CHAPTER 9 ENVIRONMENTAL REVIEW: WEST 59TH STREET CONVERTED MTS

9.1 Introduction

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

9.2 Land Use, Zoning and Public Policy
9.3 Socioeconomic Conditions
9.4 Community Facilities
9.5 Open Space and Parklands
9.6 Cultural Resources
9.7 Urban Design and Visual Quality
9.8 Neighborhood Character
9.9 Traffic and Transportation
9.10 Air Quality
9.11 Odor
9.12 Noise
9.13 Infrastructure and Energy
9.14 Natural Resources
9.15 Water Quality
9.16 Waterfront Revitalization Program
9.17 Hazardous Materials

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.

9.2 Land Use, Zoning, and Public Policy

9.2.1 Existing Conditions

9.2.1.1 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 (Figure 9.2-1). The secondary study area is defined as the area between ¼ mile and ½ mile of the site (Figure 9.2-2). 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.

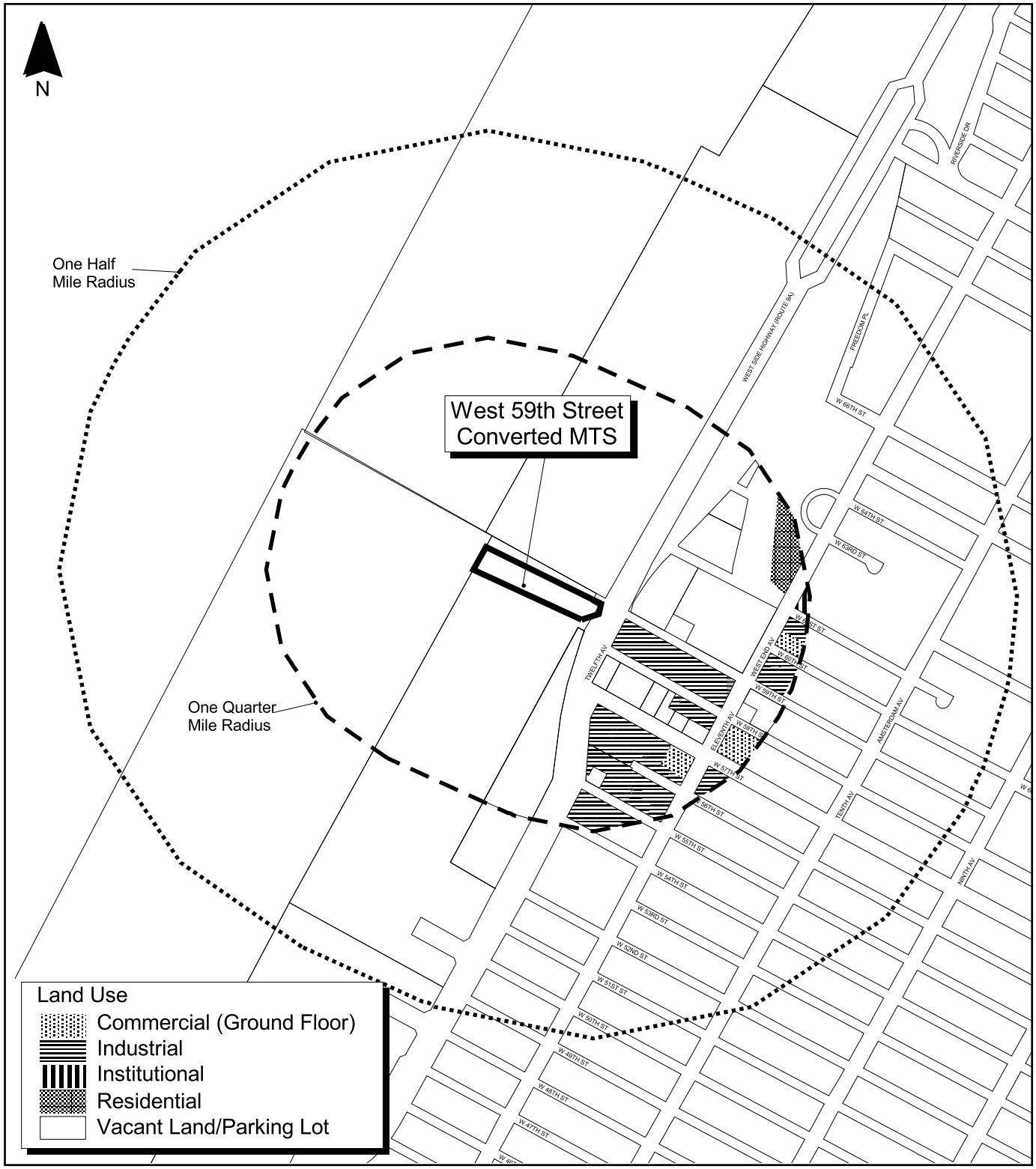
9.2.1.2 Land Use Patterns

9.2.1.2.1 General Context

Set in the larger context of Manhattan's Hudson River waterfront and the Clinton/Lincoln Center neighborhoods, the site is surrounded by a large surface parking lot, vacant land and industrial uses, as well as functional piers to the south and the West Side (Miller) Highway.

9.2.1.2.2 Land Uses in the Primary Study Area

The primary study area is characterized by active industrial uses, municipal operations and blocks of Riverside South construction activity north of West 59th Street. The most significant uses the large Consolidated Edison generating plant across the highway from the site, DSNY's Manhattan District 7 garage on 12th Avenue, DSNY's salt storage and parking on nearby piers, transfer of paper recyclables from truck to barge at the existing MTS, and commercial warehouses located along 12th Avenue and on adjacent cross streets. The site is buffered from the less industrial sections of the Clinton neighborhood by the elevated West Side (Miller) Highway and the large surface parking lot north of West 59th Street between the highway and 11th Avenue. Commercial enterprises, such as grocery stores and numerous auto sales establishments, are located on 11th Avenue. The only residential uses found in the primary study area consist of the southern tip of the sprawling Riverside South development that extends north from West 61st Street on the former Penn Central railyards.



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 9.2-1 Land Use in the Primary Study Area

West 59th Street Converted MTS

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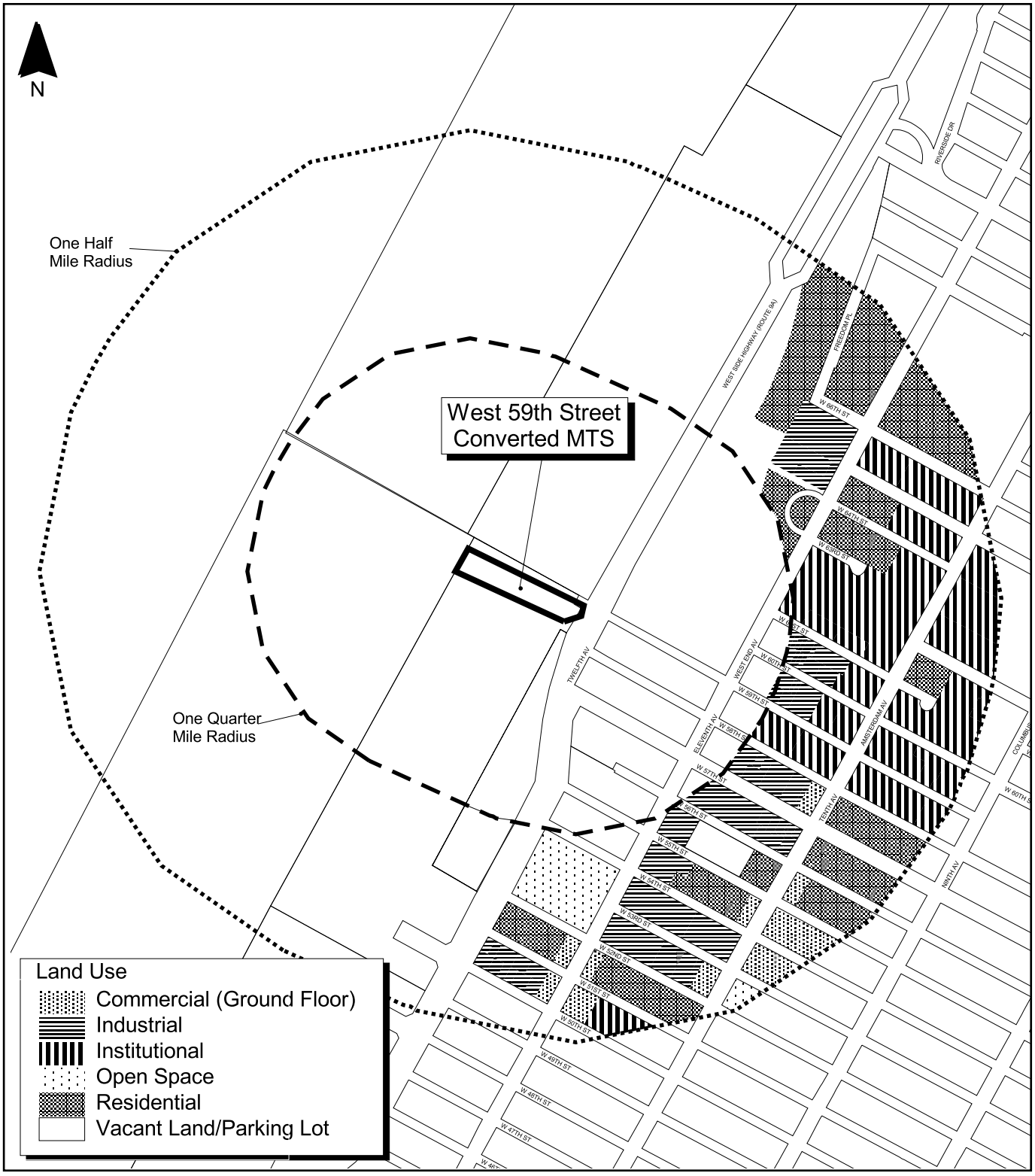

Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning
This figure illustrates predominant land uses by lot in the primary study area.

Figure 9.2-2 Land Use in the Secondary Study Area

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9.2.1.2.3 Land Uses in the Secondary Study Area

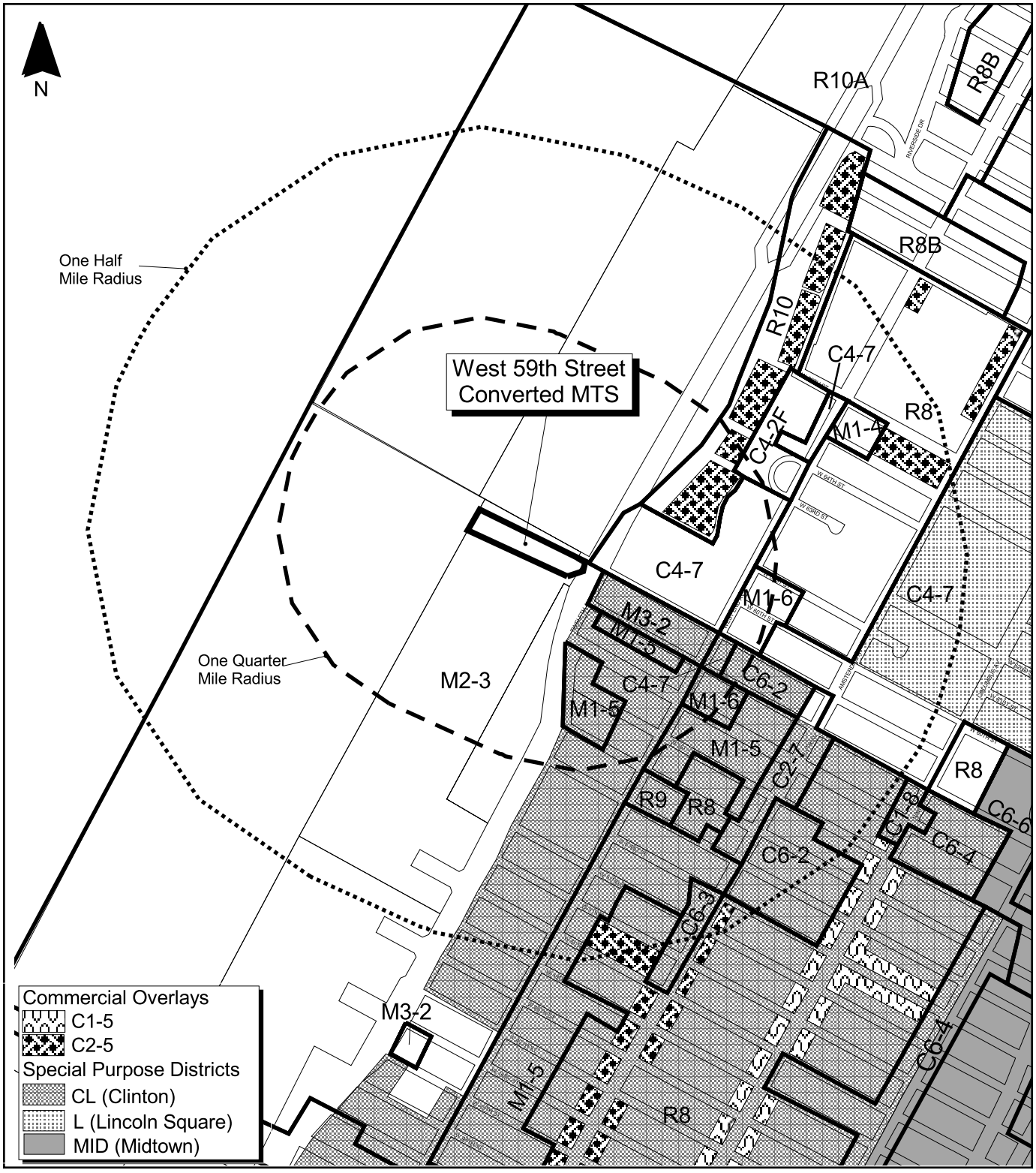
Fairly discrete concentrations of industrial, residential, commercial, and institutional uses characterize the secondary study area. In addition to Riverside South, which includes four existing residential towers lining the west side of West End Avenue north of West 61st Street, residential uses can also be found concentrated between 10th and 11th Avenues north of West 63rd Street, south of West 56th Street, and east of 10th Avenue between West 56th and West 63rd Streets. Otherwise, the blocks between 10th and 11th 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. Commercial uses are concentrated south of West 58th Street.

Dewitt Clinton Park is located south of the site, between 11th and 12th Avenues and West 52nd and West 54th Streets. A primarily residential block is located south of the park, and small scale, ground floor commercial properties line both sides of 11th Avenue southward.

9.2.1.3 Current Zoning on and near the Site

9.2.1.3.1 Zoning within the Primary Study Area

The site is located in a manufacturing (M2-3) zone, which extends more than ½ mile north and south along the waterfront, and inland to 11th Avenue (south of West 59th Street). Northeast of the site, there is a mix of commercial zoning districts and overlays (C4-7), industrial zoning (M1-6), and residential zoning (R10). Southeast of the site, there is also a mix of industrial (M1-5 and M3-2) and commercial districts (C4-7 and C6-2). The Clinton Special Purpose District also extends south of 59th Street and west to 12th Avenue in the primary study area. This zoning district was established in 1974 to preserve the residential character of the community, as it is located between the waterfront on the west and the growing CBD on the east. (See Figure 9.2-3).



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

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Figure 9.2-3 Zoning

West 59th Street Converted MTS

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9.2.1.3.2 Zoning within the Secondary Study Area

As in the primary study area, the shoreline south of the site and the bulkhead-pier areas north of the site are zoned M2-3. Northeast of the site is a mix of zoning, mostly commercial (C4-2F, C4-7) and residential (R10 and R8). There are also a couple of discrete industrial zones on West End Avenue (M1-6 and M1-4). The Lincoln Square Special Purpose District extends into the secondary study area between West 60th and West 65th Streets. 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.

9.2.1.4 Current Plans and Policies

The site lies right at the border of Community District 4 (south of West 59th Street) and Community District 7 (to the north). In the FY 2002/2003 Community District Needs Statement prepared by District 4, the Board 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 10th and 11th Avenues southeast of the site, to protect residents and businesses from displacement. A 197-a Plan is currently underway for the South Hell's Kitchen (Clinton) area. The statement urges the relocation of DSNY garage and salt storage from another pier in the community district to minimize potential conflict with the proposed Hudson River Park. In the statement, the 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 11th Avenue that is undergoing redevelopment. (See Section 9.5 for park plans.)

In its 2002/2003 Community District Needs Statement, Community District 7 expressed general concerns of its characteristically residential district. There are no statements referring to DSNY, the site, or its environs.

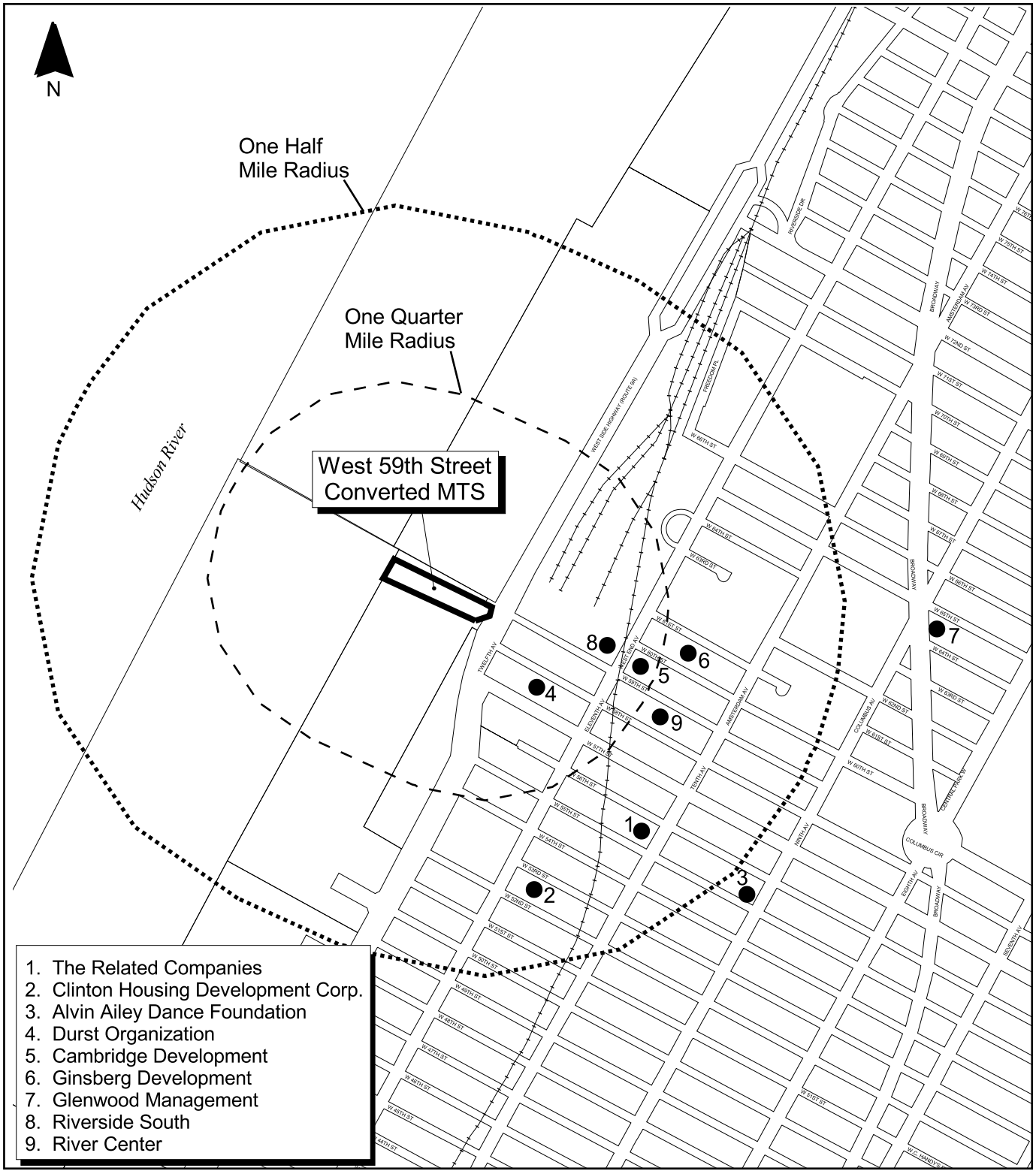
The Plan for Reach 3, which includes the site and extends south from West 59th Street to just several blocks below Canal Street, makes no recommendations pertinent to the West 59th Street Converted MTS. It is noted that the entire reach is zoned for industrial uses, with the only

existing public waterfront access located on the Intrepid Piers north of 42nd Street. 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 12th Avenue throughout the study area. The Plan for Reach 4, which extends north from West 59th Street to West 125th Street, recommends that waterfront park be developed along the shore north of the site.

9.2.2 Future No-Build Conditions

- Seventeen development parcels of Riverside South are currently under construction on West End Avenue between West 59th and West 60th Streets, constituting 5,000 dwelling units, 137,800 square feet of retail space, 336,400 square feet of community facility space, and associated parking (3,500 spaces).
- Hudson River Park development (more details to come)
- The Related Companies will be constructing 305 dwelling units and 37,000 square feet retail space on 10th Avenue between West 55th and West 56th Streets. The build year is 2003.
- Clinton Housing Development Corporation will be constructing 149 dwelling units and 4,000 square feet retail space at 11th Avenue between West 51st and West 52nd Streets. The build year is 2004.
- Alvin Ailey Dance Foundation will be constructing a 25,970-square-foot studio and 5,000-square-foot theater at West 55th Street and 9th Avenue. The build year is 2004.
- Glenwood Management will be constructing 232 dwelling units, 112,000 square feet of retail space, and associated parking (150 spaces) at 1926 Broadway. The build year is 2003.
- River Center, which will be located between 58th and 59th Streets and 10th and 11th Avenues, has been approved and will contain 1,201 dwelling units, 166,000 square feet of retail space, 900,000 square feet of community facility space and associated parking (655 spaces).
- Construction has begun on Durst Organization's NY CyberCenter, located between 57th and 58th Streets, and 11th and 12th Avenues. The 300,000 square foot project, a high-availability telecomm/data center, will include its own, private cogeneration power facility, and will be ready for occupancy by late 2003.
- Cambridge Development has proposed the construction of 224-309 dwelling units combined with up to 20,000 square feet retail space on West End Avenue at West 59th Street.
- Ginsberg Development has proposed the construction of 377 dwelling units at West 60th-61st Streets.

These planned development sites are shown in Figure 9.2-4.



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

Figure 9.2-4 Planned Development Sites

West 59th Street Converted MTS

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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.

