



DRAFT SCOPE OF WORK

FOR A

DRAFT ENVIRONMENTAL IMPACT STATEMENT

FOR THE

**M6/6A/8 SANITATION GARAGE COMPLEX
AND ADJACENT DEVELOPMENT PARCELS**

EAST 25TH STREET, BETWEEN 1ST AVENUE AND FDR DRIVE

CEQR 13-DOS-007M

MAY, 2015

CITY OF NEW YORK DEPARTMENT OF SANITATION

KATHRYN GARCIA, COMMISSIONER

www.nyc.gov/sanitation

Reduce/Reuse/Recycle

Scope of Work for a Draft Environmental Impact Statement for the M6/6A/8 Sanitation Garage Complex and Adjacent Parcels

A: INTRODUCTION

The City of New York proposes a series of actions to redevelop a full block site in the Bellevue area of Manhattan Community District 6 to allow for the construction of a new Department of Sanitation (DSNY) garage complex and new commercial and/or residential development on the adjoining parcels (“the Proposed Project”). The site forms a portion of a superblock (Block 962, part of Lot 100) and is bounded by First Avenue, Franklin Delano Roosevelt (FDR) Drive, East 25th Street and a private drive (former East 26th Street) (the “Project Site”). The Project Site currently houses the Brookdale Campus of Hunter College of the City University of New York in Manhattan. This site will be vacated in 2017 to allow for the Proposed Project.

In order to carry out its waste collection/recycling and street cleaning functions and environmental sustainability goals mandated by the City Charter and local laws, DSNY requires adequate garage facilities to house equipment and personnel support functions. DSNY seeks to site its garages equitably in a manner that provides efficient service to local community districts and minimizes impacts on the facility’s neighbors. To support DSNY’s refuse and recycling collection, street cleaning and winter weather emergency services for Manhattan Community Districts 6, 8, the City proposes to site a DSNY garage complex to house the Manhattan District 6 Garage, the Manhattan District 8 Garage, the mechanical broom depot that serves Manhattan Districts 3, 6 and 8 (the District 6A Garage), and the Manhattan Borough Command office. The Garage would be located mid-block of the Project Site. DSNY vehicles and equipment – refuse and recycling collection trucks, light duty vehicles, salt spreaders, snow plows, etc. – would be parked, maintained and refueled at the proposed garage. The facility would not include a salt shed.

The remainder of the Project Site would be divided into two separate parcels (“Parcel A” and “Parcel B” or “Parcels A and B”). See **Figure 1: Location of Proposed Action**. The program for the proposed development on Parcels A and B is expected to include a variety of residential and commercial uses, such as mixed-income residential, retail, commercial space such as office or laboratory space, and community facilities. Should the discretionary actions subject to the Uniform Land Use Review Procedure (“ULURP”) be approved, the New York City Economic Development Corporation (NYCEDC) anticipates releasing a Request for Proposals to guide the future development.

The Proposed Project would require a number of discretionary governmental actions. As described in greater detail below, the following actions are necessary for the Proposed Project:

DSNY:

- Capital funding to construct the Garage Complex
- Closure of four respective DSNY facilities and relocation to the proposed Project Site

City Planning Commission

--Garage

- Site selection for a capital project,
- Rezoning the midblock portion of the Project Site from an R8 residential district to an M1-5 manufacturing district to permit construction of the garage,
- Issuing a special permit pursuant to the designation of a portion of the Project Site as a Large Scale General Development (LSGD) for certain bulk waivers for relief from side and rear yard, street wall and setback regulations.

--Parcels A and B

- Rezoning the remaining portion of the block from an R8 residential district to a C6-4 commercial district to facilitate the future development of Parcels A and B,
- Issuing Special Permits pursuant to Section 74-78 to allow scientific research and development facilities within a C6 district,
- Disposition by sale or lease for Parcels A and B,
- Easements to allow access to the former East 26th Street and to provide light and air to future buildings that front that area, and
- Any other action necessary to facilitate the Proposed Project.

The overall project goals include 1) Provide adequate facilities to house the Manhattan Districts 6 and 8 Garages, District 6A Broom Depot, and Manhattan Borough Command office; and 2) Facilitate the development of Parcels A and B into a mixed-use development that is financially viable and supports larger City goals, including affordable housing and support for the growing life sciences sector.

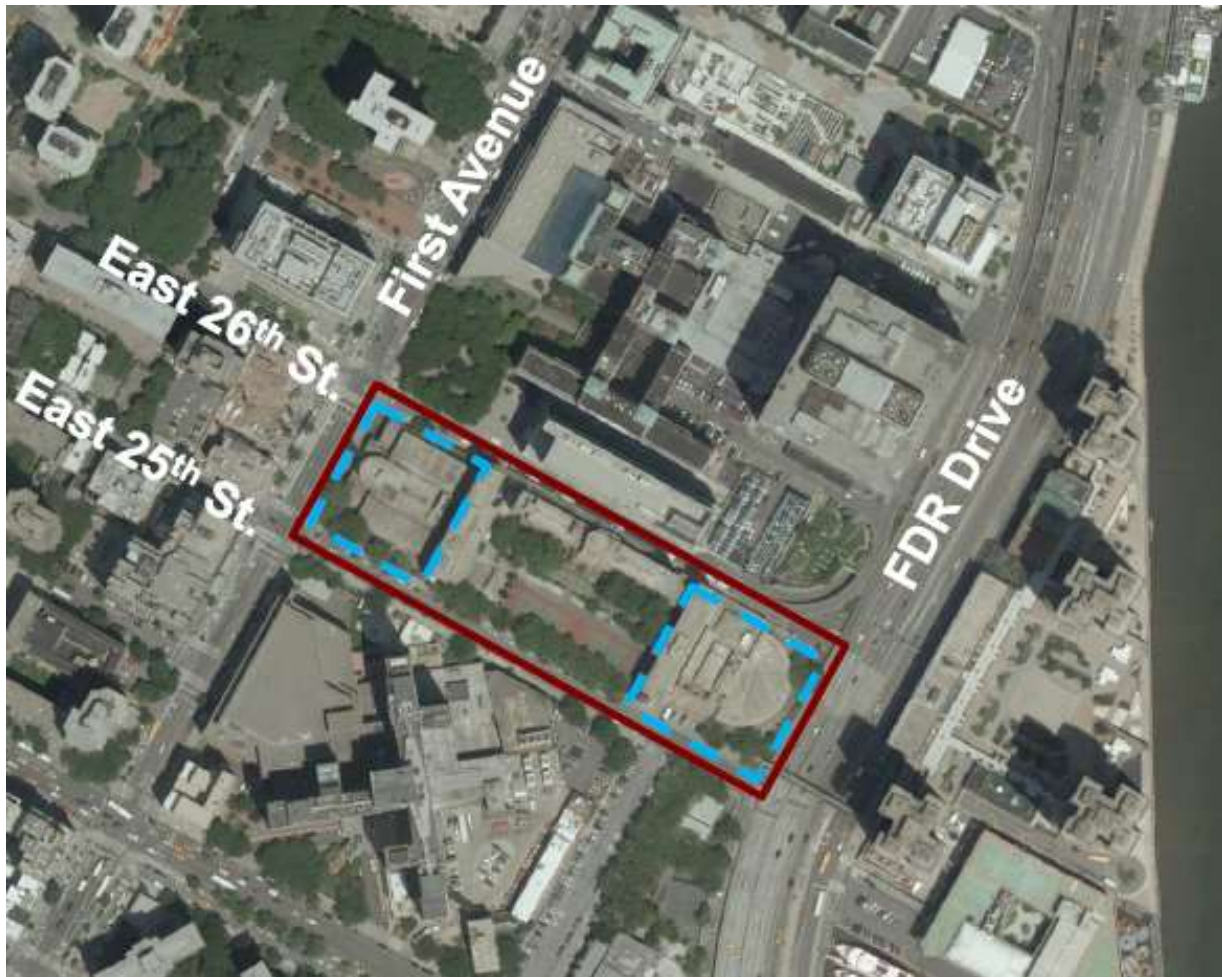
These actions are subject to ULURP and to City Environmental Quality Review procedures (CEQR) and the State Environmental Quality Review Act (SEQRA) and its implementing regulations. Accordingly, the lead agency for the environmental review is DSNY, while the City Planning Commission (CPC) and the Office of the Deputy Mayor for Housing and Economic Development are involved agencies. The City Council automatically reviews all zoning map changes and may elect to review all other ULURP actions included in the application.

Acting as Lead Agency, DSNY has determined that the Proposed Project may result in one or more significant adverse impacts to the environment, and therefore a Draft Environmental Impact Statement (DEIS) will be prepared for public review and comment and consideration by the various involved agencies. This draft Scope of Work (“Draft Scope”) describes the proposed actions, the proposed development plan and its purpose and need, and the environmental review process. It also identifies the analytical framework, tasks and methodologies to be used in the DEIS.

The Proposed Project represents an update to a prior proposal for the DSNY Garage project that was the subject of an Environmental Assessment Statement (“EAS”) and a Draft Scope for a DEIS released for public comment on May 24, 2013. A public meeting to receive comments on that Draft Scope was held on June 25, 2013 at the Hunter College Health Sciences Center, 450 First Avenue, and public comments on it were received until mid-August 2013. In response to comments received from the public and elected officials, the original DSNY project has been broadened to include the entire Project Site and related approvals for the redevelopment of the parcels adjacent to the proposed DSNY Garage complex.

The project contact person for more information is: Abas O. Braimah, City Planner, DSNY Bureau of Legal Affairs, 125 Worth Street, Room 708, New York, NY 10013. Fax 212-442-9090; tel 646-885-4993.

Figure 1: Project Site, with Parcels A and B outlined in blue



This Draft Scope is available on DSNY's website: www.nyc.gov/sanitation and at the public repositories for the project's environmental review documents:

- Department of Sanitation, 125 Worth Street, Room 708, New York, NY;
- Mayor's Office of Sustainability, 100 Gold Street, 2nd Floor, New York, NY, 10038;
- Manhattan Community Board 6, 866 UN Plaza, Suite 308, New York, NY 10017;
- New York Public Library, Epiphany Branch, 228 E. 23rd Street, New York, NY 10010; and
- New York Public Library, Kips Bay Branch, 446 Third Avenue, New York, NY 10016.

A Public Scoping meeting on the Draft Scope will be held on June 22nd, 2015 from 6 pm to 9 pm at the Hospital for Joint Diseases, Loeb Auditorium, 301 East 17th Street, New York. Comments may be given orally or in writing at the meeting. Written comments will also be accepted at least until 5:00 pm on July 3rd, 2015 and should be sent to the project contact person listed above.

B. PROJECT BACKGROUND

DSNY EXISTING NEED

DSNY requires new garages for District 6, District 8, District 6A (DSNY's mechanical broom fleet serving Manhattan's east side), and the Manhattan Borough Command office (the "Garage"). Off-street equipment storage and modern facilities would be provided for DSNY uniformed and civilian employees for these districts. The Proposed Project would replace inadequate and outdated facilities, improve operational efficiencies, reduce DSNY truck travel, achieve an economy of scale, and end the storage of DSNY equipment for these districts on public streets. See **Figure 1-1** Location of Proposed Action and DSNY Garages in Manhattan.

DSNY GARAGE COMPLEX

The proposed Garage, to be located in Manhattan Community District (MN CD) 6, would support DSNY refuse collection, recycling and winter emergency services to MN CDs 6 and 8, and street cleaning service for MN CDs 3, 6 and 8.

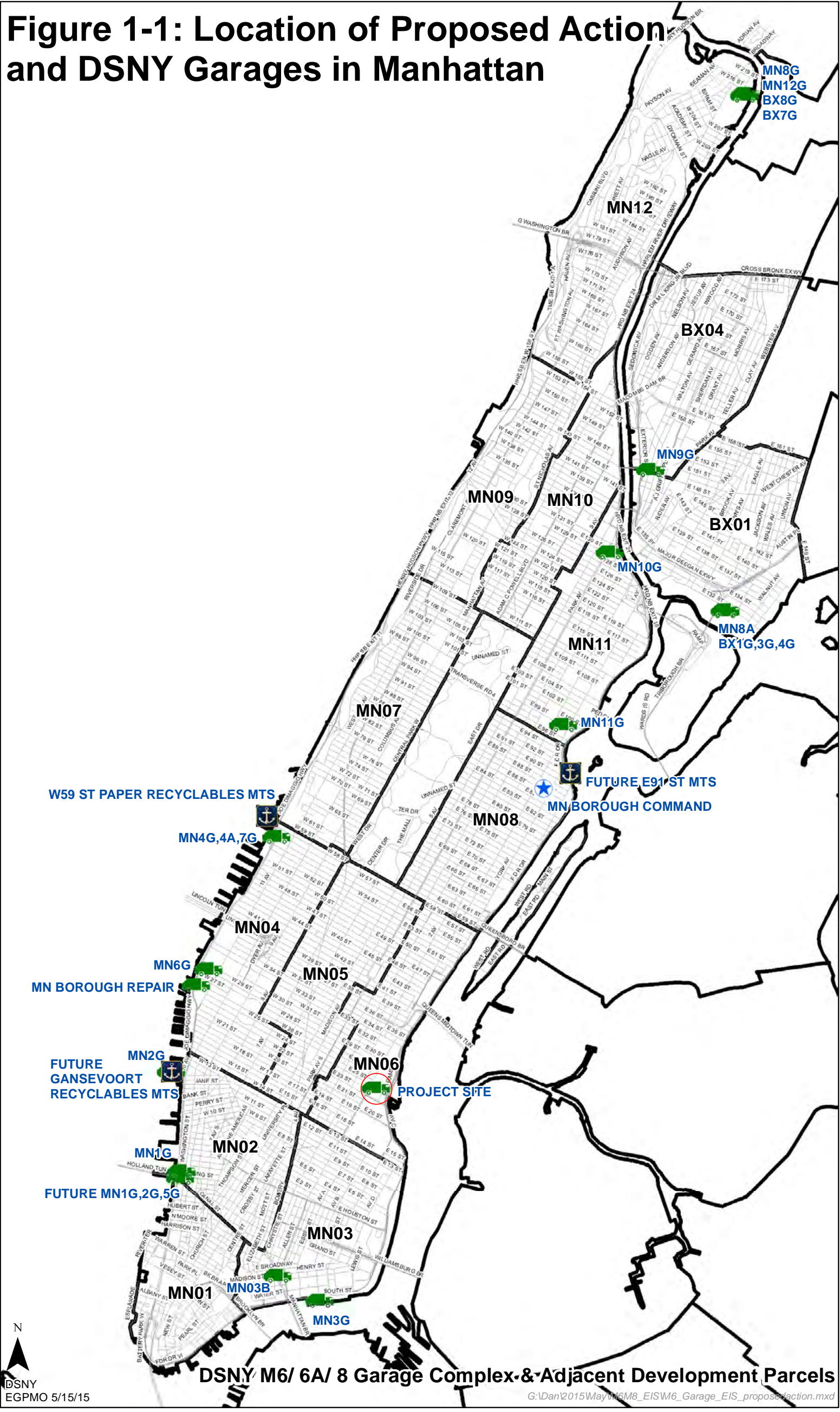
The new facility would consolidate the following operations, as further described below:

- Manhattan 6 (MN6) now at 606 W. 30th Street in MN CD 4 (with equipment parked on-street along W. 29th Street and on 11th Avenue);
- Manhattan 8 (MN8) now at 423 W. 215th in MN CD 12 (with equipment parked on-street along W. 215th Street);
- Manhattan 8A (MN8A) mechanical broom garage now at 680 E. 132nd Street in Bronx CD 1; and
- Manhattan Borough Command Office now at 427 E. 87th Street in MN CD 8, with on-street parking of DSNY sedans and sport utility vehicles.

