CHAPTER 11 ENVIRONMENTAL REVIEW: NORTH SHORE CONVERTED MTS

11.1 Introduction

The results of the environmental analyses of the North Shore Converted MTS are presented in the following sections:

11.2 Land Use, Zoning and Public Policy
11.3 Socioeconomic Conditions
11.4 Community Facilities
11.5 Open Space and Parklands
11.6 Cultural Resources
11.7 Urban Design and Visual Quality
11.8 Neighborhood Character
11.9 Traffic and Transportation
11.10 Air Quality
11.11 Odor
11.12 Noise
11.13 Infrastructure and Energy
11.14 Natural Resources
11.15 Water Quality
11.16 Waterfront Revitalization Program
11.17 Hazardous Materials

Section 2.9 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.

11.2 Land Use, Zoning, and Public Policy

11.2.1 Existing Conditions

11.2.1.1 Definition of 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 11.2-1). The secondary study area is defined as the area between ¼ mile and ½ mile of the site (Figure 11.2-2). Section 3.4 describes the methodology employed in these analyses, and Section 2.9 provides information on existing land uses and operations on the site.

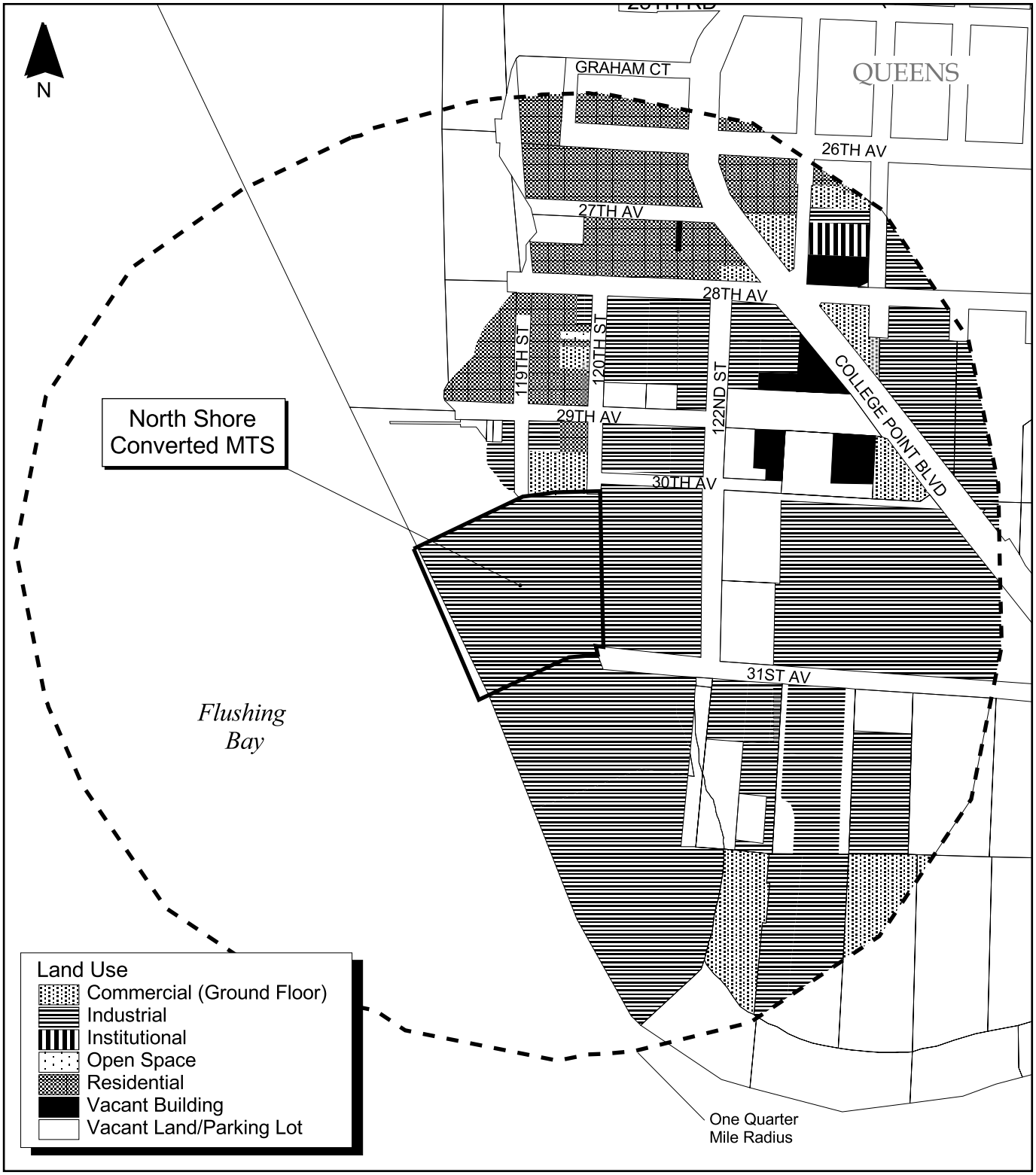
11.2.1.2 Land Use Patterns

11.2.1.2.1 General Context

The site is set on the southeast side of Flushing Bay within the mixed-use College Point peninsula and across from LaGuardia Airport. Commercial offices, manufacturing uses, warehouse storage facilities, and automotive uses are the predominant land uses in the immediate vicinity south, east and northeast of the site, while residential uses are located further to the north of the site.

11.2.1.2.2 Land Uses in the Primary Study Area

The western half of the primary study area is part of Flushing Bay while the eastern half contains a variety of land uses, mostly industrial. Industrial and manufacturing uses and their associated offices, warehouses/storage facilities and parking areas are concentrated to the south and east of the site. Commercial establishments are found throughout the primary study area, with a large number of automobile parts and service shops lining both sides of College Point Boulevard between approximately 27th and 28th Avenues and around 119th and 120th Streets, north of the site. East of and adjacent to the site is the DSNY Queens District 7 Garage and Vassilaros Coffee roasting company north of the garage. A large Consolidated Edison facility is located on the block due east of the site and the district garage, with storage and parking on the western end,



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 11.2-1 Land Use in the Primary Study Area
North Shore Converted MTS

