12

Solid Waste and Sanitation Services

This chapter analyzes the effects of the Proposed Actions on solid waste and sanitation services. According to the *2021 CEQR Technical Manual*, a solid waste assessment determines whether a Proposed Project has the potential to cause a substantial increase in solid waste production that may overburden available waste management capacity, or otherwise be inconsistent with the City's Solid Waste Management Plan (SWMP) or other stated policy related to the City's integrated solid waste management system.

Introduction

The Proposed Actions would result in the redevelopment of approximately 78 acres of underutilized, largely asphalt surface parking areas located west of Seaver Way and adjacent to Citi Field (the Development Site) with a major mixed-use development (the Queens Future Project, or Proposed Project). The Queens Future Project is anticipated to comprise up to approximately 3.7 million square feet (sf) of new construction, with destination entertainment including a music hall, gaming facility,[1] hotel, convention and meeting space, restaurant and retail space, and office and community facility uses. In addition to the commercial development, the Proposed Project would also include approximately 20 acres of public park space—at least 20 acres of the Development Site would be improved with landscaping and other amenities for public recreation—and other public improvements as well as structured parking facilities to accommodate up to 13,750 spaces.

This chapter provides an assessment of existing and future conditions for the Development Site with and without the Proposed Actions, which are described in detail below.

[1] The inclusion of a gaming facility is contingent upon receiving a gaming license from the New York State Gaming Commission. See Required Approvals section below.

Principal Conclusions

The Proposed Actions would not result in a significant adverse impact on solid waste and sanitation services. The Proposed Actions would generate an increment above the No-Action condition of approximately 464.97 tons per week of solid waste, which would represent approximately 0.628 percent of the City's anticipated future commercial waste generation and would not directly affect a solid waste management facility. None of the additional solid waste generated by the Proposed Actions would be handled by the New York City Department of Sanitation (DSNY), and 100 percent would be handled by private carters.

Overall, the uses facilitated by the Proposed Actions would be expected to generate solid waste equivalent to approximately 31 commercial carter truck loads per week, according to *CEQR Technical Manual* Table 14-1. Although this would be an increase compared with conditions in the future without the Proposed Actions, it would not affect DSNY-managed services. Under the Commercial Waste Zone Program, there will be up to three private carters authorized to serve each designated zone and up to five carters authorized for citywide containerized collection by 2026. Commercial collection fleets are expected to be sufficiently flexible to accommodate this increased demand for solid waste collection. As such, the Proposed Actions would not result in an increase in solid waste that would overburden available waste management capacity. The Proposed Actions would also not conflict with, or require any amendments to, the City's solid waste management objectives as stated in the SWMP. The Applicant would also explore several measures to reduce solid waste generation from the Proposed Project. Therefore, the Proposed Actions would not result in a significant adverse impact on solid waste and sanitation services.

Methodology

According to the *CEQR Technical Manual*, because the Proposed Actions would result in a net increase of more than 50 tons per week, an assessment of solid waste and sanitation services is warranted. As the analysis of solid waste/sanitation services is a density-based technical analysis, this assessment accounts only for the anticipated development on the Development Site.

To assess the Proposed Actions' potential impacts on solid waste and sanitation services, this chapter:

- Describes the existing solid waste management services on the Development Site and estimates solid waste generation under Existing Conditions and in the No-Action condition (for the 2030 analysis year) using solid waste generation rates for typical land uses and activities provided in the *CEQR Technical Manual*.
- Forecasts solid waste generation by the Proposed Project induced by the Proposed Actions based on CEQR guidelines in Table 14-1 of the *CEQR Technical Manual*. An assessment using solid waste generation rates provided by the Applicant (based on research and the Applicant's experience operating these uses) for the specific uses planned within the Development Site is also provided for informational purposes and to provide a breakdown of waste by type.
- Assesses the effects of the Proposed Actions' incremental solid waste generation on municipal and private sanitation services.
- Describes how the Proposed Project would adhere to the hierarchy of preferred solid waste management and identify proposed locations and storage methods for commercial refuse and recyclables.
- Considers the project's consistency with the City's SWMP.

