

DeKalb Commons
Draft Environmental Impact Statement (DEIS)

CEQR No. 18HPD078K

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

November 8, 2019

DeKalb Commons

Draft Environmental Impact Statement (DEIS)

Project Location: Community District 3
Borough of Brooklyn

CEQR No: 18HPD078K

Type of Action: Unlisted

ULURP No: 200155 HAK

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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/developers/environmental-review.page>

DeKalb Commons

Table of Contents

EXECUTIVE SUMMARY	ES-1
--------------------------------	-------------

CHAPTER 1: PROJECT DESCRIPTION

A. Introduction	1-1
B. Existing Conditions	1-1
Project Site	1-1
Surrounding Area	1-2
C. The Proposed Actions	1-4
D. Purpose and Need for the Proposed Actions	1-5
E. Analysis Framework	1-5
F. Public Review Process	1-6
Uniform Land Use Review Procedure (ULURP)	1-6
Environmental Review (CEQR)	1-6

CHAPTER 2: SHADOWS

A. Introduction	2-1
B. Principal Conclusions.....	2-1
C. Methodology.....	2-1
D. Preliminary Screening	2-4
Tier 1 Screening Assessment.....	2-4
Tier 2 Screening Assessment.....	2-4
Tier 3 Screening Assessment.....	2-4
E. Detailed Analysis of Shadow Impacts.....	2-5
Resources Potentially Affected by Project-Generated Shadows	2-5
Detailed Shadows Analysis.....	2-6
Assessment	2-9

CHAPTER 3: MITIGATION

A. Introduction	3-1
B. Principal Conclusions.....	3-1
Shadows	3-1
C. Shadows	3-1

CHAPTER 4: ALTERNATIVES

A. Introduction	4-1
B. Principal Conclusions.....	4-1
No-Action Alternative	4-1
No Significant Adverse Impacts Alternative	4-1
C. No-Action Alternative	4-2
Shadows	4-2
D. No Significant Adverse Impacts Alternative	4-2
Shadows	4-3

CHAPTER 5: UNAVOIDABLE ADVERSE IMPACTS

A. Introduction	5-1
B. Shadows	5-1

CHAPTER 6: GROWTH INDUCING ASPECTS 6-1

CHAPTER 7: IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES 7-1

Appendices

APPENDIX A: 2019 DeKalb Commons EAS

List of Tables

ES-1: Project Site – Existing Conditions ES-2

ES-2: Proposed Project ES-4

ES-3: Comparison of No-Action and With-Action Development Scenarios ES-7

1-1: Project Site – Existing Conditions 1-2

1-2: Proposed Project 1-4

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

2-2: Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 3 Screening 2-5

2-3: Duration of Shadows on Sunlight Sensitive Resources (Increment Compared to No-Action) 2-6

List of Figures

(AFTER PAGE)

ES-1: Project Location ES-1

ES-2: Land Use Map ES-2

ES-3: Proposed Development at Development Sites 1 & 2 ES-4

ES-4: Proposed Development at 1187 Fulton Street ES-4

1-1: Project Location 1-1

1-2: Existing Site Conditions 1-2

1-2a: Project Location Map 1-2

1-3: Land Use Map 1-2

1-4: Existing Zoning 1-3

1-5: Proposed Development at Sites 1 & 2 1-5

1-6: Proposed Development at 1187 Fulton Street 1-7

2-1a: Tier I and II Shadow Assessment 2-4

2-1b: Tier I and II Shadow Assessment 2-4

2-2a: Tier 3 Screening 2-5

2-2b: Tier 3 Screening 2-5

2-3a: Kosciuszko Pool Incremental Shadows on March 21/September 21 2-9

2-3b: Kosciuszko Pool Incremental Shadows on March 21/September 21 2-9

2-4a: Kosciuszko Pool Incremental Shadows on May 6/August 6 2-9

2-4b: Kosciuszko Pool Incremental Shadows on May 6/August 6 2-9

2-5a: Kosciuszko Pool Incremental Shadows on June 21 2-9

2-5b: Kosciuszko Pool Incremental Shadows on June 21 2-9

2-6a: Kosciuszko Pool Incremental Shadows on December 21 2-9

2-6b: Kosciuszko Pool Incremental Shadows on December 21 2-9

2-7: Kosciuszko Pool - Aerial View 2-9

A. INTRODUCTION

The proposal involves an application by the City of New York – Department of Housing Preservation and Development (“HPD” or the “Applicant”) on behalf of DeKalb Commons NY Housing Development Fund Corporation (HDFC) (the “Project Sponsor”), for approval of several discretionary actions subject to City Planning Commission (CPC) approval (collectively, the “Proposed Actions”) to facilitate the development of new affordable housing in the Bedford-Stuyvesant neighborhood of Brooklyn, Community District (CD) 3. The Proposed Actions include designation of an Urban Development Action Area (“UDAA”), project approval of an Urban Development Action Area Project (“UDAAP”), and disposition of City-owned property. The Applicant is proposing to develop eight vacant lots with a total of three buildings containing a total of approximately 84 affordable dwelling units (DUs), plus one dwelling unit for a residential superintendent (for a total of approximately 85 DUs), and approximately 2,512 gsf of commercial space (the “Proposed Project”). The vacant sites include a total of eight tax lots and are grouped into three Development Sites in the Bedford-Stuyvesant neighborhood. All eight lots are owned by HPD and would be conveyed to the Project Sponsor as a result of the Proposed Actions. Construction of the Proposed Project is expected to be completed in 2023.

This chapter provides a detailed description of the Proposed Actions, including project background, project purpose and need, site description, project description, and the governmental approvals required. The supplemental analyses following this chapter examine the potential for the Proposed Actions to result in significant adverse environmental impacts in any technical area of the 2014 *City Environmental Quality Review (CEQR) Technical Manual*.

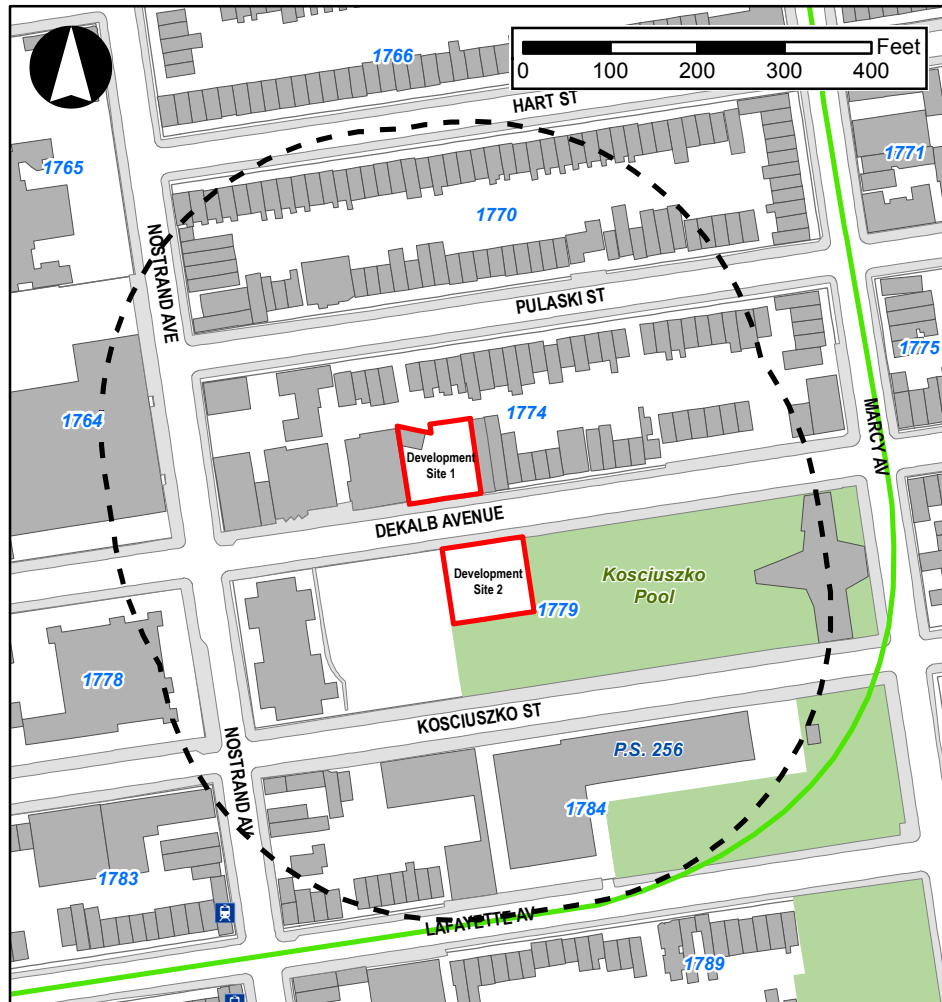
B. EXISTING CONDITIONS

Project Site

The Project Area is comprised of eight tax lots, which are grouped into three Development Sites in Bedford-Stuyvesant (see **Figure ES-1** & **Table ES-1**). Development Site 1 consists of four tax lots (Block 1774, Lots 74, 75, 76, and 77), totaling approximately 9,827 square feet (sf). All four lots are currently vacant. Development Site 1 has approximately 100 feet of frontage along the north side of DeKalb Avenue between Nostrand and Marcy Avenues. Development Site 1 is zoned R6A.

Development Site 2 consists of three tax lots (Block 1779, Lot 22, 24, and 26), totaling approximately 10,983 sf. All three lots are currently vacant. Development Site 2 has approximately 109 feet of frontage along the south side of DeKalb Avenue. Development Site 2 is also zoned R6A.

633-639 & 648-654 DeKalb Avenue:



1187 Fulton Street:

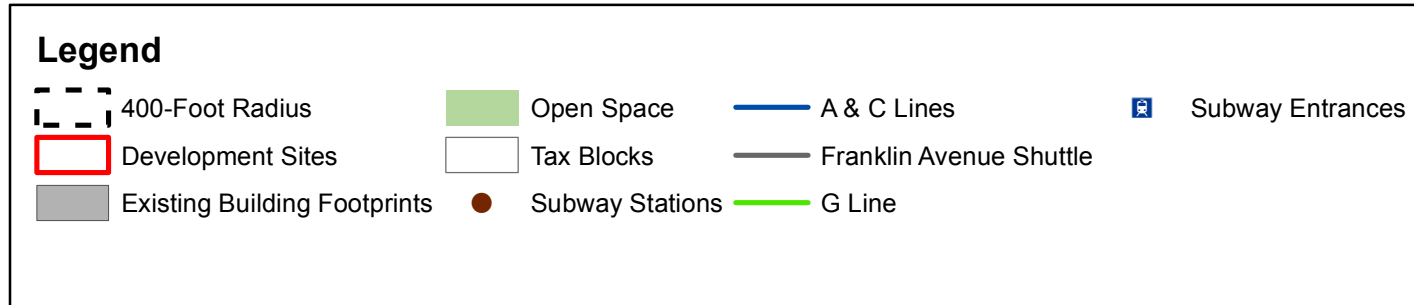
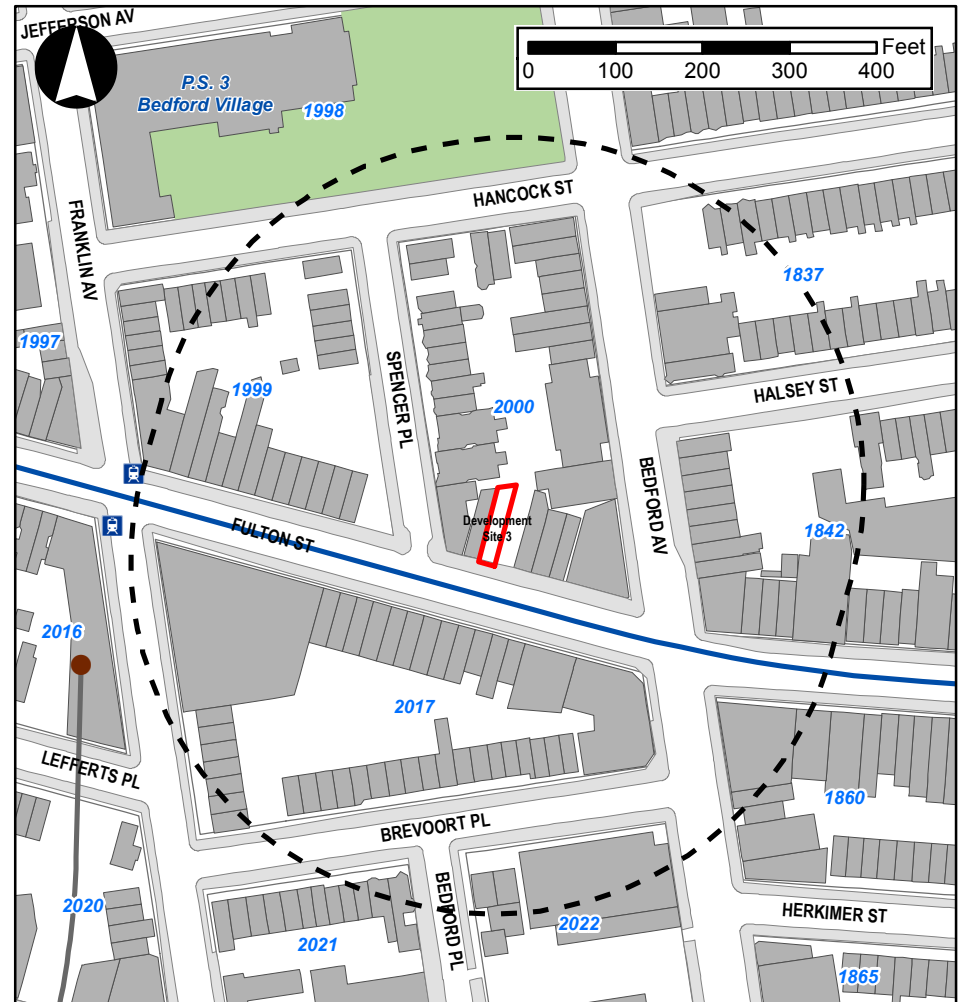


Table ES-1: Project Site - Existing Conditions

Development Site 1					
Block	Lot	Address	Zoning District	Land Use	Lot Area (SF)
1774	74, 75, 76, 77	633-639 DeKalb Avenue	R6A	Vacant	9,827
Development Site 2					
1779	22, 24, 26	648-654 DeKalb Avenue	R6A	Vacant	10,983
Development Site 3					
2000	43	1187 Fulton Street	R7D/C2-4	Vacant	1,786
Total					22,596

Development Site 3 consists of one tax lot (Block 2000, Lot 43), totalling approximately 1,786 sf. Development Site 3, which is vacant, has approximately 20 feet of frontage along the north side of Fulton Street between Spencer Place and Bedford Avenue (see **Figure ES-1**). Development Site 3 is zoned R7D/C2-4.

Surrounding Area

As the Project Area consists of three separate Development Sites, existing land uses within 400 feet of each Development Site are discussed below and shown in **Figure ES-2**.

Development Sites 1 & 2

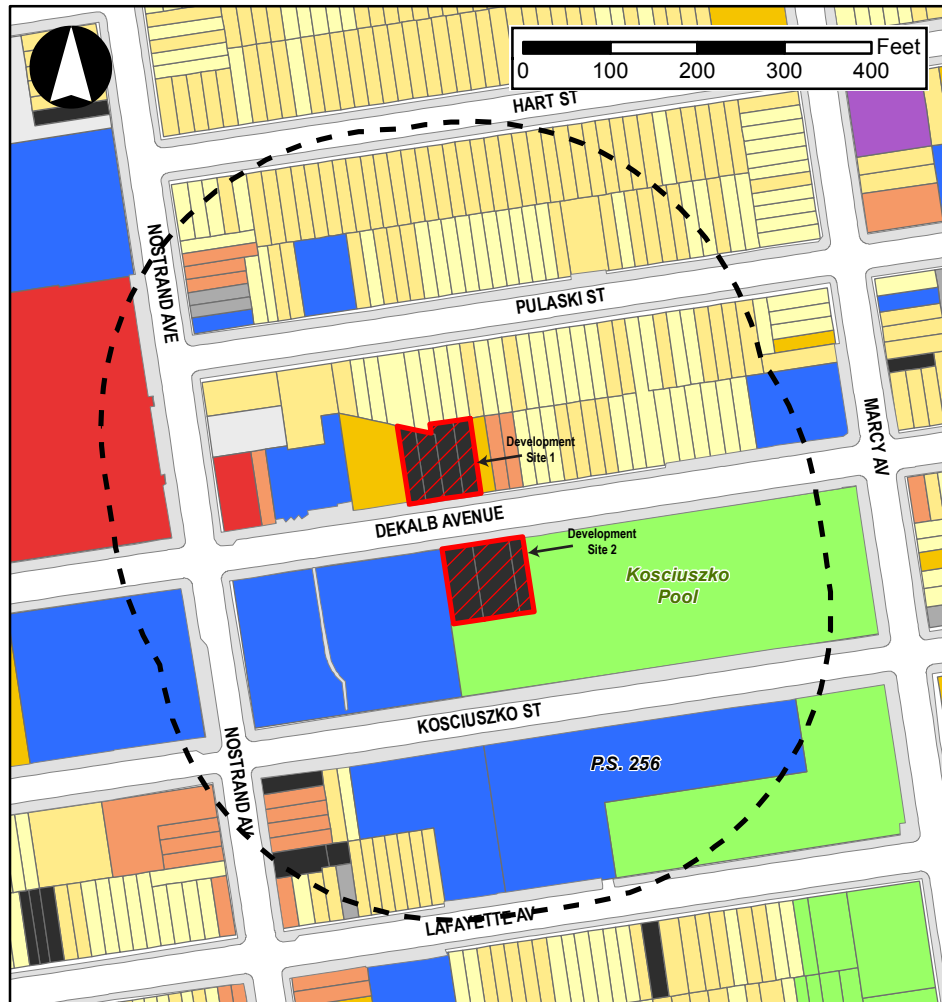
Predominant land uses within a 400-foot radius of Development Sites 1 and 2 primarily include residential uses, institutional, open space, and some commercial uses as well. The majority of residential buildings are multi-family walk-up buildings. The Kosciusko Pool is located directly to the east of Development Site 2. A medical office and its associated parking lot is located directly to the east of Development Site 2. Banneker Playground is located approximately 400 feet south of these Development Sites. P.S. 256, located adjacent to Banneker Playground, is located 250 feet south of Development Sites 1 and 2. The Salvation Army Bedford Day Care Center is also located to the south of Development Sites 1 and 2, directly adjacent to P.S. 256. The Marcy branch of the Brooklyn Public Library is located on the same block as Development Site 1. Home Depot and CABS Nursing home are located to the west of Development Sites 1 and 2, across Nostrand Avenue. The Bedford-Nostrand station for the New York City Transit (NYCT) G subway line is located just outside the 400-foot radius of Development Sites 1 and 2 at the intersection of Nostrand and Lafayette Avenues.

There are several NYCT bus routes serving Development Sites 1 and 2 including the B38, B44, and B44-Select Bus Service (SBS).

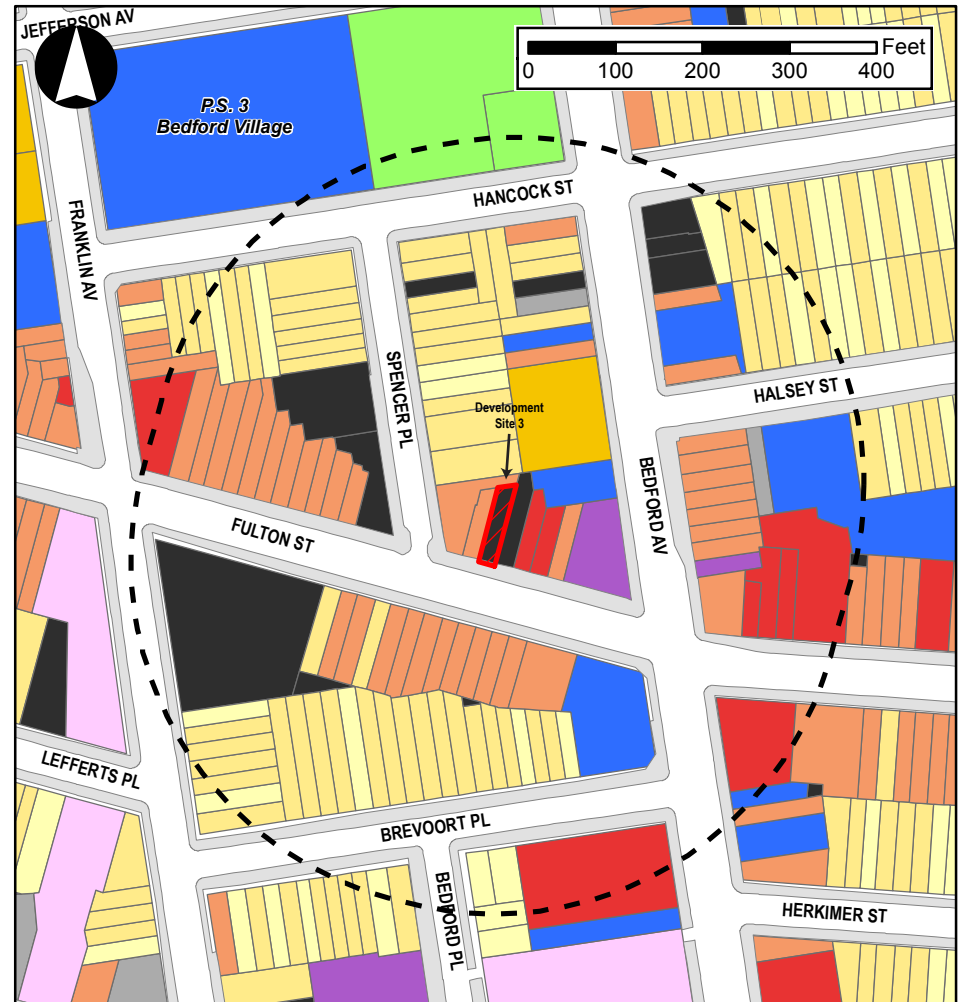
Development Site 3

Predominant land uses within a 400-foot radius of Development Site 3 primarily include residential uses, mixed commercial and residential uses, and some institutional and commercial uses as well as several vacant lots. The majority of residential buildings within the 400-foot radius are multi-family walk-up buildings some with ground floor retail, specifically along Fulton Street and Bedford Avenue. Institutional uses include several houses of worship as well as P.S. 3 located to the north of Development Site 3. The John Hancock Playground is located to the north of Development Site 3, adjacent to P.S. 3. The Co-Op School is located to the south of Development Site 3 at 40 Brevoort Place. The Franklin Avenue station for the NYCT C and S lines is located within the 400-foot radius of Development Site 3, at the intersection of Franklin Avenue and Fulton Street.

633-639 & 648-654 DeKalb Avenue:



1187 Fulton Street:



Legend

- 400-Foot Radius
- Development Sites
- Land Use**
- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data

C. DESCRIPTION OF THE PROPOSED ACTIONS

The Proposed Actions include the disposition of City-owned property, designation of an UDAA, and project approval of an UDAAP. These actions are detailed below.

Disposition of City-Owned Land & Urban Development Action Area Project

As discussed above, the proposal involves an application by HPD on behalf of the Project Sponsor, for approval of several discretionary actions subject to CPC approval to facilitate the development of new affordable housing in the Bedford-Stuyvesant neighborhood of Brooklyn, Community District (CD) 3. The Proposed Actions include designation of an UDAA, project approval of an UDAAP, and disposition of City-owned property. Designation of an UDAAP must be authorized by City Council.

D. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

The requested disposition of City-owned property and UDAAP designation are intended to provide the flexibility needed to develop much needed affordable housing and local retail compared to what would be allowed under existing conditions. The Proposed Actions would therefore support the City's goals of promoting affordable housing development by maximizing the use of vacant City-owned land and encouraging the continued economic development of this area of Brooklyn.

The Proposed Actions would help address specific needs of the local community including the provision of affordable housing units and retail and would enliven the underutilized Development Sites. The Proposed Project would provide 84 affordable DUs. Furthermore, the proposed mixed-use building on Development Site 3 would activate long-vacant City-owned site located along a major thoroughfare in close proximity to public transportation.

E. DESCRIPTION OF PROPOSED DEVELOPMENT

The Proposed Actions would facilitate the development of three buildings containing approximately 84 dwelling units, plus one unit for the residential superintendent (for a total of approximately 85 DUs) and 2,512 gsf of commercial space. The proposed development for each site is described in detail below and summarized in **Table ES-2**.

Table ES-2: Proposed Project

Development Site 1							
Block	Lot	Address	Proposed Height (including mechanical bulkhead/Solar Panels)	Residential GSF	Total DUs	Retail GSF	Total Proposed GSF
1774	74, 75, 76, 77	633-639 DeKalb Avenue	80'-9"	39,604	37	-	39,604
Development Site 2							
Block	Lot	Address	Proposed Height	Residential GSF	Total DUs	Retail GSF	Total Proposed GSF
1779	22, 24, 26	648-654 DeKalb Avenue	80'-9"	44,769	45	-	44,769
Development Site 3							
Block	Lot	Address	Proposed Height	Residential GSF	Total DUs	Retail GSF	Total Proposed GSF
2000	43	1187 Fulton Street	55'	4,576	3	2,512	7,088
Total				88,949	85	2,512	91,461

Development Site 1

Development Site 1 will include a seven-story (69'-6" to roof; 80'-9" to mechanical bulkhead/solar panels) residential building located at 633-639 DeKalb Avenue (see **Figure ES-3**). The building at Development Site 1 would be approximately 39,604 gsf and include approximately 37 DUs. The rear yard of Development Site 1 will be approximately 3,650 sf and will include an outdoor seating area, children's play area, and planted areas.

Development Site 2

Development Site 2 will include a seven-story (69'-6" to roof; 80'-9" to mechanical bulkhead/solar panels) residential building located at 648-654 DeKalb Avenue would be approximately 44,769 gsf and include approximately 44 DUs, plus one DU for a superintendent (see **Figure ES-3**). The rear yard of Development Site 2 would be approximately 3,260 sf and will include an outdoor seating area, children's play area, and planted areas. This building would also include an approximately 903 sf community room on the ground floor.

The buildings on Development Sites 1 and 2 would include solar panels on the roof.

Development Site 3

Development Site 3 will include one four-story (45' to roof; 55' to mechanical bulkhead) residential and commercial building located 1187 Fulton Street (see **Figure ES-4**). The building proposed at 1187 Fulton Street would be approximately 7,088 gsf and would include approximately 3 DUs and 2,512 gsf of commercial space on the ground floor.

The Proposed Project would be completed and occupied in 2023.



For Illustrative Purposes Only

DeKalb Commons

Figure ES-3

Proposed Development at Development Sites 1 & 2



For Illustrative Purposes Only

Project-Related Environmental Measures

Measures to ensure that no significant adverse impacts related to hazardous materials and noise would occur as a result of the Proposed Actions would be incorporated into the Proposed Project. These measures would be incorporated into the design, construction, and/or operation of the Proposed Project and since the Project Area is currently City-owned, HPD would require the Project Sponsor implement these measures to the satisfaction of the City through the Land Disposition Agreement (LDA) between HPD and the Project Sponsor.

As detailed in Attachment B of the EAS (see **Appendix A**), due to the potential presence of hazardous materials in the Project Area, the LDA between HPD and the Project Sponsor would require that Phase II testing be performed for all parcels of the Project Area, including DEP review and approval of a workplan/Health and Safety Plan (HASP) prior to such testing. In addition, if remediation is warranted for one or more parcels/phases, a Remedial Action Plan (RAP) and associated Construction Health and Safety Plan (CHASP) would be prepared subject to review and approval by HPD and DEP. Finally, at the conclusion of construction and prior to occupancy of the new buildings, a Professional Engineer (P.E.)-certified Closure Report must be reviewed and approved by HPD and DEP to ensure the required remedial measures were implemented and the new buildings are suitable for occupancy. The Project Sponsor may elect to explore performing all required testing and remediation plan development through the Mayor's Office of Environmental Remediation's (OER) Voluntary Cleanup Program. Should this be the selected course of action, the LDA between HPD and the Project Sponsor, as well as the RD to be tied to the LSGD, would require that all construction and remediation activities be conducted in accordance with OER approvals, including submission of a Closure Report at the completion of such activities.

The *CEQR Technical Manual* has set noise attenuation standards for buildings that are based on exterior noise levels. These values are designed to maintain interior noise levels of 45 dBA or lower for residential or community facility uses, and 50 dBA or lower for commercial uses. The U.S. Department of Housing and Urban Development (HUD) also sets exterior noise standards for housing construction based on exterior noise standards. As discussed in Attachment C of the EAS (see **Appendix A**), to ensure that acceptable interior noise levels are provided at the proposed buildings on Development Site 2 and 3, the proposed designs of these buildings will be required to provide window-wall attenuation of ranging from 25 to 35 dBA in order to meet CEQR and HUD requirements, which are detailed in Attachment C of the EAS. These measures would be required through the LDA between HPD and the Project Sponsor which would ensure no significant adverse noise impacts as a result of the Proposed Actions.

F. EIS ANALYSIS FRAMEWORK

The Proposed Actions would change the regulatory controls governing land use and development within the Project Area. The *CEQR Technical Manual* will serve as the general guide on the methodologies and impact criteria for evaluating the Proposed Actions' potential effects on the various environmental areas of analysis. The EIS assesses the reasonable worst-case impacts that may occur as a result of the Proposed Actions. In disclosing impacts, the EIS considers the Proposed Actions' potential adverse impacts on the environmental setting.

Analysis Year

In order to assess the potential effects of the Proposed Project, the “Future without the Proposed Actions (No-Action Condition)” and “Future with the Proposed Actions (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 Actions. The future No-Action condition identifies similar development projections for 2023 absent the Proposed Actions. The incremental difference between the With-Action and No-Action conditions serve as the basis for impact analyses.

Reasonable Worst-Case Development Scenario (RWCDs)

In order to assess the possible effects of the Proposed Actions, a reasonable worst-case development scenario (RWCDs) for the Development Sites was established for both Future No-Action and Future With-Action conditions. The incremental difference between the Future No-Action and Future With-Action conditions will serve as the basis of the impact category analyses in the EIS. For conservative analysis purposes, the Proposed Project is assumed to be the RWCDs for the Development Sites and is therefore evaluated in this analysis.

Future without the Proposed Actions (No-Action Condition)

In the 2023 future without the Proposed Actions, it is expected that there would be no new development on the Development Sites and all eight lots would remain vacant.

Future with the Proposed Actions (With-Action Condition)

As discussed above under “The Proposed Actions”, the Proposed Actions would facilitate the development of three buildings that would include a total of approximately 84 affordable DUs, plus one DU for a superintendent, and approximately 2,512 gsf of commercial space. The Proposed Project is expected to take approximately 18-21 months to construct and would be completed and fully occupied in 2023. The net increment of approximately 85 dwelling units and approximately 2,512 gsf of commercial space will represent the basis for environmental analyses.

Possible Effects of the Proposed Actions

Table ES-3 below provides a comparison of the No-Action and With-Action scenarios identified for analysis purposes of the Proposed Actions.

TABLE ES-3
Comparison of No-Action and With-Action Development Scenarios

Use	No-Action Scenario	With-Action Scenario	Increment
Residential – Affordable Housing	--	85 DUs (88,949 gsf)	85 DUs (88,949 gsf)
Local Retail	--	2,512 gsf	2,512 gsf
Vacant Land	22,596 sf	0	-22,596 sf
Population/Employment ¹	No-Action Scenario	With-Action Scenario	Increment
Residents	--	204 residents	204 residents
Workers	--	7 workers	7 workers

Notes:

¹ Assumes 2.41 persons per affordable DU (based on 2011-2015 U.S. Census data for Brooklyn Community District 3), 3 workers per 1,000 sf commercial space.

As shown, the incremental (net) change that would result from the Proposed Actions is the addition of 85 affordable DUs (88,949 gsf) and 2,512 gsf of local retail.

G. PUBLIC REVIEW PROCESS

The Proposed Project described above is subject to public review under the Uniform Land Use Review Procedure (ULURP), Section 200 of the City Charter, as well as City Environmental Quality Review (CEQR) procedures. The ULURP and CEQR review processes are described below.

Uniform Land Use Review Procedure (ULURP)

The City's ULURP, mandated by Sections 197-c and 197-d of the City Charter, is a process especially designed to allow public review of proposed actions at four levels: the affected Community Board, the Borough President and (if applicable) the Borough Board, the CPC, and the City Council. The procedure sets time limits for review at each stage to ensure a maximum total review period of approximately seven months.

The ULURP process begins with a certification by the CPC that the ULURP application is complete, which includes satisfying CEQR requirements (see the discussion below). The application is then forwarded to the affected community board (in this case, Brooklyn Community District 3), which has 60 days in which to review and discuss the application, hold public hearings, and adopt recommendations regarding the application. Once this step is complete, the Borough President reviews the application for up to 30 days and makes recommendations on the application. The CPC then has 60 days to review the application, during which time a ULURP public hearing is held. Comments made at the Draft EIS public hearing, which may be held concurrently with the ULURP public hearing, and during the subsequent comment period (that remains open for ten days after the hearing to receive written comments) are incorporated into a Final EIS. The Final EIS must be completed at least ten days before CPC makes its decision on the application. 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 Committee. The Council may approve, approve with modifications, or deny the application. If the Council proposes a modification to the Proposed Actions, 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.

Environmental Review (CEQR)

Pursuant to the State Environmental Quality Review Act (Article 8 of the Environmental Conservation Law; SEQRA) 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.

Establishing a Lead Agency: Under CEQR, a “lead agency” is the public entity responsible for conducting environmental review. Usually, the lead agency is also the entity principally responsible for carrying out, funding, or approving the proposed action(s). In accordance with CEQR rules (62 RCNY §5-03), the Department of Housing Preservation & Development (HPD) assumed lead agency status for the Proposed Project.

Determination of Significance: The lead agency’s first charge is to determine whether the proposed action(s) may have a significant adverse impact on the environment. To do so, HPD, in this case, evaluated an Environmental Assessment Statement (EAS) dated May 23, 2019 for the Proposed Project. Based on the information contained in the EAS, HPD determined that the Proposed Actions may have a significant adverse impact on the environment and issued a Positive Declaration on June 4, 2019.

Scoping: HPD issued a Draft Scope of Work for the EIS on May 23, 2019, 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 others to comment on the intended effort. CEQR requires a public scoping meeting as part of the process. A public scoping meeting was held on July 16, 2019. The public review period for agencies and the public to review and comment on the Draft Scope of Work was open through July 26, 2019. No comments were received on the Draft Scope of Work for the project’s EIS. A Final Scope of Work document for the Proposed Project was issued on November 8, 2019.

Draft Environmental Impact Statement (DEIS): This 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. When a DEIS is required, it must be accepted by the lead agency as complete before the ULURP application may also be found complete. The DEIS was deemed complete and the Notice of Completion was issued on November 8, 2019.

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. As noted above, 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 Final EIS.

Final Environmental Impact Statement (FEIS): After the close of the public comment period for the Draft EIS, 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 action, 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 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 in the ULURP process, CPC must wait at least 10 days after the FEIS is complete to take action on a given application.

H. THE FUTURE WITH THE PROPOSED PROJECT

Shadows

The shadows analysis assesses the potential for the Proposed Actions to result in incremental shadows long enough to reach any nearby publicly accessible open spaces or other sunlight-sensitive resources. According to the *City Environmental Quality Review (CEQR) Technical Manual*, a shadows assessment is required 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 discussed in Chapter 1, “Project Description,” the Proposed Actions would facilitate the development of new buildings greater than 50 feet in height adjacent to an open space resource (Kosciuszko Pool). As such, a detailed shadows analysis was prepared to determine the potential for the Proposed Actions to result in significant adverse impacts on sunlight-sensitive resources.

One sunlight-sensitive resource would experience significant adverse shadows impacts: the Kosciuszko Pool. This open space resource features an outdoor pool which measures two hundred thirty feet by one hundred feet, a spray pool, a baby pool, bleachers, and a bathhouse. The open space also features pipe sculptures for climbing, which are incorporated into the design of the bathhouse, and a large mushroom sculpture.

Project-generated shadows would fall on the Kosciuszko Pool on the December 21, March 21/September 21, May 6/August 6, and June 21 analysis days. The long afternoon duration and of incremental shadow on the pool would significantly affect the user experience on the June 21 and May 6/August 6 analysis days.

Incremental shadow durations on the outdoor pool would range from one hour and 54 minutes on the May 6/August 6 representative analysis day and three hours and 10 minutes on the June 21 representative analysis day. The maximum area of incremental shadow coverage that would cover the outdoor pool would be approximately 11,865 sf, or approximately 51.6 percent of added coverage (on June 21). Given the long duration of the incremental shadow during the summer months, the incremental shadow from the Proposed Project would significantly affect the user experience of the pool on these analysis days. Therefore, the Proposed Project would result in a significant adverse shadows impact at one sunlight sensitive open space resource.

I. MITIGATION

Incremental shadows cast by the Proposed Project would be substantial enough in extent and/or duration to significantly affect the Kosciusko Pool on all four of the representative analysis days. Incremental shadow durations would range from two hours and 22 minutes on December 21 to five hours and 40 minutes on June 21.

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; and undertaking additional maintenance to reduce the likelihood of species loss. Potential mitigation measures for the shadows 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.

J. ALTERNATIVES

No-Action Alternative

The No-Action Alternative examines future conditions within the Development Sites, but assumes the absence of the Proposed Actions (i.e., none of the discretionary approvals proposed as part of the Proposed Actions would be adopted). Under the No-Action Alternative by 2023, existing zoning and land uses within the Development Sites would remain unchanged. It is anticipated that the Development Sites would remain vacant. 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 Actions.”

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

No Significant Adverse Impacts Alternative

The No Significant Adverse Impacts Alternative examines a scenario in which the density and other components of the Proposed Actions are changed specifically to avoid the significant adverse impacts associated with the Proposed Actions. The Proposed Actions would result in significant adverse impacts related to shadows that may not be able to be mitigated.

As detailed below, in order to result in no significant adverse impacts, the height of the proposed building on Development Site 2 would have to be reduced to 23’ 6”. Therefore, the development of a residential building would not be feasible under this proposed alternative. As such, the benefits expected to result from the Proposed Actions – 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 Actions.

K. UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

As discussed in Chapter 2, “Shadows,” the Proposed Actions would result in a significant adverse shadow impact on Kosciuszko Pool. Incremental shadows on the Kosciuszko Pool would occur on all four representative analysis days, with durations ranging from 2 hours and 22 minutes to 5 hours and 40 minutes, which may have the potential to affect the enjoyment of this publicly accessible open space resource.

The *CEQR Technical Manual* identifies potential mitigation strategies for incremental shadow impacts on open space resources which may include, but are not limited, 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 or eliminate the project’s shadow impacts will be explored 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.

L. GROWTH-INDUCING ASPECTS OF THE PROPOSED ACTION

The term “growth-inducing aspects” generally refers to “secondary” impacts of a proposed action that trigger further development outside the directly affected area. The *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).

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 approximately 85 dwelling units and approximately 2,512 gsf of commercial 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 rezoning area. The Proposed Actions 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 Actions would result in more intensive land uses on the Development Sites. However, it is not anticipated that the Proposed Actions 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, industrial and community facility uses, the Proposed Actions would not create the critical mass of uses or populations that would

induce additional development outside the Development Sites. Moreover, the Proposed Actions do not include the introduction of new infrastructure or an expansion of infrastructure capacity that would result in indirect development. Therefore, the Proposed Actions would not induce significant new growth in the surrounding area.

M. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT 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 Actions. 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 development under the Proposed Actions 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 Actions 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 Actions 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 Actions (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 Actions 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 Actions. The Proposed Actions 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 of residential core.

DeKalb Commons

Chapter 1: Project Description

A. INTRODUCTION

The proposal involves an application by the City of New York – Department of Housing Preservation and Development (“HPD” or the “Applicant”) on behalf of, DeKalb Commons NY Housing Development Fund Corporation (HDFC) (the “Project Sponsor”), for approval of several discretionary actions subject to City Planning Commission (CPC) approval (collectively, the “Proposed Actions”) to facilitate the development of new affordable housing in the Bedford-Stuyvesant neighborhood of Brooklyn, Community District (CD) 3. The Proposed Actions include designation of an Urban Development Action Area (“UDAA”), project approval of an Urban Development Action Area Project (“UDAAP”), and disposition of City-owned property. The Applicant is proposing to develop eight vacant lots with a total of three buildings containing a total of approximately 84 affordable dwelling units (DUs), plus one dwelling unit for a residential superintendent (for a total of approximately 85 DUs), and approximately 2,512 gsf of commercial space (the “Proposed Project”). The vacant sites include a total of eight tax lots and are grouped into three Development Sites in the Bedford-Stuyvesant neighborhood. All eight lots are owned by HPD and would be conveyed to the Project Sponsor as a result of the Proposed Actions. Construction of the Proposed Project is expected to be completed in 2023.

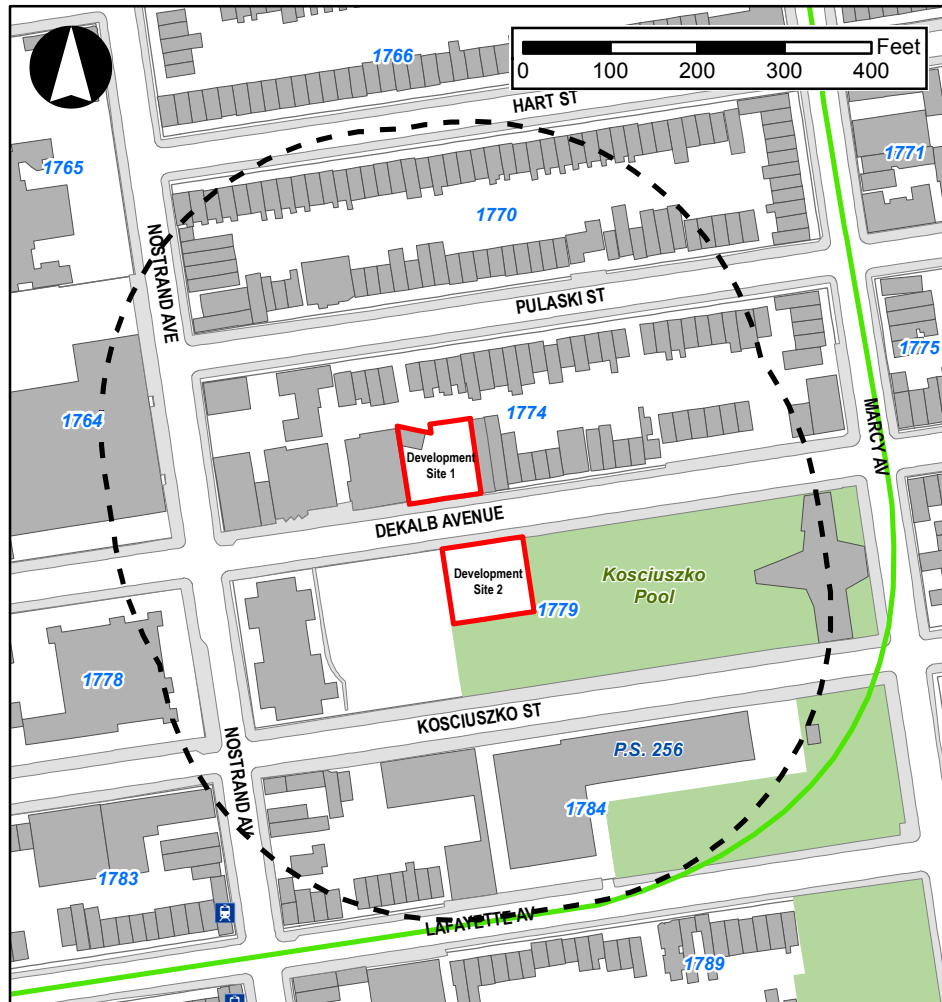
B. EXISTING CONDITIONS

Project Site

The Project Area is comprised of eight tax lots, which are grouped into three Development Sites in Bedford-Stuyvesant (see **Figure 1-1** & **Table 1-1**). Development Site 1 consists of four tax lots (Block 1774, Lots 74, 75, 76, and 77), totaling approximately 9,827 square feet (sf). All four lots are currently vacant. Development Site 1 has approximately 100 feet of frontage along the north side of DeKalb Avenue between Nostrand and Marcy Avenues. Development Site 1 is zoned R6A.

Development Site 2 consists of three tax lots (Block 1779, Lot 22, 24, and 26), totaling approximately 10,983 sf. All three lots are currently vacant. Development Site 2 has approximately 109 feet of frontage along the south side of DeKalb Avenue. Development Site 2 is also zoned R6A.

633-639 & 648-654 DeKalb Avenue:



1187 Fulton Street:

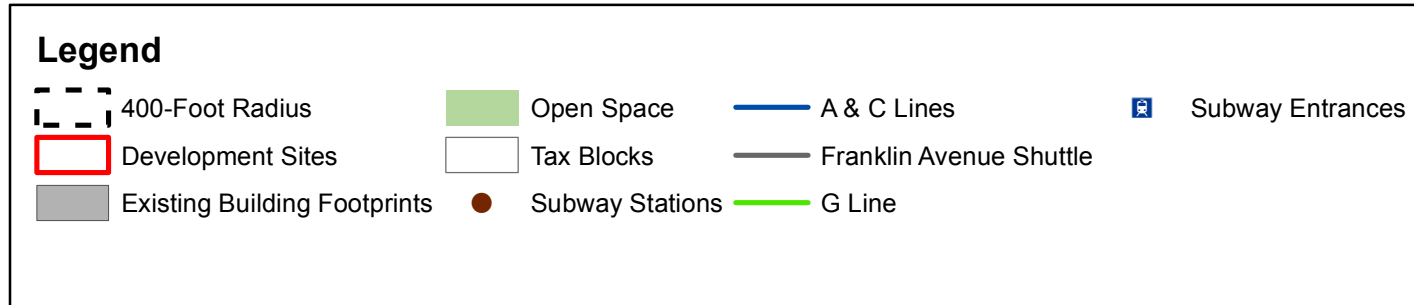
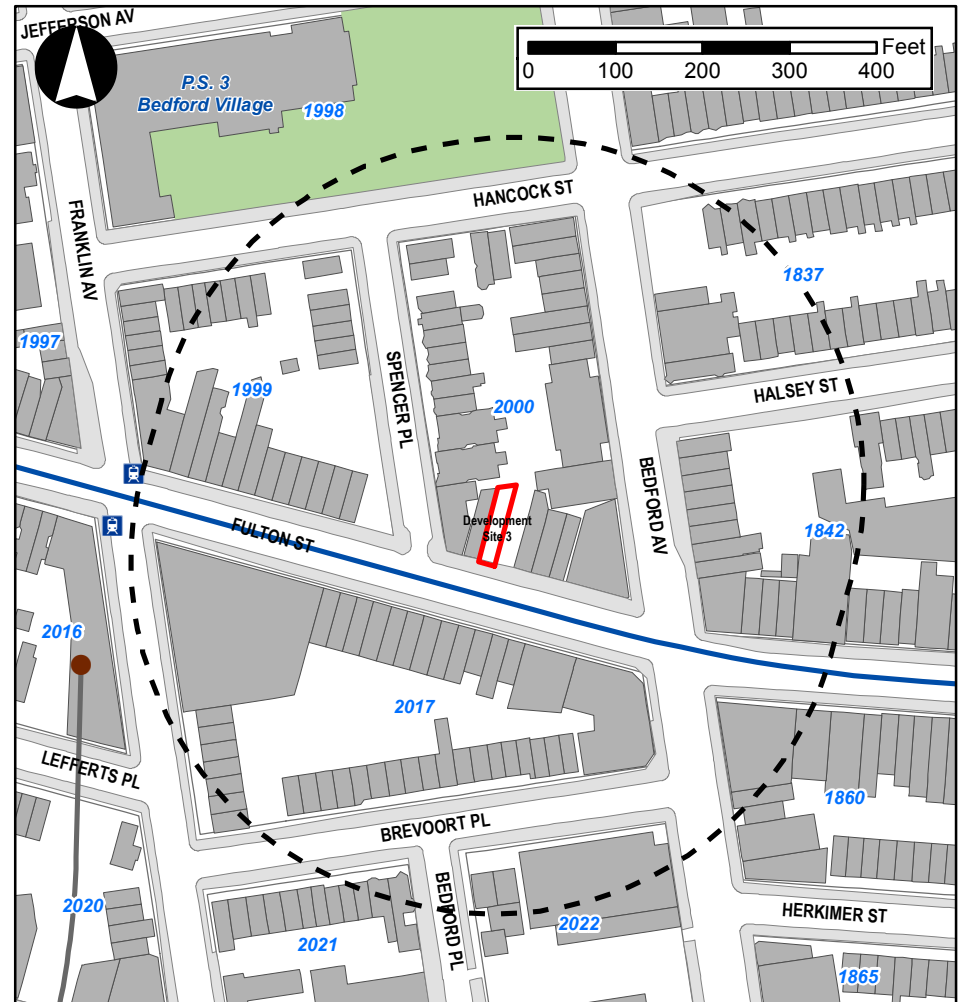


Table 1-1: Project Site - Existing Conditions

Development Site 1					
Block	Lot	Address	Zoning District	Land Use	Lot Area (SF)
1774	74, 75, 76, 77	633-639 DeKalb Avenue	R6A	Vacant	9,827
Development Site 2					
1779	22, 24, 26	648-654 DeKalb Avenue	R6A	Vacant	10,983
Development Site 3					
2000	43	1187 Fulton Street	R7D/C2-4	Vacant	1,786
Total					22,596

Development Site 3 consists of one tax lot (Block 2000, Lot 43), totalling approximately 1,786 sf. Development Site 3, which is vacant, has approximately 20 feet of frontage along the north side of Fulton Street between Spencer Place and Bedford Avenue (see **Figure 1-1**). Development Site 3 is zoned R7D/C2-4. **Figure 1-2** shows the existing site conditions for all three Development Sites.

Surrounding Area

As the Project Area consists of three separate Development Sites, existing land uses within 400 feet of each Development Site are discussed below and shown in **Figure 1-3**.

Development Sites 1 & 2

Predominant land uses within a 400-foot radius of Development Sites 1 and 2 primarily include residential uses, institutional, open space, and some commercial uses as well. The majority of residential buildings are multi-family walk-up buildings. The Kosciusko Pool is located directly to the east of Development Site 2. A medical office and its associated parking lot is located directly to the east of Development Site 2. Banneker Playground is located approximately 400 feet south of these Development Sites. P.S. 256, located adjacent to Banneker Playground, is located 250 feet south of Development Sites 1 and 2. The Salvation Army Bedford Day Care Center is also located to the south of Development Sites 1 and 2, directly adjacent to P.S. 256. The Marcy branch of the Brooklyn Public Library is located on the same block as Development Site 1. Home Depot and CABS Nursing home are located to the west of Development Sites 1 and 2, across Nostrand Avenue. The Bedford-Nostrand station for the New York City Transit (NYCT) G subway line is located just outside the 400-foot radius of Development Sites 1 and 2 at the intersection of Nostrand and Lafayette Avenues.

There are several NYCT bus routes serving Development Sites 1 and 2 including the B38, B44, and B44-Select Bus Service (SBS).

Development Site 3

Predominant land uses within a 400-foot radius of Development Site 3 primarily include residential uses, mixed commercial and residential uses, and some institutional and commercial uses as well as several vacant lots. The majority of residential buildings within the 400-foot radius are multi-family walk-up buildings some with ground floor retail, specifically along Fulton Street and Bedford Avenue. Institutional uses include several houses of worship as well as P.S. 3 located to the north of Development Site 3. The John Hancock Playground is located to the north of Development Site 3, adjacent to P.S. 3. The Co-Op School is located to the south of Development Site 3 at 40 Brevoort Place. The Franklin Avenue station for



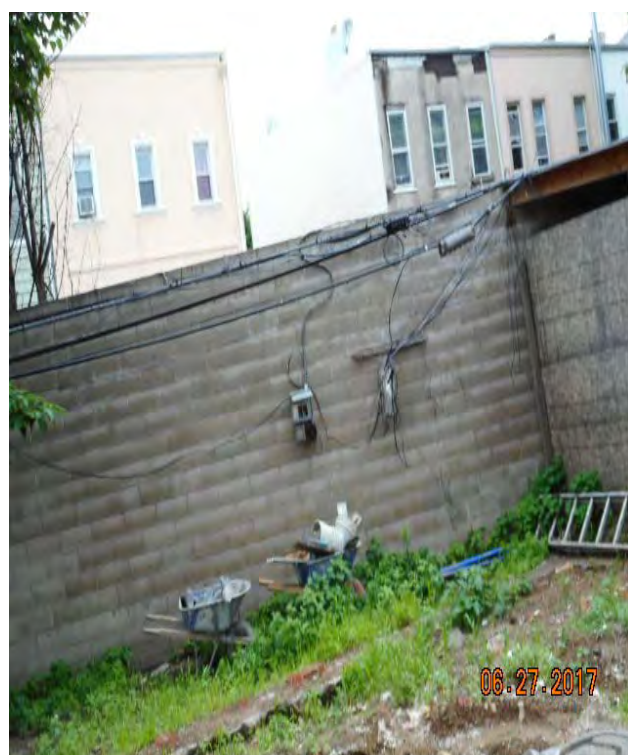
1. The Subject Property– Undeveloped Land– 633-639 Dekalb Avenue



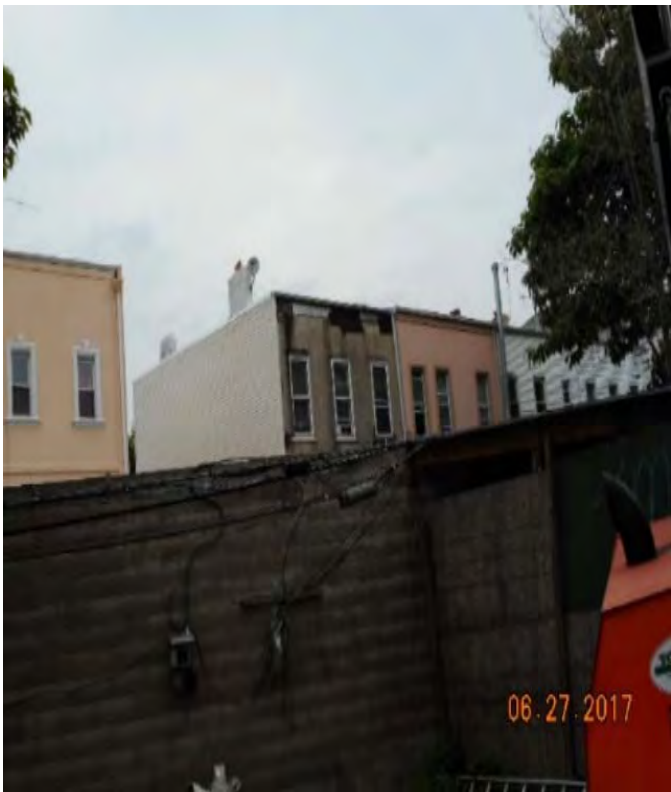
2. View of the boundary wall on the southern side of the Subject Property



3. Storage shed-Miscellaneous debris storage



4. Northern side of the Subject Property



5. Adjacent property to the north



6. Southerly adjoining property



7. Easterly adjoining property



8. Westerly adjoining property



9. The Subject Property- 648-654 DeKalb Avenue, Brooklyn, NY



10. Parked vehicles at the Subject Property



11. Chain-linked fencing delineating the Subject Property boundary



12. Additional view of the Subject Property



13. Adjacent property to the south and east



14. Adjacent property to the west



15. The Subject Property– Undeveloped parcel– 1187 Fulton Street



16. View of the front side of the Subject Property, along Fulton street



17. View of western portion of the Subject Property



18. View of the eastern portion of the Subject Property



19. View of the adjacent property to the east

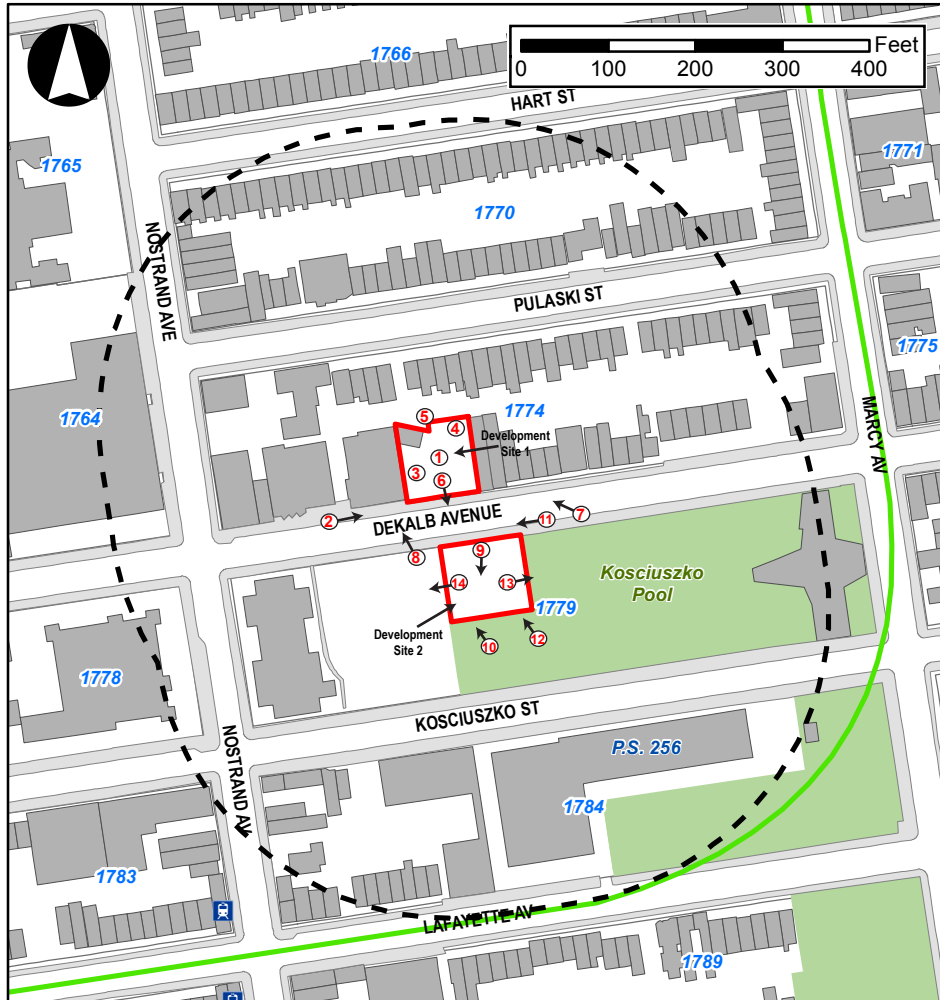


20. The adjacent properties to the south across Fulton Street

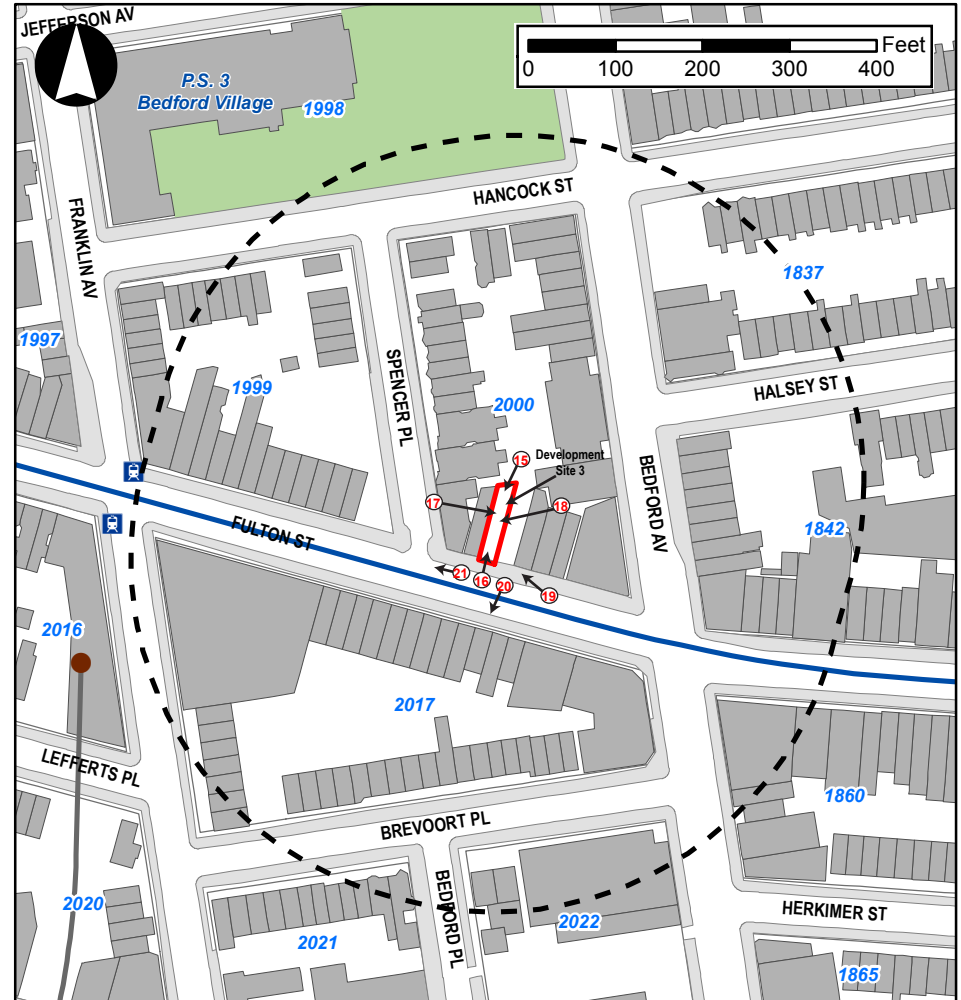


21. View of adjacent property to the west

633-639 & 648-654 DeKalb Avenue:



1187 Fulton Street:

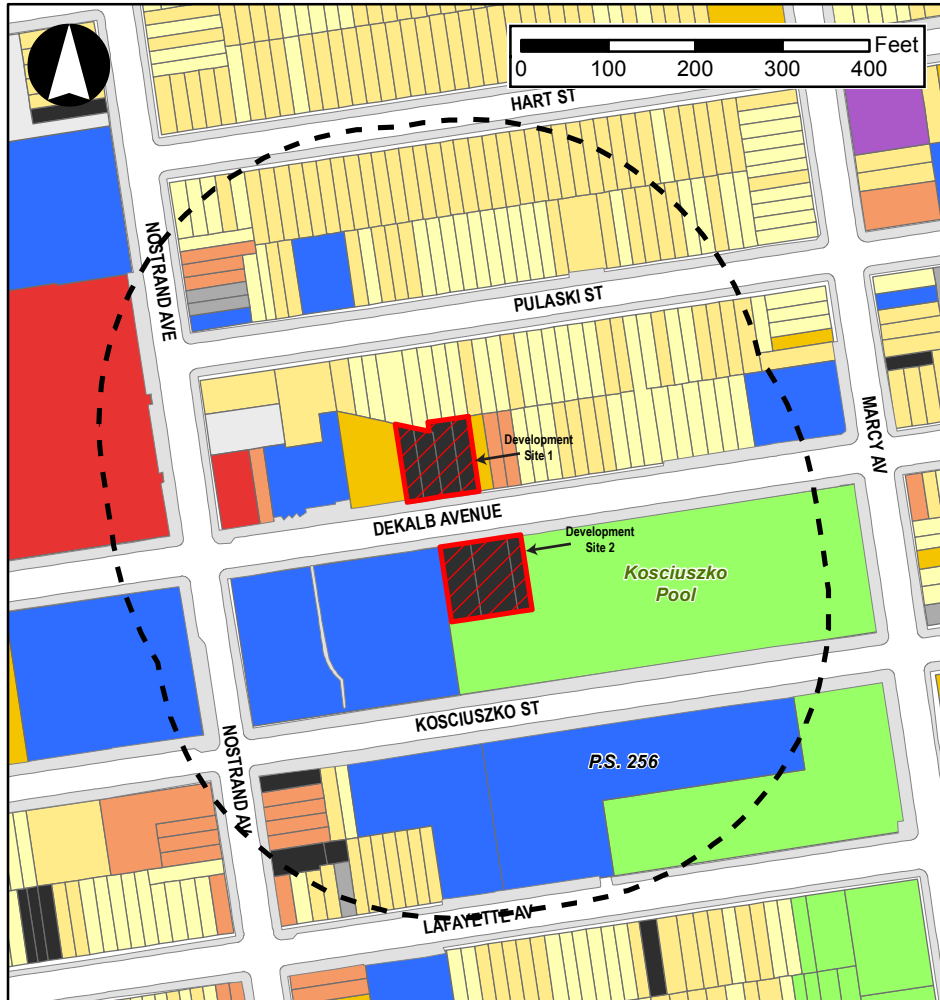


Legend

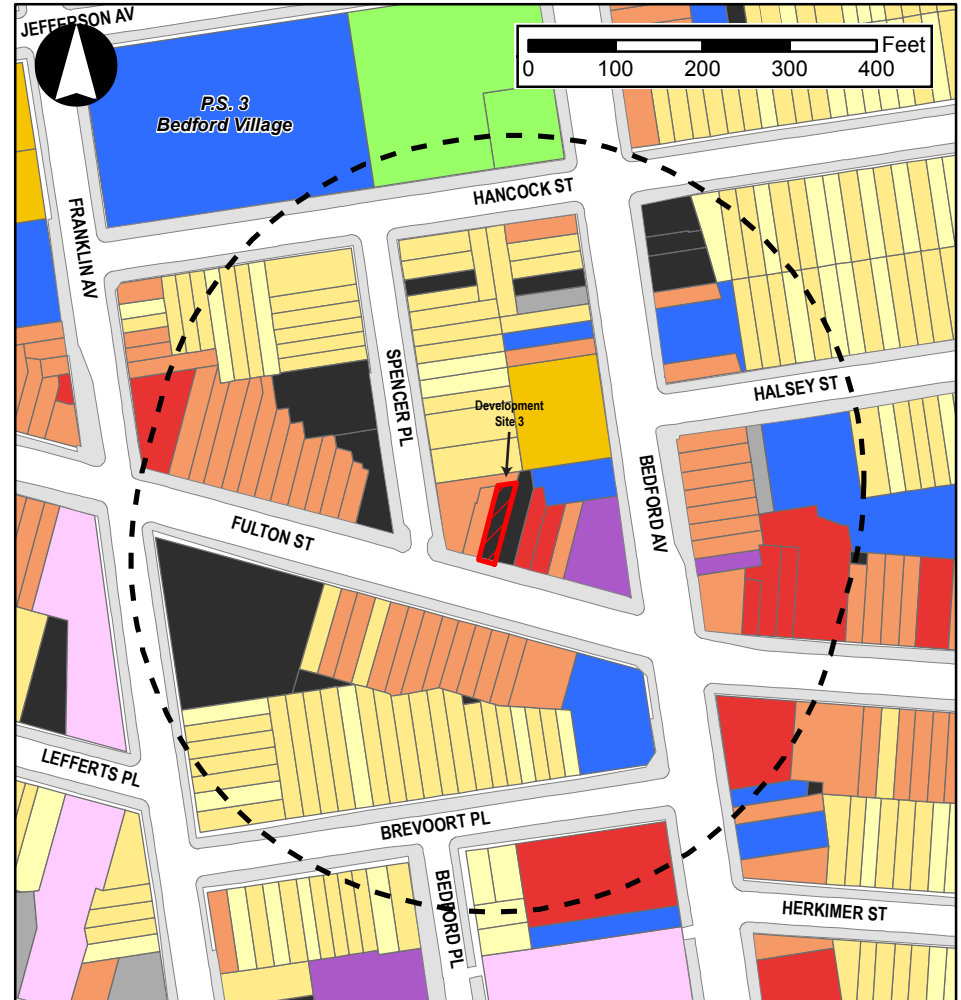
- 400-Foot Radius
- Open Space
- A & C Lines
- Subway Entrances
- Development Sites
- Tax Blocks
- Franklin Avenue Shuttle
- Photo Location
- Existing Building Footprints
- Subway Stations
- G Line



633-639 & 648-654 DeKalb Avenue:



1187 Fulton Street:



Legend

- | | | | |
|----------------------------|--|----------------------------------|-----------------------|
| 400-Foot Radius | Multi-Family Walkup Buildings | Industrial/Manufacturing | Parking Facilities |
| Development Sites | Multi-Family Elevator Buildings | Transportation/Utility | Vacant Land |
| Land Use | Mixed Commercial/Residential Buildings | Public Facilities & Institutions | All Others or No Data |
| One & Two Family Buildings | Commercial/Office Buildings | Open Space | |

the NYCT C and S lines is located within the 400-foot radius of Development Site 3, at the intersection of Franklin Avenue and Fulton Street.

Zoning

As shown in **Figure 1-4**, Development Sites 1 and 2 are zoned R6A and Development Site 3 is zoned R7D/C2-4. Each is described below.

Development Sites 1 and 2

Development Sites 1 and 2 are zoned R6A. R6A 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 set at or near the street line. Designed to be compatible with older buildings found in medium-density neighborhoods, R6A districts are mapped in the Bronx, Brooklyn and Queens. Parts of Kingsbridge in the Bronx and Williamsburg in Brooklyn are typical R6A areas.

The floor area ratio (FAR) in R6A districts is 3.0. Above a maximum base height of 60 feet, the building must set back by at least 10 feet on a wide street and 15 feet on a narrow street before rising to its maximum height of 70 feet. To preserve the traditional streetscape, the street wall of a new building can be no closer to the street line than any building within 150 feet on the same block, but need not be farther than 15 feet. The area between a building's street wall and the street line must be planted. R6A buildings must have interior amenities for the residents pursuant to the Quality Housing Program Off-street parking, which is not allowed in front of a building, is required for 50% of a building's dwelling units, or can be waived if five or fewer spaces are required.

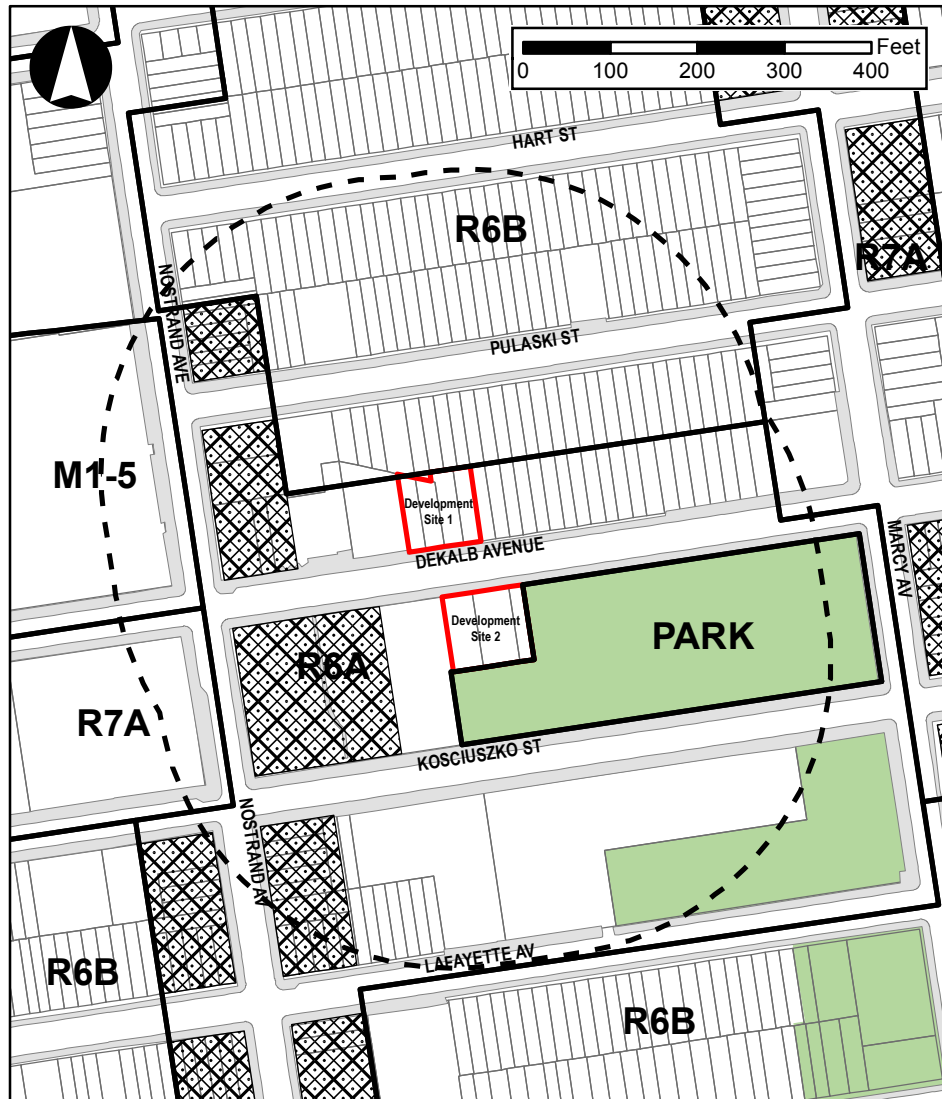
Development Site 3

Development Site 3 is zoned R7D/C2-4. R7D residential districts promote new contextual development along transit corridors. The FAR of 4.2 allows greater residential density than R7A districts and less than R7X districts. In a C4-5D district or when a commercial overlay is mapped in an R7D district, the ground floor of a building must be reserved for retail uses, such as shops and services, to maintain the vitality of the street.

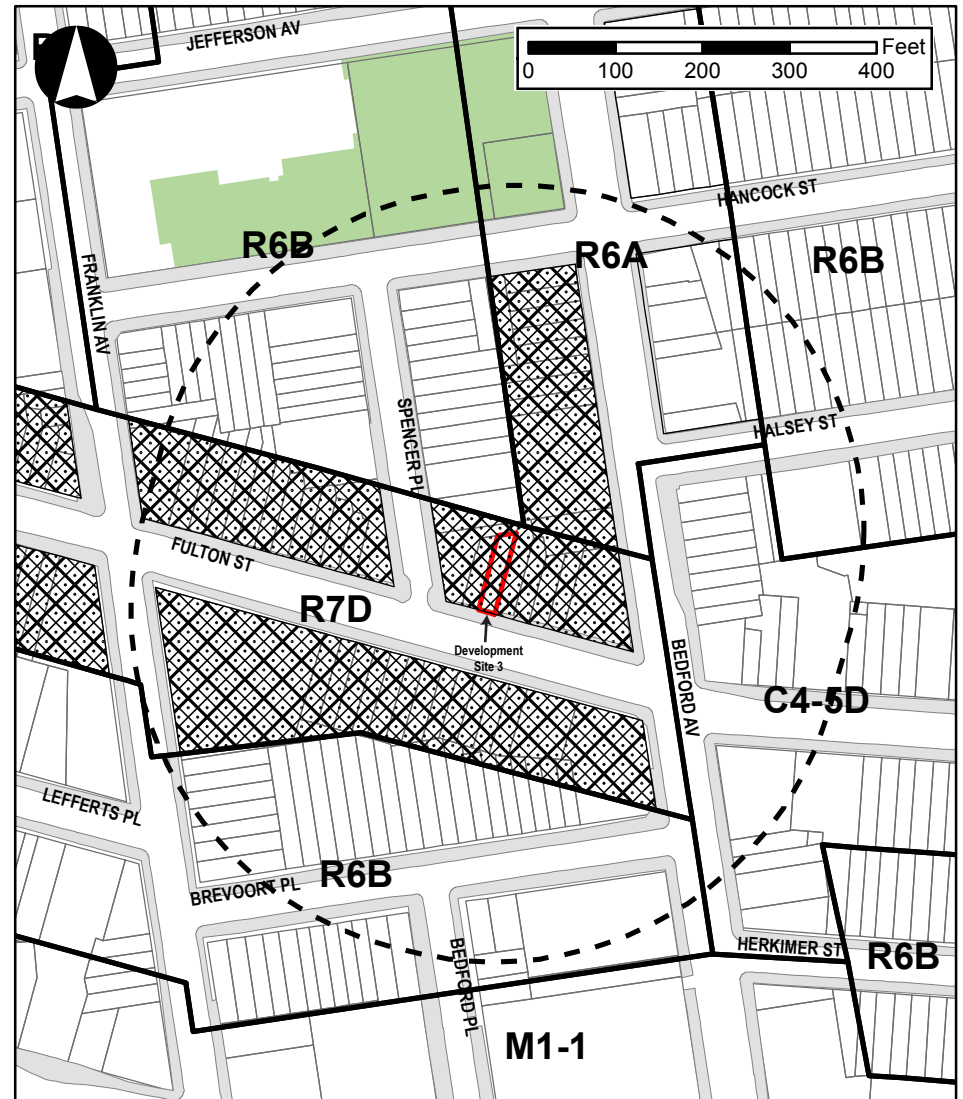
Quality Housing bulk regulations, mandatory in R7D districts, produce ten-story buildings set at or near the street line. The base height of a new building must be 60 to 85 feet before setback, rising to a maximum building height of 100 feet. In order to maintain the continuity of the street wall, a new building can be no closer to the street line than any other building within 150 feet on the same block but need not be farther than 15 feet. In commercial overlay districts or in a C4-5D district, the street wall of a building on a wide street must extend along the entire width of the zoning lot at the street line. Interior amenities for building residents pursuant to the Quality Housing Program are required. Off-street parking is required for 50 percent of dwelling units.