9.2.3 Potential Impacts with the West 59th Street Converted MTS

9.2.3.1 Land Use and Zoning

The West 59th Street Converted MTS would entail replacing the existing MTS with a new facility that would also feature containerization functions, and it would represent a slight physical upgrading of the site. The facility's processing operation would be designed to containerize waste and prepare containers for transfer to barge for disposal outside 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. Neither the waste transfer activities on the site nor the volume of truck traffic would encourage similar types of land uses or discourage other types of land use in the study areas. Therefore, no significant adverse impacts to land use or zoning in the primary or secondary study areas would result.

9.2.3.2 Consistency with Public Plans and Policies

There are no recommendations or objectives stated in relevant plans and policies that specifically relate to the site, study area, or West 59th Street Converted MTS.

9.3 Socioeconomic Conditions

9.3.1 Existing Conditions

9.3.1.1 Definition of the Study Area

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 (Figure 9.3-1), which include the waterfront south of West 59th Street and an area along West 59th Street inland to 10th 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 10th Avenue.

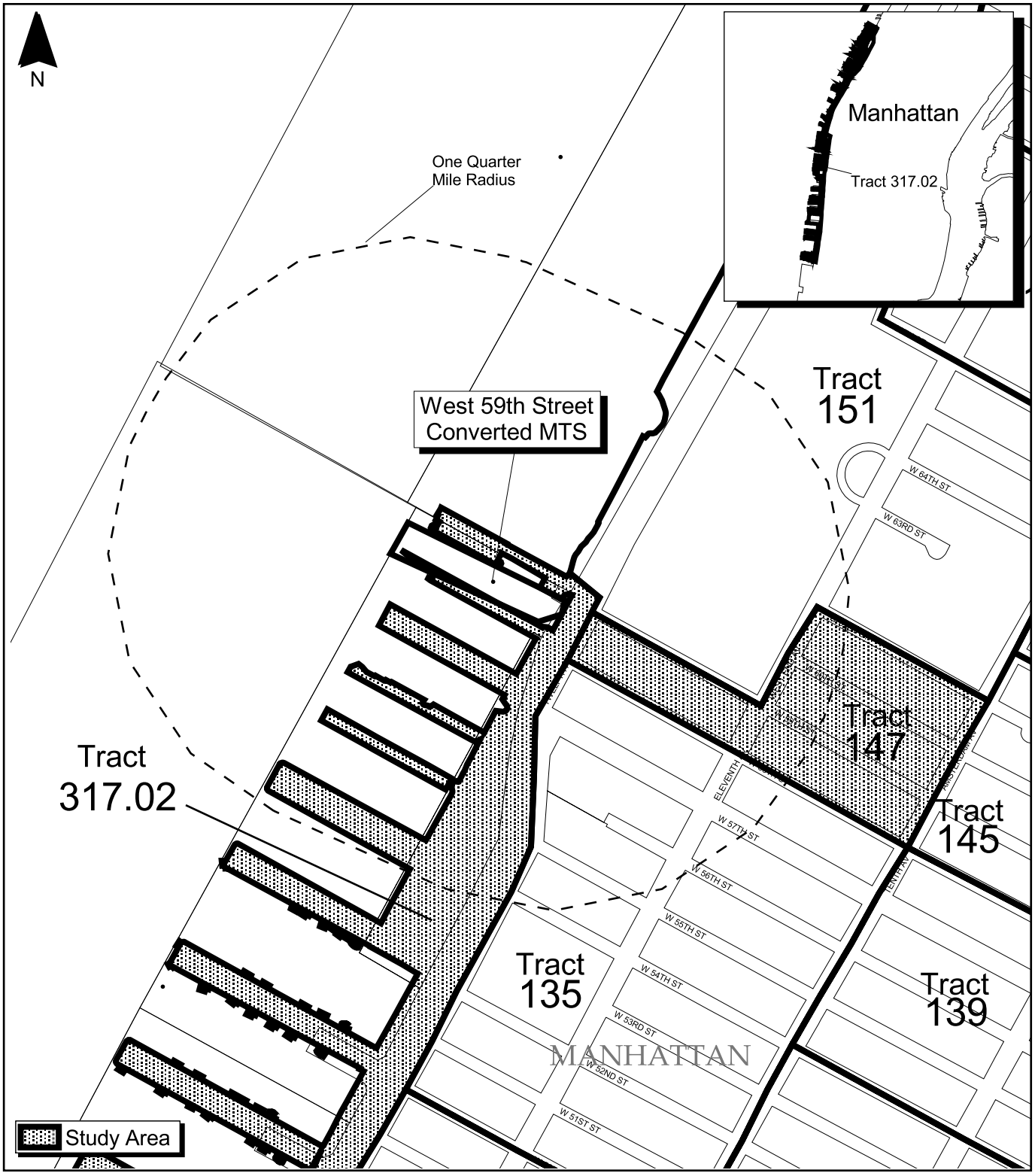
Detailed socioeconomic information referred to in the text but not presented in table form may be found in Appendix B.

9.3.1.2 Demographic Characteristics

9.3.1.2.1 Population

The total 2000 study area population was 2,198 persons (see Table 9.3-1). In terms of total population growth from 1990 to 2000, the study area experienced a considerably greater percentage increase (72 percent) than did the Borough (3 percent) and the City (9 percent) during the same period.

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. The study area contained a slightly greater percentage of children and teenagers than the Borough but less than the City; approximately 23 percent of the study area population was under the age of 20, compared to 19 percent for the Borough and 27 percent for the City.



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

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Figure 9.3-1 Census Tracts

West 59th Street Converted MTS

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Table 9.3-1
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

9.3.1.2.2 Racial and Ethnic Characteristics

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

From 1990 to 2000, the number of study area residents of Hispanic origin decreased by 50 percent while this population grew proportionally in the Borough (10 percent) and in the City (24 percent) 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.

9.3.1.2.3 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 percent) was slightly smaller than those families in Manhattan (43 percent) and in New York City (49 percent). There was a considerably larger percentage of married-couple families in the study area (73 percent) than in the Borough and the City (62 percent), and 51 percent of these families had children, greater than Manhattan (39 percent) but about the same as the City (48 percent).

Eighteen percent of the families in the study area were headed by a female householder. This percentage is lower percentage than that in the Borough or the City (both 30 percent). Only 7 percent 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 percent) and the City (55 percent).

There were 789 households in the study area in 2000, with an average household size of 1.7 persons, less than Manhattan (2 persons) and the City (2.6 persons).

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

9.3.1.2.4 Employment

Within the study area, 71 percent of persons age 16 and older participated in the labor force in 2000, greater proportionally than the 64 percent in Manhattan and 58 percent 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 percent) and the City (16 percent). Moreover, 3 percent of the study area's working population was self-employed, less than that of Manhattan (9 percent) and the City (6 percent).

From 1990 to 2000, the number of employed persons within the study area increased by 101 percent, 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 percent compared to a 15 percent decrease in the Borough and a 10 percent decrease in the City.

Current estimates indicate that about 221,990 employees worked in Manhattan Community Districts 4 and 7 in 2002, which was about 10.5 percent of the borough's total employment.[1]

[1] New York Metropolitan Transportation Council, Employment Interim Projections data set, approved 7-17-03.

9.3.1.2.5 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 percent, lower than either the Borough (8 percent) or the City (6 percent). Nearly all the housing units were renter-occupied (96 percent), considerably greater than the rate in the Borough (74 percent) and the City (66 percent). Median monthly rent ($1,174) was far higher than in the Borough ($796) and the City ($705).

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

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

9.3.1.2.6 Education

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

The study area witnessed a 388 percent 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 percent), whereas the Borough experienced an 8 percent increase in enrollees and, of that, a 98 percent increase in pre-primary students, comparable to the City (18 percent and 150 percent, respectively).

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

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 percent, and the same trend was evident in the Borough and the City, which experienced increases of 20 and 29 percent, respectively. Meanwhile, the number of people with less than a college education declined significantly in the study area overall.

9.3.1.2.7 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 percent) above $50,000. Only 10 percent of households in the study area had incomes of $25,000 or below, compared with 30 percent in the Borough and 35 percent in the City.

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

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 percent and 19 percent for the Borough, and 30 percent and 18 percent 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 11th Avenue along with several of Manhattan's major automobile retail establishments.

9.3.2 Future No-Build Conditions

9.3.2.1 Demographic Characteristics

Regional projections indicate that the population of census tracts 147 and 317.02 will remain the same as current estimates.[2]

9.3.2.2 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 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 towers. It is reasonable to assume that new retail establishments will follow to serve the new residential population. As a whole, this southern extension of Riverside South will carry conditions currently characterizing the upper West 60s nearer to the site. Additional residential, retail, and studio space will also be developed on West 58th Street, south of the Consolidated Edison building that lines West 59th Street, as well as in five other locations throughout a nine-block area east of the site, between 10th and 11th Avenues, from West 52nd to West 61st Streets.

[2] New York Metropolitan Transportation Council, Employment Interim Projections data set, approved 7-17-03.

Regional projections indicate that employment in Manhattan Community Districts 4 and 7 will increase to 284,420, about a 28 percent increase in employment between 2002 and 2006.[3]

9.3.3 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.

9.3.3.1 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 9.2.3.1 and 9.8.3, respectively.)

9.3.3.2 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.

9.3.3.3 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.

[3] New York Metropolitan Transportation Council, Employment Interim Projections data set, approved 7-17-03.

9.3.3.4 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 beyond the study area), the new workers would generate a minor amount of indirect economic benefits in the study area through local spending.

9.4 Community Facilities and Services

9.4.1 Existing Conditions

9.4.1.1 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.

9.4.1.2 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 below in Table 9.4-1 and shown on Figure 9.4-1.

9.4.2 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.

9.4.3 Potential Impacts with the West 59th Street Converted MTS

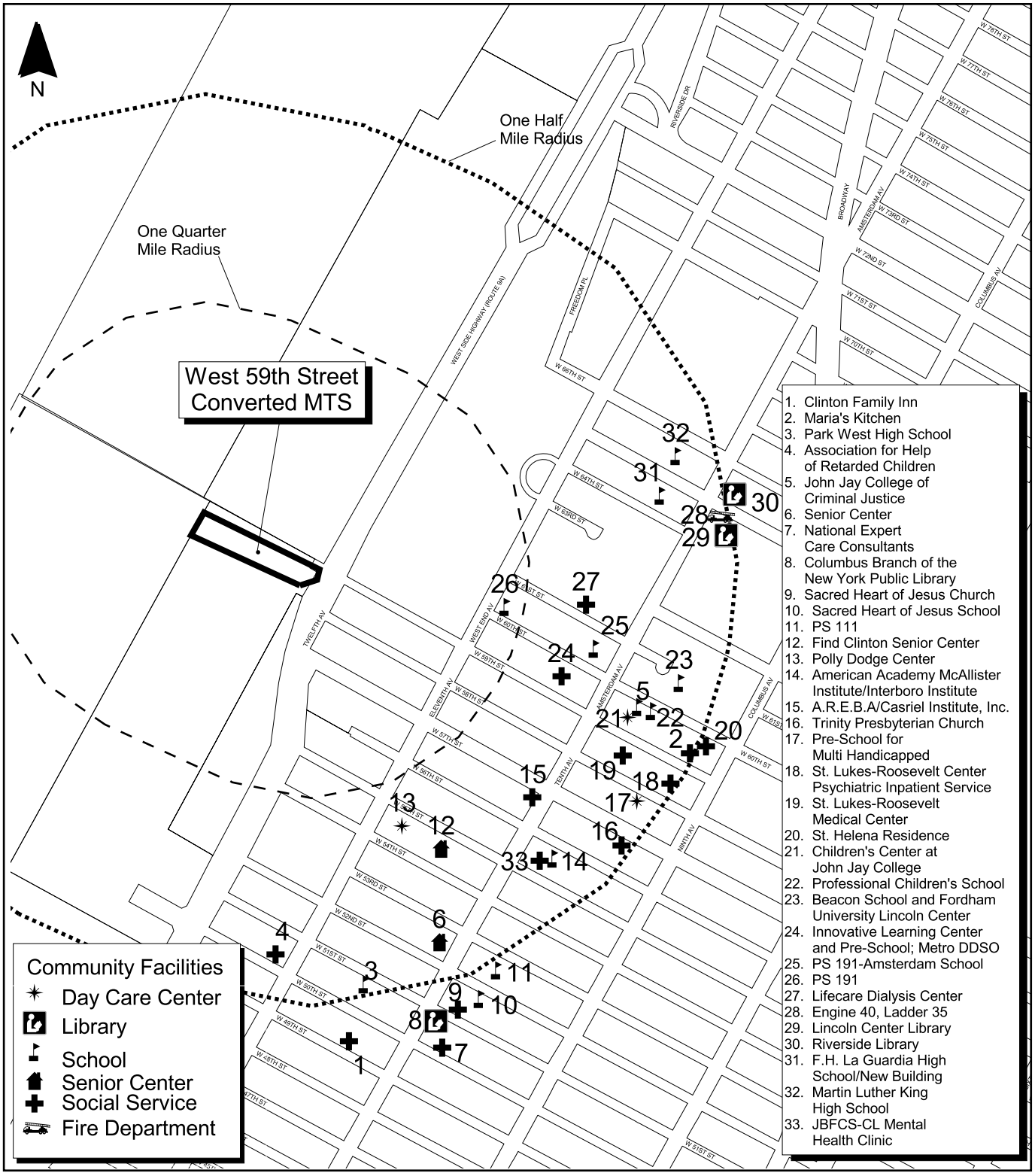
The West 59th Street Converted MTS would not create any significant new demand on services and community facilities and would not displace facilities or disrupt services. The New York City Fire Department states that it would have no problem supporting the reactivation of the site (Appendix A). No significant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

Table 9.4-1
Community Facilities and Services

Name	Address
Within Primary Study Area	
Schools	
PS 191	210 West 61st Street
Within 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 Ave.
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
PS 191 - Amsterdam School	210 West 61st Street
F.H. LaGuardia High School/New Building	108 Amsterdam Ave.
Martin Luther King High School	122 Amsterdam Ave.
John Jay College of Criminal Justice	899 10th Avenue
Senior Centers	
Senior Center, Department for the Aging	777 10th Ave.
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 10th Ave.
Innovative Learning Center and Pre-School; Metro DDSO	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 Ave.

Table 9.4-1 (continued)
Community Facilities and Services

Name	Address
Outside Secondary Study Area	
Libraries	
Columbus Branch of the New York Public Library	742 10th Ave.
Riverside Library	127 Amsterdam Ave.
Schools	
Sacred Heart of Jesus School	456 West 52nd Street
PS 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



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 9.4-1 Community Facilities and Services

West 59th Street Converted MTS

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9.5 Open Space and Parklands

9.5.1 Existing Conditions

9.5.1.1 Definition of the Study Area

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

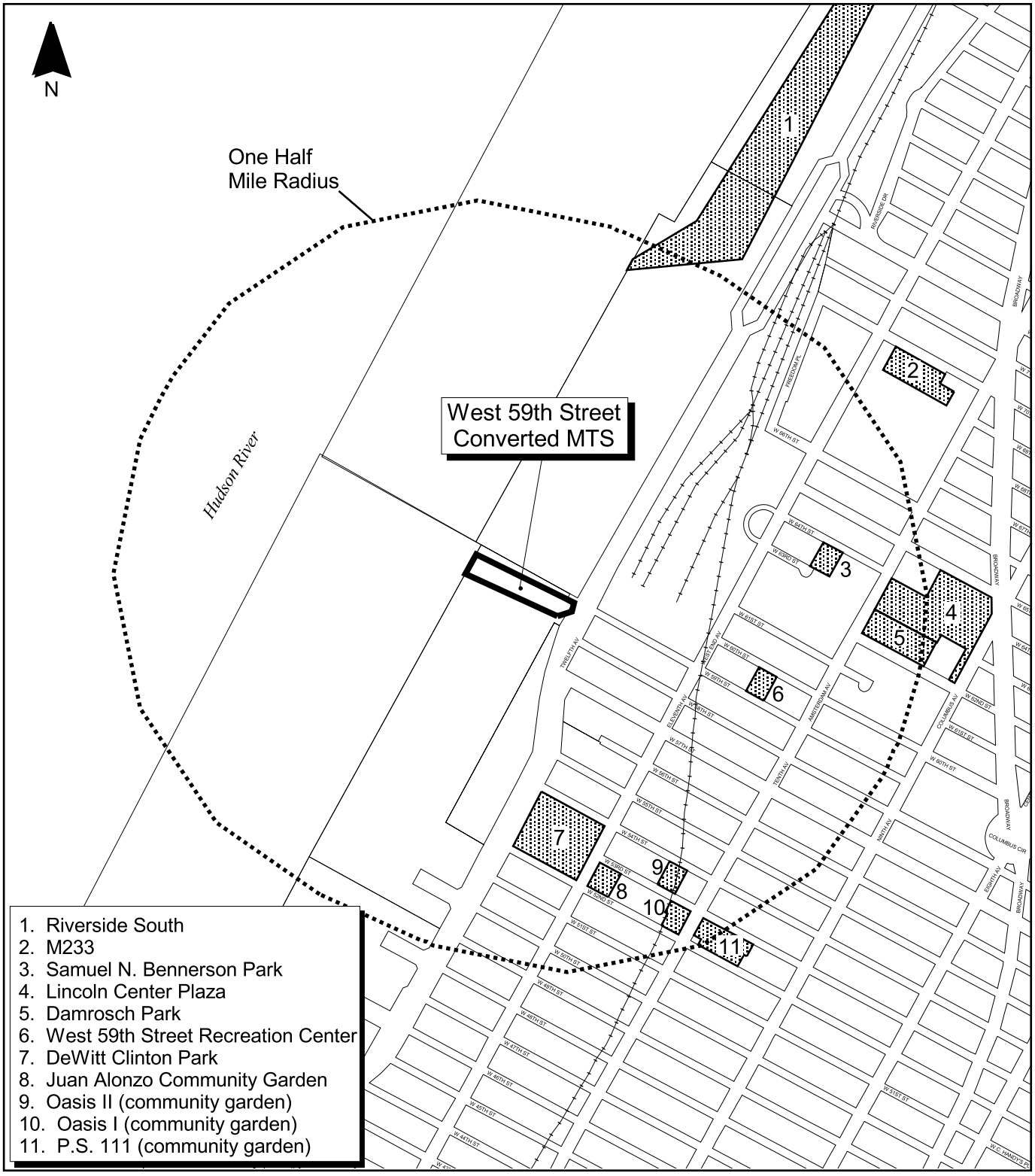
9.5.1.2 Summary of Open Space and Parklands in the Study Area

There are 10 public parks and open spaces within the study area, and one just outside to the north. They are listed in Table 9.5-1 and shown on Figure 9.5-1.

Table 9.5-1
Public Parks and Open Spaces

Name	Location	Acreage
Inside Secondary Area		
Riverside Park South	West 72nd to West 129th Streets	266.8 (total)
Samuel N. Bennerson Park	64th Street (west of 10th Avenue)	0.749
Lincoln Center Plaza	Columbus Avenue and West 63rd Street	7.19
Damrosch Park	Amsterdam Avenue and West 62nd Street	2.443
West 59th Street Recreation Center	West 59th and West 60th Streets (between 11th and 10th Avenues)	0.69
DeWitt Clinton Park	West 52nd to West 54th Streets (11th to 12th Avenues)	5.829
Juan Alonzo Community Garden	West 52nd to West 53 Streets (11th Avenue)	0.81
Oasis II (Community Garden)	West 53rd to West 54th Streets (between 10th and 11th Avenues)	0.67
Oasis I (Community Garden)	West 52nd to West 53rd Streets (10th Avenue)	0.70
P.S. 111 (Community Garden)	West 52nd to West 53rd Streets (10th Avenue)	1.80
Outside Secondary Area		
70th Street Playground	West 70th Street (East of 11th Avenue)	2.29

The Hudson River 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



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

Figure 9.5-1 Open Space/Parkland
West 59th Street Converted MTS

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Hudson River Park Act enacted an approximately 550-acre park to be built in phases along a 5-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, a privately funded waterfront park (Riverside Park South) is being construction by the Trump Organization and Hudson Waterfront Associates, though it ultimately will fall under DPR jurisdiction. As Riverside Park South and adjacent waterfront park areas are developed, they host an interim multi-use path, including the Route 9A Bikeway, which was implemented by the New York State Department of Transportation 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 of it, future phases of Trump Organization residential buildings will be developed, while the waterfront parkland to the west of the path has recently opened for public use.

As the multi-use path meets West 59th Street, there is a blind spot and known hazard for bicyclists and skaters approaching the transfer station from the north, who must approach the intersection at an angle and cannot see traffic entering or exiting the transfer station. Additionally, drainage problems at the entrance to the transfer station create a hazard for cyclists and skaters.

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. A vacant, fenced lot between the promenade and the bikeway is slated for development as part of the Hudson River Park. At West 55th Street, the promenade is merged back into the bikeway, which continues south, ultimately connecting to the Battery Park City esplanade.

9.5.2 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 set to begin in 2003 and be complete by 2005. Phase I reconstruction of the West 59th Street Recreation Center (interior) is likely to be complete by 2006. The Riverside South development, also underway by 2006 will entail the reconstruction of that portion of the bike path north of the site, running beneath the elevated West Side Highway.

9.5.3 Potential Impacts with the West 59th Street Converted MTS

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 MTS truck traffic, therefore, could potentially worsen the safety conditions on the bike path. Appropriate measures, developed in coordination with the NYC DPR would likely resolve this conflict.

9.6 Cultural Resources

9.6.1 Existing Conditions

9.6.1.1 Definition of the Study Area

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

9.6.1.2 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 rail yards.

As with much of Manhattan north of its southern tip, this 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 11th 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 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 New York City's worst slums and the home of notorious gangs. With the advent of the 9th 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, New York Central Railroad West Side Improvement Project, and 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, however, the piers in the area were abandoned and the neighborhood close to the waterfront further declined.