CURRENT MANHATTAN 6 GARAGE

DSNY's current MN District 6 garage is in an undersized leased facility (15,000 square feet building and 8000 square feet personnel trailer) on Manhattan's west side, with trucks parked mainly on public streets. The garage accommodates only light duty vehicles, repair bays and offices. The personnel trailer contains lockers and bathrooms. Until recently, the garage stored its collection and other large truck fleet and operated a fueling and vehicle washing facility on Metropolitan Transit

Figure 1-1: Location of Proposed Action and DSNY Garages in Manhattan



Authority property under the High Line. However, the Hudson Yards redevelopment project has recently displaced these uses, forcing DSNY to store its collection trucks on public streets, which is undesirable from a community impact, traffic and equipment safety perspective. DSNY must also now conduct refueling and washing at other garages, which is inefficient. The garage's location across town from its East Side service area creates further inefficiencies, with wasted time, extra truck travel with its associated traffic, air, noise and carbon impacts and equipment wear and tear. See **Figures 2-a, b & c**. Moreover, the leased facility is in contract to be sold to a third party and redevelopment is being pursued for the site, adding urgency to the DSNY's search for an alternate, East Side location for the MN6 garage.

CURRENT MANHATTAN 8 GARAGE

DSNY's current MN District 8 garage is located in Manhattan CD12 in a former incinerator at 215th Street in Manhattan with most of its trucks stored on public streets due to lack of garage space. This 215th Street complex includes Manhattan District 12 and Bronx 7 and 8 District Garages. The District 8 trucks must travel seven miles to their service area, which is inefficient and contributes to traffic congestion and to excessive wear and tear on equipment.

The MN District 8 garage had moved temporarily uptown to this location in 2007 pending the demolition and planned reconstruction of the DSNY garage complex for Districts 6 and 8 in a former incinerator and garage building at East 73rd Street between First Avenue and York Avenue. However, capital funding for DSNY's planned East 73rd Street Garage reconstruction was eliminated by budget cuts during the recent fiscal crisis. The City subsequently sold that parcel as part of an economic development project that includes private hospital construction and a new facility for Hunter College's Health Sciences program to replace the 1950s-era Brookdale campus. The sale included a \$200 million payment to the City's General Fund. This funding has been allocated by the City to construct the new DSNY garage. Hunter College will vacate the Brookdale campus by August 31, 2017.

CURRENT MANHATTAN 6A BROOM DEPOT

The mechanical brooms that serve the east side of Manhattan are garaged at 680 E. 132nd Street in the Bronx, within Bronx CD 1. The brooms must cross over the Willis Avenue Bridge and travel through a portion of Manhattan's East Side in order to access their service area of MN CDs 3, 6 and 8.

CURRENT MANHATTAN BOROUGH COMMAND

The Manhattan Borough Command Office is now at 427 E. 87th Street in MN CD 8, with on-street parking of DSNY sedans and sport utility vehicles. Twenty personnel are assigned to this office. The Office does not require a location in this area, and would be better sited in or close to a DSNY garage complex. This approximately 5,400 square foot, two-story City-owned property is fully utilized by the Borough Command Office. It has excess developable floor area under its R8 zoning but has no on-site parking, forcing DSNY's 12 vehicles assigned to the Borough Command to be stored on the street. The aging institutional building is out of character with the mainly residential street. In order to optimize DSNY operations and maximize value to the City by allowing the sale or redevelopment of the small but valuable E. 87th Street site, the Borough Command Office will be relocated to a new DSNY garage complex.



Fig. 2-a Current locations of four DSNY facilities to be consolidated at Proposed Garage Complex on E. 25th Street.



Fig. 2-c (above & below): MN 6 truck parking on 11th Ave and W. 29th Street, respectively.



Fig 2-b (right) Current DSNY MN 8 Garage at W. 215th Street.

GARAGE CRITERIA

When siting a district garage and/or mechanical broom depot, DSNY seeks a site that can provide efficient and cost effective refuse collection, street cleaning, recycling and winter emergency services to the community, without negatively impacting its character, growth, development or sustainability. Other factors evaluated are overall cost, the availability of sites, proximity of the site to service delivery areas, access to truck routes, suitable zoning, the concentration of similar city facilities and any potential adverse environmental conditions. The Project Site-- in Community District 6 on a truck route (1st Avenue) with the proposed rezoning--is believed to satisfy these criteria. The Project Site redevelopment will also allow for additional improvements on Parcels A and B that can coexist in proximity to the Garage while meeting other important City policy objectives. The criteria that DSNY uses in siting the components of the proposed Garage Complex are discussed further in a document for the Proposed Action known as the “Fair Share Criteria” Analysis for the facility, which is part of the ULURP application. The District 8 and District 6 Garages are each considered a “local facility” under the Fair Share criteria, as they each serve one community district. The District 6A Mechanical Broom Depot is considered a “regional facility” as it serves more than one community district (MN3, MN6, and MN8). The Manhattan Borough Command is also a “regional facility”, as it serves the entire Borough of Manhattan, and could be sited anywhere within the Borough.

PARCELS A AND B PLANNING PRINCIPLES

In early 2015, NYCEDC and DSNY worked with Community Board 6 and local elected officials to develop a working group (the “Working Group”) to solicit input on the community priorities for Parcels A and B. The key priorities highlighted by the Working Group included a vibrant walking experience on E. 25th Street, life sciences uses in the commercial space, locally-oriented retail and services, open space access, mixed-income residential (including senior housing), and ongoing involvement of the Working Group throughout the RFP process.

In terms of City priorities for this area, the City will be guided by the Working Group principles, additional input from Community Board 6, and major City policy initiatives. The key policy initiatives relevant to this location include the East Side Life Sciences Corridor and Housing New York, both of which are consistent with the Working Group conversations.

The East Side Life Sciences Corridor anchors the network of academic medical centers, research foundations, and private industry that plays a crucial and growing role in the New York City economy. The City is committed to not only supporting existing life sciences companies but increasing the size of industry by encouraging the growth of new companies through a variety of initiatives. In particular, the City seeks to encourage mid-range or step-up companies that may spin off from academic or research institutions and need smaller but adequate spaces to develop their research into commercial products. City initiatives include the NYC Early-Stage Life Sciences Funding initiative, a \$150 million investment to support breakthrough ventures and the Harlem Biospace, an incubator space for emerging life sciences companies. NYCEDC anticipates leveraging the City-owned property on Parcels A and B to further support emerging companies in this industry.

The other major policy initiative that the City anticipates addressing through Parcels A and B is Housing New York, an ambitious housing plan to build and preserve 200,000 units of affordable housing over the next ten years. The plan lays out ten principles that underpin the plan and its initiatives, one of

which directly relate to this project.¹ Principle #4 states that “our municipal tools and public assets should be deployed more effectively” and that the city “should...seize opportunities to thoughtfully develop affordable housing at public sites.” This Scope of Work will describe the land use actions that would be necessary to facilitate development on Parcels A and B and the analysis framework that would analyze the environmental consequences of development that could achieve these city objectives.

C. PROJECT DESCRIPTION

SITE DESCRIPTION

The project site would occupy an approximately 185,820 square foot (sf) portion of a much larger parcel (Block 962, Lot 100) that currently includes the Bellevue Hospital Center, Office of the Chief Medical Examiner and the Brookdale Campus. The former East 26th Street, now a private drive serving the superblock, forms the northern boundary of the site, while East 25th Street forms the southern boundary of the project site. See **Figure 2: Aerial View of Project Site**. The Project Site is also shown on the attached Tax Map (**Figure 3**). Access to the site is from the FDR Drive off-ramp south and west bound onto East 25th Street, from First Avenue east bound on East 25th Street, and from the Bellevue complex private drive (former East 26th Street currently one-way west bound) east from 1st Avenue and from the west.

The Project Site is currently used by Hunter College as its Brookdale Campus, with the College's School of Health Professions: The Hunter-Bellevue School of Nursing; the School of Health Sciences; the Brookdale Center on Aging; the Center for AIDS, Drugs and Community Health; a dormitory; and two College tennis courts. As noted above, Hunter College has approved a plan to vacate the site by August 2017 for a new campus that is currently under construction on East 73rd Street.

Land uses in the vicinity of the Project Site are a mix of institutional, residential, commercial and recreational uses. See Land Use map (**Figure 4**). The Project Site is currently zoned as an R8 residential district. In these districts, new buildings may be developed under height factor regulations or optional Quality Housing regulations. The Floor Area Ratio for height factor development ranges from 0.94 to 6.02. Residential and community facility uses are permitted as-of-right within R8 districts. See Zoning Map (**Figures 5-1 and 5-2**).

SITE PLAN

1. DSNY GARAGE

The proposed DSNY Garage Complex site plan would provide for the approximately 447,370 gross square feet (346,290 zoning sf) Garage to be located through-block on the middle of the Project Site. The Garage site dimensions would be 380 ft by 227 ft (to mid-point of the private drive); building dimensions would be 380 ft by 212 ft. See Site Plan (**Figure 6**). The pedestrian entrance would be on East 25th Street. The primary garage entrance and exit for all trucks and light duty vehicle would be via the private drive on the northern side of the building (the former East 26th Street). The building has been designed so that all truck queuing will take place within the building and trucks will not idle on the former East 26th Street while waiting to enter the garage facility. A secondary garage entrance and exit on

¹ Please see <http://www.nyc.gov/html/housing/pages/home/index.shtml> for the complete Housing New York plan.