The C2-4 district is mapped as a commercial overlay within the R7D 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.

633-639 & 648-654 DeKalb Avenue:



1187 Fulton Street:



Legend

- 400-Foot Radius
- Zoning District Boundaries
- Open Space
- Development Sites
- C2-4 Commercial Overlay

Typical retail uses include neighborhood grocery stores, restaurants and beauty parlors. C2 districts permit a slightly wider range of uses, such as funeral homes and repair services. 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 C2-4 overlay.

C. THE PROPOSED ACTIONS

As noted above, the Proposed Actions include the disposition of City-owned property, designation of an Urban Development Action Area, and project approval of an Urban Development Action Area Project (UDAAP) to facilitate the development of new affordable housing in the Bedford-Stuyvesant neighborhood of Brooklyn. All eight lots are owned by HPD and would and would be conveyed to the Project Sponsor as a result of the Proposed Actions. The Proposed Actions would facilitate the development of three buildings containing approximately 84 dwelling units, plus one unit for the residential superintendent (for a total of approximately 85 DUs) and 2,512 gsf of commercial space. The proposed development for each site is described in detail below and summarized in **Table 1-2**.

Table 1-2: Proposed Project

Development Site 1							
Block	Lot	Address	Proposed Height (including mechanical bulkhead/Solar Panels)	Residential GSF	Total DUs	Retail GSF	Total Proposed GSF
1774	74, 75, 76, 77	633-639 DeKalb Avenue	80'-9"	39,604	37	-	39,604
Development Site 2							
Block	Lot	Address	Proposed Height	Residential GSF	Total DUs	Retail GSF	Total Proposed GSF
1779	22, 24, 26	648-654 DeKalb Avenue	80'-9"	44,769	45	-	44,769
Development Site 3							
Block	Lot	Address	Proposed Height	Residential GSF	Total DUs	Retail GSF	Total Proposed GSF
2000	43	1187 Fulton Street	55'	4,576	3	2,512	7,088
Total				88,949	85	2,512	91,461

Development Site 1

Development Site 1 will include a seven-story (69'-6" to roof; 80'-9" to mechanical bulkhead/solar panels) residential building located at 633-639 DeKalb Avenue (see **Figure 1-5**). The building at Development Site 1 would be approximately 39,604 gsf and include approximately 37 DUs. The rear yard of Development Site 1 will be approximately 3,650 sf and will include an outdoor seating area, children's play area, and planted areas.



For Illustrative Purposes Only

DeKalb Commons

Figure 1-5
Proposed Development at Development Sites 1 & 2

Development Site 2

Development Site 2 will include a seven-story (69'-6" to roof; 80'-9" to mechanical bulkhead/solar panels) residential building located at 648-654 DeKalb Avenue would be approximately 44,769 gsf and include approximately 44 DUs, plus one DU for a superintendent (see **Figure 1-5**). The rear yard of Development Site 2 would be approximately 3,260 sf and will include an outdoor seating area, children's play area, and planted areas. This building would also include an approximately 903 sf community room on the ground floor. The buildings on Development Sites 1 and 2 would include solar panels on the roof.

Development Site 3

Development Site 3 will include one four-story (45' to roof; 55' to mechanical bulkhead) residential and commercial building located 1187 Fulton Street (see **Figure 1-6**). The building proposed at 1187 Fulton Street would be approximately 7,088 gsf and would include approximately 3 DUs and 2,512 gsf of commercial space on the ground floor.

The Proposed Project would be completed and occupied in 2023.

D. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

The Proposed Project would create opportunities for new affordable housing development on vacant 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.

E. ANALYSIS FRAMEWORK

In order to assess the potential effects of the Proposed Project, the "Future without the Proposed Actions (No-Action Condition)" and "Future with the Proposed Actions (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 Actions. The future No-Action condition identifies similar development projections for 2023 absent the Proposed Actions. The incremental difference between the With-Action and No-Action conditions serve as the basis for impact analyses.

Future without the Proposed Actions (No-Action Condition)

In the 2023 future without the Proposed Actions, it is expected that there would be no new development on the Development Sites and all eight lots would remain vacant.

Future with the Proposed Actions (With-Action Condition)

As discussed above under "The Proposed Actions", the Proposed Actions would facilitate the development of three buildings that would include a total of approximately 84 affordable DUs, plus one DU for a superintendent, and approximately 2,512 gsf of commercial space. The Proposed Project is expected to take approximately 18-21 months to construct and would be completed and fully occupied in 2023. The net increment of approximately 85 dwelling units and approximately 2,512 gsf of commercial space will represent the basis for environmental analyses.



For Illustrative Purposes Only

F. PUBLIC REVIEW PROCESS

The Proposed Actions described above are subject to public review under the Uniform Land Use Review Procedure (ULURP), Section 200 of the City Charter, as well as City Environmental Quality Review (CEQR) procedures. The ULURP and CEQR review processes are described below.

Uniform Land Use Review Procedure (ULURP)

The City's ULURP, mandated by Sections 197-c and 197-d of the City Charter, is a process specially designed to allow public review of a proposed action at four levels: the Community Board, the Borough President and (if applicable) the Borough Board, the City Planning Commission (CPC) and the City Council. The procedure sets time limits for review at each stage to ensure a maximum total review period of approximately seven months.

The ULURP process begins with a certification by the CPC that the ULURP application is complete, which includes satisfying CEQR requirements (see the discussion below). The application is then forwarded to Brooklyn Community Board 3, which has 60 days in which to review and discuss the approval, hold public hearings, and adopt recommendations regarding the application. Once this step is complete, the Borough President reviews the application for up to 30 days. CPC then has 60 days to review the application, during which time a ULURP/CEQR public hearing is held. 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 FEIS. The FEIS must be completed at least ten days before CPC makes its decision on the application. 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 Actions, 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 Actions, 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)

Pursuant to the State Environmental Quality Review Act (Article 8 of the Environmental Conservation Law; SEQRA) 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:

Establishing a Lead Agency: Under CEQR, a "lead agency" is the public entity responsible for conducting environmental review. Usually, the lead agency is also the entity principally responsible for carrying out, funding, or approving the proposed action(s). In accordance with CEQR rules (62 RCNY §5-03), the New

York City Department Housing Preservation and Development (HPD), assumed lead agency status for the Proposed Actions.

Determination of Significance: The lead agency's first charge is to determine whether the proposed action(s) may have a significant adverse impact on the environment. To do so, HPD, in this case, evaluated an Environmental Assessment Statement (EAS) dated May 23, 2019 for the Proposed Actions. Based on the information contained in the EAS, HPD determined that the Proposed Actions may have a significant adverse impact on the environment, as defined by statute, and issued a Positive Declaration on June 4, 2019, requiring that an EIS be prepared in conformance with all applicable laws and regulations.

Scoping: HPD issued a Draft Scope of Work for the EIS, dated May 23, 2019, 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 others to comment on the intended effort. CEQR requires a public scoping meeting as part of the process. A public scoping meeting was held on July 16, 2019, at Restoration Plaza, 1368 Fulton Street, Brooklyn, NY 11216. The public review period for agencies and the public to review and comment on the Draft Scope of Work was open through July 26, 2019. No comments were received on the Draft Scope of Work for the project's EIS. A Final Scope of Work document for the Proposed Actions was issued on November 8, 2019.

Draft Environmental Impact Statement (DEIS): This 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. The DEIS was deemed complete and the Notice of Completion was issued on November 8, 2019.

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 action, 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 10 days after the FEIS is complete to take action on

a given application.

A. INTRODUCTION

This attachment assesses the potential for the Proposed Actions to result in incremental shadows long enough to reach any nearby publicly accessible open spaces or other sunlight-sensitive resources. According to the *City Environmental Quality Review (CEQR) Technical Manual*, a shadows assessment is required 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 discussed in Chapter 1, “Project Description,” the Proposed Actions would facilitate the development of new buildings greater than 50 feet in height adjacent to an open space resource (Kosciuszko Pool). As such, a detailed shadows analysis was prepared to determine the potential for the Proposed Actions to result in significant adverse impacts on sunlight-sensitive resources.

B. PRINCIPAL CONCLUSIONS

One sunlight-sensitive resource would experience significant adverse shadows impacts: the Kosciuszko Pool. This open space resource features an outdoor pool which measures two hundred thirty feet by one hundred feet, a spray pool, a baby pool, bleachers, and a bathhouse. The open space also features pipe sculptures for climbing, which are incorporated into the design of the bathhouse, and a large mushroom sculpture.

Project-generated shadows would fall on the Kosciuszko Pool on the December 21, March 21/September 21, May 6/August 6, and June 21 analysis days. The long afternoon duration and of incremental shadow on the pool would significantly affect the user experience on the June 21 and May 6/August 6 analysis days.

Incremental shadow durations on the outdoor pool would range from 2 hours and 22 minutes on the December 21 representative analysis day and 5 hours and 40 minutes June 21 representative analysis day. The maximum area of incremental shadow coverage that would cover the outdoor pool would be approximately 11,865 sf, or approximately 51.6 percent of added coverage (on June 21). Given the long duration of the incremental shadow during the summer months, the incremental shadow from the Proposed Project would significantly affect the user experience of the pool on these analysis days.

Potential mitigation measures for the shadows impacts are being explored by the Applicant and will be refined between the DEIS and FEIS.

C. 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 a 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 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. 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 the proposed buildings 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 project-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.

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.

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 project would cast on a sunlight-sensitive resource during the year – resulting from the 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 Actions (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 project 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.

D. PRELIMINARY SCREENING

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. For Development Sites 1 & 2 (633-639 and 648-654 DeKalb Avenue; Brooklyn Block 1774, Lots 74-77 and Block 1779, Lots 22, 24, and 26, respectively), the maximum height of the proposed development, including mechanical bulkhead (80 feet), was used to determine the maximum shadow radius of 344 feet (Tier 1 Assessment). Within this longest shadow study area, there are two potentially sunlight-sensitive open space resources: the Kosciuszko Pool and Banneker Playground. Therefore, further screening was warranted in order to determine whether any resources could be affected by project-generated shadows at Development Sites 1 & 2.

For Development Site 3 (1187 Fulton Street; Brooklyn Block 2000, Lot 43), the maximum height of the proposed development, including mechanical bulkhead (55 feet), was used to determine the maximum shadow radius of 236.5 feet (Tier 1 Assessment). As no potentially sunlight-sensitive open space or historic resources were found within this longest shadow study area, no further screening was warranted for project-generated shadows at Development Site 3.

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 project 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 can receive shade from the proposed project.

Figure 2-1 provides a base map illustrating 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 corner of the proposed development site). Only one open space resource was identified as a sunlight-sensitive resource that warranted further assessment. This resource is provided below in **Table 2-1**.

TABLE 2-1
Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 1 and 2 Screening

No. ¹	Open Space Resources
1	Kosciuszko Pool

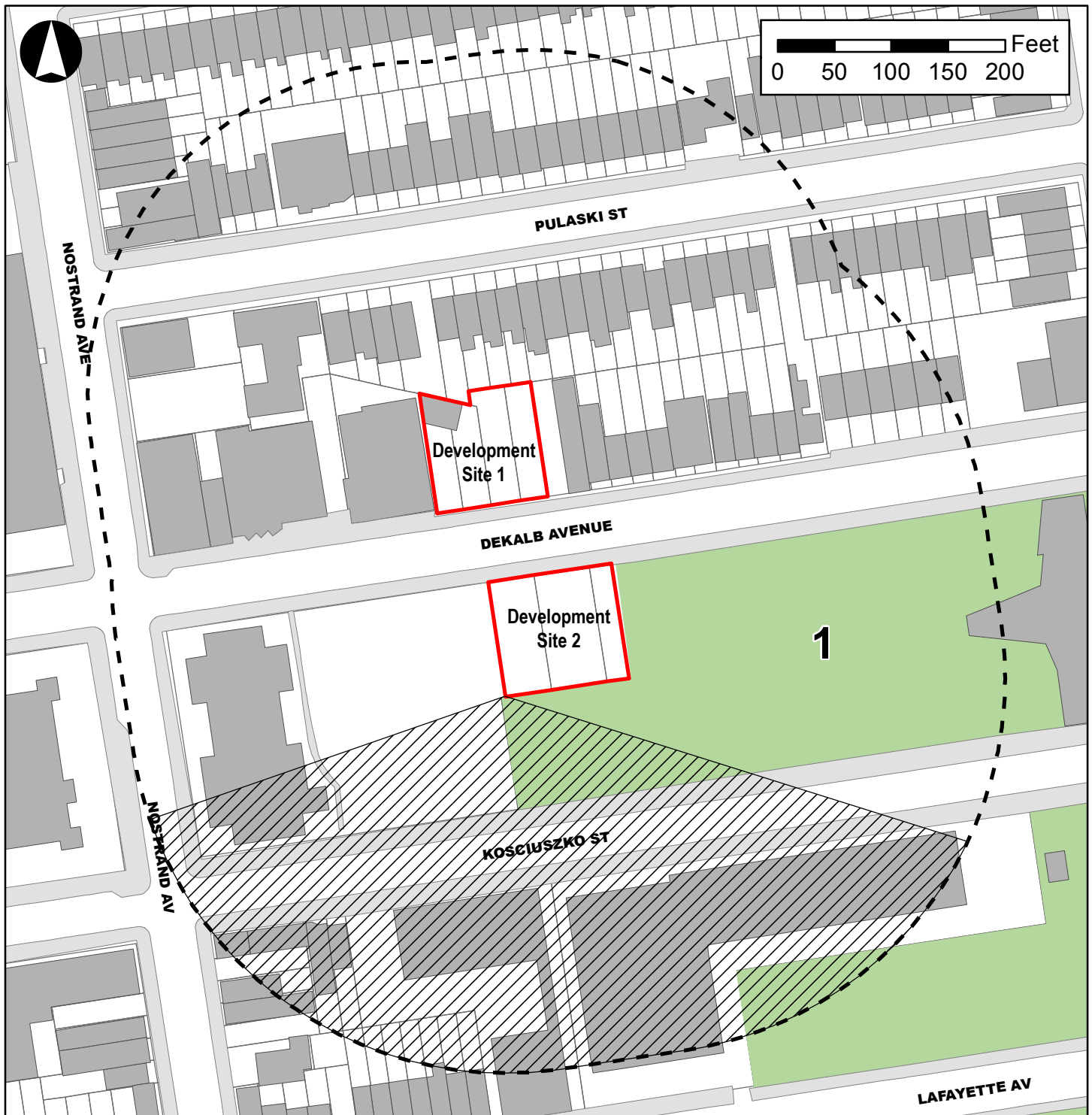
Notes:

¹ Numbers keyed to **Figure 2-1**.






Tier 3 Screening Assessment

According to the *CEQR Technical Manual*, a Tier 3 screening assessment should be performed to

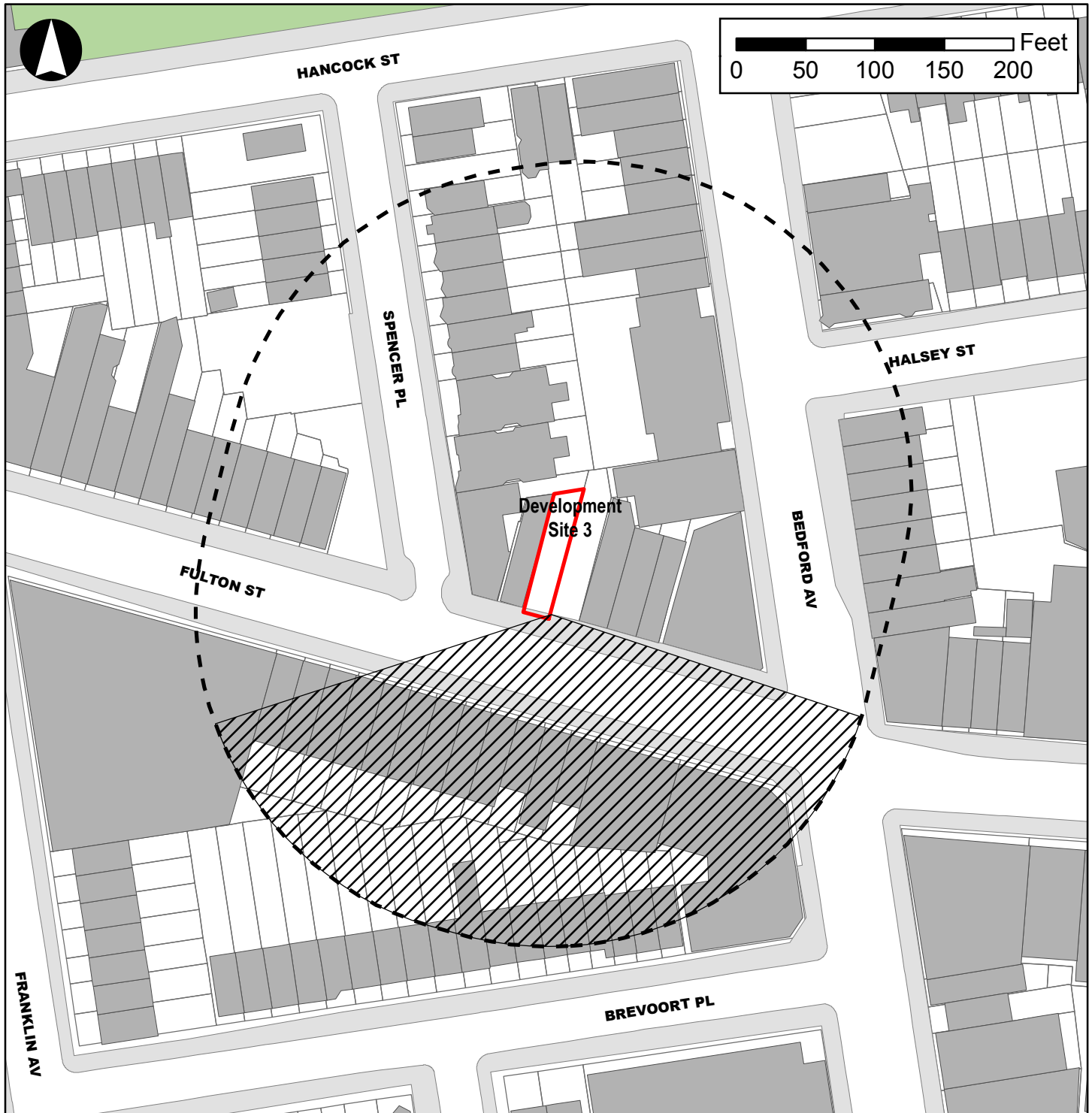
633-639 and 648-650 DeKalb Avenue:








Legend

- | | |
|---|---|
|  Cluster 1 Development Sites |  Open Space (refer to Table C-1) |
|  Tier I: Longest Shadow Study Area |  Existing Building Footprints |
|  Tier II: Area That Cannot Be Shaded | |

1187 Fulton Street:



Legend

-  Cluster 2 Development Site
-  Tier I: Longest Shadow Study Area
-  Tier II: Area That Cannot Be Shaded
-  Open Space
-  Existing Building Footprints

determine if, in the absence of intervening buildings, shadows resulting from a Proposed Project 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 project 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 project-generated shadows could reach a number of sunlight-sensitive resources, a Tier 3 assessment was performed using three dimensional (3D) computer mapping software. A 3D model of the Proposed Project was used to calculate and display project-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 Project. 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 project-generated shadows would reach any sunlight sensitive resources.

As shown in **Figure 2-2**, the Tier 3 results determined that the one sunlight-sensitive resource would receive project-generated shadows on all four analysis days and, therefore, require further analysis. **Table 2-2** presents a summary of the Tier 3 assessment, showing the one sunlight-sensitive open space resource that could, in the absence of intervening buildings, receive project-generated shadows, and on which analysis days the new shadows could occur. As presented in **Table 2-2**, based on the Tier 3 screening assessment, the potential for new incremental shadows to be cast on Kosciuszko Pool on all four analysis days could not be ruled out, and a detailed shadows analysis is warranted for this sunlight-sensitive resource.

TABLE 2-2
Sunlight-Sensitive Resources Warranting Further Analysis Based on Tier 3 Screening

No. ¹	Name	March 21/Sept. 21 7:36 AM - 4:29 PM	May 6/August 6 6:27 AM - 5:18 PM	June 21 5:57 AM - 6:01 PM	December 21 8:51 AM - 2:53 PM	Number of Analysis Days
1	Kosciuszko Pool	YES	YES	YES	YES	4

Notes:

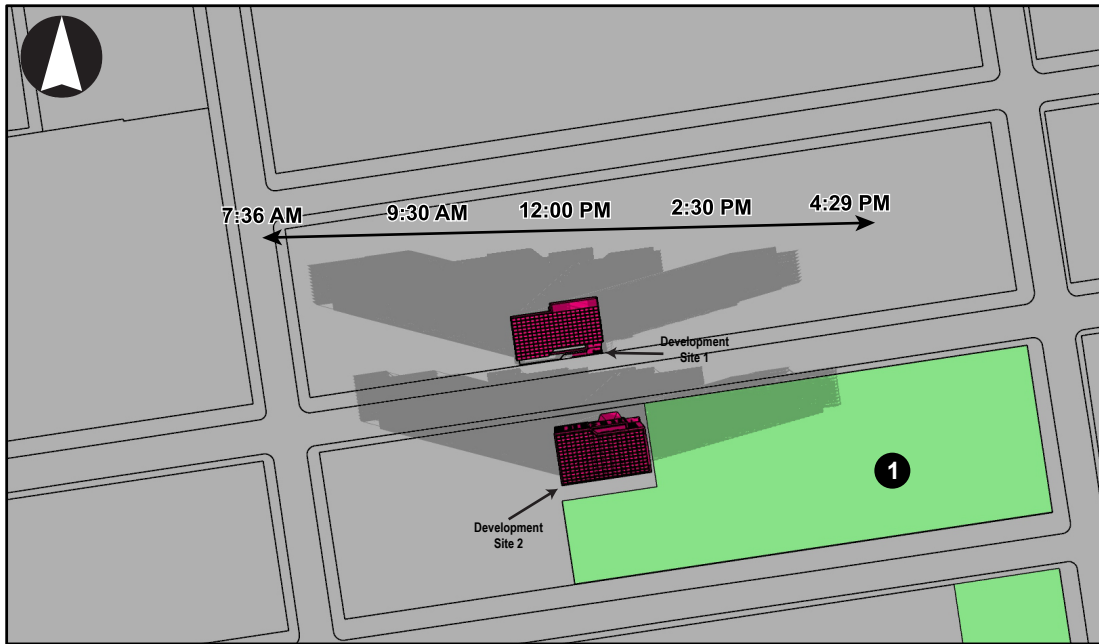
¹ Numbers keyed to **Figure 2-1**.

E. DETAILED ANALYSIS OF SHADOW IMPACTS

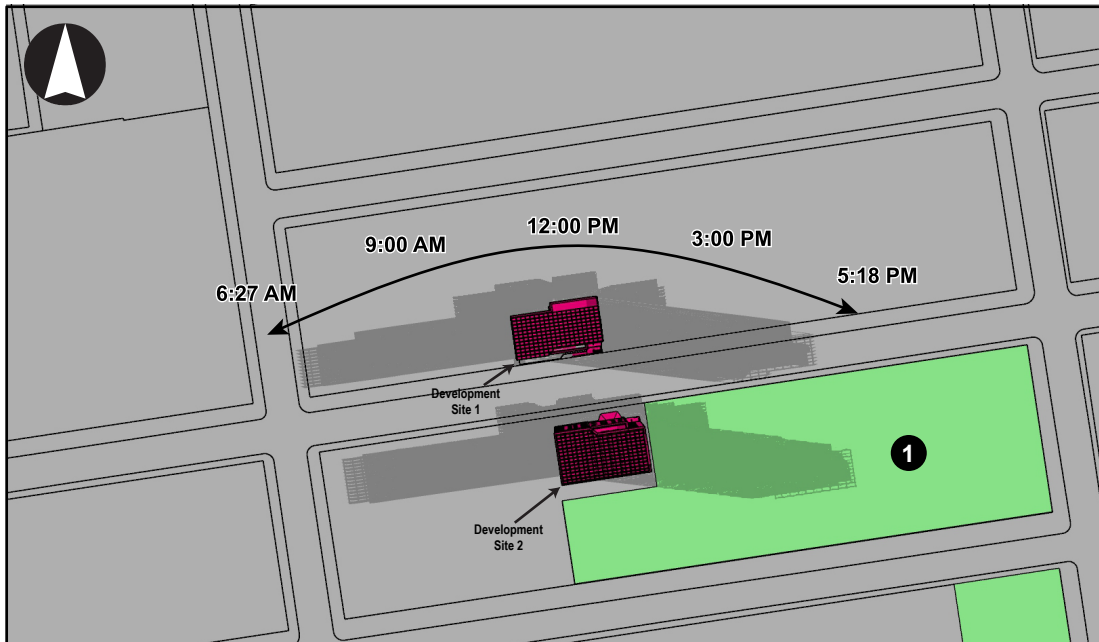
Resources Potentially Affected by Project-Generated Shadows

Kosciuszko Pool

The Kosciuszko Pool is a 2.39-acre outdoor public pool operated by the New York City Department of Parks and Recreation (DPR). The open space is located adjacent the proposed development site on Brooklyn Block 1779, Lots 22, 24, and 26, and across from the proposed development site on Block 1774, Lots 74, 75, 76, and 77, and is bounded by DeKalb Avenue to the north, Marcy Avenue to the east, and Kosciuszko Street to the south, occupying Block 1779, Lot 27. Its features include an outdoor pool which measures two hundred thirty feet by one hundred feet, a spray pool, a baby pool, bleachers, and a bathhouse. The open space also features pipe sculptures for climbing, which are incorporated into the design of the bathhouse, and a large mushroom sculpture. The pool's operating hours are from 11:00 AM through 7:00 PM, with a break for pool cleaning between 3:00 PM and 4:00 PM. It should be noted that the Kosciuszko Pool, along with all other DPR-operated outdoor pools, are seasonal, typically opening to the public in late



MARCH 21/SEPTEMBER 21



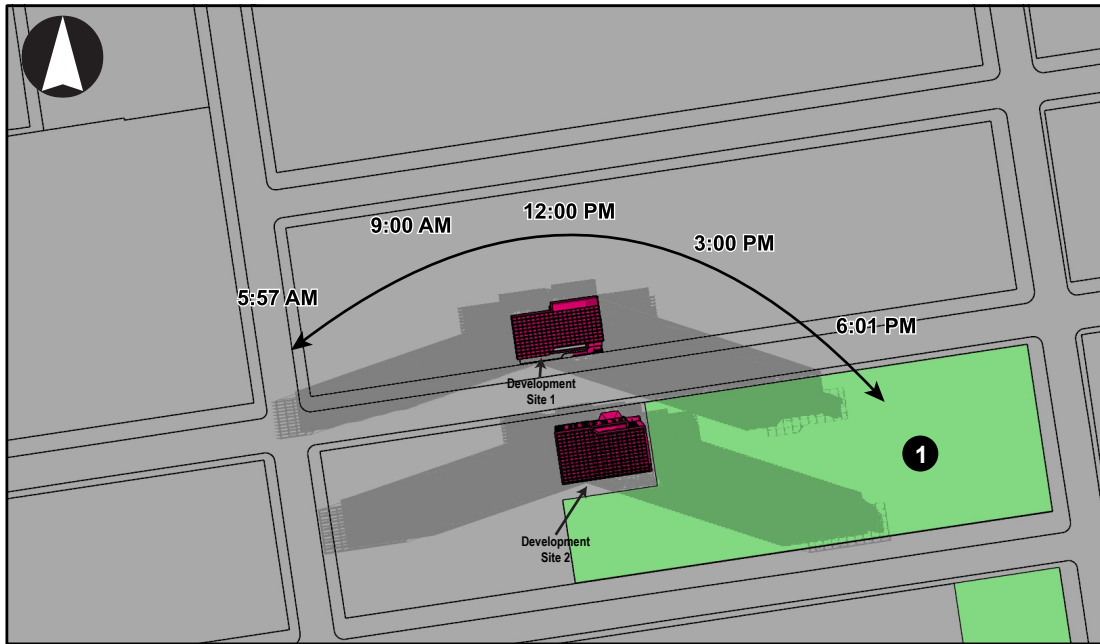
MAY 6/AUGUST 6

 Proposed Development

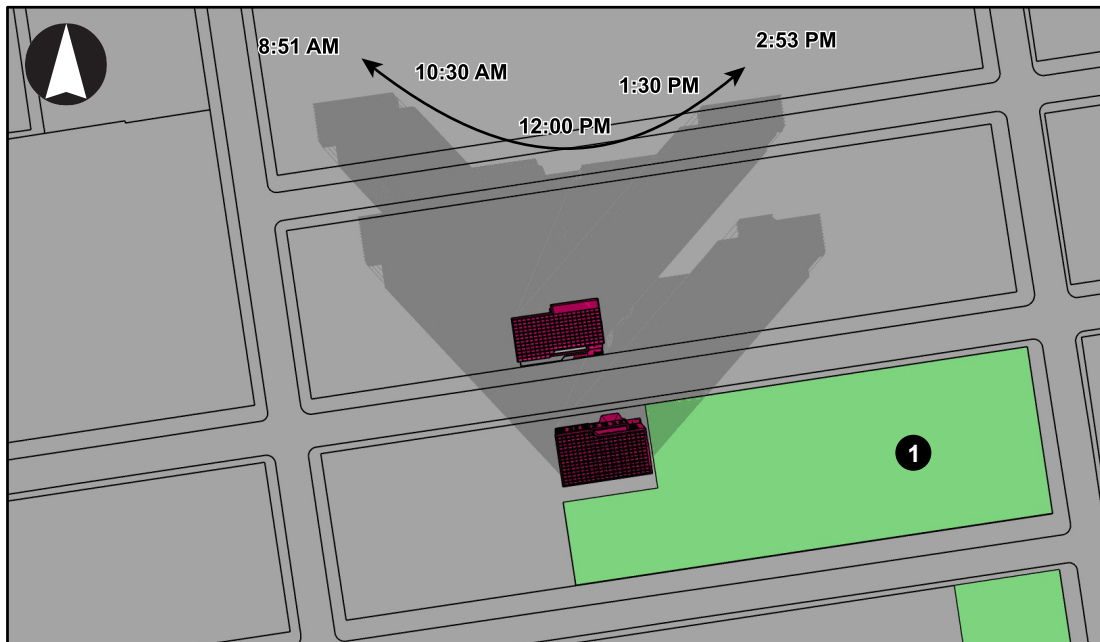
 1 Open Space

 Incremental Shadow

Note: Resources keyed to Table C-1



JUNE 21



DECEMBER 21

 Proposed Development

 1 Open Space

 Incremental Shadow

Note: Resources keyed to Table G-1

June/early July and closing in mid-September.

Detailed Shadows Analysis

Per *CEQR Technical Manual* guidelines, a shadow analysis was performed for the one sunlight-sensitive resource 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. As noted previously, *CEQR Technical Manual* guidelines define the temporal limits of a shadow analysis period to fall from 1.5 hours after sunrise to 1.5 hours before sunset. The results of the shadows analysis show the incremental difference in shadow impact between the No-Action and With-Action conditions, the results of which are summarized in **Table 2-3**.

TABLE 2-3

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
Kosciuszko Pool	Shadow enter-exit time	12:09 – 4:29 PM	12:10 – 5:18 PM	12:21 – 6:01 PM	12:31 – 2:53 PM
	Incremental shadow duration	4 hours 20 minutes	5 hours 8 minutes	5 hours 40 minutes	2 hours 22 minutes

Note: All times are Eastern Standard Time; Daylight Savings Time was not accounted for per *CEQR Technical Manual* guidelines. Table indicates the entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource.

As shown in **Table 2-3**, incremental project-generated shadows would reach the one sunlight-sensitive resource identified in the Tier 3 assessment. Increases in shadow coverage would occur at Kosciuszko Pool on all four representative analysis days (March 21/September 21, May 6/August 6, June 21, and December 21). **Figures 2-3** through **2-6** (all provided at the end of this chapter) show representative shadow views on each of the representative analysis days on which incremental shadows would occur (refer to **Table 2-3**).

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 attachment 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.

March 21/September 21

On March 21/September 21, the time period for shadows analysis begins at 7:36 AM and continues until 4:29 PM. March is considered the beginning of the growing season in New York City, and September 21, which has the same shadow patterns as March 21, is also within the growing season. On the March 21/September 21 analysis day, incremental shadows would reach portions of the Kosciuszko Pool. No other sunlight-sensitive resource would experience incremental shadow coverage on this analysis day.

The Proposed Project would cast incremental shadows on portions of the Kosciuszko Pool for a total duration of four hours and twenty minutes on the March 21/September 21 analysis day. Incremental shadows cast by Development Site 2 would enter the outdoor pool area at 12:09 PM and continue until the end of the analysis day (4:29 PM). Prior to 12:09 PM the pool would not experience any incremental shadow coverage. As indicated in **Figures 2-3a** and **2-3b**, during the early afternoon hours, shadow

coverage would be concentrated on a small portion of the open space's northeast corner fronting DeKalb Avenue. By the late afternoon incremental shadow coverage would increase slightly, moving in an easterly direction along the northern portion of the open space until the end of the analysis day. Incremental shadow coverage would be minimal and the majority of the pool area would receive direct sunlight.

The areas of Kosciuszko Pool that would experience incremental shadow coverage feature bleachers and paved areas surrounding the outdoor pool; no incremental shadows would affect the outdoor pool or baby pool on this analysis day. It should be noted that as the operation of the pool is seasonal and typically open between late June/early July and mid-September, the March 21/September 21 representative analysis day generally falls outside the period in which the pool is accessible to the public. It should also be noted that, according to DPR, the outdoor pool is temporarily closed for pool cleaning between the hours of 3:00 PM and 4:00 PM daily.

May 6/August 6

On May 6/August 6 (the midpoint between the equinoxes and solstices), the time period for shadows analysis begins at 6:27 AM and continues until 5:18 PM. On this analysis day, incremental shadows would reach portions of the Kosciuszko Pool. No other sunlight-sensitive resource would experience incremental shadow coverage.

The Proposed Project would cast incremental shadows on portions of the Kosciuszko Pool for a total duration of five hours and eight minutes on the May 6/August 6 analysis day. Incremental shadows cast by Development Site 2 would enter the outdoor pool area at 12:10 PM and continue until the end of the analysis day (5:18 PM). Prior to 12:10 PM the pool would not experience any incremental shadow coverage. As indicated in **Figures 2-4a** and **2-4b**, during the early afternoon hours incremental shadows would be limited to a small portion of the open space's northeast corner fronting DeKalb Avenue. By the late afternoon, incremental shadow coverage would increase, moving in a southeasterly direction throughout the afternoon until the end of the analysis day. Incremental shadow coverage would be minimal and the majority of the pool area would receive direct sunlight.

The areas of Kosciuszko Pool that would experience incremental shadow coverage feature bleachers, an outdoor pool, and paved areas surrounding the outdoor pool. Though incremental shadows would enter the open space at 12:10 PM, incremental shadow coverage would not reach the outdoor pool until approximately 3:24 PM and would continue until the end of the analysis day (5:18 PM) for a total duration of one hour and 54 minutes. By 4:00 PM, the maximum area of incremental shadow coverage that would cover the outdoor pool would be approximately 685 sf, or approximately 3.0 percent of added coverage. By 5:15 PM, the maximum area of incremental shadow coverage that would cover the outdoor pool would increase to approximately 10,640 sf, or approximately 46.3 percent of added coverage. No incremental shadows would affect the baby pool on this analysis day. It should also be noted that, according to DPR, the outdoor pool is temporarily closed for pool cleaning between the hours of 3:00 PM and 4:00 PM daily.

June 21

On June 21 (the summer solstice), the time period for shadows analysis begins at 5:57 AM and continues until 6:01 PM. On the summer solstice, which is the day of the year with the longest period of daylight, the sun is most directly overhead and generally shadows are shortest and move across the widest angular range from west to east. On this date, incremental shadows would be cast on portions of the Kosciuszko Pool. No other sunlight-sensitive resource would experience incremental shadow coverage.

The Proposed Project would cast incremental shadows on portions of Kosciuszko Pool for a total duration

of five hours and 40 minutes on the June 21 analysis day. Incremental shadows would enter the outdoor pool area beginning at 12:21 PM and continue until the end of the analysis day (6:01 PM). Prior to 12:21 PM the pool would not experience any incremental shadow coverage. As indicated in **Figures 2-5a** and **2-5b**, incremental shadows cast by Development Site 2 would be located in a small portion of the open space's northwestern corner fronting DeKalb Avenue during the early afternoon hours. By the late afternoon, incremental shadows cast by Development Site 2 would increase, moving in a southeasterly direction, until the end of the analysis day. Additionally, at approximately 5:45 PM, incremental shadows cast by Development Site 1 would enter the open space from the north for a brief duration and continue to move in a southeasterly direction until the end of the analysis day. Incremental shadow coverage would remain limited in size, with the majority of the open space continuing to receive direct sunlight throughout the day.

The areas of Kosciuszko Pool that would experience incremental shadow coverage feature bleachers, an outdoor pool, and paved areas surrounding the outdoor pool. Though incremental shadows would enter the open space at 12:21 PM, incremental shadow coverage would not reach the outdoor pool until approximately 2:51 PM and would continue until the end of the analysis day (6:01 PM) for a total duration of three hours and 10 minutes. By 4:30 PM, the maximum area of incremental shadow coverage that would cover the outdoor pool would be approximately 2,510 sf, or approximately 10.9 percent of added coverage. By 6:00 PM, the maximum area of incremental shadow coverage that would cover the outdoor pool would increase to approximately 11,865 sf, or approximately 51.6 percent of added coverage. No incremental shadows would affect the baby pool on this analysis day. It should also be noted that, according to DPR, the outdoor pool is temporarily closed for pool cleaning between the hours of 3:00 PM and 4:00 PM daily.