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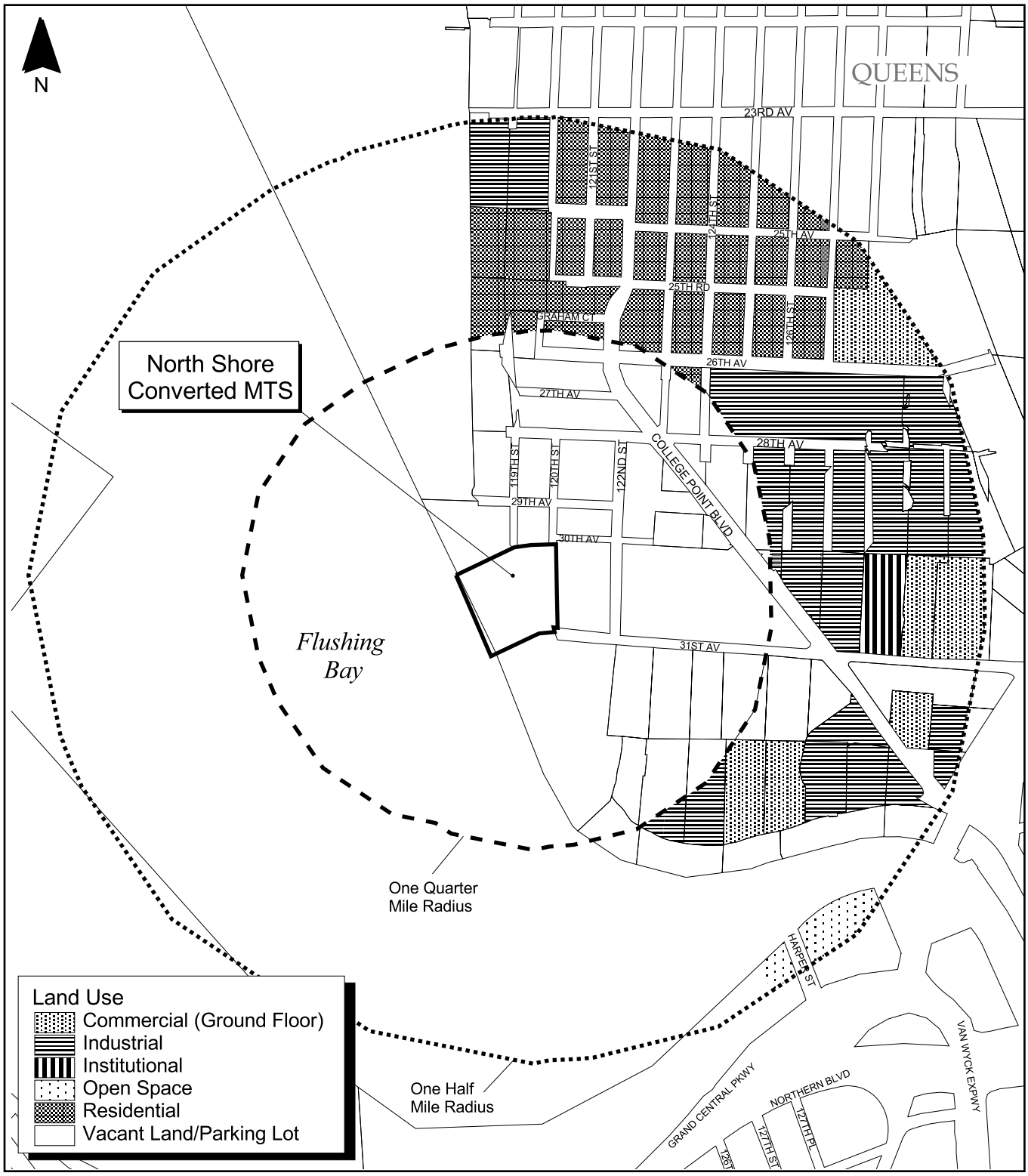

Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning
This figure illustrates generalized land uses in the secondary study area.

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Figure 11.2-2 Land Use in the Secondary Study Area
North Shore Converted MTS

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closest to the site. Residential uses are located north of the site from 29th Avenue to 28th Avenue west of 120th Street and north of 28th Avenue, where it is almost entirely residential between College Point Boulevard and the bay. The residential area contains single-family detached housing, two-family housing and some late 20th century row housing. Nursing home facilities built between 1955 and 1971 are located on the western ends of the three blocks between 25th Avenue and 27th Avenue.

South of and adjacent to the site is the Ferrara Brothers Building Materials Company on 31st Avenue. Behind their offices is the materials storage and truck loading area. Several of the mapped streets in the area are not open to the public, but instead serve the concrete and asphalt companies located there. A Home Depot Store has been recently constructed east of Ferrara Brothers near College Point Boulevard, introducing large-scale retail activity to the area.

A portion of the College Point Industrial Park to the east of the site lies in the primary study area. The park begins at College Point Boulevard and extends eastward and southward from about 26th Avenue to about 31st Avenue. Warehouses, busing facilities and storage/parking areas are located within that portion of the park within the study area, while the remainder of the park features such prominent businesses as *The New York Times* printing facility.

11.2.1.2.3 Land Uses in the Secondary Study Area

The northern portion of the secondary study area is almost exclusively residential with the exception of major industrial uses in the area between 120th Street and the shore. Enterprises uses such as Sunrise Oil and an active boat yard and parking are found there. The northern residential portion of the study area east of 119th Street contains more multi-family apartment housing than in the residential areas nearer to the site. Machine shops and small manufacturers are scattered throughout. Public School No. 29, built in 1928, is located just outside the study area, on the south side of 23rd Avenue between 125th and 126th Streets. As mentioned, a new Home Depot is situated west of College Point Boulevard, south of 31st Avenue. Except for the Full Gospel New York Church at 130-30 31st Avenue, industrial uses, including the City's impound lot south of

28th Avenue, characterize most of the remaining secondary study area east of College Point Boulevard. Large manufacturers, such as *The New York Times* printing facility, are located to the east on the perimeter of the secondary study area.

Southeast of the site, the secondary study area consists of large privately owned lots of industrial waterfront and warehouses as well as the former Metropolis nightclub at the southern end of Street. Most of these properties are accessible only via private drives. The secondary study area also includes the southern shore of Flushing Bay, where the City Bureau of Highways' Queens asphalt plant is located, as is the Flushing Meadows Corona Park, which extends south of the bay. The study area extends westward across the bay to include a small portion of the eastern edge of LaGuardia Airport.