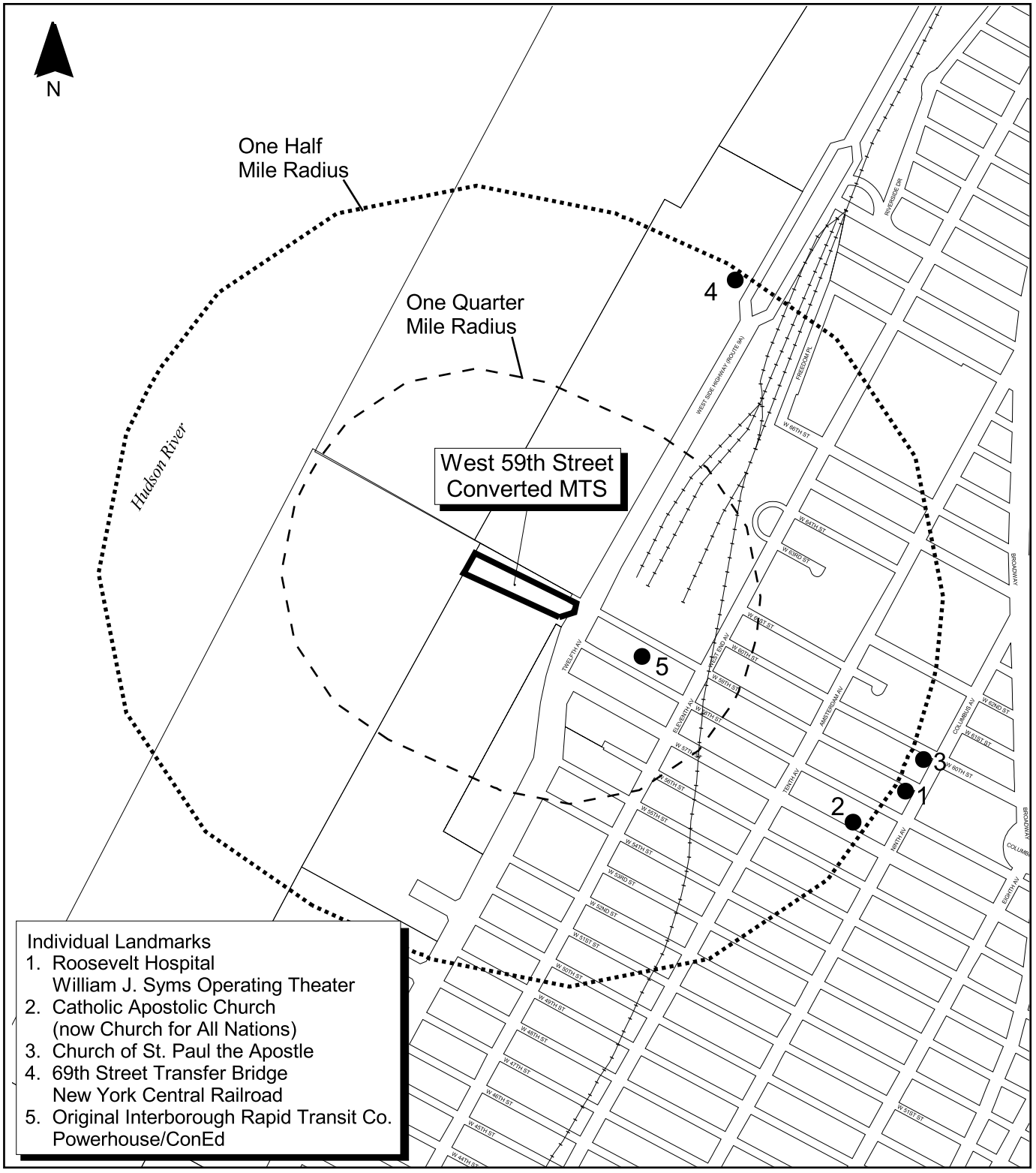
At about this same time, Hell's Kitchen was renamed Clinton (after nearby De Witt Clinton Park) to improve its image and distance itself from its violent past. Later, during the 1980s and 1990s, new private and public residential construction and housing redevelopment efforts were undertaken to rejuvenate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

9.6.1.3 Cultural Resources on the Site

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

9.6.1.4 Cultural 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 (Figure 9.6-1). These properties are listed in Table 9.6-1.



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

Figure 9.6-1 Cultural Resources

West 59th Street Converted MTS

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Table 9.6-1
Cultural Resources in the Study Area

Name	Location	Designation
Riverside Park South Original IRT (Interborough Rapid Transit) Power House (now Con Ed Generating Plant)	West 72nd to West 129th Streets 58th-59th Streets, 11th to 12th Avenues	Eligible for listing on the SR
William J. Syms Operating Theater, Roosevelt Hospital	64th Street (west of 10th Avenue) , 400 West 59th Street	NYCL
Originally Catholic Apostolic Church (now Church for all Nations),	417-419 West 59th Street	NYCL
Church of St. Paul the Apostle	415 West 59th Street	SR/NR
69th Street Transfer Bridge, New York Central Railroad	69th St. and Hudson River	Eligible for listing on the SR

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

9.6.2 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.

9.6.3 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.

9.7 Urban Design and Visual Quality

9.7.1 Existing Conditions

9.7.1.1 Definition of the Study Area

The urban design and visual quality study area is the same as the neighborhood character study area. The site has been developed in a manner consistent with the uses of the adjacent properties, although new residential development as near as 1,500 feet northeast of the site (Riverside South Development) 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, a bikeway that runs along 12th Avenue below the elevated West Side Highway and is a feature of the landscape that is sensitive to potential urban design and visual quality impacts. This is the only such existing use.

9.7.1.2 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 study 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 (Figure 9.7-1).

The artistically manipulated shell of the MTS is visible on land from the elevated West Side Highway, 12th Avenue and the bikeway, and to some extent from points on West 59th Street approximately as far east as 10th Avenue.

Figure 9.7-1 : The artistically treated entrance facade of the West 59th Street MTS, visible beneath the elevated West Side Highway.

Figure 9.7-2 : View of 12th Avenue, facing south from West 59th Street.

Figure 9.7-1 and 9.7-2
Urban Design and Visual Quality
West 59th Street Converted MTS

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9.7.1.3 Urban Design and Visual Quality of the Study Area

The streetscapes 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 (Figures 9.7-2 and 9.7-3). There is no landscaping, such as sidewalk trees, 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 landmark 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 12th Avenue are interesting features, however, designed to be more decorative than functional in appearance. They resemble much older cast-iron lamp posts 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, it runs under the elevated West Side (Miller) Highway and through areas being prepared for construction of the next phase of the Riverside South 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 recreational space on the south and typical Manhattan avenue streetscapes to the east. DeWitt Clinton Park, which features a landscaped perimeter along 12th 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 (Figure 9.7-4). 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 11th Avenue runs through the study area, it is primarily industrial with nondescript warehouses lining the streets, while 10th 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.

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Figure 9.7-3 : View of West 59th Street, facing east from 12th Avenue.

Figure 9.7-4 : View of West 59th Street MTS (behind highway signage), facing northwest from DeWitt Clinton Park
(West Side Highway and West 54th Street).

Figure 9.7-3 and 9.7-4
Urban Design and Visual Quality
West 59th Street Converted MTS

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9.7.2 Future No-Build Conditions

There are no plans for the site or immediate environs that would lead to changes in urban design or visual quality conditions of most of the study area. However, the southern extent of 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 11th Avenue. Several new towers are planned for the area that is currently a parking lot. The sleek continuum of residential towers characteristic of 11th Avenue north of West 61st Street would thus be extended to transform visual quality and urban form of the southward land immediately inland of the site, east of the elevated West Side (Miller) Highway.

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

9.7.3 Potential Impacts with the West 59th Street Converted MTS

The reactivation of waste transfer operations at the site would not significantly alter the visual quality or urban design of the waterfront. The new facility would be virtually the same as the existing MTS in terms of location and massing. The appearance of activities would resemble the ongoing waterborne transport of recyclables, though containerized waste would result in a slight improvement in aesthetics. The existing neon ornament found on the MTS would not be incorporate into the proposed facility design, though the entrance portal will remain undisturbed. Overall, there would be no notable change in the urban design and visual quality of the site or study area, and so no significant adverse impacts are predicted.

9.8 Neighborhood Character

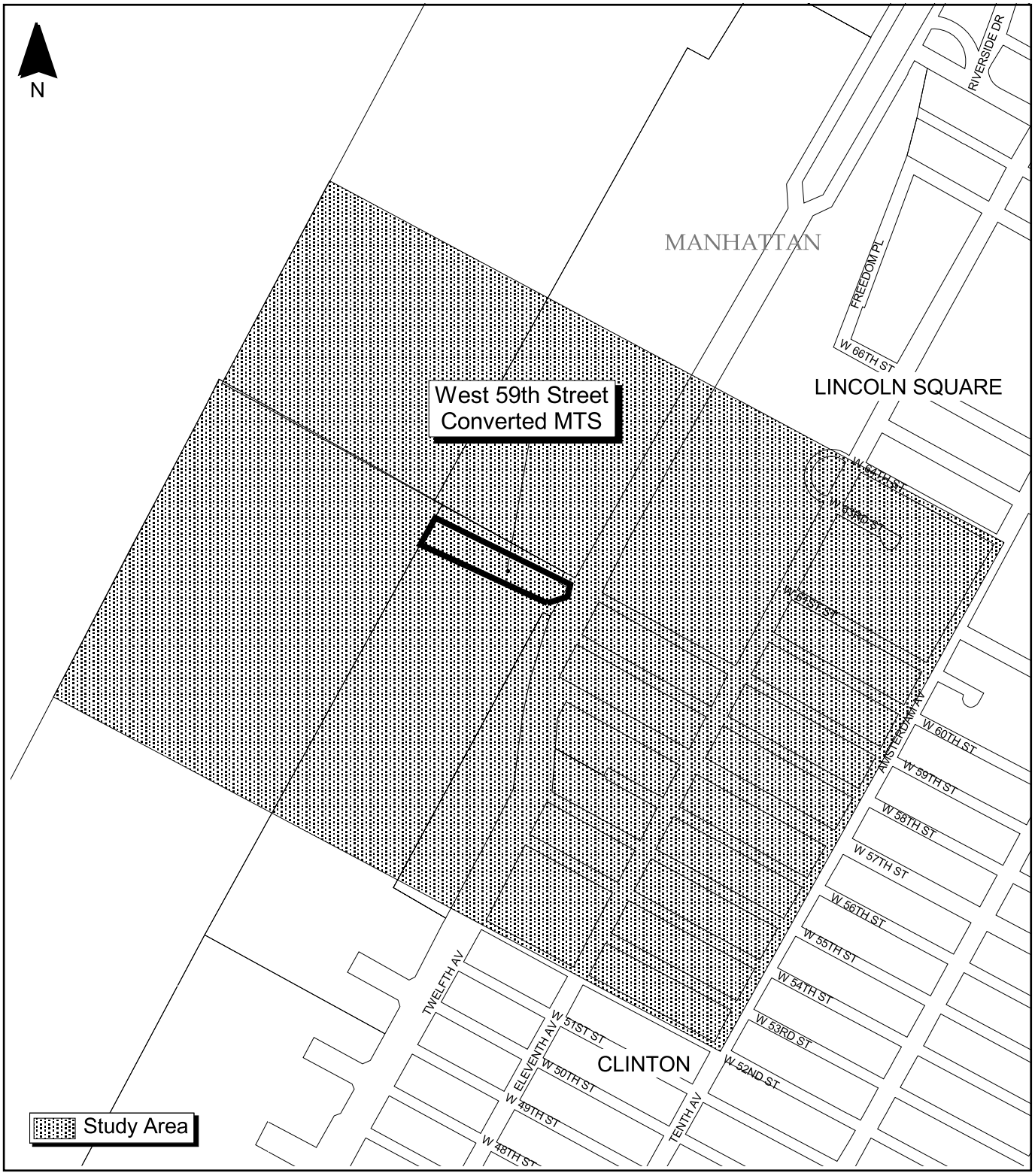
9.8.1 Existing Conditions

9.8.1.1 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, the railroad cut 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; 10th Avenue (Amsterdam Avenue) on the east; and the Hudson River shore on the west (Figure 9.8-1).

9.8.1.2 Description of Neighborhood Character

The visual quality of the area is neither oriented toward the water nor conducive to the creation of pleasant urban streetscapes. Rather, industrial uses in massive buildings surround the site, and along with the presence of the elevated West Side (Miller) Highway, the densely built blocks inhibit views to the waterfront from inland blocks in the study area, especially along West 59th Street. There is no destination in the immediate area of the site that would attract anyone but workers employed in the warehouses and industries, and this relative isolation further reveals the industrial character of the neighborhood. The nearest destination points include the John Jay College of Criminal Justice, which occupies several blocks on 10th 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 the study area and also from the few residential properties along the eastern side of the study area.



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

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Figure 9.8-1 Neigborhood Location
West 59th Street Converted MTS

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Lincoln Center is also located within the neighborhood study area, in the northeastern corner, though its plaza opens toward the east rather than toward the river or the study area. Likewise, Trump's Riverside South Development is under construction north of the site. The new residential towers stand about ¼ mile northeast of the site. Together with Riverside Park South the development will introduce physical characteristics and visual resources unlike those currently associated with the Hudson River waterfront in the vicinity of the site.

9.8.2 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 the extension of the Riverside South development, which entails construction of several residential towers in the existing parking lot between West 59th Street and West 60th Street from 11th Avenue to 12th Avenue, and parkland along the waterfront north of West 59th Street, and the Durst Organization's mixed development of residential, office and studio space south of West 58th Street, east of 12th Avenue, now under construction. The bikeway will be reconstructed as part of the Riverside South development. While the Riverside South and associated park development will substantially alter the character of the waterfront west of the elevated West Side (Miller) Highway, the remainder of the study area is expected to resemble Existing Conditions. The site will remain DSNY property and the existing MTS will continue to be used for transfer of paper recyclables from truck to barge.

9.8.3 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. Because DSNY truck routes currently run through the study area (along West 59th and West 57th Streets, as well as 12th, 11th, and 10th Avenues south of West 59th Street) and the site is buffered from the new Riverside South residential development and park by the elevated highway, potential impacts from reactivation would be largely contained to the immediate vicinity. Potential conflicts may arise between bicyclists on the reconstructed bicycle path and

truck traffic entering the MTS site, requiring possible design mitigation. (See Section 9.5 for a discussion of potential impacts to Open Space and Parklands.) No traffic impacts are predicted, however. (See Section 9.9 for a discussion of potential traffic impacts.) Likewise, there are no significant adverse air quality, odor or noise impacts predicted. (See 9.10, 9.11 and 9.12 respectively, for discussions of potential air quality and noise impacts.)

9.9 Traffic and Transportation

9.9.1 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 3.10 for a discussion of CEQR analysis thresholds.)

9.9.2 Existing Conditions

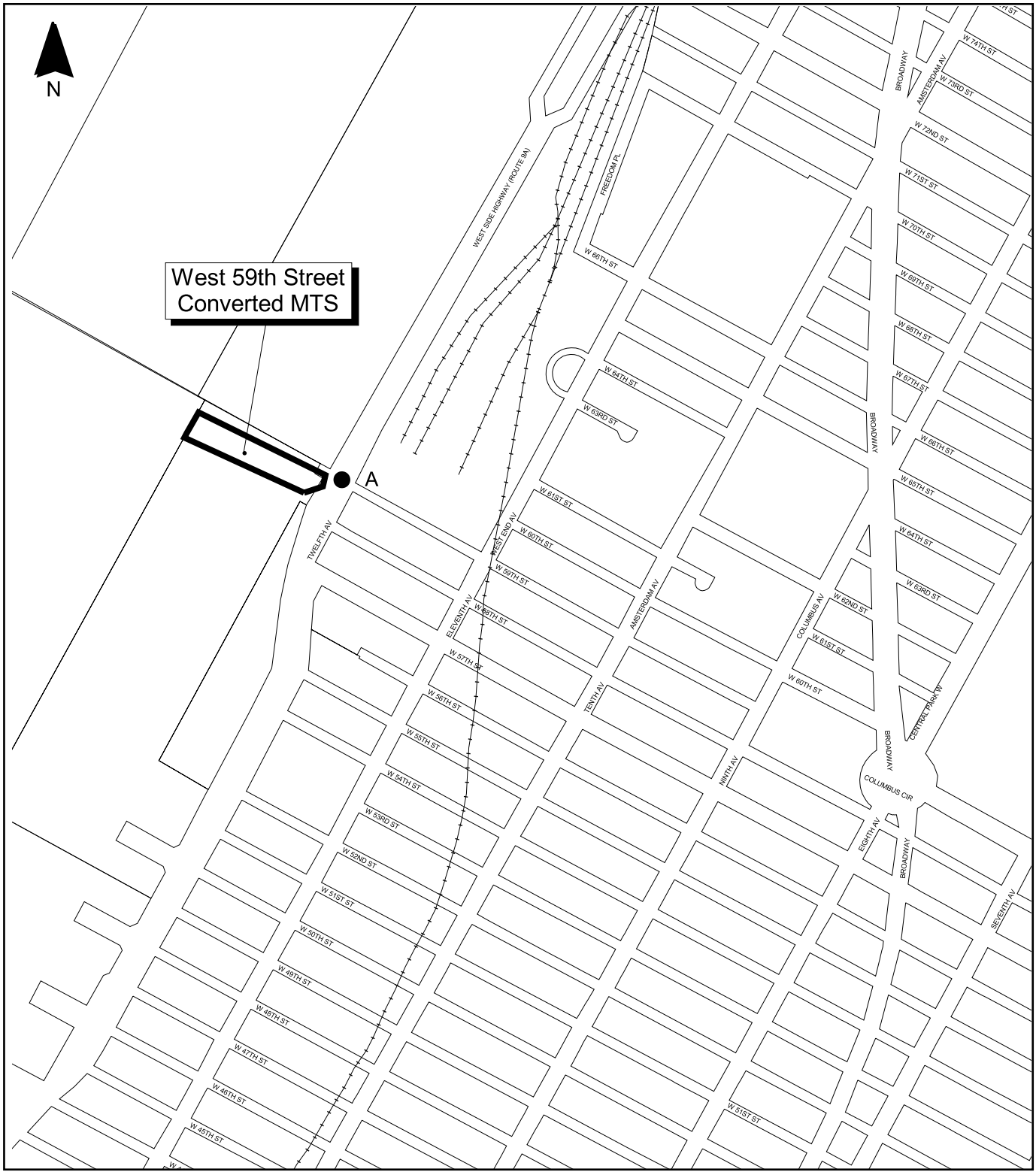
9.9.2.1 Definition of Study Area

The traffic analysis study area is limited, respective of the number of anticipated DSNY and other agency collection vehicles using this site, and is focused primarily along Twelfth 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 9.9-1 shows the locations of the intersections selected for analysis (location A). The intersections analyzed were selected using the procedures defined in Section 3.10.2.

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 Twelfth Avenue and turn west onto West 59th Street.

9.9.2.2 Surface Network

One major highway, the West Side Highway/Henry Hudson Parkway (Route 9A) services the study area. Tenth Avenue, Eleventh Avenue, Twelfth Avenues, 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 3.10.2.1 (Figure 3.10-4)



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

Figure 9.9-1 Traffic Analysis Study Area
West 59th Street Converted MTS

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9.9.2.3 Existing Traffic Operations

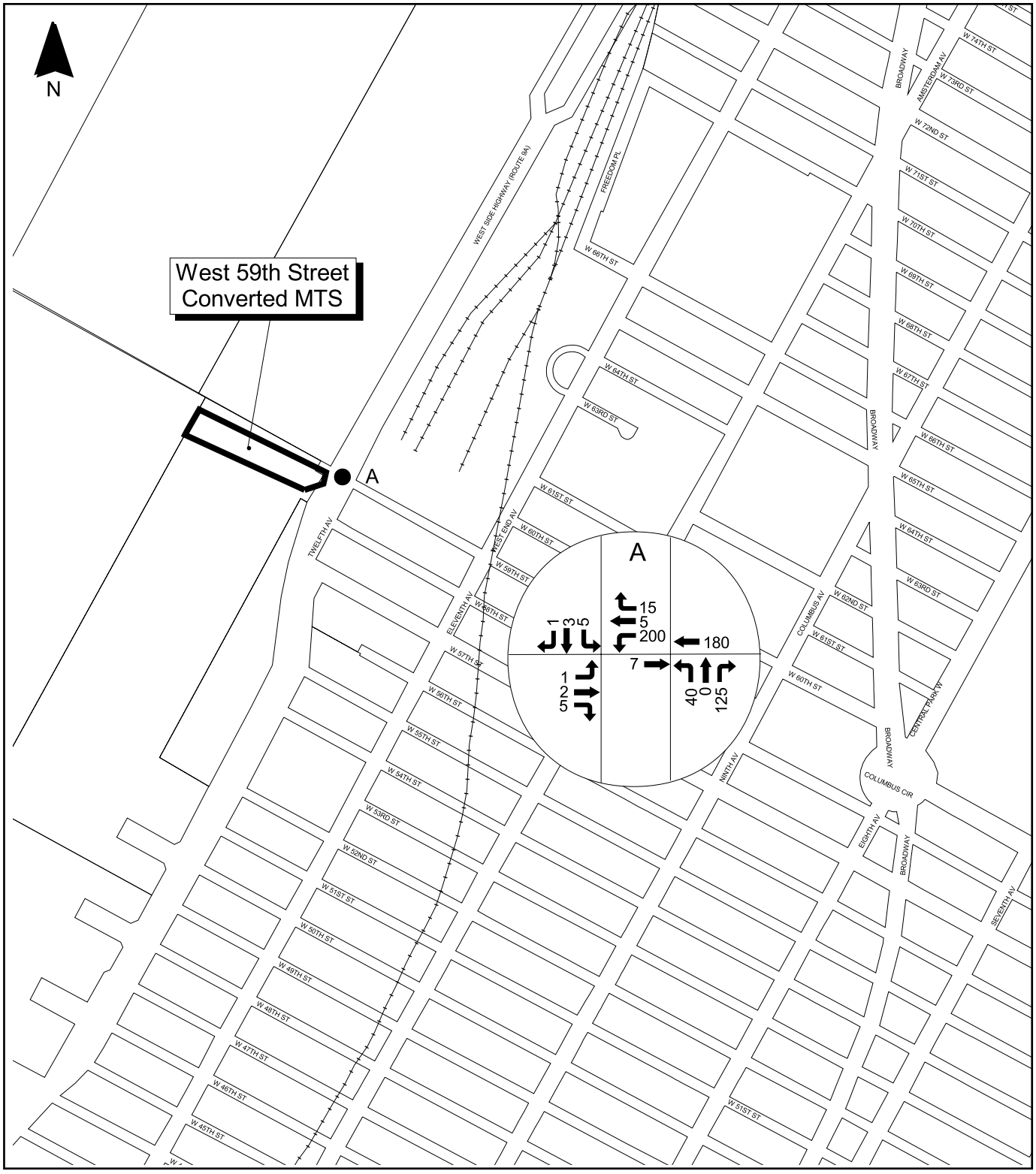
The intersections listed below were identified for analysis because they are the most likely to be impacted from an increase in DSNY and other agency collection vehicle traffic to the West 59th Street Converted MTS. Both are on major arterials and/or collection vehicle routes. Diagrams of these intersections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

- Twelfth Avenue northbound and West 59th Street – Unsignalized Intersection (Figure 9.9-1 – location A); and
- Twelfth Avenue southbound and West 59th Street – Unsignalized Intersection (Figure 9.9-1 – location A).

