THE CITY OF NEW YORK
OFFICE OF THE MAYOR
NEW YORK, N.Y. 10007

CITY ENVIRONMENTAL QUALITY REVIEW
NOTICE OF COMPLETION FOR THE
DRAFT ENVIRONMENTAL IMPACT STATEMENT

FLUSHING COMMONS

Lead Agency:	Office of the Deputy Mayor for Economic Development
Lead Agency Representative:	Robert R. Kulikowski, Ph.D.
CEQR No.:	06DME010Q
SEQR Classification:	Type I
Date Issued:	January 20, 2010
Location:	Block bounded by 138th Street, 37th Avenue, 39th Avenue, and Union Street (Block 4978, Lots 25 and 46), located in Queens Community District 7.

Pursuant to the City Environmental Quality Review (CEQR), Mayoral Executive Order 91 of 1977, as amended, and the CEQR Rules of Procedure found at Title 62, Chapter 5 of the Rules of the City of New York, and the State Environmental Quality Review Act (SEQRA), Article 8 of the State Environmental Conservation Law and its implementing regulations found in Part 617 of 6 NYCRR, a Draft Environmental Impact Statement (DEIS) has been prepared for the actions described below and is available for public review at the offices listed on the last page of this notice. A public scoping meeting was held on June 21, 2006 to accept oral comments on the draft Scope of Work, and written comments were accepted until July 7, 2006. The Final Scope of Work was issued on December 4, 2009. A public hearing on the DEIS will be held at a date to be announced later, in conjunction with the City Planning Commission's public hearing pursuant to the Uniform Land Use Review Procedure (ULURP). Advance notice will be given of the time and place of the hearing, as well as when the public comment period will end. Written comments on the DEIS are requested and will be received and considered by the Lead Agency from now until the tenth calendar day following the close of the public hearing.

A. PROJECT DESCRIPTION

Flushing Commons is a proposal to redevelop Municipal Lot 1 in Downtown Flushing, Queens, into a mixed-use project containing residential, commercial (including office, retail, restaurant, and possibly hotel uses), and community facility uses; a multi-level underground parking garage; and an approximately 1.5-acre town square-style open space (collectively, the "proposed project").

Public actions required to permit the proposed Flushing Commons project to go forward include disposition of interests in City-owned property from the New York City Department of Transportation (NYCDOT) to the New York City Economic Development Corporation (NYCEDC) and, subsequently, from NYCEDC to the designated developer, Flushing Commons LLC, based on business terms to be finalized pursuant to City Charter Section 384(b)(4); rezoning the project site block; special permits for public parking facilities; a special permit for waivers pursuant to a General Large-Scale Development; a zoning text amendment pursuant to provisions of a General Large-Scale Development; a zoning text amendment to the Downtown Flushing Waterfront Access Plan and related waterfront certification; and a special permit from the New York City Board of Standards and Appeals (BSA) to allow for modification of height regulations that apply to areas around major airports (collectively, the "proposed action").

The proposed rezoning would encompass the entire block bounded by 138th Street, 37th Avenue, 39th Avenue, and Union Street (Block 4978, Lots 25 and 46), located in Queens Community District 7. The proposed Flushing Commons project would be constructed on a portion of Lot 25 ("project site"). The remainder of the rezoning area is occupied by Macedonia African Methodist Episcopal (AME) Church (Lot 46), as well as a portion of the municipal parking lot (Lot 25) not included in the Flushing Commons project site.

The proposed rezoning would also allow for the development of the Macedonia Plaza affordable housing project on the northeast portion of the municipal parking lot, which is not part of the Flushing Commons project site.[1] To facilitate that development, the proposed action includes the transfer of management and jurisdiction of City-owned property from the NYCDOT to the New York City Department of Housing Preservation and Development (HPD) and, subsequently, disposition of the property from HPD to an entity established specific to the project. The Macedonia Plaza project is subject to the Uniform Land Use Review Procedure (ULURP) under City Charter Sections 197(c) and 197(d) and with business terms to be finalized pursuant to Article 16 of the General Municipal Law and Section 1802(6)(j) of the City Charter.

If the proposed action is approved, the Flushing Commons and Macedonia Plaza projects are anticipated to be completed in 2013.

B. PROPOSED ACTIONS

The proposed action would entail a number of City approvals requiring review under City Environmental Quality Review (CEQR). Several of these are discretionary actions requiring review under ULURP. Others require environmental review but are not subject to ULURP; nonetheless, these are subject to review under each relevant agency's public mandate.

DISCRETIONARY APPROVALS FROM THE CITY PLANNING COMMISSION

Approval for the Flushing Commons business terms pursuant to City Charter Section 384(b)(4) and Article 16 of the General Municipal Law is required by the Office of the Deputy Mayor for Economic

[1] Separate ULURP and BSA applications are associated with the Macedonia Plaza project. This Environmental Impact Statement (EIS) analyzes the potential environmental impacts associated with both the Flushing Commons and Macedonia Plaza projects.

Development (ODMED). Based on this primary action, ODMED is the CEQR lead agency for the proposed project.

The following discretionary actions from the New York City Planning Commission (CPC) are required for the development of the project site and rezoning. Additional discretionary actions are also required for the use of three off-site public parking areas during construction.

REZONING AREA

- **Zoning Map Amendment** to rezone the block bounded by 37th Avenue to the north, Union Street to the east, 39th Avenue to the south, and 138th Street to the west from C4-3 to C4-4. C4-4 and C4-3 permit the same maximum floor area ratio (FAR) for commercial uses—3.40. However, C4-4 districts permit a maximum 6.5 FAR for community facility uses and 3.44 FAR for residential uses—C4-3 districts only permit a maximum 4.8 FAR and 2.43 FAR, respectively. C4-4 districts have lower parking requirements than C4-3 districts. For example, C4-4 has a parking requirement for certain commercial uses of one space per 1,000 sf of development, while C4-3 requires one space per 400 sf.

  As part of the zoning map amendments, E-designations would be mapped, as appropriate, to address potential issues related to air quality and noise. The specific language for the E-designations is described in greater detail in Chapter 16, "Air Quality," and Chapter 17, "Noise."

Flushing Commons

- **A General Large-Scale Development** would be declared for the Flushing Commons project site pursuant to Zoning Resolution (ZR) Section 74-74. Special permits pursuant to ZR Sections 74-743 and 74-744 (General Large Scale Development) would be required to obtain waivers from certain specific zoning requirements (height and setback, rear yard equivalent, rear yard setback, location of uses within buildings, minimum distance between buildings, and open space).
- **Zoning Text Amendment** to ZR Section 74-743 to allow modification of open space regulations pursuant to the General Large-Scale Development special permit for the Flushing Commons project.
- **Disposition of City-owned property** to NYCEDC for the Flushing Commons project. A portion of Block 4978, Lot 25 would be disposed of, first to NYCEDC and then to Flushing Commons LLC. Disposition would require approval through ULURP under City Charter Section 197(c) and separate Borough Board and Mayoral approval pursuant to City Charter Section 384(b)(4) for the approval of the business terms pursuant to Article 16 of the General Municipal Law and Section 1802(6)(j) of the City Charter.
- **Public Parking Special Permit** pursuant to ZR Section 74-512 (Parking Garages or Public Parking Lots Outside High Density Central Areas) for the Flushing Commons project's public parking garage.

Macedonia Plaza

- **Urban Development Action Area Project (UDAAP) Designation, Disposition, and Project Approval** for the Macedonia Plaza project pursuant to Article 16 of the General Municipal Law.
- **Disposition of City-owned property** from HPD to a developer to be selected by HPD. Disposition would require approval through ULURP under City Charter Section 197(c) and 197(d).

OFF-SITE: COLLEGE POINT PARKING LOT

During construction, the lot located at 37-02 College Point Boulevard (Block 4963, Lot 85) would be used as an interim parking lot. The waterfront lot is also located on Parcel 2 of the Downtown Flushing Waterfront Access Plan.

- **Public Parking Special Permit** pursuant to ZR Section 74-512 and ZR Section 62-835 (Public Parking Facilities on Waterfront Blocks) to permit an interim (for a maximum term of ten years) public parking lot within a waterfront area at 37-02 College Point Boulevard (Block 4963, Lot 85).
- **Zoning Text Amendment** to ZR Section 62-952 (Waterfront Access Plan Q-2, Downtown Flushing), which requires development on sites within the Downtown Flushing Waterfront Access Plan to provide access to the waterfront from College Point Boulevard and a public walkway along the river, and to maintain a visual corridor from College Point Boulevard to the pierhead line. The proposed text amendment would exempt interim parking lots only on Parcel 2 from the access, public walkway, and visual corridor requirements and allow CPC to permit a public parking lot on Parcel 2 for a term of no more than 10 years.
- **Waterfront Certification** pursuant to ZR Section 62-811 relating to waterfront public access and visual corridors.

OFF-SITE: FULTON/MAX SITE

During construction, additional public parking would be provided between Prince Street and College Point Boulevard at the site of the existing Flushing Mall located west of the project site between 37th Avenue and 39th Avenues. With or without the proposed action, the existing Flushing Mall would ultimately be demolished and the site would be redeveloped for other uses to be determined in the future. The demolition and displacement of existing businesses is considered in the future condition without the proposed action.

- **Public Parking Special Permit** pursuant to ZR Section 74-512, for a maximum of 10 years, for the off-site parking lot.