11.2.1.3 Zoning on and near the Site

11.2.1.3.1 Zoning within the Primary Study Area

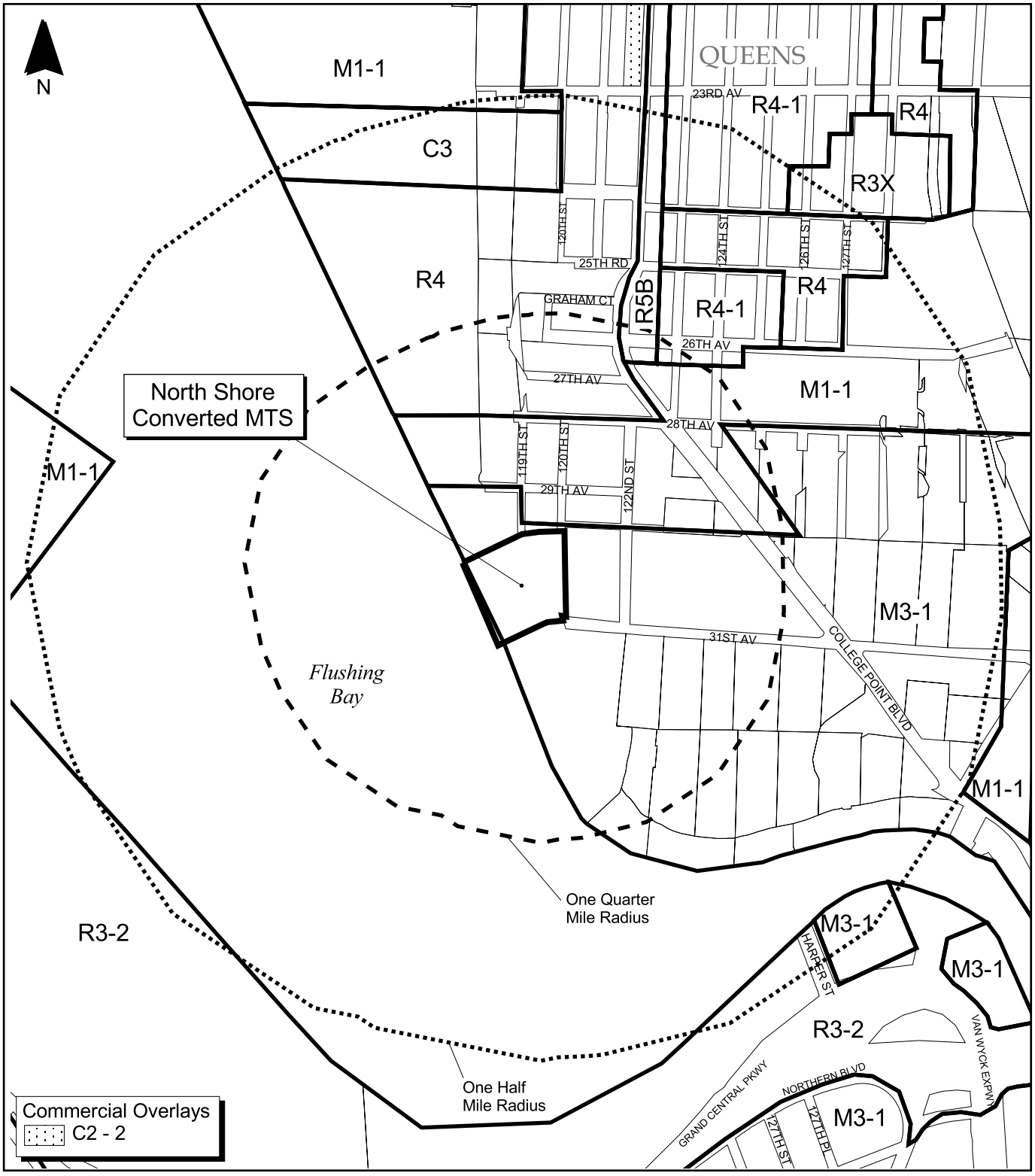
The site is in an M3-1 zoning district that extends north to about 30th Avenue, west and south to the bay, and east beyond College Point Boulevard. (See Figure 11.2-3 and Table 3.4-1: Zoning District Characteristics.) Bordering the M3-1 zone to the north is an M1-1 zone that extends from the bay to beyond the eastern edge of the secondary study area. North of this M1-1 zoning district are portions of larger R4, R5B and R4-1 zoning districts.

11.2.1.3.2 Zoning within the Secondary Study Area

The secondary study area is primarily zoned M3-1 east and southeast of the site. North and northeast of the site, the secondary study area is primarily zoned for residential uses, buffered by an M1-1 zone that cuts diagonally through the study area. The C3 zone at the northern edge of the study area encompasses the commercial waterfront between 23rd and 25th Avenues and 120th Street.

11.2.1.4 Plans and Policies

The FY 2002/2003 Community District Needs Statement for District 7 does not provide physical planning recommendations that may be relevant specifically to the site or the primary and secondary study areas.



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

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Figure 11.2-3 Zoning

North Shore Converted MTS

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DCP's *Comprehensive Waterfront Plan* for Reach 10 (Flushing Bay to Nassau County) recommends that "street-end" access to the waterfront that is compatible with industrial uses be provided at several points along the College Point industrial waterfront. Other recommendations pertaining to the study area include a recommendation to rezone a 2.5-acre vacant M1 site between 25th and 23rd Avenues to C3 to permit such water-dependent uses as a marina and restaurant or residential development. (See Section 11.5 for details on DPR park plans and Section 11.16 for a review of consistency with the Waterfront Revitalization Program.)

11.2.2 Future No-Build Conditions

It is reasonable to anticipate that the Future No-Build Conditions in the primary and secondary study areas generally will resemble the Existing Conditions. The site will remain DSNY property, the existing MTS will remain standing and the associated DSNY salt storage and garage facilities will continue to be fully operational.

11.2.3 Potential Impacts with the North Shore Converted MTS

11.2.3.1 Land Use and Zoning

The North Shore Converted MTS would include containerization functions and it would replace the existing, non-operating MTS. The North Shore Converted MTS would not be a substantial new use, however, since it would be a reactivation of former waste handling activities at the site. It would be unlikely to encourage or discourage similar development or other typical development in the area and would be unlikely to affect the residential area to the north. Because the general area is zoned for industrial uses, the North Shore Converted MTS would not be likely to affect surrounding zoning patterns.

11.2.3.2 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 the North Shore Converted MTS, so the new facility would be consistent with public plans and policies.

