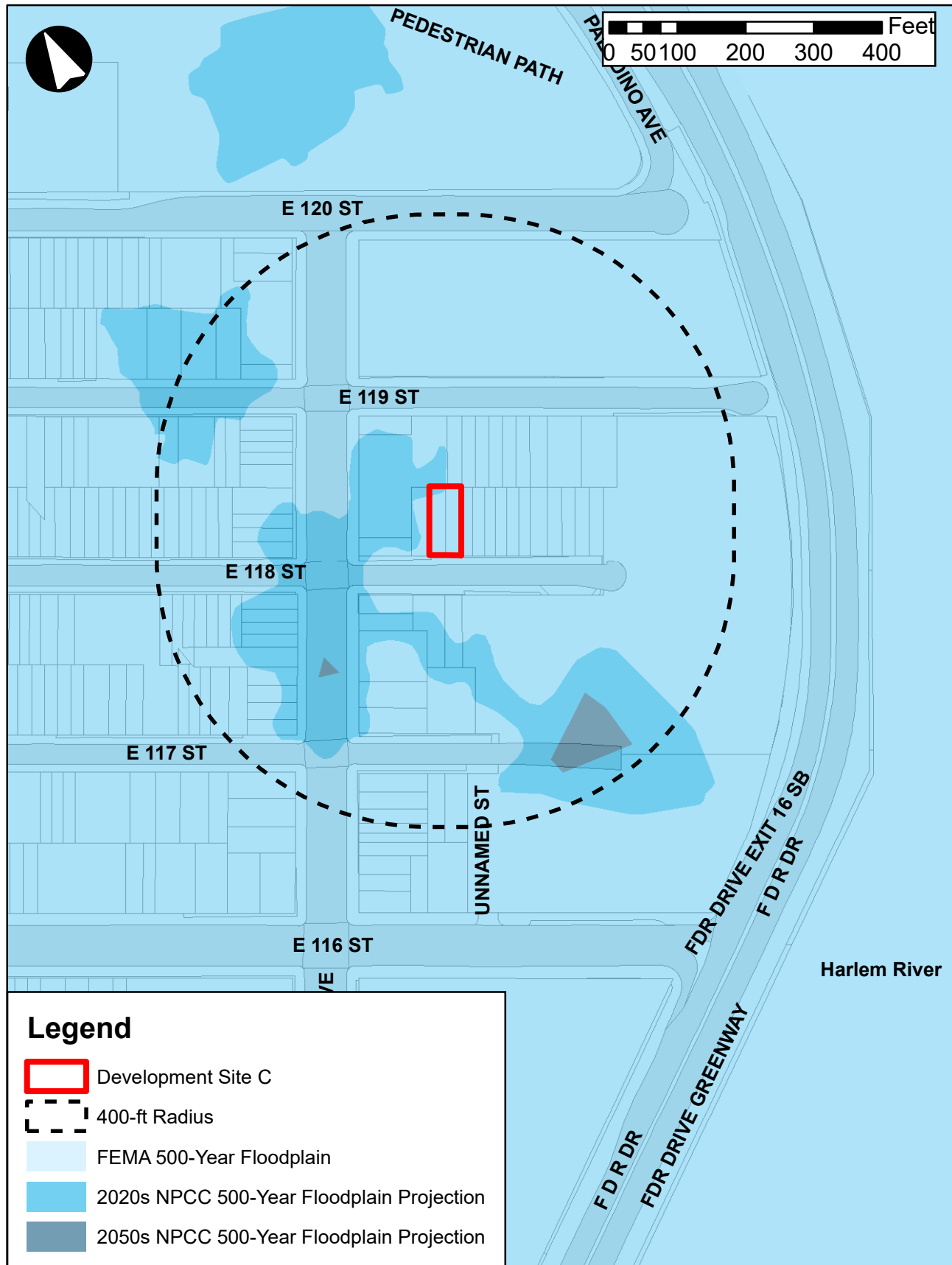


100-Year Floodplain: Development Site B



100-Year Floodplain: Development Site C





(3) *potentially hazardous*: project features that if damaged or made unsecure by flooding could potentially adversely affect the health and safety of the public and the environment; and (4) *other*: project features that are entirely open and unenclosed spaces, except the open storage of potentially hazardous materials, which may be damaged by flooding, but are not likely to present significant consequences and are more easily repaired.

The Flood Elevation Worksheet was prepared for the proposed action and is provided in **Appendix A**. This is a tool which identifies current and future flood elevations in relation to the elevations of the site and project features, presenting a range of future flood elevations as affected by sea level rise (SLR), from high (90th percentile) to low (10th percentile). In other words, “high” refers not to the predicted likelihood, which is estimated at approximately one in ten, but to being a high-end projected increase in flood elevation.

As presented in **Figures 2-5 and 2-6**, respectively, Development Sites A and B area are partly within the 100-year floodplain (per the 2015 Federal Emergency Management Agency’s (FEMA’s) preliminary Flood Insurance Rate Map (PFIRM), based on NPCC projections. Additionally, Development Site C is entirely within the 500-year floodplain (refer to **Figure 2-8**).

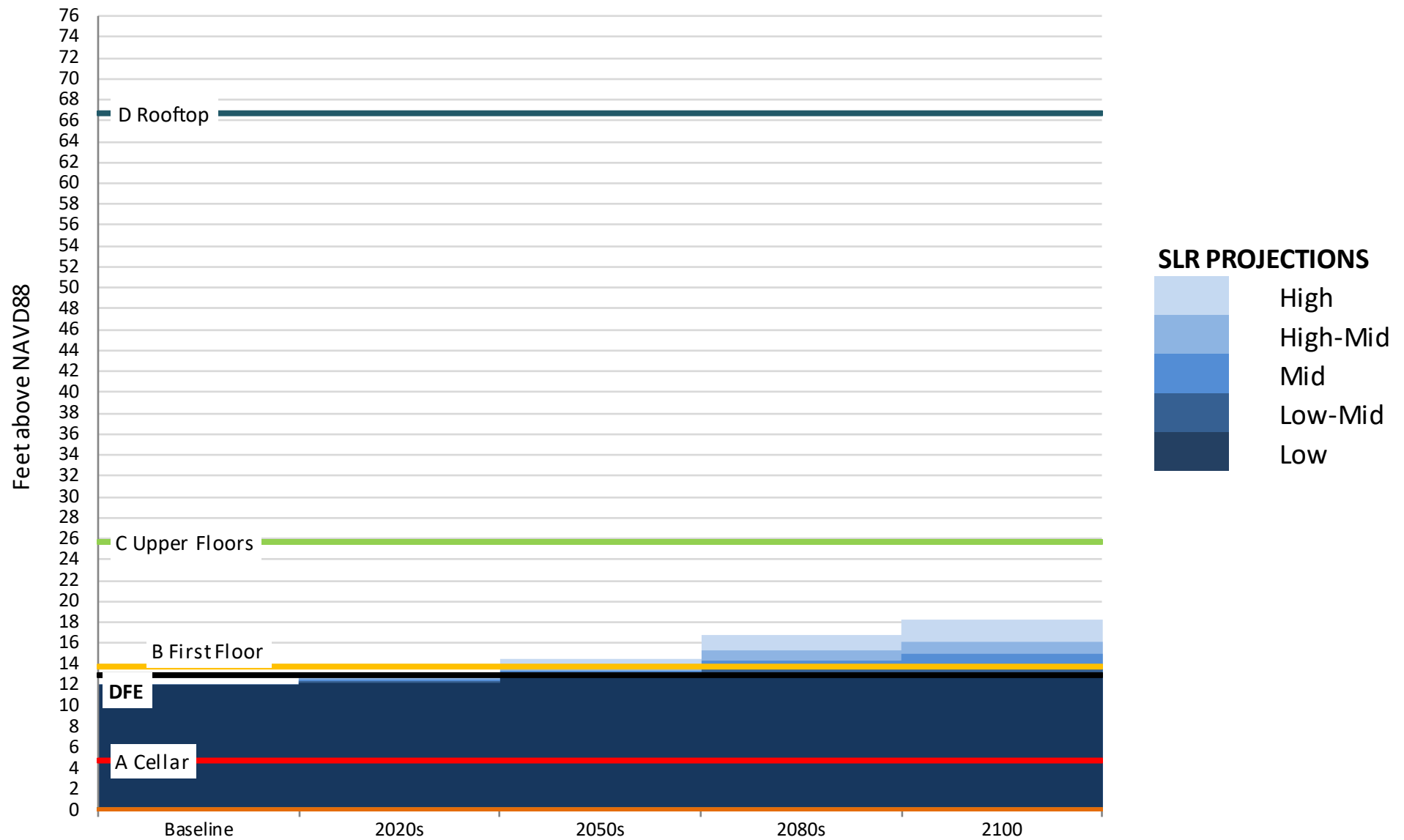
Development Site A

As shown in **Figure 2-9**, Development Site A is located partly within the baseline 1- percent annual chance floodplain (i.e., the “100-year floodplain”. The cellar, containing commercial space, laundry room, water/gas meters, and the detention tank (vulnerable features), would be below the elevation of the baseline 100-year floodplain. With a 1- percent flood elevation baseline height of 12 feet, the cellar would be susceptible to flooding. However, the cellar would not house critical equipment to the building. The building’s first floor would have an elevation of +13.86 feet (NAVD 88) and would house commercial, storage, and meter space (vulnerable features). As shown in **Figure 2-9** the first floor would remain above the 1-percent flood elevation until the high flood projections in the 2050s. In 2080s, the first floor would remain above the 1-percent flood elevation until the mid to high flood projections. In the 2100s, the first floor would remain above the 1-percent flood elevation until the mid through the high flood cycle projections. Development Site A’s lowest tenanted space would remain above the elevation of the Mean Higher High Water (MHHW) through the 2100s. The upper floors and rooftop, which house the boiler (critical feature) would not be susceptible to the 1-percent flood or the MHHW level at any time through the 2100s. Refer to **Figure 2-10**, an illustrative building section depicting this information. Refer to **Figure 1-3a**, in Chapter 1, “Project Description,” for a site plan and building section of Development Site A. Potential consequences of the cellar and first floor retail space being located within the 1-percent annual chance floodplain include flood damage to property, building structure, loss of inventory, or potentially increased flood insurance costs.

Development Site B

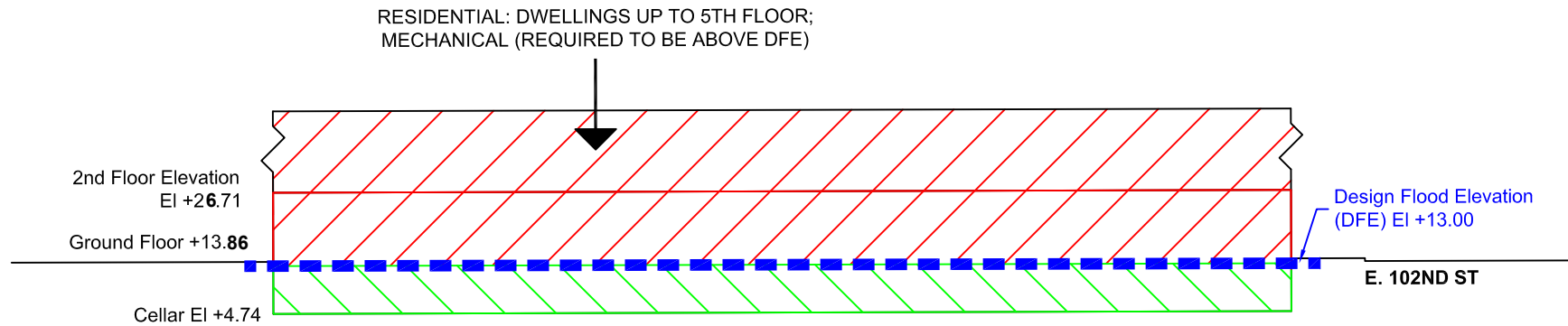
As shown in **Figure 2-11**, Development Site B is located within the baseline 1-percent annual chance floodplain and has a baseline flood elevation of +12 feet (NAVD 88). The ground floor would have an elevation of +13.27 (NAVD 88) and contain one residential unit, laundry, water and electric meters (vulnerable features). As shown in **Figure 2-11**, the ground floor would be above the elevation of the baseline 100-year floodplain through the 2020s until the mid projection

1% Flood Elevation + Sea Level Rise



Development Site A: Illustrative North-South Section: Uses in Relation to Design Flood Elevation (DFE)

This section illustrates the vertical location of uses relative to the DFE and their requirements related thereto. For illustrative purposes only.

**Legend:**

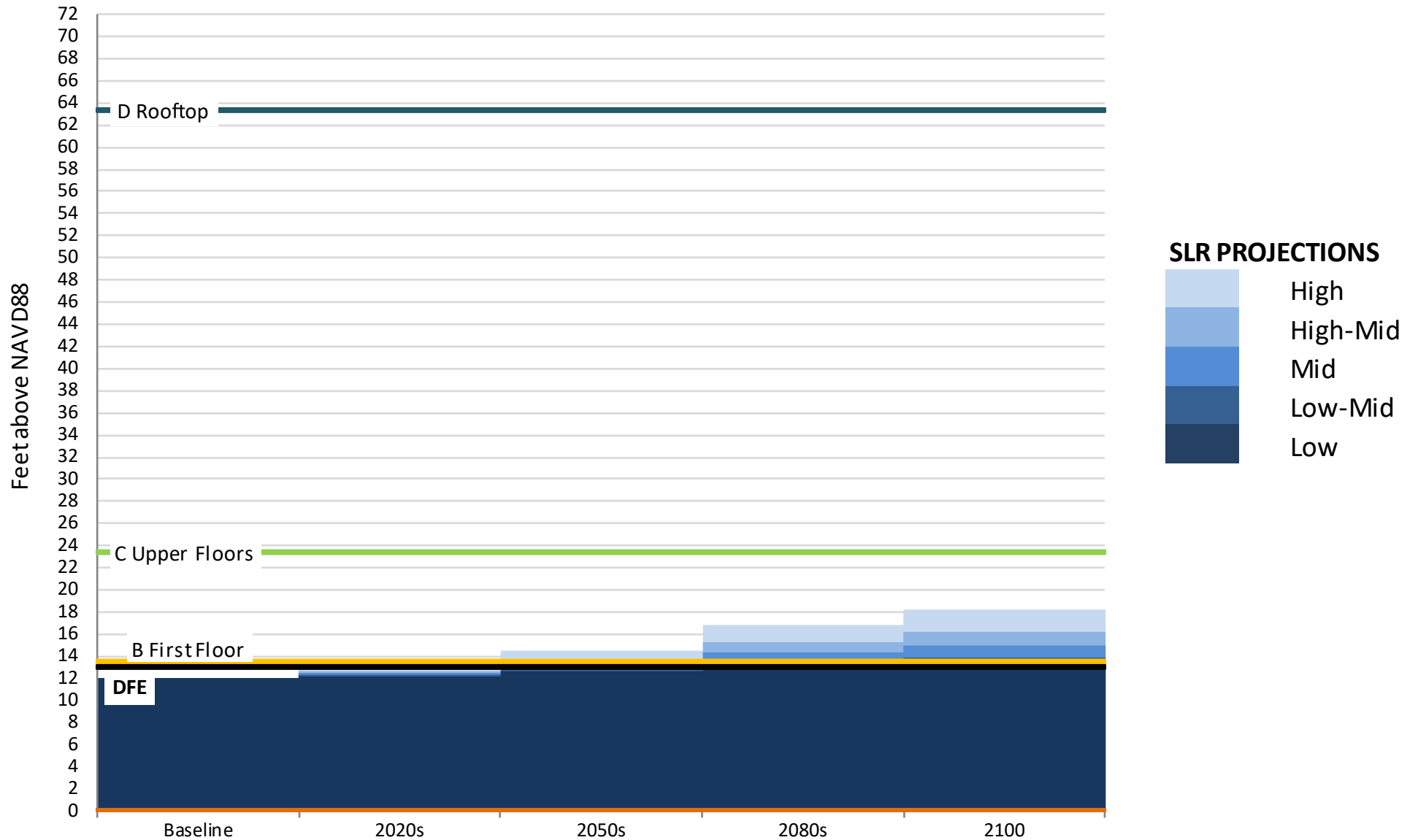
- | | | | |
|---|--|---|---|
|  | Use permitted to be located below the design flood elevation |  | Use required to be above the design flood elevation |
|---|--|---|---|

Note: Per Building Code regulations applicable to this building and site; design flood elevation is 1-foot above base flood elevation (BFE); for this site BFE = 12'-0" NAVD 88, as indicated on the NYC Flood Hazard Mapper

All elevations shown are NAVD 88

Scale (in feet):  0 25 50 75 100

1% Flood Elevation + Sea Level Rise



in the 2050s. In the 2080s the ground floor would be below the base elevation at the low-mid through the high projection. In the 2100s the ground floor would remain below the base elevation at the low-mid through the high flood cycle projection. The upper floors and rooftop, which would house critical features such as the boiler, would not be susceptible to the 1-percent flood or the MHHW through the 2100s. Refer to **Figure 2-12**, an illustrative building section depicting this information. Refer to **Figure 1-3b**, in Chapter 1, “Project Description,” for a site plan and building section of Development Site B. Potential consequences of the residential space being located within the 1-percent annual chance floodplain include flood damage to property, building structure, loss of inventory, or potentially increased flood insurance costs.

While Development Site B would have a dwelling unit on the ground floor, where it is likely to be located below the future 1-percent flood elevation, it is not feasible to adjust the elevation of the DU. It is not feasible to adjust for flood risk by elevating the dwelling to a height at the future 1-percent chance flood elevation due to the need to maintain reasonable accessibility access via ramps to the site. Additionally, including ramps to interior spaces as a means to elevate dwelling units is not practical as the building is a walk up.

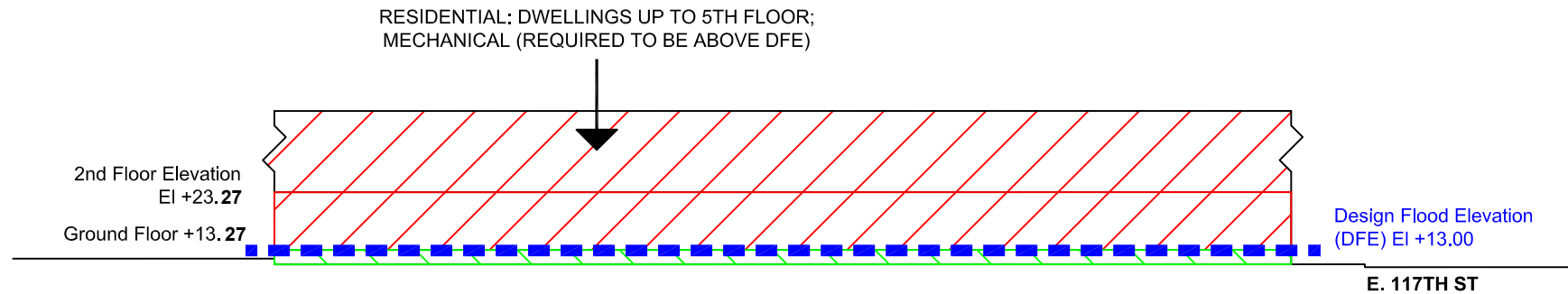
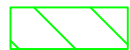
Development Site C

As shown in **Figure 2-8**, Development Site C is located within the baseline 0.2 percent annual chance floodplain. As the Development Site C’s project area is not located within the 100-year floodplain, also known as the one-percent annual chance floodplain, per DCP guidance the elevation of the closest 100-year floodplain is used to estimate the site’s baseline one-percent annual chance flood elevation; in this case the closest such floodplain has a flood elevation of +12 feet (NAVD 88). The first floor of Development Site C would have an elevation of +14.72 (NAVD 88). As shown in **Figure 2-13**, Development Site C is not projected to be within the 1-percent floodplain in the 2020s or 2050s, and as such it would not be vulnerable to the 1-percent chance flood. The first floor, containing two residences, water/sewer connections, refuse room, electric meter, gas meter and elevator bank (critical features), would be located within the 1-percent flood elevation from the 2080s onward under the high-mid-range projections and from the 2100s onward from the mid-range 1-percent sea level rise projection. The residences on the second floor and higher (a vulnerable feature) and critical mechanical systems (a critical feature) would remain above the 1-percent flood elevation through the 2100s, the farthest time horizon for which these projections are available. Refer to **Figure 2-14**, an illustrative building section depicting this information. Refer to **Figure 1-3c**, in Chapter 1, “Project Description,” for a site plan and building section of Development Site C. Potential consequences of the residential space being located within the 1-percent annual chance floodplain include flood damage to property, building structure, loss of inventory, or potentially increased flood insurance costs.

While Development Site C would have dwelling units on the ground floor, where they are likely to be located below the future 1-percent flood elevation, it is not feasible to adjust the elevation of the DUs. It is not feasible to adjust for flood risk by elevating the dwellings to a height at the future 1-percent chance flood elevation due to the need to maintain reasonable accessibility access via ramps to the site. In order to elevate the DUs and achieve the additional 28” above BFE this would be considerable and significantly cost prohibitive.

Development Site B: Illustrative North-South Section: Uses in Relation to Design Flood Elevation (DFE)

This section illustrates the vertical location of uses relative to the DFE and their requirements related thereto. For illustrative purposes only.

**Legend:**

Use permitted to be located below the design flood elevation

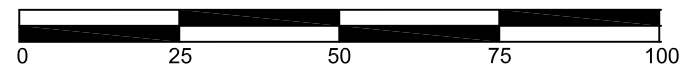


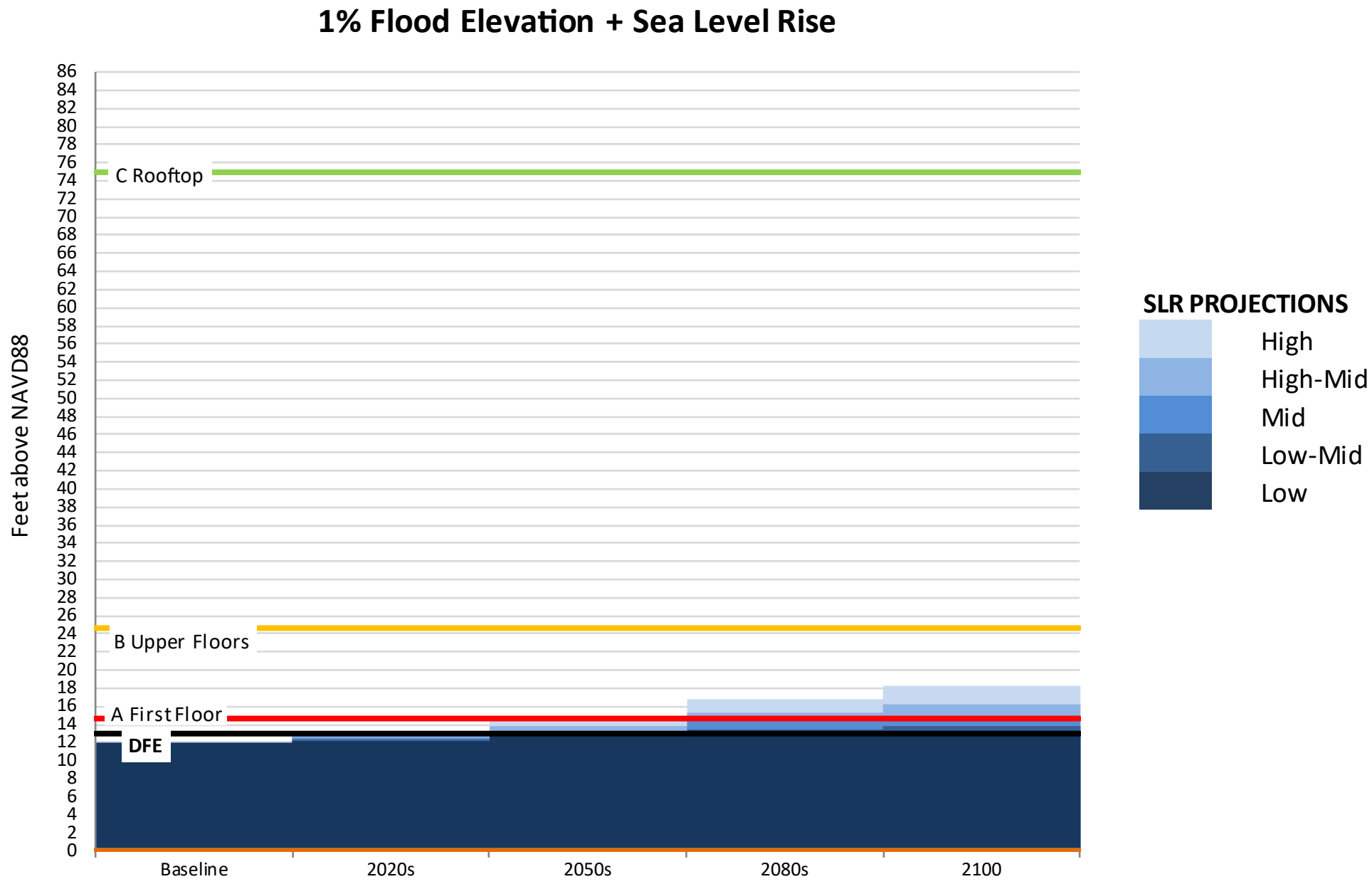
Use required to be above the design flood elevation

Note: Per Building Code regulations applicable to this building and site; design flood elevation is 1-foot above base flood elevation (BFE); for this site BFE = 12'-0" NAVD 88, as indicated on the NYC Flood Hazard Mapper

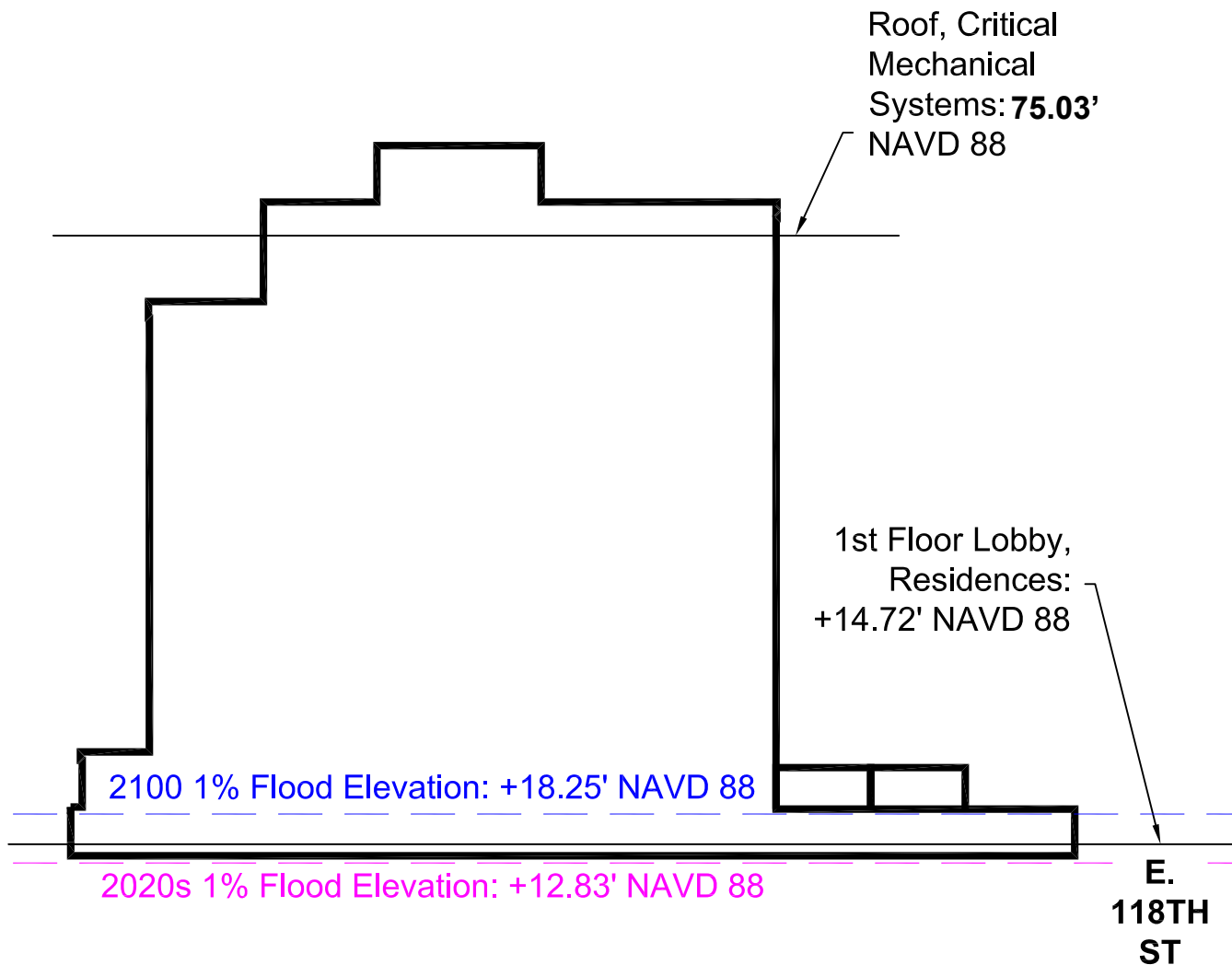
All elevations shown are NAVD 88

Scale (in feet):





Development Site C: Illustrative Section: Building Features and 1% Annual Chance Flood Elevations



All elevations shown are North American Vertical Datum of 1988 (NAVD 88) and building height relative to base plane

Future 1% Annual Chance Flood Elevations shown are the High-range 90th percentile

2050s (+14.50 NAVD 88) and 2080s (+16.83 NAVD88) Future 1% Annual Chance Flood Elevations not shown due to space constraints

Scale (in feet)



Identify Adaptive Strategies

The design and construction of Development Sites A, B and C would be required to comply with New York City Building Code requirements for construction within the 100-year floodplain in effect at the time of building construction. Currently, for structures such as residential buildings, the required DFE is one foot above the base flood elevation indicated on the Preliminary Flood Insurance Rate Map (PFIRM).

Non-habitable space, such as Development Site A's cellar, is permitted below the DFE but is subject to dry flood proofing requirements, which entails a combination of design modifications that result in the building being water tight up to the DFE with walls substantially impenetrable to the passage of water and with structural components that have the capacity to resist flood loads.

Development Site A and B, the building systems are elevated above BFE and include resilient design features. Development Site C, which is not in the 100-year flood zone, is not subject to BFE requirements but is also elevating critical features. Dwelling units at the ground floor heights would have future adaptation and/or active measure in place if necessary to address future flood risks.

Active Measures

- Installation of temporary flood barriers at entrances and perimeters in advance of an anticipated flood event.
 - Installation of flood gates to prevent water from coming through entryways
 - Installation of back flow preventers in floor drains
 - Installation of flood doors to keep water out
 - Additional Site perimeter floodproofing with sandbags
- Installation of flood alarms in elevators
- Sealing all walls and utility penetrations below BFE with waterproof coatings or a supplemental layer of concrete.

Operational resilience techniques

- Monitoring and sealing of all cracks or openings in walls and foundations
 - Regular inspection of outdoor fixtures for signs of rust and corrosion.
 - Inspection of building areas below DFE for leaks, seepage and cracks.
- Active Monitoring of building backflow preventors
- Yearly training for the installation of sandbags for floodproofing
- Monitoring of MRL elevators and their elevated control rooms
- Surface storm water management through increased efficiency of building's green roof and rear yard drains

Coastal floodplains are influenced by astronomic tide and meteorological forces and not by fluvial (river) flooding, and as such are not affected by the placement of obstructions within the

floodplain. Therefore, the construction and operation of the proposed action would not exacerbate future projected flooding conditions.

Assess Policy Consistency

The proposed action advances Policy 6.2. All new vulnerable or critical features would be protected through future adaptive actions that would incorporate flood damage reduction elements. (No potentially hazardous features are anticipated with the proposed action but should such features be included they also would be subject to future adaptive actions.)

POLICY 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.*

Policy 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 costal ecosystems.*

See the response to WRP policy 7.2, below.

Policy 7.2: *Prevent and remediate discharge of petroleum products.*

A Phase I Environmental Site Assessment (ESA) was conducted for each of the four Development Sites (refer to the Executive Summaries located in EAS Appendix 2a). Phase I ESAs were conducted on January 4, 2018 for Development Site A; January 8, 2019 for Development Site B; February 13, 2019 for Development Site C; and February 13, 2019 for Development Site D.

The Phase I ESA identified one Recognized Environmental Condition (REC) at Development Site A, warranting further investigation. A Remedial Investigation Report (RIR) was completed in accordance with the Phase II Environmental Site Investigation Work Plan in March 2020 (refer to the Executive Summary located in EAS Appendix 2b) for Development Site A. The RIR detected semi-volatile organic compounds (SVOCs), pesticides, and metals in the soil, and detected heavy metals in the groundwater, and the soil vapor analysis detected several volatile organic compounds (VOCs) and trichloroethene (TCE). Accordingly, a Remedial Action Plan (RAP) and associated Construction Health and Safety Plan (CHASP) will be prepared, reviewed and approved by DEP (refer to EAS Appendix 1: Agency Correspondence dated October 27, 2020).

Development Sites B, C and D did not identify any RECs. Per DEP guidance, a Phase II and subsequent Remedial Action Plan (RAP) and associated Construction Health and Safety Plan (CHASP) will be prepared, reviewed and approved by DEP (refer to EAS Appendix 1: Agency Correspondence dated October 16, 2020) for Development Sites B, C and D.

The completion of site remediation work, carried out subject to continued DEP oversight and approval, will be required pursuant to the land disposition agreement (LDA) that will set conditions that must be satisfied for the closing of project financing for all Development Sites. With this institutional control in place, the proposed action would not have the potential to result in a significant adverse hazardous materials impact.

Based on this information, the Proposed Project would promote Policy 7.2.

Policy 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*

See the response to WRP policy 7.2, above.

Conclusion. As the proposed action would promote the advance of applicable public policies, including the WRP, and would not conflict with any other applicable public policy, it would not result in any significant adverse public policy impacts. The proposed action received WRP approval (WRP #19-178) from the Department of City Planning on May 13th, 2021 (see **Appendix B: Agency Correspondence**).

I. INTRODUCTION

An open space assessment may be necessary if a proposed action could potentially have a direct or indirect effect on open space resources in the project area. A direct effect would “physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value.” An indirect effect may occur when the population generated by a proposed development would be sufficient to noticeably diminish the ability of an area’s open space to serve the existing or future population.

The lead agency, in consultation with the NYC Department of Parks and Recreation (DPR), has determined that the proposed action would result in significant adverse impacts related to shadows on one open space resource: the Jackie Robinson Community Garden (refer to **Chapter 4, “Shadows”**). As such, the potential for this shadows impact to be deemed also an open space impact is addressed in this chapter.

The Proposed Action would displace portions of the Jackie Robinson and Pleasant Village Community Gardens that are currently located on Development Site C and D, respectively, which are considered existing open space resources for qualitative analysis purposes. Both of these gardens are City-owned properties operating under a temporary license agreement with NYC Department of Housing Preservation and Development (HPD) that permits the community gardens to use these lots on an interim basis until HPD is ready to move forward with the development of the sites. As the Proposed Action would have a direct effect on these open space resources, a detailed assessment of these direct effects is also warranted for the Proposed Action.

As for indirect effects, according to the guidance of the 2020 *City Environmental Quality Review (CEQR) Technical Manual*, a project located in an area considered neither well-served nor underserved by open space and that would add more than 200 residents or 500 employees, or a similar number of other users, is considered to potentially have indirect effects on open space. All of the Development Sites (A, B, C and D) are located in an area that is defined as neither “well-served” nor “under-served” by open space. As discussed in **Chapter 1, “Project Description,”** the Proposed Action is expected to result in an incremental increase of 81 affordable dwelling units (DUs) plus two superintendent’s units, for a total of 83 DUs, over the 2023 No-Action condition. This would result in a total of 198 residents, with 14 new residents at Development Site A (303 East 102nd Street), 17 new residents at Development Site B (338 East 118th Street), 43 new residents at Development Site C (505 East 118th Street), and 124 new residents at Development Site D (1761 Park Avenue). While the proposed action falls slightly below the applicable 200-resident screening threshold and as such a detailed analysis is not warranted per CEQR guidance, due to the anticipated significant adverse shadow impact and due to the partial elimination of temporary community garden areas, an indirect effects open space assessment is provided in this chapter. Development Sites A and D would result in 34 retail employees and cumulative the Development Sites will result in four residential employees. As 35 employees does not exceed the *CEQR Technical Manual* threshold of 500 employees, as is well below the threshold number, there is no need for an indirect employees’ open space assessment.

II. PRINCIPAL CONCLUSIONS

The Proposed Action would result in a direct significant adverse open space impact, due to project-generated incremental shadows on Jackie Robinson Community Garden, as identified in the shadows

analysis in **Chapter 4, “Shadows.”** Apart from this, the proposed action would not result in any other significant adverse open space impacts. According to the *CEQR Technical Manual*, a proposed action may result in a significant adverse impact on open space resources if (a) there would be direct displacement/alteration of existing open space within the study area that has a significant adverse effect on existing users (*Direct Effect*); or (b) it would reduce the open space ratio and consequently overburden existing facilities or further exacerbate deficiency in open space (*Indirect Effect*). The *CEQR Technical Manual* also states “if the area exhibits a low open space ratio indicating a shortfall of open space, even a small decrease in the ratio as a result of the action may cause an adverse effect.” A five percent or greater decrease in the open space ratio is considered “substantial,” and a decrease of less than one percent is generally considered to be insignificant unless open space resources are extremely limited. The open space study area analyzed in this chapter is located in an area that is considered neither “well-served” nor “under-served” by open space as defined in the *CEQR Technical Manual Appendix: Open Space Maps*.

In New York City, local open space ratios vary widely, and the median ratio at the Citywide Community District level is 1.5 acres of open space per 1,000 residents. As a planning goal, a ratio of 2.5 acres per 1,000 residents represents an area well-served by open spaces, and is consequently used as an optimal benchmark for residential populations in large-scale plans and proposals. Ideally, this would comprise 0.50 acres of passive open space and 2.0 acres of active open space per 1,000 residents.

Direct Effects

According to the *CEQR Technical Manual*, a proposed action may result in a significant adverse direct impact on open space resources if there would be direct displacement/alteration of existing open space within the study area and would have a significant adverse effect on existing users, or an imposition of noise, air pollution emissions, odors, or shadows on public open space that may alter its usability. However, the Proposed Action would not result in any direct air quality or noise effects to area open spaces.

As discussed below, while the direct effects open space assessment shows that the Proposed Action would result in the displacement of two existing community gardens located on Development Site C (Pleasant Village Community Garden) and Development Site D (Jackie Robinson Community Garden), portions of the community gardens would remain. Pleasant Village Community Garden would remain on 0.38-acre Lot 2. Jackie Robinson Community Garden would remain on the 0.05-acre Lot 5. Furthermore, the displacement of these community gardens is consistent with the terms of the temporary license agreements under which they have operated as interim facilities until they would be developed pursuant to HPD plans. In addition, these gardens have limited public hours and as such are not accounted for in the quantitative analysis pursuant to CEQR guidance and therefore, their elimination would not affect open space ratios calculated for the indirect effects analysis. Additionally, there are several community gardens in the surrounding area, as documented in this chapter. Therefore, the direct displacement of portions of Pleasant Village Community Garden and Jackie Robinson Community Garden would not constitute a direct significant adverse open space impact.

As discussed in **Chapter 4, “Shadows,”** the Proposed Action would result in significant adverse impacts related to shadows on one open space resource: the Jackie Robinson Community Garden. The lead agency, in consultation with DPR, has determined that this also constitutes a significant adverse open space impact due to the direct effects of project-generated incremental shadows. The shadows analysis concludes that given the duration and extent of incremental shadow, the use and character of the community garden could be altered and the health of trees, flowers, and other plantings could be affected adversely by new project-generated shadows.

Indirect Effects

According to the *CEQR Technical Manual*, a proposed action may result in a significant adverse indirect impact on open space resources if it would reduce the open space ratio and consequently result in the overburdening of existing facilities or further exacerbating a deficiency in open space. The Proposed Action would introduce a net increase of an estimated 198 new residents over the No-Action condition, which does not exceed the 200-resident CEQR screening threshold. However, an open space analysis was conducted for the residential (1/2-mile) study area due to the closeness of the project to the threshold combined with the sensitivity of open space concerns for the proposed action. The quantitative assessment shows that the Proposed Action would result in the study area's open space ratio decreasing by approximately 0.1 percent. This change in the study area's open space ratio would be below the CEQR impact threshold of one percent for areas that are extremely lacking in open space, as indicated by very low open space ratios, and therefore, would not result in significant adverse impacts.

III. METHODOLOGY

The analysis of open space resources has been conducted in accordance with the guidance provided in the *CEQR Technical Manual*. Using CEQR methodology, for the indirect effects assessment the adequacy of open space in the study area is assessed quantitatively using a ratio of usable publicly-accessible open space acreage to the study area population, referred to as the open space ratio. This quantitative measure is then used to assess the changes in the adequacy of open space resources in the future, both without and with the Proposed Action. In addition, qualitative factors are considered in assessing the Proposed Action's effects on open space resources.

In accordance with the guidance provided in the *CEQR Technical Manual*, the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources. That distance is typically a half-mile radius for residential projects and a quarter-mile radius for commercial projects with a worker population. Because the Proposed Action would not increase the local worker population, a half-mile radius is the appropriate study area boundary.

Open Space Study Area

Pursuant to *CEQR Technical Manual* guidance, the residential open space study area includes all census tracts that have at least 50 percent of their area located within a half mile of the proposed development sites and all open space resources within it that are publicly accessible.

The proposed development sites are located at 303 East 103rd Street (Block 1674, Lot 104); 338 East 117th Street (Block 1688, Lot 34); 505 East 118th Street (Block 1815, Lots 5 and 6), and 1761 Park Avenue (Block 1771, Lots 1 and 2) in the East Harlem neighborhood of Manhattan Community District (CD) 11. As shown in **Figure 3-1**, the 1/2-mile open space study area includes the following census tracts in their entirety: 154, 156.01, 156.02, 158.01, 158.02, 160.02, 162, 164, 166, 168, 170, 172, 178, 180, 182, 184, 188, 190, 192, 194, 196, 198, 200, 206, 208, and 242. The open space study area extends roughly to East 132nd Street to the north; to FDR/Harlem River Drive to the east; to East 89th Street to the south; and to Fifth and Lenox Avenues to the west.



1/2-mile Radius

 Development Site A

Development Site C

 Development Site D

Analysis Framework

Direct Effects Analysis

According to the *CEQR Technical Manual*, a proposed action would have a direct effect on an open space if it causes the physical loss of public open space because of encroachment onto the space or displacement of the space; changes the use of an open space so that it no longer serves the same user population; limits public access to an open space; or causes increased noise or air pollutant emissions, odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis.

For the purposes of this analysis, Jackie Robinson Community Garden and Pleasant Village Community Garden are conservatively considered to be publicly accessible open space resources, although posted hours of public access are limited.¹ The Proposed Action would facilitate developments that would result in the displacement of the portions of these open space resources that comprise Development Sites C and D. The portions of these community gardens that are not located within the development site boundaries would not be directly affected by the Proposed Action. The direct effects analysis is included in the “The Future with the Proposed Action (With-Action Condition)” section of this chapter.

Shadows

According to the *CEQR Technical Manual*, shadows would have a direct effect on an open space if there is a substantial reduction in the usability of open space as a result of increased shadow. As the proposed action would result in incremental shadows cast on publicly accessible open spaces, detailed analyses of their effects and impact determinations are provided in **Chapter 4, “Shadows”** and a summary of the conclusions of that analysis is provided in this chapter. Refer to Chapter 4 for a discussion of shadows analysis methodology.

Indirect Effects Analysis

Indirect effects occur to an area’s open spaces when a proposed action would add enough population, either workers or residents, to noticeably diminish the ability of an area’s open space to serve the existing or future population. The *CEQR Technical Manual* methodology suggests conducting an initial quantitative assessment to determine whether analyses that are more detailed are appropriate, but also recognizes that for projects that introduce a large population in an area that is underserved by open space, it may be clear that a full detailed analysis should be conducted. The development sites are located within an area neither underserved nor well served by public open space as identified in the *CEQR Technical Manual*.

With an inventory of available open space resources and potential users, the adequacy of open space in the study area can be assessed both quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares this ratio with certain guidelines. The qualitative assessment examines other factors that can affect conclusions about adequacy, including proximity to additional open space resources beyond the study area, the availability of private recreational facilities, and the demographic characteristics of the area’s population. Specifically, the analysis in this chapter includes:

- *Characteristics of the existing and future (2023) residential users.* To determine the number of residents in the study area, US Census 2015-2019 5-Year Estimate data from the American Community Survey (ACS) has been compiled for census tracts comprising the open space study

¹ As of May 2021, signage at Jackie Robinson Community Garden notes that it is temporarily closed to the public until further notice due to Covid-19.

area. The 2023 No-Action residential population was calculated in consideration of anticipated growth from planned and anticipated study area residential developments. The net incremental residential population introduced by the proposed developments' DUs was estimated based on the average household size of renter-occupied unit in the East Harlem North and South Neighborhood Tabulation Areas (NTAs) (2.38) per 2014-2018 5-Year Estimate data from the ACS accessed via NYC DCP's Population FactFinder.

- *An inventory of all publicly accessible passive and active recreational facilities in the open space study area.* An assessment of the quantitative ratio of open space in the study area by computing the ratio of open space acreage to the population in the study area and comparing this open space ratio with certain guidelines. As a planning goal, a ratio of 2.5 acres per 1,000 residents represents an area well-served by open spaces and is consequently used by the City as an optimal benchmark for residential populations in large-scale plans and proposals. Ideally, this would be comprised of a balance of 80 percent active open space (2.0 acres per 1,000 residents) and 20 percent passive open space (0.5 acres per 1,000 residents). Local open space ratios vary widely, and the median ratio at the citywide community district level is 1.5 acres of open space per 1,000 residents.
- *An evaluation of qualitative factors affecting open space use.* The inventory includes a final determination of the adequacy of open space in the residential open space study area.

Impact Assessment

As described in the *CEQR Technical Manual*, the significance of a project's effects on an area's open space resources is determined using both quantitative and qualitative factors, as compared to the No-Action condition. The determination of significance is based upon the context of a proposed project, including its location, the quality and quantity of the open space in the future With-Action condition, the types of open space provided, and any new open space provided by the proposed project.

The quantitative assessment considers how a proposed project would change the open space ratios in the study area. The *CEQR Technical Manual* indicates that a significant adverse impact may result if a proposed project would reduce the open space ratio by more than five percent in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents, or where there would be a direct displacement or alteration of existing open space within the study area that has a significant adverse effect on existing users. In areas that are extremely lacking in open space, a reduction as small as one percent may be considered significant, depending on the area of the City. Furthermore, in areas that are well served by open space, a greater change in the open space ratio may be tolerated.

The qualitative assessment supplements the quantitative assessment and considers nearby destination open space resources, the connectivity of open space, the effects of new open space provided by the proposed project, a comparison of projected open space ratios with City guidance, and open spaces created by the proposed project not available to the general public. It is recognized that the City's planning goals are not feasible for many areas of the City, and they are not considered impact thresholds on their own. Rather, these are benchmarks indicating how well an area is served by open space.

East Harlem Rezoning FEIS Analysis

It should be noted that the 2017 *East Harlem Rezoning Final Environmental Impact Statement (FEIS)* [CEQR No. 17DCP048M] previously analyzed the redevelopment of Jackie Robinson Community Garden (Projected Development Site 69) on Development Site D. The 2017 East Harlem Rezoning analyzed a similar development to the one proposed for Development Site D. According to the *FEIS*, Projected Development Site 69 would be developed with a 165-foot tall building, as compared to 142 feet (inclusive of bulkhead) proposed for the Site D development. As described in Chapter 5, "Open Space," of the *East*

Harlem Rezoning FEIS, the Jackie Robinson Community Garden would not experience any significant adverse open space impacts. As described in Chapter 6, “Shadows,” of the *East Harlem Rezoning FEIS*, the Jackie Robinson Community Garden would experience a significant adverse shadow impact due to the development of Projected Development Site 69.

IV. EXISTING CONDITIONS

Demographic Characteristics of the Study Area

To determine the residential population served by existing open space resources, US Census 2015-2019 5-Year ACS Estimate data were compiled for the census tracts comprising the 1/2-mile study area. As mentioned above and shown in **Figure 3-1**, the open space study area is comprised of 26 census tracts. As shown in **Table 3-1** below, census data indicates the study area has a total residential population of 145,901 people.

Within a given area, the age distribution of a population affects the way open space resources are used and the need for various types of recreational facilities. Typically, children four years old or younger use traditional playgrounds that have play equipment for toddlers and preschool-aged children. Children ages five through nine also use traditional playgrounds as well as grassy and hard-surfaced open spaces, which are used for activities such as ball playing, running, and skipping rope. Children ages ten through 14 use playground equipment, court spaces, and ball fields. Teenagers’ and young adults’ needs tend toward court game facilities such as basketball and field sports. Adults between the ages of 20 and 64 continue to use court game facilities and fields for sports, as well as more individualized forms of recreation such as rollerblading, biking, and jogging, requiring bike paths, promenades, and vehicle-free roadways. Adults also gather with families for picnicking, ad hoc active sports such as Frisbee, and recreational activities in which all ages can participate. Senior citizens engage in active recreation such as tennis, gardening², and swimming, as well as recreational activities that require passive facilities.

Therefore, the residential population of the study area was also broken down by age group. As shown in **Table 3-1**, people between the ages of 20 and 64 make up the majority (approximately 65.6 percent) of the residential population. Children and teenagers (0 to 19 years old) account for approximately 20.9 percent of the entire residential population, and persons 65 years and over account for approximately 13.5 percent of the study area population. For New York County (Manhattan) and New York City as a whole, people between the ages of 20 and 64 make up the majority (approximately 67.3 and 62.5 percent, respectively) of the residential population. Children and teenagers between that ages of 0 and 19 years old account for approximately 16.5 and 23.0 percent, respectively, of the population. Persons 65 years and over account for approximately 16.2 and 14.5 percent, respectively, of the population.

The median age for the population within the individual census tracts of the study area ranges from a low of 30.1 years (Census Tract 158.02) to a high of 41.4 years (Census Tract 158.01). This data suggests a need for facilities geared towards the recreational needs of adults, as well as children and teenagers, as the study area exhibits a high percentage of residents in the 20 to 64 age bracket. In addition, the data indicates that there is variation across the census tracts in the study area in terms of age distribution and therefore some areas may warrant higher proportions of certain types of age-specific facilities. The median age for the study area (36.0 years) is slightly lower than the median ages for New York County (37.5 years) and New York City (36.7 years).

² The *CEQR Technical Manual* identifies gardening as an active recreation activity, but also identifies community gardens as passive recreation spaces. Gardens are identified as passive recreation spaces for the purposes of this analysis.

Inventory of Open Space Resources in the Study Area

According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the *CEQR Technical Manual*, public open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts under CEQR guidance, whereas private open space is not accessible to the general public on a regular basis, and is therefore only considered qualitatively. Public open spaces that do not contain seating are also excluded from the quantitative assessment, in accordance with *CEQR Technical Manual* methodology. Field surveys and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the study area.

TABLE 3-1: Existing Population and Age Distribution in the ½-Mile Study Area

Census Tract	Total Population	Under 5 Years		5 to 9 Years		10 to 14 Years		15 to 19 Years		20 to 64 Years		65 + Years		Median Age
		#	%	#	%	#	%	#	%	#	%	#	%	
154	14,134	863	6.1	394	2.8	316	2.2	342	2.4	9,641	68.2	2,578	18.2	37.6
156.01	5,130	376	7.3	90	1.8	185	3.6	27	0.5	4,016	78.3	436	8.5	32.8
156.02	2,433	119	4.9	47	1.9	86	3.5	198	8.1	1,677	68.9	306	12.6	36.8
158.01	5,099	87	1.7	198	3.9	194	3.8	292	5.7	3,270	64.1	1,058	20.7	41.4
158.02	4,353	215	4.9	80	1.8	67	1.5	479	11	3,194	73.4	318	7.3	30.1
160.02	3,421	208	6.1	110	3.2	128	3.7	63	1.8	2,393	70.0	519	15.2	35.1
162	9,412	429	4.6	613	6.5	576	6.1	734	7.8	5,680	60.3	1,380	14.7	38.2
164	7,474	565	7.6	224	3.0	432	5.8	390	5.2	4,750	63.6	1,113	14.9	37.5
166	6,377	317	5.0	259	4.1	311	4.9	254	4.0	4,604	72.2	632	9.9	34.1
168	5,115	438	8.6	393	7.7	426	8.3	193	3.8	2,685	52.5	980	19.2	40.9
170	7,829	421	5.4	299	3.8	288	3.7	233	3.0	5,054	64.6	1,534	19.6	40.6
172	5,130	184	3.6	355	6.9	211	4.1	266	5.2	3,447	67.2	667	13.0	34.1
178	3,987	157	3.9	138	3.5	283	7.1	194	4.9	3,020	75.7	195	4.9	34.1
180	7,422	169	2.3	732	9.9	580	7.8	586	7.9	4,759	64.1	596	8.0	32.4
182	7,902	210	2.7	216	2.7	854	10.8	656	8.3	4,983	63.1	983	12.4	31.5
184	7,116	481	6.8	265	3.7	355	5.0	527	7.4	4,413	62.0	1,075	15.1	38.3
188	5,437	270	5.0	398	7.3	380	7.0	179	3.3	3,705	68.1	505	9.3	32.5
190	3,734	261	7.0	330	8.8	167	4.5	150	4.0	2,277	61.0	549	14.7	40.4
192	3,802	148	3.9	275	7.2	272	7.2	371	9.8	2,260	59.4	476	12.5	39.5
194	6,166	531	8.6	433	7.0	260	4.2	343	5.6	3,914	63.5	685	11.1	33.6
196	4,310	281	6.5	131	3.0	147	3.4	214	5.0	2,710	62.9	827	19.2	39.1
198	2,645	104	3.9	152	5.7	145	5.5	34	1.3	1,673	63.3	537	20.3	38.1
200	3,606	209	5.8	233	6.5	140	3.9	108	3.0	2,559	71.0	357	9.9	37.3
206	3,432	164	4.8	118	3.4	285	8.3	188	5.5	2,367	69.0	310	9.0	33.7
208	5,432	392	7.2	378	7.0	273	5.0	106	2.0	3,685	67.8	598	11.0	33.3
242	5,003	474	9.5	494	9.9	446	8.9	196	3.9	2,964	59.2	429	8.6	30.3
Study Area Total	145,901	8,073	5.5	7,355	5.0	7,807	5.4	7,323	5.0	95,700	65.6	19,643	13.5	36.0
Manhattan Total	1,631,993	78,773	4.8	61,747	3.8	60,655	3.7	68,479	4.2	1,097,983	67.3	264,356	16.2	37.5
NYC Total	8,419,316	544,971	6.5	468,577	5.6	469,890	5.6	450,091	5.3	5,263,520	62.5	1,222,267	14.5	36.7

Source: U.S. Census Bureau, 2015-2019 Five-Year Estimates.

An open space is determined to be active or passive by the uses that its design allows. Active open space is the part of a facility used for active play, such as sports or exercise, and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, and multi-purpose play areas (open lawns and paved areas for active recreation such as running games, informal ball-playing, skipping rope, etc.). Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways, and picnicking areas.

Within the defined study area, all publicly accessible open spaces were inventoried and identified by their location, size, owner, type, utilization, equipment, hours, and condition. The information used for this analysis was gathered from the 2017 *East Harlem Rezoning Final Environmental Impact Statement (FEIS)* [CEQR No. 17DCP048M], field inventories conducted October of 2019, the New York City Department of Parks and Recreation's (NYC Parks) website, the New York City Open Accessible Space Information System (OASIS) database, and other secondary sources of information.

The condition of each open space facility was generally categorized as "Excellent," "Good," "Fair," or "Poor." A facility was considered in excellent condition if the area was clean and attractive and if all equipment was present and in good repair. A good facility had minor problems such as litter or older but operative equipment. A fair or poor facility was one that was poorly maintained, had broken or missing equipment or lack of security, or other factors that would diminish the facility's attractiveness. Determinations were made based on a visual assessment of the facilities.

Likewise, judgments as to the intensity of use of the facilities were qualitative, based on an observed degree of activity or utilization on a weekday afternoon, which is considered the weekday peak utilization period according to the *CEQR Technical Manual*. If a facility seemed to be at or near capacity (i.e. the majority of benches or equipment was in use), then utilization was considered heavy. If the facility or equipment was in use but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light. **Table 3-2**, "Inventory of Existing Open Space and Recreational Facilities in Study Area," identifies the address, ownership, features, and acreage of active and passive open spaces in the study area, as well as their condition and utilization. **Figure 3-2** maps their location in the study area.

Open Space Resources

As shown in **Table 3-2**, there are 33 publicly accessible open space resources within the study area included in the quantitative analysis. The study area contains a total of approximately 71.38 acres of publicly accessible open space, approximately 77.4 percent of which (55.26 acres) comprises active open space and approximately 22.3 percent of which (15.93 acres) comprises passive open space. In addition, there are 18 resources located within the study area that are not included in the quantitative analysis due to limited hours of operation and/or accessibility or due to the fact that they do not include seating or other amenities.

The largest open space resource in the study area is the 20.16-acre Marcus Garvey Park (Map No. 16), located in the northwestern portion of the study area at 18 Mount Morris Park West, which includes amenities such as basketball courts, bathrooms, dog-friendly areas, outdoor pools, recreation centers, Wi-Fi hot spots, fitness equipment, playgrounds, and spray showers. The next largest open space resource is the 15.52-acre Thomas Jefferson Park (Map no. 26), located in the eastern portion of the study area at 2180 1st Avenue. This park has amenities such as barbeque areas, basketball courts, dog-friendly areas, football fields, outdoor pools, recreation centers, soccer fields, Wi-Fi hot spots, baseball fields, bathrooms, fitness equipment, handball courts, playgrounds, running tracks and spray showers. Throughout the eastern portion of the open space study area is the East River Esplanade (Map No. 8), a non-continuous greenway that follows the FDR Drive along the East River between East 90th and E 125th Streets. There are entrances points from East 120th Street and Paladino Avenue, East 111th Street and FDR Drive (within Thomas

Jefferson Park), between East 102nd Street and East 105th Street and FDR Drive (within Playground 103 (Map No. 20)), and East 96th Street and FDR Drive. The esplanade includes fishing areas, benches, and other amenities.

The other open space resources considered in the quantitative analysis consist of a mix of smaller facilities of less than 2.0 acres, including playgrounds, sitting areas, and parks with active and passive recreation areas.

As noted above, there are 18 additional open space resources that are conservatively not included in the quantitative analysis because they are not fully accessible to the public, have limited hours, or do not include seating or other amenities. These 18 resources are community gardens that comprise approximately 1.99 acres of passive open space. Included in these additional open space resources are Development Site C (a portion of Pleasant Village Community Garden) and Development Site D (a portion of Jackie Robinson Community Garden).



Table 3-2: Inventory of Existing Open Space and Recreational Resources in Study Area

Map No. ¹	Name	Address	Owner/Agency	Amenities	User Groups	Hours of Access	Total Acres	Passive		Active		Condition & Utilization
								%	Acres	%	Acres	
Open Space Resources Included in <i>Quantitative Analysis</i>												
1	Alice Kornegay Triangle	Lexington Ave., E.128th St. to E. 129th St.	NYC Parks	Bathrooms, playgrounds, handball courts, spray showers	Children, Teenagers, Adults	24 Hours	0.88	0%	0	100%	0.88	Good Condition/ Low Utilization
2	Blake Hobbs Playground	E. 102nd St. to E. 104th St. and 2nd Ave.	NYC Parks	Basketball courts, handball courts, playgrounds	Children, Teenagers, Adults	6AM-Dusk	1.00	0%	0	100%	1.00	Fair Condition/ Moderate Utilization
3	Cherry Tree Park	E. 99th St. to E. 100th St., 3rd Ave.	NYC Parks	Basketball courts, bathrooms, handball courts, playgrounds, spray shower	Children, Teenagers, Adults	6AM-Dusk	0.95	10%	0.1	90%	0.85	Good Condition/ Moderate Utilization
4	Courtney Callender Playground	5th Ave., W. 130 th St. to W. 131st St.	NYC Parks	Playground, benches, basketball court, swings, handball courts	Children, Teenagers, Adults, Senior Citizens	24 Hours	0.65	15%	0.1	55%	0.55	Good Condition/ Moderate Utilization
5	Crack is Wack Playground	E. 127th St., 2 nd Ave., and Harlem River Drive.	NYC Parks	Basketball, playground, seating, plantings	Children, Teenagers, Adults, Senior Citizens	24 Hours	1.37	10%	0.14	90%	1.23	Good Condition/ Low Utilization
6	Dr. Ronald E. McNair Playground	Lexington Ave. bet. E. 122nd St. and E. 123rd St.	NYC Parks	Playground, lawn, benches	Children, Teenagers, Adults, Senior Citizens	24 Hours	0.60	50%	0.30	50%	0.30	Very Good Condition/ Moderate Utilization

7	Dream Street Park	E. 124th St between 3rd and 2nd Aves.	NYC Parks	Open lawn, pathway, playground	Children, Teenagers, Adults, Senior Citizens	6AM-Dusk	0.25	100%	0.25	0%	0	Fair Condition/ Low Utilization
8	East River Esplanade	East River; bet. 96th and 125th St.	NYC Parks	Greenway	Children, Teenagers, Adults, Senior Citizens	24 Hours	5.86	50%	2.93	50%	2.93	Good Condition/ Moderate Utilization
9	East River Playground	FDR Dr., E. 106 th St. to E. 107th St.	NYC Parks/ DOE	Basketball courts, bathrooms, handball courts, playgrounds, spray showers	Children, Teenagers, Adults	6AM-Dusk	1.28	10%	0.13	90%	1.15	Fair Condition/ Moderate Utilization
10	Eugene McCabe Field	1718 Park Ave.	NYC Parks/ DOE	Turf soccer field	Children, Teenagers, Adults	6AM-Dusk	0.79	0%	0	100%	0.79	Fair Condition/ Moderate Utilization
11	Harlem Art Park	E. 120th St. and Sylvan Pl.	NYC Parks	Seating, monument	Children, Teenagers, Adults, Senior Citizens	6AM-Dusk	0.35	100%	0.35	0%	0	Good Condition/ Moderate Utilization
12	Harlem RBI	E. 100th St between 2nd and 1st Aves.	NYC Parks	Baseball Field	Children, Teenagers, Adults	24 Hours	0.90	0%	0	100%	0.90	Good Condition/ Moderate Utilization
13	Harlem River Park	E. 128th St., 2nd Ave., 3 rd Ave., Harlem River Drive	NYC Parks	Soccer fields, basketball, handball	Children, Teenagers, Adults	6AM-Dusk	5.76	0%	0	100%	5.76	Good Condition/ High Utilization

14	James Weldon Johnson Playground	E. 115th St. bet. 3rd Ave. and Lexington Ave.	NYC Parks/ DOE	Basketball courts, playgrounds, handball courts, pathway, seating	Children, Teenagers, Adults, Senior Citizens	24 Hours	1.05	25%	0.26	75%	0.79	Excellent Condition/ Low Utilization
15	Mae Grant Playground	E. 104th St., Madison Ave. and Park Ave.	NYC Parks	Basketball courts, handball courts, playgrounds	Children, Teenagers, Adults	6AM-Dusk	0.97	10%	0.1	90%	0.87	Fair condition/ Low utilization
16	Marcus Garvey Park	18 Mt Morris Park W.	NYC Parks	Basketball courts, bathrooms, dog friendly areas, outdoor pools, recreation centers, Wi-Fi hot spots, fitness equipment, playgrounds, spray showers	Children, Teenagers, Adults, Senior Citizens	24 Hours	20.16	50%	10.08	50%	10.08	Good Condition/ High Utilization
17	Marx Brothers Playground	2nd Ave., E.96 th St. to E. 97th St.	NYC Parks/ DOE	Bathrooms, playgrounds, spray showers, baseball field	Children, Teenagers, Adults	6AM-Dusk	1.48	0%	0	100%	1.48	Good Condition/ Moderate Utilization
18	Moore Playground	Madison Ave. bet. E. 130th St. and E. 131st St.	NYC Parks/ DOE	Basketball courts, playgrounds, spray showers	Children, Teenagers, Adults	24 Hours	0.77	10%	0.08	90%	0.69	Good Condition/ Moderate Utilization
19	PS 155 Playground	E. 117th St. to E. 118th St., 1 Ave. to 2 Ave.	NYC Parks/ DOE	Basketball courts, bathrooms, handball courts, playgrounds, benches	Children, Teenagers, Adults, Senior Citizens	6AM-Dusk	0.83	10%	0.08	90%	0.75	Fair Condition/ Moderate Utilization

20	Playground 103	FDR Dr. bet. E. 102nd St. and E. 106th St.	NYC Parks	Basketball courts, playgrounds	Children, Teenagers, Adults	6AM-Dusk	1.05	0%	0	100%	1.05	Good Condition/ Moderate Utilization
21	Poor Richard's Playground	E. 109th St. bet. 2nd Ave. and 3 rd Ave.	NYC Parks/ DOE	Basketball courts, bathrooms, handball courts, playgrounds, spray showers	Children, Teenagers, Adults	24 Hours	1.58	10%	0.16	90%	1.42	Fair Condition/ Moderate Utilization
22	Ruppert Park	Second Ave. bet. E. 90 St. and E. 91 St.	NYC Parks	Playgrounds, spray showers	Children, Teenagers, Adults	7AM-10PM	1.00	0%	0	100%	1	Good Condition/ Moderate Utilization
23	Samuel Seabury Playground	Lexington Ave., E. 95th St. To E. 96th St.	NYC Parks/ DOE	Basketball courts, bathrooms, playgrounds, spray showers	Children, Teenagers, Adults	6 AM to 6 PM: Nov 1-Mar-1 6 AM to 9 PM: Mar 2 to Oct 1	0.79	10%	0.08	90%	0.71	Fair Condition/ Moderate Utilization
24	Stanley Isaacs Playground	1st Ave., E. 96 th to E. 97th St.	NYC Parks	Basketball courts, handball courts, roller hockey	Children, Teenagers, Adults	6AM-Dusk	1.23	0%	0	100%	1.23	Fair Condition/ Moderate Utilization
25	Sunshine Playground	E. 101st St between Lexington and 3rd Aves.	NYC Parks	Playground, seating areas	Children, Teenagers, Adults, Senior Citizens	6AM-Dusk	0.24	80%	0.19	20%	0.05	Poor Condition/ Low Utilization
26	Thomas Jefferson Park	2180 1st Ave.	NYC Parks	Barbecue areas, basketball courts, dog friendly areas, football fields, outdoor pools,	Children, Teenagers, Adults, Senior Citizens	6AM-Dusk	15.52	0%	0	100%	15.52	Good Condition/ High Utilization

				recreation centers, soccer fields, Wi-Fi hot spots, baseball fields, Bathrooms, fitness equipment, handball courts, playgrounds, running tracks, spray showers								
27	Wagner Houses Pool	E. 124th St. bet. 1st and 2nd Aves.	NYC Parks	Bathrooms, outdoor pools, Othmar Ammann Playground	Children, Teenagers, Adults, Senior Citizens	24 Hours	1.64	0%	0	100%	1.64	Fair Condition/ Low Utilization
28	Wagner Playground	E. 120th St. bet. 1st and 2nd Aves.	NYC Parks	Handball courts, playground, soccer field, seating plaza	Children, Teenagers, Adults, Senior Citizens	6AM-Dusk	1.27	5%	0.06	95%	1.21	Good Condition/ Moderate Utilization
29	White Playground	E. 105th St. to E. 106th St. bet. Lexington Ave. and 3rd Ave.	NYC Parks	Basketball courts, handball courts, playgrounds	Children, Teenagers, Adults	24 Hours	0.68	10%	0.07	90%	0.61	Excellent Condition/ Moderate Utilization
30	Greenstreet	Lenox Ave. bet W. 124th St. and W. 123rd St.	NYC Parks	Seating area with benches, landscaping, trees	Adults, Senior Citizens	24 Hours	0.08	100%	0.08	0%	0	Excellent Condition/ Low Utilization
31	Greenstreet	Lenox Ave. bet W. 120th	NYC Parks	Seating area with benches, landscaping, trees	Adults, Senior Citizens	24 Hours	0.08	100%	0.08	0%	0	Excellent Condition/Low Utilization

		St. and W. 119th St.										
32	Greenstreet	Lenox Ave. bet W. 122th St. and W. 121st St.	NYC Parks	Seating area with benches, landscaping, trees	Adults, Senior Citizens	24 Hours	0.08	100%	0.08	0%	0	Excellent Condition/ Low Utilization
33	Park Avenue Mall	Park Ave. bet E. 97th St and E. 96th St.	NYC Parks	Seating area with benches, landscaping, trees	Adults, Senior Citizens	24 Hours	0.24	100%	0.24	0%	0	Excellent Condition/ Moderate Utilization
Total Open Space in Quantitative Analysis:							71.38	22.3%	15.93	77.4%	55.26	

Map No. ¹	Name	Address	Owner/ Agency	Amenities	User Groups	Hours of Access	Total Acres	Passive		Active		Condition & Utilization
								%	Acres	%	Acres	
Open Space Resources Not Included in Quantitative Analysis												
A	Corozal Community Garden	170 E. 117 th St.	NYC Parks/ GreenThumb	Garden, small house, seats	Children, Teenagers, Adults, Senior Citizens	20 hours per week: April 1-Oct 31	0.08	100%	0.08	0%	0	Fair condition/ Low Utilization
B	Collyer Brothers Park	2080 5 th Ave.	NYC Parks	Seating, shrubbery	Children, Teenagers, Adults, Senior Citizens	8AM-Dusk	0.03	100%	0.03	0%	0	Good Condition/ Low Utilization
C	Diamante Garden	3057 E. 118th St.	NYC Parks/ GreenThumb	Benches, planted gardens	Children, Teenagers, Adults, Senior Citizens	Mon: 12-1PM Tues:11:30AM- 12:30PM Thur: 11AM- 12:30PM Fri: 4-6PM Sat & Sun: 11AM- 5PM	0.19	100%	0.19	0%	0	Good Condition/ Low Utilization
D	Maggie’s Magic Garden (Ebenezer Wesleyan)	1574 Lexington Ave.	NYC Parks/ GreenThumb	Benches, planted gardens	Children, Teenagers, Adults, Senior Citizens	Mon/Wed/ Fri: 1 PM-5PM Sun 9AM-5PM	0.11	100%	0.11	0%	0	Good Condition/ Low Utilization
E	Family Community Garden	156 E.111 th St.	NYC Parks/ GreenThumb	Gardens	Children, Teenagers, Adults, Senior Citizens	Mon/Wed/ Fri: 12PM-6:30PM Tues/Thurs/Sat: 12PM-7PM	0.04	100%	0.04	0%	0	Good Condition/ Low Utilization

F	Harlem Rose Garden	8 E. 129 th St.	NYC Parks/ GreenThumb	Benches, gardens	Children, Teenagers, Adults, Senior Citizens	Sunday: 11AM- 4PM Mon-Fri: Flexible time Saturday: 10AM- 3PM	0.14	100%	0.14	0%	0	Good Condition/ Low Utilization
G	Humacao Community Garden	335 E. 108 th St.	NYC Parks/ GreenThumb	Garden, seating area	Children, Teenagers, Adults, Senior Citizens	Sun & Sat: 1-6PM	0.12	100%	0.12	0%	0	Fair Condition/ Low Utilization
H	Jackie Robinson Community Garden	103 E. 122 nd Street	HPD	Garden, seating area	Children, Teenagers, Adults, Senior Citizens	Mon-Fri: 12PM-2 PM and 4PM- 6PM; Sat: 2 PM-7 PM ²	0.17	100%	0.17	0%	0	Moderate Condition/ Low Utilization
I	La Cueva Community Garden	71 E. 115 th St.	NYC Parks/ GreenThumb	Garden	Children, Teenagers, Adults, Senior Citizens	Sun/Thur/Fri/ Sat: 12-5PM	0.06	100%	0.06	0%	0	Fair Condition/ Low Utilization
J	Life Spire Garden	2015 Lexington Ave.	NYC Parks/ GreenThumb	Benches, gardens	Children, Teenagers, Adults, Senior Citizens	8AM-Dusk	0.02	100%	0.02	0%	0	Excellent Condition/ Low Utilization
K	Neighbors of Vega Baja	E. 109 St bet. 1 st . and 2 nd Aves.	NYC Parks/ GreenThumb	Garden	Children, Teenagers, Adults	Sun-Sat: 11AM- 9PM	0.07	100%	0.07	0%	0	Good Condition/ Low Utilization
L	Peaceful Valley Community Garden	52 E. 117 th St.	NYC Parks/ GreenThumb	Garden	Children, Teenagers, Adults, Senior Citizens	Sat & Sun: 10AM- 3PM	0.05	100%	0.05	0%	0	Good Condition/ Low Utilization

M	Rodale Pleasant Park Community Garden	437 E. 114 th St.	NYC Parks/ NYRP	Garden	Children, Teenagers, Adults, Senior Citizens	Friday: 3-7PM Sat & Sun: 10AM-6PM	0.23	100%	0.23	0%	0	Good Condition/ Low Utilization
N	Pleasant Village Community Garden	342-353 Pleasant Ave.	HPD	Garden, Urban Farm	Children, Teenagers, Adults, Senior Citizens	April-October: Wed: 4-7PM Sat & Sun: 10AM-2PM; "or when gate is unlocked"	0.43	100%	0.43	0%	0	Excellent Condition/ Low Utilization
O	Edward P. Bowman Park	52 W. 129 th St.	NYC Parks/ HPD	Garden, seating	Children, Teenagers, Adults, Senior Citizens	Sun-Sat: 9AM-3:30PM	0.05	100%	0.05	0%	0	Excellent Condition/ Low Utilization
P	Rev. Linette C Williams Memorial Park	65-67 W. 128 th St.	Private	Garden	Children, Teenagers, Adults	8AM-Dusk	0.06	100%	0.06	0%	0	Good Condition/ Low Utilization
Q	Unity Park	55 W. 128 th St.	NYC Parks/ GreenThumb	Grass area, plants, benches	Children, Teenagers, Adults, Senior Citizens	Sun-Sat: 9AM-3:30PM	0.13	100%	0.13	0%	0	Excellent Condition/ Low Utilization
R	West 124 th Street Community Garden	75 W. 124 th St.	NYC Parks/ GreenThumb	Garden	Children, Teenagers, Adults, Senior Citizens	Tues & Thurs: 6PM-8PM; Sat & Sun: 1PM-5PM	0.01	100%	0.01	0%	0	Good Condition/ Low Utilization
Total Open Space not included in Quantitative Analysis:							1.99	100%	1.99	0%	0	

Source: 2017 East Harlem Rezoning FEIS, NYC OASIS, NYC Parks, October 2019 field visits.

