Chapter 11: Solid Waste and Sanitation Services

11.1 Introduction

This chapter examines the Proposed Actions' potential to affect solid waste and sanitation services. In accordance with the 2021 *City Environmental Quality Review (CEQR) Technical Manual*, this solid waste assessment intends to determine whether the With-Action condition 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 New York City Solid Waste Management Plan (SWMP) or with state policy related to the City's integrated solid waste management system.

As described in Chapter 1, "Project Description," the New York City Department of City Planning (NYCDCP) is proposing a series of land use actions (collectively, the "Proposed Actions"), including zoning map amendments, zoning text amendments (including mapping a special zoning district and designating Mandatory Inclusionary Housing), and changes to the City Map that would facilitate the implementation of a multi-year planning process conducted in the Parkchester, Van Nest, and Morris Park neighborhoods of the Bronx in partnership with local stakeholders, City agencies, and the Metropolitan Transportation Authority (MTA).

The Proposed Actions would affect an approximately 46-block area primarily along the main corridors—East Tremont Avenue, White Plains Road, Bronxdale Avenue, Eastchester Road, and Stillwell Avenue—near the future Parkchester/Van Nest and Morris Park Metro-North stations in Bronx Community Districts 9, 10 and 11 (the "Affected Area"). The approximately 28-block area closest to the future Parkchester/Van Nest station is generally bound by Baker Avenue and Van Nest Avenue to the north, Silver Street to the east, East Tremont Avenue to the south, and St. Lawrence Avenue to the west. The approximately 18-block area closest to the future Morris Park station is generally bound by Pelham Parkway to the north, Marconi Street to the east, Williamsbridge Road to the south, and Eastchester Road to the west. The Proposed Actions are intended to leverage new planned Metro-North Railroad service to promote economic growth, facilitate the development of housing, including affordable housing, as well as guide investment in the public realm around new Metro-North Railroad stations to improve pedestrian safety and comfort.

Per the Reasonable Worst-Case Development Scenario (RWCDS), the Proposed Actions are expected to result in an incremental development (compared to No-Action conditions) of 7,474 dwelling units (DUs), 1,231,972 gross square feet (gsf) of commercial uses, and 1,290,628 gsf of community facility uses, and a decrease of 405,096 gsf of industrial uses on the projected development sites. This chapter provides a detailed analysis of the estimated amount of solid waste generated on the 60 projected development sites identified in the RWCDS and provides a comparison of estimates for the No-Action and With-Action conditions.

11.2 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 233 tons per week of solid waste but would not directly affect a solid waste management facility. Approximately 72 percent of the additional solid waste generated by the Proposed Actions (167.2 tons) would be handled by the New York City Department of Sanitation (DSNY), and approximately 28 percent (65.9 tons) would be handled by private carters. Overall, the uses facilitated by the Proposed Actions would be expected to generate solid waste equivalent to approximately 13.4 DSNY truck loads per week and up to six commercial carter truck loads per week. Although this would be an increase compared with conditions in the future without the Proposed Actions, the additional solid waste resulting from the Proposed Actions would be a negligible increase relative to the more than 10,000 tons of garbage and 2,000 tons of recycling handled by DSNY every day. It would also represent approximately 0.1 percent of the City's anticipated future weekly waste generation handled by DSNY by 2026, and approximately 0.09 percent of the City's anticipated future weekly commercial waste generation handled by private carters by 2025, as projected in the Solid Waste Management Plan (SWMP). 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. Therefore, the Proposed Actions would not result in a significant adverse impact on solid waste and sanitation services.

11.3 Methodology

According to the *CEQR Technical Manual*, projects with a generation rate of less than 50 tons (100,000 pounds) of solid waste per week would not result in a significant adverse impact to the City's waste management capacity, and do not warrant detailed analysis. Because it is estimated that the Proposed Actions would result in a net increase of more than 50 tons of solid waste per week, an assessment of solid waste and sanitation services is warranted.