Figure 2: Aerial View of Project Site & Vicinity



400' Radius
Project Site

0 150 300 600 Feet
EGPMO 5/19/2015

DSNY M6/ 6A/ 8 Garage Complex & Adjacent Development Parcels

G:\Dan\2015 May\M6M8_EIS\M6_Garage_ZOLA_Aerial_view.mxd

Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

Figure 3: Tax Map for Manhattan Block 962 Lot 100

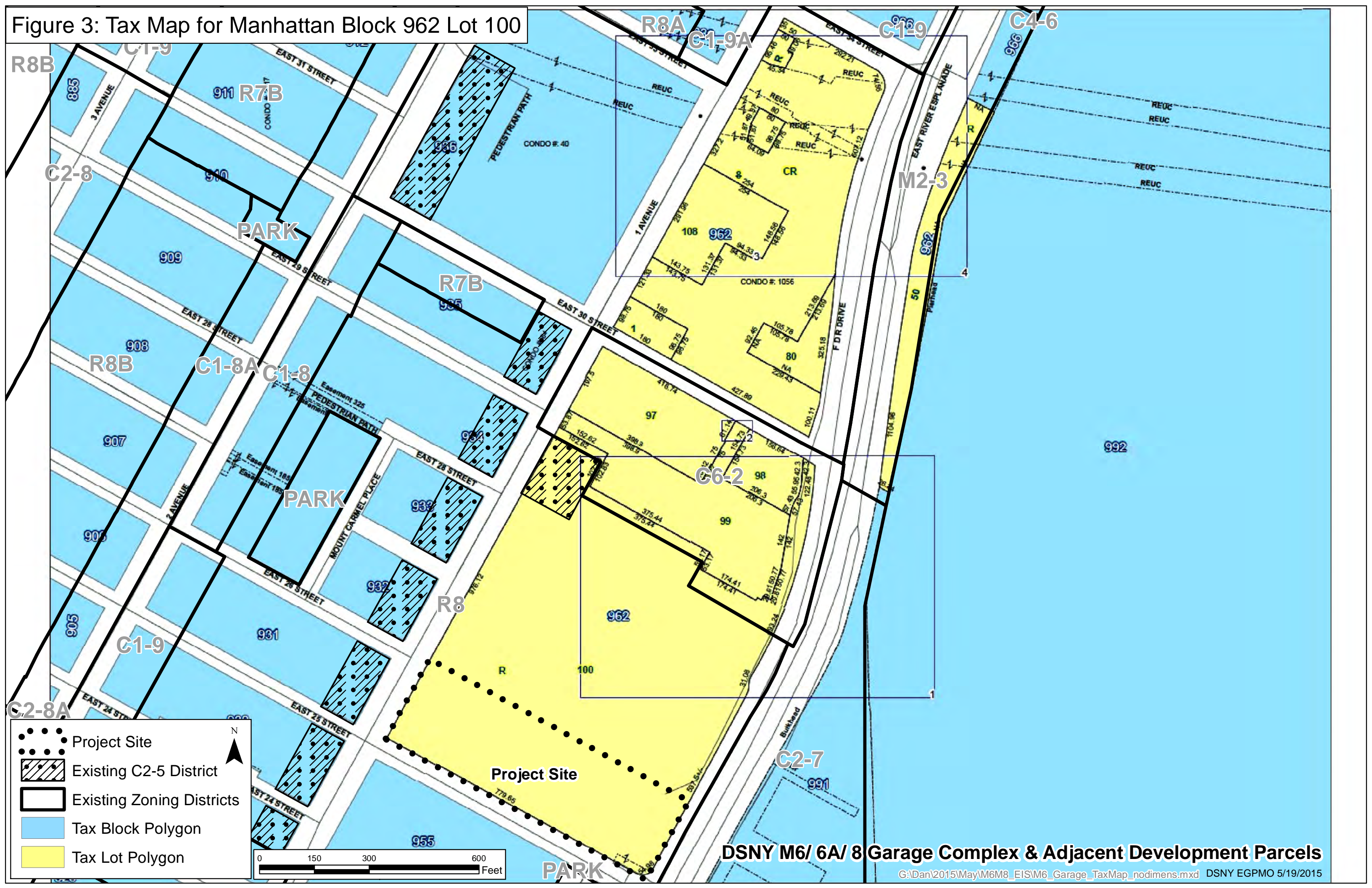


Figure 4: Land Use Map

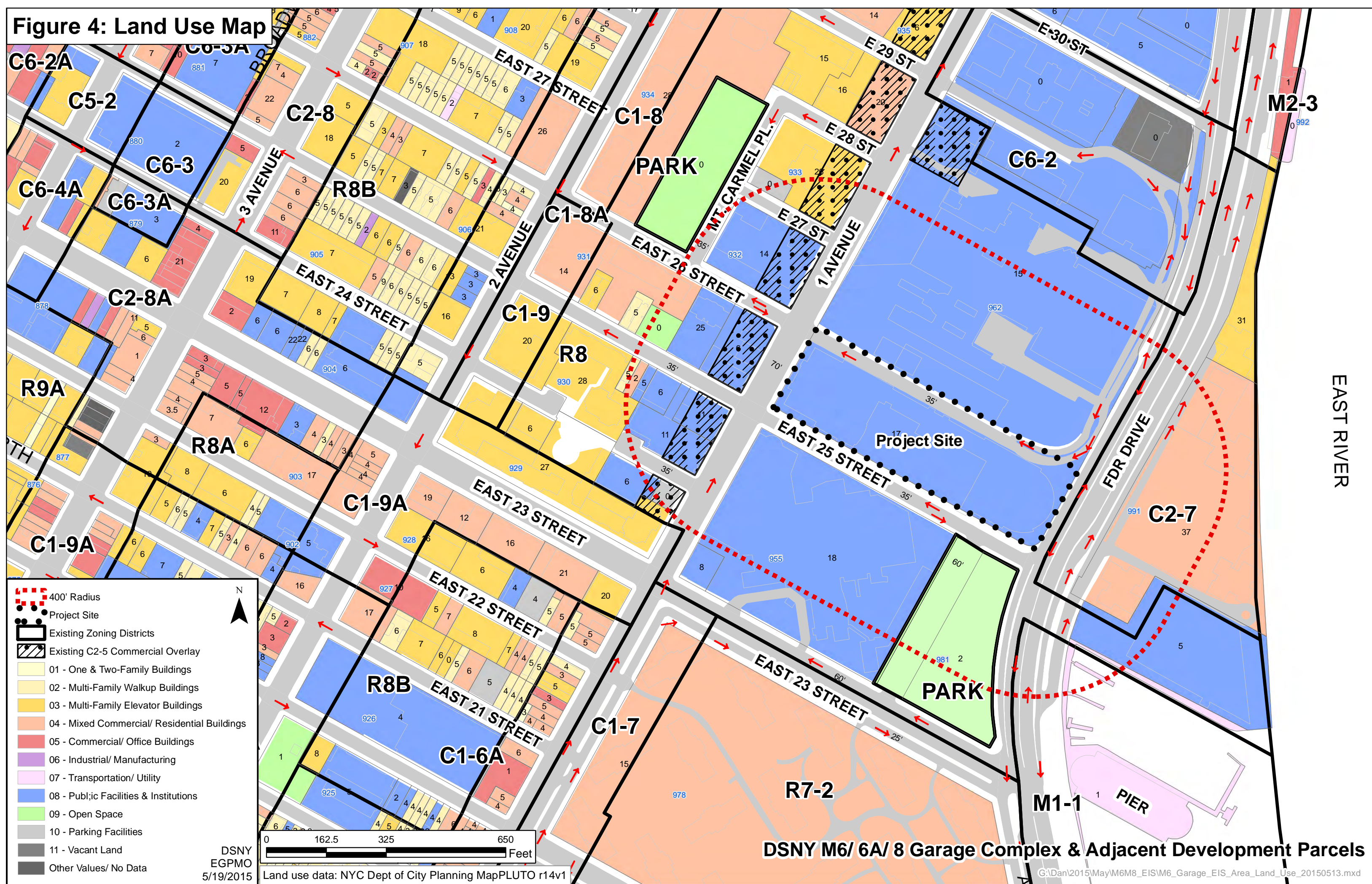


Figure 5-1: Zoning Map

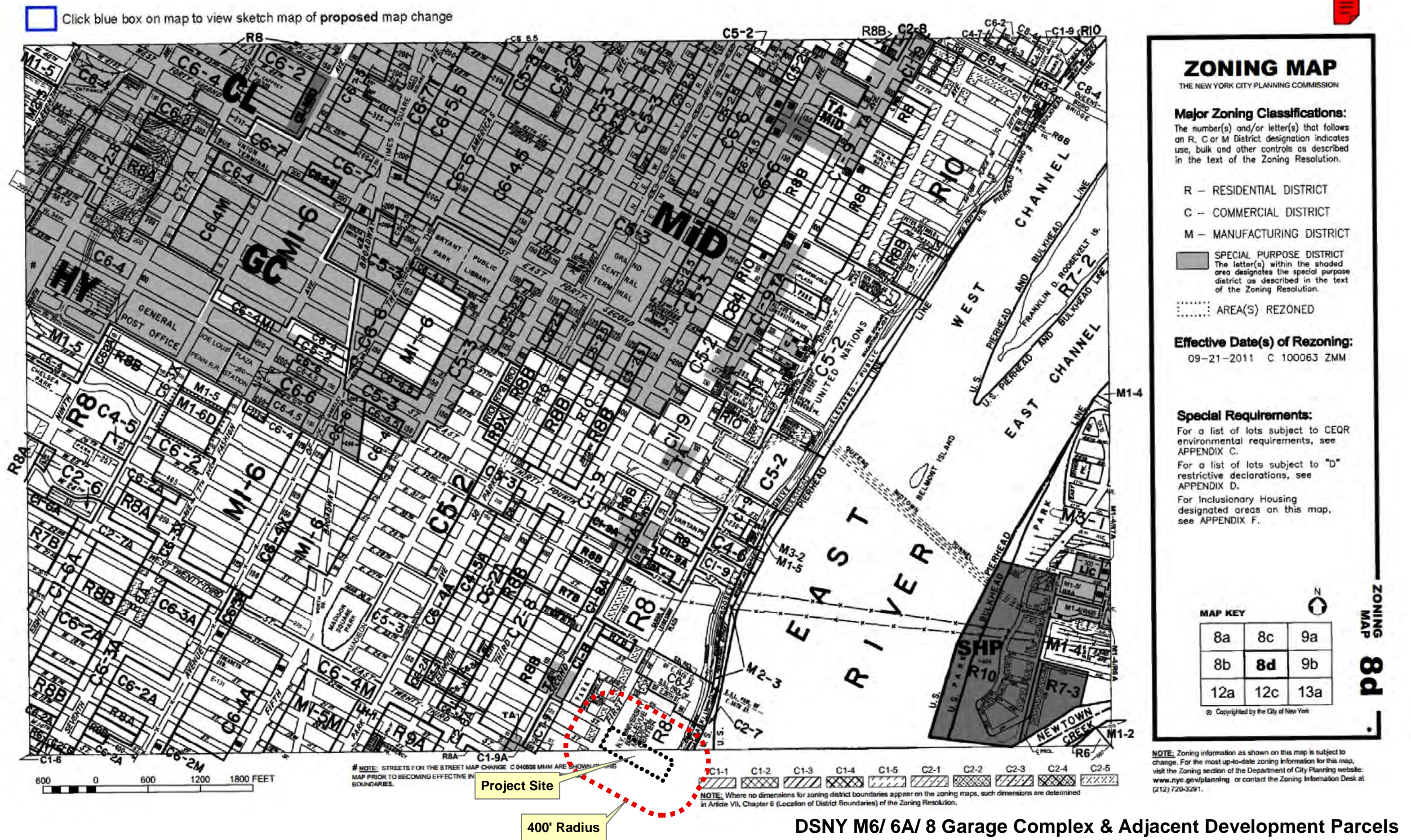


Figure 5-2: Zoning Map

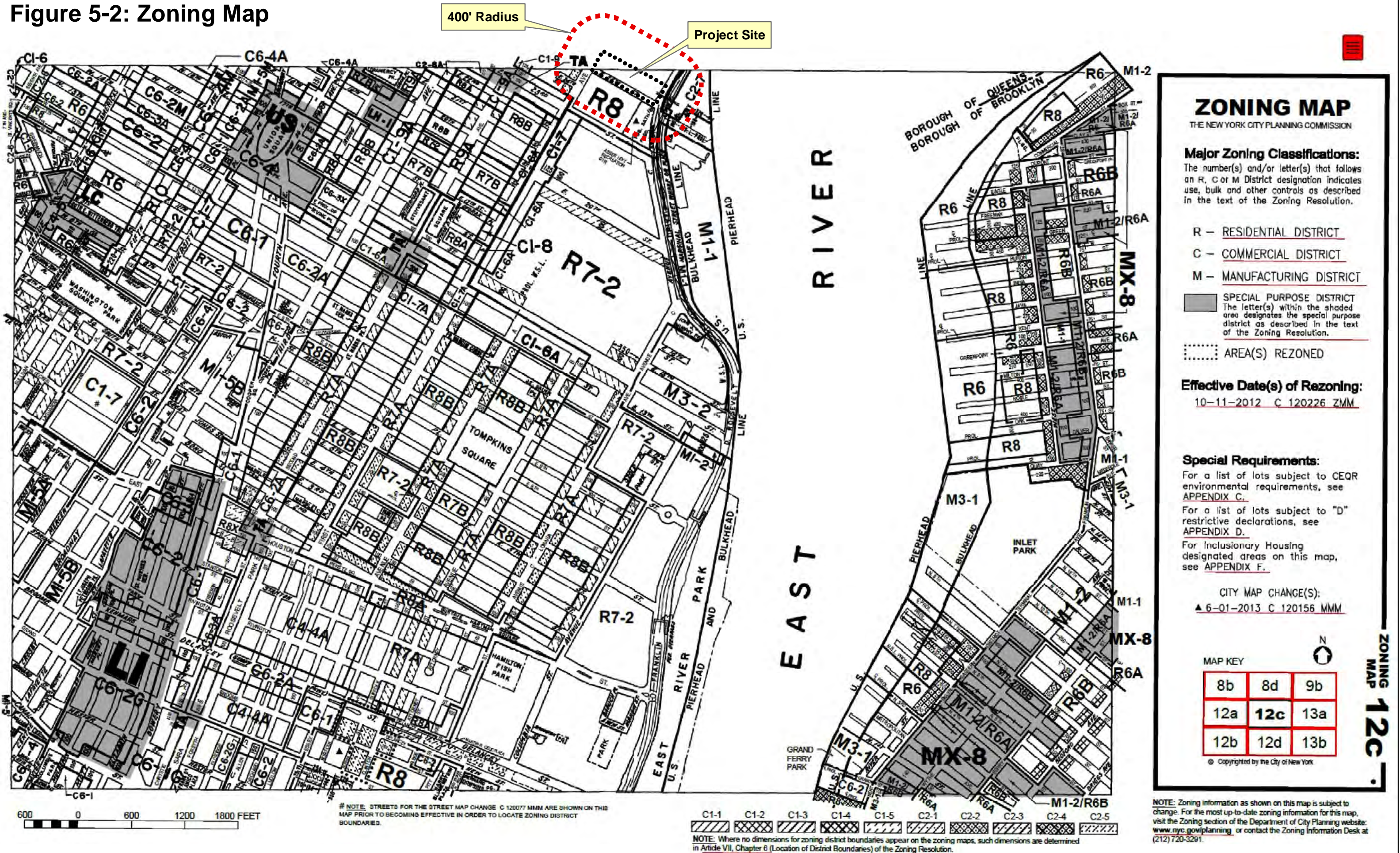
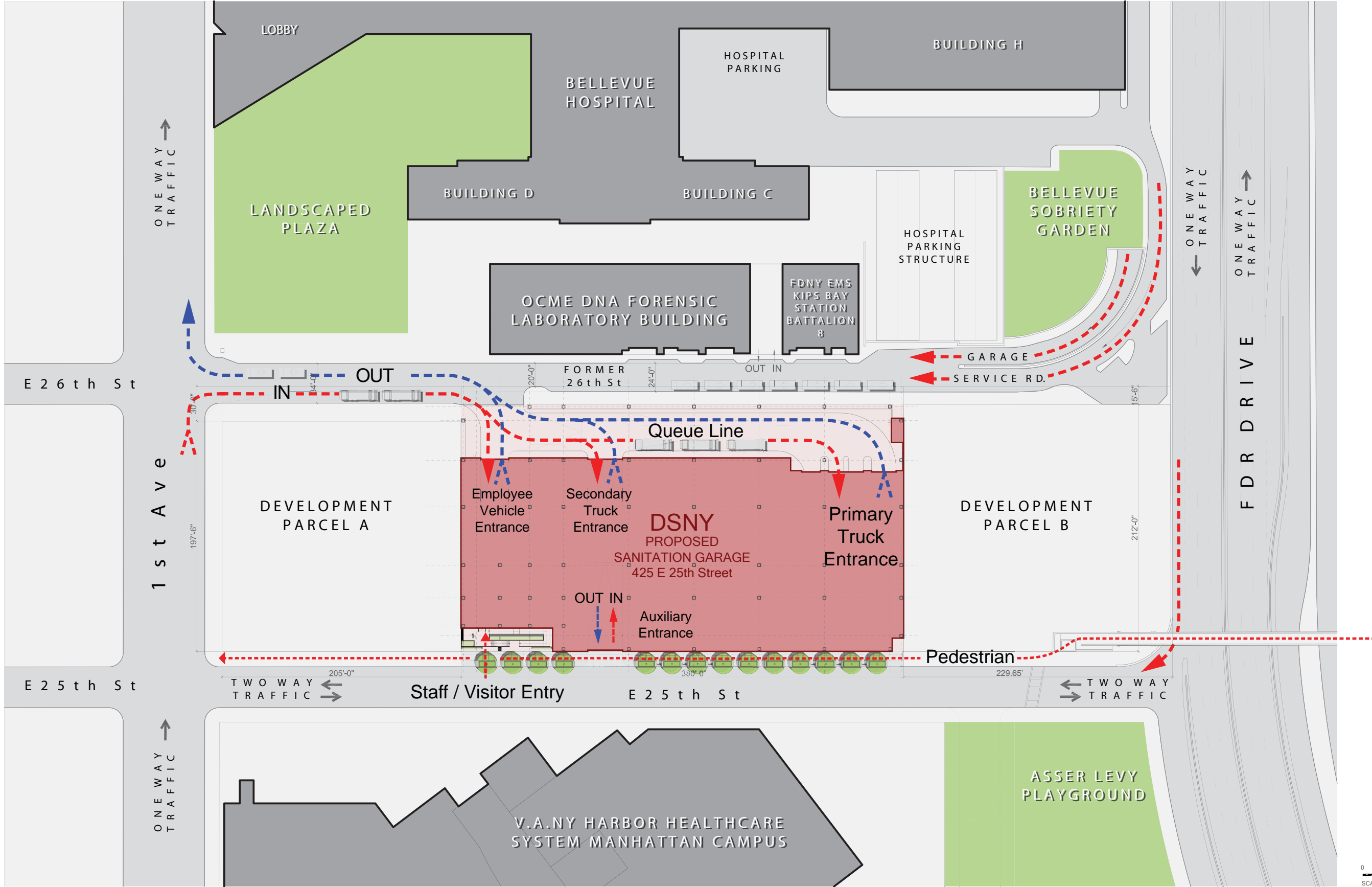


Figure 6: Site Plan



East 25th Street would be used only if the main entrance were inaccessible, such as in an emergency situation. The building would be used primarily for vehicle storage and maintenance (Use Group 16C under the Zoning Resolution), with accessory offices for support personnel, and the DSNY Manhattan Borough Command office. The DSNY equipment that would be stored at the facility are listed in Table 1, while the personnel assigned to the respective component districts are listed in Table 2, below. Taking into account scheduled vacations and days off, approximately 200 DSNY staff would be assigned to work from the facility on an average peak day of the week (a Thursday).

TABLE 1
PROPOSED EQUIPMENT ASSIGNMENT FOR
MANHATTAN 6/6A/8 GARAGE & MN BOROUGH COMMAND

EQUIPMENT	MN6	MN6A	MN8	MN BORO	TOTAL
COLLECTION TRUCK	33		47		80
E-Z PACKS	6		4		10
SALT SPREADERS	4		5		9
FLOW & DUMP	1				1
HAULSTERS	1		2		3
CUT DOWNS			1		1
MECHANICAL BROOMS		31			31
FLUSHER	2				2
FRONT END LOADER	5				5
WRECKER	1		1		2
FORK LIFT	1		1		2
UTILITY/HOUSE TRUCK	1	2	1		4
PASSENGER CARS/SUV	8		10	12	30
TOTAL	63	33	72	12	180

TABLE 2

**PERSONNEL ASSIGNED TO
MANHATTAN 6/6A/8 GARAGE & MN BOROUGH COMMAND**

	MN6	MN8	MN6A	MN BORO	Total
Officers	11	12	1	9	33
Sanitation Workers	77	129	25	5	236
Mechanics	4	4	3		11
Civilians	1	2	1	6	10
Total	93	147	30	20	290

The DSNY Garage would stand approximately 114 to 129 feet tall (measured from street grade to main roof deck) plus rooftop mechanical systems. It would contain approximately 170 parking spaces for DSNY vehicles and equipment and 115 accessory parking spaces in the cellar of the site for personnel.