OFF-SITE: MUNICIPAL PARKING LOT 2

Additional public parking would also be provided at the existing Municipal Lot 2 located west of the project site on the east side of Prince Street between 38th and 39th Avenues, by expanding the existing 87-space lot by 188 spaces, for a total capacity of 275 spaces.

- **Public Parking Special Permit** pursuant to ZR Section 74-512, for a maximum of 10 years, for the off-site parking lot.

OTHER APPROVALS AND ACTIONS

- **Office of the Deputy Mayor for Economic Development** approval of the Flushing Commons business terms to be finalized pursuant to City Charter Section 384(b)(4) and Article 16 of the General Municipal Law.
- **HPD** approval of Macedonia Plaza business terms to be finalized pursuant to Article 16 of the General Municipal Law and Section 1802(6)(j) of the City Charter.
- **BSA Special Permit** pursuant to ZR Section 73-66 (Height Regulations around Airports) for modification of height regulations applying to areas around major airports. This permit is required for both the Flushing Commons and Macedonia Plaza projects.
- **New York City Department of Environmental Protection (NYCDEP)** approval for an Amended Drainage Plan.
- **Industrial Development Authority (IDA)** benefits potentially including tax abatement and financing for the Flushing Commons project.
- **Federal Aviation Administration (FAA)** determination of No Hazard to Air Navigation is required for both the Flushing Commons and Macedonia Plaza projects. The FAA issued five Determinations

of No Hazard to Air Navigation for the Flushing Commons project, one determination for each of the encroaching building points on the Flushing Commons project site, and no further action is required. The Macedonia Plaza project has also received its FAA Determination of No Hazard to Air Navigation.

- **Mayoral Zoning Overrides** are being requested for the Macedonia Plaza project, that would waive regulations associated with ZR Sections 23-142, 23-632, 36-352, and 36-21 pertaining to minimum open space ratio, height and setback limits, and minimum accessory parking spaces. The waivers of these regulations are needed to allow for the development of the project site and to support the financial feasibility of the proposed affordable housing.

DESCRIPTION OF PROPOSED PROJECT

The proposed action would rezone the entire project block from C4-3 to C4-4. The rezoning, along with the other actions, would allow for the Flushing Commons development as described below. In addition, the rezoning would also allow for the development of the affordable housing Macedonia Plaza project on the northeastern portion of the project block, not included in the Flushing Commons project site. Therefore, this EIS will consider the potential significant adverse environmental impacts from the Flushing Commons and Macedonia Plaza projects. To be conservative, the EIS examines slightly larger build programs, as described below, for both the Flushing Commons and Macedonia Plaza projects than presented in the ULURP applications for the projects.

FLUSHING COMMONS

The proposed action would allow for the development of Flushing Commons, a mixed-use development containing residential, commercial, and community facility uses; a multi-level underground parking garage; and an approximately 1.5-acre town square-style publicly accessible, privately owned open space to be constructed on the project site. Flushing Commons would be located on a portion of Lot 25 on Block 4978.

Building Program

The proposed Flushing Commons project would comprise a mix of uses in five buildings; A, B, C, D, and E. As currently conceived, the project would include approximately 620 market-rate apartments; up to 275,000 square feet (sf) of retail and restaurant space; up to 234,000 sf of office space; up to 250 hotel rooms; and up to 98,000 sf of community facility space, including an approximately 62,000-square-foot YMCA and medical offices. For a portion of the D building, different potential development scenarios of either hotel or office use, or some combination of those two uses, will be studied. Under the office scenario, a portion of the building would consist of 124,000 sf of office space, and the project would include a total of 234,000 sf of office space. The hotel scenario would provide 130,000 sf of hotel space for approximately 250 hotel rooms.

The project would also include a 1,600 space below-grade public parking garage, which would replace the 1,101 parking spaces presently in the municipal lot. Of these spaces, about 700 would be accessory parking required by the Zoning Resolution for the proposed uses. Total gross square footage, including below-grade space and parking, would be 1.89 million sf, approximately 538,000 sf of which would be below-grade.

The proposed Flushing Commons project would provide the number of accessory parking spaces required by the proposed C4-4 zoning district, and its overall floor area would be less than what would be permitted in the proposed district. However, the project represents a reasonable maximum development scenario that will be the basis for the proposed business terms with NYCEDC. A summary of the proposed development is provided below in Table S-1.

Table S-1
Summary of Flushing Commons Development by Use (in GSF)

Use	Office Scenario	Hotel Scenario
Residential (620 units)	740,000	740,000
Commercial		
Retail/Restaurant	275,000	275,000
Office	234,000	110,000
Hotel (250 rooms)	0	130,000
Commercial Total	509,000	515,000
Community Facility	98,000	98,000
Parking (1,600 spaces), service and loading	538,000	538,000
Total	**1,885,000**	**1,891,000**

Architectural Design

The Flushing Commons buildings would be organized around a central publicly accessible, privately owned open space with adjacent walkways. The proposed project would provide a significant open space (approximately 1.5 acres) that is currently missing from the urban fabric of Downtown Flushing, a town square. This open space, which would front along 138th Street, would also be visible looking into the site along 38th Avenue, Main Street, Union Street, and from Lippmann Arcade, a pedestrian walkway that extends through the block from 39th Avenue to Roosevelt Avenue. The main portion of this space would be an elliptical green opening onto 138th Street that is expected to contain a terraced lawn, formal plaza, trees, tables and chairs, additional seating, and a water feature. Three open pedestrian passageways would also lead into the central open space—from 39th Avenue, 37th Avenue, and Union Street. The open space would be open to the public at all times and available for the programming of public events.

Interim Parking During Construction

The existing parking facility on the project site is expected to be closed and demolished at the start of construction. The parking lot currently accommodates short-term, transient parking as well as long-term commuter parking. To accommodate the short-term parking demand during construction, the proposed project would also include public parking on three nearby sites, providing a total of 1,144 new public parking spaces. With these off-site lots, there would be no net loss of public parking spaces during construction.

The first interim-parking site, Fulton/Max lot, is located west of the project at the site of the existing Flushing Mall, between 37th Avenue to the north, Prince Street to the east, 39th Avenue to the south, and College Point Boulevard to the west. Currently an enclosed one-story mall with a number of local, neighborhood retail uses within its interior, Flushing Mall would be demolished and redeveloped with 647 temporary public parking spaces.[2]

The second site, College Point lot, is located west of the project site on a 4-acre parcel at College Point Boulevard, two blocks from Main Street between 39th and 37th Avenues. College Point lot is currently used as a permitted, accessory parking lot and would accommodate 309 temporary public spaces.

The third site is the existing Municipal Lot 2, located west of the project site on the east side of Prince Street between 38th and 39th Avenues. The existing 87 spaces at Lot 2 would be increased by an additional 188 spaces, for a total of 275 public parking spaces.

[2] As described above, with or without the proposed action, the existing Flushing Mall would ultimately be demolished and therefore its demolition and displacement of existing businesses is considered in the future condition without the proposed action.

MACEDONIA PLAZA

The portion of Lot 25 located north, west, and south of the AME Church not included in the Flushing Commons project site is City-owned property and is the subject of a disposition from HPD to the AME Church for development of the Macedonia Plaza project. [3]

For EIS analysis purposes, the Macedonia Plaza project is assumed to include a 14-story mixed-use development building comprising up to approximately 142 residential units (approximately 125,000 sf), 10,000 sf of community facility space, and 25,000 sf of retail space. As noted above, the Macedonia Plaza project proposes to seek a Mayoral Override of parking requirements and, as a result, the EIS does not assume any on-site parking for the Macedonia Plaza project. For analysis purposes, all residential units are assumed to be affordable.

C. PROBABLE IMPACTS OF THE PROPOSED ACTION

LAND USE, ZONING, AND PUBLIC POLICY

The proposed action would allow for the development of Flushing Commons, a mixed-use project that would be consistent with the existing land uses and density of the surrounding area, including those buildings and uses located on the blocks adjacent to the project site. These actions would permit the extension of an existing use that is consistent with the study area's retail development trends, and that also incorporates a residential component that is compatible with the existing residences on the adjacent blocks. The proposed project would augment the diversity of land uses in this area, and would add additional shopping opportunities and variety to an area that has maintained and improved upon a thriving business environment. Further, the proposed project would provide housing and open space in an established residential community that is well served by public transportation. The overall size and scale of the Flushing Commons project would be consistent with other large retail and residential uses in the immediate area and correspond to the area's role as a center of retail and commercial activities in Queens.

The proposed C4-4 district is similar to the existing C4-3 district in allowed uses and would be compatible with density in the surrounding area. The disposition of Municipal Lot 1 would be consistent with public policy, as it would fulfill a goal of the City-issued "Development Framework for Downtown Flushing" to redevelop Municipal Lot 1. The proposed Flushing Commons project itself is a City-generated initiative to redevelop Municipal Lot 1. The proposed project would incorporate several of the goals highlighted above, including a town square-style open space, enhanced pedestrian environment with street-level retail to attract shoppers east of Main Street, new residential development in Downtown Flushing, competitively priced parking on-site, and a higher standard for design, construction, and private investment in Downtown Flushing.

Therefore, no significant adverse impacts to land use, zoning, and public policy would result from the proposed action.