Assessment

Existing Conditions

Description of Solid Waste and Sanitation Services

It is estimated that approximately 50,000 tons per day of public and private sector solid waste is generated in the City (or approximately 350,000 tons per week).[2] DSNY is responsible for the collection and disposal of residential and institutional solid waste in the City, while private carters collect solid waste from commercial and manufacturing uses. In addition to collecting municipal solid waste, refuse, and designated recyclable materials generated by residential and institutional uses, including schools, some nonprofit institutions, and many City and State agencies, DSNY also collects waste from City litter baskets, street-sweeping operations, and lot cleaning activities. In total, the DSNY collection fleet comprises over 2,000 waste collection trucks, with the typical collection truck for refuse carrying approximately 12.5 tons of waste material and the typical recycling truck carrying about 11.5 tons of paper or approximately 10.0 tons of metal, glass, and plastic containers. In total, DSNY collects approximately 10,127 tons per day of residential and institutional refuse and approximately 2,027 tons per day of recyclables.[3]

DSNY delivers most of the refuse it collects to public or private transfer facilities throughout the City, where it is unloaded and, after sorting and compaction, transported to landfills or waste-to-energy facilities. As New York City has no public or private local disposal facilities, solid wastes that are not recycled, reused, or converted to a useful product locally must be exported from the City for disposal. Designated recyclable materials are delivered to privately-operated materials recovery facilities (MRFs) in the City and surrounding communities.

Commercial carters pick up solid waste from businesses, manufacturers, and offices and transport the waste material to transfer stations where the recyclable material is separated from the solid waste. The solid waste is then consolidated into larger trucks for transport and disposal in landfills outside of the City, while the recyclable material is sold and transported to manufacturing facilities. In total, more than 100 private carters are currently licensed to serve New York City, with the typical commercial carter carrying between 12 and 15 tons of waste material per truck.

Solid Waste Management Plan

As required by New York State law, DSNY developed the local SWMP to address management of expected future demands for the City's solid waste. The first SWMP was approved by the New York City Council in 1992, and the current plan was adopted in 2006 and covers the period through 2025. The SWMP estimates public- and private-sector waste quantities that must be managed over the planning period and identifies processing, transfer, and disposal capacity that will be necessary for such waste. According to the SWMP, the City's commercial solid waste generation will increase to

[2] *2021 City Environmental Quality Review Technical Manual*, Chapter 14, "Solid Waste and Sanitation."

[3] "Annual Report: New York City Curbside and Containerized Municipal Refuse and Recycling Statistics by Borough and District: FISCAL YEAR 2022" https://dsny.cityofnewyork.us/wp-content/uploads/2022/09/about_dsny-collections-annual-FY-2022.pdf

approximately 74,000 tons per week by the year 2025.[4] The amount of DSNY-managed waste is expected to increase to approximately 115,830 tons per week.[5]

With respect to commercial waste, the current SWMP planned for three broad categories of action: (1) improving conditions at and around the transfer stations that currently serve as the lynchpin of both public and private networks; (2) facilitating the private commercial waste industry's transition from a network that is heavily reliant on trucks to one that relies primarily on barge and rail; and (3) developing a sound approach to redistribute private transfer capacity from a small number of communities that have the largest proportion of the system's impacts.

Recycling and Composting Laws

Under New York City's mandatory Recycling Law (Title 16 of the NYC Administrative Code, Chapter 3), DSNY has established and enforces rules requiring that certain designated recyclable materials be separated from household waste for separate collection. Designated recyclable materials include aluminum foil, glass, plastic, and metal containers and newspapers and other paper. Commercial establishments are also subject to mandatory recycling requirements. Businesses must separate certain types of paper waste, cardboard, metal items, and construction wastes. Food and beverage establishments must recycle metal, glass, plastic containers, and aluminum foil in addition to meeting the commercial recycling requirements.