Notes:

¹ Refer to **Figure 3-2**.

² Hours noted are pre-Covid-19 pandemic. During a May 2021 field visit, a sign indicated that the garden was temporarily closed to the public until further notice due to Covid-19; members are permitted to work in the garden.

DOE = New York City Department of Education; NYC Parks = New York City Department of Parks and Recreation; NYRP = New York Restoration Project; HPD = New York City Department of Housing Preservation and Development.

Assessment of Open Space Adequacy

The following analysis of the adequacy of open space resources within the study area takes into consideration the ratios of active, passive, and total open space resources per 1,000 residents.

QUANTITATIVE ASSESSMENT

With a total of 71.38 acres of open space, of which approximately 15.93 acres are for passive use and approximately 55.26 acres are for active use, and a total residential population of 145,901, the study area has an overall open space ratio of 0.489 acres per 1,000 residents (see **Table 3-3**). This is less than the City's planning goal of 2.5 acres of combined active and passive open space per 1,000 residents. The study area's residential passive and active open space ratios are 0.109 acres and 0.379 acres per 1,000 residents, respectively. Both the passive open space ratio and the active open space ratio are below the applicable City open space guidelines. As such, there is an existing shortfall of passive and active open space in the open space study area.

Table 3-3: Adequacy of Open Space Resources: Existing Conditions

	Population	Open Space Acreage			Open Space Ratios per 1,000 Residents			CEQR Technical Manual Open Space Optimal Planning Goal		
		Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	145,901	71.38	15.93	55.26	0.489	0.109	0.379	2.50	0.50	2.00

Notes:

¹ Based on target open space ratios established by creating a weighted average of the amount of open space necessary to meet the City guideline of 0.50 acres of passive open space per 1,000 residents and 0.15 acres of passive open space per 1,000 workers.

QUALITATIVE ASSESSMENT

Although the study area contains a mixture of recreational facilities, with approximately 77.4 percent dedicated to active uses and 22.3 percent dedicated to passive use, the open space ratios per 1,000 residents still fall well below the guideline goal of 2.5 acres per 1,000 residents and the citywide median of 1.5 acres per 1,000 residents.

The deficiency of open space resources within the study area is partially ameliorated by several factors. As shown in **Table 3-2**, the study area includes additional open space resources that serve as additional passive open spaces. Furthermore, it is possible that some residents in the study area elect to utilize other open spaces resources in the surrounding area. As shown in **Figure 3-2**, there are five additional open space resources within or close to the half-mile radius not included in the open space study area. Central Park is located just outside the western edge of the open resources study area. Central Park is a significant destination for open space resources that offers approximately 840 acres of various active and passive open spaces. Asphalt Green is a 4.35-acre park is located outside the southern edge of the study area that contains fitness equipment, playgrounds, and spray showers. The 1.00-acre Martin Luther King Jr. Playground located to the west of the study area contains basketball courts, handball courts, playgrounds, spray showers and bathrooms. There are two substantial parks on Randall's Island located to the east of the study area and accessible by foot via bridges located near East 101st and East 124th Streets. Wards Island Park is approximately 170 acres and contains barbequing areas, baseball fields, playgrounds, and spray showers. Randall's Island Park is approximately 256 acres and contains barbequing areas, bathrooms, baseball fields, dog-friendly areas, cricket fields, football fields, kayak/canoe launch sites, soccer fields, running tracks, tennis courts, golf courses, bicycling and greenways. Together, these five parks offer an additional 1,271

acres (approximately 2 square miles) of public open space for area residents that is not considered in the quantitative analysis.

The open space study area also contains numerous NYCHA developments. These are large “tower-in-the-park” style campuses with landscaped open space, trees, walkways, gardens, and seating areas throughout the developments. NYCHA open space can also serve as additional passive open spaces for the study area.

V. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION)

In the future without the Proposed Action (the No-Action condition), it is anticipated that the applicant and the Project Sponsor would not proceed with the Proposed Developments. Under the No-Action Condition Development Sites A and B are to remain vacant and Development Sites C and D would remain interim community garden spaces operated subject to temporary license agreements.

Study Area Population

In the 2023 future without the proposed projects, 39 developments that are currently anticipated, being planned, or are under construction, are expected to be completed in the open space study area (shown in **Table 3-4** and **Figure 3-3**). These include, but are not limited to, No-Action developments identified in the *East Harlem Rezoning FEIS* as expected to occur by 2023. In addition, it is conservatively assumed that approximately 60 percent of the projected 3,488-DU incremental development expected to be generated as a result of the East Harlem Rezoning, i.e., 2,093 DUs, would occur by the proposed project’s 2023 build year, as 2023 would be the sixth year of the rezoning’s ten-year development horizon identified in the *FEIS*. However, the specific location of such new units have not been identified.

These No-Action developments are expected to introduce approximately 14,835 residents to the 1/2-mile radius by 2023. Therefore, the No-Action study area population is 160,736 (refer to **Table 3-5**).

Open Space Resources

There is one additional open space resource being added to the open space study area. There is an additional open space expected in the no-action condition that is included in the quantitative assessment. No-Action Development 28 (refer to **Table 3-4**), will include a 0.28-acre passive public open space resource. With the additional 0.28-acres of passive public open space, the total passive acreage increase to 16.21 acres. The active acreage in the study area will remain the same at 55.26 acres. The total public open space area will increase slightly; from 71.38 to 71.47. There are several other qualitative changes to existing public open space resources that will be completed by 2023 that would not result in any increase or decrease to open space acreage. NYC Parks is currently in the process of altering the East River Esplanade, East River Playground, Harlem River Park, Marcus Garvey Park, PS 155 Playground, and Poor Richard’s Playground (Map Nos. 8, 9, 13, 16, 19, and 21, respectively, in **Figure 3-2**), which will improve the condition and usability of this study area’s open space resources. The renovation to all of the resources are scheduled to be complete by 2023. None of the renovations to open space resources in **Table 3-6** are anticipated to close the parks or playgrounds during construction. Portions of the parks and playgrounds will be available for use during construction and all areas will be accessible upon construction completion.

Assessment of Open Space Adequacy

In the future No-Action condition, the additional population introduced to the 1/2-mile study area would increase the demand on the area’s open spaces.



Table 3-4: No-Action Developments

Map Number	Address	Numbers of Units	Map Number	Address	Numbers of Units
1 ¹	2226 3 rd Ave	82	21 ¹	2375 2nd Ave	21
2 ¹	2102-2108 3 rd Ave	59	22 ¹	2282 2nd Ave	11
3 ¹	1887-1891 3 rd Ave	118	23 ¹	2160 2nd Ave	15
4 ¹	126 E.116 th St.	22	24 ¹	2150-2152 2nd Ave	28
5 ¹	1944-1946 Park Ave	15	25 ¹	1800 Park Ave	670
6 ¹	2203 3 rd Ave & 205 E. 120 th St.	16	26 ¹	149 East 125 th St.	233
7 ¹	1940 Park Ave	34	27 ¹	2306 3rd Ave	233
8 ¹	1640 Park Ave	8	28 ¹	201 East 125 th St.	1,000
9 ¹	1905-1911 3 rd Ave	56	29 ¹	127 East 107 th St.	400
10 ¹	154-158 E.116 th St.	17	30 ¹	1988-1996 2 nd Ave	102
11 ¹	151 E.115 th St.	9	31 ²	168 E. 111 th St.	42
12 ¹	154-156 E.112 th St.	18	32 ²	82 E. 127 St.	160
13 ¹	144 E.111 th St.	9	33 ²	1998 2 nd Ave.	185
14 ¹	152-153 E.109 th St. and 1723-1759 Lexington Ave	34	34 ²	172 E. 122 nd St.	15
15 ¹	157-159 E.109 th St.	22	35 ²	2252 3 rd Ave	61
16 ¹	1731-1733 Lexington Ave	8	36 ²	40 E.112 th St.	315
17 ¹	152-156 E. 108 th St.	15	37 ³	1516 Park Ave.	59
18 ¹	116th E.116 th St.	9	38: Projected Net Incremental Development ¹	East Harlem Rezoning Area	2,093
19 ¹	2147 3 rd Ave	10	39	316 Pleasant Avenue	8
20 ¹	205-207 E.116 th St.	21			
Total: 6,233 DUs 14,835 residents					

Source:

¹ 2017 East Harlem FEIS. See explanation in text.² NY YIMBY³ NYC ZAP

*Refer to Figure 3-3

Table 3-5: No-Action Open Space Study Area Population³

	Existing Population	Additional Population as a Result of No-Action Developments	Future No-Action Population
Residents	145,901	14,835	160,736

With the anticipated No-Action development, including increased population and slight increase in public open space acreage, the study area will continue to be underserved by passive and active open spaces in comparison to the City's guidance. As indicated in **Table 3-7**, the No-Action total, passive, and active open space ratios per 1,000 residents are expected to decline to 0.445, 0.101, and 0.344, respectively. The No-Action residential open space ratios for total, passive, and active open space would continue to be less than the City's guideline ratio of 2.5 acres of open space per 1,000 residents and 2.0 acres of active open space per 1,000 residents.

² The additional population was determined by multiplying the number of No-Action dwelling units (6,233 DU's) on the 39 No-build development sites by the average household size of renter-occupied unit (2.38) for East Harlem South (MN33) and East Harlem North (MN34) NTAs.

Table 3-6: No-Action Alterations to Open Space Resources

Name	Alteration Description	Year of Completion (Beginning of Construction to Completion)
East River Esplanade	Reconstruction and stabilization of retaining walls in the park Phase 1-3	2020-2022
Harlem River Park	(1) Synthetic turf field reconstruction (2) Comfort station construction	(1) 2021-2022 (2) 2021-2022
Marcus Garvey Park	(1) Comfort station construction (2) POP Office Roof Reconstruction (3) Pelham Fritz Recreation Center Reconstruction	(1) 2017-2021 (2) 2020-2022 (3) 2021-2022
PS 155 Playground	Playground reconstruction	2022-2023
Poor Richard's Playground	Playground play area reconstruction	2020-2021

*Information from NYC DPR Capital Projects Tracker

Table 3-7: Adequacy of Open Space Resources: No-Action Condition

	Population	Open Space Acreage			Open Space Ratios per 1,000 Residents			CEQR Technical Manual Open Space Optimal Planning Goal		
		Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	160,736	71.47	16.21	55.26	0.445	0.101	0.344	2.50	0.50	2.00

The ratios for total, passive, and active open space within the study area would remain well below the City's guidelines in the future without the proposed project. As under existing conditions, there are a number of additional open space resources in and around the study area that could be accessed by residents that are not included in the quantitative analysis including Central Park, Asphalt Green Park, Martin Luther King Jr. Playground, Randall's Island Park and Wards Island Park. These resources represent a considerable amount of accessible active and passive open space for the residential population. In addition, open spaces within the study area that are not accounted for in the quantitative analysis but are considered qualitatively, also would be available for use by some study area residents.

VI. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION)

In the future with the proposed project, Development Site A would be developed with a five-story, 8,975-gsf building containing 6 residential units. Development Site B would be developed with a five-story, 8,316-gsf building containing 7 residential units. Development Site C would be developed with a six-story, 17,505-gsf building containing 18 residential units. Development Site D would be developed with a 13-story, 55,623-gsf building containing 52 residential units. Cumulatively, the developments would introduce 83 new DUs with approximately 198 new residents in the ½-mile study area, based on the average household size of 2.38 identified above under "Methodology."

Development Sites Population

In total, the proposed project (Development Sites A, B, C and D) would result in an incremental increase of 198 residents compared to No-Action conditions. As indicated in **Table 3-8**, the ½-mile study area's residential population is expected to increase to 160,934.

Table 3-8: With-Action Open Space Study Area Population

	No-Action Population	Additional Population as a Result of the development on Development Sites A, B, C & D	Future With-Action Population
Residents	160,736	198	160,934

Direct Effects Analysis

The Proposed Action would have a direct effect on two study area open space resources on Development Site C and Development Site D. Development Site C serves as a portion of the existing 0.38-acre Pleasant Village Community Garden (Block 1815, Lots 2, 5, and 6). Development Site C includes Block 1815, Lots 5 and 6 (Lot 6 is not an active portion of the Pleasant Village Community Garden). The construction and operation of the Proposed Development Site C would cause the physical loss of 0.05-acres (2,388 sf) of open space resources. The community garden is located on land owned by HPD. Under a temporary license agreement, the 0.05-acre Lot 5 (a portion of Development Site C) is serving as an annex to the Pleasant Village Community Garden; the City-owned land occupied by the community garden is not mapped as public parkland. The temporary license agreement states that the garden may operate on Block 1815, Lot 5 on an interim basis until HPD was prepared to redevelop the site. The community garden annex on Lot 5, in its current state, is primarily programmed with passive uses, including benches and garden space. It also produces food through fruit-bearing trees.

Development Site D is within the existing 0.17-acre Jackie Robinson Community Garden (Block 1771, Lots 1, 2, and 5). Development Site D includes Block 1771, Lots 1 and 2. The construction and operation of the Proposed Development Site D would cause the physical loss of 0.11-acres (4,583 sf) of open space resources. The community garden is located on land owned by HPD. Jackie Robinson Community Garden operates under a temporary license agreement with HPD; the City-owned land occupied by the community garden is not mapped as public parkland. The temporary license agreement states that the garden may operate on Block 1771, Lots 1 and 2, until HPD was prepared to redevelop the site. The community garden on Lots 1 and 2, in its current state, is primarily programmed with passive uses, including benches, raised plant beds and gardening space. It also produces food through fruit-bearing trees and chickens.

Although the City-owned lots operating as community gardens would be displaced as part of the Proposed Action, portions of the community gardens would remain. Pleasant Village Community Garden would remain on the 0.38-acre Lot 2. Jackie Robinson Community Garden would remain on the 0.05-acre Lot 5. The physical loss of open space resources is not counted in the quantitative assessment, only in the qualitative assessment, as community gardens do not fall under the quantitative category under *CEQR* guidelines.

The direct effects on these community gardens, due to their direct displacement, would not constitute a significant adverse impact under *CEQR* as the operation of these gardens, irrespective of duration, is conditioned on the temporary license agreements explicitly defining the use of these resources as interim until such time as HPD is prepared to redevelop the sites to create new below-market rate housing consistent with City policies, including the plan to create or preserve 300,000 units of affordable housing by 2026. The use of such temporary license agreements enables HPD to provide sites to neighborhood groups before site redevelopment as otherwise such sites would be left vacant and tend to detract from neighborhood visual character and quality of life. In addition, these gardens have limited public hours and as such are not accounted for in the quantitative analysis pursuant to *CEQR* guidance and therefore, their elimination would not affect open space ratios calculated for the indirect effects analysis.

Shadows

As discussed in **Chapter 4, “Shadows,”** the Proposed Action would result in significant adverse impacts related to shadows on the Jackie Robinson Community Garden. Specifically, substantial portions of the community garden would receive less than the four-to-six hours of direct sunlight, as recommended by the *CEQR Technical Manual* for the survival of vegetation during the growing season. Given the long duration and at times large extent of incremental shadow, the use and character of the open space could be altered and the health of the trees and large variety of plants could be significantly affected by new project-generated shadows.

Notwithstanding that the hours of public access to Jackie Robinson Community Garden are limited and other similar open spaces within the study area would continue to be available and provide for passive open space uses, the lead agency, in consultation with DPR, has determined that the project-generated incremental shadows on Jackie Robinson Community Garden also constitutes a significant adverse open space impact.

Indirect Effects Analysis

Under With-Action conditions, total open space, passive, and active ratios in the residential (½-mile) study area would change only slightly from the No-Action conditions (see **Table 3-9** and “Quantitative Assessment” section below). Moreover, the ratios would continue to be below the City’s guidance ratios of 0.50 acres of passive open space per 1,000 residents and 2.0 acres of active open space per 1,000 residents.

Table 3-9: Adequacy of Open Space Resources: With-Action Condition

	Population	Open Space Acreage			Open Space Ratios per 1,000 Residents			CEQR Technical Manual Open Space Optimal Planning Goal		
		Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
Residents	160,934	71.47	16.21	55.26	0.444	0.101	0.343	2.50	0.50	2.00

The population to be generated by the proposed development at 303 East 102nd Street, 338 East 117th Street, 505 East 118th Street, and 1761 Park Avenue are not expected to have any special characteristics, such as a disproportionately younger or older population, that would place heavy demand on facilities that cater to specific groups.

It should also be noted that, while the amounts of total and active open space resources in the study area are, and would continue to be, deficient in comparison to City guidelines, the study area open spaces tend to have moderate utilization levels, and most are in good condition (refer to **Table 3-2**).

As noted above, the open space impact analysis consists of both a quantitative assessment and a qualitative assessment. The quantitative assessment considers how a proposed project would change the open space ratios in the study area. As the study area open space ratios are significantly less than both the City’s optimal benchmark of 2.5 acres of open space per 1,000 residents and the City’s median community district open space ratio of 1.5 acres of open space per 1,000 residents, a reduction in the open space ratio of as small as one percent may be considered significant, depending on the area of the City, and in consideration of qualitative factors, including proximity to nearby destination open space resources, the connectivity of open space, the effects of new open space provided by the proposed project, and open spaces created by the proposed project not available to the general public. It is recognized that the City’s planning goals are not feasible for many areas of the City, and they are not considered impact thresholds on their own. Rather, these are benchmarks indicating how well an area is served by open space.

Quantitative Assessment

Table 3-10 compares the No-Action and With-Action open space ratios per 1,000 residents. As presented, in the With-Action condition, as under existing and No-Action conditions, the open space ratios in the half-mile study area would be less than the City's open space planning goals of 2.5 acres of open space per 1,000 residents, including 0.5 acres of passive open space and 2.0 acres of active open space. Specifically, in the future with the Proposed Action, the total open space ratio is expected to decrease by 0.1 percent as compared to the No-Action condition, falling 0.0005 from 0.445 to 0.444; the With-Action passive open space ratio would decrease by 0.1 percent, falling 0.0001 from 0.1008 to 0.1007; and the With-Action active open space ratio would decrease by 0.1 percent, falling 0.0004 from 0.344 to 0.343. (Often, CEQR open space analyses only provide open space ratio to 2 or 3 decimal places as such precision is typically sufficient for analysis purposes; 4 decimals are necessary here to show the small degree to which the ratios would change.) As such, the reductions in open space ratios that would occur as a result of the proposed action would be substantially less than 1 percent, which is generally the impact threshold applied in areas that are extremely lacking in open space as measured by the open space ratios, such as the study area. In addition, as noted above, with an increment of 198 additional residents, the proposed action is technically just below the applicable 200-resident screening threshold; as also noted above detailed analysis is provided herein due to the sensitivity of open space concerns for the proposed action.

Table 3-10: Adequacy of Open Space Resource in the Study Area – No-Action vs. With-Action Conditions

	Population	Open Space Acreage			Open Space Ratios per 1,000 Residents (acres) ¹			City Open Space Planning Goals		
		Total	Passive	Active	Total	Passive	Active	Total	Passive	Active
No-Action Condition	160,736	71.47	16.21	55.26	0.445	0.1008	0.344	2.50	0.50	2.0
With-Action Condition	160,934				0.444	0.1007	0.343			
Incremental Change	198				-0.0005 (-0.1%)	-0.0001 (-0.1%)	-0.0004 (-0.1%)			

¹: Some ratio totals may appear to not sum correctly due to rounding

As the Proposed Action would result in a decrease in the total, active, and passive open space ratios in an area underserved by open space, a qualitative assessment is needed to determine whether this level of reduction in the open space ratio would be considered a significant adverse indirect open space impact. The qualitative assessment is provided below.

Qualitative Assessment

In the future with the Proposed Action, the study area would continue to have a shortfall of open space. However, although the existing open space ratios in the study area would remain less than the DCP planning goals and the citywide Community District median both without and with the Proposed Action, the deficiency of open space resources within the study area would be ameliorated by several factors. A majority of the study area open space resources included in the quantitative analysis were found to be in good condition. In addition, the study area contains a variety of recreational facilities to serve the study area's significant adult population, with 77.4 percent dedicated to active uses and 22.3 percent dedicated to passive uses. As noted above, approximately 66.3 percent of the study area's residents are between the ages of 20 and 64, indicating a need for court game facilities and fields for sports, as well as bike paths and promenades for activities such as biking, jogging, and walking. Additionally, in the future with the Proposed Action, the proximity of Central Park, Randall's Island Park, and Wards Island Park would continue to be a factor in alleviating the study area's open space deficiency. Similarly, on a smaller scale, bicycle lanes

and other private open spaces in the study area, such as the 19 community gardens, including the portions of the Jackie Robinson and Pleasant Village Community Gardens not located on Development Sites C and D, listed in **Table 3-2**, would also provide open space for some study area residents.

As such, demand for open space generated by the Proposed Developments would not significantly exacerbate the No-Action deficiency, and the population added as a result of the Proposed Developments is not expected to noticeably affect utilization of the area's open spaces. Therefore, no significant adverse open space impacts due to indirect effects would occur.

I. INTRODUCTION

This chapter assesses the potential for the proposed action to result in incremental shadows long enough to reach any nearby publicly accessible open spaces or other sunlight-sensitive resources. According to the 2020 *City Environmental Quality Review (CEQR) Technical Manual*, a shadows assessment is warranted if a proposed action would result in structures (or additions to existing structures) of 50 feet in height or greater, or those that would be located adjacent to, or across the street from, a sunlight sensitive resource. As the proposed action would facilitate the development of four new buildings that would be greater than 50 feet in height, of which three would be located either directly adjacent or across the street from a sunlight sensitive resource, a shadows analysis was prepared in accordance with *CEQR Technical Manual* guidance to determine the potential for the proposed action to result in significant adverse impacts on sunlight-sensitive resources.

II. PRINCIPAL CONCLUSIONS

The proposed action would result in significant adverse impacts related to shadows. On the March 21/September 21, May 6/August 6, and June 21 representative analysis days, portions of the Jackie Robinson Community Garden would receive less than the four- to six-hours of direct sunlight. Given the variety of plants, trees, and flowers in the garden, including those that produce food such as fruit-bearing trees, the reduction in direct sunlight due to project-generated incremental shadows would significantly impact the health of these species, and the viability of the vegetation in the garden would potentially be threatened and could result in significant adverse shadow impacts. Therefore, project-generated incremental shadows on Jackie Robinson Community Garden as a result of the proposed action would be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

III. METHODOLOGY

According to the *CEQR Technical Manual*, the longest shadow a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. For projects or actions resulting in structures less than 50 feet tall, a shadow assessment is generally not necessary, unless the site is adjacent to a park, historic resource, or important natural feature (if the feature that makes the structure significant depends on sunlight).

First, a preliminary screening assessment must be conducted to ascertain whether shadows resulting from an action or project could reach any sunlight-sensitive resource at any time of year. The *CEQR Technical Manual* defines sunlight-sensitive resources as those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. The following are considered to be sunlight-sensitive resources¹:

- *Public open space* (e.g., parks, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions or roadbeds that are part of the

¹ According to the *CEQR Technical Manual*, city streets, sidewalks, and private open spaces (such as private residential front and back yards, stoops, and vacant lots) are not considered to be sunlight-sensitive resources.

Greenstreets program are also considered sunlight-sensitive resources. Sunlight sensitivity is assessed for both (1) warm-weather dependent features, like wading pools and sandboxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include: passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Where lawns are actively used, the turf requires extensive sunlight. As defined in the *CEQR Technical Manual*, vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is a minimum requirement.

- *Features of historic architectural resources that depend on sunlight for their enjoyment by the public.* Only the sunlight-sensitive features of an architectural resource are considered in a shadows analysis. Sunlight-sensitive features include the following: design elements that are part of a recognized architectural style that depends on the contrast between light and dark (e.g., deep recesses or voids, such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication); elaborate, highly carved ornamentation; stained glass windows; exterior building materials and color that depend on direct sunlight for visual character (e.g., the polychromy [multicolored] features found on Victorian Gothic Revival or Art Deco facades); historic landscapes, such as scenic landmarks, including vegetation recognized as an historic feature of the landscape; and structural features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as an historic landmark.
- *Natural resources where the introduction of shadows could alter the resource's condition or microclimate.* Such resources could include surface water bodies, wetlands, or designated resources, such as coastal fish and wildlife habitats.

The preliminary screening assessment consists of three tiers of analysis. The first tier determines a simple radius around each of the proposed development sites representing the longest shadow that could be cast. If there are sunlight-sensitive resources within the radius, the analysis proceeds to the second tier, which reduces the area that could be affected by action-generated shadows by accounting for a specific range of angles that can never receive shade in New York City due to the path of the sun in the northern hemisphere. If the second tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a third tier of screening analysis further refines the area that could be reached by new shadows by looking at specific representative days of the year and determining the maximum extent of shadow over the course of each representative day.

If the third tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a detailed shadow analysis is required to determine the extent and duration of the incremental shadow – or the additional, or new, shadow that a building or other built structure resulting from a proposed action would cast on a sunlight-sensitive resource during the year – resulting from the proposed project. Incremental shadows are determined by establishing a baseline condition (the No-Action condition) and comparing it to the future condition resulting from the proposed action (i.e., the With-Action condition), thus illustrating the shadows cast by existing or future buildings and distinguishing the additional (incremental) shadows cast by a proposed project. In accordance with the *CEQR Technical Manual*, shadows on sunlight-sensitive resources of concern were modeled for four representative days of the year. For the New York City area, the months of interest for an open space resource encompass the growing season (i.e., March through October) and one month between November and February representing a cold-weather month (usually December). Representative days for the growing season are generally the March 21 vernal equinox (or the September 21 autumnal equinox, which is approximately the same), the June 21 summer solstice, and a spring or summer day halfway between the summer solstice and equinoxes, such as May 6 or August 6 (which are approximately the same). For the cold weather months, the December 21 winter solstice is included to demonstrate conditions when open space users rely most

heavily on available sunlight warmth. As these months and days are representative of the full range of possible shadows, they are also used for assessing shadows on sunlight-sensitive resources.

The *CEQR Technical Manual* defines the temporal limits of a shadow analysis period to fall from an hour and a half after sunrise to an hour and a half before sunset.

The detailed analysis provides the data needed to assess the shadow impacts. The effects of incremental shadows on the sunlight-sensitive resources are described, and their degree of significance is considered. The result of the analysis and assessment are documented with graphics, a table of incremental shadow durations, and narrative text. As described in the *CEQR Technical Manual*, an incremental shadow is generally not considered significant when its duration is no longer than ten minutes at any time of year and the resource continues to receive substantial direct sunlight. A significant shadow impact generally occurs when an incremental shadow of ten minutes or longer falls on a sunlight-sensitive resource and results in one of the following:

- *Vegetation*: a substantial reduction in sunlight available to sunlight-sensitive features of the resource to less than the minimum time necessary for its survival (when there would be sufficient sunlight in the future without the project) or a reduction in direct sunlight exposure where the sensitive feature of the resource is already subject to substandard sunlight (i.e., less than the minimum time necessary for its survival).
- *Historic and cultural resources*: a substantial reduction in sunlight available for the enjoyment or appreciation of the sunlight-sensitive features of an historic or cultural resource.
- *Open space utilization*: a substantial reduction in the usability of open space as a result of increased shadow, including information regarding anticipated new users and the open space's utilization rates throughout the affected time periods.
- *For any sunlight-sensitive feature of a resource*: complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

In general, a significant adverse shadow impact occurs when the incremental shadow added by a proposed action falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight exposure, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources.

IV. PRELIMINARY SCREENING

First, an assessment of the four proposed development sites was performed in order to determine which sites required preliminary screening assessment. Pursuant to *CEQR Technical Manual* guidance, only new development or enlargements that would result in an incremental increase of 50 feet or more compared to the future without the proposed action require assessment. In addition, any development site adjacent to, or across the street from, a sunlight sensitive resource requires preliminary screening regardless of its height.

Table 4-1 summarizes this initial screening. As indicated in the table, new structures of approximately 50 feet in incremental height are anticipated on all four of the proposed development sites: Development Sites A, B, C, and D. In addition, Development Site B at 338 East 117th Street is across the street from the P.S. 155 Playground, Development Site C at 505 East 118th Street is adjacent to the Pleasant Village Community Garden, and Development Site D at 1761 Park Avenue is adjacent to Jackie Robinson Community Garden.

Table 4-1: Development Sites Warranting Preliminary Shadow Analyses

Sites Warranting Preliminary Shadows Analysis		Sites Not Warranting Preliminary Shadows Analysis
Sites with 50-foot or Greater Height Increment	Sites Adjacent to Sunlight Sensitive Resources	Sites with Less than 50-foot Height Increment Not Adjacent to Sunlight-Sensitive Resources
A, B, C, D	B, C, D	N/A

Tier 1 Screening Assessment

According to the *CEQR Technical Manual*, the longest shadow that a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height. The maximum radius for each of the four sites warranting a preliminary shadow analysis was determined using each site's preliminary building massing and maximum height, including mechanical bulkhead.² The longest shadows that could be cast by a new building on Development Site A (approximately 73'-8" tall) would be approximately 317 feet in length; the longest shadows that could be cast by a new building on Development Site B (approximately 73'-2" tall) would be approximately 314 feet in length; the longest shadows that could be cast by a new building on Development Site C (approximately 82'-0" tall) would be approximately 353 feet in length; and the longest shadows that could be cast by a new building on Development Site D (approximately 154' tall) would be approximately 662 feet in length.

Base maps were prepared (see **Figures 4-1a through 4-1d**) for each of the development sites identified for analysis in **Table 4-1**, the surrounding street layout, and all potentially sunlight-sensitive resources (publicly-accessible open spaces, architectural resources, natural resources, and greenstreets). Within the maximum shadow radius for these proposed development sites, there are eight identified potentially sunlight-sensitive open spaces, including a park, a ball field, and several playgrounds and community gardens. Therefore, further screening was warranted in order to determine whether any resources would be affected by action-generated shadows.

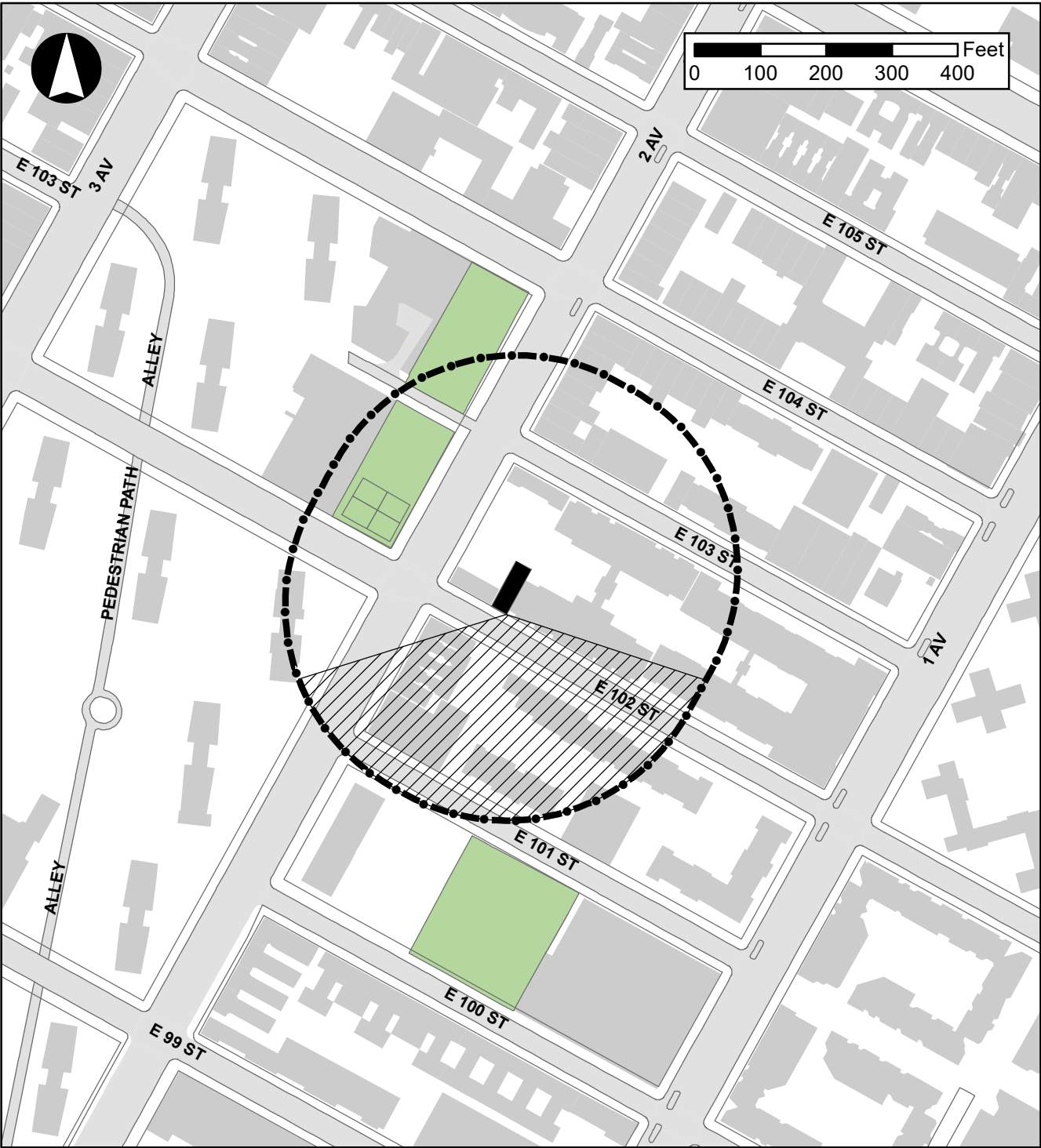
Tier 2 Screening Assessment

Due to the path of the sun across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given development site. In New York City, this area lies between -108 and +108 degrees from true north. The purpose of the Tier 2 screening is to determine whether the sunlight-sensitive resources identified in the Tier 1 screening are located within portions of the longest shadow study area that could receive incremental shadows from the proposed developments.

Figures 4-1a to 4-1d illustrate the results of the Tier 1 and Tier 2 screening assessments (i.e., the portion of the longest shadow study area lying within -108 degrees from the true north and +108 degrees from true north as measured from the southernmost portions of the development sites). A total of seven open space resources were identified as sunlight-sensitive resources that warranted further assessment. A list of these resources is provided below in **Table 4-2**.

² As presented in **Chapter 1, "Project Description,"** the proposed building heights assume a mechanical bulkhead of approximately nine feet in height for each proposed development site. However, for conservative analysis purposes, the shadows analysis assumes a mechanical bulkhead of approximately 20 feet at each development site.

Tier 1 and Tier 2 Shadows Screening Assessment:
Proposed Development Site A



Legend



Proposed Development Site



Open Space Resource (Keyed to Table 4-1)

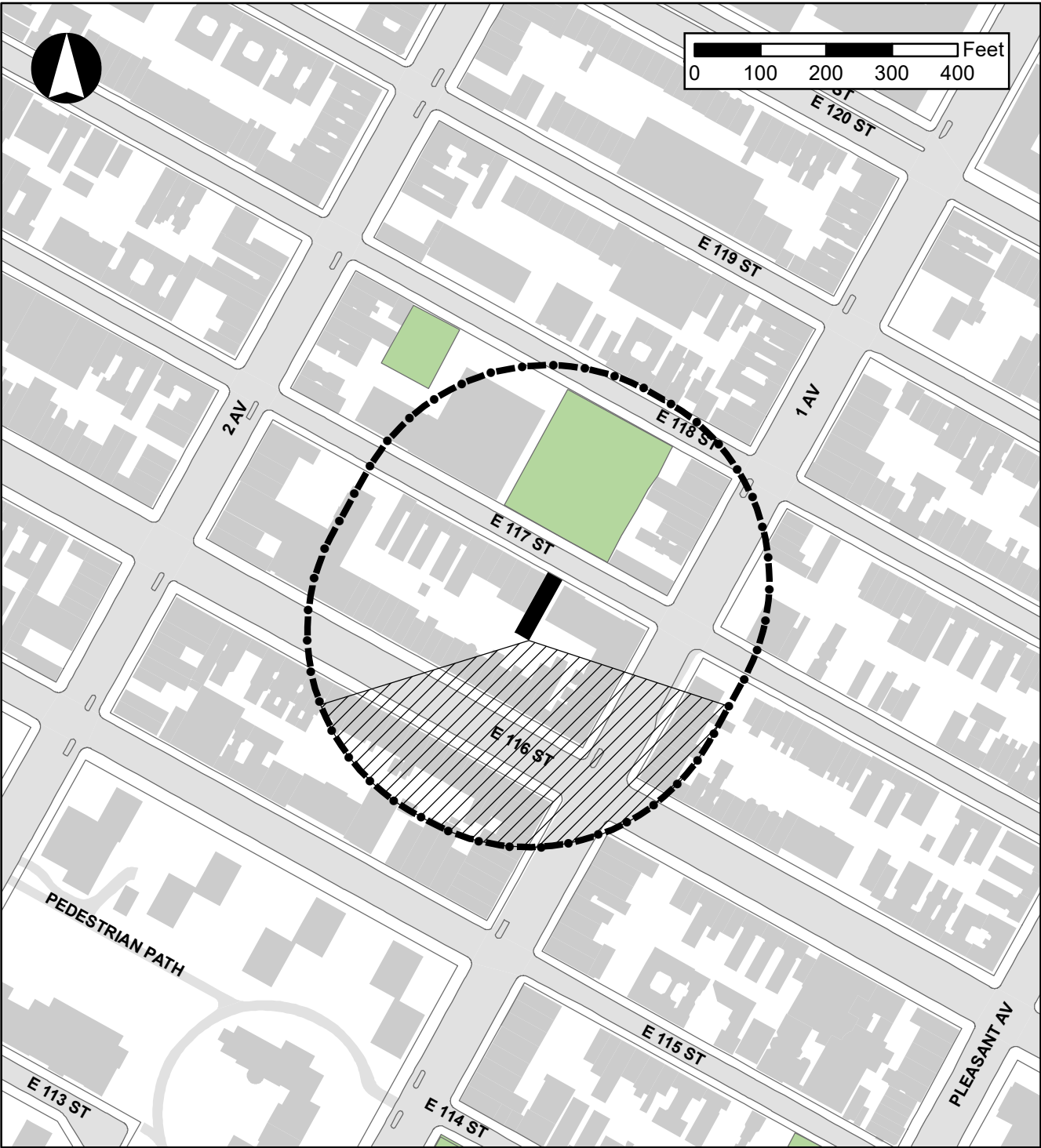


Tier 1: Longest Shadow Study Area



Tier 2: Area That Cannot Be Shaded

Tier 1 and Tier 2 Shadows Screening Assessment:
Proposed Development Site B



Legend



Proposed Development Site

Open Space Resource (Keyed to Table 4-1)

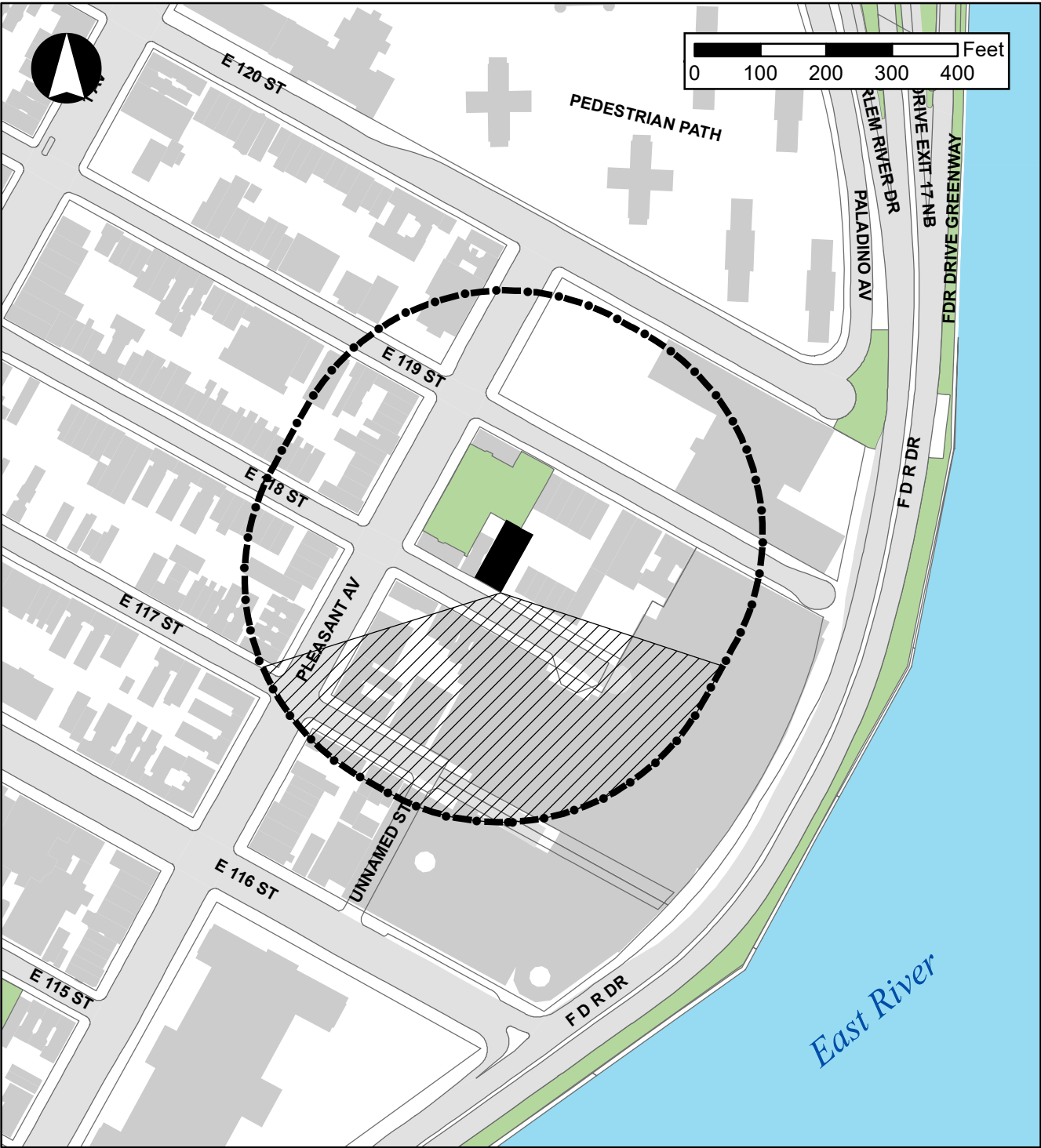


Tier 1: Longest Shadow Study Area



Tier 2: Area That Cannot Be Shaded

Tier 1 and Tier 2 Shadows Screening Assessment:
Proposed Development Site C



Legend



Proposed Development Site

Open Space Resource (Keyed to Table 4-1)

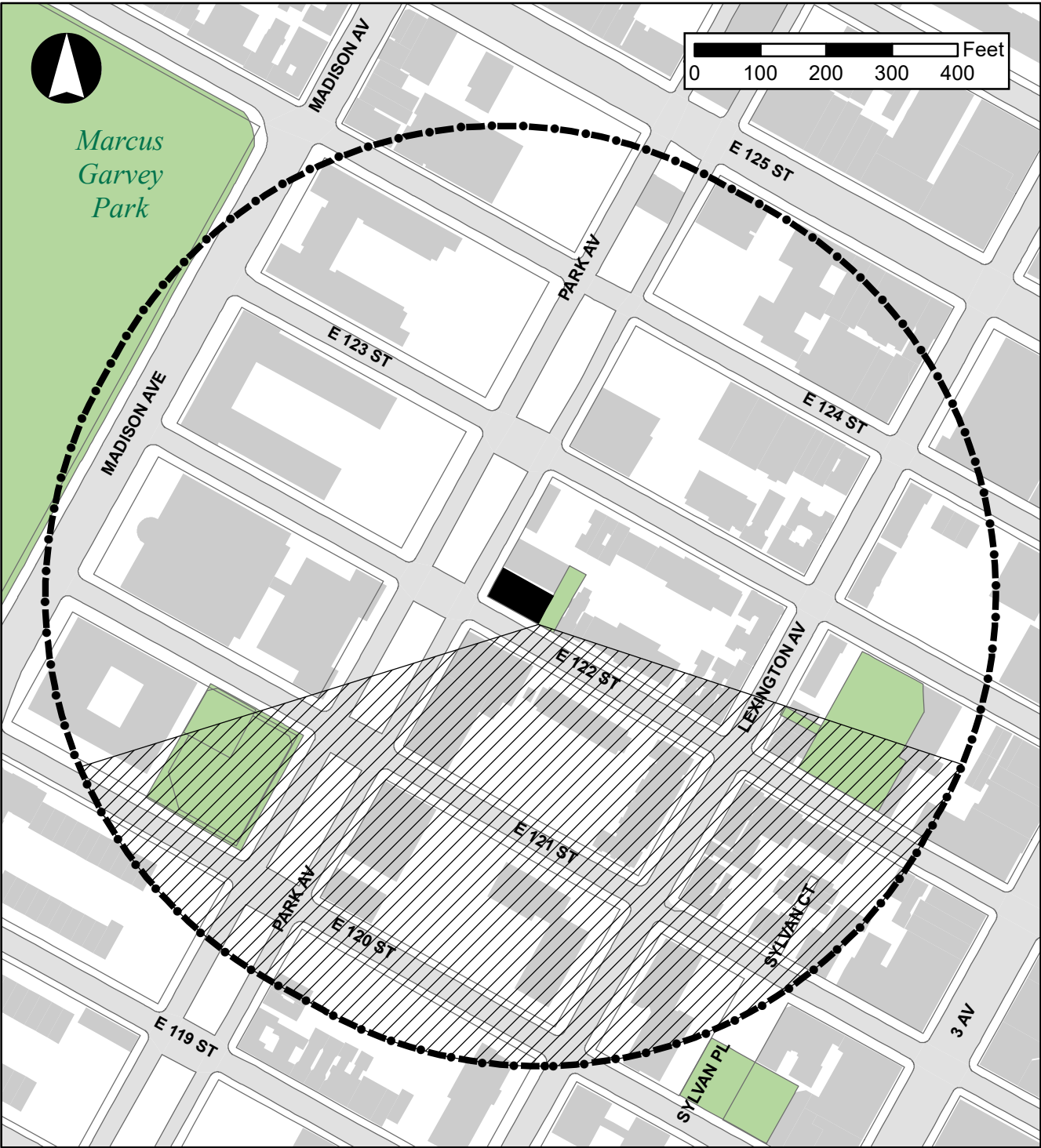


Tier 1: Longest Shadow Study Area



Tier 2: Area That Cannot Be Shaded

Tier 1 and Tier 2 Shadows Screening Assessment:
Proposed Development Site D



Legend



Proposed Development Site



Open Space Resource (Keyed to Table 4-1)



Tier 1: Longest Shadow Study Area



Tier 2: Area That Cannot Be Shaded

Table 4-2: Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 1 and 2 Screening

Map. No.	Open Space
1	Blake Hobbs Playground
2	P.S. 155 Playground
3	Pleasant Village Community Garden
4	Jackie Robinson Community Garden
5	Eugene McCabe Field
6	Dr. Ronald E. McNair Playground
7	Marcus Garvey Park

Notes:

¹ Map numbers keyed to sunlight-sensitive resources shown in **Figures 4-1a to 4-1d**.

Tier 3 Screening Assessment

According to the *CEQR Technical Manual*, a Tier 3 screening assessment should be performed to determine if, in the absence of intervening buildings, shadows resulting from a proposed action can reach a sunlight-sensitive resource, thereby warranting a detailed shadow analysis. The Tier 3 screening assessment is used to determine if shadows resulting from a proposed action can reach a sunlight-sensitive resource at any time between 1.5 hours after sunrise and 1.5 hours before sunset on representative analysis dates.

As action-generated shadows could reach several sunlight-sensitive resources, a Tier 3 assessment was performed using three-dimensional (3D) computer mapping software. A 3D model of the proposed buildings on Development Sites A, B, C, and D was used to calculate and display action-generated shadows on individual representative analysis dates. The model contained 3D representations of the elements in the base map used in the preceding assessments and a 3D model of the proposed developments on each of these sites. At this stage of the assessment, surrounding buildings within the study area were not included in the model so that it may be determined whether action-generated shadows would reach any sunlight sensitive resources.

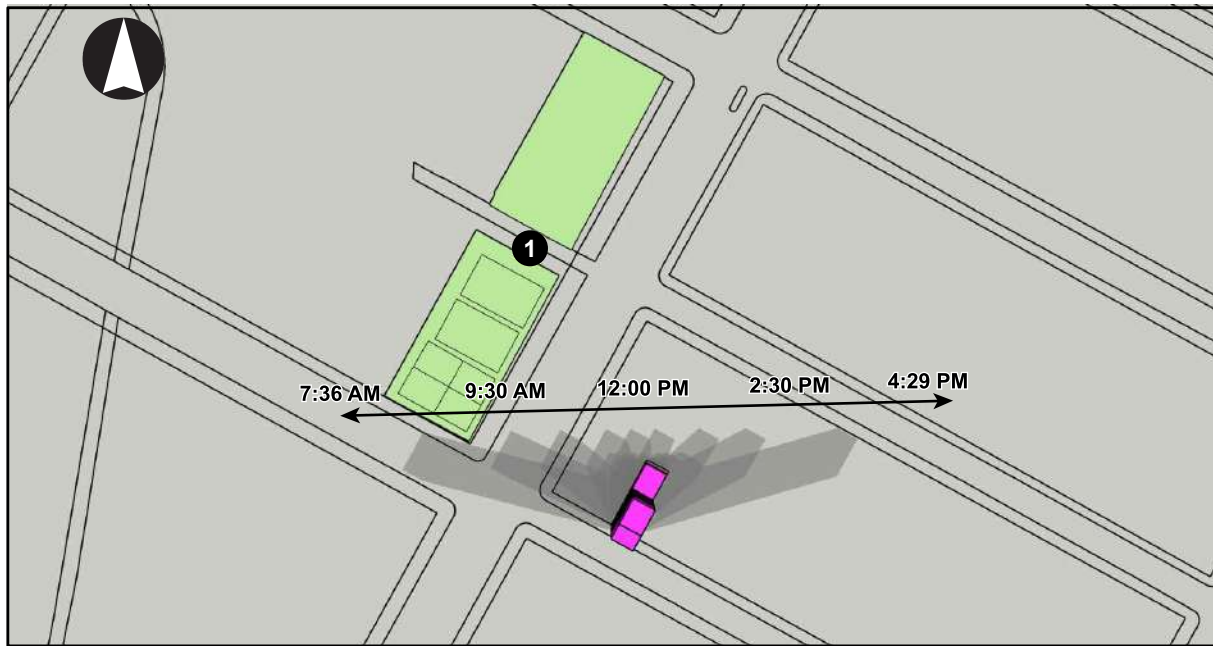
Table 4-3: Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 3 Screening

No. ¹	Name	March 21/Sept. 21 7:36AM - 4:29PM	May 6/August 6 6:27AM - 5:18PM	June 21 5:57AM - 6:01PM	December 21 8:51AM - 2:53PM	Number of Analysis Days
1	Blake Hobbs Playground	YES	NO	NO	YES	2
2	P.S. 155 Playground	YES	NO	NO	YES	2
3	Pleasant Village Community Garden	YES	YES	YES	YES	4
4	Jackie Robinson Community Garden	YES	YES	YES	YES	4
5	Eugene McCabe Field	NO	NO	YES	NO	1
6	Dr. Ronald E. McNair Playground	NO	NO	YES	NO	1
7	Marcus Garvey Park	NO	NO	NO	YES	1

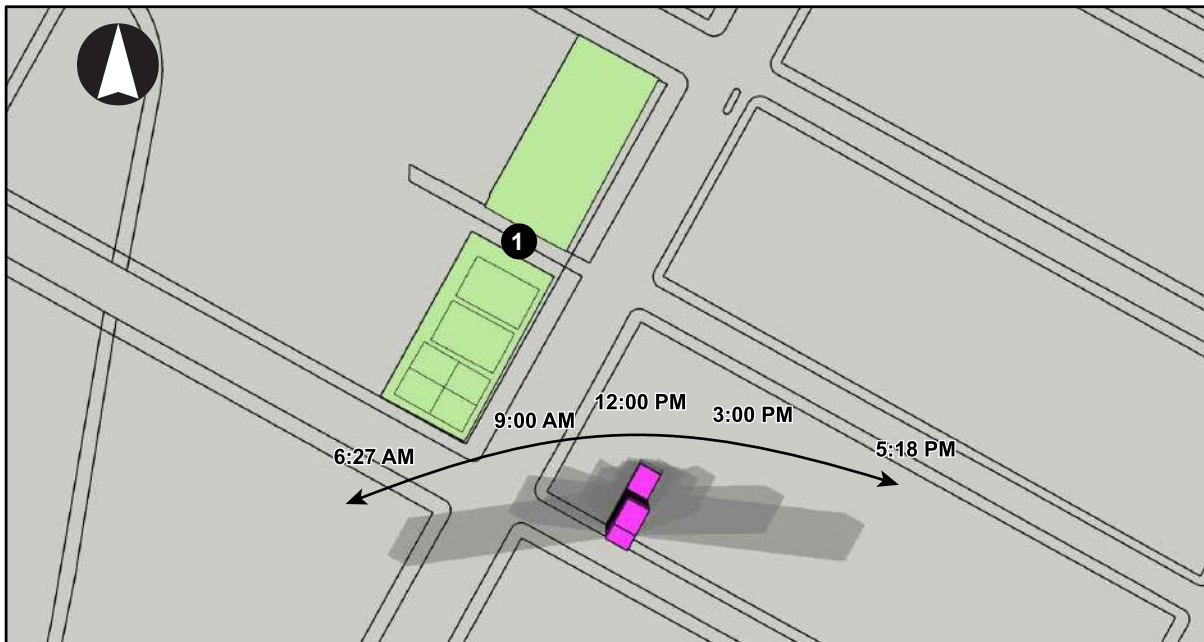
Notes:

¹ Numbers keyed to sunlight-sensitive resources shown in **Figures 4-2a to 4-2h**.

