CHAPTER 22 ENVIRONMENTAL REVIEW: WEST 59TH STREET CONVERTED MTS

22.1 Introduction

The results of the environmental analyses of the West 59th Street Converted MTS are presented in the following sections:

22.2 Land Use, Zoning, and Public Policy
22.3 Socioeconomic Conditions
22.4 Community Facilities and Services
22.5 Open Space
22.6 Cultural Resources
22.7 Urban Design, Visual Resources, and Shadows
22.8 Neighborhood Character
22.9 Natural Resources
22.10 Hazardous Materials
22.11 Water Quality
22.12 Waterfront Revitalization Program
22.13 Infrastructure, Solid Waste and Sanitation Services, and Energy
22.14 Traffic, Parking, Transit, and Pedestrians
22.15 Air Quality
22.16 Odor
22.17 Noise
22.18 Commercial Waste to the West 59th Street Converted MTS

Section 2.7 provides a summary description of the site and important characteristics of the facility design. A detailed discussion of the methodologies that were applied in conducting each analysis is provided in Chapter 3. Supplemental information on the site or the study area is provided in the following sections when appropriate to the analysis.

22.2 Land Use, Zoning, and Public Policy

22.2.1 Existing Conditions

22.2.1.1 Definition of the Study Areas

The primary study area for the land use, zoning, and public policy analyses is defined as the area within ¼-mile of the site (see Figure 22.2-1). The secondary study area is defined as the area between ¼-mile and ½-mile of the site (see Figure 22.2-2). Section 3.4 describes the methodology employed in these analyses and Section 2.7 provides information on existing land uses and operations on the site.

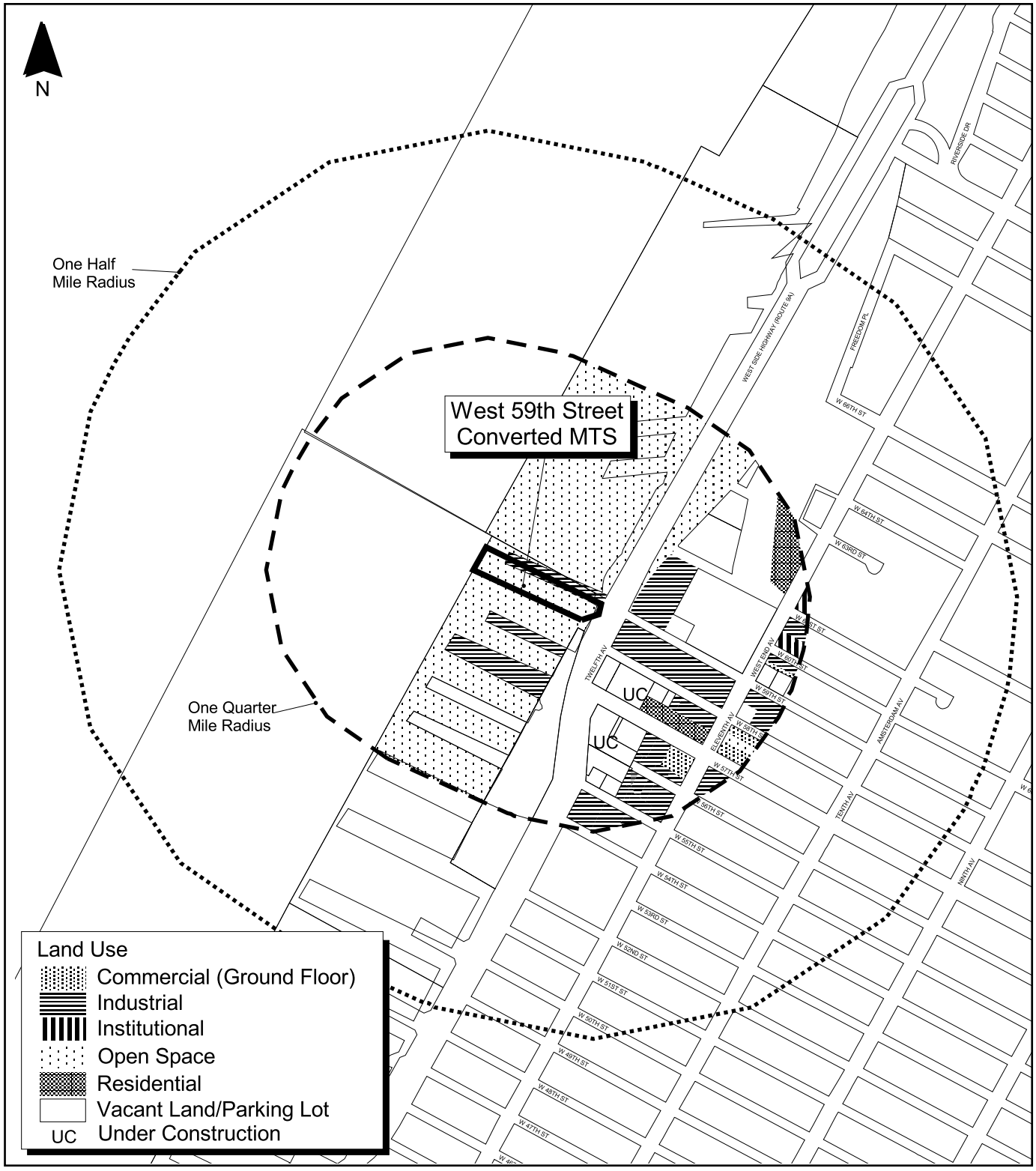
22.2.1.2 Land Use Patterns

22.2.1.2.1 General Context

Set in the larger context of Manhattan's changing Hudson River waterfront, west of the Clinton/Lincoln Center neighborhoods, the site is surrounded by a large surface parking lot, construction sites, industrial activities, and the elevated West Side (Miller) Highway.

22.2.1.2.2 Land Uses in the Primary Study Area

The primary study area is characterized by active industrial uses, municipal operations, and transportation infrastructure, as well as extensive construction activity. The elevated Miller Highway itself dominates the study area immediately surrounding the site, as it touches down to grade at West 57th Street, as does the massive generating plant across Twelfth Avenue and the large surface parking lot north of West 59th Street. In addition to the plant, Consolidated Edison occupies Pier 98 (at the terminus of West 58th Street), immediately south of the MTS site, which is used for fuel transfer operations. Just south of this pier is Pier 97, which DSNY utilizes for vehicle parking and various storage operations. Piers 95 and 96 (at the terminus of West 55th and West 56th Streets, respectively), which are under construction as part of the



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning
This figure illustrates predominant land uses by lot in the primary study area.

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Figure 22.2-1 Land Use in the Primary Study Area

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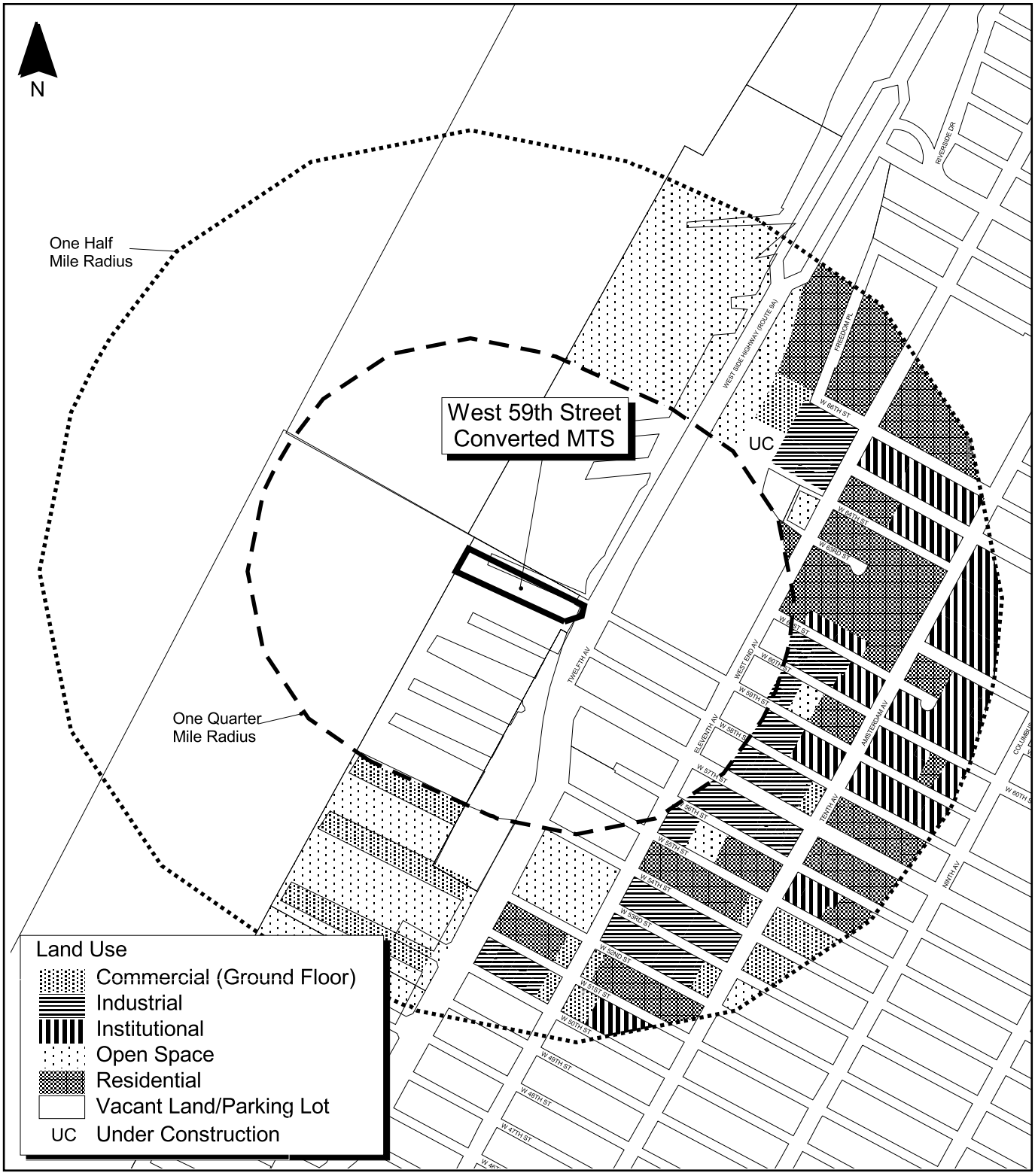

Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning
This figure illustrates predominant land uses by lot in the secondary study area.

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Figure 22.2-2 Land Use in the Secondary Study Area

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Hudson River Park's "Clinton Cove Park" will feature a boathouse and other waterfront amenities. This section of park is scheduled to open in 2005. (Pier 97 is also planned to be rehabilitated in the future as part of the Clinton Cove Park and may include passive and active recreational areas.)

East of Twelfth Avenue between West 58th and West 57th Streets is the expansive ArtKraft Sign Corp. factory, as well as other industrial activities located along the side streets. Interspersed with these one- and two-story warehouses are parking garages and surface lots. A large site has been cleared for the new DSNY District (4, 4A and 7) Garage construction across Twelfth Avenue, spanning West 56th Street (from West 55th to West 57th Streets). It is due to be completed by 2007. Further east, the land use pattern changes with a mix of century-old low-rise tenement buildings and recent high-rise apartment towers that have come to characterize the Clinton neighborhood.

Directly north of the site is an unbuilt section of Riverside Park South, which will connect the developing upland residential and commercial development north of West 59th Street to the waterfront under the elevated Miller Highway structure. The northern section, between West 65th and West 72nd Streets, is already completed and features expansive lawn areas, landscaped waterfront walkways, seating and a new 750-foot pier (West 70th Street). The park segment between West 62nd and West 65th Streets (Phase 3) is actively under construction and due to be completed in 2005. The planned park terminates at West 59th Street, where the upland area is restricted to street right-of-way, such that the adjacent bicycle/pedestrian path is the only physical and visual link between Riverside Park South and the emerging Hudson River Park to the south.

The West End Towers Park is a relatively new park that is privately owned, though open to the public on West End Avenue, between West 63rd and West 64th Streets. De Witt Clinton Park is located south of the site, between West 52nd and West 54th Streets and Eleventh and Twelfth Avenues.

The Riverside South Development will ultimately extend from West 59th to West 72nd Streets on the site of the former Penn Central Yards. In conjunction with the park, the northern segments – between West 65th and West 72nd Streets – were completed first. Construction continues as a new ABC studio building is rising at West 66th Street.

Further northeast of the site (along West End/Eleventh Avenue and Amsterdam/Tenth Avenue), the Upper West Side mix of high-rise residential buildings, institutions and neighborhood shopping has moved steadily southward, though upscale car dealership and headquarters still remain, particularly on Eleventh Avenue (and West 57th Street).

22.2.1.2.3 Land Uses in the Secondary Study Area

Fairly discrete concentrations of industrial, residential, commercial and institutional uses characterize the secondary study area. In addition to Riverside South, whose residential towers line the west side of West End Avenue north of West 61st Street, residential uses can also be found concentrated between Tenth and Eleventh Avenues north of West 63rd Street, south of West 56th Street, and east of Tenth Avenue between West 56th and West 63rd Streets. Large new residential developments have recently opened in the secondary study area, including the Westport (500 West 56th Street) with more than 300 apartments and ground-floor retail; and the Clinton Parkview Apartments (555 West 52nd Street) with 96 apartments and space for a community garden and offices. The Clinton Parkview Apartments is the first entirely income-restricted building to be constructed in Clinton since 1981. Otherwise, the blocks between Tenth and Eleventh Avenues are mostly industrial and institutional in nature, featuring uses such as John Jay College of Criminal Justice, Fordham University at Lincoln Center and St. Luke's/Roosevelt Hospital Center. New residential buildings are proposed or under construction within the area as well. Commercial uses are concentrated south of West 58th Street.

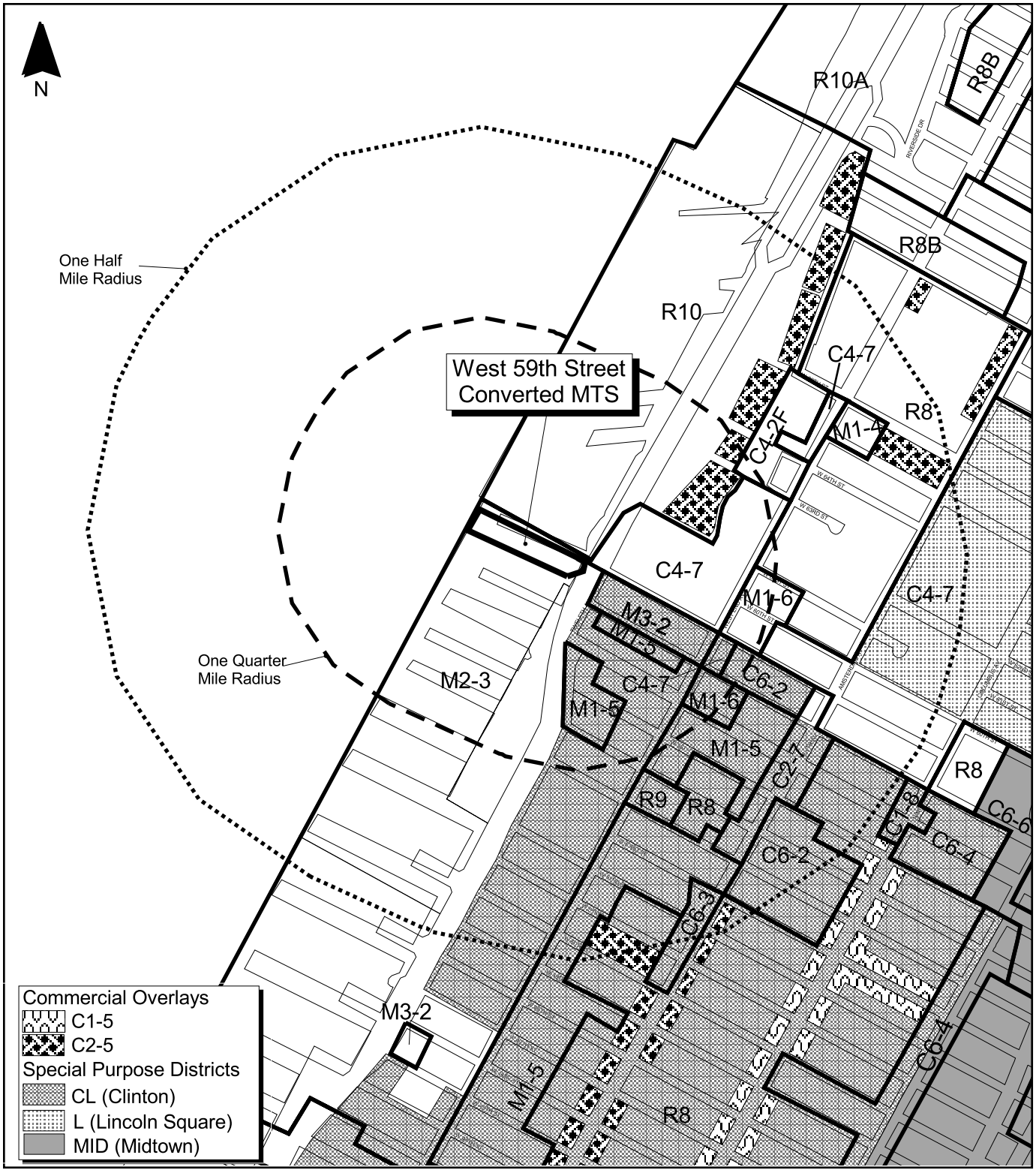
DeWitt Clinton Park is a nearly six-acre City park, located approximately ¼-mile south of the site, between Eleventh and Twelfth Avenues and West 52nd and West 54th Streets. South of the park, the remainder of the study area is largely residential with small-scale, ground-floor commercial properties lining both sides of Eleventh Avenue southward.

22.2.1.3 Current Zoning On and Near the Site

22.2.1.3.1 Zoning Within the Primary Study Area

The site is located at the northern edge of an M2-3 manufacturing zone, which extends south along the Hudson River waterfront to the Gansevoort Peninsula and then continues south again to Battery Park City. Adjacent to the site's northern boundary, is a large R10 district that covers the waterfront and the residential portion of the new Riverside South Development. Directly northeast of the site is a C4-7 zoning district and an M1-6 district.

Southeast of the site, the immediate area is predominantly zoned for a range of industrial uses (M1-5 and M3-2). There are also two small recently-rezoned commercial districts, east of West End Avenue, between West 59th and West 60th Streets. This rezoning allows the construction of a 31-story apartment building and underground garage. This is one of several rezoning actions since 1999 that allows land uses and building forms that are compatible with the context of the blocks north and northwest of West End Avenue. The Clinton Special Purpose District also extends south of West 59th Street and west to Twelfth Avenue in the primary study area. This zoning district was established in 1974 to preserve the residential character of the community, located between the waterfront on the west and the growing CBD on the east. (See Figure 22.2-3.)



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

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Figure 22.2-3 Zoning

West 59th Street Converted MTS

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22.2.1.3.2 Zoning Within the Secondary Study Area

As in the primary study area, the shoreline south of the site is zoned M2-3. Northeast of the site is a mix of zoning, with mostly commercial (C4-2F, C4-7) and high-density residential districts (R10 and R8). There are a couple of discrete industrial zones on West End Avenue (M1-6 and M1-4), but largely it is zoned for residential and commercial activities. The Lincoln Square Special Purpose District extends into the secondary study area between West 60th and West 65th Streets. This district was created to protect and promote the unique cultural and architectural character of the Lincoln Center area. Southeast of the site is a mix of commercial (C6-2, C2-7, C6-3), industrial (M1-6 and M1-5) and residential (R8 and R9) districts, including a portion of the Clinton Special Purpose District.

22.2.1.4 Plans and Policies

The site lies right at the border of CD 4 (south of West 59th Street) and CD 7 (to the north). In the FY 2004 CDNS prepared by CD 4, the Governing Board of the CDs lists criteria for new development proposed for the Clinton Urban Renewal Area, which covers the mixed-use community between West 50th and West 56th Streets and Tenth and Eleventh Avenues southeast of the site, to protect residents and businesses from displacement. A 197-a Plan is currently being prepared for the South Hell's Kitchen (Chelsea) area. The statement urges the relocation of the DSNY garage and salt storage to another pier in the CD to minimize potential conflict with the proposed Hudson River Park. In the statement, the Governing Board supports improvement and maintenance of DeWitt Clinton Park and the improvement of the West 59th Street Recreation Center, a former bath house structure with pool located between West 59th and West 60th Streets east of Eleventh Avenue.

In its 2004 CDNS, CD 7 expressed general concerns of its generally residential district. There are no statements referring to DSNY, the site or its environs.

The Plan for Reach 3, which includes the site and extends south from West 59th Street to several blocks below Canal Street, makes no recommendations pertinent to the West 59th Street Converted MTS. The site and the Consolidated Edison Pier (Pier 98) to the south are working waterfront sites, though Pier 97 is recommended as a public access site and a continuous "esplanade" is recommended for part of the "Hudson River Valley Greenway", Twelfth Avenue throughout the study area. In the intervening years, the bikeway/pedestrian path along Route 9A has been constructed.

22.2.2 Future No-Build Conditions

- The new ABC Studio in Riverside South, is are currently under construction on West End Avenue between West 64th and West 66th Streets. It is scheduled to be completed in 2005. Other development parcels (residential and mixed use) within The Riverside South project area are expected to be under construction in 2006.

- Clinton Cove Park (part of Hudson River Park) is currently under construction on Piers 95 and 96. It will include a large grassy area and feature a boathouse and kayak launch on Pier 96, and a passive open space near the river on Pier 95. It is due to be completed in Spring 2005. Pier 97, which currently functions as a DSNY storage pier, will ultimately be rehabilitated for active recreation and historic ships when it is redeveloped as part of the Hudson River Park (schedule unknown).

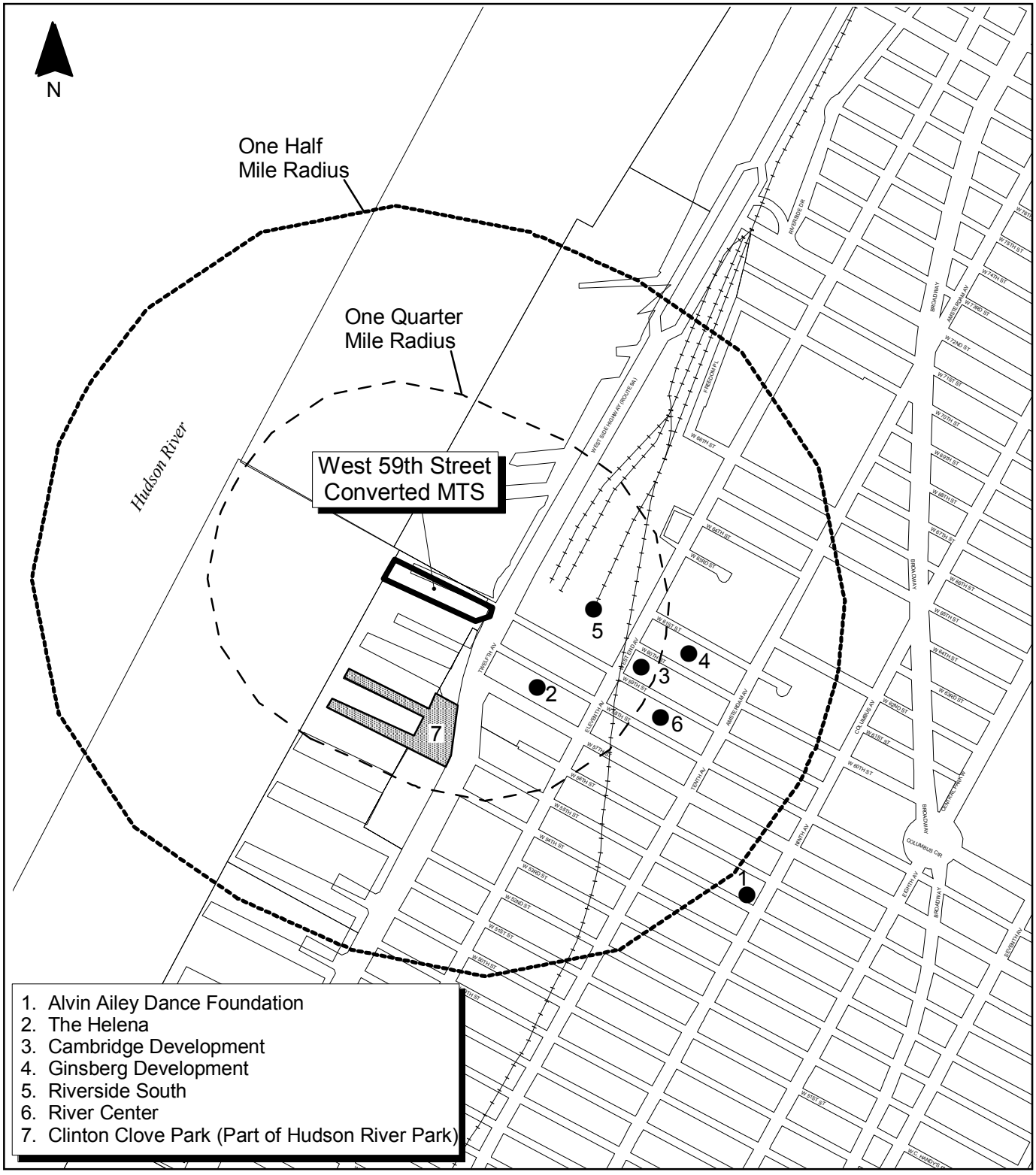
- The Alvin Ailey Dance Foundation is currently completing construction of a 25,970-square-foot studio and 5,000-square-foot theater at West 55th Street and Ninth Avenue. It is expected to open in late 2004.

- River Center is a mixed-use project proposed (and approved) for a site located between 58th and 59th Streets and Tenth and Eleventh Avenues. It will contain 1,200 dwelling units; 166,000 square feet of retail space; 900,000 square feet of community facility space; and 655 associated parking spaces.

- Construction is underway on The Helena - a Durst Organization apartment building, located between West 57th and West 58th Streets and Eleventh and Twelfth Avenues. The 300,000-square-foot luxury residential tower stands 31 stories and will be ready for occupancy by late 2004.

- Cambridge Development has proposed the construction of 224 to 309 dwelling units combined with up to 20,000 square feet retail space on West End Avenue at West 59th Street. It is assumed to be completed in 2005.

These planned development sites are shown in Figure 22.2-4.



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.2-4 Planned Development Sites

West 59th Street Converted MTS

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The Passenger Ship Terminal located on Piers 88, 90 and 92 (at the southern end of, and beyond, the secondary shady area) is planned for internal site circulation and signage improvements to upgrade pedestrian and vehicular movements within the terminal. Pier 94 (at 54th Street) would continue to function as a venue for trade shows in the future.

In the future No-Build Condition, the site will remain DSNY property and the existing MTS will continue to be used for the transfer of paper recyclables from truck to barge.

22.2.3 Potential Impacts with the West 59th Street Converted MTS

22.2.3.1 Land Use and Zoning

The West 59th Street Converted MTS would entail replacing the existing MTS with a new facility that would feature containerization functions. It would represent a slight physical upgrading of the site itself. The facility's processing operation would be designed to containerize waste and prepare containers for transfer to barge for disposal outside of the City. The existing MTS, which extends over the water, would be demolished and the new, larger one would be built in almost precisely the same place, still extending as a linear pier, with a footprint resembling those of neighboring piers. The location of the entrance to the site would remain unchanged.

The addition of waste containerization and associated truck traffic to ongoing recycling activities on the site would not be a change in on-site land use, nor would it encourage similar types of land uses or discourage other types of land use in the study areas, (e.g. residential, commercial and parkland development) which have already been redefining the area West of West End/10th Avenue. Therefore, no significant adverse impacts to land use or zoning in the primary or secondary study areas would result.

22.2.3.2 Consistency with Public Plans and Policies

With the exception of park development (Riverside Park South) to the north and the Hudson River Park, and completion of the Hudson River Valley Greenway further south (the pedestrian/bike path alongside the MTS), there are no recommendations or objectives stated in relevant plans or policies that specifically relate to the site, study area or West 59th Street Converted MTS. Continued municipal waste transfer activity on the site is a permitted use noted in the Hudson River Park Act Plan and would therefore not conflict with its implementation. The Converted MTS would similarly have no effect on the completion or use of Riverside Park South to the north. The adjacent bike/pedestrian path segment is already in place and will continue to serve as a connection to the parks north and south of the site's industrial sub-area.

22.3 Socioeconomic Conditions

22.3.1 Existing Conditions

22.3.1.1 Definition of the Study Areas

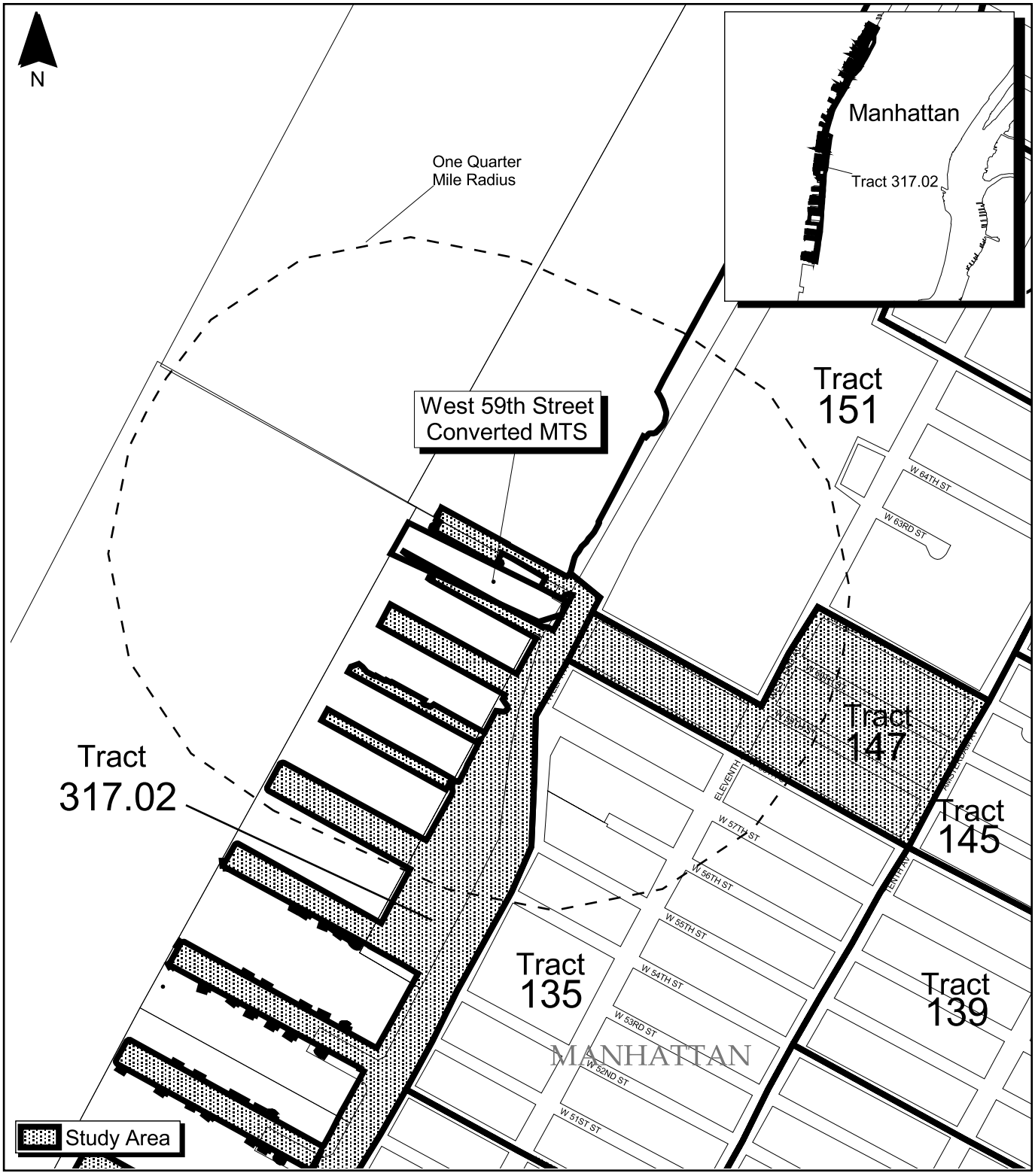
Two study areas were used for the analysis of socioeconomic conditions: (1) a demographic study area based roughly on census tracts within ¼-mile of the site, and (2) a study area related to economic activity that generally covers a larger area that extends ½-mile from the site. (Refer to Section 3.5 for a more detailed description of study area delineation.) The demographic study area is comprised of Census Tracts 147 and 317.02 (see Figure 22.3-1), which include the waterfront south of West 59th Street and an area along West 59th Street inland to Tenth Avenue. For comparison purposes, both 1990 and 2000 census data were gathered at the borough and City levels. The study area for the assessment of potential impacts on economic conditions extends as far north as West 69th Street, as far south as West 49th Street, and far enough east to include Tenth Avenue.

Detailed socioeconomic information referred to in the text but not presented in table form may be found in Appendix B.

22.3.1.2 Demographic Characteristics

22.3.1.2.1 Population

The total 2000 study area population was 2,198 persons (see Table 22.3-1). In terms of total population growth from 1990 to 2000, the study area experienced a considerably greater percentage increase (72%) than did the borough (3%) and the City (9%) during the same period.



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

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Figure 22.3-1 Census Tracts

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The age-sex distribution was slightly different from the population distribution of the borough and the City, with an even greater proportion of females to males within the study area. The study area contained a slightly greater percentage of children and teenagers than the borough but less than the City; approximately 23% of the study area population was under the age of 20, compared to 19% for the borough and 27% for the City.

Table 22.3-1
1990-2000 Population

	Study Area	Manhattan	City
2000	2,198	1,537,195	8,008,278
1990	1,278	1,487,536	7,322,564
Percent Change	+72.0%	+3.3%	+9.4%

Source: U.S. Census 1990, 2000

22.3.1.2.2 Racial and Ethnic Characteristics

The 2000 study area population had a far smaller proportion (6%) of people of Hispanic origin (all races) than did Manhattan or the City (27%). Of the 94% not of Hispanic origin, 9% were Black, 23% were Asian and 64% were White. In Manhattan and the City, Blacks represented approximately 21% and 33% of the non-Hispanic populations, respectively; Asians represented 13% at both levels and Whites represented 63% and 48%, respectively.