Pursuant to Local Law 85 of 2023, DSNY created a mandatory curbside composting program for all residential properties by October 2024. The program decreases the City's reliance on landfills, which release methane—a powerful greenhouse gas—from the decomposition of organic waste; reduces air emissions from city refuse sent to waste-to-energy plants and from long-distance waste transport; and reduces related fossil fuel use. The implementation plan is based on the strategy deployed in DSNY's Fall 2023 curbside organics pilot in Queens. This pilot strategy in Queens diverted three times the material at less than one third the cost, on average per district, compared to prior programs.[6]

In addition, pursuant to Local Law 146 of 2013, DSNY enforces commercial food waste composting rules for commercial businesses designated in the law. Covered businesses include those that involve food—including, but not limited to, food manufacturing, food wholesalers, retail food stores, arenas, stadiums, food service establishments, and catering establishments. The law's applicability also depends on business or facility size and other factors. Covered businesses must keep their organic waste (i.e., food scraps, soiled paper, plant trimmings) separate from other waste and arrange to have it converted to useful products like compost or biogas rather than landfilled or incinerated. This can be done either via collection by private carters or self-transport for off-site conversion, or by managing the conversion onsite using in-vessel composting or aerobic or anaerobic digestion.

Commercial Waste Zones

Local Law 199 of 2019 requires the establishment of Commercial Waste Zones (CWZ) throughout New York City. The CWZ program divides the city into 20 commercial waste zones, established in February 2020 via DSNY rulemaking, each served by up to three carters that have been selected through a competitive process. Five citywide contracts have also been awarded for citywide containerized collection. This approach is expected to reduce truck traffic associated with commercial waste

[4] Comprehensive Solid Waste Management Plan, September 2006; Attachment IV, Table IV 2-2. 1 (cityofnewyork.us)

[5] Comprehensive Solid Waste Management Plan, September 2006; Attachment II, Table II 2-6. 1 (cityofnewyork.us)

[6] Mandatory Curbside Composting Implementation Plan, July 2023. CurbsideCompostingPlan.pdf

collection by 50 percent, eliminating millions of heavy-duty truck miles from NYC streets every year while strengthening service standards and allowing for customer choice. Customer transitions are expected to begin in 2024 and be complete by 2026. The Development Site falls in the Queens Northeast (QN-3) CWZ.

Solid Waste Generation on the Development Site

The Development Site contains surface parking lots (7,423 spaces). It is bisected by the MTA 7 Subway Line along Roosevelt Avenue. The surface parking area south of Roosevelt Avenue also contains two MTA structures associated with the Subway Line. The Development Site is comprised of approximately 78 acres of land. State legislation enacted in 1961 authorizes the City to enter into agreements with private parties for the use of a stadium and parking lots on the Development Site and the current site of Citi Field. Because the Development Site is comprised of parking lots containing 7,423 spaces, there is no solid waste generation under existing conditions.

No-Action Condition

In the No-Action condition, it is assumed that the Development Site would continue operating under existing conditions; it would remain as a paved parking area for Citi Field under the current lease agreement with the City. The surface parking lots currently contain 7,423 parking spaces. Therefore, the Development Site would continue to result in no solid waste generation in the No-Action condition. The CWZ program is expected to be in effect by the 2030 build year.

With-Action Condition

As detailed in **Chapter 1, Project Description**, the With-Action condition would result in the redevelopment of approximately 78 acres of underutilized, asphalt surface parking areas located adjacent and accessory to Citi Field west of Seaver Way with a major mixed-use development in Area of Development A, while Area of Development B is proposed to contain uses geared towards visitors to the sports complexes and other local visitors. The Proposed Project is anticipated to comprise up to approximately 3.7 million square feet of new construction, with destination entertainment including a music hall, gaming facility, hotel, convention and meeting space, restaurant and retail space, and office and community facility uses. In addition to the commercial development, the Proposed Project would also include approximately 20 acres of public park space and other public improvements as well as structured parking facilities to accommodate up to 13,750 spaces.

Solid Waste Generation Estimates

The Proposed Project would introduce a total of approximately 7,534 employees. However, solid waste generation was estimated for only 7,352 employees. The employees associated with the parking garages and public park space uses do not have CEQR waste generation rates, which would be nominal, and were therefore, excluded. Based on the citywide average rates for solid waste generation provided in the *CEQR Technical Manual*, total solid waste generation from the Proposed Project would be approximately 464.97 tons per week, which represents a 464.97-ton increment in weekly waste generation relative to the No-Action condition (see **Table 12-1**). Given the unique nature of some of the uses proposed, and that the *CEQR Technical Manual* does not provide generation estimates for such uses, the estimates of solid waste generation, based on the Applicant's research and experience operating these uses, are provided in **Table 12-2** for informational purposes.