December 21

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 incremental shadows would be cast by the Proposed Project on portions of the Kosciuszko Pool. No other sunlight-sensitive resource would experience incremental shadow coverage.

The Proposed Project would cast incremental shadows on a small portion of the Kosciuszko Pool for a total duration of two hours and 22 minutes on the December 21 analysis day. Incremental shadows cast by Development Site 2 would enter the outdoor pool area beginning at 12:31 PM and continue until the end of the analysis day (2:53 PM). Prior to 12:31 PM the pool would not experience any incremental shadow coverage. As indicated in **Figure 2-6**, incremental shadows would be minimal and limited to a small portion of the open space's northwestern corner fronting DeKalb Avenue during the early afternoon hours, and would move in an easterly direction throughout the afternoon until the end of the analysis day. Incremental shadow coverage would be minimal in size and the majority of the open space would continue to receive direct sunlight throughout the day.

The areas of Kosciuszko Pool that would experience incremental shadow coverage feature bleachers. However, it should be noted that as the operation of the pool is seasonal and generally open to the public between late June/early July and mid-September, the December 21 representative analysis day falls outside the period in which the pool is accessible to the public.

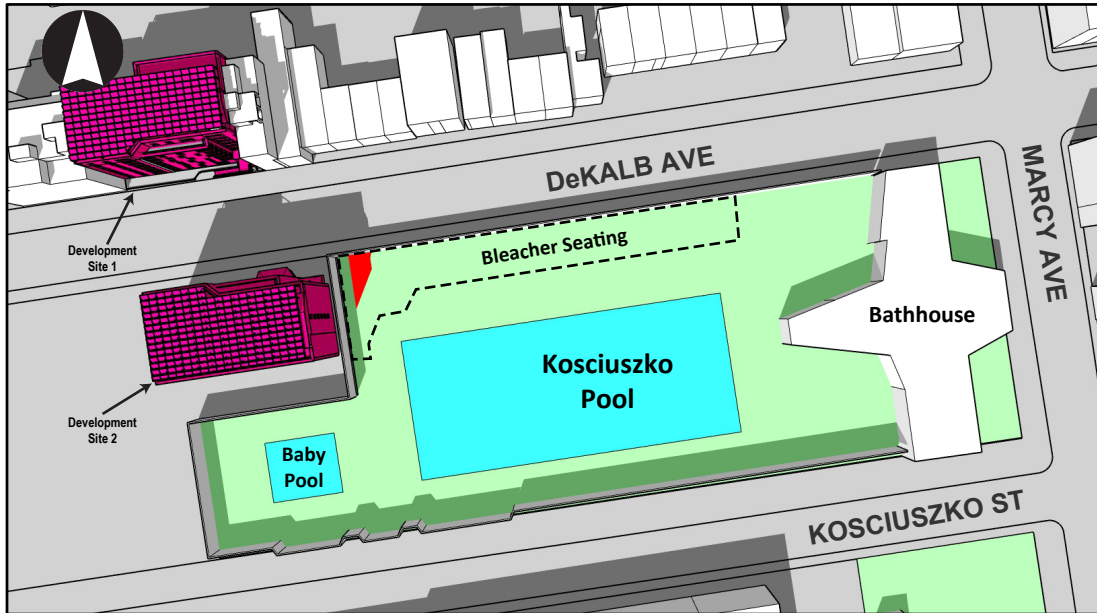
Assessment

Kosciuszko Pool

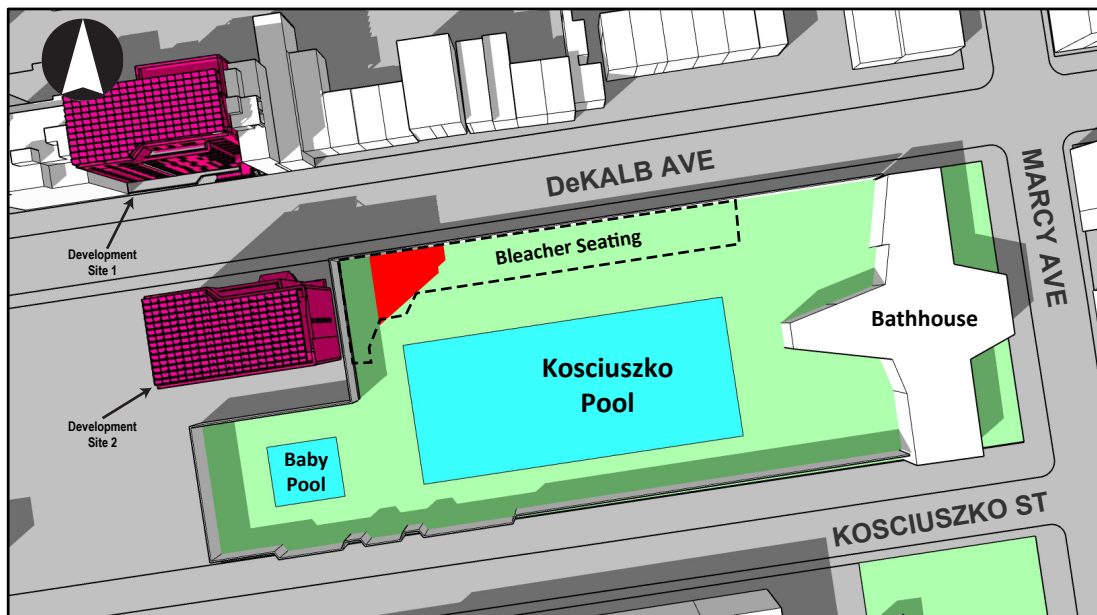
The Proposed Project would cast incremental shadows on portions of the Kosciuszko Pool on all four of the representative analysis days. Incremental shadow durations would range from two hours and 22 minutes on December 21 to five hours and 40 minutes on June 21. Incremental shadow coverage would generally be limited to northwestern and northern portions of the outdoor pool area and would not be cast on a single part of the outdoor pool for an extended period of time (see **Figures 2-3** through **2-6**).

The areas affected by incremental shadows are paved and feature bleacher seating and are predominantly used for passive recreation (see **Figure 2-7**). In addition, small portions of the open space's outdoor pool are also affected by incremental shadows, and are generally used for active recreation, such as swimming. Incremental shadow durations on the outdoor pool would range from one hour and 54 minutes on the May 6/August 6 representative analysis day and three hours and 10 minutes on the June 21 representative analysis day. The maximum area of incremental shadow coverage that would cover the outdoor pool would be approximately 11,865 sf, or approximately 51.6 percent of added coverage (on June 21). Furthermore, at the points of maximum total shadow coverage on the March 21/September 21, May 6/August 6, June 21, and December 21 analysis days (including incremental shadows and shadows cast by existing area buildings), a minimum of 96.6, 47.2, 37.4, and 71.6 percent of the outdoor pool, respectively, would continue to receive sunlight.

Incremental shadow from the Proposed Project would be substantial enough in extent and/or duration on the June 21 and May 6/August 6 analysis days to significantly affect the use of the Kosciuszko Pool. Therefore, the Proposed Actions would result in a significant adverse shadow impact.

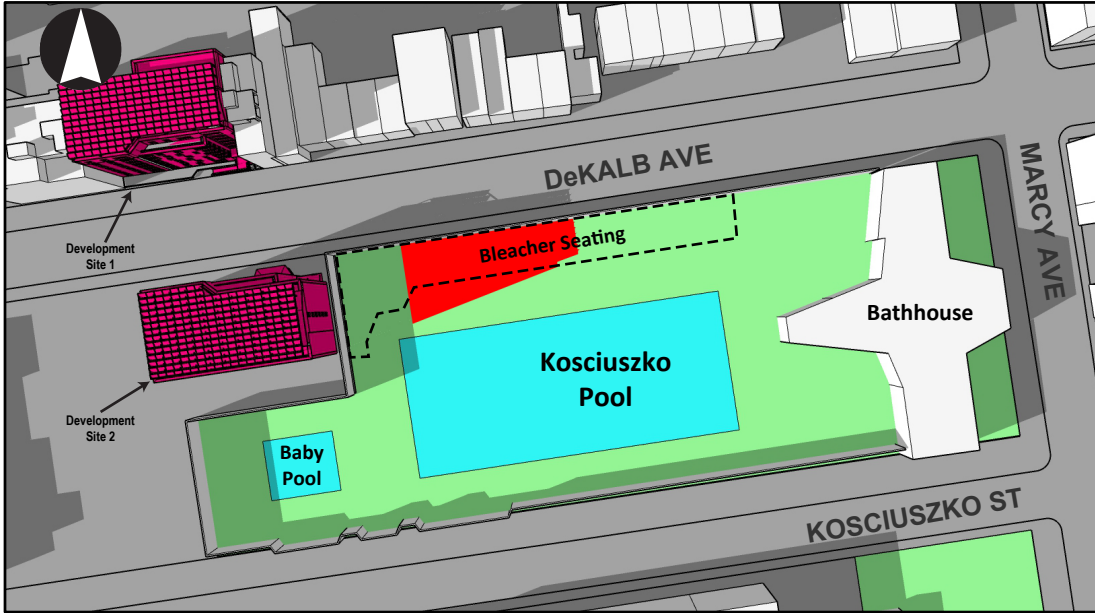


1:00 PM

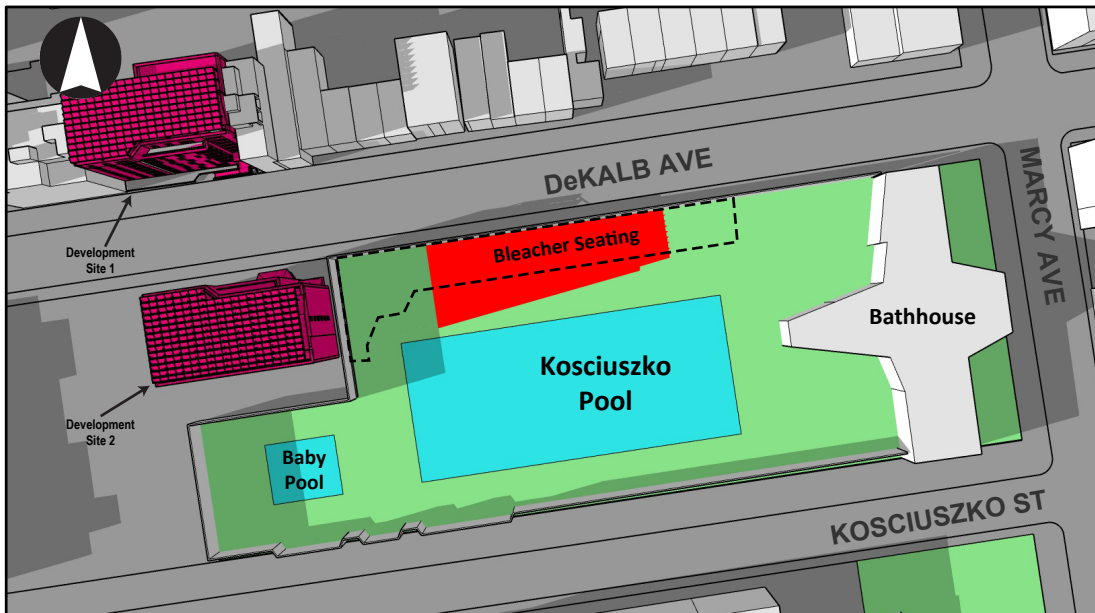


2:30 PM

- Proposed Development
- Open Space
- Pool
- Incremental Shadow

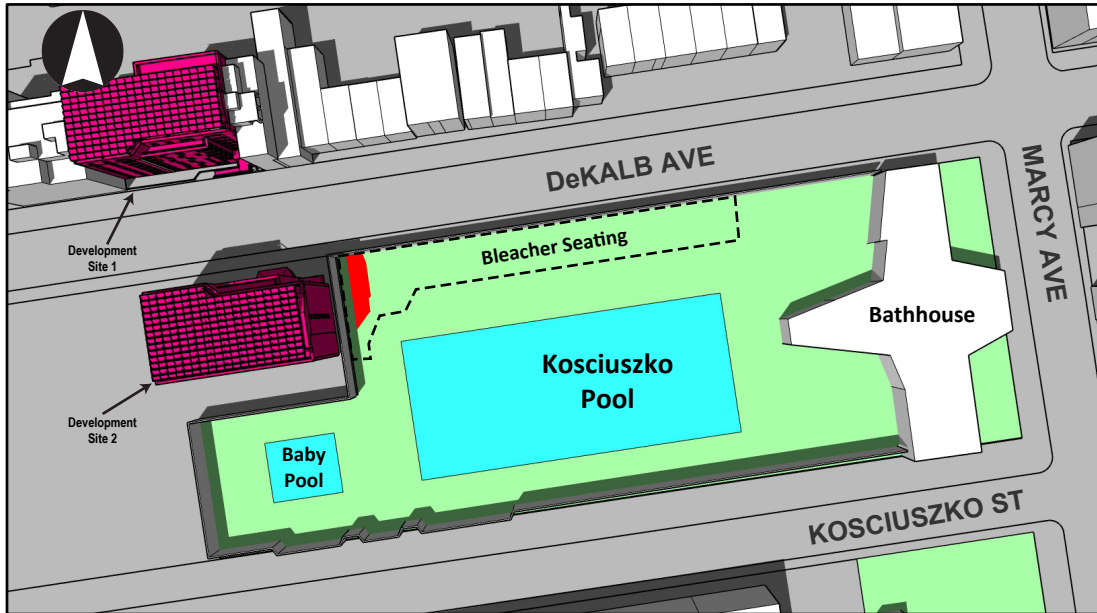


4:00 PM

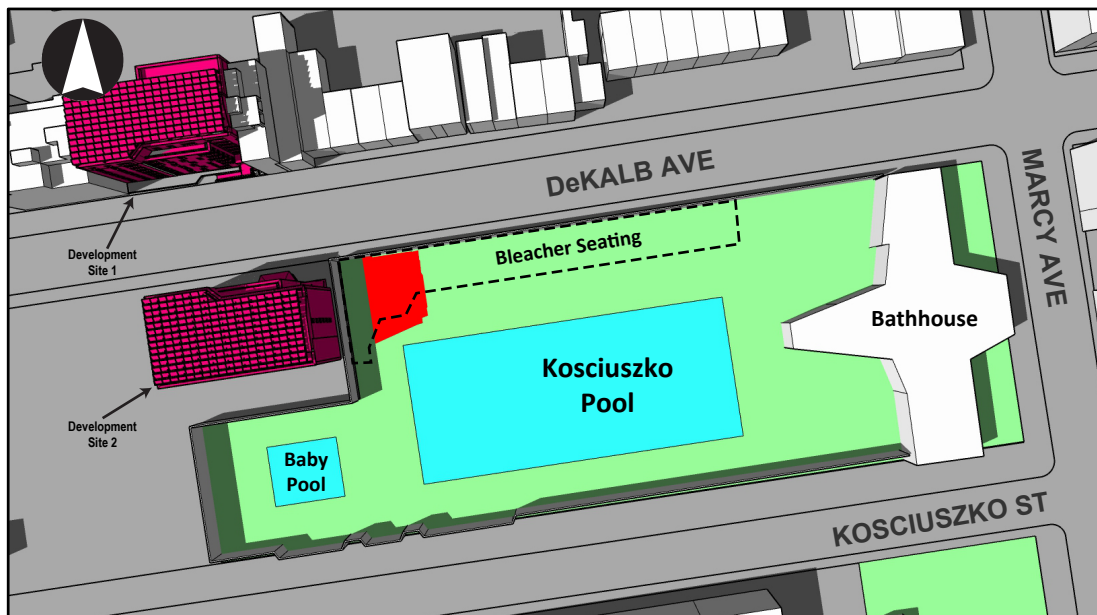


4:29 PM

-  Proposed Development
-  Open Space
-  Pool
-  Incremental Shadow

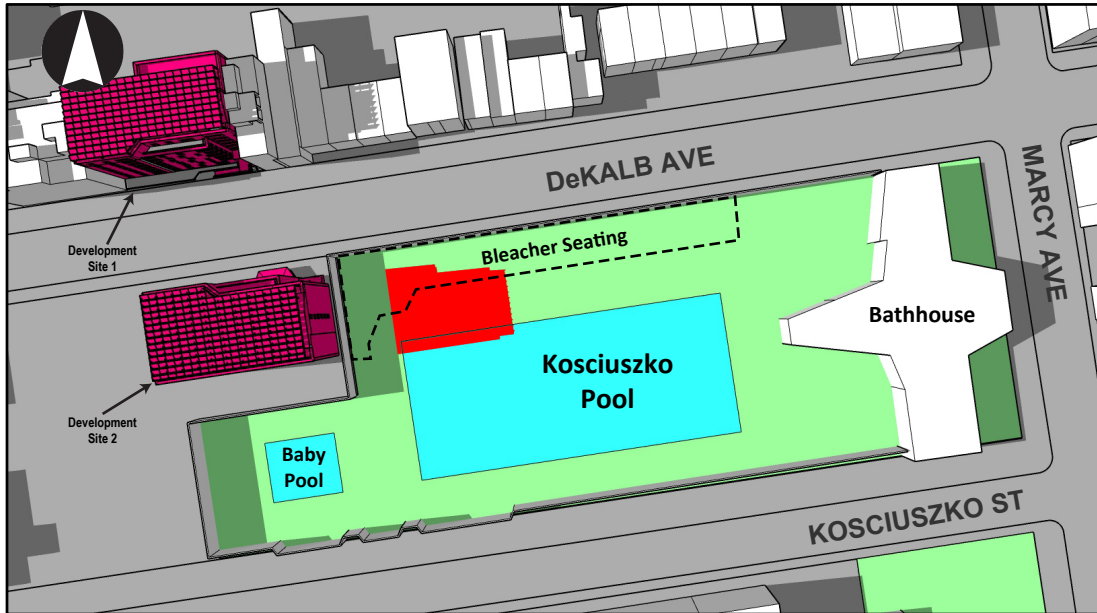


1:00 PM

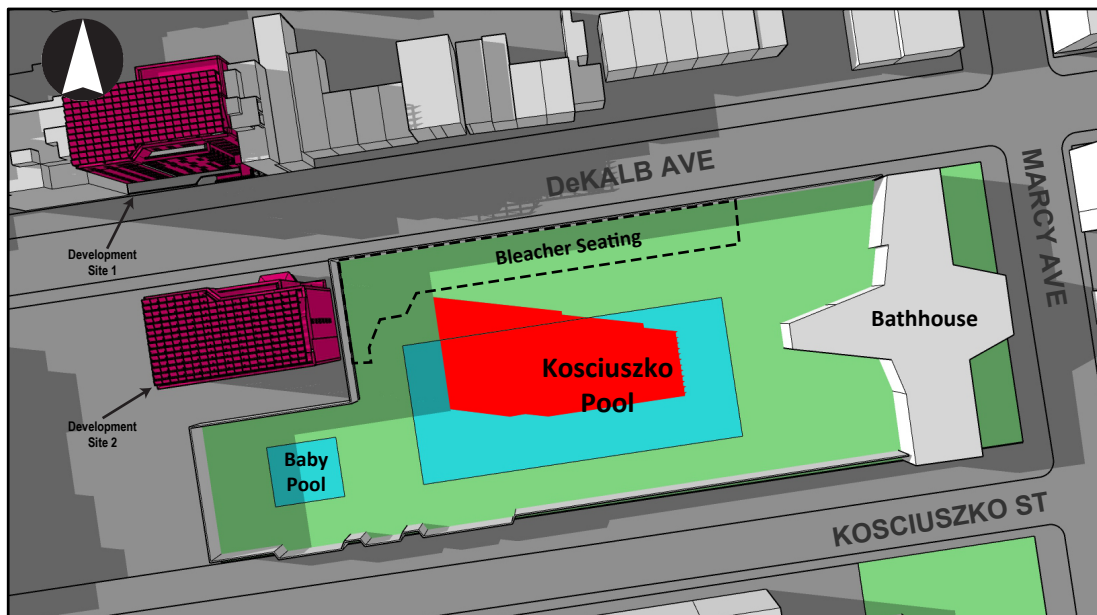


2:30 PM

-  Proposed Development
-  Open Space
-  Pool
-  Incremental Shadow

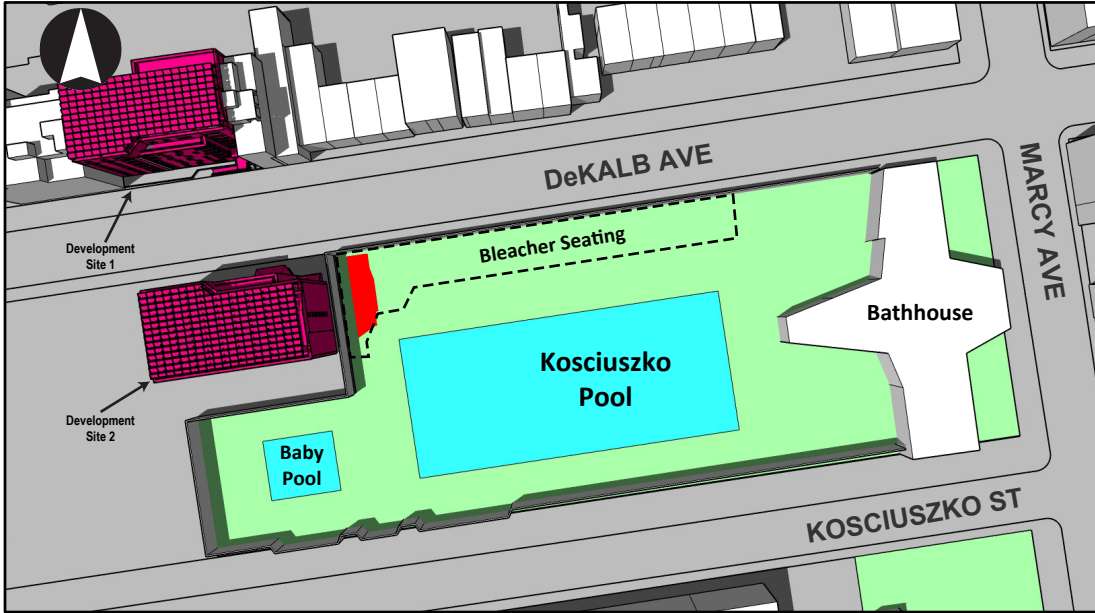


4:00 PM

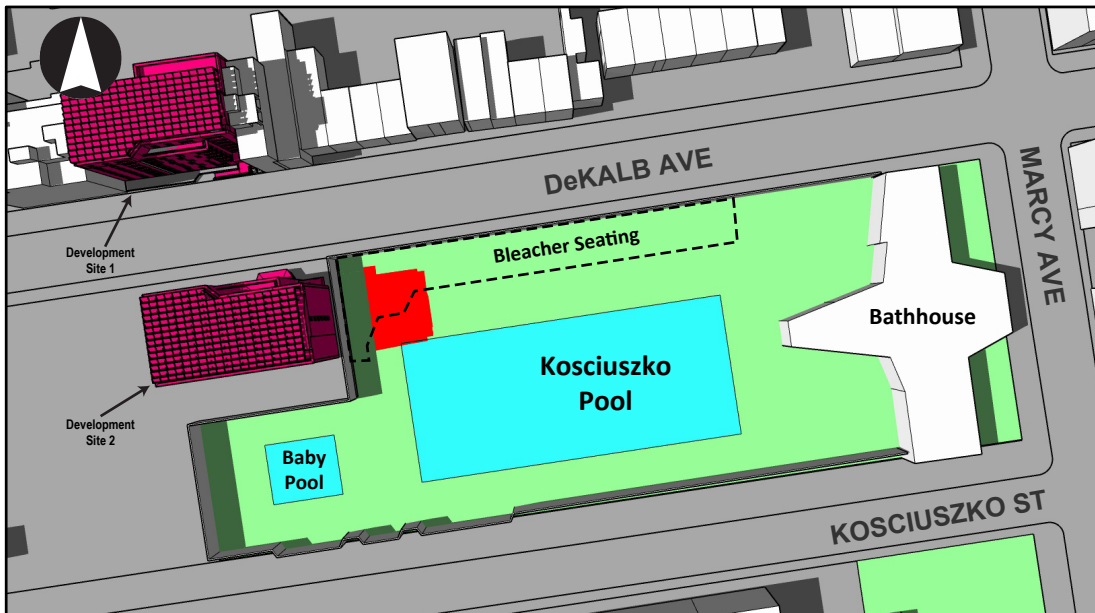


5:15 PM

-  Proposed Development
-  Open Space
-  Pool
-  Incremental Shadow

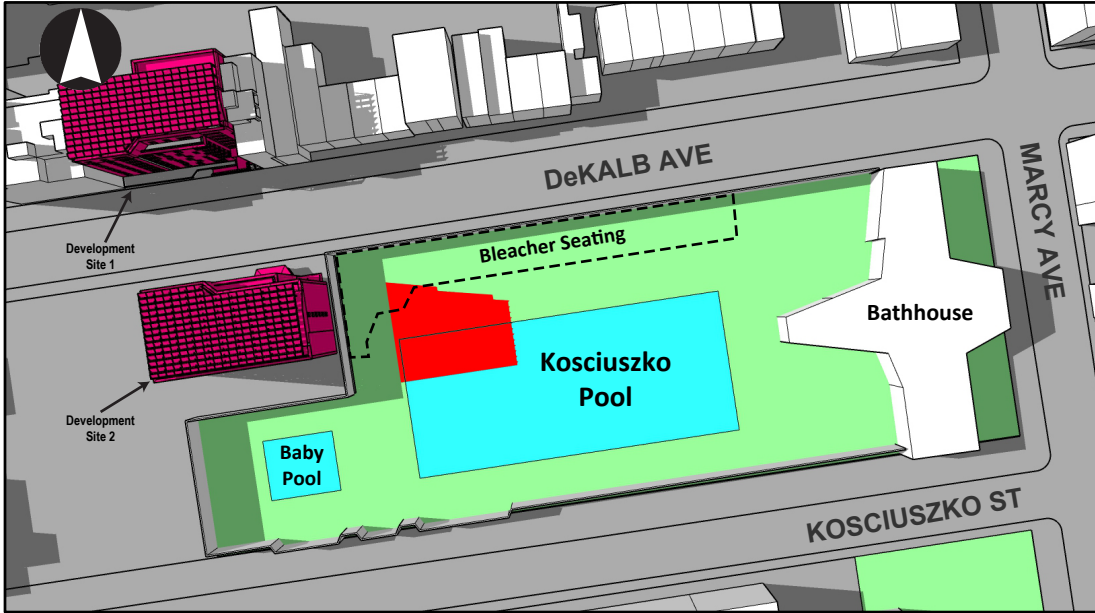


1:30 PM

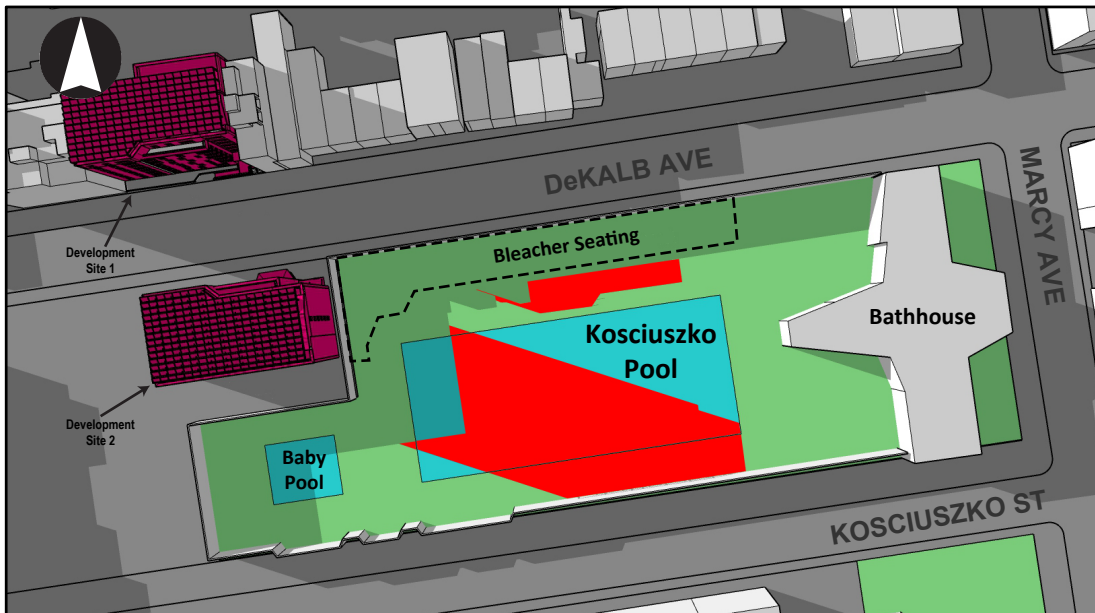


3:00 PM

-  Proposed Development
-  Open Space
-  Pool
-  Incremental Shadow

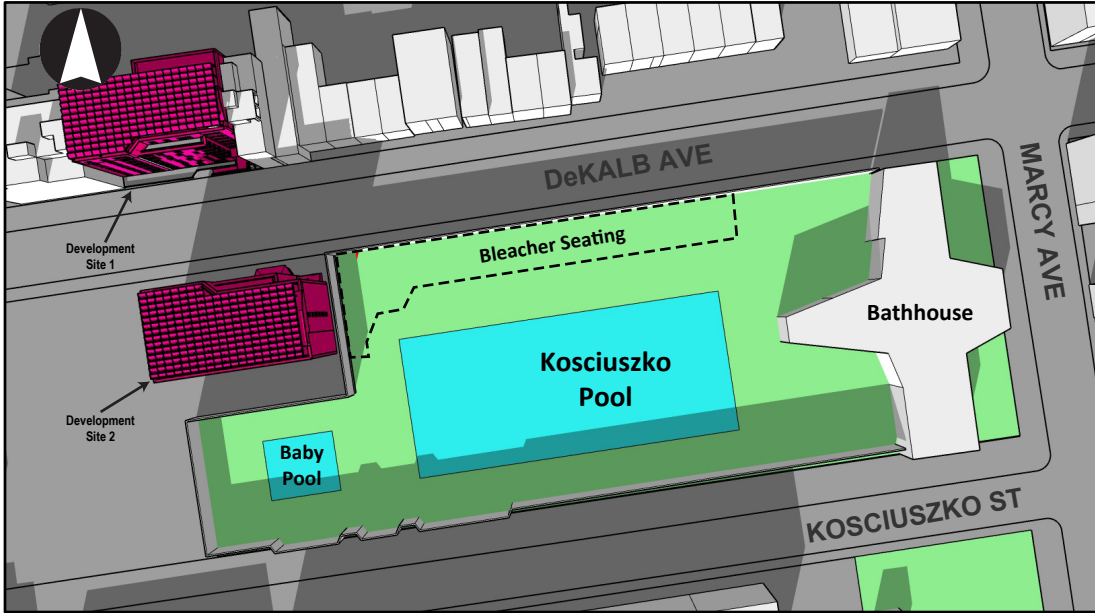


4:30 PM

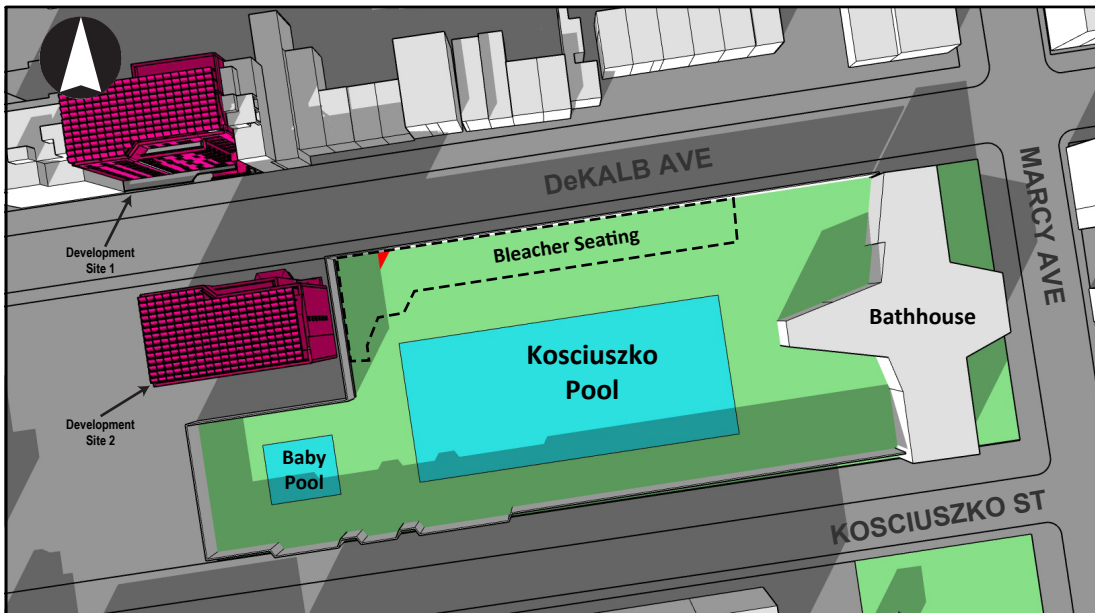


6:00 PM

- Proposed Development
- Open Space
- Pool
- Incremental Shadow

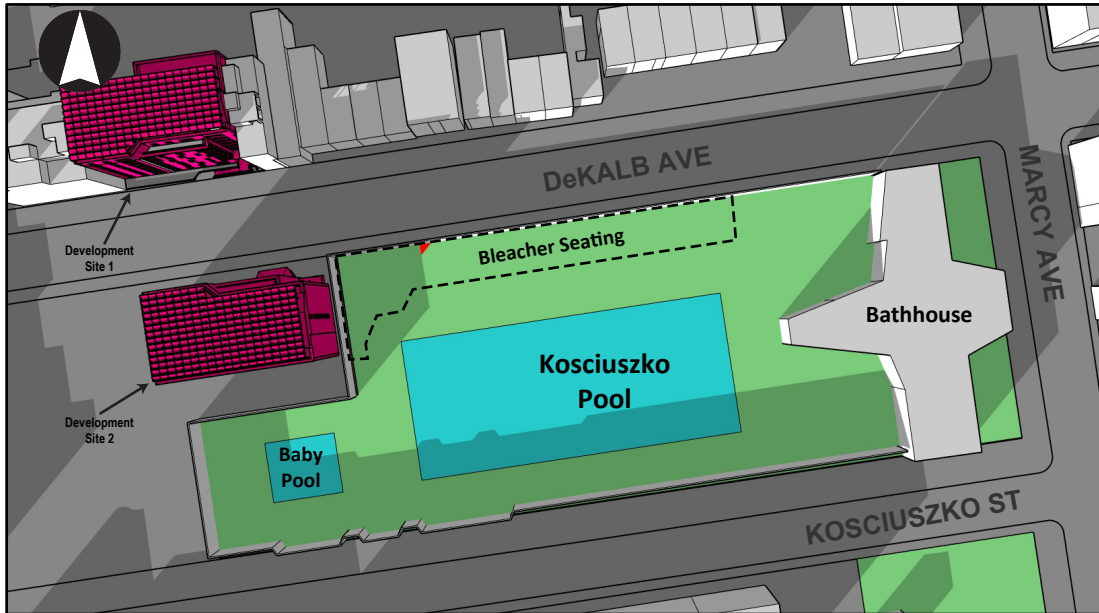


12:45 PM



1:45 PM

-  Proposed Development
-  Open Space
-  Pool
-  Incremental Shadow



2:45 PM

-  Proposed Development
-  Open Space
-  Pool
-  Incremental Shadow



A. INTRODUCTION

In accordance with the 2014 *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. Measures to further mitigate adverse impacts may be evaluated between the DEIS and FEIS. Therefore, the FEIS will include more complete information and commitments on all practicable mitigation measures to be implemented with the Proposed Actions.

B. PRINCIPAL CONCLUSIONS

Shadows

Incremental shadows cast by the Proposed Project would be substantial enough in extent and/or duration to significantly affect the Kosciusko Pool 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.

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; and undertaking additional maintenance to reduce the likelihood of species loss. Potential mitigation measures for the shadows 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.

C. SHADOWS

As detailed in Chapter 3, “Shadows,” incremental shadow from Development Site 2 would cast new shadows that would be substantial enough in extent and/or duration to significantly affect one sunlight-sensitive open space resource: the Kosciuszko Pool on the December 21, March 21/September 21, May 6/August 6, and June 21 analysis days.

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; and undertaking additional maintenance to reduce the likelihood of species loss. To eliminate the significant adverse shadow impact on the Kosciuszko Pool, Development Site 2 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.

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.

A. INTRODUCTION

As described in the 2014 *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 this action. As described in Chapter 1, “Project Description,” the Proposed Actions would facilitate the development of three buildings containing a total of approximately 84 affordable dwelling units (DUs), plus one dwelling unit for a residential superintendent (for a total of approximately 85 DUs), and approximately 2,512 gsf of commercial space in the Bedford-Stuyvesant neighborhood of Brooklyn, Community District (CD) 3.

This chapter considers two alternatives to the Proposed Actions: 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.

B. PRINCIPAL CONCLUSIONS

No-Action Alternative

The No-Action Alternative examines future conditions within the Development Sites, but assumes the absence of the Proposed Actions (i.e., none of the discretionary approvals proposed as part of the Proposed Actions would be adopted). Under the No-Action Alternative by 2023, existing zoning and land uses within the Development Sites would remain unchanged. It is anticipated that the Development Sites would remain vacant. 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 Actions.”

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

No Significant Adverse Impacts Alternative

The No Significant Adverse Impacts Alternative examines a scenario in which the density and other components of the Proposed Actions are changed specifically to avoid the significant adverse impacts associated with the Proposed Actions. The Proposed Actions would result in significant adverse impacts related to shadows that may not be able to be mitigated.

As detailed below, in order to result in no significant adverse impacts, the height of the proposed building on Development Site 2 would have to be reduced to a 23'-6"-tall building. As such, the benefits expected to result from the Proposed Actions – 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 Actions.