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 3.10.6 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 9.9-2 and 9.9-3 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 9.9-1 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 percent during the morning hours then decreased to 4 percent or lower during the PM peak hours.



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

Figure 9.9-2 Existing Traffic Volumes - AM Peak
West 59th Street Converted MTS

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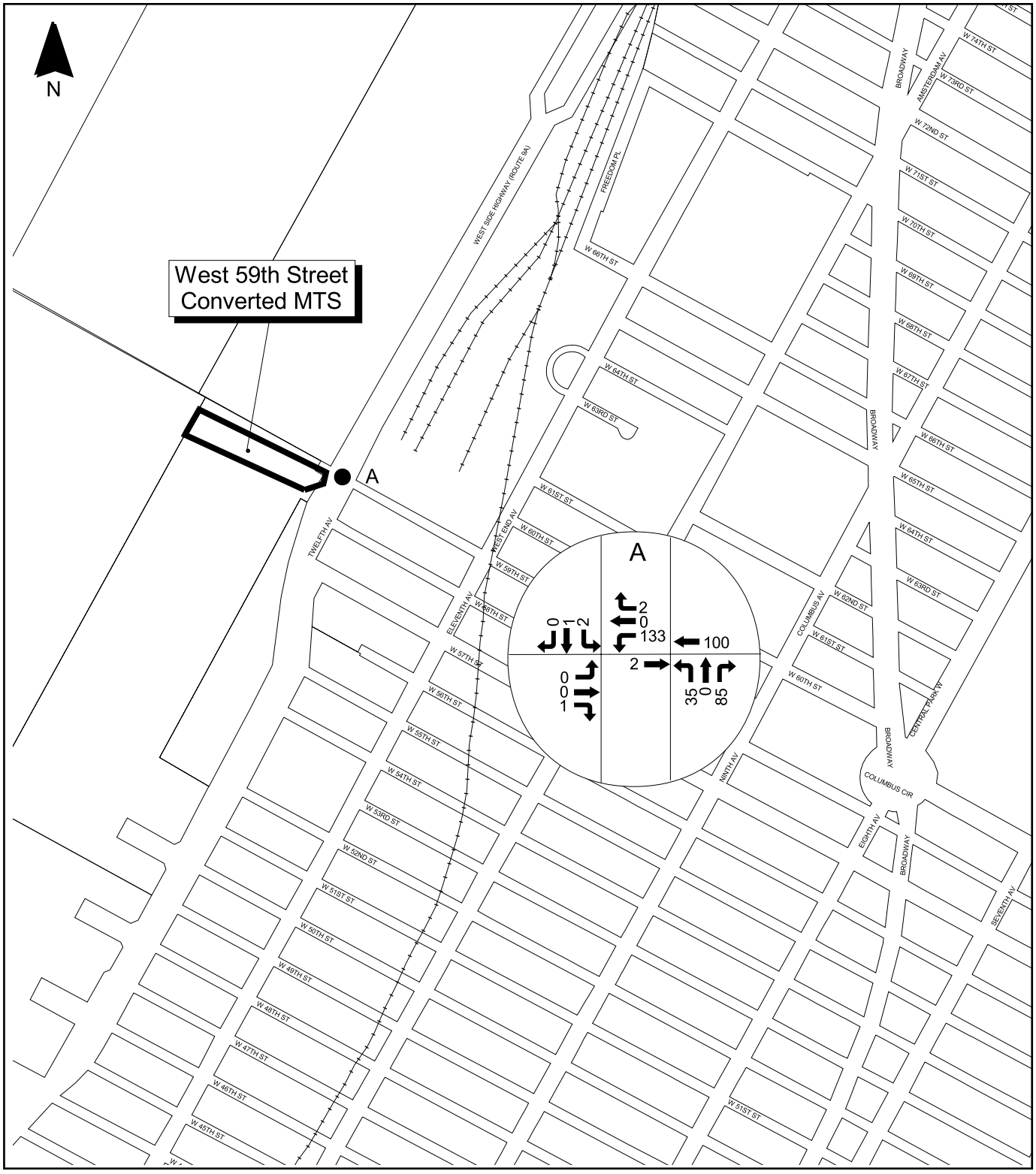

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Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 9.9-3 Existing Traffic Volumes - PM Peak
West 59th Street Converted MTS

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Table 9.9-1
HCM Analysis[(1)] – Existing Conditions
West 59th Street Converted MTS

Intersection & Lane Group	AM & Facility Peak Hour (9:00 a.m. – 10:00 a.m.)			PM Peak Hour (5:30 p.m. – 6:30 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
NB = northbound
SB = southbound
EB = eastbound
WB = westbound

9.9.2.3.1 LOS at Signalized Intersections

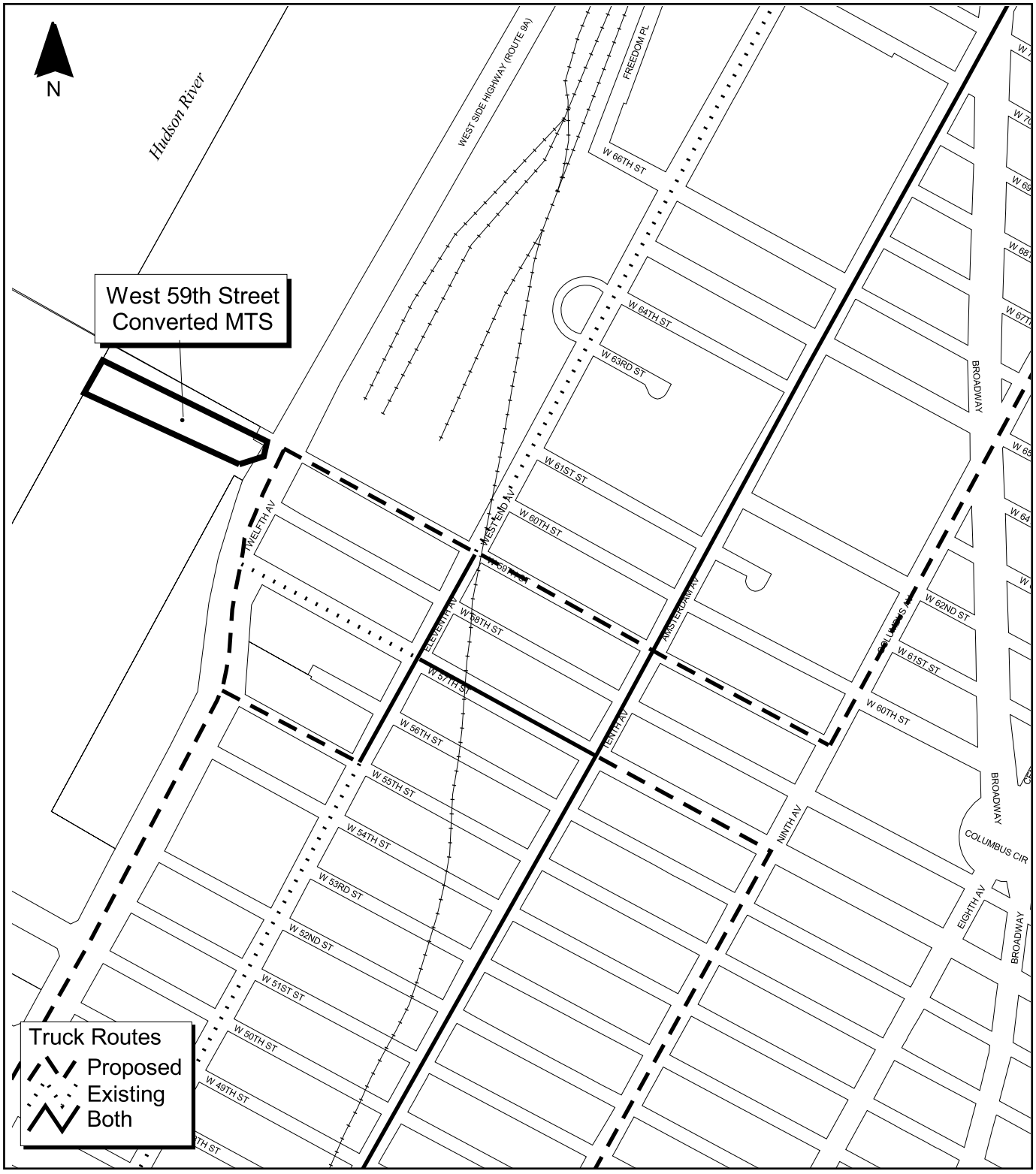
No signalized intersections were analyzed.

9.9.2.3.2 LOS at Unsignalized Intersections

Table 9.9-1 shows that the unsignalized intersections generally operated at an overall LOS of A or B.

9.9.2.4 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 District 7 Garage (West 57th Street at Twelfth Avenue). Within the study area, DSNY-related traffic is routed primarily along West End/Eleventh Avenue, Amsterdam Avenue/Tenth Avenue, and West 57th Street. The existing routes to the commercial vendors (located in New Jersey) are presented in Figure 9.9-4.



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

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Figure 9.9-4 Existing and Proposed Sanitation Truck Routes West 59th Street Converted MTS

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9.9.2.5 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.

9.9.2.6 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.

9.9.3 Future No-Build Conditions

9.9.3.1 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-61st Street (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); μ
- 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 9.9-5 and 9.9-6 depict the Future No-Build traffic volumes for the AM and PM peaks at the intersections analyzed. Table 9.9-2 (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.

9.9.3.2 Public Transportation

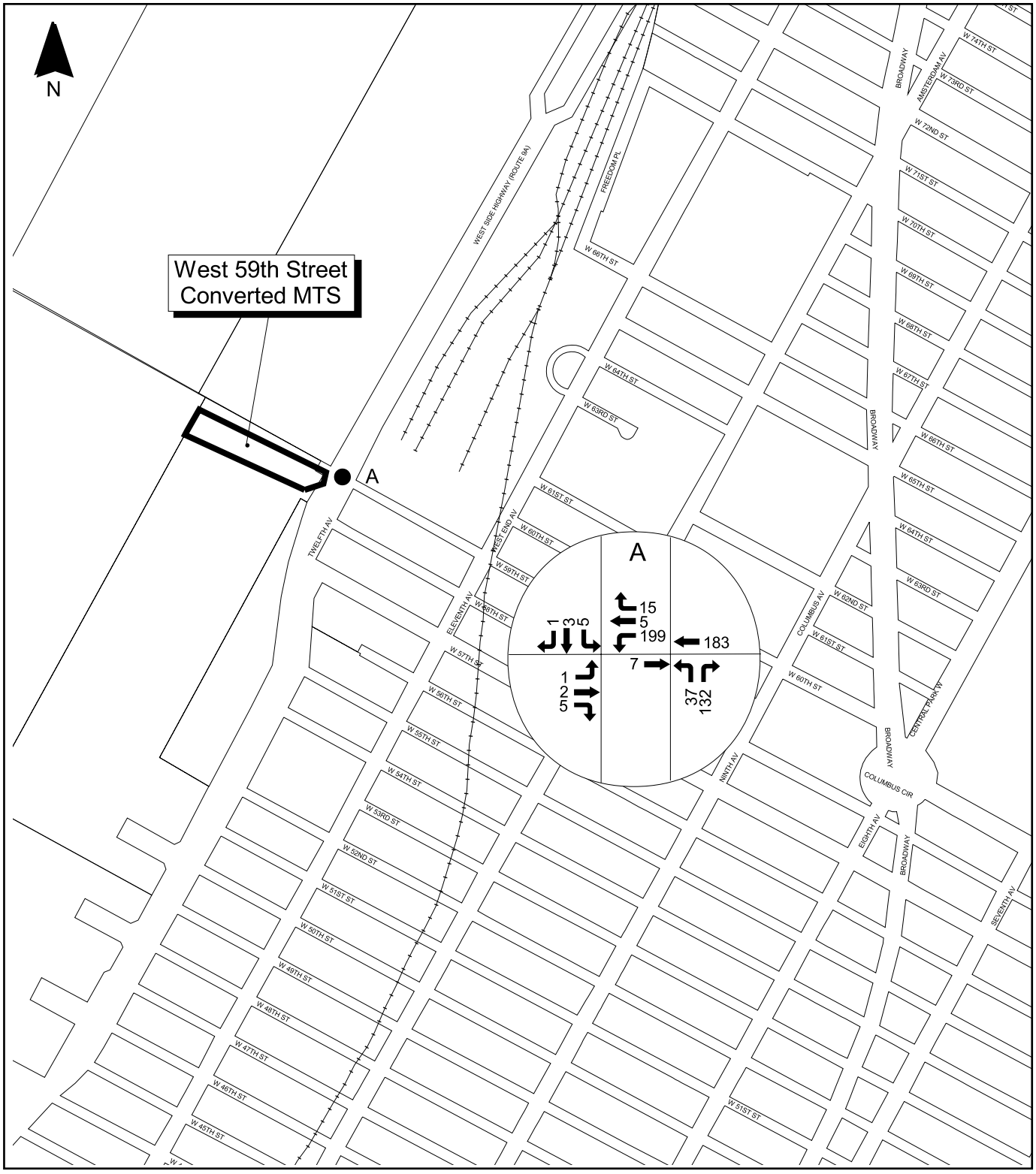
Future No-Build Conditions are expected to remain the same as Existing Conditions.

9.9.3.3 Pedestrian Activity

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

9.9.4 Potential Impacts with the West 59th Street Converted MTS

The West 59th Street Converted MTS would receive waste from five CDs in Manhattan-Manhattan Districts 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 9.9-5 Future No-Build Traffic Volumes AM Peak West 59th Street Converted MTS

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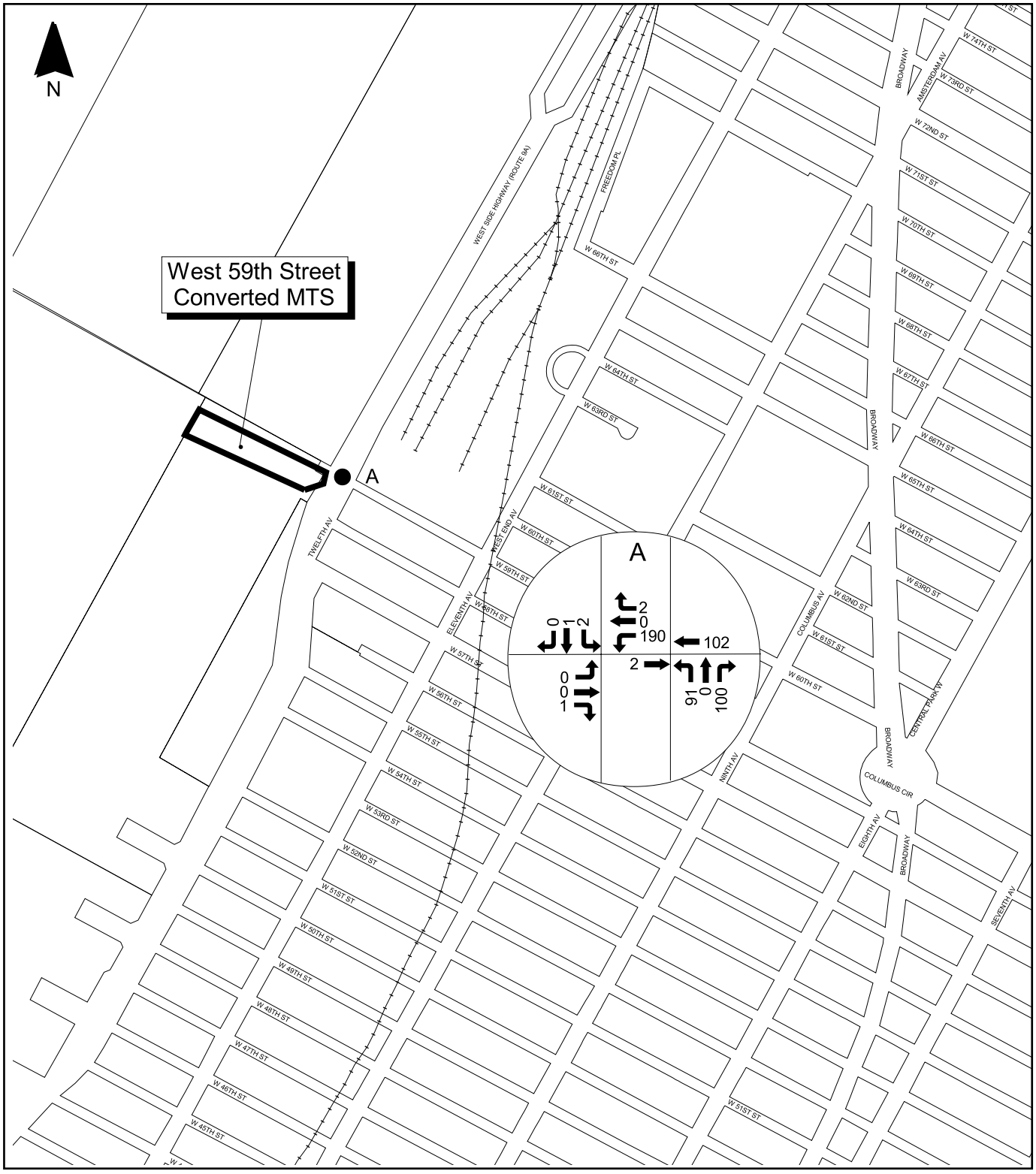

Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 9.9-6 Future No-Build Traffic Volumes PM Peak West 59th Street Converted MTS

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9.9.4.1 2006 Build Traffic Conditions

The 2006 Future Build Conditions assume that the West 59th Street Converted MTS would generate 250 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 9.9-4.

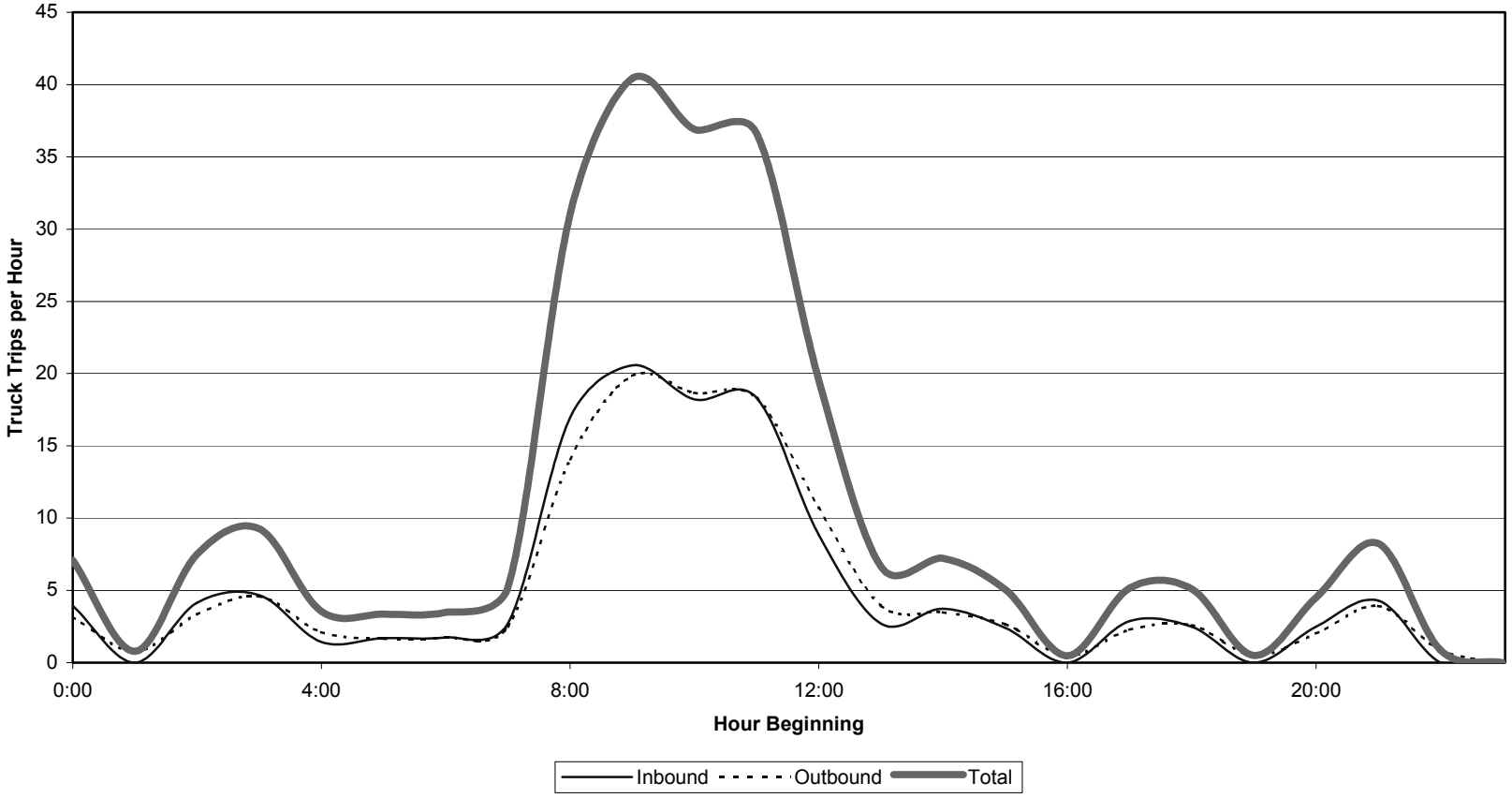
Table 9.9-2
HCM Analysis(1) – Future No-Build Conditions
West 59th Street Converted MTS

Intersection & Lane Group	AM & Facility Peak Hour (9:00 a.m. – 10:00 a.m.)			PM Peak Hour (5:30 p.m. – 6:30 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

Figure 9.9-7 presents the average peak day temporal distribution of collection vehicles for the West 59th Street Converted MTS. Section 3.10.3.1 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 9.9-7
Truck Trips per Hour
West 59th Street Converted MTS