Figure 7 shows the proposed tax lots for the Garage and two adjacent development parcels. **Figure 8** shows sections of elevations of the Garage Complex. **Figures 9-a** through **9-d** show renderings of the Garage looking east along 25th Street and the Bellevue Drive opposite East 26th Street, respectively, and from above. **Figure 10** shows the Garage site plan with the first floor plan.

The facility will include fuel dispensers and sub-floor petroleum storage tanks for B5 and B20 Biodiesel, gasoline, motor oil, hydraulic fluid, and waste oil, for a total of approximately 35,000 gallons of storage. This would include one 10,000-gallon biodiesel fuel tank, three 4,000-gallon biodiesel fuel tank, one 4,000-gallon unleaded gasoline tank, one 4,000-gallon hydraulic fluid tank, one 2,500-gallon motor oil tank and one 2,500-gallon waste oil tank. The tanks will be of double-walled fiberglass with interstitial leak detection systems, and will be installed in accordance with federal regulations, New York State Department of Conservation rules and New York City Fire Department regulations. The building will be equipped with electric chargers for plug-in electric vehicles. Pursuant to local law, most of DSNY's light duty vehicles to be stored at the facility are gas-electric hybrids or all-electric. The facility's vehicle wash bays will direct wash water through an oil/water separator before being discharged to the City's sewer system for further treatment.

All the diesel equipment housed at the Garage in 2022 would utilize ultra-low sulfur B5 or B20 biodiesel fuel and be equipped with 'Clean Diesel' technology typically consisting of USEPA Certified 2007 Model Year-compliant technology or better, with after-treatment technology such as diesel particulate filters that have been shown to reduce vehicle particulate emissions by 90%-- to levels comparable to those from trucks fueled by compressed natural gas. Likewise, emissions of NOx from DSNY diesel trucks will be controlled through advanced technology such as urea injection.

The building will incorporate other energy saving technology and environmentally sustainable design elements, including a green vegetated roof and a system with a basement cistern to harvest

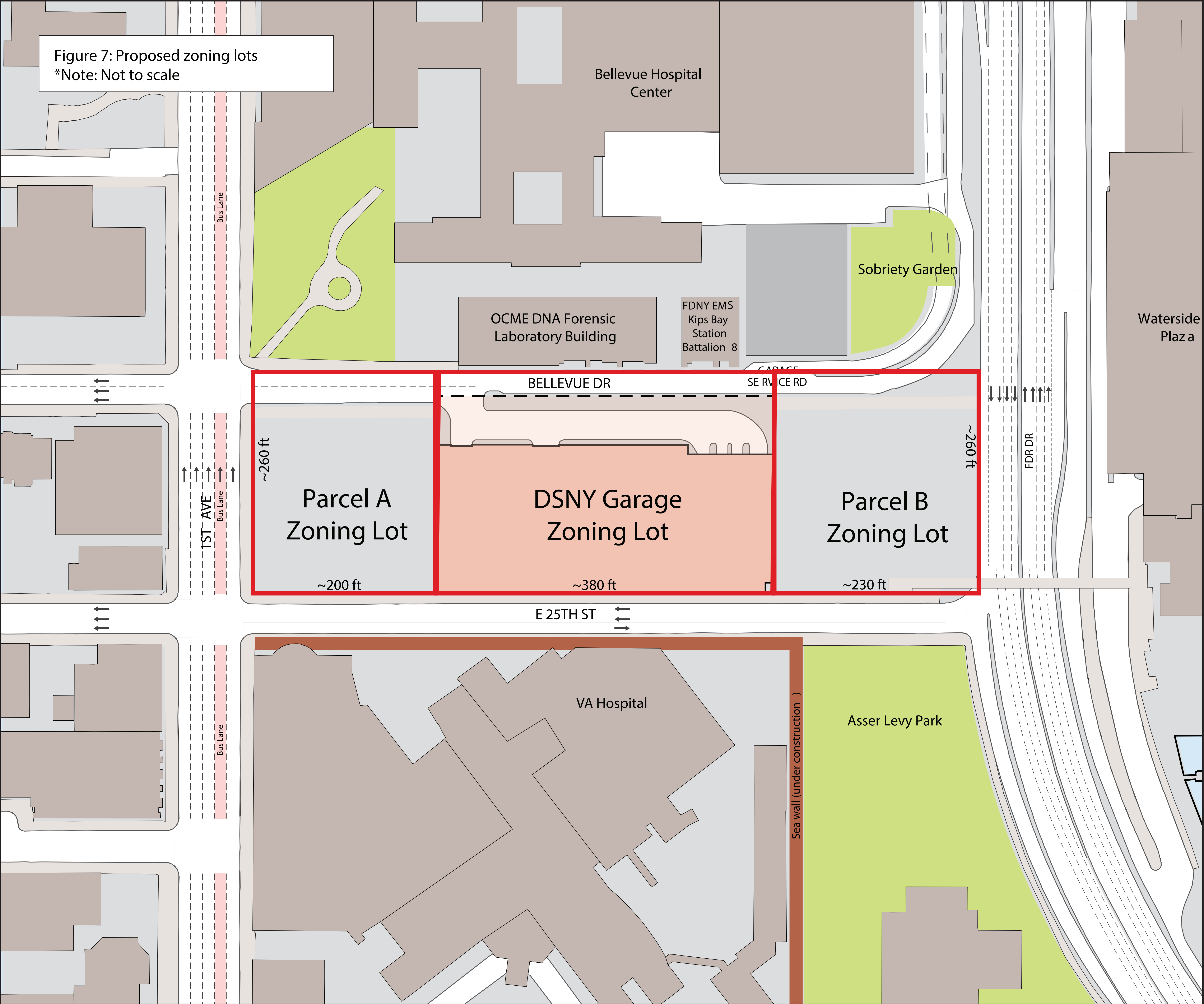


Figure 7: Proposed zoning lots
*Note: Not to scale

DSNY M6/ 6A/ 8 Garage Complex & Adjacent Development Parcels

Figure 8: Garage Complex Sections

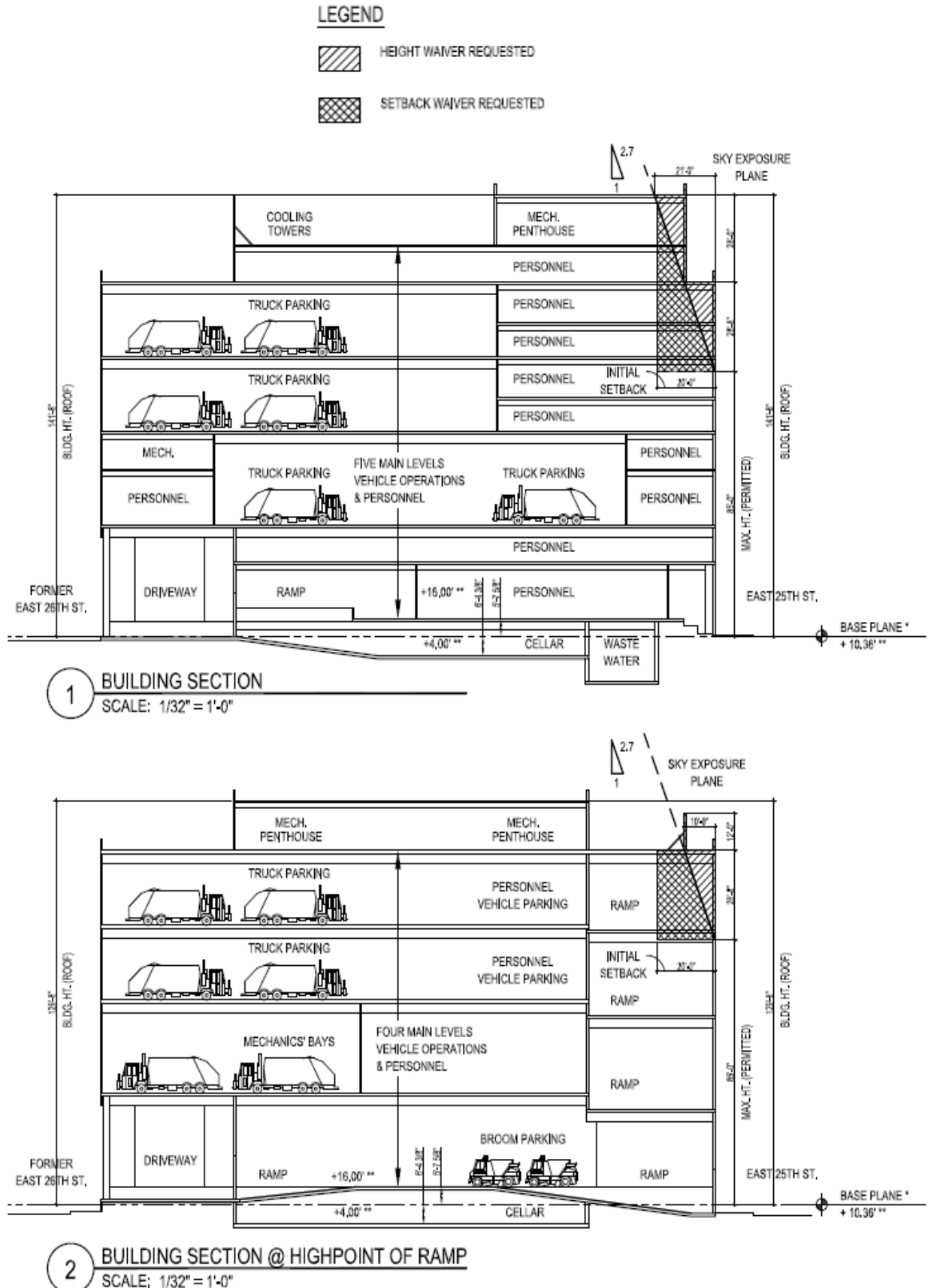




Fig 9-a. Rendering of Garage Complex looking east along E. 25th Street.



Fig 9-b. Rendering of Garage Complex looking east along E. 25th Street: pedestrian entrance and sidewalk experience.



Fig. 9-c. Rendering of Garage Complex, view east along Bellevue private drive at First Avenue and E.26th Street.



Fig. 9-d. Rendering of Garage Complex looking east along East 25th Street, showing one concept for Parcel A.

rainwater for use in the building. The building will be served by the Consolidated Edison steam network for building heating and cooling. The building will meet a minimum of LEED (Leadership in Energy and Environmental Design) Silver status, an accreditation attested to by the U.S. Green Buildings Council.

The location of the Garage in the midblock of the Project Site has been proposed in order to minimize any conflicts between traffic associated with the garage and traffic associated with uses on the Bellevue Campus, in particular EMS vehicles and other first responders. This location also greatly reduces the likelihood that entering trucks would have to queue onto 1st Avenue. With truck queuing occurring inside the building on the northern side and with the southern side of the building sealed with windows and featuring personnel space, the building is designed to avoid impacts to the pedestrian corridor of East 25th Street.

Given that the eastern portion of the Project Site is within the 100-year flood plain, the midblock location also provides resiliency benefits. By taking advantage of the existing grade change along the Project Site and the midblock location, the functional first floor will be established above the recently proposed updated Federal Emergency Management Agency (FEMA) Advisory Base Flood Elevation currently under review and adopted by the New York City Department of Buildings. Moreover, the garage has been designed for resiliency to a 500-year flood event and the fuel storage areas and truck ramps have been specifically designed to ensure that DSNY functions are not interrupted during a major flood event.

DSNY operations are generally six days per week, with minimal activity on Sundays. The garage will be staffed and security provided 24 hours per day, seven days per week. The three shifts are 12AM to 8AM, 6AM to 2PM, and 4PM to 12AM. The principal collection routes are on the 6AM to 2PM shift, with the trucks leaving before 6:30 AM and returning staggered over the 10:30 AM to 1:30 PM period, depending on their routes and varying conditions. On a typical day, an average of 63 collection trucks and mechanical brooms leave the facility for their service districts. On the peak day of the week, a Thursday, 71 collection trucks and brooms are in service.

DSNY crews are expected to dump their loads on shift before returning to the Garage. Refuse collected by the facility's crews will be delivered to the DSNY Marine Transfer Station (MTS) located at East 91st Street and the East River, where it will be placed into containers and shipped by barge to a container terminal in Howland Hook and sent to waste-to-energy plants in Chester, PA and in Niagara Falls, NY. Recyclable metal, glass and plastic (MGP) collected by MN6 and MN8 crews are driven to the Sims Municipal Recycling transfer location in the Bronx, from which it is barged to the Sims Material Recovery Facility in Sunset Park, Brooklyn for sorting, baling and shipment to processors for recycling into various feedstuffs. Paper collected from MN 6 and 8 is driven to the DSNY West 59th Street MTS, where it is put into barges and taken to a private paper recycling mill in Staten Island for processing into new paperboard products such as pizza boxes. DSNY plans to construct a recycling MTS for paper and MGP on the Gansevoort Peninsula, in accordance with the approved Solid Waste Management Plan. This would take paper and MGP from MN6 and MN8, among other districts. This facility may be operational by the Build year of 2022; that is the subject of a separate environmental review.

DSNY personnel serve a critical public function, must respond to winter weather emergencies by coming to work even when mass transit is unavailable, and must at times work 12- hour shifts. Accordingly, DSNY has programmed parking space in the building for employee vehicles. Garage operations during and

in preparation for winter storm emergencies are atypical conditions, and therefore do not warrant assessment in the EIS.

With the proposed Garage Complex, DSNY will be closing several personnel section stations in the field, which are locations where DSNY crews take breaks, have lunch and access restrooms. These facilities are currently needed due to the distance from the MN6, MN8 and MN6A service districts and their respective district garages. The section stations to close are: 155 East 10th Street, 223 East 26th Street, and 1120 Second Avenue, all in Manhattan. This will achieve a savings to the City and reduce DSNY truck traffic in the vicinity of these locations.

As discussed above, the advancement of the proposed action represents a continuation of DSNY's plan to house all equipment and personnel in a manner that enhances delivery of service to local community districts and minimizes impacts on those districts. Projects already completed in Manhattan include the construction of a new garage for MN12 at 301 W. 215th Street in MN CD 12, and a new garage for MN4, MN4A and MN7 at 786 12th Avenue in MN CD 4. A new garage for MN1, MN2 and MN5 is nearing completion at 353 Spring Street/500 Washington Street in MN CD 2.

Garage construction is anticipated to take approximately three years, following demolition of the Brookdale Campus buildings. Temporary closures of sidewalks and portions of streets during construction would be coordinated with the New York City Department of Transportation ("NYCDOT"). In accordance with the New York City Noise Code, a noise mitigation plan will be prepared and implemented during construction, and dust control measures will be deployed.

2. PARCELS A & B

In addition to the development of the DSNY Garage, the Proposed Project includes the development of Parcels A and B. Following completion of the City approvals process, the City anticipates issuing one or more competitive public Request for Proposals ("RFP") by the end of 2016 for development of Parcels A and B by one or more developers. NYCEDC, on behalf of the Deputy Mayor for Housing and Economic Development, would manage the RFP process. The RFP(s) will set overall parameters for development of Parcels A and B, and will result in a disposition of these parcels by sale or lease. It is anticipated that a developer would be selected in 2017 with construction commencing on one or both of the sites starting 2019 and continuing to 2022. In order to facilitate the achievement of the City's policy goals on Parcels A and B, the City proposes rezoning the parcels to a C6-4 zoning district.