As shown in **Figures 4-2a through 4-2h**, the Tier 3 results determined that all seven of the sunlight-sensitive resources would receive incremental shadows from the proposed developments on at least one of the four analysis days and, therefore, require further analysis. **Table 4-3** presents a summary of the Tier 3 assessment, showing the seven open space sunlight-sensitive resources that could, in the absence of intervening buildings, receive action-generated shadows, and on which analysis days the new shadows could occur. As presented in **Table 4-3**, based on the Tier 3 screening assessment, the potential



MARCH 21/SEPTEMBER 21



MAY 6/AUGUST 6



Proposed Development

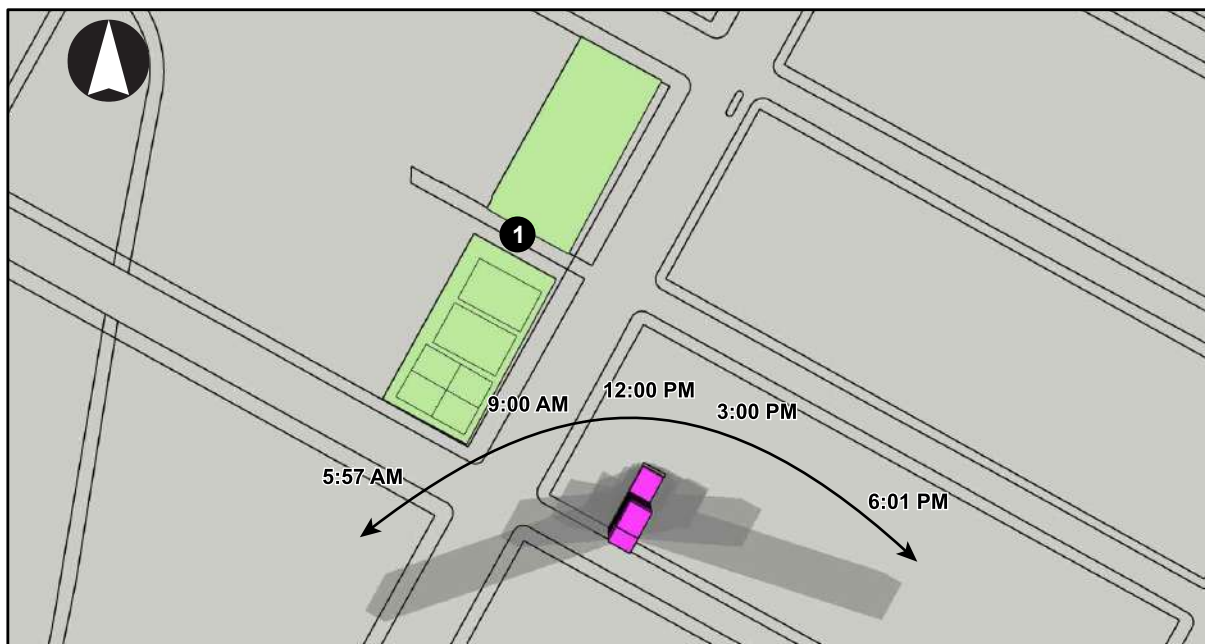


Open Space

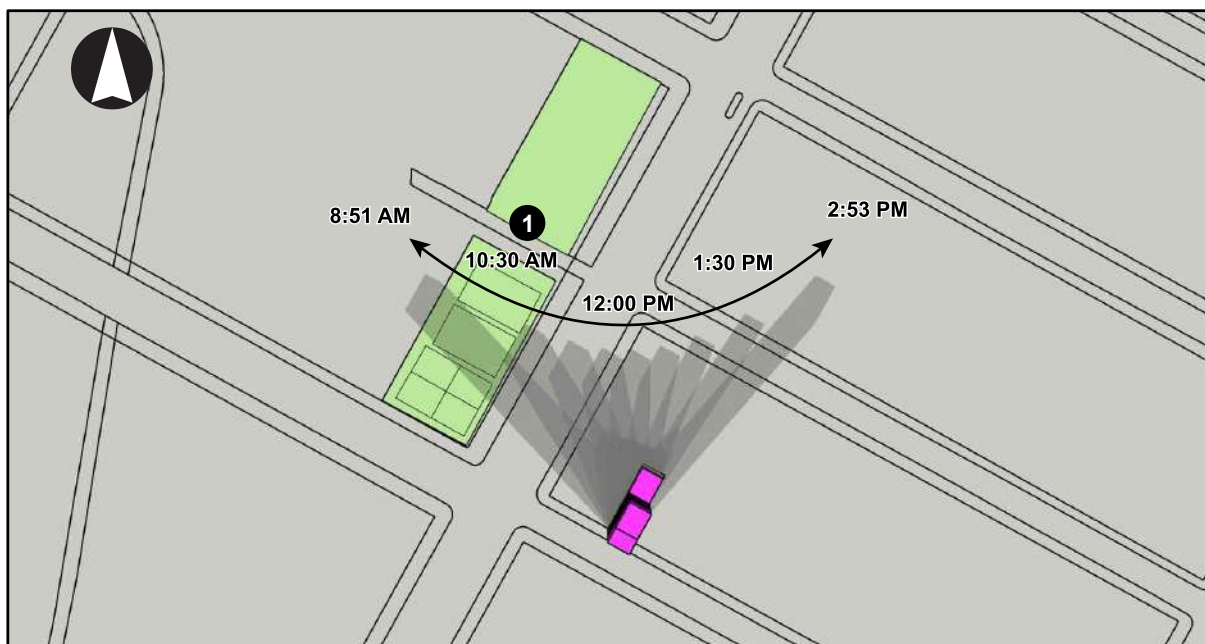
Note: Resources keyed to Table 4-1



Incremental Shadow



JUNE 21



DECEMBER 21



Proposed Development

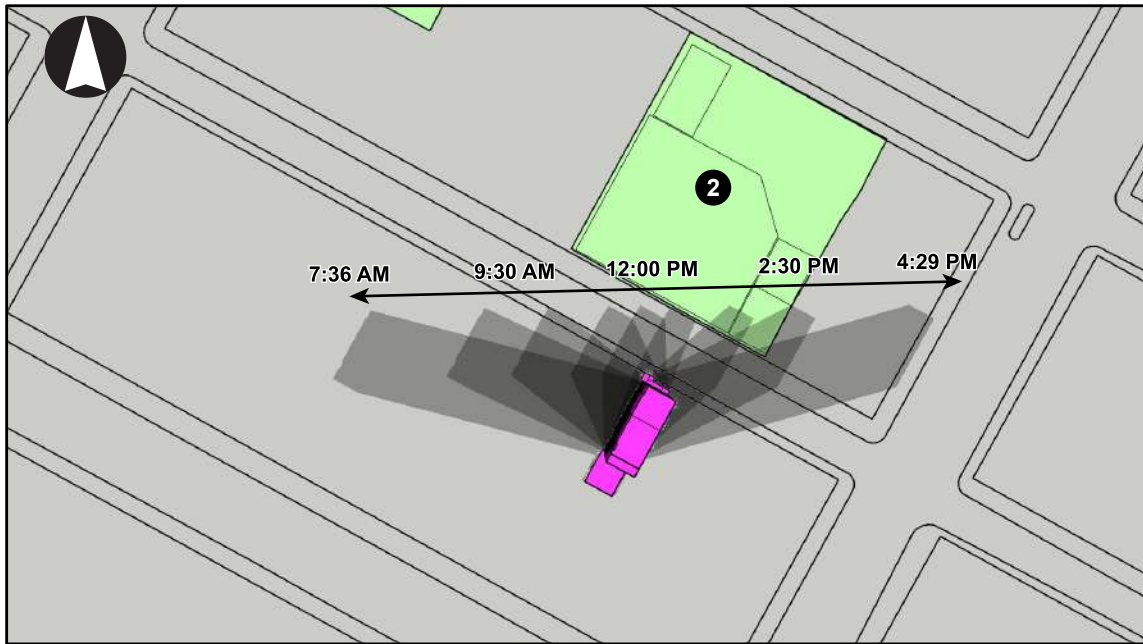


Open Space

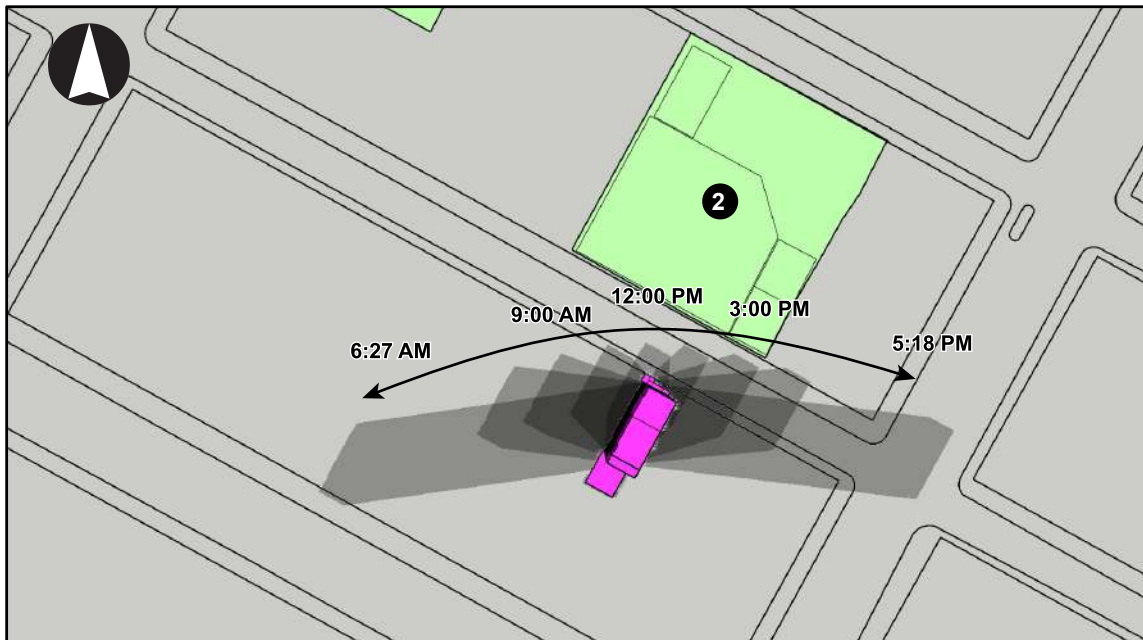
Note: Resources keyed to Table 4-1



Incremental Shadow



MARCH 21/SEPTEMBER 21



MAY 6/AUGUST 6



Proposed Development

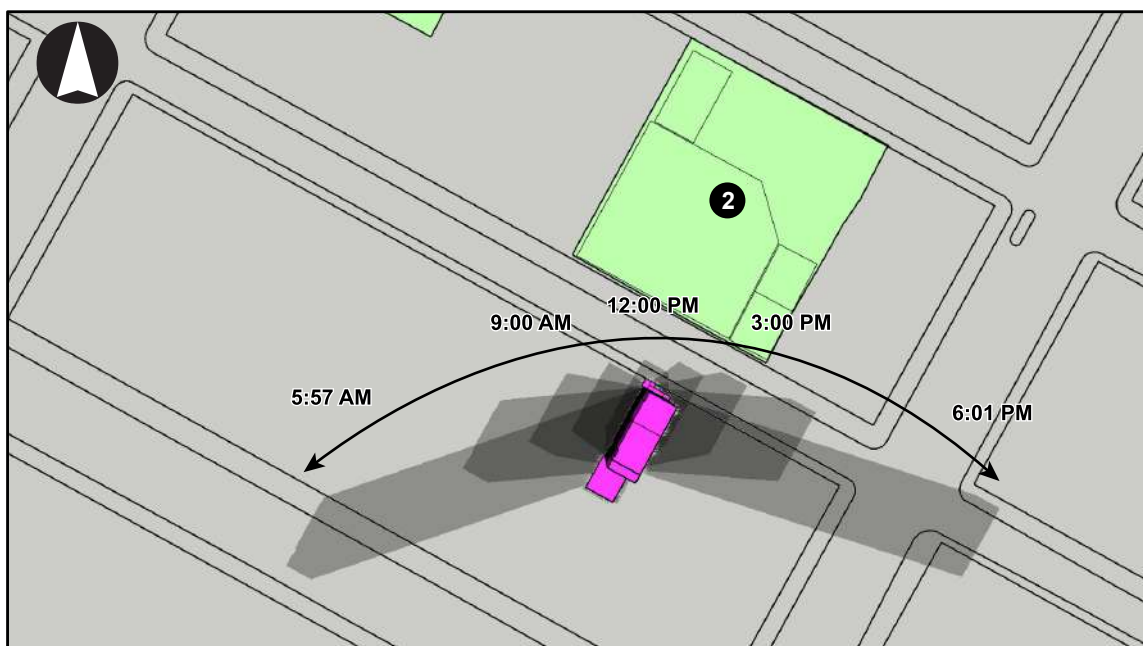


Open Space

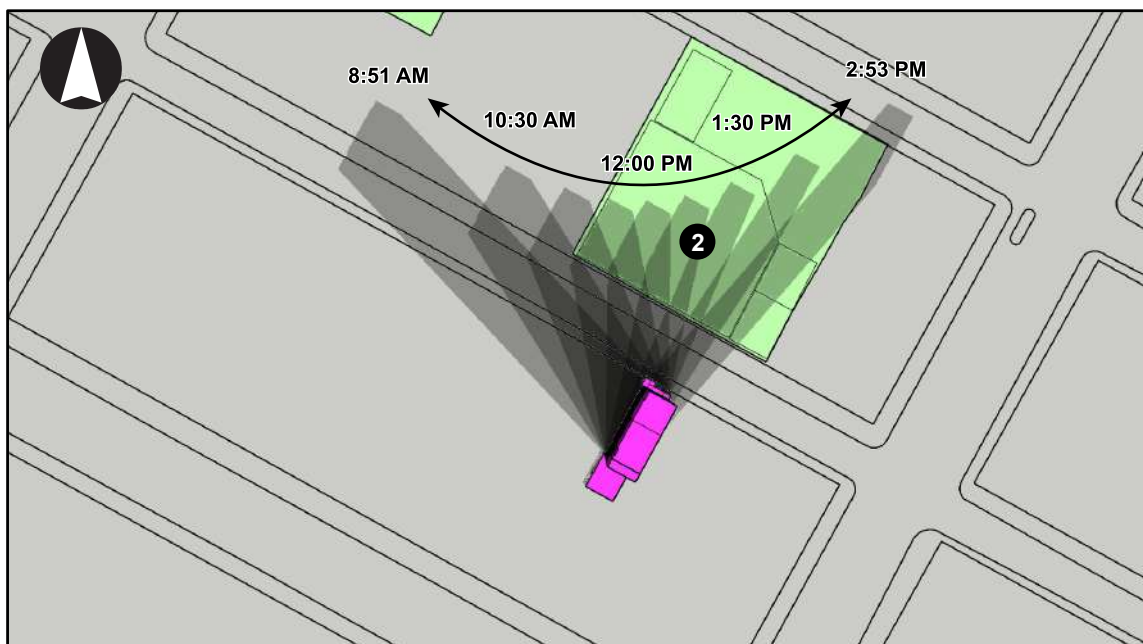


Incremental Shadow

Note: Resources keyed to Table 4-1



JUNE 21



DECEMBER 21



Proposed Development

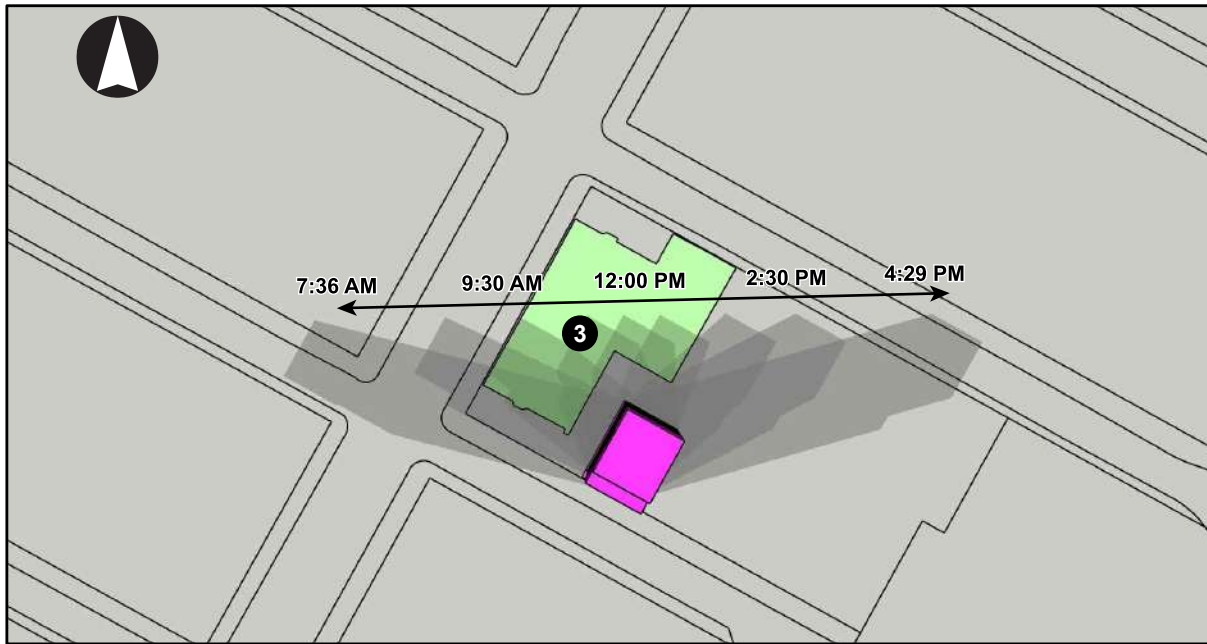


Open Space

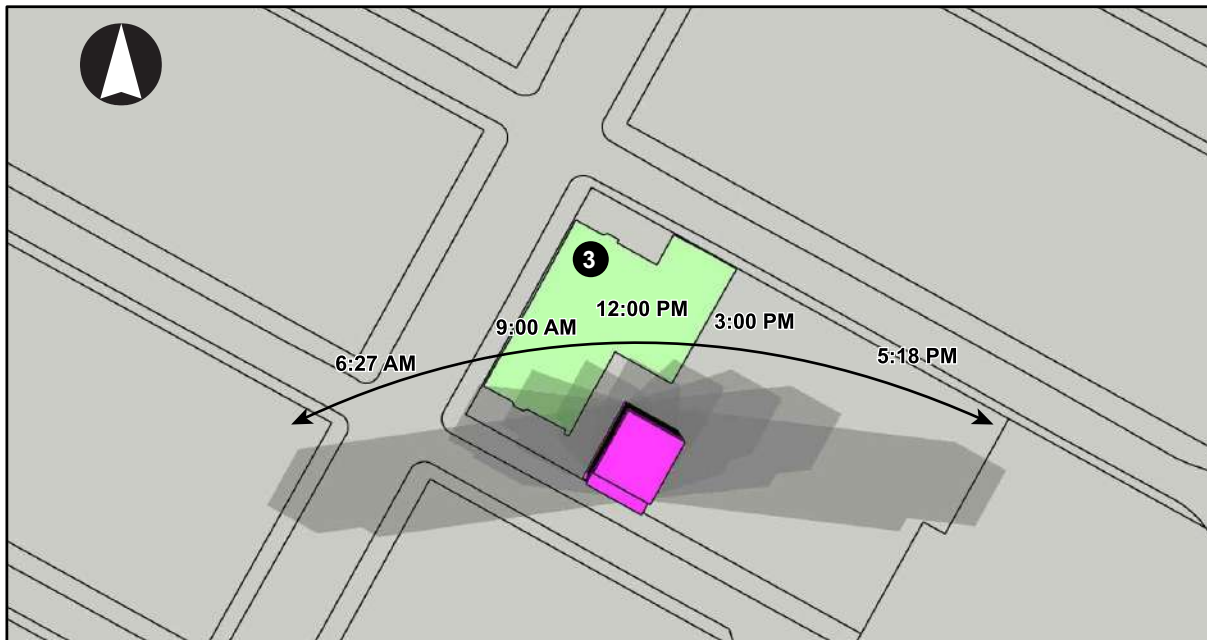


Incremental Shadow

Note: Resources keyed to Table 4-1



MARCH 21/SEPTEMBER 21



MAY 6/AUGUST 6



Proposed Development

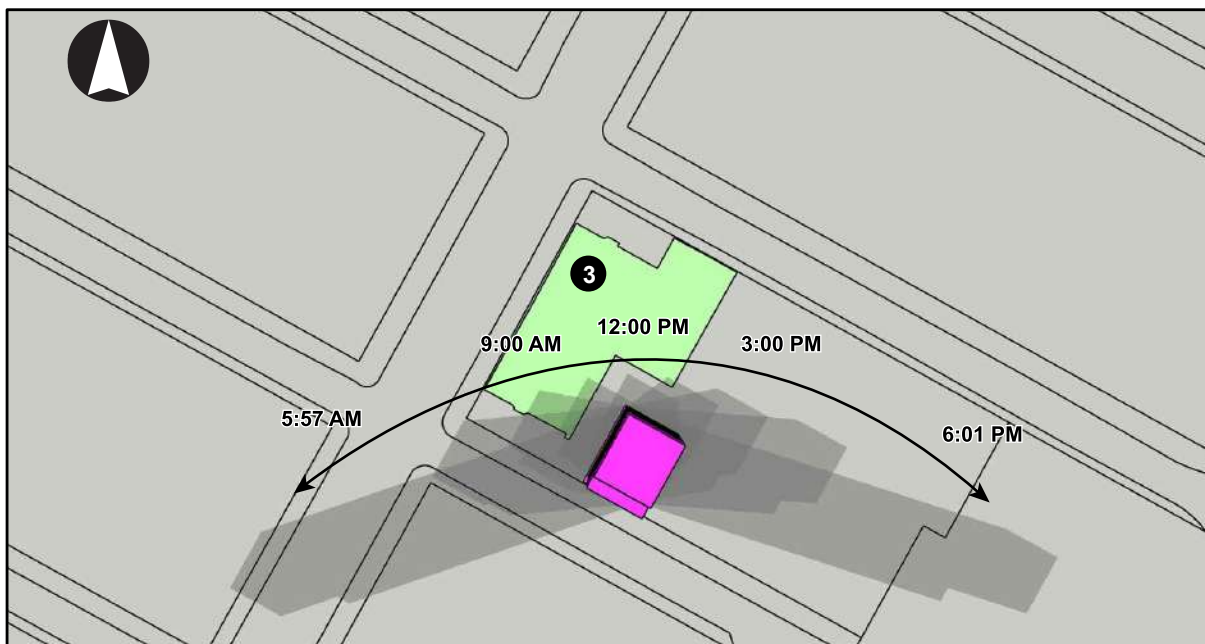


Open Space

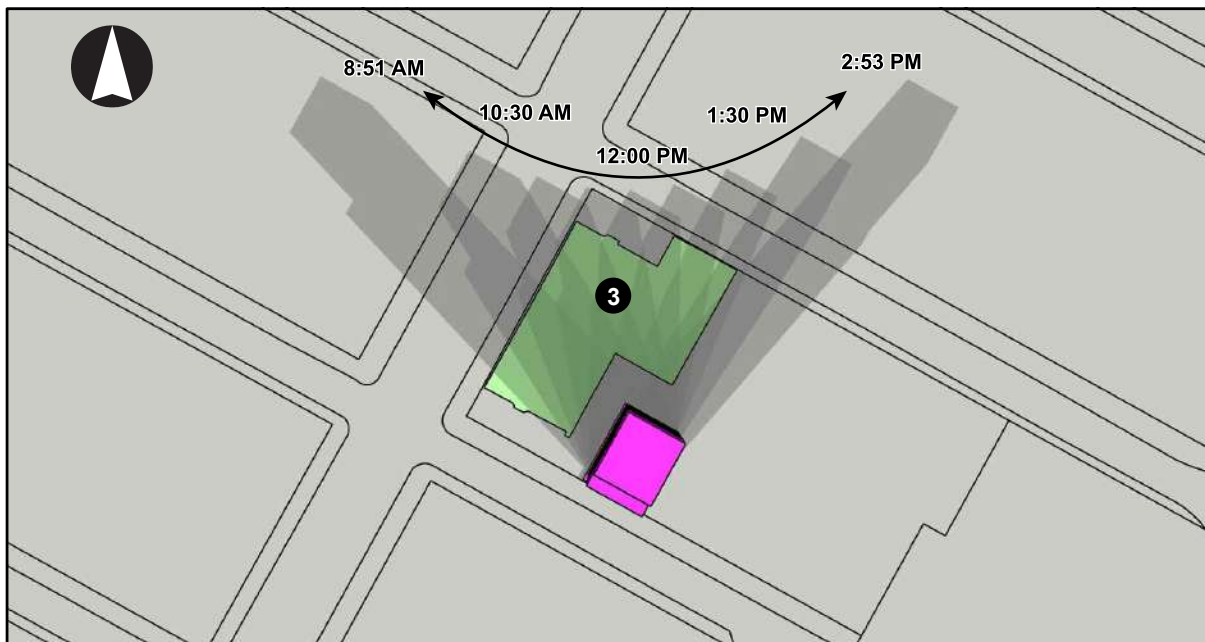
Note: Resources keyed to Table 4-1



Incremental Shadow



JUNE 21



DECEMBER 21



Proposed Development

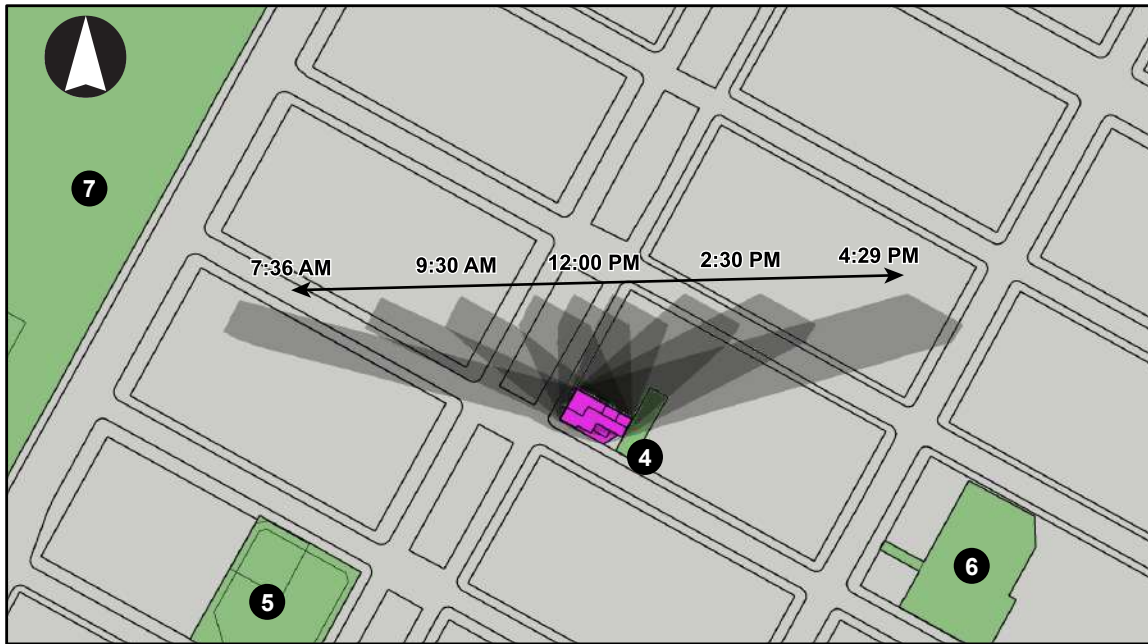


Open Space

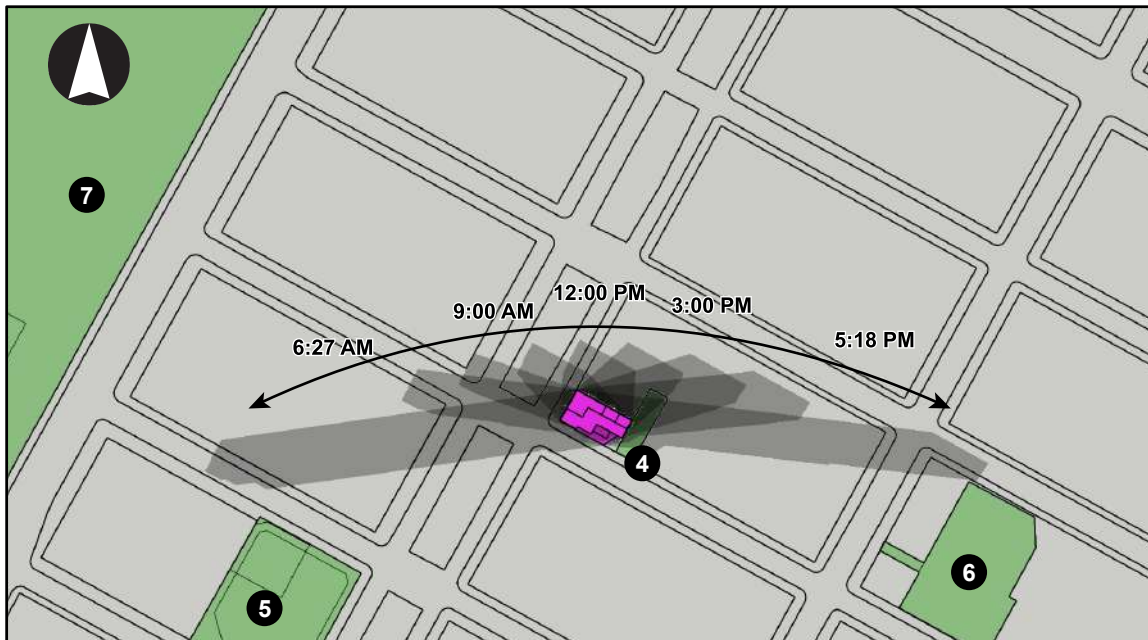


Incremental Shadow

Note: Resources keyed to Table 4-1



MARCH 21/SEPTEMBER 21



MAY 6/AUGUST 6



Proposed Development

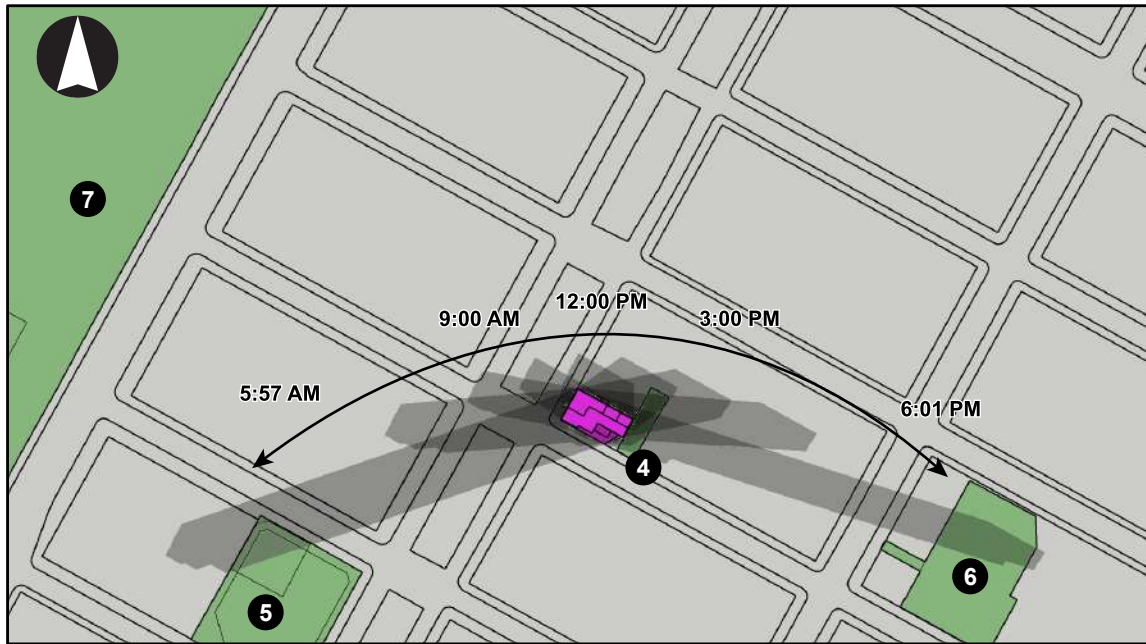


Open Space

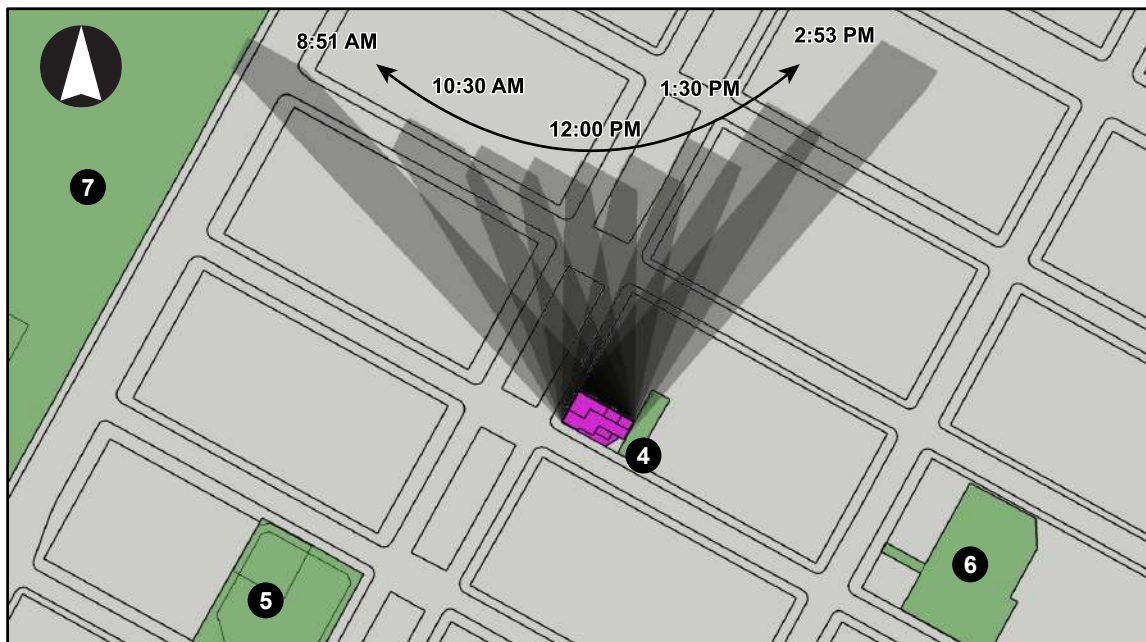
Note: Resources keyed to Table 4-1



Incremental Shadow



JUNE 21



DECEMBER 21

 Proposed Development

 Open Space

 Incremental Shadow

Note: Resources keyed to Table 4-1

for new incremental shadows to be cast on Pleasant Village Community Garden and Jackie Robinson Community Garden on four analysis days, on Blake Hobbs Playground and P.S. 155 Playground on two analysis days, and on the Eugene McCabe Field, Dr. Ronald E. McNair Playground, and Marcus Garvey Park on one analysis day, could not be ruled out, and a detailed shadows analysis is warranted for these seven sunlight-sensitive resources.

E. DETAILED ANALYSIS OF SHADOW IMPACTS

Detailed Shadow Analysis

Per *CEQR Technical Manual* guidance, shadow analyses were performed for the seven sunlight-sensitive resources identified above on four representative days of the year: March 21/September 21, the equinoxes; May 6, the midpoint between the summer solstice and the equinox (and equivalent to August 6); June 21, the summer solstice and the longest day of the year; and December 21, the winter solstice and shortest day of the year. These four representative days indicate the range of shadows over the course of the year. CEQR guidance defines the temporal limits of a shadow analysis period to fall from 1.5 hours after sunrise to 1.5 hours before sunset. As discussed above, the results of the shadows analysis show the incremental difference in shadow impact between the No-Action and With-Action conditions (see **Table 4-4**).

Table 4-4: Duration of Shadows on Sunlight-Sensitive Resources (Increment Compared to No-Action)

Resource	Analysis Day	March 21/Sept. 21	May 6/August 6	June 21	December 21
		7:36 AM – 4:29 PM	6:27 AM – 5:18 PM	5:57 AM – 6:01 PM	8:51 AM – 2:53 PM
Blake Hobbs Playground	Shadow enter-exit time	-			8:51 AM – 9:52 AM
	Incremental shadow duration	-			1 Hour 1 Minute
P.S. 155 Playground	Shadow enter-exit time	12:55 PM – 3:58 PM			10:43 AM – 2:53 PM
	Incremental shadow duration	3 Hours 3 Minutes			4 Hours 10 Minutes
Pleasant Village Community Garden	Shadow enter-exit time	8:22 AM - 2:36 PM	9:18 - 11:24 AM 11:46 AM - 2:17 PM	9:54 - 11:09 AM 12:49 - 2:11 PM	9:10 AM - 2:53 PM
	Incremental shadow duration	6 Hours 14 Minutes	2 Hours 6 Minutes 2 Hours 31 Minutes	1 Hour 15 Minutes 1 Hour 22 Minutes	5 Hours 43 Minutes
Jackie Robinson Community Garden	Shadow enter-exit time	1:25 - 4:29 PM	12:47 - 5:18 PM	12:41 - 6:01 PM	1:57 - 2:53 PM
	Incremental shadow duration	3 Hours 4 Minutes	4 Hours 31 Minutes	5 Hours 20 Minutes	56 Minutes
Eugene McCabe Field	Shadow enter-exit time			-	
	Incremental shadow duration			-	
Dr. Ronald E. McNair Playground	Shadow enter-exit time			5:57 – 6:01 PM	
	Incremental shadow duration			4 Minutes	
Marcus Garvey Park	Shadow enter-exit time				-
	Incremental shadow duration				-

As shown in **Table 4-4**, incremental action-generated shadows would reach five of the seven sunlight-sensitive resources identified in the Tier 3 assessment: Blake Hobbs Playground, P.S. 155 Playground, Pleasant Village Community Garden, Jackie Robinson Community Garden, and the Dr. Ronald E. McNair

Playground. Incremental shadows would not reach the Eugene McCabe Field or Marcus Garvey Park on any of the four representative analysis days, and as such, further analysis is not required. **Figures 4-3 through Figure 4-8** provided at the end of this chapter show representative incremental shadows for the five affected sunlight-sensitive resources of concern on each of the four representative analysis days.

It should be noted that, per the *CEQR Technical Manual*, all times reported herein are Eastern Standard Time and do not reflect adjustments for daylight savings time that is in effect from mid-March to early November. As such, the times reported in this chapter for March 21/September 21, May 6/August 6, and June 21 need to have one hour added to reflect the Eastern Daylight Saving Time.

Resources Affected by Project-Generated Shadows

Blake Hobbs Playground

Blake Hobbs Playground is a 1.0-acre open space extending along the west side of Second Avenue between East 102nd and East 104th streets northwest of Development Site A. The playground is located directly east of P.S. 38 Roberto Clemente/Harlem Prep Middle School with frontages along the north side of East 102nd Street, the west side of Second Avenue, and the south side of East 104th Street. The playground is owned and operated by New York City Department of Parks and Recreation (DPR), and in October 1994, was reconstructed under the Neighborhood Park Improvement Program. The playground features playgrounds, basketball courts, handball courts, volleyball courts, landscaped areas, tree plantings, and bench seating.

The proposed action would result in new incremental shadows on one of the four representative analysis days at Blake Hobbs Playground. Incremental shadows would last for a total of approximately one hour and one minute (from 8:51 to 9:52 AM) on December 21 (see **Table 4-4**).

On the winter solstice (December 21), the day of the year with the shortest period of daylight, the sun is low in the sky and shadows are at their longest but move rapidly. On this date, which is outside the growing season in New York City, incremental shadows would cover limited portions of the open space through the morning hours. Incremental shadows would enter the open space at the start of the analysis day (8:51 AM) and continue until 9:52 AM, for a duration of one hour and one minute. After 9:52 AM, Blake Hobbs Playground would not experience any incremental shadow coverage. As shown in **Figure 4-3a**, at the start of the analysis day (8:51 AM), shadow coverage would be concentrated on a small, western portion of the open space fronting the adjacent P.S. 38 Roberto Clemente school. By 9:15 AM, incremental shadows coverage would increase slightly, and would continue to move in an easterly direction. By 9:45 AM, incremental shadow coverage would be concentrated on a small, eastern portion of the playground fronting Second Avenue, and would continue to move in an easterly direction until exiting the open space at 9:52 AM (see **Figure 4-3b**). The areas of Blake Hobbs Playground that would experience incremental shadow coverage would include one of the two basketball courts. As shadows are not static and move from west to east throughout the day, the basketball court would continue to receive adequate direct sunlight on the December 21 representative analysis day, and thus, would not significantly affect the utilization or enjoyment of this open space resource. Further, as December 21 falls outside the plant growing season defined by the *CEQR Technical Manual*, vegetation would not be affected by the proposed action on this analysis day.

Assessment

Blake Hobbs Playground would experience incremental shadow coverage on one of the four representative analysis days. Incremental shadow duration would be minimal, affecting the playground for a duration of one hour and one minute on the December 21 representative analysis day. On this analysis day, shadow

coverage would not be cast on a single part of the open space for an extended period of time, allowing the open space's sunlight-sensitive resources to receive adequate direct sunlight throughout the day. At no point during any of the representative analysis days would incremental shadows result in a complete loss of sunlight on the playground. Incremental shadows would affect active recreational uses, including one of the two basketball courts found within the open space resource. However, incremental shadow coverage on December 21, when temperatures would be colder and the use of active recreational space would not be as high (compared to warmer months), are not expected to affect the utilization or enjoyment of the affected basketball court. Additionally, as the December 21 analysis day falls outside the plant growing season defined by the *CEQR Technical Manual*, vegetation would not be affected. Therefore, as the extent and duration of the incremental shadows would (1) not significantly reduce or completely eliminate direct sunlight exposure on any of the sunlight-sensitive resources found within this open space, and (2) would not significantly alter the public's use or enjoyment of the open space or threaten the viability of vegetation or other resources, incremental shadows on Blake Hobbs Playground as a result of the proposed action would not be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

P.S. 155 Playground

The P.S. 155 Playground is an approximately 0.83-acre open space located north of Development Site B. The playground is mostly paved and features basketball courts, volleyball courts, handball courts, playgrounds, spray showers, public bathrooms, tree plantings, and bench seating. The playground, which has frontages on both East 117th and East 118th streets between First and Second avenues, is co-owned and operated by DPR and New York City Department of Education (DOE).

It should also be noted that the 2017 *East Harlem Rezoning Final Environmental Impact Statement (FEIS)* [CEQR No. 17DCP048M] previously analyzed the potential shadow impacts on P.S. 155 from projected developments on the same block as Development Site B, though *FEIS* did not identify any development sites on Development Site B. As described in Chapter 6, "Shadows," of the *East Harlem Rezoning FEIS*, the short duration and small extent of incremental shadow would not significantly alter the public use of the open space resource or threaten the vitality of its vegetation.

The proposed action would result in new incremental shadows of varying duration and coverage on two of the four representative analysis days at the P.S. 155 Playground. Incremental shadows would last for a total of approximately three hours and three minutes (from 12:55 to 3:58 PM) on March 21/September 21, and approximately four hours and 10 minutes (from 10:43 AM to 2:53 PM) on December 21 (see **Table 4-4**).

On March 21/September 21, incremental shadows would cover minimal portions of the open space during the afternoon hours. Incremental shadows would enter the playground at 12:55 PM and continue until 3:58 PM, for a duration of three hours and three minutes. Prior to 12:55 PM and following 3:58 PM, the open space would not experience any incremental shadow coverage. As indicated in **Figure 4-4a**, incremental shadow coverage would enter the open space from the west, and would be concentrated on a small, southern portion of the open space fronting East 117th Street. By 2:30 PM, incremental shadow coverage would increase slightly, and would continue to move in an easterly direction. By 3:30 PM, incremental shadow coverage would be concentrated on a small southeastern portion of the open space fronting East 117th Street and First Avenue, and would continue to move in an easterly direction and decrease in coverage until exiting the open space at 3:58 PM (see **Figure 4-4b**). The areas of the P.S. 155 Playground that would experience incremental shadow coverage would include basketball/volleyball courts, handball courts, and bench seating.

On December 21, which is considered outside the growing season in New York City, incremental shadow coverage would cover moderate portions of the open space throughout the early afternoon hours, including

basketball/volleyball courts, handball courts, playgrounds, tree plantings, and bench seating. Incremental shadows would enter the open space at 10:43 AM and continue until the end of the analysis day (2:53 PM), for a duration of four hours and 10 minutes. Prior to 10:43 AM, the P.S. 155 Playground would not experience any incremental shadow coverage. As shown in **Figure 4-4c**, during the late morning hours, shadow coverage would be concentrated on a small, southwestern portion of the open space adjacent to the P.S. 155 William Paca school featuring paved basketball/volleyball courts. By 1:00 PM, incremental shadow coverage would increase, and would continue to move in an easterly direction, affecting new portions of the basketball/volleyball courts. By 2:30 PM, incremental shadow coverage would continue to increase, moving in a northeasterly direction until the end of the analysis day (2:53 PM), covering portions of the open space's basketball/volleyball courts, handball courts, playgrounds, tree plantings, and bench seating (see **Figure 7-4d**).

Assessment

P.S. 155 Playground would experience incremental shadow coverage on two of the four representative analysis days. Incremental shadow duration would be moderate, ranging from three hours and three minutes on March 21/September 21 to four hours and 10 minutes on December 21. During the growing season, shadow coverage would generally be limited to the southern portions of the open space that do not feature sunlight-sensitive vegetative resources and would not be cast on a single part of the playground for an extended period of time, allowing the open space's sunlight-sensitive resources to receive adequate direct sunlight throughout the day (at least the four- to six-hour minimum specified in the *CEQR Technical Manual*), and vegetation in the playground would not be significantly threatened (see **Figures 4-4a** and **4-4b**). On December 21, which is outside the growing season in New York City, shadow coverage would be concentrated in the southern and northeastern portions of the playground (see **Figures 4-4c** and **4-4d**). Additionally, as the December 21 analysis day falls outside the plant growing season defined by the *CEQR Technical Manual*, vegetation would not be affected. As shadows are not static and move from west to east throughout the day, the playground's sunlight-sensitive features would continue to receive direct sunlight on these two representative analysis days. At no point during any of the representative analysis days would incremental shadows result in a complete loss of sunlight on the playground. Incremental shadows on active recreational uses during the warmer weather months (March 21/September 21) are not expected to significantly affect the usability of the open space. Incremental shadow coverage on December 21, when temperatures would be colder and the use of active recreational space would not be as high (compared to warmer months), are not expected to affect the utilization or enjoyment of this open space resource. In addition, the open space's active (i.e., athletic courts and playgrounds) and passive recreational amenities (i.e., bench seating) would continue to receive direct sunlight throughout the majority of the two representative analysis days, and thus, would not significantly affect the utilization or enjoyment of this open space resource. Therefore, as the extent and duration of the incremental shadows would (1) not significantly reduce or completely eliminate direct sunlight exposure on any of the sunlight-sensitive resources found within this open space, and (2) would not significantly alter the public's use or enjoyment of the open space or threaten the viability of vegetation or other resources, incremental shadows on P.S. 155 Playground as a result of the proposed action would not be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

Pleasant Village Community Garden

Pleasant Village Community Garden is a 0.43-acre community garden located on Manhattan Block 1815, Lots 2 and 5, with frontages on Pleasant Avenue to the west, East 119th Street to the north, and East 118th Street to the south. The open space is jointly owned by New York City Department of Housing Preservation and Development (HPD) and DPR, as Lot 5 is owned HPD and operates under a temporary license agreement with HPD that permits the community garden to use this site on an interim basis until HPD is ready to move forward with its redevelopment and Lot 2 is owned by DPR. However, as detailed in **Chapter**

3, “Open Space,” the construction and operation of the Proposed Development Site C (Lots 5 and 6) would result in the physical loss of approximately 0.05 acres (2,388 sf) of the Pleasant Village Community Garden. Therefore, in the future with the proposed action, Pleasant Village Community Garden would be reduced to a 0.38-acre open space located on Lot 2. The 0.38-acre portion of the community garden that would remain in the With-Action condition features bench seating and various forms of vegetation including raised gardening beds, landscaped areas, and trees, including those that bear fruit which serve as a food source (see **Figure 4-5**).

The proposed action would result in new incremental shadows of varying duration and coverage on each of the four representative analysis days at Pleasant Village Community Garden. Incremental shadows would last for a total of approximately six hours and 14 minutes (from 8:22 AM to 2:36 PM) on March 21/September 21, approximately four hours and 37 minutes (from 9:18 to 11:24 AM, and from 11:46 AM to 2:17 PM) on May 6/August 6, approximately two hours and 37 minutes (from 9:54 to 11:09 AM, and from 12:49 to 2:11 PM) on June 21, and approximately five hours and 43 minutes (from 9:10 AM to 2:53 PM) on December 21 (see **Table 4-4**).

On March 21/September 21, while incremental shadow coverage would be long in duration, it would cover a small-to-moderate portion of the open space during the morning and early afternoon hours. Incremental shadows would enter the community garden at 8:22 AM and continue until 2:36 PM for a duration of six hours and 14 minutes. Prior to 8:22 AM and following 2:36 PM, the open space would not experience any incremental shadow coverage. As indicated in **Figures 4-6a** and **4-6b**, shadow coverage would be concentrated on the southern portions of the open space, which features raised garden beds, landscaped areas, bench seating, and tree plantings. During the early morning hours, incremental shadows would enter the open space on a small, thin southwestern portion of the community garden (see **Figure 4-6a**). By 11:00 AM, incremental shadow coverage would increase, and would continue to move in an easterly direction. By 1:00 PM, incremental shadow coverage would continue to increase and move in an easterly direction. By 2:15 PM, incremental shadows would decrease and be concentrated on a small southeastern portion of the open space, and would continue to move in an easterly direction and decrease in coverage until exiting the open space at 2:36 PM (see **Figure 4-6b**). As shadows are not static and move from west to east throughout the day, the community garden’s sunlight-sensitive amenities would continue to receive some direct sunlight on the March 21/September 21 representative analysis day, and the community garden would continue to receive adequate sunlight during the growing season (at least the four- to six-hour minimum specified in the *CEQR Technical Manual*) and vegetation in the garden would not be affected.

On May 6/August 6, incremental shadows would be moderate in duration and would cover small portions of the open space during the morning and early afternoon hours. Initially, incremental shadows would enter a small southwestern portion of the community garden (see **Figure 4-6c**) beginning at 9:18 AM and continuing until 11:24 AM, for a duration of two hours and six minutes. At 11:46, incremental shadows would reenter the community garden in a small, southeastern portion of the open space and continue until 2:17 PM for a duration of two hours and 37 minutes (see **Figure 4-6d**). Prior to 9:18 AM, after 2:17 PM, and between 11:24 and 11:46 AM, the open space would not experience any incremental shadow coverage. The areas of the Pleasant Village Community Garden that would experience incremental shadow coverage feature raised garden beds, landscaped areas, bench seating, and tree plantings. During the morning hours, incremental shadows would enter the open space on a small, thin southwestern portion of the community garden (see **Figure 4-6c**). By 11:00 AM, incremental shadow coverage would decrease, and would continue to move in an easterly direction until exiting the open space at 11:24 AM. At 11:46 AM, incremental shadows would reenter the open space on a small southeastern portion of the garden, and by 12:30 PM, coverage would continue to increase slightly and move in an easterly direction. By 2:00 PM, incremental shadows would decrease and be concentrated on a small southeastern portion of the open space, and would continue to move in an easterly direction and decrease in coverage until exiting the open space at 2:17 PM (see **Figure 4-6d**). As shadows are not static and move from west to east throughout the day, the community

garden's sunlight-sensitive amenities would continue to receive some direct sunlight on the May 6/August 6 representative analysis day, and the community garden would continue to receive adequate sunlight during the growing season (at least the four- to six-hour minimum specified in the *CEQR Technical Manual*) and vegetation in the garden would not be affected.

On June 21, incremental shadows would be moderate in duration and would cover minimal portions of the open space during the morning and early afternoon hours. Initially, incremental shadows would enter a small southwestern portion of the community garden (see **Figure 4-6e**) beginning at 9:54 AM and continuing until 11:09 AM, for a duration of one hour and 15 minutes. At 12:49 PM, incremental shadows would reenter the community garden in a small, southeastern portion of the open space and continue until 2:11 PM for a duration of one hour and 22 minutes (see **Figure 4-6e**). Prior to 9:54 AM, after 2:11 PM, and between 11:09 AM and 12:49 PM, the open space would not experience any incremental shadow coverage. The areas of the Pleasant Village Community Garden that would experience incremental shadow coverage feature raised garden beds, landscaped areas, bench seating, and tree plantings. During the morning hours, incremental shadows would enter the open space on a small southwestern portion of the community garden (see **Figure 4-6e**). By 10:30 AM, incremental shadow coverage would continue to move in an easterly direction and decrease in size until exiting the open space at 11:09 AM. At 12:49 PM, incremental shadows would reenter the open space on a small southeastern portion of the garden, and by 1:30 PM, coverage would continue to increase slightly and move in an easterly direction until exiting the open space at 2:11 PM (see **Figure 4-6e**). As shadows are not static and move from west to east throughout the day, the community garden's sunlight-sensitive amenities would continue to receive some direct sunlight on the June 21 representative analysis day, and the community garden would continue to receive adequate sunlight during the growing season (at least the four- to six-hour minimum specified in the *CEQR Technical Manual*) and vegetation in the garden would not be affected.

On December 21, incremental shadow coverage would be long in duration and would cover moderate portions of the open space during the morning and early afternoon hours. Incremental shadows would enter the community garden at 9:10 AM and continue until the end of the analysis day (2:53 PM) for a duration of five hours and 43 minutes. Prior to 9:10 AM, the open space would not experience any incremental shadow coverage. As indicated in **Figures 4-6f** and **4-6g**, shadow coverage would be concentrated on the northern portions of the open space, which features raised garden beds, landscaped areas, bench seating, and tree plantings. During the morning hours, incremental shadows would enter the open space on a moderate northwestern portion of the community garden fronting Pleasant Avenue (see **Figure 4-6f**). By 11:00 AM, incremental shadow coverage would increase and cover a large, central portion of the open space, and would continue to move in an easterly direction. By 1:00 PM, incremental shadow coverage would decrease slightly and continue to move in an easterly direction. By 2:30 PM, incremental shadows would continue to decrease and be concentrated on a small eastern portion of the open space, and would continue to decrease in coverage and move in an easterly direction until the end of the analysis period (2:53 PM) (see **Figure 4-6g**). As shadows are not static and move from west to east throughout the day, the community garden's sunlight-sensitive amenities would continue to receive some direct sunlight on the December 21 representative analysis day. In addition, as December 21 falls outside the plant growing season defined by the *CEQR Technical Manual*, vegetation would not be affected by the proposed action on this analysis day.

Assessment

Pleasant Village Community Garden would experience incremental shadow coverage on each of the four representative analysis days. Incremental shadow duration would be moderate to long, ranging from two hours and 37 minutes on June 21 to six hours and 14 minutes on March 21/September 21. During the growing season, shadow coverage would not be cast on a single part of the community garden for an extended period of time, allowing the open space's sunlight-sensitive features to receive adequate direct

sunlight throughout the day (at least the four- to six-hour minimum specified in the *CEQR Technical Manual*), and vegetation in the garden, inclusive of fruit bearing trees, would not be significantly threatened (see **Figures 4-6a** through **4-6e**). As shadows are not static and move from west to east throughout the day, the garden's sunlight-sensitive features would continue to receive direct sunlight on each of the four representative analysis days. Further, at no point during any of the representative analysis days would the community garden be completely covered in shadow due to the introduction of new, incremental shadows. In addition, incremental shadows on the open space's passive recreational uses (such as bench seating) during the months surrounding the summer solstice when temperatures are warmer are not expected to significantly affect the usability of the open space. Furthermore, the community garden would continue to receive adequate sunlight during the growing season and vegetation would not be affected. This includes the fruit-bearing trees that serve as a source for food production, consistent with the aforementioned guidance of the *CEQR Technical Manual* regarding minimum sunlight. While incremental shadow coverage would be large and long in duration on December 21, utilization of the community garden in cold weather months is generally expected to be significantly lower, and as such, is not expected to affect the usability of the open space. Additionally, as December 21 is outside the growing season, no vegetation within the community garden would be threatened by incremental shadows. Therefore, as the extent and duration of the incremental shadows would (1) not significantly reduce or completely eliminate direct sunlight exposure on any of the sunlight-sensitive resources found within this open space, and (2) would not significantly alter the public's use or enjoyment of the open space or threaten the viability of vegetation or other resources, incremental shadows on Pleasant Village Community Garden as a result of the proposed action would not be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

Jackie Robinson Community Garden

Jackie Robinson Community Garden is a 0.17-acre community garden located on Manhattan Block 1771, Lots 1, 2, and 5 with frontages along Park Avenue to the west and East 122nd Street to the south. Lots 1 and 2 of the open space are owned by HPD and Lot 5 is owned by DPR. The HPD-owned portion operates under a temporary license agreement with HPD that permits the community garden to use this site on an interim basis until HPD is ready to move forward with its redevelopment. However, as detailed in **Chapter 3, "Open Space,"** the construction and operation of the Proposed Development Site D (Lots 1 and 2) would result in the physical loss of approximately 0.11 acres (4,852 sf) of the Jackie Robinson Community Garden. Therefore, in the future with the proposed action, Jackie Robinson Community Garden would be reduced to a 0.05-acre open space located on Lot 5. The 0.05-acre portion of the community garden that would remain in the With-Action condition features raised gardening beds, landscaped areas, bench seating, and trees (see **Figure 4-7**).

It should also be noted that the 2017 *East Harlem Rezoning Final Environmental Impact Statement (FEIS)* [CEQR No. 17DCP048M] previously analyzed the potential shadow impacts on Jackie Robinson Community Garden from a similar development (i.e., Projected Development Site 69) on Development Site D. As described in Chapter 6, "Shadows," of the *East Harlem Rezoning FEIS*, the Jackie Robinson Community Garden would experience a significant adverse shadow impact due to the development of Projected Development Site 69. According to the FEIS, the site would be developed with a 165-foot tall building, as compared to 142 feet (inclusive of bulkhead) proposed for the Site D development, i.e. somewhat taller. Specifically, incremental shadows would significantly alter the hours of direct sunlight received by the community garden on the analysis days within the growing season (i.e., March 21/September 21, May 6/August 6, and June 21). As much of the community garden would receive less than four hours of direct sunlight – which is the general minimum requirement to support most vegetation – it was anticipated that project-generated shadows from Projected Development Site 69 would result in significant adverse shadow impacts on Jackie Robinson Community Garden. As described in Chapter 21, "Mitigation," of the *East Harlem Rezoning FEIS*, possible mitigation measures included (i) relocating

sunlight-sensitive features within the community garden to avoid sunlight loss; (ii) relocating or replacing vegetation with more shade-tolerant plant species; (iii) undertaking additional maintenance to reduce the likelihood of species loss; or (iv) providing replacement facilities on another nearby site. The FEIS does not discuss whether such mitigation measures would be practicable to address the special characteristics of the garden's fruit-bearing trees. In any event, the FEIS concluded that, although mitigation measures were explored in consultation with NYC Parks, it was found that there are no reasonable means to partially or fully mitigate the significant adverse shadows impact. In the absence of feasible mitigation, the significant adverse shadow impact on Jackie Robinson Garden would be unavoidable.

The proposed action would result in new incremental shadows of varying duration and coverage on each of the four representative analysis days at Jackie Robinson Community Garden. Incremental shadows would last for a total of approximately three hours and four minutes (from 1:25 to 4:29 PM) on March 21/September 21, approximately four hours and 31 minutes (from 12:47 to 5:18 PM) on May 6/August 6, approximately five hours and 20 minutes (from 12:41 to 6:01 PM) on June 21, and approximately 56 minutes (from 1:57 to 2:53 PM) on December 21 (see **Table 4-4**).

On March 21/September 21, incremental shadow coverage would be long in duration and would cover moderate portions of the open space during the afternoon hours. Incremental shadows would enter the community garden at 1:25 PM and continue until the end of the analysis day (4:29 PM) for a duration of three hours and four minutes. Prior to 1:25 PM, the open space would not experience any incremental shadow coverage. As indicated in **Figures 4-8a** and **4-8b**, shadow coverage would be concentrated on the northern and central portions of the open space, which features raised garden beds, landscaped areas, bench seating, and tree plantings. During the early afternoon hours, incremental shadows would enter the open space on a northeastern portion of the community garden (see **Figure 4-8a**). By 3:15 PM, incremental shadow coverage would increase and be concentrated on a large, central portion of the open space, and would continue to increase in size and move in an easterly direction until the end of the analysis day (4:29 PM) (see **Figure 4-8b**). As shadows are not static and move from west to east throughout the day, the community garden's sunlight-sensitive amenities would continue to receive some direct sunlight on the March 21/September 21 representative analysis day. However, as the open space's sunlight-sensitive features are already subject to substandard sunlight conditions during the morning hours due to existing shadows being cast on the open space on the March 21/September 21 analysis day, the reduction in direct sunlight in the afternoon hours from project-generated incremental shadows would result in some of the sunlight-sensitive features to receive less than adequate sunlight during the growing season (less than the four- to six-hour minimum specified in the *CEQR Technical Manual*). Given the variety of plants, trees, and flowers in the garden, including those that produce food such as fruit-bearing trees, this reduction in direct sunlight could significantly impact the health of these species. Use of the garden includes, among other activities, active maintenance and care of the plantings, the provision of a communal space open to the public during some periods, and food production, and the incremental shadow would likely not affect these activities. Therefore, the incremental shadows would not significantly affect the use or users of this space. However, as noted above, the viability of the vegetation in the garden would potentially be threatened and could result in significant adverse shadow impacts.

On May 6/August 6, incremental shadow coverage would be long in duration and would cover moderate portions of the open space during the afternoon hours. Incremental shadows would enter the community garden at 12:47 PM and continue until the end of the analysis day (5:18 PM) for a duration of four hours and 31 minutes. Prior to 12:47 PM, the open space would not experience any incremental shadow coverage. As indicated in **Figures 4-8c** and **4-8d**, shadow coverage would be concentrated on the northern and central portions of the open space, which features raised garden beds, landscaped areas, bench seating, and tree plantings. During the early afternoon hours, incremental shadows would enter the open space on a northeastern portion of the community garden (see **Figure 4-8c**). By 2:30 PM, incremental shadow coverage would increase and be concentrated on a large, central and northeastern portion of the open space,

and would continue to move in a southeasterly direction. By 4:00 PM, incremental shadow coverage would now decrease slightly and continue to move in a southeasterly direction until the end of the analysis day (5:18 PM) (see **Figure 4-8d**). As shadows are not static and move from west to east throughout the day, the community garden's sunlight-sensitive amenities would continue to receive some direct sunlight on the May 6/August 6 representative analysis day with the exception of 5:09 to 5:18 PM (nine minutes) when incremental shadows would result in the complete elimination of all direct sunlight on the garden's sunlight-sensitive features. In addition, as the open space's sunlight-sensitive features are already subject to substandard sunlight conditions during the morning hours due to existing shadows being cast on the open space on this analysis day, the reduction in direct sunlight in the afternoon hours from project-generated incremental shadows would result in some of the sunlight-sensitive features to receive less than adequate sunlight during the growing season (less than the four- to six-hour minimum specified in the *CEQR Technical Manual*). Given the variety of plants, trees, and flowers in the garden, including those that produce food such as fruit bearing trees, this reduction in direct sunlight could significantly impact the health of these species. Use of the garden includes, among other activities, active maintenance and care of the plantings, the provision of a communal space open to the public during some periods, and food production, and the incremental shadow would likely not affect these activities. For users seeking sunlight, during the limited period when the incremental shadows would eliminate all direct sunlight (between 5:09 and 5:18 PM), other sunlit areas would be available one block to the west at Marcus Garvey Park and one block to the east at Dr. Ronald E. McNair Playground. Therefore, the incremental shadows would not significantly affect the use or users of this space. However, as noted above, the viability of the vegetation in the garden would potentially be threatened and could result in significant adverse shadow impacts.

On June 21, incremental shadow coverage would be long in duration and would cover moderate portions of the open space during the afternoon hours. Incremental shadows would enter the community garden at 12:41 PM and continue until the end of the analysis day (6:01 PM) for a duration of five hours and 20 minutes. Prior to 12:41 PM, the open space would not experience any incremental shadow coverage. As indicated in **Figures 4-8e** through **4-8g**, shadow coverage would be concentrated on the northern and central portions of the open space, which features raised garden beds, landscaped areas, bench seating, and tree plantings. During the early afternoon hours, incremental shadows would enter the open space on a northeastern portion of the community garden (see **Figure 4-8e**). By 2:00 PM, incremental shadow coverage would increase and be concentrated on a large, central and northeastern portion of the open space, and would continue to move in a southeasterly direction. By 3:00 PM, incremental shadow coverage would increase slightly and continue to move in a southeasterly direction (see **Figure 4-8f**). By 4:00 PM, incremental shadow coverage would now begin to decrease slightly and be concentrated on a central portion of the open space, continuing to move in a southeasterly direction. By 5:00 PM, incremental shadow coverage would again increase slightly and be concentrated on the southern half of the open space, and would continue to move in a southeasterly direction until the end of the analysis day (6:01 PM) (see **Figure 4-8g**). As shadows are not static and move from west to east throughout the day, the community garden's sunlight-sensitive amenities would continue to receive some direct sunlight on the June 21 representative analysis day with the exception of 5:31 to 6:01 PM (30 minutes) when incremental shadows would result in the complete elimination of all direct sunlight on the garden's sunlight-sensitive features. Additionally, as the open space's sunlight-sensitive features are already subject to substandard sunlight conditions during the morning hours due to existing shadows being cast on the open space on this analysis day, the reduction in direct sunlight in the afternoon hours from project-generated incremental shadows would result in some of the sunlight-sensitive features to receive less than adequate sunlight during the growing season (less than the four- to six-hour minimum specified in the *CEQR Technical Manual*). Given the variety of plants, trees, and flowers in the garden, including those that produce food such as fruit-bearing trees, this reduction in direct sunlight could significantly impact the health of these species. Use of the garden includes, among other activities, active maintenance and care of the plantings, the provision of a communal space open to the public during some periods, and food production, and the incremental shadow would likely not affect

this these activities. For users seeking sunlight, during the 30-minute period when incremental shadows would eliminate all direct sunlight on the garden, other sunlit areas would be available one block to the west at Marcus Garvey Park and one block to the east at Dr. Ronald E. McNair Playground. Therefore, the incremental shadows would not significantly affect the use or users of this space. However, as noted above, the viability of the vegetation in the garden would potentially be threatened and could result in significant adverse shadow impacts.

On December 21, incremental shadow coverage would be brief in duration and would cover minimal portions of the open space during the afternoon hours. Incremental shadows would enter the community garden at 1:57 PM and continue until the end of the analysis day (2:53 PM) for a duration of 56 minutes. Prior to 1:57 AM, the open space would not experience any incremental shadow coverage. As indicated in **Figure 4-8h**, shadow coverage would be concentrated on small northern and western portions of the open space, which features raised garden beds, landscaped areas, bench seating, and tree plantings. During the afternoon hours, incremental shadows would enter the open space on a thin northwestern portion of the community garden (see **Figure 4-8h**). By 2:50 PM, incremental shadow coverage would move in a northeasterly direction and cover a small, northern portion of the open space, and would continue to move in a northeasterly direction until the end of the analysis period (2:53 PM) (see **Figure 4-8h**). As shadows are not static and move from west to east throughout the day, the community garden's sunlight-sensitive amenities would continue to receive some direct sunlight on the December 21 representative analysis day. In addition, as December 21 falls outside the plant growing season defined by the *CEQR Technical Manual*, vegetation would not be affected by the proposed action on this analysis day.

Assessment

Jackie Robinson Community Garden would experience incremental shadow coverage on each of the four representative analysis days. Incremental shadow duration would be moderate, ranging from 56 minutes on December 21 to five hours and 20 minutes on June 21. During the growing season, the northern and central portions of the community garden would be cast in a combination of existing and incremental shadow coverage for an extended period of time, resulting in substandard sunlight conditions on the community garden throughout the growing period. Incremental shadow coverage would therefore result in some of the community garden's sunlight-sensitive features, including raised garden beds and landscaped areas, to receive less than adequate direct sunlight during the growing season (less than the four- to six-hour minimum specified in the *CEQR Technical Manual*) (see **Figures 4-8a through 4-8g**). Given the variety of plants and flowers in the garden, the reductions in direct sunlight could significantly impact the health of these species. Use of the garden includes, among other activities, active maintenance and care of the plantings, the provision of a communal space open to the public during some periods, and food production, and the incremental shadow would likely not affect this these activities. In addition, incremental shadows on the open space's passive recreational uses (such as bench seating) during the months surrounding the summer solstice when temperatures are warmer are not expected to significantly affect the usability of the open space. For users seeking sunlight, during the nine- and 30-minute periods on the May 6/August 6 and June 21 representative analysis days, respectively, when incremental shadows would eliminate all direct sunlight on the garden, other sunlit areas would be available one block to the west at Marcus Garvey Park and one block to the east at Dr. Ronald E. McNair Playground. Incremental shadow coverage on December 21, which is outside the growing season, is not expected to affect the usability of the community garden as utilization of the open space in cold weather months is generally expected to be significantly lower. Additionally, as December 21 is outside the growing season, no vegetation within the community garden would be threatened by incremental shadows on this analysis day. As such, the incremental shadows would not significantly affect the use or users of this space. However, as noted above, the viability of the vegetation in the garden would potentially be threatened and could result in significant adverse shadow impacts. Therefore, as the extent and duration of the incremental shadows would (1) significantly reduce or completely eliminate direct sunlight exposure on some of the sunlight-sensitive resources found within this

open space, and (2) would threaten the viability of some vegetation within the open space, incremental shadows on Jackie Robinson Community Garden as a result of the proposed action would be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

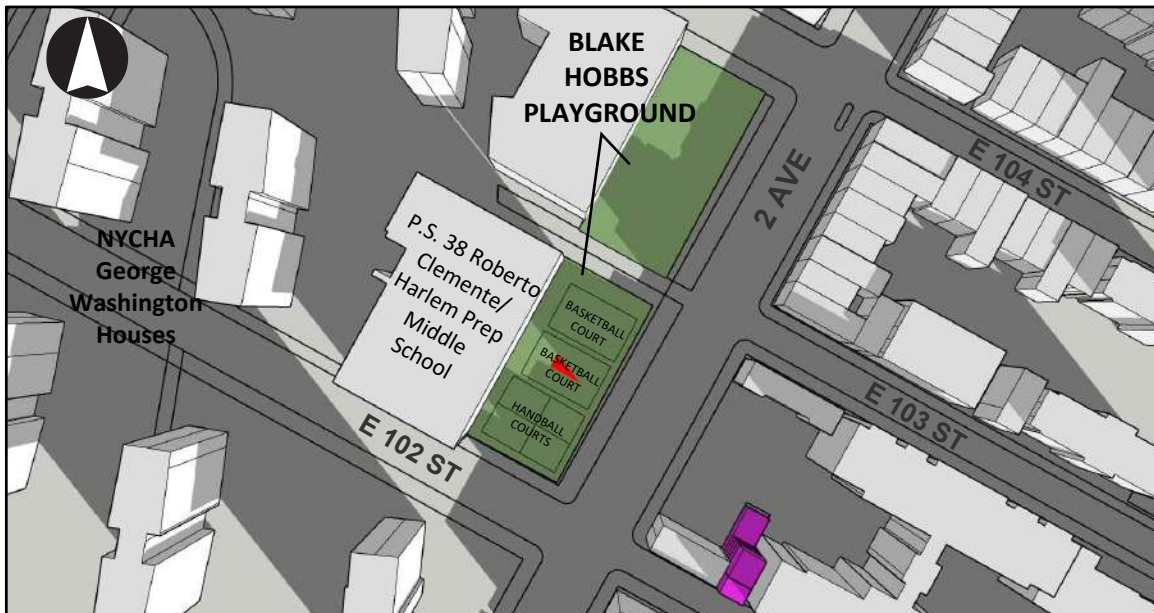
Dr. Ronald E. McNair Playground

Dr. Ronald E. McNair Playground is a 0.60-acre open space with frontages on the north side of East 122nd Street and the south side of East 123rd Street between Lexington Avenue and Third Avenue, located southwest of Development Site D. The playground is owned and operated by New York City Department of Parks and Recreation (DPR), and features playgrounds, spray showers, landscaped areas, tree plantings, and bench seating.

The proposed action would result in new incremental shadows on one of the four representative analysis days at Dr. Ronald E. McNair Playground. Incremental shadows would last for a total of approximately four minutes (from 5:57 to 6:01 PM) on June 21 (see **Table 4-4**). However, as the duration of incremental shadow coverage on the playground would be less than 10 minutes, and as the playground continues to receive substantial direct sunlight throughout the day, incremental shadows would not be considered significant, in accordance with *CEQR Technical Manual* guidance.