Table 12-1 With-Action Condition: Solid Waste Generation (*CEQR Technical Manual Rates*)

Development Area	Use	Area (gsf)	Employees	Solid Waste Generation Rate (lbs/wk)[4]	Solid Waste Generation (CEQR)	
					Lbls/wk	Tons/wk
Area of Development A[3]	Hotel	2,118,000	470	75	35,250	17.63
	Restaurants	198,790	1,774	251	445,274	222.64
	Entertainment Space,[1] Retail, and Support[2]	1,137,210	4,435	79	350,365	175.18
Area of Development B	Retail	32,000	96	79	7,584	3.79
	Restaurants	118,000	354	251	88,854	44.43
	Community Facility	25,000	75	9	675	0.34
	Office	37,000	148	13	1,924	0.96
				Total Solid Waste Generation	**929,926**	**464.97**
				Solid Waste Handled by Private Carters	**929,926**	**464.97**
				Solid Waste Handled by DSNY	--	--

Notes:
[1] Includes Music Hall, Convention Center, Amenities, and Gaming Facility Uses.
[2] Includes Marketing and Facility Support for Area A.
[3] Employees for Development Area A were provided by the Applicant.
[4] Per Employee. Solid waste generation is based on citywide average waste generation rates presented in Table 14-1 of the *CEQR Technical Manual*, and estimates of workers by use, as follows:
General retail: 79 lbs/wk per employee; assume 1 employee per 333.3 sf.
Restaurant: 251 lbs/wk per employee; assume 1 employee per 333.3 sf.
Community facility: 9 lbs/wk per employee; assume 1 employee per 333.3 sf.
Office: 13 lbs/wk per employee; assume 1 employee per 250 sf.

As shown in **Table 12-1**, using *CEQR Technical Manual* generation rates, the Proposed Project would result in an approximately 464.97-ton increase in weekly solid waste handled by private carters. This would represent approximately 0.628 percent of the City's anticipated future commercial waste generation (estimated at 74,000 tons per week), as projected in the SWMP. Based on the typical commercial carter capacity of between 12 and 15 tons of waste material per truck, the Proposed Project would require approximately 31 additional collection trucks per week compared to the No-Action condition (assuming a 15-ton truck).

For informational purposes only, a separate assessment was conducted to determine the total amount of waste generated in weight and by waste type for the Proposed Project. These rates are based on research conducted by the Applicant for the specific categories of uses in the Proposed Project and the Applicant's experience operating these uses. Based on these calculations, the Proposed Project would result in an approximately 152.75-ton increase in weekly solid waste handled by private carters (see **Table 12-2**), approximately a third of what would be generated based on the *CEQR Technical Manual* generation rates. These estimates have been based on a typical waste disposal profile and not an ideal waste disposal profile, for the purpose of providing a reasonable worst-case development scenario. A typical waste disposal profile reflects the actual amount of waste disposed in each waste stream and not an aspirational amount (i.e., after waste reduction strategies).

Based on the Applicant's rates and the resulting total solid waste generation for each proposed use show in **Table 12-2**, an estimated breakdown is provided in **Table 12-3** for the generation of

recycling, organics, and trash for each proposed use. The estimated tons per week of trash, mixed recyclables, and organics are 124.72, 24.32, and 3.72, respectively.

Table 12-2 With-Action Condition: Solid Waste Generation Rates (*Applicant Rates*)

Use	Area (gsf)	Solid Waste Generation Rate (lbs/sf/wk)	Solid Waste Generation (Applicant) lbs/wk	Solid Waste Generation (Applicant) tons/wk
Hotel[1]	2,118,000	0.0547	115,900	57.95
Convention and Meeting Space[2]	150,000	0.0635	9,524	4.76
Gaming Facility[3]	445,000	0.0656	29,206	14.60
Music Hall[3]	290,610	0.0656	19,073	9.54
Retail[4]	134,330	0.1681	22,577	11.29
Restaurants[5]	316,790	0.2575	81,564	40.78
Amenities[3]	149,270	0.0656	9,797	4.90
Office[6]	37,000	0.1477	5,464	2.73
Community Facility[7]	25,000	0.0249	623	0.31
Open Space[8]	20 (acres)	0.0135	11,778	5.89
Total Solid Waste Generation			**305,506**	**152.75**
Solid Waste Handled by Private Carters			**305,506**	**152.75**
Solid Waste Handled by DSNY			--	--