Parcel A

Parcel A is located at the western end of the block with frontages on First Avenue, East 25th Street, and the demapped portion of the former East 26th Street. The zoning lot would be approximately 200 feet along East 25th Street by 260 feet along 1st Avenue for a total zoning lot area of approximately 52,000 gross square feet. It is assumed that the proposed building on Parcel A would be developed as of right under the future C6-4 zoning district, which would allow development up to a maximum Floor Area Ratio ("FAR") of 10 for commercial, community facility, and residential uses. If the Inclusionary Housing or Plaza programs are pursued through future development, the maximum FAR of Parcel A could be up to 12.

Parcel B

Parcel B would be located at the eastern end of the block with frontages on the FDR service road, East 25th Street, and the demapped portion of the former East 26th Street. The zoning lot's frontage along East 25th Street would be approximately 230 feet while frontage along the service road would be 260 feet

for a total zoning lot area of approximately 59,800 gross square feet. As with Parcel A, it is assumed that the proposed building on Parcel B would be developed under a proposed C6-4 rezoning, which would allow development up to a maximum FAR of 10 for commercial, community facility, and residential uses, or a maximum FAR of 12 if the Inclusionary Housing or Plaza programs are successfully incorporated into the project.

PROPOSED DISCRETIONARY ACTIONS

The discretionary governmental approvals subject to CEQR and SEQRA that have been identified for the Proposed Project include:

DSNY

- Capital funding for Garage Complex Construction.
- Closure of four facilities and relocation of operations to the proposed Garage Complex.

City Planning Commission

- Site Selection for a capital project for the Garage.
- Rezoning of the mid-block portion of the Project Site from the current R8 residential district to M1-5 manufacturing district.
- Certain bulk waivers by means of special permits issued for a Large Scale General Development (LSGD) pursuant to Zoning Resolution §74-74 *et seq.* for relief from side and rear yard, street wall height and setback regulations.
- Rezoning of Parcels A and B from current R8 to C6-4.
- Special Permits pursuant to Zoning Resolution §74-78 to permit a scientific research and development facility within a C6 district.
- Disposition by the City of New York's Land Development Corporation for the development of Parcels A and B, with approval of the Manhattan Borough Board pursuant to New York City Charter Section 384(b)(4).
- Determination of the Proposed Action's consistency with the City's Waterfront Revitalization Program.
- Any other approvals as may be required to facilitate the development of the Parcels A and B.

Office of the Mayor

- Approval of disposition for development of Parcels A and B pursuant to City Charter 384(b)(4).

ULURP approvals are subject to review and approval by the City Council, at its option. Public Design Commission approval of the garage exterior design would also be required.

D. FRAMEWORK FOR ENVIRONMENTAL REVIEW

The DEIS will be prepared in accordance with the guidelines presented in the *CEQR Technical Manual* (2014 ed.) and additional guidance from the City's expert technical agencies, the Department of Transportation and Department of Environmental Protection. For each technical area that warrants assessment, the analysis will include a description of existing conditions, an assessment of conditions in the future without the proposed actions, and an assessment of future conditions with the Proposed Project.

BUILD YEAR

Construction of the Proposed Project is anticipated to start in 2019 following the necessary public approvals, DSNY fully designing the garage and procuring a construction contractor, and a public RFP process for Parcels A and B at the end of which a developer would be selected to develop the sites. It is anticipated that construction on the garage and Parcels A and B would occur simultaneously with all of the facilities fully operational by the year 2022. Accordingly, the Proposed Project will use a 2022 Build Year for analysis purposes. As the Proposed Project would be operational in 2022, its environmental setting is not the current environment, but the future environment. Therefore, the technical analyses and consideration of alternatives assess current conditions and forecast these conditions to the expected Build Year of 2022 for the purposes of determining potential impacts. The DEIS will provide a description of “Existing Conditions” and assessments of future conditions without the Proposed Project (“Future without the Proposed Project”) and with the Proposed Project (“Future with the Proposed Project”).

BASELINE EXISTING CONDITIONS

The analysis framework will begin with an assessment of existing conditions on the project site and in the relevant study area because these can be most directly measured and observed. The assessment of existing conditions does not represent the condition against which the Proposed Project is measured, but serves as a starting point for the projection of future conditions with and without the proposed actions and the analysis of project impacts.

REASONABLE WORST-CASE DEVELOPMENT SCENARIO (RWCDs)

In order to assess the possible effects of the Proposed Project, a reasonable worst-case development scenario (RWCDs) for the project was established for both Future No-Action and Future With-Action conditions. The incremental difference between the Future No-Action and Future With-Action conditions will serve as the basis of the impact category analyses in the DEIS.

For conservative analysis purposes, this analysis assumes that the entire Project Site is redeveloped. The Garage is assumed to be developed in the midblock area of the Project Site under M1-5 zoning. Parcels A and B would be developed on the adjoining parcels and would be developed under C6-4 zoning regulations. Given that the assumed zoning district for Parcels A and B permits a range of uses, the RWCDs will assume two different development scenarios as this would be the most conservative analysis.

First, each technical area will include an analysis of a scenario that assumes that Parcel A and B are each entirely redeveloped with commercial uses, specifically a scientific and research facility as described in Section 74-78 of the Zoning Resolution, community facility space, and ground-floor retail (the “All Commercial Scenario”). In addition to the All Commercial Scenario, the technical analysis will be supplemented in some cases by an additional scenario which assumes each parcel is redeveloped with residential uses, ground floor retail, and community facility use (the “All Residential Scenario”). For this scenario, each technical area will provide an appropriate level of analysis. Each scenario is described in detail below.

THE FUTURE WITHOUT THE PROPOSED ACTIONS (“FUTURE NO-ACTION”)

The future without the proposed actions (the “No Action” condition) will describe a future baseline condition to which the changes that are expected to result from the Proposed Project are

compared. For each technical analysis, approved or designated development projects within the appropriate study area that are likely to be completed by the 2022 analysis year are considered.

The No-Action condition assumes that none of the proposed actions necessary for the Proposed Project are approved. Without the Proposed Project, it is assumed the Project Site would continue to be used as an academic-type community facility at full occupancy, under the current R8 zoning.

THE FUTURE WITH THE PROPOSED ACTIONS (“FUTURE WITH-ACTION”)

By 2022 under With-Action conditions, as described in the Project Description and shown in Tables 1 through 4, the Proposed Project would result in significant new development on the Project Site. The Project Site would be divided into three separate zoning lots, each of which would encompass portions of the current Brookdale Campus as well as portions of the former East 26th Street. The Future with the Proposed Actions assumes that the entire project site is redeveloped with the Garage being developed under M1-5 zoning and Parcels A and B being developed under C6-4 zoning regulations.

The new zoning lot for the proposed DSNY Garage would be located in the middle of the Project Site. The new zoning lot would have a length of 380 feet along East 25th Street with a width of approximately 260 feet spanning from East 25th Street to the northern side of the former East 26th Street for a total area of approximately 98,800 square feet with the proposed Garage facility occupying approximately 80,560 square feet of that space. The proposed M1-5 zoning district allows development to a maximum of 5.0 FAR. As such, the Garage could be constructed to a maximum of 494,000 square feet. Although the Garage could be developed to that maximum, the actual facility would be developed to approximately 346,290 square feet. Accordingly approximately 147,710 square feet of floor area could be available for transfer to either Parcel A or Parcel B for use as commercial floor area.

Parcels A and B would be developed on new zoning lots directly adjacent to the Garage. Parcel A would be located at the western end of the block with frontages on 1st Avenue and East 25th Street. The zoning lot for Parcel A would have a length of approximately 200 feet along East 25th Street and a width of approximately 260 feet from East 25th Street to the northern side of the former East 26th Street for a total zoning lot area of approximately 52,000 square feet. Parcel B would be located at the eastern end of the Project Site with frontages on the FDR service road and East 25th Street. The zoning lot for Parcel B would have a length of approximately 230 feet along East 25th Street and a width of approximately 260 feet from East 25th Street to the northern side of the former East 26th Street for a total zoning lot area of approximately 59,800 square feet.

In order to capture all potential impacts from the development possibilities on Parcels A and B, the RWCDs encompasses both an All Commercial Scenario and an All Residential Scenario. Analyzing these two scenarios allows for one of four potential outcomes – commercial buildings on both sites, mixed-use residential on both sites, or one commercial building and one mixed-use residential on either Parcel A or Parcel B. The conservative analysis ensures that the highest environmental impact uses will be included in the proper technical analysis area.

The All Commercial scenario assumes that Parcels A and B are redeveloped with commercial space, specifically scientific and research facilities as described in Section 74-78 of the Zoning Resolution, and ground-floor retail. Parcel A would be developed with a 624,000 square foot building and Parcel B would be developed with a 717,600 square foot building. Parcel A would have approximately 39,380 square feet of retail space on the ground-floor along 1st Avenue and East 25th Street, and approximately 39,380 square feet of community facility space, and the remaining 545,240 square feet would be used as a scientific research facility. Parcel B would have approximately 43,600 square feet of ground-floor retail with frontage along East 25th Street and 43,600 square feet of community facility space. The remaining 630,400 square feet would be used as a scientific research facility (see Table 3).

Table 3: All Commercial Scenario

Use	Site A	Site B
Scientific Research and Development Facility	545,240	630,400
Retail	39,380	43,600
Community Facility	39,380	43,600
Total	624,000	717,600

To ensure a conservative analysis, it is assumed that each building would be built to the maximum 12 FAR by utilizing a public plaza bonus to augment the base 10 FAR for commercial uses in a C6-4 district. In addition to the plaza bonus, it is assumed that the remaining, unused commercial floor area from the DSNY garage facility and adjoining private drive (147,710 square feet) would be transferred to one of the two buildings. As such, the total commercial development across both parcels could be up to approximately 1,489,310 square feet of development.

For the All Commercial scenario, each building would be built within the as-of-right bulk envelope with an 85-foot high base with a tower rising above the base. The tower would be set back by at least 15 feet along 1st Avenue and by 20 feet along East 25th Street. The base would not occupy the entire zoning lot and would not be built within the former East 26th Street. Instead, each building would be located within the area generally defined by the existing sidewalks on East 25th Street and the former East 26th Street Bellevue private driveway. Each building would be constructed to maintain the proposed access to the Garage's entry drive, which will include widening the private Bellevue driveway along Site A.

The All Residential scenario assumes that Parcels A and B are redeveloped with residential uses, ground floor retail, and community facility space. With this assumption, Parcel A would be developed with a mixed use building with up to approximately 39,380 square feet of ground-floor retail along 1st Avenue or East 25th Street, up to approximately 39,380 square feet of community facility space, and up to approximately 545,240 square feet of residential space. Parcel B would be a residential building with up to approximately 630,400 square feet of residential space, 43,600 square feet of retail, and 43,600 square feet of community facility space (see Table 4). Based on an assumption of 1,000 square feet per residential unit, Parcel A would have up to approximately 541 residential units and Parcel B would have

635 residential units. Of the 1,176 total residential units, it is assumed that up to 30%, or 353 units, would be affordable with the remaining 823 units as market-rate residential units. An assumed 20% of the units (within the 30%) would be low-income as defined by the New York City Department of Housing Preservation and Development.

Table 4: All Residential Scenario

Use	Site A	Site B
Residential	545,240	630,400
Retail	39,380	43,600
Community Facility	39,380	43,600
Total	624,000	717,600

To ensure a conservative analysis, it is assumed that each building would be built to the maximum 12 FAR for residential uses in a C6-4 district by receiving a floor area bonus through participation in the Inclusionary Housing Program. For this scenario, it is assumed that the remaining, unused commercial floor area from the DSNY garage facility and adjoining private drive (147,710 square feet) would be transferred to one of the two buildings. As such, the total development across both parcels could be up to approximately 1,489,310 square feet of development.

Similar to the first scenario, for the All Residential scenario, each building would be built within the as-of-right bulk envelope with an 85-foot high base with a tower rising above that base height. The tower would be set back by at least 15 feet along 1st Avenue and by 20 feet along East 25th Street. The base would not occupy the entire zoning lot and would not be built within the former East 26th Street. Instead, each building would be located within the area generally defined by the existing sidewalks on East 25th Street and the former East 26th Street, with appropriate zoning lot line setbacks from the DSNY Garage and preserving access to the Garage entry drive, which will include widening the private driveway along Site A.

As described above, the incremental difference between the Future No-Action and Future With-Action conditions will serve as the basis of the impact category analyses in the EIS. Table 5 illustrates the incremental difference between the All Commercial Scenario and the No Action Condition. Table 6 illustrates the incremental difference between the All Residential Scenario and the No Action Condition.

Table 5: Comparison of Total Development Potential between the No-Action Condition and All Commercial Scenario

Use	No-Action Scenario (sf)	All-Commercial Scenario (sf)	Increment
Scientific Research Facility	0	1,323,350	1,323,350
Ground Floor Retail	0	82,980	82,980
Community Facility	450,000	82,980	-367,020
Total	450,000	1,489,310	1,039,310

Table 6: Comparison of Total Development Potential between the No-Action Condition and All Residential Scenario

Use	No-Action Scenario(sf)	All-Residential Scenario (sf)	Increment
Ground Floor Retail	0	82,980	82,980
Community Facility	450,000	82,980	-367,020
Residential	0	1,175,640	1,175,640
Total	450,000	1,341,600	891,600

PROJECT POPULATION

In the Future No Action condition, the buildings of the Project Site would have an institutional use with no additional construction assumed. Based on an assumed population generation of 1 employee per 450 square feet of institutional space and no new construction by 2022, the Future No Action condition would have a population of approximately 1,000 persons (students, visitors, clients, patients, and/or employees).

With the Proposed Project, it is anticipated that approximately 290 staff would be based at and/or work from the Garage, spread over several shifts. The total number of employees assigned on a peak day/peak shift would be 199, excluding winter emergencies. Most of the DSNY staff would spend the majority of their work day in the field.

For the All Commercial Scenario, development on Parcels A and B would generate a project population of 5,999 employees, an incremental increase of 4,999 employees compared to the No Action condition. For the All Residential Scenario, development on Parcels A and B would generate a project population of 759 employees, an incremental decrease of 241 employees compared to the No Action

condition.² The All Residential Scenario would generate a residential population of 1,952 people, based on an average household size of 1.66.³

PROBABLE IMPACTS OF THE PROPOSED ACTION

The identification of potential environmental impacts will be based upon the comparison of the No Action condition to the Future with Action condition. In certain technical areas this comparison can be quantified and the severity of impact rated in accordance with the *CEQR Technical Manual*. In other technical areas, the analysis will be qualitative in nature. The methodology for each analysis will be presented at the start of each technical analysis.

ENVIRONMENTAL REVIEW PROCESS

DSNY, as lead agency, determined that the Proposed Action may include the potential for at least one significant adverse environmental impact according to applicable criteria and, therefore, pursuant to CEQR procedures, issued a positive declaration directing that a Draft EIS be prepared in conformance with all applicable laws and regulations, including the State Environmental Quality Review Act (SEQRA), the City's Executive Order No. 91, and CEQR regulations (August 24, 1977), as well as the relevant guidelines of the *CEQR Technical Manual*. This Scope of Work was prepared in accordance with those laws and regulations and the City's 2014 *CEQR Technical Manual*.

This Draft Scope of Work will direct the content and preparation of the DEIS. Public comments will be received on this Draft Scope for at least 10 days following the Public Scoping Meeting. DSNY will consider the comments received on the Draft Scope, issue a Final Scope of Work, and prepare the DEIS. Once DSNY has determined that the DEIS is complete, it will be released for public comment. At a date to be announced later, a public hearing on the DEIS will be held in conjunction with the public hearing on the ULURP application for the project. A Final EIS (FEIS) will then be prepared, including a response to public comments. DSNY and involved agencies will make CEQR findings based on the FEIS, before making a decision on project approval.