SOCIOECONOMIC CONDITIONS

For four of the five areas of socioeconomic concern—direct residential displacement, direct business displacement, indirect residential displacement, and adverse effects on specific industries—a preliminary assessment was sufficient to conclude that the proposed action would not cause any significant adverse

[3] Although the AME Church may renovate or expand the church building proper at some point in the future, these plans and any associated actions are not included in the proposed action and, therefore, not included in this EIS. However, as discussed in the text, the EIS does consider the development of a proposed new construction residential development.

socioeconomic impacts. The preliminary assessment of the fifth area of concern, indirect business displacement, concluded that a detailed analysis was required to determine whether significant adverse impacts would result due to competition.

The detailed analysis finds that the proposed action would not result in any such significant adverse impacts.

DIRECT RESIDENTIAL DISPLACEMENT

The proposed action would not directly displace any residential population, and therefore no significant adverse impacts would result from direct residential displacement.

DIRECT BUSINESS AND INSTITUTIONAL DISPLACEMENT

The proposed action would not directly displace any businesses or institutions, and therefore no significant adverse impacts would result from direct business and institutional displacement.

INDIRECT RESIDENTIAL DISPLACEMENT

The proposed action would not result in significant adverse impacts due to indirect residential displacement. The proposed action would introduce an estimated 2,202 new residents. This amount is approximately 3.3 percent of the estimated existing population in the study area. According to the *CEQR Technical Manual*, generally if a proposed action would increase the population in the study area by less than 5 percent—as is the case here—it would not be large enough to affect socioeconomic trends significantly. While a majority of the new population would have higher incomes than most existing residents, the new residents would not constitute a sizeable addition to the study area and therefore would not change the overall socioeconomic profile of the study area population. The proposed action would introduce 142 units of affordable housing as part of the proposed Macedonia Plaza project, and 620 units of market-rate housing that would be more costly compared with most existing housing in the study area, but comparable to other new developments planned to be built by the time the proposed action is implemented.

The assessment did not identify any factors that could substantially influence residential rents in the study area. The proposed action would also not displace any uses or properties that have had a "blighting" effect on property values in the area, nor would it alter the socioeconomic composition of the study area by direct displacement. The proposed action would introduce a sizable addition of non-residential uses to the study area, but it would not make the area noticeably more attractive as a residential neighborhood complex because Downtown Flushing is surrounded by residential and mixed-use land use patterns radiating from its established commercial core. The proposed action would draw existing residents and additional shoppers to the neighborhood's stores, further enlivening an area already known for its vibrant commercial district.

COMMUNITY FACILITIES

Although the proposed action would introduce new residents to Downtown Flushing, the proposed action would not result in significant adverse impacts to community facilities and services.

The proposed action would introduce a total of approximately 762 housing units and 2,202 new residents (the proposed Flushing Commons project would create 620 market-rate dwelling units and the Macedonia Plaza project for the remainder of the rezoning area is projected to develop 142 affordable housing units), which would likely generate approximately 213 elementary students and 91 intermediate school students. The analysis concludes that in the future with the proposed action, even with this increased enrollment, no significant impacts on public schools would occur as a result of the proposed action.

The number of new residents added to library service areas by the proposed action would be a very small percentage (1.7 percent) of the total annual library users. Therefore, the proposed action would not cause a significant adverse impact on library resources.

The proposed Macedonia Plaza project would introduce 20 children under the age of 6 who would be eligible for publicly-funded child care. (The Flushing Commons project would not include affordable housing units, and thus would not generate any students eligible for public child care.) The Macedonia Plaza project would also include a new child care facility with a 59-slot capacity. This new facility would meet the demand generated by the project's affordable housing units, and its excess capacity could be utilized to address the predicted shortage in child care slots within the 1½-mile study area. Although child care facilities in the study area would continue to operate above capacity in the future with the proposed action, the proposed Macedonia Plaza project would decrease the predicted shortage in child care slots. Therefore, the proposed action would not result in a significant adverse impact on child care facilities.

According to the thresholds set forth in the *CEQR Technical Manual*, the proposed action would not have significant adverse impacts on hospitals or health care facilities. In addition, the proposed action would not affect the physical operations of, or access to and from, a fire station or police precinct house, and, therefore, the proposed action would not have a significant adverse impact on police and fire services.

OPEN SPACE

The proposed action would add 1.52 acres of passive open space to the Flushing area and would not displace or eliminate any existing open space resources. The area currently suffers from a shortfall of passive open space resources, and the proposed action's new open space would provide a quality passive open space amenity—green, landscaped, and relatively separated from major traffic flows—that is notably absent in this densest portion of Downtown Flushing near the Main Street No. 7 subway station. As a result, passive open space ratios would increase in the future with the proposed action (see Table S-2). While these ratios would increase from existing conditions, all except the passive open space ratio per 1,000 workers would continue to be below the optimal planning goals recommended by the City. Although not accounted for in the quantitative analysis, the Macedonia Plaza project would create an additional 18,834 square feet of private open space that would be located primarily around the north, west and south sides of the existing Macedonia AME Church. While this facility would not be public, it would provide an open space amenity for Macedonia Plaza residents and, therefore, could reduce incremental demand of this new population on area open space resources.

The active open space ratio in the residential study area would decrease in the future with the proposed action and continue to be below the level recommended by the City. Because the active open space ratio is substantially lower than established City guidelines, this decline would constitute a significant adverse impact on active open spaces. The *CEQR Technical Manual* recognizes that the optimal planning goals recommended by the City are not feasible in many areas of the City, and these goals are not considered impact thresholds. According to the *CEQR Technical Manual*, a 5 percent decrease in open space ratios is considered a substantial change warranting a detailed analysis. However, in areas where the open space ratio is very low (e.g., below 1.5 acres per 1,000 residents), a decrease of 1 percent or less in the open space ratio may result in a potential significant adverse impact on open space. The proposed action is located within such an area, and would reduce the active open space ratio by 2.82 percent (see Table S-2). Therefore, it is necessary to identify measures to mitigate this impact to the greatest extent practicable. The *CEQR Technical Manual* lists potential on- and off-site mitigation measures. Absent any such measures, an unmitigated significant adverse impact on active open spaces would result.

Table S-2
2013 Future with the Proposed Action: Open Space Ratios Summary

Ratio	City Guideline	Open Space Ratios			Percent Change
		Existing Conditions	Future Without the Proposed Action	Future with the Proposed Action	Future Without the Proposed Action to Future With the Proposed Action*
Commercial Study Area					
Passive/Workers	0.15	0.291	0.258	0.320	24.07%
Passive/Total Population	weighted** (0.358)	0.110	0.102	0.130	27.73%
Residential Study Area					
Total/Residents	2.5	0.159	0.141	0.160	13.51%
Active/Residents	2	0.080	0.071	0.069	-2.82%
Passive/Residents	0.5	0.079	0.070	0.092	30.40%
Passive/Total Population	weighted (0.394)**	0.057	0.050	0.065	28.57%

Notes:
* Ratios are presented to the third decimal digit to prevent rounding errors in calculating the percent change between the future without the proposed action and the future with the proposed action.
** Weighted average combining 0.15 acres per 1,000 workers and 0.50 acres per 1,000 residents is different in each condition. In commercial study area: existing conditions, 0.37; future without the proposed action, 0.36; future with the proposed action, 0.36. In residential study area: 0.40 for existing and future without the proposed action and 0.39 in the future without the proposed action.

In considering the significance of the projected decline in the active open space ratio, it is important to note that the proposed action would add open space where it would not otherwise exist. There are a number of factors not accounted for in the quantitative analysis of open space ratios in the future with the proposed action. The quantitative analysis does not account for the approximately 6.75 acres of active open space in the Department of Education-owned athletic field that lies within a ½ mile of the rezoning area. The field was not included in the open space calculation due to the vagaries of census tract boundaries. It is likely that residents generated by the proposed action would use this open space, thus allaying the shortage of active open space predicted by the quantitative analysis. In addition, Kissena Corridor West, a 100-acre City park, lies just beyond the residential study area and is within three-quarters of a mile of the rezoning area.

Additionally, the Flushing Commons project includes recreational space for the YMCA and exercise amenity space within the residential component of the project. The residential portion of Flushing Commons would include several thousand square feet of amenity space, including exercise rooms and equipment, as well as a children's play space. The proposed YMCA space in the Flushing Commons project would include approximately 62,000 sf of state-of-the art recreational facilities. In particular, it would contain two indoor swimming pools, a full basketball court, classrooms and meeting rooms for youth, as well as standard exercise equipment. While these facilities would not be considered public open space, the new YMCA will be an important active recreation center serving the entire Flushing community.

SHADOWS

The proposed buildings of the Flushing Commons project would cast incremental shadow on the arched windows of the Macedonia AME Church on all four analysis days: March 21 (or September 21, which is approximately equivalent), the equinoxes; June 21, the summer solstice, the longest day of the year, when shadows are shortest; May 6/August 6, the midpoints between the equinoxes and the summer solstice; and December 21, the winter solstice, the shortest day of the year, when shadows are longest. The Macedonia

Plaza project, which requires a zoning override for building height, does not contribute to this shadow impact.

Incremental shadow durations would range from just over four hours in June to nearly seven hours on the March 21/September 21 analysis day. The incremental shadow would significantly reduce the amount of direct sunlight that currently shines through these windows throughout the year, causing a significant adverse impact on the users of this potential historic resource.

No other significant adverse shadow impacts from the proposed Flushing Commons or Macedonia Plaza projects would result.