From 1990 to 2000, the number of study area residents of Hispanic origin decreased by 50% while this population grew proportionally in the borough (10%) and in the City (24%) during the same period. Because the 2000 Census introduced the option for respondents to identify themselves as two or more races, racial categories are not directly comparable with 1990.

22.3.1.2.3 Families and Households

There were 326 families in the study area in 2000 and the percentage of these families that had children under the age of 18 (about 40%) was slightly smaller than those families in Manhattan (43%) and in the City (49%). There was a considerably larger percentage of married-couple families in the study area (71%) than in the borough (62%) and the City (62%), and 51% of these families had children, greater than Manhattan (39%) but about the same as the City (48%).

Eighteen percent of the families in the study area were headed by a female householder. This percentage is lower than that in the borough or the City (both 30%). Only 7% of the female householder families in the study area had children under the age of 18, far less than the percentages in the borough (53%) and the City (55%).

There were 789 households in the study area in 2000, with an average household size of 1.7 persons, less than Manhattan (2.0 persons) or the City (2.6 persons).

From 1990 to 2000, the number of households in the study area increased by 30%, far greater than the 3% increase in the borough and 7% increase in the City.

22.3.1.2.4 Employment

Within the study area, 71% of persons aged 16 and older participated in the labor force in 2000, greater proportionally than the 64% in Manhattan and 58% in the City. The majority of these people in all three areas were employed as private wage and salary workers.

Five percent of employed persons 16 and over were government workers, compared to Manhattan (10%) and the City (16%). Moreover, 3% of the study area's working population was self-employed, less than that of Manhattan (9%) and the City (6%).

From 1990 to 2000, the number of employed persons within the study area increased by 101%, while the number of employed persons in the borough and the City remained approximately the same. Among employed persons, those engaged in government jobs decreased by 21%, compared to a 15% decrease in the borough and a 10% decrease in the City.

Current forecasts indicate that about 280,288 employees worked in Manhattan CDs 4 and 7 in 2005.[1]

[1] Based on New York Metropolitan Transportation Council, Population and Employment Forecasts, approved 7-17-03.

22.3.1.2.5 Housing

Most housing units in the study area were constructed in two periods – 1970 to 1979 and 1995 to 2000 – while the majority of housing units in both Manhattan and the City were built before 1960. As of 2000, there were 866 housing units in the study area with a vacancy rate of about 3.7%, lower than either the borough (8%) or the City (6%). Nearly all the housing units were renter-occupied (96%), considerably greater than the rate in the borough (74%) or the City (66%). Median monthly rent ($1,174) was far higher than in the borough ($796) or the City ($705).

The turnover in the study area (63%) from 1995 until 2000 was greater than that of the borough (45%) and the City (43%) in the same period.

From 1990 to 2000, a total of 344 housing units were added in the study area, representing a 66% increase, markedly greater than the borough (2%) or the City (7%).

22.3.1.2.6 Education

Although the proportion of children in the study area was similar to that of the larger areas, the rate of school enrollment (49%) was approximately twice that of the borough (24%) or the City (29%). Of those enrolled in school within the study area in 2000, 8% were enrolled in elementary school or high school and 89% were enrolled in college or beyond. In Manhattan, 51% were enrolled in elementary or high school and 39% in college or beyond, while 62% of the City's enrolled population were in elementary or high school and 27% in college or beyond.

The study area witnessed a 388% increase in the number of persons enrolled in school from 1990 to 2000, with the largest increase in enrollments occurring at the college level (804%), whereas the borough experienced an 8% increase in enrollees and, of that, a 98% increase in pre-primary students, comparable to the City (18% and 150%, respectively).

The study area had a far higher educational attainment level than either the borough or the City. A markedly larger proportion (94%) of the study area population aged 25 and over had a college degree or some college education, compared to Manhattan (65%) and the City (48%). The study area had a smaller percentage of people with only high school diplomas (4%) compared to the borough (14%) and a considerably smaller percentage than that of the City (24%).

Consistent with the higher educational levels, from 1990 to 2000 the study area witnessed rising levels of educational attainment. The number of college graduates increased 74%, and the same trend was evident in the borough and the City, which experienced increases of 20% and 29%, respectively. Meanwhile, the number of people with less than a college education declined significantly in the study area overall.

22.3.1.2.7 Income and Poverty

In 2000, both median household income ($68,750) and median family income ($93,164) were far higher than in Manhattan ($47,030 and $50,229, respectively) and the City ($38,293 and $41,887, respectively). Compared to the larger two areas, a greater percentage of study area households were concentrated at the highest income levels, with the majority of annual household incomes (64%) above $50,000. Only 10% of households in the study area had incomes of $25,000 or below, compared with 30% in the borough and 35% in the City.

Within the study area, the percentage of families living below the poverty level (2%) was far less than that of Manhattan (18%) or the City (19%). However, there were no families living below the poverty level with children under the age of 18, which contrasts greatly with Manhattan (48%) and the City (55%).

There were no people either under the age of 18, or 65 and older, living below the poverty level in the study area as compared to 32% and 19% for the borough, and 30% and 18% for the City, respectively.

9.3.1.3 Economic Conditions

The portion of Manhattan's West Side within approximately ½-mile of the site contains light industrial development, including waterfront piers, warehouses and television studios. Ground-floor commercial establishments serving the neighborhood line Eleventh Avenue, along with several of Manhattan's major automobile retail establishments.

22.3.2 Future No-Build Conditions

22.3.2.1 Demographic Characteristics

Regional projections indicate that the population of Manhattan CDs 4 and 7 will remain about the same as current conditions.[2]

22.3.2.2 Economic Conditions

The current paper recycling transfer operations at the existing MTS are expected to continue in the Future No-Build Conditions.

Several new developments are predicted for the area by 2006, with the primary changes to the socioeconomic landscape being the introduction of additional residential space and some retail. The second phase of the Riverside South development will be under way or complete, replacing much of the parking lot and vacant land east of the site on West End Avenue between West 59th and West 60th Streets with new residential and mixed-use towers. It is reasonable to assume that new retail establishments will follow to serve the new residential population.

Regional projections indicate that employment in Manhattan CDs 4 and 7 will remain about the same as current conditions.[3]

[2] Based on New York Metropolitan Transportation Council, Population and Employment Forecasts, approved 7-17-03.
[3] Ibid.

22.3.3 Potential Impacts with the West 59th Street Converted MTS

The West 59th Street Converted MTS represents the reactivation of solid waste transfer operations on the site with added containerization operations. Therefore, it would not result in socioeconomic changes in the study area. No significant direct or indirect impacts are anticipated related to socioeconomic conditions.

22.3.3.1 Residential Impacts

No direct residential displacement would occur as a result of the West 59th Street Converted MTS, and land use and neighborhood character analyses predict no adverse impacts. (See Sections 22.2.3.1 and 22.8.3, respectively.)

22.3.3.2 Direct Business and Institutional Impacts

The West 59th Street Converted MTS would not result in the direct displacement of businesses or institutional uses. The transfer of paper recyclables from truck to barge that would continue in the Future No-Build Condition would continue as part of the West 59th Street Converted MTS.

22.3.3.3 Indirect Business and Institutional Impacts

The West 59th Street Converted MTS would not result in indirect impacts to study area businesses or institutions since local truck routes follow busy avenues and side streets that will remain predominantly industrial in nature. No traffic, air or noise impacts or neighborhood character impacts are predicted.

22.3.3.4 Employment Impacts

The West 59th Street Converted MTS is expected to generate a total of 85 jobs, including supervisors, equipment operators, mechanics, laborers and clerical personnel. In addition to the direct positive employment impacts (likely to reach beyond the study area), the new workers would generate a minor amount of indirect economic benefits in the study area through local spending.

22.4 Community Facilities and Services

22.4.1 Existing Conditions

22.4.1.1 Definition of the Study Areas

The primary study area is defined as the area within ¼-mile of the site. The secondary study area is defined as the area between ¼- and ½-mile of the site.

22.4.1.2 Summary of Community Facilities and Services

There is one community facility in the primary study area and 24 in the secondary study area. These facilities and others serving the site, but located outside the secondary study area, are listed in Table 22.4-1 and shown on Figure 22.4-1.

22.4.2 Future No-Build Conditions

There are no known changes planned for the community facilities and services within the primary and secondary study areas by 2006. Therefore, anticipated Future No-Build Conditions are expected to remain fundamentally the same as Existing Conditions.

22.4.3 Potential Impacts with the West 59th Street Converted MTS

The West 59th Street Converted MTS would not create any significant new demand on services and community facilities and would not displace facilities or disrupt services. The NYFD states that it would have no problem supporting the reactivation of the site (see Appendix A). No significant adverse impacts to service delivery are expected.

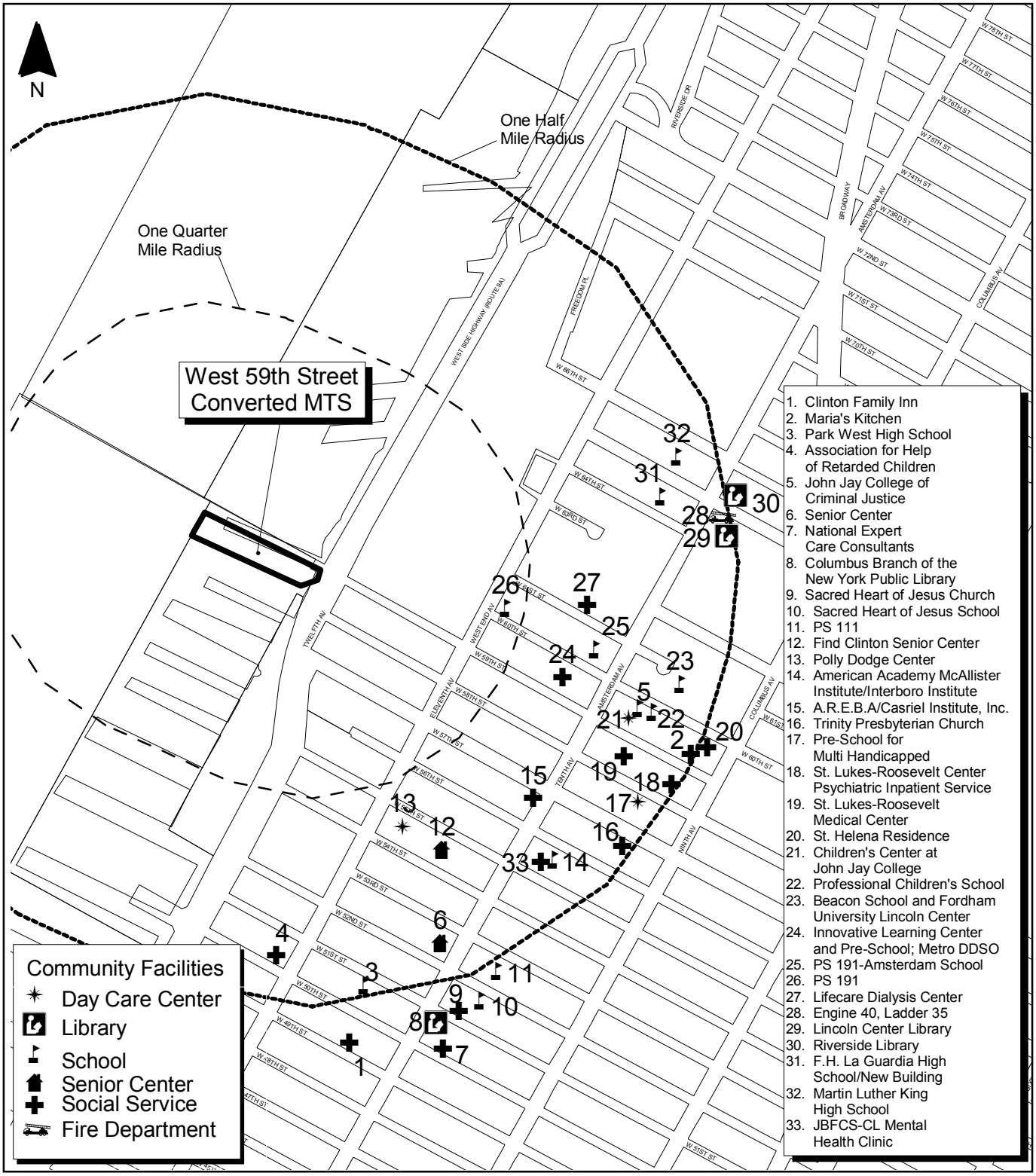
Table 22.4-1
Community Facilities and Services

Name	Address
Within the Primary Study Area	
Schools	
P.S. 191	210 West 61st Street
Within the Secondary Study Area	
Day Care Centers	
Polly Dodge Center	538 West 55th Street
Pre-School for Multi Handicapped	432 West 58th Street
Children's Center at John Jay College	445 West 59th Street
Libraries	
Lincoln Center Library	111 Amsterdam Avenue
Schools and Colleges	
Park West High School	525 West 50th Street
American Academy McAllister Institute/Interboro Institute	450 West 56th Street
Professional Children's School	132 West 60th Street
Beacon School and Fordham University Lincoln Center	113 West 60th Street
P.S. 191 – Amsterdam School	210 West 61st Street
F.H. LaGuardia High School/New Building	108 Amsterdam Avenue
Martin Luther King High School	122 Amsterdam Avenue
John Jay College of Criminal Justice	899 Tenth Avenue
Senior Centers	
Senior Center, Department for the Aging	777 Tenth Avenue
Find Clinton Senior Center	530 West 55th Street
Social Services	
Association for Help of Retarded Children	601 West 50th Street
A.R.E.B.A/Casriel Institute, Inc.	500 West 57th Street
Trinity Presbyterian Church	422 West 57th Street
St. Luke's – Roosevelt Center Psychiatric Inpatient Service	428 West 59th Street
St. Luke's – Roosevelt Medical Center	1000 Tenth Avenue
Innovative Learning Center and Pre-School; Metro DDSO(1)	515 West 59th Street
Life Care Dialysis Center	221 West 61st Street
Maria's Kitchen	415 West 59th Street
JBFCS-CL Mental Health Clinic	444 West 56th Street
Fire Departments	
Engine 40, Ladder 35	131 Amsterdam Avenue

Table 22.4-1 (continued)
Community Facilities and Services

Name	Address
Outside the Secondary Study Area	
Libraries	
Columbus Branch of the New York Public Library	742 Tenth Avenue
Riverside Library	127 Amsterdam Avenue
Schools	
Sacred Heart of Jesus School	456 West 52nd Street
P.S. 111	440 West 53rd Street
Social Services	
St. Helena Residence	120 West 60th Street
Clinton Family Inn	521 West 49th Street
National Expert Care Consultants	455 West 50th Street
Sacred Heart of Jesus Church (food pantry)	457 West 51st Street

Note:
(1) Developmentally Disabled Service Office



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning
Note: Fire stations, police stations and hospitals outside the secondary study area may not be shown on the figure

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Figure 22.4-1 Community Facilities and Services

West 59th Street Converted MTS

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22.5 Open Space

22.5.1 Existing Conditions

22.5.1.1 Definition of the Study Area

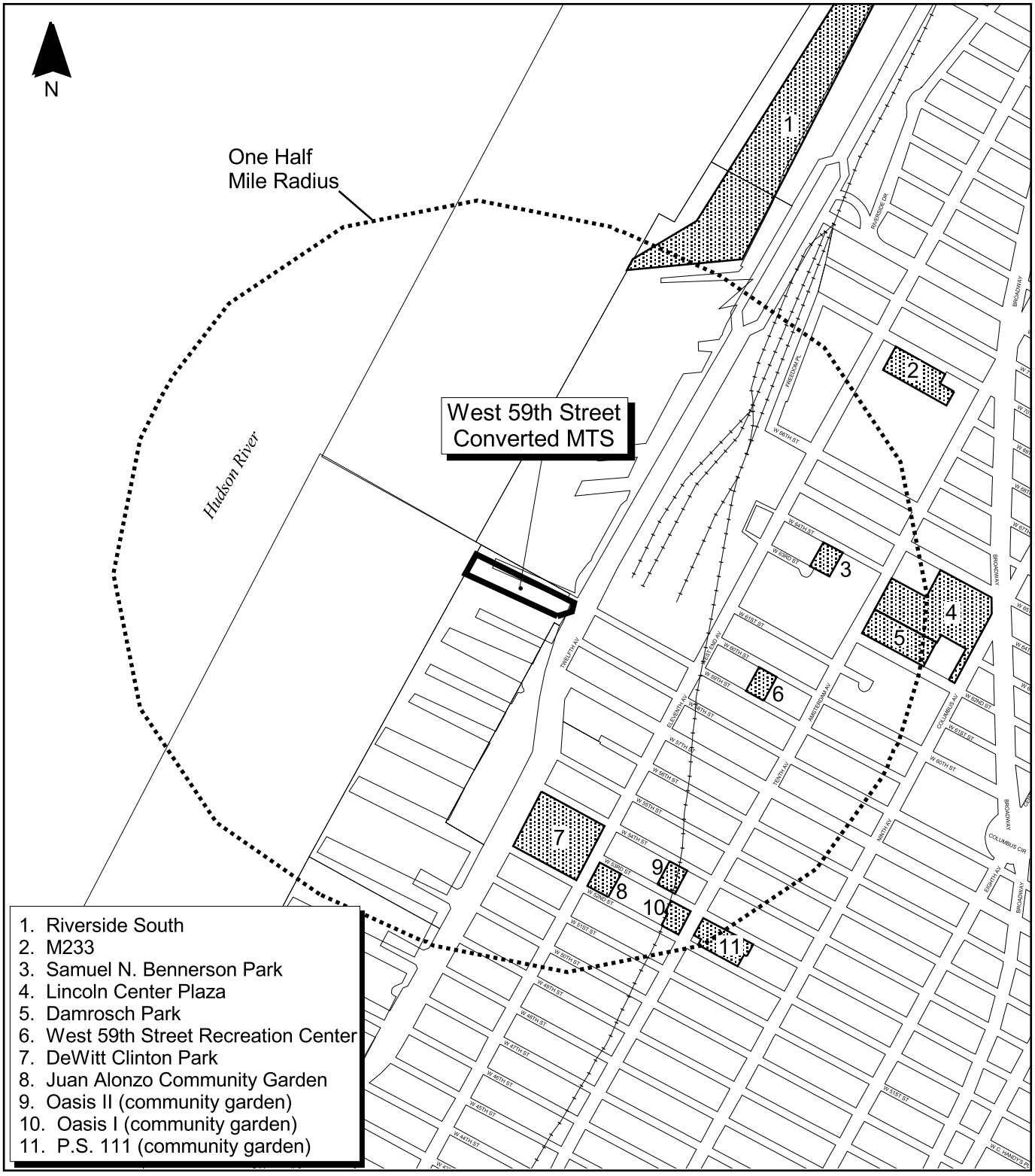
The study area for open space is defined as being the area within a ½-mile radius of the site.

22.5.1.2 Summary of Open Space in the Study Area

There are 10 public parks and open spaces within the study area, and one just outside to the north. They are listed in Table 22.5-1 and shown on Figure 22.5-1.

Table 22.5-1
Public Parks and Open Spaces

Name	Location	Acreage
Inside the Study Area		
Riverside Park South	West 66th to West 72nd Streets	11
Riverside Park	West 72nd to West 129th Streets	266.8 (total)
Samuel N. Bennerson Park	64th Street (west of Tenth Avenue)	0.75
Lincoln Center Plaza	Columbus Avenue and West 63rd Street	7.19
Damrosch Park	Amsterdam Avenue and West 62nd Street	2.44
West 59th Street Recreation Center	West 59th and West 60th Streets (between Eleventh and Tenth Avenues)	0.69
DeWitt Clinton Park	West 52nd to West 54th Streets (Eleventh to Twelfth Avenues)	5.83
Juan Alonzo Community Garden	West 52nd to West 53 Streets (Eleventh Avenue)	0.81
Oasis II (Community Garden)	West 53rd to West 54th Streets (between Tenth and Eleventh Avenues)	0.67
Oasis I (Community Garden)	West 52nd to West 53rd Streets (Tenth Avenue)	0.70
P.S. 111 (Community Garden)	West 52nd to West 53rd Streets (Tenth Avenue)	1.80
Outside the Study Area		
70th Street Playground	West 70th Street (East of Eleventh Avenue)	2.29



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.5-1 Open Space/Parkland

West 59th Street Converted MTS

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In addition to the typical urban parks and open spaces serving the study area, is the linear Hudson River Valley Greenway. The Hudson River Valley Greenway comprises a pedestrian and bicycle pathway stretching along the Hudson River in Manhattan and the Bronx, and a greenway of developed waterfront parkland extending from Battery Place to about West 181st Street in Manhattan. In 1998, the Hudson River Park Act authorized that an approximately 550-acre park to be built in phases along a five-mile stretch from West 59th Street to Battery Place. The park is designed to reserve extensive portions of the waterfront exclusively for public recreation and to significantly limit the types and locations of commercial activities allowed. The act also designated the river itself as an estuarine sanctuary, and it requires that every dollar earned within the park be directed to fund the park's construction, maintenance, or operations.

Along the Hudson River from West 59th to West 72nd Street, the privately funded Riverside Park South is being constructed in phases and will ultimately fall under NYCDPR jurisdiction. As Riverside Park South and adjacent waterfront park areas are developed, they host an interim multi-use path, including the Route 9A Bikeway (part of the Greenway), which was implemented by the NYSDOT as part of the reconstruction of Route 9A (also known as Joe DiMaggio Highway/West Street/West Side Highway). This multi-use path, which will become permanent when park construction is complete, lies roughly 150 feet inland and travels directly beneath the elevated West Side Highway from West 70th Street to West 65th Street. To the east, future phases of Riverside South residential buildings will be developed, while the first two phases of waterfront parkland to the west of the path are already open for public use (West 65th to West 72nd Streets).

South of West 59th Street where the West Side Highway returns to street level, the path lies directly adjacent to the highway, passing a mixture of waterfront uses to the west.

The multi-use path is divided south of West 57th Street, where a pedestrian promenade hugs the waterfront to the west and the main path remains adjacent to the West Side Highway. To the south, at West 56th and West 55th Streets, construction of Clinton Cove Park is underway on Piers 95 and 96 as part of Hudson River Park. At West 55th Street, the promenade merges back into the bikeway, which continues south, ultimately connecting to the Battery Park City esplanade.

22.5.2 Future No-Build Conditions

Segment 7 of Hudson River Park, which stretches from West 44th Street to West 59th Street, is currently in final design stages, with construction underway and set to be completed by 2005. Segment 7 will include Clinton Cove Park which will feature a boat and kayak lunch and provide passive recreational opportunities at the waterfront. Phase I interior reconstruction of the nearby West 59th Street Recreation Center (between Eleventh and Twelfth Avenues) is likely to be complete by 2006. Additional Riverside South development construction is expected to be underway by 2006, and will entail the reconstruction of that portion of the bike path north of the site, running beneath the elevated West Side Highway.

22.5.3 Potential Impacts with the West 59th Street Converted MTS

Due to the West 59th Street Converted MTS's industrial location within the Hudson River Park, adjacent to the developing Riverside South Park and in the vicinity of several other public parks, air quality, odor, noise and traffic studies were conducted to determine what the environmental consequences would be on these sensitive uses; no significant adverse impacts were found. . Due to site constraints, the angle for the existing site entrance will remain unchanged and therefore the existing hazard created for southbound bicyclists would not be eliminated. Any increase in MTS truck traffic, therefore, could potentially worsen the safety conditions on the bike path. Appropriate measures, developed in coordination with the NYCDPR, would likely resolve this conflict.

22.6 Cultural Resources

22.6.1 Existing Conditions

22.6.1.1 Definition of the Study Area

The cultural resources study area is defined as that area within ½-mile of the site.

22.6.1.2 Development History of the Area

The study area straddles two neighborhoods: Clinton (formerly Hell's Kitchen), which is located south of West 59th Street; and a portion of the Upper West Side, which is located north of West 59th Street and includes the Lincoln Center Urban Renewal area and Riverside South development on the former Penn Central railyards.

As with much of Manhattan north of its southern tip, the study area was farmland and forest during the Colonial period and only later, in the early 1800s, was it divided into developable lots. In 1851, the New York and Hudson River Railroad began steam rail service along the east side of the Hudson River, connecting Manhattan with the Bronx and the rest of the mainland. Its terminal was located on Eleventh Avenue at West 30th Street, south of the study area. This rail line was the first to carry freight directly into Manhattan and, as such, it played a significant role in the Upper West Side's development. Related industries and activities sprang up around the route, as did worker housing.

During the mid-19th century, the study area was populated largely by Irish immigrants. The predominant land uses were slaughterhouses, freightyards, warehouses, lumberyards, factories and many adjacent blocks of tenements. At the end of the Civil War, Hell's Kitchen was known as one of the City's worst slums and the home of notorious gangs. With the advent of the Ninth Avenue El in the 1880s (along Columbus Avenue), more tenements were built west of Broadway.

After 1900, new populations immigrated and migrated to the area, beginning with Greeks and other eastern Europeans early in the century, followed by Blacks migrating from the south and Hispanics from Puerto Rico in the 1940s. Many of the area's earlier social problems remained.

Large areas of tenements were demolished during the first half of the 20th century to make way for large public works projects, such as the West Side Highway, Lincoln Tunnel, the New York Central Railroad West Side Improvement Project and the Port Authority Bus Terminal. Slums were cleared for urban renewal projects as well, such as Lincoln Towers, Lincoln Center and Fordham University in the 1960s. With the decline of the ocean liner industry, the piers in the area were abandoned and the neighborhood close to the waterfront further declined.

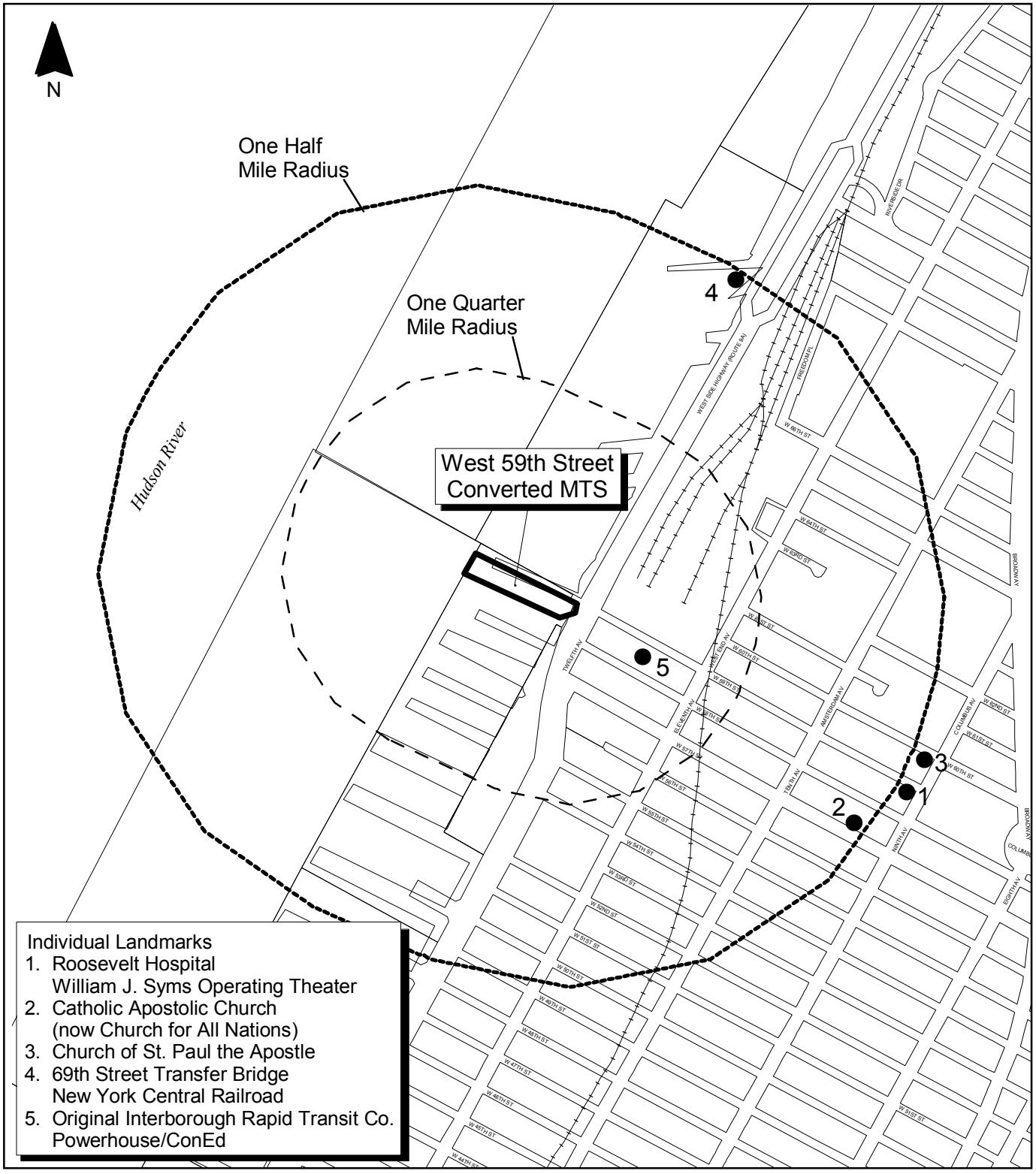
At about this same time, Hell's Kitchen was renamed Clinton (after nearby DeWitt Clinton Park) to improve its image and distance itself from its violent past. Later, during the 1980s and 1990s, new private and public residential construction and housing redevelopment efforts were undertaken to rejuvenate the area.

22.6.1.3 Cultural Resources on the Site

There are no elements of architectural or archaeological significance within the site.

22.6.1.4 Historic Resources Within the Study Area

There are five historic properties located within the study area, representing development from the late-19th century to the mid-20th century (see Figure 22.6-1). These properties are listed in Table 22.6-1.



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.6-1 Cultural Resources

West 59th Street Converted MTS

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Table 22.6-1
Cultural Resources in the Study Area

Name	Location	Designation
Riverside Park	West 72nd to West 129th	NRHP/SRHP, NMCL
Original IRT (Interborough Rapid Transit) Power House (now Consolidated Edison Generating Plant)	Streets, 58th-59th Streets, Eleventh to Twelfth Avenues	Eligible for listing on the SRHP
William J. Syms Operating Theater, Roosevelt Hospital	64th Street (west of Tenth Avenue), 400 West 59th Street	NYCL
Church of St. Paul the Apostle	415 West 59th Street	SRHP/NRHP
69th Street Transfer Bridge, New York Central Railroad	69th Street and Hudson River	Eligible for listing on the SRHP

Notes:
SRHP= New York State Register of Historic Places
NR= National Register of Historic Places
NYCL= New York City Landmark

22.6.2 Future No-Build Conditions

Two properties within the study area, the IRT Power House and 69th Street Transfer Bridge, have been determined to be eligible for listing on the State Register of Historic Places. Except for these properties, there is no reason to anticipate the designation of other resources in this area in the near future. Even with their potential designation, anticipated Future No-Build Conditions are assumed to be essentially the same as Existing Conditions.

22.6.3 Potential Impacts with the West 59th Street Converted MTS

Based upon its review, SHPO has stated that the West 59th Street Converted MTS will have no impact upon cultural resources in, or be eligible for inclusion in, State and National Registers of Historic Places. The LPC has stated that the site contains no architectural or archeological significance (see Appendix A). The West 59th Street Converted MTS would not result in adverse impacts to cultural resources and no mitigation measures would be warranted.

22.7 Urban Design, Visual Resources, and Shadows

22.7.1 Existing Conditions

22.7.1.1 Definition of the Study Area

The urban design and visual quality study area is the same as the neighborhood character study area. The neighborhood character study area is bounded by West 64th Street on the north, West 52nd Street on the south, Tenth Avenue (Amsterdam Avenue) on the east and the Hudson River on the west (see Figure 22.8-1). The site has been developed in a manner consistent with the uses of the adjacent properties, although new residential development as near as ¼-mile northeast and southeast of the site is changing the general character of the area. The site is separated from upland areas by the West Side Highway, which itself obstructs some street-level views to the waterfront throughout the area. There is, however, the bikeway that runs alongside Twelfth Avenue below the elevated West Side Highway, connecting Riverside Park South to Hudson River Park below West 59th Street. This feature and surrounding park facilities are sensitive to potential urban design and visual quality impacts.

22.7.1.2 Description of the Site

The existing MTS is unique among such facilities as it is the only one featuring a neon light installation, which was designed by the artist Stephen Antonakos as part of the its renovation in 1990. As such, the MTS makes a unique and positive contribution to the otherwise bleak visual quality of the immediate area. The neon is installed on the interior of the MTS and is visible outside through frosted plastic panels. It provides architectonic definition to the eastern facades of the station and adjacent office, with red light framing alternating windows on the northern elevation. The entrances are further emphasized with a neoclassical arch added to the eastern side of the MTS property, framing the MTS on the waterfront in the background (see Figure 22.7-1).

The artistically enhanced MTS façade is visible on land from the elevated West Side Highway, Twelfth Avenue, and the bikeway, and to some extent from points on West 59th Street approximately as far east as Tenth Avenue.