11.3 Socioeconomic Conditions

11.3.1 Existing Conditions

11.3.1.1 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.) In this case, the demographic study area is comprised of Census Tract 907 (Figure 11.3-1). Queens Census Tract 907 extends east from Flushing Bay in Queens to the Whitestone Expressway, as far south as approximately 32nd Avenue and as far north as approximately 20th Avenue. For comparison purposes, both 1990 and 2000 Census data were also gathered at the Borough and City levels. The study area used for the assessment of potential impacts on economic conditions extends as far north as approximately 23rd Avenue and as far east as approximately the intersection of the Whitestone Expressway and College Point Avenue.

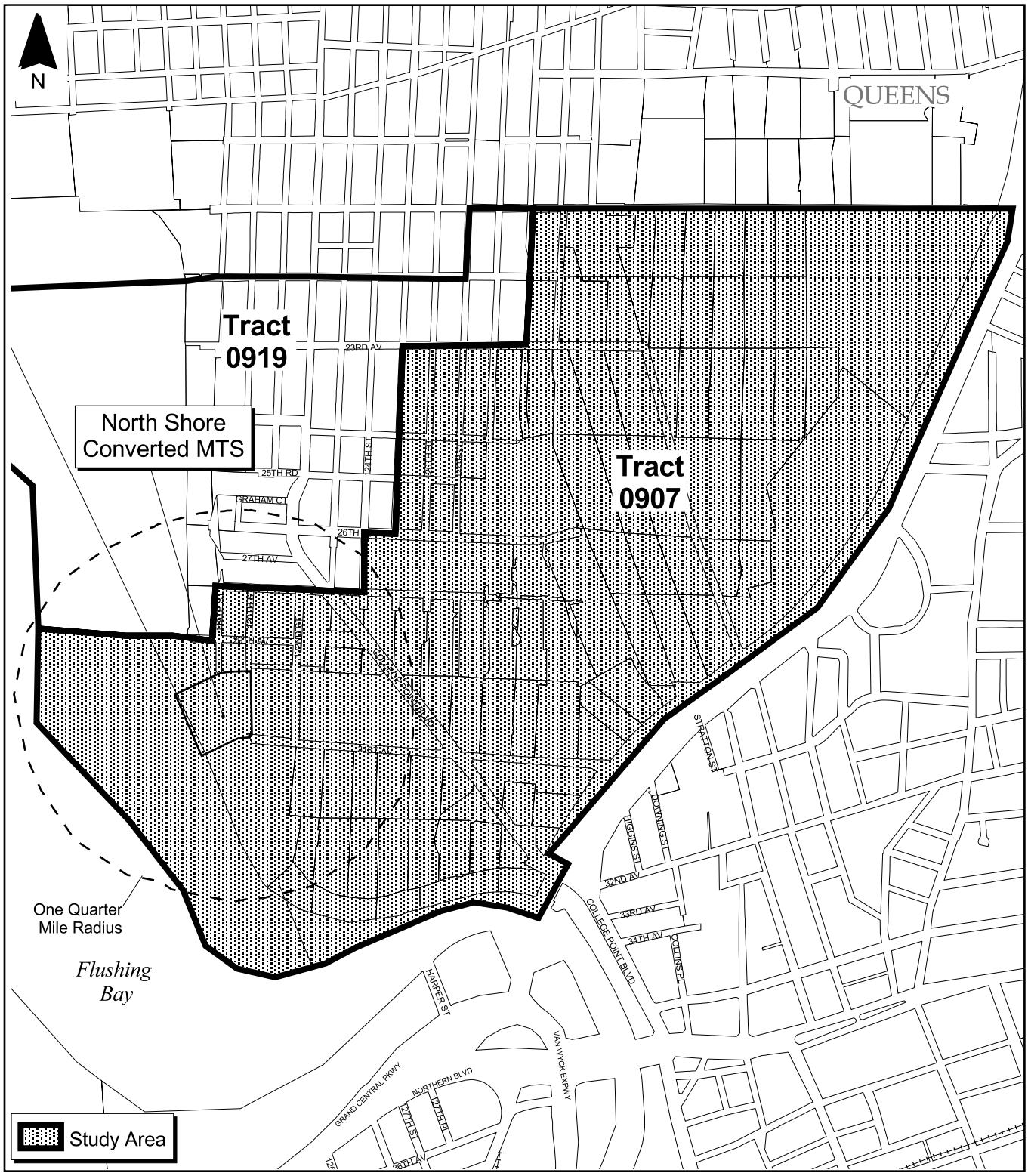
Detailed socioeconomic information referred to in the text but not presented in table form may be found in Appendix B.

11.3.1.2 Demographic Characteristics

11.3.1.2.1 Population

The total 2000 study area population was 1,243 persons (Table 11.3-1). In terms of total population growth from 1990 to 2000, the study area experienced a smaller percentage increase (7 percent) than did the Borough during the same period (14 percent), but its population grew almost as rapidly as the City's as a whole (9 percent).

The age-sex distribution was approximately the same as the population distribution of the Borough and the City. The study area contained approximately the same percentage of children and teenagers as the Borough or City; approximately 26 percent of the study area population was under the age of 20, compared to 25 percent for Queens 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 11.3-1 Census Tracts

North Shore Converted MTS

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Table 11.3-1
1990-2000 Population

	Study Area	Queens	City
2000	1,243	2,229,379	8,008,278
1990	1,157	1,951,598	7,322,564
Percent Change	+7.4%	+14.2%	+9.4%

Source: U.S. Census 1990, 2000

11.3.1.2.2 Racial and Ethnic Characteristics

The 2000 study area population had a similar proportion (25 percent) of people of Hispanic origin (all races) to that of Queens and the City (27 percent). Of the 75 percent not of Hispanic origin, 67 percent were White, 26 percent were Asian, and 1 percent was Black. In Manhattan and the City, Blacks represented approximately 25 and 33 percent of the non-Hispanic populations, respectively, while Whites represented 44 and 48 percent, respectively, and Asians represented 23 and 13 percent, respectively.

From 1990 to 2000, the number of study area residents of Hispanic origin increased by a greater rate (106 percent) than in the Borough (50 percent) and City (24 percent) during the same period. The Asian population increased dramatically in the study area, becoming 26 percent of its population in that 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.