Notes: Generation rates compiled from various sources of waste generation and composition data studies and sources of employee density factors in order to create standardized waste generation rates. Each waste generation source also includes an estimated breakdown for trash, mixed recyclables, and organics.

Sources:

[1] "Hotels and Lodging." 2014 CalRecycle Generator-Based Characterization of Commercial Sector Disposal and Diversion in California; US Green Buildings Council, LEED BD+C: New Construction v4 Appendix 2: Default occupancy counts Appendix 2. Default occupancy counts | U.S. Green Building Council (usgbc.org)

[2] Excel Centre, London, UK (2019-2021); EIA Table PBA2, 2012, https://www.eia.gov/consumption/commercial/data/2012/bc/cfm/pba2.php

[3] "Arts, Entertainment, and Recreation." 2014 CalRecycle Generator-Based Characterization of Commercial Sector Disposal and Diversion in California; EIA Table PBA2, 2012, https://www.eia.gov/consumption/commercial/data/2012/bc/cfm/pba2.php

[4] Retail Trade - All Other." 2014 CalRecycle Generator-Based Characterization of Commercial Sector Disposal and Diversion in California; US Green Buildings Council, LEED BD+C: New Construction v4 Appendix 2: Default occupancy counts Appendix 2. Default occupancy counts | U.S. Green Building Council (usgbc.org)

[5] "Restaurants." 2014 CalRecycle Generator-Based Characterization of Commercial Sector Disposal and Diversion in California; US Green Buildings Council, LEED BD+C: New Construction v4 Appendix 2: Default occupancy counts Appendix 2. Default occupancy counts | U.S. Green Building Council (usgbc.org)

[6] "Services - Professional, Technical, and Financial." 2014 CalRecycle Generator-Based Characterization of Commercial Sector Disposal and Diversion in California; EIA Table PBA2, 2012, https://www.eia.gov/consumption/commercial/data/2012/bc/cfm/pba2.php

[7] "Public Administration." 2014 CalRecycle Generator-Based Characterization of Commercial Sector Disposal and Diversion in California; US Green Buildings Council, LEED BD+C: New Construction v4 Appendix 2: Default occupancy counts Appendix 2. Default occupancy counts | U.S. Green Building Council (usgbc.org)

[8] Governors Island, https://www.nyc.gov/html/oec/downloads/pdf/dme_projects/11DME007M/FGEIS/11DME007M_FGEIS_13_Solid_Waste_and_Sanitation_Services.pdf

Table 12-3 With-Action Condition: Estimated Recycling, Organics, and Trash Breakdown (*Applicant Rates*)

Use	Trash (%)	Mixed Recyclables (%)	Organics (%)	Trash (lbs/wk)	Mixed Recyclables (lbs/wk)	Organics (lbs/wk)	Trash (tons/wk)	Mixed Recyclables (tons/wk)	Organics (tons/wk)
Hotel[1]	80%	19%	1%	93,184	21,905.11	811.30	46.59	10.95	0.41
Convention and Meeting Space[2]	45%	45%	10%	4,286	4,285.78	952.40	2.14	2.14	0.48
Gaming Facility[3]	83%	16%	1%	24,183	4,731.39	292.06	12.09	2.37	0.15
Music Hall[3]	83%	16%	1%	15,793	3,089.86	190.73	7.90	1.54	0.10
Retail[4]	89%	11%	0%	20,048	2,528.60	-	10.02	1.26	-
Restaurants[5]	82%	12%	6%	67,127	9,543.03	4,893.86	33.56	4.77	2.45
Amenities[3]	83%	16%	1%	8,112	1,587.09	97.97	4.06	0.79	0.05
Office[6]	81%	16%	4%	4,409	857.82	196.70	2.20	0.43	0.10
Community Facility[7]	84%	16%	0%	521	102.22	-	0.26	0.05	-
Open Space[8]	100%			11,778	-	-	5.89	-	-
Total Solid Waste Generation				**249,440**	**48,631**	**7,435**	**124.72**	**24.32**	**3.72**
Solid Waste Handled by Private Carters				**249,440**	**48,631**	**7,435**	**124.72**	**24.32**	**3.72**
Solid Waste Handled by DSNY				--	--	--	--	--	--