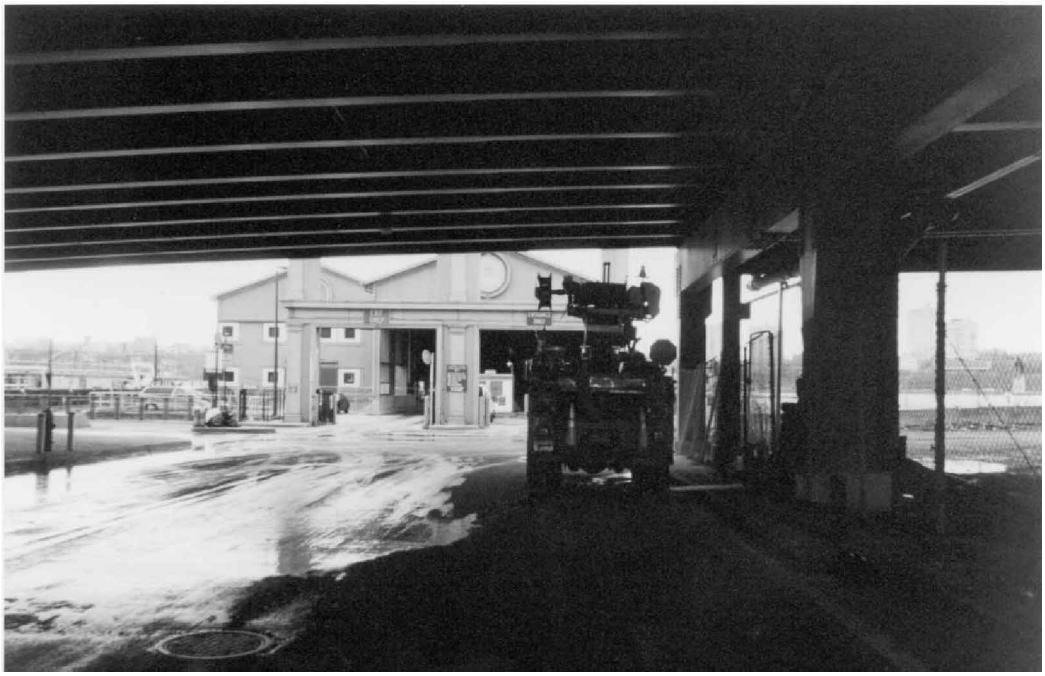

Figure 22.7-1 : The artistically treated entrance facade of the West 59th Street MTS, visible beneath the elevated West Side Highway.

Figure 22.7-2 : View of 12th Avenue, facing south from West 59th Street.

Figure 22.7-1 and 22.7-2
Urban Design and Visual Quality
West 59th Street Converted MTS

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22.7.1.3 Urban Design and Visual Resources of the Study Area

The streetscapes immediately around the site are not unusual for the waterfront areas of Manhattan that have not been improved with parks, promenades or waterfront housing developments. It is industrial in nature, and the appearance of the area is not visually attractive (see Figures 22.7-2 and 22.7-3). Landscaping, such as sidewalk trees, is limited within the study area, and the environmental features most prominently figuring into the visual quality of the area are the vacant lots and truck/equipment storage areas under the elevated highway near the site. The large neoclassical Consolidated Edison power plant (originally the IRT Subway Power House), located on the block east of the site, does feature classical detailing. The building would play an important role in defining the streetscape of West 59th Street but for the vacant lot and industrial buildings across the street to the north and the bland addition on its western side facing the elevated highway. Recently-added new streetlights along Twelfth Avenue are interesting features; however, they are designed to be more decorative than functional in appearance. They resemble much older cast-iron lampposts with sculptured bases and poles as well as scrollwork near a bell-shaped lantern.

The bikeway runs through these unattractive areas and, in the vicinity of the site, under the elevated West Side (Miller) Highway and through areas being prepared for construction of the next phase of the Riverside South mixed use and park development. Though the area is not pedestrian-oriented, the bikeway does provide a unique, separated route for non-motorized transportation.

The remainder of the study area beyond the blocks immediate surrounding the site include the DeWitt Clinton Park, an active public park to the south and typical Manhattan avenue streetscapes to the east. DeWitt Clinton Park, which features a landscaped perimeter along Twelfth Avenue, several lighted ballparks, ball courts and a playground, is located five blocks south of the site. From the park there are views of the site and the piers to the south (see Figure 22.7-4). DSNY trucks associated with current recycling operations are clearly visible when parked on the site. The views are not significant, however, since the busy West Side Highway traffic and its signage are more prominent components of the view. Where Eleventh Avenue runs through the study area, it is primarily industrial with nondescript warehouses

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Figure 22.7-3 : View of West 59th Street, facing east from 12th Avenue.

Figure 22.7-4 : View of West 59th Street MTS (behind highway signage), facing northwest from DeWitt Clinton Park
(West Side Highway and West 54th Street).

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lining the streets, while Tenth Avenue in the study area features stylishly designed large-scale commercial establishments, such as automobile showrooms, and small-scale groceries and restaurants defined by their signage and window treatments.

Construction of Clinton Cove Park is underway on Piers 95 and 96 (at West 55th and West 56th Streets) approximately 600 feet south of the site. This park will provide a boat launch and recreational open space on the river.

22.7.2 Future No-Build Conditions

There are no plans for the site or immediate environs that would lead to substantial changes in urban design or visual quality conditions of most of the study area by 2006. However, the southern extent of the Riverside South development, which is set to be under construction or complete by 2006, will substantially transform the landscape north of West 59th Street and west of Eleventh Avenue. Several new towers are planned for the area, currently occupied by a large surface parking lot. The sleek continuum of residential towers characteristic of Eleventh Avenue north of West 61st Street would thus be extended to transform the visual quality and urban form of the southward land immediately inland of the site, east of the elevated West Side (Miller) Highway.

Riverside Park South Phase III (West 62nd to West 65th Streets) is due to be completed by 2005, which will include extended timber walkways (with two additional overlooks), landscaped areas, and a major plaza at West 64th Street. The proposed park area immediately adjacent to the site would not yet be redeveloped.

The site would remain DSNY property and the existing MTS would remain in operation for the transfer of paper recyclables.

22.7.3 Potential Impacts with the West 59th Street Converted MTS

Development of a containerization facility at the site would alter the visual quality or urban design of the changing waterfront. The new facility would be approximately 70 feet tall (about 20 feet taller than the existing MTS structure, but similarly sited on the linear pier. Transfer activities would resemble the ongoing waterborne transport of recyclables, though containerized waste would result in a slight improvement in aesthetics. Electric cranes used to load containers, which would be filled inside the new facility onto waiting barges, would be situated on the south side of the facility and stand approximately 80 feet tall. This loading activity would be screened by the active Consolidated Edison Pier (to the south). The existing neon ornament found on the MTS would not be incorporated into the proposed facility design, though the entrance portal will remain undisturbed. Overall, the larger new facility would not create notable changes to the urban design and visual quality of the site or study area, and no significant adverse impacts are predicted.

According to the 2001 CEQR Technical Manual, an impact area should be drawn around the site to encompass the maximum project shadow in order to determine if any sensitive resources nearby might be affected, and consequently, if a full shadow impact assessment is warranted. (This shadow impact area is calculated by multiplying the height of the proposed structure by 4.3 to estimate its longest possible shadow.) If this site were chosen and a noise wall used as the preferred mitigation, a supporting analysis would be conducted.

While there are three mapped open space/parkland resources within the shadow impact area, only one facility – the bicycle/pedestrian path extending from Riverside Park South – is near enough to the site to be potentially affected by shadows. This path is generally used for active recreation, including bicycling, pedestrian activities, rollerblading, etc. (See Figure 22.7-5.)

There are no expected physical changes to the project site or vicinity that might create new shadows on these resources in the Future No-Build Condition. Therefore, the shadow assessment considered only the consequences of the West 59th Street Converted MTS development.

Figure 22.7-5 Shadow Diagram

West 59th Street Converted MTS

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During most of the year, shadows generated by the 71-foot-tall West 59th Street Converted MTS and 84-foot-tall cranes would completely fall across portions of the Hudson River. Analysis of December 21st indicates that the walkway would not be affected by shadows. During the three other analysis periods, approximately 40 feet in length of the bicycle/pedestrian path would be affected by shadow, for approximately one hour during each period. On June 21st, shadows would fall over the bicycle/pedestrian path from 5:50 p.m. to 7:00 p.m.; on March 21st, from 3:40 p.m. to 4:30 p.m.; and on May 6th, from 5:20 p.m. to 6:20 p.m. As shadows would only affect 40 feet of the walkway for approximately one hour during three periods, and since the walkway is not dependent upon direct sunlight for its active uses, the West 59th Street Converted MTS is not considered to cause a significant shadow impact.

22.8 Neighborhood Character

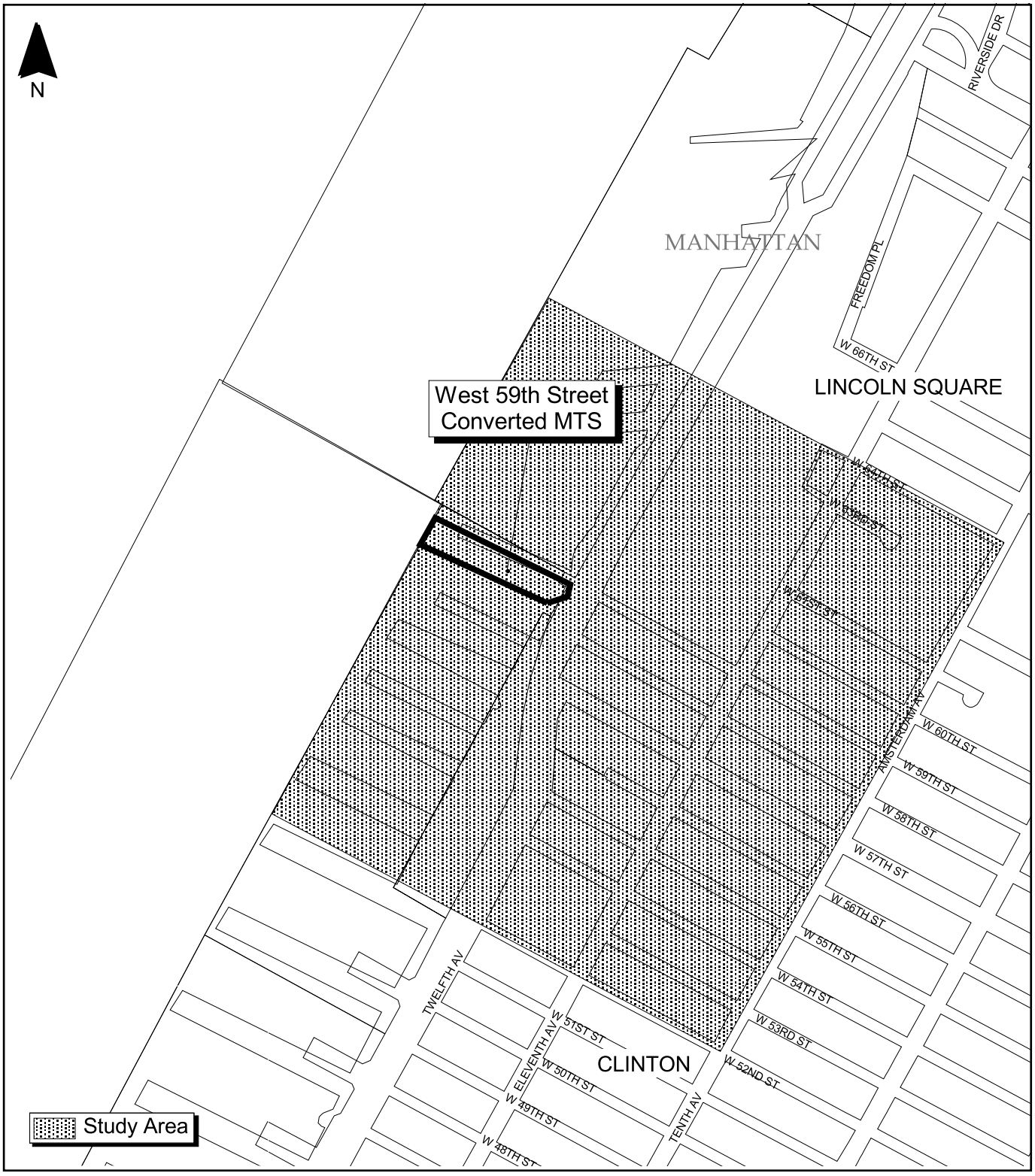
22.8.1 Existing Conditions

22.8.1.1 Definition of the Study Area

The site is surrounded by industrial uses and is effectively separated from inland blocks by the elevated West Side (Miller) Highway (West 59th to West 72nd Streets) and vacant land beneath it or in its immediate vicinity. Although there is a concentration of institutional uses, including Lincoln Center and John Jay College of Criminal Justice several blocks east of the site, the industrial uses and dense urban nature development inland are the major factors contributing to the neighborhood character. This is especially true near the West Side (Miller) Highway where a large Consolidated Edison generating plant is located one block inland of the site. Riverside South residential towers have recently been built, introducing a major new physical element to an area north of the site, but this residential development currently shares no direct connectivity to the site at this point, and is separated from it by the elevated West Side Highway, and the large parking lot between the two. The neighborhood character study area is bounded by West 64th Street on the north, West 52nd Street on the south, Tenth Avenue (Amsterdam Avenue) on the east and the Hudson River shore on the west (see Figure 22.8-1).

22.8.1.2 Description of Neighborhood Character

The general neighborhood character of the study area is mixed and changing, as described in the previous sections, though remains industrial immediately surrounding the site to the east and south. Industrial uses on densely-built blocks along with the presence of the elevated West Side (Miller) Highway, inhibit views to the waterfront from inland blocks in the study area, especially along West 59th Street. While construction is underway on several surrounding sites (to create waterfront parks to the north and south, a new sanitation garage, new large-scale residential and commercial developments), the character of the immediate environs remains largely industrial and transportation-oriented. There is no destination in the immediate area of the site that would attract anyone but workers employed in the warehouses and industries. The nearest destination points include the John Jay College of Criminal Justice, and St. Lukes/Roosevelt Hospital Center, east of Tenth Avenue — two blocks east of the site — and the DeWitt Clinton Park along the southern boundary of the study area, both of which would attract people from outside and within the study area.



Site delineations are approximate.
Base Map Source: New York City Department of City Planning

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Figure 22.8-1 Neigborhood Location

West 59th Street Converted MTS

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The new residential towers of Riverside South stand about ¼-mile northeast of the site and an additional parcel (ABC studios) is under construction nearby. Together with Riverside Park South, whose Phase III is scheduled to open in 2005, these developments will introduce physical characteristics and visual resources unlike those currently associated with the Hudson River waterfront in this vicinity.

22.8.2 Future No-Build Conditions

Nearly all the proposed development expected to be complete or under way by 2006 will be located within the neighborhood character study area. The two developments nearest the site would be: (1) the extension of the Riverside South development, which entails construction of several residential and mixed-use towers north of the large surface parking lot across Twelfth Avenue, from the site and parkland along the waterfront north of West 59th Street; and (2) the Helena (Durst Organization) residential tower south of West 58th Street, east of Twelfth Avenue, to open later in 2004. (The new DSM District 4, 4A and 7 Garage is soon to be under construction on Twelfth Avenue, between West 55th and West 57th Streets, though not scheduled to open until 2007). While the Riverside South and associated park development will substantially alter the character of the waterfront west of the elevated West Side (Miller) Highway, north of the site, the remainder of the study area is expected to resemble Existing Conditions, particularly due to the continued presence of the monumental Consolidated Edison Power Plant, the West Side (Miller) Highway and neighboring industrial/municipal uses. The site will remain DSNY property and the existing MTS will continue to be used for transfer of paper recyclables from truck to barge.

22.8.3 Potential Impacts with the West 59th Street Converted MTS

The West 59th Street Converted MTS is not expected to result in significant impacts on neighborhood character since it would be a reactivation of waste transfer facilities on a site formerly used for that purpose and currently used for the transfer of recyclable paper from truck to barge. Traffic, air quality, odor and noise studies all indicated that nearby sensitive receptors would not experience significant adverse impacts. (See Sections 22.14, 22.15, 22.16 and 22.17.)

Because DSNY trucks currently run through the study area (along West 59th and West 57th Streets, as well as Twelfth, Eleventh and Tenth Avenues south of West 59th Street) and the site is somewhat buffered from the new residential and park uses to the north by the elevated Miller Highway, potential operational impacts from the facility would be largely contained to the immediate vicinity. (See Section 22.5 for a discussion of potential impacts to open space.)

The Converted MTS and barge movements will be partly visible from Riverside Park South to the north, particularly from the planned overlooks now under construction between West 62nd and West 65th Streets, and from the Clinton Cove Park some 600 feet south of the site, as part of the developing Hudson River Park. However, given the industrial nature of the immediate area, the impacts to neighborhood character would not be significantly adverse. Rather, the immediate industrial character would be reinforced and visual quality upgraded with the containerization facility, as opposed to the previous open barge transfer.

22.9 Natural Resources

22.9.1 Existing Conditions

Existing Conditions include stressed aquatic and terrestrial communities that are typical of this area of Manhattan. Conditions associated with the presence of natural resources, including water resources and endangered species and habitats, were investigated within the defined study area to identify potential impacts that might arise from implementation of the West 59th Street Converted MTS.

22.9.1.1 Definition of Study Area

The study area includes the existing MTS and the waterfront section that is bounded by the Hudson River to the west (see Figure 2.7-1). The existing MTS is a platform structure extending out from the shore into the river. As a result, no terrestrial natural resources exist to be discussed. Because Future Build Conditions would include dredging of bottom sediments and construction of a new MTS, a description of the aquatic communities is included.

22.9.1.2 Geology

Previous borings performed along the length of the existing MTS site ranged from 62 to 110 feet in depth.[4] These borings reference the water surface (Elevation 0.0 feet) as the top of the borings. Four borings terminated at rock between –57 and –110 feet. Bedrock generally dips to the west, as the two westernmost borings did not encounter bedrock at –110 feet. The uppermost layer generally consisted of organic soil, with shells and vegetation present within this stratum. At the bulkhead along 12th Avenue, riprap and boulders were present. In addition, occasional pieces of timber were encountered in this stratum beneath the existing pier. Below the organic soil, the surface of quartz-mica schist was encountered between –57 and –90 feet. The bedrock

[4] Geology discussion based on "Report of Subsurface Evaluation of West 59th Street (Manhattan) Marine Transfer Station, City of New York Department of Sanitation," September 1983, by Woodward-Clyde Consultants, Inc., as cited in the *MTS Conversion Conceptual Design Report,* April 2003, by Greeley and Hansen, LLC.

was described as soft to moderately hard, seamy, slightly weathered schist. Overlaying this schist are river sediments deposited over time that are characterized as dark to grey-brown hard clay with some silty sand, with approximately 38,250 mg/kg of TOC. The sediment surrounding the MTS was made up of 91.6% silt and clay, 8.0% sand and 0.6% gravel.[5] Sediment was found to be somewhat degraded due to contaminants in the sample material. The three metals with the highest concentrations in the sediment were lead, chromium and barium, with 91.77 mg/kg, 67.75 mg/kg and 55.42 mg/kg, respectively.

22.9.1.3 Floodplains

The site is located within the 100-year coastal floodplain (see Figure 22.9-1). No wetlands, other than the Hudson River, a NYSDEC-designated littoral zone, exist on the site (see Figure 22.9-2).

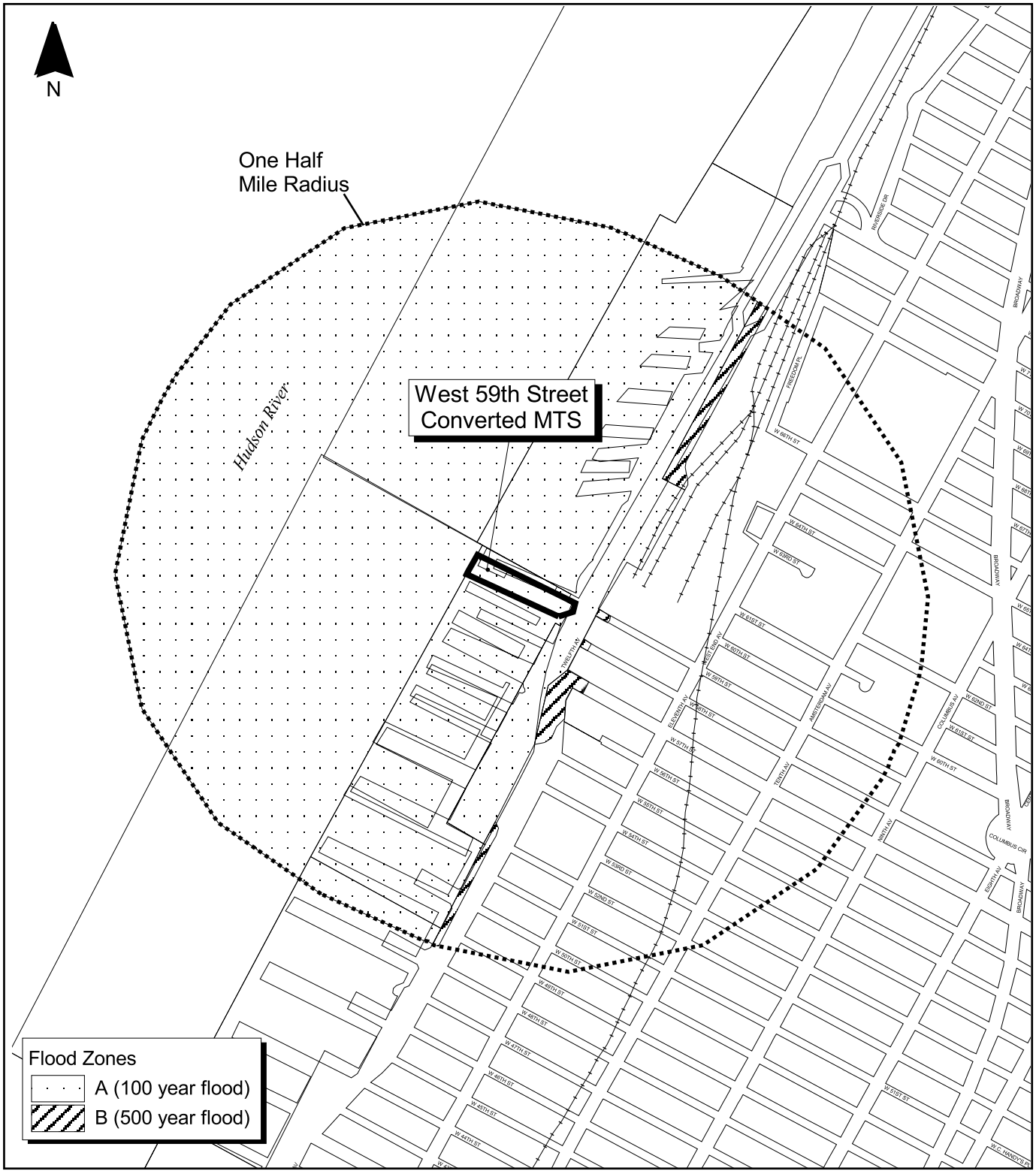
22.9.1.4 Ecosystems

Because the site is located on an offshore platform, there are no upland natural resources to consider, describe or map. The majority of the approaches leading to the facility are hard surfaced and devoid of vegetation.

A field program that took place in 2003 was designed to fully characterize the marine biological resources of the study area. The program included monthly sampling for adult finfish, finfish eggs and larvae and water quality, and quarterly sampling for benthic invertebrates and sessile colonizing organisms. Results of the program are presented in the following paragraphs.

The West 59th Street Converted MTS was determined to support one of the more biologically productive marine communities. It had one of the highest species richnesses of adult finfish and megainvertebrates and the highest total catch of both. It supported six EFH-listed adult finfish species and three larval species. It also had the highest concentration of finfish eggs.

[5] New York City Department of Sanitation, March 2004. Marine Biological Studies of the Marine Transfer Stations Operated by the New York City Department of Sanitation. Prepared by EEA, Inc.



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

HDR HydroQual URBITRAN PB 100 YEARS EEA Cambridge Environmental Inc

Figure 22.9-1 Floodplains

West 59th Street Converted MTS

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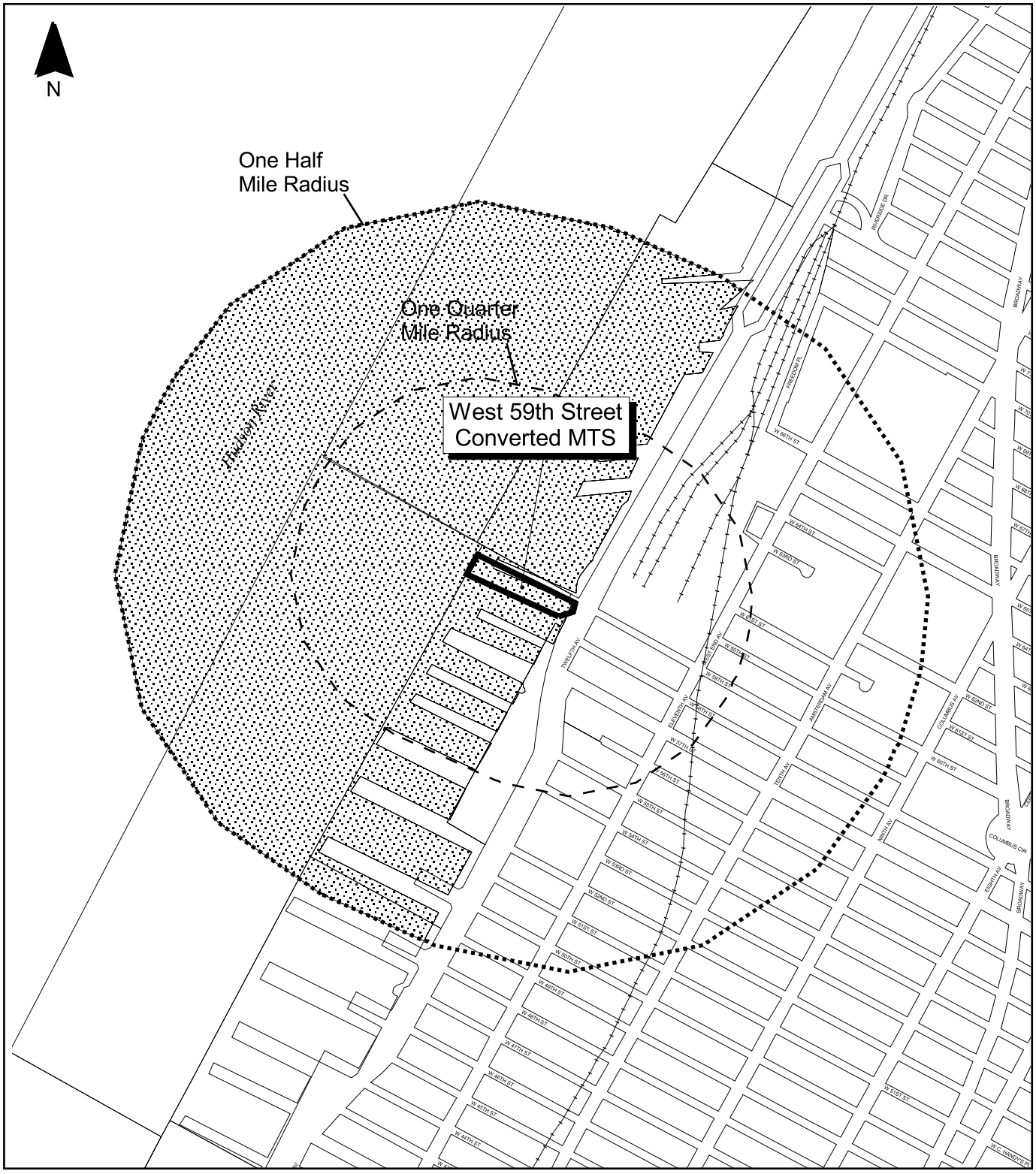

Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

HDR | HydroQual | URBITRAN | PB | EEA | Cambridge Environmental Inc

Figure 22.9-2 Wetlands

West 59th Street Converted MTS

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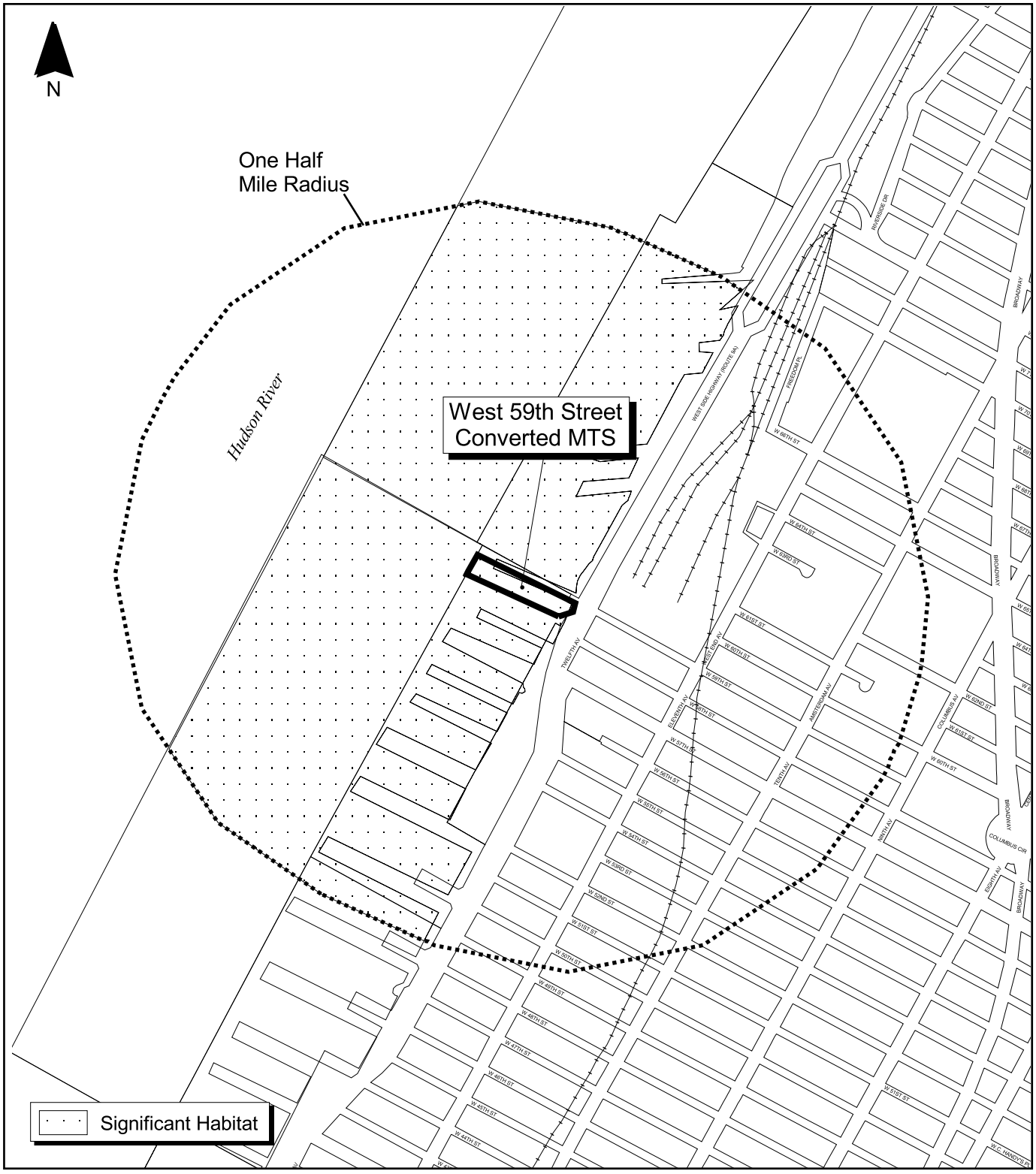
A total of 1,390 adult finfish were collected at the West 59th Street Converted MTS, the highest catch of the eight MTSs studied.[6] The most abundant species collected was striped bass (*Morone saxatilis*), followed by hogchoker (*Trinectes maculates*), Atlantic tomcod (*Microgadus tomcod*), weakfish (*Cynoscion regalis*) and bay anchovy (*Anchoa mitchilli*). There were six EFH-designated species collected: windowpane (*Scophthalmus aquosus*), Atlantic butterfish (*Peprilus triacanthus*), winter flounder (*Pleuronectes americanus*), summer flounder (*Paralichthys dentatus*), Atlantic herring (*Clupea harengus*) and bluefish (*Pomatonus saltatrix*). Finfish eggs and larvae were least diverse at the West 59th Street Converted MTS. The most abundant finfish egg collected at this MTS was bay anchovy. Anchovy spp., winter flounder and goby spp. (*Gobiosoma* spp.) larvae were also abundant. Winter flounder and windowpane, both EFH listed, eggs and larvae were present at the West 59th Street Converted MTS.

Sevenspine bay shrimp (*Crangon septemspinosa*) and eastern mudsnail (*Ilyanassa obsoleta*) were the most abundant megainvertebrates collected from the West 59th Street Converted MTS. The fewest number of benthic invertebrates and lowest abundances were collected at this facility. Oligochaetes were the most abundant, followed by polychaetes. The West 59th Street Converted MTS also had a high number of species in common with the other MTSs sampled, suggesting that it is less distinct in its community composition. The most abundant epibenthic colonizers collected were *Pleusymtes glaber* (amphipods), *Polydora* sp. (polychaete worms), *Balanus* sp. (barnacles), and hydrozoa, mud and algal film.

It should be noted that the Lower Hudson Reach, in which the study area is located, is a New York State Department of State Division of Coastal Resources and Waterfront Revitalization-designated SCFWH (see Figure 22.9-3). New York State's CMP includes a specific policy for the protection of fish and wildlife habitats that are determined to be of statewide significance. An inventory of the coastline was conducted to identify the most valuable habitats according to the following criteria: ecosystem rarity, species population levels, support of vulnerable species, human use and replaceability. A numerical rating system using these criteria was applied to more than 300 areas and approximately 235 have qualified for official designation and mapping as SCFWHs.

[6] Ibid.



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.9-3 Significant Habitat

West 59th Street Converted MTS

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NYSDEC's NHP records list the common nighthawk (*Chordeiles minor*) as a species suspected of breeding in the study area. The state legal status of this wild bird is Protected-Special Concern, which includes those species that are not yet recognized as endangered or threatened but for which documented concern exists for their continued welfare in New York, and that are federally-protected wild birds.

22.9.2 Future No-Build Conditions

If the West 59th Street Converted MTS were not to be built, the study area would remain as is. The absence of terrestrial natural resources would remain, as the study area does not contain any upland features. Aquatic natural resources would continue to be present in the waters in and around the study area.

22.9.3 Potential Impacts with the West 59th Street Converted MTS

22.9.3.1 Geology

The geology of the study area would not be changed other than by the removal of dredge material to accommodate the barges and tugboats. The dredging activity would remove layers of sediments deposited over time and further alter the submarine ecological features of the study area, but would not result in any significant impact.