11.3.1.2.3 Families and Households

There were 312 families in the study area in 2000 and the percentage of these families that had children under the age of 18 (about 31 percent) was considerably smaller than those families in Queens with children under 18 (46 percent) and in New York City (49 percent). Of the families in the three compared areas, there was a greater percentage of married couples in the study area (75 percent) than in Queens (69 percent) or New York City (62 percent), and 35 percent of these families had children, a smaller percentage than in Queens (49 percent) and the City (48 percent).

Twenty-two percent of the families in the study area were headed by a female householder, a similar percentage to that of the Borough (22 percent) but less than that of the City (30 percent). Nineteen 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 (45 percent) and the City (55 percent).

There were 390 households in the study area in 2000, with an average household size of 3.2 persons, greater than that of Queens (2.4 persons) and the City (2.6 persons).

From 1990 to 2000, the number of households in the study area experienced a slight increase of 1 percent, compared with a 9 percent increase in Queens and a 7 percent increase in New York City.

11.3.1.2.4 Employment

There was no great distinction in terms of labor force or worker class characteristics among the study area, the Borough and the City. Within the study area, 60 percent of persons age 16 and older participated in the labor force in 2000, compared to 58 percent in Queens and 58 percent in the City. The majority of these people in all three areas were employed as private wage and salary workers.

Eleven percent of employed persons 16 and over were government workers, compared to Queens and the City (both 16 percent). Moreover, 4 percent of the study area's working population was self-employed, about the same proportion as in Queens (5 percent) and the City (6 percent).

From 1990 to 2000, the number of employed persons within the study area and the City remained relatively stable; however, Queens reported a 2 percent growth in employment. Among employed persons, those engaged in government jobs decreased by 28 percent compared to a 5 percent decrease in the Borough and a 10 percent decrease in the City.

Current estimates indicate that about 58,287 employees worked in Queens Community District 7 in 2002, which is about 11.4 percent of the borough's total employment.[1]

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

11.3.1.2.5 Housing

The housing stock of the area is considerably newer than the Borough and City. About half of the housing units (49 percent) in the study area were constructed between 1960 and 1980 and the remainder were largely built before 1960, while the majority of housing units in both Queens (71 percent) and the City (67 percent) were built before 1960. As of 2000, there were 448 housing units in the study area with a vacancy rate of about 1 percent, lower than the Borough (4 percent) and the City (6 percent). In contrast to these two larger areas, the study area was occupied by a considerably higher percentage of owners than renters. Only 38 percent of the housing units were renter-occupied, in contrast to the Borough (55 percent) and the City (66 percent).

The 2000 median value of housing units in the study area ($235,800) was greater than in Queens ($212,600) and the City ($211,900). The study area's median monthly rent ($784) was slightly higher than in the Borough ($775), and the City ($705). The turnover in the study area (32 percent) from 1995 until 2000 was lower than that of the Borough (42 percent) and the City (43 percent).

From 1990 to 2000, a total of 31 housing units were added in the study area, representing a 7 percent increase, slightly less than the Borough (9 percent), and equivalent to the City (also 7 percent).

11.3.1.2.6 Education

Among people age 3 and older, there was a slightly lower rate of school enrollment (21 percent) than in either the Borough (27 percent) or the City (29 percent). Of those enrolled in school within the study area, in 2000, 71 percent were enrolled in elementary school or high school and 25 percent were enrolled in college or beyond. In Queens, 61 percent were enrolled in elementary school or high school, 28 percent in college or beyond, while 62 percent of the City's enrolled population was in elementary and 27 percent in college or beyond.

The number of persons enrolled in school from 1990 to 2000 within the study area remained relatively the same, in contrast to the 25 percent increase in Queens and the 18 percent increase in the City.

The study area had a lower educational attainment level compared to the Borough and the City. While half of the study area population age 25 and over had some college degree compared to Queens (47 percent) and the City (48 percent), a smaller percentage of study area residents graduated college (13 percent) compared to the Borough (24 percent) and the City (27 percent). Similarly, the study area had a slightly higher percentage of people with only high school diplomas (29 percent) compared to the Borough (28 percent) and the City (24 percent).

Despite the lower educational levels, from 1990 to 2000, the study area witnessed rising levels of educational attainment. The number of college graduates increased 48 percent, and the same trend was evident in the Borough and the City, which experienced increases of 32 and 29 percent, respectively.

11.3.1.2.7 Income and Poverty

In 2000, the median household income and median family income ($45,956) for the area were the same, and were only a little different than the reported numbers in Queens ($42,439 and $48,608, respectively), while greater than those of the City ($38,293 and $41,887, respectively). Forty-four percent of households in the study area had incomes of $50,000 and above, compared with 43 percent in the Borough and 40 percent in the City.

Within the study area, the percentage of families living below the poverty level (12 percent) was the same as that of Queens and less than that of the City (19 percent). The percentage of families living below the poverty level with children under the age of 18 (17 percent) was the same for Queens and considerably less than that of the City (26 percent).

A smaller percentage of persons in the study area under the age of 18 were living below the poverty level in 2000 (18 percent), than in Queens (19 percent) and the City (30 percent). The 2000 Census also reported that about 9 percent of persons 65 years or older were living below the poverty level in the study area, less than Queens (13 percent) and half of the proportion in the City (18 percent).

From 1990 to 2000, the total number of people living below the poverty level in the study area increased dramatically from 5 to 155 (an increase of 3,000 percent), while the Borough of Queens experienced an increase of 53 percent, more than twice that of the City (21 percent).

11.3.1.3 Economic Conditions

The study area contains a mix of offices, automotive repair shops, light industrial uses and some warehouse storage facilities. Industrial uses include a Consolidated Edison facility, the Ferrara Brothers Building Materials Company, Sunrise Oil, and other manufacturing uses. Nearby commercial enterprises are primarily associated with automobile parts and service.

A portion of the 578-acre College Point Industrial Park is located within ½ mile of the site. It currently houses active warehouses, light industry, bus facilities, storage/parking areas and Consolidated Edison facilities between College Point Boulevard and Linden Place.

11.3.2 Future No-Build Conditions

11.3.2.1 Demographic Characteristics

Regional projections indicate that the population of census tract 907 will remain about the same as current estimates.[2]

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

11.3.2.2 Economic Conditions

No significant changes to socioeconomic conditions within the study area are expected. Stable industrial and commercial uses are expected to continue to shape the character of the area around the site. The NYCEDC will continue to market sites within the College Point Industrial Park, although no significant new construction is expected to occur within the study area.