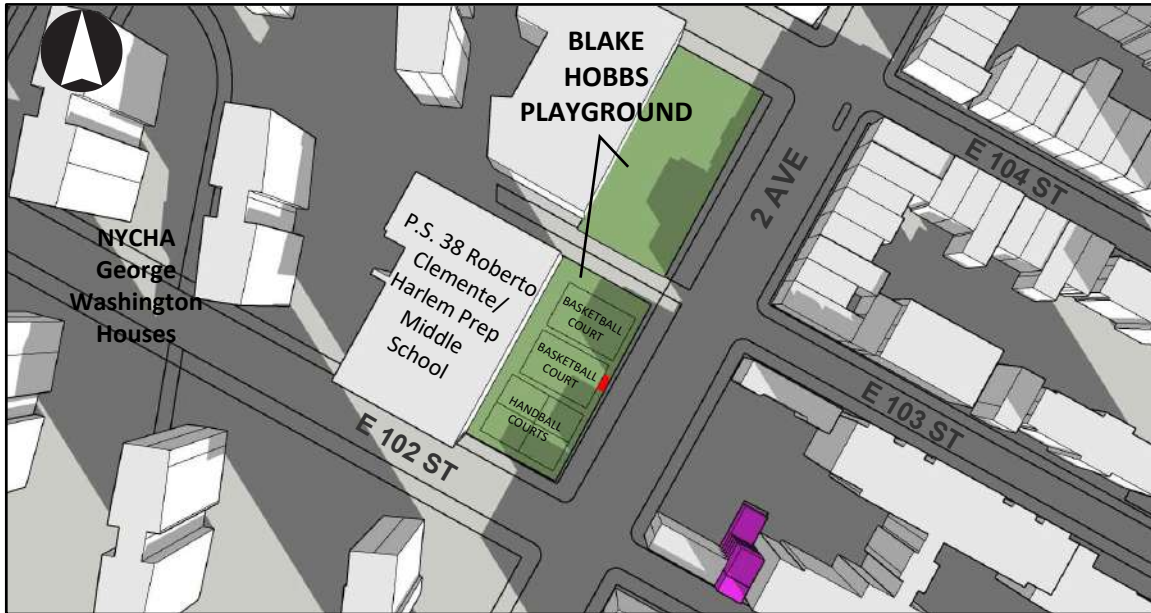


8:51 AM



9:15 AM

Proposed Development
 Open Space
 Incremental Shadow



9:45 AM

 Proposed Development

 Open Space

 Incremental Shadow

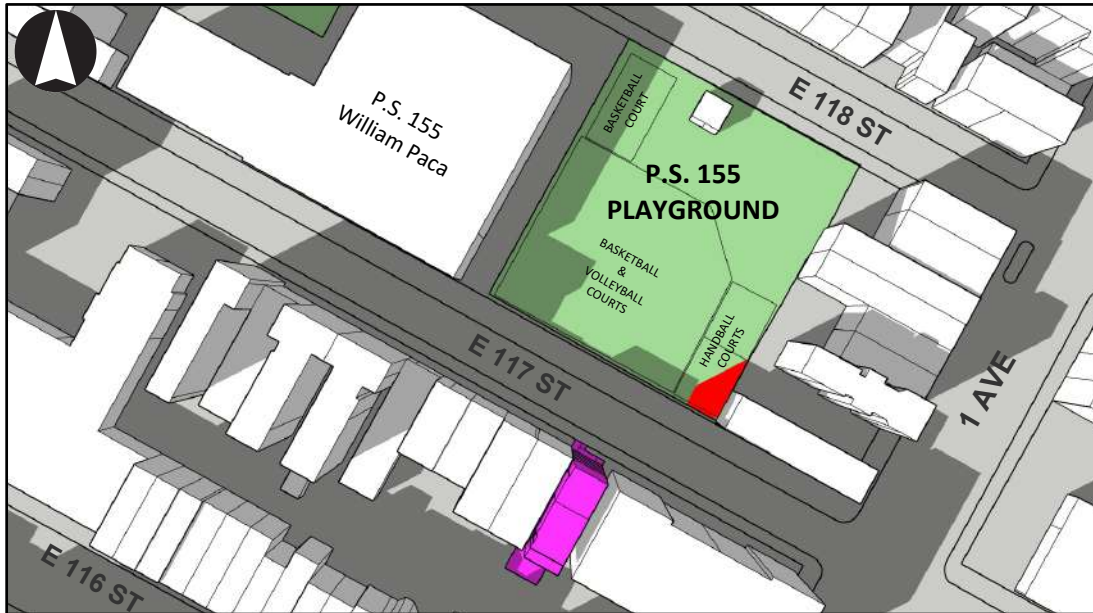


1:30 PM



2:30 PM

Proposed Development
 Open Space
 Incremental Shadow



3:30 PM

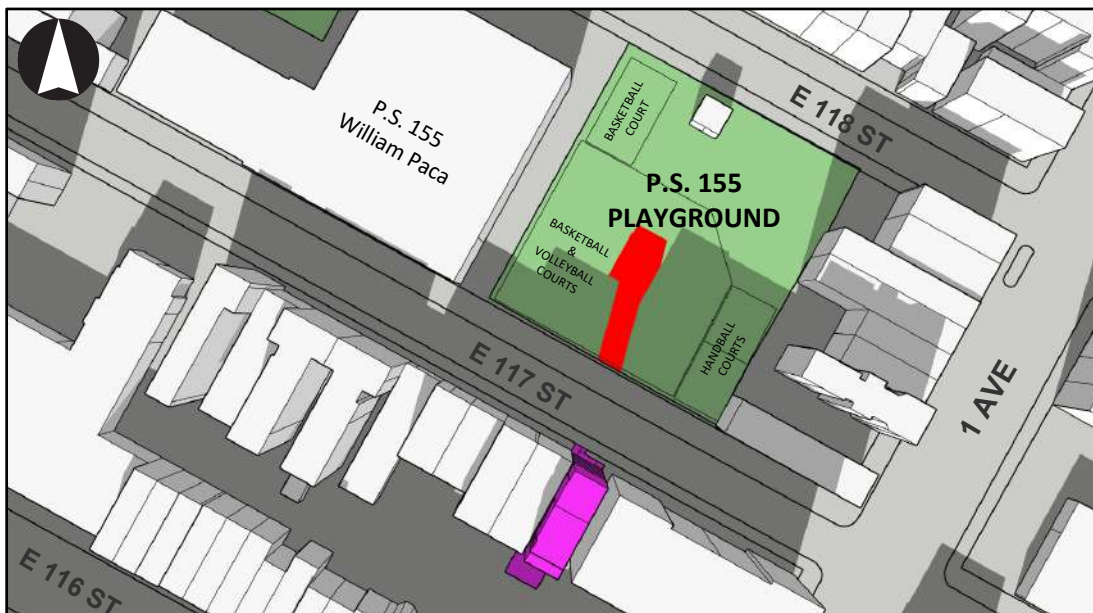
 Proposed Development

 Open Space

 Incremental Shadow



11:00 AM



1:00 PM

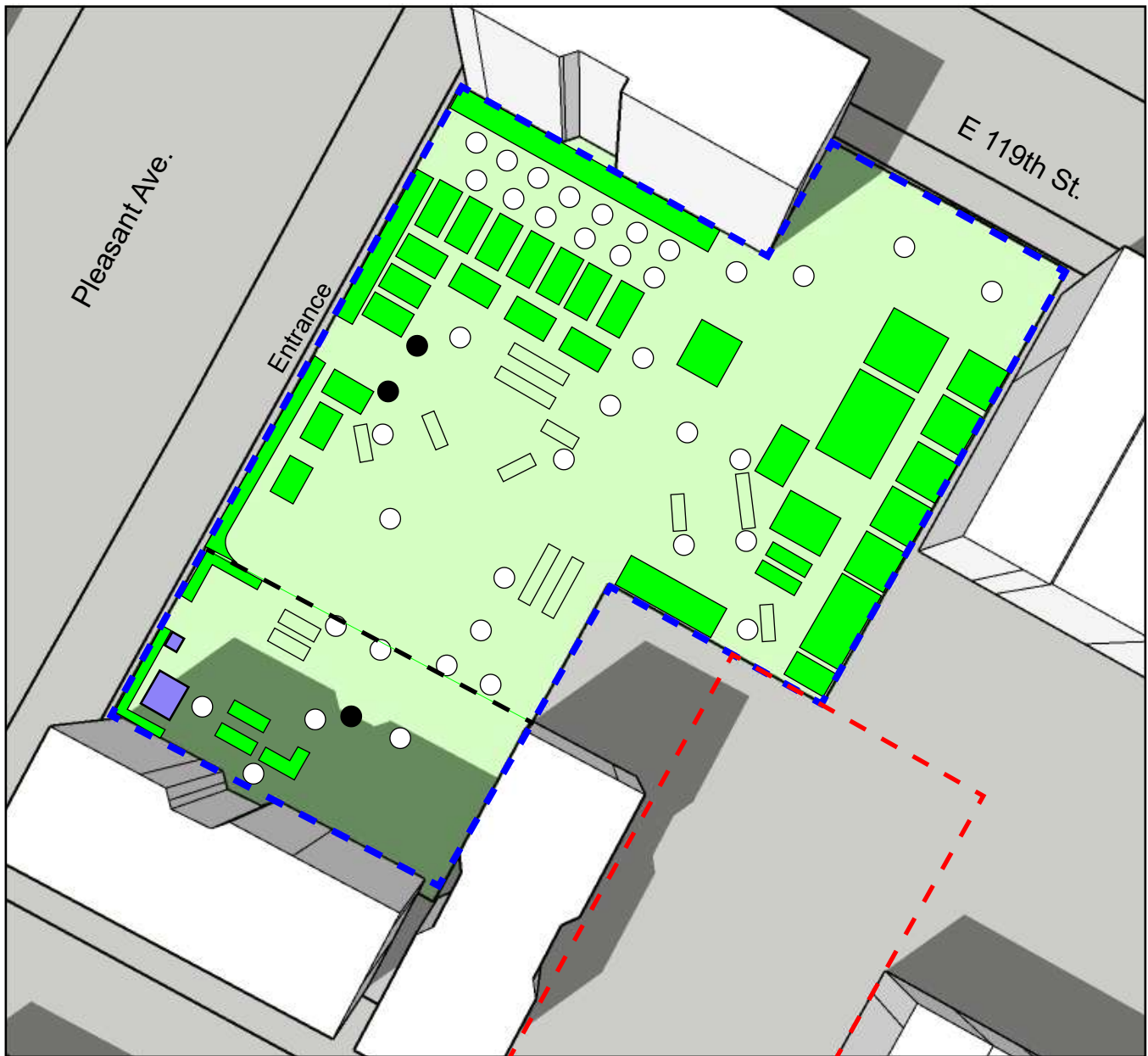
 Proposed Development  Open Space  Incremental Shadow











2:30 PM



Pleasant Village Community Garden
Map of Sunlight-Sensitive Features

**Legend**

- | | | |
|---|--|--|
|  Raised Garden Bed |  Tree Plantings |  Development Site C |
|  Gazebo |  Plant in planter |  Pleasant Village Community Garden |
|  Fence |  Bench | |





9:00 AM



11:00 AM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure 4-5 for Key of Sunlight-Sensitive Features

Pleasant Village Community Garden
Incremental Shadows on March 21/September 21



1:00 PM



2:15 AM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure 4-5 for Key of Sunlight-Sensitive Features



10:00 AM



11:00 AM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure 4-5 for Key of Sunlight-Sensitive Features



12:30 PM



2:00 PM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure 4-5 for Key of Sunlight-Sensitive Features



10:30 AM



1:30 PM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure 4-5 for Key of Sunlight-Sensitive Features



9:30 AM



11:00 AM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure 4-5 for Key of Sunlight-Sensitive Features



1:00 PM



2:30 PM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure 4-5 for Key of Sunlight-Sensitive Features

Jackie Robinson Community Garden
Map of Sunlight-Sensitive Features



Legend



Raised Garden Bed



Tunneled Garden Bed



Gazebo



Tree Plantings



Plant in planter



Bench



Development Site D



Jackie Robinson
Community Garden





2:00 PM



3:15 PM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure E-7 for Key of Sunlight-Sensitive Features

Jackie Robinson Community Garden
Incremental Shadows on March 21/September 21



4:29 PM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure E-7 for Key of Sunlight-Sensitive Features



1:00 PM



2:30 PM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure E-7 for Key of Sunlight-Sensitive Features



4:00 PM



5:18 PM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure E-7 for Key of Sunlight-Sensitive Features



1:00 PM



2:00 PM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure E-7 for Key of Sunlight-Sensitive Features



3:00 PM



4:00 PM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure E-7 for Key of Sunlight-Sensitive Features



5:00 PM



6:01 PM

 Proposed Development	 Open Space	 Incremental Shadow
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*Refer to Figure E-7 for Key of Sunlight-Sensitive Features



2:15 PM



2:50 PM

 Proposed Development  Open Space  Incremental Shadow

*Refer to Figure E-7 for Key of Sunlight-Sensitive Features

I. INTRODUCTION

This chapter describes the transportation characteristics and potential impacts associated with the proposed action, which consists of a disposition of City-owned property (the “proposed action”). As described in **Chapter 1, “Project Description,”** the proposed action would facilitate the development of affordable housing developments (the “Proposed Project”) in the East Harlem neighborhood of Manhattan, Community District 11 (CD11). The Proposed Project would develop six tax lots grouped into four Development Sites (named A through D for identification purposes) with a total of four buildings. The incremental (net) change would result in the addition of 81 affordable dwelling units (DUs) (plus two superintendent’s units for a total of 83 units) and approximately 10,740 gross square feet (gsf) of community facility space. For travel demand forecasting purposes, the community facility space is conservatively assumed to be occupied by medical office uses. Construction of the Proposed Project is expected to be completed in 2023.

II. PRINCIPAL CONCLUSIONS

As shown in **Tables 5-1a** through **5-1d**, each of the proposed developments would generate significantly less than 2020 *City Environmental Quality Review (CEQR) Technical Manual* analysis threshold of 50 vehicle trips during each of the analysis peak hours. Similarly, the proposed developments would each generate less than 200 subway and bus trips during each of the analysis peak hours. Therefore, further quantified traffic and transit analyses are not warranted. As per the *CEQR Technical Manual*, a detailed parking assessment is not needed if the threshold for traffic analysis is not exceeded. Additionally, as shown in **Tables 5-1a** through **5-1d**, each of the proposed developments would each generate less than 200 pedestrian trips during each analysis peak hour. Therefore, no significant adverse impacts are expected, and a detailed pedestrian analysis is not warranted.

III. PRELIMINARY ANALYSIS METHODOLOGY

The *CEQR Technical Manual* describes a two-level screening procedure for the preparation of a “preliminary analysis” to determine if quantified operational analyses of transportation conditions are warranted. As discussed in the following sections, the preliminary analysis begins with a trip generation (Level 1) forecast to estimate the numbers of person and vehicle trips attributable to the proposed action. According to the *CEQR Technical Manual*, if the proposed action is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (a Level 2 analysis) are performed to estimate the incremental trips that would be incurred at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the proposed action would generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a sidewalk, corner area or crosswalk, then further quantified operational analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, parking, and vehicular and pedestrian safety.

IV. LEVEL 1 SCREENING ASSESSMENT

A Level 1 trip generation screening assessment was conducted to estimate the numbers of person and vehicle trips by mode expected to be generated by the proposed action during the weekday AM, midday, and PM and Saturday midday peak hours. These estimates were then compared to the *CEQR Technical Manual* analysis thresholds to determine if Level 2 screening and/or quantified operational analyses would be warranted. The travel demand assumptions used for the assessment are described in the following sections, along with a summary of the travel demand that would be generated by the proposed action. A detailed travel demand forecast is then provided for the proposed action.

Transportation Planning Factors

The transportation planning factors used to forecast travel demand for the Proposed Development's land uses are summarized in **Table 5-1**. The trip generation rates, temporal distributions, modal splits, vehicle occupancies, and truck trip factors for each of the land uses were primarily based on those cited in the *CEQR Technical Manual*, 2013-2017 American Community Survey (ACS) journey-to-work data, and factors developed for recent environmental reviews. Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel demand) and the weekday midday and Saturday peak hours (typical peak periods for retail demand). Additional details on the transportation planning factors used for the travel demand forecast are presented in the *Transportation Planning Factors and Travel Demand Forecast* technical memorandum provided in **Appendix C**. The New York City Department of Transportation (NYCDOT) has reviewed and accepted the transportation planning factors used therein; refer to **Appendix B** for correspondence from NYCDOT.

Residential

The forecast of travel demand for the residential use at each Development Site applied a weekday trip generation rate of 8.075 person trips per DU, a Saturday trip generation rate of 9.6 trips per DU, and temporal distributions of 10 percent, 5 percent, 11 percent, and 8 percent for the weekday AM, midday, PM, and Saturday midday peak hours, respectively, per the *CEQR Technical Manual*. Truck trip generation rates were estimated based on the *CEQR Technical Manual*. The directional (in/out) splits and taxi vehicle occupancies were based on data from the *East Harlem Rezoning FEIS*, 2017. As discussed below, the residential modal splits and auto vehicle occupancies are based on census data from local tracts, and therefore vary by site.

Site A

The residential modal splits were estimated to be 7.5 percent, 1.4 percent, 56.9 percent, 19.0 percent, and 15.2 percent mode shares for private auto, taxi, subway, bus, and walk-only modes, respectively, based on 2013 to 2017 American Community Survey (ACS) Means of Transportation to Work data for Manhattan Census Tract 164. Similarly, the auto vehicle occupancy of 1.04 persons per auto was based on the same source.

Site B

The residential modal splits were estimated to be 16.8 percent, 0 percent, 70.0 percent, 7.1 percent, and 6.1 percent mode shares for private auto, taxi, subway, bus, and walk-only modes, respectively, based on 2013

to 2017 ACS Means of Transportation to Work data for Manhattan Census Tract 188. Similarly, the auto vehicle occupancy of 1.13 persons per auto was based on the same source.

Site C

The residential modal splits were estimated to be 9.4 percent, 0.5 percent, 58.6 percent, 15.3 percent, and 16.2 percent mode shares for private auto, taxi, subway, bus, and walk-only modes, respectively, based on 2013 to 2017 ACS Means of Transportation to Work data for Manhattan Census Tract 178. Similarly, the auto vehicle occupancy of 1.00 persons per auto was based on the same source.

Site D

The residential modal splits were estimated to be 4.3 percent, 0.6 percent, 65.9 percent, 11.5 percent, and 17.7 percent mode shares for private auto, taxi, subway, bus, and walk-only modes, respectively, based on 2013 to 2017 ACS Means of Transportation to Work data for Manhattan Census Tract 196. Similarly, the auto vehicle occupancy of 1.16 persons per auto was based on the same source.

Community Facility (Medical Office)

The forecast of travel demand for the medical office uses at Development Sites A and D used a weekday trip generation rate of 76 person trips per 1,000 sf, a Saturday trip generation rate of 39 person trips per 1,000 sf, and temporal distributions of 11 percent, 13 percent, 9 percent, and 17 percent for the weekday AM, midday, PM, and Saturday midday peak hours, respectively, as per data provided by NYCDOT. The modal splits were estimated to be 1.0 percent, 5.0 percent, 60.0 percent, 5.0 percent, and 29.0 percent for private auto, taxi, subway, bus, and walk-only modes, respectively, based on data provided by NYCDOT. The directional splits and vehicle occupancies of 1.53 persons per auto/taxi were based on data provided by NYCDOT. Truck trip generation rates were estimated based on data from the *2016 East New York Rezoning Proposal FEIS*.

Trip Generation

The net incremental change in person and vehicle trips expected to result from the proposed action by the 2023 analysis year was derived based on the land uses described above and the transportation planning factors shown in **Tables 5-1a through 5-1d**. **Tables 5-2a through 5-2d** presents a summary of the forecast of incremental trips generated by the proposed action by mode, for each development site discretely.

According to the *CEQR Technical Manual*, detailed pedestrian analyses are not required if the proposed development is projected to result in less than 200 peak hour pedestrian trips. As shown below the total incremental walk trips at each proposed development site do not exceed the CEQR threshold during any analyzed peak hour. Therefore, no significant adverse impacts are expected and a detailed pedestrian analysis is not required at these sites.

TABLE 5-1a
Transportation Planning Factors: Development Site A

Land Use:	<u>Residential</u>		<u>Medical Office</u>	
Size/Units:	6	DU	2,497	gsf
Person Trip Generation:	(1)		(4)	
Weekday	8.075		76.0	
Saturday	9.6		39.0	
	per DU		per 1,000 gsf	
Temporal Distribution:	(1)		(4)	
AM	10.0%		11.0%	
MD	5.0%		13.0%	
PM	11.0%		9.0%	
SatMD	8.0%		17.0%	
Modal Splits:	(2)		(4)	
	All Periods		All Periods	
Auto	7.5%		1.0%	
Taxi	1.4%		5.0%	
Subway	56.9%		60.0%	
Bus	19.0%		5.0%	
Walk/Other	15.2%		29.0%	
	100.0%		100.0%	
In/Out Splits:	(3)		(4)	
	In	Out	In	Out
AM	20%	80%	62%	38%
MD	51%	49%	47%	53%
PM	65%	35%	35%	65%
Sat MD	50%	50%	49%	51%
Vehicle Occupancy:	(2,3)		(4)	
Auto	1.04		1.53	
Taxi	1.40		1.53	
Truck Trip Generation:	(1)		(5)	
Weekday	0.06		0.29	
Saturday	0.02		0.29	
	per DU		per 1,000 sf	
Temporal Distribution	(1)		(5)	
AM	12.0%		3.0%	
MD	9.0%		11.0%	
PM	2.0%		1.0%	
Sat MD	9.0%		0.0%	
	In	Out	In	Out
AM/MD/PM/SMD	50.0%	50.0%	50.0%	50.0%

Notes:

- (1) Based on data from *City Environmental Quality Review (CEQR) Technical Manual, 2020*.
- (2) Based on American Community Survey 2013-2017 Means of Transportation to Work data for Manhattan Census Tract 164.
- (3) Based on data from the *East Harlem Rezoning FEIS, 2017*.
- (4) Based on data provided by NYCDOT.
- (5) Based on data from the *East New York Rezoning Proposal FEIS, 2016*.

TABLE 5-1b
Transportation Planning Factors: Development Site B

Land Use:	<u>Residential</u>	
Size/Units:	7	DU
Person Trip Generation:	(1)	
Weekday	8.075	
Saturday	9.6	
	per DU	
Temporal Distribution:	(1)	
AM	10.0%	
MD	5.0%	
PM	11.0%	
SatMD	8.0%	
Modal Splits:	(2)	
	All Periods	
Auto	16.8%	
Taxi	0.0%	
Subway	70.0%	
Bus	7.1%	
Walk/Other	6.1%	
	<hr/>	
	100.0%	
In/Out Splits:	(3)	
	In	Out
AM	20%	80%
MD	51%	49%
PM	65%	35%
Sat MD	50%	50%
Vehicle Occupancy:	(2,3)	
Auto	1.13	
Taxi	1.40	
Truck Trip Generation:	(1)	
Weekday	0.06	
Saturday	0.02	
	per DU	
Temporal Distribution	(1)	
AM	12.0%	
MD	9.0%	
PM	2.0%	
Sat MD	9.0%	
	In	Out
AM/MD/PM/SMD	50.0%	50.0%

Notes:

- (1) Based on data from *City Environmental Quality Review (CEQR) Technical Manual, 2020*.
 (2) Based on American Community Survey 2013-2017 Means of Transportation to Work data for Manhattan Census Tract 188.
 (3) Based on data from the *East Harlem Rezoning FEIS, 2017*.

TABLE 5-1c
Transportation Planning Factors: Development Site C

Land Use:	<u>Residential</u>	
Size/Units:	18	DU
Person Trip Generation:	(1)	
Weekday	8.075	
Saturday	9.6	
	per DU	
Temporal Distribution:	(1)	
AM	10.0%	
MD	5.0%	
PM	11.0%	
SatMD	8.0%	
Modal Splits:	(2)	
	All Periods	
Auto	9.4%	
Taxi	0.5%	
Subway	58.6%	
Bus	15.3%	
Walk/Other	16.2%	
	<hr/>	
	100.0%	
In/Out Splits:	(3)	
	In	Out
AM	20%	80%
MD	51%	49%
PM	65%	35%
Sat MD	50%	50%
Vehicle Occupancy:	(2,3)	
Auto	1.00	
Taxi	1.40	
Truck Trip Generation:	(1)	
Weekday	0.06	
Saturday	0.02	
	per DU	
Temporal Distribution	(1)	
AM	12.0%	
MD	9.0%	
PM	2.0%	
Sat MD	9.0%	
	In	Out
AM/MD/PM/SMD	50.0%	50.0%

Notes:

- (1) Based on data from *City Environmental Quality Review (CEQR) Technical Manual, 2020*.
- (2) Based on American Community Survey 2013-2017 Means of Transportation to Work data for Manhattan Census Tract 178.
- (3) Based on data from the *East Harlem Rezoning FEIS, 2017*.

TABLE 5-1d
Transportation Planning Factors: Development Site D

Land Use:	<u>Residential</u>		<u>Medical Office</u>	
Size/Units:	52	DU	8,243	gsf
Person Trip Generation:	(1)		(4)	
Weekday	8.075		76.0	
Saturday	9.6		39.0	
	per DU		per 1,000 gsf	
Temporal Distribution:	(1)		(4)	
AM	10.0%		11.0%	
MD	5.0%		13.0%	
PM	11.0%		9.0%	
SatMD	8.0%		17.0%	
Modal Splits:	(2)		(4)	
	All Periods		All Periods	
Auto	4.3%		1.0%	
Taxi	0.6%		5.0%	
Subway	65.9%		60.0%	
Bus	11.5%		5.0%	
Walk/Other	17.7%		29.0%	
	100.0%		100.0%	
In/Out Splits:	(3)		(4)	
	In	Out	In	Out
AM	20%	80%	62%	38%
MD	51%	49%	47%	53%
PM	65%	35%	35%	65%
Sat MD	50%	50%	49%	51%
Vehicle Occupancy:	(2,3)		(4)	
Auto	1.16		1.53	
Taxi	1.40		1.53	
Truck Trip Generation:	(1)		(5)	
Weekday	0.06		0.29	
Saturday	0.02		0.29	
	per DU		per 1,000 sf	
Temporal Distribution	(1)		(5)	
AM	12.0%		3.0%	
MD	9.0%		11.0%	
PM	2.0%		1.0%	
Sat MD	9.0%		0.0%	
	In	Out	In	Out
AM/MD/PM/SMD	50.0%	50.0%	50.0%	50.0%

Notes:

- (1) Based on data from the *City Environmental Quality Review (CEQR) Technical Manual, 2020*.
- (2) Based on American Community Survey 2013-2017 Means of Transportation to Work data for Manhattan Census Tract 196.
- (3) Based on data from the *East Harlem Rezoning FEIS, 2017*.
- (4) Based on data provided by NYCDOT.
- (5) Based on data from the *East New York Rezoning Proposal FEIS, 2016*.

Table 5-2a, Development Site A: Summary of Incremental Peak Hour Travel Demand

	Weekday AM	Weekday Midday	Weekday PM	Saturday Midday
Vehicle Trips	+2	+4	+2	0
Subway Trips	+16	+16	+15	+14
Bus Trips	+2	+2	+2	+2
Pedestrian Trips¹	+25	+25	+21	+21

Notes:

1. Pedestrian Trips include walk-only, vehicle, subway and bus trips.
2. Refer to **Appendix C** for details.

Table 5-2b, Development Site B: Summary of Incremental Peak Hour Travel Demand

	Weekday AM	Weekday Midday	Weekday PM	Saturday Midday
Vehicle Trips	+1	0	+1	0
Subway Trips	+4	+2	+5	+4
Bus Trips	0	0	0	0
Pedestrian Trips¹	+5	+2	+6	+5

Notes:

1. Pedestrian Trips include walk-only, vehicle, subway and bus trips.
2. Refer to **Appendix C** for details.

Table 5-2c, Development Site C: Summary of Incremental Peak Hour Travel Demand

	Weekday AM	Weekday Midday	Weekday PM	Saturday Midday
Vehicle Trips	+1	+0	+2	+2
Subway Trips	+10	+3	+8	+8
Bus Trips	+2	+2	+3	+2
Pedestrian Trips¹	+15	+7	+16	+14

Notes:

1. Pedestrian Trips include walk-only, vehicle, subway and bus trips.
2. Refer to **Appendix C** for details.

Table 5-2d, Development Site D: Summary of Incremental Peak Hour Travel Demand

	Weekday AM	Weekday Midday	Weekday PM	Saturday Midday
Vehicle Trips	+5	+4	+6	+6
Subway Trips	+71	+64	+65	+61
Bus Trips	+8	+6	+8	+6
Pedestrian Trips¹	+108	+98	+99	+93

Notes:

1. Pedestrian Trips include walk-only, vehicle, subway and bus trips.
2. Refer to **Appendix C** for details.

I. INTRODUCTION

The New York City Department of Housing Preservation and Development (HPD), the applicant, on behalf of Las Raices East Harlem LLC, the project sponsor, proposes the development of four new affordable housing developments on four separate development sites in the East Harlem neighborhood of Manhattan. These sites are:

- Development Site A is located at 303 E 102nd Street (Block 1674, Lot 104) and the development would be a 5-story (approximately 53 feet and 8 inches-tall) residential/community facility building that would have 8,976 gross square foot (gsf) of floor area. The proposed building would also have a rooftop mechanical bulkhead that would be 62feet and 8 inches-tall.
- Development Site B is located at 338 E 117th Street (Block 1688, Lot 34) and the development would be a 5-story (approximately 53 feet and 2 inches -tall) residential building that would have 8,306 gsf of floor area. The proposed building would also have a rooftop mechanical bulkhead that would be 62 feet and 2 inches-tall.
- Development Site C is located at 505 E 118th Street (Block 1815, Lots 5 and 6) and the development would be a 6-story (approximately 62 foot-tall) residential building that would have 17,310 gsf of floor area. The proposed building would also have a rooftop mechanical bulkhead that would be 70 feet and 2 inches tall.
- Development Site D is located at 1761 Park Avenue (Block 1771, Lots 1 and 2) and the development would be a 13-story (approximately 134 foot-tall) residential building that would have 55,670 gsf of floor area. The proposed building would also have a rooftop mechanical bulkhead that would be 142 feet tall.

In accordance with the 2020 *New York City Environmental Quality Review Technical Manual (CEQR TM)*, the following air quality analyses may be required to determine whether the potential air quality impacts of the development would be significant:

HVAC Analysis. Emissions released from the heating, ventilation, and air conditioning (HVAC) systems of each of the proposed buildings could potentially impact the other project buildings or impact existing land uses. A review of existing land uses using NYC Oasis interactive mapping application and Google aerial photos show that there are existing buildings located within 400 feet of the project area that are taller than the proposed developments.

Industrial Source Analysis. A review of land use within 400 feet of proposed development sites identified possible industrial sources. The air toxic emissions from the facilities could impact the proposed developments. Actual permits were requested and obtained from the New York City Department of Environmental Protection (NYCDEP).

Large Emission Source Analysis. A review of the New York State Department of Environmental Conservation (NYSDEC) permit database and Google aerial images identified a large combustion emission source having a State Facility Permit within 1,000 feet of proposed developments. In accordance with *CEQR* guidance, “All Major or Large emission sources within the 1,000-foot study area that may not be properly accounted for in the background concentrations should be identified along with their stack parameters and emission calculations. A search should be conducted beyond the 1,000-foot initial study

area to identify any existing sources that have the potential to significantly add to pollutant loadings at the identified sensitive receptors.”

In addition, a review of existing land uses using New York City’s Open Accessible Space Information System (OASIS) interactive mapping application shows that there are numerous existing buildings located within 400 feet of the development sites that are taller or the same height as the proposed buildings. The analysis conducted for this project employed the procedures and methodologies prescribed in the *CEQR TM*, and was conducted to determine whether the impacts of the HVAC emissions from the proposed developments on existing land uses would have the potential to be significant.

II. PRINCIPAL CONCLUSIONS

HVAC Analysis

The proposed sites are located more than 400 feet from one another and therefore, could not impact each other. As such, no project-on-project analysis was warranted. However, each building’s HVAC system individually could impact nearby taller existing buildings. Therefore, a project-on-existing analysis was conducted. A screening-level analysis determined that, with the LDA requirements, the potential HVAC impacts of the proposed development on these nearby taller buildings would not be significant.

Industrial Source Analysis

A review of the NYCDEP database identified four (4) possible nearby existing industrial facilities. The permits for these facilities are PR008416, PB001011, PB046511, and PB517103. A review of these permits determined that the first three of these permits are for minor combustion installations or emergency generators. As such, these permits are not for industrial sources with toxic air pollutants. In addition, the fourth permit (Permit # PB517103) is for a dry-cleaning facility and, based on recent NYCDEP recommendations, dry cleaning facilities with 4th-generation emission control equipment are currently heavily regulated and do not require an air quality analysis. Based on this review, it was concluded that there are no industrial sources with toxic air emissions within 400-feet of the study area that have the potential to significantly impact the proposed developments and, as such, no industrial source analysis is warranted.

Large Emission Source Analysis

The analysis conducted employed the procedures and methodologies prescribed in the *CEQR TM* to determine whether the impacts of nearby large emission source emissions on the proposed developments could be significant. Potential impacts of the NO₂, PM_{2.5}, PM₁₀, and SO₂ emissions from Metropolitan Hospital’s boilers on Site A with both natural gas and fuel oil were estimated, and the results compared with the 24-hour/annual PM_{2.5} *CEQR* significant impact criteria and applicable National Ambient Air Quality Standards (NAAQS) (i.e., the 1-hour/annual NO₂, 1-hour SO₂, and 24-hour PM₁₀ NAAQS). The result of dispersion analysis for both types of fuels is that PM_{2.5} impacts are less than *CEQR* significant impact criteria, and total PM_{2.5}, PM₁₀, NO₂, and SO₂ concentrations are below the applicable NAAQS. Therefore, it is concluded that Metropolitan Hospital’s boiler emissions, firing either natural gas or fuel oil #2, would not significantly impact the proposed development.

Updated Project Dimensions

Subsequent to the completion of the air quality analysis, the dimensions of the buildings were modified slightly. With one exception, the differences in building heights between those evaluated in this report and the final design are less than 1 inch. The only exception is Site D, which was 134-feet tall but is now 142-feet tall. However, Site D was and still is taller than the nearby existing buildings and would therefore not cause any significant air quality impacts. As such, the small changes in building heights in the final design would not measurably affect the results of this analysis.

III. METHODOLOGY

HVAC Analysis

A screening-level analyses were conducted to predict whether the potential impacts of the proposed development on existing buildings that are of similar or greater height would be significant.

Industrial Source Analysis

A review of the NYCDEP database identified four (4) possible nearby existing industrial facilities. The permits for these facilities are PR008416, PB001011, PB046511, and PB517103. A review of these permits determined that the first three of these permits are for minor combustion installations or emergency generators. As such, these permits are not for industrial sources with toxic air pollutants. In addition, the fourth permit (Permit # PB517103) is for a dry-cleaning facility and, based on recent NYCDEP recommendations, dry cleaning facilities with 4th-generation emission control equipment are currently heavily regulated and do not require an air quality analysis.

Based on this review, it was concluded that there are no industrial sources with toxic air emissions within 400-feet of the study area that have the potential to significantly impact the proposed developments and, as such, no industrial source analysis is warranted.

Large Emission Source Analysis

The analysis that was conducted employed the procedures and methodologies prescribed in the *CEQR TM* to determine whether the impacts of nearby large emission source emissions on the proposed developments could be significant.

IV. ANALYSIS

HVAC Analysis

The proposed development buildings are relatively small, and the HVAC systems of each building would therefore emit relatively low amounts of emissions. However, the potential impacts on adjacent taller buildings could still be significant.

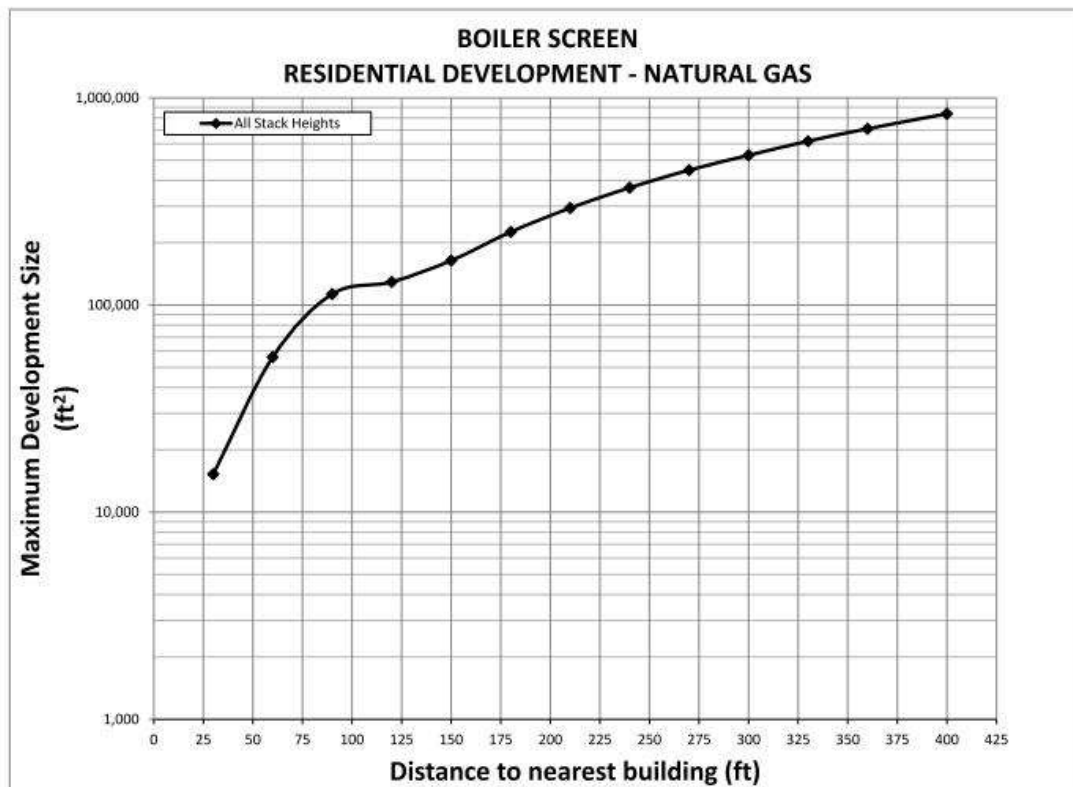
Using the attached boiler screen (Figure 6-1), which was provided by DEP, for residential development with a natural gas boiler, the results of the screening analysis are as follows:

- Development Site A – Based on the development size, the HVAC exhaust stack needs to be set

back 30 feet from the closest window or air intake of the nearby building to preclude significant boiler impact.

- Development Site B – Based on the development size, the screening distance is approximately 30 feet. Adjacent buildings are of similar height; therefore, no detailed dispersion modeling is necessary.
- Development Site C – Based on the development size, the screening distance is approximately 35 feet. The two adjacent buildings within this screening distance are approximately 5 stories, whereas the proposed project building is 6 stories. Therefore, Development Site C screens out and no detailed dispersion modeling is necessary.
- Development Site D – Based on the development size, the screening distance is 60 feet. There are no buildings of similar or greater height within 60 feet; therefore, Development Site D screens out.

Figure 6-1: Boiler Screen for Residential Development with a Natural Gas Boiler



Large Emission Source Analysis

The source that was identified is the NYC-HH-Metropolitan Hospital, located at 1901 1st Avenue (Block 1669 Lot 1) -- approximately 850 feet from Site A. Using the NYSDEC Title V and State Facility permit database and a "Search DEC Permit Applications Data" application, it was determined that the Metropolitan Hospital currently has an Air State Facility permit (NYSDEC ID: 2620400058) that defines the facility as a large (by *CEQR* definition) emission source.

Metropolitan Hospital's heating system underwent several modifications. In 2010, the facility had an Air Title V permit with boilers firing fuel #6 oil, which defines it as a Major Emission Source. After modification, the facility changed to fuel oil #6 boilers, and accepted 24.5 tons per year cap on its annual NOx emissions. As a result, the Title V facility permit is no longer required.

Since 2015, the Hospital has been operating under a State Air Facility Permit. The current permit (Permit ID 2-6204-00058/0004) contains two modifications (Mod 0 and Mod 1). The effective date of Mod 0 is 05/06/2015 and the effective date Mod 1 is 04/04/2016, with both modifications expiring in 05/05/2025. Mod 0 is for the operation of two (2) distillate oil-fired boilers that will be shut down once the three natural-gas boilers addressed in this permit application are constructed. The facility, under this permit, utilizes distillate fuel oil #2 with a sulfur content of 0.0015 percent by weight. Mod 1 is for the construction and operation of the three (3) permanent natural gas-fired boilers. The hospital also operates emergency generators, petroleum storage tanks, and laboratory fume hoods, all of which are exempt from permitting.

This Metropolitan Hospital complex is within approximately 850 feet of the Site A but more than 3,000 feet from the other development sites. Therefore, the only Site A would be affected by Metropolitan Hospital's boiler emissions while the other three sites would not be significantly impacted. Therefore, a detailed air quality analysis was conducted to determine whether the potential impacts of Metropolitan Hospital emissions on Site A would be significant.

Based on current permit modifications, the following three scenarios were investigated:

Scenario 1: An analysis of the potential impacts of emissions from two (2) oil-fired boilers (Unit U-T0001) with each boiler having its own exhaust stack.

Scenario 2: An analysis of the potential impacts of emissions from three (3) natural gas-fired boilers (Unit U-00001) from one common exhaust stack; and

Scenario 3: An analysis of the potential impacts of emissions from fuel oil as a backup using the same emission unit (U-00001) as for natural gas. This is because the permit lists particulate the emission factor for this operation as 0.1 lb/MMBtu, which is higher than the appropriate emission factor provided in USEPA's AP-42. Conservatively, it was assumed that all particulates would be in the form of PM_{2.5}.

Combustion Equipment

Under Mod 0, the heating plant includes two identical Victory Energy boilers burning distillate oil, rated at a maximum fuel input of 47.8 MMBtu/hr each (Emission Unit U-T0001).

Under Mod 1, the heating plant includes three identical Victory Energy boilers rated at a maximum fuel input of 42.1 MMBtu/hr each. They can burn either natural gas or fuel oil as backup fuel but primary natural gas (Emission Unit U-00001).

Emission Points

The natural gas and fuel-oil fired emission sources (Unit U-00001 and U-T0001) have different stack parameters (heights, diameters, etc.) and locations. According to permit, emissions from the fuel oil-fired boilers (Emission Unit U-T0001) would be released from two stacks while emissions from the three-natural gas-fired boilers would be released through one stack (Emission Unit U-00001). Geographical coordinates for all stacks under each modification are given in the Universal Transverse Mercator System (UTM, km), as follows:

- Unit U-T0001 (fuel oil) -- Emission Point TSTK1, UTM Coordinates: 589.1 km (E) and 4515.39 km (N)
- Unit U-T0001 (fuel oil) -- Emission Point TSTK2, UTM Coordinates: 589.103 km (E) and 4515.394 km (N)
- Unit U-00001 (nat gas) -- Emission Point B0001, UTM Coordinates: 589.032 km (E) and 4515.443 km (N)

According to permit, both emission points for emission unit U-T0001 with fuel oil (TSTK1 and TSTK2) would be located on a temporary building (Building Temp) while emission points for U-00001 would be located on the facility's Main Building.

Based on visual observation of Google maps and/or other available maps, the Metropolitan Hospital complex includes multiple buildings of various heights – from 24 feet to 203 feet (**Figure 6-2**). However, the UTM coordinates listed in permit do not seem to correspond any actual stack locations. No tall roof-top stack or standing alone stack could be identified based on these coordinates. No building higher than 203 feet within the Hospital complex that could house a 237-foot-tall stack from the natural gas-burning boilers could be found. It also could be that the three proposed natural-gas boilers are not yet constructed or not yet displayed on Google maps. However, the coordinates listed in permit allowed the stack location within the Hospital buildings to be approximated. The tallest 203-foot-tall Main building was assumed to be the location where the stack from natural gas boilers would be placed since its location coincides with approximate UTM coordinates of U-0001 for the natural gas-fired boilers.

The two 30-foot tall stacks associated with U-T0001 for fuel oil-fired boilers were assumed to be located on the low-level building that is listed in the permit as the TEMP building. It was also assumed that the approximately 30-foot-tall building on the eastern side of the Main building would be where the stacks for U-T0001 are located. This location coincides with UTM coordinates listed in the permit for the fuel oil-fired boilers.

Based on these assumptions, the approximated stack locations under each permit modification were drawn on the shapefile used as a base map for AERMOD modeling. The top views of Site A together with the Metropolitan Hospital stacks under both fuel alternatives are shown in **Figures 6-3**.

Figure 6-2: Metropolitan Hospital Complex



Figure 6-3: View of Hospital Stack from Natural Gas-firing Boilers and Site A

Stack Parameters

Parameters for the exhaust stacks on the Metropolitan Hospital buildings are as follows:

- Fuel Oil Unit U-T0001, TSTK1 -- Height = 30 feet, Diameter = 30 inches.
- Fuel Oil Unit U-T0001, TSTK2 -- Height = 30 feet, Diameter = 30 inches.
- Natural Gas Unit U-00001, B0001 -- Height = 237 feet, length = 108 inches, and width = 84 inches (The rectangular stack diameter was substituted for by an equivalent round diameter of 2.64 meters).

The permit for Metropolitan Hospital does not list stack exit temperatures and velocities. Therefore, an exhaust temperature of 300 deg-F (422 deg-K), which is applicable for boilers, was used for this analysis, and an exit velocity of 21 feet per second, which is applicable for boilers greater than 15 MMBtu/hr, was applied.

Regulated Pollutants

The Metropolitan Hospital burning natural gas as a primary fuel and with distillate fuel oil #2 uses ultra-low sulfur diesel (USLD) with a sulfur content of 15 ppm (0.0015%). The facility's potential to emit (PTE) for nitrogen oxide (NO_x) is limited to 49,800 pounds per year (24.9 tons/year). The State Facility permit regulates only two (2) pollutants – oxides of nitrogen (NO_x) and particulates.

Relevant Air Pollutants

The criteria pollutants considered for analysis are particles smaller than 2.5 microns (PM_{2.5}), particles smaller than 10 microns (PM₁₀), nitrogen dioxide (NO₂) and sulfur dioxide (SO₂). PM_{2.5} and PM₁₀ are fractions of total particulate matter. These four pollutants, which are associated both with natural gas and distillate fuel oil #2 combustion, were considered in this analysis.

Applicable Air Quality Standards and Significant Impact Criteria

As required by the Clean Air Act, NAAQS have been established for the criteria pollutants by EPA. The NAAQS are concentrations set for each of the criteria pollutants to protect public health and the nation's welfare, and New York has adopted the NAAQS as the State ambient air quality standards.

In addition to the NAAQS, the *CEQR TM* requires that projects subject to CEQR apply PM_{2.5} significant impact criteria (based on concentration increments) developed by the New York City Department of Environmental Protection (NYCDEP) to determine whether potential adverse PM_{2.5} impacts would be significant. If the estimated impacts of a proposed project are less than these increments, the impacts are not considered to be significant. This analysis addressed compliance of the potential impacts with the 24-hour and annual PM_{2.5} CEQR significant incremental impact criteria as well as with its respective NAAQS. Compliance with 1-hour/annual NO₂, 24-hour PM₁₀, and 1-hour SO₂ NAAQS is also demonstrated.

The current standards and CEQR significant impact criteria that were applied to this analysis, together with their health-related averaging periods, are provided in **Table 6-1**.

Table 6-1: Applicable National Ambient Air Quality Standards and CEQR Threshold Values

Pollutant	Averaging Period	NAAQS	CEQR Thresholds
NO ₂	1 Hour	0.10 ppm (188 µg/m ³)	--
	Annual	.053 ppm (100 µg/m ³)	--
PM _{2.5}	24 Hour	35 µg/m ³	8.7
	Annual	12 µg/m ³	0.3
PM ₁₀	24 Hour	150 µg/m ³	--
SO ₂	1 Hour	75 ppb (196 µg/m ³)	--

NO₂ NAAQS

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO_x in these emissions is then gradually converted to NO₂, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source).

The 1-hour NO₂ NAAQS standard of 0.100 ppm (188 µg/m³) is the 3-year average of the 98th percentile of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modelling approach for estimating 1-hour NO₂ concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100%) conversion of NO_x to NO₂; Tier 2 ARM2 applies a conservative ambient NO_x/NO₂ ratio to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's Plume Volume Molar Ratio Method (PVMRM) module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO₂ within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO₂ concentrations or total 1-hour NO₂ concentrations (if hourly NO₂ background concentrations are added internally within the model) and averages these values over the numbers of the years modelled. Total estimated concentrations are generated in the statistical form of the 1-hour NO₂ NAAQS format and can be directly compared with the 1-hour NO₂ NAAQS standard. Based on NYCDEP recommendations, the in-stack NO_x/NO₂ ratio for PVMRM module of 0.5 and the value of single missing ozone background value of 0.04 ppm was applied. In-stack NO_x/NO₂ ratio for PVMRM module of 0.5 is also the EPA current default value.

Based on New York City Department of Planning (NYCDEP) guidance, Tier 1, as the most conservative approach, should initially be applied as a preliminary screening tool to determine whether violations of the NAAQS is likely to occur. If exceedances of the 1-hour NO₂ NAAQS were estimated, the less conservative Tier 3 approach should be applied.

The annual NO₂ standard is 0.053 parts per million (ppm or 100 µg/m³). To conservatively estimate annual NO₂ impacts, a NO₂ to NO_x ratio of 0.75 percent, which is recommended by the NYCDEP for an annual NO₂ analysis, should be applied.

PM_{2.5} CEQR Significant Impact Criteria

CEQR TM guidance includes the following criteria for evaluating significant adverse PM_{2.5} incremental impacts:

Predicted 24-hour maximum PM_{2.5} concentration increase of more than half the difference between the 24-hour PM_{2.5} background concentration and the 24-hour standard.

A 24-hour PM_{2.5} background concentration of 17.5 µg/m³ was obtained from Manhattan JHS-45 monitoring station as the average of the 98th percentile for the latest 3 years of available monitoring data collected by the NYSDEC for 2016-2018. As the applicable background value is 17.5 µg/m³, half of the difference between the 24-hour PM_{2.5} NAAQS and this background value is 8.7 µg/m³. As such, a significant impact criterion of 8.7 µg/m³ was used for determining whether the potential 24-hour PM_{2.5} impacts on the proposed development are considered to be significant.

For an annual average adverse PM_{2.5} incremental impact, according to *CEQR* guidance:

Predicted annual average PM_{2.5} concentration increments greater than 0.3 µg/m³ at any receptor location for stationary sources.

The above 24-hour and annual significant impact criteria were used to evaluate the significance of predicted PM_{2.5} impacts on the proposed development.

Dispersion Analysis

A dispersion modelling analysis that was conducted to estimate the potential impacts from Metropolitan Hospital's boiler emissions on Site A used the latest version of EPA's AERMOD dispersion model 9.0 (EPA version 19191). In accordance with *CEQR* guidance, this analysis was conducted assuming stack tip downwash, urban dispersion surface roughness length, and elimination of calms. AERMOD's Plume Volume Molar Ratio Method (PVMRM) module was utilized for 1-hour NO₂ analysis -- to account for NO_x to NO₂ conversion. Analyses were conducted with and without the effects of wind flow around the proposed building (i.e., with and without downwash) utilizing AERMOD Building Profile Input Program (BPIP) algorithm and both sets of results are reported.

Site Geometry

A digital base map for the AERMOD modelling was developed using the NYCDOP PLUTO shapefile for the project site area together with the proposed building footprint. Metropolitan Hospital buildings footprints were obtained from the New York City Open Data shape files database. These footprints were used to delineate the shape of the Metropolitan Hospital's buildings layout.

Meteorological Data

All analyses were conducted using the latest five consecutive years of meteorological data (2014-2018). Surface data was obtained from LaGuardia Airport and upper air data was obtained from Brookhaven station, New York. The data were processed by Trinity Consultants, Inc. using the current EPA AERMET and EPA procedures. These meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5 years.

Five years of meteorological data were combined into a single multiyear file to conduct 24-hour/annual PM_{2.5} and 1-hour NO₂ as well as other pollutants modelling. The PM_{2.5} special procedure, which is incorporated into AERMOD, calculates concentrations at each receptor for each year modelled, averages those concentrations across the number of years of data, and then selects the highest values across all receptors of the 5-year averaged highest values.

Background Concentrations

Because the nearest monitoring station in Manhattan JHS-45 does not collect hourly ozone and NO₂ background data, hourly NO₂ and hourly ozone background concentrations were developed from data collected at the next closest monitoring station in Queens (Queens College 2) for 5 consecutive years (2014 through 2018) and compiled into AERMOD's required hourly emission (NO₂) and concentration (ozone) data format.

The maximum 1-hour NO₂ background concentration from the Queens College 2 monitoring station is 56.2 ppb (105.6 µg/m³), which is the 3-year average of the 98th percentile of daily maximum 1-hour concentrations, and the annual NO₂ background concentration of 15.2 ppb (28.7 µg/m³) is the maximum annual average for 2016 through 2018.

The maximum annual average PM_{2.5} background concentration from Manhattan JHS-45 monitoring station for 2016-2018 is 7.6 µg/m³. The maximum 24-hour PM₁₀ and 1-hour SO₂ background concentrations from Queens College 2 monitor are 38 µg/m³ and 14.8 µg/m³, respectively.

Receptor Locations

Receptors were placed around all faces of the Site A building, in 10-foot increments on all floor levels, starting at ground level (6 feet) and extending up to 48 feet (height of the upper windows that were assumed to be 5 feet below roof level). To assure that maximum impacts are estimated, more than 150 receptors were considered.

Emission Rates

Emission rates for all pollutants were estimated using the EPA AP-42 emission factors and the heat input of Metropolitan Hospital boilers under each modification. Pollutant emission factors were obtained for uncontrolled small boilers (less than 100 MMBtu/hr) in pounds of pollutant per million standard cubic feet of natural gas-fired (lb/mmscf) and then converted into lb/MMBtu. For natural gas burning, the permit list only particulates (total) without distinguishing between fractions of particulate matter $PM_{2.5}/PM_{10}$. Therefore, emission factors for individual pollutants $PM_{2.5}$ and PM_{10} were applied and, for conservative purposes, the same emission factors, which include both condensable and filterable particles, were used for both $PM_{2.5}$ and PM_{10} for estimating its emission rates from natural gas firing.

For fuel oil burning in the same units as natural gas (Unit U-00001), the permit list particulate emission factor as an average for 2 hours of 0.1 lb/MMBtu. Because this unit is designed to burn natural gas, fuel oil is presumably used only as fuel backup and for short time periods, especially during the winter season. This conservative emission factor of 0.1 lb/MMBtu was applied to both $PM_{2.5}$ and PM_{10} to estimate short-term emission rates. As for fuel-burning units (U-T0001), separate $PM_{2.5}$ and PM_{10} emission factors were obtained from AP-42, as presented below. The emission factors for fuel oil were in units of pounds of pollutant per 1,000 gallons of oil-fired (lb/10³ gallons of oil) and then converted into lb/MMBtu.

Pollutant emission factors used in this analysis are listed below:

Natural Gas (for Boilers Firing Natural Gas)

- NO_x -- 100 lb/mmscf (9.8E-02 lb/MMBtu), AP-42, Table 1.4-1
- $PM_{2.5}$ -- 7.6 lb/mmscf (7.45E-03 lb/MMBtu), which includes condensable and filterable particles (AP-42, Table 1.4-2)
- PM_{10} -- 7.6 lb/mmscf (7.45E-03 lb/MMBtu), which includes condensable and filterable particles (AP-42, Table 1.4-2)
- SO₂ -- 0.6 lb/mmscf (5.88E-04 lb/MMBtu).

Fuel Oil #2 ULSD (for Boilers Firing ULSD Fuel Oil)

- NO_x -- 20 lb/10³ gal (1.43 E-01 lb/MMBtu), AP-42, Table 1.3-1
- $PM_{2.5}$ for fuel-oil when used as backup in unit U-0001 -- 0.1 lb/MMBtu, as in permit
- $PM_{2.5}$ for fuel oil burning in units U-T0001 -- 2.13 lb/10³ gal (1.52E-02 lb/MMBtu), which includes 1.3 lb/10³ gal emission factor for condensable particles less than 1 micron in diameter (Condensable Particulate Matter for Fuel Oil Combustion, AP-42, Table 1.3-2) and 0.83 lb/10³ gal for particles with size of 2.5 microns from "Cumulative Particle Size Distribution and Size-Specific Emission Factors for Uncontrolled Commercial Boilers Burning Residual or Distillate Oil", AP-42, Table 1.3-7
- PM_{10} -- 3.08 lb/10³ gal (2.2E-02 lb/MMBtu) which include filterable particles (AP-42, Table 1.3-1); and particles with size of 10 micron from Table 1.3-7
- SO₂ -- 0.213 lb/10³ gal (1.52E-03 lb/MMBtu) (estimated from equation $SO_2 = 142S$ where S = sulfur content in fuel oil (0.0015%), from "Criteria Pollutant Emission Factors for Fuel Oil Combustion" AP-42, Table 1.3-1

The hospital's permit states that annual NO₂ emissions are capped at 24.5 tons/year (so as not to exceed the established facility limit of 49,000 pounds of NO_x per year). This annual limit is applied to each type of fuel because fuel-oil firing boilers would function independently only until permanent natural gas boilers will be constructed. It was assumed that each type of boiler would operate continuously for the whole year to provide heat and hot water. To estimate short-term emission rates for both natural gas and fuel oil, it was assumed that boilers would operate at 100% load. However, as estimated, the annual load should not exceed approximately 45% to satisfy the established annual NO_x emission limit for each type of fuel of 49,000 lb/year. For fuel oil used as a backup for natural gas in U-0001 units, it was assumed that it would be used for short periods during the three cold winter months (i.e., 2,400 hours).

Estimated short-term and annual emission rates for all pollutants for both natural gas and fuel oil are provided in **Tables 6-2 and 6-3**.

Table 6-2: Estimated Pollutant Emission Rates with Natural Gas Under Air State Facility Permit #2-6204-00058

Pollutant Emission Factors	Units	Total Heat Input	Short-Term Emission Rates		Annual Emission Rates	
lb/MMBtu	#	MMBtu/hr	lb/hr	g/sec	lb/year	g/sec
Natural Gas			PM_{2.5} Emission Rates			
7.45E-03	3	126.3	9.41E-01	1.19E-01	3.71E+03	5.34E-02
			PM₁₀ Emission Rates			
7.45E-03	3	126.3	9.41E-01	1.19E-01	3.71E+03	5.34E-02
			NO_x Emission Rates			
9.80E-02	3	126.3	1.24E+01	1.56E+00	4.88E+04	7.02E-01
			SO₂ Emission Rates			
5.88E-04	3	126.3	7.43E-02	9.36E-03	2.93E+02	4.21E-03

Table 6-3: Estimated Pollutant Emission Rates with Fuel Oil ULSD Under Air State Facility Permit #2-6204-00058

Pollutant Emission Factors	Units	Total Heat Input	Short-Term Emission Rates		Annual Emission Rates	
lb/MMBtu	#	MMBtu/hr	lb/hr	g/sec	lb/year	g/sec
Fuel Oil #2 ULSD			PM_{2.5} Emission Rates			
1.52E-02	2	47.8	7.27E-01	9.16E-02	2.61E+03	3.76E-02
			PM₁₀ Emission Rates			
2.20E-02	2	47.8	1.05E+00	1.32E-01	3.78E+03	5.43E-02
			NO_x Emission Rates			
1.43E-01	2	47.8	6.83E+00	8.60E-01	2.45E+04	3.53E-01
			SO₂ Emission Rates			
1.52E-03	2	47.8	7.27E-02	9.16E-03	2.61E+02	3.76E-03

Modelling parameters used in the analysis are provided in **Table 6-4**.

Table 6-4: Modeling Parameters for Analysis

Model	AERMOD (EPA Version 19181)
Source Type	Point Source
Number of emission points (stacks)	One (1) for natural gas and two (2) for fuel oil
Surface Characteristic	Urban Area Option
Urban Surface Roughness Length	1
Downwash effect	BPIP Program
Meteorological Data	Preprocessed by the AERMET meteorological preprocessor program by Trinity Consultants, Inc. using yearly meteorological data for 2014-2018
Surface Meteorological Data	LaGuardia 2014-2018
Profile Meteorological Data	Brookhaven Station 2014-2018
Pollutant Background Concentrations	Manhattan and Queens College 2 monitoring stations data for 2014-2018
PM_{2.5} Analysis	Special procedure incorporated into AERMOD where model calculates concentration at each receptor for each year modelled averages those concentrations across the number of years of data and then selects the highest across all receptors of the 5-year averaged highest values

V. RESULTS

HVAC Analysis

As previously determined, the following setbacks would be required to preclude any significant adverse air quality impacts on the existing land uses:

- Development Site A – the HVAC exhaust stack should be set back 30 feet from the closest window or air intake of the nearby building.
- Development Site B – no setback requirement is warranted.
- Development Site C - no setback requirement is warranted.
- Development Site D – no setback requirement is warranted.

Land Disposition Agreement

As a result of this analysis, restriction on stack locations and fuel type via a Land Disposition Agreement (LDA) would be for imposed on Sites A. This will ensure that no adverse air quality impact would occur. There would be no LDA requirements for Development Sites B, C, and D.

The LDA for Development Site A will include (1) restrictions on the location and minimum stack heights for any residential/community facility developments on Block 1674 Lot 104, and (2) the exclusive use of natural gas in the HVAC systems, as follows:

Development Site A

Any new development on Block 1674, Lot 104 must exclusively use natural gas as the type of fuel for HVAC systems and hot water boiler, and ensure that the heating, ventilating and air conditioning and hot water equipment stack is located on the bulkhead at the height of at least 65 feet above grade and at least 30 feet from the closest window or air intake of the nearby building to avoid any potential significant adverse air quality impacts.

Large Emission Source Analysis

Potential impacts of the NO₂, PM_{2.5}, PM₁₀, and SO₂ emissions from Metropolitan Hospital's boilers on Site A with both natural gas and fuel oil were estimated, and the results compared with the 24-hour/annual PM_{2.5} CEQR significant impact criteria and applicable NAAQS (i.e., the 1-hour/annual NO₂, 1-hour SO₂, and 24-hour PM₁₀ NAAQS). The result of dispersion analysis for both types of fuels is that PM_{2.5} impacts are less than CEQR significant impact criteria, and total PM_{2.5}, PM₁₀, NO₂, and SO₂ concentrations are below the applicable NAAQS. The following is a detailed discussion of these results.

Natural Gas

The potential impacts with natural gas are not significant because the Hospital stack (237-foot) is much higher than the level of upper receptors (windows) on Site A, where the highest impacts are likely to occur. Also, Metropolitan Hospital complex's structures have a minor effect on estimated pollutant concentrations with and without downwash because the Hospital complex and Site A are relatively far from each other.

PM_{2.5}

The result of the PM_{2.5} analysis is that the maximum estimated 24-hour PM_{2.5} impact is 0.45 µg/m³, which is less than the 8.7 µg/m³ CEQR significant impact criterion. Results with downwash are slightly higher than without downwash. The maximum estimated annual PM_{2.5} impact is less than 0.1 µg/m³, which is less than the 0.3 µg/m³ CEQR annual significant impact criterion.

Therefore, PM_{2.5} emissions from the Metropolitan Hospital boilers burning natural gas would not significantly impact Site A.

The result of the PM_{2.5} analysis with fuel oil firing in unit U-00001 as a backup for natural gas is that the maximum estimated 24-hour PM_{2.5} impact is 2.28 µg/m³, which is less than the 8.7 µg/m³ CEQR significant impact criterion.

24-Hour PM₁₀

The result of the 24-hour PM₁₀ analysis is that the maximum estimated 24-hour PM₁₀ impact is 0.45 µg/m³. The maximum total 24-hour PM₁₀ concentration, including background value of 38 µg/m³, is estimated to be 38.5 µg/m³, which is less than the 24-hour PM₁₀ NAAQS of 150 µg/m³. Therefore, the 24-hour PM₁₀ emissions from the Metropolitan Hospital boilers burning natural gas would not significantly impact Site A.

1-Hour NO₂

The Tier 1 NO₂ analysis was sufficient to demonstrate compliance with the 1-hour NO₂ NAAQS – with the resulting maximum concentration (116.4 µg/m³) within the 1-hour NAAQS. The total average annual NO₂ total concentration is 29.0 µg/m³ (with added background value). Both the 1-hour and annual NO₂ concentrations are less than the 1-hour and annual NO₂ NAAQS of 188 µg/m³ and 100 µg/m³, respectively. Therefore, 1-hour and annual NO₂ emissions from the Metropolitan Hospital boilers burning natural gas would not significantly impact Site A.

1-Hour SO₂

The results of the 1-hour SO₂ analysis is that the maximum estimated 1-hour SO₂ impact is 0.06 µg/m³ and the total 4th highest daily 1-hour averaged SO₂ concentration, including background value, is estimated to be 14.9 µg/m³, which is less than the 1-hour SO₂ NAAQS of 196 µg/m³. Therefore, 1-hour SO₂ emissions from the Metropolitan Hospital boilers burning natural gas would not significantly impact Site A.

Fuel Oil

The results with fuel oil are higher than those for natural gas primarily because pollutant emission rates are higher and the stacks firing fuel-oil are shorter (30-foot tall) than Site A's upper-story window receptors. However, while emissions from the Hospital boilers firing fuel-oil may be higher, the impact of these emissions would still not be significant. As shown below, all predicted impacts are less than the *CEQR* significant impact criteria and applicable NAAQS.

PM_{2.5}

The result of the PM_{2.5} analysis with ULSD fuel oil is that the maximum estimated 24-hour PM_{2.5} impact is 3.58 µg/m³, which is less than the 8.7 µg/m³ *CEQR* significant impact criterion. The maximum estimated annual PM_{2.5} impact is less than 0.2 µg/m³, which is less than the 0.3 µg/m³ *CEQR* annual significant impact criterion. Results without downwash are slightly higher than with downwash. Therefore, PM_{2.5} emissions from Metropolitan Hospital boilers burning fuel oil would not significantly impact Site A.

24-Hour PM₁₀

The result of the 24-hour PM₁₀ analysis is that the maximum estimated 24-hour PM₁₀ impact is 5.16 µg/m³. The maximum total 24-hour PM₁₀ concentration, including background value of 38 µg/m³, is estimated to be 43.2 µg/m³, which is less than the 24-hour PM₁₀ NAAQS of 150 µg/m³. Results without downwash are slightly higher than with downwash. Therefore, the 24-hour PM₁₀ emissions from the Metropolitan Hospital boilers burning fuel oil would not significantly impact Site A.

1-Hour NO₂

The Tier 1 NO₂ analysis was not sufficient to demonstrate compliance with the 1-hour NO₂ NAAQS. Therefore, a Tier 3 analysis with the PVMRM module was employed. The maximum NO₂ concentration with Tier 3 is 155.8 µg/m³, which is less than the 1-hour NAAQS of 188 µg/m³. Results with downwash are slightly higher than with downwash and occurred at low-level receptors.

The maximum estimated total annual NO₂ total concentration is 30.2 µg/m³ (with a maximum impact of 1.5 µg/m³ and background value of 28.7 µg/m³). Both the 1-hour and annual NO₂ concentrations are less than the 1-hour and annual NO₂ NAAQS of 188 µg/m³ and 100 µg/m³, respectively. Therefore, 1-hour and

annual NO₂ emissions from the Metropolitan Hospital boilers burning fuel oil would not significantly impact Site A.

1-Hour SO₂

The results of the 1-hour SO₂ analysis is that the maximum 4th highest maximum daily 1-hour SO₂ concentration, including background value, is estimated to be 16.0 µg/m³, which is less than the 1-hour SO₂ NAAQS of 196 µg/m³. Result with downwash is slightly higher than with downwash. Therefore, 1-hour SO₂ emissions from the Metropolitan Hospital boilers burning fuel oil would not significantly impact Site A.

A summary of the results for all averaging periods, with and without downwash effects, are presented in **Table 6-5**.