22.9.3.2 Floodplains

Implementation of the West 59th Street Converted MTS would have no effect on elevation of the study area. It would be constructed within the 100-year floodplain, and would not include any provisions for raising any portions of the study area over this level.

22.9.3.3 Ecosystems

Construction of the West 59th Street Converted MTS would involve installing piles for the foundation supports and dredging to accommodate the deeper draft of the coastal barges, resulting in an immediate, short-term destruction of the benthic invertebrates in the area. Because the benthic diversity had a medium rank and marine construction causes turbidity and siltation that could smother the benthic organisms, the short-term degree of impact is expected to be medium to high. However, recolonization of the area by benthic invertebrates can be expected to occur within 6 to 12 months after cessation of dredging activities.[7] Given the relatively small size of the project, minimal overall impact to the benthic community is expected at the West 59th Street Converted MTS. The removal of the existing platform will also remove the existing epibenthic community; however, the new expanded platform will result in more surface area for epibenthic communities to colonize the site. This would positively affect the epibenthic communities at the West 59th Street Converted MTS.

The pile-driving and dredging activity during the construction will cause adult finfish to avoid the site. Fish in the herring family are most sensitive to the suspended sediment and noise from construction; flatfish (flounders) are least sensitive. Flounder catch was much higher at the West 59th Street Converted MTS than herring catch, so it can be assumed that this site is not an important herring habitat that will be temporarily impacted. Finfish eggs and larvae are more sensitive to suspended sediment, and those that settle to the harbor floor may be smothered by sediment. Swift currents may sweep eggs and larvae past the construction site, but the short exposure time should not significantly harm the ichthyoplankton. In addition, larvae will be able to swim away from the impacted environments. Winter flounder eggs were found at the West 59th Street Converted MTS, but construction impacts are expected to be negligible.

Operational impacts will last the entire lifespan of the facility. The major impact is the footprint of the pier over water. The proposed plan for the West 59th Street Converted MTS is for an increase in 25,631 square feet of pier. This will result in increased shading that will block

[7] U.S. Army Corps of Engineers, 1999. The New York District's Biological Monitoring Program for the Atlantic Coast of New Jersey, Asbury Park to Manasquan Section Beach Erosion Control Project, Draft. Phase II-III. During Construction and 1st Year Post-Construction Studies.

sunlight and hinder primary production. The enlarged platform, however, will not adversely impact the ichthyoplankton, benthic, epibenthic or adult finfish communities. A field study conducted on the Hudson River reported no statistical difference in benthic populations in interpier and underpier areas in New York Harbor waters.[8] Epibenthic communities will have a larger surface area to colonize, and finfish should return to the area with the return of food sources.

Experts have differing opinions regarding the effects of shading on finfish. Studies conducted by EEA in the late 1980s showed similar finfish communities in the interpier and underpier environments in a large-scale program on the East River. There were, however, slight differences in the dominant finfish in the populations. Studies by Able *et al*. showed caged juvenile winter flounder (*Pseudopleuronectes americanus*) to have depressed feeding on the benthos beneath piers as compared to feeding activity alongside and between piers.[9] Able's studies are controversial, however, because the fish were caged, and this may impact the results of the study. Some fish are even known to associate with submerged structures, as they provide shelter and surfaces for food to grow. While the field tests appear to be contradictory, there is no doubt that finfish inhabit at least the interface of platforms. However, because the increase in shading over water is very small, there are not expected to be significant deleterious results. There is a possibility of a slight shift in the finfish community with the addition of over-water pier coverage; however, because finfish are transient, this shift may be hard to measure.

According to the Atlas of Breeding Birds in New York State, the common nighthawk (*Chordeiles minor*) regularly nests on flat-roofed structures in cities and towns and feeds upon insects during flight. The West 59th Street Converted MTS is not likely to directly impact any potential nesting habitat or prey species on which the nighthawk depends.[10]

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[8] Hudson River Center Site Aquatic Environmental Study Final Report, 1988. Prepared for New York City Public Development Corp. by EEA, Inc.
[9] Duffy-Anderson, J.T. & Able, K.W., 2001. "An Assessment of the Feeding Success of Young-of-the-Year Winter Flounder (*Pseudopleuronectes americanus*) Near a Municipal Pier in the Hudson River Estuary, U.S.A." Estuaries, Vol. 24, No. 3, p. 430-440.
[10] Andrle, R.F. & Carroll, J.R., eds. 1988. "The Atlas of Breeding Birds in New York State." Cornell University Press, Ithaca.

22.10 Hazardous Materials

22.10.1 Existing Conditions

Existing Conditions associated with the presence of hazardous materials in soil, groundwater and building components/equipment were investigated within the defined study area. The Hazardous Materials Assessment was performed in accordance with the guidelines for a preliminary assessment presented in the 2001 CEQR Technical Manual and is consistent with the requirements for a Phase I ESA established by the ASTM (ASTM E-1527). The assessment was performed in February 2003 and included a historical land use review, regulatory agency database review, reconnaissance of the study area and surrounding area, and surface and subsurface drainage evaluation.

The historical land use review included an assessment of Sanborn fire insurance maps for the study area, if available, and a Freedom of Information Law request to the NYFD for UST records. Standard federal and state environmental databases were assessed for records of sites within the study area that had evidence of hazardous waste activity or spills. A written request to NYCDEP was made to solicit records pertaining to hazardous or toxic materials activities within the study area. A pedestrian reconnaissance of accessible interior and exterior areas within the study area was conducted in February 2003. During the reconnaissance, visual evidence was sought of hazardous materials handling or storage, including the presence of tanks, drums, transformers and unusual stains and odors. Topographic maps, visual observations and readily available geologic information sources were reviewed if off-site potential sources of contamination were identified.

22.10.1.1 Definition of Study Area

The study area includes the site and neighboring properties within a 1,000-foot radius.

22.10.1.2 Delineation of Area of Concern

Areas of concern are defined as parts of the ground, groundwater, surface water or structures within the study area where the presence or likely presence of hazardous materials exists and implementation of the West 59th Street Converted MTS could lead to an increased exposure of people or the environment to those materials. No specific areas of concern were identified at this site during the assessment.

22.10.2 Future No-Build Conditions

The existing MTS would continue to be used for the transfer of paper recyclables from truck to barge. There would be no areas of significant concern with regard to hazardous materials.

22.10.3 Potential Impacts with the West 59th Street Converted MTS

The West 59th Street Converted MTS would not result in adverse impacts. No additional testing would be required. If any areas of concern were identified during the construction phase, an analysis would be made to determine what, if any, mitigation measures should be applied.

22.11 Water Quality

22.11.1 Existing Conditions

22.11.1.1 Definition of the Study Area

The water quality study area encompasses the Hudson River and includes discharges from CSOs located within ½-mile of the site.

22.11.1.2 Water Quality

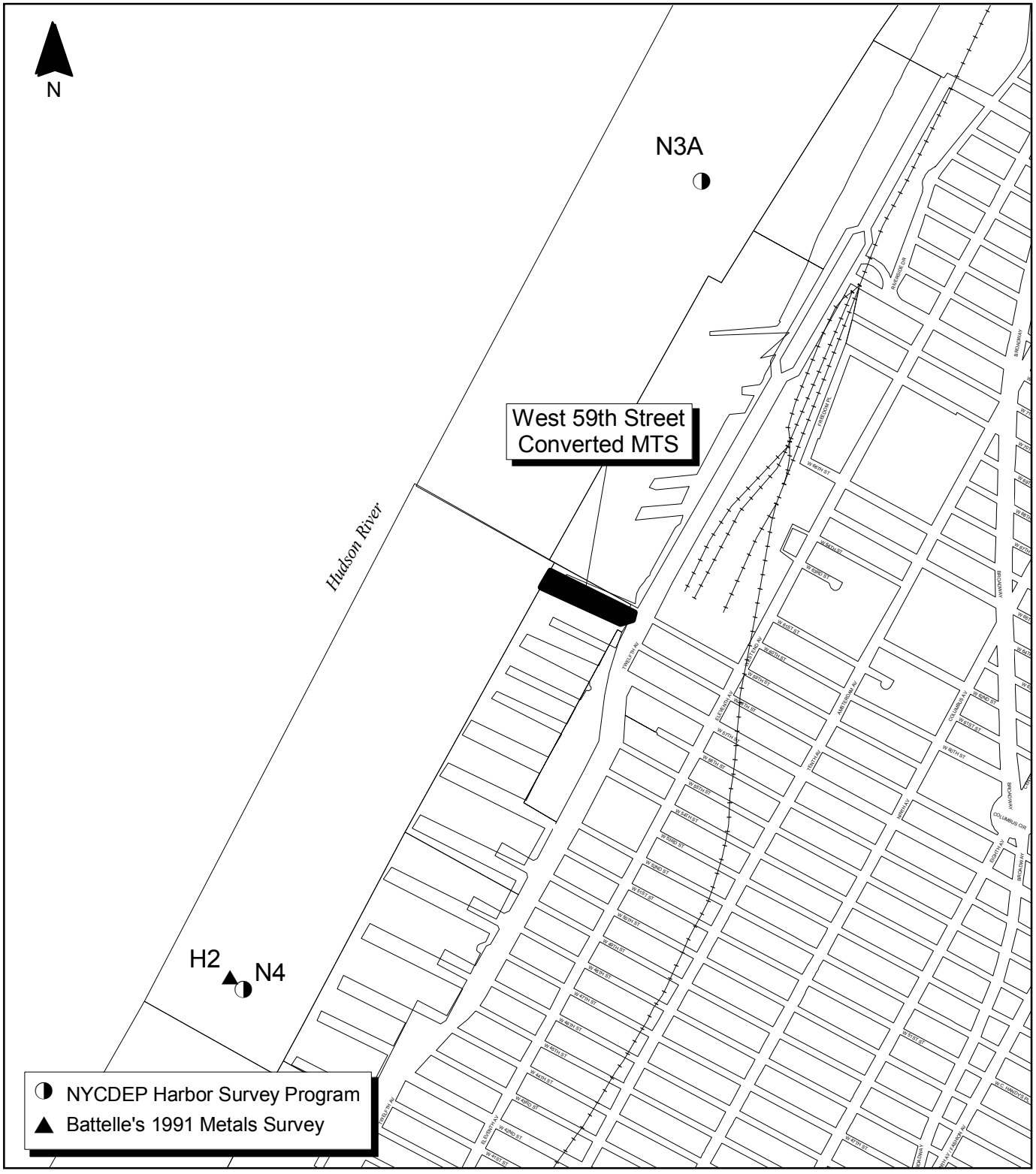
The water quality data for the following monitoring stations, shown in Figure 22.11-1, are generally representative of water quality in the study area:

- NYCDEP Harbor Survey Program – Stations N-3A, located one-third of the distance from the Manhattan shore at West 72nd Street to the New Jersey shore; and N-4, located one-third of the distance from the Manhattan shore at West 42nd Street to the New Jersey shore.
- Battelle's 1991 Metals Survey – Station H-2T and H-2B[11] located one-third of the distance from the Manhattan shore at West 42nd Street to the New Jersey shore.

These data, along with NYSDEC's water quality standards and guidance values, are presented in Table 22.11-1. The standards and guidance values for the waters in the vicinity of the site correspond to "Class I," which indicates waters suitable for secondary contact recreation (i.e., fishing and boating).

As shown in Table 22.11-1, on average, NYSDEC standards and guidance values are met. The mercury concentration for Battelle Stations H-2T and H-2B did not conform to the water quality standard for mercury.

[11] Stations H-2T and H-2B are located at the same longitude and latitude. Station H-2T is located at the surface of the Hudson River. Station H-2B is located at the bottom of the Hudson River.



Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.11-1 Ambient Water Quality Stations

West 59th Street Converted MTS

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Table 22.11-1
Existing Water Quality Conditions and Standards
West 59th Street Converted MTS Study Area

Average Concentration						
Parameter	**Units**	**N-3A[1]**	**N-4[2]**	**H-2T[3]**	**H-2B[4]**	**NYS Class I Standards**
Dissolved Oxygen (surface/minimum)	mg/L	8.4[5]/4.9[6]	8.37[7]/5.71[8]	-------	-------	4
Dissolved Oxygen (bottom/minimum)	mg/L	7.0[5]/4.4[6]	6.69[7]/4.37[8]	-------	-------	4
BOD (surface)	mg/L	2.1[9]	1.9[9]	-------	-------	-------
BOD (bottom)	mg/L	3.0[9]	2.6[9]	-------	-------	-------
Total Coliform (surface)	MPN/100 ml	1436[10]	1495[10]	-------	-------	10,000
Total Coliform (bottom)	MPN/100 ml	1284[10]	1316[10]	-------	-------	10,000
Fecal Coliform (top)	MF	46	85	-------	-------	2,000
Fecal Coliform (bottom)	MF	42	46	-------	-------	2,000
Total Suspended Solids (surface)	mg/L	22	12.7	-------	-------	-------
Total Suspended Solids (bottom)	mg/L	56	42.53	-------	-------	-------
NH_3-N	mg/L	0.238	0.24	-------	-------	-------
(NO_3 + NO_2)	mg/L	0.448	0.47	-------	-------	-------
Total Phosphorous	mg/L	0.521[11]	0.12	-------	-------	-------
Dissolved PO_4	mg/L	-------	-------	-------	-------	-------
Chlorophyll-a	µg/L	11.6	6.3	-------	-------	-------
Arsenic	µg/L	-------	-------	-------	-------	36 [12, 13]
Cadmium	µg/L	-------	-------	0.08[12]	0.07[12]	7.7 [12, 13]
Chromium	µg/L	-------	-------	-------	-------	-------
Copper	µg/L	-------	-------	2.14[12]	1.78[12]	5.6 [13, 14]
Lead	µg/L	-------	-------	0.16[12]	0.18[12]	8 [12, 13]
Mercury	µg/L	-------	-------	0.0053[12]	0.0033[12]	0.0026 [12, 13]
Nickel	µg/L	-------	-------	1.37[12]	1.39[12]	8.2 [12, 13]
Silver	µg/L	-------	-------	0.0133[12]	0.0121[12]	-----
Zinc	µg/L	-------	-------	7.23[12]	7.19[12]	66 [12, 13]
Cyanide	µg/L	-------	-------	-----	-----	1.0 [13]

Notes:

[1] Average concentrations for 1999 NYCDEP Harbor Survey site N-3A, located off of Manhattan at West 72nd Street in the Hudson River.

[2] Average concentrations for 2003 NYCDEP Harbor Survey site N-4, located off of Manhattan at West 42nd Street in the Hudson River.

[3] Average concentrations for 1991 Battelle Ambient Survey site H-2T, located off of Manhattan at West 42nd Street on the surface of the Hudson River.

[4] Average concentrations for 1991 Battelle Ambient Survey site H-2B, located off of Manhattan at West 42nd Street on the bottom of the Hudson River.

[5] Represents average between March and December 1999.

[6] Minimum between June 1, 1999 and September 30, 1999.

[7] Represents average between January and December 2003.

[8] Minimum between June 1, 2003 and September 30, 2003.

[9] Latest available data 1997.

[10] Latest available data 1996.

[11] Latest available data 1998.

[12] Guidance values and data are for dissolved metals.

[13] NYSDEC Guidance Value (NYSDEC TOGS 1.1.1, June 1998, errata January 1999 and addendum April 2000).

[14] Site-specific chronic and acute criteria for dissolved copper in New York/New Jersey Harbor.

Notes for Table 22.11-1 (continued)
BOD = biochemical oxygen demand
NH_3-N = ammonia
NO_3 = nitrate; NO_2 = nitrite
PO_4 = phosphate
mg/L = milligrams per liter
MPN/100 ml = most probable number per 100 milliliters
MF = membrane filter
µg/L = micrograms per liter

22.11.1.3 Permitted Discharges

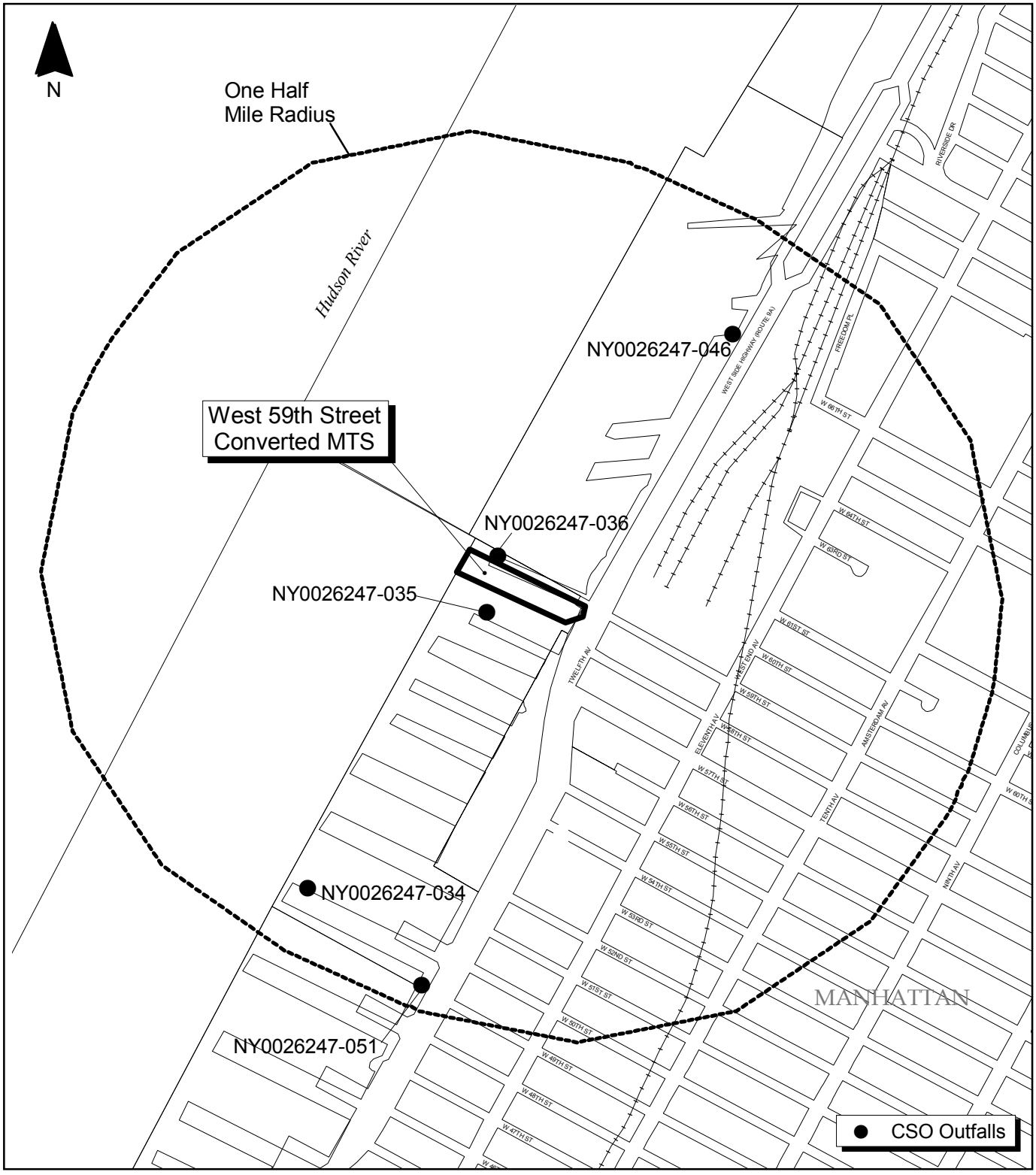
A review of the most recently available NYSDEC and USEPA databases indicated that there are five permitted discharges in the vicinity of the site. The existing discharges within a ½-mile radius are listed in Table 22.11-2 and shown in Figure 22.11-2. These discharges consist of five CSOs, all of which are permitted by the NYSDEC.

Table 22.11-2
Existing Permitted Discharges
West 59th Street Converted MTS Study Area

Combined Sewer Overflow (CSOs)			
Outfall Location/WPCP	**Permit Number**	**County**	**Receiving Water Body**
West 59th Street/North River	NY0026247-036	New York	Hudson River
West 58th Street/North River	NY0026247-035	New York	Hudson River
West 50th Street/North River	NY0026247-034	New York	Hudson River
West 66th Street/North River	NY0026247-046	New York	Hudson River
West 49th Street/North River	NY0026247-051	New York	Hudson River

22.11.1.4 Existing Pollutant Loads and Stormwater Runoff

Using available databases on stormwater pollutant concentrations and local precipitation data, an estimate of existing stormwater pollutant loadings was calculated. The existing paved areas were assumed to be completely impervious, and the existing unpaved areas were assumed to have 100% infiltration and/or storage. A runoff flow of 0.093 cfs was calculated using the impervious site area (1.55 acres), an average rainfall intensity of 0.06 inches/hour and a runoff coefficient of 1. The resulting stormwater loads, shown in Table 22.11-3, represent the existing loads at the West 59th Street site.



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.11-2 Permitted Outfalls and CSO Locations

West 59th Street Converted MTS

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Table 22.11-3
Estimated Existing Pollutant Loads and Runoff Flows
West 59th Street Converted MTS Study Area

Pollutant	Concentration	Pollutant Loading (lbs/day)
Fecal Coliform MPN/100 ml	34,000	17,010[(1)]
BOD mg/L	11	6
Heavy Metals		
Copper µg/L	35	0.018
Lead µg/L	28	0.014
Zinc µg/L	154	0.077
Total Impervious Area (acre) = 1.55		Runoff Coefficient (C) = 1.00
Average Rainfall Intensity per Storm (inch/hour) = 0.06[(2)]		Runoff Volume (cfs) = 0.093

Notes:
(1) Coliform loads are not shown in lbs/day. Loading comparable to MPN/100 ml.
(2) Based on Central Park Rain Data (1969-2002); The National Climatic Data Center.

22.11.2 Future No-Build Conditions

Water quality would be expected to remain the same or improve. Water quality improvements would be due to the NYCDEP CSO Abatement Program, which will reduce untreated discharges to receiving waterways; nitrogen removal activities, which will reduce nitrogen loads from City WPCPs; and other programs. Stormwater loads from the existing site would not be expected to change, so no significant water quality impacts would be expected.

22.11.3 Potential Impacts with the West 59th Street Converted MTS

All solid waste processing at the West 59th Street Converted MTS would occur within structures on the site. All process wastewater from waste handling operations in the facility, such as washdown water, would be routed to an on-site pretreatment system (e.g., oil/water separation). After treatment, the process wastewater would be discharged to the municipal sewer system and, ultimately, to the North River WPCP, where it would be treated prior to discharge to the Hudson River and, therefore, would not adversely affect water quality.

Stormwater loads and impervious area, shown in Table 22.11-4 would be expected to increase above Existing Conditions. According to the 208 Model, however, the increased loads would have no significant impact on water quality in the adjacent surface waters.

Table 22.11-4
Impervious Area and Estimated Pollutant Loads
West 59th Street Converted MTS

			Estimated Pollutant Loadings/Incremental Change[1]				
Conditions	**Total Impervious Area (acres)**	**Change in Impervious Area (acres)**	**Fecal Coliform[2]**	**BOD (lbs/day)**	**Copper (lbs/day)**	**Lead (lbs/day)**	**Zinc (lbs/day)**
Existing Conditions	1.55	0	17,010/NA	6/NA	0.018/NA	0.014/NA	0.077/NA
Future Build Conditions	2.19	0.64	24,044/7,034	8/2	0.025/0.007	0.020/0.006	0.109/0.032

Notes:
(1) Incremental change refers to difference in the pollutant loading between the Existing Conditions and Future Build Conditions.
(2) Coliform loads are not shown in lbs/day. Loading comparable to MPN/100 ml.
NA = Not Applicable

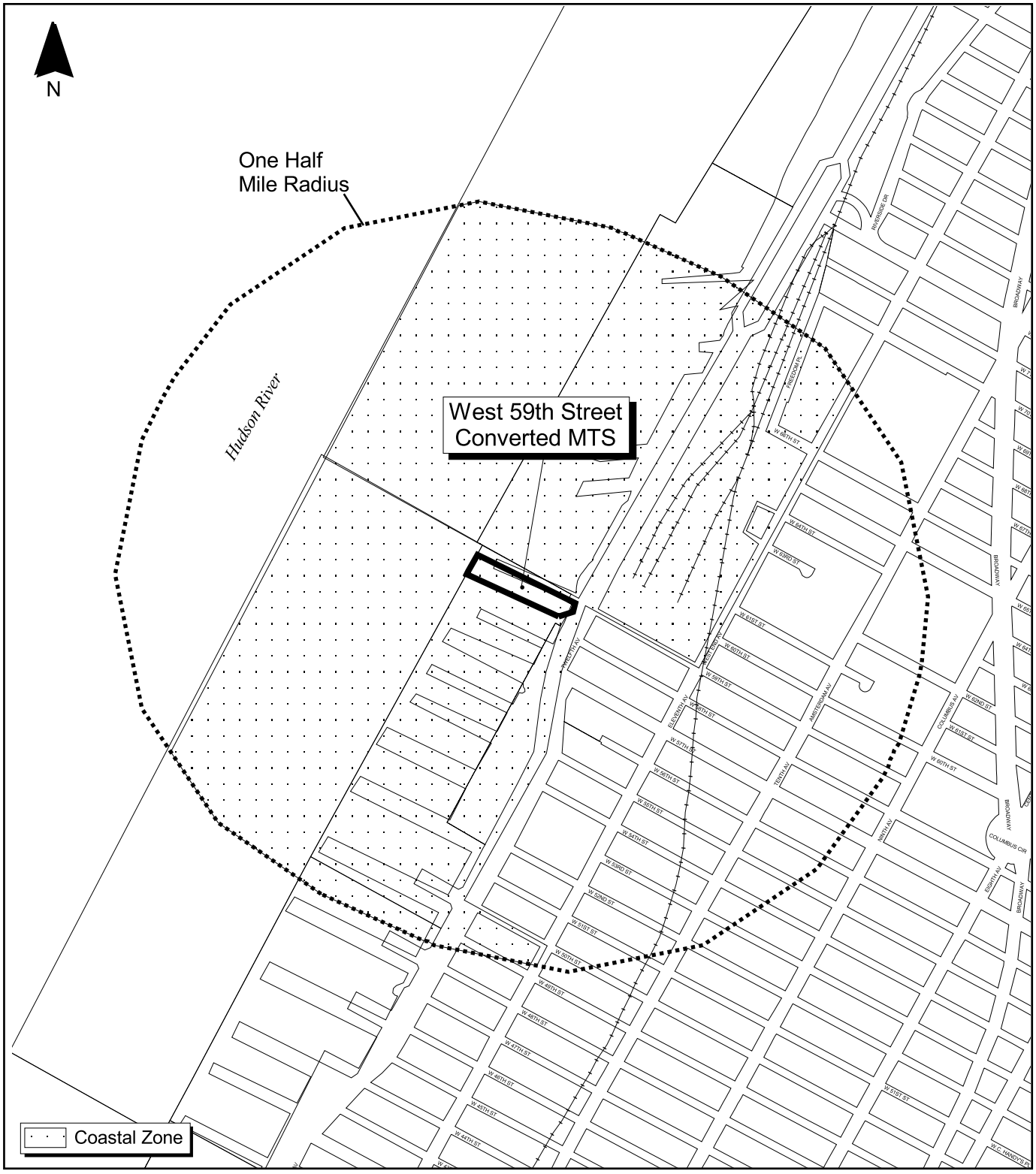
Unimpeded operation of the West 59th Street Converted MTS may also require dredging activities to construct the waterfront structures and improve existing water depths in the immediate vicinity of the site. All dredging activities would be conducted in compliance with applicable federal, state and local regulations and required permits would be acquired prior to any proposed dredging activities. Applicable and appropriate measures (e.g., closed clamshell buckets, silt curtains, etc.) would be implemented during any and all dredging activities to minimize and/or eliminate any short-term impacts to local water quality. Short-term impacts could include an increase in turbidity during active dredging operations; however, dredging would not result in any significant long-term impacts.

22.12 Waterfront Revitalization Program

22.12.1 Introduction

The Federal Coastal Zone Management Act of 1972 established coastal zone management programs to preserve, protect, develop and restore the coastal zone of the U.S. Due to its proximity to the waterfront of the Hudson River, the West 59th Street Converted MTS would be within the City's coastal zone boundary (see Figure 22.12-1). According to "The New Waterfront Revitalization Program," the West 59th Street Converted MTS would be classified as a water-dependent, industrial use. The site is not within a designated SNWA or SMIA; it would be located within Reach 3/The West Side as indicated within the "New York City Comprehensive Waterfront Plan" and the "Plan for the Manhattan Waterfront." The West 59th Street Converted MTS is, therefore, subject to review under the 10 primary policies and the 32 subpolicies identified within "The New Waterfront Revitalization Program" that address the waterfront's important natural, recreational, industrial, commercial, ecological, cultural, aesthetic and energy resources.

The West 59th Street Converted MTS was reviewed to determine its general consistency with each of these policies and subpolicies. This review identified several subpolicies that were not applicable. These included subpolicies 1.1, 1.2, 2.1, 3.1, 4.4, 6.2, 6.3 and 8.5. All policies and subpolicies, including those identified as not applicable, are listed in Table 3.14.1. In instances where a component of the West 59th Street Converted MTS required clarification or was inconsistent with a specific policy or subpolicy, further discussion is provided below. A description of waste handling operations that would occur at the West 59th Street Converted MTS is provided in Section 2.7.



Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

500 0 500 Feet

HDR HydroQual URBITRAN PB 100 YEARS EEA Cambridge Environmental Inc

Figure 22.12-1 Coastal Zone Boundary

West 59th Street Converted MTS

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22.12.2 Consistency Assessment

Policy 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development.

1.3 Encourage redevelopment in the coastal area where public facilities and infrastructure are adequate or will be developed.

A review of available information indicates that there are sufficient public services and facilities to support the new West 59th Street Converted MTS. As part of the West 59th Street Converted MTS, connections from the new facility to existing utilities in the vicinity (e.g., sewer and electrical connections, etc.) would be established.

Policy 2: Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.

2.2 Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas.

The existing West 59th Street MTS is not currently located within an NYCDCP-designated SMIA. The development of the West 59th Street Converted MTS would involve the demolition of the existing MTS and the development of a new, expanded processing building in approximately the same location. The West 59th Street Converted MTS would involve the conversion of the existing facility from a truck-to-barge waste transfer station into a TCB transfer station that would transport DSNY-managed Waste to remote out-of-City disposal facilities. Paper recycling activities allowing for the transport by barge to recycling facilities would also be incorporated.

The site redevelopment, as described in Section 2.7.2, would enhance existing waterfront industrial property and would be generally compatible with existing manufacturing, industrial and maritime uses in the vicinity. The majority of reconstruction activities would occur over water and would consist of four primary components: (1) an expanded, enclosed processing building which would include a tipping floor, loading floor and pier level; (2) a new elevated access ramp with accompanying retaining walls to the truck gallery; (3) a gantry crane, outside of the processing building along the southern waterfront of the proposed pier; and (4) new bulkheads and fendering systems that may be required for the new facility. The West 59th Street Converted MTS would generally be consistent with existing land uses along the waterfront and with the "Plan for the Manhattan Waterfront," which recommends the continued industrial use of the pier. Although it would not encourage or facilitate the siting of any additional water-dependent uses, the West 59th Street Converted MTS would represent an expansion and revitalization of an existing water-dependent use and would be compatible with surrounding uses. Therefore, the West 59th Street Converted MTS would be consistent with this subpolicy.

2.3 Provide infrastructure improvements necessary to support working waterfront uses.

The West 59th Street Converted MTS would involve the demolition of the existing MTS and the subsequent development of a new TCB transfer station at the site. Its development would allow for the truck delivery of waste to the MTS, where it would be transferred into sealed containers, loaded onto DSNY barges and transported by barges to out-of-City disposal facilities. In addition, once construction efforts were completed, paper recycling activities would continue in a manner similar to existing paper recycling operations at the site.

Waterfront development would be comprised of four primary components: (1) an expanded, enclosed processing building which would include a tipping floor, loading floor and pier level; (2) a new elevated access ramp with accompanying

retaining walls to the truck gallery; (3) a gantry crane, outside of the processing building along the southern waterfront of the proposed pier; and (4) new bulkheads and fendering systems that may be required for the new facility.

The West 59th Street Converted MTS would require dredging to improve existing water depths at and in the immediate vicinity of the site and allow for the unimpeded operation of barges and tugboats once it became operational. All required dredging would be conducted in compliance with applicable federal, state and local regulations and required permits would be acquired prior to any proposed dredging activities.

Policy 3: Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation centers.

3.2 Minimize conflicts between recreational, commercial, and ocean-going freight vessels.

Development of the West 59th Street Converted MTS would involve the expansion of an existing waterfront use and would not interfere with any maritime industrial, commercial or recreational vessel activities in the area. Activities resulting from the West 59th Street Converted MTS within this portion of the Hudson River would be limited to barge loading along the pier level and the periodic swapping of loaded barges along the southern bulkhead of the new MTS. Approximately four or five barges would be filled on a daily basis. These swapping activities would be in close proximity to the West 59th Street Converted MTS. Therefore, there would be no anticipated impact on other uses within the water body. In addition, barge movements associated with paper recycling operation at the westernmost portion of the pier would be comparable to current activities. Therefore, the West 59th Street Converted MTS would be consistent with this subpolicy.

3.3 Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.

The West 59th Street Converted MTS would involved the conversion of an existing truck-to-barge system where loose waste was placed in open barges, into a TCB transfer station where waste was transferred into containers that would be sealed and placed into flat deck barges that would transport DSNY-managed Waste to out-of-City disposal locations and, therefore, would be protective of the aquatic environment and surrounding land and water uses. All solid waste handling would occur within an enclosed processing building. All waste would be placed in sealed containers before leaving the building for loading on barges. Paper recycling activities would continue in a manner similar to existing paper recycling operations at the site. Paper would be placed in open-top barges, netted and transported to recycling facilities.

Inside the facility, several measures would be taken to minimize the potential for environmental degradation as a result of the facility. Building ventilation would be maintained under negative pressure, which would maintain dust inside the enclosed processing building. Additional dust, odor and vector control systems would be used to minimize impacts to the surrounding environment. Litter control methods, such as routine sweeping and washing of the tipping floor, would be implemented to minimize or eliminate the potential for litter entering surface waters. All process wastewaters generated on site (e.g. washdown waters, etc.) would be treated prior to their discharge to the municipal sewer system. In addition, on-site storage of petroleum products and hazardous materials related to the operation of the West 59th Street Converted MTS would be done in accordance with applicable federal, state and local regulations. The West 59th Street Converted MTS would be consistent with this subpolicy.