The near-term economic health of industrial areas such as the study area may be supported by recently established City programs available through the IDA. These programs, such as the Industrial Incentive Program and the Small Industry Incentive Program, provide businesses with tax incentives for capital renovation and expansion projects. However, no significant changes are anticipated through 2006.

11.3.3 Potential Impacts with the North Shore Converted MTS

The North Shore Converted MTS represents the reactivation of solid waste transfer operations with added containerization operations. No significant direct or indirect impacts are anticipated related to socioeconomic conditions.

11.3.3.1 Residential Impacts

No residential uses would be displaced or indirectly affected as a result of the North Shore Converted MTS, and land use and neighborhood character analyses predict no adverse impacts.

11.3.3.2 Direct Business and Institutional Impacts

The North Shore Converted MTS would not result in direct displacement of any businesses or institutional uses.

11.3.3.3 Indirect Business and Institutional Impacts

The businesses adjacent to and near the site are industrial, automotive, office, or storage-related uses that would not be significantly affected by the North Shore Converted MTS.

11.3.3.4 Employment Impacts

The North Shore Converted MTS is expected to generate a total of approximately 85 jobs, including supervisors, equipment operators, mechanics, laborers, and clerical personnel. In addition to the direct positive employment impacts, the new workers would generate a minor amount of indirect economic benefits through local spending.

11.4 Community Facilities

11.4.1 Existing Conditions

11.4.1.1 Definition of the Study Area

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 from the site.

11.4.1.2 Summary of Community Facilities and Services

Consistent with the industrial nature of the primary and secondary study areas, very few community facilities are present. Community facilities within and serving the area are listed in Table 11.4-1 and locations are shown on Figure 11.4-1.

11.4.2 Future No-Build Conditions

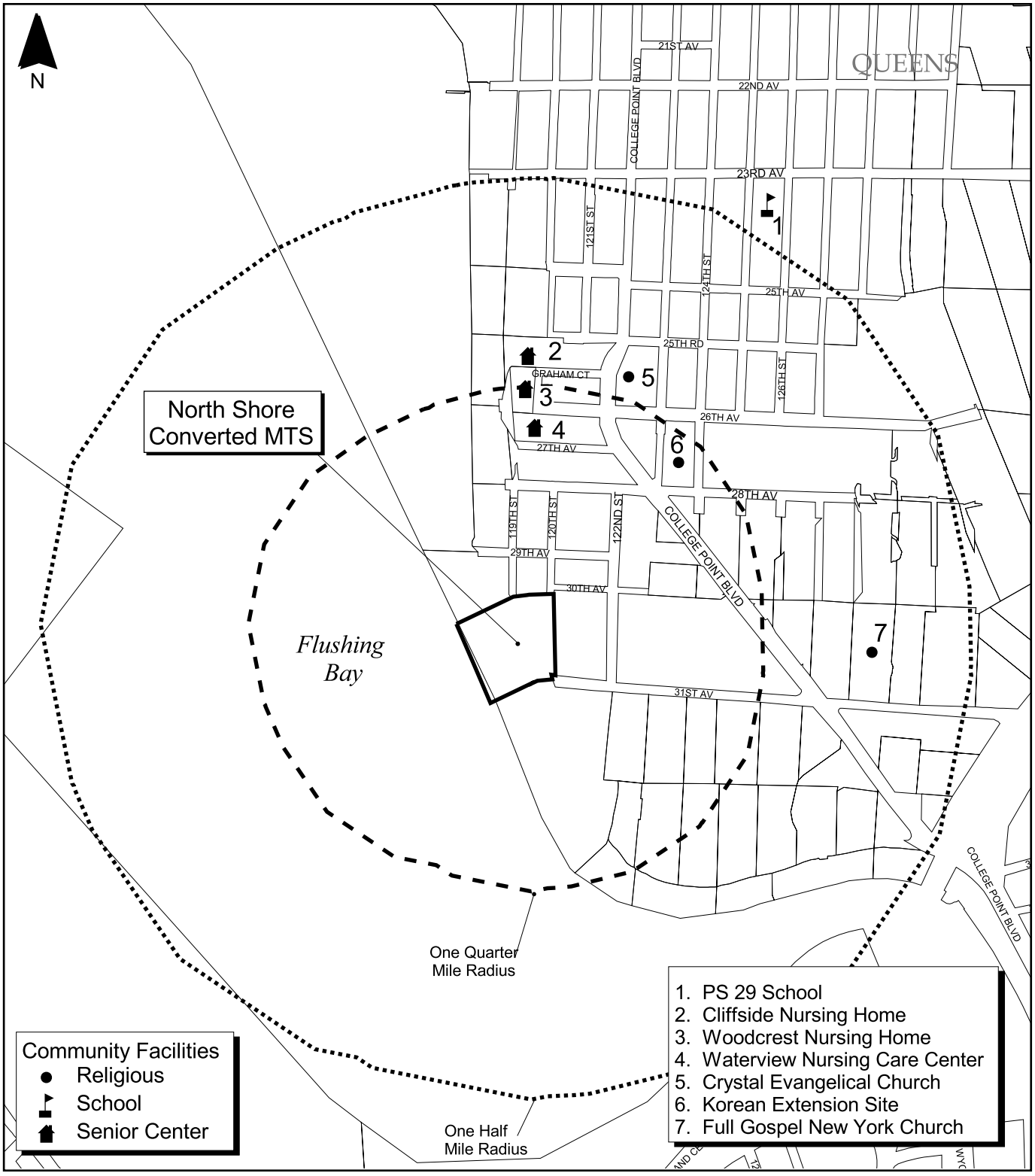
There are no known changes planned for the community facilities and services within the primary and secondary study areas by the Future No-Build year. Therefore, anticipated Future No-Build Conditions are expected to be fundamentally the same as Existing Conditions regarding availability of facilities and services and their capacity or adequacy of delivery.

11.4.3 Potential Impacts with the North Shore Converted MTS

The North Shore Converted MTS would not create any significant new demand on services and community facilities. No significant adverse impacts to service delivery are expected. The New York City Fire Department states that it would have no problem supporting the North Shore Converted MTS (Appendix A).