HISTORIC RESOURCES

ARCHAEOLOGICAL RESOURCES

The Flushing Commons project would require subsurface disturbance across the entire project site, including areas of potential archaeological sensitivity related to the Flushing Female Association School and 19th century homelots. Therefore, before construction of the Flushing Commons project, Stage 1B archaeological field testing would be undertaken for these areas of potential sensitivity to conclusively determine whether there are any resources present in these areas that could be disturbed by the proposed action. The protocol for the Stage 1B testing would be reviewed and approved by the New York City Landmarks Preservation Commission (LPC). If resources are identified, an archaeological treatment plan would be developed and implemented in coordination with LPC to mitigate the proposed action's effects on these resources. Any required mitigation would be determined based on the characteristics and significance of the resource and could include archaeological excavation to record information about the find.

The Macedonia Plaza project by the Macedonia AME Church is anticipated to require excavation to the south, west, and north of the existing church structure. LPC has recommended that the Macedonia Plaza project be redesigned to avoid the archaeological no-impact zone. Since this project—as presently designed—would not observe the recommended archaeological no-impact zones on the north, west, and south sides of the extant church lot, the redevelopment of this area could adversely affect areas of sensitivity for possible human remains. Therefore, the Macedonia AME Church would be required to consult with LPC to develop a plan that appropriately addresses: how the area with the potential sensitivity for burials would be appropriately archaeologically tested, and that any proposed subsurface construction work in the vicinity would be redesigned as much as possible in response to the results of the testing; what would occur should any burials be encountered; that the plan would be developed in consultation with the appropriate descendant community; what would happen to any remains that may be encountered before testing occurs; and that all appropriate measures as approved by LPC would be completed. As the current plans for the Macedonia Plaza project include pilings within the areas of potential sensitivity, but no additional excavation, it is anticipated that only the piling locations would need to be archaeologically tested. Provisions related to the archaeological resources mitigation for the Macedonia Plaza project would be incorporated into the Land Disposition Agreement (LDA) with parties as determined by HPD.

ARCHITECTURAL RESOURCES

Construction of the proposed Flushing Commons development would occur within 90 feet of the Macedonia AME Church building. Therefore, the Flushing Commons project would avoid potential adverse direct, physical impacts on this resource through the implementation of a construction protection plan (CPP) developed in consultation with LPC. The CPP would follow the guidelines set forth in section 523 of the *CEQR Technical Manual*, including conforming to LPC's *New York City Landmarks Preservation Commission Guidelines for Construction Adjacent to a Historic Landmark* and *Protection*

Programs for Landmark Buildings. The CPP would also comply with the procedures set forth in the New York City Department of Buildings (DOB)'s *Technical Policy and Procedure Notice* (TPPN) #10/88.[4] The context of the church would be altered by the addition of taller, modern mixed-use buildings to the project site; however, the church already exists in a mixed visual environment, and this change is not considered a significant adverse impact. Furthermore, the open site layout would open up views to the church from the project site and the area to the southwest.

The Flushing Commons buildings to be developed on the project site would cast incremental shadow on the arched windows of the church, ranging in duration from just over 4 hours in June to nearly 7 hours on the March 21/September 21 analysis day. The incremental shadow would reduce the amount of direct sunlight that currently shines through these windows throughout the year and would cause a significant adverse shadow impact for the users of this place of worship. As described in Chapter 20, "Mitigation," mitigation measures would be designed to avoid or minimize any adverse shadow impacts on the sun-sensitive architectural resources of the church.

The Flushing Commons project site is located far enough away from the known and potential historic resources in the study area, and so the proposed development would not have any direct, physical effects on these off-site resources. The architectural resources in the study area already exist in a built context that includes a mix of both short and tall commercial and residential buildings. Therefore, while the heights of the proposed buildings—up to approximately 204 feet (above average curb level), including mechanical—would be taller than the existing structures on the project site, they would not be incompatible with buildings in the study area. It is expected that the historic buildings in the surrounding area would remain visible within the overall urban landscape due to their distinguished façades and massings.

The Macedonia Plaza project would create a new 14-story, mixed-use structure that is directly adjacent to the Macedonia AME Church building. This development would notably change the appearance of the church from Union Street. However, the portion of the church building that faces onto Union Street was constructed ca. 1954-57, and is more modern in appearance than the portion of the building that faces the interior of the project block. In addition, the expected materials of the Macedonia Plaza structure—primarily brick and glass—would be consistent with the façade materials of the church itself, and the size and massing of the proposed building would be consistent with the Flushing Commons development that would transform the remainder of the project block. To avoid potential adverse physical impacts on the Macedonia AME Church building, the church would be required to develop and implement a CPP, reviewed and approved by LPC, to protect the adjacent church building. The CPP would follow the guidelines set forth in section 523 of the *CEQR Technical Manual*, including conforming to LPC's *New York City Landmarks Preservation Commission Guidelines for Construction Adjacent to a Historic Landmark* and *Protection Programs for Landmark Buildings*. The CPP would also comply with the procedures set forth in DOB's TPPN #10/88.

URBAN DESIGN AND VISUAL RESOURCES

The Flushing Commons project would greatly improve the urban design characteristics of the current site, an underutilized paved parking lot. The proposed project would replace the one-story parking structure with five new buildings of various heights (which would create new streetwalls) and public open spaces. The Flushing Commons project, as well as the proposed Macedonia Plaza project, would add new uses and vitality to the site and improve the overall appearance of the site.

[4] TPPN #10/88 was issued by DOB on June 6, 1988, to supplement Building Code regulations with regard to historic structures. TPPN #10/88 outlines procedures for the avoidance of damage to historic structures resulting from adjacent construction, defined as construction within a lateral distance of 90 feet from the historic resource.

The Flushing Commons buildings would be organized around the central open space with walkways to adjacent streets and provide a significant open space that is currently missing from the urban fabric of Downtown Flushing—a town square. The open space would be open to the public at all times and available for programming for public events.

The Macedonia Plaza project would be directly adjacent to the Macedonia AME Church, creating a new notable presence at the corner of Union Street and 37th Avenue. It would also provide 18,834 square feet of private open space in the interior of the project block, which would be anticipated to enhance the site's visual appearance.

The residential, commercial, and community facility uses of the proposed buildings would be consistent with the predominant uses in the study area. There is a wide variety of building styles and materials used in the area; thus, the design of the buildings and mix of materials would be in keeping with what is currently found in the study area. While the new buildings would be taller and have larger footprints than some of the buildings in the surrounding area, they would be in keeping with other large-scale developments in the area, including the Queens Crossing development and the condominium building to the south of the site.

Although views of the spire of St. George's Episcopal Church would be blocked by the proposed Flushing Commons and Macedonia Plaza buildings, this would not be an adverse effect as the rezoning area is not a prime viewing location for this resource, with many intermediate buildings of varying heights including the recently completed Queens Crossing. Further, the proposed Flushing Commons and Macedonia Plaza projects would not have an adverse impact on the street pattern, block shapes, and natural features of the study site, nor would it adversely affect the visual resources in the study area. Finally, the proposed Flushing Commons project would enhance the streetscape with its open plaza.

NEIGHBORHOOD CHARACTER

The proposed action would not adversely affect the combined elements contributing to the neighborhood character of the downtown area of Flushing, Queens. Specifically, it would not cause any significant adverse impacts on land use, urban design, visual resources, socioeconomic conditions, pedestrian conditions, or noise.

The proposed action would result in the development of Flushing Commons, a mixed-use project containing residential, commercial, community facility, and possibly hotel uses at the site of existing Municipal Lot 1. The proposed project would result in a major change in land use on the project site. However, this change is considered to be complementary to the area, as it would create a mixed-use development that would bring new residents, workers, and visitors to the area as well as serve the existing Downtown Flushing community. The Flushing Commons project would bring additional housing to an established residential neighborhood. The overall size and scale of the Flushing Commons project would correspond to the area's role as a regional center of retail and commerce. The proposed Flushing Commons project would also include approximately 1.5 acres of passive open space on the site—an amenity that is noticeably absent in Downtown Flushing.

The buildings to be developed on the project site would cast incremental shadow on the arched windows of the Macedonia AME Church. The incremental shadow would reduce the amount of direct sunlight that currently shines through these windows throughout the year and cause a significant adverse shadow impact for the users of this place of worship. However, the shadow impact would only be on the interior functionality of the church, and it would not significantly impair the public's enjoyment of the church as a historic resource. Therefore, the significant adverse historic resources impact on the Macedonia AME Church from shadows would not result in a significant adverse impact on neighborhood character.

The proposed action would result in unmitigated traffic impacts at 13 locations during the weekday AM peak hour, 11 locations during the weekday midday peak hour, 13 locations during the weekday PM peak hour, and 14 locations during the Saturday midday peak hour. However, service levels at most of these study area analysis locations would be the same with or without the proposed action even though, in accordance with CEQR criteria, the increases in delays resulted in these impacts. It is also important to note that the City is considering several scenarios to improve traffic and safety in Downtown Flushing as alternatives to the contra-flow bus lane configuration analyzed in this DEIS. The City continues to analyze other scenarios and it is possible that some of the unmitigated traffic impacts may be eliminated. Overall, no significant adverse impacts on neighborhood character would result from the proposed action.

HAZARDOUS MATERIALS

No significant adverse impacts would occur in relation to the demolition and excavation for the proposed action. Once the proposed Flushing Commons and Macedonia Plaza projects are constructed, there would be no further potential for adverse impacts.

INFRASTRUCTURE

Based on the existing uses present within the rezoning area, a 1,101-space municipal parking lot and the Macedonia AME Church, there are no significant demands for water supply and sanitary sewage. The proposed action, which would include new residential, commercial (including office, retail, restaurant, and possibly hotel uses), and community facility uses, would change the demand for water and wastewater services within the rezoning area.