Technical analysis of solid waste/sanitation services is density-based, and as a result, only the anticipated development on the projected development sites forms the basis of this assessment. The analysis describes existing and future New York City solid waste disposal practices (including the collection system and disposal methods) and estimates the solid waste generated by activities on the projected development sites under existing conditions, and the No-Action and With-Action conditions for the 2033 Analysis Year. Forecasts of solid waste generation by these projected developments are based on the solid waste generation rates for typical land uses and activities provided in Table 14-1 of the *CEQR Technical Manual*. The chapter also assesses the effects of the Proposed Actions' incremental solid waste generation on municipal and private sanitation services in the With-Action condition and considers the Proposed Actions' consistency with the City's SWMP.

11.4 Existing Conditions

DESCRIPTION OF CURRENT SOLID WASTE SANITATION SERVICES

The New York City Department of Sanitation (DSNY) is responsible for the collection and disposal of residential and institutional solid waste (including waste from schools, some non-profit institutions and many City and State agencies), while private carters collect solid waste from commercial and manufacturing uses. In addition to collecting solid waste, DSNY also collects waste from City litter baskets, street sweeping operations, and lot cleaning activities. DSNY has over 2,000 waste collection trucks in its fleet. The typical collection truck for residential refuse carries approximately 12.5 tons of waste material (eight tons for containerized collections) and the typical recycling truck carries approximately 11.5 tons of paper or approximately 10.0 tons of metal, glass, and plastic containers, according to the *CEQR Technical Manual*. In total, DSNY collects over 10,000 tons of garbage and some 2,000 tons of recycling per day.[1]

Commercial establishments (e.g., restaurants, retail facilities, offices, and industries) in the City contract with private carters for the collection, processing, and disposal of commercial and manufacturing solid waste. This includes municipal solid waste (MSW), construction and demolition debris, non-hazardous industrial waste, and recyclables. Certain commercial establishments – such as some food service establishments, retail food stores, and other facilities meeting certain size and capacity requirements – are required under Local Law 146 of 2013 to separate their organic waste. This includes food scraps, plant trimmings, food-soiled paper, and certified compostable products. Businesses are given the option to arrange for collection by a private carter, transport organic waste themselves, or process the material on-site through in-vessel composting. The City's Business Integrity Commission licenses over 2,200 private carting trucks to collect the City's commercial municipal solid waste, recyclables, and other wastes, and registers over 5,200 more trucks to haul private sector construction and demolition debris in the City (2019 figures from the 2021 *CEQR Technical Manual*). Commercial carters typically carry between 12 and 15 tons of waste material per truck. NYC commercial businesses whose waste is collected by private carting companies generate approximately 9,000 tons of MSW and recyclables daily.[2]

Under NYC'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, including aluminum foil, glass and metal containers, plastic bottles and jugs, other rigid plastics, beverage cartons, newspapers and magazines, cardboard and other paper wastes, and other metal items (including bulk metal such as stoves, refrigerators, file cabinets, *etc.*). Commercial establishments are also subject to mandatory recycling requirements. Businesses must source-separate metal, glass, and plastic containers; certain types of recycling materials, including paper waste, cardboard, metal components in bulk waste, bulk metal, aluminum foil products; and construction

[1] About DSNY: https://www1.nyc.gov/assets/dsny/site/services (accessed January 16, 2023)
[2] The City of New York Department of Sanitation, Final Generic Environmental Impact Statement for the NYC Commercial Waste Zone Program, 2019

waste (for businesses exclusively engaged in an activity that generates construction waste). Significant generators of yard waste or textile waste (at least ten percent of the business' waste in a month) must recycle that material. Private carters may also separate other types of recyclables from the waste after collection.

DSNY's now mandatory organics collection and composting program provides curbside collection and convenient neighborhood drop-off locations. The program decreases the City's reliance on landfills, which release methane—a powerful greenhouse gas (GHG)—from the decompostion 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. DSNY's curbside composting service is currently available in select Community Boards in the Bronx, Brooklyn, and Manhattan as well as all Queens residents, and is scheduled to expand to all NYC residents by late 2024.