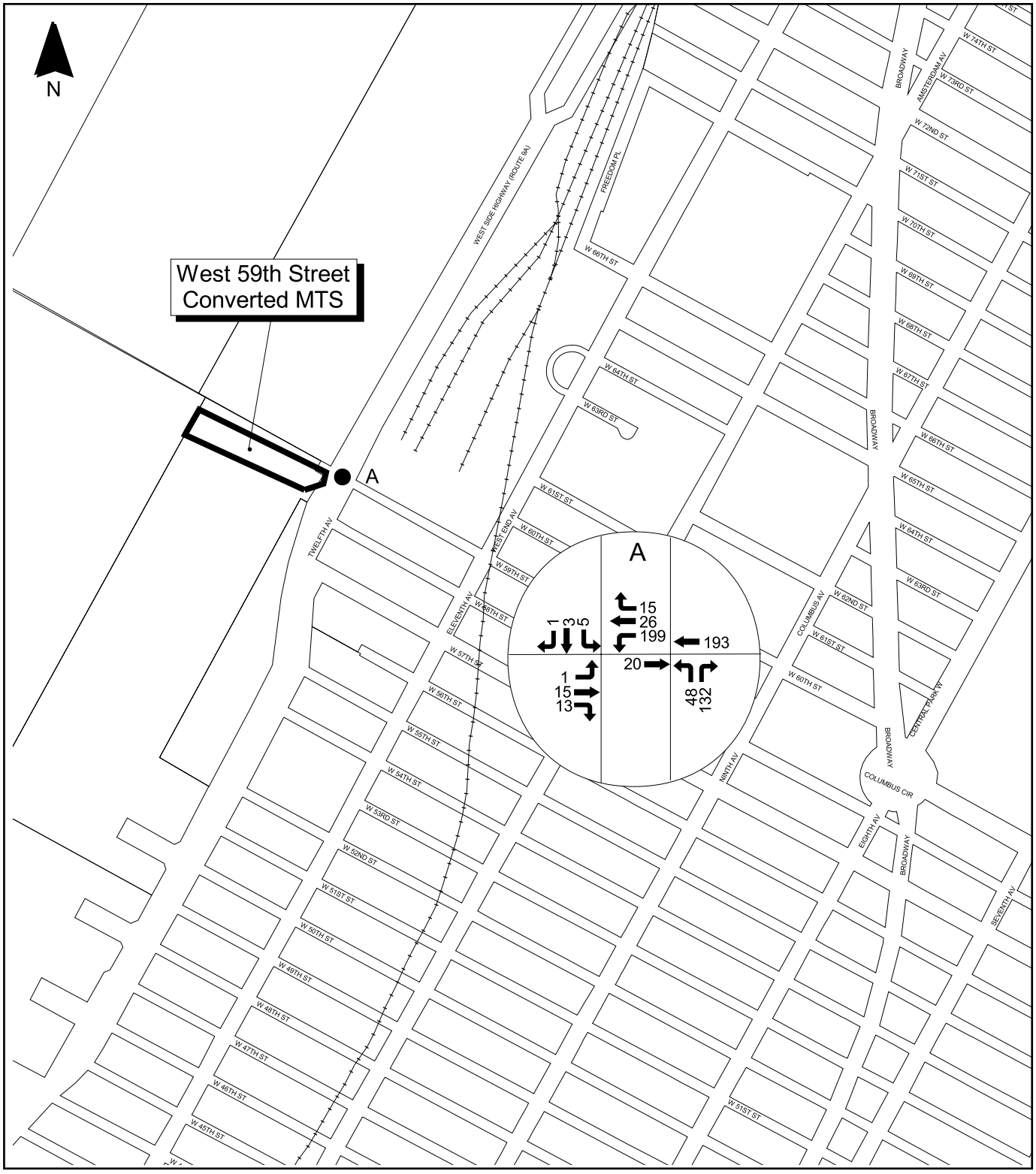
Figures 9.9-8, and 9.9-9 show the intersections analyzed with the net increase in site-generated traffic added to the Future No-Build traffic levels. Figures 9.9-10, 9.9-11 show the intersections analyzed with only the net increase in site generated traffic. Traffic volumes indicated by a dash (-) are 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 Twelfth 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 percent of the inbound loads delivered during a typical average peak day. Additionally, traffic data indicated that the weekend background traffic volumes were approximately 81 percent of weekday traffic volumes. Table 9.9-3 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 worst overall case conditions.

Table 9.9-3
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.



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

Figure 9.9-8 2006 Build Traffic Volumes - AM Peak

West 59th Street Converted MTS

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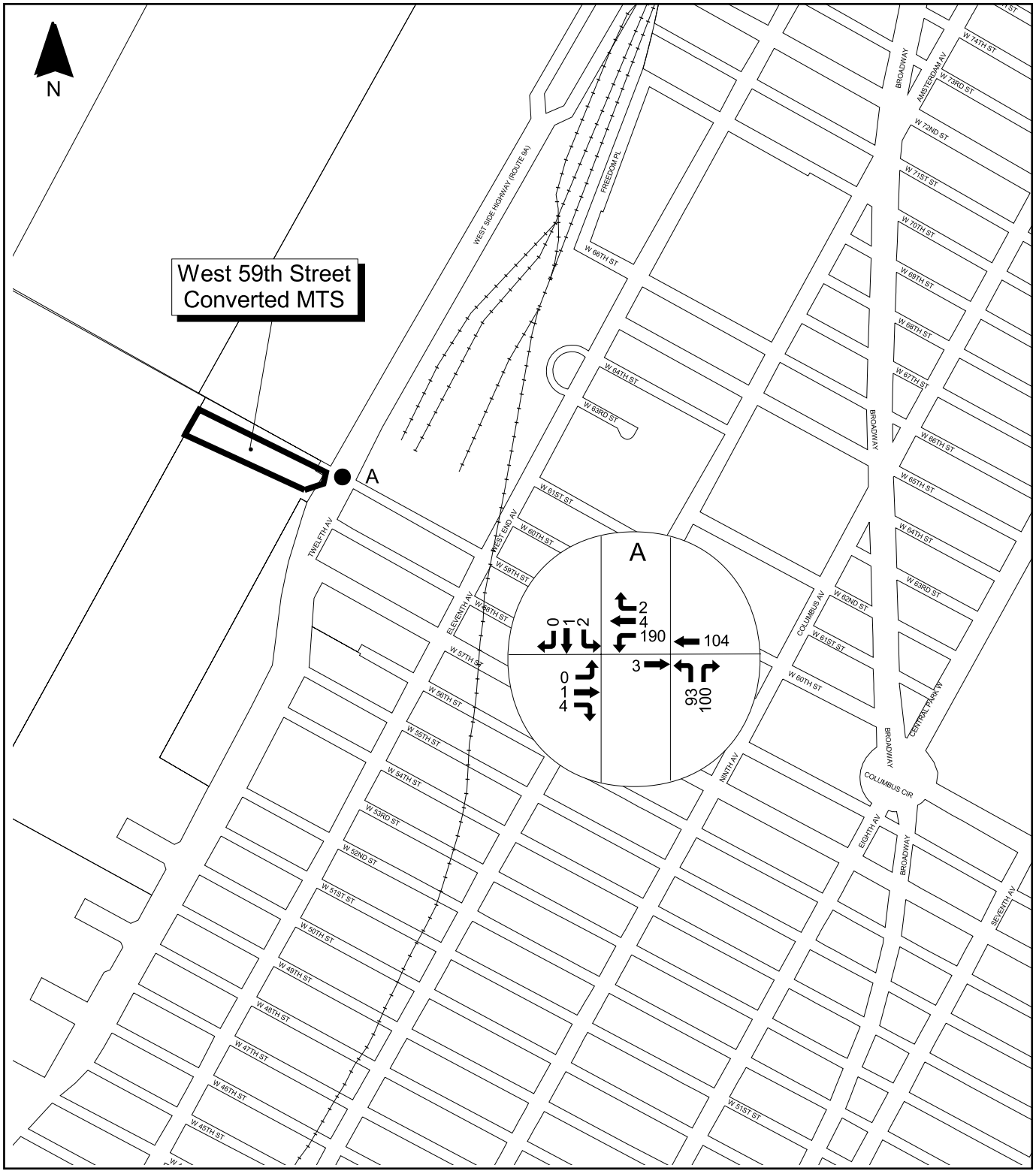

Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 9.9-9 2006 Build Traffic Volumes - PM Peak
West 59th Street Converted MTS

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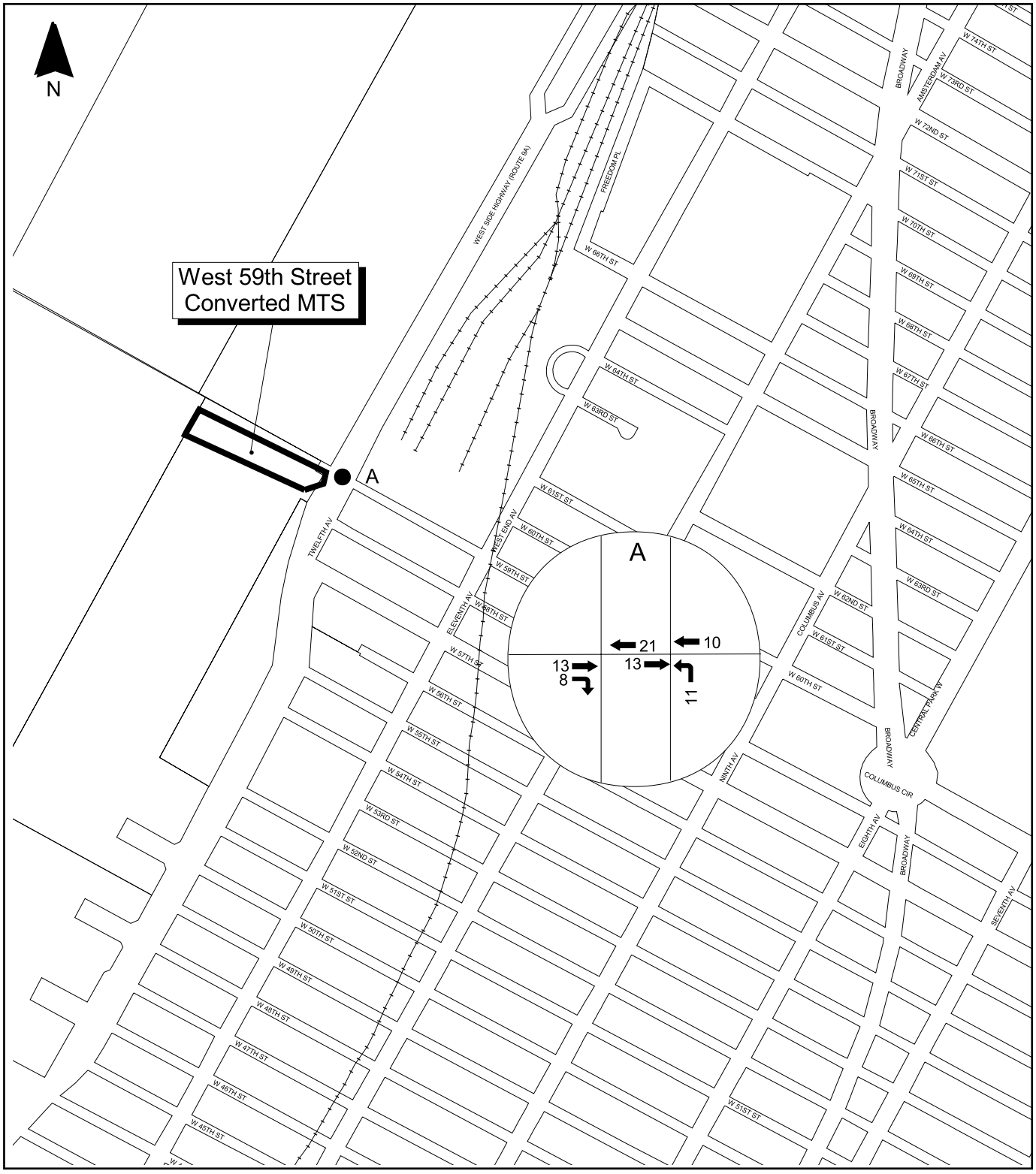

Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 9.9-10 2006 Net Traffic - AM Peak

West 59th Street Converted MTS

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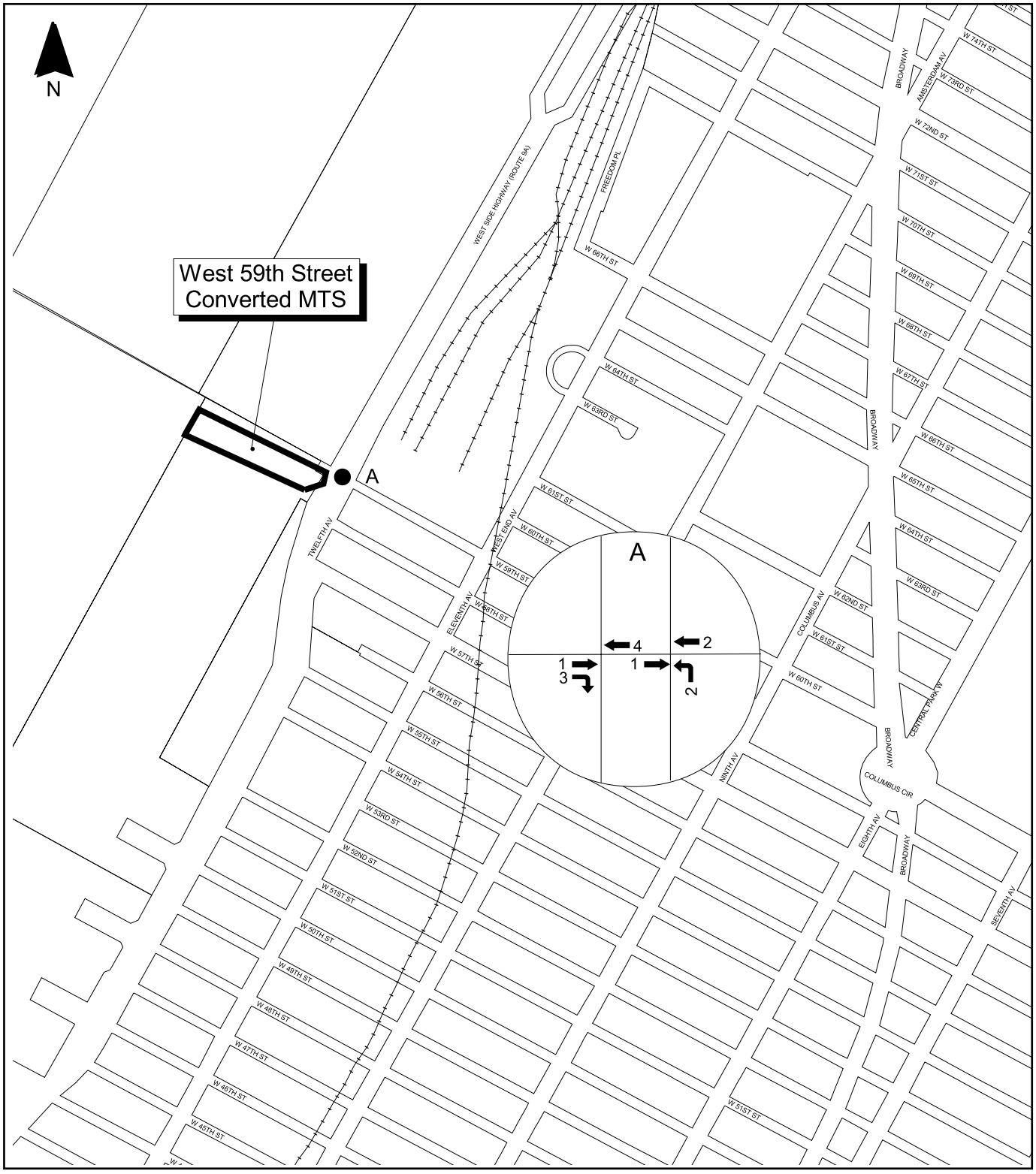

Site delineations are approximate.
Base Map Source: New York City Department of City Planning

Figure 9.9-11 2006 Net Traffic - PM Peak

West 59th Street Converted MTS

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Table 9.9-4 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 5 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 Twelfth Avenue southbound and West 59th Street increased from 15.0 to 16.5 seconds (LOS B to LOS C).

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.

9.9.4.3 Public Transportation

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

9.9.4.4 Pedestrian Activity

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

Table 9.9-4
HCM Analysis[(1)] – Future Build Conditions
West 59th Street Converted MTS

Intersection & Lane Group	AM & Facility Peak Hour (9:00 a.m. – 10:00 a.m.)			PM Peak Hour (5:30 p.m. – 6:30 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

9.10 Air Quality

9.10.1 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 9.10.4.2.

9.10.2 Existing Conditions

Applicable air quality data collected at the monitoring station(s) nearest the study area are shown in Table 9.10.1. These data were compiled by NYSDEC for 2002, 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 9.10-1
Representative Ambient Air Quality Data
West 59th Street Converted MTS

Pollutant	Monitor	Averaging Time	Value	NAAQS
CO	NA	8-Hour	3,322 μg/m^3	10,000 μg/m^3
		1-Hour	4,353 μg/m^3	40,000 μg/m^3
NO_2	PS 59	Annual	77 μg/m^3	100 μg/m^3
PM_{10}	PS 59	Annual	34 μg/m^3	50 μg/m^3
		24-Hour	88 μg/m^3	150 μg/m^3
SO_2	PS 59	3-Hour	265 μg/m^3	1300 μg/m^3
		24-Hour	139 μg/m^3	365 μg/m^3
		Annual	34 μg/m^3	80 μg/m^3

Source: NYCDEP April 18, 2003.

9.10.3 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.

9.10.4 Potential Impacts of the West 59th Street Converted MTS

9.10.4.1 On-Site Analysis

9.10 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 9.10-2. Figure 9.10-1 shows the locations of these sources within the site.

9.10.4.1.2 Results of the Criteria Pollutant Analysis

The highest estimated criteria pollutant concentrations at any of the receptor locations considered are presented in Table 9.10-3. 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 9.10-3, are below the STVs. The West 59th Street Converted MTS would not, therefore, significantly impact air quality in the area.

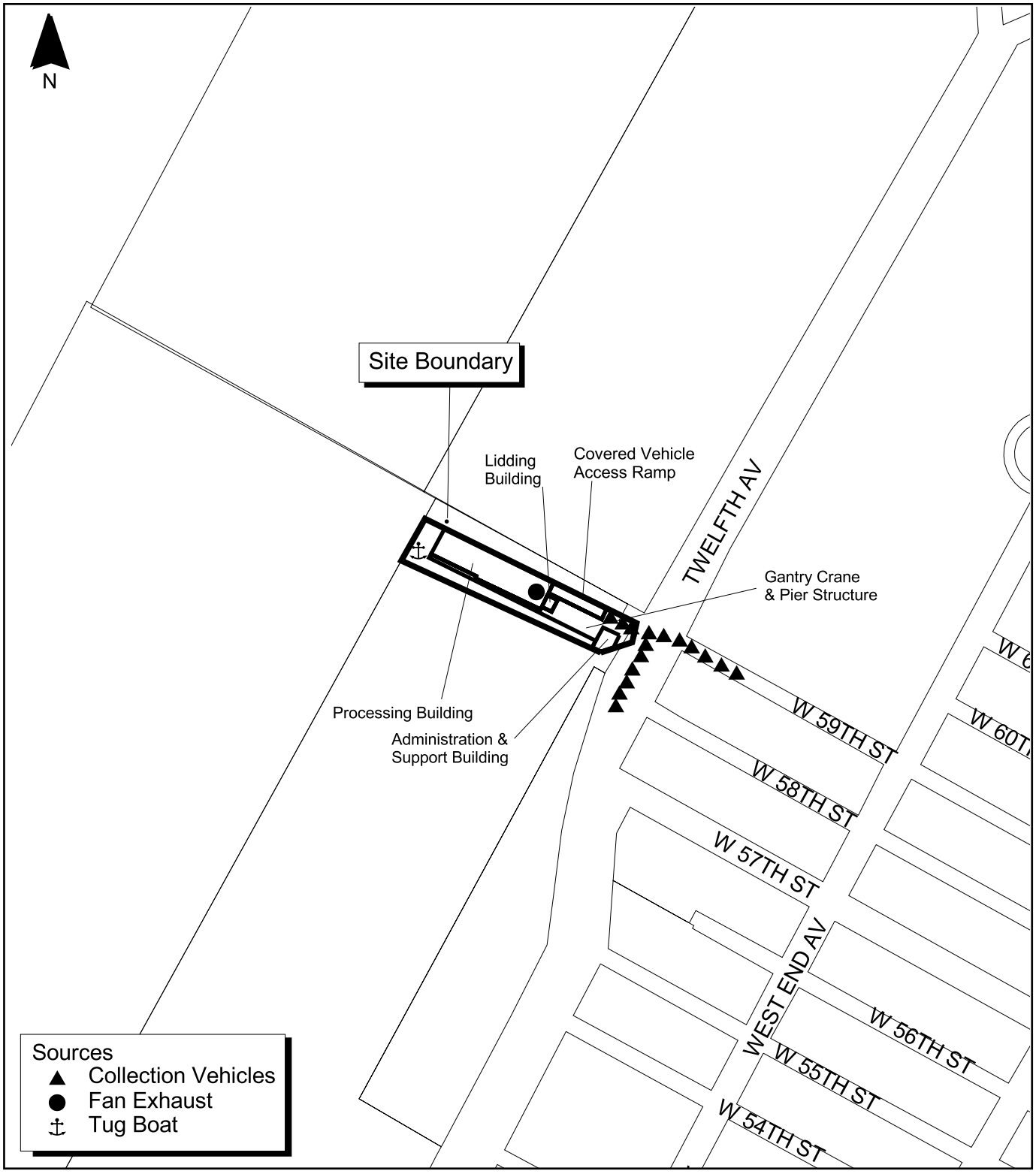
Table 9.10-2
Emission Sources Considered for On-Site Air Quality Analysis [1]
West 59th Street Converted MTS

Type of Emission Source	Number of Sources Operated During Peak Hour	Number of Sources Operated During 24-hour and Annual Average Hour
Within Processing Building		
Wheel Loaders	2	1
Tamping Cranes	1	1
Mini-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[2]	18 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) Peak 8-hour and 3-hour average number of queuing collection vehicles outside building is 6. Theoretically, the 3-hour value should be no less than one-third of the peak 1-hour value (18), but for this analysis, the 3-hour and 8-hour values are more realistic estimates of actual peak queuing activity, while the 1-hour peak is simply a conservative assumption based on the maximum available physical queuing space on the entrance road/ramp.