Table 6-5: Summary of Results of the Metropolitan Hospital Air State Facility Emissions Analysis

Pollutant	Modelled Concentration ¹	Background Conc.	Max Total Conc.	Evaluation Criteria
	µg/m ³	µg/m ³	µg/m ³	µg/m ³
Natural Gas				
24-hr PM _{2.5}	0.45/0.06	-	0.45	8.7 (CEQR Criteria)
24-hr PM _{2.5}	0.45	7.6	8.1	35 (NAAQS)
Annual PM _{2.5}	<0.1	-	<0.1	0.3 (CEQR Criteria)
1-hr NO ₂ ²	10.8/3.30	105.6	116.4	188 (NAQQS)
Annual NO ₂	0.27/<0.1	28.7	29.0	100 (NAAQS)
1-hr SO ₂	0.06/0.02	14.8	14.9	196 (NAQQS)
24-hr PM ₁₀	0.45/0.06	38	38.5	150 (NAQQS)
Fuel Oil #2 ULSD				
24-hr PM _{2.5}	2.66/3.58	-	3.58	8.7 (CEQR Criteria)
24-hr PM _{2.5}	3.58	7.6	11.2	35 (NAAQS)
Annual PM _{2.5}	0.13/0.22	-	0.22	0.3 (CEQR Criteria)
1-hr NO ₂ ³	155.8/142.4	-	155.8	188 (NAQQS)
Annual NO ₂	0.94/1.55	28.7	30.2	100 (NAAQS)
1-hr SO ₂	1.18/0.83	14.8	16.0	196 (NAQQS)
24-hr PM ₁₀	3.83/5.16	38	43.2	150 (NAQQS)

Notes:

¹ Modelled concentrations with/without downwash effects

² Results with Tier 1 analysis

³ Results with Tier 3 analysis

VI. SUMMARY

HVAC Analysis

With the restriction on stack locations and fuel type via a LDA, the potential air quality impacts of the emissions from the HVAC systems of the proposed buildings on Sites A, B, C, and D would not be significant.

Large Emission Source Analysis

The results of this analysis are that Metropolitan Hospital's boiler emissions, firing either natural gas or fuel oil #2, would not significantly impact the proposed development.

I. INTRODUCTION

This chapter assesses the potential for the proposed action to result in significant adverse noise impacts. As described in **Chapter 1, “Project Description,”** the New York City Department of Housing Preservation and Development (HPD), the applicant, on behalf of Las Raices East Harlem LLC, the project sponsor, proposes the development of four new affordable housing developments (“proposed project”) on four separate development sites in the East Harlem neighborhood of Manhattan, Community District 11 (CD 11). The proposed project would be facilitated by the disposition of City-owned property (the “proposed action”).

The Proposed Project would develop six tax lots grouped into four Development Sites (named A through D for identification purposes) with a total of four buildings containing a total of approximately 81 affordable dwelling units (DUs) (plus two superintendent’s units for a total of 83 units) and approximately 10,740 gsf of community facility space. Construction of the Proposed Project is expected to be completed in 2023.

The noise analysis for the Proposed Project was carried out in compliance with 2020 *CEQR Technical Manual* guidelines and consists of two parts:

- (1) A screening analysis to determine whether traffic generated by the proposed action would have the potential to result in significant adverse noise impacts on existing sensitive receptors;
- (2) An analysis to determine the level of building attenuation necessary to ensure that the With-Action developments’ interior noise levels satisfy applicable interior noise criteria. This chapter does not include an analysis of mechanical equipment because such mechanical equipment would be designed to meet all applicable noise regulations and, therefore, would not result in adverse noise impacts.

II. PRINCIPAL CONCLUSIONS

In the future with the proposed actions, the predicted peak period L_{10} values at the receptor locations would range from a minimum of 58.82 dBA to a maximum of 83.02 dBA. When compared to the future without the proposed action, the relative increases in noise levels are expected to be well below 3.0 dBA at all analyzed receptor locations. Therefore, no significant adverse mobile source noise impacts due to action-generated vehicular traffic would occur.

Based on predicted future With-Action exterior noise levels and *CEQR Technical Manual* criteria, With-Action noise levels at Receptor Locations 1 and 2 would remain in the “Marginally Acceptable” CEQR Noise Exposure category and Receptor Location 3 would remain in the “Acceptable” CEQR Noise Exposure category, and, as such, no special noise attenuation measures

beyond standard construction practices would be required for residential or community facility uses on any of the frontages at Development Sites A, B or C in order to achieve the required residential or community facility interior noise level of 45 dBA or lower. However, Receptor Locations 4 and 5 would fall in the “Clearly Unacceptable” and “Marginally Unacceptable” CEQR Noise Exposure categories, respectively, and, as such, would require a minimum of 40 dBA attenuation on any western-facing (Park Avenue) frontages and a minimum of 36 dBA attenuation on any southern-facing (East 122nd Street) frontages at Development Site D.

Furthermore, as the maximum predicted L_{dn} noise levels at Receptor Location 2 (Development Site B) would fall within the “Normally Unacceptable” category defined by the U.S. Department of Housing and Urban Development (HUD), a minimum of 25 dBA of attenuation is needed along any northern-facing (East 117th Street) frontages at Development Site B. Additionally, as the maximum predicted L_{dn} noise levels at Receptor Locations 4 and 5 (Development Site D) would both fall within the “Unacceptable” category defined by HUD, a minimum of 36 dBA and 31 dBA of attenuation would be needed along any western- (Park Avenue) and southern-facing (East 122nd Street) frontages at Development Site D, respectively.¹

Both the CEQR and HUD noise attenuation measures would be required through provisions contained in the Land Disposition Agreement (LDA) between HPD and the project sponsor.² With implementation of the attenuation levels discussed below, the Proposed Project would not result in any significant adverse noise impacts related to noise attenuation.

III. NOISE FUNDAMENTALS

Noise is considered unwanted sound. Sound is a fluctuation in air pressure. Sound pressure levels are measured in units called “decibels” (dB). The particular character of the sound that we hear (a whistle compared with a French horn, for example) is determined by the speed, or “frequency,” at which the air pressure fluctuates or “oscillates.” Frequency defines the oscillation of sound pressure in terms of cycles per second (cps). One cycle per second is known as 1 Hertz (Hz). People can hear sound over a relatively limited range of frequencies, generally between 20 Hz and 20,000 Hz. Furthermore, the human ear does not perceive all frequencies equally well. High frequencies (e.g., a whistle) are more easily discernible and therefore more intrusive than many of the lower frequencies (e.g., the lower notes on the French horn).

A-Weighted Sound Level (dBA)

In order to establish a uniform noise measurement that simulates people’s perception of loudness and annoyance, the decibel measurement is weighted to account for those frequencies most audible to the human hearing range. This is known as the A-weighted sound level, or “dBA,” and it is the

¹ It should be noted that the HUD attenuation requirement described above would only be required in the event the Proposed Project include federal sources of funding. In addition, any CEQR attenuation requirements exceeding those required by HUD at a particular receptor would supersede the HUD requirement as it would satisfy both the CEQR and HUD requirements at that receptor. Therefore, in regards to Development Site D, the CEQR requirement for both the western (40 dBA) and southern (36 dBA) frontages would supersede the HUD requirements for those same frontages (36 dBA and 31 dBA, respectively).

² Absent the federal sources of funding, the Proposed Project would only be required to provide the noise attenuation levels pursuant to CEQR.

descriptor of noise levels most often used for community noise. As shown in **Table 7-1**, the threshold of human hearing is defined as 0 dBA; very quiet conditions (as in a rural area at night, for example) are approximately 30-40 dBA; levels between 50 dBA and 70 dBA define the range of noise levels generated by normal daily activity; levels above 70 dBA would be considered noisy, and then loud, intrusive, and deafening, as the scale approaches 120 dBA.

Table 7-1: Common Noise Levels

Sound Source	(dBA)
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Soft Whisper at 5 meters	30
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0

Note: A 10 dBA increase appears to double the loudness, and a 10 dBA decrease appears to halve the apparent loudness.

Source: *CEQR Technical Manual*/Cowan, James P. *Handbook of Environmental Acoustics*. Van Nostrand Reinhold, New York, 1994. Egan, M. David, *Architectural Acoustics*. McGraw-Hill Book Company, 1988.

Community Response to Changes in Noise Levels

Table 7-2 shows the average ability of an individual to perceive changes in noise. It is important to note that the dBA scale is logarithmic, meaning that each increase of 10 dBA describes a doubling of perceived loudness. Thus, the noise on a platform with a passing subway train, at 100 dBA, is perceived as twice as loud as passing heavy trucks at 90 dBA. For most people to perceive an increase in noise, it must be at least 3 dBA. At 5 dBA, the change will be readily noticeable. These guidelines permit direct estimation of an individual's probable perception of changes in noise levels.

Table 7-2: Average Ability to Perceive Changes in Noise Levels

Change (dBA)	Human Perception of Sound
2-3	Barely perceptible
5	Readily noticeable
10	A doubling or halving of the loudness of sound
20	A dramatic change
40	Difference between a faintly audible sound and a very loud sound

Source: Bolt Beranek and Neuman, Inc., *Fundamentals and Abatement of Highway Traffic Noise*, Report No. PB-222-703. Prepared for Federal Highway Administration, June 1973.

Noise Descriptors Used in Impact Assessment

Because the sound pressure level unit, dBA, describes a noise level at just one moment, and very few noises are constant, other ways of describing noise over extended periods have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the “equivalent sound level”, L_{eq} , can be computed. L_{eq} is the constant sound level that, in

a given situation and time period (e.g., 1 hour, denoted by $L_{eq(1)}$) conveys the same sound-energy as the actual time-varying sound.

Statistical sound level descriptors such as L_1 , L_{10} , L_{50} , L_{90} , and L_x , are sometimes used to indicate noise levels that are exceeded 1, 10, 50, 90 and “x” percent of the time, respectively. Discrete event peak levels are given as L_1 levels. L_{eq} is used in the prediction of future noise levels, by adding the contributions from new sources of noise (i.e., increases in traffic volumes) to the existing levels and in relating annoyance to increases in noise levels.

The relationship between L_{eq} and levels of exceedance is worth noting. Because L_{eq} is defined in energy rather than straight numerical terms, it is not simply related to the levels of exceedance. If the noise fluctuates very little, L_{eq} will approximate L_{50} or the median level. If the noise fluctuates broadly, the L_{eq} will be approximately equal to the L_{10} value. If extreme fluctuations are present, the L_{eq} will exceed L_{90} or the background level by 10 or more decibels. Thus the relationship between L_{eq} and the levels of exceedance will depend on the character of the noise. In community noise measurements, it has been observed that the L_{eq} is generally between L_{10} and L_{50} . The relationship between L_{eq} and exceedance levels has been used in this analysis to characterize the noise sources and to determine the nature and extent of their impact at both monitoring locations.

For the purposes of this analysis, the maximum 1-hour equivalent sound level (L_{eq}) has been selected as the noise descriptor to be used in the noise impact evaluation. L_{eq} is the noise descriptor used in the *CEQR Technical Manual* for noise impact evaluation, and is used to provide an indication of highest expected sound levels. L_{10} is the noise descriptor used in the *CEQR Technical Manual* for building attenuation.

The day-night sound level (L_{dn}) is the noise description used in the HUD Noise guidebook that sets exterior noise standards for housing construction projects receiving federal funds. Similar to L_{eq} , the L_{dn} refers to a 24-hour average noise level with a 10 dBA penalty applied to noise levels during the hours between 10:00 PM and 7:00 AM to reflect the greater intrusiveness of noise experienced during these hours. Pursuant to the Federal Transit Authority (FTA) noise impact analysis methodology, the L_{dn} is adopted to assess noise generated by trains.³ However, because the L_{dn} descriptor tends to average out high hourly values over 24 hours, the *CEQR Technical Manual* recommends that the L_{eq} descriptor be used for purposes of impact analysis.

³ Source: Report “Transit Noise and Vibration Impact Assessment Manual”, 2018, Federal Transportation Authority, Office of Planning and Environment.

Applicable Noise Codes and Impact Criteria

CEQR Technical Manual Noise Standards

The NYC Department of Environmental Protection (DEP) has set external noise exposure standards based on L_{10} noise levels. These standards are shown in **Table 7-3**. Noise exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable.

The *CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise level. Recommended noise attenuation values for building facades are designed to maintain interior noise levels of 45 dBA or lower for residential uses and 50 dBA or lower for commercial uses, and are determined based on exterior L_{10} noise levels. The standards shown are based on maintaining an interior noise level for the worst-case hour L_{10} of 45 dBA or lower. Attenuation requirements are shown in **Table 7-4**.

United States Department of Housing and Urban Development (HUD) Noise Regulations

Based on reports by the Environmental Protection Agency (EPA), HUD published regulations establishing standards for HUD-assisted projects in 1979. HUD categorized noise levels for proposed residential development as acceptable, normally unacceptable, and unacceptable, as shown in **Table 7-5**. HUD assistance for construction of new noise sensitive uses is generally prohibited for projects with unacceptable noise exposures and is discouraged for projects with normally unacceptable noise exposure. The assumption is that standard construction provides an average of 20 dBA of attenuation from exterior noise levels (this is in contrast to NYC guidance for non-HUD-assisted projects for which it is assumed that standard construction provides 25 dBA of attenuation). For an exterior L_{dn} of 65 dBA or below, this amount of attenuation would be sufficient to meet an interior L_{dn} level of 45 dBA. HUD-financed buildings constructed in Normally Unacceptable or Unacceptable areas must provide sufficient sound attenuation, as specified by HUD, to reduce interior noise levels to an L_{dn} of 45 dBA. According the *HUD Noise Guidebook*, if the exterior L_{dn} noise level is between 65 dBA and 70 dBA, a minimum of 25 dBA of noise attenuation must be provided, and if the exterior noise L_{dn} noise level is between 70 dBA and 75 dBA, a minimum of 30 dBA of noise attenuation would be required. Likewise, in the event that L_{dn} noise levels exceed 75 dBA, sufficient attenuation must be provided to bring interior noise levels down to 45 L_{dn} or below.

Table 7-3: Noise Exposure Guidelines for Use in City Environmental Impact Review

Receptor Type	Time Period	Acceptable General External Exposure	Airport ³ Exposure	Marginally Acceptable General External Exposure	Airport ³ Exposure	Marginally Unacceptable General External Exposure	Airport ³ Exposure	Clearly Unacceptable General External Exposure	Airport ³ Exposure
1. Outdoor area requiring serenity and quiet ²		$L_{10} \leq 55$ dBA	----- Ldn ≤ 60 dBA -----		----- 60 < Ldn ≤ 65 dBA -----		(1) 65 < Ldn ≤ 70 dBA, (II) 70 \leq Ldn		----- Ldn ≤ 75 dBA -----
2. Hospital, Nursing Home		$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 65$ dBA		$65 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
3. Residence, residential hotel or motel	7 AM to 10 PM	$L_{10} \leq 65$ dBA		$65 < L_{10} \leq 70$ dBA		$70 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
	10 PM to 7 AM	$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 70$ dBA		$70 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
4. School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out-patient public health facility		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
5. Commercial or office		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
6. Industrial, public areas only ⁴	Note 4	Note 4		Note 4		Note 4		Note 4	

Notes:

(i) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more;

¹ Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.

² Tracts of land where serenity and quiet are extraordinarily important and serve an important public need and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and residents of sanitariums and old-age homes.

³ One may use the FAA-approved L_{dn} contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.

⁴ External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are octave band standards).

Source: New York City Department of Environmental Protection (adopted policy 1983).

Table 7-4: Required Attenuation Values to Achieve Acceptable Interior Noise Levels

Noise level with Proposed Action	Marginally Unacceptable				Clearly Unacceptable
	$70 < L_{10} \leq 73$	$73 < L_{10} \leq 76$	$76 < L_{10} \leq 78$	$78 < L_{10} \leq 80$	$80 < L_{10}$
Attenuation ^A	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	$36 + (L_{10} - 80)^B$ dB(A)
Note: ^A The above composite window/wall attenuation values are for residential dwellings. Commercial office spaces and meeting rooms would be 5 dB (A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation. ^B Required attenuation values increase by 1 dB (A) increments for L ₁₀ values greater than 80 dBA.					
Source: NYC Department of Environmental Protection, <i>CEQR Technical Manual</i>					

Table 7-5: HUD Acceptability Standards for Noise

Category	Noise Level (L _{dn})
Acceptable	≤ 65 dBA
Normally Unacceptable	> 65 dBA ≤ 75 dBA
Unacceptable	> 75 dBA

Source: U.S. Department of Housing and Urban Development, March 1985.

For this analysis, L_{dn} levels were estimated using the following equation:

$$L_{dn} = L_{10} - 3$$

The method used to determine L_{dn} values is to measure the loudest hourly L_{10} for a typical day and then to estimate the L_{dn} from this loudest hourly L_{10} , which is consistent with the *HUD Noise Guidebook*.

IV. NOISE PREDICTION METHODOLOGY

General Methodology

Future noise levels were calculated using a proportional modeling technique, which was used as a screening tool to estimate change in noise levels. The proportional modeling technique is an analysis methodology recommended for analysis purposes in the *CEQR Technical Manual*. The noise analysis examined the typical weekday AM, midday, and PM peak hours. As discussed above, additional noise measurements were performed at Receptor Locations 1, 2, and 3 during the School PM (2:30 PM to 3:30 PM) peak period, due to the proximity of Primary School 38 (P.S. 38 – Robert Clemente) to Receptor 1, Primary School 155 (P.S. 155 – William Paca) to Receptor 2, and Primary School 112 (P.S. 112 – Manhattan) to Receptor 3. However, as the noise levels measured during the School PM weekday peak period at Receptor Location 2 were lower than those during the AM, midday, and PM weekday peak periods, and as the noise levels measured during the School PM weekday peak period at Receptor Location 3 were lower than those during the midday and PM weekday peak periods, it was determined that the School PM noise levels at Receptor Locations 2 and 3 did not reflect worst-case conditions, and was not included in the future noise level analysis.

The selected time periods are when development facilitated by the proposed action would be expected to produce the maximum traffic generation and, therefore, result in the maximum potential for significant noise level increases. The methodologies used for the noise analyses are described below.

Proportional Modeling

Proportional modeling was used to determine No-Action and With-Action noise levels at the receptor locations, which are discussed in more detail below. Proportional modeling is one of the techniques recommended in the *CEQR Technical Manual* for mobile source analysis. Using this technique, the prediction of future noise levels, where traffic is the dominant noise source, is based on a calculation using measured existing noise levels and predicted changes in traffic volumes to determine No-Action and With-Action noise levels. Vehicular traffic volumes, which are counted during the noise recording, are converted into Passenger Car Equivalent (PCE) values, for which one medium-duty truck (having a gross weight between 9,900 and 26,400 pounds) is assumed to generate the noise equivalent of 13 cars, and one heavy-duty truck (having a gross weight of more than 26,400 pounds) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles

designed to carry more than nine passengers) is assumed to generate the noise equivalent of 18 cars. Future noise levels are calculated using the following equation:

$$\text{FNA NL} = 10 \log (\text{NA PCE} / \text{E PCE}) + \text{E NL}$$

where:

FNA NL = Future No-Action Noise Level

NA PCE = No-Action PCEs

E PCE = Existing PCEs

E NL = Existing Noise Level

Sound levels are measured in decibels and therefore increase logarithmically with sound source strength. In this case, the sound source is traffic volumes measured in PCEs. For example, assume that traffic is the dominant noise source at a particular location. If the existing traffic volume on a street is 100 PCE and if the future traffic volume were increased by 50 PCE to a total of 150 PCE, the noise level would increase by 1.8 dBA. Similarly, if the future traffic were to increase by 100 PCE, or doubled to a total of 200 PCE, the noise level would increase by 3.0 dBA.

Analyses for the proposed action were conducted for three typical time periods: the weekday AM peak hour (8 AM to 9 AM), the midday peak hour (12 PM to 1 PM), and the weekday PM peak hour (5 PM to 6 PM). These time periods are the hours when the maximum traffic generation is expected and, therefore, the hours when future conditions with the proposed action is most likely to result in maximum noise impacts for the receptor locations. An additional noise measurement was performed during the school dismissal/bus departure (School PM) peak period (2:30 PM to 3:30 PM), due to the location of three public schools near the development sites, in order to determine whether ambient noise levels were higher during this period than during the other standard weekday peak periods.⁴

For the purpose of this analysis, during the noise recording, vehicles were counted and classified. To calculate the No-Action PCE values, an annual background growth rate of 0.25 percent for 2019-2023 was applied to the existing PCE noise values based on counted vehicles⁵. In order to obtain the future With-Action noise PCE values to calculate the With-Action noise levels, a trip generation forecast was created for the proposed incremental dwelling units (83 total DUs) and community facility space (10,740 gsft) generated by the 2023 With-Action development for each of the four development sites, which is based on existing modal split data for the census tract within which the Proposed Project is located.⁶

⁴ However, as discussed above, noise levels measured during the School PM weekday peak period at Receptor Locations 2 and 3 were lower than those during the AM, midday, and/or PM weekday peak periods, and as such, it was determined that the School PM noise levels at Receptor Locations 2 and 3 did not reflect worst-case conditions. Therefore, the School PM noise levels at Receptor Locations 2 and 3 were not included in the future No-Action and With-Action proportional modeling analyses.

⁵ Calculation according to Table 16-4 in the *CEQR Technical Manual*.

⁶ Based on: American Community Survey (ACS) 2013-2017 Means of Transportation Journey to Work, Manhattan Census Tract 164, 178, 188, & 196; *East Harlem Rezoning FEIS*, 2017; NYCDOT.

Train Noise Modeling

Pursuant to the guidance of *CEQR Technical Manual* Section 332.3, “Train Noise,” noise from train operations on the elevated tracks of the MTA Metro-North railroad’s Hudson, Harlem, and New Haven rail lines (located adjacent to Development Site D) were calculated using the detailed noise analysis methodology contained in the September 2018 Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual*.

Using this methodology, L_{eq} values are calculated as a function of a number of factors: the distance between the track and the receptor, number of trains, average number of cars per train, train speed, track conditions, and whether the track is on grade or on structure. Values calculated using the FTA methodology may either be used directly or adjusted based on adjustment factors developed to account for site-specific differences between measured and model-predicted values.

The FTA analysis starts with predicting the source noise levels, expressed in terms of Sound Exposure Level (SEL) at a reference distance and a reference speed. These are given in Table 4-9 of the FTA manual and are reproduced in **Table 7-6**, below.

Table 7-6
Reference SEL’s 50 Feet from Track and at 50 mph, One Vehicle

Source/Type		Reference Conditions	Reference SEL (SEL _{ref}), dBA
Commuter Rail, At-Grade	Locomotives	Diesel-electric, 3000hp, throttle 5	92
		Electric	90
	Diesel Multiple Unit (DMU)	Diesel-powered, 1200hp	85
	Horns	Within ¼-mile of grade crossing	110
	Cars	Ballast, welded rail	82
Rail Transit and Streetcars at 50 mph		At-grade, ballast, welded rail	82
Rail Transit and Streetcars at 25 mph		At-grade, ballast, welded rail	76
Transit Whistles/Warning Devices		Within 1/8-mile of grade crossing	93
AGT	Steel Wheel	Aerial, concrete, welded rail	80
	Rubber Tire	Aerial, concrete guideway	78
Monorail		Aerial straddle beam	82
Maglev		Aerial, open guideway	72

Source: FTA *Transit Noise and Vibration Impact Assessment Manual*, Table 4-9 (September 2018).

After determining the reference levels for each of the noise sources, the next step is to determine the noise exposure at 50 feet expressed in terms of $L_{eq(h)}$ and L_{dn} . The additional data needed include: number of train passbys during the day (defined as 7:00 AM to 10:00 PM) and night (defined as 10:00 PM to 7:00 AM); peak hour train volume; number of vehicles per train; maximum speed; guideway configuration; noise barrier location; and location of highway and street grade crossings, if any. These data are used to obtain adjustment factors to calculate $L_{eq(h)}$ and L_{dn} at 50 feet.

Using the FTA methodology described above, existing noise levels emitted from the elevated tracks were calculated for the weekday Daytime (7:00 AM to 10:00 PM) and Nighttime (10:00

PM to 7:00 AM) periods for Receptor Locations 4 and 5 according to the current MTA Metro-North railroad timetable for the Hudson, Harlem and New Haven rail lines. This included calculating the L_{eq} SEL values at 50 feet and comparing these to the monitored noise levels at Receptor Locations 4 and 5 as summarized in **Table F-7**, below. As presented in **Table F-7**, the forecasted L_{eq} and L_{10} values at Receptor Locations 4 and 5 were higher than the monitored noise levels.

Table 7-7
FTA Forecasted Noise Levels For Receptor Locations on Park Avenue and 122nd Street

Receptor Location ¹	Maximum Monitored L_{eq}	Maximum Monitored L_{10}	FTA Forecasted L_{eq}	FTA Forecasted L_{10}
4	78.23	82.97	79.35	84.09
5	75.39	78.67	77.34	80.62

Notes: ¹ See *Selection of Noise Monitoring/Receptor Locations* in Section V, “Existing Conditions” below for more information on receptor location details.

Table 7-8
Computation of Noise Exposure at 50 feet for Fixed-Guideway General Noise Assessment

Locomotives* Leq(1hr) at 50 ft	$L_{eq,Loco(1hr)} = SEL_{ref} + 10 \log(N_{Loco}) + K \log\left(\frac{S}{50}\right) + 10 \log(V) - 35.6$	Eq. 4-1
Locomotive Warning Horns** Leq(1hr) at 50 ft	$L_{eq,LHorns(1hr)} = SEL_{ref} + 10 \log(V) - 35.6$	Eq. 4-2
Rail Vehicles† Leq(1hr) at 50 ft	$L_{eq,RCars(1hr)} = SEL_{ref} + 10 \log(N_{Cars}) + 20 \log\left(\frac{S}{50}\right) + 10 \log(V) - 35.6 + Adj_{track}$	Eq. 4-3
Streetcars (25 mph or slower) Leq(1hr) at 50 ft	$L_{eq,SCars(1hr)} = SEL_{ref} + 10 \log(N_{Cars}) + 20 \log\left(\frac{S}{25}\right) + 10 \log(V) - 35.6 + Adj_{track}$	Eq. 4-4
Transit Warning Horns Leq(1hr) at 50 ft	$L_{eq,THorns(1hr)} = SEL_{ref} - 10 \log\left(\frac{S}{50}\right) + 10 \log(V) - 35.6$	Eq. 4-5
Combined Locomotive and transit†† Leq(1hr) at 50 ft	$L_{eq,Combo(1hr)} = 10 \log(10^{(L_{eq,Loco(1hr)})/10} + 10^{(L_{eq,RCars(1hr)})/10} + 10^{(L_{eq,SCars(1hr)})/10} + 10^{(L_{eq,LHorns(1hr)})/10} + 10^{(L_{eq,THorns(1hr)})/10})$	Eq. 4-6
Daytime Ld at 50 ft	$L_d = L_{eq(1hr)}$ where $V = V_d$, $N_{Loco} = N_d$ (loco events), and $N_{Cars} = N_d$ (car events)	Eq. 4-7
Nighttime Ln at 50 ft	$L_n = L_{eq(1hr)}$ where $V = V_n$, $N_{Loco} = N_d$ (loco events), and $N_{Cars} = N_d$ (car events)	Eq. 4-8
Day/Night Ldn at 50 ft	$L_{dn} = 10 \log(15 \times 10^{(L_d/10)} + 9 \times 10^{(L_n+10)/10}) - 13.8$	Eq. 4-9
<p> N_{Loco} = average number of locomotives per train K = constant -10 for passenger diesel 0 for DMUs +10 for electric S = train speed, mph V = average hourly volume of train traffic, trains per hour N_{Cars} = average number of cars per train Adj_{track} = constant +5 for jointed track or for a crossover within 300 ft +4 for aerial structure with slab track (except AGT and monorail) +3 for embedded track on grade -5 if a noise barrier blocks the line of sight V_d = average hourly daytime volume of train traffic, trains per hour = $\frac{\text{number of trains, 7 a.m. to 10 p.m.}}{15}$ N_d = average hourly number of events that occur during daytime (7 a.m. to 10 p.m.) = $\frac{\text{number of events between 7 a.m. to 10 p.m.}}{15}$ V_n = average hourly nighttime volume of train traffic, trains per hour = $\frac{\text{number of trains, 10 p.m. to 7 a.m.}}{9}$ N_n = average hourly number of events that occur during nighttime (10 p.m. to 7 a.m.) = $\frac{\text{number of events between 10 p.m. to 7 a.m.}}{9}$ </p>		

* Assumes a diesel locomotive power rating at approximately 3000 hp.

** Based on FRA's horn noise model (<http://www.fra.dot.gov/eLib/Details/L04091>).

† Includes all commuter rail cars, transit cars, streetcars above 25 mph, AGT and monorail.

†† Only include appropriate terms.

V. EXISTING CONDITIONS

The project area is comprised of six tax lots, which are grouped into four Development Sites in East Harlem. Development Site A (Block 1674, Lot 104) has a lot area of approximately 1,898 square feet (sf) and is currently vacant. Development Site A has approximately 25 feet of frontage along the north side of East 102nd Street between Second and First Avenues. Development Site A is zoned C1-5/R8A.

Development Site B (Block 1688, Lot 34) has a lot area of approximately 2,523 sf and is currently vacant. Development Site B has approximately 25 feet of frontage along the south side of East 117th Street between Second and First Avenues. Development Site B is zoned R7B.

Development Site C (Block 1815, Lots 5 and 6) has a lot area of approximately 4,827 sf. Development Site C, which is a temporary portion of the Pleasant Village Community Garden, has approximately 47.84 feet of frontage along the north side of East 118th Street between Pleasant Avenue and a cul-de-sac where the street terminates. Development Site C is zoned R7B. Pleasant Village Community Garden also includes adjoining land with frontage on Pleasant Avenue; that adjoining community garden area is not part of the development site and would not be directly affected by the proposed action. The community garden on the development site operates under a temporary license agreement with HPD that permits the community garden to use this site on an interim basis until HPD is ready to move forward with its redevelopment.

Development Site D (Block 1771, Lots 1 and 2) has a lot area of approximately 4,583 sf. Development Site D, which is a temporary portion of the Jackie Robinson Community Garden, has approximately 50.92 feet of frontage along the east side of Park Avenue between East 122nd and East 123rd Streets and 91.94 feet of frontage on the north side of E. 122nd Street extending east from intersection with Park Avenue. Development Site D is zoned M1-6/R10 (MIH). The community garden on the development site operates under a temporary license agreement with HPD that permits the community garden to use this site on an interim basis until HPD is ready to move forward with its redevelopment.

Selection of Noise Monitoring/Receptor Locations

In order to collect existing baseline volumes at the development sites, existing noise levels were measured at five separate locations. Receptor 1 was located on the southern side of East 102nd Street along the frontage of Development Site A, to measure noise resulting from traffic along East 102nd Street. The rear and western boundaries of Development Site A also contain a direct line-of-sight to Second Avenue, located approximately 75 feet to the northwest. However, a New Building (NB) work permit has been issued by the New York City Department of Buildings (DOB) for a 12-story building located on the vacant lot (Block 1674, Lot 49) at 1998 Second Avenue. Therefore, the completion of 1998 Second Avenue would eliminate all direct lines-of-sight from the rear and western boundaries of Development Site A to Second Avenue, and no noise monitoring was conducted at the rear or western boundaries of Development Site A.

Receptor 2 was located on the southern side of East 117th Street along the frontage of Development Site B, to measure noise resulting from traffic along East 117th Street. Receptor 3 was located on the northern side of East 118th Street along the frontage of Development Site C, to measure noise resulting from traffic along East 118th Street. Receptor 4 was located on the eastern side of Park Avenue along the western frontage of Development Site D, to measure noise resulting from traffic along Park Avenue and trains along the elevated Metro-North rail lines. Receptor 5 was located on the northern side of East 122nd Street along the southern frontage of Development Site D, to measure noise resulting from traffic along East 122nd Street and trains along the elevated Metro-North rail lines. For reference, the noise monitoring receptor locations are identified in **Figure 7-1a-d** and explained further below:

Receptor Location 1 – Future southern frontage of Development Site A (303 East 102nd Street); approximate midpoint of lot frontage (see **Figure 7-1a**).

Receptor Location 2 – Future frontage of Development Site B (338 East 117th Street); approximate midpoint of lot frontage (see **Figure 7-1b**).

Receptor Location 3 – Future frontage of Development Site C (505 East 118th Street); approximate midpoint of lot frontage (see **Figure 7-1c**).

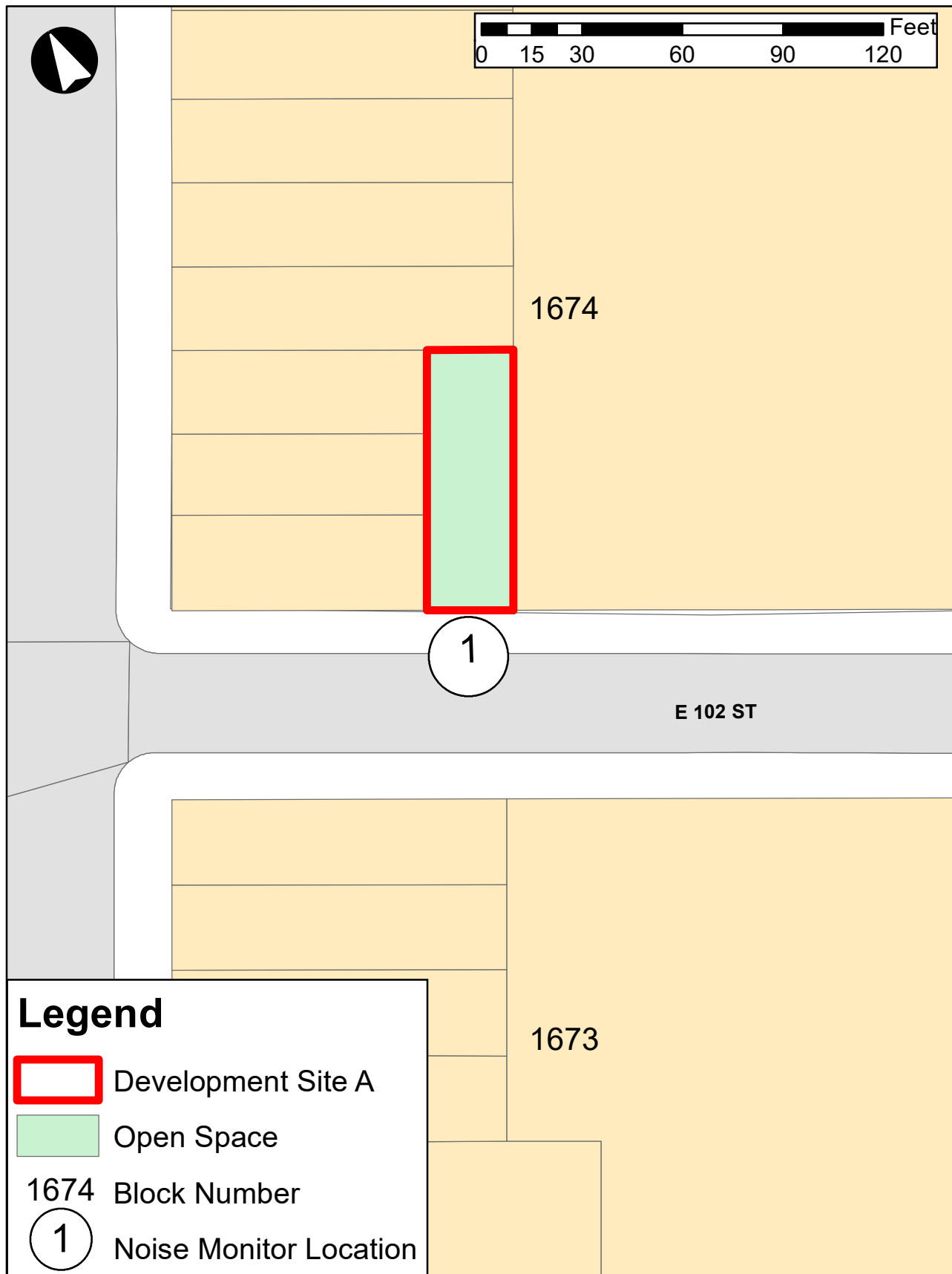
Receptor Location 4 – Future western frontage of Development Site D (1761 Park Avenue); approximate midpoint of lot frontage (see **Figure 7-1d**).

Receptor Location 5 – Future southern frontage of Development Site D (1761 Park Avenue); approximate midpoint of lot frontage (see **Figure 7-1d**).

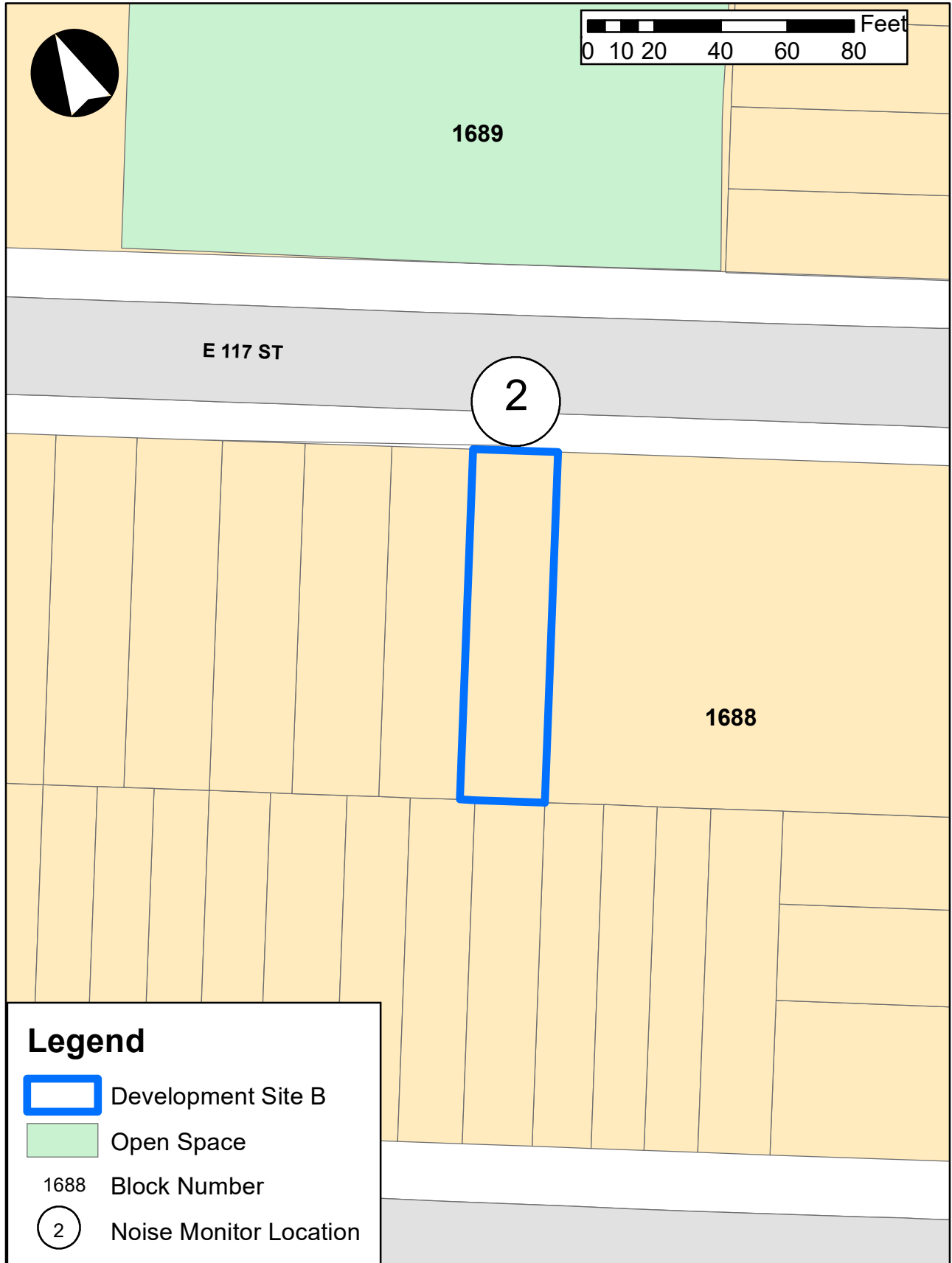
Noise Monitoring

Pursuant to CEQR guidelines, as the main source of noise was local traffic, 20-minute measurements were performed at Receptor Locations 1, 2, and 3 to establish existing noise levels for three analysis time periods, including: weekday AM peak hour (8AM to 9AM), midday (MD) peak hour (12PM to 1PM), and weekday PM peak hour (5PM to 6PM). As the main source of noise at Receptor Locations 4 and 5 was the elevated Metro-North rail line tracks, 1-hour measurements of existing noise levels were performed during the same three weekday peak hour analysis periods (i.e., AM, midday, and PM) as at Receptor Locations 1 through 3, pursuant to CEQR guidelines. As discussed above, additional noise measurements were performed at Receptors 1, 2, and 3 during the school dismissal/bus departure (School PM) peak period (2:30PM to 3:30PM), due to the proximity of Primary School 38 (P.S. 38 – Robert Clemente) to Receptor 1, Primary School 155 (P.S. 155 – William Paca) to Receptor 2, and Primary School 112 (P.S. 112 – Manhattan) to Receptor 3. Noise monitoring was conducted during the School PM weekday peak

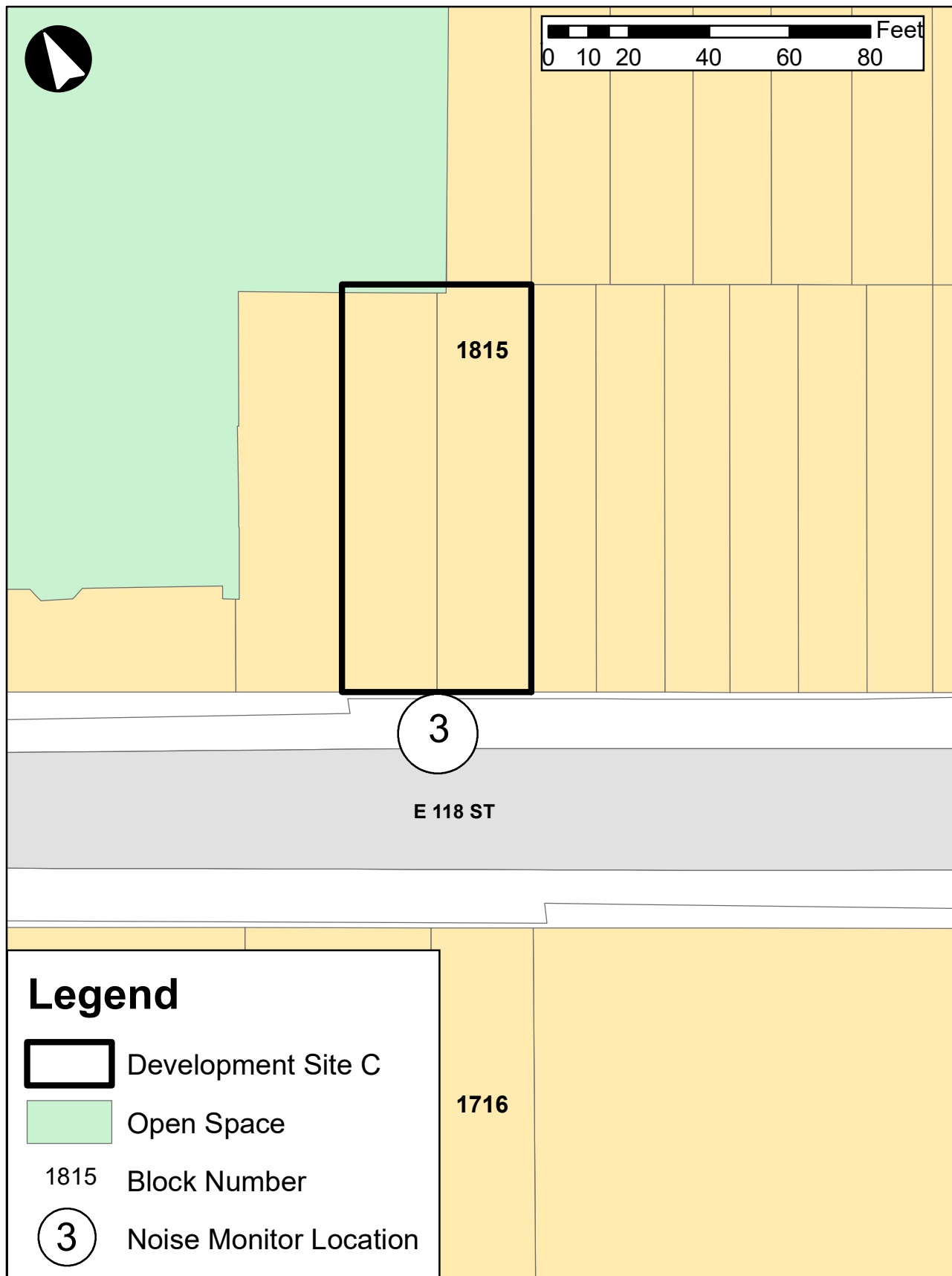
Noise Monitor Location: Development Site A



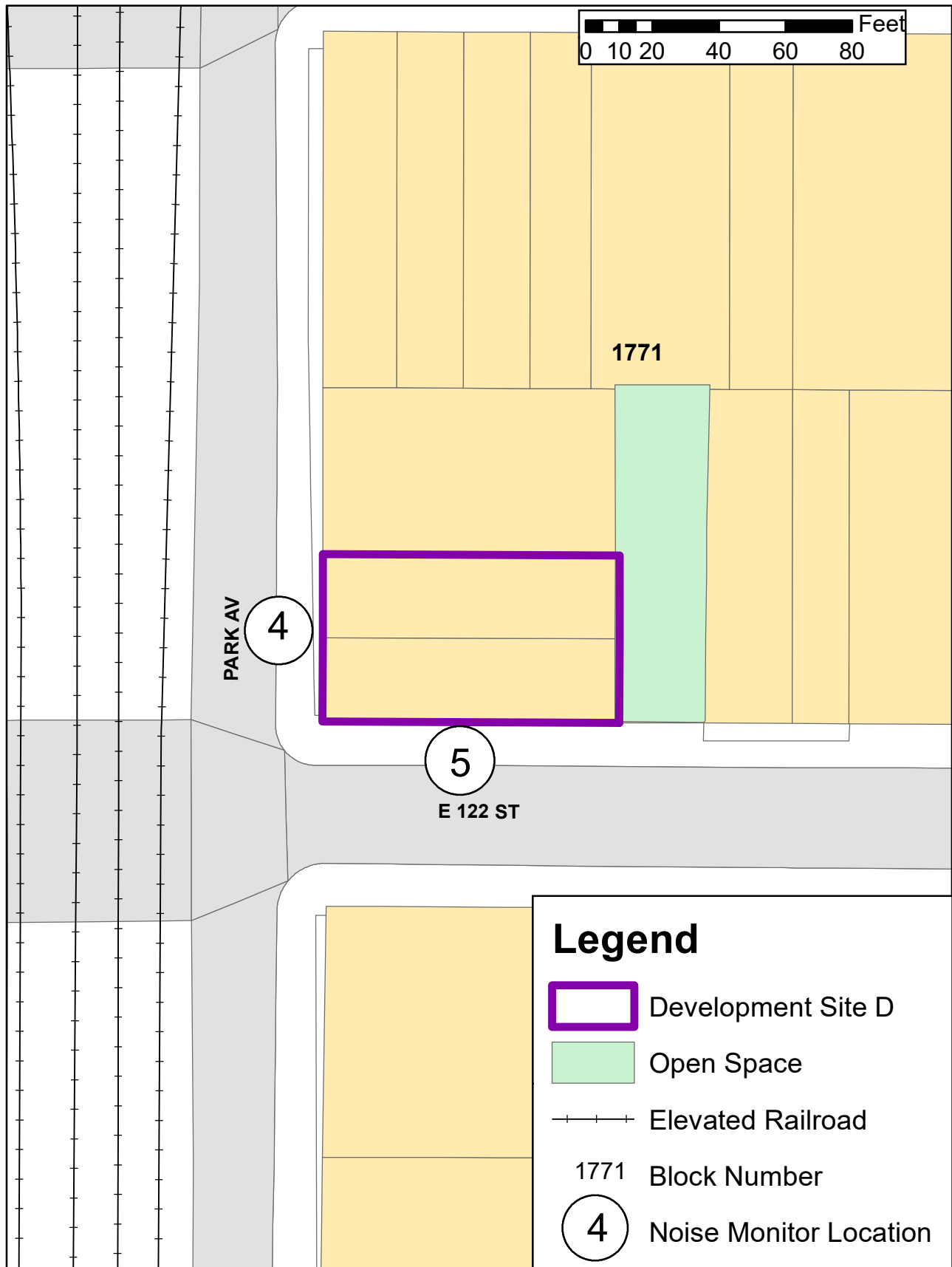
Noise Monitor Location: Development B



Noise Monitor Location: Development Site C



Noise Monitor Location :Development Site D



period in order to determine whether ambient noise levels were higher during this period than during the other standard weekday peak periods.⁷

Noise monitoring at Receptor 1 was performed on Wednesday, November 6th, 2019. On November 6th, 2019, the weather was mostly cloudy with temperatures in the low- to mid-50s and an average wind speed of seven mph.

Noise monitoring at Receptors 2 and 3 was performed on Thursday, October 24th, 2019. On October 24th, 2019, the weather was mostly cloudy with temperatures in the mid- to high-50s and an average wind speed of nine mph.

Noise monitoring at Receptor 4 was performed on Thursday, November 7th, 2019 and Wednesday, November 13th, 2019. The AM and MD peak hour readings were collected on November 7th, 2019 and the PM peak hour readings were collected on November 13th, 2019. The PM readings were collected on a separate day due to rain during the PM November, 7th 2019 analysis time period. On November 7th, 2019, the weather was mostly cloudy with temperatures in the low- to mid-50s and an average wind speed of 10 mph. On November 13th, 2019, the weather was mostly clear with temperatures in the low-50s and an average wind speed of 10 mph.

Noise monitoring at Receptor 5 was performed on Thursday, November 7th, 2019 and Thursday, November 14th, 2019. The AM and MD peak hour readings were collected on November 7th, 2019 and the PM peak hour readings were collected on November 14th, 2019. The PM readings were collected on a separate day due to rain during the PM November, 7th 2019 analysis time period. On November 7th, 2019, the weather was mostly cloudy with temperatures in the low- to mid-50s and an average wind speed of 10 mph. On November 14th, 2019, the weather was mostly cloudy with temperatures in the low-to-mid-50s and an average wind speed of 10 mph.

Equipment Used During Noise Monitoring

The instrumentation used for the measurements was a Brüel & Kjær Type 4189 ½-inch microphone connected to a Brüel & Kjær Model 2250 Type 1 (as defined by the American National Standards Institute) sound level meter. This assembly was mounted at a height of 6 feet above the ground surface on a tripod and at least 6 feet away from any sound-reflecting surfaces to avoid major interference with source sound levels being measured at the receptor locations along East 102nd, East 117th, East 118th, and East 122nd streets, and Park Avenue. The meter was calibrated before and after readings with a Brüel & Kjær Type 4231 sound-level calibrator using the appropriate adaptor. Measurements at each location were made on the A-scale (dBA). The data were digitally recorded by the sound level meter and displayed at the end of the measurement period in units of dBA. Measured quantities included L_{eq} , L_1 , L_{10} , L_{50} , and L_{90} . A windscreen was used during all sound measurements except for calibration. Traffic, train, and aircraft flyover noise was captured; noise from other sources (e.g., emergency sirens etc.) was excluded from the measured noise levels. Weather conditions were noted to ensure a true reading as follows: wind

⁷ As discussed above, noise levels measured during the School PM weekday peak period at Receptor Locations 2 and 3 were lower than those during the AM, midday, and/or PM weekday peak periods, and as such, it was determined that the School PM noise levels at Receptor Locations 2 and 3 did not reflect worst-case conditions. Therefore, the School PM noise levels at Receptor Locations 2 and 3 were not included in the future No-Action and With-Action proportional modeling analyses.

speed under 12 mph; relative humidity under 90 percent; and temperature above 14°F and below 122°F (pursuant to ANSI Standard S1.13-2005).

Existing Noise Levels at Monitoring Locations

The noise monitoring results are shown in **Table 7-9** below. Automobile traffic was the dominant source of noise at Receptors 1, 2, and 3, and train activity on the elevated Metro-North tracks was the dominant source of noise at Receptors 4 and 5. Overhead flights were moderate sources of noise at each of the receptors, but they were not continuous. As stated above, the rear and western boundaries of Development Site A (corresponding to Receptor 1) also contain a direct line-of-sight to Second Avenue, located approximately 75 feet to the northwest. However, a New Building (NB) work permit has been issued by the New York City Department of Buildings (DOB) for a 12-story building located on the vacant lot (Block 1674, Lot 49) at 1998 Second Avenue. Therefore, the completion of 1998 Second Avenue would eliminate all direct lines-of-sight from the rear and western boundaries of Development Site A to Second Avenue, and no noise monitoring was conducted at the rear or western boundaries of Development Site A.

As shown in **Table 7-9**, the highest overall L_{10} value (82.97 dBA) was measured in the PM peak period at Receptor 4. Pursuant to *CEQR Technical Manual* guidelines, this L_{10} value places Receptor 4 in the “Clearly Unacceptable” CEQR Noise Exposure category, as the noise levels exceed 80.0 dBA under existing conditions. The highest L_{10} for Receptor 1 was measured in the School PM peak period (65.32 dBA), placing Receptor 1 in the “Marginally Acceptable” CEQR Noise Exposure category under existing conditions. The highest L_{10} for Receptor 2 was measured in the MD peak period (69.03 dBA), placing Receptor 2 in the “Marginally Acceptable” CEQR Noise Exposure category under existing conditions. The highest L_{10} for Receptor 3 was measured in the PM peak period (62.96 dBA), placing Receptor 3 in the “Acceptable” CEQR Noise Exposure category under existing conditions. The highest L_{10} for Receptor 4 was measured in the PM peak period (82.97 dBA), placing Receptor 4 in the “Clearly Unacceptable” CEQR Noise Exposure category under existing conditions. The highest L_{10} for Receptor 5 was measured in the PM peak period (78.67 dBA), placing Receptor 5 in the “Marginally Unacceptable (IV)” CEQR Noise Exposure category under existing conditions.

Table 7-9: Existing Noise Levels (dBA) at Development Sites

Development Site	Noise Receptor Location ¹	Time ²	L _{max}	L _{min}	L _{eq}	L ₁	L ₁₀ ³	L ₅₀	L ₉₀	CEQR Noise Exposure Category
A	1	AM	82.72	53.71	62.90	71.24	65.06	60.79	57.11	Marginally Acceptable
		MD	85.31	54.85	63.28	73.14	64.71	60.60	57.73	
		SC PM	87.39	51.05	63.18	72.81	65.32	60.07	55.61	
		PM	84.48	52.94	62.73	73.12	64.62	59.61	56.01	
B	2	AM	92.66	51.89	66.18	78.39	67.22	59.85	55.78	Marginally Acceptable
		MD	85.22	50.11	65.73	74.61	69.03	61.90	56.25	
		SC PM	83.58	51.55	63.63	74.85	65.64	59.03	55.02	
		PM	88.86	52.78	64.61	73.92	66.61	60.70	57.31	
C	3	AM	80.28	46.26	57.03	67.98	58.58	52.29	48.87	Acceptable
		MD	93.40	48.70	60.41	68.57	62.96	55.68	51.73	
		SC PM	79.44	47.34	58.33	70.92	59.61	52.83	49.85	
		PM	84.44	47.63	58.16	68.57	60.71	52.94	50.01	
D	4	AM	99.75	51.65	76.32	87.37	80.71	64.59	54.87	Clearly Unacceptable
		MD	85.49	50.36	70.56	82.52	74.24	59.41	52.61	
		PM	99.36	52.45	78.23	88.90	82.97	64.76	55.07	
	5	AM	100.80	51.16	73.55	84.37	77.16	61.74	56.12	Marginally Unacceptable (IV)
		MD	88.09	49.59	67.62	79.23	70.37	58.21	54.61	
		PM	101.97	48.81	75.39	86.98	78.67	61.74	55.14	

Notes: Field measurements were performed by Philip Habib & Associates on October 24th, 2019 and November 6th, 7th, 13th, and 14th, 2019

¹ Receptor Locations keyed to **Figure 7-1a-d**.

² AM = weekday AM peak hour; MD = weekday midday peak hour; SC PM = weekday school PM peak hour; PM = weekday PM peak hour

³ Highest L₁₀ at each receptor is shown in **bold**.

Existing L_{dn} Noise Levels

As the Proposed Project may include federal sources of funding in the future, L_{dn} noise levels were calculated for the corresponding receptor locations, as described above in the “HUD Development Guidelines” section. According to the methodology described above, the highest L_{dn} for Receptor 1 was estimated to be 62.32 dBA, the highest L_{dn} for Receptor 2 was estimated to be 66.03 dBA, the highest L_{dn} for Receptor 3 was estimated to be 59.96 dBA, the highest L_{dn} for Receptor 4 was estimated to be 79.97 dBA, and the highest L_{dn} for Receptor 5 was estimated to be 75.67 dBA. According to HUD criteria, the calculated existing L_{dn} noise level at Receptor 1 would fall in the “Acceptable” category, the calculated existing L_{dn} noise level at Receptor 2 would fall in the

“Normally Unacceptable” category, the calculated existing L_{dn} noise level at Receptor 3 would fall in the “Acceptable” category, the calculated existing L_{dn} noise level at Receptor 4 would fall in the “Unacceptable” category, and the calculated existing L_{dn} noise level at Receptor 5 would fall in the “Unacceptable” category.

VI. THE FUTURE WITHOUT THE PROPOSED ACTION (NO-ACTION)

In the future without the proposed action (the No-Action scenario), it is expected that there would be no new development on any of the four development sites and each of the development sites would remain in its current state.

As there are no additional anticipated developments expected to generate a significant number of vehicle trips by 2023 within a 400-foot radius of the development sites, consistent with *CEQR Technical Manual* guidelines, estimates of peak hour noise levels for the No-Action condition were developed by applying an annual background growth rate of 0.25 percent from 2019 to 2023 to the existing traffic levels at Receptors 1, 2, 3, 4 and 5.

As presented in **Table 7-10**, in the future without the proposed action, noise levels at the development sites would be similar to existing conditions, apart from slight increases (0.04 dBA) associated with minor increases in traffic and due to general background growth. As indicated in **Table 7-10**, noise levels at all receptor locations would remain in their respective CEQR Noise Exposure categories; with noise levels at both Receptors 1 and 2 remaining in the “Marginally Acceptable” noise category, Receptor 3 remaining in the “Acceptable” noise category, Receptor 4 remaining in the “Clearly Unacceptable” noise category, and Receptor 5 remaining in the “Marginally Unacceptable (IV)” noise category.

Table 7-10: 2023 No-Action Noise Levels (dBA) at the Development Sites

Receptor Location	Time	Existing PCEs	No-Action PCEs	Existing L_{eq}	No-Action L_{eq}	Change ¹	No-Action L_{10} ²	CEQR Noise Exposure Category
1	AM	429.0	433.3	62.90	62.94	0.04	65.10	Marginally Acceptable
	MD	243.0	245.4	63.28	63.32	0.04	64.75	
	SC	576.0	581.8	63.18	63.22	0.04	65.36	
	PM	402.0	406.0	62.73	62.77	0.04	64.66	
2	AM	333.0	336.3	66.18	66.22	0.04	67.26	Marginally Acceptable
	MD	180.0	181.8	65.73	65.77	0.04	69.07	
	PM	159.0	160.6	64.61	64.65	0.04	66.65	
3	AM	21.0	21.2	57.03	57.07	0.04	58.62	Acceptable
	MD	48.0	48.5	60.41	60.45	0.04	63.00	
	PM	48.0	48.5	58.16	58.20	0.04	60.75	
4	AM	1,229.0	1,241.3	76.32	76.36	0.04	80.75	Clearly Unacceptable
	MD	1,061.0	1,071.6	70.56	70.60	0.04	74.28	
	PM	1,511.0	1,526.2	78.23	78.27	0.04	83.01	
5	AM	254.0	256.5	73.55	73.59	0.04	77.20	Marginally Unacceptable (IV)
	MD	115.0	116.2	67.62	67.66	0.04	70.41	
	PM	211.0	213.1	75.39	75.43	0.04	78.71	

Notes: All PCE and noise values are shown for a weekday.

¹ No-Action L_{eq} – Existing L_{eq} .

² Highest L_{10} at each receptor is shown in **bold**.

No-Action L_{dn} Noise Levels

As the Proposed Project may include federal sources of funding in the future, No-Action L_{dn} noise levels were calculated for the corresponding receptor locations, as described above in the “HUD Development Guidelines” section. According to the methodology described above, the No-Action L_{dn} for Receptor 1 was estimated to be 62.36 dBA; the No-Action L_{dn} for Receptor 2 was estimated to be 66.07 dBA; the No-Action L_{dn} for Receptor 3 was estimated to be 60.00 dBA; the No-Action L_{dn} for Receptor 4 was estimated to be 80.01 dBA; and the No-Action L_{dn} for Receptor 5 was estimated to be 75.71 dBA. According to HUD criteria, the calculated No-Action L_{dn} noise level at Receptor 1 would remain in the “Acceptable” category, the calculated No-Action L_{dn} noise level at Receptor 2 would remain in the “Normally Unacceptable” category, the calculated No-Action L_{dn} noise level at Receptor 3 would remain in the “Acceptable” category, the calculated No-Action L_{dn} noise level at Receptor 4 would remain in the “Unacceptable” category, and the calculated No-Action L_{dn} noise level at Receptor 5 would remain in the “Unacceptable” category.

No-Action Train Noise Levels

Based on the FTA noise prediction methodology, as no significant changes in train operations are anticipated in the 2023 No-Action condition, the maximum predicted No-Action L_{10} noise levels at Receptor Locations 4 and 5 would remain at 84.09 dBA and 80.62 dBA, respectively.

VII. FUTURE WITH THE PROPOSED ACTION (WITH-ACTION CONDITION)

Following *CEQR Technical Manual* guidelines, noise levels in the 2023 future with the proposed action were calculated for the weekday AM, MD, and PM peak periods for each of the five receptor locations, as well as the weekday School PM peak period for Receptor Location 1. These calculations account for the additional traffic that would be added as a consequence of the proposed action. As shown in **Table 7-11**, the analysis indicates that the highest L_{10} noise levels at Receptor 1 would be 65.38 dBA, and it would remain in the “Marginally Acceptable” Noise Exposure category; the highest L_{10} for Receptor 2 would be 69.07 dBA, and it would remain in the “Marginally Acceptable” Noise Exposure category; the highest L_{10} for Receptor 3 would be 63.00 dBA, and it would remain in the “Acceptable” Noise Exposure category; the highest L_{10} for Receptor 4 would be 83.02 dBA, and it would remain in the “Clearly Unacceptable” Noise Exposure category; and the highest L_{10} for Receptor 5 would be 78.7 dBA, and it would remain in the “Marginally Unacceptable (IV)” Noise Exposure category.

Accordingly, in the future with the proposed action, noise levels at the development sites would be similar to No-Action conditions, apart from slight increases (up to 0.29 dBA) associated with increased traffic in the vicinity of the development sites. As indicated in **Table 7-11**, noise levels at each receptor location would remain in its respective CEQR Noise Exposure categories, with noise levels at both Receptors 1 and 2 remaining in the “Marginally Acceptable” noise category, Receptor 3 remaining in the “Acceptable” noise category, Receptor 4 remaining in the “Clearly Unacceptable” noise category, and Receptor 5 remaining in the “Marginally Unacceptable (IV)” noise category, as under No-Action conditions.

Table 7-11: 2023 With-Action Noise Levels (dBA) at the Development Sites

Receptor Location	Time	No-Action PCEs	With-Action PCEs	No-Action L_{eq}	With-Action L_{eq}	Change ¹	With-Action L_{10} ²	CEQR Noise Exposure Category
1	AM	433.3	433.3	62.94	62.94	0.00	65.10	Marginally Acceptable
	MD	245.4	247.4	63.32	63.36	0.04	64.79	
	SC	581.8	583.8	63.22	63.24	0.01	65.38	
	PM	406.0	406.0	62.77	62.77	0.00	64.66	
2	AM	336.3	337.3	66.22	66.24	0.01	67.28	Marginally Acceptable
	MD	181.8	181.8	65.77	65.77	0.00	69.07	
	PM	160.6	161.6	64.65	64.68	0.03	66.8	
3	AM	21.2	22.2	57.07	57.27	0.20	58.82	Acceptable
	MD	48.5	48.5	60.45	60.45	0.00	63.00	
	PM	48.5	50.5	58.20	58.38	0.18	60.93	
4	AM	1,241.3	1,244.3	76.36	76.37	0.01	80.76	Clearly Unacceptable
	MD	1,071.6	1,079.6	70.60	70.64	0.03	74.32	
	PM	1,526.2	1,530.2	78.27	78.28	0.01	83.02	
5	AM	256.5	259.5	73.59	73.64	0.05	77.25	Marginally Unacceptable (IV)
	MD	116.2	124.2	67.66	67.95	0.29	70.70	
	PM	213.1	217.1	75.43	75.51	0.07	78.79	

Notes: All PCE and noise values are shown for a weekday.

¹ With-Action L_{eq} – No-Action L_{eq} .

² Highest L_{10} at each receptor is shown in **bold**.

Comparing the future With-Action noise levels with No-Action noise levels, noise levels at Receptor 1 would experience increases ranging from 0.01 dBA to 0.04 dBA; increases in noise levels at Receptor 2 would range from 0.01 dBA to 0.03 dBA; increases in noise levels at Receptor 3 would range from 0.18 dBA to 0.20 dBA; increases in noise levels at Receptor 4 would range from 0.01 dBA to 0.03 dBA; and increases in noise levels at Receptor 5 would range from 0.05 dBA to 0.29 dBA.

According to the *CEQR Technical Manual*, increases of these magnitudes would not be perceptible. As these increases are less than the CEQR impact criteria threshold (3.0 dBA), the overall changes to noise levels at the development sites as a result of the proposed action would not result in any significant adverse noise impacts.

With-Action L_{dn} Noise Levels

As the Proposed Project may include federal sources of funding in the future, With-Action L_{dn} noise levels were calculated for the corresponding receptor locations, as described above in the “HUD Development Guidelines” section. According to the methodology described above, the With-Action L_{dn} for Receptor 1 was estimated to be 62.38 dBA, the With-Action L_{dn} for Receptor 2 was estimated to be 66.07 dBA, the With-Action L_{dn} for Receptor 3 was estimated to be 60.00 dBA, the With-Action L_{dn} for Receptor 4 was estimated to be 80.02 dBA, and the With-Action L_{dn} for Receptor 5 was estimated to be 75.79 dBA.

According to HUD criteria, the calculated With-Action L_{dn} noise level at Receptor 1 would remain in the “Acceptable” category, the calculated With-Action L_{dn} noise level at Receptor 2 would remain in the “Normally Unacceptable” category, the calculated With-Action L_{dn} noise level at Receptor 3 would remain in the “Acceptable” category, the calculated With-Action L_{dn} noise level

at Receptor 4 would remain in the “Unacceptable” category, and the calculated With-Action L_{dn} noise level at Receptor 5 would remain in the “Unacceptable” category.

With-Action Train Noise Levels

Based on the FTA noise prediction methodology, as no significant changes in train operations are anticipated in the 2023 With-Action condition, the maximum predicted L_{10} noise level would remain at 84.09 dBA at Receptor Location 4 and 80.62 dBA at Receptor Location 5, as under existing and No-Action conditions. Using this methodology, the maximum L_{10} noise levels at Receptor Locations 4 and 5 using the FTA noise prediction methodology are higher than projected noise levels using the proportional modeling technique presented in **Table 7-11**. As such, the projected L_{10} noise values based on the train noise modeling will be utilized in determining the levels of noise attenuation measures required for the eastern- and southern-facing facades at Development Site D, which is discussed in greater detail below.