DSNY delivers most of the refuse it collects to certain public or private solid waste management facilities known as transfer stations, in the City or in adjoining communities, for processing and transportation to out-of-City disposal facilities. At waste transfer stations DSNY-delivered refuse is compacted and loaded onto railroad cars or barges for transport to landfills or waste-to-energy facilities. Similarly, commercial municipal solid waste and other solid waste that is not carted directly to disposal facilities is delivered to transfer stations for transport to disposal facilities; most of this commercial waste leaves the City by truck. Non-putrescible waste, such as construction and demolition debris, is typically sorted at transfer stations specialized for this waste. The transfer stations remove clean fill materials, metal, and wood for recycling, and then send the residue to landfills for disposal.

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 for processing and transportation to end product manufacturers. Paper recyclables collected by DSNY in Manhattan, Staten Island, and parts of Brooklyn are transported to the Pratt Industries/Visy Paper Recycling Plant in Staten Island, which processes them for use in the production of liner board and similar products. Paper recyclables collected by DSNY in the Bronx are transported to the Sims Municipal Recycling processing facility at the South Brooklyn Marine Terminal (SBMT).

A private vendor operates DSNY's yard waste composting facility in western Staten Island (which also accepts food waste). This facility accepts leaf and yard waste collected from the community districts that are served by DSNY's leaf and yard waste collection program, and from commercial landscapers. Compost from this facility is sold, provided to City agencies such as the Department of Parks and Recreation, and given to community gardens. Other small composting facilities operate locally in partnership with DSNY and local organizations and botanical gardens. The City also runs a small food waste composting facility on Riker's Island that processes food waste from the correctional facility on the island.

Special Waste items are certain designated household waste items that require special handling to avoid mixing with regular refuse and recycling collections. Special Waste includes latex paint, motor oil,

automotive batteries, household batteries, motor oil filters, fluorescent light tubes, compact fluorescent bulbs, mercury thermostats, and electronic waste (E-waste). DSNY accepts Special Waste from New York City households at a drop-off collection facility located in each borough. Special Waste is transported and disposed or recycled pursuant to a contract with a private vendor.

COMPREHENSIVE SOLID WASTE MANAGEMENT PLAN

New York City has adopted a comprehensive SWMP, as required by New York State law, for the long-term management of solid waste generated by the City. The current SWMP 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 is projected to increase to approximately 74,000 tons per week by the year 2025.[3] The amount of DSNY-managed waste is projected to increase to approximately 139,600 tons per week by the year 2026.[4]

The SWMP takes into account the objectives of New York State's solid waste management policy with respect to the preferred hierarchy of waste management methods, in order of preference: waste reduction, recycling, composting, resource conservation and energy production, and landfill disposal. The SWMP includes programs designed to prevent, reduce, reuse, recycle, and compost solid waste, and includes initiatives intended to reduce truck traffic and air emissions associated with the export of DSNY and commercial waste and recyclables to processors and disposal facilities such as landfills and resource recovery facilities.

With respect to commercial waste, the SWMP provides for the capacity to barge export certain amounts of commercial refuse from the four DSNY marine transfer stations (MTS), plans for barge export of construction and demolition waste from the existing DSNY MTS at West 59th Street in Manhattan, and requires railroad export of commercial refuse from the three private transfer stations in the City that also contract to handle DSNY refuse. The SWMP also includes more stringent restrictions on the siting and operation of commercial solid waste transfer stations, a reduction in the concentration of transfer station capacity, and additional measures to reduce the impacts of commercial waste truck traffic on communities.