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

300 0 300 Feet

Figure 9.10-1 On-Site Air Quality Analysis

West 59th Street Converted MTS

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Table 9.10-3
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]	3,033	3,322	6,355	40,000	NA
	8-hour[6]	582	4,353	4,935	10,000	NA
Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual	5	77	82	100	NA
Particulate Matter (PM_{10}), $\mu g/m^3$	24-hour[7]	14	88	102	150	NA
	Annual	2	34	36	50	NA
Particulate Matter ($PM_{2.5}$), $\mu g/m^3$	24-hour	4	-	-	NA	5
	Annual Neighborhood Average	0.02[5]	-	-	NA	0.1
Sulfur Dioxide (SO_2), $\mu g/m^3$	3-hour[6]	57	265	322	1,300	NA
	24-hour[6]	25	139	164	365	NA
	Annual	1	34	35	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 on April 14, 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 in this provides a very conservative comparison with standards.

[7] The 24-hour PM10 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

9.10.4.1.3 Results of the Toxic Pollutant Analysis

The results of the toxic pollutant analysis are summarized in Table 9.10-4. 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.

9.10.4.2 Off-Site Analysis

9.10.4.2.1 Pollutants Considered and Analyses Conducted

Locations potentially affected by DSNY and other agency collection vehicles were identified using *CEQR Technical Manual Guidelines* that are outlined in Section 3.11.5. Following these guidelines, the following detailed mobile source analyses were conducted for the applicable (i.e., worst-cast) 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 for 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 PM10 NAAQS.

The roadway intersections selected for the mobile source analysis are shown in Figure 9.10-2.

Table 9.10-4
Highest Estimated Non-Cancer Hazard Index and Cancer Risk of Toxic Air Pollutant from On-Site Emissions
West 59th Street Converted MTS

No.	Toxic Air Pollutants	Acute Non-Cancer Risk: Highest Estimated Short-Term (1-hr) Pollutant Conc.[1] ($\mu g/m^3$)	Acute Non-Cancer Risk: Short-Term (1-hr) Guideline Conc. (SGCs) [2] ($\mu g/m^3$)	Acute Non-Cancer Risk: Acute Non-Cancer Hazard Index[3]	Chronic Non-Cancer Risk: Highest Estimated Long-Term (Annual) Pollutant Conc.[4] ($\mu g/m^3$)	Chronic Non-Cancer Risk: Long-Term (Annual) Guideline Conc. (AGCs) [5] ($\mu g/m^3$)	Chronic Non-Cancer Risk: Chronic Non-Cancer Hazard Index [6]	Cancer Risk: Highest Estimated Long-Term (Annual) Pollutant Conc. [4] ($\mu g/m^3$)	Cancer Risk: Unit Risk Factors [7] ($\mu g/m^3$)	Cancer Risk: Maximum Cancer Risk [8,9]
Carcinogenic Pollutants										
1	Benzene	9.85E-01	1.30E+03	7.58E-04	5.67E-03	1.30E-01	4.36E-02	5.67E-03	8.30E-06	4.71E-08
2	Formaldehyde	1.25E+00	3.00E+01	4.15E-02	7.17E-03	6.00E-02	1.20E-01	7.17E-03	1.30E-05	9.33E-08
3	1,3 Butadiene	4.13E-02	-	-	2.38E-04	3.60E-03	6.60E-02	2.38E-04	2.80E-04	6.66E-08
4	Acetaldehyde	8.10E-01	4.50E+03	1.80E-04	4.66E-03	4.50E-01	1.04E-02	4.66E-03	2.20E-06	1.03E-08
5	Benzo(a)pyrene	1.98E-04	-	-	1.14E-06	2.00E-03	5.72E-04	1.14E-06	1.70E-03	1.94E-09
6	Propylene	2.72E+00	-	-	1.57E-02	3.00E+03	5.23E-06	1.57E-02	NA	NA
Non-Carcinogenic Pollutants [10]										
7	Acrolein	9.77E-02	1.90E-01	5.14E-01	5.63E-04	2.00E-02	2.81E-02	5.63E-04	NA	NA
8	Toluene	4.32E-01	3.70E+04	1.17E-05	2.49E-03	4.00E+02	6.22E-06	2.49E-03	NA	NA
9	Xylenes	3.01E-01	4.30E+03	7.00E-05	1.73E-03	7.00E+02	2.48E-06	1.73E-03	NA	NA
10	Anthracene	1.97E-03	-	-	1.14E-05	2.00E-02	5.68E-04	1.14E-05	NA	NA
11	Benzo(a)anthracene	1.77E-03	-	-	1.02E-05	2.00E-02	5.11E-04	1.02E-05	NA	NA
12	Chrysene	3.73E-04	-	-	2.15E-06	2.00E-02	1.07E-04	2.15E-06	NA	NA
13	Naphthalene	8.95E-02	7.90E+03	1.13E-05	5.16E-04	3.00E+00	1.72E-04	5.16E-04	NA	NA
14	Pyrene	5.05E-03	-	-	2.91E-05	2.00E-02	1.45E-03	2.91E-05	NA	NA
15	Phenanthrene	3.10E-02	-	-	1.79E-04	2.00E-02	8.94E-03	1.79E-04	NA	NA
16	Dibenz(a,h)anthracene	6.16E-04	-	-	3.55E-06	2.00E-02	1.77E-04	3.55E-06	NA	NA
		Total Estimated Acute Non-Cancer Hazard Index		**5.57E-01**	**Total Estimated Chronic Non-Cancer Hazard Index**		**2.80E-01**	**Total Estimated Combined Cancer Risk**		**2.19E-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 9.10-4:

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

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

(3) Estimated by dividing the maximum 1-hr 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 hydrocarbons.

(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.

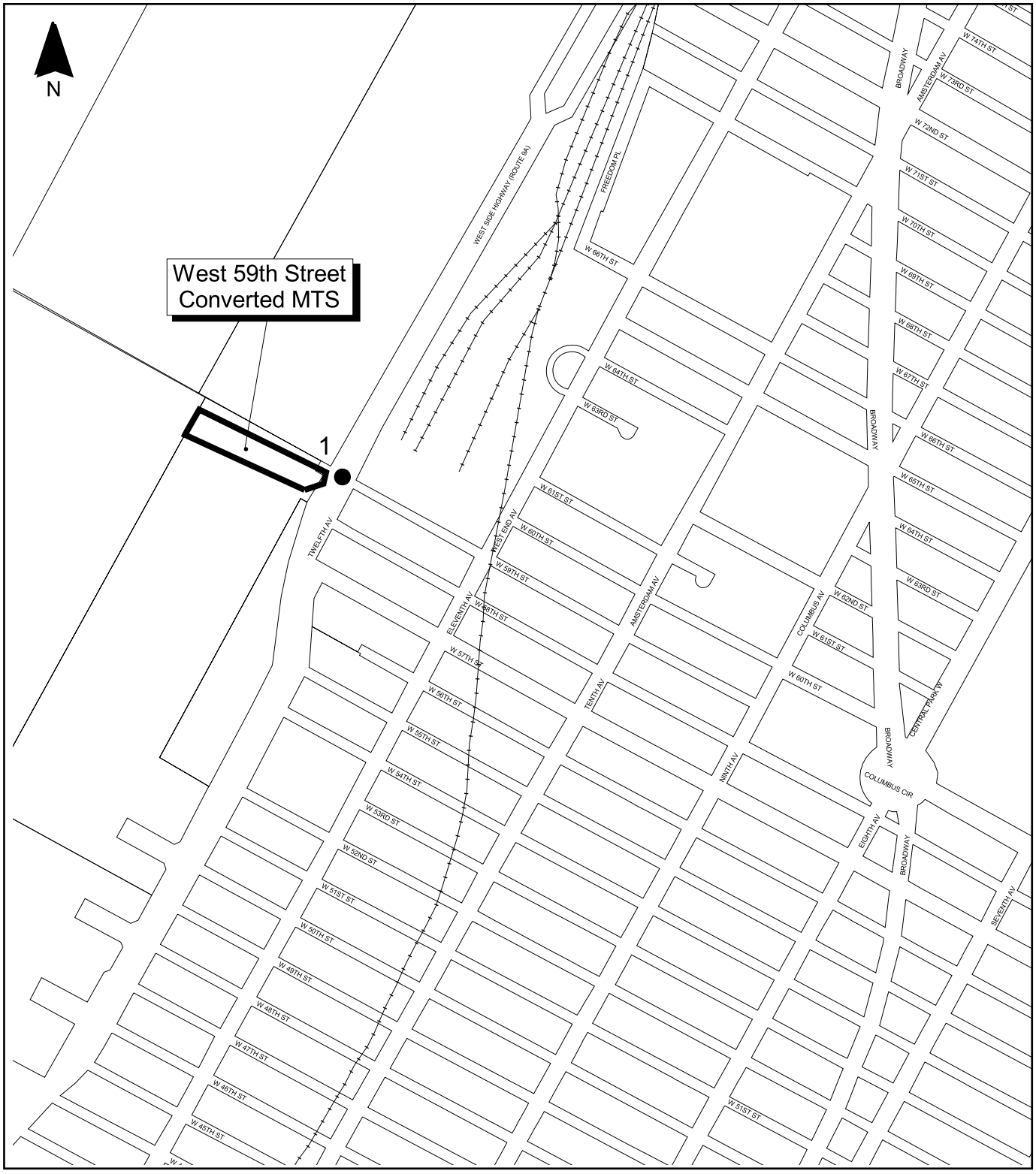
(7) Unit risk factors established by USEPA and other governmental agencies for the inhalation of carcinogenic air pollutants.

(8) The maximum cancer risk of each of the individual pollutant 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.



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

Figure 9.10-2 Off-Site Air Quality Intersections Studied West 59th Street Converted MTS

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9.10.4.2.2 Results of the Off-Site Analysis

Applicable pollutant concentrations estimated near each selected intersection, which are shown in Table 9.10-5, 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 9.10-5
Maximum Estimated Pollutant Concentrations Near Selected Roadway Intersection
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 $\mu g/m^3$)
59th St. and 12th Avenue									
Existing Conditions		86	36						
Future No Build Conditions		92	40						
Future Build Conditions	N/A[5]	93	41						
Future Build Incremental				1.57	0.18	1.75	0.10	0.04	0.14
Route 9A & 57th									
Existing Conditions		105	44						
Future No Build Conditions		109	44						
Future Build Conditions	N/A[5]	109	44						
Future Build Incremental				0.64	0.1	0.75	0.03	0.02	0.05

Notes:

(1) PM_{10} concentrations are the maximum concentrations estimated using the AM, Facility AM, 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 estimated 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 3 meters from the edge of the roadways using AM, midday 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, midday 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

9.11 Odor

9.11.1 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.

9.11.2 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.

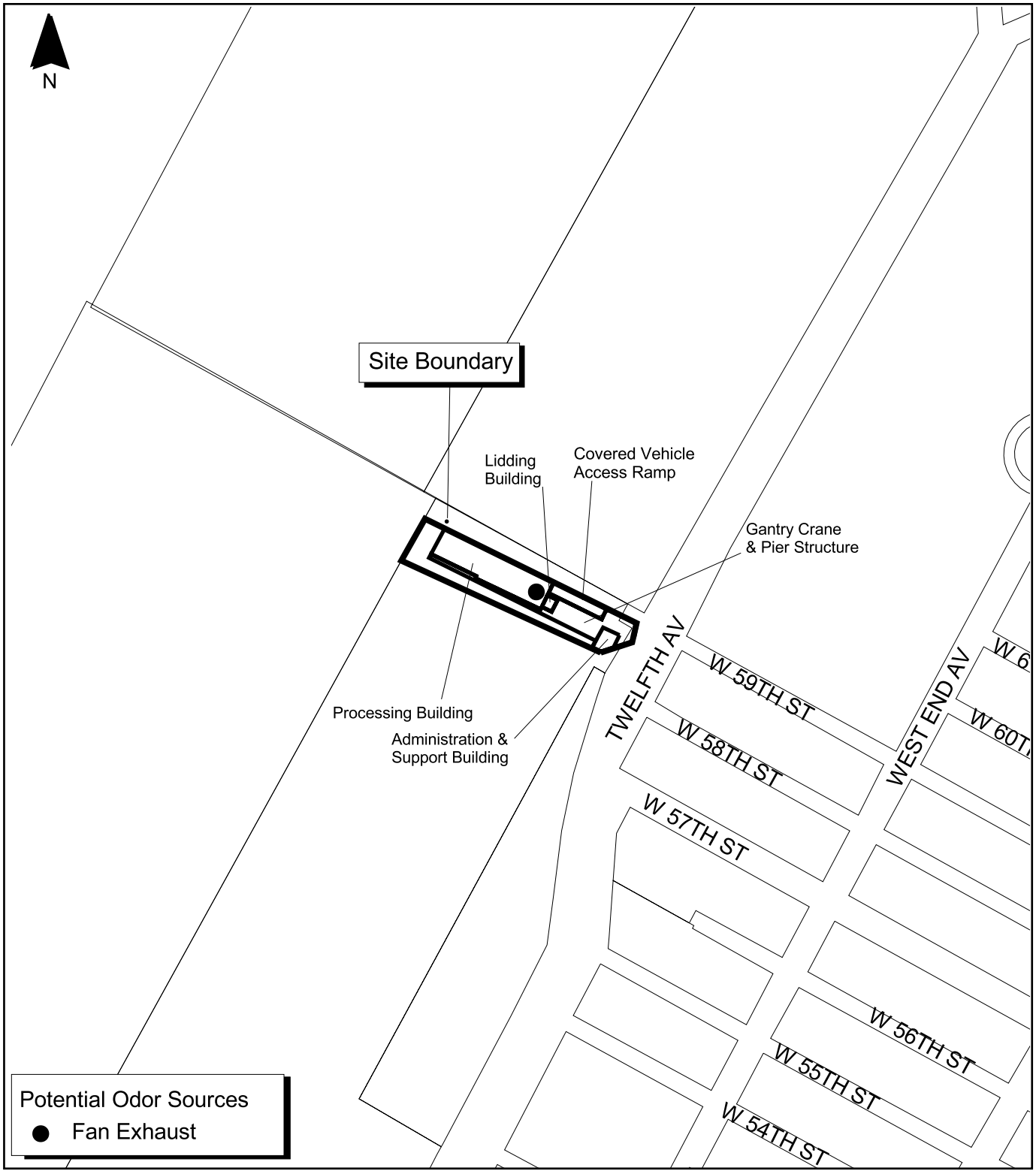
9.11.3 Potential Impacts with the West 59th Street Converted MTS

9.11.3.1 Odor Source Types and Locations Considered in the Analysis

The anticipated number and type 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 9.11-1. Figure 9.11-1 shows the locations of these sources within the site.

Table 9.11-1
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



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

Figure 9.11-1 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 percent and 99 percent of odorous compounds. For purposes of modeling odor dispersion, a 90 percent 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 9.11-2. The predicted odor unit values at sensitive receptor locations are compared to an odor unit of 5, which represents the level of odor impact that would begin to be detected by an average observer. The highest predicted odor unit 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 9.11-2
Highest Predicted Odor Concentration(s) from On-site Sources
West 59th Street Converted MTS

Parameter	Resulting D/T Ratio [1]
Estimated Detectable Concentration	1.0
Highest Result	0.20
Type Of Receptor	Discrete Receptor
Location of Receptor [2]	Over Water
Closest Sensitive Receptor Result	0.034
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.

9.12 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 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 New York City Noise Code. Section 3.14 provides a general discussion of the relevant regulatory standards and methodologies used in this analysis.

9.12.1 Existing Conditions

9.12.1.1 Introduction

Figure 9.12-1 shows the location of the West 59th Street Converted MTS and the surrounding area. The nearest noise-sensitive receptor is an apartment building on 11th Avenue between 61st and 62nd Street, approximately 530 meters (1,739 feet) from the West 59th Street Converted MTS property line. Additional residential areas exist immediately east and north of these residences.

9.12.1.2 On-site Noise Sources

Existing on-site noise sources 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}, L_{min}, L_{max},[4] and the statistical metrics of L_{10}, L_{50}, and L_{90}.[5] Table 9.12-1 presents monitored noise levels. As shown, the quietest hours at the monitoring location occurred between 5 p.m. to 6 p.m. and had an $L_{eq}(h)$ 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.

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[4] Terms L_{eq}, L_{min}, L_{max} are defined in Section 3.14.2
[5] Terms L_{10}, L_{50}, and L_{90} are defined in Section 3.14.2

Table 9.12-1
Existing Hourly (Monitored) Noise Levels On-Site[(1)]
West 59th Street Converted MTS

Time of Measurement	L_{eq} (h) (dBA)	L_{90} (dBA)	L_{50} (dBA)	L_{10} (dBA)	L_{min} (dBA)	L_{max} (dBA)
11:00-12:00 a.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
11:00-12:00 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 sensitive receptor to identify the quietest background hour.

9.12.1.3 Off-site Noise Sources

Existing off-site noise sources consist of 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 the DSNY and other agency collection vehicles. As a result of this screening, which is described in more detail in Section 3.14.5.2, no off-site noise analysis was required. Therefore, no noise monitoring data were collected for off-site noise sources.

9.12.2 Future No-Build Conditions

9.12.2.1 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.

9.12.2.2 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 CEQR Manual. Table 9.12-2 below 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 roadways where there is a possible impact based on the second level screening.

Table 9.12-2
Off-site Noise Traffic Volume
West 59th Street Converted MTS

Location	Hour	Existing Traffic Volume	Future No Build Traffic Volume
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

9.12.3 Potential Impacts with the West 59th Street Converted MTS

9.12.3.1 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 Noise Code analysis are shown in Table 9.12-3. Spectral noise levels used in the Performance Standards analysis are shown in Table 9.12-4. The number and type of equipment assumed for this analysis was based on the facility's peak design capacity.

Table 9.12-3
Equipment Modeled in the Noise Analysis and Referenced Noise Levels
West 59th Street Converted MTS

Equipment Name (quantity)	Reference Noise Level (1) at 50 feet (dBA)
Indoor	
Wheel Loaders (2)	81
Tamping Crane (1)	81
Bridge Crane (1)	70
Mini-Sweeper (1)	76
Moving /Queing Collection Vehicle (12)	73
Outdoor	
Moving Queuing Collection Vehicle (4)	67
Container Car Pullers (3)	45
Gantry Cranes (1)	78
Oceangoing Tugboats (1)	73

Note:
(1) See Section 3.14.7.1 for sources.

Table 9.12-4
Equipment Modeled in the Noise Analysis and Spectral Noise Levels
West 59th Street Converted MTS

Equipment	Reference Noise Level at 50 feet (dB)							
	Frequency (Hz)							
	63	125	250	500	1000	2000	4000	8000
Indoor								
Wheel Loaders (2)	78	77	75	76	77	74	68	60
Tamping Crane (1)	95	90	85	85	81	78	73	64
Bridge Crane (1)	77	78	77	71	74	71	69	57
Mini-Sweeper (1)	71	74	69	74	71	68	64	56
Outdoor								
Container Car Pullers (3)	31	30	47	44	36	35	42	46
Gantry Cranes (1)	79	82	82	79	78	73	64	56
Oceangoing Tugboats (1)	97	85	79	75	72	66	59	52

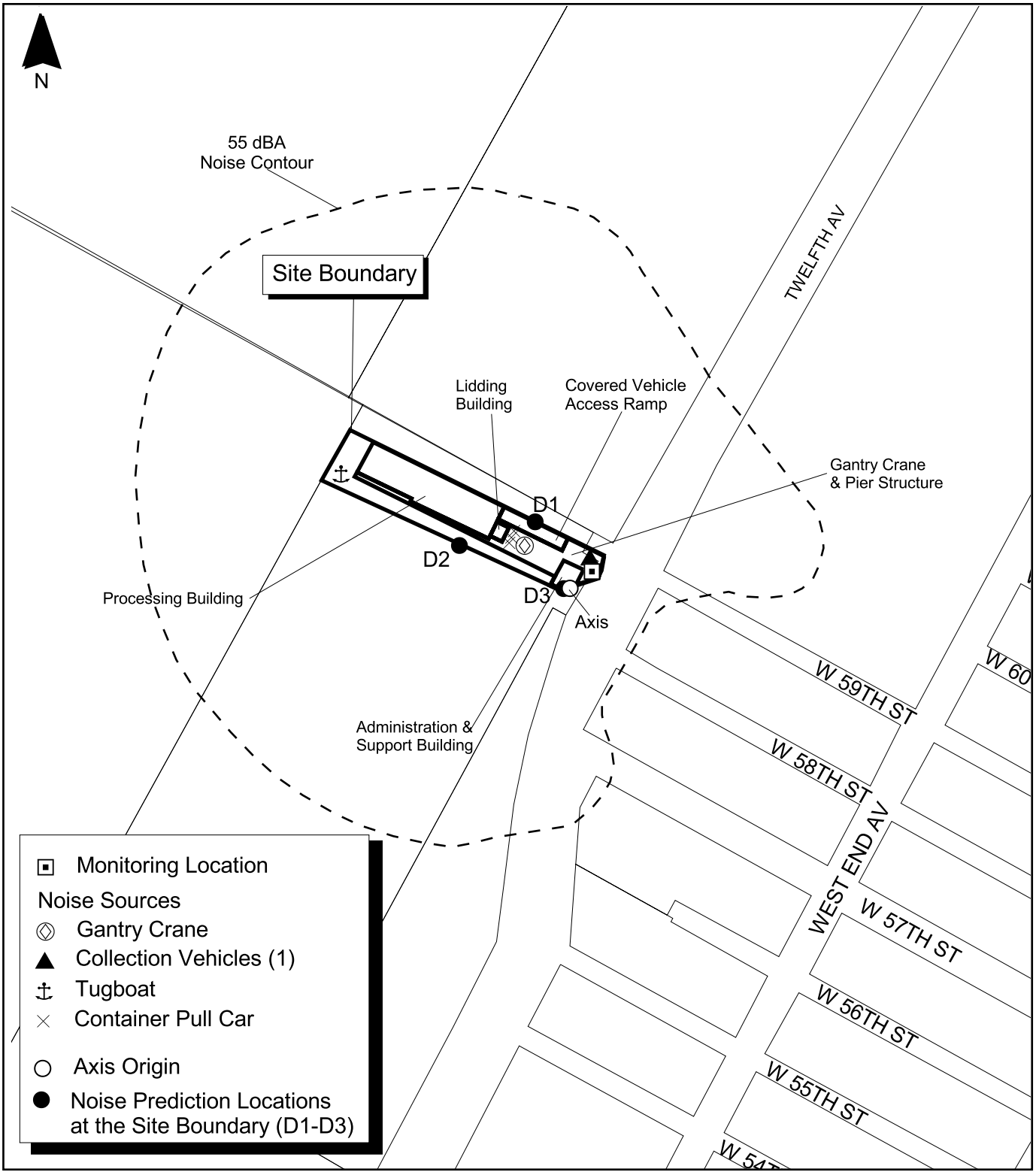
Figure 9.12-1 shows the West 59th Street Converted MTS layout and the locations of the points along the facility boundary where overall noise predictions were calculated, and the predicted 55 dBA contour line.