Policy 4: Protect and restore the quality and function of ecological systems within the New York coastal area.

4.1 Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas, Recognized Ecological Complexes, and Significant Coastal Fish and Wildlife Habitats.

Based upon a review of SNWAs, as described in "The New Waterfront Revitalization Program", as well as Recognized Ecological Complexes, the West 59th Street Converted MTS would not be within a designated area. SCFWH information maintained by the New York State Department of State indicates that the West 59th Street Converted MTS would be located with the Lower Hudson Reach SCFWH.

The development of the West 59th Street Converted MTS would involve the demolition of the existing MTS and development of a new, expanded processing building that would incorporate existing paper recycling operations at the site. Construction of the Converted MTS would include dredging within the Hudson River to improve existing water depths at and in the immediate vicinity of the site in order to allow for unimpeded barge and tugboat operations. The West 59th Street Converted MTS would represent an expansion of an existing previous use and would not be anticipated to significantly impact natural resources in the vicinity of the site. The West 59th Street Converted MTS would, therefore, be consistent with this subpolicy.

4.2 Protect and restore tidal and freshwater wetlands.

A review of NYSDEC tidal and freshwater wetland maps was conducted in order to determine the presence of wetlands within the project site. As noted in Section 22.14.1, the West 59th Street Converted MTS would be located on the Hudson River, a NYSDEC-designated littoral zone. No freshwater wetlands exist on the site. The West 59th Street Converted MTS would involve the demolition and subsequent construction of a TCB transfer station that would incorporate the existing paper recycling operation. Dredging would also be required to improve

existing water depths at and in the immediate vicinity of the site to allow for the unimpeded operation of barges and tugboats. Dredging activities associated with the construction of the new facility would result in limited, short-term impact to these tidal wetlands.

The West 59th Street Converted MTS is not anticipated to have significant impacts on wetland areas in the vicinity due to existing water depths in excess of six feet at mean low water, previous and ongoing activities at and in the vicinity of the site and previous dredging activities that have historically occurred at the existing MTS. Mitigation for potential impacts would be proposed during the environmental review and permitting of the West 59th Street Converted MTS. This mitigation, if required, would address potential impacts that may occur due to the West 59th Street Converted MTS and would effectively restore these wetlands and their associated value. The West 59th Street Converted MTS would, therefore, be consistent with this subpolicy.

4.3 Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.

A review of the NYSDEC NHP database indicated the Common Nighthawk (*Chordeiles minor*) as a species suspected of breeding in the vicinity of the site. The Common Nighthawk is classified by the state as a Protected Special Concern species.

As part of the West 59th Street Converted MTS, the existing MTS and its support pilings would be removed as part of the demolition activities. Dredging will be necessary to allow for the unimpeded operation of barges and tugboats. As stated in Section 22.13.3, modifications to the site would pose little, if any, adverse ecological impacts or loss of habitat for rare or endangered species due to previous and ongoing industrial and dredging activities at and in the vicinity of the site. Sanitary and process wastewaters would be routed to on-site treatment

systems and would then be discharged to the municipal sewer system. Stormwater runoff from the West 59th Street Converted MTS and the storage of any petroleum products would be conducted in accordance with applicable federal, state and local regulations. Further, the West 59th Street Converted MTS would not introduce hazardous wastes or other pollutants into the environment that could adversely impact fish and wildlife resources within the coastal area.

Policy 5: Protect and improve water quality in the New York City coastal area.

5.1 Manage direct or indirect discharges to waterbodies.

The West 59th Street Converted MTS would be developed in accordance with applicable federal, state and local regulations. Consistent with this subpolicy, sanitary and process wastewaters (e.g., floor washdown waters, etc.) would be conveyed to an on-site treatment system, which would consist of oil/water separators, etc., discharging eventually to the municipal sewer system. In addition, the slope of the tipping floor would prevent the build-up of free liquids by directing all liquids to drains. Stormwater runoff from the West 59th Street Converted MTS would be managed in accordance with all applicable federal, state and local regulations.

In addition, the majority of activity associated with the West 59th Street Converted MTS would be conducted within an enclosed processing building. Only sealed, air- and watertight containers would be transferred to barges outside of the processing building by gantry cranes installed at the pier level. Inside the facility, several measures would be taken to minimize the potential for environmental degradation as a result of the facility. Building ventilation would be maintained under negative pressure, which is intended to keep dust inside the enclosed processing building. Litter control methods such as routine sweeping and washing of the tipping floor would be implemented to minimize or eliminate the potential for litter entering surface waters. Therefore, the West 59th Street Converted MTS would be consistent with this subpolicy.

5.2 Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.

BMPs would be used to the extent possible during all phases of construction and operation of the West 59th Street Converted MTS in order to minimize any nonpoint discharges. The West 59th Street Converted MTS would comply with federal, state and local requirements concerning the management of stormwater runoff and erosion. All handling and containerization of solid waste would be conducted within an enclosed processing building. During construction, non-structural and, if necessary, structural, measures would be used to minimize nonpoint source pollution.

5.3 Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.

Dredging would be necessary to provide sufficient water depths for unimpeded operations once the West 59th Street Converted MTS were operational, as well as to construct its expanded pier structure. Any dredging done as part of construction would result in temporary impacts and would be conducted in a manner to minimize siltation, erosion and other short-term impacts to water quality. To the extent practical, non-structural and, if necessary, structural, measures would be used to minimize siltation and potential adverse impacts to tidal wetlands in the vicinity. All dredged materials would be disposed of at a permitted upland facility in accordance with applicable federal, state and local regulations. Therefore, the West 59th Street Converted MTS would be consistent with this subpolicy.

5.4 Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.

The West 59th Street Converted MTS would have no impact on the quality or quantity of surface or ground waters. Process wastewaters (e.g. washdown waters, etc.) would be conveyed to an on-site treatment system and would then discharge to the municipal sewer system. Stormwater runoff from the facility would be managed in accordance with all applicable federal, state and local regulations. No surface or ground waters in the vicinity of the site constitute a primary or sole source aquifer or water supply. The West 59th Street Converted MTS would be consistent with this policy.

Policy 6: Minimize loss of life, structures and natural resources caused by flooding and erosion.

6.1 Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the condition and use of the property to be protected and the surrounding area.

According to a review of the FEMA National Flood Insurance Program maps, the West 59th Street Converted MTS would be is located in a section of Zone C (outside of the 100-year and 500-year floodplains). The existing MTS would be demolished and the West 59th Street Converted MTS would be constructed at approximately the same location. Dredging would be required as part of the activity to allow for unimpeded barge operations at the site. Improvements to the existing bulkhead may also be required. Construction of the West 59th Street Converted MTS would not affect the potential for flooding or erosion. All structures would comply with applicable building code requirements. To the extent practicable, non-structural and, if necessary, structural, measures would be used to minimize damage from flooding and erosion during the demolition of the existing MTS and subsequent construction of the West 59th Street Converted MTS.

Policy 7: Minimize environmental degradation from solid waste and hazardous substances.

7.1 Manage solid waste material, hazardous wastes, toxic pollutants, and substances hazardous to the environment to protect public health, control pollution and prevent degradation of coastal ecosystems.

The West 59th Street Converted MTS would not involve the storage, treatment or disposal of hazardous waste, but would facilitate the management and processing of solid waste through a TCB system and marine transport to out-of-City disposal sites. Recyclable paper would also continue to be handled by the facility. Unless emergencies close the facility, solid waste would generally be containerized within 24 hours of tipping. All solid waste handling operations would be conducted in accordance with NYSDEC Part 360 regulations (6 NYCRR Parts 360-1 and 360-11) for solid waste transfer stations, which would be incorporated by reference into the permit to construct and operate the West 59th Street Converted MTS. The majority of activities would occur within an enclosed processing building. Only sealed, air- and watertight containers would be utilized outside of the facility. Radiation detection equipment would be located at the facility, and contingency plans would be in place in the event of unauthorized waste and/or other situations that could disrupt the operation of the facility.

On-site storage of petroleum or hazardous materials related to the operation of the West 59th Street Converted MTS would be minimal. All storage would be in accordance with applicable federal, state and local regulations. The West 59th Street Converted MTS would be operated in a manner to ensure that there would be no impact to ground and surface water supplies, significant fish and wildlife habitats, recreational areas and scenic resources.

7.2 Prevent and remediate discharge of petroleum products.

See response to Subpolicy 7.1.

7.3 Transport solid waste and hazardous substances and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.

See response to Subpolicy 7.1.

Policy 8: Provide public access to and along New York City's coastal waters.

8.1 Preserve, protect and maintain existing physical, visual and recreational access to the waterfront.

Due to the existing industrial uses at and in the immediate vicinity of the West 59th Street Converted MTS, public access would not be compatible with the principal use of the site. Therefore, this subpolicy is not applicable.

8.2 Incorporate public access into new public and private development where compatible with proposed land use and coastal location.

The West 59th Street Converted MTS would be a stand-alone, water-dependent, industrial facility on the Hudson River. Public access would not be compatible with the West 59th Street Converted MTS; however, its development would not preclude any future development of public access at other locations along the Hudson River that have been identified for potential public access sites.

8.3 Provide visual access to coastal lands, waters and open space where physically practical.

The West 59th Street Converted MTS site would be considered an expansion of an existing waterfront use and would not impair visual access to coastal lands, waters or open space. See also response to Subpolicy 22.1.

8.4 Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.

Due to its isolated location to the west of the West Side Highway, it is not anticipated that the West 59th Street Converted MTS would have a significant impact on any open space resources within the study area. Furthermore, the development of the West 59th Street Converted MTS would not preclude development of waterfront parks to either the north or south. Therefore, it would be consistent with this subpolicy.

Policy 9: Protect scenic resources that contribute to the visual quality of the New York City coastal area.

9.1 Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.

The West 59th Street Converted MTS would be an expansion and rehabilitation of an existing waterfront use and would be compatible with the existing urban design context and visual conditions of this portion of the Hudson River Waterfront, as noted in Section 9.7. Based on the information presented in that section, the West 59th Street Converted MTS would be consistent with this subpolicy.

9.2 Protect scenic values associated with natural resources.

The West 59th Street Converted MTS would pose no impact to scenic values associated with natural resources. Therefore, this subpolicy is not applicable.

Policy 10: Protect, preserve and enhance resources significant to the historical, archaeological and cultural legacy of the New York City coastal area.

10.1 Retain and preserve designated historic resources and enhance resources significant to the coastal culture of New York City.

The West 59th Street Converted MTS would have no effect on any cultural resources on or near the site, as noted in Section 22.6.3. Based on the information presented in that section, the West 59th Street Converted MTS would be consistent with this subpolicy.

10.2 Protect and preserve archaeological resources and artifacts.

No archaeologically significant resources are located at the site or in the study area. This subpolicy, therefore, is not applicable.

22.13 Infrastructure, Solid Waste and Sanitation Services, and Energy

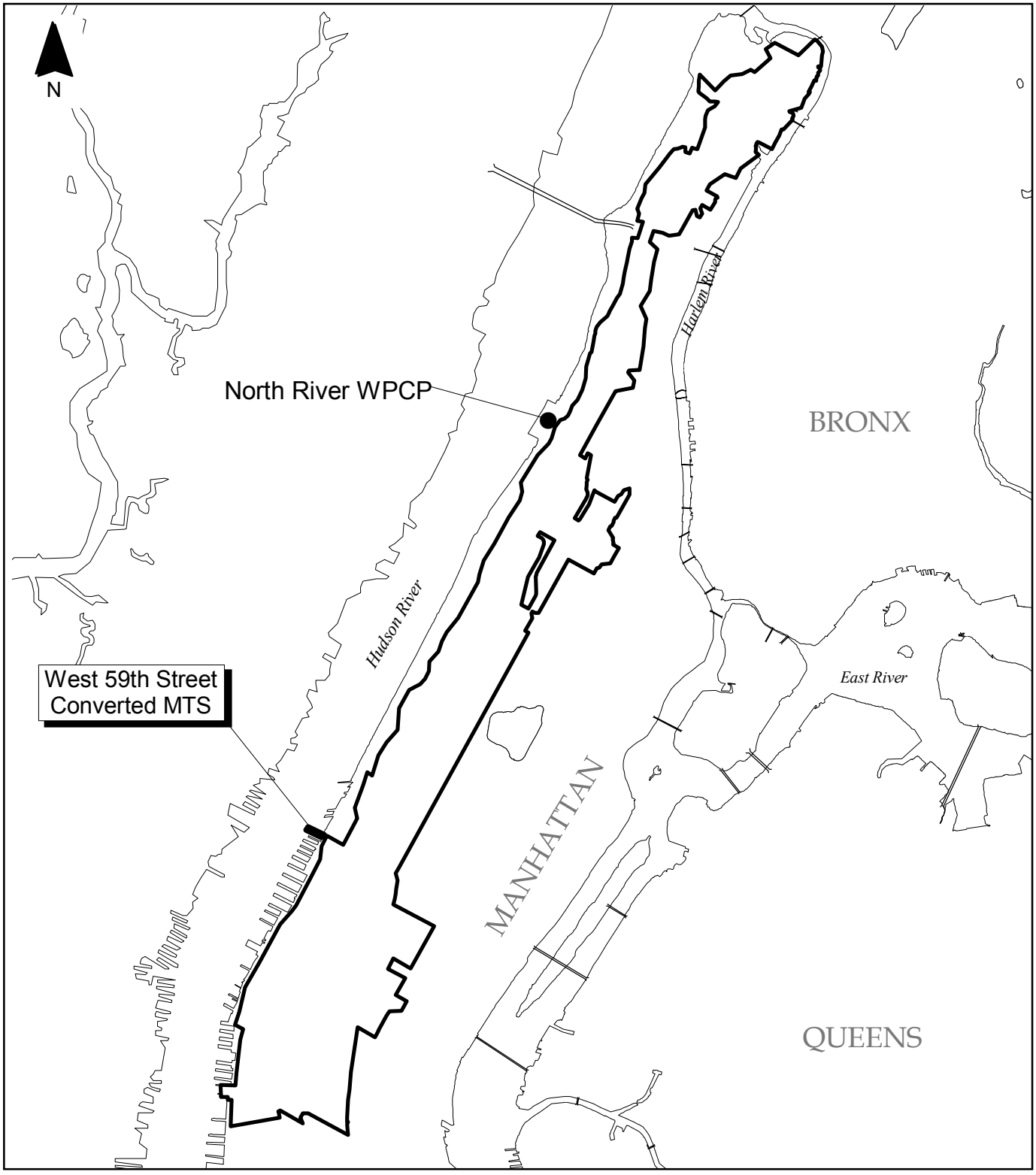
Existing Conditions

22.13.1.1 Water Supply

Water is supplied to the existing West 59th Street MTS from the Delaware and Catskill reservoir systems through the City's municipal water distribution system. A 16-inch-diameter pipe along West 59th Street provides potable water for both consumption and sanitary requirements. Water pressure throughout the City system is generally maintained at about 20 psi, which is the minimum pressure acceptable for uninterrupted service (2001 CEQR Technical Manual). To ensure that adequate pressure is provided on site, the potable and fire water systems are currently supplemented with a pump.

22.13.1.2 Sanitary Sewage and Stormwater

A review of NYCDEP I&I maps shows that the site is served by the North River WPCP, which serves west Manhattan from Chelsea to Inwood. The WPCP drainage area is illustrated in Figure 22.13-1. From July 2002 through June 2003, the North River WPCP treated an average of 124 mgd of wastewater under dry weather flow conditions and an average flow of 133 mgd which include the sanitary and stormwater flows received by the WPCP during wet weather (see Table 22.13-1). The maximum dry weather flow during this period was 130 mgd during August 2002 and June 2003 and the maximum average flow was 149 mdg during June 2003. Effluent from the plant is discharged into the Hudson River and is regulated by NYSDEC under the SPDES. The current SPDES permit limit for flow to the North River WPCP is 170 mgd. It is estimated that current on-site employee water usage is about 475 gpd. This estimate is based on the current staff of 19 employees using 25 gallons per person, per day (2001 CEQR Technical Manual). In addition, approximately 180 gpd of potable water is used for tipping floor washdown and dust control. Total existing water usage is approximately 655 gpd.



Site delineations are approximate.
Base Map Source: New York City Department of City Planning

1 0 1 Miles

Figure 22.13-1 Existing WPCP Drainage Area
West 59th Street Converted MTS

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Table 22.13-1
Average Monthly Dry Weather and Average Flows
North River Water Pollution Control Plant
Fiscal Year 2003

Month	Dry Weather Flow (mgd)	Average Monthly Flow (1) (mgd)
July 2002	127	129
August	130	137
September	124	135
October	121	140
November	118	130
December	120	128
January 2003	119	125
February	125	129
March	122	130
April	128	134
May	122	129
June	130	149
Average Effluent	**124**	**133**

Note:
(1) Average flow includes the sanitary and stormwater flows received by the plant during wet weather.

A 12-inch-diameter sewer on West 59th Street and 12th Avenue serves the site. The sewer is connected to a 10.5-foot, square interceptor line (combined sanitary and stormwater system) that runs north along Riverside Drive where waste is directed to the North River WPCP. Stormwater runoff from the existing MTS parking area and ramp are routed to catch basins that discharge to the combined sewer system.

22.13.1.3 Solid Waste

Based on solid waste generation information from the 2001 CEQR Technical Manual, it was estimated that each employee at the existing MTS produces approximately nine pounds of solid waste per week for a facility total of 171 pounds per week (approximately 25 pounds per day). The solid waste is collected by DSNY personnel and transported by truck to an appropriately licensed solid waste management facility.

22.13.1.4 Energy

Electricity to the facility is provided by Consolidated Edison of New York. A review of applicable utility plans shows lines along West 59th Street and 12th Avenue with the existing MTS service connected to the Consolidated Edison system at the intersection of 12th Avenue and West 59th Street. The West 59th Street MTS utilized 0.24E + 10 BTU during FY 2002 (i.e., July 2001 through June 2002) based on operations information provided by DSNY. No gas is currently supplied to the facility.

22.13.2 Future No-Build Conditions

The existing West 59th Street MTS would continue to operate as it does today. Potable water use, process and sanitary wastewater generation, solid waste generation and energy use would remain at or near Existing Conditions levels for security employees. Wastewater flows to the North River WPCP would continue to increase and would be projected to be 135.1 mgd by 2006.

22.13.3 Potential Impacts with the West 59th Street Converted MTS

22.13.3.1 Water Supply

The West 59th Street Converted MTS would have a total of up to 60 employees working three shifts per day. They would require approximately 1,500 gallons of potable water per day plus an additional 1,800 gpd for truck and tipping floor washdown and dust control. The combined total usage of 3,300 gpd of potable water would represent an increase of 2,645 gpd above current consumption levels.

The West 59th Street Converted MTS would have no impact on the existing system's ability to supply water reliably. Under worst-case conditions, the increased usage would not have significant impacts on water pressure in the system.

22.13.3.2 Sanitary Sewage

Based on the estimated water usage of 3,300 gpd for the West 59th Street Converted MTS, the small quantities of wastewater sent to the North River WPCP would not significantly impact the sewage flow rate or the ability of the North River WPCP to meet its SPDES permit limits. The projected wastewater flows at the WPCP would be anticipated to be approximately 135.1 mgd in 2006, which would be well below the permitted capacity of 170 mgd. In addition, the new wastewater flows due to the proposed action would not result in a significant increase in combined sewer overflows (CSO).

22.13.3.3 Solid Waste

Solid waste transfer station facility use is not cited under the solid waste generation rates provided in the 2001 CEQR Technical Manual, so rates for a commercial office building (1.3 lbs/day per employee) were used as a basis for a conservative estimate of waste generation. For an estimated 60 facility employees per day, 468 pounds of solid waste would be generated per week (78 lbs/day) and would represent an incremental increase of approximately 297 pounds per week (approximately 50 lbs/day) above current waste generation levels. This volume would be managed at the West 59th Street Converted MTS and would not significantly impact the system.

22.13.3.4 Energy

The West 59th Street Converted MTS would require an additional 5.48E+10 BTU/year of electricity to operate the facility. Natural gas heating would be used with an estimated demand of 2.00E+08 BTU/year.

Consolidated Edison has been notified of the power requirements of the West 59th Street Converted MTS and has stated that all demands generated by the facility could be met without an impact on the power requirements of the surrounding community and without the need for additional power generation capacity.

Consolidated Edison was also notified of the natural gas requirements of the West 59th Street Converted MTS and has stated that the facility could be supplied with natural gas with no adverse impacts to the utility.

22.14 Traffic, Parking, Transit, and Pedestrians

22.14.1 Introduction

The West 59th Street Converted MTS would receive waste from DSNY and other agency collection vehicles. Therefore, pursuant to CEQR guidelines, a traffic analysis was performed on the projected net increase in collection vehicles in the study area (which is defined below) and on other site-generated traffic. (See Section 3.16 for a discussion of CEQR analysis thresholds.)

22.14.2 Existing Conditions

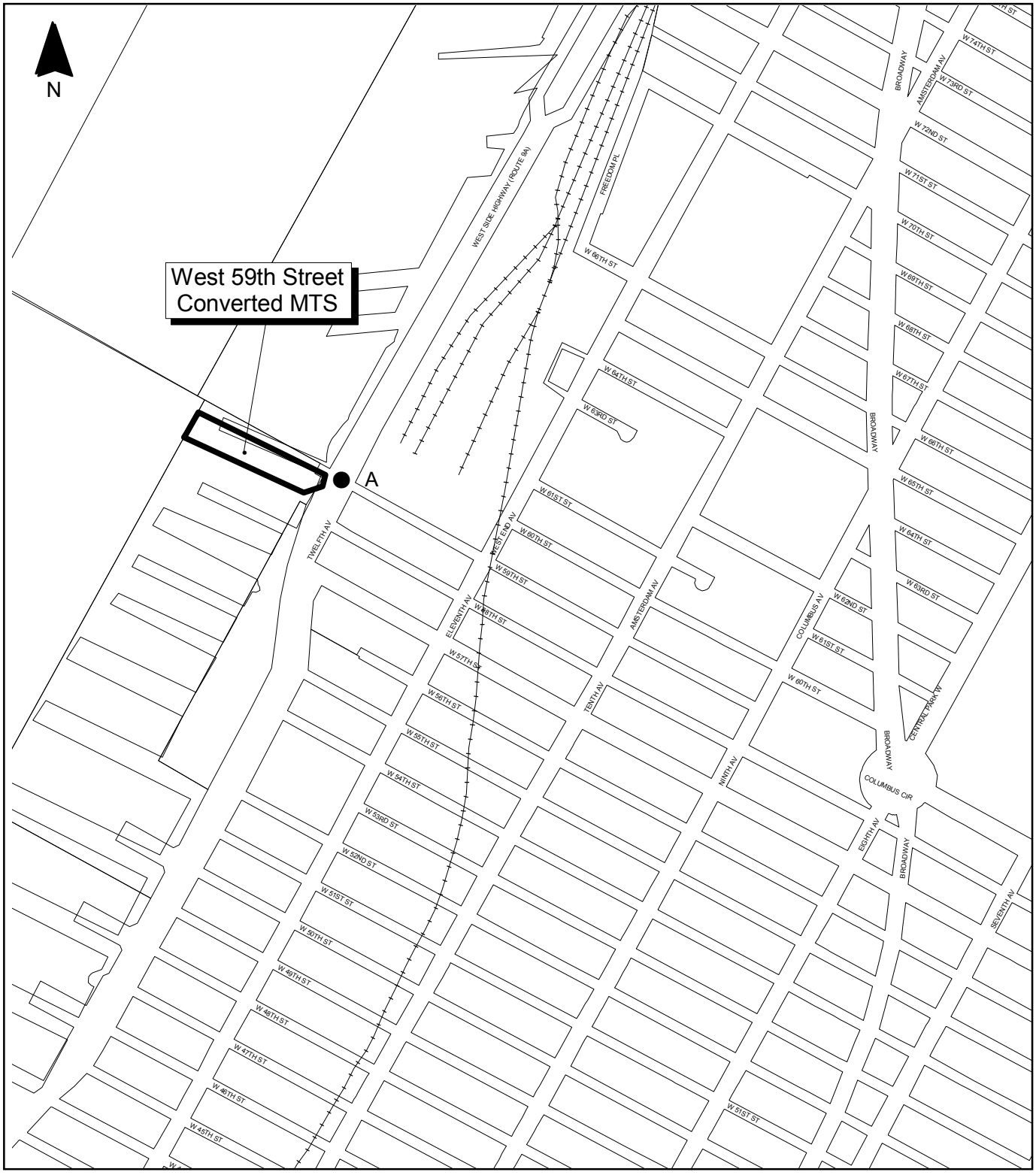
22.14.2.1 Definition of Study Area

Based on the number of anticipated DSNY and other agency collection vehicles using this site, the traffic analysis study area is limited, and is focused primarily along 12th Avenue (Route 9A). This study area is a mix of light industrial, commercial and residential uses. There are no CEQR-defined areas of concern located within the study area. Figure 22.14-1 shows the locations of the intersections selected for analysis (location A). The intersections analyzed were selected using the procedures defined in Section 3.16.

All collection vehicles must access the site from West 59th Street. Westbound collection vehicles would approach the site along West 59th Street. Northbound collection vehicles would approach from the south via 12th Avenue and turn west onto West 59th Street. Section 22.14.2.2 further discusses the specific routes used by DSNY and other agency collection vehicles to access the West 59th Street Converted MTS.

22.14.2.2 Surface Network

One major highway, the West Side Highway/Henry Hudson Parkway (Route 9A), services the study area. Tenth Avenue, 11th Avenue, 12th Avenue and West 57th Street are local truck routes that provide access to and from the site. A map showing all major truck routes and local truck routes in Manhattan is provided in Section 3.16 (see Figure 3.16-4).



Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.14-1 Traffic Analysis Study Area

West 59th Street Converted MTS

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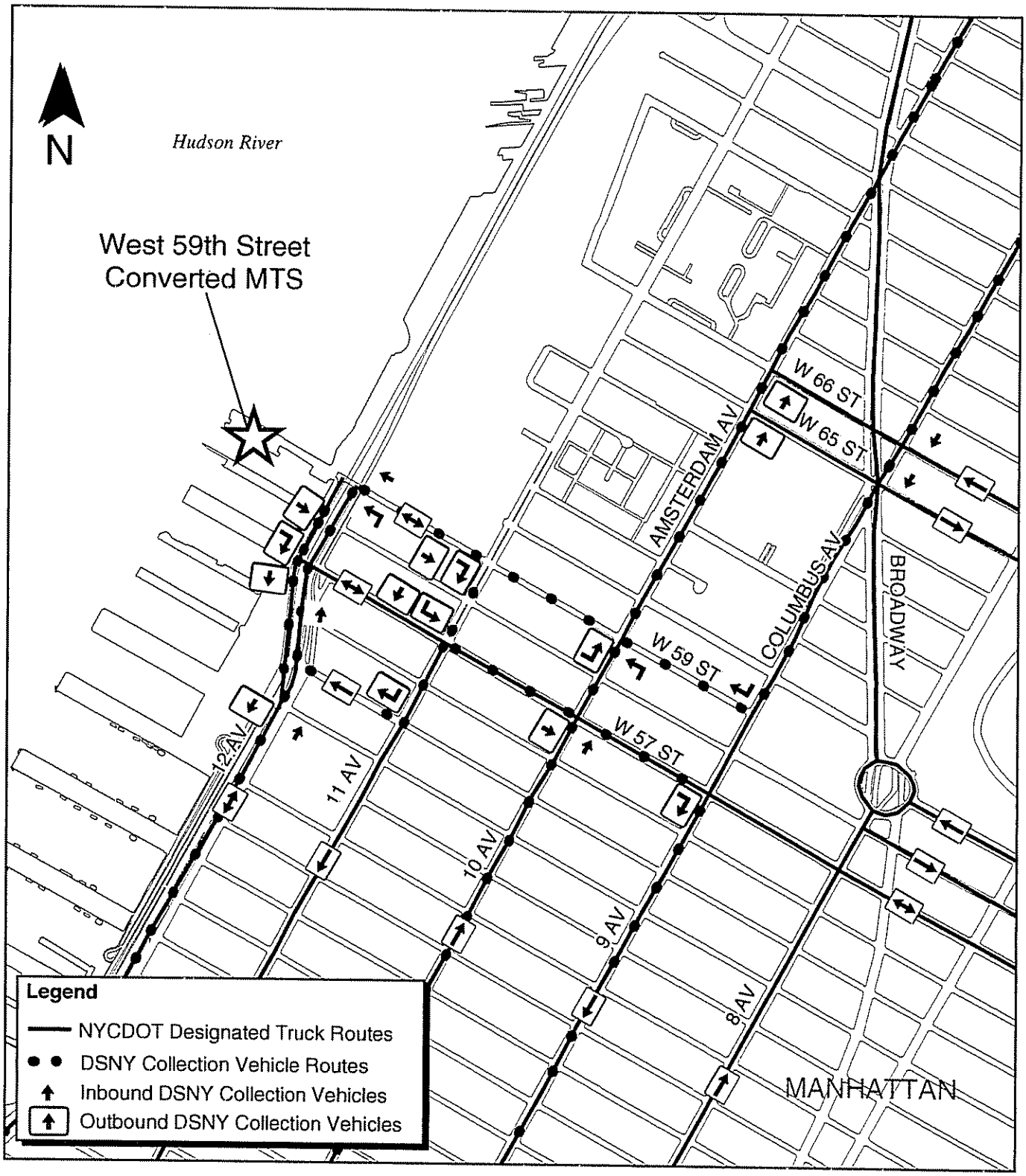
Twelfth Avenue (West Side Highway – Route 9A) is a principal arterial that is the major west side access route from downtown Manhattan to all points north. West 59th Street is an east-west collector road for local traffic. Ninth Avenue, 11th Avenue and Columbus Avenue run southbound only in the vicinity of the site and 8th Avenue, 10th Avenue and Amsterdam Avenue run northbound only.

DSNY and other agency collection vehicles traveling north to the facility from lower Manhattan would use Route 9A and exit onto 12th Avenue at West 57th Street. Twelfth Avenue is divided in the vicinity of the site by Route 9A as it ramps up into an elevated highway. Vehicles traveling north to the facility from more local areas would follow 10th Avenue north to West 59th Street and then turn west to enter the facility. Vehicles traveling south to the facility would follow Columbus Avenue to West 59th Street. All vehicles entering the facility pass through the intersection of 12th Avenue (northbound and southbound) and West 59th Street. All exiting vehicles pass through the intersection of West 59th Street and 12th Avenue (southbound). DSNY and other agency collection vehicles returning north follow West 59th Street east to Amsterdam Avenue and then turn north. Vehicles returning to lower Manhattan turn south at the exit of the facility onto 12th Avenue and merge onto Route 9A near West 55th Street, while vehicles returning to local areas south of the Converted MTS follow West 59th Street east to either 11th Avenue or 9th Avenue and then proceed south. Figure 22.14-2 depicts NYCDOT designated truck routes near the facility and the future DSNY and other agency collection vehicle routes to the facility.

22.14.2.3 Existing Traffic Operations

The intersections listed below were identified for analysis because they are the most likely to be impacted from an increase in DSNY and other agency collection vehicle traffic to the West 59th Street Converted MTS. Both are on major arterials and/or collection vehicle routes. Diagrams of these intersections are included in technical backup submitted to NYCDOT.

- Twelfth Avenue northbound and West 59th Street – Unsignalized Intersection (see Figure 22.14-1 – location A)
- Twelfth Avenue southbound and West 59th Street – Unsignalized Intersection (see Figure 22.14-1 – location A)



Site delineations are approximate
Base Map Source: New York City Department of Information Technology & Telecommunications

500 0 500 Feet

HDR URBITRAN EEA Hydroqual PB Cambridge Environmental Inc

Figure 22.14-2 DSNY Collection Vehicle Routes
West 59th Street Converted MTS

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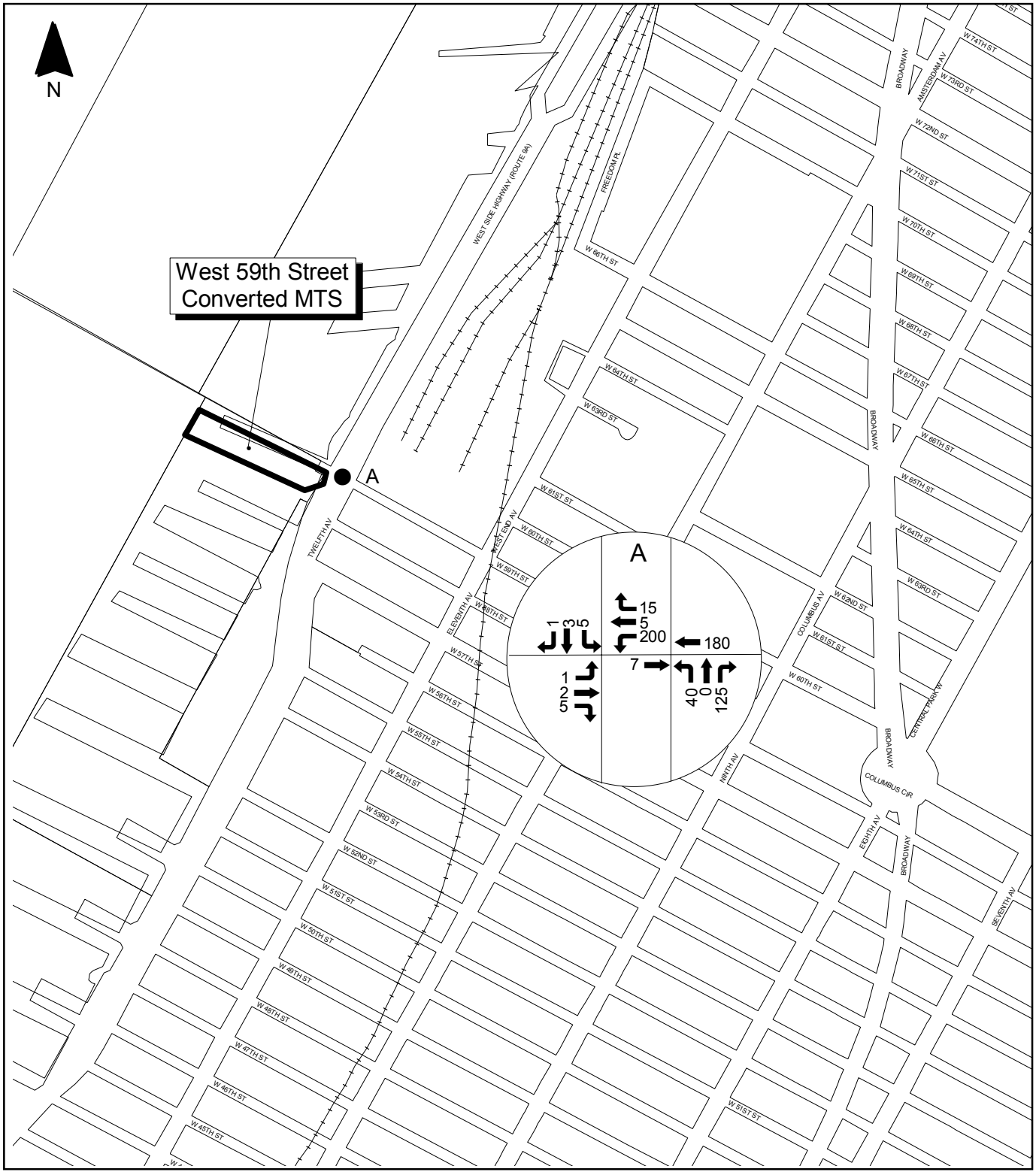
Twelfth Avenue (West Side Highway – Route 9A) is a principal arterial that is the major west side access route from downtown Manhattan to all points north. West 59th Street is an east-west collector road for local traffic.