In summary, the incremental demand for water supply from the proposed action would not adversely affect the ability of the existing system to distribute water to, or maintain water pressure for, local users. Furthermore, the increase in sanitary sewage and stormwater discharge would not cause the Tallman Island Water Pollution Control Plant (WPCP) to exceed its design capacity or its New York State Pollution Discharge Elimination System (SPDES) permit flow limit. The stormwater generated by the proposed action would not have a significant adverse impact on the combined sewer system or the Flushing River.

The proposed action would require an Amended Drainage Plan to reflect previously mapped 138th Street between 37th and 39th Avenues and the de-mapped bed of 38th Avenue between 138th Street and Union Street on the drainage plan. The Amended Drainage Plan would be completed in accordance with NYCDEP requirements; the existing sewer located in the former street bed of 38th Avenue between Union Street and 138th Street would be removed. Overall, the proposed action would not result in any significant adverse impacts on water supply, sewage treatment, and combined sewer systems.

SOLID WASTE AND SANITATION SERVICES

The proposed action (both the proposed Flushing Commons project and the Macedonia Plaza project) would increase the volume of solid waste generation at the rezoning area, generating an estimated 216,399 pounds of solid waste per week (about 107 tons per week). The proposed action would be required to comply with the City's recycling program. It is expected that all the residential waste and recyclable materials would be collected and disposed of by the DSNY. Commercial and regulated medical waste would be handled by private waste carters. The solid waste generated by the proposed action would represent a minimal increase in the City's waste stream. Therefore, no adverse impact on solid waste handling and disposal systems would result.

ENERGY

The proposed action (both the proposed Flushing Commons project and the Macedonia Plaza project) would generate new demand for energy at the rezoning area, but it would not significantly affect the

transmission or generation of energy. Electricity and gas is expected to be supplied by Con Edison, which would provide heating, cooling, and lighting for the proposed action. The operational consumption for the proposed action is expected to be approximately 200,062 million British Thermal Units (BTUs) per year. This increase in energy demand could be provided by Con Edison without disruption to the distribution system. Therefore, the proposed action would not result in any significant adverse impacts on energy supply or demand.

TRAFFIC AND PARKING

TRAFFIC

As detailed in Chapter 14, "Traffic and Parking," at the study area's 30 intersections, the proposed action would result in significant impacts on one or more approaches at 17 intersections during the weekday AM peak hour, 14 intersections during the weekday midday peak hour, 20 intersections during the weekday PM peak hour, and 21 intersections during the Saturday midday peak hour. As detailed in Chapter 20, "Mitigation," measures have been identified to mitigate some, but not all, of the proposed action's significant adverse impacts. It should be noted that the future conditions analyses prepared for this Draft EIS (DEIS) reflect conditions under the Main Street/Union Street one-way with contra-flow bus lane configuration. However, the City is considering other scenarios as alternatives to the contra-flow configuration and it is possible that some of the unmitigated traffic impacts noted above may be eliminated.

PARKING

With the proposed action, the existing Municipal Lot 1 would be replaced by the Flushing Commons mixed-use development. The project would create a public garage with 1,600 spaces on three underground levels that would accommodate parking demand generated by the proposed action and by the general public. Access to the garage would be available from both 37th and 39th Avenues. The new facility is intended to provide both self-parking and valet parking. With approximately 500 more spaces than the current municipal lot, and the cumulative demand of both existing general public and project-generated traffic is expected to be accommodated in the new facility.

TRANSIT AND PEDESTRIANS

TRANSIT

Future conditions with and without the proposed action at the Flushing-Main Street No. 7 subway station were studied at critical station points, including a stairway and two escalators. The increases in the volume-to-capacity ratios that would be generated by the proposed action at these station areas are not considered to be significant according to *CEQR Technical Manual* guidelines, and, therefore, no significant impacts in the peak analysis hours would result.

However, significant impacts are projected for local buses, including the Q17, Q27, Q44/20, and Q48, as project-generated ridership would compound other growth projected on these and other routes by 2013. Measures to mitigate these impacts are discussed in Chapter 20, "Mitigation." There would be no impacts on the local bus system during the Saturday peak hour. The Final EIS (FEIS) will provide updates of ridership data and operations of the newly added Q19 bus route on Main Street and other routes in Flushing.

PEDESTRIANS

Future conditions with and without the proposed action were studied at nearby crosswalks, corner reservoirs, walkways, and sidewalks. The proposed action would add person trips to the study area's pedestrian facilities during the analyzed peak hours. These trips would increase pedestrian volumes

adjacent to the project site. The proposed action would not result in any significant adverse impacts at any location during the weekday AM peak hour. During the weekday midday peak hour, significant adverse impacts are projected at five crosswalks, three corners, and three sidewalk segments. During the weekday PM peak hour, significant adverse impacts are projected to occur at three crosswalks, three corners, and two sidewalk segments. During the Saturday midday peak hour, significant adverse impacts are projected at three crosswalks, three corners, and two sidewalk segments. Measures to mitigate some, but not all, of these impacts are discussed in Chapter 20, "Mitigation."

As discussed above, NYCDOT is considering several scenarios to improve pedestrian safety in Downtown Flushing as alternatives to the contra-flow bus configuration, which is the scenario analyzed in this DEIS.

AIR QUALITY

The analyses conclude that the proposed action would not result in any significant adverse air quality impacts on sensitive uses in the surrounding community, and the proposed Flushing Commons and Macedonia Plaza projects would not be adversely affected by new or existing sources of air emissions around the rezoning area.

The maximum predicted pollutant concentrations and concentration increments from mobile sources with the proposed Flushing Commons and Macedonia Plaza projects would be below the corresponding air quality impact criteria. Impacts due to the proposed Flushing Commons project's parking facilities would result in no significant adverse air quality impacts. To preclude the potential for significant adverse air quality impacts from parking garage ventilation emissions, an E-designation would be incorporated for the proposed action that would include provisions restricting the number and minimum height of ventilation exhausts.

A stationary source screening analysis determined that there would be no potential significant adverse air quality impacts from the proposed Flushing Commons and Macedonia Plaza projects' heating, ventilation, and air conditioning (HVAC) systems. To ensure that significant adverse air quality impacts are avoided, limitations on the type of fuel and location of certain exhaust stacks for fossil fuel-fired equipment would be included in an air quality E-designation for the proposed action. In addition, there would be no significant adverse air quality impacts from industrial facilities on the proposed Flushing Commons and Macedonia Plaza projects.

NOISE

The analysis concludes that the traffic generated by the proposed action would not produce significant increases in noise levels at any location within and/or adjacent to the rezoning area. In addition, with implementation of the proposed design measures, noise levels within the proposed buildings would comply with all applicable requirements. The measures for providing sufficient building attenuation would be mandated by placing an E-designation on the rezoning area—Block 4978, Lot 25—requiring window/wall attenuation that would provide at least 35 dBA for all façades of each building. This would provide sufficient attenuation to achieve the CEQR requirements, and, therefore, the proposed action would not result in any significant adverse noise impacts.

CONSTRUCTION

Although there would be localized, temporary disruptions, the proposed action is expected to result in significant adverse construction-related impacts only for traffic conditions during the 2012 peak construction period. Interim parking at three off-site locations would be provided during construction of the proposed Flushing Commons project. With these interim parking areas, there would be no net loss of public parking spaces during construction. The overall traffic volumes associated with the existing

parking facility would be re-circulated within the surrounding area, and an overall increase or decrease in volumes within the existing Downtown Flushing network is not expected. However, during peak construction, significant adverse traffic impacts were identified for the Northern Boulevard intersections with Prince Street and with Union Street. Both of these intersections would have unmitigatable impacts under the 2013 build condition. For the 2012 peak construction condition, the impact at the Union Street intersection could be mitigated with standard traffic engineering measures while those at the Prince Street intersection would remain unmitigated.

With the implementation of applicable controls and measures, no significant adverse impacts on land use and zoning, socioeconomic conditions, community facilities and services, historic resources, hazardous materials, parking, transit, pedestrians, air quality, and noise are expected during the construction period.

PUBLIC HEALTH

Chapter 10, "Hazardous Materials," concludes that there is little risk of contamination based on existing or former uses known to have been on the project site. With implementation of appropriate measures, including pre-construction surveys and implementation of Health and Safety Plans during demolition and construction, no significant adverse impacts related to hazardous materials are expected to occur with the proposed action.

In terms of potential solid waste disposal issues creating a public health hazard, Chapter 12, "Solid Waste and Sanitation Services," determined that the proposed action would conform to standards appropriate for commercial and residential facilities in New York City, including participation in mandatory recycling and waste reduction programs. Overall, no impacts on solid waste management are expected with the proposed action, and no public health concerns would result.

Chapter 16, "Air Quality," indicates that the proposed action would not result in any significant adverse impacts and would not cause exceedances of National Ambient Air Quality Standards (NAAQS). As a result, there would be no significant adverse impact on public health.

Chapter 17, "Noise," found that no adverse noise impacts are expected with the proposed action, and no adverse health effects on the general public would result.

In terms of construction-related impacts, Chapter 18, "Construction," concludes that no significant adverse impacts on air quality are expected as a result of construction activities. With no large-scale or open-air demolition of buildings as part of the proposed action, there would be a diminished risk of particulate emissions. Therefore, most new emissions would be generated by construction vehicles and equipment that would be used on site. It is assumed that potential construction activities would not result in exceedances of $PM_{2.5}$ threshold criteria with the use of ultra-low sulfur diesel other clean technologies in all construction equipment. With these measures, there would be no exceedances of the significant threshold values established by NYCDEP, and, as a result, there would be no significant adverse impacts on public health.