C. NO-ACTION ALTERNATIVE

The No-Action Alternative assumes that the Proposed Actions are not implemented. This includes no disposition approval, no approval of an Urban Development Action Area Project (UDAAP), and no approval for construction financing. Conditions under this alternative are similar to the “Future without the Proposed Actions” described in the preceding chapters, which are compared in the following sections to conditions under the Proposed Actions.

Under the No-Action Alternative, it is anticipated that the Development Sites would remain vacant. 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 Actions are provided below.

Shadows

The No-Action Alternative would not introduce a new 80-foot tall building to Development Site 2, therefore, would not result in any incremental shadows cast on the adjacent Kosciuszko Pool. The No-Action Alternative would avoid the significant adverse shadows impacts identified for the Proposed Actions on the Kosciuszko Pool.

D. NO SIGNIFICANT ADVERSE IMPACTS ALTERNATIVE

Based on the analyses presented in other chapters of this EIS, there is the potential for the Proposed Actions to result in significant adverse impacts with respect to shadows. 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 height of the proposed building on Development Site 2 would have to be reduced to a 23' 6" -tall building.

The No Significant Adverse Impacts Alternative would result in the same actions as the future with the Proposed Actions, but considers the magnitude of development that could occur within Development Site 2 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 Actions.

Shadows

Under the RWCDs, the Proposed Actions would result in a significant adverse impact with respect to shadow. To avoid the identified significant adverse shadows impact, the height of the proposed building on Development Site 2 would have to be reduced to a 23' 6" -tall building. As the proposed building on Development Site 2 would need to be substantially shorter, this would compromise the feasibility of the project and proportionally reduce the amount of permanently affordable housing that could be provided by the Proposed Project. Under this alternative, incremental shadows cast by the proposed building on Development Site 2 would not reach the adjacent Kosciuszko Pool. However, reducing the number of affordable housing units developed within Development Site would be less supportive of the goals and objectives of the Proposed Actions.

Chapter 6: 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 *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 Actions, 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 approximately 85 dwelling units and approximately 2,512 gsf of commercial 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 rezoning area. The Proposed Actions 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 Actions would result in more intensive land uses on the Development Sites. However, it is not anticipated that the Proposed Actions 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, industrial and community facility uses, the Proposed Actions would not create the critical mass of uses or populations that would induce additional development outside the Development Sites. Moreover, the Proposed Actions do not include the introduction of new infrastructure or an expansion of infrastructure capacity that would result in indirect development. Therefore, the Proposed Actions would not induce significant new growth in the surrounding area.

DeKalb Commons

Chapter 7: 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 Actions. 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 development under the Proposed Actions 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 Actions 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 Actions 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 Actions (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 Actions 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 Actions. The Proposed Actions 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 of residential core.

APPENDIX A
2019 DeKalb Commons EAS



City Environmental Quality Review

ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) SHORT FORM

FOR UNLISTED ACTIONS ONLY • Please fill out and submit to the appropriate agency ([see instructions](#))

Part I: GENERAL INFORMATION

1. Does the Action Exceed Any Type I Threshold in 6 NYCRR Part 617.4 or 43 RCNY §6-15(A) (Executive Order 91 of 1977, as amended)? YES NO

If "yes," STOP and complete the [FULL EAS FORM](#).

2. Project Name DeKalb Commons

3. Reference Numbers

CEQR REFERENCE NUMBER (to be assigned by lead agency)
18HPD078K

BSA REFERENCE NUMBER (if applicable)

ULURP REFERENCE NUMBER (if applicable)

OTHER REFERENCE NUMBER(S) (if applicable)
(e.g., legislative intro, CAPA)

4a. Lead Agency Information

NAME OF LEAD AGENCY

NYC Department of Housing Preservation and Development (HPD)

NAME OF LEAD AGENCY CONTACT PERSON

Callista J. Nazaire, Director of Environmental Planning

ADDRESS 100 Gold Street; 7-A3C

CITY New York

STATE NY

ZIP 10038

TELEPHONE (212) 863-7826

EMAIL NazaireC@hpd.nyc.gov

4b. Applicant Information

NAME OF APPLICANT

HPD on behalf of DeKalb Commons NY Housing Development Fund Corporation (HDFC)

NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON

Lin Zeng, Director of Brooklyn Planning, HPD

ADDRESS 100 Gold Street, Room 9X

CITY New York

STATE NY

ZIP 10038

TELEPHONE (212) 863-5327

EMAIL zengl@hpd.nyc.gov

5. Project Description

The Applicant is proposing to develop eight vacant lots with a total of three buildings containing a total of approximately 84 dwelling units, plus one unit for the superintendent (total of approximately 85 DUs) in the Bedford-Stuyvesant neighborhood of Brooklyn Community District 3 (the "Proposed Project"). The City-owned vacant sites include a total of eight tax lots and are grouped into three development sites in the Bedford-Stuyvesant neighborhood. Development Site 1 includes four lots to be developed at 633-639 DeKalb Avenue (approximately 37 DUs). Development Site 2 includes three lots to be developed at 648-654 DeKalb Avenue (approximately 44 DUs plus one DU for the superintendent). Development Site 3 includes one lot to be developed at 1187 Fulton Street (approximately 3 DUs and 2,512 gsf of retail). This proposal involves an application by HPD for several actions (the "Proposed Actions") subject to City Planning Commission approval including the disposition of City-owned property to a developer to be selected by HPD, designation of an Urban Development Action Area, and project approval of an Urban Development Action Area Project (UDAAP). Construction of the Proposed Project is expected to be completed in 2021.

Project Location

BOROUGH Brooklyn

COMMUNITY DISTRICT(S) 3

STREET ADDRESS 633-639 DeKalb Avenue; 648-654 DeKalb Avenue; 1187 Fulton Street

TAX BLOCK(S) AND LOT(S) Block 2000, Lot 43; Block 1774 Lots 74, 75, 76, 77; Block 1779, Lots 22, 24, 26

ZIP CODE 11216

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS DeKalb Avenue between Marcy and Nostrand Avenues; Fulton Street between Bedford Avenue and Spencer Place

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY
R7D/C2-4; R6A

ZONING SECTIONAL MAP NUMBER 17a

6. Required Actions or Approvals (check all that apply)

City Planning Commission: YES NO

UNIFORM LAND USE REVIEW PROCEDURE (ULURP)

CITY MAP AMENDMENT

ZONING CERTIFICATION

CONCESSION

ZONING MAP AMENDMENT

ZONING AUTHORIZATION

UDAAP

ZONING TEXT AMENDMENT

ACQUISITION—REAL PROPERTY

REVOCABLE CONSENT

SITE SELECTION—PUBLIC FACILITY DISPOSITION—REAL PROPERTY FRANCHISE
 HOUSING PLAN & PROJECT OTHER, explain:
 SPECIAL PERMIT (if appropriate, specify type: modification; renewal; other); EXPIRATION DATE:

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

Board of Standards and Appeals: YES NO

VARIANCE (use)
 VARIANCE (bulk)
 SPECIAL PERMIT (if appropriate, specify type: modification; renewal; other); EXPIRATION DATE:

SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

Department of Environmental Protection: YES NO If "yes," specify:

Other City Approvals Subject to CEQR (check all that apply)

LEGISLATION FUNDING OF CONSTRUCTION, specify:
 RULEMAKING POLICY OR PLAN, specify:
 CONSTRUCTION OF PUBLIC FACILITIES FUNDING OF PROGRAMS, specify:
 384(b)(4) APPROVAL PERMITS, specify:
 OTHER, explain:

Other City Approvals Not Subject to CEQR (check all that apply)

PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC) LANDMARKS PRESERVATION COMMISSION APPROVAL
 OTHER, explain:

State or Federal Actions/Approvals/Funding: YES NO If "yes," specify:

7. Site Description: *The directly affected area consists of the project site and the area subject to any change in regulatory controls. Except where otherwise indicated, provide the following information with regard to the directly affected area.*

Graphics: *The following graphics must be attached and each box must be checked off before the EAS is complete. Each map must clearly depict the boundaries of the directly affected area or areas and indicate a 400-foot radius drawn from the outer boundaries of the project site. Maps may not exceed 11 x 17 inches in size and, for paper filings, must be folded to 8.5 x 11 inches.*

SITE LOCATION MAP ZONING MAP SANBORN OR OTHER LAND USE MAP
 TAX MAP FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
 PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

Total directly affected area (sq. ft.): 22,596 Waterbody area (sq. ft) and type: N/A
 Roads, buildings, and other paved surfaces (sq. ft.): N/A Other, describe (sq. ft.): 22,596 sf vacant

8. Physical Dimensions and Scale of Project (if the project affects multiple sites, provide the total development facilitated by the action)

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 91,461 gsf (total)

NUMBER OF BUILDINGS: 3

GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 633-639 DeKalb Ave: 39,604 gsf; 648-654 DeKalb Ave: 44,769 gsf; 1187 Fulton St: 7,088 gsf

HEIGHT OF EACH BUILDING (ft.): 633-639 DeKalb Ave: 69'-6" to roof (80'-9" to mechanical bulkhead/solar panels); 648-654 DeKalb Ave: 69'-6" to roof (80'-9" to mechanical bulkhead/solar panels); 1187 Fulton St: 45' to roof (55' to mechanical bulkhead)

NUMBER OF STORIES OF EACH BUILDING: 633-639 DeKalb Ave: 7 stories; 648-654 DeKalbe Ave: 7 stories; 1187 Fulton St: 4 stories

Does the proposed project involve changes in zoning on one or more sites? YES NO

If "yes," specify: The total square feet owned or controlled by the applicant:
The total square feet not owned or controlled by the applicant:

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? YES NO

If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):

AREA OF TEMPORARY DISTURBANCE: 22,596 sq. ft. (width x length) VOLUME OF DISTURBANCE: TBD cubic ft. (width x length x depth)
 AREA OF PERMANENT DISTURBANCE: 22,596 sq. ft. (width x length)

Description of Proposed Uses (please complete the following information as appropriate)

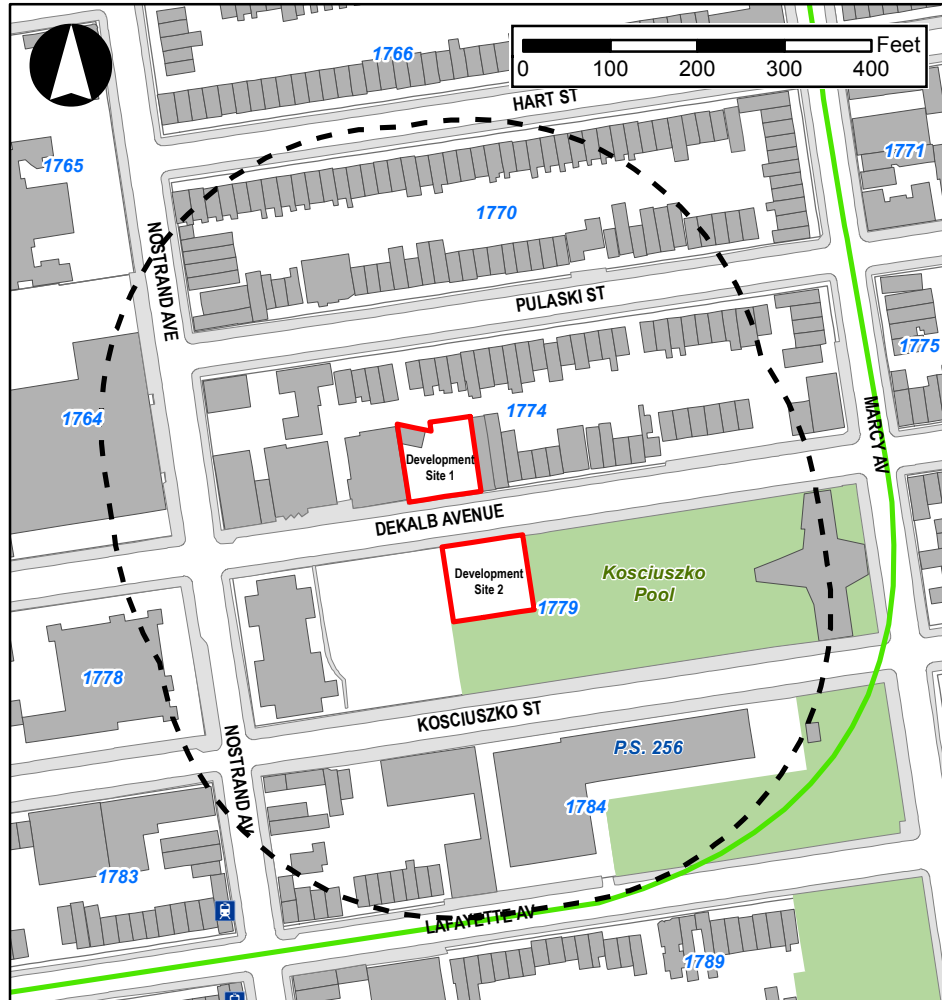
Residential

Commercial

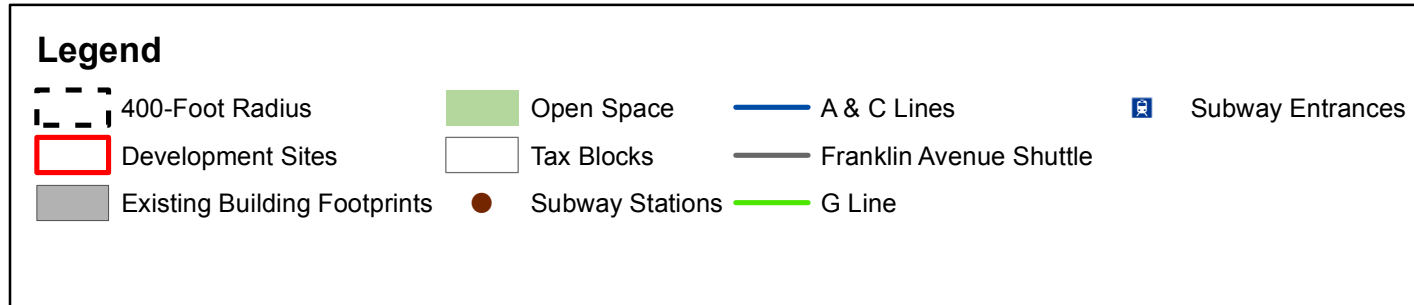
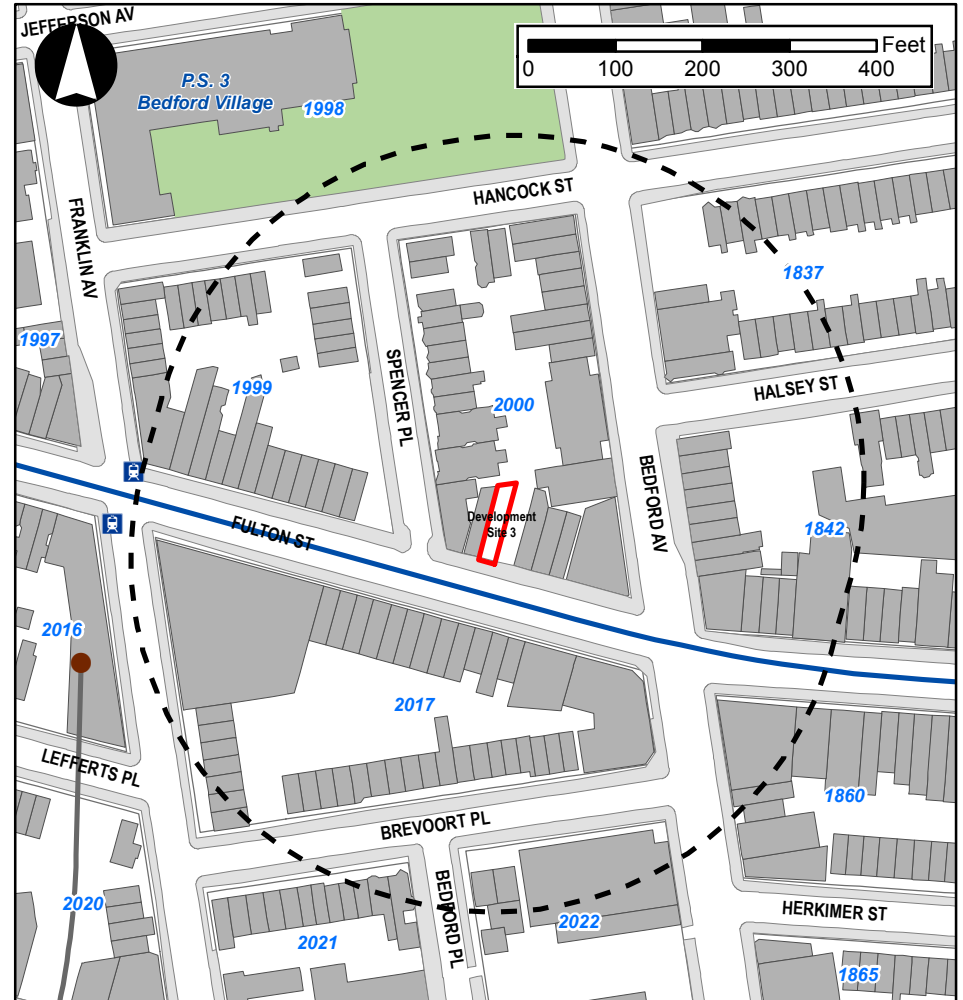
Community Facility

Industrial/Manufacturing

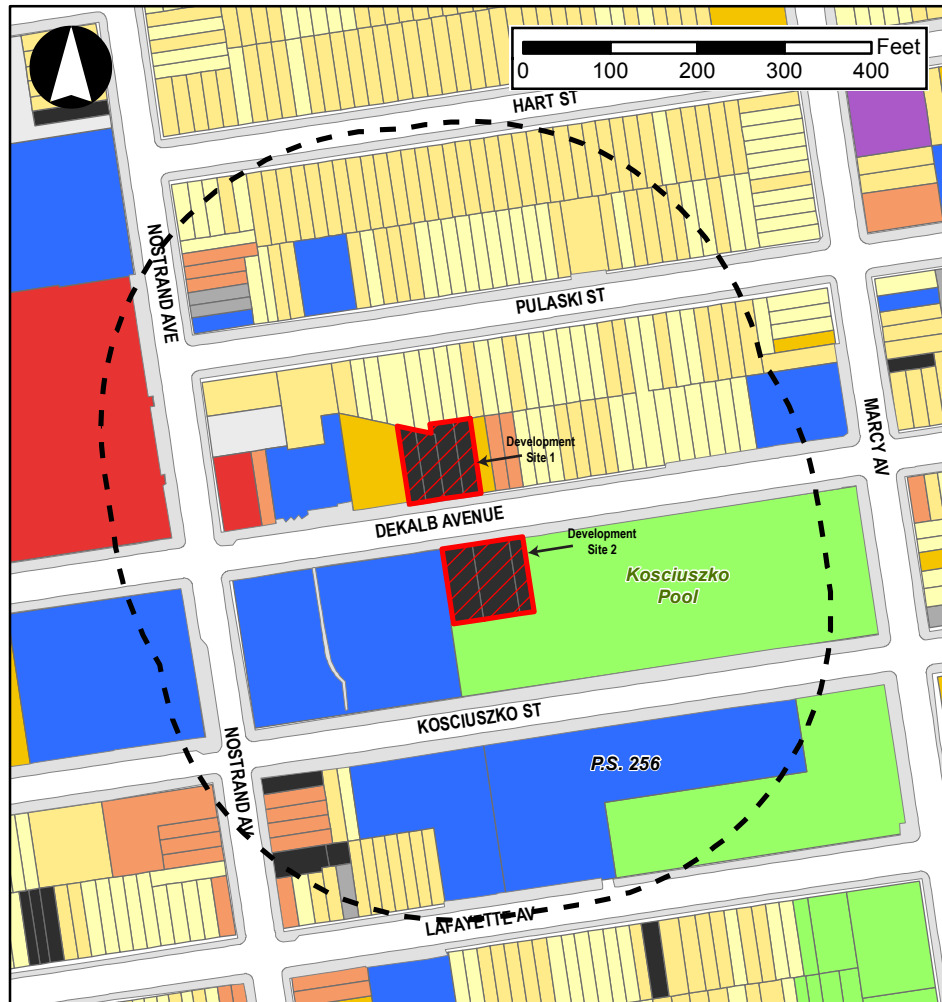
633-639 & 648-654 DeKalb Avenue:



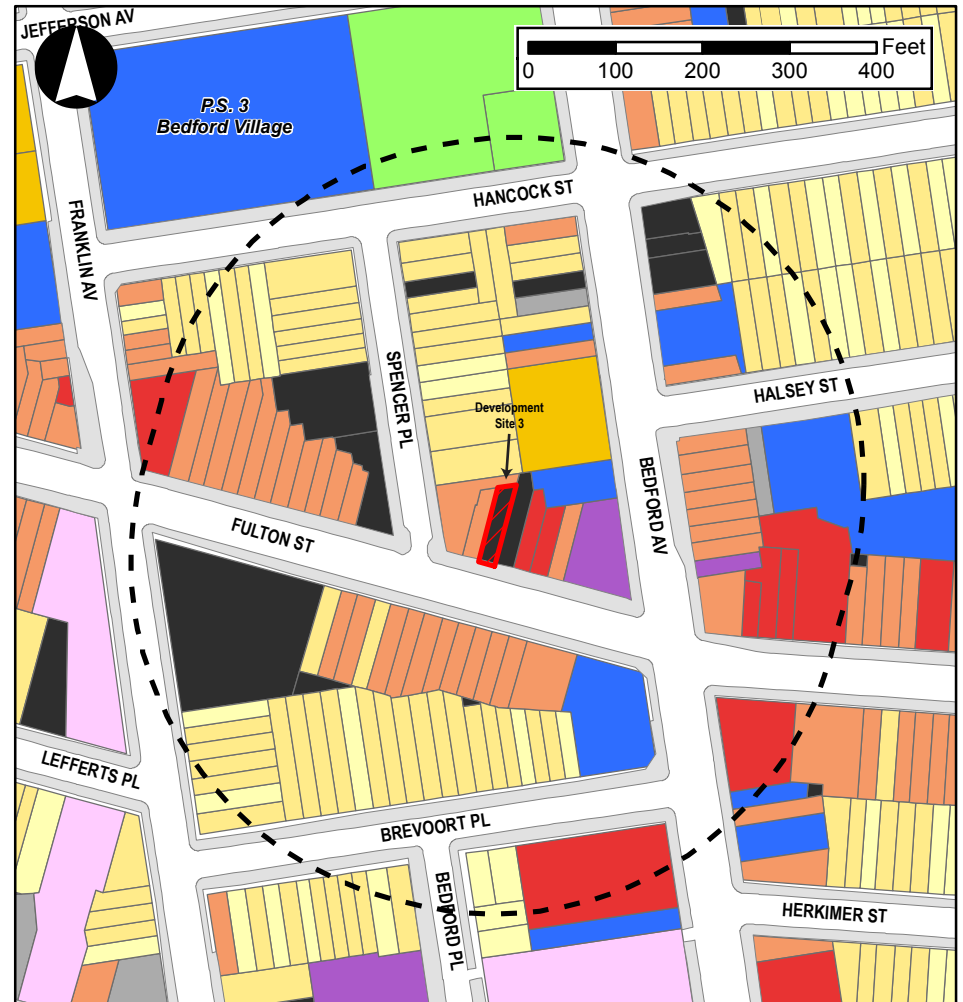
1187 Fulton Street:



633-639 & 648-654 DeKalb Avenue:



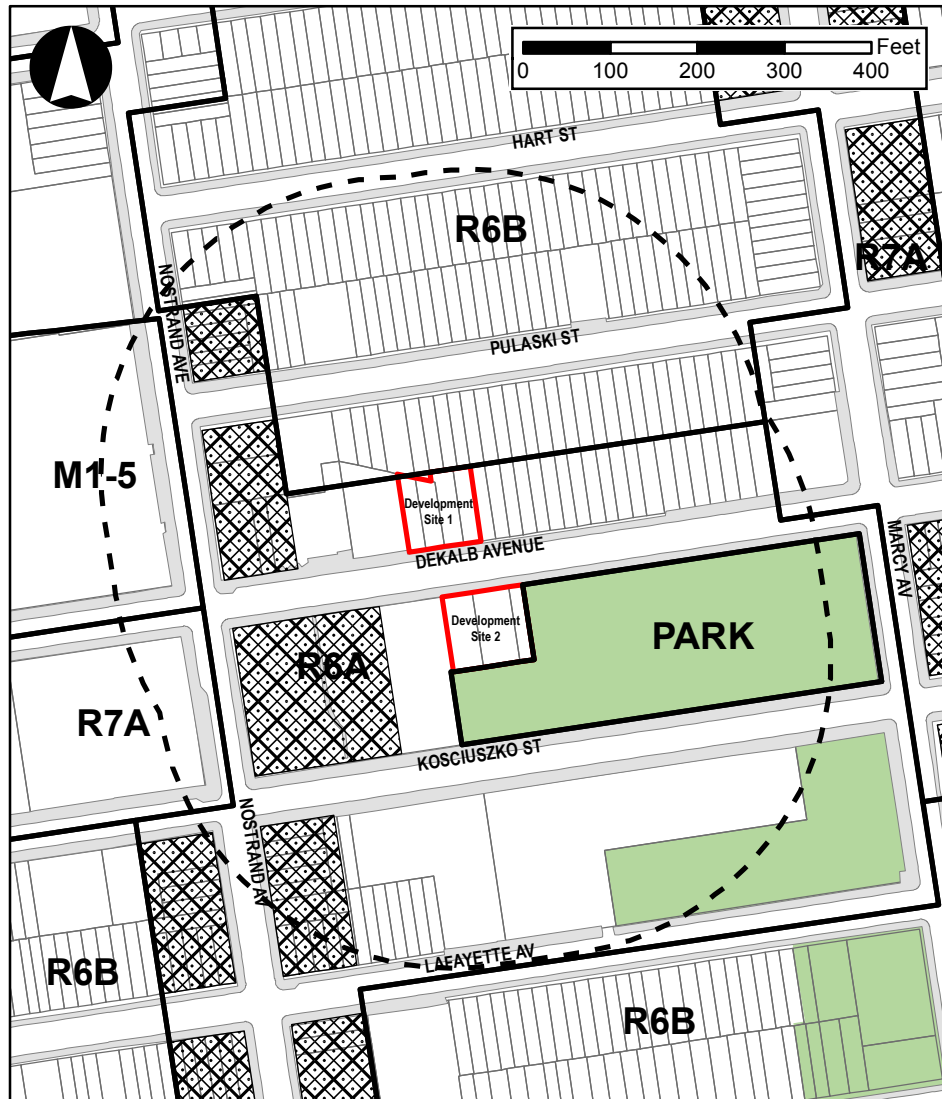
1187 Fulton Street:



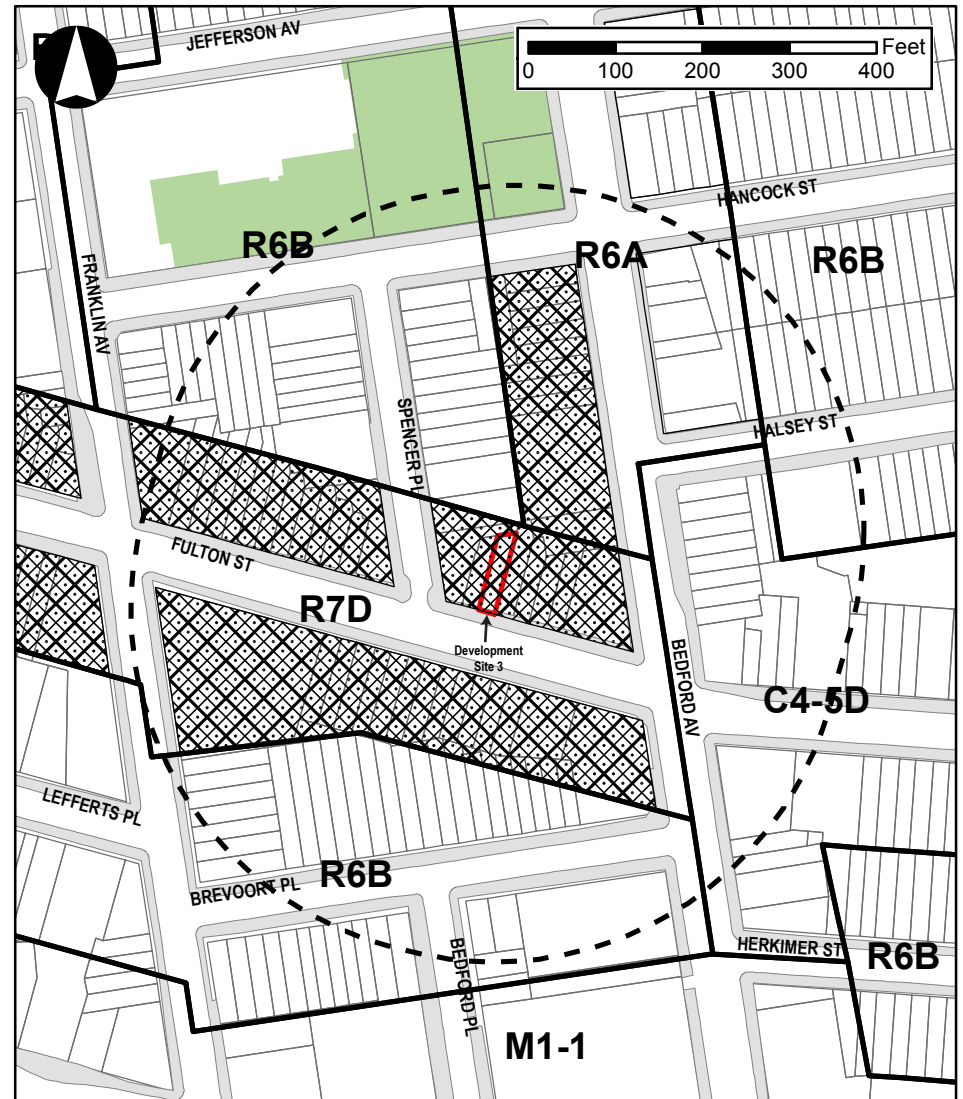
Legend

- 400-Foot Radius
- Development Sites
- Land Use**
- One & Two Family Buildings
- Multi-Family Walkup Buildings
- Multi-Family Elevator Buildings
- Mixed Commercial/Residential Buildings
- Commercial/Office Buildings
- Industrial/Manufacturing
- Transportation/Utility
- Public Facilities & Institutions
- Open Space
- Parking Facilities
- Vacant Land
- All Others or No Data

633-639 & 648-654 DeKalb Avenue:



1187 Fulton Street:



Legend

- 400-Foot Radius
- Development Sites
- Zoning District Boundaries
- C2-4 Commercial Overlay
- Open Space



NYC Digital Tax Map

Effective Date : 12-05-2008 09:50:31
End Date : Current
Brooklyn Block: 2000

Legend

- Streets
- Miscellaneous Text
- ↓ Possession Hooks
- - - - - Boundary Lines
- ↓ Lot Face Possession Hooks
- Regular
- - - - - Underwater
- Tax Lot Polygon
- Condo Number
- Tax Block Polygon

Development Site





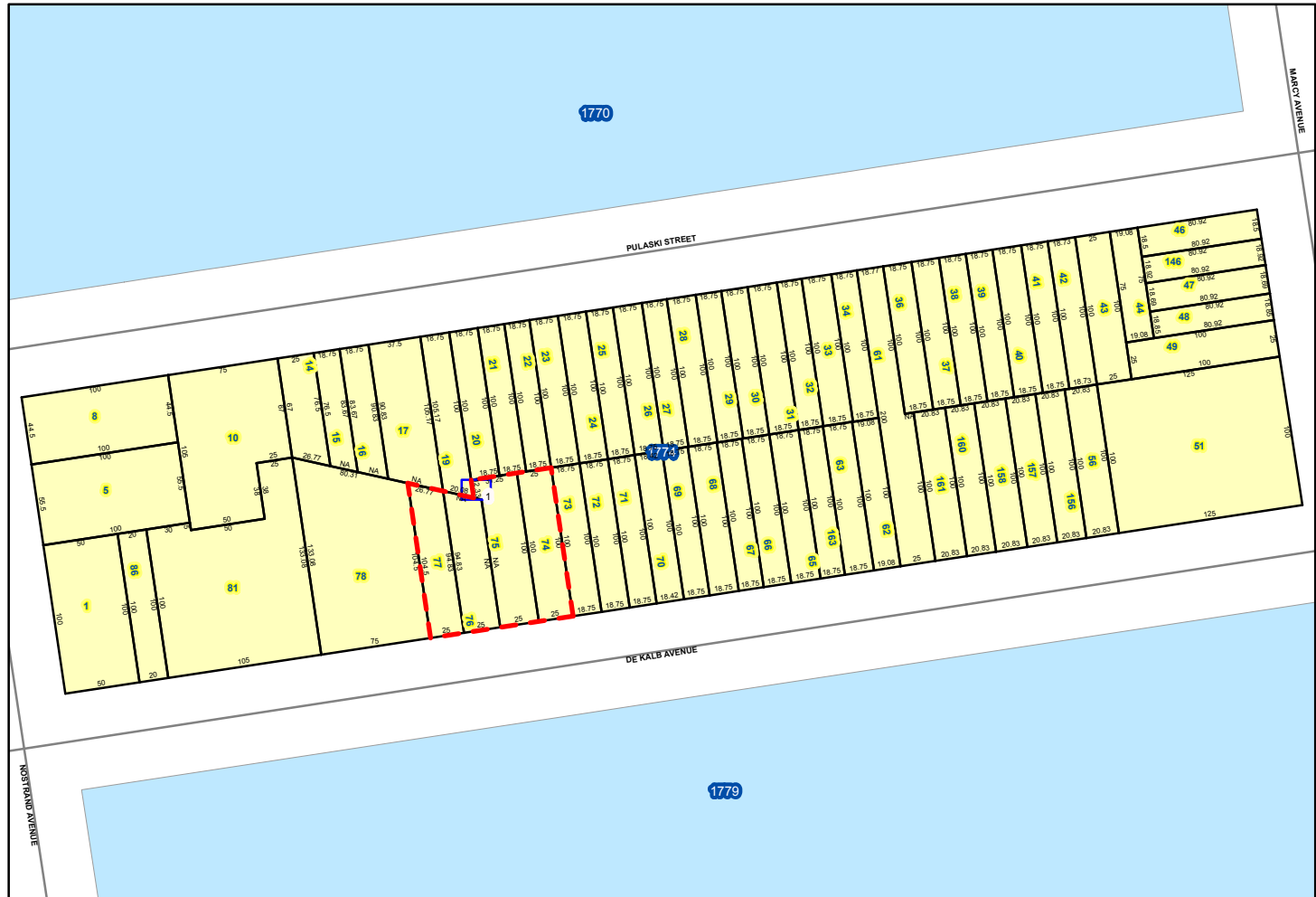
NYC Digital Tax Map

Effective Date : 08-04-2014 15:31:37
End Date : Current
Brooklyn Block: 1774

Legend

- Streets
- Miscellaneous Text
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- - - - - Boundary Lines
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- Regular
- - - - - Underwater
- Tax Lot Polygon
- Condo Number
- Tax Block Polygon

Development Site





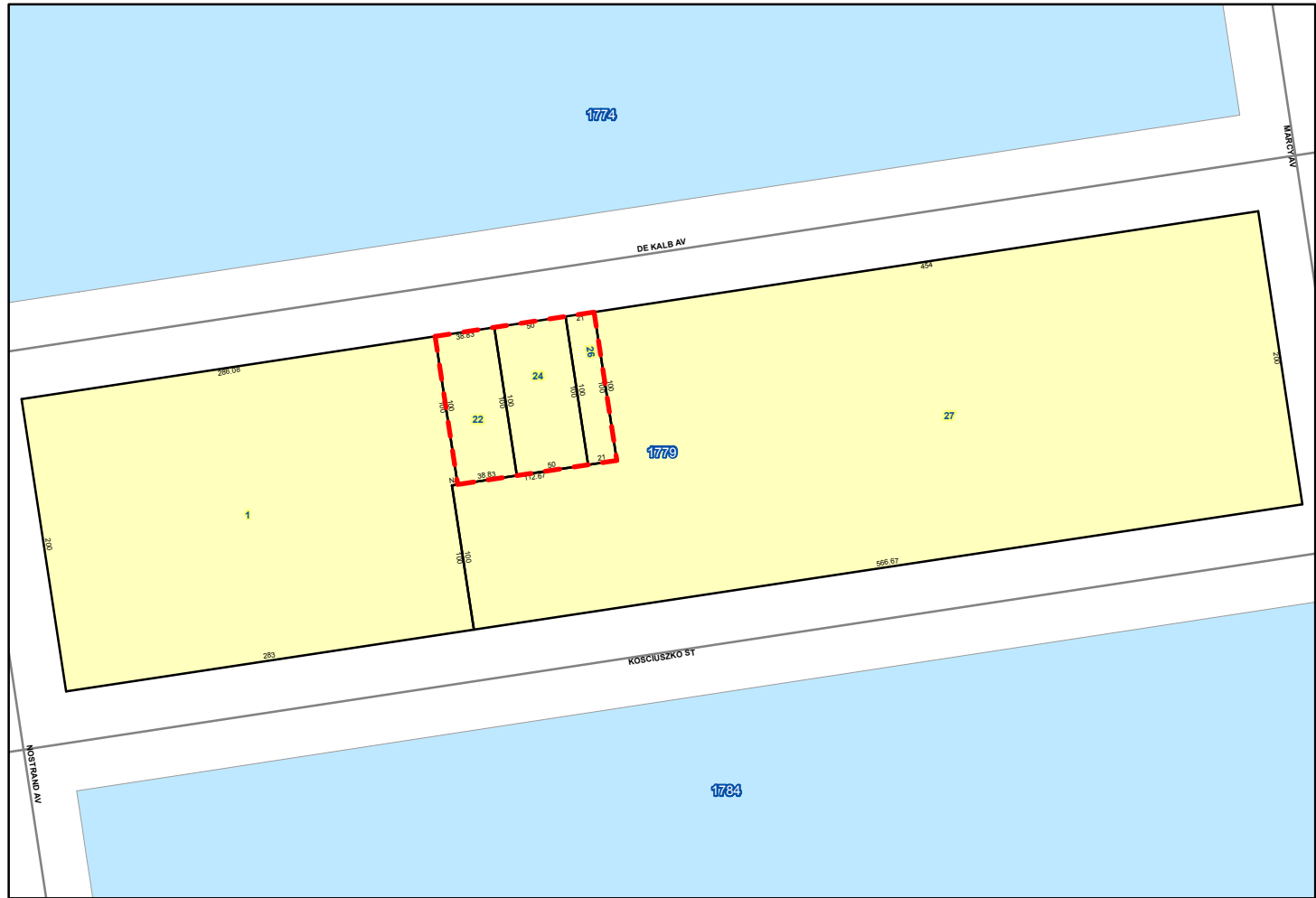
NYC Digital Tax Map

Effective Date : 12-04-2008 18:42:10
End Date : Current
Brooklyn Block: 1779

Legend

- Streets
- Miscellaneous Text
- ↓ Possession Hooks
- - - - - Boundary Lines
- ↓ Lot Face Possession Hooks
- Regular
- - - - - Underwater
- Tax Lot Polygon
- Condo Number
- Tax Block Polygon

Development Site



Size (in gross sq. ft.)	88,949 gsf	2,512 gsf	N/A	N/A
Type (e.g., retail, office, school)	85 units	Local retail	N/A	N/A
Does the proposed project increase the population of residents and/or on-site workers? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 204 NUMBER OF ADDITIONAL WORKERS: 7 Provide a brief explanation of how these numbers were determined: Based on 2011-2015 ACS Census Data - 2.41 Persons Per Household for Brooklyn CD 3; 3 employees per 1,000 sf of retail				
Does the proposed project create new open space? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If "yes," specify size of project-created open space: sq. ft.				
Has a No-Action scenario been defined for this project that differs from the existing condition? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If "yes," see Chapter 2 , "Establishing the Analysis Framework" and describe briefly:				
9. Analysis Year CEQR Technical Manual Chapter 2				
ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2021				
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18-21				
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF MULTIPLE PHASES, HOW MANY?				
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:				
10. Predominant Land Use in the Vicinity of the Project (check all that apply) <input checked="" type="checkbox"/> RESIDENTIAL <input type="checkbox"/> MANUFACTURING <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> PARK/FOREST/OPEN SPACE <input checked="" type="checkbox"/> OTHER, specify: Institutional				

Part II: TECHNICAL ANALYSIS

INSTRUCTIONS: For each of the analysis categories listed in this section, assess the proposed project’s impacts based on the thresholds and criteria presented in the CEQR Technical Manual. Check each box that applies.