VIII. ATTENUATION REQUIREMENTS

CEQR

As shown earlier in **Table 7-4**, the *CEQR Technical Manual* has set noise attenuation requirements for buildings based on L_{10} noise levels. Recommended composite window/wall attenuation values for buildings are designed to maintain interior noise levels of 45 dBA or lower for residential and community facility uses and 50 dBA or lower for commercial uses, and are determined based on L_{10} noise levels.

All facades that would experience an L_{10} of 70.0 dBA or greater must provide an alternate means of ventilation (AMV) permitting a closed window condition during warm weather. This can be achieved by installing double-glazed windows on a heavy frame for masonry structures or windows consisting of laminated glass, along with AMV such as central air conditioning, through-wall sleeve-fitted air conditioners, packaged terminal air conditioning (PTAC) units, trickle vents integrated into window frames, or other approved means. Where the required window/wall attenuation is above 40 dBA, special design features may be necessary that go beyond the normal double-glazed window and air conditioning. These may include specially designed windows (e.g., windows with small sizes, windows with air gaps, windows with thicker glazing, etc.) and additional building insulation.

Based on predicted future With-Action exterior noise levels and *CEQR Technical Manual* criteria, With-Action noise levels at Receptor Locations 1 and 2 would remain in the “Marginally Acceptable” CEQR noise exposure category and Receptor Location 3 would remain in the “Acceptable” noise exposure category, and therefore, no special noise attenuation measures beyond standard construction practices would be required for residential or community facility uses on any of the Proposed Project’s street frontages in order to achieve the required residential or community facility interior noise levels of 45 dBA.

However, as detailed in Section VII above, the maximum predicted L_{10} noise levels at Development Site D’s western- (Receptor Location 4) and southern-facing (Receptor Location 5)

facades are expected to be 84.09 dBA and 80.62 dBA, respectively. Thus, as shown in **Table 7-12** and **Figure 7-2**, to ensure acceptable interior noise levels at Development Site D, a minimum of 40 dBA of attenuation is needed along the proposed building's western-facing frontages and a minimum of 36 dBA of attenuation is needed along the proposed building's southern-facing frontages.

The noise attenuation specifications for Development Site D would be mandated through the provisions contained in the LDA between HPD and the project sponsor. With implementation of the noise attenuation levels outlined above, the Proposed Project would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines of 45 dBA (L_{10}) or lower for residential/community facility uses. Therefore, the Proposed Project would not result in any significant adverse noise impacts related to building noise attenuation requirements.

Table 7-12: Window/Wall Attenuation Requirements for Development Sites A, B, C, & D

Development Site	Frontage	Associated Receptor Location ¹	Maximum With-Action L_{10} (in dBA)	CEQR Minimum Required Attenuation (in dBA) ²	Maximum With-Action L_{dn} (in dBA)	HUD Minimum Required Attenuation (in dBA) ³
A	Southern Façade (E 102 Street)	1	65.38	N/A ⁴	62.38	N/A
B	Northern Façade (E 117 Street)	2	69.07	N/A	66.07	25
C	Southern Façade (E 118 Street)	3	63.00	N/A	60.00	N/A
D	Western Façade (Park Avenue)	4	84.09	40	81.09	36
	Southern Façade (E 122 Street)	5	80.62	36	77.62	31

Notes: ¹ Receptor locations shown in **Figure 7-1**; required attenuation levels are shown in **Figure 7-2**.

² The above composite window/wall attenuation values are for residential/community facility uses. Commercial uses would be 5.0 dBA less in each category. All the above categories require a closed window situation and an alternate means of ventilation.

³ The composite window/wall attenuation values are for residential uses only.

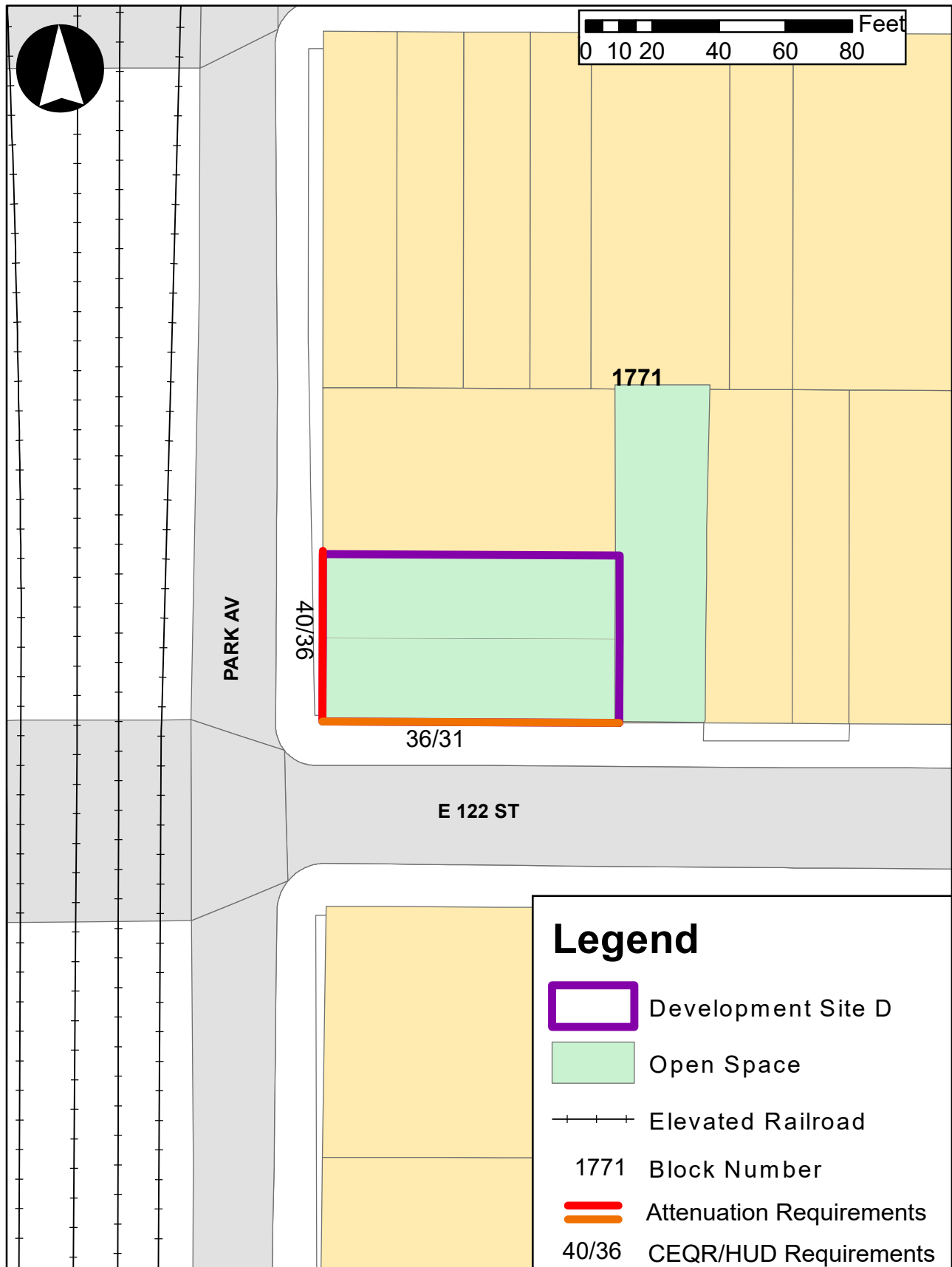
⁴ N/A = Not Applicable. Additional noise attenuation measures above standard construction practices are not required to achieve interior noise levels of 45 dBA or lower for residential/community facility uses.

HUD

As described above in the “HUD Development Guidelines” section, the L_{dn} noise levels for all receptor locations were estimated using the worst-case With-Action L_{10} noise levels and are shown above. Based on the methodology for estimating the L_{dn} value described above in the “HUD Development Guidelines” section, the L_{dn} at Receptor 1 was determined to be 62.38 dBA, the L_{dn} at Receptor 2 was determined to be 66.07 dBA, the L_{dn} at Receptor 3 was determined to be 60.00 dBA, the L_{dn} at Receptor 4 was determined to be 80.02 dBA, and the L_{dn} at Receptor 5 was determined to be 75.79 dBA.

As the calculated With-Action L_{dn} noise level at Receptors 1 and 3 would be in the “Acceptable” category, no attenuation measures would be required to ensure interior noise levels of 45 dBA at Development Sites A and C. However, as the calculated With-Action L_{dn} noise levels at Receptor 2 would be in the “Normally Unacceptable” category, and as the calculated With-Action L_{dn} noise levels at Receptors 4 and 5 would be in the “Unacceptable” category, additional attenuation measures are required to ensure interior noise levels of 45 dBA or lower. As such,

Building Attenuation Requirements: Development Site D



according to the *HUD Noise Guidebook*, to ensure acceptable interior noise levels at the proposed development at Development Site B, a minimum of 25 dBA of attenuation would be needed along Development Site B's northern frontage (East 117th Street), as shown in **Figure 7-3**; and to ensure acceptable interior noise levels at the proposed development at Development Site D, a minimum of 36 dBA of attenuation would be needed along Development Site D's western frontage (Park Avenue) and a minimum of 31 dBA of attenuation would be needed along the site's southern frontage (East D Street), as shown in **Figure 7-2**. According to the *HUD Noise Guidebook*, all facades that would experience an L₁₀ in exceedance of 65.0 dBA must provide an alternate means of ventilation (AMV) permitting a closed window condition during warm weather.

The noise attenuation specifications for Development Sites B and D described above would be required for residential uses in the event the Proposed Project includes federal sources of funding. However, it should be noted that for any CEQR attenuation requirements exceeding those required by HUD at a particular receptor (see **Table 7-12**), the higher CEQR requirement would supersede the HUD requirement as it would satisfy both the CEQR and HUD requirements at that receptor; similarly, any HUD attenuation requirement that exceeds the CEQR requirement will take precedence as the higher HUD requirement would satisfy both noise attenuation requirements. Absent the federal sources of funding, the Proposed Project would only be required to provide the noise attenuation levels pursuant to CEQR. Such noise attenuation specifications would be mandated through the provisions contained in the LDA between HPD and the project sponsor. With implementation of the noise attenuation levels outlined above, the Proposed Project would provide sufficient attenuation to achieve the *HUD Development Guidelines* interior noise level requirements of 45 dBA (L_{dn}) or lower for residential uses. Therefore, the Proposed Project would not result in any significant adverse noise impacts related to building noise attenuation requirements.

IX. OTHER NOISE CONCERNS

Mechanical Equipment

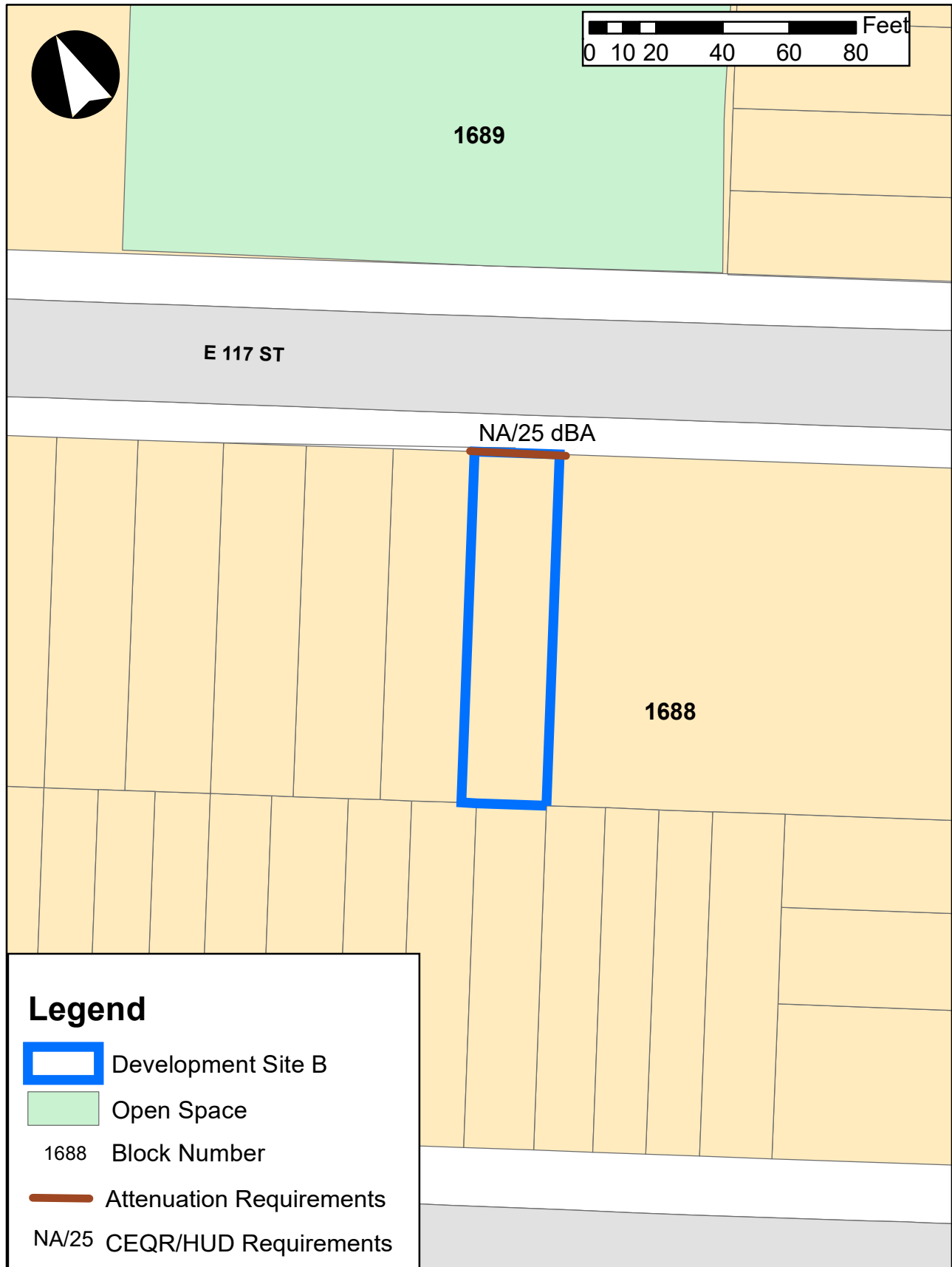
All of the future buildings' mechanical systems (i.e., heating, ventilation, and air conditioning systems) will be designed to meet all applicable noise regulations and requirements and designed to produce noise levels that would not result in any significant increase in ambient noise levels. In addition, the building mechanical systems would be designed with enclosures where necessary to meet all applicable noise regulations (i.e., Subchapter 5 §24-227 of the New York City Noise Control Code and the NYC DOB Building Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. Therefore, the Proposed Project would not result in any significant increases in ambient noise levels.

Aircraft Noise

An initial aircraft noise impact screening analysis would be warranted if the new receptors would be located within one mile of an existing flight path, or cause aircraft to fly through existing or new flight paths over or within one mile of a receptor. Since the Proposed Project is not located

within one mile of an existing flight path, no initial aircraft noise impact screening analysis is warranted.

Building Attenuation Requirements: Development B



I. INTRODUCTION

This chapter assesses the proposed action's effects on public health. As defined by the *City Environmental Quality Review (CEQR) Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability, and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on human health may occur as a result of a proposed project and, if so, to identify measures to mitigate such effects.

The *CEQR Technical Manual* states that a public health assessment is not necessary for most projects. Where no significant adverse unmitigated impacts are found in other CEQR analysis areas—such as air quality, water quality (natural resources and water and sewer infrastructure), hazardous materials, or noise—no public health analysis is warranted. If, however, an unmitigated adverse impact is identified in any of these other CEQR analysis areas, the lead agency may determine that a public health assessment is warranted for that specific technical area.

As outlined in **Chapter 1, “Project Description,”** the proposed action includes the disposition of City-owned property on four separate development sites in the East Harlem neighborhood of Manhattan Community District 11. The proposed action would facilitate the development of four buildings containing approximately 81 affordable housing DUs (plus two superintendent's units for a total of 83 units) and 10,740 gsf of community facility space. The anticipated Build Year is 2023.

As described in the relevant analyses of this EIS, the proposed action would not result in any unmitigated significant adverse hazardous materials or water quality impacts, and, with the establishment of a Land Disposition Agreement (LDA) as part of the proposed action, no unmitigated significant adverse impacts would occur in the areas of air quality (operation-related) or operational noise. However, the proposed action would have the potential to result in unmitigated significant adverse shadows and open space impacts, as presented in **Chapter 12, “Unavoidable Adverse Impacts.”**

II. PRINCIPAL CONCLUSIONS

The proposed action is not expected to result in unmitigated significant adverse impacts in the following technical areas that contribute to public health: operational air quality, construction-related air quality, operational noise, water quality, or hazardous materials. The proposed action could result in unmitigated significant adverse shadows and open space related impacts. Therefore, a preliminary assessment of public health was conducted, and is provided below. As detailed therein, while the proposed action would result in significant adverse unmitigated impacts related to shadows on one open space, the potential for these impacts to occur is expected to be limited and would not significantly affect public health. Therefore, no significant adverse public health impacts are expected as a result of the proposed action.

III. PRELIMINARY SCREENING

As recommended in the *CEQR Technical Manual*, if a public health assessment is determined to be necessary, the assessment process involves evaluating whether and how exposure to environmental contaminants may occur and the extent of that exposure; characterizing the relationship between exposures and health risks; and applying that relationship to the population exposed.

The proposed action would not induce development where it otherwise would not have been possible as-of-right. Air quality and noise impact assessments were performed for the proposed action based on a comparison of the development on the four development sites under the No-Action and With-Action scenarios. Water Quality (i.e. Water and Sewer Infrastructure and Natural Resources) and Hazardous Materials were screened out per the EAS. As discussed in **Chapter 6, “Air Quality”** and **Chapter 7 “Noise,”** the proposed action would not result in any significant adverse impacts related to air quality, or noise.

As detailed in **Chapter 4, “Shadows,”** project-generated incremental shadows would occur on Jackie Robinson Community Garden. However, the potential for additional shadows as a result of the proposed action is limited to relatively small areas in comparison to the total area of public open space within the East Harlem neighborhood. Therefore, the potential impacts are not expected to be sufficiently large or widespread to raise the potential for significant adverse public health impacts in the future with the Proposed Action, and further analysis is not warranted.

I. INTRODUCTION

This chapter assesses the proposed action’s potential effects on neighborhood character. As defined in the 2020 *City Environmental Quality Review (CEQR) Technical Manual*, neighborhood character is an amalgam of various elements that give a neighborhood its distinct “personality.” These elements may include a neighborhood’s land use, socioeconomic, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, and/or noise conditions; but not all of these elements contribute to neighborhood character in all cases. For a proposed project or action, a neighborhood character analysis under CEQR first identifies the defining features of the neighborhood and then evaluates whether the project or action has the potential to affect those defining features, either through the potential for a significant adverse impact or a combination of moderate effects in relevant technical analysis areas. Thus, to determine the effects of a proposed action on neighborhood character, the salient features of neighborhood character are considered together. According to the *CEQR Technical Manual*, neighborhood character impacts are rare, and it would be unusual that, in the absence of a significant adverse impact in any of the relevant technical areas, a combination of moderate effects to the neighborhood would result in an impact to neighborhood character. Moreover, a significant impact identified in one of the technical areas that contribute to a neighborhood’s character is not automatically equivalent to a significant adverse impact on neighborhood character, but rather serves as an indication that neighborhood character should be examined.

As discussed in Chapter 1, “Project Description,” the proposed action would facilitate the development of four new affordable housing developments “the proposed project” on four separate development sites in the East Harlem neighborhood of Manhattan, Community District 11 (CD 11). The project area is comprised of six tax lots, which are grouped into four Development Sites. Development Site A is located at 303 East 102nd Street (Block 1674, Lot 104) and has a lot area of approximately 1,898 square feet (sf). Development Site B is located at 338 East 117th Street (Block 1688, Lot 34) and has a lot area of approximately 2,523 sf. Development Site C is located at 505 East 118th Street (Block 1815, Lots 5 and 6) and has a lot area of approximately 4,827 sf. Development Site D is located at 1761 Park Avenue (Block 1771, Lots 1 and 2) and has a lot area of approximately 4,583 sf. The proposed project would be facilitated by disposition of City-owned property.

The proposed action would facilitate new construction on the development sites that would result in an incremental (net) increase compared to No-Action conditions of approximately 81 affordable dwelling units (DUs) (plus two superintendent’s units for a total of 83 units) and approximately 10,740 gross square feet (gsf) of community facility space. Construction of the proposed project is expected to be completed in 2023.

This chapter includes a preliminary assessment of neighborhood character, which was prepared in conformance with the *CEQR Technical Manual*. This chapter describes the defining features of the existing neighborhood character and considers the potential effects of the proposed action on these defining features. This assessment relies on the technical analyses presented in other chapters of this EIS.

II. PRINCIPAL CONCLUSIONS

The proposed action would not result in significant adverse impacts associated with neighborhood character. The proposed action would permit the development of affordable housing at four development sites in East Harlem, which would remain underutilized absent the proposed action. The proposed project would support the City's goals of promoting affordable housing development by maximizing the use of vacant and underutilized land.

As described elsewhere in this EIS and summarized herein, the proposed action would not result in significant adverse impacts in the areas of land use, zoning, and public policy; socioeconomic conditions; historic and cultural resources; urban design and visual resources; or noise. As discussed in greater detail below, the significant adverse shadows impacts that would occur as a result of the proposed action would not affect any defining feature of neighborhood character, nor would a combination of moderately adverse effects (related to any of the above-mentioned technical analysis areas) affect such a defining feature. Although significant adverse impacts would occur with respect to shadows and open space, the impact would not result in significant change to one of the determining elements of neighborhood character.

In addition, while incremental vehicle volumes introduced as a result of the proposed action would increase noise levels adjacent to the development sites, the increases would not be perceptible to individuals (i.e., would be less than 3.0 dBA) and therefore, would not alter the character of the surrounding neighborhood.

III. METHODOLOGY

According to the *CEQR Technical Manual*, an assessment of neighborhood character is generally needed when a project or action has the potential to result in significant adverse impacts in any of the following technical areas: land use, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, or noise. The *CEQR Technical Manual* states that, even if a proposed action does not have the potential to result in a significant adverse impact in any specific technical area(s), an assessment of neighborhood character may be required if the project would result in a combination of moderate effects to several elements that may cumulatively affect neighborhood character. A "moderate" effect is generally defined as an effect considered reasonably close to the significant adverse impact threshold for a particular technical analysis area.

A preliminary assessment of neighborhood character determines whether changes expected in other technical analysis areas may affect a defining feature of neighborhood character. The key elements that define neighborhood character, and their relationships to one another, form the basis of determining impact significance; in general, the more uniform and consistent the existing neighborhood context, the more sensitive it is to change. A neighborhood that has a more varied context is typically able to tolerate greater change without experiencing significant adverse impacts. If there is no potential for a proposed project to affect the defining features of neighborhood character, a detailed assessment is not warranted. Pursuant to the *CEQR Technical Manual*, the preliminary assessment evaluates the expected changes resulting from the proposed action in the above technical areas using the findings from the respective chapters of this EIS and the Environmental Assessment Statement (EAS) that preceded it to identify whether the proposed action would result in any significant adverse impacts or moderate adverse effects in these technical areas, and whether any such changes would have the potential to affect the defining features of neighborhood character.

Study Area

According to the *CEQR Technical Manual*, the study area for a preliminary assessment of neighborhood character is typically consistent with the study areas utilized in the relevant technical areas assessed under CEQR that contribute to the defining features of the neighborhood. Therefore, the study area for this analysis is the same as those used in land use assessment. The study area for the assessment of the proposed action on neighborhood character extends to include all lots within an approximate 400-foot radius of each development site.

IV. PRELIMINARY ASSESSMENT

Defining Features

Project Area

Development Site A

Development Site A (Block 1674, Lot 104) is a vacant lot owned by the NYC Department of Housing Preservation and Development (HPD). It is a rectangular-shaped interior lot with frontage on East 102nd Street.

Development Site B

Development Site B (Block 1688, Lot 34) is a vacant lot owned by the NYC Department of Citywide Administrative Services (DCAS). It is a rectangular-shaped interior lot with frontage on East 117th Street.

Development Site C

Development Site C (Block 1815, Lots 5 and 6) is a portion of the Pleasant Village Community Garden owned by NYC HPD. It is a rectangular-shaped interior lot with frontage on East 118th Street. The community garden on Development Site C operates under a temporary license agreement with HPD that permits the community garden to use this site on an interim basis until HPD is ready to move forward with its redevelopment.

Development Site D

Development Site D (Block 1771, Lots 1 and 2) is a portion of the Jackie Robinson Community Garden owned by NYC HPD. It is a rectangular-shaped corner lot with frontage on both Park Avenue and East 122nd Street. The community garden on Development Site D operates under a temporary license agreement with HPD that permits the community garden to use this site on an interim basis until HPD is ready to move forward with its redevelopment.

400-Foot Secondary Study Area

Overall, the study areas surrounding the development sites are characterized by a dense neighborhood developed around the typical Manhattan grid system of north-south avenues and east-west cross streets. As noted in the *East Harlem Rezoning FEIS* (2017), this community is a vibrant neighborhood with a rich cultural history. Several factors have played a role in shaping the character of East Harlem, including waves of immigration, construction of the elevated rail lines in the late 19th century, the development of tenement housing that extended into the early 20th century, and the large-scale urban renewal projects of the mid-20th century. East Harlem was devastated during the City's fiscal crisis of 1970s, when New York City grappled with urban flight, substance abuse, and gangs. In the aftermath of the social upheaval of the 1970s, East Harlem was marked by community organization and advocacy. In recent decades the area has

stabilized thanks in part to the redevelopment of vacant properties with new buildings, including a mix of market and affordable housing units, institutional uses, cultural activities, and community gardens.

Development Site A

The 400-foot radius study area for Development Site A is generally bound by East 104th Street on the north, 1st Avenue on the east, East 100th Street on the south, and the midblock area located between 2nd and 3rd Avenues on the west.

Predominant land uses within a 400-foot radius of Development Site A include residential, institutional, open space, commercial and some vacant land as well. The majority of residential buildings are mixed use and multi-family walk-up buildings. Notable uses include PS 38 Roberto Clemente Learning Complex and Blake Hobbs Playground, both located to the west of Development Site A and Hobbs Court, an affordable housing development, located directly east of Development Site A. The New York City Housing Authority (NYCHA)'s George Washington Houses are also located west and south west of the Development Site. In addition, NYCHA's MetroNorth Plaza buildings are located to the south and its East River Houses are located one block east of the site. The 103rd Street station for the NYCT 6 subway line is located 0.3 miles east from Development Site A and the 96th Street Station for the 4/5/6 lines is located 0.5 miles southeast from the site. The M15 NYCT bus route serves Development Site A along First and Second Avenues. There is also a Citi Bike Station located 0.1 miles north of Development Site A.

Development Site B

The 400-foot radius study area for Development Site B is generally bound by the midblock area located between East 119th and East 118th Streets on the north, 1st Avenue on the east, East 115th Street on the south, and 2nd Avenue on the west.

Predominant land uses within a 400-foot radius of Development Site B include residential, institutional, and some commercial uses as well. The majority of residential buildings are multi-family mixed-use buildings. Notable land uses include PS 155 William Paca School and PS 155 Playground located directly to the north of Development Site B across East 117th Street. NYCHA's Edward Corsi Houses are located to the west of the site. The 116th Street station for the NYCT 6 subway line is located 0.5 miles west of Development Site B. There are several NYCT bus routes serving Development Site B including the M116 (along East 116th Street) and M15 /M15-Select Bus Service (SBS) (along 1st and 2nd Avenues).

Development Site C

The 400-foot radius study area for Development Site C is generally bound by East 120th Street on the north, FDR Drive on the east, midblock between East 117th and East 116th Streets on the south, and the midblock area located between 1st and Pleasant Avenues on the west. Refer to Figure 2-1c.

Predominant land uses within a 400-foot radius of Development Site C include residential, institutional, open space, and commercial uses. The majority of residential buildings are multi-family walk-up buildings. Notable land uses include the East River Plaza shopping mall, located to the east and southeast of Development Site C. East River Plaza is a large complex with various retailers and its associated parking garage. There are no pedestrian entrances to the shopping center or vehicular entrances to the parking garage on East 118th Street. Both pedestrian and vehicular entrances can be found one block south on East 117th Street. Located on the same block, PS 206 and PS 112 and their associated playground is located one block north of the site. The 116th Street station for the NYCT 6 subway line is located 0.6 miles west of Development Site C. The M116 NYCT bus route (along E. 116th Street) serves Development Site C. There

is also a Citi Bike Station located one block north of Development Site C on the corner of Pleasant Avenue and East 120th Street.

Development Site D

The 400-foot radius study area for Development Site D is generally bound by East 124th Street on the north, Lexington Avenue on the east, midblock between East 121st and East 120th Streets on the south, and the midblock area located between Madison and Park Avenues on the west.

Predominant land uses within a 400-foot radius of Development Site D include residential, institutional, open space and some commercial uses as well. The majority of residential buildings are multi-family walk-up buildings. The Henry J. Carter Specialty Hospital and Nursing Facility is located one block southwest of Development Site D. The elevated Metro-North rail line is located to the west of Development Site D in the Park Avenue mapped street right-of-way. Marcus Garvey Park is located just outside the 400-foot radius two blocks to the west. The 125th Street station for the NYCT 4/5/6 subway lines is located just outside the 400-foot radius of Development Site D at the intersection of Lexington Avenue and East 125th Street. The Metro-North 125th Street Station is also located just outside the 400-foot radius of Development Site D at the intersection of East 125th Street and Park Avenue. There are several NYCT bus routes serving Development Site D including the M1 (along Madison Avenue), M101 and M103 (along Lexington Avenue).

Assessment of the Potential to Affect the Defining Features of the Neighborhood

The sections below discuss potential changes resulting from the proposed action in the following technical areas that are considered in the neighborhood character assessment pursuant to the *CEQR Technical Manual*: land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; and noise. The assessment uses the findings from the respective chapters of this EIS and from the EAS, as applicable, to identify whether the proposed action and resultant proposed project would result in any significant adverse impacts or moderate adverse effects in these technical areas, and whether any such changes would have the potential to affect the defining features of neighborhood character. As described below, defining features of the study area's neighborhood character would not be adversely affected either through the potential of any significant adverse impact or in combination with any other moderate effects in the relevant technical areas.

Land Use, Zoning, and Public Policy

Defining features of the neighborhood would not be adversely affected due to potential effects of the proposed action on land use, zoning, and public policy, either individually or in combination with potential impacts in other relevant technical areas discussed in this chapter. The proposed action would allow new developments containing a mix of residential and community facility uses that would be in keeping with the existing character of the surrounding neighborhood. The proposed developments would be built at a density and bulk compatible with the underlying zoning of each of the development sites.

As described in **Chapter 2, "Land Use, Zoning, & Public Policy,"** no significant adverse impacts related to land use, zoning, or public policy would occur in the future with the proposed action. The proposed action would not adversely affect surrounding land use, nor would the proposed action generate land uses that would be incompatible with land use, zoning, or public policy within the secondary study area.

The proposed affordable residential units would directly support several major City policies aimed at increasing supply of affordable housing in New York City. The proposed action would facilitate two mixed-use developments in areas well-served by mass transit. As such, the proposed action would result in a

development that, in addition to being appropriate for the development sites, would complement the residential, retail, and community facility character of each secondary study area.

Socioeconomic Conditions

Defining features of the neighborhood would not be adversely affected due to potential effects of the proposed action on socioeconomic conditions, either individually or in combination with potential impacts in other relevant technical areas discussed in this chapter. As discussed in the EAS, **Attachment B, “Supplemental Screening,”** the proposed action did not require an analysis of socioeconomic conditions as the action would not result in a net increase of more than 200 residential units or 200,000 square feet of commercial space. Therefore, the proposed action would not result in significant adverse socioeconomic impacts related to direct residential displacement, direct business/institutional displacement, indirect residential displacement, indirect business/institutional displacement, or adversely affect specific industries on the development sites or surrounding study areas.

Open Space

Defining features of the neighborhood would not be adversely affected due to potential effects of the proposed action on publicly accessible open space, either individually or in combination with potential impacts in other relevant technical areas discussed in this chapter. As detailed in **Chapter 3, “Open Space,”** the proposed action would result in a significant adverse impact on the City’s open space resources.

The proposed action would not directly displace or alter any of the local or regional open spaces located in or immediately adjacent to the development sites, and the proposed project would not result in a reduction of open space ratios in the study areas that would consequently overburden existing facilities or further exacerbate a deficiency in open space.

As discussed in **Chapter 3, “Open Space,”** while the direct effects open space assessment shows that the proposed action would result in the displacement of two existing community gardens located on Development Site C (Pleasant Village Community Garden) and Development Site D (Jackie Robinson Community Garden), portions of the community gardens would remain. Pleasant Village Community Garden would remain on the 0.38-acre Lot 2. Jackie Robinson Community Garden would remain on the 0.05-acre Lot 5. Furthermore, the displacement of these community gardens is consistent with the terms of the temporary license agreements under which they have operated as interim facilities until they would be developed pursuant to HPD plans. Therefore, the direct displacement of portions of Pleasant Village Community Garden and Jackie Robinson Community Garden would not constitute a direct significant adverse open space impact (see discussion below under “Shadows” concerning the Neighborhood Character effects of project-generated shadows). However, the shadows impact on the open space would constitute a direct significant adverse open space impact on Jackie Robinson Community Garden. Additionally, as shown in the chapter, there are a variety of public open space options surrounding each of the development sites, thereby enhancing the character of the neighborhood.

As discussed in **Chapter 4, “Shadows,”** incremental shadows from the Development Site D would constitute a significant adverse impact on Jackie Robinson Community Garden Playground (see discussion below under “Shadows” concerning the Neighborhood Character effects of project-generated shadows).

Shadows

Defining features of the neighborhood would not be adversely affected due to potential shadows of the proposed project, either individually or in combination with potential impacts in other relevant technical areas discussed in this chapter.

As detailed in **Chapter 4, “Shadows,”** the proposed action would result in incremental shadow coverage (i.e., additional, or new, shadow coverage) on portions of one sunlight-sensitive open space resource: Jackie Robinson Community Garden. Given the variety of plants and flowers in the garden, the reduction in direct sunlight due to project-generated incremental shadows would significantly impact the health of these species, and the viability of the vegetation in the garden would potentially be threatened and could result in significant adverse shadow impacts. Therefore, project-generated incremental shadows on Jackie Robinson Community Garden as a result of the proposed action would be considered a significant adverse impact. Though impacts would result on the Jackie Robinson Community Garden from incremental shading from Development Site D, the Jackie Robinson Community Garden is not a defining feature of the neighborhood. The Jackie Robinson Community Garden is an open space resource that is open to the public Monday through Fridays from 12pm-2pm and 4pm-6pm and on Saturdays from 2pm-7pm. As such, it is not integrated into the urban fabric of the neighborhood to such a degree that it constitutes an integral part of the neighborhood’s identity or daily functioning. For example, as its hours are limited, local residents cannot visit the garden at will for passive and activities such as resting on a bench or dog walking, as is the case for typical public streets and parks. Shadows impacts to this open space would not significantly alter the character of the neighborhood.

Historic and Cultural Resources

Defining features of the neighborhood would not be adversely affected due to the potential effects of the proposed action on historic and cultural resources, either individually or in combination with potential impacts in other relevant technical areas discussed in this chapter. As detailed in the EAS, **Attachment B, “Supplemental Screening,”** the analysis of historic and cultural resources was screened out. While Development Site B and C are located within the State/National Register of Historic Places (S/NR) listed East Harlem Historic District, the New York City Landmarks Preservation Commission (NYC LPC) has not raised any concerns, such as contextual effects, about the proposed project or a potential impact on the S/NR historic district (see **EAS, “Appendix 1”** for NYC LPC Environmental Review letter dated October 2, 2019). During the DEIS process, the New York State Historic Preservation Office (SHPO) is being consulted regarding properties listed in S/NR Districts (Development Site B and C).

As the development sites do not contain any designated or eligible historic architectural resources, the proposed action would not result in any direct impacts to historic resources. Additionally, as detailed in **Chapter 4, “Shadows,”** the proposed action would not generate incremental shadows on any sunlight-sensitive features of surrounding historic resources. Therefore, the proposed action would not result in any significant adverse shadows impacts on historic resources.

Additionally, during construction, any listed historic structures, such as buildings within the S/NR-listed East Harlem Historic District located within 90 feet of the development sites, would be protected by ensuring adherence to all applicable construction guidelines and the requirements laid out in the Department of Building’s Technical Policy and Procedure Notice (TPPN) #10/88, which supplements the standard building protections afforded by the Building Code. Under TPPN 10/88, a construction protection plan (CPP) which follows LPC’s Guidelines for Construction Adjacent to a Historic Landmark and Protection Programs for Landmark Buildings must be provided to LPC for review and approval prior to construction. With these measures, the proposed developments would not be expected to cause any significant adverse construction-related impacts to historic resources. As such, the proposed action would not adversely affect

the architectural character of the historic resources in the study area, and therefore no significant adverse impacts to neighborhood character can be expected in relation to historic and cultural resources.

Urban Design and Visual Resources

Defining features of the neighborhood would not be adversely affected due to potential effects of the proposed action on urban design and visual resources, either individually or in combination with potential impacts in other relevant technical areas discussed in this chapter. As noted in the EAS, because the proposed action would facilitate building volumes that are currently permitted as-of-right, analysis of urban design was not warranted. Therefore, the proposed action would not result in significant adverse impacts on urban design and visual resources.

Transportation

Defining features of the neighborhood would not be adversely affected due to potential effects of the proposed action on transportation, either individually or in combination with potential impacts in other relevant technical areas discussed in this chapter. As described in **Chapter 5, “Transportation,”** the proposed action would not result in significant adverse traffic, safety, subway service, bus service, pedestrian, or parking impacts. Therefore, no significant adverse impacts to neighborhood character would result from the proposed action.

Noise

Defining features of the neighborhood would not be adversely affected due to potential noise effects of the proposed action, either individually or in combination with potential impacts in other relevant technical areas discussed in this chapter. As detailed in **Chapter 7, “Noise,”** the proposed action would not result in significant adverse noise impacts.

Changes in noise levels in proximity to the development sites in the future with the proposed action would not be perceptible, as the increased traffic volumes generated by the proposed action would fall well below the applicable *CEQR Technical Manual* significant adverse impact threshold (3.0 dBA). In terms of noise exposure categories, noise levels along area roadways adjacent to Development Site A and B would be classified as “Marginally Acceptable” and Development Site C would be classified as “Acceptable” CEQR Noise Exposure categories, same as under the No-Action conditions, and as such, no special noise attenuation measures would be required. However, Development Site D frontages on Park Avenue and East 122nd Street would fall in the “Clearly Unacceptable” and “Marginally Unacceptable” same as under the No-Action conditions, respectively, and, as such, would require a minimum of 40 dBA attenuation on any Park Avenue frontages and a minimum of 36 dBA attenuation on any East 122nd Street frontages.

Additionally, as the maximum predicted Ldn noise levels at Development Site B would fall within the “Normally Unacceptable” category defined by the U.S. Department of Housing and Urban Development (HUD), same as the No-Action condition, thus a minimum of 25 dBA of attenuation is needed along any East 117th Street frontage. The maximum predicted Ldn noise levels at Development Site D frontages would both fall within the “Unacceptable” category defined by HUD, same as the No-action conditions, thus a minimum of 36 dBA and 31 dBA of attenuation would be needed along any Park Avenue and East 122nd Street frontages, respectively. The maximum predicted Ldn noise levels at Development Site A and C frontages would both fall within the “Acceptable” category, same as No-action condition, and as such, no special noise attenuation measures would be required. Both the CEQR and HUD noise attenuation measures would be required through provisions contained in the Land Disposition Agreement (LDA) between HPD and the project sponsor. With implementation of the attenuation levels discussed above, the proposed project would not result in any significant adverse noise impacts related to noise attenuation.

The noise levels in proximity to the development sites are typical of many neighborhoods in New York City, and would remain so under the With-Action conditions. As noise level is not a defining feature of the neighborhood, the anticipated noise levels surrounding the development sites as a result of the proposed action would not constitute a significant adverse impact on neighborhood character.

Potential for Combined Effects on Neighborhood Character

As stated in the *CEQR Technical Manual*, if a proposed project would have the potential to affect the defining features of the neighborhood through a combination of moderate effects in relevant technical areas, then a detailed assessment may be required. Though development facilitated by the proposed action would result in small to moderate effects in some of technical areas that contribute to neighborhood character, these combined effects would not result in any significant adverse impacts on neighborhood character.

Therefore, based on the results of the preliminary assessment, there is no potential for the proposed action to result in significant adverse impacts to neighborhood character, and further analysis is not warranted.

I. INTRODUCTION

As presented in **Chapter 1, “Project Description,”** the proposed action would facilitate the development of four buildings containing approximately 81 affordable housing DUs (plus two superintendent’s units for a total of 83 units and 10,740 gsf of community facility space in the East Harlem neighborhood of Manhattan. Construction of the development sites are expected to be complete with all components fully operational in 2023.

The potential for the Proposed Project to result in significant adverse impacts was evaluated in Chapters 2 through 9 of this EIS. In accordance with the 2020 *City Environmental Quality Review (CEQR) Technical Manual*, where significant adverse impacts are identified, mitigation measures to reduce or eliminate the impacts to the fullest extent practicable are developed and evaluated. This chapter considers mitigation measures to address the limited significant adverse impacts generated by the Proposed Project. Measures to further mitigate significant adverse impacts will continue to be evaluated between the DEIS and FEIS. Therefore, the FEIS may include additional information and commitments on all practicable and feasible mitigation measures to be implemented with the proposed action.

The Proposed Actions have the potential to result in significant adverse impacts to shadows, and open space (through shadows impacts on sunlight-sensitive open space). Potential mitigation measures for the technical areas are identified below.

II. PRINCIPAL CONCLUSIONS

Open Space and Shadows

Incremental shadows cast by the Proposed Project would be substantial enough in extent and/or duration to significantly affect the Jackie Robinson Community Garden on all four of the representative analysis days. Incremental shadow durations would range from 2 hours and 22 minutes on December 21 to 5 hours and 40 minutes on June 21. As disclosed in **Chapters 3 and 4, “Open Space” and “Shadows,”**, respectively, this would constitute a shadows impact on an open space resource.

The *CEQR Technical Manual* identifies several measures that could mitigate significant adverse shadow impacts on open spaces, including modifying the height, shape, size or orientation of a proposed development in order to eliminate or reduce the extent and duration of incremental shadow on the resource; relocating sunlight-sensitive features within an open space to avoid sunlight loss; relocating or replacing vegetation; undertaking additional maintenance to reduce the likelihood of species loss; and sharing spaces such as building roofs or rear yards. Potential mitigation measures for the shadows and open space impacts are being explored by the Applicant in consultation with the New York City Department of Parks and Recreation (DPR), and will be refined between the DEIS and FEIS. If feasible mitigation measures are identified, the impacts would be considered partially mitigated. As the significant adverse shadows impact would not be fully mitigated, the Proposed Actions would result in unmitigated significant adverse shadows impacts to this resource. Generally, shadows impacts (including those on open spaces) that result from the proposed actions have been found to be unavoidable if modifying the building envelope is infeasible.

III. OPEN SPACE AND SHADOWS

As detailed in **Chapters 3 and 4, “Open Space”** and **“Shadows,”**, respectively incremental shadow from Development Site D would be substantial enough in extent and/or duration to significantly affect one sunlight-sensitive open space resource: the Jackie Robinson Community Garden on the December 21, March 21/September 21, May 6/August 6, and June 21 analysis days. (Apart from this, there would be no other significant adverse open space or shadows impacts.)

Potential Mitigation Measures

The *CEQR Technical Manual* identifies several different measures that could mitigate significant adverse shadow impacts on open spaces. These measures include modifying the height, shape, size or orientation of a proposed development in order to eliminate or reduce the extent and duration of incremental shadow on the resource; relocating sunlight-sensitive features within an open space to avoid sunlight loss; relocating or replacing vegetation; undertaking additional maintenance to reduce the likelihood of species loss; and sharing spaces such as building roofs or rear yards.

To eliminate the significant adverse shadow impact Jackie Robinson Community Garden, Development Site D would need to be substantially shorter, which would compromise the feasibility of the project and proportionally reduce the amount of permanently affordable housing that could be provided by the Proposed Project. **Chapter 11, “Alternatives,”** discussed possible modifications to the proposed building on Site D that were considered but which were found to be non-economical to construct and operate due to the loss of floor area and inefficient layout.

Generally, shadows impacts (including those on open spaces) that result from the proposed actions have been found to be unavoidable if modifying the building envelope is infeasible. Potential mitigation measures are being explored by the Applicant in consultation with DPR between the DEIS and FEIS. If feasible mitigation measures are identified, the impacts will be considered partially mitigated. As the significant adverse shadows impact would not be fully mitigated, the Proposed Actions would result in unmitigated significant adverse shadows impacts to this resource.

I. INTRODUCTION

As described in the 2020 *City Environmental Quality Review (CEQR) Technical Manual*, alternatives selected for consideration in an environmental impact statement are generally those that are feasible and have the potential to reduce, eliminate, or avoid adverse impacts of a proposed action while meeting some or all of the goals and objectives of the proposed action. As described in **Chapter 1, “Project Description,”** the proposed action would facilitate the development of four buildings containing a total of approximately 81 affordable dwelling units (DUs) (plus two superintendent’s units for a total of 83 units) and approximately 10,740 gross square feet (gsf) of community facility space in the East Harlem neighborhood of Manhattan, Community District (CD) 11.

This chapter considers two alternatives to the proposed action: the No-Action Alternative, in which no new development is anticipated to occur within the Project Area; and the No Significant Adverse Impacts Alternative, which considers whether a reduction in the size of the Proposed Project would eliminate the potential for significant adverse impacts.

II. PRINCIPAL CONCLUSIONS

No-Action Alternative

The No-Action Alternative examines future conditions within the development sites, but assumes the absence of the proposed action (i.e., the discretionary approval proposed as part of the proposed action would not be adopted). Under the No-Action Alternative by 2023, existing land uses within the development sites would remain unchanged. It is anticipated Development Sites A and B would remain vacant and Development Sites C and D would remain as portions of Pleasant Village Community Garden (Development Site C) and Jackie Robinson Community Garden (Development Site D) operating under temporary license agreements with the NYC Department of Housing Preservation and Development (HPD) that permits community garden groups to use these sites on an interim basis until HPD is ready to move forward with their redevelopment. Redevelopment of the development sites would not be possible without the disposition of City-owned property. The technical chapters of this EIS have described the No-Action Alternative as “the Future Without the Proposed Action.”

The significant adverse impacts anticipated for the proposed action would not occur under the No-Action Alternative. However, the No-Action Alternative would not meet the goals of the proposed action. The benefits expected to result from the proposed action – including promoting affordable housing development by maximizing the use of vacant City-owned land and encouraging the continued economic development of East Harlem – would not be realized under this alternative, and the No-Action Alternative would fall short of the objectives of the proposed action.

No Significant Adverse Impacts Alternative

The No Significant Adverse Impacts Alternative examines a scenario in which the density and other components of the proposed action are changed specifically to avoid the significant adverse impacts

associated with the proposed action. The proposed action would result in significant adverse impacts related to shadows and open space that may not be able to be mitigated.

As detailed below, in order to result in no significant adverse impacts, the proposed building on Development Site D would be altered to contain no two-story base or podium, the volume would be substantially modified to create a building with a small and irregular floorplate and the resulting building would be either 145'-tall or 210'-tall (heights inclusive of mechanical bulkheads). This inefficient design would be financially infeasible and functionally undesirable. As such, the benefits expected to result from the proposed action – including promoting affordable housing development by maximizing the use of vacant City-owned land – would not be realized under this alternative, and the No Significant Adverse Impacts Alternative would fall short of the objectives of the proposed action.

III. NO-ACTION ALTERNATIVE

The No-Action Alternative assumes that the proposed action is not implemented, including no disposition approval. Conditions under this alternative are similar to the “Future without the Proposed Action” described in the preceding chapters, which are compared in the following sections to conditions under the proposed action.

Under the No-Action Alternative, it is anticipated that the development sites would remain in their existing condition: Development Sites A and B would continue to be vacant and Development Sites C and D would continue to be operated under temporary license agreements with HPD that permits community garden groups to use these sites on an interim basis until HPD is ready to move forward with their redevelopment. Redevelopment of the Development Sites would not be possible without the disposition of City-owned property and other discretionary approvals through the CPC.

The effects of the No-Action Alternative in comparison to those of the proposed action as it relates to significant adverse impacts are provided below.

Shadows

The No-Action Alternative would not introduce a new 142'-tall building (height inclusive of mechanical bulkhead) to Development Site D. Therefore, the No-Action Alternative would not result in any incremental shadows cast on the adjacent Jackie Robinson Community Garden. The No-Action Alternative would avoid the significant adverse shadows impacts identified for the proposed action on the Jackie Robinson Community Garden.

IV. NO SIGNIFICANT ADVERSE IMPACTS ALTERNATIVE

Based on the analyses presented in other chapters of this EIS, there is the potential for the proposed action to result in significant adverse impacts with respect to shadows on one open space. This alternative considers development that would not result in any significant adverse impacts. As detailed below, in order to result in no significant adverse impacts, the volume of the proposed building on Development Site D would have to be substantially altered to an inefficient massing with either a 145'-tall or 210'-tall building (heights inclusive of mechanical bulkheads).

The No Significant Adverse Impacts Alternative would result in the same actions as the future with the proposed action, but considers the magnitude of development that could occur within Development Site D without resulting in any significant adverse impacts. The analysis framework is determined by focusing on

an alternative that avoids the anticipated significant adverse shadows impacts associated with the proposed action.

Shadows

As described in **Chapter 3, “Open Space”** and **Chapter 4, “Shadows,”** under the With-Action RWCDs, the proposed action would result in significant adverse impacts with respect to shadows. As described above, to avoid the identified significant adverse shadows impacts, the height of the proposed building on Development Site D would have to be altered to contain no two-story base or podium, the building volume would be substantially modified to create a building with an small and irregular floorplate and that would be either 145’-tall or 210’-tall (heights inclusive of mechanical bulkheads). As shown in **Figures 11-1** through **11-4**, the No Significant Adverse Impacts Alternative would cast incremental shadows on Jackie Robinson Community Garden. As detailed in **Table 11-1**, incremental shadow duration on Jackie Robinson Community Garden would range from 55 minutes on December 21 to five hours and 20 minutes on June 21. The coverage of incremental shadows on Jackie Robinson Community Garden would be reduced significantly as compared to the proposed action.

Table 11-1
Incremental Shadow Coverage – No Significant Adverse Impacts Alternative

No Significant Adverse Impacts Alternative	Resource	Analysis Day	March 21/Sept. 21	May 6/August 6	21-June	21-Dec.	Incremental Shadow Durations Compared to Table 4-4 of DEIS			
			7:36 AM – 4:29 PM	6:27 AM – 5:18 PM	5:57 AM – 6:01 PM	8:51 AM – 2:53 PM	March 21/Sept. 21	May 6/August 6	21-Jun	21-Dec
Alternative Massing Without Two-story Base (145’)	Jackie Robinson Community Garden	Shadow enter-exit time	1:25 - 4:29 PM	12:47 - 5:18 PM	12:41 - 6:01 PM	1:58 - 4:29 PM	No Change	No Change	No Change	-1 minute
		Incremental shadow duration	3 Hours 4 Minutes	4 Hours 31 Minutes	5 Hours 20 Minutes	55 Minutes				
Alternative Massing Without Two-story Base (210’)	Jackie Robinson Community Garden	Shadow enter-exit time	1:25 - 4:29 PM	12:47 - 5:18 PM	12:41 - 6:01 PM	1:58 - 4:29 PM	No Change	No Change	No Change	-1 minute
		Incremental shadow duration	3 Hours 4 Minutes	4 Hours 31 Minutes	5 Hours 20 Minutes	55 Minutes				

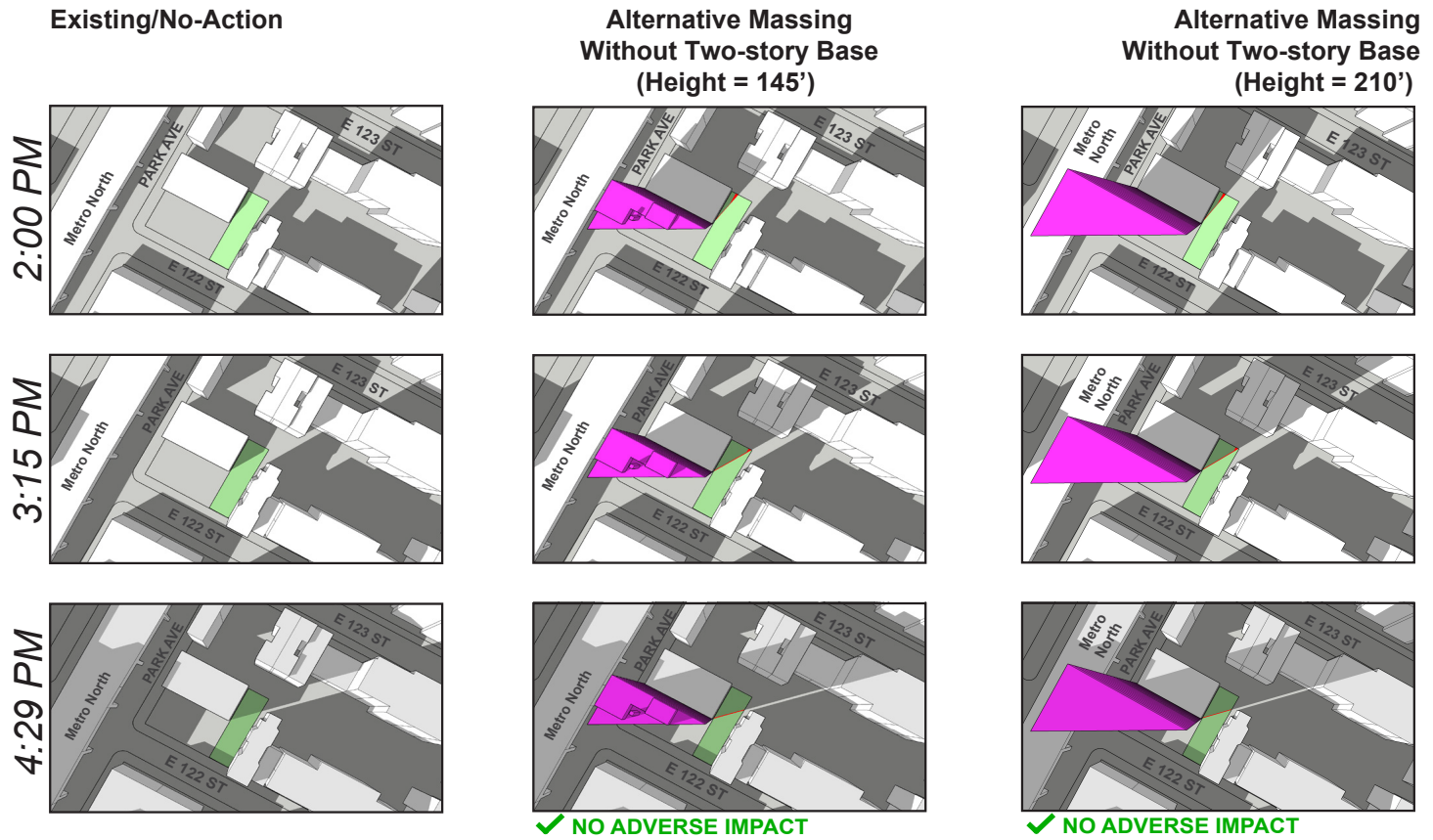
Notes:

1. All times are Eastern Standard Time; Daylight Savings Time was not accounted for per *CEQR Technical Manual* guidance.
2. Table indicates the entry and exit times and total duration of incremental shadow coverage for the sunlight-sensitive resource.

Compared to the Proposed Project, the No Significant Adverse Impacts Alternative would result in a decrease of incremental shadow duration of one minute on the December 21 analysis day (refer to **Table 11-1**).

At Development Site D, approximately 50 percent of the Proposed Project’s floorplate (located in the southeastern portion of the development site) would need to be eliminated for significant adverse impacts on Jackie Robinson Community Garden to be avoided. Eliminating approximately 50 percent of the Proposed Project’s floorplate would significantly reduce the amount of affordable residential units that could be provided at Development Site D. In the No Significant Adverse Impacts Alternative, due to the small, irregular, and functionally inefficient shape of floorplates, a majority of the residential unit types would be studio units, as opposed to the Proposed Project, which would contain predominantly one- and two-bedroom units. The No Significant Adverse Impacts Alternative would result in a 70 percent reduction in the 1.5 FAR of community facility space required to be located within the Proposed Project. The proportion of each floor devoted to mechanical cores, corridors, and structural elements would be higher

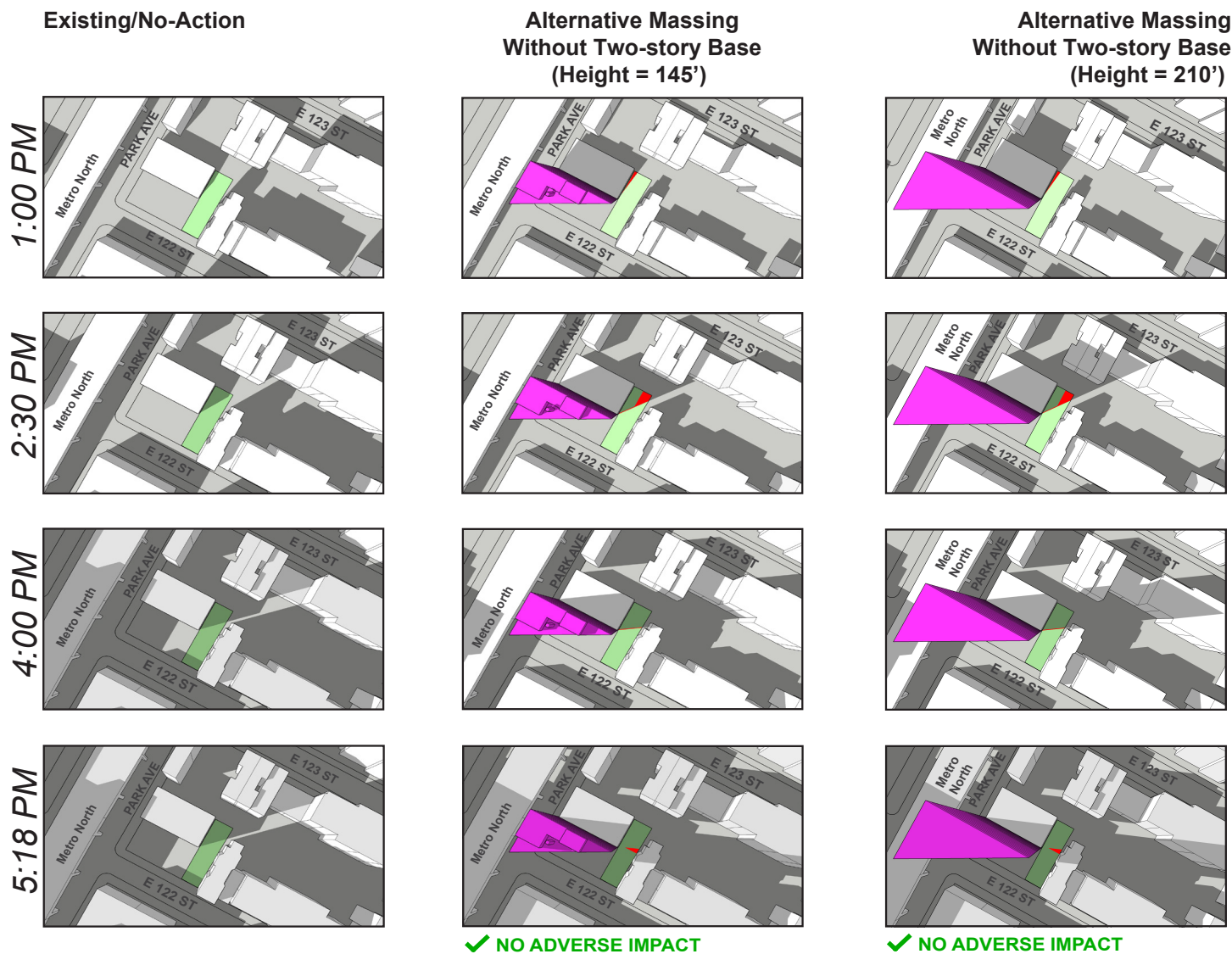
Jackie Robinson Community Garden Incremental Shadow Coverage on March 21/September 21



 Alternative Massing
  Jackie Robinson Community Garden
  Incremental Shadow

Note: All significant adverse shadow impacts identified in this study are a result of the effected areas of Jackie Robinson Community Garden receiving less than the four-to-six hours of direct sunlight necessary for the survival of vegetation, as recommended by the 2020 CEQR Technical Manual.

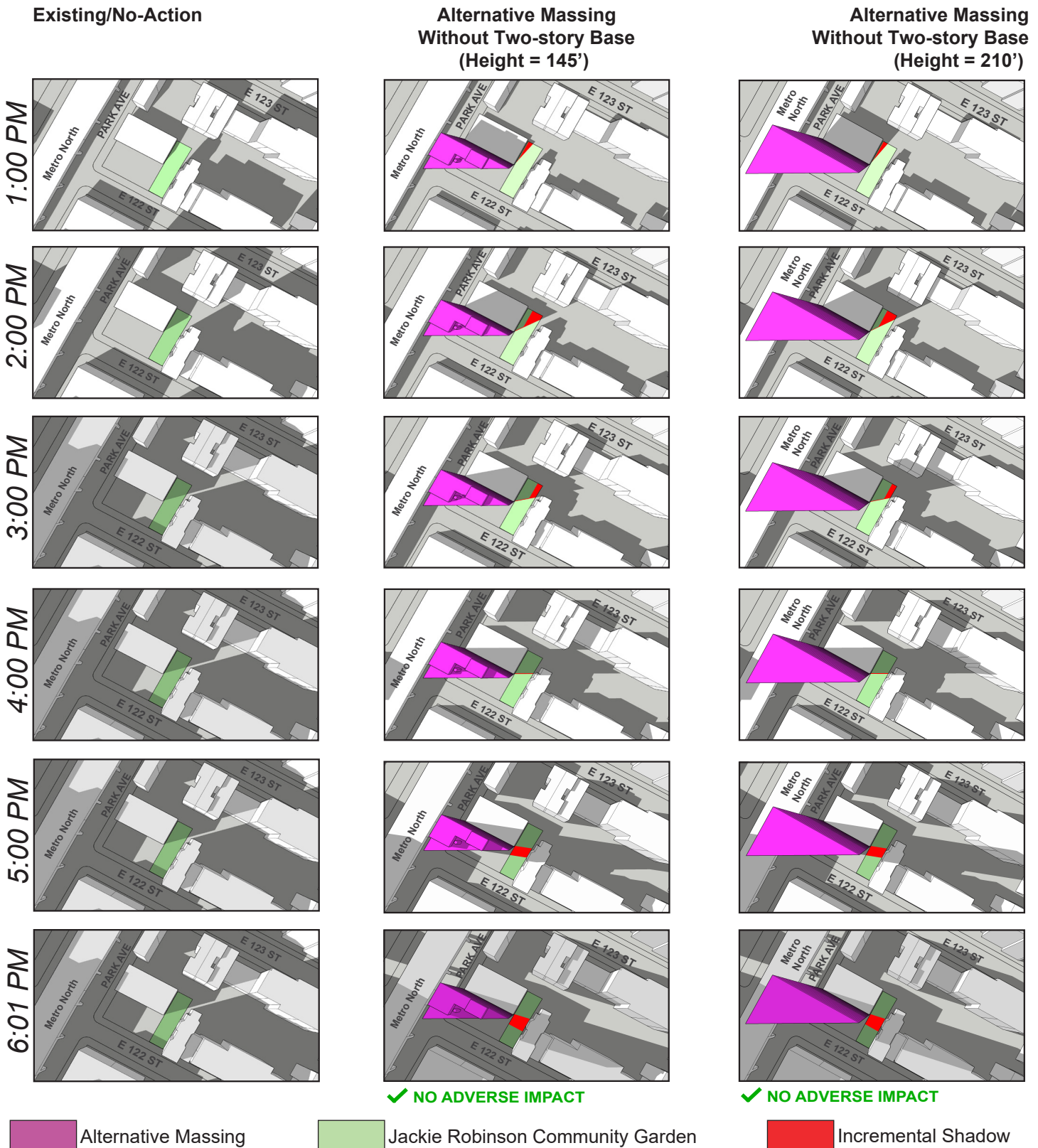
Jackie Robinson Community Garden Incremental Shadow Coverage on May 6/August 6



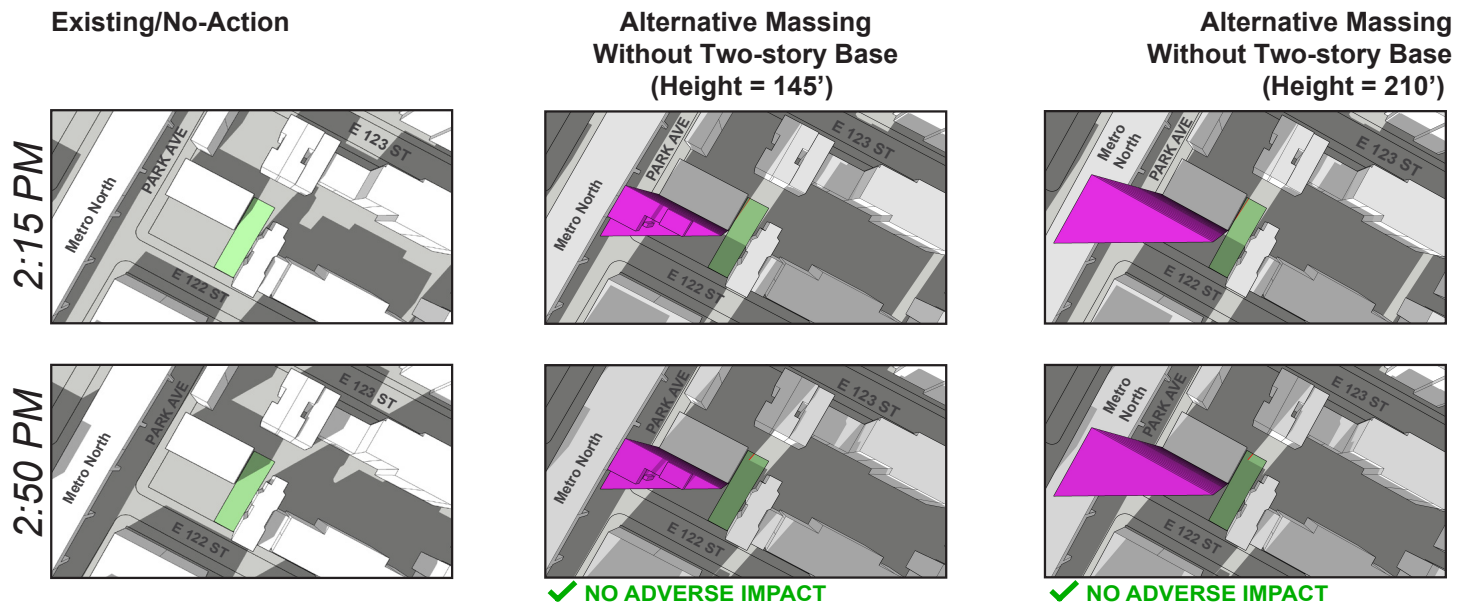
 Alternative Massing
  Jackie Robinson Community Garden
  Incremental Shadow

Note: All significant adverse shadow impacts identified in this study are a result of the effected areas of Jackie Robinson Community Garden receiving less than the four-to-six hours of direct sunlight necessary for the survival of vegetation, as recommended by the 2020 CEQR Technical Manual.