In addition, pursuant to Local Law 146 of 2013 and subsequent rules, food waste from many types of commercial establishments must be collected separately from refuse and converted to compost or other beneficial use such as biogas. This applies to hotels serving food with at least 100 sleeping rooms, buildings where food service establishments combined total at least 8,000 square feet, individual commercial food service establishments having at least 7,000 square feet of floor area, food preparation establishments

[3] DSNY, *Comprehensive Solid Waste Management Plan*, Sept 2006; Attachment IV, Table IV 2-2. Table IV 2-2 shows the generation of commercial putrescible waste by borough, through the year 2025.

[4] DSNY, *Comprehensive Solid Waste Management Plan*, Sept 2006; Attachment II, Table II 2-6. Tables in Attachment II of the SWMP show the projections for DSNY-managed Waste quantities and Recyclables for FY 2007, 2010, 2015, 2020 and 2026.

with at least 6,000 square feet of floor area, and retail food stores with at least 10,000 square feet of floor area.

Three DSNY Sanitation District garages, Bronx Garages Districts 9, 10, and 11, are located nearby, but outside of the study area at 800 and 850 Zerega Avenue, between Hermany and Lafayette Avenues. These garages service Sanitation Districts 9, 10 and 11 in the Bronx, three of 59 Citywide, are essential to DSNY's sanitation operations, as they store and maintain DSNY vehicles that provide refuse collection, recycling, and winter emergency services. The facilities allow DSNY to perform its regular duties and execute emergency response, as needed, to the surrounding neighborhoods.

DSNY operations at the garage for Bronx Garages Districts 9, 10, and 11 would not be affected by the Proposed Actions.

SOLID WASTE GENERATION ON PROJECTED DEVELOPMENT SITES

The 60 projected development sites are currently occupied by 59 residential DUs, 946,520 gsf of commercial uses (including local retail, office, storage and garage space), 23,990 gsf of community facility uses (including medical office, house of worship, and education uses), and 389,967 gsf of industrial uses (including manufacturing, warehouse, and auto-related uses). Based on the citywide average rates for solid waste generation (Table 14-1 of the *CEQR Technical Manual*) the existing uses on the projected development sites currently are estimated to generate a total of approximately 36 tons of solid waste per week, as shown in Table 11-1, "Existing Solid Waste Generation – Projected Development Sites." Approximately 96 percent (about 34.5 tons per week) of existing solid waste is handled by private carters and approximately four percent (about 1.6 tons per week) is handled by DSNY.

Table 11-1: Existing Solid Waste Generation – Projected Development Sites

Use	Type	Floor Area/Units		Occupants		Generation Rate (pounds per week)		Solid Waste Generation		
								lbs/wk	lbs/wk	tons/wk
Residential	-	59	Units	59	Households	41	Per Household	2,419	2,419	1.21
Commercial	Local Retail	159,534	Square Feet	479	Employees	79	Per Employee	37,841	54,734	27.37
	Office	319,413	Square Feet	1,278	Employees	13	Per Employee	16,614		
	Storage Area	110,160	Square Feet	7	Employees	9	Per Employee	63		
	Garage	357,413	Square Feet	24	Employees	9	Per Employee	216		
Community Facility	Medical Office	2,850	Square Feet	6	Employees	9	Per Employee	54	774	0.39
	House of Worship	6,970	Square Feet			0.03	Per Square Foot	209		
	Education	17,020	Square Feet			0.03	Per Square Foot	511		
Industrial	Manufacturing	43,445	Square Feet	43	Employees	182.5	Per Employee	7,848	14,236	7.12
	Warehouse	260,879	Square Feet	17	Employees	9	Per Employee	153		
	Auto-Related	85,643	Square Feet	86	Employees	72.5	Per Employee	6,235		
Total Solid Waste Generation								***72,163***	***72,163***	***36.08***
Amount Handled by DSNY								***3,193***	***3,193***	***1.60***
Amount Handled by Private Carters								***68,970***	***68,970***	***34.49***

Notes:

Solid waste generation is based on citywide average waste generation rates presented in Table 14-1 of the *CEQR Technical Manual*.

Residential Use: 41 lbs/wk/dwelling unit.