A traffic data collection program that consisted of manual turning movement counts with vehicle classifications and ATR counts was undertaken to define existing weekday traffic operations (see Section 3.16 for a discussion on traffic data collection). Manual turning movement counts were conducted between February 11 and February 13, 2003, while ATR counts were conducted between February 10 and February 14, 2003. Figures 22.14-3 and 22.14-4 depict the existing traffic volumes for AM and PM peaks at the intersections analyzed (the Facility peak coincides with the AM peak, thus only two peak hours were analyzed for this site). The AM peak generally occurred between 8:45 a.m. and 9:45 a.m. and the PM peak between 3:45 p.m. and 4:45 p.m. Table 22.14-1 presents the v/c ratio, delay and LOS for the two intersections during the AM and PM peaks.

Existing truck traffic through these intersections was relatively low. The percentage of trucks was 9% during the morning hours, then decreased to 4% or lower during the PM peak hours.



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Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.14-3 Existing Traffic Volumes - AM Peak
West 59th Street Converted MTS

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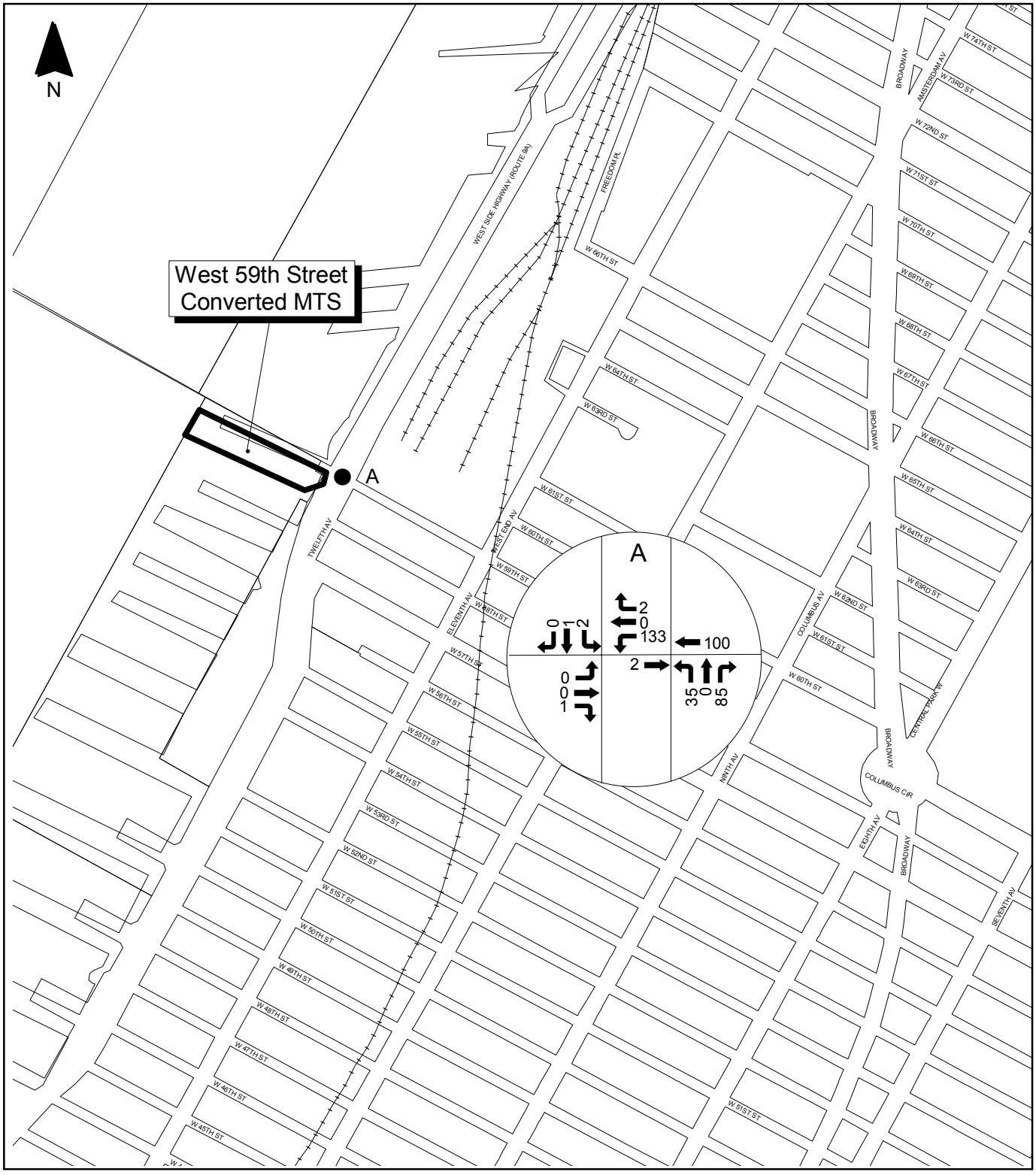

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Site delineations are approximate.
Base Map Source: New York City Department of City Planning

HDR | HydroQual | URBITRAN | PB | EEA | Cambridge Environmental Inc

Figure 22.14-4 Existing Traffic Volumes - PM Peak

West 59th Street Converted MTS

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Table 22.14-1
HCM Analysis[(1)] – Existing Conditions
West 59th Street Converted MTS

Intersection & Lane Group	AM & Facility Peak Hour (8:45 a.m. – 9:45 a.m.)			PM Peak Hour (3:45 p.m. – 4:45 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
12th Avenue Northbound & West 59th Street (unsignalized)						
NB LR	0.31	13.1	B	0.23	11.8	B
12th Avenue Southbound & West 59th Street (unsignalized)						
EB LTR	0.00	7.8	A	0.00	7.5	A
WB LTR	0.18	7.8	A	0.10	7.5	A
SB TR	0.03	15.0	B	0.01	11.3	B

Notes:
(1) HCM output is included in technical backup submitted to the NYCDOT.
LTR = left, through and right movements
TR = through right movement
LR = left right movement
NB = northbound
SB = southbound
EB = eastbound
WB = westbound

22.14.2.3.1 LOS at Signalized Intersections

No signalized intersections were analyzed.

22.14.2.3.2 LOS at Unsignalized Intersections

Table 22.14-1 shows that the unsignalized intersections generally operated at an overall LOS of A or B.

22.14.2.4 Existing DSNY-Related Traffic

The existing DSNY-related traffic in the vicinity of the West 59th Street Converted MTS is generated by DSNY and related facilities in the immediate study area, most notably the DSNY Manhattan CD 7 garage (West 57th Street at 12th Avenue). Within the study area, DSNY-related traffic is routed primarily along West End/11th Avenue, Amsterdam Avenue/10th Avenue, and West 57th Street.

22.14.2.5 Public Transportation

Subway and bus service are provided within the vicinity of the site. The "59th Street/Columbus Circle" station, located approximately ¾-mile to its east, is the closest subway stop to the site. Subway service on MTA's A, B, C, D, 1 and 2 lines is provided at this station. Two MTA bus lines, M31 and M57, provide service primarily along West 57th Street/York Avenue and West 57th Street/West End Avenue, respectively. There are no bus routes or bus stops located at either study intersection.

22.14.2.6 Pedestrian Activity

Pedestrian activity is generally moderate within the study area. Striped crosswalks are provided at major pedestrian crossings, including the bicycle/pedestrian path that is a part of the Hudson River Park.

22.14.3 Future No-Build Conditions

22.14.3.1 Traffic Conditions

Future No-Build traffic volumes were determined by applying a growth rate of 0.5% per year to existing traffic volumes in accordance with the 2001 CEQR Technical Manual. In addition, additional traffic generated by proposed developments in the study expected to be completed by the Future No-Build year (2006) was also included. The following is a listing of the approved or in-process developments that are expected to generate significant volumes of traffic through the study area, and thus were specifically accounted for as part of this analysis:

- Hearst Tower (retail and offices);
- AOL Time Warner (residential, retail, offices, hotel and theater);
- Alvin Ailey Dance Foundation (studio/showroom and theater);
- River Center (residential, retail and community facility);
- Durst Organization, Scheme "C" (residential, retail, office and studio/showroom);

- Cambridge Development: 2 West End Avenue (residential and retail);
- Ginsberg Development: West 60th to West 61st Streets (residential);
- Glenwood Management: 1926 Broadway (residential and retail);
- Riverside South: West End Avenue, between 59th Street and 60th Street (residential, retail, community facility, park and studio/showroom);
- Sidney Fetner Associates: southwest corner of 10th Avenue and West 42nd Street (residential);
- Chinese Embassy: West 43rd Street between 10th and 11th Avenues (residential);
- 345 West 42nd Street (residential and retail);
- J.D. Carlyle Development: 12th Avenue and West 42nd Street (office);
- Douglas Durst: northeast corner of 9th Avenue and West 42nd Street (residential and retail);
- National Video Studio expansion: 10th Avenue and West 42nd Street (office); and
- Milstein: 8th Avenue and West 42nd Street (office).

Figures 22.14-5 and 22.14-6 depict the Future No-Build traffic volumes for the AM and PM peaks at the intersections analyzed. Table 22.14-2 (Future No-Build Conditions) shows the Future No-Build v/c ratio, delay and LOS for the studied intersections. Overall, unsignalized intersections experienced relatively small increases in delay (less than 5 seconds) and are projected to remain at their existing condition LOS.

22.14.3.2 Public Transportation

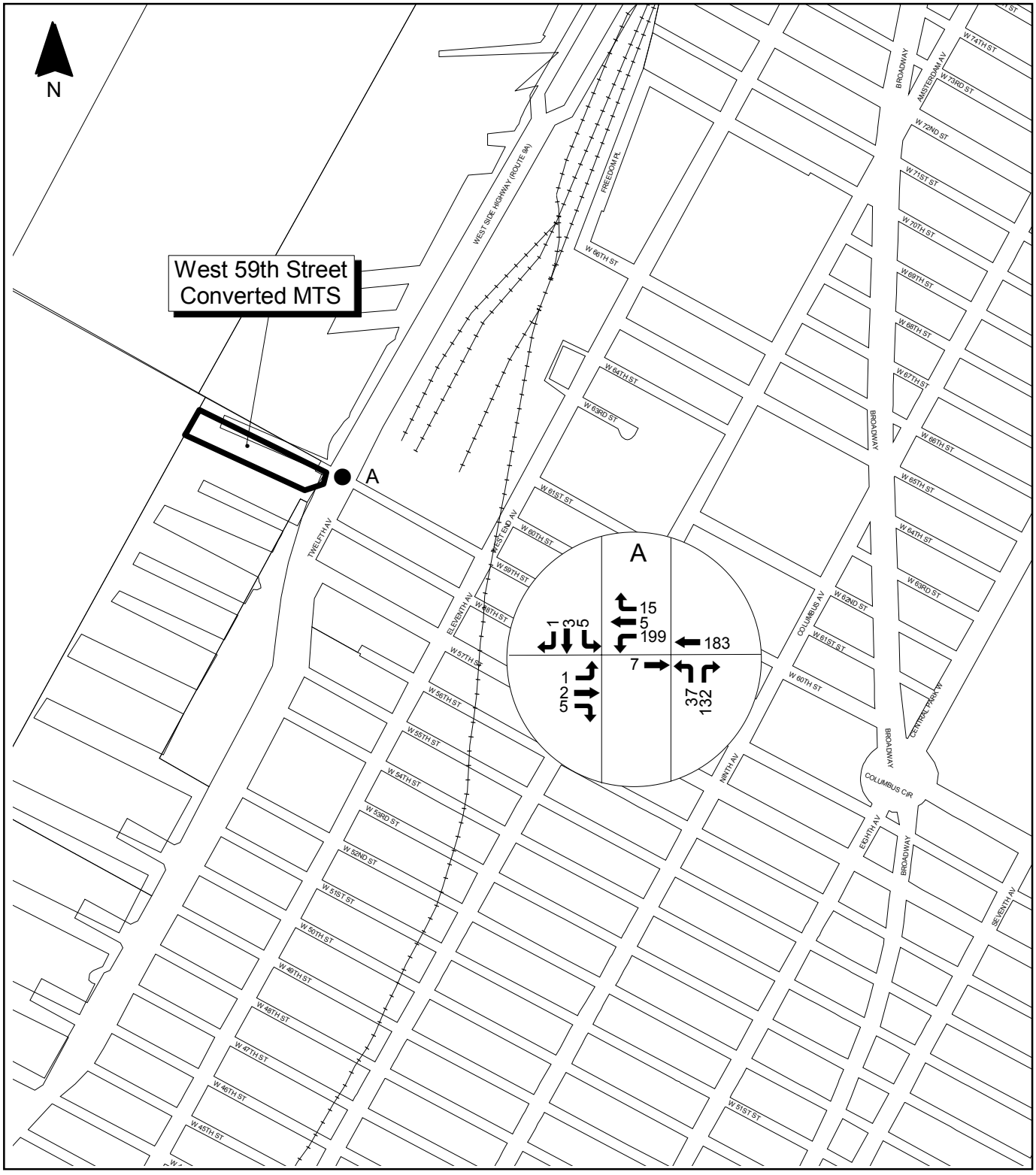
Future No-Build Conditions are expected to remain the same as Existing Conditions.

22.14.3.3 Pedestrian Activity

Future No-Build Conditions are expected to remain the same as Existing Conditions.

22.14.4 Potential Impacts with the West 59th Street Converted MTS

The West 59th Street Converted MTS would receive waste from five CDs in Manhattan - Manhattan CDs MN01 through MN04 and MN07. Potential traffic impacts may result from the increase in DSNY and other agency collection vehicle trips to and from the site during all peak hours.



Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.14-5 Future No-Build Traffic Volumes AM Peak West 59th Street Converted MTS

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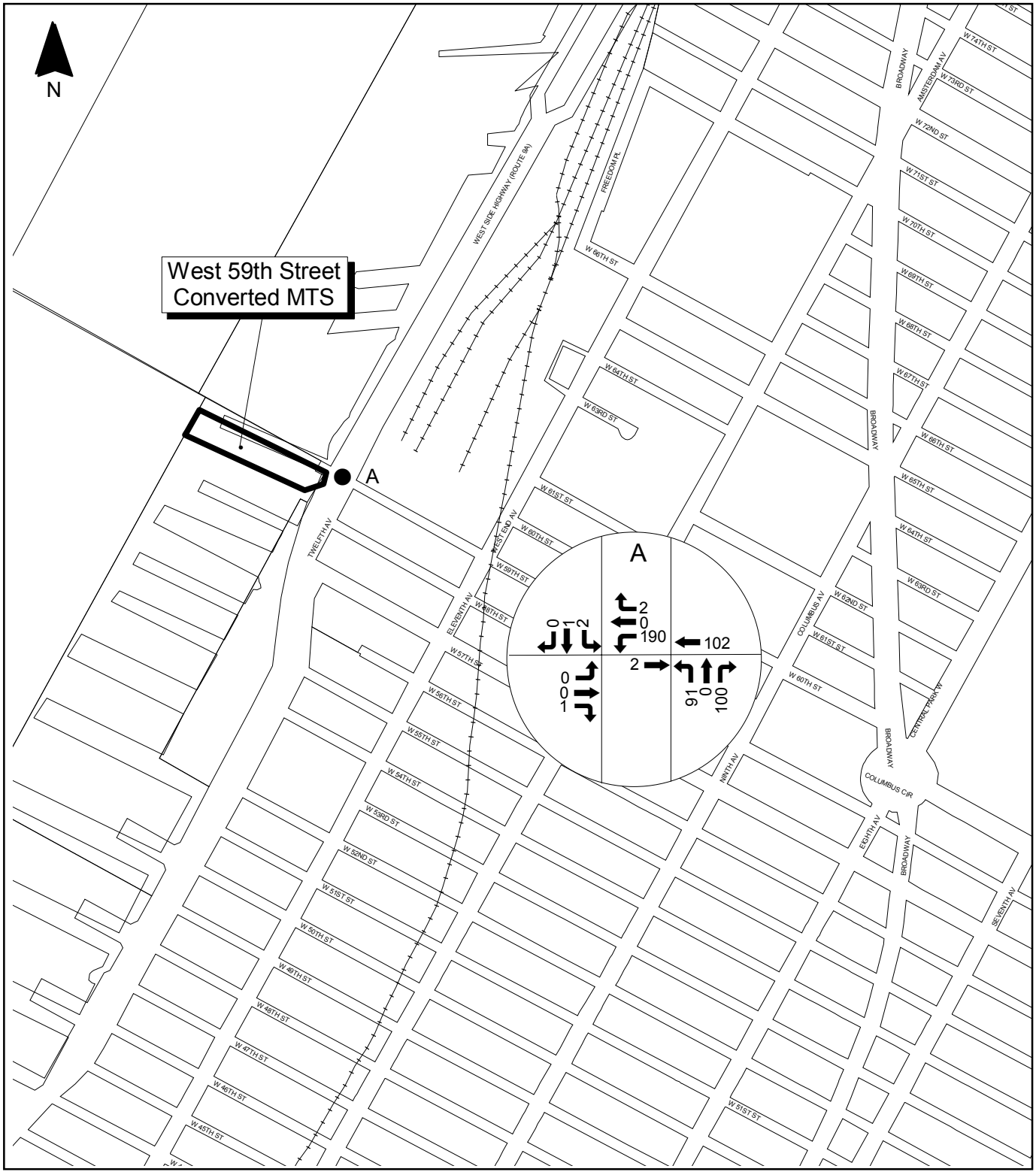

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Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.14-6 Future No-Build Traffic Volumes
PM Peak
West 59th Street Converted MTS

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Table 22.14-2
HCM Analysis[(1)] – Future No-Build Conditions
West 59th Street Converted MTS

Intersection & Lane Group	AM & Facility Peak Hour (8:45 a.m. – 9:45 a.m.)			PM Peak Hour (3:45 p.m. – 4:45 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
12th Avenue Northbound & West 59th Street (unsignalized)						
NB LTR	0.31	13.1	B	0.38	13.4	B
12th Avenue Southbound & West 59th Street (unsignalized)						
EB LTR	0.00	7.8	A	0.00	7.5	A
WB LTR	0.18	7.8	A	0.14	7.6	A
SB LTR	0.03	15.0	B	0.01	12.9	B

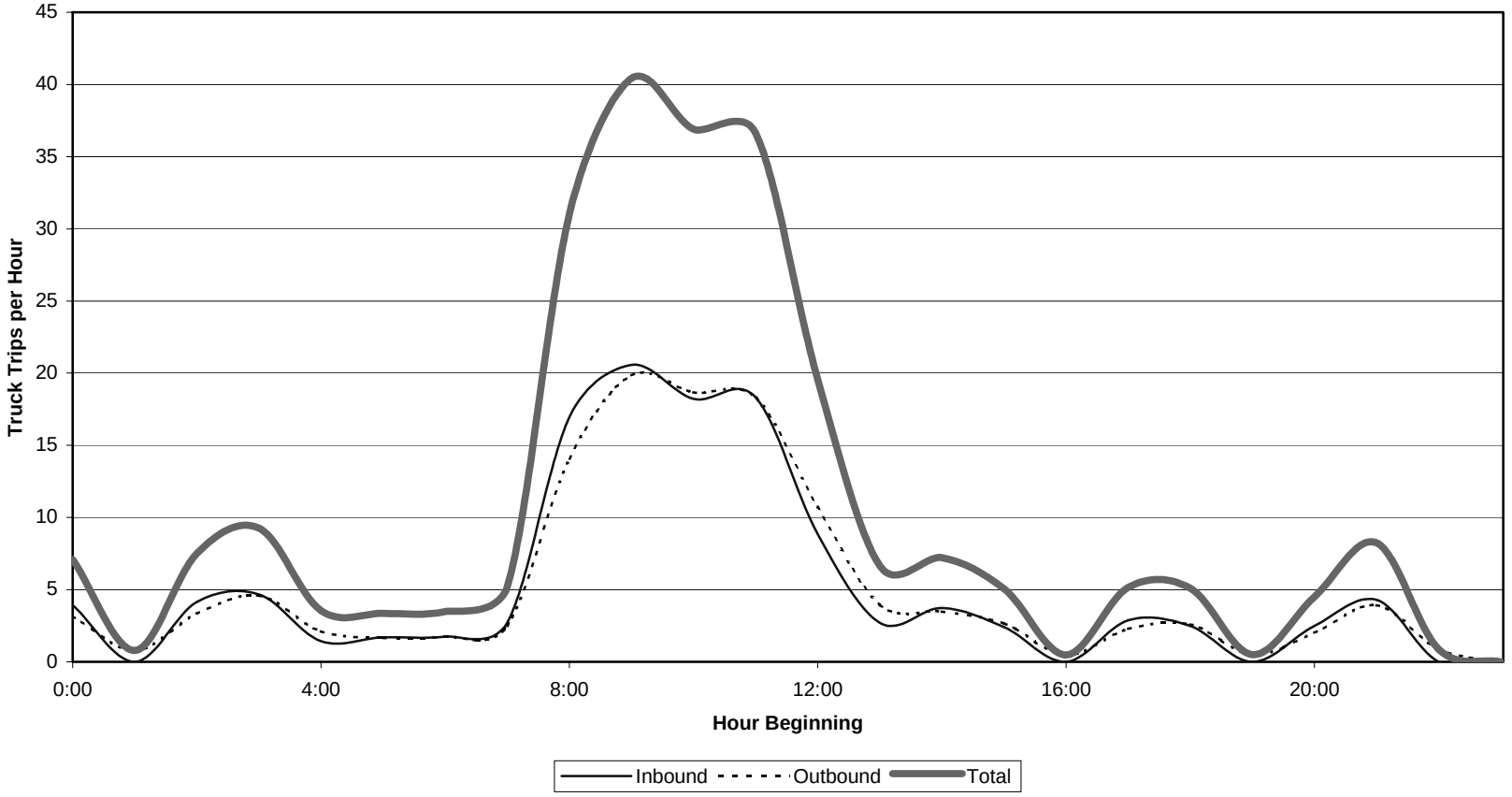
Notes:
(1) HCM output is included in technical backup submitted to the NYCDOT.
LTR = left, through and right movements
NB = northbound
SB = southbound
EB = eastbound
WB = westbound

22.14.4.1 2006 Future Build Traffic Conditions

The 2006 Future Build Traffic Conditions assume that the West 59th Street Converted MTS would generate 124 net inbound collection vehicles per average peak day. As per NYCDOT Title 34, truck trips to and from the site are restricted to travel along local truck routes directly to the site or the intersection closest to the site if the streets adjacent to the site are not designated truck routes. The proposed collection vehicle truck routes for the West 59th Street Converted MTS are shown in Figure 22.14-2.

Figure 22.14-7 presents the average peak day temporal distribution of collection vehicles for the West 59th Street Converted MTS. Section 3.16 provides a detailed explanation of DSNY collection and delivery operational shifts (priority, non-priority and relay). As shown, the number of collection vehicles generated by the West 59th Street Converted MTS is expected to vary from approximately 0 to 10 truck trips per hour in the late evening/early morning, 5 to 42 truck trips per hour in the mid-morning/early afternoon, and 0 to 10 truck trips per hour in the late afternoon/early evening. The peak hourly number of collection vehicle truck trips (42) occurs at approximately 9:00 a.m.

Figure 22.14-7
Truck Trips per Hour
West 59th Street Converted MTS

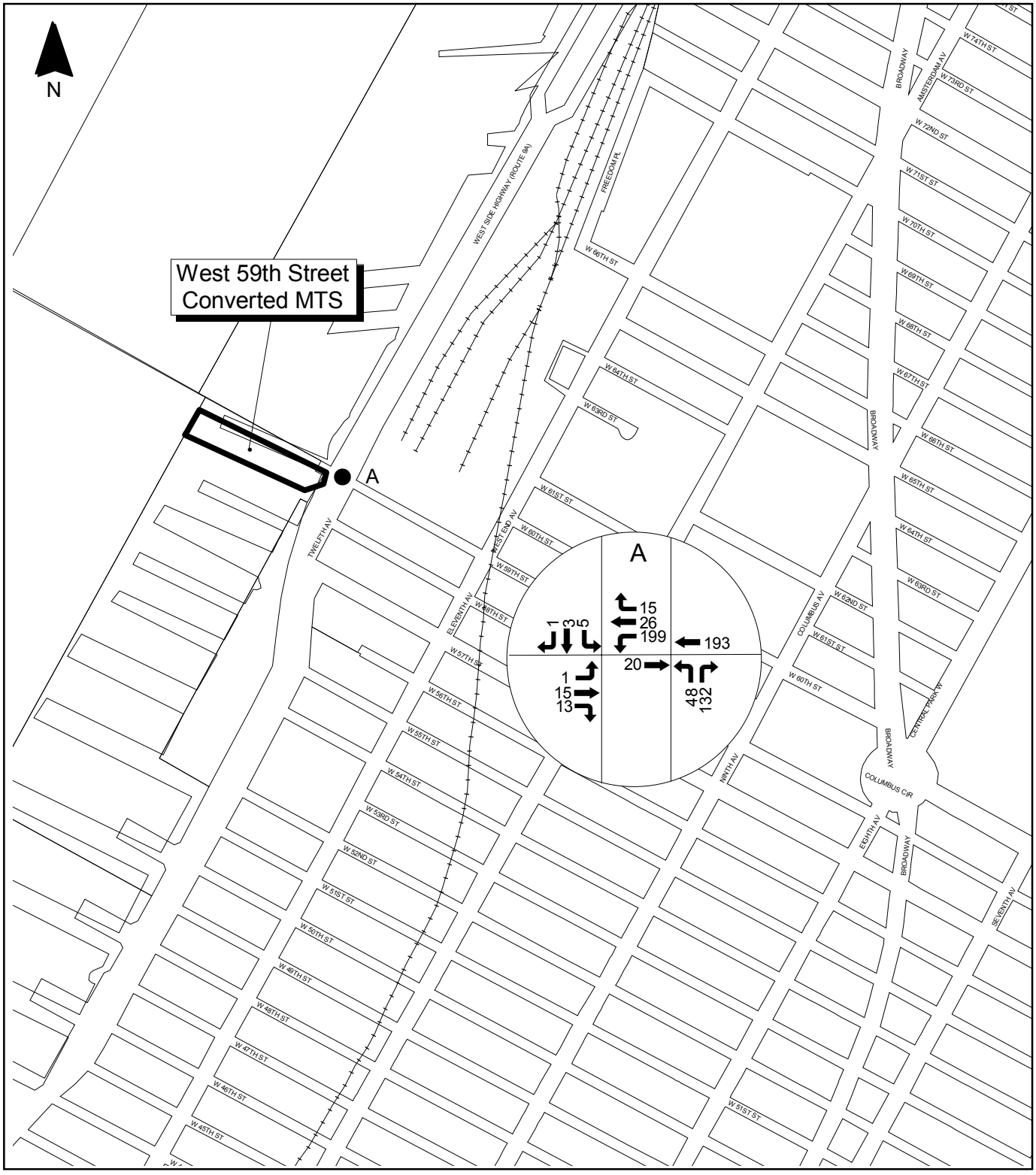


Figures 22.14-8 and 22.14-9 show the intersections analyzed with the Future Build traffic levels. Figures 22.14-10 and 22.14-11 depict the net future traffic volumes added to the Future No-Build Conditions to generate Future Build Conditions for AM and PM peaks at the intersections analyzed. Traffic volumes indicated by a dash (-) are the result of changing the disposal location from the existing commercial vendor facilities to the West 59th Street Converted MTS. These projected net increases were routed through the intersections for the AM and PM peak hours. The highest net increase in trucks in the ingress or egress direction was 21. The highest net increase at any one intersection was 42 trucks. Both of these net increases occurred at the intersection of 12th Avenue southbound and West 59th Street.

The need for Saturday analysis was considered. However, a traffic analysis was not performed on the projected net increases on Saturday truck trips because the total net increase in collection vehicles delivering waste on Saturdays would be approximately 69% of the inbound loads delivered during a typical average peak day. Additionally, traffic data indicated that the weekend background traffic volumes were approximately 81% of weekday traffic volumes. Table 22.14-3 illustrates the decrease in weekday background traffic and the decrease in DSNY and other agency collection vehicle traffic on the weekend. No analysis was performed for Sunday because the West 59th Street Converted MTS would not operate on Sundays. It was, therefore, judged that peak weekday analysis would represent the overall worst-case conditions.