Jackie Robinson Community Garden Incremental Shadow Coverage on June 21



Note: All significant adverse shadow impacts identified in this study are a result of the effected areas of Jackie Robinson Community Garden receiving less than the four-to-six hours of direct sunlight necessary for the survival of vegetation, as recommended by the 2020 CEQR Technical Manual.

Jackie Robinson Community Garden
Incremental Shadow Coverage on December 21

Note: All significant adverse shadow impacts identified in this study are a result of the effected areas of Jackie Robinson Community Garden receiving less than the four-to-six hours of direct sunlight necessary for the survival of vegetation, as recommended by the 2020 CEQR Technical Manual.

than for the standard configuration provided by proposed project. This inefficient design would be financially infeasible and functionally undesirable.

Therefore, the No Significant Adverse Impacts Alternative would be non-economical to construct and operate due to the loss of floor area and inefficient layout. In addition, important project goals, including the harmonious provision of a mixture of residential units for families and community facility space, would not be achievable under the No Significant Adverse Impacts Alternative.

I. INTRODUCTION

This chapter summarizes unavoidable significant adverse impacts resulting from the proposed action. According to the 2020 *City Environmental Quality Review (CEQR) Technical Manual*, unavoidable significant adverse impacts are those that would occur if a proposed project or action is implemented regardless of the mitigation employed, or if mitigation is infeasible.

As described in **Chapter 10, “Mitigation,”** the proposed action would result in significant adverse impacts with respect to shadows and open space. It has been determined that no practicable mitigation was identified to fully mitigate the significant adverse impact, and there are no reasonable alternatives to the proposed action that would meet its purpose and need, eliminate the impact, and not cause other or similar significant adverse impacts.

II. SHADOWS AND OPEN SPACE

As discussed in **Chapter 4, “Shadows,”** the proposed action would result in a significant adverse shadow impact on Jackie Robinson Community Garden, which is also an open space impact. On the March 21/September 21, May 6/August 6, and June 21 representative analysis days, portions of the Jackie Robinson Community Garden would receive less than four- to six-hours of direct sunlight daily, i.e., the minimum necessary for the survival of sunlight-sensitive vegetation, which would result in significant adverse impacts.

The *CEQR Technical Manual* identifies potential mitigation strategies for incremental shadow impacts on open space resources which may include, but are not limited to, relocating, replacing or monitoring vegetation for a set period of time; undertaking additional maintenance to reduce the likelihood of species loss; or providing for replacement facilities on another nearby site. Other potential mitigation strategies include the redesign or reorientation of the open space site plan to provide for replacement facilities, vegetation, or other features. Feasible and practical measures to reduce the project’s shadow impacts will continue to be explored in consultation with the New York City Department of Parks and Recreation (DPR) between the DEIS and FEIS. If feasible mitigation measures are identified, the impacts would be considered partially mitigated. As the significant adverse shadows and open space impacts would not be fully mitigated, the Proposed Actions would result in unmitigated significant adverse shadows impacts to this resource.

Las Raices EIS

Chapter 13: Growth-Inducing Aspects of the Proposed Actions

The term “growth-inducing aspects” generally refers to "secondary" impacts of a proposed action that trigger further development outside the directly affected area. The 2020 *City Environmental Quality Review (CEQR) Technical Manual* indicates that an analysis of the growth-inducing aspects of a proposed action is appropriate when the project: (1) adds substantial new land use, residents, or new employment that could induce additional development of a similar kind or of support uses, such as retail establishments to serve new residential uses; and/or (2) introduces or greatly expands infrastructure capacity (e.g., sewers, central water supply).

The goal of the proposed action, as noted in **Chapter 1, “Project Description,”** is to create opportunities for new affordable housing development on vacant lots in an area where a strong demand for affordable housing exists.

As detailed in **Chapter 1, “Project Description,”** the incremental change between the No-Action and With- Action conditions that would result from the Proposed Actions would be a net increase of 83 dwelling units and approximately 10,740 gsf of community facility space.

The projected increase in residential population is likely to increase the demand for neighborhood services, ranging from community facilities to local goods and services retail. This would enhance the growth of local commercial corridors in the area. The proposed action could also lead to additional growth in the City and State economies, primarily due to employment and fiscal effects during construction on the development sites and operation of these developments after their completion. However, this secondary growth would be expected to occur incrementally throughout the region and is not expected to result in any significant impacts in any particular area or at any particular site.

The proposed action would result in more intensive land uses on the development sites. However, it is not anticipated that the proposed action would generate significant secondary impacts resulting in substantial new development in nearby areas. As the surrounding areas have a well-established residential market and a critical mass of non-residential uses, including retail, public facilities and institutions, and community facility uses, the proposed action would not create the critical mass of uses or populations that would induce additional development outside the development sites. Moreover, the proposed action does not include the introduction of new infrastructure or an expansion of infrastructure capacity that would result in indirect development. Therefore, the proposed action would not induce significant new growth in the surrounding area.

Las Raices EIS
Chapter 14: Irreversible and Irretrievable
Commitments of Resources

Resources, both natural and man-made, would be expended in the construction and operation of developments projected to occur as a result of the proposed action. These resources include the building materials used in construction; energy in the form of gas and electricity consumed during construction and operation of project-generated development by various mechanical and processing systems; and the human effort (time and labor) required to develop, construct, and operate various components of project-generated development. These are considered irretrievably committed because their reuse for some other purpose would be highly unlikely.

The proposed developments under the proposed action also constitutes a long-term commitment of land resources, thereby rendering land use for other purposes highly unlikely in the foreseeable future. However, the land use change that would occur as a result of the proposed action would be compatible in terms of use and scale with existing conditions and trends in the area as a whole. None of the development sites possess any natural resource values, and the sites are in large part developed or have been previously developed. It is noted that funds committed to the design, construction/renovation, and operation of proposed developments under the proposed action would not be available for other projects. However, this is not a significant adverse fiscal impact or a significant adverse impact on City resources.

In addition, the public services provided in connection with the proposed developments under the proposed action (e.g., police and fire protection, public education, open space, and other city resources) also constitute resource commitments that might otherwise be used for other programs or projects. However, the proposed action would enliven the area and produce economic growth that would generate substantial tax revenues providing a new source of public funds that would offset these expenditures.

The commitments of resources and materials are weighed against the benefits of the proposed action. The proposed action would promote new permanently affordable residential development, encourage mixed-use development on key corridors, enhance and revitalize major thoroughfares through new economic development, and protect neighborhood character.

Las Raices EIS

**Chapter 15: Response to Comments on the Draft Scope of Work for the Draft
Environmental Impact Statement**

I. INTRODUCTION

This document summarizes and responds to comments on the Draft Scope of Work (DSOW), issued on February 17, 2021, for the Las Raices project (the Proposed Action). Oral and written comments were received during the public meeting held by the New York City Department of Housing Preservation and Development (HPD) on March 31, 2021. Written comments were accepted until the close of the public comment period, which ended through the end of the day on Thursday, April 12, 2021. **Appendix D** contains the written comments received on the DSOW. A Final Scope of Work (FSOW) will be issued, incorporating comments received on the DSOW where relevant and appropriate, as well as other background and project updates that were made subsequent to publication of the DSOW.

Section B lists the elected officials, organizations, and individuals that provided relevant comments on the DSOW. Section C contains a summary of these relevant comments and a response to each. These summaries convey the substance of the comments made, but do not necessarily quote the comments verbatim. Comments are organized by subject matter and generally parallel the chapter structure of the DSOW/EIS.

II. LIST OF ELECTED OFFICIALS, ORGANIZATIONS, AND INDIVIDUALS THAT COMMENTED ON THE DRAFT SCOPE OF WORK

Elected Officials

1. Gale Brewer, Manhattan Borough President: written statement dated April 13, 2021.

Organizations and Interested Public

2. Milena Avenova: member of Pleasant Village Community Garden, oral statement at the public scoping meeting.
3. Stuart Blackstock: member of Pleasant Village Community Garden, written submission dated April 4, 2021.
4. Wendy Frank: East Harlem resident, oral statement at the public scoping meeting.
5. Warren James: East Harlem resident and architect/urban designer, oral statement at the public scoping meeting.
6. Christine Johnson: member Pleasant Village Community Garden, oral statement at the public scoping meeting.
7. Matt: written submission dated March 31, 2021.
8. Ursula Monaghan: member Pleasant Village Community Garden, written submission dated April 12, 2021.
9. Natassia Rodriguez: member Pleasant Village Community Garden, written submission dated April 8, 2021.
10. Saco Yasuma: member Pleasant Village Community Garden, written submission dated April 1, 2021.
11. Kim Yim: President, Pleasant Village Community Garden, written submission dated April 12, 2021.

III. COMMENTS AND RESPONSES ON THE DRAFT SCOPE OF WORK

1. Project Description

Comment 1.1: “I feel that the Las Raices development is another moment where public representatives stick to the inertia of doing what makes the most money, rather than the doing what’s right, despite the costs to the people in the neighborhood.” (#8 Monaghan)

Response 1.1: Comment noted. As noted in the DSOW, the proposed action would result in the creation of 81 affordable housing units (plus 2 superintendent’s units for a total of 83 units). Also, the environmental review documents, specifically the Environmental Assessment Statement (EAS), which was issued on February 16, 2021, and the Environmental Impact Statement (EIS), provide a means for considering the effects of the proposed action on the human and natural environment in accordance with the guidance of the 2020 CEQR Technical Manual.

Comment 1.2: “I believe that full consideration has not been made when selecting the proposed site: 505-507 East 118th Street – (Block 1815 Lots 5 and 6) for development and I think this should be reconsidered.” (#3 Blackstock)

Response 1.2: Comment noted. In 2014, HPD released a City-wide Request for Qualifications (RFQ) for the New Infill Homeownership Opportunities Program (NIHOP, now called Open Door) and Neighborhood Construction Program (NCP) to develop new construction affordable housing development projects on small scattered, hard to develop City-owned sites. Through the RFQ processes, HPD identified and selected the East Harlem Cluster, also known as the Las Raices project, for development. Additionally, the lots have always been designated as affordable housing sites due to the high need for affordable housing, including HPD the lots currently in interim use by Pleasant Village and Jackie Robinson Community Gardens. Manhattan Community Board 11 issues an annual *Statement of District Needs and Community Board Budget Requests*. The most recent *Statement* by CB 11 for Fiscal Year 2021 identifies the three most pressing issues facing East Harlem as affordable housing, land use trends, and unemployment. HPD is sometimes challenged with balancing the critical need for affordable housing and preserving open or garden spaces; both needs have been exacerbated due to the pandemic. CB 11 has identified affordable housing as one of their top needs and this project will be providing much needed low-income affordable housing for the E. Harlem community.

Comment 1.3: “As a member of this community garden, but also an East Harlem resident, all for striking a balance between greenspaces for leisure and affordable housing. So my comment will be mostly on the East 118th Street site and given that the anticipated negative impact it will have on the community garden, which serves a quite diverse group of citizens all year round, it seems to me the new planned building on the 505 East 118th Street would only make sense if it’s truly affordable and it would be helpful if we hear how your definition of affordability in the context of this specific neighborhood, and my concern is that with only 18 units for this specific building the number of the homeless people about 11 percent or about four people and the low-income people expected to benefit from this specific new affordable housing and those served by the Pleasantville Community Garden will perhaps

be disproportionate. So the questions is how is it ensured that homeless people will benefit at all? How will you ensure that?” (#2 Avenova)

Response 1.3: The project is 100% affordable and includes units for formerly homeless individuals and families. HPD works with the Department of Homeless Services (“DHS”) to ensure homeless individuals and families gain access to these units.

Comment 1.4: “The proposal would use land that is part of an active community garden which currently has several uses and is part of a plan for a greater neighborhood and community use.” (#3 Blackstock)

Response 1.4: The Proposed Project includes portions of the Jackie Robinson and Pleasant Village Community Gardens that are currently located on Development Site C and D, respectively. Both of these gardens are City-owned properties operating under a temporary license agreement with NYC Department of Housing Preservation and Development (HPD) that permits the community gardens to use these lots on an interim basis until HPD is ready to move forward with the development of the sites.

2. Land Use

Comment 2.1: “The city and developers should revitalize abundant buildings in the East Harlem neighborhood.” (#10 Yasuma)

“There is still vacant land and unused properties in the area – space and buildings that are unused. I believe these should be looked at for better development opportunities.” (#3 Blackstock)

Response 2.1: See response 1.2.

Comment 2.2: “Why didn’t HPD give unused and inaccessible land (like 174 East 108th St. and 1612 Lexington Ave.) to be developed rather than the land currently being utilized by Pleasant Village Community Garden?” (#7 Matt)

Response 2.2: See response 1.2.

Comment 2.3: “Regarding the project is bringing additional excess retail spaces to a neighborhood that is already more than aptly supplied with retail spaces, which are empty at the moment. Instead of retail space it is here recommended that those retail spaces be made residential, and those are allowed by code and the current zoning as-of-right.” (#5 James)

“I believe that it would be in the city’s interest to try and use the existing retail space in this area before creating more retail space.” (#3 Blackstock)

Response 2.3: Comment noted.

Comment 2.4: “The land that is in scope for development is actively used for this East Harlem community. People come together to work and to celebrate in this space. Spaces like this need to be protected and nurtured as we come out of Covid-19 to help build better, stronger, healthier communities. There are plans to increase the land’s use further to give more opportunities to local adults and youth. This land is important to the area and its people. I urge you to reconsider the proposal to develop on the proposed site: 505-507 East 118th Street.” (#3 Blackstock)

Response 2.4: Comment noted.

Comment 2.5: “The proposed action is a disposition of City-owned property and as such it has the potential for significant impact on Land Use, Zoning and Public Policy. In addition, public policy initiatives that affect the development sites and surrounding area include the *Harlem-East Harlem Urban Renewal Plan*, the *Community District 11 197-a Plan area*, *Comprehensive Manhattan Waterfront Plan*, *Housing New York 2.0*, *One New York* and the *NYC Waterfront Revitalization Program*.

Additionally, the 2016 *East Harlem Neighborhood Plan* was published by East Harlem Neighborhood Plan Project Partners, including the Office of City Council Speaker Melissa Mark-Viverito, Manhattan Community Board 11, Community Voices Heard, and my office. The goals and recommendations of this report, which was produced after a robust community engagement process, emphasizes the need for affordable housing in the East Harlem neighborhood and should be considered along with other public policy initiatives.” (#1 Brewer)

Response 2.5: As stated in the DSOW, the public policy assessment will evaluate the proposed action’s consistency with public policies, including the 2016 *East Harlem Neighborhood Plan*. The public policy assessment will be conducted in accordance with *CEQR Technical Manual* methodology evaluating the potential for significant adverse impacts in the primary study area (coterminous with the development sites) and secondary (400-foot radius) study area.

Comment 2.6: “The East Harlem Neighborhood Plan contains a number of recommendations that are relevant to this proposal. The plan recommends that affordable housing on public sites “should be built with 100% affordable units, and these units should be required to reach deep and varied levels of affordability up to 130% of AMI, and to establish a target of at least 20% of the units at or below 30% of AMI.”¹ This development is 100% affordable, and exceeds 20% of units below 30% of AMI with 16% of units at 0%-30% of AMI set aside for formerly homeless, and an additional 11% of units set aside for 0%-30% of AMI.” (#1 Brewer)

Response 2.6: Comment noted. The Proposed Project would include 100% affordable units, reinforcing the recommendations in the *East Harlem Neighborhood Plan*.

Comment 2.7: “However, the plan [East Harlem Neighborhood Plan] also notes that “Numerous community gardens are threatened and under-resourced, and in some cases are not open or programmed for wider public use. Loss of these open spaces is a threat to the community.” This should

also be considered as this proposed action represents a loss of community garden space at two different sites.” (#1 Brewer)

Response 2.7: See response 1.4.

Comment 2.8: “It’s very disappointing to see that Bill de Blasio – when he was given money to do an environmental impact study – and there was freedom of information requests to get this information about East Harlem and how vulnerable East Harlem is to flooding was not shared and the reason it wasn’t shared because it wasn’t completed so much of it was redacted.” (#6 Johnson)

Response 2.8: Comment Noted. As stated in the DSOW, the Land Use, Zoning, and Public Policy analysis will evaluate the proposed action’s consistency with public policies, including the *Waterfront Revitalization Program*. The public policy assessment will be conducted in accordance with *CEQR Technical Manual* methodology evaluating the potential for significant adverse impacts, including adverse impacts related to flood risk and climate change.

Comment 2.9: “Pleasant Village Community Garden (PVCG) is built-in “green-infrastructure,” that mitigates neighborhood flooding during storms and prevents excess runoff from flowing into the nearby East River [commenter provides information on these issues]. So, the environmental case to preserve the green space on PVCG’s HPD Land, is that it is one of many green spaces that the city should be fighting to preserve, to soak up rainwater and keep all the stuff on our sidewalks and roads out of our waterways Every square yard of green infrastructure, when added together, can make a huge difference for the health and safety of NYC.” (#8 Monaghan)

Response 2.9: Comment noted. See response 2.8.

3. Open Space

Comment 3.1: “The city is making a big push to reduce our carbon emissions over the next decade. How will New Yorkers believe that the city cares about the environment, when it’s encouraging the development of green space? We aren’t the only community garden that is being developed in this project, and there have been many other gardens in the city that have already been developed. Every single block of green space in a city as large and developed as NYC is an island for reducing temperature, adding environmental resilience, and providing a space for community.” (#8 Monaghan)

Response 3.1: Comment Noted.

Comment 3.22: “I wish the city would consider the impact of developing a lot that is home to a thriving community garden [Pleasant Village Community Garden].” (#8 Monaghan)

Response 3.2 As stated in the DSOW, the Open Space Chapter will include a detailed analysis of direct and indirect effects of the proposed action on open space. Although the City-owned lots operating as community gardens under an interim agreement would be developed as part of the Proposed Project, the Parks portions of the gardens would

remain. Pleasant Village Community Garden would remain with 0.38-acres. Jackie Robinson Community Garden would remain with 0.05-acres.

Comment 3.3: “New Yorkers are seeking for greener, relaxing and sustainable life style. Reducing community garden space in the city is the opposite direction that the community want to choose.” (#10 Yasuma)

“The loss of community garden space at 505-507 East 117th Street and 1761 Park Avenue will have adverse impacts on the community’s open space resources.” (#1 Brewer)

Response 3.3: See response 3.2.

Comment 3.4: “It is my position that these projects [505-507 East 117th Street and 1761 Park Avenue] should create new permanent open space resources.” (#1 Brewer)

Response 3.4: See response 3.2.

Comment 3.5: “In addition, the development team needs to minimize the extent to which ongoing construction will affect the integrity of the adjacent community gardens.” (#1 Brewer)

Response 3.5: As stated in the DSOW, the Open Space Chapter will include a detailed analysis of direct and indirect effects of the proposed action on open space.

Comment 3.6: “And I believe one of the questions that I had, or concerns that I have is whether the three towers that are going to be developed on the East Harlem Mall is still going go through and whether this environmental impact of just these... this one building on that lot is taking into account the loss, or how those three large buildings are going to effect the environment already in addition to these two buildings, or does this just, is this just taking into account the environmental impact of this one building.” (#6 Johnson)

Response 3.6: The analysis will include all known developments that will be complete by the anticipated build year for the development sites. As there are no active permits, land use applications, or as-of-right development plans for the East River Plaza site, this will not be included in the analysis. However, should this change during the preparation of the EIS, then it will be accounted for in the EIS.

Comment 3.7: “I do understand the need for housing, but green space is also important.” (#6 Johnson)

Response 3.7: Comment noted. See response 1.4.

4. Shadows

Comment 4.1: “The new building will block out a lot of the sun in our garden [Pleasant Village Community Garden].” (#8 Monaghan)

“Potential for shadow impacts should also be studied at Pleasant Village Community Garden.” (#1 Brewer)

Response 4.1: As stated in the DSOW, the Shadows Chapter will included a detailed analysis of shadows on sunlight sensitive publicly accessible resources or other resources of concern, including Pleasant Village Community Garden.

9. Neighborhood Character

Comment 9.1: “Affordable housing in East Harlem is needed but it should be done in a sustainable way that maintains and builds on the character of the neighborhood not by taking away parts of the community.” (#3 Blackstock)

Response 9.1: As stated in the DSOW, an assessment of neighborhood character will be provided. The assessment methodology, which is outlined in the DSOW, will be conducted in accordance with *CEQR Technical Manual* guidance. The assessment will identify the defining features of the existing neighborhood character, summarize changes in the character of the neighborhood that can be expected in the future With-Action condition as compared to the future No-Action condition, and evaluate whether the proposed action has the potential to affect these defining features. If the neighborhood character assessment determines that the proposed action could affect the defining features of neighborhood character, a detailed neighborhood character analysis will be conducted in accordance with the *CEQR Technical Manual* guidance.

Comment 9.2: “The garden is a major part of the community. Kids from schools in the area and schools all over the city have been able to benefit from the HPD land.” (#9 Rodriguez)

Response 9.2: Comment noted..

Comment 9.3: “My comments on this project have to do with the impacts of these four projects on neighborhood character. In a previous meeting where these four proposals were presented by the developers, the issue was brought up of design quality and street character of these four projects. The design has not changed. At that time it was brought up that design of the facades are cookie cutter and a copy-paste inexpensive fast and cheap alternative, or option that is being put onto the community. These designs have been repeated already several times in the neighborhood eroding the neighborhood character to something that is homogenous, undesirable, and less than attractive. So I’m here, again, bringing up the issue of design, which is impacting neighborhood character. The four current designs of the four facades facing the streets are underwhelming and under designed and I would like to have the architects revisit the designs of these four buildings as to their public facades. In terms of materials, in terms of shape and expression on the streets, having these mosaics and murals is inadequate to address the lack of character in these four projects and continue to erode neighborhood character.” (#5 James)

Response 9.3: Comment noted.

10. Mitigation

Comment 10.1: “The loss of significant community garden space must be mitigated in ways that reflect the needs of community stakeholders. I encourage the Applicant to take the loss of open space very seriously and consider mitigation.

I look forward to seeing a proposal that creates affordable housing and balances the taking of vacant land with a commitment to preserve open space and community gardens.” (#1 Brewer)

Response 10.1: Comment Noted. As discussed in the DSOW, where significant adverse projects have been identified, mitigation measure will be explored.

Comment 10.2: “So, if the development [of 505 East 118th Street] moves on, I at least ask that the developer and property manager work with the garden. Can gardeners maintain the backyard and the green roof, in a partnership with the building? We have extremely dedicated and experienced gardeners, and the building could become part of a larger movement of sustainability, access to food, and community.” (#8 Monaghan)

“Is there some way the developers can partner with the garden [Pleasant Village Community Garden] to create and help maintain a green space either behind the building or on the roof?” (#9 Rodriguez)

Response 10.2: Comment Noted. Mitigation strategies will be identified and studied in the Draft EIS and Final EIS.

Comment 10.3: “The impact of shadows on both of these community gardens [Pleasant Village Community Garden and Jackie Robinson Community Garden] has the potential to significantly alter the uses and programing of those resources. I encourage the Applicant to offer mitigation measures as part of the design of the building.” (#1 Brewer)

Response 10.3: Comment Noted. See response 4.1 and 10.2.

11. Alternatives

Comment 11.1: “I encourage the Applicant to consider alternative building designs that could increase open space at 1761 Park Avenue without reducing the number of units.” (#1 Brewer)

Response 11.1: As discussed in the DSOW, the alternatives analysis will examine reasonable and practical options that avoid or reduce project-related significant adverse impacts while achieving the goals and objectives of the Proposed Project.

12. Miscellaneous/Other Comments

Comment 12.1: “So would hope that you listen to the input of the public cause that was not done in the HPD building that I live in nor was discussion as developers change their LLCs after they

build and they fly away, never to be found again, or they just change their LLCs to something else that when buildings have serious construction defects that the City does not track loan funds” (#4 Frank)

Response 12.1: Comment Noted.

Comment 12.2: “Maybe HPD should be tracking the fact that buildings have to take a loan fund to make these repairs because the warranties that you do on these buildings last two seconds and by the time you navigate who did the roof nobody seems to want to pay attention to who’s responsible.” (#4 Frank)

Response 12.2: Comment Noted.

Comment 12.3: “The garden has a plan to work on a grant and employ youth from the area to grow healthy and organic food with the help of community grants like BHC (Building Healthy Communities). I feel this employment is a better fit for the area and for New York City as it will help local youth and strengthen the community.” (#3 Blackstock)

Response 12.3: Comment noted.

Comment 12.4: “Community events are regularly held on the land where the development is proposed.” (#3 Blackstock)

Response 12.4: Comment noted. As noted in Response 3.5 3.2.

Comment 12.5: “Pleasant Village Community Garden is making a difference in the community... The environmental impact is that this building will be in the disguise of green housing but these units will have poor insulation and tenants will be using a lot of energy running the proper system to regulate temperature. When it rains it will just add to the run off into our systems and increase chances of flooding. It will end our composting program and most likely phase out our chickens as well. And while the sun will cast down on the roof of that building all day it will only increase cooling costs in the summer for tenants. The building will also block crucial morning sun that crops need in order to thrive. We have a unique opportunity and I am well experienced in rooftop gardening. Say yes to affordable housing but only if our program of growing food and us having access to the space either for composting or on their roof growing produce. We should be joining these efforts into one instead of separating them as if one can survive without the other! Our leaders today in Congress have set the stage for such solutions (the Green New Deal). The plan for a single affordable housing project alone is a dated plan that does not reflect the needs of what local residents actually need.” (#11 Yim)

Response 12.5: Comment noted.

**APPENDIX A:
NYC WATERFRONT
REVITALIZATION PROGRAM**

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: Las Raices East Harlem, LLC

Name of Applicant Representative: Philip A. Habib, P.E., Philip Habib and Associates

Address: 102 Madison Avenue, 11th floor, New York, NY 10016

Telephone: (212) 929-5656 Email: phabib@phaeng.com

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The proposed action consists of the disposition of City-owned property. The proposed action will facilitate the development four buildings containing a total of approximately 81 affordable dwelling units (DUs) (plus two superintendent's units for a total of 83 units) and approximately 10,740 gsf of community facility space in the East Harlem neighborhood of Manhattan, Community District 11. The location of the sites are: 303 East 102 Street (Site A), 338 East 117 Street (Site B), 505 East 118 Street (Site C), and 1761 Park Avenue (Site D). Development Site A would be approximately 8,976 gsf and include approximately 6 DUs, 2,497 gsf of community facility space, and a one level cellar for community facility use. Development Site B would be approximately 8,306 gsf and include approximately 7 DUs. Development Site C would be approximately 17,310 gsf and would include approximately 18 DUs. Development Site D would be approximately 55,670 gsf and include approximately 52 DUs and 8,243 gsf of community facility space. The developments include a total of six tax lots grouped into four separate development sites. It is expected that the proposed developments would be completed by 2023.

2. Purpose of activity

The Proposed Project would create opportunities for new affordable housing development on vacant and underutilized lots in an area where a strong demand for affordable housing exists. This project supports New York Cities Housing 2.0 policy. In addition, the Proposed Project would bring further redevelopment and improvement to the neighborhood through the creation of 10,740 gsf of community facility space on Development Sites A and D.

C. PROJECT LOCATION

Borough: Manhattan Tax Block/Lot(s): Block 1674, Lot 104; Block 1688, Lot 34; Block 1815, Lot 5

Street Address: 303 East 102 Street (A), 338 East 117 Street (B), and 505 East 118 Street (C)

Name of water body (if located on the waterfront): N/A

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission

☒ Yes ☐ No

- | | | |
|---|---|--|
| <input type="checkbox"/> City Map Amendment | <input type="checkbox"/> Zoning Certification | <input type="checkbox"/> Concession |
| <input type="checkbox"/> Zoning Map Amendment | <input type="checkbox"/> Zoning Authorizations | <input type="checkbox"/> UDAAP |
| <input type="checkbox"/> Zoning Text Amendment | <input type="checkbox"/> Acquisition – Real Property | <input type="checkbox"/> Revocable Consent |
| <input type="checkbox"/> Site Selection – Public Facility | <input checked="" type="checkbox"/> Disposition – Real Property | <input type="checkbox"/> Franchise |
| <input type="checkbox"/> Housing Plan & Project | <input type="checkbox"/> Other, explain: _____ | |
| <input type="checkbox"/> 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

- | | |
|--|--|
| <input type="checkbox"/> Legislation | <input checked="" type="checkbox"/> Funding for Construction, specify: <u>NYC HPD Construction Financing</u> |
| <input type="checkbox"/> Rulemaking | <input type="checkbox"/> Policy or Plan, specify: _____ |
| <input type="checkbox"/> Construction of Public Facilities | <input type="checkbox"/> Funding of Program, specify: _____ |
| <input type="checkbox"/> 384 (b) (4) Approval | <input type="checkbox"/> Permits, specify: _____ |
| <input type="checkbox"/> 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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I.4	In areas adjacent to SMIA's, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.1.	Support and encourage in-water recreational activities in suitable locations.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.3	Minimize conflicts between recreational boating and commercial ship operations.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Protect and restore the quality and function of ecological systems within the New York City coastal area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.5	Protect and restore tidal and freshwater wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.8	Maintain and protect living aquatic resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Promote	Hinder	N/A
5	Protect and improve water quality in the New York City coastal area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.1	Manage direct or indirect discharges to waterbodies.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.2	Prevent and remediate discharge of petroleum products.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Provide public access to, from, and along New York City's coastal waters.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.3	Provide visual access to the waterfront where physically practical.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Protect scenic resources that contribute to the visual quality of the New York City coastal area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9.2	Protect and enhance scenic values associated with natural resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10.2	Protect and preserve archaeological resources and artifacts.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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: Philip Habib, P.E

Address: 102 Madison Ave, 11th Fl New York, NY 10016

Telephone: (212) 929-5656

Email: phabib@phaeng.com

Applicant/Agent's Signature: _____

Date: 4/1/21

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

Site A

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	Las Raices
Location	303 East 102nd Street (Development Site A)
Type(s)	<div><input checked="" type="checkbox"/> Residential, Commercial, Community Facility</div> <div><input type="checkbox"/> Parkland, Open Space, and Natural Areas</div> <div><input type="checkbox"/> Tidal Wetland Restoration</div> <div><input type="checkbox"/> Critical Infrastructure or Facility</div> <div><input type="checkbox"/> Industrial Uses</div> <div><input type="checkbox"/> Over-water Structures</div> <div><input type="checkbox"/> Shoreline Structures</div> <div><input type="checkbox"/> Transportation</div> <div><input type="checkbox"/> Wastewater Treatment/Drainage</div> <div><input type="checkbox"/> Coastal Protection</div>
Description	Development Site A is located at 303 East 102nd Street between First and Second Avenues. Development Site A has a lot area of 1,898 gsf and includes Block 1674, Lot 104. The lot has a depth of 100' by 25'. Development Site A will include 5,506 gsf of residential space (6 Dwelling Units) and 1,380 gsf of commercial space.
Planned Completion Date	2023
Expected Project Lifespan	2073

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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	2.60	2.60	NAVD88	<i>Appendix</i>
1% flood height	12.00	12.00	NAVD88	<i>NYC Flood Hazard Mapper</i>
Design flood elevation	13.00	13.00	NAVD88	<i>Survey</i>
<i>As relevant:</i>				
0.2% flood height	-->		NAVD88	

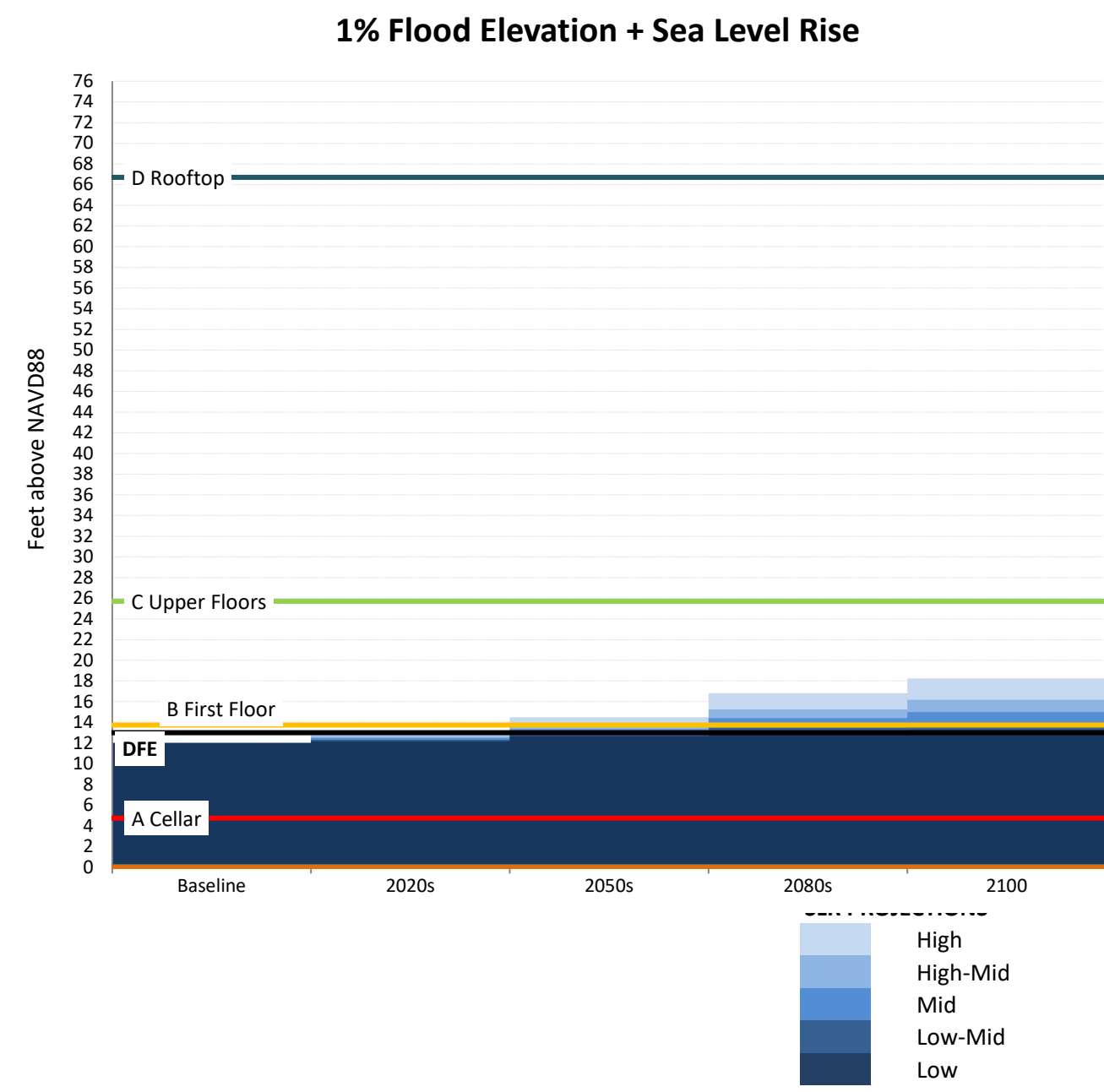
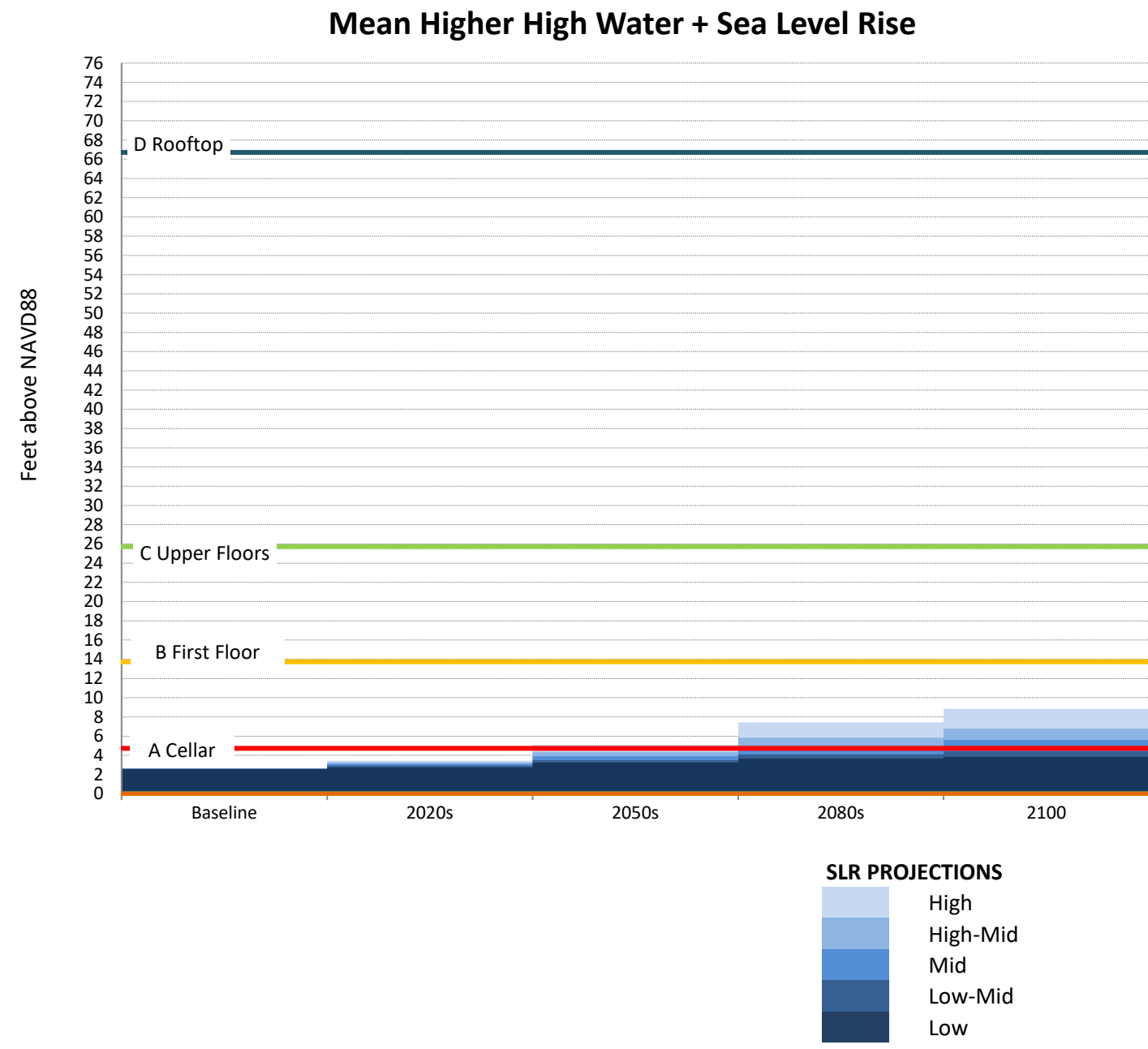
Data will be converted based on the following datums:

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 <small>(enter name)</small>	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
A Cellar	<input checked="" type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other		4.7	Feet	NAVD88	4.7	4.7	2.1	#VALUE!
Commercial space, laundry room, detention tank and water meter/sewer/gas space									
B First Floor	<input checked="" type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other		13.7	Feet	NAVD88	13.7	13.7	11.1	#VALUE!
Commercial space, electric meter room, and entry-way, refuse room									
C Upper Floors	<input type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other		25.7	Feet	NAVD88	25.7	25.7	23.1	#VALUE!
Total of 6 dwelling units									
D Rooftop	<input type="checkbox"/> Vulnerable <input checked="" type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other		66.7	Feet	NAVD88	66.7	66.7	64.1	#VALUE!
Boiler, maintnece storage, and unoccupied planted roof									
E	<input type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials									
F	<input type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials									
G	<input type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials									
H	<input type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials									

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



Site B

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	Las Raices
Location	338 East 117th Street (Development Site B)
Type(s)	<div><input checked="" type="checkbox"/> Residential, Commercial, Community Facility</div> <div><input type="checkbox"/> Parkland, Open Space, and Natural Areas</div> <div><input type="checkbox"/> Tidal Wetland Restoration</div> <div><input type="checkbox"/> Critical Infrastructure or Facility</div> <div><input type="checkbox"/> Industrial Uses</div> <div><input type="checkbox"/> Over-water Structures</div> <div><input type="checkbox"/> Shoreline Structures</div> <div><input type="checkbox"/> Transportation</div> <div><input type="checkbox"/> Wastewater Treatment/Drainage</div> <div><input type="checkbox"/> Coastal Protection</div>
Description	Development Site B is located at 338 East 117th Street between First and Second Avenues. Development Site B has a lot area of 2,523 gsf and includes Block 1688, Lot 34. The lot has a depth of 100' 11" by 25'. Development Site B will include 7,580 gsf of residential space (7 Dwelling Units).
Planned Completion Date	2023
Expected Project Lifespan	2073

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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	2.60	2.60	NAVD88	<i>Appendix</i>
1% flood height	12.00	12.00	NAVD88	<i>FEMA</i>
Design flood elevation	13.00	13.00	NAVD88	<i>Survey</i>
<i>As relevant:</i>				
0.2% flood height	-->		NAVD88	

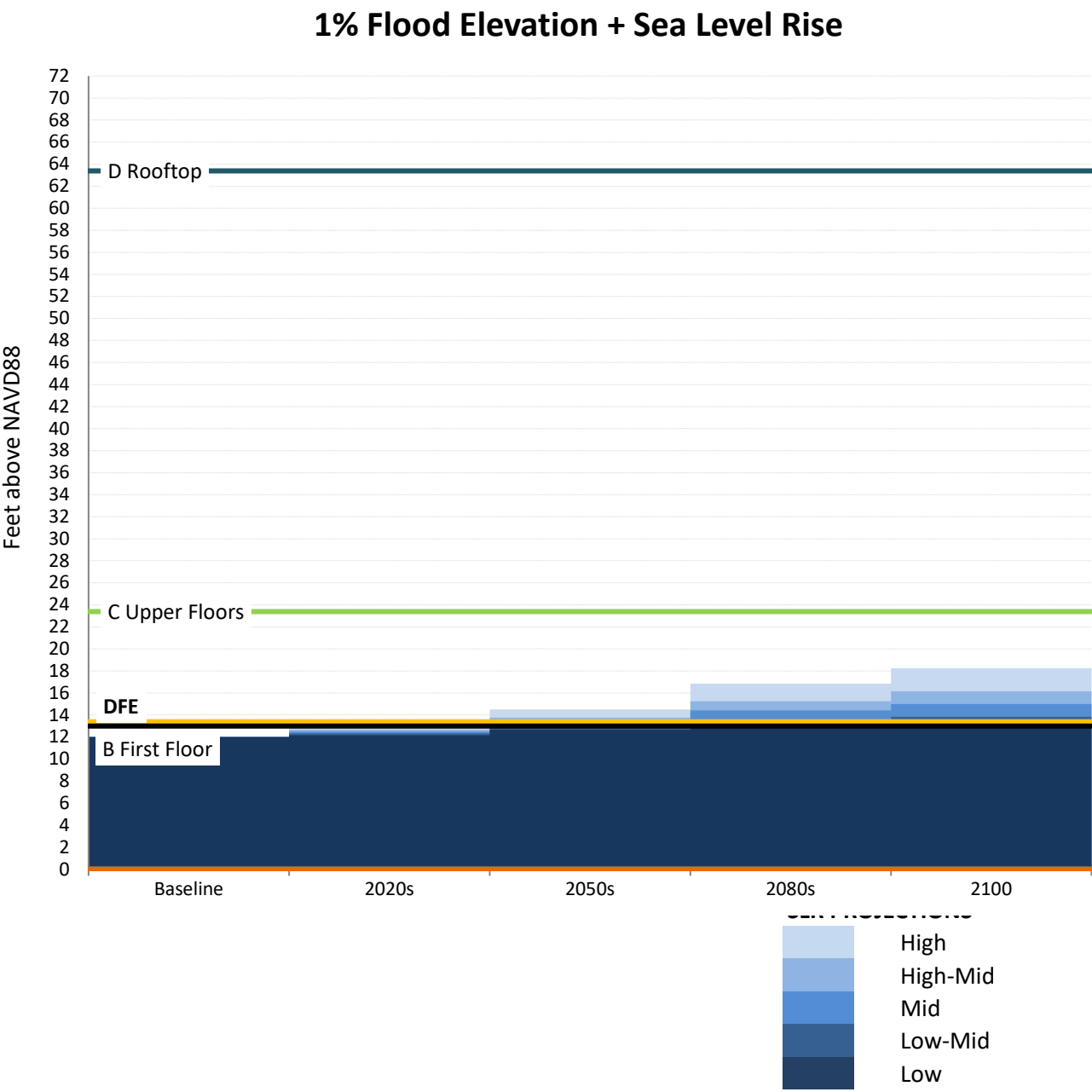
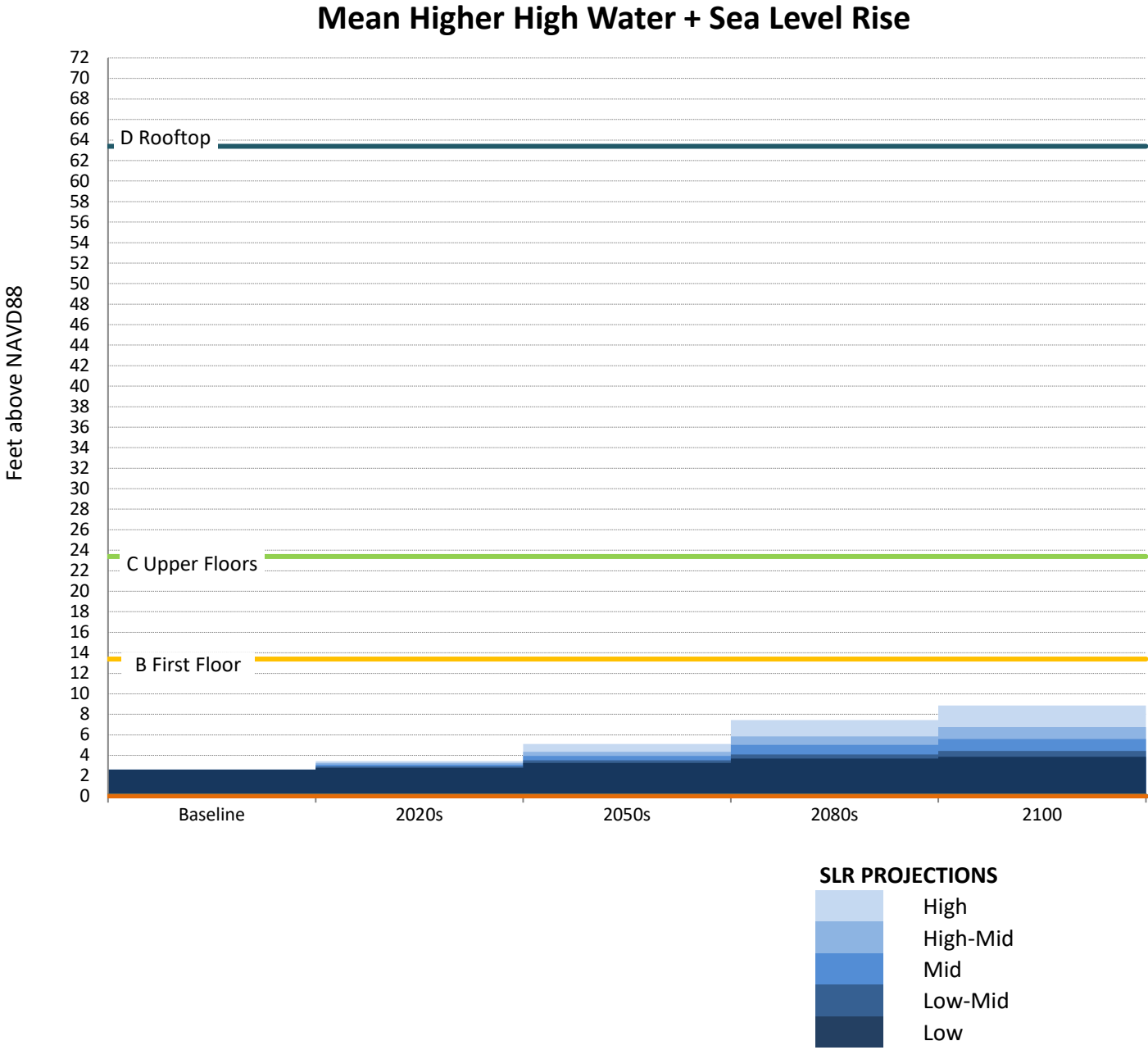
Data will be converted based on the following datums:

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 <small>(enter name)</small>	Feature Category				Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
A Cellar	<input type="checkbox"/> Vulnerable	<input type="checkbox"/> Critical	<input type="checkbox"/> Potentially Hazardous	<input type="checkbox"/> Other			Feet	NAVD88	13.4	13.4	10.8	#VALUE!
B First Floor	<input checked="" type="checkbox"/> Vulnerable	<input type="checkbox"/> Critical	<input type="checkbox"/> Potentially Hazardous	<input type="checkbox"/> Other		13.4	Feet	NAVD88				
residential space, electric meter room, water meter/rpz room, and entry-way												
C Upper Floors	<input checked="" type="checkbox"/> Vulnerable	<input type="checkbox"/> Critical	<input type="checkbox"/> Potentially Hazardous	<input type="checkbox"/> Other		23.4	Feet	NAVD88	23.4	23.4	20.8	#VALUE!
Total of 7 dwelling units												
D Rooftop	<input type="checkbox"/> Vulnerable	<input checked="" type="checkbox"/> Critical	<input type="checkbox"/> Potentially Hazardous	<input type="checkbox"/> Other		63.4	Feet	NAVD88	63.4	63.4	60.8	#VALUE!
Boiler, maintnece storage, and unoccupied planted roof												
E	<input type="checkbox"/> Vulnerable	<input type="checkbox"/> Critical	<input type="checkbox"/> Potentially Hazardous	<input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials												
F	<input type="checkbox"/> Vulnerable	<input type="checkbox"/> Critical	<input type="checkbox"/> Potentially Hazardous	<input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials												
G	<input type="checkbox"/> Vulnerable	<input type="checkbox"/> Critical	<input type="checkbox"/> Potentially Hazardous	<input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials												
H	<input type="checkbox"/> Vulnerable	<input type="checkbox"/> Critical	<input type="checkbox"/> Potentially Hazardous	<input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials												

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



Site C

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	Las Raices
Location	505 East 118th Street (Development Site C)
Type(s)	<div><input checked="" type="checkbox"/> Residential, Commercial, Community Facility</div> <div><input type="checkbox"/> Parkland, Open Space, and Natural Areas</div> <div><input type="checkbox"/> Tidal Wetland Restoration</div> <div><input type="checkbox"/> Critical Infrastructure or Facility</div> <div><input type="checkbox"/> Industrial Uses</div> <div><input type="checkbox"/> Over-water Structures</div> <div><input type="checkbox"/> Shoreline Structures</div> <div><input type="checkbox"/> Transportation</div> <div><input type="checkbox"/> Wastewater Treatment/Drainage</div> <div><input type="checkbox"/> Coastal Protection</div>
Description	Development Site C is located at 505 East 118th Street between Pleasant Avenue and FDR/Harlem River Drive. Development Site C includes block 1815, lots 5 and 6. Development Site C has a lot area of 4,828 gsf. The lot has a depth of 100' 11.5" by 47'10". Development Site C will include 16,403 gsf of residential space (18 Dwelling Units).
Planned Completion Date	2023
Expected Project Lifespan	2073

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Last update: Sept. 7, 2018

Establish current tidal and flood heights.

	FT (NAVD88)	Feet	Datum	Source
MHHW	2.60	2.60	NAVD88	<i>Appendix</i>
1% flood height	12.00	12.00	NAVD88	<i>FEMA</i>
Design flood elevation	13.00	13.00	NAVD88	<i>Survey</i>
<i>As relevant:</i>				
0.2% flood height	-->		NAVD88	

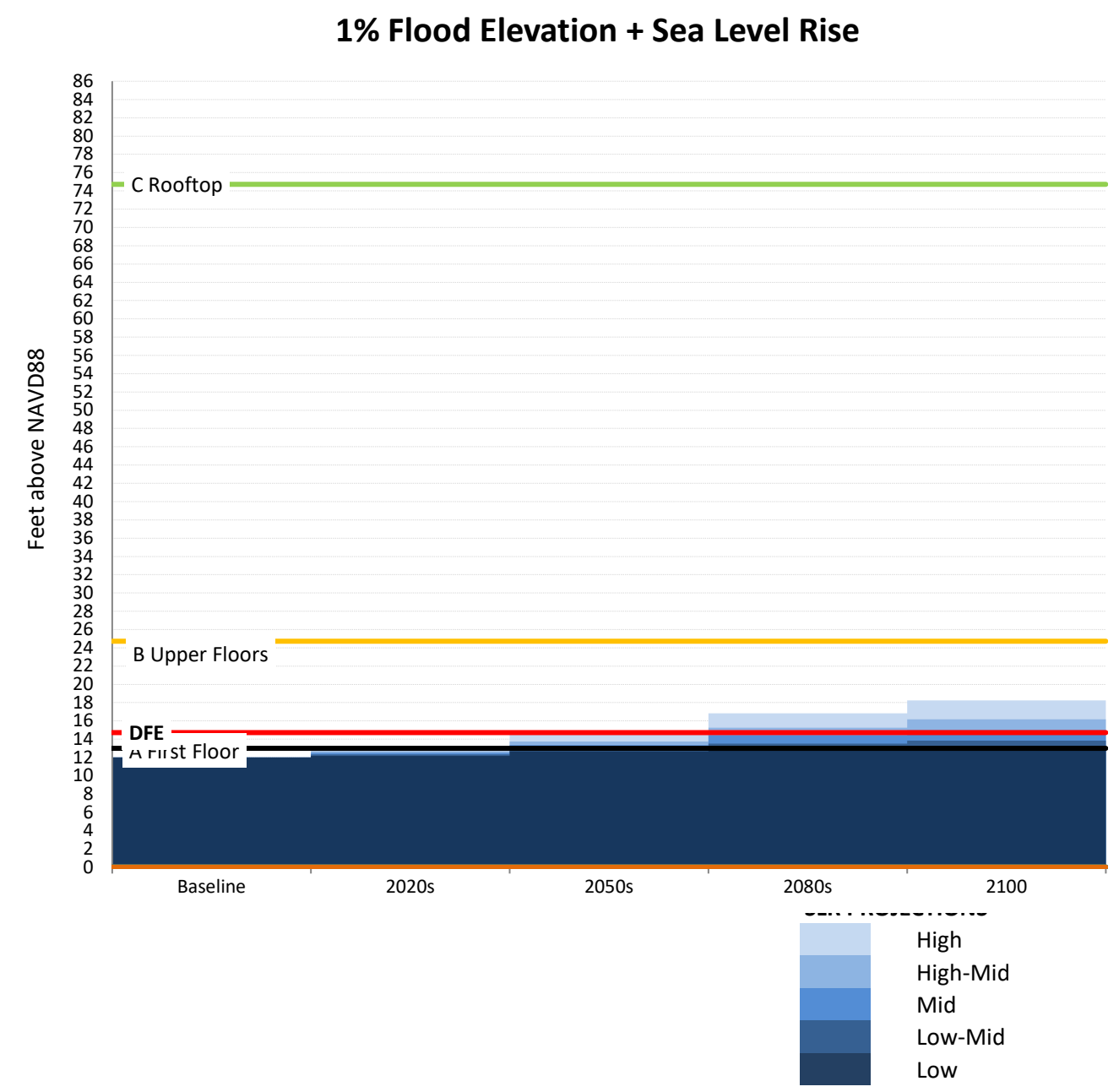
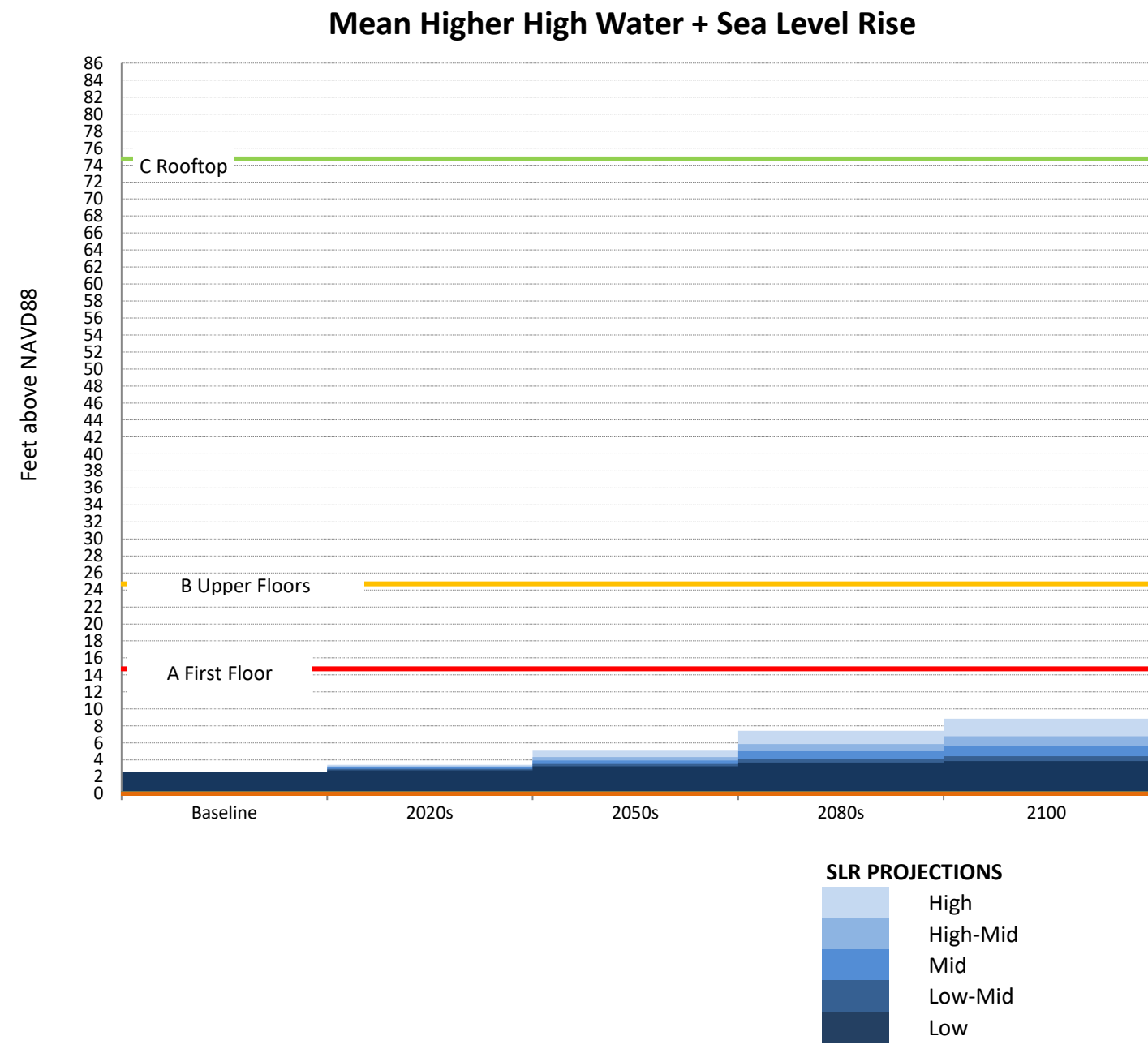
Data will be converted based on the following datums:

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 <small>(enter name)</small>	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
A First Floor	<input type="checkbox"/> Vulnerable <input checked="" type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other	2073	14.7	Feet	NAVD88	14.7	14.7	12.1	#VALUE!
2 dwelling units, electric meter room, water/sewar/rpz room, trash compactor/recycling room									
B Upper Floors	<input type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other	2073	24.7	Feet	NAVD88	24.7	24.7	22.1	#VALUE!
16 Dwelling units									
C Rooftop	<input type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other	2073	74.7	Feet	NAVD88	74.7	74.7	72.1	#VALUE!
Unoccupied roof									
D	<input type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials									
E	<input type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials									
F	<input type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials									
G	<input type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials									
H	<input type="checkbox"/> Vulnerable <input type="checkbox"/> Critical <input type="checkbox"/> Potentially Hazardous <input type="checkbox"/> Other			Feet	NAVD88				
Description of Planned Uses and Materials									

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



APPENDIX B:
AGENCY CORRESPONDENCE

Subject: FW: WRP Consistency Review: Las Raices (WRP #19-178)
From: "Juliana, Matthew (HPD)" <JulianaM@hpd.nyc.gov>
Date: 5/13/2021, 12:29 PM
To: Laura Davis <ldavis@phaeng.com>

See below, thank you!

From: Allan Zaretsky (DCP) <AZARETSKY@planning.nyc.gov>
Sent: Thursday, May 13, 2021 12:14 PM
To: Juliana, Matthew (HPD) <JulianaM@hpd.nyc.gov>
Cc: Anthony Howard (DCP) <AHoward@planning.nyc.gov>; Sarah Whitham (DCP) <SWHITHA@planning.nyc.gov>; Jose Trucios (DCP) <JTrucios@planning.nyc.gov>; Michael Marrella (DCP) <MMarrel@planning.nyc.gov>
Subject: WRP Consistency Review: Las Raices (WRP #19-178)

Hello,

We have completed the review of the project as described below for consistency with the policies and intent of the New York City Waterfront Revitalization Program (WRP).

Las Raices (CEQR # 20HPD002M): The Department of Housing Preservation and Development (HPD) proposes an application for disposition of four city-owned properties to facilitate the development of four buildings, with a total of approximately 81 affordable dwelling units, and a total of approximately 8,001 square feet of commercial space, located in East Harlem

Based on the information submitted, the Waterfront Open Space Division, on behalf of the New York City Coastal Commission, having reviewed the waterfront aspect of this action, hereby concurs with the applicant that the actions will not substantially hinder the achievement of any Waterfront Revitalization Program (WRP) policy.

This determination is only applicable to the information received and the current proposal. Any additional information or project modifications would require an independent consistency review.

For your records, this project has been assigned WRP #19-178. If there are any questions regarding this review, please contact me.

Allan Zaretsky, AICP
Senior Planner | WATERFRONT & OPEN SPACE DIVISION
Waterfront Revitalization Program Consistency Review

NYC DEPT. OF CITY PLANNING
120 Broadway, 31st Floor • NEW YORK, NY 10271
t 212.720.3448 • azaretsky@planning.nyc.gov

<http://www1.nyc.gov/site/planning/applicants/wrp/wrp.page>

Subject: FW: Las Raices

From: "Juliana, Matthew (HPD)" <JulianaM@hpd.nyc.gov>

Date: 5/13/2021, 3:57 PM

To: Laura Davis <ldavis@phaeng.com>, "jreuben@phaeng.com" <jreuben@phaeng.com>

From: Cuff, David (Parks) <David.Cuff@parks.nyc.gov>

Sent: Thursday, May 13, 2021 3:45 PM

To: Juliana, Matthew (HPD) <JulianaM@hpd.nyc.gov>

Cc: Humes, Emily (Parks) <Emily.Humes@parks.nyc.gov>

Subject: Las Raices

Matt- Here are our comments. Please let me know if you want to discuss further.

General Comments:

- Both Open Space and Shadows Chapters are a little unclear regarding what is the difference between what is proposed now and the East Harlem Rezoning. Is it the same site/development characteristics? Is the chapter just acknowledging the impact from last time? Was there any effect from East Harlem Rezoning on Pleasant Village and/or PS 155? East Harlem (and Projected Development Site 69) gets mentioned but not sure what the effect is on the Las Raices review.
- We agree with overall Shadows Chapter conclusion of impacts to Jackie Robinson. However, do not agree with this Open Space Chapter conclusion that the shadows would not affect the use and enjoyment of the resources, *"Therefore, the Proposed Action would not result in direct significant adverse open space impacts due to incremental shadow impacts."* The shadows would lead to an impact on Jackie Robinson, the Open Space Chapter should acknowledge this and disclose an Open Space impact.
- While it was understood that the displacement would occur, the discussion on Page 3-2 of the Open Space Chapter makes it sound as if this is the main reason there is no impact: *"Furthermore, the displacement of these community gardens is consistent with the terms of the temporary license agreements under which they have operated as interim facilities until they would be developed pursuant to HPD plans. Therefore, the direct displacement of portions of Pleasant Village Community Garden and Jackie Robinson Community Garden would not constitute a direct significant adverse open space impact."* Yes, it was a part of the agreement - but there other reasons should be discussed as well, the gardens would continue in some fashion in the future, there are other gardens in the area, etc. (To be more in line with the similar discussion on Page 3-22)
- Notes on Table 3-1:
 - Dream street Park is 0.25 acres
 - Alice Kornegay triangle 0.88 acres
 - Marx Brothers 1.48 also jointly operated with DOE (JOP)
 - PS 155 is JOP
 - Moore PG is JOP
 - James Weldon Johnson is JOP
 - Eugene McCabe is JOP
 - East River PG is JOP
 - Poor Richards is JOP
 - Samuel Seabury is JOP
 - Triboro Plaza - does this resources offer any amenities aside from landscaping?
 - Lenox Ave is spelled with one "n"

Comment on the Gardens Assessments –

- The document characterizes the gardens as growing “vegetation.” The Gardens are food producing and Jackie Robinson (and Carolina) have chickens.
- Characterization of the community garden use for “care and maintenance” is misleading. Gardeners care and maintain a public space because of its diverse uses including food production and the EAS should assess for impacts to its food production use (see below_.
- **Page 4-10/11 (Pleasant Village):** The garden has food production and many trees, including fruit bearing. The assessment should acknowledge this and asses for the potential for impacts. The assessment now is generic, referring to only “vegetation” at the site.
- **Page 4-12/12 (Jackie Robinson):** The garden has food production and many trees, including fruit bearing. It is unclear how the mitigation measures from the East Harlem Rezoning FEIS are related to this action. Further some may not be compatible with the uses of the garden (e.g., “relocating or replacing vegetation with more shade tolerant plant species” would be difficult with edible crops). They gardens are not only growing “plants and flowers” – they are growing food.

David Cuff

Director of Environmental Review
Planning and Development

T 212.360.3492

C 917-938-5221

F 212.360.3453

E David.Cuff@parks.nyc.gov

NYC Parks

The Arsenal, Central Park
830 Fifth Avenue, Room 401
New York, NY 10065
nyc.gov/parks

Subject: FW: 20HPD002M- Las Raices - Positive Declaration

From: "Juliana, Matthew (HPD)" <JulianaM@hpd.nyc.gov>

Date: 3/3/2021, 3:01 PM

To: "Owring, Shahandeh (HPD)" <OwringS@hpd.nyc.gov>, Laura Davis <ldavis@phaeng.com>, "jreuben@phaeng.com" <jreuben@phaeng.com>

CC: "Auton, Melissa (HPD)" <AutonM@hpd.nyc.gov>, "Cortes, Felipe (HPD)" <CortesF@hpd.nyc.gov>, "Simmons, Veanda (HPD)" <simmonsv@hpd.nyc.gov>

Hi all- Please see below for Transportation signoff from DOT. Shay, could you save the below email?