Table 11.4-1
Community Facilities and Services

Name	Address
Within the Primary Study Area	
Senior Centers	
Waterview Nursing Care Center	119-15 27th Avenue
Woodcrest Nursing Home	119-09 26th Avenue
Religious and Cultural Institutions	
Korean Extension Site	2625 123rd Street
Within the Secondary Study Area	
Senior Centers	
Cliffside Nursing Home	119-19 Graham Court
Religious and Cultural Institutions	
Crystal Evangelical Church	2567 College Point Boulevard
Full Gospel New York Church	130-30 31st Avenue
Outside the Secondary Study Area	
Hospitals	
Booth Memorial Medical Center	56-45 Main Street
Flushing Hospital Medical Center	45th Avenue and Parsons Boulevard
Flushing Hospital – North Division	35-06 Parsons Boulevard
Police	
109th Precinct	37-05 Union Street
Fire	
1st Engine Company – Engine Company 297 and 1st Ladder Company – Ladder Company 130	119-11 14th Road
2nd Engine Company – Engine Company 295 and 2nd Ladder Company – Ladder Company 144	12-49 149th Street
Schools	
PS 29	125-10 23rd Avenue



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.

Figure 11.4-1 Community Facilities and Services

North Shore Converted MTS

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11.5 Open Space and Parklands

11.5.1 Existing Conditions

11.5.1.1 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.

11.5.1.2 Summary of Open Space and Parklands in the Study Area

A small portion of Flushing Meadows Corona Park, a large regional open space resource is located within the study area (Table 11.5-1 and Figure 11.5-1.)

Table 11.5-1
Public Parks and Open Spaces

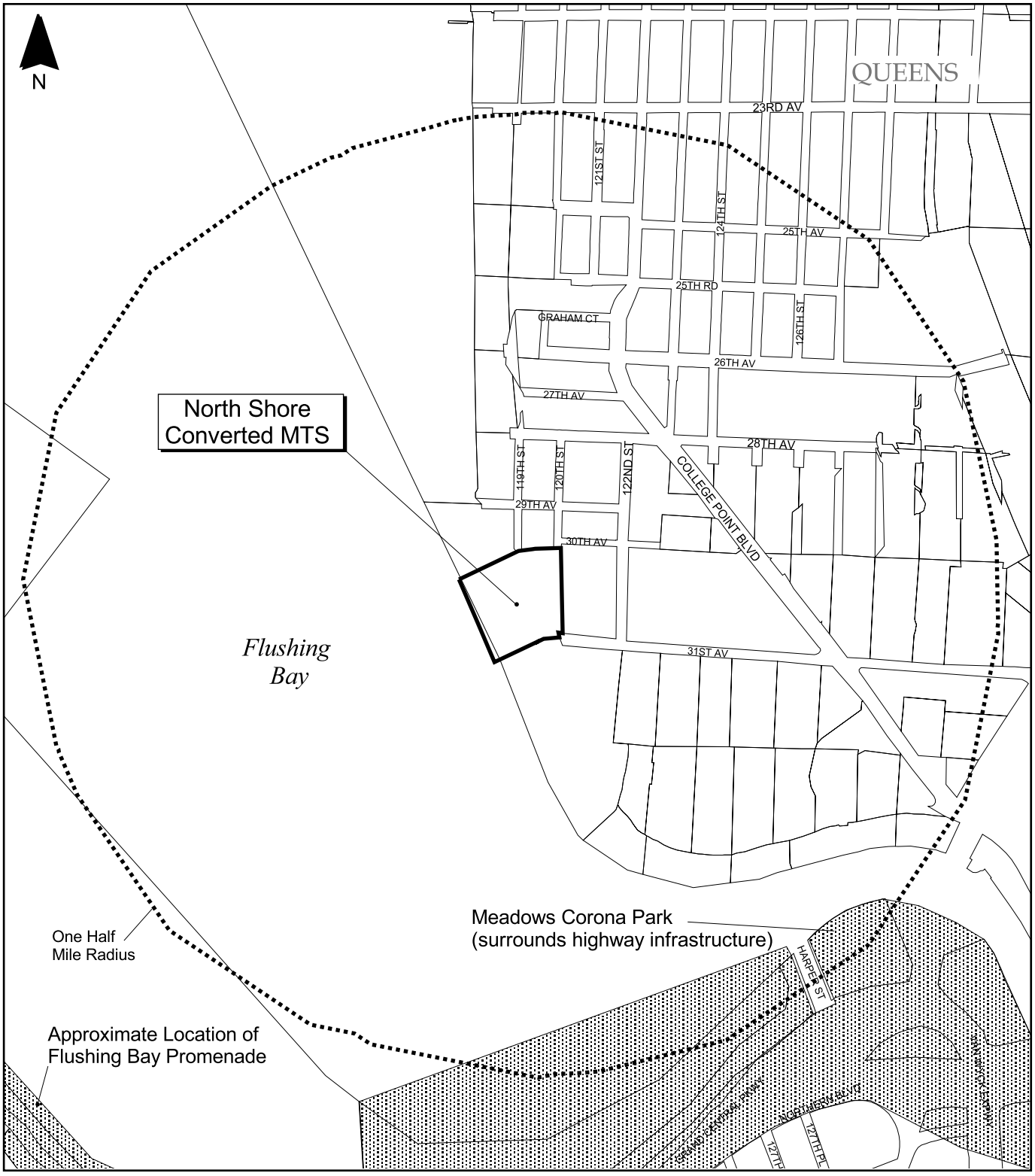
Name	Address	Acreage
Flushing Meadows Corona Park	Flushing Meadows Corona Park, north of Grand Central Parkway	1,258

11.5.2 Future No-Build Conditions

The various park improvements planned for Flushing Meadows Corona Park will be located outside the study area. The improvements planned or under construction include a pool and ice skating facilities, statue, playground, and three soccer fields. The only portion of the park that would likely afford views of the site is the Flushing Bay Promenade, which is along the Southern shore of Flushing Bay.

11.5.3 Potential Impacts with the North Shore Converted MTS

The North Shore Converted MTS would have no effect on any open space resources within the study area. It would neither physically change or eliminate any open space or reduce its utilization or aesthetic value, nor introduce a substantial new user population that would create or exacerbate over-utilization of open space resources. In particular, the North Shore Converted MTS would not affect views from the Flushing Bay Promenade because its appearance and placement would be similar to those of the existing MTS.