In summary, this screening analysis concludes that no significant impacts on public health are expected as a result of the proposed action.

D. MITIGATION

OPEN SPACE

Chapter 5, "Open Space," identifies an indirect significant adverse impact on the active open space ratio in the residential study area in 2013. Because the proposed action could result in an indirect significant adverse impact on active open space, it is necessary to identify measures to mitigate these impacts on the greatest extent practicable. The *CEQR Technical Manual* lists potential on- and off-site mitigation

measures. These measures include creating new public open spaces on-site or elsewhere in the study area of the type needed to serve the proposed population and offset their impact on existing open spaces in the study area, and improving existing open spaces in the study area to increase their utility, safety, and capacity to meet identified needs in the study area. Absent any such measures, an unmitigated impact would result.

The proposed Flushing Commons project would create approximately 1.52 acres of passive public open space on the project site. As described in Chapter 1, "Project Description," one of the goals for redevelopment of the site, as reflected in the "Development Framework for Downtown Flushing," is to create a town square-style public open space that would be a center of community activity, which is currently missing from the urban fabric of Downtown Flushing, The main portion of the proposed open space would be an elliptical green opening onto 138th Street that is intended to respond to the community's desire for a central gathering place. It is expected to contain a terraced lawn, formal plaza, trees, tables and chairs, additional seating, and a water feature. The terraced lawn is also intended to function as an amphitheater for ceremonies and performances. The open space would be open to the public at all times and available for programming for public events. Due to the configuration of the proposed buildings and the below-grade parking, this open space would not be able to accommodate active open space uses and also meet the goal of providing a town square-style community gathering place.

As described in Chapter 5, "Open Space," the quantitative open space analysis does not account for the amenity space within the residential portion of the Flushing Commons project or the new YMCA space that would be provided. The residential portion of Flushing Commons would include several thousand square feet of amenity space, including exercise rooms and equipment, outdoor rooftop and terrace space, as well as a children's play space, that would serve the proposed population. In addition, Flushing Commons would house a proposed new YMCA, an approximately 62,000 sf state-of-the art recreational facility. The existing YMCA facility in Downtown Flushing is one of the oldest YMCA facilities in the City and is currently located on a lot that cannot accommodate any further expansion. The proposed new YMCA space in the Flushing Commons project would contain two indoor swimming pools, a full basketball court, classrooms and meeting rooms for youth, as well as standard exercise equipment. The YMCA is also considering developing programs whereby residents of the proposed project would be allowed to buy discounted memberships at the same price as "group" or "corporate" memberships. While these resources are not considered as public open space, the recreational space and the YMCA facility would each include a number of uses that would relieve future open space demands, particularly for active open space, created by the residential and worker populations introduced by the proposed action.

Absent the creation of additional active public open space resources, the proposed action would result in an unmitigated significant adverse impact on the active open space ratio.

HISTORIC RESOURCES

PROJECT SITE

Archaeological Resources

The Flushing Commons project would require subsurface disturbance across the entire project site, including areas of potential archaeological sensitivity related to the Flushing Female Association School and 19th century home lots. Therefore, before construction of the Flushing Commons project, Stage 1B archaeological field testing would be undertaken for these areas of potential sensitivity to conclusively determine whether there are any resources present in these areas that could be disturbed by the proposed project. The protocol for the Stage 1B testing would be reviewed and approved by LPC. If resources are identified, an archaeological treatment plan would be developed and implemented in coordination with

LPC to mitigate the project's effects on these resources. Any required mitigation would be determined based on the characteristics and significance of the resource, and could include archaeological excavation to record information about the find.

To preserve and respect potentially intact burials in the Macedonia AME Church area, the Flushing Commons project would establish a no-impact zone of at least 15 feet around the west and south perimeters of the extant Macedonia AME Church lot before and during construction activities for the proposed development. On the south side of the church lot, the protective buffer would not need to extend beyond the former roadway of 38th Avenue. However, if Flushing Commons' project-related subsurface excavations are necessary in this portion of the former 38th Avenue roadbed that would be deeded to the church, archaeological monitoring may be appropriate. In this scenario, a protocol for monitoring would be developed in coordination with and approved by LPC.

The Macedonia Plaza project by the Macedonia AME Church is anticipated to require excavation to the south, west, and north of the existing church structure. Since this project—as presently designed—would not observe the recommended archaeological no-impact zones on the north, west, and south sides of the extant church lot, the redevelopment of this area could adversely affect areas of sensitivity for possible human remains. Therefore, as a condition of the disposition of this site, the Macedonia AME Church would be required to coordinate with LPC and undertake archaeological monitoring and/or testing, as appropriate, before construction of the Macedonia Plaza project commences.

Architectural Resources

As described in Chapter 7, "Historic Resources," the proposed Flushing Commons buildings would cast incremental shadows on the arched windows of the Macedonia AME Church on all four analysis days: March 21 (or September 21, which is approximately equivalent), the equinoxes; June 21, the summer solstice, the longest day of the year when shadows are shortest; May 6/August 6, the midpoints between the equinoxes and the summer solstice; and December 21. Incremental shadow durations would range from just over four hours in June to nearly seven hours on the March 21/September 21 analysis day. The incremental shadow would significantly reduce the amount of direct sunlight that currently shines through these windows throughout the year and would cause a significant adverse impact for the users of this place of worship.

The Flushing Commons project sponsors would coordinate with the Macedonia AME Church to develop measures to offset the potential effect of the project's shadows on the arched windows. Such measures could include lighting the windows by a new light source that would be mounted on one of the proposed buildings. This light source could approximate sunlight conditions for the arched windows, without indirect light spillover to adjacent areas. Other options could be removing the existing protective coverings from the arched windows, cleaning the interior and exterior of the windows, and installing new transparent protective coverings of similar or greater durability; a stained glass restoration effort; and/or the implementation of some other mutually agreed-to measure.

Construction of the proposed Flushing Commons and Macedonia Plaza projects would occur within 90 feet of the Macedonia AME Church building. Therefore, it is expected that the Flushing Commons project would avoid potential adverse physical impacts on this resource through the implementation of a construction protection plan developed in consultation with LPC. For the Macedonia Plaza project, the disposition of this site would include a condition requiring the church and/or the future developer of this area to develop and implement a construction protection plan, reviewed and approved by LPC, to protect the adjacent church building.

SHADOWS

The only identified significant shadow impact of the proposed action is the impact on the arched windows of the Macedonia AME Church. Mitigation for this impact is discussed above, in "Historic Resources."

TRAFFIC AND PARKING

As described in Chapter 14, "Traffic and Parking," the proposed action is expected to result in significant adverse traffic impacts at 17 intersections during the weekday AM peak hour, 14 during the weekday midday peak hour, 20 during the PM peak hour, and 21 during the Saturday midday peak hour.

The analyses show that standard mitigation measures, such as modifying signal timings and adding a new traffic signal, would fully mitigate the projected significant adverse impacts at some of the study area intersections, while others would be partially mitigated or remain unmitigated. Of the 17 intersections with significant adverse traffic impacts during the weekday AM peak hour, 4 would be fully mitigated and 13 would be partially mitigated or remain unmitigated. Of the 14 intersections with significant adverse traffic impacts during the weekday midday peak hour, 3 would be fully mitigated and 11 would be partially mitigated or remain unmitigated. Of the 20 intersections with significant adverse traffic impacts during the weekday PM peak hour, 7 would be fully mitigated and 13 would be partially mitigated or remain unmitigated. Of the 21 intersections with significant adverse traffic impacts during the Saturday midday peak hour, 7 would be fully mitigated and 14 would be partially mitigated or remain unmitigated.

It should be noted that the future conditions analyses prepared for this Draft EIS (DEIS) reflect conditions under the Main Street/Union Street one-way with contra-flow bus lane configuration. However, the City is considering other scenarios as alternatives to the contra-flow configuration to improve traffic and safety in Downtown Flushing, and it is possible that some of the unmitigated traffic impacts identified in Chapter 20, "Mitigation" could be eliminated.

TRANSIT AND PEDESTRIANS

This section describes the potential measures that would mitigate the significant adverse transit (bus) and pedestrian impacts resulting from the proposed action. These impacts are detailed in Chapter 15, "Transit and Pedestrians." With the recommended measures in place, all projected significant adverse impacts would be mitigated, except for one sidewalk and three street corners, where the projected impacts would remain unmitigated. As discussed above, NYCDOT is considering several scenarios to improve pedestrian safety in Downtown Flushing as alternatives to the contra-flow bus configuration, which is the scenario analyzed in this DEIS.

TRANSIT – NYCT BUS LINE HAUL

As described in Chapter 15, "Transit and Pedestrians," significant adverse impacts are projected on local buses, including Q17, Q27, Q44/20, and Q48, as project-generated ridership would compound other growth projected on these and other routes by 2013. These significant impacts could be mitigated by the introduction of additional buses and related schedule adjustments. Metropolitan Transportation Authority (MTA)-New York City Transit (NYCT) would evaluate these needs and make the necessary adjustments where warranted, subject to financial and operational constraints. There would be no impacts on the local bus system during the Saturday peak hour. The FEIS will provide updates of ridership data and operations of the newly added Q19 bus route on Main Street and other routes in Flushing.