Notes: Generation rates compiled from various sources of waste generation and composition data studies and sources of employee density factors in order to create standardized waste generation rates. Assumes 100% of the solid waste generated by the open space would be trash as no data studies or sources on open space waste generation rates were found.

Sources:

[1] "Hotels and Lodging." 2014 CalRecycle Generator-Based Characterization of Commercial Sector Disposal and Diversion in California; US Green Buildings Council, LEED BD+C: New Construction v4 Appendix 2: Default occupancy counts Appendix 2. Default occupancy counts | U.S. Green Building Council (usgbc.org)

[2] Excel Centre, London, UK (2019-2021); EIA Table PBA2, 2012, https://www.eia.gov/consumption/commercial/data/2012/bc/cfm/pba2.php

[3] "Arts, Entertainment, and Recreation." 2014 CalRecycle Generator-Based Characterization of Commercial Sector Disposal and Diversion in California; EIA Table PBA2, 2012, https://www.eia.gov/consumption/commercial/data/2012/bc/cfm/pba2.php

[4] Retail Trade - All Other." 2014 CalRecycle Generator-Based Characterization of Commercial Sector Disposal and Diversion in California; US Green Buildings Council, LEED BD+C: New Construction v4 Appendix 2: Default occupancy counts Appendix 2. Default occupancy counts | U.S. Green Building Council (usgbc.org)

[5] "Restaurants." 2014 CalRecycle Generator-Based Characterization of Commercial Sector Disposal and Diversion in California; US Green Buildings Council, LEED BD+C: New Construction v4 Appendix 2: Default occupancy counts Appendix 2. Default occupancy counts | U.S. Green Building Council (usgbc.org)

[6] "Services - Professional, Technical, and Financial." 2014 CalRecycle Generator-Based Characterization of Commercial Sector Disposal and Diversion in California; EIA Table PBA2, 2012, https://www.eia.gov/consumption/commercial/data/2012/bc/cfm/pba2.php

[7] "Public Administration." 2014 CalRecycle Generator-Based Characterization of Commercial Sector Disposal and Diversion in California; US Green Buildings Council, LEED BD+C: New Construction v4 Appendix 2: Default occupancy counts Appendix 2. Default occupancy counts | U.S. Green Building Council (usgbc.org)

[8] Governors Island, https://www.nyc.gov/html/oec/downloads/pdf/dme_projects/11DME007M/FGEIS/11DME007M_FGEIS_13_Solid_Waste_and_Sanitation_Services.pdf

Assessment

Based on the *CEQR Technical Manual* rates, private carters would handle an additional approximately 464.97-tons per week of solid waste; this would represent approximately 0.628 percent of the City's anticipated future commercial waste generation. The Proposed Project would add approximately 31 additional collection trucks per week.

Under the CWZ Program, by 2026 there will be up to three private carters authorized to serve each designated zone and up to five carters authorized for citywide containerized collection. It is expected that their collection fleets of private carting trucks would be sufficiently flexible to accommodate this increased demand for solid waste collection.

The Proposed Project is a private (non-residential or institutional) commercial project and would not be serviced by DSNY trucks, transfer stations, or processing facilities to handle waste. It would comply with all relevant laws and would choose a private carter from the Commercial Waste Zone when the program is in effect, which is expected to occur before the 2030 build year.