General Retail: 79 lbs/wk/employee, assume 3 employees per 1,000 sf.

Commercial Office: 13 lbs/wk/employee, assume 1 employee per 250 sf.

Storage Area and Garage uses: use commercial single office rate of 9 lbs/wk/employee, assume 1 employee per 15,000 sf (same as warehouse).

Medical Office: use commercial single office rate of 9 lbs/wk/employee, assume 1 employee per 450 sf.

Other Community Facility Uses: 0.03 lbs/wk/sf.

Industrial Uses: average of apparel/textile and printing/publishing rates - 182.5 lbs/wk/employee, assume 1 employee per 1,000 sf.

Warehouse: 9 lbs/wk/employee, assume 1 employee per 15,000 sf.

Auto Related Uses: average of retail and wholesale rates - 72.5 lbs/wk/employee, assume 1 employee per 1,000 sf.

Source: NYC Department of City Planning, 2023; *CEQR Technical Manual*, 2021; Philip Habib Associates, 2023.

11.5 The Future without the Proposed Actions (No-Action Condition)

As detailed in Chapter 1, "Project Description," it is anticipated that in the No-Action condition the 60 projected development sites would contain approximately 239 DUs, 1,243,250 gsf of commercial space (including local retail, office, storage, and garage space), 229,777 gsf of community facility space (including medical office and house of worship), and 405,096 of industrial/warehouse/auto-related space. Overall, solid waste generated by the projected development sites would increase under the No-Action condition, as compared to existing conditions.

Under the No-Action condition, approximately 64.8 tons of solid waste per week would be generated, compared with approximately 36 tons per week under existing conditions. As shown in Table 11-2, "No-Action Solid Waste Generation – Projected Development Sites," the amount of solid waste handled by DSNY weekly would increase to approximately 7.2 tons from 1.6 tons, and the amount of solid waste

handled by private carters per week is expected to increase to 57.6 tons from the 34.5 tons generated under existing conditions.

Table 11-2: No-Action Solid Waste Generation – Projected Development Sites

Use	Type	Floor Area/Units		Occupants		Generation Rate (pounds per week)		Solid Waste Generation		
								lbs/wk	lbs/wk	tons/wk
Residential	-	239	Units	239	Households	41	Per Household	9,799	9,799	4.90
Commercial	Local Retail	336,343	Square Feet	1,009	Employees	79	Per Employee	79,711	98,855	49.43
	Office	361,715	Square Feet	1,447	Employees	13	Per Employee	18,811		
	Storage Area	129,600	Square Feet	9	Employees	9	Per Employee	81		
	Garage	415,592	Square Feet	28	Employees	9	Per Employee	252		
Community Facility	Medical Office	221,577	Square Feet	492	Employees	9	Per Employee	4,428	4,674	2.34
	House of Worship	8,200	Square Feet			0.03	Per Square Foot	246		
Industrial	Manufacturing	51,112	Square Feet	51	Employees	182.5	Per Employee	9,308	16,276	8.14
	Warehouse	260,352	Square Feet	17	Employees	9	Per Employee	153		
	Auto-Related	93,633	Square Feet	94	Employees	72.5	Per Employee	6,815		
Total Solid Waste Generation								***129,604***	***129,604***	***64.80***
Amount Handled by DSNY								***14,473***	***14,473***	***7.24***
Amount Handled by Private Carters								***115,131***	***115,131***	***57.57***

Notes:

Solid waste generation is based on citywide average waste generation rates presented in Table 14-1 of the *CEQR Technical Manual*.

Residential Use: 41 lbs/wk/dwelling unit.

General Retail: 79 lbs/wk/employee, assume 3 employees per 1,000 sf.

Commercial Office: 13 lbs/wk/employee, assume 1 employee per 250 sf.

Storage Area and Garage uses: use commercial single office rate of 9 lbs/wk/employee, assume 1 employee per 15,000 sf (same as warehouse).