PEDESTRIANS

As described in Chapter 15, "Transit and Pedestrians," the proposed action would result in significant adverse impacts at five crosswalks, three street corners, and three sidewalks during the weekday midday

peak hour; at three crosswalks, three street corners, and two sidewalks during the weekday PM peak hour; and at three crosswalks, three street corners, and two sidewalks during the Saturday midday peak hour. There were no significant adverse pedestrian impacts projected for the weekday AM peak hour. The measures proposed to mitigate the significant adverse pedestrian impacts identified for the weekday midday, weekday PM, and Saturday midday peak hours include widening of crosswalks and increasing sidewalk effective widths via addition of pavers and relocating a waste container and newspaper stands.

Implementing the above measures would fully mitigate all significant adverse crosswalk and sidewalk impacts, with the exception of those identified for the northeast sidewalk along Main Street at Roosevelt Avenue. The projected impacts here during the weekday midday, PM, and Saturday PM peak hours would remain unmitigated. At the 39th Avenue/Main Street, Roosevelt Avenue/Main Street, and Roosevelt Avenue/Union Street intersections, all identified street corner impacts would also remain unmitigated. As stated above, the true one-way operation of Main Street northbound and Union Street southbound could yield wider sidewalks and street corners that may potentially eliminate these unmitigated pedestrian impacts.

AIR QUALITY

Chapter 16, "Air Quality," predicts the maximum predicted CO concentrations from traffic generated by the proposed action and concludes that the proposed action would not result in any significant adverse air quality impacts. Therefore, no air quality mitigation is required.

EFFECTS OF PROPOSED TRAFFIC MITIGATION MEASURES

The effects on air quality of the proposed action with implementation of the traffic mitigation measures discussed above were also considered. The results (presented in Appendix B) show that with the proposed traffic mitigation measures, future concentrations of pollutants with the proposed action would be below NAAQS and would not result in any significant adverse air quality impacts using the *de minimis* thresholds for CO impacts. Appendix B presents the tables summarizing these results.

E. ALTERNATIVES

A number of alternatives to the proposed project were examined, as follows:

- No Action Alternative
- Existing Zoning Alternative
- Alternatives to Reduce or Avoid Significant Adverse Impacts

Each alternative is summarized below.

NO ACTION ALTERNATIVE

The No Action Alternative assumes that no discretionary actions would be taken—specifically, that there would be no disposition of interests in City-owned property to the designated developer and that no amendments to the zoning map would be adopted.

The No Action Alternative would not involve any major changes to the rezoning area, and the proposed Flushing Commons development would not be implemented. The disposition of the remainder of Lot 25 for the development of the Macedonia Plaza affordable housing project would not occur in the No Action Alternative. The No Action Alternative would not result in new high-quality development on this large parcel of City-owned land in Downtown Flushing. The No Action Alternative would not create new employment and residential opportunities and generate economic and fiscal benefits to the City in the form of economic activity, tax revenue, and community benefits, including approximately 98,000 sf of community facility space and a 1.5-acre town square-style public open space, an amenity that is notably

absent in this densest portion of Downtown Flushing. The No Action Alternative would not respond to the City's land use strategy for the site, as reflected in the "Development Framework for Downtown Flushing," May 2004.

In the No Action Alternative, the Flushing Commons project site would continue to operate as Municipal Lot 1, the northeastern corner of Lot 25 would continue to be occupied by Municipal Lot 1, and Lot 46 would continue to be occupied by the Macedonia AME Church. No new residential, commercial, community facility, hotel, or open space uses would be introduced on the project site or in the rezoning area. Unlike the proposed action, this alternative would not enhance the quality and diversity of Downtown Flushing and more firmly establish Downtown Flushing as an important commercial and residential center in New York City. In the No Action Alternative, Municipal Lot 1 would continue to provide a well-utilized large surface public parking lot, which has been serving Downtown Flushing since the 1960s.

Overall, neither the No Action Alternative, nor the proposed action's development, would result in significant adverse impacts on the area's land use, zoning, and public policy, socioeconomic conditions, community facilities, urban design and visual resources, neighborhood character, hazardous materials, infrastructure, solid waste, energy, air quality, noise, public health, and construction.

While the No Action Alternative would not introduce new residents and workers to the open space study area, it would also not result in the proposed action's creation of 1.5 acres of new passive open space—an amenity that is notably absent in this densest portion of Downtown Flushing. On balance, the open space ratios would generally be lower for the No Action Alternative (see Table S-3) than with the proposed action. The No Action Alternative would not result in any significant adverse effects on open space in the study area; in comparison, the decline in the active open space ratio with the proposed action would constitute a significant adverse impact on active open spaces.

Table S-3
No Action Alternative, Adequacy of Open Space Resources Compared with the Proposed Action

Ratio	City Guideline Ratio[1]	No Action Ratio[1]	Proposed Action Ratio[1]	Percent Change
Commercial Study Area				
Passive/non-residents	0.15	0.258	0.320	24.07
Passive/total population	weighted[2]	0.102	0.130	27.73
Residential Study Area				
Total/residents	2.50	0.141	0.160	13.51
Active/residents	2.00	0.071	0.069	-2.82
Passive/residents	0.50	0.070	0.092	30.40
Passive/total population	weighted[2]	0.050	0.065	28.57

Notes:
1. Ratios in acres per 1,000 people.
2. Weighted average combining 0.15 acres per 1,000 workers and 0.50 acres per 1,000 residents is different in each condition. In commercial study area: existing conditions, 0.37; future without the proposed action, 0.36; future with the proposed action, 0.36. In residential study area: 0.40 for existing and future without the proposed action and 0.39 in the future without the proposed action.

Without new buildings on the Flushing Commons project site, the No Action Alternative would not result in significant new shadows on sun-sensitive receptors. Therefore, the No Action Alternative would not cast new shadows on the arched windows of the Macedonia AME Church, whereas the proposed action would result in significant adverse impacts on this sun-sensitive receptor.

Although this alternative would not generate any new traffic trips, traffic volumes in the study area are expected to increase as a result of other planned development in the study area and general growth in the City. Significant adverse traffic impacts at 17 intersections during the weekday AM peak hour, eight intersections during the weekday midday peak hour, 14 intersections during the weekday midday peak hour, 20 intersections during the weekday PM peak hour, and 21 intersections during the Saturday midday peak hour that would result from the proposed action would not occur with this alternative, thus eliminating the need for mitigation associated with the proposed action. Unlike the proposed action, the No Action Alternative would not result in significant adverse unmitigated traffic impacts at 13 intersections during the weekday AM peak hour, 11 intersections during the weekday midday peak hour, 13 intersections during the weekday PM peak hour, and 14 intersections during the Saturday midday peak hour. As with the proposed action, no impacts on parking are anticipated with this alternative.

Although this alternative would not generate any new transit and pedestrian trips, volumes in the study area would be expected to increase as a result of other planned development in the study area and general growth in the City. Neither the No Action Alternative nor the proposed action would result in any significant adverse impacts at the Flushing-Main Street subway station. Significant adverse bus impacts on the local buses, including the Q17, Q27, Q44/20, and Q48, that would result from the proposed action would not occur with this alternative. Similarly, significant adverse impacts from the proposed action at five crosswalks, three corners, and two sidewalks during the weekday midday peak hour, three crosswalks, three corners, and two sidewalks during the weekday PM peak hour, and three crosswalks, three corners, and two sidewalks, during the Saturday midday peak hour would not occur with the No Action Alternative, thus eliminating the need for mitigation associated with the proposed action. Unlike the proposed action, the No Action Alternative would not result in significant adverse unmitigated pedestrian impacts at three corners and one sidewalk during each of the weekday midday, weekday PM, and Saturday midday peak hours.

EXISTING ZONING ALTERNATIVE

During the initial planning process, an alternative was considered to develop the Flushing Commons project under the existing C4-3 zoning district currently mapped for the project site. The existing C4-3 district allows an FAR of 3.4 for commercial uses, 4.8 for community facility uses, and 2.43 for residential uses. There are accessory parking requirements for C4-3 districts specific to various uses. Parking must be provided for 70 percent of the new residential dwelling units. Such commercial uses as restaurant, retail, and office uses require one parking space for every 400 sf of floor area. Other commercial uses, such as hotels, require one parking space for every 12 rooms and one space for every 25 people. Community facilities require one parking space for every 20 people.

The proposed C4-4 district has lower parking requirements than the existing C4-3 district. The proposed rezoning from C4-3 to C4-4 would reduce the residential parking requirement from 70 percent of units to 50 percent. The commercial parking requirement for restaurant, retail, and office uses would be reduced from one space per 400 sf under C4-3 to one space per 1,000 sf under C4-4. There would be no parking requirement for community facility uses under C4-4, compared with one space per 20 people under the existing C4-3 zoning. The commercial parking requirement for possible hotel uses would remain the same.

As described in Chapter 1, “Project Description,” the Flushing Commons project has been proposed in response to a request for proposals (RFP) issued by NYCEDC to encourage new high-quality development on this large parcel of City-owned land in Downtown Flushing. The RFP set forth several development controls and minimum land use requirements for the site, including a minimum 1 acre of public open space; a significant market-rate residential component; street-level retail, in which each storefront must have its own street-level entrance and be accessible for pedestrians at street level from the

sidewalk or public space; and, at minimum, the provision of 750 short-term public parking spaces and 75 permit parking spaces. In addition, the RFP noted that the majority of the parking must be accommodated underground, but a small number of spaces could be permitted above ground provided the structures have sensitive design and do not adversely affect the streetwall or pedestrian experience; and that the inclusion of a cultural or community facility in this development is recommended, but not required.