As described in greater detail below, the DEIS will contain:

- A description of the proposed actions and the Proposed Project and their environmental setting;
- An analysis of the potential for adverse environmental impacts to result from the project;
- A description of mitigation measures proposed to eliminate or minimize any adverse environmental impacts disclosed in the DEIS;
- An identification of any adverse environmental effects that cannot be avoided if the Proposed Project is implemented;
- A discussion of alternatives to the proposed actions and project; and
- A discussion of any irreversible and irretrievable commitments of resources to develop the project.

² Residential use assumed to generate 1 employee per 22 units, scientific research facility assumed to generate 4 employees per 1,000 sf, ground floor retail assumed to generate 3 employees per 1,000 sf, and community facility use assumed to generate 1 employee per 450 sf. Assumptions based on Columbia Manhattanville FEIS and Cornell Tech FEIS.

³ Average household size assumption based on NYC DCP MN NTA Murray Hill-Kips Bay, data table SF1-H2. Data set available at: http://www.nyc.gov/html/dcp/html/census/demo_tables_2010.shtml

E. SCOPE OF WORK

The DEIS will generally follow guidelines in the *2014 CEQR Technical Manual*. Tasks that warrant discussion are discussed below. Based on the project's site characteristics, the nature of the proposed action, and the review previously done in the project's Environmental Assessment Statement, the DEIS will not discuss in detail impacts concerning natural resources, energy use, historical and cultural resources, or solid waste generation.

TASK 1. PROJECT DESCRIPTION

The Project Description introduces the reader to the Proposed Project and provides the data from which impacts are assessed. The chapter will contain a brief history of the uses on the Project Site; the purpose and need for the project; the proposed development program; a description of the design of the proposed Garage building and development expected on Parcels A and B; figures to depict the proposed development; and a discussion of the approvals required. Estimates of vehicular and pedestrian traffic to be generated by the project will be provided.

Appropriate data from the ULURP application will be used. The role of the lead agency for CEQR will also be described as well as the environmental review. The need for environmental requirements (e.g., E-designations or restrictive declarations) necessary to develop the Proposed Project will also be identified. The framework for the analysis will also be described, including procedures to be followed, the No Action condition, and the single analysis year for all technical areas except construction.

TASK 2. LAND USE, ZONING AND PUBLIC POLICY

This analysis will consider the Proposed Project's effects in terms of land use compatibility and trends in zoning and public policy. The context for the proposed zoning map amendment will be described along with any other land use actions required. Because the Project Site is located within the Coastal Zone designated by New York State and City, a review of the project's compliance with the New York City Waterfront Revitalization Program (WRP) will be included. As the Project Site is within the 100-year Flood Plane (Zone A) and experienced flooding in October 2012 during Tropical Storm Sandy, a discussion of the project in light of 2013 Advisory Base Flood Elevation maps and Department of Buildings emergency building regulations of January 2013 will be provided. In general, this chapter provides a context for other analyses in the EIS. It will:

- Describe predominant land use patterns in the study area, including recent development trends. The study area will include the portions of the blocks immediately surrounding the project site and land uses within approximately 400 feet.
- Provide a zoning map and discuss existing zoning and recent zoning actions on the project site and in the study area.
- Summarize other public policies that may be relevant to the project site and study area.
- Describe conditions on the project site absent the Proposed Project. Prepare a list of other projects expected to be built in the study area that would be completed before or concurrently with the Proposed Project. Describe the effects of these projects on land use patterns and development trends. Also, describe any pending zoning actions or other public policy actions that could affect land use patterns and trends in the study area, including plans for public improvements.
- Describe the Proposed Project and provide an assessment of the impacts of the Proposed Project on land use and land use trends, zoning, and public policy. Consider the effects related to issues of compatibility

with surrounding land use, consistency with zoning and other public policy initiatives, and the effect of the project on development trends and conditions in the area. Assess the project's compatibility with the WRP.

TASK 3. COMMUNITY FACILITIES AND SERVICES

The demand for community facilities and services is directly related to the type and size of the new population generated by development resulting from the Proposed Project. New workers tend to create limited demands for community facilities and services, while new residents create more substantial and permanent demands. The Proposed Project would not result in direct displacement of any community facility or services. As such, no further analysis of direct effects on community facilities is warranted.

This chapter of the DEIS will evaluate the indirect effects on community services due to the Proposed Project, focusing on public schools, publicly funded day care facilities, and libraries. A community facilities impact screening will be presented based on the incremental number of residents and employees that would be generated under the Proposed Project, following the *2014 CEQR Technical Manual* procedures and thresholds. The community facilities and services assessment will include a description of existing conditions, and evaluations of future conditions in 2022 with and without the Proposed Project. If a preliminary analysis determines that further analysis is warranted, then a detailed analysis will be performed.

TASK 4. OPEN SPACE

Open space is defined as publicly or privately owned land that is publicly accessible and operates, functions, or is available for leisure, play, or sport, or is set aside for the protection and/or enhancement of the natural environment. An analysis of open space is required to determine whether or not a Proposed Project would have direct effects resulting from the elimination or alteration of open space, and/or indirect effects resulting from overtaking available open space.

According to the 2014 CEQR Technical Manual, an assessment of a project's potential for direct effects may be appropriate if the project would result in a physical loss of publicly accessible open space (by encroaching on an open space or displacing an open space); change the use of an open space so that it no longer serves the same user population (e.g., elimination of playground equipment); limit public access to an open space; or cause increased noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness, whether on a permanent or temporary basis. The Project Site does not include any publicly accessible open space and the Proposed Project would not have a direct physical effect on any existing open space resource. (Shadow impacts will be discussed under a separate task.) As such, the analysis will be limited to its indirect effects on open space.

An indirect effect may occur when the population generated by a project would be sufficiently large to noticeably diminish the ability of an area's open space to serve the future population. The population thresholds for a CEQR assessment of indirect effects vary, depending upon the current adequacy of open space in the project's study area. The Project Site is not located within an underserved

or well-served open space area of Manhattan⁴, and as such, the *CEQR Technical Manual* threshold for an open space assessment is more than 200 residents and 500 employees. The incremental increase in residents and employees associated with the Proposed Project would exceed these thresholds, which would create added demands on local open space and recreational facilities. Therefore, a preliminary open space analysis will be conducted. If the preliminary analysis determines that further analysis is warranted, then a detailed analysis will be performed.

This section of the DEIS will note the open spaces in the immediate vicinity of the project site, including Asser Levy Recreational Center, Pool and Playground south of the site; and two non-park landscaped spaces north of the site that the public may access for passive use: the Bellevue Sobriety Garden and the Bellevue Hospital landscaped entrance plaza.

TASK 5. SHADOWS

This chapter will examine the Proposed Project's potential for significant and adverse shadow impacts pursuant to 2014 *CEQR Technical Manual* guidelines. Generally, the potential for shadow impacts exists if an action would result in new structures or additions to existing buildings resulting in structures greater than 50 feet in height or located adjacent to, or across the street from a sunlight-sensitive resource. Such resources include publicly accessible open spaces, important sunlight-sensitive natural features, or historic resources with sun-sensitive features.

The Proposed Project would result in new buildings on the Project Site, the tallest of which would be on either Parcels A or B, which could be up to 30 stories (approximately 350-feet tall). Shadow impacts from buildings on the Project Site in the No Action condition will be compared to the shadow impacts expected with the garage and its associated bulk waivers and with the proposed rezoning of Parcels A and B with bonus floor area awarded for affordable housing or a public plaza, in accordance with the *CEQR Technical Manual*. The proposed DSNY garage would include four major vehicle stories with a roof height from the curb up to approximately 129 feet plus mechanical penthouse, casting a maximum shadow of 541 feet the north, east and west at certain times of the year. This is less than the current maximum shadow cast by the 160 foot North Tower and 132 foot West Tower currently on the Project Site. Under the No Action condition, the Project Site would remain as is. The shadow analysis thus will analyze the incremental difference between the No-Action and the Proposed Action condition with a focus on Parcels A and B, with bonus floor area assumed for both sites. Any publicly accessible open spaces, important sunlight-sensitive natural features, or historic resources that would be cast in shadow by the project will be identified. The Bellevue Sobriety Garden to the north of the Project Site will be considered, as will the landscaped entrance plaza to Bellevue Hospital Center accessed from First Avenue, as the public may access these private spaces. Asser Levy Playground and Recreational Center is south of the Project Site, and therefore not expected to be affected by shadows from the Proposed Action.

The shadows assessment will determine the extent, duration, and effects of any potential new shadows on any other sunlight-sensitive resource in the vicinity of the Project Site. The shadows

⁴ Open space information is available here:
http://www.nyc.gov/html/oec/html/ceqr/open_space_maps_manhattan.shtml

assessment would be coordinated with Task 4, “Open Space.” The preliminary screening assessment would include the following tasks:

- Develop a base map illustrating the Project Site in relationship to publicly accessible open spaces, historic resources with sunlight-dependent features, and natural features in the area.
- Determine the longest possible shadow that could result from the Proposed Project to determine whether it could reach any sunlight-sensitive resources at any time of year.
- Perform a screening assessment to ascertain which seasons and times of day shadows from the Proposed Project could reach any sunlight-sensitive resources.

If the possibility of new shadows reaching sunlight-sensitive resources cannot be eliminated in the preliminary screening assessment, the EIS will include a detailed analysis.

TASK 6. HISTORIC AND CULTURAL RESOURCES

Historic and cultural resources include archaeological (buried) resources and architectural (historic standing structure) resources. The Project Site (Block 962, part of Lot 100) does not contain any landmarked structures or structures eligible for inclusion in the National Register of Historic Places. It was previously disturbed by construction. The Project Site would be subject to demolition, including below-grade structures. Therefore, the potential for any remaining archaeological resources appears to be slight. In accordance with the *CEQR Technical Manual*, the New York City Landmarks Preservation Commission (LPC) was consulted regarding the Project Site’s potential archaeological sensitivity. LPC advised that the Project Site has no architectural or archeological significance. Accordingly, no further discussion will be presented with respect to archaeological and cultural resources.

TASK 7. URBAN DESIGN AND VISUAL RESOURCES

According to the *CEQR Technical Manual*, urban design is the summation of those elements that may impact a pedestrian’s experience of an area. Such elements as streets, buildings, visual resources, open space, natural features, and wind have the potential to alter the arrangement, appearance, and functionality of the built environment, and therefore define the identity and uniqueness of a neighborhood. A visual resource is the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources. If a project requires actions that would result in physical changes to a project site beyond those allowable by existing zoning and which could be observed by a pedestrian from street level, a preliminary assessment of urban design and visual resources should be prepared.

Since the Proposed Project would require land use approvals that would result in physical differences to what would be allowed under existing zoning and those differences could be observed by a pedestrian from street level, a preliminary assessment of urban design and visual resources will be prepared. The preliminary assessment will include a concise narrative of the existing project area, the future without the proposed action, and the future with the proposed actions.

The preliminary assessment will present photographs, zoning and floor area calculations, building heights, project drawings and site plans, and view corridor assessments. The study area for the preliminary assessment of urban design and visual resources will be a 400 feet radius of the Project Site,

consistent with that of the study area for the analysis of land use, zoning and public policy. The preliminary assessment will determine whether any physical changes proposed by the Proposed Project would raise the potential to significantly and adversely affect elements of urban design and pedestrian experience such as disturbance to the vitality, the walkability, or the visual character of the area. If the preliminary assessment shows that changes to the pedestrian environment are sufficiently significant to require greater explanation and further study, then a detailed analysis will be prepared. As described in the *CEQR Technical Manual*, examples of projects that may require a detailed analysis are those that would allow a project to potentially obstruct view corridors, compete with icons in the skyline, or make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings.

If warranted, the detailed analysis would describe the Project Site and the urban design characteristics and visual resources of the surrounding area. The analysis would describe the potential changes that could occur to urban design and visual resources in the future with the Proposed Project, in comparison to the future without the proposed actions, focusing on the changes to the built environment's arrangement, appearance, or functionality that could negatively affect a pedestrian's experience of the area. If necessary, mitigation measures such as design changes and/or physical changes that reduce or eliminate potential significant adverse impacts will be identified.

TASK 8. HAZARDOUS MATERIALS

The EIS will address the potential presence of hazardous materials and/or contamination on the Project Site. Asbestos is known to be present on the Brookdale Campus, and would be abated in accordance with applicable regulations prior to building demolition. The DEIS will include a summary of the Phase I Environmental Site Assessment (ESA) reviewing the site's history, proximity to any known spills and any recognized environmental conditions, and other available reports, and will include any necessary recommendations for additional testing (such as a Phase II ESA) or other activities that would be required either prior to or during construction and/or operation of the project, including a discussion of any necessary remedial or related measures. The DEIS will include a general discussion of the health and safety measures that would be implemented during project construction. Any appropriate remediation measures specific to the proposed uses on the Project Site, including those recommended by the New York City Department of Environmental Protection (NYCDEP), will be provided in the DEIS.

This section of the DEIS will also include an overview of hazardous materials (e.g., petroleum bulk storage, maintenance fluids, automotive batteries, laboratory supplies, etc.) that would be associated with operation of the DSNY Garage and development on Parcels A and B with a brief summary of the procedures/requirements for ensuring they are each managed safely.

TASK 9. WATER AND SEWER INFRASTRUCTURE

WATER SUPPLY

According to the *CEQR Technical Manual*, an analysis of an action's impact on the water supply system should be conducted only for actions that would have exceptionally large demand for water, such as power plants, very large cooling systems, or large developments (e.g., those that use more than 1 million gallons per day). In addition, actions located at the extremities of the water distribution system

should be analyzed. The Proposed Project does not meet any of these criteria, and therefore an analysis of water supply is not warranted.

WASTEWATER AND STORMWATER CONVEYANCE AND TREATMENT

The 2014 *CEQR Technical Manual* outlines thresholds for analysis of a project's water demand and its generation of wastewater and stormwater. An analysis of the City's water supply is not warranted as the Proposed Project would not result in a demand of more than one million gallons per day (gpd) and the Project Site is not located in an area that experiences low water pressure. The need for an analysis of a project's effects on wastewater and stormwater conveyance depends on a project's proposed density, its location, and its potential to increase impervious surfaces. A preliminary assessment of the Proposed Project's effects on wastewater infrastructure is warranted as the All Commercial scenario would result in an incremental increase of more than 250,000 square feet of commercial space in Manhattan, compared to the No Action condition. Stormwater runoff from the Site is not expected to increase over the No Action scenario, as the proposed action's garage component would have a green vegetated roof and harvest stormwater for the building's use and store it in a cellar cistern. As a result, stormwater from the proposed action is expected to be less than the No Action scenario, which is assumed to have no green roof or stormwater harvesting or flow detention technology. The All Residential scenario would result in an incremental increase of less than 1,000 residential units, which is below the level that would warrant an assessment. Therefore, this chapter will analyze the All Commercial scenario's potential effects on wastewater infrastructure while providing a screening level assessment for the All Residential scenario. NYCDEP will be consulted during the preparation of the preliminary wastewater infrastructure assessment.

The following describes the scope of analysis of the effects of the Proposed Project's incremental sanitary flows on the capacity of the sewer infrastructure.