- If the proposed project can be demonstrated not to meet or exceed the threshold, check the “no” box.
- If the proposed project will meet or exceed the threshold, or if this cannot be determined, check the “yes” box.
- For each “yes” response, provide additional analyses (and, if needed, attach supporting information) based on guidance in the CEQR Technical Manual to determine whether the potential for significant impacts exists. Please note that a “yes” answer does not mean that an EIS must be prepared—it means that more information may be required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to provide additional information to support the Short EAS Form. For example, if a question is answered “no,” an agency may request a short explanation for this response.

	YES	NO
1. LAND USE, ZONING, AND PUBLIC POLICY: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Is there the potential to affect an applicable public policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) If “yes,” to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If “yes,” complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City’s Waterfront Revitalization Program boundaries ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If “yes,” complete the Consistency Assessment Form .		
2. SOCIOECONOMIC CONDITIONS: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
o Generate a net increase of 200 or more residential units?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Generate a net increase of 200,000 or more square feet of commercial space?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Directly displace more than 500 residents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Directly displace more than 100 employees?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Affect conditions in a specific industry?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. COMMUNITY FACILITIES: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
o Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Indirect Effects		
o Child Care Centers: Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Libraries: Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Public Schools: Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Health Care Facilities and Fire/Police Protection: Would the project result in the introduction of a sizeable new neighborhood?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. OPEN SPACE: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Is the project located within an under-served area in the Bronx , Brooklyn , Manhattan , Queens , or Staten Island ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If “yes,” would the proposed project generate more than 50 additional residents or 125 additional employees?	<input type="checkbox"/>	<input type="checkbox"/>
(c) Is the project located within a well-served area in the Bronx , Brooklyn , Manhattan , Queens , or Staten Island ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If “yes,” would the proposed project generate more than 350 additional residents or 750 additional employees?	<input type="checkbox"/>	<input type="checkbox"/>
(d) If the project is located in an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	YES	NO
5. SHADOWS: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. HISTORIC AND CULTURAL RESOURCES: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. See Appendix A		
7. URBAN DESIGN AND VISUAL RESOURCES: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. NATURAL RESOURCES: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," complete the Jamaica Bay Watershed Form , and submit according to its instructions .		
9. HAZARDOUS MATERIALS: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Does the proposed project site have existing institutional controls (e.g., (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (e.g., gas stations, oil storage facilities, heating oil storage)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Has a Phase I Environmental Site Assessment been performed for the site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See Attachment B		
10. WATER AND SEWER INFRASTRUCTURE: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) If the proposed project located in a separately sewered area , would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas , including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	YES	NO
(f) Would the proposed project be located in an area that is partially sewerred or currently unsewerred?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. SOLID WASTE AND SANITATION SERVICES: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14 , the project's projected operational solid waste generation is estimated to be (pounds per week): 4,021		
o Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. ENERGY: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15 , the project's projected energy use is estimated to be (annual BTUs): 11,588,109		
(b) Would the proposed project affect the transmission or generation of energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. TRANSPORTATION: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
o Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	<input type="checkbox"/>	<input type="checkbox"/>
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? **It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.	<input type="checkbox"/>	<input type="checkbox"/>
o Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	<input type="checkbox"/>	<input type="checkbox"/>
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	<input type="checkbox"/>	<input type="checkbox"/>
o Would the proposed project result in more than 200 pedestrian trips per project peak hour?	<input type="checkbox"/>	<input type="checkbox"/>
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	<input type="checkbox"/>	<input type="checkbox"/>
14. AIR QUALITY: CEQR Technical Manual Chapter 17		
(a) <i>Mobile Sources:</i> Would the proposed project result in the conditions outlined in Section 210 in Chapter 17 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) <i>Stationary Sources:</i> Would the proposed project result in the conditions outlined in Section 220 in Chapter 17 ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17 ? (Attach graph as needed) See Attachment B	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Does the proposed project involve multiple buildings on the project site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) Does the proposed project site have existing institutional controls (e.g., (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15. GREENHOUSE GAS EMISSIONS: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project fundamentally change the City's solid waste management system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18 ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16. NOISE: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Does the proposed project site have existing institutional controls (e.g., (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17. PUBLIC HEALTH: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality;	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	YES	NO
Hazardous Materials; Noise?		

(b) If “yes,” explain why an assessment of public health is or is not warranted based on the guidance in [Chapter 20](#), “Public Health.” Attach a preliminary analysis, if necessary. As discussed in detail in the EAS, the Proposed Actions are not anticipated to result in any significant adverse impacts to air quality, noise, or hazardous materials. As such, a detailed assessment of public health is not warranted.

18. NEIGHBORHOOD CHARACTER: [CEQR Technical Manual Chapter 21](#)

(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?

<input checked="" type="checkbox"/>	<input type="checkbox"/>
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(b) If “yes,” explain why an assessment of neighborhood character is or is not warranted based on the guidance in [Chapter 21](#), “Neighborhood Character.” Attach a preliminary analysis, if necessary. The Proposed Project does not have the potential to result in significant adverse impacts to land use, zoning, and public policy, socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, or noise. Nor would the Proposed Project result in a combination of moderate effects to several elements that cumulatively may affect neighborhood character. Therefore, an assessment of neighborhood character is not warranted.

19. CONSTRUCTION: [CEQR Technical Manual Chapter 22](#)

(a) Would the project’s construction activities involve:

<input type="checkbox"/> Construction activities lasting longer than two years?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc.)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> The operation of several pieces of diesel equipment in a single location at peak construction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Closure of a community facility or disruption in its services?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Activities within 400 feet of a historic or cultural resource?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Disturbance of a site containing or adjacent to a site containing natural resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

(b) If any boxes are checked “yes,” explain why a preliminary construction assessment is or is not warranted based on the guidance in [Chapter 22](#), “Construction.” It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.


Construction on the development sites may result in temporary disruptions including noise, dust, and traffic associated with the delivery of materials and the arrival of workers to the site. These effects, however, would be temporary (lasting less than approximately 24 months) and are therefore not considered significant.

20. APPLICANT’S CERTIFICATION

I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records.

Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.

APPLICANT/REPRESENTATIVE NAME Christina Szczepanski, Philip Habib & Associates	DATE 5/23/2019
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SIGNATURE 

PLEASE NOTE THAT APPLICANTS MAY BE REQUIRED TO SUBSTANTIATE RESPONSES IN THIS FORM AT THE DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICANCE.

Part III: DETERMINATION OF SIGNIFICANCE (To Be Completed by Lead Agency)

INSTRUCTIONS: In completing Part III, the lead agency should consult 6 NYCRR 617.7 and 43 RCNY § 6-06 (Executive Order 91 or 1977, as amended), which contain the State and City criteria for determining significance.

1. For each of the impact categories listed below, consider whether the project may have a significant adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude.

Potentially Significant Adverse Impact

IMPACT CATEGORY	YES	NO
Land Use, Zoning, and Public Policy	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Socioeconomic Conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Community Facilities and Services	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Open Space	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Shadows	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Historic and Cultural Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Urban Design/Visual Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Natural Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hazardous Materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water and Sewer Infrastructure	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Solid Waste and Sanitation Services	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Transportation	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Air Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Greenhouse Gas Emissions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Public Health	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Neighborhood Character	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2. Are there any aspects of the project relevant to the determination of whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials?

YES NO

If there are such impacts, attach an explanation stating whether, as a result of them, the project may have a significant impact on the environment.


3. Check determination to be issued by the lead agency:

Positive Declaration: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a *Positive Declaration* and prepares a draft Scope of Work for the Environmental Impact Statement (EIS).

Conditional Negative Declaration: A *Conditional Negative Declaration (CND)* may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. The CND is prepared as a separate document and is subject to the requirements of 6 NYCRR Part 617.

Negative Declaration: If the lead agency has determined that the project would not result in potentially significant adverse environmental impacts, then the lead agency issues a *Negative Declaration*. The *Negative Declaration* may be prepared as a separate document (see [template](#)) or using the embedded Negative Declaration on the next page.

4. LEAD AGENCY'S CERTIFICATION

TITLE Director - Environmental Planning Unit	LEAD AGENCY NYC - Dept. of Housing Preservation and Development
NAME Callista Nazaire	DATE June 4, 2019
SIGNATURE 	

DeKalb Commons EAS
ATTACHMENT A: PROJECT DESCRIPTION

I. INTRODUCTION

The New York City Department of Housing Preservation and Development (HPD), on behalf of DeKalb Commons NY Housing Development Fund Corporation (HDFC) (the “Applicant”), is requesting the disposition of City-owned property, designation of an Urban Development Action Area, and project approval of an Urban Development Action Area Project (UDAAP) to facilitate the development of new affordable housing in the Bedford-Stuyvesant neighborhood of Brooklyn, Community District (CD) 3 (the “Proposed Actions”). The Applicant is proposing to develop eight vacant lots with a total of three buildings containing a total of approximately 84 affordable dwelling units (DUs), plus one dwelling unit for a residential superintendent (for a total of approximately 85 DUs), and approximately 2,512 gsf of commercial space (the “Proposed Project”). The vacant sites include a total of eight tax lots and are grouped into three Development Sites in the Bedford-Stuyvesant neighborhood. All eight lots are owned by HPD and would be conveyed to a developer to be selected by HPD as a result of the Proposed Actions. Construction of the Proposed Project is expected to be completed in 2021.

II. EXISTING CONDITIONS

Project Site

The project area is comprised of eight tax lots, which are grouped into three Development Sites in Bedford-Stuyvesant (see **Figure A-1 & Table A-1**). Development Site 1 consists of four tax lots (Block 1774, Lots 74, 75, 76, and 77), totaling approximately 9,827 square feet (sf). All four lots are currently vacant. Development Site 1 has approximately 100 feet of frontage along the north side of DeKalb Avenue between Nostrand and Marcy Avenues. Development Site 1 is zoned R6A.

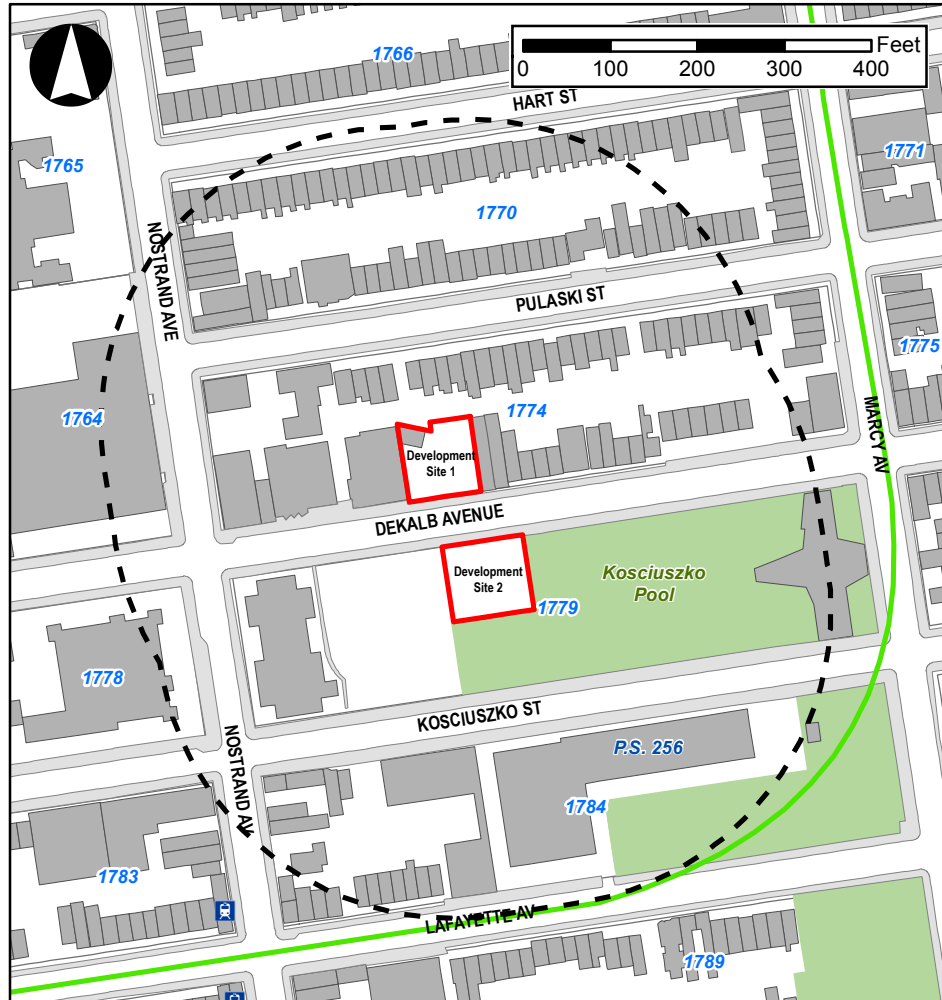
Development Site 2 consists of three tax lots (Block 1779, Lot 22, 24, and 26), totaling approximately 10,983 sf. All three lots are currently vacant. Development Site 2 has approximately 109 feet of frontage along the south side of DeKalb Avenue. Development Site 2 is also zoned R6A.

Table A-1: Project Site - Existing Conditions

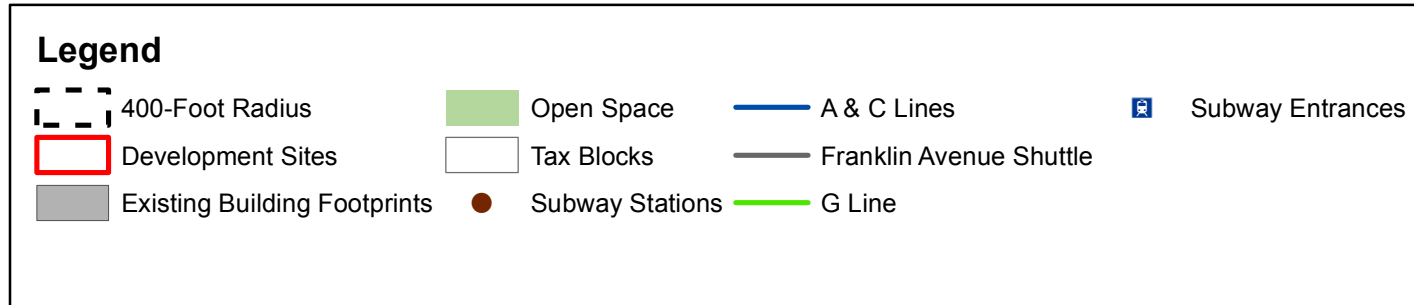
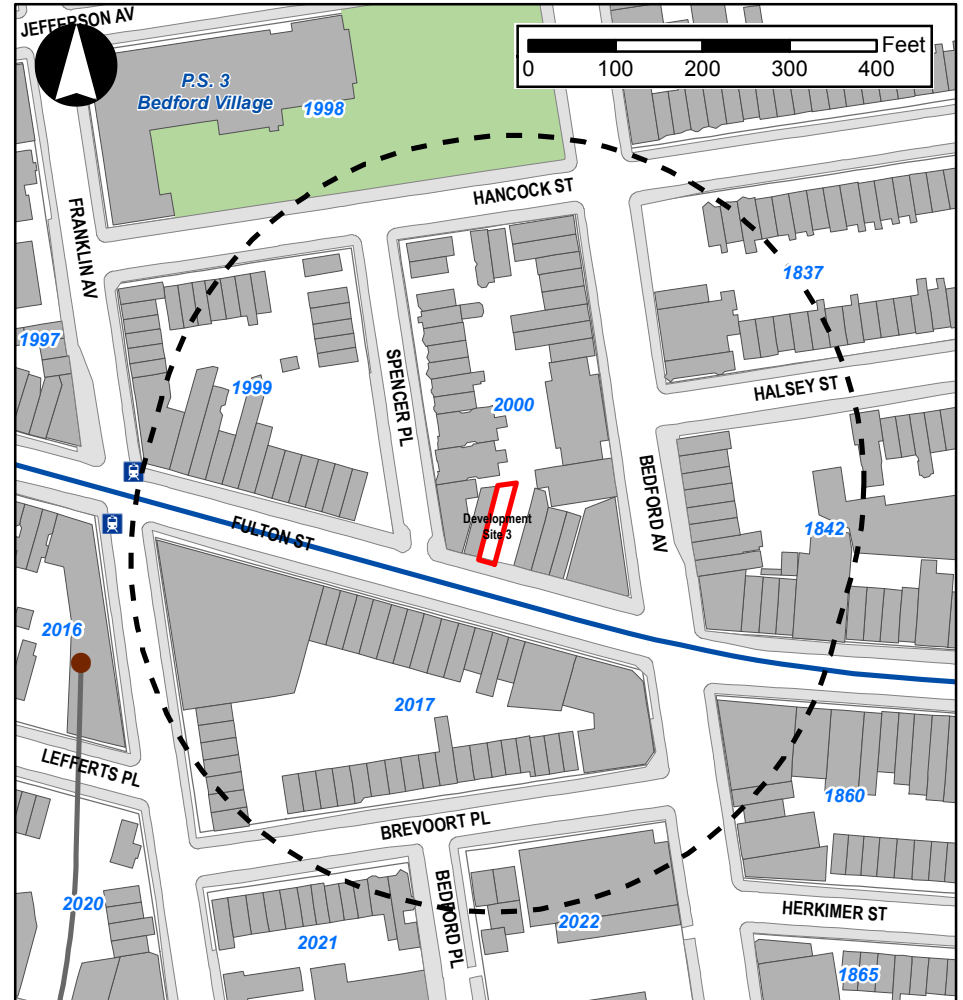
Development Site 1					
Block	Lot	Address	Zoning District	Land Use	Lot Area (SF)
1774	74, 75, 76, 77	633-639 DeKalb Avenue	R6A	Vacant	9,827
Development Site 2					
1779	22, 24, 26	648-654 DeKalb Avenue	R6A	Vacant	10,983
Development Site 3					
2000	43	1187 Fulton Street	R7D/C2-4	Vacant	1,786
Total					22,596

Development Site 3 consists of one tax lot (Block 2000, Lot 43), totalling approximately 1,786 sf. Development Site 3, which is vacant, has approximately 20 feet of frontage along the north side of Fulton Street between Spencer Place and Bedford Avenue (see **Figure A-1**). Development Site 3 is zoned R7D/C2-4. **Figure A-2** shows the existing site conditions for all three Development Sites.

633-639 & 648-654 DeKalb Avenue:



1187 Fulton Street:





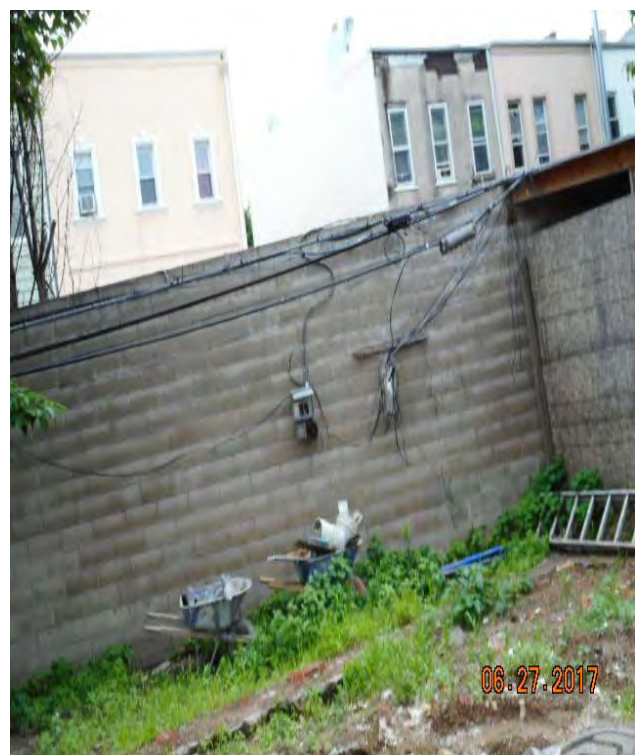
1. The Subject Property– Undeveloped Land– 633-639 Dekalb Avenue



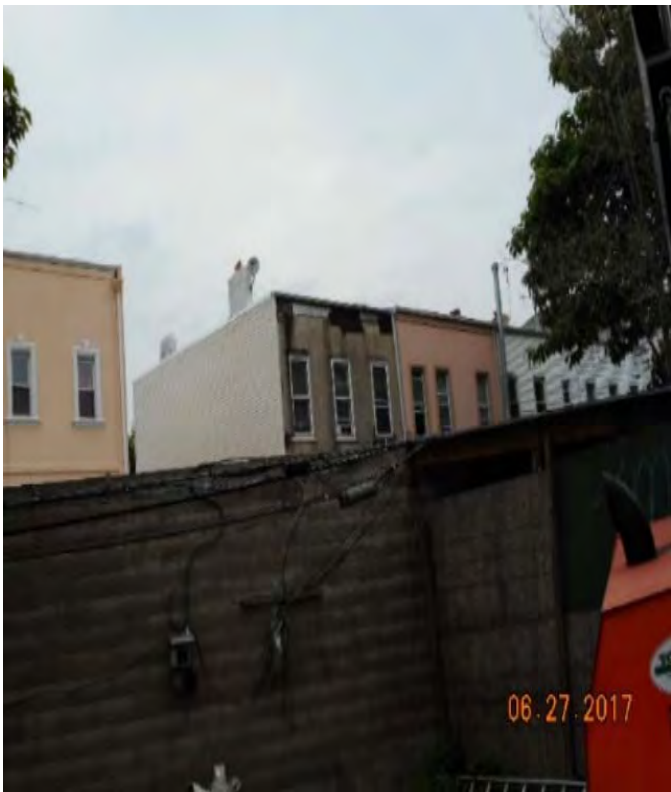
2. View of the boundary wall on the southern side of the Subject Property



3. Storage shed-Miscellaneous debris storage



4. Northern side of the Subject Property



5. Adjacent property to the north



6. Southerly adjoining property



7. Easterly adjoining property



8. Westerly adjoining property



9. The Subject Property- 648-654 DeKalb Avenue, Brooklyn, NY



10. Parked vehicles at the Subject Property



11. Chain-linked fencing delineating the Subject Property boundary



12. Additional view of the Subject Property



13. Adjacent property to the south and east



14. Adjacent property to the west



15. The Subject Property– Undeveloped parcel– 1187 Fulton Street



16. View of the front side of the Subject Property, along Fulton street



17. View of western portion of the Subject Property



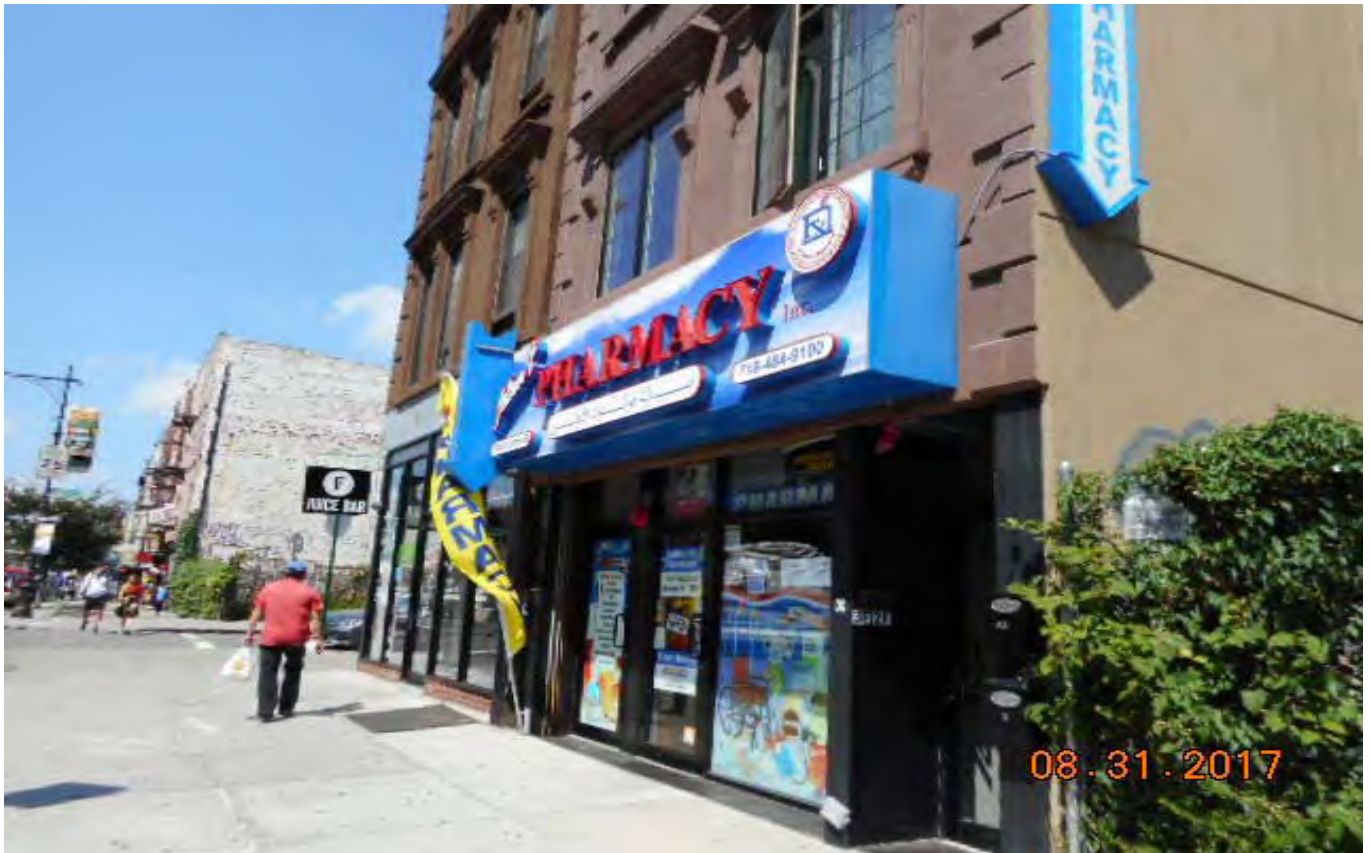
18. View of the eastern portion of the Subject Property



19. View of the adjacent property to the east



20. The adjacent properties to the south across Fulton Street



21. View of adjacent property to the west

Surrounding Area

As the Project Area consists of three separate Development Sites, existing land uses within 400 feet of each Development Site are discussed below and shown in **Figure A-3**.

Development Sites 1 & 2

Predominant land uses within a 400-foot radius of Development Sites 1 and 2 primarily include residential uses, institutional, open space, and some commercial uses as well. The majority of residential buildings are multi-family walk-up buildings. The Kosciusko Pool is located directly to the east of Development Site 2. A medical office and its associated parking lot is located directly to the east of Development Site 2. Banneker Playground is located approximately 400 feet south of these Development Sites. P.S. 256, located adjacent to Banneker Playground, is located 250 feet south of Development Sites 1 and 2. The Salvation Army Bedford Day Care Center is also located to the south of Development Sites 1 and 2, directly adjacent to P.S. 256. The Marcy branch of the Brooklyn Public Library is located on the same block as Development Site 1. Home Depot and CABS Nursing home are located to the west of Development Sites 1 and 2, across Nostrand Avenue. The Bedford-Nostrand station for the New York City Transit (NYCT) G subway line is located just outside the 400-foot radius of Development Sites 1 and 2 at the intersection of Nostrand and Lafayette Avenues.

There are several NYCT bus routes serving Development Sites 1 and 2 including the B38, B44, and B44-Select Bus Service (SBS).

Development Site 3

Predominant land uses within a 400-foot radius of Development Site 3 primarily include residential uses, mixed commercial and residential uses, and some institutional and commercial uses as well as several vacant lots. The majority of residential buildings within the 400-foot radius are multi-family walk-up buildings some with ground floor retail, specifically along Fulton Street and Bedford Avenue. Institutional uses include several houses of worship as well as P.S. 3 located to the north of Development Site 3. The John Hancock Playground is located to the north of Development Site 3, adjacent to P.S. 3. The Co-Op School is located to the south of Development Site 3 at 40 Brevoort Place. The Franklin Avenue station for the NYCT C and S lines is located within the 400-foot radius of Development Site 3, at the intersection of Franklin Avenue and Fulton Street.

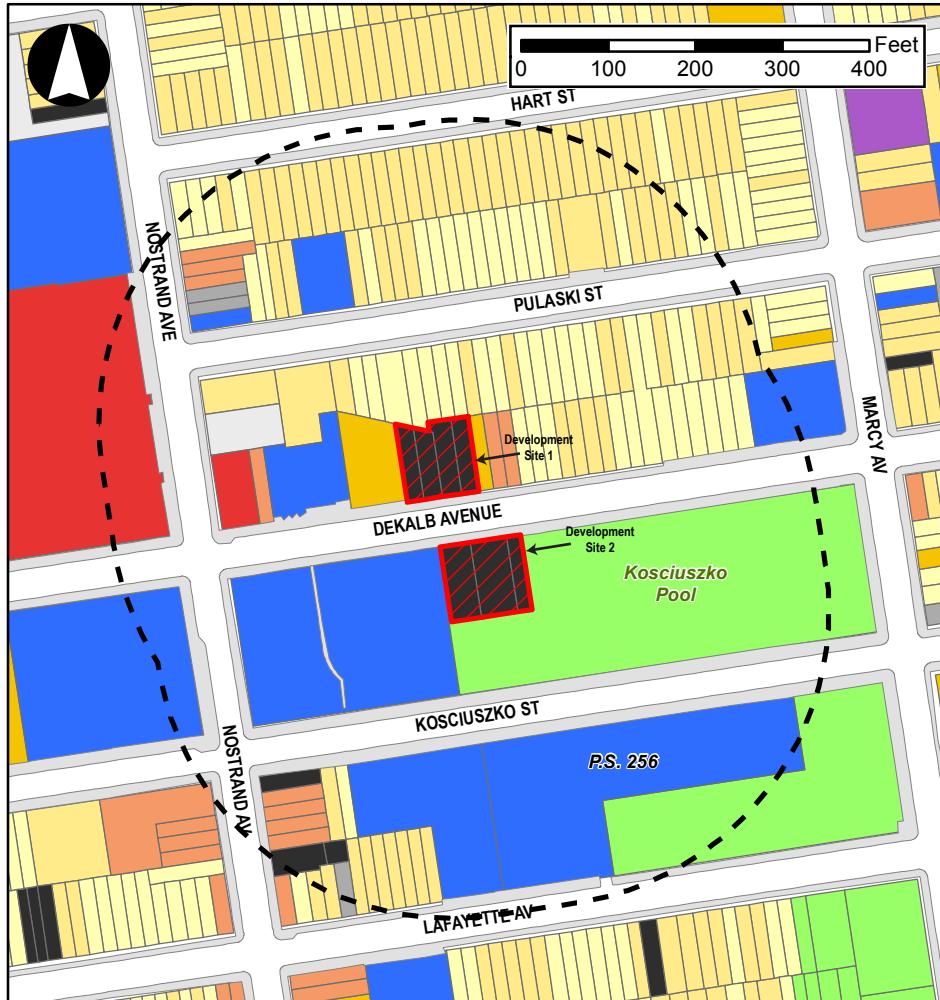
Zoning

As shown in **Figure A-4**, Development Sites 1 and 2 are zoned R6A and Development Site 3 is zoned R7D/C2-4. Each is described below.

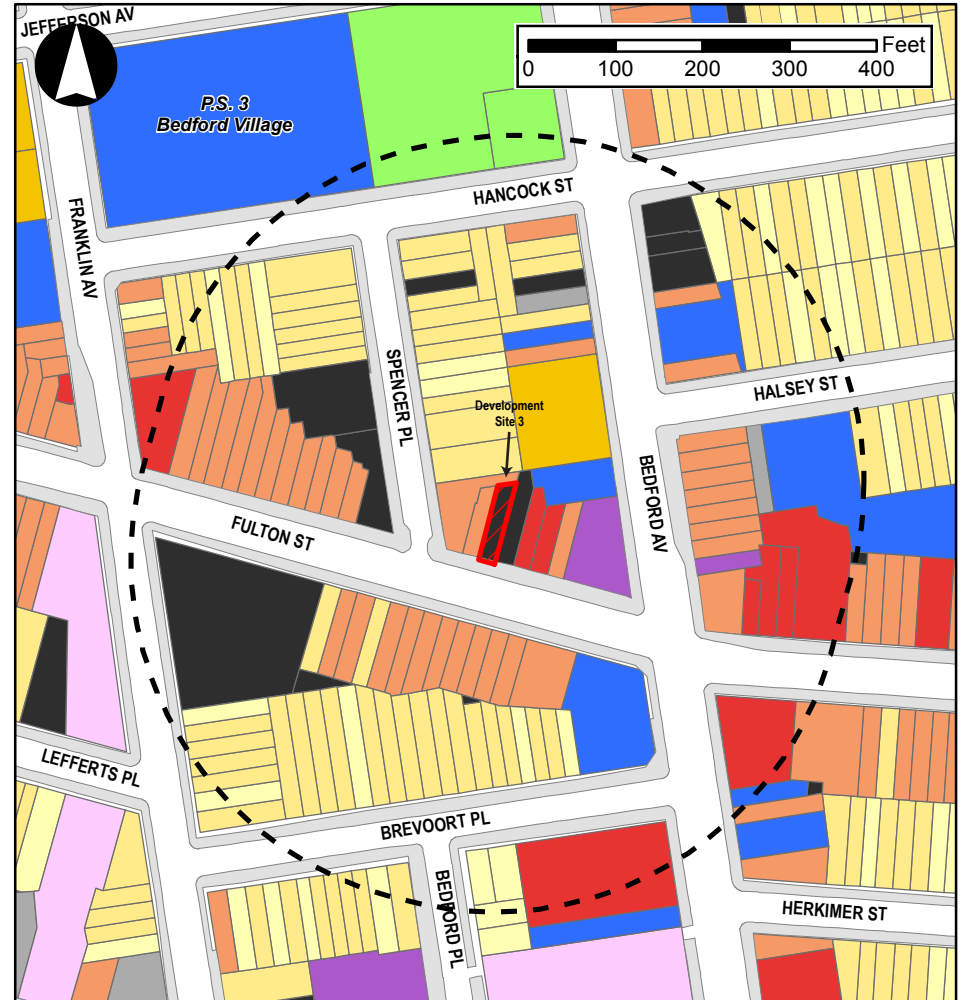
Development Sites 1 and 2

Development Sites 1 and 2 are zoned R6A. R6A 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 set at or near the street line. Designed to be compatible with older buildings found in medium-density neighborhoods, R6A districts are mapped in the Bronx, Brooklyn and Queens. Parts of Kingsbridge in the Bronx and Williamsburg in Brooklyn are typical R6A areas.