9.12.3.2 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 272 meters (893 feet) from the property line in the direction of the nearest noise-sensitive receptor, which is 530 meters (1,739 feet) from the site 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. The results of the screening analysis show that sensitive receptors are not located within the 55 dBA contour line, therefore, on-site noise monitoring and an on-site noise analysis was not required.

9.12.3.3 Performance Standards for Zoning Code Analysis

Overall noise predictions were calculated at the locations of the points along the West 59th Street Converted MTS boundary to determine the total noise level for each octave band from indoor and outdoor sources, not including DSNY and other agency collection vehicles, in accordance with the New York City Zoning Code Performance Standards for Manufacturing Districts (see Table 9.12-5 below). Based on this analysis, exceedances to the Performance Standards are predicted however, there will be no impacts since there are no noise sensitive receptors adjacent to the West 59th Street Converted MTS.



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

300 0 300 Feet

Figure 9.12-1 Noise Sources and Receptors

West 59th Street Converted MTS

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Table 9.12-5
Spectral Noise Analysis
West 59th Street Converted MTS

Manufacturing District Regulation (M3)	Frequency Range							
	63	125	250	500	1K	2K	4K	8K
	79	74	69	63	57	52	48	45
Total Lp dB: D1	76.0	63.9	57.9	53.7	50.4	43.8	36.2	34.5
Total Lp dB: D2	76.5	70.5	69.1	66.0	64.7	59.4	49.7	41.2
Total Lp dB: D3	72.6	70.0	69.5	66.4	65.3	60.0	50.4	42.3

9.12.3.4 Noise Code Analysis

Overall noise predictions were calculated at the locations of the points along the West 59th Street Converted MTS boundary to determine the Total L_{eq} from all indoor and outdoor sources. This is shown in Table 9.12-6 below. Based on this analysis, the Total L_{eq} does not exceed the Noise Code Standard of 70 dBA.

Table 9.12-6
Stationary Noise Analysis
West 59th Street Converted MTS

Location at Plant Boundary	Total L_{eq} Contribution at Plant Boundary (dBA)
D1	61.7
D2	67.3
D3	68.2

9.12.3.5 Off-site Noise Analysis

A screening analysis was conducted to determine if noise monitoring would be required along the truck routes. As a result of this screening, which is described in Section 3.14.5.2, no off-site noise analysis was required. Screening results 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 roadways where there is a possible impact based on the second level screening are provided in Table 9.12-7 below.

Table 9.12-7
Off-site Noise Screening Results
West 59th Street Converted MTS

Location	Hour	Future No-Build PCEs[1]	Collection Vehicles	Employee Vehicles	Future Build PCEs[1][2]	Possible Impact[3]
West 59th Street between 10th and 11th Avenues	2:00 a.m.	528	3	0	141	No
West 59th Street between 10th and 11th Avenues	11:00 a.m.	1736	17	0	799	No

Notes:
(1) Total PCEs are rounded to the nearest whole number.
(2) Future Build PCEs include North Shore Converted MTS-related collection vehicles and employee vehicles.
(3) There is a possible impact if the Future Build PCEs are double the Future No-Build PCEs.

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.

9.13 Infrastructure & Energy

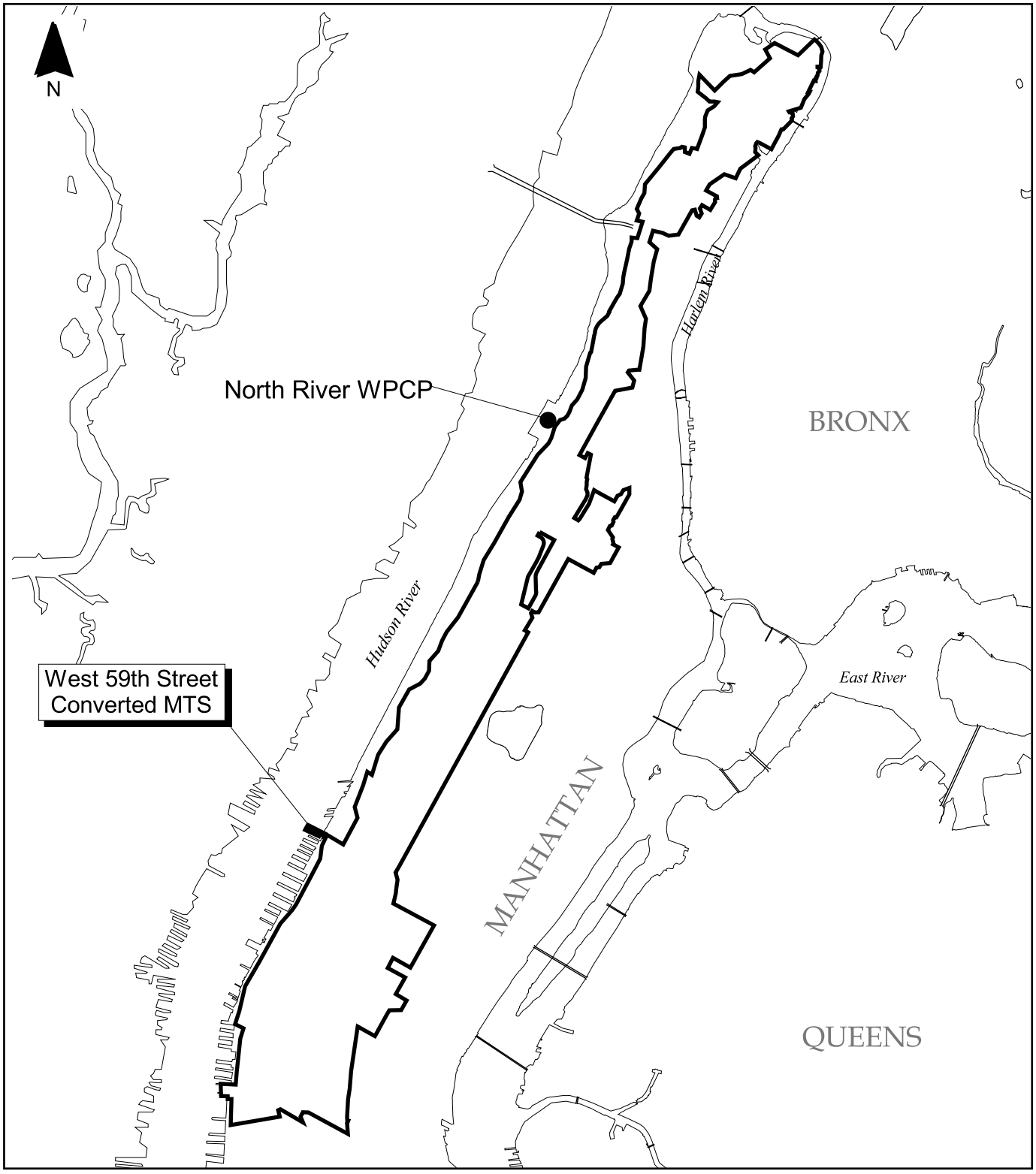
9.13.1 Existing Conditions

9.13.1.1 Water Supply

Water is supplied to the 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 pounds per square inch (psi), which is the minimum pressure acceptable for uninterrupted service (CEQR Technical Manual, 2001). To ensure that adequate pressure is provided on-site, the potable and fire water systems are currently supplemented with a pump.

9.13.1.2 Sanitary Sewage and Storm Water

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 9.13-1. From July 2001 through June 2002, the North River WPCP treated an average of 123 million gallons per day (mgd) of wastewater during dry weather flow (see Table 9.13-1). The maximum dry weather flow during this period was 137 mgd during August 2001. Effluent from the plant is discharged into the Hudson River and is regulated by NYSDEC under the State Pollutant Discharge Elimination System (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 (CEQR Technical Manual, 2001). 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 9.13-1 Existing WPCP Drainage Area
West 59th Street Converted MTS

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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 storm water system) that runs north along Riverside Drive where waste is directed to the North River WPCP. Storm water runoff from the existing MTS parking area and ramp are routed to catch basins that discharge to the combined sewer system.

Table 9.13-1
Average Monthly Dry Weather Flows
North River Water Pollution Control Plant
Fiscal Year 2002

Month	Dry Weather Flow (mgd)
July 2001	129
August	137
September	134
October	124
November	123
December	121
January 2002	121
February	117
March	116
April	116
May	113
June	123
Average Effluent	**123**

9.13.1.3 Solid Waste

Based on solid waste generation information from the CEQR Technical Manual, it was estimated that each employee at the existing MTS produces approximately 9 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.

9.13.1.4 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 0.24 E + 10 BTU during fiscal year 2002 (i.e., July 2001 through June 2002) based on operations information provided by DSNY. No gas is currently supplied to the facility.

9.13.2 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.

9.13.3 Potential Impacts with the West 59th Street Converted MTS

9.13.3.1 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 180 gpd for truck and tipping floor washdown and dust control. The combined total usage of 1,680 gpd of potable water would represent an increase of 1,205 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.

9.13.3.2 Sanitary Sewage

Based on the estimated water usage of 1,680 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 North River facility treated an average of 123 mgd in fiscal year 2002 and has a design operating capacity of 170 mgd.

9.13.3.3 Solid Waste

Solid waste transfer station facility use is not cited under the solid waste generation rates provided in the 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.

The West 59th Street Converted MTS would be in compliance with DSNY's siting regulations for solid waste transfer stations. Subsequent to adoption of the City's Final Solid Waste Management Plan, the West 59th Street Converted MTS, if incorporated in the Plan, would be subject to permitting as a solid waste management facility by NYSDEC and DSNY.

9.13.3.4 Energy

The West 59th Street Converted MTS would require an additional 1.27E+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 Modified 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 Modified MTS and has stated that the facility could be supplied with natural gas with no adverse impacts.

9.14 Natural Resources

9.14.1 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 to identify potential impacts that might arise from implementation of the West 59th Street Converted MTS.

9.14.1.1 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.

9.14.1.2 Geology

Based on information derived from a review of the Bedrock and Engineering Geologic Maps of New York City by Charles A. Baskerville, 1994, the geology of this section of Manhattan, including the study area, is gray sillimanite-muscovite-tourmaline schist otherwise referred to as Manhattan schist.[6] 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 25,000 mg/Kg of total organic carbon. Sediment was found to be somewhat degraded due to contaminants in the sample material.

[6] Baskerville, C.A. 1994. "Bedrock and Engineering Geologic Maps of New York County and Parts of Kings and Queens counties, New York and Parts of Bergan and Hudson Counties, New Jersey.

9.14.1.3 Floodplains

The site is located within the 100-year coastal floodplain (Figure 9.14-1). No wetlands, other than the Hudson River, a NYSDEC-designated littoral zone, exist on the site (Figure 9.14-2).

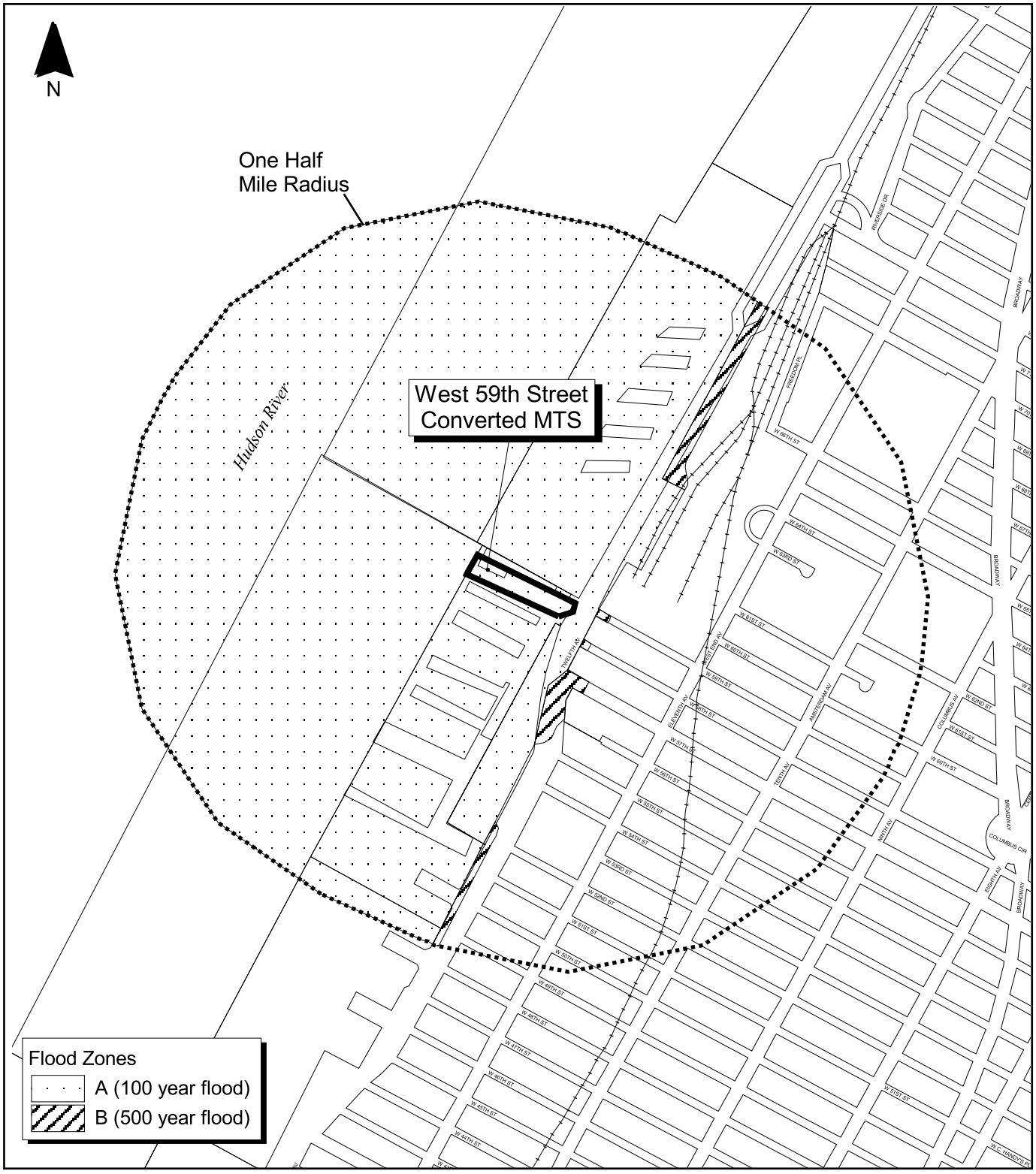
9.14.1.4 Ecosystems

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.

There are no direct data available on the aquatic resources of the study area, although a two-year ecology program was conducted on a similar site approximately one third mile to the north in 1988.[7] The following discussion is based on those findings, which are believed to be reasonably applicable because no major dredging or development projects are known to have taken place along the waterfront of this area in the past 11 years.

A detailed invertebrate study revealed that the typical nearshore sediments (black, organic silts) were dominated by typical fauna such as the aquatic earthworm class *Oligochaeta*, polychaete worms (*Streblospio benedicti*), and soft-shelled clams (*Mya arenaria*). Overall numbers of these forms were high, a common finding in New York Harbor sediments. Organism densities of as high as 60,000 per square meter were observed; however, the infauna was not limited to these three groupings. Approximately 80 species and other taxonomic groupings were found throughout the course of the program. Overall, the benthic communities exhibited structures similar to those of the typical black organic silts that are predominant throughout the harbor. Typically, higher species richness was encountered in the September through December period; it was lowest in April through June.

[7] Hudson River Center Site Aquatic Environmental Study Final Report, 1988. Prepared for NYC Public Development Corp. by EEA, Inc.



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

Figure 9.14-1 Floodplains

West 59th Street Converted MTS

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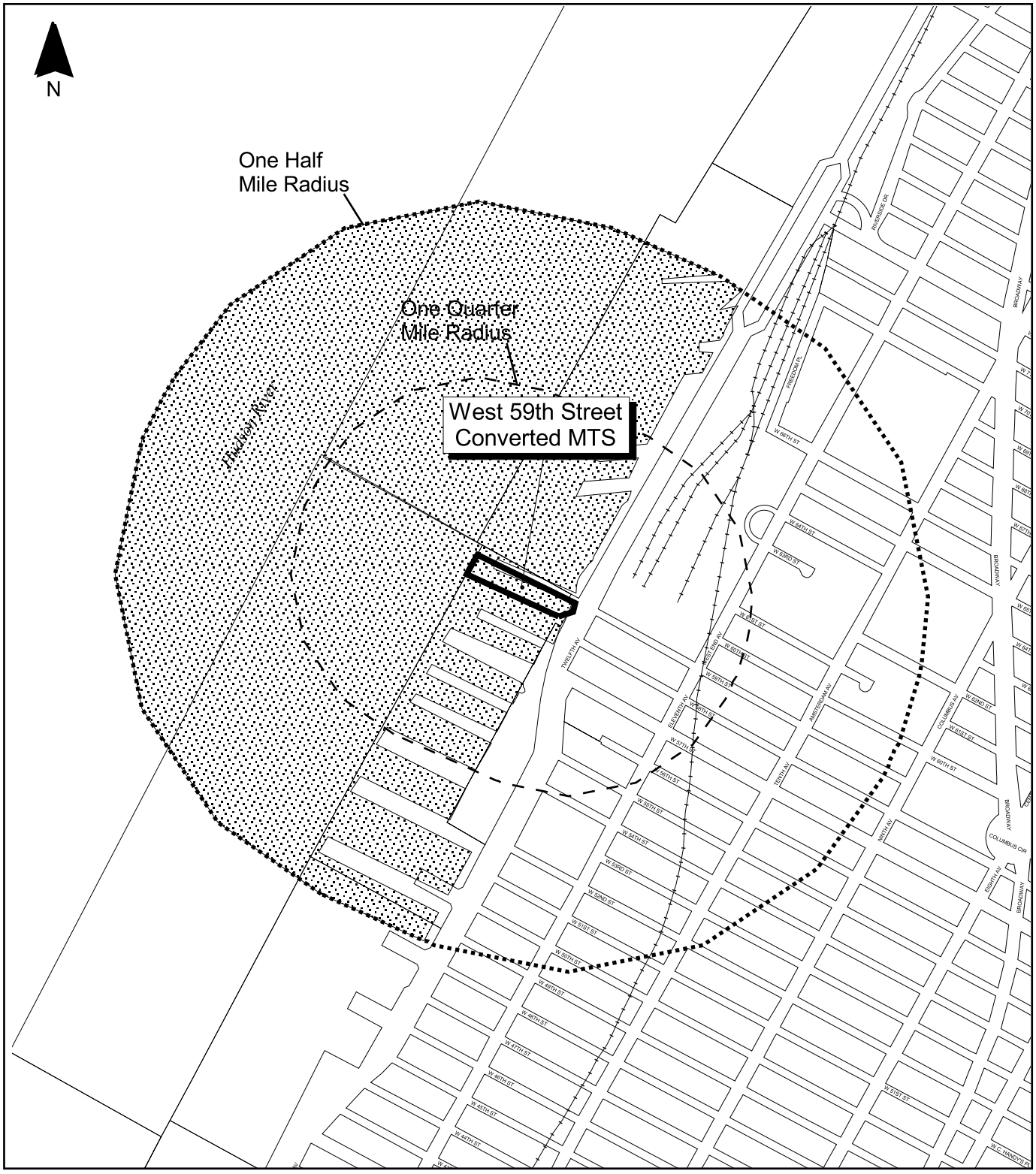

Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

Figure 9.14-2 Wetlands

West 59th Street Converted MTS

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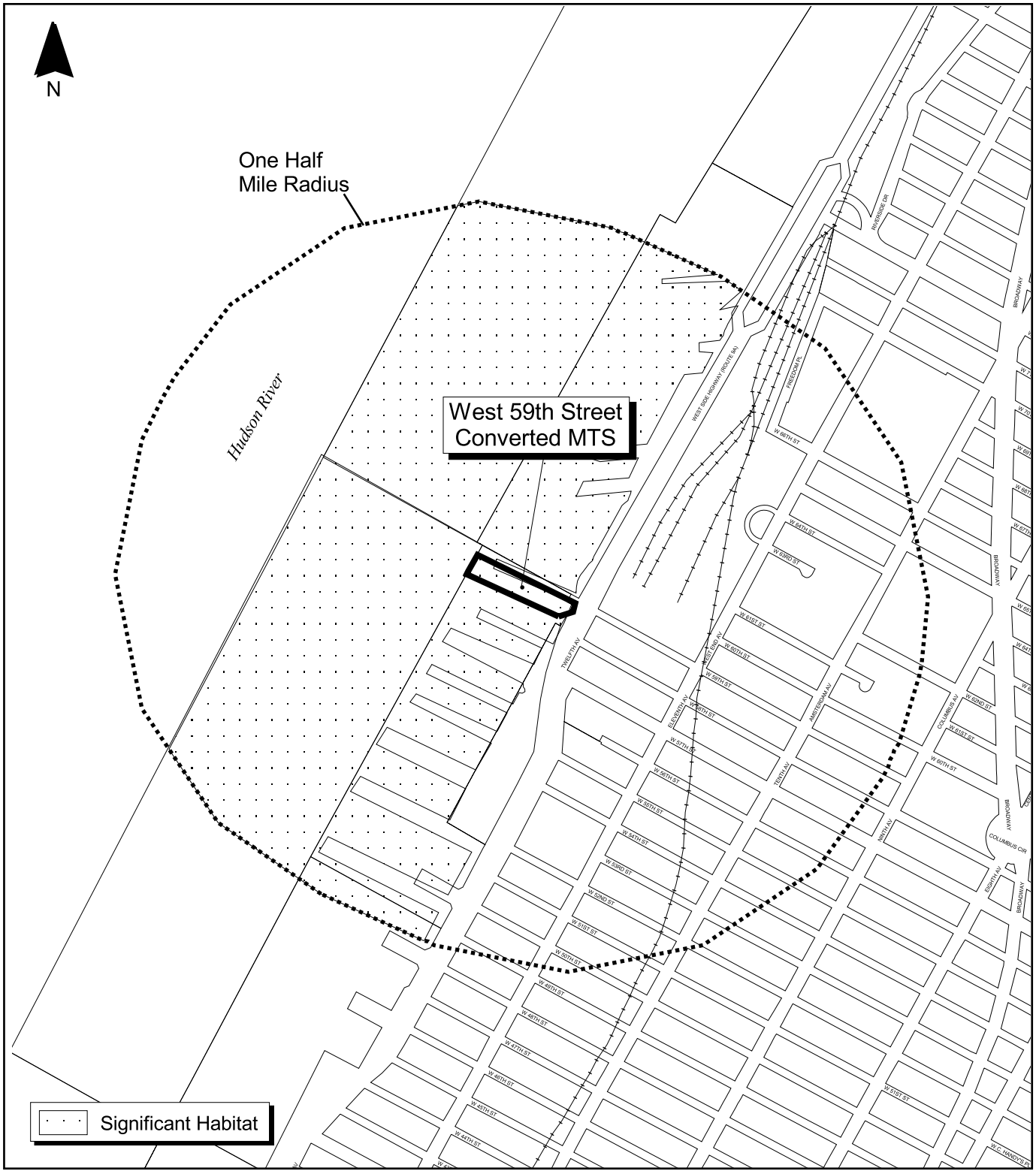
A field program that commenced in January 2003 and is scheduled to end in December 2003 was designed to fully characterize the marine biological resources of the study area. The program includes monthly sampling for finfish, fish eggs and larvae, and quarterly sampling for benthic invertebrates and sessile colonizing organisms. Results of the program through the second quarter samplings are included in this MTS Environmental Evaluation. Results of annual program will be included in the DEIS for the new Plan.