In terms of the indirect effects of the truck trips from the private haulers related to air quality and noise, the traffic analysis was conducted in accordance with *CEQR Technical Manual* guidelines. For each proposed use, the total numbers of automobile and truck trips were projected for each analysis peak period for the morning (8AM-9AM), midday (1PM-2PM), late afternoon (5PM-6PM), and Saturday afternoon (7PM-8PM) peak hours. In order to assess the effects and potential impacts of these incremental trips, the trips were assigned (distributed based on logical routes) to different roadways to and from the Development Site. This traffic analysis was then factored into the mobile source air quality and noise analyses, which were conducted in accordance with *CEQR Technical Manual* guidelines. See **Chapter 14, Transportation**; **Chapter 15, Air Quality**; and **Chapter 17, Noise** for the results of those assessments.

The SWMP goals and policies surrounding commercial waste management pertain to regulating carters and private transfer stations. There are no commercial milestones that are relevant to private development or that address specific capacity/diversion rates. Specifically, the Proposed Project would not materially conflict with the following:

- Adherence to the hierarchy of preferred solid waste management, which places waste prevention first—followed by reuse, recycling or composting, derivation of energy from non-recyclable waste in an environmentally acceptable way, and disposal by landfilling;
- Implementation of the New York City Recycling Law (Local Law 19 of 1989), as amended; and
- Any element of the SWMP, including a significant delay in achieving one or more milestones identified in the SWMP.

Therefore, the Proposed Project is consistent with the SWMP.

On-Site Solid Waste Handling and Storage

A commercial waste hauler would collect all waste generated within the buildings introduced by the Proposed Project. Waste generated in the public park space would be collected by the Applicant and moved to existing areas on-site for collection. As noted above, waste collection would be subject to Local Law 199 with the Development Site in the Queens Northeast Zone.

In Areas of Development A and B, dedicated space would be provided within the proposed buildings for the collection and storage of solid waste and recyclable materials near the loading docks.

Recyclables would include mixed paper, corrugated cardboard, glass, plastics, and metals. Although the proposed buildings have not been fully designed at this time, options are being explored to reduce the spatial requirements for waste storage. Space would be provided in the proposed buildings for the storage of organic waste and for storage and disposal of electronic waste (e-waste) introduced in the With-Action condition. It is currently anticipated that this space would include a large-scale composting machine. Given the scale and operations of the With-Action condition, the amount of compost produced could likely be reused on the Development Site for gardens, trees, and other plantings. Otherwise, the compost could likely be utilized by a local community garden.

The handling of organic waste related to the proposed food service establishments on the Development Site would be determined by the specific type of area/use, which primarily include the prep areas and ware washing areas. For prep areas, it is anticipated that dual trash cans for each prep station would be utilized to allow the operations/culinary staff to sort their refuse and collect the bins dedicated to organic waste. For ware wash areas, it is anticipated that food collector equipment would be used, which allow for water soluble waste to drain through the waste lines. With the water mostly removed, the weight of waste would be reduced, and the remaining waste would be sent to the bins dedicated to organic waste, which would be sent to the large-scale composting machine.

For the public park space, waste receptacles would be provided in dedicated areas for the collection and storage of solid waste. Waste receptacles would also be provided in dedicated areas for the collection and storage of commingled recyclable materials, which would include mixed paper, corrugated cardboard, glass, plastics, and metals. Space would also be provided for the storage of organic waste introduced in the With-Action condition.

In the proposed parking garages, waste receptacles would be provided in dedicated areas for the collection and storage of solid waste, although it is assumed to be minimal. Waste receptacles would be provided in dedicated areas for the collection and storage of commingled recyclable materials, although they are also assumed to be minimal.

Additional waste reduction measures would be investigated throughout the Development Site, including the following:

- Require the commercial waste hauler to perform annual waste audits to understand where waste is coming from and to identify opportunities for waste reduction;
- Plan for takeback/backhauling of delivery materials (e.g., pallets, cardboard boxes);
- Develop awareness and education programs;
- Consider if materials can be removed from the waste stream or waste can be reduced through procurement decisions; and
- Track food waste generation and donate surplus edible food.

Overall, the uses facilitated by the Proposed Actions would be expected to generate solid waste equivalent to approximately 31 commercial carter truck loads per week, which would be handled privately. Furthermore, the Proposed Project would follow all applicable laws and policies, institute waste reduction measures, and would not conflict with the SWMP. Therefore, the Proposed Project would not overburden the City's solid waste management capacity and would not have significant adverse impacts on the City's solid waste and sanitation services.