633-639 & 648-654 DeKalb Avenue:



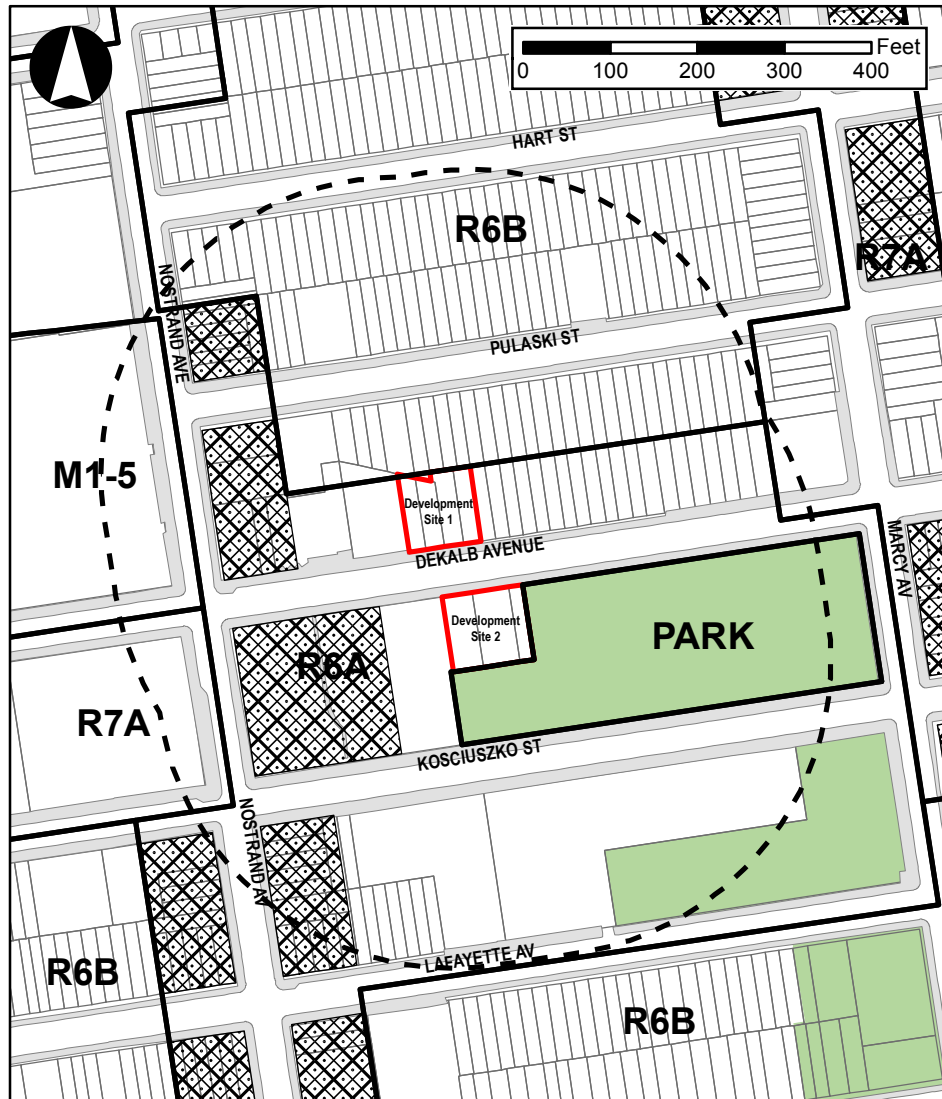
1187 Fulton Street:



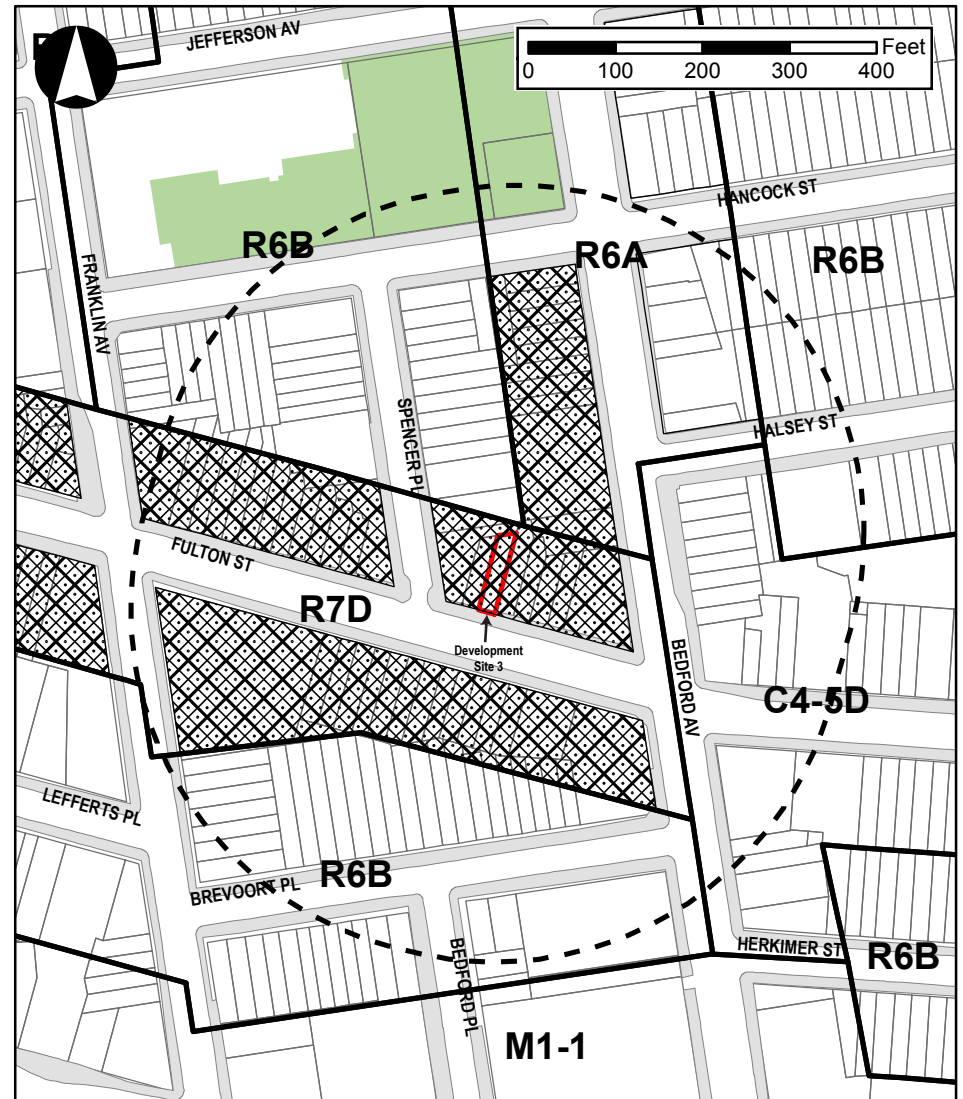
Legend

- | | | | |
|----------------------------|--|----------------------------------|-----------------------|
| 400-Foot Radius | Multi-Family Walkup Buildings | Industrial/Manufacturing | Parking Facilities |
| Development Sites | Multi-Family Elevator Buildings | Transportation/Utility | Vacant Land |
| Land Use | Mixed Commercial/Residential Buildings | Public Facilities & Institutions | All Others or No Data |
| One & Two Family Buildings | Commercial/Office Buildings | Open Space | |

633-639 & 648-654 DeKalb Avenue:



1187 Fulton Street:



Legend

- 400-Foot Radius
- Zoning District Boundaries
- Open Space
- Development Sites
- C2-4 Commercial Overlay

The floor area ratio (FAR) in R6A districts is 3.0. Above a maximum base height of 60 feet, the building must set back by at least 10 feet on a wide street and 15 feet on a narrow street before rising to its maximum height of 70 feet. To preserve the traditional streetscape, the street wall of a new building can be no closer to the street line than any building within 150 feet on the same block, but need not be farther than 15 feet. The area between a building's street wall and the street line must be planted. R6A buildings must have interior amenities for the residents pursuant to the Quality Housing Program Off-street parking, which is not allowed in front of a building, is required for 50% of a building's dwelling units, or can be waived if five or fewer spaces are required.

Development Site 3

Development Site 3 is zoned R7D/C2-4. R7D residential districts promote new contextual development along transit corridors. The FAR of 4.2 allows greater residential density than R7A districts and less than R7X districts. In a C4-5D district or when a commercial overlay is mapped in an R7D district, the ground floor of a building must be reserved for retail uses, such as shops and services, to maintain the vitality of the street.

Quality Housing bulk regulations, mandatory in R7D districts, produce ten-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 100 feet. In order to maintain the continuity of the street wall, a new building can be no closer to the street line than any other building within 150 feet on the same block but need not be farther than 15 feet. In commercial overlay districts or in a C4-5D district, the street wall of a building on a wide street must extend along the entire width of the zoning lot at the street line. Interior amenities for building residents pursuant to the Quality Housing Program are required. Off-street parking is required for 50 percent of dwelling units.

The C2-4 district is mapped as a commercial overlay within the R7D 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. C2 districts permit a slightly wider range of uses, such as funeral homes and repair services. 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 C2-4 overlay.

III. THE PROPOSED ACTIONS

As noted above, the Proposed Actions include the disposition of City-owned property, designation of an Urban Development Action Area, and project approval of an Urban Development Action Area Project (UDAAP) to facilitate the development of new affordable housing in the Bedford-Stuyvesant neighborhood of Brooklyn. All eight lots are owned by HPD and would and would be conveyed to a developer to be selected by HPD as a result of the Proposed Actions. The Proposed Actions would facilitate the development of three buildings containing approximately 84 dwelling units, plus one unit for the residential superintendent (for a total of approximately 85 DUs) and 2,512 gsf of commercial space. The proposed development for each site is described in detail below and summarized in **Table A-2**.

Table A-2: Proposed Project

Development Site 1							
Block	Lot	Address	Proposed Height (including mechanical bulkhead/Solar Panels)	Residential GSF	Total DUs	Retail GSF	Total Proposed GSF
1774	74, 75, 76, 77	633-639 DeKalb Avenue	80'-9"	39,604	37	-	39,604
Development Site 2							
Block	Lot	Address	Proposed Height	Residential GSF	Total DUs	Retail GSF	Total Proposed GSF
1779	22, 24, 26	648-654 DeKalb Avenue	80'-9"	44,769	45	-	44,769
Development Site 3							
Block	Lot	Address	Proposed Height	Residential GSF	Total DUs	Retail GSF	Total Proposed GSF
2000	43	1187 Fulton Street	55'	4,576	3	2,512	7,088
Total				88,949	85	2,512	91,461

Development Site 1

Development Site 1 will include a seven-story (69'-6" to roof; 80'-9" to mechanical bulkhead/solar panels) residential building located at 633-639 DeKalb Avenue (see **Figure A-5**). The building at Development Site 1 would be approximately 39,604 gsf and include approximately 37 DUs. The rear yard of Development Site 1 will be approximately 3,650 sf and will include an outdoor seating area, children's play area, and planted areas.

Development Site 2

Development Site 2 will include a seven-story (69'-6" to roof; 80'-9" to mechanical bulkhead/solar panels) residential building located at 648-654 DeKalb Avenue would be approximately 44,769 gsf and include approximately 44 DUs, plus one DU for a superintendent (see **Figure A-5**). The rear yard of Development Site 2 would be approximately 3,260 sf and will include an outdoor seating area, children's play area, and planted areas. This building would also include an approximately 903 sf community room on the ground floor.

The buildings on Development Sites 1 and 2 would include solar panels on the roof.

Development Site 3

Development Site 3 will include one four-story (45' to roof; 55' to mechanical bulkhead) residential and commercial building located 1187 Fulton Street (see **Figure A-6**). The building proposed at 1187 Fulton Street would be approximately 7,088 gsf and would include approximately 3 DUs and 2,512 gsf of commercial space on the ground floor.

The Proposed Project would be completed and occupied in 2021.



For Illustrative Purposes Only

DeKalb Commons EAS

Figure A-5

Proposed Development at Development Sites 1 & 2



For Illustrative Purposes Only

IV. PURPOSE AND NEED FOR THE PROPOSED ACTIONS

The Proposed Project would create opportunities for new affordable housing development on vacant 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. ANALYSIS FRAMEWORK

In order to assess the potential effects of the Proposed Project, the “Future without the Proposed Actions (No-Action Condition)” and “Future with the Proposed Actions (With-Action Condition)” are analyzed for an analysis year, or “Build Year” of 2021. The future With-Action condition identifies the amount, type, and location of development that is expected to occur by 2021 as a result of the Proposed Actions. The future No-Action condition identifies similar development projections for 2021 absent the Proposed Actions. The incremental difference between the With-Action and No-Action conditions serve as the basis for impact analyses in this EAS.

Future without the Proposed Actions (No-Action Condition)

In the 2021 future without the Proposed Actions, it is expected that there would be no new development on the Development Sites and all eight lots would remain vacant.

Future with the Proposed Actions (With-Action Condition)

As discussed above under “The Proposed Actions”, the Proposed Actions would facilitate the development of three buildings that would include a total of approximately 84 affordable DUs, plus one DU for a superintendent, and approximately 2,512 gsf of commercial space. The Proposed Project is expected to take approximately 24 months to construct and would be completed and fully occupied in 2021. The net increment of approximately 85 dwelling units and approximately 2,512 gsf of commercial space will represent the basis for environmental analyses in this EAS.

VI. REQUIRED APPROVALS

The disposition of City-owned property and the UDAAP designation are actions subject to both the Uniform Land Use Review Procedure (ULURP), as well as the City Environmental Quality Review (CEQR). ULURP is a process that allows public review of proposed actions at four levels: The Community Board; the Borough President; the City Planning Commission; and if applicable, the City Council. The procedure mandates time limits for each stage to ensure a maximum review period of seven months. Through CEQR, agencies review discretionary actions for the purpose of identifying the effects those actions may have on the environment.

I. INTRODUCTION

This Environmental Assessment Statement (“EAS”) has been prepared in accordance with the guidelines and methodologies presented in the 2014 *City Environmental Quality Review (“CEQR”) Technical Manual*. For each technical area, thresholds are defined, which if met or exceeded, require that a detailed technical analysis be undertaken. Using these guidelines, preliminary screening assessments were conducted for the Proposed Actions to determine whether detailed analysis of any technical area may be appropriate. The technical areas that warranted a “Yes” answer in Part II of the EAS form were Open Space, Shadows, Hazardous Materials, Air Quality, and Noise. As such, a supplemental screening assessment for each area is provided in this attachment. All remaining technical areas detailed in the *CEQR Technical Manual* were not deemed to require supplemental screening because they do not trigger initial CEQR thresholds and/or are unlikely to result in significant adverse impacts.

The supplemental screening assessment contained herein identified that a detailed analysis is required in Shadows and Noise. **Table B-1** identifies for each CEQR technical area whether (a) the potential for impacts can be screened out based on the EAS Form, Part II, Technical Analyses; (b) the potential for impacts can be screened out based on a supplemental screening per the *CEQR Technical Manual*, (c) or whether a more detailed assessment is required.

As described in **Attachment A, “Project Description,”** the Proposed Actions include the disposition of City-owned property, designation of an Urban Development Action Area, and project approval of an Urban Development Action Area Project (UDAAP) to facilitate the development of new affordable housing in the Bedford-Stuyvesant neighborhood of Brooklyn. The Applicant is proposing to develop eight vacant lots with a total of three buildings containing a total of approximately 84 affordable dwelling units, plus one dwelling unit for the superintendent (total of approximately 85 dwelling units), and approximately 2,512 gsf of commercial space (the “Proposed Project”). The vacant sites include a total of eight tax lots and are grouped into three development sites throughout the Bedford-Stuyvesant neighborhood. All eight lots are owned by HPD and would be conveyed to a developer to be selected by HPD as a result of the Proposed Actions. Construction of the Proposed Project is expected to be completed in 2021.

Table B-1: Summary of CEQR Technical Areas Screening

CEQR TECHNICAL AREA	SCREENED OUT PER EAS FORM	SCREENED OUT PER SCREENING	DETAILED ANALYSIS IN EAS	DETAILED ANALYSIS IN EIS
Land Use, Zoning, & Public Policy	X			
Socioeconomic Conditions	X			
Community Facilities	X			
Open Space		X		
Shadows				X
Historic & Cultural Resources	X			
Urban Design & Visual Resources	X			
Natural Resources	X			
Hazardous Materials		X		
Water and Sewer Infrastructure	X			
Solid Waste & Sanitation Services	X			
Energy	X			
Transportation				
- Traffic & Parking	X			
- Transit	X			
- Pedestrians	X			
Air Quality				
- Mobile Sources	X			
- Stationary Sources		X		
Greenhouse Gas Emissions	X			
Noise			X	
Public Health	X			
Neighborhood Character	X			
Construction	X			

II. SUPPLEMENTAL SCREENING AND SUMMARY OF DETAILED ANALYSES

Open Space

Based on the *CEQR Technical Manual*, an open space assessment is typically warranted if an action would directly affect an open space, or if it would increase the population by more than 200 residents or 500 workers (these thresholds apply to areas that do not fall in areas that have been designated as “neither under-served nor well-served”).

The Proposed Actions would result in a total of 205 new residents and 7 employees. Development Sites 1 and 2 (633-639 and 648-654 DeKalb Avenue) would generate approximately 195 new residents and Development Site 3 (1187 Fulton Street) would generate approximately 7 new residents 7 employees. The distance between Development Sites 1 and 2 and Development Site 3 is approximately one mile, and would therefore have separate open space study areas (0.5-mile radius for residential study area per the *CEQR Technical Manual*). As such, the Proposed Actions would generate less than 200 residents in each respective study area and therefore an open space assessment is not warranted.

Shadows

A shadows assessment considers Proposed Actions that result in new shadows long enough to reach a publicly accessible open space or historic resource (except within an hour and a half of sunrise or sunset). For Proposed Actions resulting in structures less than 50 feet high, a shadow assessment is generally not necessary unless the site is adjacent to a park, historic resource, or important natural feature (if the features that make the structure significant depend on sunlight). According to the *CEQR Technical Manual*, some open spaces contain facilities that are not sunlight-sensitive, and do not require a shadow analysis including paved areas (such as handball or basketball courts) and areas without vegetation.

As detailed in **Attachment A, "Project Description,"** the proposed new buildings on Development Sites 1 and 2 would be 7-stories with a height of 69'-6" to the roof and a maximum height of 80'-9", including mechanical bulkhead and solar panels. The proposed new building on Development Site 3 would be 4-stories with a height of 45' to the roof and a maximum height of 55', including mechanical bulkhead. As a sunlight sensitive open space resource is located within the vicinity of Development Sites 1 and 2, a shadows assessment is required and has been provided in **Chapter 2, "Shadows"** in the EIS. As detailed in the chapter, the Proposed Actions would result in incremental shadows on one sunlight-sensitive resource: The Kosciusko Pool. Although these project-generated shadows would be limited in duration and coverage, they would affect the utilization and enjoyment of this open space resource. As such, the Proposed Actions would result in significant adverse shadows impacts.

Hazardous Materials

As defined in the *CEQR Technical Manual*, a hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and semivolatile organic compounds, methane, polychlorinated biphenyls, and hazardous wastes (defined as substances that are chemically reactive, ignitable, corrosive, or toxic). According to the *CEQR Technical Manual*, the potential for significant adverse impacts from hazardous materials can occur when: (a) hazardous materials exist on a site, and (b) an action would increase pathways to their exposure; or (c) an action would introduce new activities or processes using hazardous materials.

Phase I Environmental Site Assessments (ESAs) were prepared for each development site by ALC Environmental in July and September 2017. The Phase I ESAs for each Development Site are summarized below.

Development Site 1

As per the historical records reviewed, the project site at 633-639 DeKalb Avenue was previously improved with four row-type mixed-use residential and commercial buildings and one dwelling, constructed as early as 1887. The ground levels of the former buildings were utilized for retail, tin shop, printing, shoe repair, hospital supplies manufacturing, cosmetics manufacturing, and warehousing purposes between the 1920s and the late 1960s. The former printing facility, which operated between approximately 1950 and 1965, and the manufacturing operations identified (cosmetics, hospital supplies etc.) most likely generated hazardous waste such as spent solvents and waste oils. The former onsite buildings were demolished between 1966 and 1974, with the exception of the former building at 633 DeKalb Avenue, which was demolished circa 1979. The site was subsequently used for dumping and storage of

miscellaneous materials such as metal scrap, discarded automobiles and appliances. The former onsite printing and manufacturing operations, as well as the long-term onsite dumping operations represent a Recognized Environmental Condition (REC). The site was not listed on the databases reviewed. The database search indicated numerous listings of properties within the standard search radii on multiple regulatory databases. Many of these listings are located a significant distance from and/or downgradient of the site. Most upgradient leaking tank and all upgradient spill cases have been closed and are not considered RECs.

No underground or aboveground storage tanks were visually observed at the site during the site visit. However, fuel oil was historically utilized at the site for heating purposes, specifically at the building previously located at 635 DeKalb Avenue (Lot 76), as evidenced by a fuel oil burner application dated 1965, which was on-file with the New York City Department of Buildings (DOB). Although requested, no information regarding the former usage or storage of fuel oil was provided by property ownership. A request for public records was submitted to the Fire Department of New York (FDNY), however a response to the request submitted was not received in time for inclusion in this report. As such, the status of the former onsite fuel oil tank(s) is unknown. The lack of information pertaining to the former fuel oil tank at the site constitutes a REC.

In regards to the historical uses of the site for printing and manufacturing purposes, as well as the long-term use of the site for dumping of miscellaneous materials, including vehicles, ALC recommends that a limited subsurface investigation including a soil vapor investigation be conducted at the site prior to any site redevelopment activities, in order to confirm or deny impacts from the historical uses of the site.

In regards to the former usage of fuel oil at the site for heating purposes, if no information pertaining to the status of the former fuel oil storage tank(s) is obtained from the FDNY, ALC recommends that prior to any redevelopment activities at the site, a Ground Penetrating Radar (GPR) Survey be conducted in order to confirm/deny the presence of any buried tanks.

In regards to the open violation from DOB, ALC recommends the Applicant follow up with DOB and take necessary corrective actions in order to close out the violation.

Development Site 2

As per the historical Sanborn maps and city directories reviewed, the site was formerly improved with two commercial buildings which were used to store building materials and lumber, between at least 1932 and 2007. Historically, lumber was treated with chemicals such creosote (an insecticide, sporicide, miticide and fungicide that penetrates deeply into pressure-treated wood for a long time) and chromated copper arsenate. These chemicals have the potential to leech out and contaminate the subsurface media. Additionally, woodworking activities were conducted at the former building at 652-654 DeKalb between at least 1951 and 1965. Typical wastes associated with woodworking activities include spent solvents and adhesives, and chemicals used to treat wood. As per the municipal records reviewed, the onsite buildings were demolished in 2007 and the site has remained vacant since. There are no reported releases or known contamination associated with the Subject Property. However, there is a possibility that the site subsurface was impacted by improper disposal or storage of hazardous materials/waste associated with said lumber storage and woodworking activities. As such, the historical lumber storage and woodworking operations at the site constitute a recognized environmental condition (REC).

In regards to the historical onsite lumber storage and woodworking operations, ALC recommends that a limited subsurface investigation be conducted at the site prior to any site redevelopment activities, in order to confirm or deny the presence of impacts. Based on the findings, further action may be warranted.

Since the site was previously developed, future redevelopment activities should evaluate for the presence of historic fill materials on the site, in order to ensure that the redevelopment activities are conducted in accordance with applicable local, state, and federal regulations. Ensuring compliance may necessitate the collection of soil samples for characterization of the property's soil quality and/or for off-premise disposal purposes.

Development Site 3

As per the historical sources reviewed, the site was previously improved with a 4-story mixed-use residential and commercial building constructed prior to 1888. The commercial occupants of the former building included butchers and a meat market. The former building was reportedly demolished in 1994 and the site has remained vacant since. No other former uses were identified.

Since the site was previously developed, future redevelopment activities should evaluate for the presence of historic fill materials on the site, in order to ensure that the redevelopment activities are conducted in accordance with applicable local, state, and federal regulations. Ensuring compliance may necessitate the collection of soil samples for characterization of the property's soil quality and/or for off-premise disposal purposes.

The Phase I ESAs for the Development Sites have been reviewed by the New York City Department of Environmental Protection (DEP). DEP subsequently requested Phase II ESI Work Plan and HASP for Development Sites 1 and 2. According to a letter from DEP dated May 9, 2018 (see **Appendix B** for the letter), DEP finds the Work Plan and HASP acceptable. Upon completion of the investigation, a detailed Phase II report will be submitted to DEP for review and approval.

Upon completion of the investigation activities, a detailed Phase II report (consisting of laboratory analysis of subsurface samples), conducted in accordance with the DEP-approved March 2018 Work Plan, will be submitted to DEP for review and approval. Based on the results of the Phase II, a RAP and associated CHASP would be prepared and implemented during the subsurface disturbance associated with the proposed project. The RAP would include any necessary measures required to be incorporated into the new project, e.g., a vapor barrier beneath/outside of the foundations and a clean soil cap in landscaped/unpaved areas. The RAP and CHASP would also be subject to HPD and DEP approval. Impacts would be avoided by constructing the proposed buildings in accordance with these measures, which would be required through the Land Disposition Agreement (LDA) between HPD and the Project Sponsor.

Air Quality

According to the guidelines provided in the *CEQR Technical Manual*, air quality analyses are conducted in order to assess the effect of an action on ambient air quality (i.e., the quality of the surrounding air), or effects on the project because of ambient air quality. Air quality can be affected by "mobile sources," pollutants produced by motor vehicles, and by pollutants produced by fixed facilities, i.e., "stationary sources." As per the *CEQR Technical Manual*, an air quality assessment should be carried out for actions

that can result in either significant adverse mobile source or stationary source air quality impacts. Per the EAS Form, further analysis of air quality mobile sources from action-generated vehicle trips has been screened out in accordance with *CEQR Technical Manual* assessment screening thresholds.

Stationary source impacts could occur with actions that create new stationary sources or pollutants, such as emission stacks for industrial plants, hospitals, or other large institutional uses, or a building's boiler stacks used for heating/hot water, ventilation, and air conditioning ("HVAC") systems, that can affect surrounding uses. Impacts from boiler emissions associated with a development are a function of fuel type, stack height, minimum distance of the stack on the source building to the closest building of similar or greater height, building use, and the square footage size of the source building. In addition, stationary source impacts can occur when new uses are added near existing or planned emissions stacks, or when new structures are added near such stacks and those structures change the dispersion of emissions from the stacks so that they affect surrounding uses.

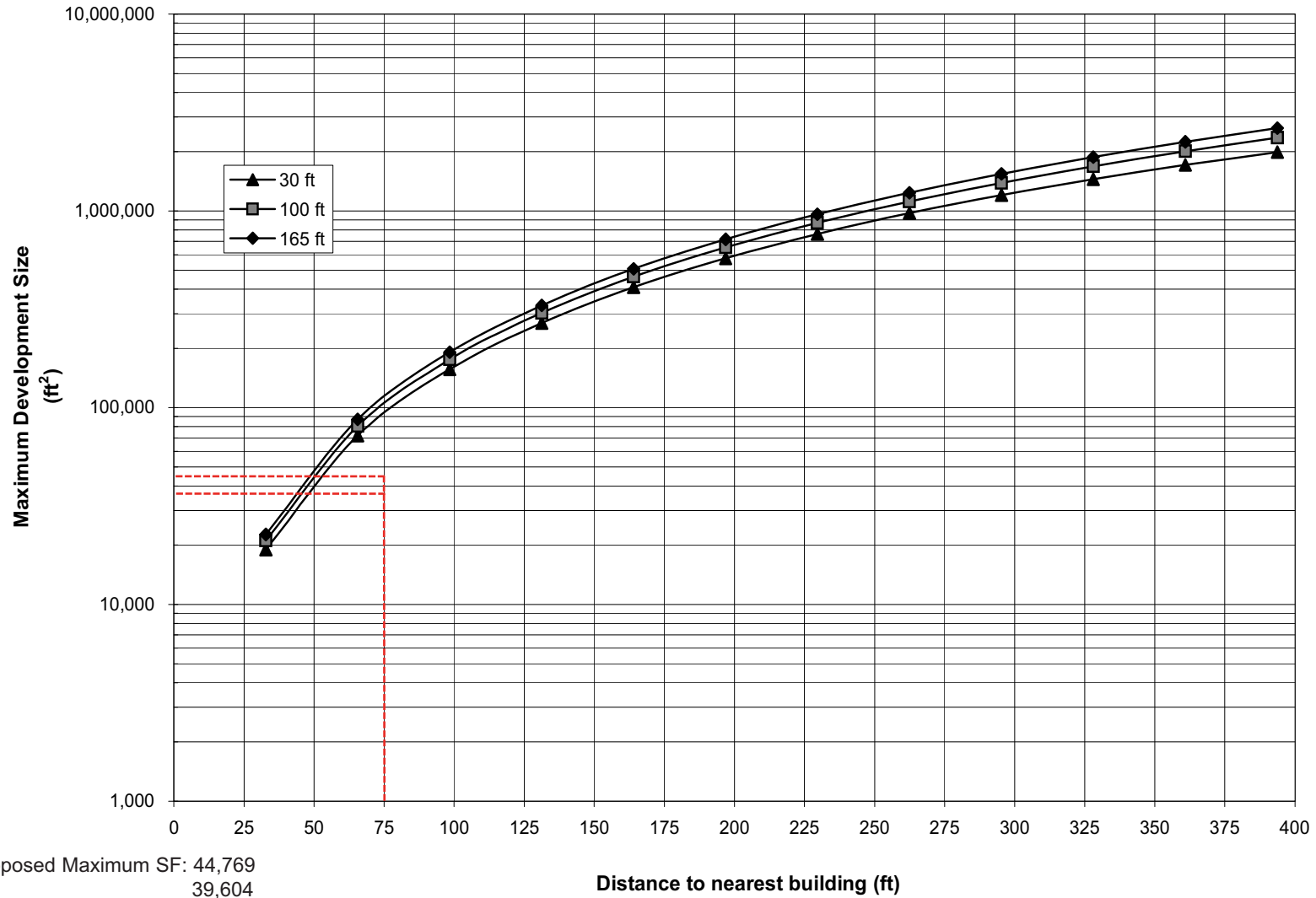
Development Sites 1 and 2

The residential construction would include the installation of HVAC systems, which would use natural gas. A preliminary HVAC screening analysis, using Figure 17-7 of the *CEQR Technical Manual* Air Quality Appendix was conducted to identify if a detailed HVAC analysis is warranted, and if the Proposed Project would result in any significant adverse impacts on air quality. It should be noted that because the proposed buildings at Development Sites 1 & 2 would be 80 feet in height (including mechanical bulkhead), they would be taller than any building (existing) within a 400-foot radius and therefore would not result in significant adverse impacts on air quality to existing buildings.

The air quality analysis of boiler HVAC emissions is based on the screening procedures and methodologies provided in Sub-Section 322.1 of the *CEQR Technical Manual*. This analysis uses a nomographic procedure based on the size of the development (i.e., floor area square footage), fuel type, and distance to the nearest receptor or buildings of a height similar to or greater than the stack height of the proposed building. The nomographic figure was specifically developed through detailed mathematical modeling to predict the threshold of development size below which a project would not be likely to have a significant impact. This procedure is only appropriate for buildings at least thirty feet or more from the nearest building of similar or greater height. If a proposed project passes the screening analysis, then there is no potential for a significant adverse air quality impact from the project's boiler, and a detailed analysis may not need to be conducted.

Because the proposed buildings at Development Sites 1 and 2 would be within close proximity to one another and the same height, a project-on-project preliminary HVAC screening analysis was necessary to identify if a detailed HVAC analysis is warranted, and if the Proposed Project would result in any significant adverse impacts on air quality. Based on Figure 17-7 of the *CEQR Technical Manual*, the HVAC systems for the proposed buildings would not result in any air quality impacts on one another (see **Figure B-1** for the nomographic figure). Emissions from the proposed buildings would fall below the applicable curve and would therefore not result in any adverse air quality impacts. As such, no further analysis of emissions from the Proposed Project on itself is warranted.

**FIGURE 17-7
NO₂ BOILER SCREEN
RESIDENTIAL DEVELOPMENT - NATURAL GAS**



Proposed Maximum SF: 44,769
39,604

Distance to nearest building (ft)
Development Sites 1 & 2: Project-on-Project Analysis
Distance between proposed buildings at 633-639 DeKalb Ave. and
648-654 DeKalb Ave...: 75 feet

Development Site 3

The proposed building at Development Site 3 would have a height of approximately 55 feet (including mechanical bulkhead). The closest building of similar or greater height is a 6-story mixed-use building located approximately 40 feet away. Like Development Sites 1 and 2, the proposed building at Development Site 3 would utilize natural gas for its HVAC system. Based on Figure 17-7 of the *CEQR Technical Manual*, the HVAC systems for the proposed building would not result in any air quality impacts on one another (see **Figure B-2** for the nomographic figure). Emissions from the proposed building would fall below the applicable curve and would therefore not result in any adverse air quality impacts. As such, no further analysis of emissions from the Proposed Project is warranted.

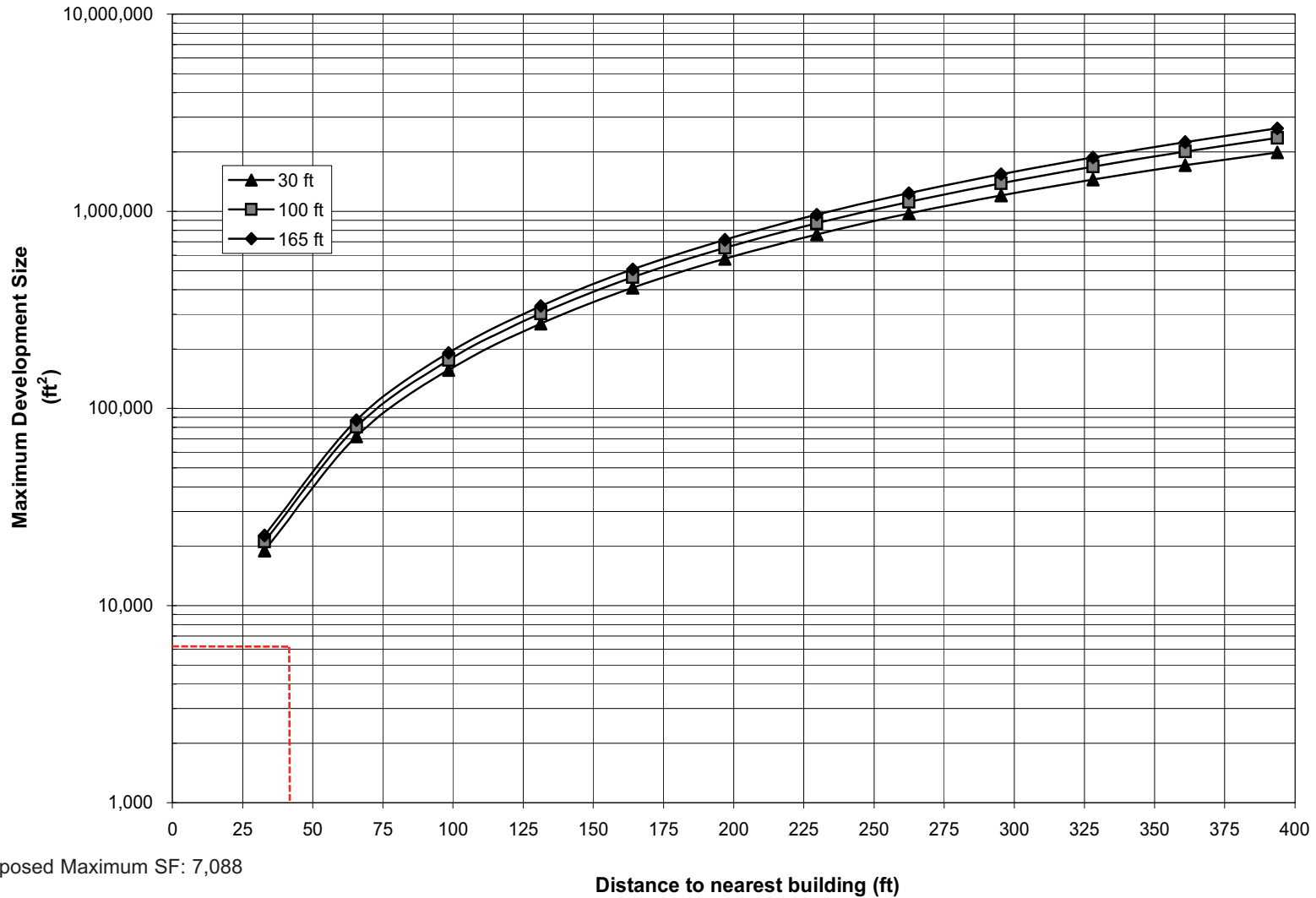
Noise

The proposed project would not generate sufficient traffic to result in a significant noise impact (i.e., doubling of Noise PCEs), therefore, an assessment of mobile source noise impacts is not provided. However, the Proposed Actions would allow sensitive receptors on sites that are located within the vicinity of Atlantic Avenue. Therefore, a noise analysis was conducted, pursuant to the standards set forth in the *CEQR Technical Manual*, to determine ambient noise levels and the level of building attenuation necessary to ensure that interior noise levels of the Proposed Project would satisfy applicable interior noise criteria for the respective uses. Based on the detailed analysis in **Attachment C, "Noise,"** the required noise attenuation for the Proposed Project's building facades would be 28 dBA along the southern facade and 35 dBA along the eastern facade of the proposed building at Development Site 2 (648-654 DeKalb Avenue). For Development Site 3 (1187 Fulton Street), as the maximum predicted L_{dn} noise levels 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 the proposed building's southern facade.

No additional noise attenuation measures above standard construction practices would be required along all facades of the proposed building at Development Site 1 (633-639 DeKalb Avenue).

The noise analysis provided in Attachment C focused on determining ambient noise levels and the level of building attenuation necessary to ensure that interior noise levels of the Proposed Project satisfy applicable interior noise criteria for the respective uses. As discussed in the attachment, the Proposed Actions would not result in any significant adverse noise impacts.

**FIGURE 17-7
NO₂ BOILER SCREEN
RESIDENTIAL DEVELOPMENT - NATURAL GAS**



Proposed Maximum SF: 7,088

Distance to nearest building (ft)
 Development Site 3: Project-on-Existing Analysis
 Distance between proposed building at 1187 Fulton Street and
 existing building at 1183 Fulton Street: 40 feet

I. INTRODUCTION

This attachment assesses the potential for the Proposed Actions to result in significant adverse noise impacts. As described in **Attachment A, “Project Description,”** the New York City Department of Housing Preservation and Development (HPD), on behalf of DeKalb Commons NY Housing Development Fund Corporation (HDFC) (the “Applicant”), is requesting the disposition of City-owned property, designation of an Urban Development Action Area, and project approval of an Urban Development Action Area Project (UDAAP) to facilitate the development of new affordable housing in the Bedford-Stuyvesant neighborhood of Brooklyn, Community District 3 (the “Proposed Actions”).

The Applicant is proposing to develop eight vacant lots with a total of three buildings containing a total of approximately 84 affordable dwelling units, plus one dwelling unit for the residential superintendent (total of approximately 85 dwelling units), and approximately 2,512 gsf of commercial space (the “Proposed Project”). The vacant sites include a total of eight tax lots and are grouped into three Development Sites in the Bedford-Stuyvesant neighborhood. All eight lots are owned by HPD and would be conveyed to a developer to be selected by HPD as a result of the Proposed Actions. Construction of the Proposed Project is expected to be completed in 2021.

The noise analysis for the Proposed Project was carried out in compliance with *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 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 attachment 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 66.3 dBA to a maximum of 69.8 dBA. When compared to the future without the Proposed Actions, 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 all noise receptor locations would remain in the “Marginally 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 Site 1 (633-639 DeKalb Avenue) in order to achieve the required residential or community facility interior noise level of 45 dBA or lower.