- The existing sewer system serving the Project Site will be described based on records obtained from NYCDEP. Records obtained will include sewer network maps, drainage plans, and capacity information for sewer infrastructure components, as applicable. The existing flows to the Newtown Creek wastewater treatment plant (WWTP) that serves the Project Site will be obtained for the latest 12-month period, and the average dry weather monthly flow will be presented.
- Any changes to the Project Site's stormwater drainage system and surface area expected in the future No-Action condition will be described for the 2022 build year.
- Any changes to the sewer system expected to occur in the future No-Action condition will be described based on information provided by NYCDEP; to the extent feasible, information will be gathered on large-scale developments that would affect the sewer system serving the Newtown Creek WWTP.
- Sanitary sewage generation will be estimated. The effects of the incremental demand on the system will be assessed to determine the impact on operations of the WWTP.
- Based on the assessment of future wastewater generation, the change in flows and volumes to the combined sewer system and/or water bodies due to the Proposed Project will be determined.

If warranted, a detailed analysis will be prepared following the guidelines of the 2014 *CEQR Technical Manual*.

TASK 10. SOLID WASTE AND SANITATION SERVICES

The Proposed Project includes new development that would require sanitation services. A screening level assessment will be provided. This chapter will provide an estimate of the additional solid waste expected to be generated by the Proposed Project and assess its effects on the City's solid waste and sanitation services and its consistency with the City's Solid Waste Management Plan (SWMP) or with state policy related to the City's integrated solid waste management system. The City's solid waste system includes waste minimization at the point of generation, collection, treatment, recycling, composting, transfer, processing, energy recovery, and disposal. The analysis will include the following tasks:

- Describe existing and future New York City solid waste disposal practices, including the collection system and disposal methods.
- Estimate existing solid waste generation and solid waste generation in the future without the Proposed Project.
- Project solid waste generation by the Proposed Project based on generation rates provided in Table 14-1 of the 2014 *CEQR Technical Manual*.
- Assess the impacts of the Proposed Project's incremental solid waste generation on the City's collection needs and disposal capacity.

TASK 11. TRANSPORTATION

Based on the *CEQR Technical Manual*, detailed transportation analyses may be warranted if a proposed action is anticipated to result in an incremental increase of 50 or more peak hour vehicles trips, 200 or more peak hour subway or bus trips, or 200 or more peak hour pedestrian trips. As currently contemplated, the Proposed Project is expected to result in peak hour trip generation that would exceed these thresholds and therefore, detailed analyses of traffic, transit, and pedestrian operations, as well as assessments of vehicular and pedestrian safety and screening assessments of the area's parking supply and utilization, are warranted. The specific transportation analysis tasks to be undertaken as part of this environmental review are outlined below.

Travel Demand Projections and Screening Assessments

To determine the scale of the detailed transportation impact analyses, trip generation estimates will be developed for the proposed garage and Parcels A and B development. These estimates will rely primarily on the *CEQR Technical Manual* and information from current garage operations and projected future operations for the analysis or build year. Travel characteristics of the different user groups (i.e., work shifts, temporal distribution and modal split, employee home zip codes) and the Garage's operational characteristics (building hours, programming details, etc.) will also be identified via a combination of available information from DSNY, as well as travel data from approved studies of other similar uses.

Based on the results of the trip generation estimates, "Level 1" and "Level 2" screening assessments will be prepared in accordance with the 2014 *CEQR Technical Manual*. The Level 1 screening assessment will compare the projected peak hour trips against the CEQR analysis thresholds described above. For analysis areas (traffic, transit and pedestrians) that are expected to generate more

peak hour trips than these thresholds, a Level 2 screening assessment, involving the distribution and assignment of the projected peak hour trips onto the transportation network, would be undertaken. The trip assignment will need to account for the appropriate on- and off-site parking assumptions, as well as anticipated commuter and truck trips on the proposed garage driveway at the former East 26th Street. Based on the results of this Level 2 screening assessment, the appropriate study areas for detailed traffic, transit and pedestrian analyses will be identified. The trip estimates and results of the Level 1 and Level 2 screening assessments will be summarized in a Travel Demand Factors (TDF) memo for review and comment by the DSNY as the Lead Agency and the New York City Department of Transportation (NYCDOT) for concurrence on the travel demand assumptions and detailed analysis study areas. The specific detailed analyses that will then be prepared are described below.

Traffic and Parking Analyses

The Proposed Project site is bounded by the FDR Drive southbound roadway to the east, First Avenue to the west, the former East 26th Street to the north, and East 25th Street to the south. Given the Project Site's access to the FDR Drive and the local street network, as well as the anticipated program operation's schedule, the trip estimates and assignments described above warrant a weekday and weekend peak period (AM and midday peak hours) detailed traffic impact study for a study area comprising 16 intersections. See **Fig. 11: Proposed Traffic Count Locations**. For intersection locations where recent traffic data are not available, new traffic counts will be collected via a combination of manual and machine counts in accordance with CEQR procedures. Operational characteristics at the study area intersections during the analysis peak hours will be documented with a field inventory of roadway configurations, lane widths and utilization, curbside regulations, traffic congestion/queuing, and signal phasing/timing (to be confirmed with NYCDOT official signal timing data). If a mobile source air quality and/or noise analysis is determined to be warranted based on the results of the Level 2 screening assessment, additional data on travel time and delays will also be collected.

Using the collected baseline data, existing peak hour balanced traffic networks will be developed for the detailed analysis of intersection levels-of-service (LOS). This analysis will be prepared in accordance with the *2014 CEQR Technical Manual* and 2010 Highway Capacity Manual (HCM) procedures using the latest approved Highway Capacity Software (HCS) or Synchro. Appropriate analysis tools will be determined in coordination with NYCDOT. Building on the existing traffic volumes, background growth and traffic attributed to other approved or as-of-right projects, as well as any anticipated changes to the area's roadway network, will be compiled to project future baseline traffic volumes and establish the No Action condition. Project-generated peak hour trips will then be overlaid onto the future No Action condition traffic networks to create the future condition with the Proposed Project traffic networks. Operating conditions for the No Action and proposed project traffic volumes at the study area intersections will be analyzed in the same manner as described for existing conditions. The analysis results for the No Action condition and conditions with the Proposed Project will then be compared to the impact criteria outlined in the *2014 CEQR Technical Manual* to determine the potential for significant adverse traffic impacts. Where impacts are identified, practical mitigation measures (i.e., signal timing adjustments, parking restrictions, lane restriping, etc.) will be explored to alleviate these impacts.

It is expected that the proposed Garage's parking demand will be accommodated on-site. Therefore, a detailed parking demand study is not warranted for the garage. Development on Parcels A and B are expected to include some parking on site. Parking demand associated with the projected All

Figure 11: Proposed Traffic Count Locations



Commercial and All Residential development scenarios on Parcels A and B will be compared with the Future No Action development, in accordance with the *CEQR Technical Manual*.

Transit and Pedestrian Analyses

Currently, trips made by public transportation to and from the Project Site are served by the Lexington Avenue No. 6 train, the M9, M23 and M34A bus routes at East 23rd Street, and the First/Second Avenue M15 bus route. In addition, several express bus routes have stops along East 23rd Street proximate to the Project Site. The trip estimates and distribution of transit trips to these area public transportation services from the two proposed action development scenarios (All Residential scenario plus garage; and All Commercial scenario plus garage) will be estimated and compared to the No Action condition to see whether it warrants for a detailed analysis of stairway and control area elements at the nearest subway station and line-haul conditions of the subway and bus routes identified above. If necessary, the detailed transit analysis will assess the AM and PM commuter peak periods. Where impacts are identified, practical mitigation measures will be discussed.

Project-related transit and pedestrian trips are projected to traverse area sidewalks, corner reservoirs and crosswalks. These modes are not inclusive of commuting automobiles traveling to/from the Garage as they are anticipated to park internally on-site. Based on a preliminary examination of the Proposed Project's characteristics, the need for a detailed pedestrian analysis is unlikely as the majority of project generated trips would occur via truck or automobile for the Garage. Pedestrian trips from the development increment from Parcels A and B (two scenarios noted above) over the Future No Build condition will be determined. If pursuant to the *CEQR Technical Manual* it is determined that the analysis of additional pedestrian locations is warranted, up to four locations will be included for detailed pedestrian analysis. Where impacts are identified, practical mitigation measures such as street furniture removal, crosswalk widening, corner extension, etc. will be explored to alleviate these impacts. The pedestrian screening and/or analysis will employ a similar methodology to the traffic assessment discussed above.

Vehicular and Pedestrian Safety Assessment

Accident data for the study area intersections and other nearby sensitive locations from the most recent three-year period will be obtained from the New York State Department of Transportation (NYSDOT). These data will be analyzed to determine if any of the studied locations may be classified per *CEQR Technical Manual* criteria as high vehicle crash or high pedestrian/bike accident locations and whether trips and changes resulting from the Proposed Project would adversely affect vehicular and pedestrian safety in the area. If any high accident locations are identified, feasible improvement measures will be explored to address potential safety issues. The Project Site currently has a Citibike station. All available and appropriate Citibike data will be considered in consultation with NYCDOT.

Construction Period Transportation Assessment

Construction of the Proposed Project is expected to exceed the short-term threshold of two years as defined in the *2014 CEQR Technical Manual*. As such, a construction period screening assessment will be conducted to determine if a detailed analysis is warranted. The analysis will identify changes to traffic circulation and potential increase in trips to/from the study area, as well as identify street closures resulting from the construction of the Proposed Project. If construction generated trip thresholds (similar to those identified in the TDF Memorandum) are exceeded, a detailed analysis will be conducted.

TASK 12. AIR QUALITY

The air quality studies for the proposed actions will include both mobile and stationary source analyses. The mobile source air quality impact analysis will assess the potential impacts from particulate matter (PM) and carbon monoxide (CO) from traffic-generated emissions. The stationary source air quality impact analysis will address the effects of vehicle emissions inside the garage that are exhausted via roof vents. As the Project Site will be supplied by Consolidated Edison steam, no building boiler emissions are expected.

MOBILE SOURCE ANALYSIS

DSNY collection trucks all use advanced clean diesel technology with diesel particulate filters and ultra-low sulfur diesel fuel. All of DSNY's mechanical brooms also use clean diesel technology, in accordance with federal USEPA standards that took effect with the 2007 model year. DSNY light duty vehicles are subject to local law requirements that they be the cleanest in their class; most are hybrid-electric; an increasing number are plug-in electric vehicles, with zero emissions. DSNY collection trucks are heavy duty diesel Class 8 trucks. Diesel trucks are not a significant source of CO. The principal collection routes are on the 6AM to 2PM shift, with the trucks leaving before 6:30 AM and returning prior to 2PM. Trip generation estimates will be used to determine if the number of project-generated vehicles including trips associated with Parcels A and B exceed the *CEQR Technical Manual* CO and/or PM_{2.5} screening thresholds and related guidance of the NYCDEP during a peak hour at one or more intersections in the study area. For the PM_{2.5} 24-hour standard, project-generated trips at peak roadway segments will be averaged over a 24-hour period. If the average number exceeds the applicable screening value, a detailed analysis of mobile source air quality impacts would be conducted. Using computerized dispersion modeling techniques, the effects of project-generated traffic on CO and PM_{2.5} levels at critical intersection locations will be determined. In addition, the impact of the proposed Garage and buildings assumed on Parcels A and B (as stationary sources of emissions) on air quality will be analyzed, and the results from that analysis will be combined with the intersection analyses, where applicable.

The work program will consist of predicting (using computerized dispersion modeling techniques) the effects of traffic under both the No Action and Build conditions on PM_{2.5} and CO levels at intersection locations within the study area, and, if significant impacts are predicted to occur due to the action, developing feasible traffic measures to alleviate those impacts. The analysis methodology is as follows: selection of appropriate sites for intersection analysis, calculation of vehicular emissions, calculation of pollutant concentration levels using dispersion models that have been approved by the applicable air quality review agencies (i.e., U.S. Environmental Protection Agency ("EPA"), New York State Department of Environmental Conservation ("NYSDEC"), and NYCDEP), and the determination of impacts. Specifically:

- Collect and summarize existing ambient air quality data for the study area. Ambient air quality monitoring data published by the NYSDEC will be compiled for the analysis of existing conditions.
- Calculate emission factors. Select emission calculation methodology and "worst-case" meteorological conditions. Compute vehicular cruise and idle emission factors for the intersection modeling using the EPA-developed MOBILE6.2.03 model (or the MOVES mode, as applicable) and applicable assumptions based on guidance by EPA, NYSDEC and NYCDEP. Compute re-suspended road dust emission factors based on the EPA procedure defined in AP-42.
- Select appropriate background levels. Select appropriate CO background levels for the study area.

- Select appropriate analysis sites. Based on the background and project-increment traffic volumes and levels of service, select intersections for analysis, representing locations with the worst potential total and incremental pollution impacts.
- Use EPA's first-level CAL3QHC intersection model to predict the maximum change in CO concentrations, and the refined CAL3QHCR intersection model to predict the maximum change in PM_{2.5}. At each analysis site calculate for each peak period the maximum 1- and 8-hour average CO concentrations for: (i) existing conditions; (ii) No Action conditions; and (iii) the future with the Proposed Project. For selected intersections, the maximum 24-hour and annual average PM_{2.5} concentrations will be determined for: (i) No Action conditions; and (ii) the future with the Proposed Project.
- Perform an analysis of CO for the Proposed Project's parking facility (DSNY Garage). The analysis will use the procedures outlined in the *CEQR Technical Manual* for assessing potential impacts from proposed parking facilities. Cumulative impacts from on-street sources and emissions from parking garages will be calculated, where appropriate.
- Compare with benchmarks and evaluate impacts. Evaluate potential impacts by comparing predicted future CO pollutant levels with standards, the predicted CO increment with *de minimis* criteria, and the PM_{2.5} increments with the City's interim guidance criteria. If significant adverse impacts due to CO concentrations are predicted, refine results by performing detailed dispersion analysis at affected locations using EPA's refined CAL3QHCR intersection model and compare refined results to benchmarks.
- For locations where significant adverse impacts are predicted, identify and analyze appropriate mitigation measures.
- Provide a qualitative discussion of the effects of project related traffic on NO₂ concentrations at affected roadways.

STATIONARY SOURCE ANALYSIS

HVAC Analysis

As noted above, the Project Site is served by Con Edison steam lines for building heating, ventilation and air conditioning (HVAC) purposes. Therefore, no building boiler emissions are expected. The Garage building's ventilation system will exhaust transitory vehicle emissions to the roof. A screening analysis will be performed to determine whether incremental emissions from any onsite HVAC equipment (Garage and development on Parcels A and B) over conditions in the Future No Action would be significant. The screening analysis will use the procedures outlined in the *CEQR Technical Manual* that consider the distance of the HVAC exhaust to the nearest building of equal or greater height, the proposed building size, the height of the exhaust stack and the type(s) of fuel used. The screening analysis will also be performed to determine whether there are any potential significant adverse impacts with respect to the new 1-hour nitrogen dioxide (NO₂) and 1-hour sulfur dioxide (SO₂) ambient air quality standards.

If the screening analyses for the Proposed Project's HVAC systems indicate that there would be a potential for significant adverse air quality impacts, a more detailed stationary source analysis will be performed using EPA's AERMOD model. For this analysis, five years of meteorological data from La Guardia Airport and concurrent upper air data from Brookhaven, New York will be utilized for the simulation program. Concentrations of nitrogen dioxide, sulfur dioxide, and particulate matter (PM₁₀) will be determined at sensitive receptor sites. Predicted values will be added to ambient background concentrations and compared with National Ambient Air Quality Standards. Predicted concentrations of PM_{2.5} at sensitive receptor sites will be compared to the City's interim guidance criteria for PM_{2.5}. In the

event that violations of National Ambient Air Quality Standards or NYCDEP's significant impact level guidance levels are predicted, design measures to reduce pollutant levels to below such levels will be proposed.