Medical Office: use commercial single office rate of 9 lbs/wk/employee, assume 1 employee per 450 sf.

Other Community Facility Uses: 0.03 lbs/wk/sf.

Industrial Uses: average of apparel/textile and printing/publishing rates - 182.5 lbs/wk/employee, assume 1 employee per 1,000 sf.

Warehouse: 9 lbs/wk/employee, assume 1 employee per 15,000 sf.

Auto Related Uses: average of retail and wholesale rates - 72.5 lbs/wk/employee, assume 1 employee per 1,000 sf.

Source: NYC Department of City Planning, 2020; *CEQR Technical Manual*, 2021; Philip Habib Associates, 2023.

As required by New York State law, the City has adopted a comprehensive SWMP for the long- term management of solid waste generated within its borders. The current SWMP was adopted in 2006 and covers a 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 is projected to increase to approximately 74,000 tons per week by the year 2025.[5] The amount of DSNY managed waste is projected to increase to approximately 139,600 tons per week.[6]

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

Under the With-Action condition, the 60 projected development sites are expected to result in the addition of approximately 7,713 DUs, which is a net increase of approximately 7,474 DUs as compared with the No-Action condition. The Proposed Actions are also expected to result in approximately 2,475,223 gsf of commercial space (including local retail, office, and life sciences uses) and 1,520,405 gsf of community facility space (including medical office, house of worship, and educational uses[7]).

As shown in Table 11-3, "With-Action Solid Waste Generation – Projected Development Sites," the total solid waste generation under the Proposed Actions would be approximately 298 tons per week, which represents an additional 233 tons in weekly solid waste generation as compared with the No-Action condition.

[5] DSNY, *Comprehensive Solid Waste Management Plan*, Sept 2006; Attachment IV, Table IV 2-2.
[6] DSNY, *Comprehensive Solid Waste Management Plan*, Sept 2006; Attachment II, Table II 2-6.
[7] For purposes of analysis, it is conservatively assumed that an educational facility would develop on two of the projected development sites. Site 9 is assumed to be a primary school (with approximately 1,396 seats), and Site 59 is assumed to be a STEAM (Science, Technology, Engineering, Arts, and Math) Center with approximately 700 seats.

Table 11-3: With-Action Solid Waste Generation – Projected Development Sites

Use	Type	Floor Area/Units		Occupants		Generation Rate (pounds per week)		Solid Waste Generation		
								lbs/wk	lbs/wk	tons/wk
Residential	-	7,713	Units	7,713	Households	41	Per Household	316,233	316,233	158.12
Commercial[1]	Local Retail	638,579	Square Feet	1,916	Employees	79	Per Employee	151,364	246,875	123.44
	Office	216,019	Square Feet	864	Employees	13	Per Employee	11,232		
	Life Sciences	1,620,625	Square Feet	6,483	Employees	13	Per Employee	84,279		
Community Facility	Medical Office	1,301,789	Square Feet	2,893	Employees	9	Per Employee	26,037	32,663	16.33
	House of Worship	34,611	Square Feet			0.03	Per Square Foot	1,038		
	Education - Elementary School	1,396	Students			3	Per Student	4,188		
	Education - STEAM Center	700	Students			2	Per Student	1,400		
Total Solid Waste Generation								***595,771***	***595,771***	***297.89***
Amount Handled by DSNY								***348,896***	***348,896***	***174.45***
Amount Handled by Private Carters								***246,875***	***246,875***	***123.44***

Notes:

Solid waste generation is based on citywide average waste generation rates presented in Table 14-1 of the *CEQR Technical Manual*.

Residential Use: 41 lbs/wk/dwelling unit.

General Retail: 79 lbs/wk/employee, assume 3 employees per 1,000 sf.

Commercial Office: 13 lbs/wk/employee, assume 1 employee per 250 sf.

Medical Office: use commercial single office rate of 9 lbs/wk/employee, assume 1 employee per 450 sf.