Table 22.14-4 shows the 2006 Future Build v/c ratio, delay time and LOS for the intersections analyzed during the AM and PM peak times associated with the West 59th Street Converted MTS. Overall, unsignalized intersections experienced relatively small increases in delay (less than five seconds) and are projected to remain at their Future No-Build condition LOS, with the following exception:

- During the AM peak hour, the delay of the southbound approach at the intersection of 12th Avenue southbound and West 59th Street increased from 15.0 to 16.5 seconds (LOS B to LOS C)
- Figure 22.14-8 2006 Future Build Traffic Volumes – AM Peak – West 59th Street Converted MTS



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Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.14-8 2006 Future Build Traffic Volumes
AM Peak
West 59th Street Converted MTS

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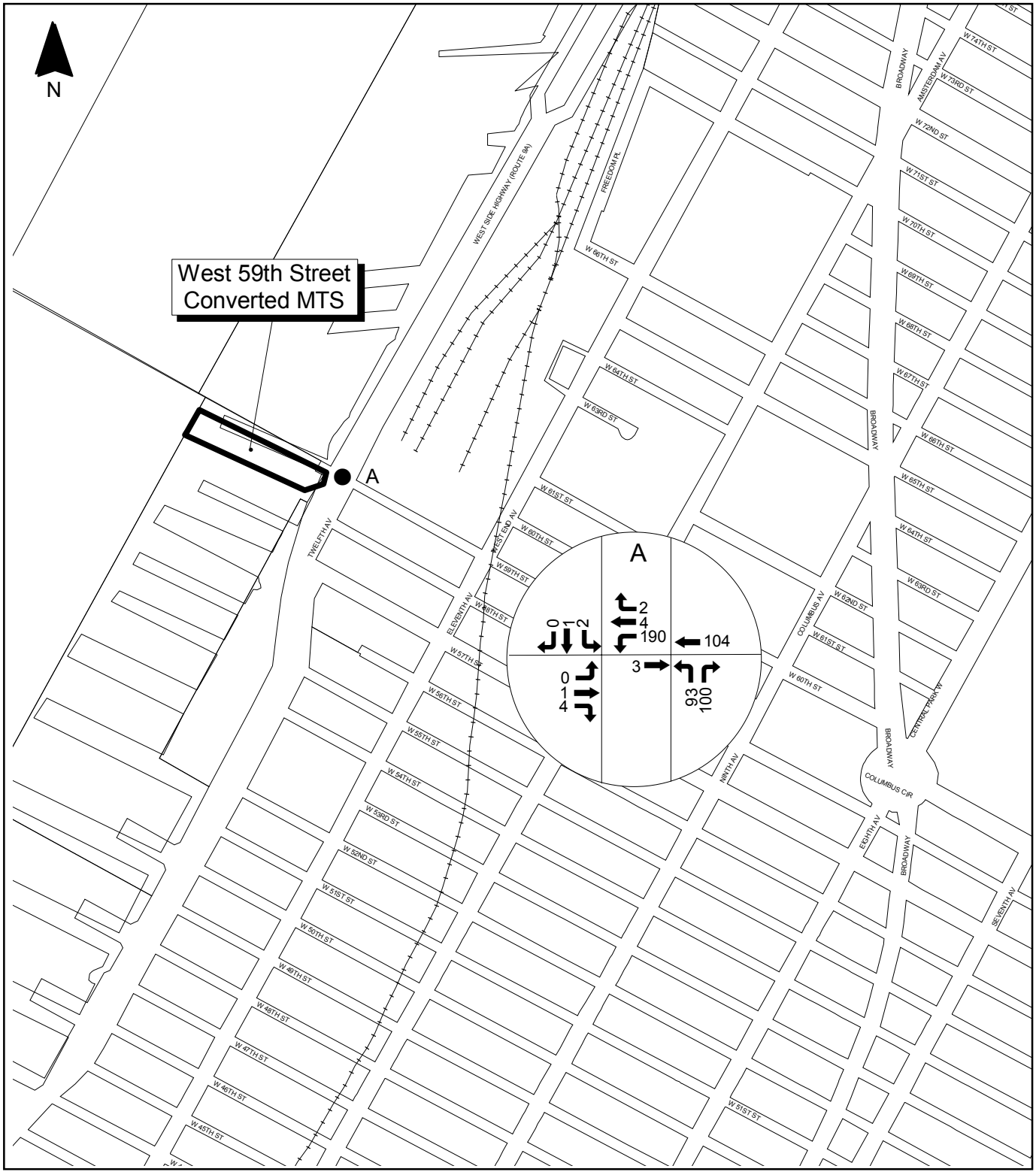

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Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.14-9 2006 Future Build Traffic Volumes PM Peak West 59th Street Converted MTS

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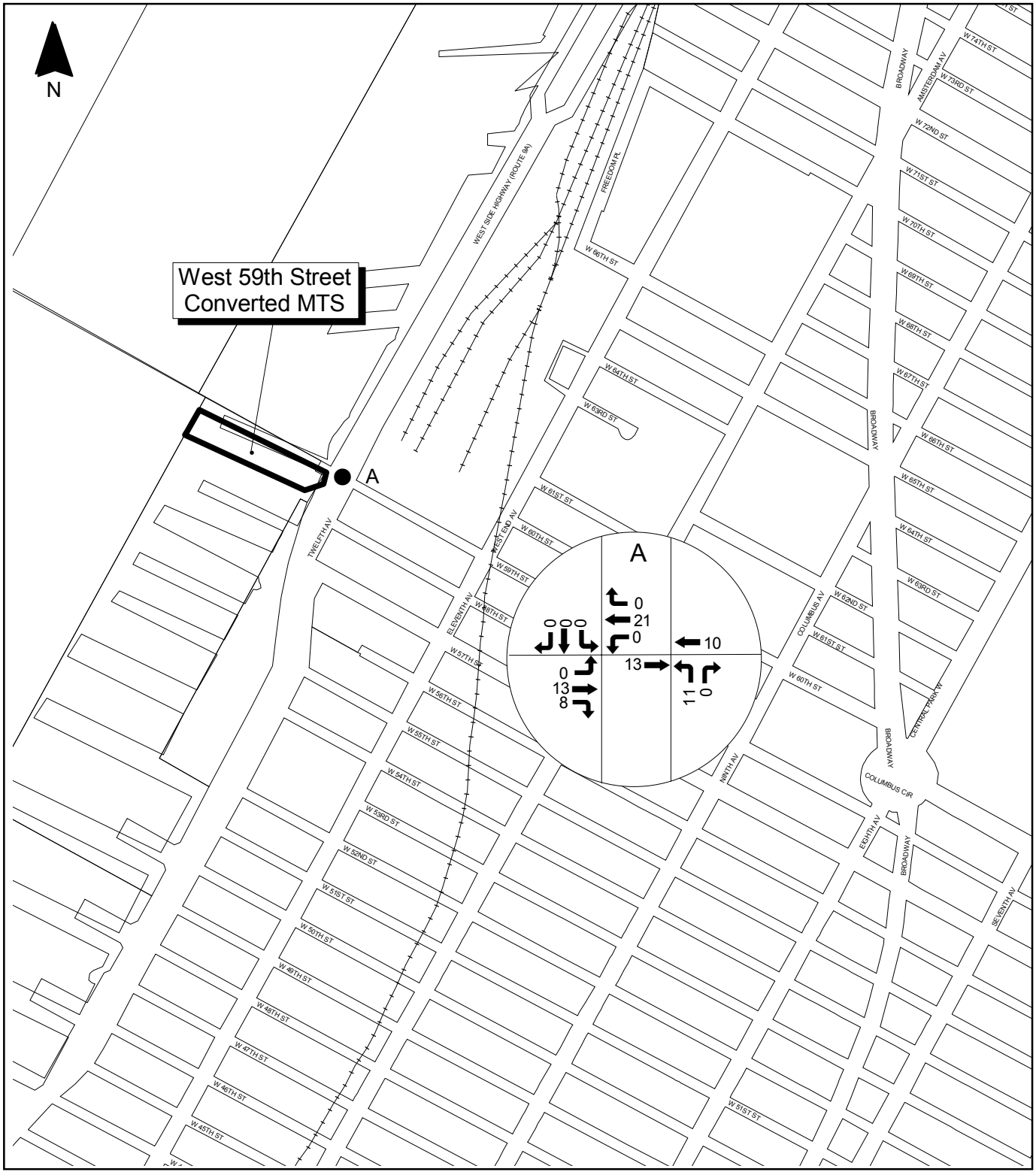

Site delineations are approximate.
Base Map Source: New York City Department of City Planning

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Figure 22.14-10 2006 Net Traffic - AM Peak

West 59th Street Converted MTS

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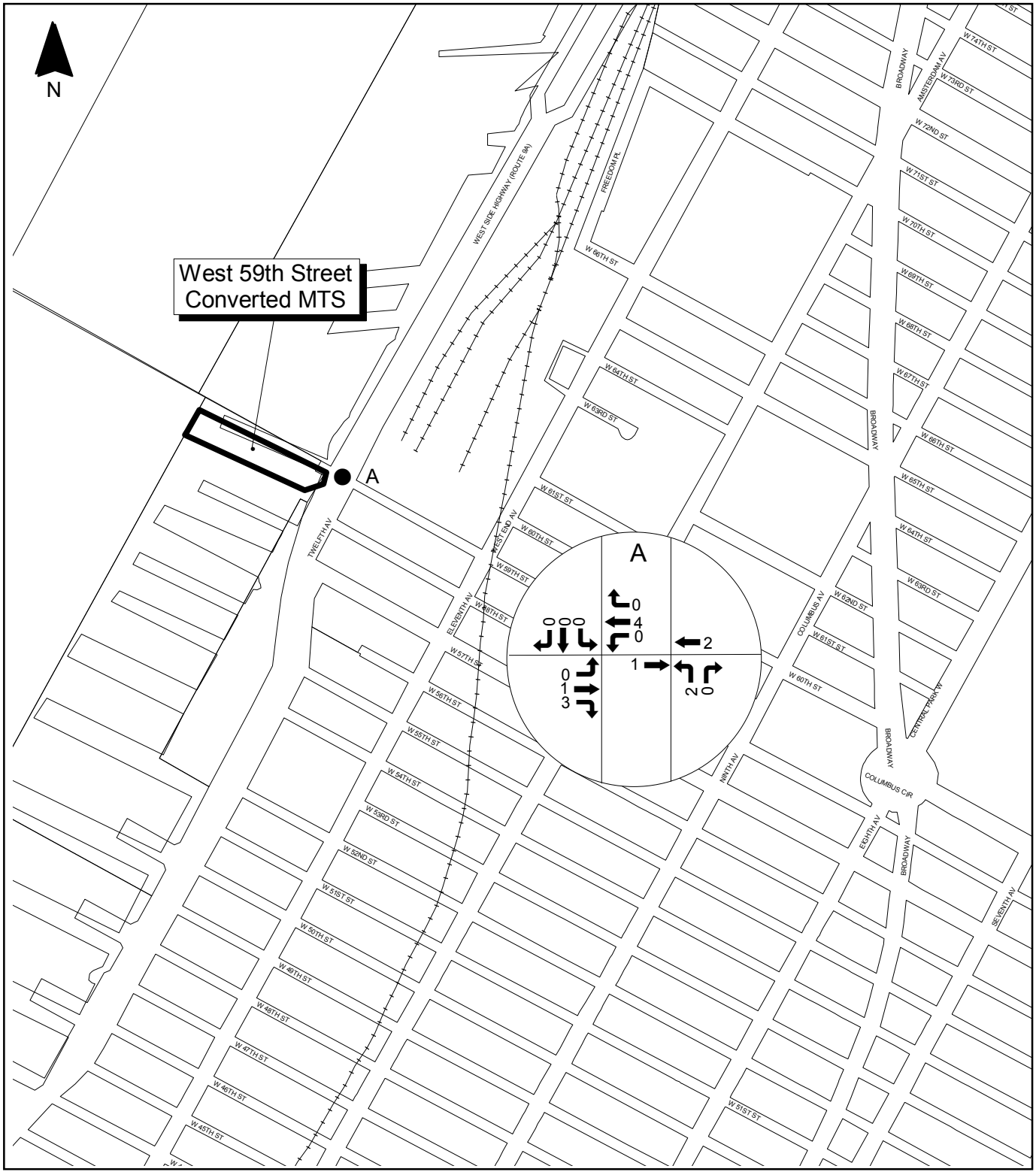

Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.14-11 2006 Net Traffic - PM Peak

West 59th Street Converted MTS

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Table 22.14-3
Weekday and Weekend Traffic
West 59th Street Converted MTS

DSNY and Other Agency Collection Vehicle Traffic		Background Traffic NB and SB on 11th Avenue (1)	
Average Peak Day Trucks/Day	Saturday Trucks/ Day	Weekday Average Vehicles/Day	Weekend Average Vehicles/Day
124	110	27,133	21,991

Note:
(1) NB and SB traffic data collected from ATR counts taken on 11th Avenue between 58th Street and 59th Street from September 11 to 17, 2003.

Table 22.14-4
HCM Analysis(1) – 2006 Future Build Conditions
West 59th Street Converted MTS

Intersection & Lane Group	AM & Facility Peak Hour (8:45 a.m. – 9:45 a.m.)			PM Peak Hour (3:45 p.m. – 4:45 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
12th Avenue Northbound & West 59th Street (unsignalized)						
NB LTR	0.38	14.7	B	0.38	13.5	B
12th Avenue Southbound & West 59th Street (unsignalized)						
EB LTR	0.00	7.9	A	0.00	7.5	A
WB LTR	0.19	7.9	A	0.14	7.6	A
SB LTR	0.04	16.5	C	0.01	13.1	B

Notes:
(1) HCM output is included in technical backup submitted to the NYCDOT.
LTR = left, through and right movements
NB = northbound
SB = southbound
EB = eastbound
WB = westbound

Although the West 59th Street Converted MTS would remain within the vicinity of several parks, no air quality, odor, noise or traffic impacts are predicted to result. Due to site constraints, the angle for the existing site entrance will remain unchanged. The existing hazard created for southbound bicyclists will not be eliminated. Any increase in West 59th Street Converted MTS truck traffic, therefore, could potentially worsen the safety conditions on the bike path.

Appropriate measures developed in coordination with NYCDPR would likely resolve this conflict.

22.14.4.2 Impacts and Mitigation

No traffic impacts are expected to occur as a result of Future Build Conditions.

22.14.4.3 Public Transportation

Future Build Conditions are expected to remain the same as Future No-Build Conditions.

22.14.4.4 Pedestrian Activity

Future Build Conditions are expected to remain the same as Future No-Build Conditions.

22.15 Air Quality

22.15.1 Definition of the Study Areas

The study area for the on-site air quality analysis for criteria pollutants (except $PM_{2.5}$) is defined as the area within 500 meters (0.3 miles) of the property line in all directions. The study area for the on-site analysis for $PM_{2.5}$ is defined as the area within 500 meters from the highest impact location of the West 59th Street Converted MTS. The study area for the off-site air quality analysis is defined as the area or intersections listed in Section 22.15.4.2.

22.15.2 Existing Conditions

Applicable air quality data collected at the monitoring station(s) nearest the study area are shown in Table 22.15.1. These data were compiled by NYSDEC for the latest calendar year for which applicable data are currently available. The monitored levels do not exceed national and state ambient air quality standards.

Table 22.15-1
Representative Ambient Air Quality Data
West 59th Street Converted MTS

Pollutant	Monitor	Averaging Time	Value	NAAQS
CO(1)	P.S.59	8-Hour	2,978µg/m^3	10,000 µg/m^3
		1-Hour	5,268µg/m^3	40,000 µg/m^3
NO_2(1)	P.S. 59	Annual	71 µg/m^3	100 µg/m^3
PM_{10}	P.S. 59	Annual	34 µg/m^3	50 µg/m^3
		24-Hour	88 µg/m^3	150 µg/m^3
SO_2(1)	P.S. 59	3-Hour	186 µg/m^3	1,300 µg/m^3
		24-Hour	123 µg/m^3	365 µg/m^3
		Annual	37 µg/m^3	80 µg/m^3

Note:
Source: NYCDEP, April 2003& USEPA Airdata – Monitor Values Report (http://oaspub.epa.gov/airdata)
(1) Values are the highest pollutant levels recorded during the 2003 calendar year.

22.15.3 Future No-Build Conditions

The primarily commercial/industrial nature of the study area is not expected to change by the Future No-Build 2006 analysis year. As such, no changes to air quality levels are anticipated, and Future No-Build air quality conditions are assumed to be the same as Existing Conditions for all pollutants except CO. CO concentrations are expected to be lowered by increasingly stringent, federally-mandated vehicular emission controls, although any effects may be offset by increases in regional traffic volumes.

22.15.4 Potential Impacts with the West 59th Street Converted MTS

22.15.4.1 On-Site Analysis

22.15.4.1.1 Sources Considered in the Analysis

The sources of emissions and the number of each type of source that are anticipated to be in operation during the peak hour and under daily average conditions are provided in Table 22.15-2. Figure 22.15-1 shows the locations of these sources within the site.

22.15.4.1.2 Results of the Criteria Pollutant Analysis

The highest estimated criteria pollutant concentrations at any of the receptor locations considered are presented in Table 22.15-3. These values are below the national and state ambient air quality standards for the appropriate averaging time periods. In addition, the highest estimated changes in 24-hour and annual $PM_{2.5}$ concentrations from West 59th Street Converted MTS-generated vehicles at any of the receptor locations considered, which are also presented in Table 22.15-3, are below the STVs. The West 59th Street Converted MTS would not, therefore, significantly impact air quality in the area.

Table 22.15-2
Emission Sources Considered for On-Site Air Quality Analysis[1]
West 59th Street Converted MTS

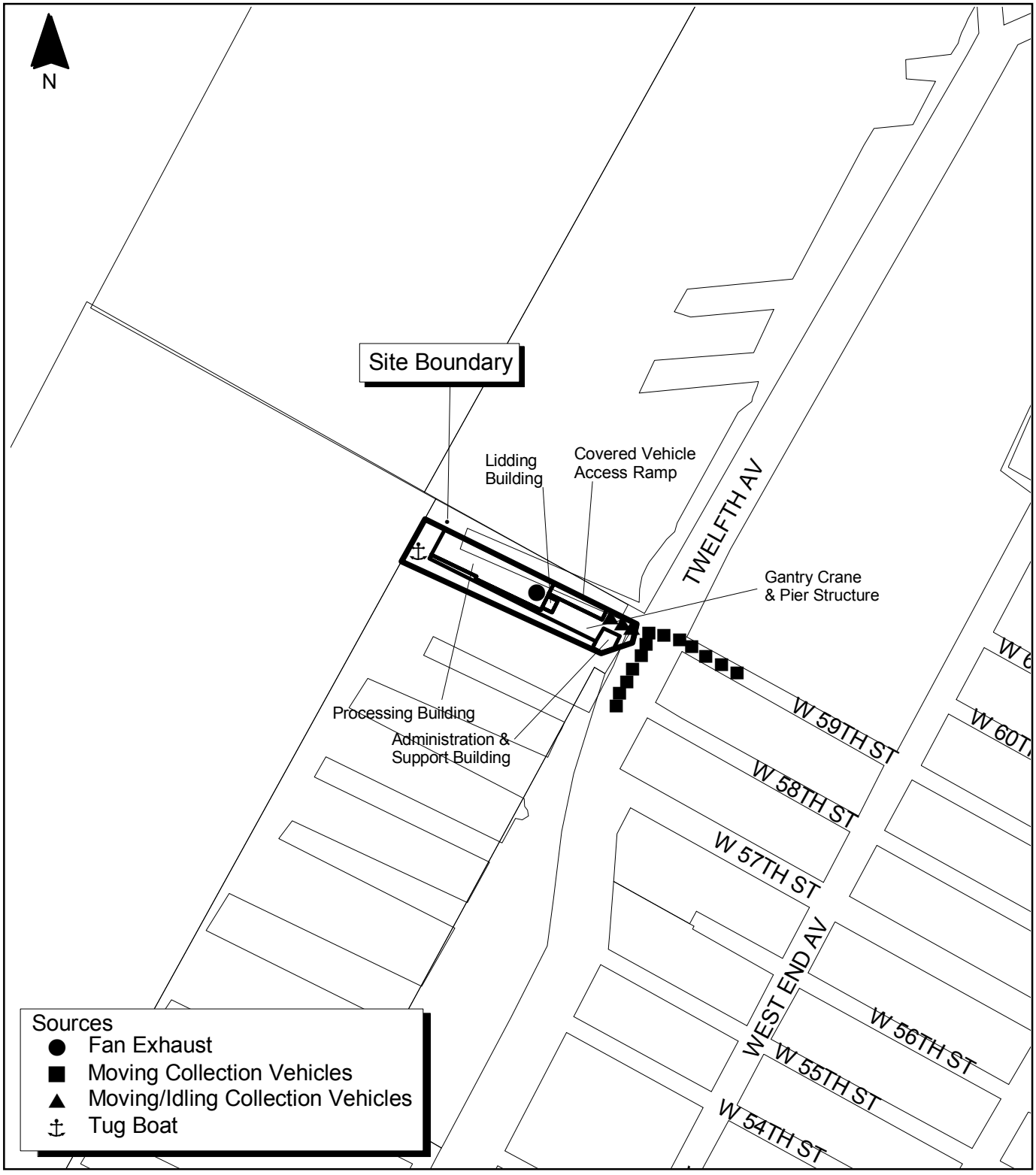
Type of Emission Source	Maximum Number of Sources Operated During a Single Hour[2]	Number of Sources Operated During 24-hour and Annual Average Hour
Within Processing Building		
Wheel Loaders	2	1
Mini Loaders	1	1
Tamping Cranes	1	1
Mini-Sweepers	1	1
Vacuum Sweepers	1	1
Moving/Queuing Collection Vehicles	51	13
Space Heaters	10	3
Boiler	1	1
Outside Processing Building		
Moving Collection Vehicles	51	13
Queuing Collection Vehicles[3]	4 in, 1 out	3 in, 1 out
Oceangoing Tugboats	1	1

Notes:

(1) Emission factors used and emission rates estimated for each of these sources are included in technical backup provided to the NYCDEP.

(2) This is based on design capacity of the Converted MTS, not analyzed truck arrival rates.

(3) Peak 8-hour and 3-hour average number of queuing collection vehicles outside building is 4, the same as peak 1 hour value.



Site delineations are approximate.
Base Map Source: New York City Department of City Planning
Note: These are modeled source locations used in the on-site air quality analysis and do not represent individual collection vehicles

300 0 300 Feet

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Figure 22.15-1 On-Site Air Quality Analysis

West 59th Street Converted MTS

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Table 22.15-3
Highest Estimated Concentrations of the Criteria Pollutants from On-Site Emissions
West 59th Street Converted MTS

Pollutant	Averaging Time Period	Maximum Impacts from On-Site Emission Sources (1)	Background Pollutant Concentrations (2)	Highest Estimated On-Site Pollutant Concentrations	NAAQS(3)	STV(4)
Carbon Monoxide (CO), $\mu g/m^3$	1-hour(6)	491	4,352	4,843	40,000	NA
	8-hour(6)	174	3,321	3,495	10,000	NA
Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual	9	77	86	100	NA
Particulate Matter (PM_{10}), $\mu g/m^3$	24-hour(7)	8	88	96	150	NA
	Annual	2	34	36	50	NA
Particulate Matter ($PM_{2.5}$), $\mu g/m^3$	24-hour	3	NA	NA	NA	5
	Annual Neighborhood Average	0.025(5)	NA	NA	NA	0.1
Sulfur Dioxide (SO_2), $\mu g/m^3$	3-hour(6)	24	265	289	1,300	NA
	24-hour(6)	2	139	141	365	NA
	Annual	0.3	34	34	80	NA

Notes:

(1) The highest estimated pollutant concentrations found at any of the off-site receptor locations.

(2) Background concentrations were obtained from the NYCDEP in April 2003.

(3) NAAQS = National Ambient Air Quality Standard.

(4) Screening threshold value (STV) established by the NYCDEP and NYSDEC.

(5) Average $PM_{2.5}$ concentration over 1 km x 1 km "neighborhood-scale" receptor grid.

(6) The standards for these averaging periods allow one exceedance per year, so the use of the overall maximum concentration provides a very conservative comparison with standards.

(7) The 24-hour PM^{10} NAAQS is based on a 99th percentile concentration, which means that the high, 4th high concentration is appropriate for comparison with the standard. Therefore, the use of the overall highest concentration in this comparison is quite conservative.

NA = Not Applicable

22.15.4.1.3 Results of the Toxic Pollutant Analysis

The results of the toxic pollutant analysis are summarized in Table 22.15-4. The highest estimated non-carcinogenic toxic air pollutant impacts are below the short-term (acute) and long-term (chronic) hazard index thresholds specified in New York State's Air Guide 1. In addition, the highest estimated carcinogenic impacts are less than the one-in-a-million threshold level that is defined by NYSDEC as being significant. As such, the potential impacts of the toxic pollutant emissions from the on-site operations of the West 59th Street Converted MTS are not considered to be significant.

22.15.4.2 Off-Site Analysis

22.15.4.2.1 Pollutants Considered and Analyses Conducted

Locations potentially affected by DSNY and other agency collection vehicles were identified using 2001 CEQR Technical Manual guidelines that are outlined in Section 3.17. Following these guidelines, the following detailed mobile source analyses were conducted for the applicable (i.e., worst-case) time periods:

- An analysis of the intersections of 12th Avenue and West 59th Street, and Route 9A and West 57th Street to determine whether West 59th Street Converted MTS-generated traffic has the potential to cause exceedances of NYCDEP's 24-hour and annual $PM_{2.5}$ STVs; and
- An analysis of the intersections of 12th Avenue and West 59th Street, and Route 9A and West 57th Street to determine whether West 59th Street Converted MTS-generated traffic has the potential to cause exceedances of the 24-hour and annual PM^{10} NAAQS.

The roadway intersections selected for the mobile source analysis are shown in Figure 22.15-2.

Table 22.15-4
Highest Estimated Non-Cancer Hazard Index and Cancer Risk of Toxic Air Pollutants from On-Site Emissions
West 59th Street Converted MTS

		Acute Non-Cancer Risk			Chronic Non-Cancer Risk			Cancer Risk		
No.	Toxic Air Pollutants	Highest Estimated Short-Term (1-hr) Pollutant Conc.(1) ($\mu g/m^3$)	Short-Term (1-hr) Guideline Conc. (SGCs) (2) ($\mu g/m^3$)	Acute Non-Cancer Hazard Index(3)	Highest Estimated Long-Term (Annual) Pollutant Conc.(4) ($\mu g/m^3$)	Long-Term (Annual) Guideline Conc. (AGCs) (5) ($\mu g/m^3$)	Chronic Non-Cancer Hazard Index (6)	Highest Estimated Long-Term (Annual) Pollutant Conc. (4) ($\mu g/m^3$)	Unit Risk Factors (7) ($\mu g/m^3$)	Maximum Cancer Risk (8,9)
Carcinogenic Pollutants										
1	Benzene	1.92E-01	1.30E+03	1.47E-04	4.95E-03	1.30E-01	3.81E-02	4.95E-03	8.30E-06	4.11E-08
2	Formaldehyde	2.42E+01	3.00E+01	8.08E-03	6.27E-03	6.00E-02	1.04E-01	6.27E-03	1.30E-05	8.15E-08
3	1,3 Butadiene	8.03E-03	-	-	2.08E-04	3.60E-03	5.77E-02	2.08E-04	2.80E-04	5.81E-08
4	Acetaldehyde	1.58E-01	4.50E+03	3.50E-05	4.07E-03	4.50E-01	9.05E-03	4.07E-03	2.20E-06	8.96E-09
5	Benzo(a)pyrene	3.86E-05	-	-	9.98E-07	2.00E-03	4.99E-04	9.98E-07	1.70E-03	1.70E-09
Non-Carcinogenic Pollutants (10)										
6	Propylene	5.30E+01	-	-	1.37E-02	3.00E+03	4.57E-06	1.37E-02	NA	NA
7	Acrolein	1.90E-02	1.90E-01	1.00E-01	4.91E-04	2.00E-02	2.46E-02	4.91E-04	NA	NA
8	Toluene	8.40E-02	3.70E+04	2.27E-06	2.17E-03	4.00E+02	5.43E-06	2.17E-03	NA	NA
9	Xylenes	5.85E-02	4.30E+03	1.36E-05	1.51E-03	7.00E+02	2.16E-06	1.51E-03	NA	NA
10	Anthracene	3.84E-04	-	-	9.93E-06	2.00E-02	4.97E-04	9.93E-06	NA	NA
11	Benzo(a)anthracene	3.45E-04	-	-	8.92E-06	2.00E-02	4.46E-04	8.92E-06	NA	NA
12	Chrysene	7.25E-05	-	-	1.87E-06	2.00E-02	9.37E-05	1.87E-06	NA	NA
13	Naphthalene	1.74E-02	7.90E+03	2.20E-06	4.50E-04	3.00E+00	1.50E-04	4.50E-04	NA	NA
14	Pyrene	9.82E-04	-	-	2.54E-05	2.00E-02	1.27E-03	2.54E-05	NA	NA
15	Phenanthrene	6.04E-03	-	-	1.56E-04	2.00E-02	7.81E-03	1.56E-04	NA	NA
16	Dibenz(a,h)anthracene	1.20E-04	-	-	3.10E-06	2.00E-02	1.55E-04	3.10E-06	NA	NA
		Total Estimated Acute Non-Cancer Hazard Index		**1.08E-01**	**Total Estimated Chronic Non-Cancer Hazard Index**		**2.45E-01**	**Total Estimated Combined Cancer Risk**		**1.91E-07**
		Acute Non-Cancer Hazard Index Threshold (11)		**1.0E+00**	**Chronic Non-Cancer Hazard Index Threshold (11)**		**1.0E+00**	**Cancer Risk Threshold (11)**		**1.0E-06**

Notes to Table 22.15-4:

(1) Estimated by multiplying the total 1-hour HCs concentration by the ratio of the emission factor for that pollutant to the emission factor of the total HCs.

(2) Short-term (1-hour) guideline concentrations (SGC) established by NYSDEC

(3) Estimated by dividing the maximum 1-hour concentrations of each pollutant by the SGC value of that pollutant and summing up the resulting values to obtain hazard index for all of the pollutants combined.

(4) Estimated by multiplying the total annual HCs concentration by ratio of the emission factor for that pollutant to the emission factor of the total HCs.

(5) Long-term (annual) guideline concentrations (AGC) established by NYSDEC.

(6) Estimated by dividing the maximum annual concentration of each of the individual pollutants by the AGC value of that pollutant and summing up the resulting values to obtain hazard index for all of the pollutants combined.

(7) Unit risk factors established by USEPA and other governmental agencies for the inhalation of carcinogenic air pollutants.

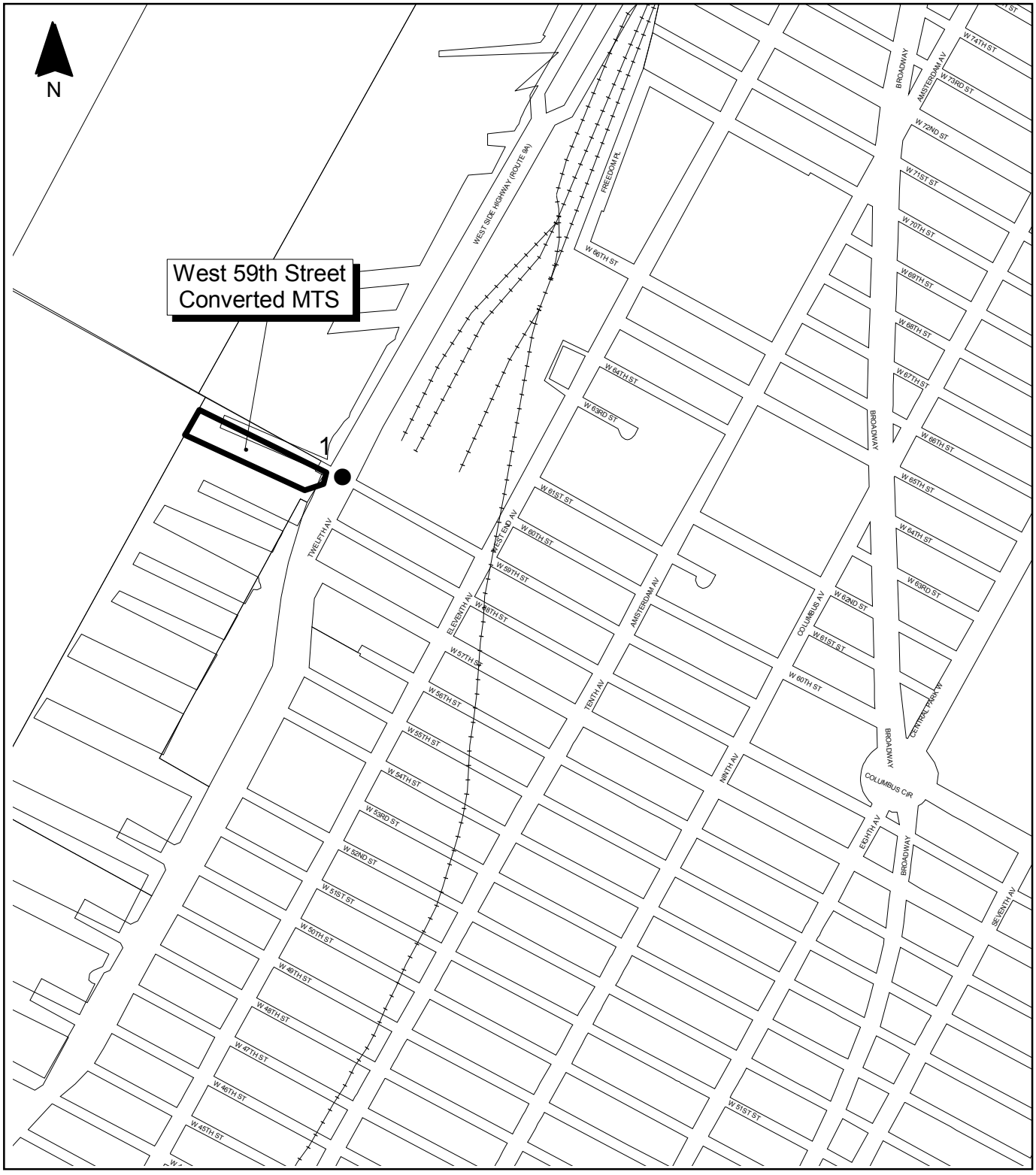
(8) The maximum cancer risk of each of the individual pollutants was estimated by multiplying the estimated annual concentration of each pollutant by its unit risk factor.

(9) The total incremental cancer risk from all of the pollutants combined was estimated by summing the maximum cancer risk of each of the individual pollutants.

(10) Some of the pollutants included in the group of non-carcinogenic pollutants, such as anthracene, benzo(a)anthracene and chrysene, may also have carcinogenic effects. As these pollutants do not have established unit risk factors, they were evaluated using the hazard index approach for non-carcinogens.

(11) Hazard index and cancer risk thresholds based on NYSDEC "Guidelines for the Control of Toxic Ambient Air Contaminants" dated November 12, 1997. Estimated values below these threshold limits are considered to be insignificant impacts.

NA = Not Applicable



500 0 500 Feet

Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.15-2 Off-Site Air Quality Intersections Studied West 59th Street Converted MTS

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22.15.4.2.2 Results of the Off-Site Analysis

Applicable pollutant concentrations estimated near each selected intersection, which are shown in Table 22.15-5, are all within (less than) the applicable state and federal ambient air quality standards, STVs (for $PM_{2.5}$) and/or de minimus impact values (for CO). A Tier II analysis of the intersection of Route 9A and West 57th Street was done to determine the off-site annual impacts for $PM_{2.5}$. The results of this Tier II analysis are within the applicable annual STVs for $PM_{2.5}$. The off-site operations of the West 59th Street Converted MTS are not, therefore, considered to be significant.

Table 22.15-5
Maximum Estimated Pollutant Concentrations Near Selected Roadway Intersections
West 59th Street Converted MTS

Air Quality Receptor Site	CO	PM_{10}		24-hr $PM_{2.5}$ Impacts			Max Annual Neighborhood $PM_{2.5}$ Impacts		
	8-hr CO Conc.[1] ppm (NAAQS: 9 ppm)	24-hr PM_{10} Conc.[1] $\mu g/m^3$ (NAAQS: 150 $\mu g/m^3$)	Annual PM_{10} Conc.[1] $\mu g/m^3$ (NAAQS: 50 $\mu g/m^3$)	Impacts from On-Site Emission Sources[2] $\mu g/m^3$ (STV: 5 $\mu g/m^3$)	Impacts from Off-Site Emission Sources[3] $\mu g/m^3$ (STV: 5 $\mu g/m^3$)	Total Combined Impacts from On- and Off-Site Emission Sources $\mu g/m^3$ (STV: 5 $\mu g/m^3$)	Impacts from On-Site Emission Sources[2] $\mu g/m^3$ (STV: 0.1 $\mu g/m^3$)	Impacts from Off-Site Emission Sources[4] $\mu g/m^3$ (STV: 0.1 $\mu g/m^3$)	Total Combined Impacts from On- and Off-Site Emission Sources $\mu g/m^3$ (STV: 0.1 $\mu g/m^3$)
West 59th Street and 12th Avenue									
Existing Conditions		86	36						
Future No-Build Conditions		92	40						
Future Build Conditions	NA[5]	93	41						
Future Build Incremental				1.57	0.18	1.75	0.037	0.04	0.08
Route 9A & West 57th Street									
Existing Conditions		105	44						
Future No-Build Conditions		109	44						
Future Build Conditions	NA[5]	109	44						
Future Build Incremental				0.64	0.1	0.75	0.037	0.02	0.06

Notes:

[1] PM_{10} concentrations are the maximum concentrations estimated using the AM, Facility, and PM peak traffic conditions plus background concentration (24-hr PM_{10} = 46 $\mu g/m^3$; Annual PM_{10} = 21$\mu g/m^3$).

[2] The maximum incremental concentrations of on-site emissions near the intersection considered.

[3] The $PM_{2.5}$ concentrations are the maximum modeled incremental $PM_{2.5}$ impacts (due to project-induced [or Future Build] traffic only) estimated by taking the difference between the maximum $PM_{2.5}$ concentrations for the Future No-Build and Future Build scenarios at any receptor three meters from the edge of the roadways using AM, Facility, or PM peak traffic conditions.