Fisheries of the lower Hudson River in the general vicinity of the study area have been well documented. The 1988 study described above provided a two-year evaluation of the nearshore fishery resources. Overall, the results show that the study area exhibits species composition and seasonal trends similar to other study areas (COE, 1984).[8] The most abundant finfish were silversides (*Menidia menidia*). Bay anchovy (*Anchoa mitchilli*), which has a similar appearance, is also a dominant forage fish.[9] While the 2003 study is not complete, a number of finfish species have been identified, including a species of special concern, striped bass, (*Morone saxatilis*) gizzard shad (*Dorosoma petenense*), northern pipefish (*Syngnathus fuscus*), cunner (*Tautogolabrus adspersus*), Atlantic silverside (*Menidia menidia*), hogchoker (*Trinectes maculates*), bay anchovy (*Anchoa mitchilli*), white perch (*Morone Americana*), Atlantic tomcod (*Microgadus tomcod*), hickory shad (*Alosa mediocris*), Atlantic menhaden (*Brevoortia tyrannus*), and spotted hake (*Urophysics regia*). Several EFH listed species were caught, including winter flounder (*Pleuronectes americanus*), summer flounder (*Paralichthys* dentatus), windowpane (*Scophthalmus aquosus*) and Atlantic herring (*Clupea harengus*). In addition, eggs and larvae of winter flounder and larvae of the rock gunnel (*Pholis gunnelus*) were also identified, as were invertebrates, including sevenspine bay shrimp (*Crangon septemspinosa*), eastern mudsnail (*Ilyanassa obsolete*) and Pacific graupsid shore crab (*Hemigrapsus sanguineus*).

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 Significant Fish and Wildlife Habitat (Figure 9.14-3). New York State's Coastal

[8] U.S. Army Corps of Engineers, 1984. Final Supplemental Environmental Impact Statement: Westside Highway Project. FHWA-NY-EIS-03-S.

[9] Bigelow, H.B. and W.C. Schroeder, 1953. Fishes of the Gulf of Maine. Fishery Bulletin 74, vol. 53. Fishery Bulletin of the U.S. Fish and Wildlife Service.



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

Figure 9.14-3 Significant Habitat

West 59th Street Converted MTS

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Management Program 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 Significant Fish and Wildlife Habitats.

NYSDEC Natural Heritage Program 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.

9.14.2 Future No-Build Conditions

The study area would remain as it 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.

9.14.3 Potential Impacts with the West 59th Street Converted MTS

9.14.3.1 Geology

The geology of the study area would not be changed other than by the removal of dredge spoil 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.

9.14.3.2 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 it would not include any provisions for raising any portions of the study area over this level.

9.14.3.3 Ecosystems

Construction of the West 59th Street Converted MTS may require dredging of sections of the Hudson River to accommodate the barges and tugboats. This dredging would create a temporary, short-term loss of habitat for finfish and the displacement of habitat for the macrobenthic community. Recolonization of the area by these organisms can be anticipated to occur within 6 months to 12 months. Tugboat activity would cause periodic turbidity conditions and potential silting of the dock area, and may require dredging at a frequency of not more than once every 3 years to 5 years.

The West 59th Street Converted MTS would result in increased shading. Experts have differing opinions regarding the effects of shading; however, field studies have clearly shown no statistical difference in benthic populations in inter-pier and under-pier areas in New York Harbor waters.[10] In some cases, benthic populations were shown to be greater in under-pier areas than along the edge or outside the pier.[11] The West 59th Street Converted MTS represents a relatively minor change and, as such, any impacts would be slight.

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 that the nighthawk depends on.[12]

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[10] Hudson River Center Site Aquatic Environmental Study Final Report. 1988. Prepared for NYC Public Development Corp. by EEA, Inc.

[11] Duffy-Anderson, J.T and Able, K.W. "An Assessment of the Feeding Success of Young-of-the-Year Winter Flounder Near a Municipal Pier in the Hudson River Estuary. Estuaries, Vol. 24, No. 3. June 2001

[12] Andrle, R.F. & Carroll, J.R., eds. 1988. "The Atlas of Breeding Birds in New York State" Cornell University Press. Ithaca.

9.15 Water Quality

9.15.1 Existing Conditions

9.15.1.1 Definition of Study Area

The water quality study area encompassed the Hudson River and included discharges from CSOs located within ½ mile of the site.

9.15.1.2 Water Quality

The water quality data for the following monitoring stations, shown in Figure 9.15-1, are generally representative of water quality in the study area:

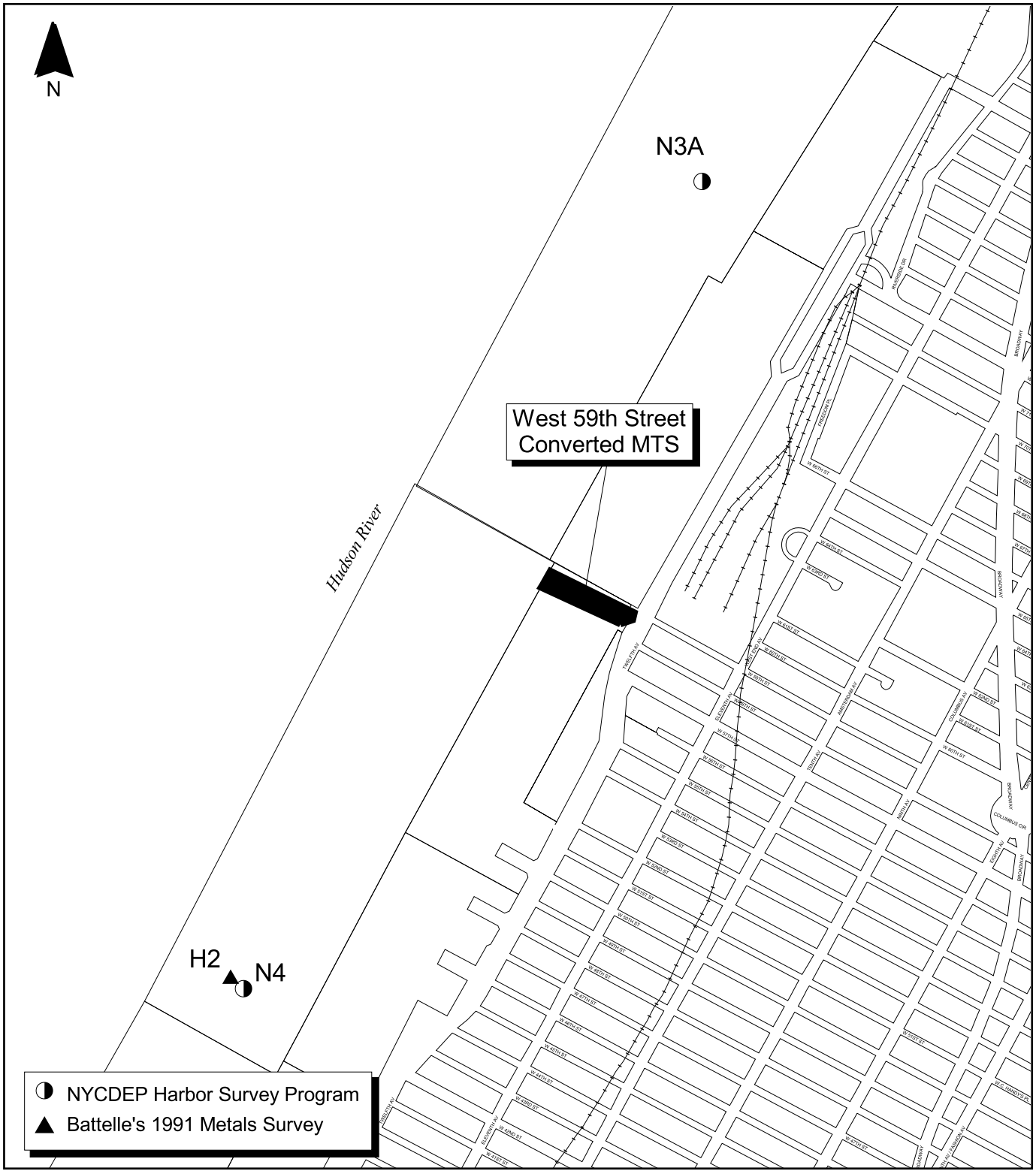
NYCDEP Harbor Survey Program – Stations N3A, located one-third of the distance from the Manhattan shore at West 72nd Street to the New Jersey shore; and N-4, located one-third of the distance from the Manhattan shore at West 42nd Street to the New Jersey shore; and

Battelle's 1991 Metals Survey – Station H-2T and H-2B[13] 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 9.15-1. 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 9.15-1, on average, NYSDEC standards and guidance values are met. For Harbor Survey Station N-4, however, the minimum bottom dissolved oxygen between July 1, 2002, and September 30, 2002, did not meet the water quality standard for dissolved oxygen. In addition, the mercury concentration for Battelle Stations H-2T and H-2B did not conform to the water quality standard for mercury.

[13] 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 9.15-1 Ambient Water Quality Stations

West 59th Street Converted MTS

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Table 9.15-1
Existing Water Quality Conditions and Standards
West 59th Street Converted MTS Study Area

Average Concentration						
Parameter	**Units**	**N3A[1]**	**N4[2]**	**H2T[3]**	**H2B[4]**	**NYS Class I Standards**
Dissolved Oxygen (surface/minimum)	mg/L	8.4[5]/4.9[6]	7.1[7]/4.6[8]	-------	-------	4
Dissolved Oxygen (bottom/minimum)	mg/L	7.0[5]/4.4[6]	5.7[7]/3.8[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]	-------	-------	10000
Total Coliform (bottom)	MPN / 100 mL	1284[10]	1316[10]	-------	-------	10000
Fecal Coliform (top)	MF	46	78	-------	-------	2000
Fecal Coliform (bottom)	MF	42	46[11]	-------	-------	2000
Total Suspended Solids (surface)	mg/L	22	16	-------	-------	-------
Total Suspended Solids (bottom)	mg/L	56	48	-------	-------	-------
NH3-N	mg/L	0.238	0.293	-------	-------	-------
(NO3 + NO2)	mg/L	0.448	0.468	-------	-------	-------
Total Phosphorous	mg/L	0.521[12]	0.349[12]	-------	-------	-------
Dissolved PO4	mg/L	-------	-------	-------	-------	-------
Chlorophyll-a	µg/L	11.6	3.3	-------	-------	-------
Arsenic	µg/L	-------	-------	-------	-------	36 [13, 14]
Cadmium	µg/L	-------	-------	0.08[13]	0.07[13]	7.7 [13, 14]
Chromium	µg/L	-------	-------	-------	-------	-------
Copper	µg/L	-------	-------	2.14[14]	1.78[15]	5.6 [14, 15]
Lead	µg/L	-------	-------	0.16[13]	0.18[13]	8 [13, 14]
Mercury	µg/L	-------	-------	0.0053[13]	0.0033[13]	0.0026 [13, 14]
Nickel	µg/L	-------	-------	1.37[13]	1.39[13]	8.2 [13, 14]
Silver	µg/L	-------	-------	0.0133[13]	0.0121[13]	-----
Zinc	µg/L	-------	-------	7.23[13]	7.19[13]	66 [13, 14]
Cyanide	µg/L	-------	-------	-----	-----	1.0 [14]

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 2002 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 February and December 2002.

[8] Minimum between June 1, 2002 and September 30, 2002.

[9] Latest available data 1997.

[10] Latest available data 1996.

[11] Latest available data 1999.

[12] Latest available data 1998.

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

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

[15] Site specific chronic and acute criteria for dissolved copper in NY/NJ Harbor.

9.15.1.3 Permitted Discharges

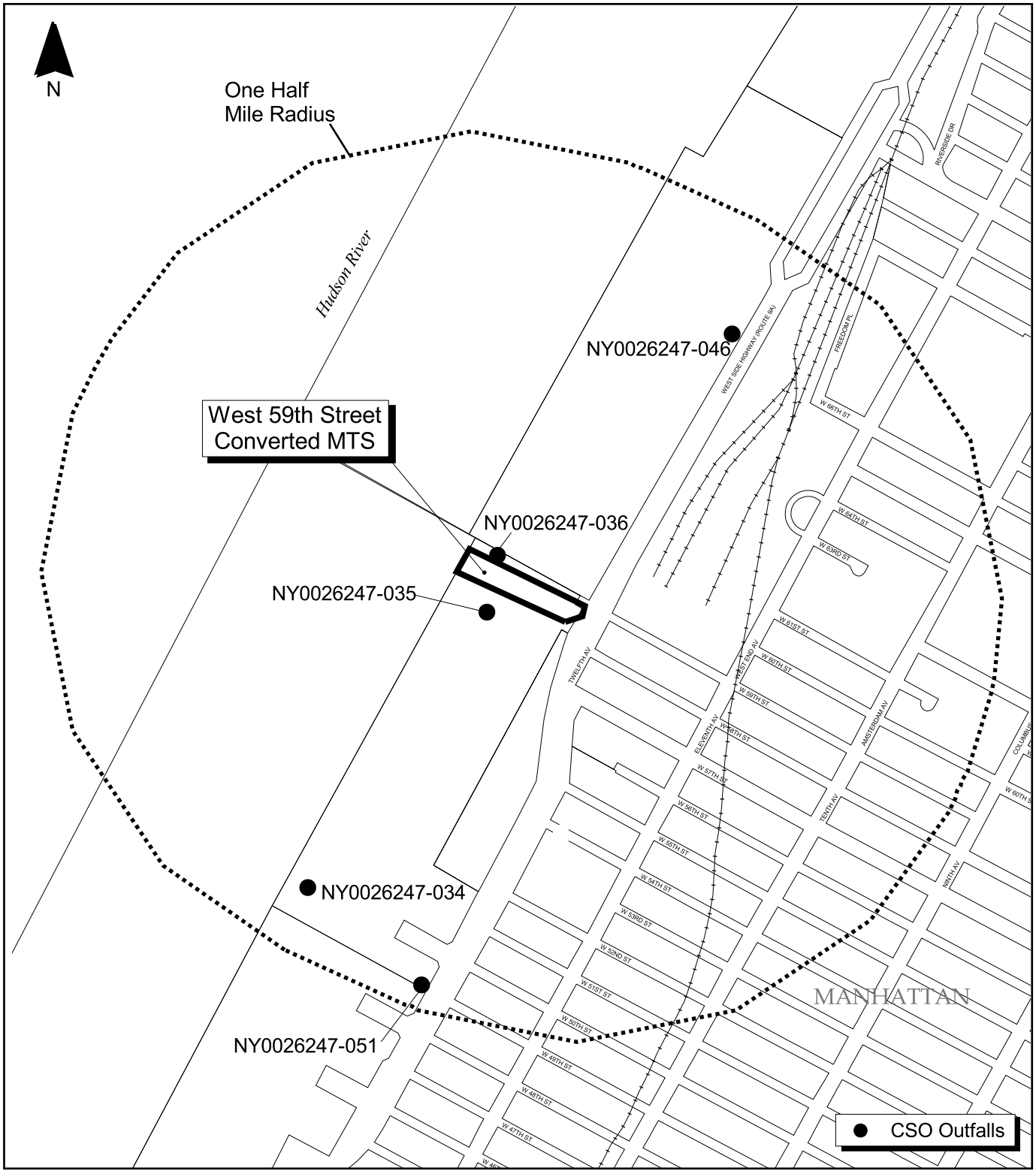
A review of the most recently available NYSDEC and USEPA databases indicated that there is five permitted discharges in the vicinity of the site. The existing discharges within a 1/2-mile radius are shown in Figure 9.15-2 and listed in Table 9.15-2. These discharges consist of five CSOs, all of which are permitted by the NYSDEC.

Table 9.15-2
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

9.15.1.4 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 9.15-3, 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 9.15-2 Permitted Outfalls and CSO Locations

West 59th Street Converted MTS

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Table 9.15-3
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	**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. Values shown are input to the 208 Model, with output results comparable to MPN/100 mL.
[2] Based on Central Park Rain Data (1969-2002); The National Climatic Data Center.

9.15.2 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 site would not be expected to change, so no significant water quality impacts would be expected.

9.15.3 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 9.15-4 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 9.15-4
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. Values shown are input to the 208 Model, with output results comparable to MPN/100 ml.

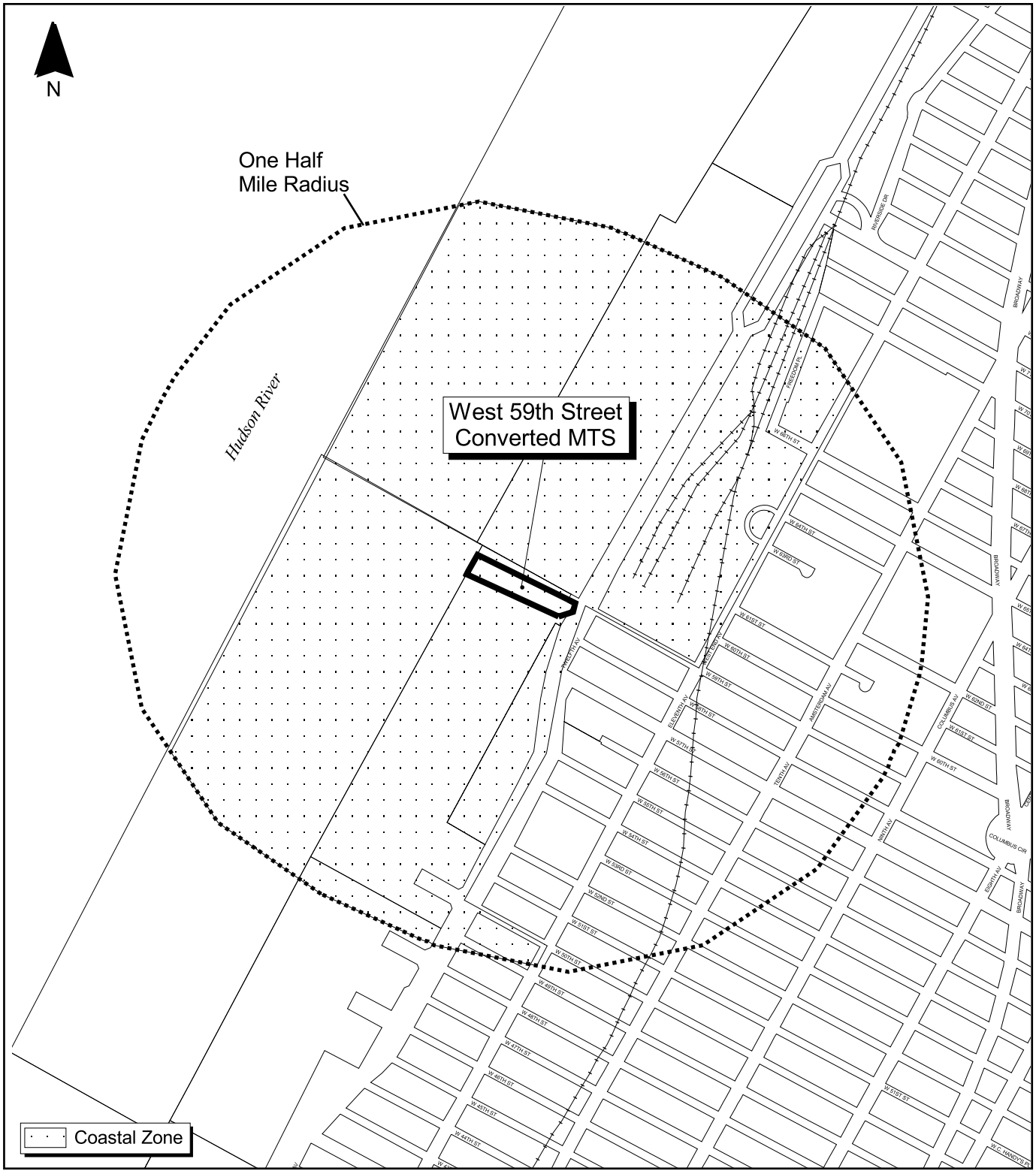
Unimpeded operation of the West 59th Street Converted MTS may also require dredging activities to construct the waterfront structures and improve existing water depths in the immediate vicinity of the site. All dredging activities would be conducted in compliance with applicable federal, state, and local 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.

9.16 Waterfront Revitalization Program

9.16.1 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 New York City's coastal zone boundary (Figure 9.16-1). 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 and 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 3.18.1. 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

Figure 9.16-1 Coastal Zone Boundary

West 59th Street Converted MTS

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9.16.2 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.

2.1 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 a DCP 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 waterbody. 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 modified hopper barges that would transport DSNY-managed 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. Significant Coastal Fish & Wildlife Habitat (SCFWH) information maintained by the New York State Department of State (NYSDOS) 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 9.14.1, 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, Natural Heritage 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 may also be necessary to allow for the unimpeded operation of barges and tugboats. As stated in section 9.13.3, 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 water-tight 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. 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. In addition, 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 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 and, to the extent practicable, non-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 (6NYCRR 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 water-tight 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 9.1.

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 11.17.3. 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 11.6.3. 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.

9.17 Hazardous Materials

9.17.1 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 CEQR Manual (October 2001) and is consistent with the requirements for a Phase I ESA established by the American Society for Testing and Materials (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 New York City Fire Department for underground storage tank 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.

9.17.1.1 Definition of Study Area

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

9.17.1.2 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.

9.17.2 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.

9.17.3 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.