TASK 13. GREENHOUSE GASES

The Proposed Project would result in incremental development that would exceed the 2014 *CEQR Technical Manual* threshold of 350,000 square feet of development, and therefore, a Greenhouse Gas (GHG) emissions consistency assessment will be included as a separate chapter in the EIS. In accordance with the 2014 *CEQR Technical Manual*, an assessment of the consistency with the City's established GHG reduction goal will be performed.

- Sources of GHG from the Proposed Project will be identified. The pollutants for analysis will be discussed, as well as the various city, state, and federal goals, policy, regulations, standards and benchmarks for GHG emissions.
- Fuel consumption will be estimated for the Proposed Project based on the calculations of energy use estimated for the project in the "Energy" screening analysis conducted as part of the EAS document.
- GHG emissions associated with project-related traffic will be estimated for the Proposed Project using data from the transportation analysis. A calculation of Vehicle Miles Traveled (VMT) will be prepared.
- The types of construction materials and equipment proposed will be discussed along with opportunities for alternative approaches that may serve to reduce GHG emissions associated with construction.

A qualitative discussion of stationary and mobile sources of GHG emissions will be provided in conjunction with a discussion of goals for reducing GHG emissions to determine if the Proposed Project is consistent with GHG reduction goals, including building efficient buildings, use of clean power, transit-oriented development and sustainable transportation, reduction of construction operations emissions, and use of building materials with low carbon intensity.

The document will assess changes to DSNY vehicle miles traveled compared to the Future No Action, and assess whether the change would constitute a significant impediment to achieving the City's GHG reduction goal. The construction phase or the extraction or production of materials or fuels needed to construct the project is not likely to be a significant part of total project emissions. Therefore, emissions resulting from construction activity and construction materials will be assessed qualitatively. The project would not fundamentally change the city's solid waste management system. Therefore a quantified assessment of emissions due to solid waste management is not warranted. Features of the project that demonstrate consistency with the City's GHG reduction goals will be described.

TASK 14. NOISE

The *CEQR Technical Manual* requires that the noise study address whether the Proposed Project would result in a significant increase in noise levels at sensitive land uses such as residences and institutions, and if so, what level of building sound attenuation is necessary to provide acceptable interior noise levels at affected buildings. For the purposes of noise analysis, the All Residential scenario will

conservatively be used for Parcels A and B, and compared to institutional academic uses under the Future No Action condition.

The Proposed Project will generate vehicular trips, particularly trips by DSNY trucks serving their routes, which are a mobile source of noise. For CEQR purposes, it is assumed that outdoor mechanical equipment would be designed to meet applicable regulations and no detailed analysis of potential noise impacts due to stationary outdoor mechanical equipment will be required. Specifically, the analysis will include the following:

- Select appropriate noise descriptors. Appropriate noise descriptors to describe the existing noise environment will be selected. The L_{eq} and L_{10} levels will be the primary noise descriptors used for the EIS analysis. Other noise descriptors including the L_1 , L_{10} , L_{50} , L_{90} , L_{min} , and L_{max} levels will be examined when appropriate.
- Based on the traffic studies (see Task 9, “Transportation”), perform a screening analysis to determine whether there are any locations where there is the potential for the Proposed Project to result in significant noise impacts (i.e., doubling of Noise passenger car equivalents, or PCEs) due to project generated traffic.
- Select receptor locations for building sound attenuation analysis purposes. A maximum of four (4) receptor locations will be selected. Receptor locations will include locations adjacent to the Proposed Project area.
- Perform 20-minute measurements at each receptor locations during typical weekday and weekend AM, midday, and PM peak periods. L_1 , L_{10} , L_{50} , L_{90} , L_{min} , and L_{max} values will be recorded. Where site access and security permits, a 24-hour continuous measurement may be performed in lieu of a 20-minute measurement.
- Data analysis and reduction. The results of the noise measurement program will be analyzed and tabulated.
- Determine future noise levels in the Future No Build condition without the proposed actions for the analysis year using existing noise levels, acoustical fundamentals and either proportional modeling or the Traffic Noise Model (TNM).
- Determine future noise levels with the Proposed Project. At the mobile source noise analysis receptor locations, noise levels with the proposed actions will be determined for the analysis year using existing noise levels, acoustical fundamentals and either proportional modeling or the TNM.
- Compare predicted noise levels with *CEQR Technical Manual* impact evaluation criteria. Existing noise levels and future noise levels, both with and without the proposed actions, will be compared with the CEQR noise impact criteria to determine project impacts.
- Determine the level of attenuation necessary to satisfy *CEQR Technical Manual* criteria to mitigate any significant impact. The level of building sound attenuation necessary to satisfy such requirements is a function of exterior noise levels and will be determined. Measured values will be compared to appropriate standards and guideline levels. As necessary, recommendations regarding general noise attenuation measures needed for the Proposed Project to achieve compliance with standards and guideline levels will be made.

TASK 15. SOCIOECONOMIC CONDITIONS

Socioeconomic impacts can occur when a Proposed Project directly or indirectly changes economic activities in an area. The purpose of the socioeconomic assessment is to disclose changes that would be created by a proposed action and identify whether they rise to a significant level. The socioeconomic chapter will examine the effects of the proposed actions on socioeconomic conditions on the Project Site and in the surrounding neighborhood.

The analysis will follow the guidelines of the 2014 *CEQR Technical Manual* in assessing the Proposed Project's effects on socioeconomic conditions. The analysis will present sufficient information regarding the effects of the project to make a preliminary assessment either to rule out the possibility of significant impacts or to determine that more detailed analysis is required to make a determination as to impacts. According to *CEQR Technical Manual* guidelines, the five principal issues of concern with respect to socioeconomic conditions are whether a proposed action would result in significant impacts due to: (1) direct residential displacement; (2) direct business and institutional displacement; (3) indirect residential displacement; (4) indirect business/institutional displacement; and (5) adverse effects on a specific industry. As detailed below, the Proposed Project warrants an assessment of socioeconomic conditions with respect to indirect business and residential displacement.

As the Project Site does not support any active business or residential uses, the Proposed Project would not result in the direct displacement of any residents or businesses, and therefore, an assessment of potential socioeconomic effects due to direct displacement is not warranted for the Proposed Project. In addition, the *CEQR Technical Manual* indicates that an assessment is appropriate if a project is expected to affect conditions within a specific industry. This could affect socioeconomic conditions if a substantial number of workers or residents depend on the goods or services provided by the affected businesses, or if the project would result in the loss or substantial diminishment of a particularly important product or service within the city. The project site does not include any commercial uses, and therefore the Proposed Project would not directly displace any businesses or employees. Moreover, the proposed actions are site-specific, and do not include any citywide regulatory changes that would adversely affect the economic and operational conditions of certain types of businesses or processes. Therefore, the proposed actions would not result in significant adverse effects on specific industries, and no further analysis of this issue is required in the EIS.

The All Commercial scenario would result in an incremental increase of more than 200,000 square feet of new commercial uses to the area, which is the *CEQR Technical Manual* threshold for "substantial" new development, a preliminary socioeconomic analysis of indirect business displacement is warranted. The All Residential scenario for the Proposed Project would exceed the *CEQR Technical Manual* threshold of 200 residential units, and therefore, a preliminary socioeconomic analysis of indirect residential displacement is warranted.

In conformance with the *CEQR Technical Manual* guidelines, the assessment of indirect business displacement and indirect residential displacement will begin with a preliminary assessment to determine whether a detailed analysis is necessary. Detailed analyses will be conducted if the preliminary assessment cannot definitively rule out the potential for significant adverse impacts. If the detailed assessments are necessary, they will be framed in the context of existing conditions and evaluations of the future No-Action and With-Action conditions in 2022, including any population and employment changes anticipated to take place by the analysis year for the proposed actions.

TASK 16. PUBLIC HEALTH

According to the *CEQR Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on public health may occur as a result of a Proposed Project, and if so, to identify measures to mitigate such effects.

According to the guidelines of the *CEQR Technical Manual*, a public health analysis is not warranted if a project does not result in a significant unmitigated adverse impact in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. The project will result in ending on-street and unenclosed vehicle storage of DSNY collection trucks and other equipment, and will store the vehicles indoors instead. DSNY trucks use advanced clean diesel technology and ultra-low sulfur diesel fuel. DSNY light duty vehicles are subject to local law requirements that they have the lowest emissions in their class; most are hybrid-electric. Based on the environmental reviews of other DSNY garages projects, no impacts to public health from the relocation, construction and operation of a modern garage facility are expected. Commercial or residential mixed use development on Parcels A and B would not be uses that would raise significant public health concerns. If unmitigated significant adverse impacts are identified in any one of the analyzed technical areas, and the lead agency determines that a public health assessment is warranted, an analysis will be provided for that specific technical area.

TASK 17. NEIGHBORHOOD CHARACTER

The Proposed Project involves a proposed sanitation garage facility with indoor vehicle storage on a site currently occupied by institutional uses in a neighborhood with institutional buildings of comparable scale. In addition, commercial and/or residential development is proposed for Parcels A and B. According to the *CEQR Technical Manual*, neighborhood character is a combination of various elements that give neighborhoods their distinct “personality.” These elements may include a neighborhood’s land use, urban design, visual resources, historic resources, socioeconomics, transportation, and/or noise, and they are considered together to determine a project’s effects on neighborhood character. In assessing the impact of this project upon neighborhood character, the DEIS will consider how these elements of the environment interact to create the context and feeling of a neighborhood and how the Proposed Project may affect that context and feeling. DSNY’s preliminary assessment in the EAS found that the Proposed Project may result in a significant adverse impact to land use, zoning and public policy; transportation; and noise; and that these areas warrant further study to determine if such impacts are significant and can be mitigated. The extent to which these elements constitute significant components of neighborhood character will be assessed. Impacts concerning historic resources, shadows, open spaces, and socioeconomic conditions will also be considered, as appropriate. Following the guidance in the *2014 CEQR Technical Manual*, the assessment of neighborhood character will consist of the following:

- Define the salient features of the Project Site’s neighborhood, using a 400 foot radius of the Project Site, with a particular focus on land use, urban design, visual resources, traffic, and noise. Drawing on these technical areas, discuss whether the Proposed Project has the potential to

adversely impact the identified salient features. The discussion here will focus on the major characteristics of the neighborhood and how they relate to the project area's overall character.

- If the Proposed Project has the potential to adversely affect a determining element of neighborhood character, conduct a more detailed analysis of neighborhood character impacts. This analysis would summarize changes that can be expected in the character of the area in the future without the proposed actions, based on planned development projects, public policy initiatives, and planned public improvements.,.
- Assess and summarize the Proposed Project's effects on neighborhood character using the analysis of impacts as presented in other relevant analyses (particularly land use, urban design and visual resources, traffic, and noise).

TASK 18. CONSTRUCTION

Construction impacts, though temporary, can have an effect on the adjacent community, as well as on people passing through the area. Construction impacts are usually important when construction activity has the potential to affect transportation conditions, archaeological resources and the integrity of historic resources, community noise patterns, mitigation of hazardous materials, and air quality conditions. This task will describe the construction schedule and logistics, discuss anticipated on-site activities, and provide estimates of construction workers and truck deliveries.

According to the *CEQR Technical Manual*, construction duration is often broken down into short-term (less than two years) and long-term (two or more years). Where the duration of construction is expected to be short-term, any impacts resulting from such short-term construction generally do not require detailed assessment. Construction of the Proposed Project would be implemented in a single phase and would be long-term, lasting up to approximately 36 months. It would involve the construction of an DSNY garage facility and the redevelopment of Parcels A and B with either commercial or residential uses. It is expected that all proposed buildings would be completed and occupied concurrently by the project's anticipated Build Year of 2022.

This chapter will describe the construction schedule for the Proposed Project and provide an estimate of activity on-site. In addition, unless otherwise specified, a qualitative analysis of the effects of construction activities will be performed. The construction assessment for the project will focus on areas where construction activities may pose specific environmental problems. The analysis will also consider other construction projects, ongoing and planned, that would occur in the area during construction of the Proposed Project. Where potential significant impacts are predicted, mitigation measures to avoid or reduce potential significant adverse impacts will be identified. In circumstances in which construction activities impact the surrounding community for a prolonged period, those impacts will be analyzed in greater detail.

Technical areas to be analyzed include:

- **Transportation Systems.** This assessment will consider losses in lanes, sidewalks, off-street parking on the Project Site, and effects on other transportation services, if any, during the construction periods, and identify the increase in vehicle trips from construction workers and equipment. Based on the trip projections of activities associated with peak construction and completed portions of the Proposed Project, an assessment of potential impacts during construction and how they are compared to the project's operational impacts will be provided. This scope assumes that this assessment can be made via a qualitative comparison

using the impact findings from the operational analysis and would not require a separate detailed analysis. Where appropriate, the relevant mitigation measures will be discussed.

- **Air Quality.** The construction air quality impact section will contain a qualitative discussion of both mobile source emissions from construction equipment and worker and delivery vehicles, and fugitive dust emissions. It will discuss measures to reduce impacts and may include components such as: diesel equipment reduction; clean fuel; best available tailpipe reduction technologies; utilization of equipment that meets specified emission standards; and fugitive dust control measures, among others.
- **Noise.** The construction noise impact section will contain a qualitative discussion of noise from each phase of construction activity. Appropriate recommendations will be made to comply with NYCDEP Rules for Citywide Construction Noise Mitigation and the New York City Noise Control Code.
- **Hazardous Materials.** In coordination with the Hazardous Materials chapter, determine whether the construction of the project has the potential to expose construction workers to contaminants.
- **Other Technical Areas.** As appropriate, discuss other areas of environmental assessment for potential construction-related impacts.
- If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

TASK 19. MITIGATION

Where significant impacts have been identified in the analyses discussed above, measures will be described to mitigate those impacts. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

TASK 20. ALTERNATIVES

The purpose of an alternatives analysis is to examine reasonable and practicable options that avoid or reduce project-related significant adverse impacts while achieving the goals and objectives of the Proposed Project. The specific alternatives to be analyzed are typically finalized as project impacts are clarified. CEQR/SEQRA requires an analysis of a No Action Alternative (without the proposed actions). Other alternatives to be analyzed could possibly involve different design alternatives, alternative Garage locations and/or a different zoning map change. The analyses will be primarily qualitative, except where specific project impacts have been identified (e.g., traffic intersections with significant adverse impacts). However, the qualitative analysis will be of sufficient detail to allow comparisons of associated environmental impacts and attainment of project goals and objectives. This section will include a discussion of the site screening process done for selection of the Project Site for the DSNY Garage Complex.

TASK 21. SUMMARY CHAPTERS

Several summary chapters will be prepared, focusing on various aspects of the EIS, as set forth in the regulations and the *CEQR Technical Manual*. They are as follows:

1. *Executive Summary.* Once the EIS technical sections have been prepared, a concise executive summary will be drafted. The executive summary will use relevant material from the body of the EIS to describe the proposed actions, environmental impacts, measures to mitigate those impacts, and alternatives to the proposed actions.
2. *Unavoidable Adverse Impacts.* Those impacts, if any, that could not be avoided and could not be practicably mitigated will be described in this chapter.
3. *Growth-Inducing Aspects of the Proposed Actions.* This chapter will focus on whether the proposed actions would have the potential to induce new development within the surrounding area.
4. *Irreversible and Irretrievable Commitments of Resources.* This chapter focuses on those resources, such as energy and construction materials, that would be irretrievably committed should the Proposed Project be built.