Due to the proximity of the Kosciuszko Pool to Development Site 2 (648-654 DeKalb Avenue), a playground noise analysis was conducted. It is projected that maximum With-Action L_{10} noise levels at the southern and eastern facades of the proposed building facing Kosciuszko Pool would be 73.0 dBA and 78.0 dBA, respectively, and would fall in the “Marginally Unacceptable” (I) and “Marginally Unacceptable” (IV) CEQR Noise Exposure categories, respectively. As such, a minimum of 28 dBA of composite window/wall attenuation on the proposed building’s southern facade and a minimum of 35 dBA of composite window/wall attenuation on the proposed building’s eastern facade would be required for residential/community facility uses in order to achieve the required residential and community facility interior noise levels of 45 dBA or lower. With the incorporation of these attenuation requirements, noise generated by Kosciuszko Pool would not result in significant adverse noise impacts to Development Site 2.

Furthermore, for Development Site 3 (1187 Fulton Street), as the maximum predicted L_{dn} noise levels 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 the proposed building’s southern facade.

The 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 below, the Proposed Project would not result in any significant adverse noise impacts related to noise.

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 descriptor of noise levels most often used for community noise. As shown in **Table C-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 C-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 C-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 C-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.¹ 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.

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 C-3**. Noise exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable.

¹ Source: Report "Transit Noise and Vibration Impact Assessment", 2006, Federal Transportation Authority, Office of Planning and Environment.

TABLE C-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 amphitheatres, 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 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 C-4: Required Attenuation Values to Achieve Acceptable Interior Noise Levels

Noise level with Proposed Actions	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, *CEQR Technical Manual*

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 C-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 C-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. 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.

Table C-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

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 Actions 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 Actions are 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 (2:30PM to 3:30PM), due to the location of two 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. Primary School (P.S.) 3 – The Bedford Village is located between Hancock Street and Jefferson Avenue one block to the north Development Site 3 along Fulton Street, and Primary School (P.S.) 256 – Benjamin Banneker is located along Kosciuszko Street one block to the south of the development sites located along DeKalb Avenue.

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 2018-2021 was applied to the existing PCE noise values based on counted vehicles². 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 (85 total DUs) and commercial space (1,279 gsf) generated by the 2021 With-Action development for each of the three development sites, which is based on existing modal split data for the census tract within which the Proposed Project is located.³ The total incremental vehicles generated by the Proposed Project per hour were estimated at six for the AM peak hour, eight for the midday peak hour, and seven for the PM peak hour. For conservative purposes, all of the action-generated trips were assigned to DeKalb Avenue and Fulton Street, exclusive of one another.

V. EXISTING CONDITIONS

The project area is comprised of eight tax lots, which are grouped into three development sites in the Bedford-Stuyvesant neighborhood of Brooklyn CD 3. As shown in **Table C-6**, Development Site 1 at 633-639 DeKalb Avenue consists of four tax lots (Block 1774, Lots 74, 75, 76, 77), totalling approximately 9,827 square feet (sf). All four lots are currently vacant and contain overgrown vegetation and debris. Development Site 2 has approximately 100 feet of frontage along the north side of DeKalb between Nostrand and Marcy Avenues. Development Site 2 at 648-654 DeKalb Avenue consists of three tax lots

² Calculation according to Table 16-4 in the *CEQR Technical Manual*.

³ Based on: 2011-2015 ACS T128. Means of Transportation Journey to Work, Brooklyn Census Tract 253; *West Harlem Rezoning FEIS*, August 2012.

(Block 1779, Lot 22, 24, 26), totalling approximately 10,983 sf. All three lots are currently vacant and contain overgrown vegetation and debris. Development Site 2 has approximately 109 feet of frontage along the south side of DeKalb Avenue. All lots within Development Sites 1 and 2 are zoned R6A. Development Site 3 consists of one tax lot (Block 2000, Lot 43), totalling approximately 1,786 sf. Development Site 3 is vacant and contains overgrown vegetation and debris. Development Site 3 has approximately 20 feet of frontage along the north side of Fulton Street between Spencer Place and Bedford Avenue. Development Site 3 is zoned R7D/C2-4.

Table C-6: Development Sites – Existing Conditions

Development Site 1					
Block	Lot	Address	Zoning District	Land Use	Lot Area (SF)
1774	74, 75, 76, 77	633-639 DeKalb Avenue	R6A	Vacant	9,827
Development Site 2					
1779	22, 24, 26	648-654 DeKalb Avenue	R6A	Vacant	10,983
Development Site 3					
2000	43	1187 Fulton Street	R7D/C2-4	Vacant	1,786
Total					22,596

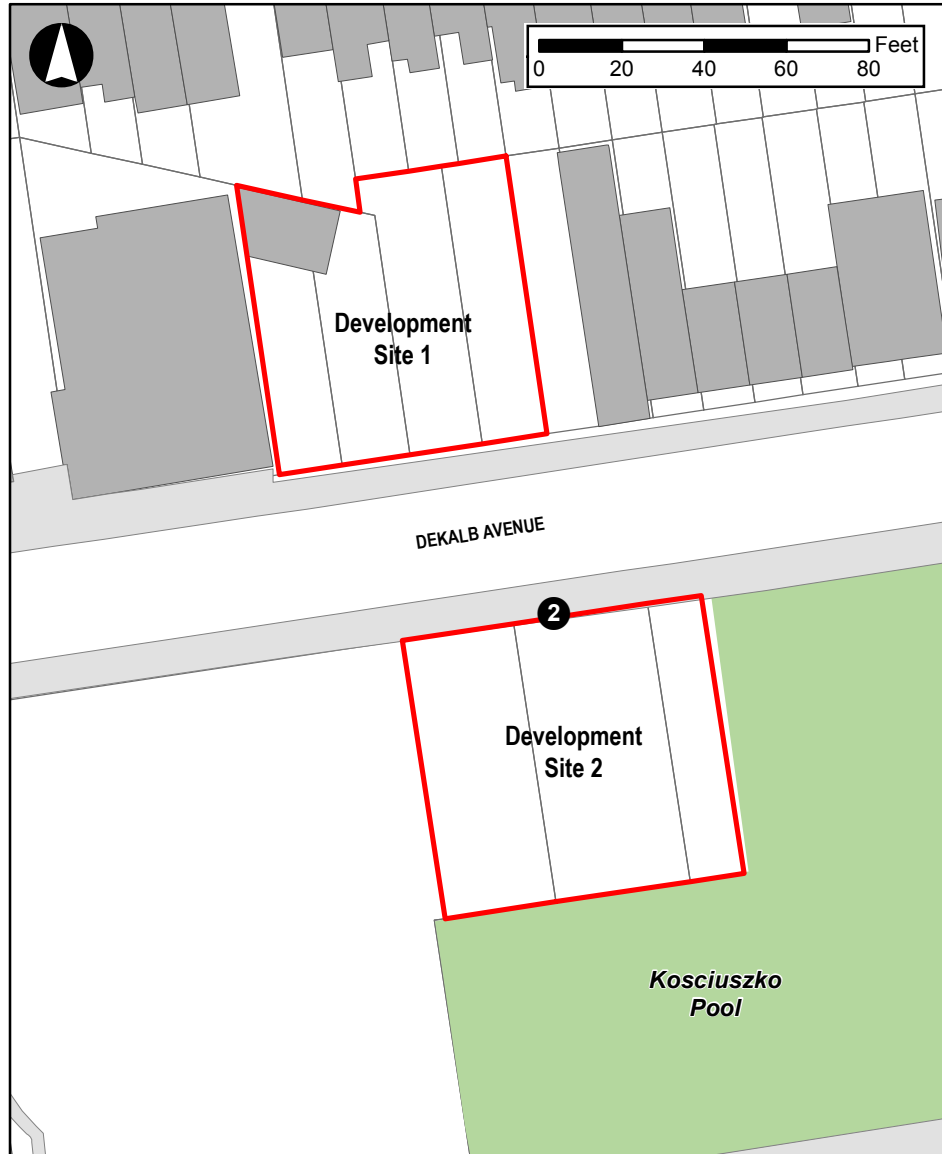
The area surrounding Development Sites 1 & 2 consists primarily of residential, public facility/institutional, and open space uses. Multi-family residential buildings are located primarily to the north of Development Sites 1 & 2, while public facility/institutional and open space uses dominate the areas located to the south, east, and west. Public facility/institutional uses include a daycare center, the Marcy branch of the Brooklyn Public Library, a church, a nursing home, a medical office building, and a public school (P.S. 256). Open space uses include Kosciusko Pool and Banneker Playground. Commercial uses are also present to the west of Development Sites 1 & 2 along Nostrand Avenue, which serves as a commercial corridor for the surrounding area. Commercial uses in this area include a Home Depot and local retail establishments located on the ground floors of mixed-use commercial/residential buildings.

The area surrounding Development Site 3 consists primarily of residential, mixed-use commercial/residential, public facility/institutional, and vacant uses. Residential buildings are located primarily to the north and south of Development Site 3, and include a mix of multi-family and one- and two-family buildings. Mixed-use commercial/residential buildings are located primarily to the east and west of Development Site 3, along Fulton Street, which serves as a commercial corridor for the surrounding area. Commercial uses in this area are typically local retail establishments located on the ground floors of mixed-use commercial/residential buildings. A small number of public facility/institutional uses are located to the east of Development Site 3 and include a mosque and several churches.

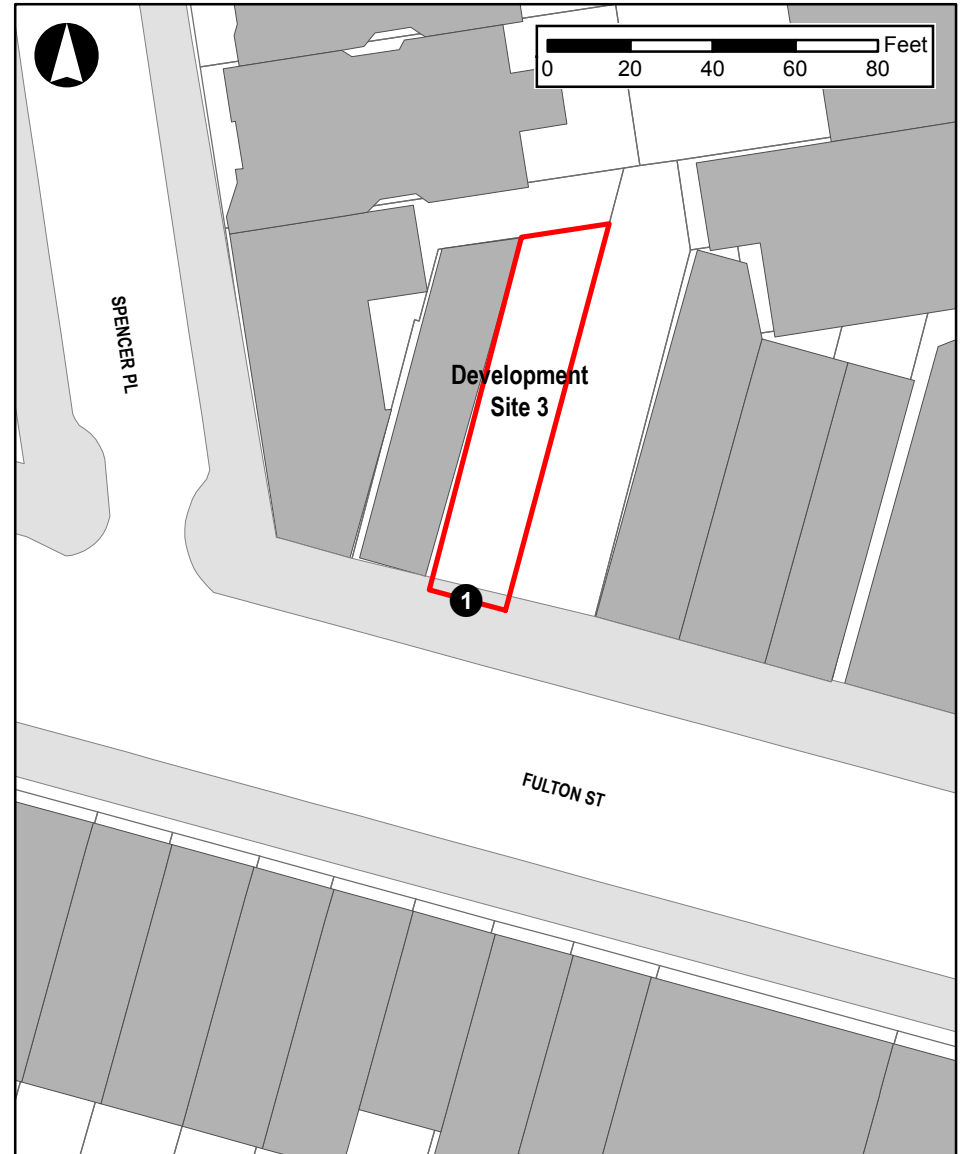
Selection of Noise Monitoring/Receptor Locations

In order to collect existing baseline volumes at the development sites, existing noise levels were measured at two locations. Receptor 1 was located on the northern side of Fulton Street along the southern frontage of Development Site 3 (1187 Fulton Street), to measure noise resulting from traffic along Fulton Street. Receptor 2 was located on the southern side of DeKalb Avenue along the northern frontage of Development Site 2 (648-654 DeKalb Avenue), to measure noise resulting from traffic along DeKalb Avenue. For reference, the noise monitoring receptor locations are identified in **Figure C-1** and explained further below:

633-639 & 648-654 DeKalb Avenue:



1187 Fulton Street:



Legend

- ① Noise Monitoring Locations
- ▭ Development Sites
- ▭ Existing Building Footprints
- ▭ Sidewalks
- ▭ Open Space

Receptor Location 1 – Future southern frontage of Development Site 3 (Fulton Street); approximate midpoint of lot frontage.

Receptor Location 2 – Future northern frontage of Development Site 2 (648-654 DeKalb Avenue); approximate midpoint of lot frontage.

Noise Monitoring

At Receptor 1, as the main source of noise was local traffic, pursuant to CEQR guidelines, 20-minute measurements were performed 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). At Receptor 2, as the main source of noise was local traffic, pursuant to CEQR guidelines, 20-minute measurements of existing noise levels were performed during the same three analysis time periods as at Receptor 1. Additional noise measurements were performed at Receptors 1 and 2 during the school dismissal/bus departure (School PM) peak period (2:30PM to 3:30PM), due to the proximity of Primary School 5 (P.S. 5 – The Bedford Village) to Receptor 1 and Primary School 256 (P.S. 256 – Benjamin Banneker) to Receptor 2. Noise monitoring was conducted during the School PM weekday peak period in order to determine whether ambient noise levels were higher during this period than during the other standard weekday peak periods. Noise monitoring at Receptors 1 and 2 was performed on Thursday, January 18th, 2018. On January 18th, 2018, the weather was mostly cloudy with temperatures in the low- to mid-30s and an average wind speed of eight 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 DeKalb Avenue and Fulton Street. 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 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 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 C-7** below. Automobile traffic was the dominant source of noise at Receptor 1, located on the street level along Fulton Street, and at Receptor 2, located on the street level along DeKalb Avenue. Overhead flights were moderate sources of noise at each of the receptors, but they were not continuous.

As vehicle activity on adjacent roadways were relatively high, there were relatively moderate noise levels in the vicinity of the development sites. Specifically, as shown in **Table C-7**, the highest overall L_{10} value (69.7 dBA) was measured in the AM peak period at Receptor 1. Pursuant to *CEQR Technical Manual*

guidelines, this L_{10} value places Receptor 1 in the “Marginally Acceptable” CEQR Noise Exposure category, as the noise levels exceed 65.0 dBA under existing conditions. The highest L_{10} for Receptor 2 was measured in both the AM and PM peak periods (each 67.5 dBA), placing Receptor 2 in the “Marginally Acceptable” CEQR Noise Exposure category under existing conditions.

TABLE C-7: Existing Noise Levels (dBA) at Development Sites

# ¹	Noise Receptor Location	Time ²	L_{max}	L_{min}	L_{eq}	L_1	L_{10} ³	L_{50}	L_{90}	CEQR Noise Exposure Category
1	North side of Fulton Street; approximate midpoint of frontage; street level	AM	82.5	54.3	66.1	74.8	69.7	62.9	56.1	Marginally Acceptable
		MD	88.1	51.2	66.2	77.0	68.2	61.5	52.8	
		SC	90.5	52.0	66.3	76.4	67.2	60.9	53.9	
		PM	80.2	53.1	64.7	72.7	68.0	62.1	54.7	
2	South side of DeKalb Avenue; approximate midpoint of frontage; street level	AM	83.3	52.9	64.3	72.9	67.5	61.5	55.7	Marginally Acceptable
		MD	76.9	49.1	62.9	72.8	66.6	58.6	52.3	
		SC	87.9	49.0	63.2	71.2	66.2	58.3	52.0	
		PM	80.1	48.4	63.7	71.8	67.5	60.8	55.4	

Notes: Field measurements were performed by Philip Habib & Associates on January 18th, 2018.

¹ Refer to Figure C-1 for receptor locations.

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

³ Highest L_{10} 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 L_{dn} for Receptor 1 was estimated to be 66.7 dBA, and the L_{dn} for Receptor 2 was estimated to be 64.5 dBA. According to HUD criteria, the calculated existing L_{dn} noise level at Receptor 1 would be in the “Normally Unacceptable” category and the calculated existing L_{dn} noise level at Receptor 2 would be in the “Acceptable” category.

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

In the future without the Proposed Actions (the No-Action scenario), it is expected that there would be no new development on any of the three development sites, and each of the eight tax lots that comprise the three development sites would remain in their current vacant state.

As there are no additional anticipated developments expected to generate a significant number of vehicle trips by 2021 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 2018 to 2021 to the existing traffic levels at Receptors 1 and 2 (refer to **Table C-8**).

In the future without the Proposed Actions, noise levels at the development sites would be similar to existing conditions, apart from slight increases (0.03 dBA) associated with minor increases in traffic along DeKalb Avenue and Fulton Street due to general background growth. As indicated in **Table C-8**, noise levels at both 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.

TABLE C-8: 2021 No-Action Noise Levels (dBA) at the Development Sites

#	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	1,710.0	1,722.9	66.1	66.1	0.03	69.8	Marginally Acceptable
	MD	1,575.0	1,586.8	66.2	66.2	0.03	68.2	
	SC	1,089.0	1,097.2	66.3	66.3	0.03	67.3	
	PM	1,083.0	1,091.1	64.7	64.7	0.03	68.0	
2	AM	1,560.0	1,571.7	64.3	64.3	0.03	67.5	Marginally Acceptable
	MD	1,554.0	1,565.7	62.9	63.0	0.03	66.7	
	SC	780.0	785.9	63.2	63.3	0.03	66.2	
	PM	600.0	604.5	63.7	63.8	0.03	67.5	

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, 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 L_{dn} for Receptor 1 was estimated to be 66.8 dBA, and the L_{dn} for Receptor 2 was estimated to be 64.5 dBA. According to HUD criteria, the calculated existing L_{dn} noise level at Receptor 1 would remain in the “Normally Unacceptable” category and the calculated existing L_{dn} noise level at Receptor 2 would remain in the “Acceptable” category.

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

Following *CEQR Technical Manual* guidelines, noise levels in the future with the Proposed Actions were calculated for the weekday AM, MD, and PM peak periods in the 2021 analysis year. These calculations account for the additional traffic that would be added as a consequence of the Proposed Actions. As shown in **Table C-9**, the analysis indicates that the highest L_{10} noise levels at Receptor 1 will be 69.8 dBA, and it will remain in the Marginally Acceptable Noise Exposure category; and the highest L_{10} noise levels at Receptor 2 will be 67.5 dBA and it will remain in the Marginally Acceptable Noise Exposure category.

In the future with the Proposed Actions, noise levels at the development sites would be similar to No-Action conditions, apart from slight increases (up to 0.05 dBA) associated with increased traffic along DeKalb Avenue and Fulton Street. As indicated in **Table C-9**, noise levels at each receptor location 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.

TABLE C-9: 2021 With-Action Noise Levels (dBA) at the Development Sites

#	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	1,722.9	1,728.9	66.1	66.1	0.02	69.8	Marginally Acceptable
	MD	1,586.8	1,594.8	66.2	66.3	0.02	68.2	
	SC	1,097.2	1,105.2	66.3	66.4	0.03	67.3	
	PM	1,091.1	1,098.1	64.7	64.8	0.03	68.0	
2	AM	1,571.7	1,577.7	64.3	64.3	0.02	67.5	Marginally Acceptable
	MD	1,565.7	1,573.7	63.0	63.0	0.02	66.7	
	SC	785.9	793.9	63.3	63.3	0.04	66.3	
	PM	604.5	611.5	63.8	63.8	0.05	67.5	

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 0.02 dBA to 0.03 dBA; and increases in noise levels at Receptor 2 would range from 0.02 dBA to 0.05 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 Actions 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, 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 L_{dn} for Receptor 1 was estimated to be 66.8 dBA, and the L_{dn} for Receptor 2 was estimated to be 64.5 dBA. According to HUD criteria, the calculated existing L_{dn} noise level at Receptor 1 would remain in the “Normally Unacceptable” category and the calculated existing L_{dn} noise level at Receptor 2 would remain in the “Acceptable” category.

VIII. 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 would be 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.

Play Area Noise

While people are not usually thought of as stationary noise, children in playgrounds or spectators at outdoor sporting events or concerts can introduce additional sources of noise within communities. According to the *CEQR Technical Manual*, noise generated by children in playgrounds or people using parks is considered a stationary source of noise. As noted in **Attachment A, "Project Description,"** the 2.39-acre Kosciuszko Pool, an outdoor pool facility operated by NYC Parks, is located to the east of Development Site 2, on the neighboring tax lot.

According to *CEQR Technical Manual* guidance, the maximum L_{eq} noise level at the boundary of a playground would be 75 dBA. Geometric spreading and the consequent dissipation of sound energy with increased distance from the playground decreases noise levels at varying distances from the playground boundary. Based upon measurements and acoustical principles, hourly noise levels at 15 feet from the boundary would be 73 dBA, and 70 dBA at 30 feet, and noise levels would continue to decrease by 4.5 dBA per doubling of distance beyond 30 feet. In certain situations these values may overstate playground noise levels.⁴

Due to the proximity of Kosciuszko Pool to Development Site 2, the southern and eastern facades of the proposed building would experience hourly noise levels of up to 75 dBA. After calculating the predicted L_{10} noise levels from Kosciuszko Pool (see **Table C-10**), the southern facade of the proposed building would fall in the "Marginally Unacceptable" (I) CEQR Noise Exposure category while the eastern facade of the proposed building would fall in the "Marginally Unacceptable" (IV) CEQR Noise Exposure category. However, with implementation of the attenuation levels outlined in Section IX below, the Proposed Project would provide sufficient attenuation to achieve *CEQR Technical Manual* interior noise level guidelines of 45 dBA for the proposed building's residential uses.

Table C-10: Noise Levels due to Proximity of Kosciuszko Pool (dBA)

Sensitive Receptor at 648-654 DeKalb Avenue	Distance to Pool (in feet)	Estimated Playground Noise at Receptor (L_{eq}) ¹ (in dBA)	Predicted L_{10} Noise Level ² (in dBA)
Southern Facade of Proposed Project	30	70	73.0
Eastern Facade of Proposed Project	8	75	78.0

Notes: ¹ Estimated playground noise level calculations based on 4.5 dBA decrease in noise levels for every doubling of distance after 30 feet (Source: SCA Playground Noise Study, AKRF, Inc., October 23, 1992)

² For conservative purposes, predicted L_{10} play area noise levels calculated by combining the playground L_{eq} and the difference between L_{eq} and L_{10} monitored noise levels (3.04 dBA) under existing conditions.

⁴ Based upon noise measurements taken at ten school playgrounds in 1987. DEP. *CEQR Technical Manual*, Chapter 19: Noise, Section 333.

IX. ATTENUATION REQUIREMENTS

CEQR

As shown earlier in **Table C-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 both noise receptor locations would remain in the “Marginally Acceptable” CEQR noise exposure category, and 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.

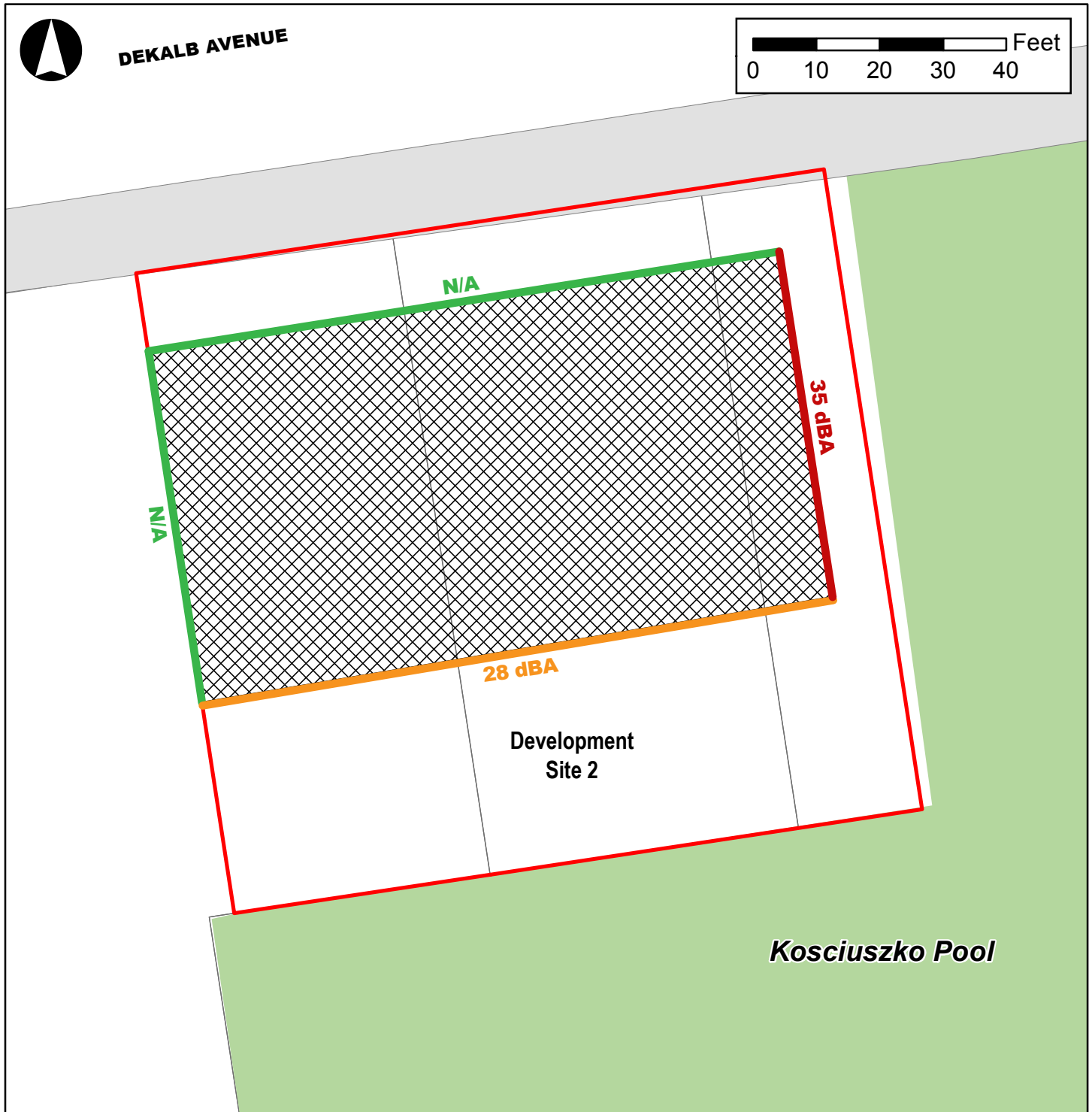
However, as detailed in Section VIII above, the maximum predicted L_{10} noise level is expected to be 73.0 dBA along the southern facade and 78.0 dBA along the eastern facade of the proposed building at 648-650 DeKalb Avenue. Thus, as shown in **Figure C-2**, to ensure acceptable interior noise levels at Development Site 2, a minimum of 28 dBA of attenuation is needed along the proposed building’s southern facade and a minimum of 35 dBA of attenuation is needed along the proposed building’s eastern facade.

The noise attenuation specifications for Development Site 2 at 648-654 DeKalb Avenue 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} for residential uses. Therefore, the Proposed Project would not result in any significant adverse noise impacts related to building noise attenuation requirements.

HUD

As described above in the “HUD Development Guidelines” section, the L_{dn} for both receptor locations were estimated using the worst-case With-Action L_{10} noise levels. 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 66.8 dBA and the L_{dn} at Receptor 2 was determined to be 64.5 dBA. As the calculated With-Action L_{dn} noise level at Receptor 2 would be in the in the “Acceptable” category, no attenuation measures are required to ensure interior noise levels of 45 dBA. However, as the calculated

648-650 DeKalb Avenue:



Legend

- Development Site
- Proposed Building Footprint
- Existing Building Footprints

CEQR Window/Wall Attenuation Requirements

(Refer to Table E-10)

- N/A
- 28 dBA
- 35 dBA

*Attenuation requirements for commercial uses would be 5 dBA less.

With-Action L_{dn} noise level at Receptor 1 would be in the “Normally Unacceptable” category, additional attenuation measures are required to ensure interior noise levels of 45 dBA.

According to the *HUD Acceptability Standards for Noise*, all facades that would experience an L_{10} of 65.0 dBA to 70.0 dBA must provide an alternate means of ventilation (AMV) permitting a closed window condition during warm weather. Thus, to ensure acceptable interior noise levels for the Proposed Project at Receptor 1, a minimum of 25 dBA of attenuation is needed along the proposed development’s southern facade. The noise attenuation specifications for Development Site 3 at 1187 Fulton Street (Block 2000, Lot 43) 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} for residential uses. Therefore, the Proposed Project would not result in any significant adverse noise impacts related to building noise attenuation requirements.

APPENDIX A
HISTORIC RESOURCES

ENVIRONMENTAL REVIEW

Project number: HOUSING PRESERVATION AND DEV. / LA-CEQR-K
Project: DEKALB AVE/FULTON STREET
Date received: 1/17/2018

Properties with no Architectural or Archaeological significance:

- 1) ADDRESS: 1187 Fulton Street, BBL: 3020000043
- 2) ADDRESS: 639 DeKalb Avenue, BBL: 3017740074
- 3) ADDRESS: 637 DeKalb Avenue, BBL: 3017740075
- 4) ADDRESS: 635 DeKalb Avenue, BBL: 3017740076
- 5) ADDRESS: 633 DeKalb Avenue, BBL: 3017740077
- 6) ADDRESS: 648 DeKalb Avenue, BBL: 3017790022
- 7) ADDRESS: 652 DeKalb Avenue, BBL: 3017790024
- 8) ADDRESS: 654 DeKalb Avenue, BBL: 3017790026

Gina Santucci

1/29/2018

SIGNATURE
Gina Santucci, Environmental Review Coordinator

DATE

File Name: 33029_FSO_DNP_01262018.doc

APPENDIX B
HAZARDOUS MATERIALS



May 9, 2018

Callista Nazaire
Deputy Director, Environmental Planning
New York City Department of Housing Preservation and Development
100 Gold Street
New York, NY 10038

Re: DeKalb Commons
633-639 DeKalb Avenue and 648-654 DeKalb Avenue
Block 1774, Lots 74, 75, 76, and 77; Block 1779, Lots 22, 24, and 26
CEQR # 18HPD078K

Dear Ms. Nazaire:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the February 2018 Environmental Assessment Statement, the July 2017 Phase I Environmental Site Assessment (Phase I) for 633-639 DeKalb Avenue, the September 2017 Phase I for 648-654 DeKalb Avenue and the March 2018 Phase II Environmental Site Assessment Work Plans (Work Plan) and Health and Safety Plans (HASP) prepared by ALC Environmental on behalf of Housing Development Fund Corporation (applicant) for the above referenced project. It is our understanding that the New York City Department of Housing Preservation and Development (HPD) on behalf of the applicant is proposing to develop several vacant sites with a total of three residential buildings containing a total of 85 dwelling units in the Bedford-Stuyvesant neighborhood of Brooklyn Community District 3. The City-owned vacant sites include a total of eight tax lots and are grouped into three development sites. Development Site 1 includes four lots to be developed at 633-639 DeKalb Avenue. Development Site 2 includes three lots to be developed at 648-654 DeKalb Avenue. This proposal involves an application by HPD for several actions subject to City Planning Commission approval including the disposition of City-owned property and designation and approval of the project area as an Urban Development Action Area Project.

633-639 DeKalb Avenue

The July 2017 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential and commercial uses including a tin shop, printing, shoe repair, auto repair, hospital supplies manufacturing, cosmetics manufacturing, a paint store, a dyeing and cleaning facility and warehousing. Regulatory databases identified 16 spills, 2 historical auto body shops and 1 historical dry cleaner within 1/8 mile; 9 underground storage tank sites and 21 aboveground storage tank sites within 1/4 mile; and 31 leaking storage tank sites and 2 brownfield sites within 1/2 mile of the subject property.

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

The March 2018 Work Plan proposes to advance six soil borings to a depth of 11 feet below grade surface (bgs). Two soil samples will be collected from each of the six soil borings. A surface soil sample (from 0 to 2 feet bgs) and a subsurface soil sample (from the 2-foot interval beneath the proposed maximum excavation depth of 9 feet bgs) will be collected from soil borings advanced within the footprint of the proposed development. A subsurface soil sample will be collected from 4 to 6 feet bgs from soil borings advanced within proposed unexcavated areas. Groundwater samples will be collected from three temporary groundwater monitoring wells. Soil and groundwater samples will be analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds (SVOCs) by EPA Method 8270, Target Analyte List (TAL) Metals by EPA Method 6010 and 7471 (filtered and unfiltered for groundwater), pesticides by EPA Method 8081, and polychlorinated biphenyls (PCBs) by EPA Method 8082. Five soil vapor samples will be collected and analyzed for VOCs via EPA Method TO-15.

648-654 DeKalb Avenue

The September 2017 Phase I report revealed that historical on-site and surrounding land uses consisted of a variety of residential and commercial uses including lumber storage, woodworking, and printing. Regulatory databases identified 16 spills, 3 historical auto body shops and 1 historical dry cleaner within 1/8 mile; 8 underground storage tank sites and 21 aboveground storage tank sites within 1/4 mile; and 30 leaking storage tank sites and 2 brownfield sites within 1/2 mile of the subject property.

The March 2018 Work Plan proposes to advance four soil borings to a depth of 11 feet bgs. Two soil samples will be collected from each of the four soil borings. A surface soil sample (from 0 to 2 feet bgs) and a subsurface soil sample (from the 2-foot interval beneath the proposed maximum excavation depth of 9 feet bgs) will be collected from soil borings advanced within the footprint of the proposed development. A subsurface soil sample will be collected from 4 to 6 feet bgs from soil borings advanced within proposed unexcavated areas. Groundwater samples will be collected from three temporary groundwater monitoring wells. Soil and groundwater samples will be analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270, TAL Metals by EPA Method 6010 and 7471 (filtered and unfiltered for groundwater), pesticides by EPA Method 8081, and PCBs by EPA Method 8082. Four soil vapor samples will be collected and analyzed for VOCs via EPA Method TO-15.

Based upon our review of the submitted documentation, we have the following comments and recommendations to HPD:

Work Plans

- HPD should instruct the applicant that the proposed sampling locations should be individually labeled in Figure 2 (e.g., SB-1, GW-1, SV-1, etc.).

DEP finds the March 2018 Work Plans and HASPs for the proposed project acceptable as long as the aforementioned information is incorporated into the Work Plans. HPD should inform the applicant that upon completion of the investigation activities, the applicant should submit a

detailed Phase II report to DEP for review and approval. The report should include, at a minimum, an executive summary, narrative of the field activities, laboratory data and conclusions, comparison of soil, groundwater, and soil vapor analytical results (i.e., New York State Department of Environmental Conservation (NYSDEC) 6NYCRR Part 375, NYSDEC Water Quality Regulations, and the New York State Department of Health's October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York), updated site plans depicting sample locations, boring logs, and remedial recommendations, if warranted.

Sincerely,



Wei Yu
Deputy Director, Hazardous Materials

- c: R. Weissbard
- S. Davidow
- T. Estes
- M. Wimbish

APPENDIX C
SHADOWS



NYC Parks

City of New York
Parks & Recreation
www.nyc.gov/parks

Planning & Development Division

TO: Nicole J. Francis, HPD, Environmental Planner

FROM: Emily Humes, NYC Parks, Project Planner

CC: Colleen Alderson, NYC Parks; Callista Nazaire, HPD

DATE: February 5, 2019

RE: Dekalb Commons
CEQR No. 18HPD078K
Shadows/Kosciuszko Pool

Parks has concluded its environmental review of HPD's project "DeKalb Commons." HPD is proposing to develop eight vacant lots with a total of three buildings containing a total of approximately 85 affordable dwelling units, and approximately 2,512 gsf of commercial space on what are currently vacant lots. One of these buildings will be directly adjacent to Kosciuszko Pool and a second of these buildings will be across the street (north-west).

The building directly adjacent to the pool (Development Site 2) will be 7 stories tall and contain 45 affordable DU. This building will cast shadows on Kosciuszko Pool. To a lesser degree, the building across the street (Development Site 1) will result in incremental shadows as well during the June 21 analyses period. As per the EAS, shadows will fall on the pool proper for nearly two hours during the May/August analysis day and approximately 3 hours during the June analysis day. These shadows will fall on the pool proper beginning in the afternoon, starting at about 4pm until the end of the pool's operational hours. The EAS dated October 11, 2018 states that the proposed actions would result in limited incremental shadows in duration and coverage and would not affect the utilization or enjoyment of this open space resource. The EAS concludes no significant adverse impact based on the shadow analyses.

Pools are an especially sunlight sensitive resource. Kosciuszko Pool in particular provides a critical resource to this community due to: its larger size (nearest large pools are McCarren and Betsy Head), Bed-Stuy's high heat vulnerability, Bed-Stuy's high poverty level, Bed-Stuy's high population density coupled with minimal open space resources, and Bed-Stuy's high projected population growth. For the 2018 pool season, the pool had nearly 50,000 visitors. After reviewing the EAS dated October 11, 2018, the updated and supplemental shadow graphics received in December, and carefully considering all of the above, NYC Parks recommends that HPD disclose a significant adverse impact in its environmental review due to the extent and duration of shadows and the subsequent effect they will likely have on utilization of the Kosciuszko Pool.