Education Use: 3 lbs/wk/student for elementary school; use public high school rate of 2 lbs/wk/student for STEAM Center.

Other Community Facility Uses: 0.03 lbs/wk/sf.

Industrial Uses: average of apparel/textile and printing/publishing rates - 182.5 lbs/wk/employee, assume 1 employee per 1,000 sf.

Warehouse: 9 lbs/wk/employee, assume 1 employee per 15,000 sf.

Auto Related Uses: average of retail and wholesale rates - 72.5 lbs/wk/employee, assume 1 employee per 1,000 sf.

Source: NYC Department of City Planning, 2020; *CEQR Technical Manual*, 2021; Philip Habib Associates, 2023.

As shown in Table 11-3, "With-Action Solid Waste Generation – Projected Development Sites," commercial uses under the Proposed Actions would generate approximately 123 tons of solid waste per week. Solid waste generated by commercial uses would be collected by private commercial carters and commercial buildings developed under the Proposed Actions would be subject to mandatory recycling requirements for paper, metals, construction waste, and aluminum foil as well as metal, glass, and plastic containers. Residential and community facility uses would generate approximately 174 tons of solid waste per week under the With-Action condition. Solid waste generated by residential and community facility uses would be collected by DSNY trucks and would be served by existing DSNY collection routes. As a general practice, DSNY adjusts its operations to service the community. Residents will be required to participate in the City's recycling program for paper, organics, metals, glass, and certain types of plastics.

As shown in Table 11-4, "Comparison of Weekly Solid Waste Generation on Projected Development Sites – Existing, No-Action, and With-Action Conditions," compared with the No-Action condition the Proposed Actions would result in an approximately 167-ton increase in weekly solid waste handled by DSNY. This would represent approximately 0.1 percent of the City's anticipated future waste generation handled by DSNY (it is estimated that DSNY will manage 139,600 tons of solid waste for export, recycling compost, and refuse per week by 2026), as projected in the 2006 SWMP. Based on the typical DSNY collection truck capacity of approximately 12.5 tons, the new residential and community facility uses introduced by the

Proposed Actions would be expected to generate solid waste equivalent to approximately 13.4 truckloads per week. This increase is not expected to overburden DSNY's solid waste handling services.

Table 11-4: Comparison of Weekly Solid Waste Generation on Projected Development Sites – Existing, No-Action, With-Action Conditions

	Existing Condition	No-Action Condition	With-Action Condition	Increment (No-Action to With-Action)
Total Solid Waste Generation (tons/wk)	36.08	64.80	297.89	233.09
Solid Waste Handled by DSNY (tons/wk)	1.60	7.24	174.45	167.21
Solid Waste Handled by Private Carters (tons/wk)	34.49	57.57	123.44	65.87

Source: Philip Habib Associates, 2023.

Compared with the No-Action condition, the Proposed Actions would result in an approximately 66-ton increase in weekly solid waste handled by private carters. This would represent approximately 0.09 percent of the City's anticipated future commercial waste generation, as it is estimated that private carters will carry 74,000 tons of solid waste per week by 2025, 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 Actions would require between 4.4 and 5.5 additional collection trucks per week compared with the No-Action condition. Under Local Law 199, codified in Title 16-B of the New York City Administrative Code, the Sanitation Commissioner divided the City into 20 zones, including Bronx CDs 9, 10, and 11, where the Proposed Project is located. Local Law 199 authorizes up to three carters per zone. Therefore, the net increment in commercial solid waste handled by private carters would not overburden the City's waste management system.

Overall, the Proposed Actions would not conflict with the SWMP, or have a direct effect on a solid waste management facility. The Proposed Actions would generate a net increase of approximately 13.4 DSNY truckloads and up to six commercial carter truckloads of refuse per week. The incremental solid waste generated by the Proposed Actions would not overburden the City's solid waste handling systems, and therefore the Proposed Actions would not have a significant adverse impact on the City's solid waste and sanitation services.