Based on the parking requirements of the existing C4-3 district, the Flushing Commons project would require a total of 2,380 parking spaces—1,555 accessory parking spaces required by zoning and 825 public parking spaces required by the RFP. This would result in approximately 780 more spaces than that of the proposed action. To accommodate all of this parking below grade, five levels would have to be constructed, whereas parking for the Flushing Commons project under the proposed C4-4 parking requirements would be accommodated in three below-grade levels.

Construction of the additional two levels below grade, for a total of five levels, is not feasible because of several site constraints. Due to the level of groundwater at the site, the fifth level of parking (P5) would be located approximately 6 feet below the water table, and building foundations would be as much as 12 feet below the water table. Dewatering would be required, and operating a dewatering system across the entire site (approximately 5 acres) would be logistically difficult. It is anticipated that only localized dewatering would be required for construction of the proposed three levels of below-grade parking. During construction of the five below-grade levels, a dewatering system would need to operate continuously—24 hours a day, seven days a week, for 12 months to prevent uplift on the footings and structure. To counter the buoyancy, several levels of superstructure would need to be constructed before the dewatering system could be deactivated, and a large pressure slab would need to be installed to counter the uplift at the perimeter of the site. The large volume of groundwater would be discharged into the combined sewer system surrounding the site. NYCDEP would need to review the dewatering plan to assess the capacity in the existing system to handle the discharge. The dewatering and construction associated with the below-grade P5 parking level would be cost prohibitive for the project.

To meet the minimum open space requirements for the project, building footprints could not be enlarged from that currently proposed by the Flushing Commons site plan. To accommodate the C4-3 parking requirements above grade, portions of the street level retail would need to be eliminated and the provisions of quality open space would be severely diminished. This would not meet the goals of the project to have active ground-floor retail. If ground-floor retail could be accommodated in buildings with parking developed above, then the buildings would need to be substantially taller to accommodate the same development program. However, the additional height would likely not be approved by FAA[5]. If parking were to be developed above grade and completely replace other revenue-generating uses, then the project would not be financially viable for the designated developer. Thus, the parking requirement for the existing C4-3 zoning could not be accommodated above grade.

For all these reasons, the existing zoning alternative is not considered a viable and feasible alternative and was eliminated from further consideration.

ALTERNATIVES TO REDUCE OR AVOID SIGNIFICANT ADVERSE IMPACTS

The impact analyses in this EIS identify unmitigated significant adverse impacts with respect to shadows, historic resources (due to shadows), traffic, and pedestrians (see Chapter 6, "Shadows," Chapter 7, "Historic Resources," Chapter 14, "Traffic and Parking," and Chapter 15, "Transit and Pedestrians,"

[5] The project site is also located in the flight path for LaGuardia Airport, and the FAA must make a determination of No Hazard to Air Navigation for any new construction.

respectively). This section examines the feasibility of alternatives that would reduce or eliminate these unmitigated significant impacts.

SHADOWS

The proposed Flushing Commons project would cause a significant adverse impact by casting new shadows on the arched western and southern windows of the Macedonia AME Church. The Flushing Commons project's incremental shadow would significantly reduce the amount of direct sunlight that currently shines through these windows throughout the year and thus would adversely affect the users of this potential historic resource.

Bringing the C/D Building down to 75 feet would eliminate the shadow impact on the windows of the southern façade of the church.

Similarly to the proposed action, there would be no incremental shadow on the June 21 analysis day with this alternative.

On the May and August analysis day, the two hours of late morning incremental shadow that would occur with the proposed action would be completely eliminated with this alternative.

On the March and September analysis day, there would only be 30 minutes of incremental shadow, from 9:45 AM to 10:15 AM, and only a very limited area would be affected; the entire large central window and one of the two smaller windows would remain entirely unshaded.

In December, shadow cast by the alternative would fall on portions of the windows for much of the day. However, the windows would only be completely shaded between 8:51 AM and 10:30 AM. Shadow would begin moving off the large central window at 10:30 AM and would exit completely by 11:15 AM, though the two small lower windows would continue to be in shadow. By 12:30 PM, all incremental shadow would be off the southern façade, and would remain off until 2:00 PM. From 2:00 PM until 2:53 PM some incremental shadow would return to the lower windows.

Project shadow would still fall on portions of the windows for much of the day, only fully shaded between 8:51 AM and 10:30 AM. Between 10:30 AM and 11:15 AM shadow would move off main window and after 11:15 AM full sunlight would be able to come through the main window until the end of the analysis day in mid-afternoon.

During the spring, summer and fall seasons the windows of the church's southern façade would remain unaffected by project shadow. In the winter, the large central window would remain in sunlight for most of the analysis day. Therefore under this alternative, the Flushing Commons project would not result in a significant shadow impact on the southern façade of the church.

Bringing the building located just west of the church (Building B) down to 100 feet would not eliminate the significant shadow impact on the windows along the western façade of the church, because there would still be between two and three hours of new shadow covering the windows in the late afternoons of the late spring and summer seasons, and nearly two hours in the March and September analysis period as well. Eliminating this building entirely and leaving only the 73 feet high retail base would still result in approximately two hours of new shadow through the late spring and summer.

TRAFFIC AND PARKING

As discussed in Chapter 14, "Traffic and Parking," the proposed action would result in significant adverse traffic impacts at 17 intersections during the weekday AM peak hour, 14 intersections during the weekday midday peak hour, 20 intersections during the weekday PM peak hour, and 21 intersections during the Saturday peak hour. As discussed in Chapter 20, "Mitigation," the range of traffic mitigation measures available could not fully mitigate the impacts of the proposed action at 13 of the 17 impacted intersections

during the weekday AM peak hour, 11 of the 14 impacted intersections during the weekday midday peak hour, 13 of the 20 impacted intersections during the weekday PM peak hour, and 14 of the 21 impacted intersections during the Saturday midday peak hour. It should be noted that the future conditions analyses prepared for this Draft EIS (DEIS) reflect conditions under the Main Street/Union Street one-way with contra-flow bus lane configuration. The City is also considering other scenarios as alternatives to the contra-flow configuration to improve traffic and safety in Downtown Flushing. It is possible that some of the unmitigated traffic impacts noted above may be eliminated, although it is likely that numerous significant adverse traffic impacts would remain unmitigated.

Since the elimination of these significant adverse traffic impacts would require that not more than a few vehicles could travel through numerous study area intersections, any small amount of new development on the project site would create an unmitigatable significant adverse traffic impact. Therefore, there would be no feasible reduction in the density of the Flushing Commons project that could reduce or eliminate these impacts, which would remain significant unmitigated impacts of the proposed action.

TRANSIT AND PEDESTRIANS

As described in Chapter 15, "Transit and Pedestrians," the proposed action would result in significant adverse impacts at five crosswalks, three street corners, and three sidewalks during the weekday midday peak hour; at three crosswalks, three street corners, and two sidewalks during the weekday PM peak hour; and at three crosswalks, three street corners, and two sidewalks during the Saturday midday peak hour. There were no significant adverse pedestrian impacts projected for the weekday AM peak hour.

As discussed in Chapter 20, "Mitigation," implementing the proposed pedestrian mitigation measures would fully mitigate all significant adverse crosswalk and sidewalk impacts, with the exception of those identified for the northeast sidewalk along Main Street at Roosevelt Avenue. These projected impacts during the weekday midday, PM, and Saturday PM peak hours would remain unmitigated. At the 39th Avenue/Main Street, Roosevelt Avenue/Main Street, and Roosevelt Avenue/Union Street intersections, all identified street corner impacts would also remain unmitigated. As noted above, NYCDOT is considering several scenarios to improve pedestrian safety in Downtown Flushing as alternatives to the contra-flow bus lanes, which is the scenario analyzed in this DEIS.

The significant adverse pedestrian impacts are projected to occur at some of the busiest locations in Downtown Flushing where sidewalks, street corners and crosswalks already experience significant volumes of pedestrians generated by the high-density commercial, retail and residential uses, in addition to being located in the vicinity of a major subway station and terminus at Main Street, and numerous bus lines. Further, the incremental volume of pedestrians generated by the proposed action includes not only walk-only trips, but also those involving subway and bus passenger pedestrian trips. The elimination of the significant adverse pedestrian impacts would therefore require that a substantially smaller incremental volume of peak hour pedestrian trips be added by these various modes of transportation to these already busy locations. It is projected that a development program that is greater than 45 percent of the size of the development program proposed for the project site would create an unmitigatable significant adverse pedestrian impact. Therefore, there would be no feasible reduction in the density of the Flushing Commons project that could reduce or eliminate these impacts, which would remain significant unmitigated impacts of the proposed action.

F. CONTACT

Request for copies of the DEIS and public comments and questions regarding the GEIS should be forwarded to:

Mr. Robert Holbrook
New York City Economic Development Corporation
110 William Street
New York City, New York 10038
Telephone: (212) 312-3706
Fax: (212) 312-3989

or

Mayor's Office of Environmental Coordination
235 Broadway, 14th Floor
New York, New York 10007
Telephone: (212) 788-9956

The DEIS is also available on the website of the Mayor's Office of Environmental Coordination: http://www.nyc.gov/oec.

Robert R. Kulikowski, Ph.D.

Assistant to the Mayor

January 20, 2010

Date