Laura and Jeff, I know I owe you emails, my apologies.

Matt

From: Peter, Tyler <tpeter@dot.nyc.gov>

Sent: Wednesday, March 3, 2021 9:48 AM

To: Juliana, Matthew (HPD) <JulianaM@hpd.nyc.gov>

Cc: Samuelson, Michele <msamuelson@dot.nyc.gov>; Taylor, Jessica <jtaylor@dot.nyc.gov>; sahmed2@dot.nyc.gov

Subject: RE: 20HPD002M- Las Raices - Positive Declaration

Good Morning Mathew,

Our only comment is that Site A's trip generation rates are missing from the new submittal, but they appears to mirror the rates we reviewed last year.

Note that the end result of the transportation analysis is that Site A, B, & C do not go over the CEQR Level 1 thresholds. Site D, which only passed the Level 1 pedestrian threshold, does not go over the Level 2 pedestrian threshold. Therefore there is no need for additional transportation analysis for this project.

Sincerely,

Tyler Peter (he/him/they/them)

Office of Planning Analysis and CEQR

NYC DOT | Traffic Engineering & Planning

55 Water Street | New York, NY 10041

tpeter@dot.nyc.gov

From: Juliana, Matthew (HPD) [<mailto:JulianaM@hpd.nyc.gov>]

Sent: Thursday, February 18, 2021 4:22 PM

To: MN11 (CB) <MN11@cb.nyc.gov>; Simmons, Veanda (HPD) <simmonsv@hpd.nyc.gov>; Auton, Melissa (HPD) <AutonM@hpd.nyc.gov>; Cortes, Felipe (HPD) <CortesF@hpd.nyc.gov>; Goldberg, Arielle (HPD) <goldbear@hpd.nyc.gov>; Owring, Shahandeh (HPD) <OwringS@hpd.nyc.gov>; Jonathan Cruz <JCruz@mdgny.com>; Olga Abinader (DCP) <OABINAD@planning.nyc.gov>; Anthony Howard (DCP) <AHoward@planning.nyc.gov>; Humes, Emily (Parks) <Emily.Humes@parks.nyc.gov>; Cuff, David (Parks) <David.Cuff@parks.nyc.gov>; Alderson, Colleen (Parks) <Colleen.Alderson@parks.nyc.gov>; Estes, Terrell <terrelle@dep.nyc.gov>; Samuelson, Michele <msamuelson@dot.nyc.gov>; Gina Santucci (LPC) <GSantucci@lpc.nyc.gov>

Subject: 20HPD002M- Las Raices - Positive Declaration

Good afternoon,

Attached please find HPD's Positive Declaration and Notice of Public Scoping Hearing for the Las Raices proposal (CEQR No. 20HPD002M). The proposal involves a request by HPD on behalf of the project sponsor, Las Raices East Harlem LLC., for approval of disposition of city-owned property, a discretionary action subject to approval by the City

Planning Commission, as well as construction financing from HPD at a later date. These actions would facilitate the proposed new construction of 81 affordable dwelling units (plus two superintendent's units for a total of 83 dwelling units) across four Development Sites in the East Harlem neighborhood of Manhattan, Community District 11.

Please refer to the Positive Declaration for additional information. The Environmental Assessment Statement (EAS), Positive Declaration, Draft Scope of Work for the DEIS, and Notice of Public Scoping Hearing are available on HPD's Environmental Review webpage: <https://www1.nyc.gov/site/hpd/services-and-information/environmental-review.page>

Documents can also be accessed through MOEC's CEQR Access portal: <https://a002-ceqraccess.nyc.gov/ceqr/> please note there may be a delay before files are available.

Matthew Juliana, AICP | Director, Environmental Planning
Division of Building and Land Development Services
NYC Department of Housing Preservation & Development
100 Gold St, 7-A3c | New York, NY 10038
JulianaM@hpd.nyc.gov | Desk: 212-863-8575



May 13, 2021

Mr. Matthew Juliana
NYC Department of Housing Preservation and Development
100 Gold Street
New York, New York 10038

**Re: Las Raices
CEQR # 20HPD002M**

Vincent Sapienza, P.E.
Commissioner

Angela Licata
*Deputy Commissioner of
Sustainability*

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
Fax (718) 595-4422
alicata@dep.nyc.gov

Dear Matthew:

The New York City Department of Environmental Protection, Bureau of Environmental Planning and Analysis (DEP) has reviewed the air quality and the noise chapters of the Environmental Impact Statement (dated May 13, 2021) prepared by Philip Habib & Associates on behalf of Las Raices East Harlem, LLC (the applicant) for the above referenced project. It is our understanding that the applicant is seeking approval to facilitate development of four separate sites (Sites A, B, C and D) with a total of 83 affordable dwelling units and approximately 11,101 gross square feet of commercial space. The project sites are located at 303 East 102nd Street (Site A), 338 East 117th Street (Site B), 505 East 118th Street (Site C) and 1761 Park Avenue (Site D) in the East Harlem neighborhood of Manhattan, Community District 11.

Per HPD request (20HPD002M-12-06042021090458 and 20HPD002M-13-10032021130342), we have reviewed mentioned above material and our office has the following comments:

Air Quality:

Based on the result of the Air Quality analysis performed as per the City Environmental Quality Review Technical Manual, it was determined that the proposed project would not result in significant adverse impact for air quality. The assessment includes air quality from mobile and stationary sources such as those from HVAC systems. Please note that the chapter incorrectly defines UTM as Universal 'Mercaptan' System.

Noise:

Based on the results of the Noise analysis performed as per the City Environmental Quality Review Technical Manual, it was determined that the proposed project would not result in significant adverse impact for noise. The assessment includes noise from mobile and stationary sources.

If you have any questions, you may contact myself at (718) 595-4416.

Sincerely,

Chung Chan,
Director
Air Quality and Noise Review and Planning

APPENDIX C:
TPF TECHNICAL MEMORANDUM



TECHNICAL MEMORANDUM

TO: New York City Department of Housing Preservation and Development

FROM: Philip Habib & Associates

DATE: May 6, 2021

PROJECT: Las Raices EAS (#1979)

RE: Transportation Planning Factors Memorandum

INTRODUCTION

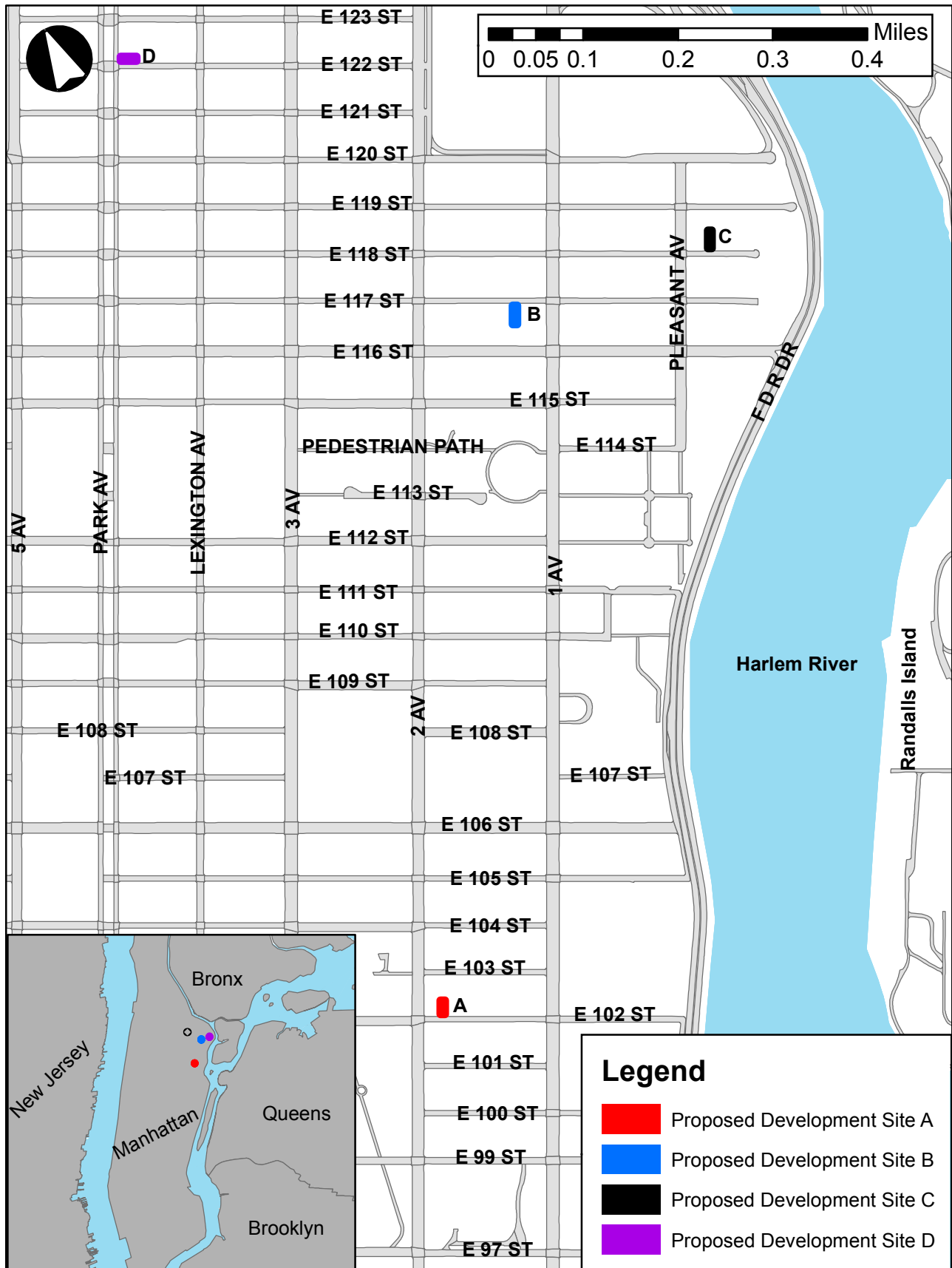
The applicant, the New York City Department of Housing Preservation and Development (HPD) on behalf of Las Raices East Harlem LLC, the project sponsor, is seeking several discretionary actions that would facilitate the development of four new affordable housing developments (“the proposed project”) on four separate development sites in the East Harlem neighborhood of Manhattan, Community District (CD) 11 (refer to **Figure 1**). The proposed project would be facilitated by disposition of City-owned property through the Uniform Land Use Review Procedure (“the Proposed Actions”).

The proposed project would develop six tax lots grouped into four Development Sites (named A through D for identification purposes) with a total of four buildings containing a total of approximately 83 affordable dwelling units (DUs) and approximately 10,740 gsf of community facility space. For travel demand forecasting purposes, the community facility space is conservatively assumed to be occupied by medical office uses. All six lots (Site A: Block 1674, Lot 104; Site B: Block 1688, Lot 34, Site C: Block 1815, Lots 5 and 6, Site D: Block 1771, Lots 1 and 2) are City-owned and would be conveyed by HPD to the project sponsor as a result of the Proposed Actions. The proposed development is expected to be completed and operational in 2023. This memorandum summarizes the transportation planning factors to be used for the environmental assessment statement (EAS) analyses of traffic, transit, pedestrian, and parking conditions for the Proposed Development.

REASONABLE WORST CASE DEVELOPMENT SCENARIO (RWCDs)

In order to assess the potential effects of the Proposed Development, a RWCDs for both the “future without the Proposed Actions” (No-Action) and the “future with the Proposed Actions” (With-Action) conditions is analyzed for an analysis year of 2023. In the future without the proposed actions, no new development would occur and the existing conditions at the Development Site would remain. Under existing conditions, Development Sites A and B are currently vacant, and would remain vacant under the No-Action condition. Development Sites C and D are currently occupied by portions of the Pleasant Village Community Garden and the Jackie Robinson Community Garden, respectively, which would remain under the No-Action condition. In the future under the With-Action conditions, the Proposed Actions would facilitate the development of 83 affordable DUs and approximately 10,740 gsf of community facility (medical office) space. As shown below in **Table 1**, by 2023, the incremental (net) change that would result from the Proposed

Project Location of all Development Sites



Development is a net increase of approximately 83 affordable DUs, and 10,740 gsf of community facility (medical office) space.

Table 1
Comparison of 2023 No-Action and 2023 With-Action Conditions

Development Site	Use	No-Action Scenario	With-Action Scenario	Increment
A (Block 1674, Lot 104)	Residential	0 DUs	6 DUs	+6 DUs
	Community Facility – Medical Office	0 gsf	2,497 gsf	+2,497 gsf
B (Block 1688, Lot 34)	Residential	0 DUs	7 DUs	+7 DUs
	Community Facility – Medical Office	0 gsf	0 gsf	0 gsf
C (Block 1815, Lots 5 and 6)	Residential	0 DUs	18 DUs	+18 DUs
	Community Facility – Medical Office	0 gsf	0 gsf	0 gsf
D (Block 1771, Lots 1 and 2)	Residential	0 DUs	52 DUs	+52 DUs
	Community Facility – Medical Office	0 gsf	8,243 gsf	+8,243 gsf
Total	Residential	0 DUs	83 DUs	+83 DUs
	Community Facility – Medical Office	0 gsf	10,740 gsf	+10,740 gsf

TRANSPORTATION PLANNING FACTORS

In order to conduct a Level 1 Trip Generation Screening Assessment for the Proposed Development in 2023, a travel demand forecast was prepared a typical peak hour during the weekday AM, midday, and PM and Saturday midday periods for each Development Site (A – D) separately. The transportation planning factors shown below in **Tables 2A – 2D** were developed based on standard criteria as per the 2020 *City Environmental Quality Review (CEQR) Technical Manual*, census data, and studies that have been used in previous CEQR documents for projects with similar uses. These include trip generation rates, temporal and directional distributions, mode choice factors, and vehicle occupancies for the With-Action increment of approximately 83 DUs and 10,740 gsf of community facility (medical office).

Residential

The forecast of travel demand for the residential use at each Development Site used a weekday trip generation rate of 8.075 person trips per DU, a Saturday trip generation rate of 9.6 trips per DU, and temporal distributions of 10 percent, 5 percent, 11 percent, and 8 percent for the weekday AM, midday, PM, and Saturday midday peak hours, respectively, as per the 2020 *CEQR Technical Manual*. Truck trip generation rates were estimated based on the 2020 *CEQR Technical Manual*. The directional (in/out) splits and taxi vehicle occupancies were based on data from the *East Harlem Rezoning FEIS, 2017*. As discussed below, the residential modal splits and auto vehicle occupancies are based on census data, and therefore vary by site.

Site A

The residential modal splits were estimated to be 7.5 percent, 1.4 percent, 56.9 percent, 19.0 percent, and 15.2 percent mode shares for private auto, taxi, subway, bus, and walk-only modes, respectively, based on 2013 to 2017 American Community Survey (ACS) Means of Transportation to Work data for Manhattan Census Tract 164. Similarly, the auto vehicle occupancy of 1.04 persons per auto was based on the same source.

Site B

The residential modal splits were estimated to be 16.8 percent, 0 percent, 70.0 percent, 7.1 percent, and 6.1 percent mode shares for private auto, taxi, subway, bus, and walk-only modes, respectively, based on 2013 to 2017 American Community Survey (ACS) Means of Transportation to Work data for Manhattan Census Tract 188. Similarly, the auto vehicle occupancy of 1.13 persons per auto was based on the same source.

Site C

The residential modal splits were estimated to be 9.4 percent, 0.5 percent, 58.6 percent, 15.3 percent, and 16.2 percent mode shares for private auto, taxi, subway, bus, and walk-only modes, respectively, based on 2013 to 2017 American Community Survey (ACS) Means of Transportation to Work data for Manhattan Census Tract 178. Similarly, the auto vehicle occupancy of 1.00 persons per auto was based on the same source.

Site D

The residential modal splits were estimated to be 4.3 percent, 0.6 percent, 65.9 percent, 11.5 percent, and 17.7 percent mode shares for private auto, taxi, subway, bus, and walk-only modes, respectively, based on 2013 to 2017 American Community Survey (ACS) Means of Transportation to Work data for Manhattan Census Tract 196. Similarly, the auto vehicle occupancy of 1.16 persons per auto was based on the same source.

Medical Office

The forecast of travel demand for the medical office uses at Development Sites A and D used a weekday trip generation rate of 76 person trips per 1,000 sf, a Saturday trip generation rate of 39 person trips per 1,000 sf, and temporal distributions of 11 percent, 13 percent, 9 percent, and 17 percent for the weekday AM, midday, PM, and Saturday midday peak hours, respectively, as per data provided by NYCDOT. The modal splits were estimated to be 1.0 percent, 5.0 percent, 60.0 percent, 5.0 percent, and 29.0 percent for private auto, taxi, subway, bus, and walk-only modes, respectively, based on data provided by NYCDOT. The directional splits and vehicle occupancies of 1.53 persons per auto/taxi were based on data provided by NYCDOT. Truck trip generation rates were estimated based on data from the *2016 East New York Rezoning Proposal FEIS*.

Table 2A
Site A - Transportation Planning Factors

Land Use:	<u>Residential</u>		<u>Medical Office</u>	
Size/Units:	6	DU	2,497	gsf
Person Trip Generation:	(1)		(4)	
Weekday	8.075		76.0	
Saturday	9.6		39.0	
	per DU		per 1,000 gsf	
Temporal Distribution:	(1)		(4)	
AM	10.0%		11.0%	
MD	5.0%		13.0%	
PM	11.0%		9.0%	
SatMD	8.0%		17.0%	
Modal Splits:	(2)		(4)	
	All Periods		All Periods	
Auto	7.5%		1.0%	
Taxi	1.4%		5.0%	
Subway	56.9%		60.0%	
Bus	19.0%		5.0%	
Walk/Other	15.2%		29.0%	
	100.0%		100.0%	
In/Out Splits:	(3)		(4)	
	In	Out	In	Out
AM	20%	80%	62%	38%
MD	51%	49%	47%	53%
PM	65%	35%	35%	65%
Sat MD	50%	50%	49%	51%
Vehicle Occupancy:	(2,3)		(4)	
Auto	1.04		1.53	
Taxi	1.40		1.53	
Truck Trip Generation:	(1)		(5)	
Weekday	0.06		0.29	
Saturday	0.02		0.29	
	per DU		per 1,000 sf	
Temporal Distribution	(1)		(5)	
AM	12.0%		3.0%	
MD	9.0%		11.0%	
PM	2.0%		1.0%	
Sat MD	9.0%		0.0%	
	In	Out	In	Out
AM/MD/PM/SMD	50.0%	50.0%	50.0%	50.0%

Notes:

- (1) Based on data from *City Environmental Quality Review (CEQR) Technical Manual, 2020*.
- (2) Based on American Community Survey 2013-2017 Means of Transportation to Work data for Manhattan Census Tract 164.
- (3) Based on data from the *East Harlem Rezoning FEIS, 2017*.
- (4) Based on data provided by NYCDOT.
- (5) Based on data from the *East New York Rezoning Proposal FEIS, 2016*.

Table 2B

Site B - Transportation Planning Factors

Land Use:	<u>Residential</u>	
Size/Units:	7	DU
Person Trip Generation:	(1)	
Weekday	8.075	
Saturday	9.6	
	per DU	
Temporal Distribution:	(1)	
AM	10.0%	
MD	5.0%	
PM	11.0%	
SatMD	8.0%	
Modal Splits:	(2)	
	All Periods	
Auto	16.8%	
Taxi	0.0%	
Subway	70.0%	
Bus	7.1%	
Walk/Other	6.1%	
	100.0%	
In/Out Splits:	(3)	
	In	Out
AM	20%	80%
MD	51%	49%
PM	65%	35%
Sat MD	50%	50%
Vehicle Occupancy:	(2,3)	
Auto	1.13	
Taxi	1.40	
Truck Trip Generation:	(1)	
Weekday	0.06	
Saturday	0.02	
	per DU	
Temporal Distribution	(1)	
AM	12.0%	
MD	9.0%	
PM	2.0%	
Sat MD	9.0%	
	In	Out
AM/MD/PM/SMD	50.0%	50.0%

Notes:

- (1) Based on data from the *City Environmental Quality Review (CEQR) Technical Manual, 2020*.
 (2) Based on American Community Survey 2013-2017 Means of Transportation to Work data for Manhattan Census Tract 188.
 (3) Based on data from the *East Harlem Rezoning FEIS, 2017*.

Table 2C
Site C - Transportation Planning Factors

Land Use:	<u>Residential</u>	
Size/Units:	18	DU
Person Trip Generation:	(1)	
Weekday	8.075	
Saturday	9.6	
	per DU	
Temporal Distribution:	(1)	
AM	10.0%	
MD	5.0%	
PM	11.0%	
SatMD	8.0%	
Modal Splits:	(2)	
	All Periods	
Auto	9.4%	
Taxi	0.5%	
Subway	58.6%	
Bus	15.3%	
Walk/Other	16.2%	
	100.0%	
In/Out Splits:	(3)	
	In	Out
AM	20%	80%
MD	51%	49%
PM	65%	35%
Sat MD	50%	50%
Vehicle Occupancy:	(2,3)	
Auto	1.00	
Taxi	1.40	
Truck Trip Generation:	(1)	
Weekday	0.06	
Saturday	0.02	
	per DU	
Temporal Distribution	(1)	
AM	12.0%	
MD	9.0%	
PM	2.0%	
Sat MD	9.0%	
	In	Out
AM/MD/PM/SMD	50.0%	50.0%

Notes:

- (1) Based on data from the *City Environmental Quality Review (CEQR) Technical Manual, 2020*.
- (2) Based on American Community Survey 2013-2017 Means of Transportation to Work data for Manhattan Census Tract 178.
- (3) Based on data from the *East Harlem Rezoning FEIS, 2017*.

Table 2D
Site D - Transportation Planning Factors

Land Use:	<u>Residential</u>		<u>Medical Office</u>	
Size/Units:	52	DU	8,243	gsf
Person Trip Generation:	(1)		(4)	
Weekday	8.075		76.0	
Saturday	9.6		39.0	
	per DU		per 1,000 gsf	
Temporal Distribution:	(1)		(4)	
AM	10.0%		11.0%	
MD	5.0%		13.0%	
PM	11.0%		9.0%	
SatMD	8.0%		17.0%	
Modal Splits:	(2)		(4)	
	All Periods		All Periods	
Auto	4.3%		1.0%	
Taxi	0.6%		5.0%	
Subway	65.9%		60.0%	
Bus	11.5%		5.0%	
Walk/Other	17.7%		29.0%	
	100.0%		100.0%	
In/Out Splits:	(3)		(4)	
	In	Out	In	Out
AM	20%	80%	62%	38%
MD	51%	49%	47%	53%
PM	65%	35%	35%	65%
Sat MD	50%	50%	49%	51%
Vehicle Occupancy:	(2,3)		(4)	
Auto	1.16		1.53	
Taxi	1.40		1.53	
Truck Trip Generation:	(1)		(5)	
Weekday	0.06		0.29	
Saturday	0.02		0.29	
	per DU		per 1,000 sf	
Temporal Distribution	(1)		(5)	
AM	12.0%		3.0%	
MD	9.0%		11.0%	
PM	2.0%		1.0%	
Sat MD	9.0%		0.0%	
	In	Out	In	Out
AM/MD/PM/SMD	50.0%	50.0%	50.0%	50.0%

Notes:

- (1) Based on data from the *City Environmental Quality Review (CEQR) Technical Manual, 2020*.
- (2) Based on American Community Survey 2013-2017 Means of Transportation to Work data for Manhattan Census Tract 196.
- (3) Based on data from the *East Harlem Rezoning FEIS, 2017*.
- (4) Based on data provided by NYCDOT.
- (5) Based on data from the *East New York Rezoning Proposal FEIS, 2016*.

TRIP GENERATION

According to the 2020 *CEQR Technical Manual* guidelines, a two-tier screening process is used to determine whether quantified analyses of any technical areas of the transportation system are necessary. A Level 1 screening is typically necessary if a proposed project has the potential to exceed either 50 vehicle trips, 200 transit trips or 200 pedestrian trips during any given peak hour. If these thresholds are exceeded, a Level 2 screening assessment is required in order to ensure that there are not 50 vehicle trips, 50 bus trips, 200 subway/rail trips, or 200 pedestrian trips assigned to an individual transportation element (intersections, bus routes, subway stations, etc.), during any analysis peak hour. Based on the planning factors shown in **Tables 2A – 2D**, travel demand forecasts (Level 1 screening) were prepared for each proposed Development Site, and are shown below in **Tables 3A – 3D**.

Level 1 Screening

Traffic

Site A

Based on the factors outlined in **Table 2A**, an incremental increase of approximately 2, 4, 2, and 0 vehicle trips (in and out combined) would be generated at Site A as a result of the proposed development program during the weekday AM, midday, PM, and Saturday midday peak hours, respectively (refer to **Table 3A**).

Site B

Based on the factors outlined in **Table 2B**, an incremental increase of approximately 1, 0, 1, and 0 vehicle trips (in and out combined) would be generated at Site B as a result of the proposed development program during the weekday AM, midday, PM, and Saturday midday peak hours, respectively (refer to **Table 3B**).

Site C

Based on the factors outlined in **Table 2C**, an incremental increase of approximately 1, 0, 2, and 2 vehicle trips (in and out combined) would be generated at Site C as a result of the proposed development program during the weekday AM, midday, PM, and Saturday midday peak hours, respectively (refer to **Table 3C**).

Site D

Based on the factors outlined in **Table 2D**, an incremental increase of approximately 5, 4, 6, and 6 vehicle trips (in and out combined) would be generated at Site C as a result of the proposed development program during the weekday AM, midday, PM, and Saturday midday peak hours, respectively (refer to **Table 3D**).

Overall

As the *CEQR Technical Manual* Level 1 screening threshold of 50 vehicle trips per peak hour is not exceeded during any of the four peak hour periods at any of the proposed development sites, significant adverse impacts would be unlikely and a Level 2 screening analysis is not warranted. As per the *CEQR Technical Manual*, a detailed parking assessment is not needed if the threshold for traffic analysis is not exceeded.

Table 3A
Site A - Travel Demand Forecast

Land Use:		<u>Residential</u>		<u>Medical Office</u>		<u>Total</u>	
Size/Units:		6	DU	2,497	gsf		
Peak Hour Person Trips:							
AM		5		21		26	
MD		2		25		27	
PM		5		17		22	
Sat MD		5		16		21	
Person Trips:							
AM		In	Out	In	Out	In	Out
	Auto	0	0	0	0	0	0
	Taxi	0	0	1	0	1	0
	Subway	1	2	8	5	9	7
	Bus	0	1	1	0	1	1
	Walk/Other	<u>0</u>	<u>1</u>	<u>4</u>	<u>2</u>	<u>4</u>	<u>3</u>
	Total	1	4	14	7	15	11
MD		In	Out	In	Out	In	Out
	Auto	0	0	0	0	0	0
	Taxi	0	0	1	1	1	1
	Subway	1	1	7	7	8	8
	Bus	0	0	1	1	1	1
	Walk/Other	<u>0</u>	<u>0</u>	<u>3</u>	<u>4</u>	<u>3</u>	<u>4</u>
	Total	1	1	12	13	13	14
PM		In	Out	In	Out	In	Out
	Auto	0	0	0	0	0	0
	Taxi	0	0	0	1	0	1
	Subway	3	1	4	7	7	8
	Bus	1	0	0	1	1	1
	Walk/Other	<u>0</u>	<u>0</u>	<u>1</u>	<u>3</u>	<u>1</u>	<u>3</u>
	Total	4	1	5	12	9	13
Sat MD		In	Out	In	Out	In	Out
	Auto	0	0	0	0	0	0
	Taxi	0	0	0	0	0	0
	Subway	1	1	6	6	7	7
	Bus	1	1	0	0	1	1
	Walk/Other	<u>0</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>3</u>
	Total	2	3	8	8	10	11
Vehicle Trips :							
AM		In	Out	In	Out	In	Out
	Auto (Total)	0	0	0	0	0	0
	Taxi	0	0	1	0	1	0
	Taxi Balanced	0	0	1	1	1	1
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total	0	0	1	1	1	1
		In	Out	In	Out	In	Out
MD	Auto (Total)	0	0	0	0	0	0
	Taxi	0	0	1	1	1	1
	Taxi Balanced	0	0	2	2	2	2
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total	0	0	2	2	2	2
		In	Out	In	Out	In	Out
PM	Auto (Total)	0	0	0	0	0	0
	Taxi	0	0	0	1	0	1
	Taxi Balanced	0	0	1	1	1	1
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total	0	0	1	1	1	1
		In	Out	In	Out	In	Out
Sat MD	Auto (Total)	0	0	0	0	0	0
	Taxi	0	0	0	0	0	0
	Taxi Balanced	0	0	0	0	0	0
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total	0	0	0	0	0	0
		In	Out	In	Out	In	Out

Table 3B
Site B - Travel Demand Forecast

Land Use:		<u>Residential</u>		<u>Total</u>	
Size/Units:		7	DU		
Peak Hour Person Trips:					
AM		5		5	
MD		2		2	
PM		6		6	
Sat MD		5		5	
Person Trips:					
AM		In	Out	In	Out
	Auto	0	1	0	1
	Taxi	0	0	0	0
	Subway	1	3	1	3
	Bus	0	0	0	0
	Walk/Other	0	0	0	0
	Total	1	4	1	4
MD		In	Out	In	Out
	Auto	0	0	0	0
	Taxi	0	0	0	0
	Subway	1	1	1	1
	Bus	0	0	0	0
	Walk/Other	0	0	0	0
	Total	1	1	1	1
PM		In	Out	In	Out
	Auto	1	0	1	0
	Taxi	0	0	0	0
	Subway	4	1	4	1
	Bus	0	0	0	0
	Walk/Other	0	0	0	0
	Total	5	1	5	1
Sat MD		In	Out	In	Out
	Auto	0	0	0	0
	Taxi	0	0	0	0
	Subway	2	2	2	2
	Bus	0	0	0	0
	Walk/Other	0	1	0	1
	Total	2	3	2	3
Vehicle Trips :					
AM		In	Out	In	Out
	Auto (Total)	0	1	0	1
	Taxi	0	0	0	0
	Taxi Balanced	0	0	0	0
	Truck	0	0	0	0
	Total	0	1	0	1
MD		In	Out	In	Out
	Auto (Total)	0	0	0	0
	Taxi	0	0	0	0
	Taxi Balanced	0	0	0	0
	Truck	0	0	0	0
	Total	0	0	0	0
PM		In	Out	In	Out
	Auto (Total)	1	0	1	0
	Taxi	0	0	0	0
	Taxi Balanced	0	0	0	0
	Truck	0	0	0	0
	Total	1	0	1	0
Sat MD		In	Out	In	Out
	Auto (Total)	0	0	0	0
	Taxi	0	0	0	0
	Taxi Balanced	0	0	0	0
	Truck	0	0	0	0
	Total	0	0	0	0

Table 3C
Site C - Travel Demand Forecast

Land Use:		<u>Residential</u>		<u>Total</u>	
Size/Units:		18	DU		
Peak Hour Person Trips:					
AM		15		15	
MD		7		7	
PM		16		16	
Sat MD		14		14	
Person Trips:					
		In	Out	In	Out
AM	Auto	0	1	0	1
	Taxi	0	0	0	0
	Subway	2	8	2	8
	Bus	0	2	0	2
	Walk/Other	<u>0</u>	<u>2</u>	<u>0</u>	<u>2</u>
	Total	2	13	2	13
		In	Out	In	Out
MD	Auto	0	0	0	0
	Taxi	0	0	0	0
	Subway	2	1	2	1
	Bus	1	1	1	1
	Walk/Other	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	Total	4	3	4	3
		In	Out	In	Out
PM	Auto	1	1	1	1
	Taxi	0	0	0	0
	Subway	5	3	5	3
	Bus	2	1	2	1
	Walk/Other	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>
	Total	10	6	10	6
		In	Out	In	Out
Sat MD	Auto	1	1	1	1
	Taxi	0	0	0	0
	Subway	4	4	4	4
	Bus	1	1	1	1
	Walk/Other	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
	Total	7	7	7	7
Vehicle Trips :					
		In	Out	In	Out
AM	Auto (Total)	0	1	0	1
	Taxi	0	0	0	0
	Taxi Balanced	0	0	0	0
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total	0	1	0	1
		In	Out	In	Out
MD	Auto (Total)	0	0	0	0
	Taxi	0	0	0	0
	Taxi Balanced	0	0	0	0
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total	0	0	0	0
		In	Out	In	Out
PM	Auto (Total)	1	1	1	1
	Taxi	0	0	0	0
	Taxi Balanced	0	0	0	0
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total	1	1	1	1
		In	Out	In	Out
Sat MD	Auto (Total)	1	1	1	1
	Taxi	0	0	0	0
	Taxi Balanced	0	0	0	0
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total	1	1	1	1

Table 3D
Site D - Travel Demand Forecast

Land Use:		<u>Residential</u>		<u>Medical Office</u>		<u>Total</u>	
Size/Units:		52	DU	8,243	gsf		
Peak Hour Person Trips:							
	AM	42		69		111	
	MD	21		81		102	
	PM	46		56		102	
	Sat MD	40		55		95	
Person Trips:							
AM		In	Out	In	Out	In	Out
	Auto	0	1	0	0	0	1
	Taxi	0	0	2	1	2	1
	Subway	6	23	26	16	32	39
	Bus	1	4	2	1	3	5
	Walk/Other	<u>1</u>	<u>6</u>	<u>13</u>	<u>8</u>	<u>14</u>	<u>14</u>
	Total	8	34	43	26	51	60
MD		In	Out	In	Out	In	Out
	Auto	0	0	0	0	0	0
	Taxi	0	0	2	2	2	2
	Subway	7	8	23	26	30	34
	Bus	1	1	2	2	3	3
	Walk/Other	<u>2</u>	<u>2</u>	<u>11</u>	<u>13</u>	<u>13</u>	<u>15</u>
	Total	10	11	38	43	48	54
PM		In	Out	In	Out	In	Out
	Auto	1	1	0	0	1	1
	Taxi	0	0	1	2	1	2
	Subway	20	11	12	22	32	33
	Bus	3	2	1	2	4	4
	Walk/Other	<u>5</u>	<u>3</u>	<u>6</u>	<u>10</u>	<u>11</u>	<u>13</u>
	Total	29	17	20	36	49	53
Sat MD		In	Out	In	Out	In	Out
	Auto	1	1	0	0	1	1
	Taxi	0	0	1	1	1	1
	Subway	13	13	17	18	30	31
	Bus	2	2	1	1	3	3
	Walk/Other	<u>4</u>	<u>4</u>	<u>8</u>	<u>8</u>	<u>12</u>	<u>12</u>
	Total	20	20	27	28	47	48
Vehicle Trips :							
AM		In	Out	In	Out	In	Out
	Auto (Total)	0	1	0	0	0	1
	Taxi	0	0	1	1	1	1
	Taxi Balanced	0	0	2	2	2	2
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total	0	1	2	2	2	3
MD		In	Out	In	Out	In	Out
	Auto (Total)	0	0	0	0	0	0
	Taxi	0	0	1	1	1	1
	Taxi Balanced	0	0	2	2	2	2
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total	0	0	2	2	2	2
PM		In	Out	In	Out	In	Out
	Auto (Total)	1	1	0	0	1	1
	Taxi	0	0	1	1	1	1
	Taxi Balanced	0	0	2	2	2	2
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total	1	1	2	2	3	3
Sat MD		In	Out	In	Out	In	Out
	Auto (Total)	1	1	0	0	1	1
	Taxi	0	0	1	1	1	1
	Taxi Balanced	0	0	2	2	2	2
	Truck	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
	Total	1	1	2	2	3	3

Transit

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) specified in the 2020 *CEQR Technical Manual*, detailed transit analyses are generally not required if the proposed development is projected to result in fewer than 200 peak hour subway/rail or bus transit riders. If a proposed action would result in 50 or more bus passengers assigned to a single bus route (in one direction), or it would result in an increase of 200 or more passengers at a single subway station or on a single subway line, a detailed bus and/or subway analysis would be warranted. Transit analyses typically focus on the weekday AM and PM commuter peak hours as it is during these periods that overall demand on the subway and bus system is usually highest.

Site A

As shown in **Table 3A**, the proposed development at Site A would generate an incremental increase of 16 and 15 subway trips (in and out combined) during the weekday AM and PM peak periods, respectively. Similarly, the proposed development at Site A would generate an incremental increase of 2 and 2 bus trips during the AM and PM peak hours, respectively.

Site B

As shown in **Table 3B**, the proposed development at Site B would generate an incremental increase of 4 and 5 subway trips (in and out combined) during the weekday AM and PM peak periods, respectively. Similarly, the proposed development at Site B would not generate any incremental bus trips during the AM and PM peak hours.

Site C

As shown in **Table 3C**, the proposed development at Site C would generate an incremental increase of 10 and 8 subway trips (in and out combined) during the weekday AM and PM peak periods, respectively. Similarly, the proposed development at Site C would generate an incremental increase of 2 and 3 bus trips during the AM and PM peak hours, respectively.

Site D

As shown in **Table 3D**, the proposed development at Site D would generate an incremental increase of 71 and 65 subway trips (in and out combined) during the weekday AM and PM peak periods, respectively. Similarly, the proposed development at Site C would generate an incremental increase of 8 and 8 bus trips during the AM and PM peak hours, respectively.

Overall

Therefore, as the *CEQR Technical Manual* transit thresholds are not met at any of the proposed development sites, a detailed transit analysis would not be warranted, and no significant adverse impacts are expected.

Pedestrians

Site A

As shown in **Table 3A**, the proposed development at Site A would generate an incremental increase of 7, 7, 4, and 5 walk-only trips (in and out combined) during the weekday AM, midday, PM and Saturday midday

peak periods, respectively. In addition to the walk-only trips, the auto, subway, and bus trips also include walk portions of the trip. Therefore, the proposed project would generate a total of 25, 25, 21, and 21 walk trips in the weekday AM, midday, PM and Saturday peak periods respectively.

Site B

As shown in **Table 3B**, the proposed development at Site B would not generate incremental walk-only trips during the weekday AM, midday, and PM peak hours and would generate 1 walk-only trip during the Saturday peak hour. In addition to the walk-only trips, the auto, subway, and bus trips also include walk portions of the trip. Therefore, the proposed project would generate a total of 5, 2, 6, and 5 walk trips in the weekday AM, midday, PM and Saturday peak periods respectively.

Site C

As shown in **Table 3C**, the proposed development at Site C would generate an incremental increase of 2, 2, 3, and 2 walk-only trips (in and out combined) during the weekday AM, midday, PM and Saturday midday peak periods, respectively. In addition to the walk-only trips, the auto, subway and bus trips also include walk portions of the trip. Therefore, the proposed project would generate a total of 15, 7, 16, and 14 walk trips in the weekday AM, midday, PM and Saturday peak periods respectively.

Site D

As shown in **Table 3D**, the proposed development at Site D would generate an incremental increase of 28, 28, 24, and 24 walk-only trips (in and out combined) during the weekday AM, midday, PM and Saturday midday peak periods, respectively. In addition to the walk-only trips, the auto, subway, and bus trips also include walk portions of the trip. Therefore, the proposed project would generate a total of 108, 98, 99, and 93 walk trips in the weekday AM, midday, PM and Saturday peak periods respectively.

Overall

According to the *CEQR Technical Manual*, detailed pedestrian analyses are not required if the proposed development is projected to result in less than 200 peak hour pedestrian trips. As discussed above, the total incremental walk trips do not exceed the CEQR threshold during any analyzed peak hour at any of the proposed development sites. Therefore, no significant adverse impacts are expected and a detailed pedestrian analysis is not required.

CONCLUSIONS

A transportation forecast and assignment has been prepared for the proposed development of four new affordable housing developments containing a total of approximately 83 affordable DUs, and 10,740 gsf of community facility space. According to the 2020 *CEQR Technical Manual* guidelines, if a proposed development is expected to result in fewer than 50 vehicle trips, 200 peak hour transit trips, and 200 peak hour pedestrian trips, further quantified analyses are warranted.

As shown in **Tables 3A – 3D**, each of the proposed developments would generate significantly less than *CEQR Technical Manual* threshold of 50 vehicle trips during each of the analysis peak hours. Similarly, the proposed developments would each generate less than 200 subway and bus trips during each of the analysis peak hours. Therefore, further quantified traffic and transit analyses are not warranted. As per the *CEQR Technical Manual*, a detailed parking assessment is not needed if the threshold for traffic analysis is not exceeded.

Additionally, as shown in **Tables 3A – 3C**, each of the proposed developments would each generate significantly less than 200 pedestrian trips during each analysis peak hour. Therefore, no significant adverse impacts are expected, and a detailed pedestrian analysis is not warranted.

APPENDIX D:
COMMENTS ON THE DRAFT SCOPE OF WORK

Transcription of Las Raices Scoping Hearing Public Comments

First Comment:

1:32:26 Warren James

Hello, I'm Warren James, resident of East Harlem at 138 East 112th Street. I'm an architect and urban designer based in the community in CB11. My comments on this project have to do with the impacts of these four projects on neighborhood character. In a previous meeting where these four proposals were presented by the developers, the issue was brought up of design quality and street character of these four projects. The design has not changed. At that time it was brought up that design of the facades are cookie cutter and a copy-paste inexpensive fast and cheap alternative, or option that is being put onto the community. These designs have been repeated already several times in the neighborhood eroding the neighborhood character to something that is homogenous, undesirable, and less than attractive. So I'm here, again, bringing up the issue of design, which is impacting neighborhood character. The four current designs of the four facades facing the streets are underwhelming and under designed and I would like to have the architects revisit the designs of these four buildings as to their public facades. In terms of materials, in terms of shape and expression on the streets, having these mosaics and murals is inadequate to address the lack of character in these four projects and continue to erode neighborhood character. Those are my comments and the final one is regarding the project is bringing additional excess retail spaces to a neighborhood that is already more than aptly supplied with retail spaces, which are empty at the moment. Instead of retail space it is here recommended that those retail spaces be made residential, and those are allowed by code and the current zoning as-of-right. So those are my comments and I thank the community and the partners of this project for the public comments period. Thank you.

Second comment:

1:37:00 Christine Johnson

So I'm Christine Johnson and I'm with Pleasant Village Community Garden. And obviously I've been concerned about the development of the two lots that abut Pleasant Village Community Garden for a while. And I believe one of the questions that I had, or concerns that I have is whether the three towers that are going to be developed on the East Harlem Mall is still gonna go through and whether this environmental impact of just these... this one building on that lot is taking into account the loss, or how those three large buildings are going to effect the environment already in addition to these two buildings, or does this just, is this just taking into account the environmental impact of this one building. And the other thing that I wanted to mention and say is that it's very disappointing to see that Bill de Blasio – when he was given money to do an environmental impact study – and there was freedom of information requests to get this information about East Harlem and how vulnerable East Harlem is to flooding was not shared and the reason it wasn't shared because it wasn't completed so much of it was redacted. And I think that this needs to be a more open process and I'm hoping that when this study is done that all these things will be taken into consideration. I do understand the need for housing, but green space is also important.

Third comment:

1:39:04 Wendy Frank

Hi, my name is Wendy. I live on 148th Street and I actually did my thesis on how HPD doesn't track developer to year of building to construction defect. I live in a building where the developer there are numerous lawsuits by the same developer and so every time I write to HPD I've been through, let's see, eight commissioners, one assistant commissioner that, when he did finally come to our building to show him that our roof was never pitched properly, the next day he was arrested by the FBI. So would hope that you listen to the input of the public cause that was not done in the HPD build that I live in nor was discussion as developers change their LLCs after they build and they fly away, never to be found again, or they just change their LLCs to something else that when buildings have serious construction defects that the City does not track loan funds, and so when you're walking around, Matthew, and you see a brand new building with scaffolding around it and you go "Hm, why is that?" that maybe HPD should be tracking the fact that building have to take a loan fund to make these repairs because the warranties that you do on these buildings last two seconds and by the time you navigate who did the roof nobody seems to want to pay attention to whose responsible for the roof leaks and why a roof was not pitched properly in the first place. So you should address these things. It's a live and learn moment from HPD since you have high turnover that HPD never goes back to the building that they built to ask the constituents what they think of the building they bought into. And it's not like you can test drive your apartment or co-op like you can do a car. At least, if you by an Audi there's a better warranty than buying an HPD building. Thank you.

Fourth:

1:41:51 Milena Avenova

Hi, thank you for allowing me to speak with such short notice. So I live on East 119th Street and Pleasant Avenue and I've been a member of the Pleasantville Community Garden for several years now. As a member of this community garden, but also an East Harlem resident, all for striking a balance between greenspaces for leisure and affordable housing. So my comment will be mostly on the East 118th Street site and given that given the anticipated negative impact it will have on the community garden, which serves a quite diverse group of citizens all year round, it seems to me the new planned building on the 505 East 118th Street would only make sense if it's truly affordable and it would be helpful if we hear how your definition of affordability in the context of this specific neighborhood, and my concern is that with only 18 units for this specific building the number of the homeless people about 11 percent or about 4 people and the low-income people expected to benefit from this specific new affordable housing and those served by the Pleasantville Community Garden will perhaps be disproportionate. So the questions is how is it ensured that homeless people will benefit at all? How will you ensure that?



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Gale A. Brewer, Borough President

April 13, 2021

Gale A. Brewer, Manhattan Borough President
Scoping Comments on Las Raices

CEQR No. 20HPD002M
ULURP No. Pending

The New York City Department of Housing Preservation and Development (HPD), on behalf of Las Raices East Harlem LLC (the “Applicant”), is seeking a disposition of City-owned land for the construction of four residential buildings in the East Harlem neighborhood of Manhattan, Community District (CD) 11, which requires a Uniform Land Use Review Procedure (ULURP) application. In addition, this proposed action would receive public financing under the Neighborhood Construction Program.

Under the proposed action, six City-owned tax lots would be grouped into four development sites at 303 East 102nd Street, 338 East 117th Street, 505-507 East 118th Street, and 1761 Park Avenue. Currently, the development areas located at 303 East 102nd Street and 338 East 117th Street are vacant, and the development areas located at 505-507 East 117th Street and 1761 Park Avenue are occupied by community gardens. In total, these four proposed buildings would contain 81 affordable dwelling units, and two building superintendent units, for a total of 83 dwelling units, and approximately 11,101 gross square feet (GSF) of commercial space. All four sites would be redeveloped pursuant to existing zoning.

Task 2: Land Use, Zoning and Public Policy

The proposed redevelopment on the four development sites would be done in accordance with the existing zoning regulations. 303 East 102nd Street is zoned C1-5/R8A; 338 East 117th Street is zoned R7B; 505-507 East 118th Street is zoned R7B; and 1761 Park Avenue is zoned M1-2/R8 within the Special East Harlem Corridors District (EHC), created as a part of the East Harlem Neighborhood Initiative.

The proposed action is a disposition of City-owned property and as such it has the potential for significant impact on Land Use, Zoning and Public Policy. In addition, public policy initiatives that affect the development sites and surrounding area include the *Harlem-East Harlem Urban Renewal Plan*, the *Community District 11 197-a Plan area*, *Comprehensive Manhattan*

Waterfront Plan, Housing New York 2.0, One New York and the NYC Waterfront Revitalization Program.

Additionally, the 2016 *East Harlem Neighborhood Plan* was published by East Harlem Neighborhood Plan Project Partners, including the Office of City Council Speaker Melissa Mark-Viverito, Manhattan Community Board 11, Community Voices Heard, and my office. The goals and recommendations of this report, which was produced after a robust community engagement process, emphasizes the need for affordable housing in the East Harlem neighborhood and should be considered along with other public policy initiatives.

The East Harlem Neighborhood Plan contains a number of recommendations that are relevant to this proposal. The plan recommends that affordable housing on public sites “should be built with 100% affordable units, and these units should be required to reach deep and varied levels of affordability up to 130% of AMI, and to establish a target of at least 20% of the units at or below 30% of AMI.”¹ This development is 100% affordable, and exceeds 20% of units below 30% of AMI with 16% of units at 0%-30% of AMI set aside for formerly homeless, and an additional 11% of units set aside for 0%-30% of AMI.

However, the plan also notes that “Numerous community gardens are threatened and under-resourced, and in some cases are not open or programmed for wider public use. Loss of these open spaces is a threat to the community.”² This should also be considered as this proposed action represents a loss of community garden space at two different sites.

Task 3: Open Space

The loss of community garden space at 505-507 East 117th Street and 1761 Park Avenue will have adverse impacts on the community’s open space resources. Currently, the Pleasant Village Community Garden occupies a portion of the development site at 505-507 East 117th Street, and Jackie Robinson Community Garden occupies a portion of the development site at 1761 Park Avenue. Garden users have been informed of the redevelopment plans, and they recognize that development is moving forward. It is my position that these projects should create new permanent open space resources. In addition, the development team needs to minimize the extent to which ongoing construction will affect the integrity of the adjacent community gardens.

To mitigate these impacts, I encourage the Applicant to consider alternative building designs that could increase open space at 1761 Park Avenue without reducing the number of units. Currently the plans for this site are a 125 feet tall building, but the underlying M1-2/R8 zoning and Special East Harlem Corridors District allow for a maximum height of 210 feet. With a smaller building footprint, it could be possible to preserve additional space for Jackie Robinson Community Garden.

¹ The East Harlem Neighborhood Plan

https://hesterstreet.org/wp-content/uploads/2017/07/EHNP_FINAL.pdf

² *ibid.*

Task 4: Shadows

For the City Environmental Quality Review (CEQR), structures that are under 50 feet are not subject to a shadow assessment unless the site is adjacent to a park, historic resource, or important natural feature. The height of proposed buildings planned for the development sites, including mechanical bulkheads, are 62'-8" at the 5-story 303 East 102nd Street, 61'-6" at the 5-story 338 East 117th Street, 70'-2" at the 7-story 505-507 East 118th Street, and 142' at the 13-story 1761 Park Avenue.

In addition to sunlight sensitive open space resources near development sites at 338 East 117th Street, 505-507 East 118th Street, and 1761 Park Avenue, HPD, in conjunction with the NYC Department of Parks and Recreation, has identified a potential significant impact on Jackie Robinson Community Garden.

Potential for shadow impacts should also be studied at Pleasant Village Community Garden. The impact of shadows on both of these community gardens has the potential to significantly alter the uses and programming of those resources. I encourage the Applicant to offer mitigation measures as part of the design of the building.

Conclusion

I support the Applicant's goal to build more affordable housing in the East Harlem neighborhood. For years, this neighborhood has faced great development pressure, and both Community Board 11 and other neighborhood groups have identified affordable housing as a key need of the district. However, the loss of significant community garden space must be mitigated in ways that reflect the needs of community stakeholders. I encourage the Applicant to take the loss of open space very seriously and consider mitigation.

I look forward to seeing a proposal that creates affordable housing and balances the taking of vacant land with a commitment to preserve open space and community gardens.

Subject: Comment on Las Raices HPD Development on 118th St Pleasant Village Community Garden

From: Ursula Monaghan <te.ursula.monaghan@gmail.com>

Date: 4/12/2021, 2:34 PM

To: "Juliana, Matthew (HPD)" <JulianaM@hpd.nyc.gov>

Dear Matthew Juliana,

My name is Ursula Monaghan, and I live on 120th St in East Harlem. I am writing with my comments on the proposed building on the lot on 118th St, which I believe is Site C in the Las Raices East Harlem developments.

As a NYC resident, I believe the city needs to provide affordable housing. I wish I didn't have to write in opposition to a cause as important as affordable housing. I believe it is our duty to look out for those that are struggling to keep a roof over their heads, and we should be working hard to provide safe, stable, consistent homes for everyone in the city.

I'm a member of Pleasant Village community garden. At the stage of the development process, we are all aware that regardless of what we submit in comments, signatures, or emails, the project moves on. It's saddening that the city doesn't support this space - an entirely volunteer run garden, open to the public, providing an example of a regenerative community. So, if the development moves on, I at least ask that the developer and property manager work with the garden. Can gardeners maintain the backyard and the green roof, in a partnership with the building? We have extremely dedicated and experienced gardeners, and the building could become part of a larger movement of sustainability, access to food, and community.

That being said, I wish the city would consider the impact of developing a lot that is home to a thriving community garden. I'm a member of pleasant village community garden, and it is a valuable resource to the neighborhood. We compost, raise chickens, and grow produce for the community in this lot. We gather as a community in this space. We host children's events, such as Halloween and Easter egg hunts. We learn about growing fresh fruit and vegetables, and tending to our land. Although we will still have some space, the new building will block out a lot of the sun in our garden.

There are so many abandoned buildings in East Harlem. I know that developing an existing building is more expensive, but the city could consider this route before developing over valuable community gardens. It's a false narrative that we can only have one or the other - affordable housing or a community garden. These are two vital resources that we need to have in our neighborhood. Today, after the exodus last year due to the pandemic, there are thousands of open apartments. Can the city use some creativity to make vacant apartments affordable housing?

Also, I urge community board members to come visit our space, and see that it is not just a vacant lot, as it was called in Las Raices' environmental assessment. We have beds for growing produce, a chicken coop, two brand-new compost structures, and beautiful flowering trees.

Further, the history of community gardens in New York City, is one that traces back to redlining, and communities coming together to build something beautiful, despite the resources that were being stolen from red-lined neighborhoods, such as East Harlem. Community gardens, like PVG, were formed during a time when landlords would burn their buildings down for insurance money, which was more profitable than owning the building. These community gardens then raised the value of property around them. Then, when it became profitable to develop in these neighborhoods again, the city moved to eliminate them in Giuliani's era, by selling them for development. I feel that the Las Raices development is another moment where public representatives stick to the inertia of doing what makes the most money, rather than the doing what's right, despite the costs to the people in the neighborhood.

In light of the limited time our planet has to address Climate Change, the city is making a big push to reduce our carbon emissions over the next decade. How will New Yorkers believe that the city cares about the environment, when it's encouraging the development of green space? We aren't the only community garden that is being developed in this project, and there have been many other gardens in the city that have already been developed. Every single block of green space in a city as large and developed as NYC is an island for reducing temperature, adding environmental resilience, and providing a space for community.

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The environmental benefits of the garden.

Pleasant Village Community Garden (PVCG) is built-in "green-infrastructure," that mitigates neighborhood flooding during storms and prevents excess runoff from flowing into the nearby East River. Sidewalks, asphalt, and buildings are called 'impervious surfaces.'

East Harlem is mostly covered by impervious surfaces. When it rains in East Harlem, most water becomes runoff because it isn't absorbed by impervious surfaces. The stormwater and any contaminants it picks up off the ground then ends up flowing into streams and rivers without treatment. Stormwater runoff is a health hazard because oil, metals, dog waste, and cleaning chemicals end up in the water that eventually gets processed for us to drink. People also fish in the East River water.

Stormwater runoff also contributes to large scale algae blooms in the ocean, which are toxic to aquatic life. When we build over green spaces we don't get them back, while their benefits can't be over-stated.

In NYC, when it rains more than 1/4 (maybe even 1/8) of an inch, our sewer systems are overtaxed and they have to release the unprocessed sewage into the Rivers flanking Manhattan. This is bad for human and environmental health. Many old cities in the world have this issue, and the number one way to mitigate it is to preserve and build new green infrastructure. (https://gcc02.safelinks.protection.outlook.com/?url=https://www2.ny.gov/c2f20202f2f202f2f202f2f21144943f2fnew-york-water-combined-sewer-flow-dep-plan&id=047f7c017f2fJulianaMw40pd_nyc.gov/f7cd417bec96a19ebf08d8fde15ab7f3c2f56f7f54e22a95b15da6613be7f7c07f7c673f7394939168237923f?linkname=7c7fWf6pGz5b3d8eJYUjoi2W4LwAMdAw1CJQJoi2V12W1U1CJ1B7I16IK1haWdL1CJWCJ6M9e3d07f300f300f&data=ZiApc2tMcXFaXjKKLaVnFwI9r28ar9SAUJr9e3d07f300f300f&reserved=0)

Whenever excess organics or sewage flow into our waterways, they get eaten up by microbes and bacteria in an aerobic process that pulls dissolved oxygen from the water. Dissolved oxygen is essential for aquatic life. But after rain storms, all the runoff around NYC can end increase the oxygen demand of microbes in the water. What results are called "dead zones," where aquatic life (like fish) can't breathe. I think that this is what happened last summer, when we saw hundreds of dead fish floating in the Hudson River in Manhattan and NJ (<https://gcc02.safelinks.erotection.outlook.com?url=https%3A%32Fabc7ny.com%2Fnets-animals%2Fhundreds-of-dead-fish-spotted-floating-in-hudson-river%2F62933442f8amp;context=7C0173C7JullanaMx40hp.nyu.govv7fcd17f862a1da8a18ef88df8de15ba7c32f56f75f8142da295b15da66513be7f7C0X7C07C7353849391682372K7UnknownX7C7Wf0pGzsh3d8eyJwIoiMc4wIaAMdAIJCJ0joiV2lUmIJC8Tl76T61k1haWdIJCXVt6Gm930X7C3000&context=Vut8uWtrNpPq5jgI02SVN52810urJjvnc1uicGwE3X30&reserved=0>)

As our summers get warmer due to climate change, we can expect to see dead zones happen more often. When it's warmer, the bacteria in our waterways becomes more active, and breaks down the organic material faster. This is why we see more dead zones in the summer.

So, the environmental case to preserve the green space on PVCG's HPD Land, is that it is one of many green spaces that the city should be fighting to preserve, to soak up rainwater and keep all the stuff on our sidewalks and roads out of our waterways. Every square yard of green infrastructure, when added together, can make a huge difference for the health and safety of NYC.

All of this is without stating the environmental benefits of the compost program that takes place on the HPD section of the garden, which I believe other gardeners will attest to. We are currently processing ~1188 lbs of compost a month.

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Thank you for your time. I do not want to fight affordable housing, and I never wanted to even write an email like this. I know that the motivation for most in the project is probably good, and I believe we need more affordable housing. But I urge the city to consider alternative locations that aren't on community gardens.

Best regards,
Ursula Monaghan
432 E 120th St.

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Subject: Las Raices public meeting - testimonial
From: Stuart B <stuart.william.mary@gmail.com>
Date: 4/7/2021, 3:50 PM
To: "Juliana, Matthew (HPD)" <JulianaM@hpd.nyc.gov>

Dear Matthew,

Re: Las Raices East Harlem (CEQR no 20HPD002M)

I attended the Las Raices Scoping Hearing – Public Scoping Meeting on March 31st, 2021 at the time I was unable to testify but I would like to testify now.

I am a member of PVCG (Pleasant Village Community Garden) and believe that full consideration has not been made when selecting the proposed site: 505-507 East 118th Street – (Block 1815 Lots 5&6) for development and I think this should be reconsidered.

The proposal would use land that is part of an active community garden which currently has several uses and is part of a plan for a greater neighborhood and community use.

Currently the land is used for a community food scraps and composting program, for a chicken coop, for growing food (a program supported by a Building Healthy Communities (BHG) Grant) and community events.

Community composting works as a drop off site to compost organic food waste from the neighborhood for re-use in the garden and for chicken feed. The use of the community composting has significantly increased after the suspension of the city-wide composting scheme during Covid-19. The compost facility – led by 3 NYC trained master composters - is currently a Hotbox system (this unique system was developed in New York City and was installed with help from composters from Bro/Sis Sol and members of the Lower East Side Ecology center). Approximately 400lbs of food waste is composted every week and currently there is more food scraps waste than the current system can handle. Options are being considered to deal with the increased demand from the neighborhood, including expanding the current composting facility. To be able to meet this need in the area may require more space for composting and perhaps even paid composters.

Chickens are kept on the land scheduled for development in this proposal. The chickens are fed appropriate scraps from the food waste drop off, the eggs from the chickens are sold at low prices to the local community giving low-cost organic food to people in the neighborhood. Any proceeds from the eggs are used for the upkeep of the chickens.

Food grown on the land proposed for development is currently supported by a BHG grant – this organic food is supplied to the local area. The plan in the coming years is to increase this and to receive grants to employ four local teenagers to help growing the food in the summer months giving income to the teenagers and helping to increase the food production for distribution in the neighborhood.

Being a board member of an affordable HDFC co-op I fully support the affordable housing initiatives in the area and in New York City, but I think this needs to be in the correct context. There are currently, and have been in the last couple of years, a lot of development in East Harlem around the 118th Street area and most of this affordable housing. I think this should be taken into consideration. In addition to this there is still vacant land and unused properties in the area – space and buildings that are unused. I believe these should be looked at for better development opportunities. Affordable housing in East Harlem is needed but it should be done in a sustainable way that maintains and builds on the character of the neighborhood not by taking away parts of the community.

Community events are regularly held on the land where the development is proposed. Easter egg hunts and Halloween events are especially popular with children in the local community. These events attract young kids from the nearby school (PS/MS 206) and the housing complex nearby. My son who is on the Autism Spectrum took part in these when he was young, now that he is older (12-year-old) he has helped set up some of the events. He has also helped in gardening duties and composting. Working like this within the local community is critical to his development and has been an important outlet during the last year and Covid-19.

The proposal for this site mentions that employment will be provided by shops in the buildings, but I find this unrealistic. This area has had many vacant retail spaces for years before Covid-19, since Covid-19 the situation has become even worse. I believe that it would be in the city's interest to try and use the existing retail space in this area before creating more retail space. The garden has a plan to work on a grant and employ youth from the area to grow healthy and organic food with the help of community grants like BHC (Building Healthy Communities). I feel this

employment is a better fit for the area and for NYC as it will help local youth and strengthen the community.

The land that is in scope for development is actively used for this East Harlem community. People come together to work and to celebrate in this space. Spaces like this need to be protected and nurtured as we come out of Covid-19 to help build better, stronger, healthier communities. There are plans to increase the land's use further to give more opportunities to local adults and youth. This land is important to the area and its people. I urge you to reconsider the proposal to develop on the proposed site: 505-507 East 118th Street.

Regards

Stuart Blackstock

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Subject: Natassia Rodriguez testimonial on the HPD portions of the Pleasant Village Garden (MN Block 1815, Lot 5 and 6)
From: Natassia Rodriguez <natassiarodriguez22@gmail.com>
Date: 4/8/2021, 11:26 PM
To: "Juliana, Matthew (HPD)" <JulianaM@hpd.nyc.gov>

Hello my name is Natassia Rodriguez and my family have been members of pleasant village community garden since I was 9 (over 7 years) and I used to go to school across the street from the garden. The garden is a major part of the community. Kids from schools in the area and schools all over the city have been able to benefit from the HPD land in the back. My question is there some way the developers can partner with with garden to create and help maintain a green space either behind the building or on the roof?

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Subject: Public Comment about HPD Land use
From: Hisako Yasuma <sacoyasuma@msn.com>
Date: 4/1/2021, 2:53 PM
To: "Juliana, Matthew (HPD)" <JulianaM@hpd.nyc.gov>

Dear Mr. Juliana,

I am a member of Pleasant Village Community Garden. Here's my comment:

The section of HPD Land in Pleasant Village Community Garden is a very vital and crucial part of the garden, using for the communal purpose; chicken coop, compost facility and BHC program.

Chicken Coop: Our healthy eggs are available for neighbors to purchase.

The compost facility: We receive about 300 to 400 lbs of food scraps each week and producing soil amendment that necessary for the urban gardens and trees. This effort also helps to raise the awareness of our community about the environmental health.

Under the BHC (Building Healthy Community) grant program, we grow and offer fresh and healthy vegetables to our community.

New Yorkers are seeking for greener, relaxing and sustainable life style. Reducing community garden space in the city is the opposite direction that the community want to choose. Instead, the city & developers should revitalize abundant buildings in the East Harlem neighborhood.

Thank you,
Saco Yasuma

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Subject: public testimonial**From:** Kim Yim <pvcg.president@gmail.com>**Date:** 4/12/2021, 4:12 PM**To:** "Juliana, Matthew (HPD)" <JulianaM@hpd.nyc.gov>

Dear Mr. Juliana,

I do hope this email finds you well. My name is Kim Yim and I am the current President of Pleasant Village Community Garden. I am writing today in hopes that we can open a more inclusive conversation about the use of the HPD land. By request from HPD, I am currently putting together a comprehensive look at how Pleasant Village Community Garden currently utilizes the HPD lots. I will forward you a copy of that report by Wednesday of this week.

PVCG is making a difference in the community. Our garden processed over 10,000 lbs of food scraps from local drop off. over 7,000 was just from June which shows the increased awareness and need for our drop off site. I am committed full time to this position and plan to continue making the community stronger and healthier to the best of my ability. It is in our power to do right by underserved communities. We would no longer have a drop off and no longer compost except in house scraps.

When people walk by our street they are more likely bringing their child to see the chickens. We have 10 chickens and the production of laying close to 4000 eggs per year is running on a self sustaining system while providing organic free range eggs at a fraction of the cost in a store. This year alone our soil level has increased by about 6 inches of organic compost spread out on HPD land. That soil is made up from all the local leaves that drop in the fall. The fact is those leaves would have been washed away in our sewer systems causing havoc I can only speculate. Its like sending organic waste to a landfill. It was irresponsible then its a crime now . A crime against nature. its a crime to humanity. We don't have time to debate who needs what more. suffering is suffering. If we are acting from a place of concern for underserved people. True concern we should not be figuring out which one but how can both be accomplished.

We are living in a time where politics and red tape have no space in the saving of humanity. And I get how that sounds but we are at a place in time where doesn't it feel appropriate to say? We have reached a point where investing a little funding in one area of service isn't enough to say we did all we could to be our best. Especially when it destroys years of investment and hard work to another initiative. This is what seems to be the plan for this HPD Land and I strongly urge everyone to reconsider the amount of good that can come from joining both initiatives together. The environmental impact is that this building will be in the disguise of green housing but these units will have poor insulation and tenants will be using a lot of energy running the proper system to regulate temperature. When it rains it will just add to the run off into our systems and increase chances of flooding . It will end our composting program and most likely phase out our chickens as well. And while the sun will cast down on the roof of that building all day it will only increase cooling costs in the summer for tenants. The building will also block crucial morning sun that crops need in order to thrive. We have a unique opportunity and I am well experienced in rooftop gardening . Say yes to affordable housing but only if our program of growing food and us having access to the space either for composting or on their roof growing produce . We should be joining these efforts into one instead of separating them as if one can survive without the other! Our leaders today in congress have set the stage for such solutions (the Green New deal). The plan for a single affordable housing project alone is a dated plan that does not reflect the needs of what local residents actually need.

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Subject: RE: Question
From: "Juliana, Matthew (HPD)" <JulianaM@hpd.nyc.gov>
Date: 4/2/2021, 12:17 PM
To: Jonathan Cruz <JCruz@mdgny.com>
CC: "Owring, Shahandeh (HPD)" <OwringS@hpd.nyc.gov>

Thanks Jonathan! Shay, please save to the file.

From: Jonathan Cruz <JCruz@mdgny.com>
Sent: Friday, April 2, 2021 12:10 PM
To: Juliana, Matthew (HPD) <JulianaM@hpd.nyc.gov>
Subject: FW: Question

Matt –

These emails came to me during the environmental scoping meeting for Las Raices -I think they are meant for you.
Email 1/2

Thanks



Jonathan Cruz
Development | Project Manager
JCruz@mdgny.com | MDGNY.com
Cell (347) 228-0871
170 Froehlich Farm Boulevard | Woodbury, NY 11797

From: matt <mabe@rocketmail.com>
Sent: Wednesday, March 31, 2021 6:03 PM
To: Jonathan Cruz <JCruz@mdgny.com>
Subject: Question

Why didnt HPD give unused and inaccessible land (like 174 East 108th st and 1612 Lexington Ave) to be developed rather than the land currently being utilized by Pleasant Village Comunity Garden?

Sorry. The last question had a typo.

Thanks
[Sent from Yahoo Mail on Android](#)