[4] The $PM_{2.5}$ concentrations are the maximum modeled incremental $PM_{2.5}$ impacts (due to project-induced [or Future Build] traffic only) estimated by taking the difference between the maximum $PM_{2.5}$ concentrations for the Future No-Build and Future Build scenarios at any receptor 15 meters from the edge of the roadways using AM, Facility, or PM peak traffic conditions.

[5] Incremental 1-hour vehicular trips were below CEQR CO air quality screening thresholds.

ppm = parts per million

$\mu g/m^3$ = microgram per cubic meter

NA = Not Applicable

22.16 Odor

22.16.1 Existing Conditions

Paper recycling activities are conducted at the existing MTS. There are no putrescible waste handling operations there, however, and, therefore, there are no existing sources of odor at the site. The study area is within 500 meters (0.3 miles) from the facility boundary. The locations for sensitive receptors in this analysis are the same as those used in the noise analysis. The nearest sensitive receptor is the apartment building located on 11th Avenue between 61st Street and 62nd Street, approximately 1,739 feet from the site boundary.

22.16.2 Future No-Build Conditions

No additional odor-producing sources are currently anticipated in the vicinity of the West 59th Street Converted MTS. Thus, Existing Conditions are assumed to be representative of Future No-Build Conditions.

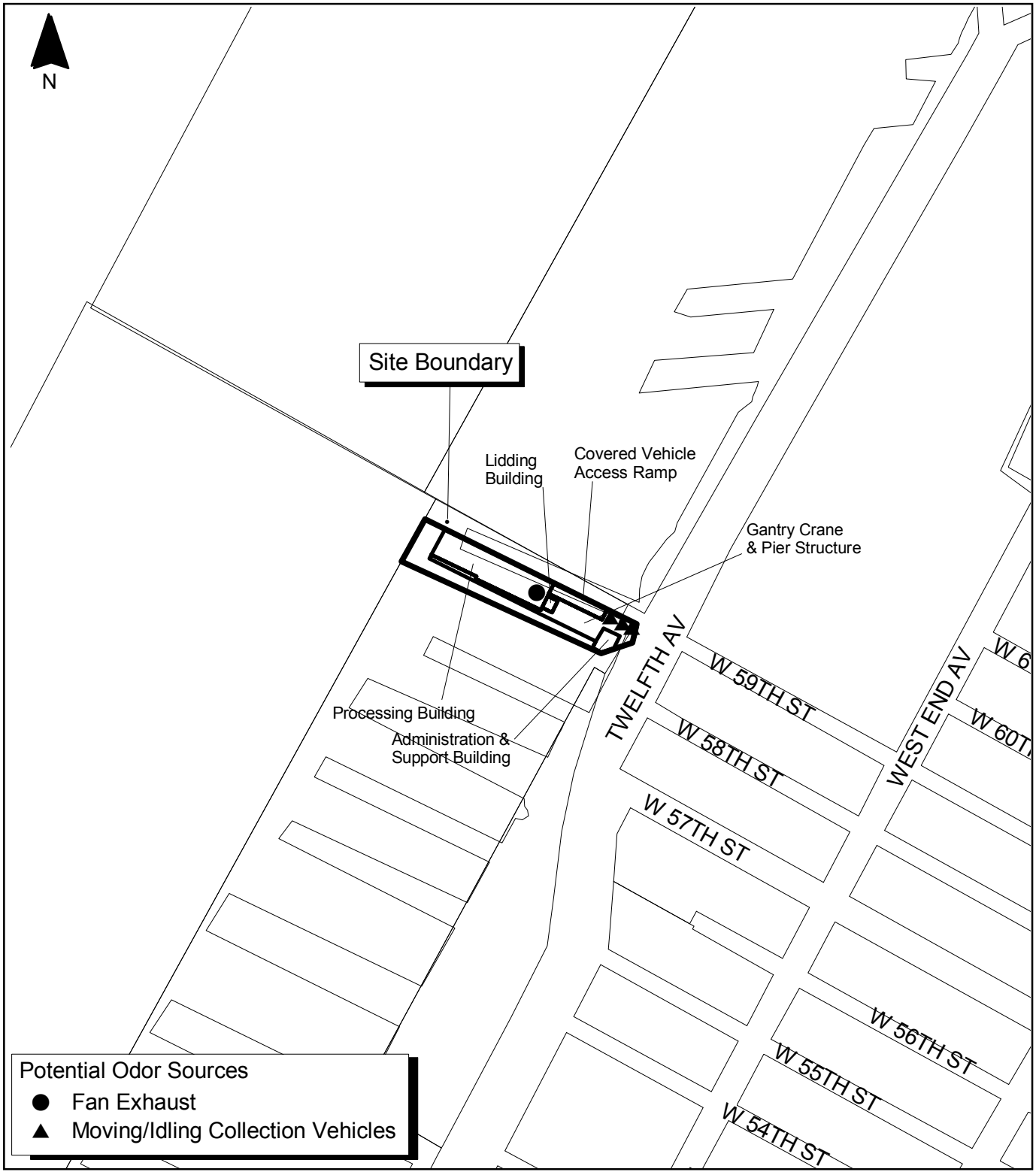
22.16.3 Potential Impacts with the West 59th Street Converted MTS

22.16.3.1 Odor Source Types and Locations Considered in the Analysis

The anticipated number and types of odor sources that would be associated with waste processing operations at peak design capacity at the West 59th Street Converted MTS are provided in Table 22.16-1. Figure 22.16-1 shows the locations of these sources within the site.

Table 22.16-1
Odor Sources Included in Odor Analysis
West 59th Street Converted MTS

Type of Emission Source	Number of Sources Operated During Peak Design Capacity
Exhaust Fans from Processing Building	1
Moving and Idling Collection Vehicles	5



Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 22.16-1 Potential Odor Sources

West 59th Street Converted MTS

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An odor control system (e.g., scrubber, neutralizing agent misting system injected into the exhaust duct work system, etc.) would be included in the design to control odorous emissions from the processing building. Odor control systems can remove between 90% and 99% of odorous compounds. For purposes of modeling odor dispersion, a 90% reduction of odorous emissions was conservatively assumed for the West 59th Street Converted MTS.

9.11.3.2 Results of the Odor Analysis

The highest estimated odor concentrations at any of the receptor sites considered and the concentrations at the closest sensitive receptor are presented in Table 22.16-2. The predicted OU values at sensitive receptor locations are compared to an OU of 5, which represents the level of odor impact that would begin to be detected by an average observer. The highest predicted OU associated with the West 59th Street Converted MTS at any nearby sensitive receptor is less than 1, so odors from the West 59th Street Converted MTS would not be detectable by off-site sensitive receptors and the facility would comply with NYSDEC requirements for effective odor control. Therefore, no significant adverse impacts from odors on receptors are expected to occur as a result of this facility.

Table 22.16-2
Highest Predicted Odor Concentration(s) from On-Site Sources
West 59th Street Converted MTS

Parameter	**Resulting D/T Ratio (1)**
Estimated Detectable Concentration	5.0
Highest Result	0.23
Type of Receptor	Discrete Receptor
Location of Receptor (2)	Over Water
Closest Sensitive Receptor Result	0.02
Type of Receptor	Apartment Building
Distance to Receptor (3)	1,739 Feet

Notes:
(1) D/T ratio is dimensionless.
(2) Measured from the site boundary.
(3) Measured from the site property line.

22.17 Noise

The noise analysis addresses on-site and off-site sources of noise emissions from West 59th Street Converted MTS-related solid waste management activities. It is based on Section R of the 2001 CEQR Technical Manual for both on-site and off-site sources, and, for on-site sources only, the Performance Standards of the New York City Zoning Code for Manufacturing Districts and the Current New York City Noise Code. Section 3.19 provides a general discussion of the relevant regulatory standards and methodologies used in this analysis.

22.17.1 Existing Conditions

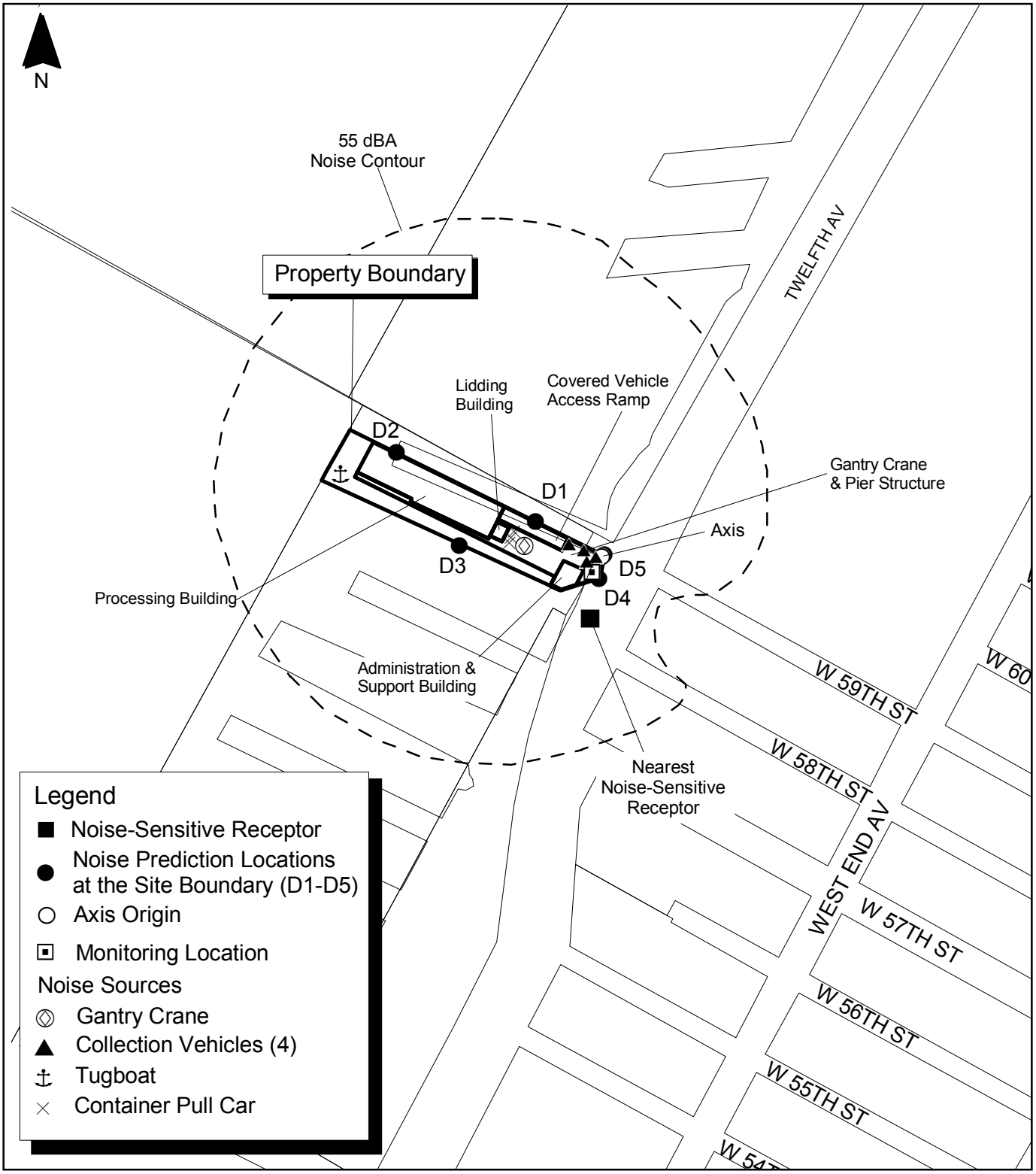
22.17.1.1 Introduction

Figure 22.17-1 shows the location of the West 59th Street Converted MTS, the surrounding area and the points that represent the property boundary (D1, etc.) for all noise analyses. The nearest noise-sensitive receptor is Riverside Park South directly adjacent the West 59th Street Converted MTS property line. Riverside Park South is a shared walkway area and public recreational bicycle path designated as parkland. It passes on the east side of the West 59th Street Converted MTS site. Additional residential areas exist immediately east and north of the path.

22.17.1.2 On-Site Noise Levels

Existing on-site noise levels consist of noise created by the activities and events on and immediately surrounding the site. Existing noise levels were monitored hourly for a 24-hour period at the property line closest to the nearest noise-sensitive receptor. Noise monitoring data recorded hourly included: $L_{eq(1)}$, L_{min} and L_{max},[12] and the statistical metrics of L_{10}, L_{50} and L_{90}.[13]

[12] Terms $L_{eq(1)}$, L_{min} and L_{max} are defined in Section 3.19.2.
[13] Terms L_{10}, L_{50} and L_{90} are defined in Section 3.19.2.



Site delineations are approximate.
Base Map Source: New York City Department of City Planning

300 0 300 Feet

HDR HydroQual URBITRAN PB EEA Cambridge Environmental Inc

Figure 22.17-1 Noise Sources and Receptors

West 59th Street Converted MTS

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Table 22.17-1 presents monitored noise levels. As shown, the quietest hours at the monitoring location occurred between 5:00 p.m. to 6:00 p.m. and had an $L_{eq(1)}$ of 66.5 dBA on December 23, 2003. Activities and events that contribute to the on-site noise levels are as follows:

- Recycling activities at the existing West 59th Street MTS;
- Traffic from the Henry Hudson Parkway; and
- Marine activity on the Henry Hudson River.

22.17.1.3 Off-Site Noise Levels

Existing off-site noise levels consist of noise from the existing traffic and other background noise. A screening analysis was conducted to determine if noise monitoring would be required along the 59th Street Converted MTS-related truck routes due to an increase in traffic caused by DSNY and other agency collection vehicles. As a result of this screening, which is described in Section 3.19.5.2, no off-site noise analysis was required. Therefore, no noise monitoring data were collected for off-site noise levels.

22.17.2 Future No-Build Conditions

22.17.2.1 On-Site Noise Levels

No appreciable changes in on-site noise levels are anticipated by 2006; therefore, Future No-Build Conditions are expected to be the same as Existing Conditions.

22.17.2.2 Off-Site Noise Levels

Off-site noise levels for the Future No-Build Conditions in 2006 were calculated using the annual growth rates for traffic volume provided in Section O: Traffic of the 2001 CEQR Technical Manual. Table 22.17-2 presents the existing traffic volume and the Future No-Build traffic volume for the hour expected to receive the largest change in noise levels (when the difference between traffic noise levels and background noise levels is greatest) during the daytime (if any) and nighttime for locations where there is a possible impact based on the first-level screening.

Table 22.17-1
Existing Hourly (Monitored) Noise Levels On Site[(1)]
West 59th Street Converted MTS

Time of Measurement	$L_{eq(1)}$ (dBA)	L_{90} (dBA)	L_{50} (dBA)	L_{10} (dBA)	L_{min} (dBA)	L_{max} (dBA)
11:00 a.m.-12:00 p.m.	72.0	66.9	69.4	75.1	63.4	87.2
12:00-1:00 p.m.	69.5	64.3	67.7	70.9	60.1	87.8
1:00-2:00 p.m.	70.8	67.2	69.2	72.6	64.3	82.7
2:00-3:00 p.m.	70.4	66.9	69.2	72.2	63.4	85.6
3:00-4:00 p.m.	72.1	66.0	68.5	71.6	62.1	94.1
4:00-5:00 p.m.	68.8	65.6	67.9	70.2	62.2	83.3
5:00-6:00 p.m.	66.5	61.8	65.2	68.4	57.9	81.3
6:00-7:00 p.m.	72.8	60.6	64.7	68.4	58.0	102.1
7:00-8:00 p.m.	67.9	64.8	67.3	69.7	59.5	81.1
8:00-9:00 p.m.	69.0	64.7	67.4	70.5	56.7	81.9
9:00-10:00 p.m.	67.4	64.4	66.8	69.0	58.3	80.2
10:00-11:00 p.m.	68.6	64.4	67.3	69.8	59.3	82.8
11:00 p.m.-12:00 a.m.	67.8	64.1	67.0	69.4	57.8	81.7
12:00-1:00 a.m.	70.1	64.5	67.4	71.9	59.7	86.8
1:00-2:00 a.m.	68.1	60.6	65.1	71.3	53.9	81.0
2:00-3:00 a.m.	70.6	60.5	65.9	73.7	55.2	90.9
3:00-4:00 a.m.	68.8	59.0	64.6	71.5	54.4	88.8
4:00-5:00 a.m.	67.1	58.7	63.4	68.9	55.0	84.9
5:00-6:00 a.m.	68.9	61.3	65.7	70.3	55.0	91.9
6:00-7:00 a.m.	68.9	65.1	68.7	70.6	58.1	80.5
7:00-8:00 a.m.	70.3	67.8	69.8	71.8	63.1	79.0
8:00-9:00 a.m.	69.8	66.2	68.7	71.2	61.1	84.8
9:00-10:00 a.m.	69.6	65.4	68.2	70.9	59.0	87.0
10:00-11:00 a.m.	73.3	67.2	70.3	75.4	60.3	99.0

Note:
(1) The 24-hour background noise levels were measured at the site boundary nearest to the closest noise-sensitive receptor to identify the quietest background hour.

Table 22.17-2
Off-Site Noise Traffic Volume
West 59th Street Converted MTS

Location	Hour	Existing Traffic Volume (1) (Vehicles / Hour)	Future No-Build Traffic Volume (2) (Vehicles / Hour)
West 59th Street between 10th & 11th Avenues	2:00 a.m.	68	69
West 59th Street between 10th & 11th Avenues	11:00 a.m.	375	381

Notes:
(1) Existing Traffic Volumes are based on ATR data.
(2) Future No-Build Traffic Volumes are based on CEQR annual traffic growth rates.

22.17.3 Potential Impacts with the West 59th Street Converted MTS

22.17.3.1 On-Site Noise Levels

Equipment assumed to be operating at the West 59th Street Converted MTS and its reference noise levels used in the CEQR and Current Noise Code analysis are shown in Table 22.17-3. Spectral noise levels used in the Performance Standards Noise Code analysis are shown in Table 22.17-4. The number and types of equipment assumed for this analysis were based on the West 59th Street Converted MTS's peak design capacity. Shown earlier, Figure 22.17-1 indicates the West 59th Street Converted MTS layout, the locations of the points along the facility boundary where overall noise predictions were calculated and the predicted 55 dBA contour line.

Table 22.17-3
Equipment Modeled in the Noise Analysis and Reference Noise Levels (L_{eq})
West 59th Street Converted MTS

Equipment Name (quantity)[(1)]	Reference Sound Pressure Noise Level at 50 feet (dBA)
Indoor	
Wheel Loader 966G (2)	80.6
Wheel Loader 908 (1)	69.3
Tamping Crane (1)	81
Bridge/Spreader Crane (1)	70
Mini-Sweeper (1)	76
Vacuum Sweeper (1)	64.3
Moving /Queuing Collection Vehicle (14)	73
Outdoor	
Moving Queuing Collection Vehicle (3)	67
Container Car Puller (3)	45
Gantry Crane (1)	77.2
Oceangoing Tugboat (1)	73

Notes:
(1) Instantaneous maximum number of pieces of equipment on site at any given time.

Table 22.17-4
Equipment Modeled in the Noise Analysis and Spectral Noise Levels (L_{max})
West 59th Street Converted MTS

Equipment (quantity)[1]	Reference Noise Level at 50 feet (dB)							
	Frequency (Hz)							
	63	125	250	500	1K	2K	4K	8K
Indoor								
Wheel Loader 966G (2)	78	77	75	76	77	74	68	60
Wheel Loader 908 (1)	78	77	75	76	77	74	68	60
Tamping Crane (1)	95	90	85	85	81	78	73	64
Bridge/Spreader Crane (1)	77	78	77	71	74	71	69	57
Mini-Sweeper (1)	71	74	69	74	71	68	64	56
Vacuum Sweeper (1)	71	74	69	74	71	68	64	56
Outdoor								
Container Car Puller (3)	31	30	47	44	36	35	42	46
Gantry Crane (1)[2]	79	82	81	74	70	65	61	56

Notes:
(1) Instantaneous maximum number of pieces of equipment on site at any given time.
(2) This is the noise level that will be specified for the gantry crane in DSNY's plans and specification for construction of the converted MTS's
Hz = Hertz
K = Thousand

22.17.3.2 CEQR Analysis

A screening analysis was conducted to determine if a detailed noise analysis would be required for the on-site operations at the West 59th Street Converted MTS. Noise levels from indoor and outdoor sources were combined to determine the location of the 55 dBA contour line. The 55 dBA contour line is approximately 61 meters (199 feet) from the property boundary in the direction of the nearest noise-sensitive receptor, which is directly abutting the property boundary. The 55 dBA contour line was selected as a limit for the study area because 55 dBA, (i.e., the point off site where noises generated on site attenuate to 55 dBA), is considered an acceptable noise level in an urban environment. Section 3.19.5.1 discusses this concept in greater detail. The results of the screening analysis show that noise-sensitive receptors are located within the 55 dBA contour line (see Figure 22.17-1); therefore, an on-site noise analysis, including noise monitoring at the nearest noise-sensitive receptor, was required to determine if an impact is predicted under Section R of the 2001 CEQR Technical Manual.

Noise monitoring was conducted at the noise-sensitive receptor during the quietest hour based on noise monitoring provided in Table 22.17-1 above. A detailed noise analysis was performed to calculate the West 59th Street Converted MTS-related predicted noise levels at the noise-sensitive receptor, and the predicted noise levels with both facility noise and background noise combined. The difference between this combined noise level and the existing noise level at the noise-sensitive receptor represents the predicted incremental change in noise level from the West 59th Converted MTS. Since the quietest hour occurs during the daytime, the CEQR threshold is 65 dBA. However, since the background noise level is greater than 62 dBA, an impact would be caused if the predicted incremental change is greater than the CEQR threshold of 3 dBA at the nearest noise-sensitive receptor. Therefore, there is a predicted impact that would be caused by the West 59th Converted MTS on-site operations based on this conservative analysis.

On-site queuing collection vehicles were further analyzed to refine the calculated noise levels from the West 59th Street Converted MTS facility truck ramp to the Riverside Park South receptor. Individual, position-specific utilization factors were assigned to each inbound collection vehicle position on the inbound side of the ramp, and to one collection vehicle position on the outbound scale based on the processing time at the West 59th Street Converted MTS. The utilization factor for each truck was estimated based on the peak hour of inbound collection vehicles, totaling 8 trucks and conservatively assuming these utilization factors would occur for 24 hours. The assumption was made that each inbound truck would be queuing on-site for approximately two minutes before proceeding one truck length further up the ramp towards the facility.

Table 22.17-5 below shows the results of the CEQR analysis with the refined queuing analysis at the Riverside Park South. The table includes the existing noise level at the noise-sensitive receptors, the West 59th Street Converted MTS-related noise levels and the combined noise level. The table also provides the difference between this combined noise level and the existing noise level at the sensitive receptors. This difference represents the predicted incremental change in noise level from the West 59th Street Converted MTS. Because this incremental change is less than the CEQR threshold of 3 dBA during nighttime hours, or during daytime hours when the daytime background noise level is greater than 62 dBA, for the Riverside Park South receptor analyzed, there is no predicted impact that would be caused by the West 59th Street Converted MTS on-site operations.

22.17.3.3 Performance Standards for Zoning Code Analysis

Overall noise predictions were calculated at the locations of the points representative of the West 59th Street Converted MTS boundary (D1, etc.) to determine the total noise level for each octave band from indoor and outdoor sources, not including DSNY and other agency collection vehicles and tugboats, in accordance with the New York City Zoning Code Performance Standards for Manufacturing Districts (assuming tugboats are transportation facilities) (see Table 22.17-6). Based on this analysis, no exceedances to the Performance Standards are predicted.

Table 22.17-5
CEQR Analysis
Existing and Predicted Noise Levels (L_{eq}) at the Nearest Noise-Sensitive Receptor with Refined On-Site Queuing Collection Vehicle Utilization Factor
West 59th Street Converted MTS

Noise-Sensitive Receptor ID	Distance from Facility (meters/ feet)	Existing Noise Levels During Quietest Hour (dBA)[1][2]	Predicted Facility Noise Level at Noise-Sensitive Receptor (dBA)[3]	Combined Facility and Background Noise Level at the Noise-Sensitive Receptor (dBA)	Increase over Existing Noise Levels (dBA)	Impact[4] (yes or no)
Riverside Park South	Directly abutting	65.4	61.0	66.8	1.4	No

Notes:
(1) Twenty-minute noise level readings measured at the closest noise-sensitive receptor during the quietest hour determined from the 24-hour noise level readings.
(2) Existing noise levels measured on February 10, 2004 at 5:00 p.m.
(3) Predicted noise level calculations at noise-sensitive receptor include on-site and off-site shielding from structures.
(4) According to CEQR, an increase of 3 dBA or more, when the daytime existing noise level is greater than 62 dBA, is considered an impact. The impact analysis compares the loudest noise emissions from daily operations at the West 59th Street Converted MTS with the quietest background noise levels that occur during facility operation. The quietest hour of background noise levels occurred during the daytime hours for the nearest noise-sensitive receptor; therefore, only daytime impact criteria are discussed in this analysis for this noise-sensitive receptor.

Table 22.17-6
Zoning Code Analysis
Predicted Spectral Noise Levels (L_{max}) at the Property Boundary
West 59th Street Converted MTS

Manufacturing District Regulation (M3)								
Frequency Range (Hz)	**63**	**125**	**250**	**500**	**1K**	**2K**	**4K**	**8K**
Threshold	**79**	**74**	**69**	**63**	**57**	**52**	**48**	**45**
Adjacent to Residential Zone Threshold	**73**	**68**	**63**	**57**	**51**	**46**	**42**	**39**
Total Lp dB: D1[1]	61.5	63.4	61.9	54.6	50.2	45.0	41.1	37.4
Total Lp dB: D2	59.6	55.0	48.9	42.0	36.5	30.1	23.9	17.0
Total Lp dB: D3	59.9	60.9	59.2	51.9	47.4	41.9	37.6	34.1
Total Lp dB: D4	61.0	63.6	62.1	54.8	50.4	45.1	40.7	35.0
Total Lp dB: D5[1]	60.0	63.2	61.8	54.5	50.1	44.8	40.4	35.0

Notes:
(1) This boundary point is adjacent to a residential zone.
Hz = Hertz
Lp = Sound pressure level
dB = Decibel
D1 through D5 are points representative of the West 59th Street Converted MTS boundary that are used in all noise analyses.
K = Thousand
Bold = Exceedance

22.17.3.4 NYC Noise Code Analysis – Current

Overall noise predictions were calculated at the locations of the points (D1, etc.) representative of the West 59th Street Converted MTS boundary to determine the total L_{eq} from all indoor and outdoor sources for comparison to the current Noise Code. This is shown in Table 22.17-7. Based on this analysis, the total L_{eq} does not exceed the current Noise Code Standard of 70 dBA at the property boundary.

Table 22.17-7
Current Noise Code Analysis
West 59th Street Converted MTS

Location at Plant Boundary	Total L_{eq} Contribution at Plant Boundary (dBA)
D1	61.6
D2	51.3
D3	63.0
D4	64.6
D5	68.2

22.17.3.5 Off-Site Noise Levels

A screening analysis was conducted to determine if a detailed off-site noise analysis including noise monitoring would be required along the truck routes serving the West 59th Street Converted MTS. The assumed DSNY and other agency collection vehicle routes are provided in Section 14 of this chapter. As a result of this screening, which is described in Section 3.19.5.2, no off-site noise analysis was required. Results of the second-level screening for the hour expected to receive the largest change in noise levels (when the difference between traffic noise levels and background noise levels is greatest) during the daytime (if any) and nighttime are provided in Table 22.17-8.

Because the screening results presented above showed that the PCEs would not double on a roadway due to DSNY and other agency collection vehicles coming to or going from the West 59th Street Converted MTS, a detailed off-site noise analysis was not required.

Table 22.17-8
Off-Site Noise Screening Results
West 59th Street Converted MTS

Location	Hour	Future No-Build PCEs(1)	Collection Vehicles	Employee Vehicles	Total Net DSNY Collection Vehicle PCEs(1)	Future Build PCEs(1)(2)	Possible Impact(3)
West 59th Street between 10th and 11th Avenues	2:00 a.m.	528	3	0	141	669	No
West 59th Street between 10th and 11th Avenues	11:00 a.m.	1,736	17	0	799	2,535	No

Notes:

(1) Total PCEs are rounded to the nearest whole number.

(2) Future Build PCEs include West 59th Street Converted MTS-related collection vehicles and employee vehicles. Per CEQR, collection vehicles are converted to PCEs using a factor of 47, and employee vehicles are converted to PCEs using a factor of 1.

(3) There is a possible impact if the Future Build PCEs are double the Future No-Build PCEs or more.

22.17.3.6 Combined On-Site and Off-Site Noise Levels

An off-site noise analysis was performed for the West 59th Street Converted MTS. The results of the on-site screening analysis showed that noise-sensitive receptors were not located within the 55 dBA contour line (see Figure 4.17-1); therefore, on-site noise monitoring and an on-site noise analysis were not required. Since an on-site analysis was not required, a combined noise analysis was not performed.

22.18 Commercial Waste to the West 59th Street Converted MTS

22.18.1 Existing Conditions

No commercial waste is delivered to the West 59th Street MTS site under Existing Conditions. Commercial waste generated in Manhattan is taken directly out of the City to remote disposal locations.

22.18.2 Future No-Build Conditions

Under Future No-Build Conditions, no commercial waste would be delivered to the West 59th Street Converted MTS; therefore, Future No-Build Conditions are the same as Existing Conditions.

22.18.3 Potential Impacts of Sending Commercial Waste to the West 59th Street Converted MTS

The complete analysis of potential impacts of sending commercial waste to the Converted MTSs is presented in Volume III of the March 2004 Commercial Waste Management Study, which is included as Appendix D to this DEIS.

22.18.3.1 On-Site Air Quality, Odor and Noise

Under Future Build Conditions, the West 59th Street Converted MTS was evaluated for on-site air quality, odor and noise impacts at its maximum design capacity of approximately 2,145 tpd (see Sections 22.15, 22.16 and 22.17). Results showed no unmitigatible adverse on-site air quality, odor or noise impacts. Although the peak hourly arrival rates of collection vehicles are not sustained over a 24-hour period, the analysis of on-site impacts conservatively modeled these peak hour conditions to predict the potential for on-site noise and odor impacts, and air quality impacts for short-term (1-hour, 3-hour, 8-hour and 24-hour) averaging periods. Because the analysis of short-term averaging periods was based on facility operations at the design capacity, no additional evaluation of on-site noise was required.

An evaluation of potential on-site air quality impacts for pollutants compared to annual average standards was modeled assuming commercial waste was processed at the Converted MTS. Based on these analyses, the potential processing of these quantities of the City's commercial putrescible waste would not cause any significantly adverse air quality impacts attributable to on-site operations. Likewise, odors from on-site operations of the Converted MTS with the addition of commercial waste at levels discussed in the Commercial Waste Management Study were also analyzed and results showed no unmitigatible significant adverse odor impacts.

See Appendix D for the revised tables to the Commercial Waste Management Study that contain the results of the on-site air quality and odor analyses.

22.18.3.2 Off-Site Traffic, Air Quality and Noise

Potential off-site traffic, air quality and noise impacts of deliveries of DSNY-managed Waste to the West 59th Street Converted MTS were evaluated in Sections 22.14, 22.15 and 22.17 based on temporal distributions of DSNY and other agency collection vehicles identified in Section 22.14.

The greatest number of DSNY and other agency collection vehicles analyzed for traffic impacts during all three periods (AM, midday and PM peak hours) was 21 (inbound trip ends) per hour, which occurred during the AM peak. These 21 DSNY and other agency collection vehicles are also more than the 12 peak hour DSNY and other agency collection vehicle and commercial waste hauling vehicle inbound trip ends that can be processed per hour at the West 59th Street Converted MTS during the 8:00 p.m. to 8:00 a.m. shift. In addition, the intersection LOS is lower (i.e., poorer) and the background volumes of traffic are higher during the AM peak than the 8:00 p.m. to 8:00 a.m. hours, so the AM peak analysis represents worst-case conditions. As reported above, there were no unmitigatible significant adverse environmental impacts from the 21 DSNY and other collection agency vehicles at the West 59th Street Converted MTS. Therefore, the addition of the 12 DSNY and other agency collection vehicles and commercial waste hauling vehicles at the West 59th Street Converted MTS per hour during the 8:00 p.m. to 8:00 a.m. shift — during a period with a better LOS and lower background traffic volumes — would also have no unmitigatible significant adverse traffic impacts.

Likewise, the 21 inbound DSNY and other agency collection vehicles analyzed for off-site air quality impacts during the AM peak hour was the highest number of collection vehicles analyzed for all three periods (AM, midday and PM peak hours). For off-site air quality modeling, a Tier I analysis assumed conservatively that the 21 inbound DSNY and other agency collection vehicles would travel through the analyzed intersections each hour over a 24 hour period. Results showed there would be no unmitigatible significant adverse environmental impacts at several analyzed intersections. Consequently, because the 12 inbound DSNY and other agency collection vehicles and commercial waste hauling vehicles that can travel through these intersections per hour during the 8:00 p.m. to 8:00 a.m. shift would be fewer than the number of such vehicles analyzed for the AM peak over a 24-hour period, there would be no significant adverse off-site air quality impacts.

For the intersection of Route 9A and West 57th Street, a Tier II analysis was required. The estimated actual hourly distribution over 24 hours included the estimated 21 inbound DSNY and other agency collection vehicles and commercial waste hauling vehicles that could potentially be processed at the West 59th Street Converted MTS, and no unmitigatible significant adverse environmental impacts were identified.

Evaluating the potential for off-site noise impacts required the use of a second-level noise screening analysis. The results of this analysis indicate that the potential number of commercial waste hauling vehicles that could be routed to the West 59th Street Converted MTS during various hours within the 8:00 p.m. to 8:00 a.m. period must be limited to less than the available excess capacity to avoid causing potential impacts at noise-sensitive receptors on the approach routes these vehicles would take to the Converted MTS. The amount of available capacity that can be used to process commercial waste during the hours of 8:00 p.m. to 8:00 a.m., without causing any significant adverse noise impacts, is 956 tons (or 91 commercial waste hauling vehicles, assuming an average of 11 tons per truck) over this 12-hour period.