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

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Figure 11.5-1 Open Space/Parkland

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11.6 Cultural Resources

11.6.1 Existing Conditions

11.6.1.1 Definition of the Study Area

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

11.6.1.2 Development History of the Area

Flushing Bay and its creek form the western boundary of College Point, which had practically been an island until much of the marshland was filled in the 19th century. The College Point neighborhood was established in 1854 by Conrad Poppenhausen, owner of a hard rubber factory, to accommodate his workers. Streets, houses, businesses and schools were developed under Poppenhausen's guidance. The area grew rapidly in the 1880s and 1890s, attracting a largely German population. Breweries, silk mills and paint works were established. Beer halls and amusement parks, especially Point View Island, made the area popular for outings, steamboat excursions and political clubs. The resorts declined during the Prohibition era and were replaced eventually by aircraft and aviation parts factories built by Sikorsky Aircraft, the LWF Company and the EDO Corporation to support the nearby LaGuardia Airport. LaGuardia Airport, located on the south side of Flushing Bay, opened in 1939 as the first viable commercial airport serving New York City.

11.6.1.3 Cultural Resources on the Site

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

11.6.1.4 Cultural Resources within the Study Area

There are no state, national, or local historic districts or individually designated properties within the study area.

11.6.2 Future No-Build Conditions

There are no elements of potential historic significance slated for review. Because of the nature of architectural and archaeological resources, and the fact that there is no reason to anticipate the designation of such resources in this area in the near future, anticipated Future No-Build Conditions are assumed to be the same as Existing Conditions.

11.6.3 Potential Impacts with the North Shore Converted MTS

The North Shore Converted MTS would have no effect on any known cultural resources. Based upon its review, SHPO has stated that the North Shore Converted MTS would have no impact upon cultural resources in, or be eligible for inclusion in, the State and National Registers of Historic Places. The LPC has stated that the site contains no architectural or archeological significance (see Appendix A).

11.7 Urban Design and Visual Quality

11.7.1 Existing Conditions

11.7.1.1 Definition of the Study Area

The urban design and visual quality study area is the same as the neighborhood character study area (Figure 11.8-1). The site has been developed in a manner consistent with adjacent properties and the overall study area. It is a non-sensitive industrial area in terms of urban design and visual quality assessment. There are no sensitive view corridors, publicly accessible open areas or points of waterfront access that might be affected by development of the North Shore Converted MTS.

11.7.1.2 Description of the Site

Much of the space on the site and in the surrounding area is devoted to parking for employees and for storage of trucks and other vehicles associated with the existing uses (Figure 11.7-1). A curved ramp extending from 31st Street leads to the existing MTS (Figure 11.7-2). The design of the existing MTS is typical of similar facilities with a height of approximately 50 feet and a shell constructed of pre-fabricated steel. There are lights mounted on the exterior walls of the facility and light poles throughout the site.

In addition to the existing MTS building, there is the foundation of a former salt shed within which salt is still stored in the northern portion of the site that still contains salt piles. The base walls are constructed of unpainted, prefabricated concrete panels.

The shoreline near the existing MTS is overgrown with scrub and grasses and a few trees next to the access ramp. Otherwise, the site is entirely paved and has no vegetative landscaping.

11.7.1.3 Urban Design and Visual Quality of the Study Area

The area surrounding the site is characterized by mid- to late-20th century brick and pre-fabricated concrete or steel industrial buildings, which generally do not exceed two stories in height and are generally not built to the lot lines. The block forms, large lots, and street patterns

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Figure 11.7-1 : View of MTS from 31st Avenue.

Figure 11.7-2 : View from the site at 31st Avenue, with salt piles and parking area visible over the ramp.

Figure 11.7-1 and 11.7-2
Urban Design and Visual Quality
North Shore Converted MTS

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are suited to truck circulation with certain streets fully dedicated to truck use. Alteration of fairly large lots to suit industry needs has kept the development pattern of the area suitable for manufacturing.

Although there are some properties within the area that are undeveloped, all property appears to be utilized. Unbuilt areas, for example, tend to serve as parking areas for trucks and equipment associated with the industrial uses. There is no recreational open space. There are no undisturbed natural features in the area and the lack of landscaping reflects the purely functionalist fashion in which the area has developed.

DSNY's Queens District 7 Garage, which contains administrative offices, is adjacent to the eastern side of the site. The southern portion of the building, the administrative section, is two stories tall and the remainder of the building, extending north and facing the shore, is one story tall and has eight garage bays. A one-story portion of the building with five garage bays extends east from the administrative section and faces south. The building is unpainted and is faced in textured, pre-fabricated concrete, and blocks views of the existing MTS from 31st Avenue, approaching the site from the east. A view corridor exists from the Consolidated Edison building on 31st Avenue and 125th Street to the site, but since it is in a purely industrial area, it is not considered sensitive (Figure 11.7-3).

Flushing Bay developed as a working waterfront, but non-water-dependent industries are inland around the site. The Consolidated Edison building at 125th Street and 31st Avenue (east of the site) is ten stories tall and has exterior walls that are mostly glass. Various one-story, mid-20th century manufacturing and garage-type buildings are visible to the north of the site. Beyond these buildings are semi-detached, two-story white clapboard houses with chimneys in a repeating facade pattern.

Ferrara Brothers Building Materials Company has offices and materials storage and loading facilities on the property adjacent to the southern edge of the site (Figure 11.7-4). The office building on 31st Avenue is a two-story building faced in brick and dark steel siding. The areas used for storing and loading building materials, such as sand and mixes, are behind (south of) the offices. The loading facilities are painted orange, like the trucks used in the operation, and are clearly industrial in nature.

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Figure 11.7-3 : View north from the site at 31st Avenue.

Figure 11.7-4 : Ferrara Brothers Building Materials Corporation viewed from 31st Avenue, facing south.

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11.7.2 Future No-Build Conditions

There are no plans for the site or surrounding environs; therefore, the anticipated Future No-Build Conditions are fundamentally the same as Existing Conditions. The site will remain DSNY property, the existing MTS will remain standing, and the DSNY salt pile storage and garage facility will continue to be utilized.

11.7.3 Potential Impacts with the North Shore Converted MTS

The North Shore Converted MTS would not significantly affect the urban design or visual quality of the site or study area. Because it would be constructed on a site that is already arranged to handle waste transfer operations, no impacts on urban design of the area would result. Likewise, the North Shore Converted MTS would be similar in appearance to the existing MTS. With it and the associated barges being set amid DSNY and other industrial uses, the North Shore Converted MTS would result in no impact to visual quality.

11.8 Neighborhood Character

11.8.1 Existing Conditions

11.8.1.1 Definition of the Study Area

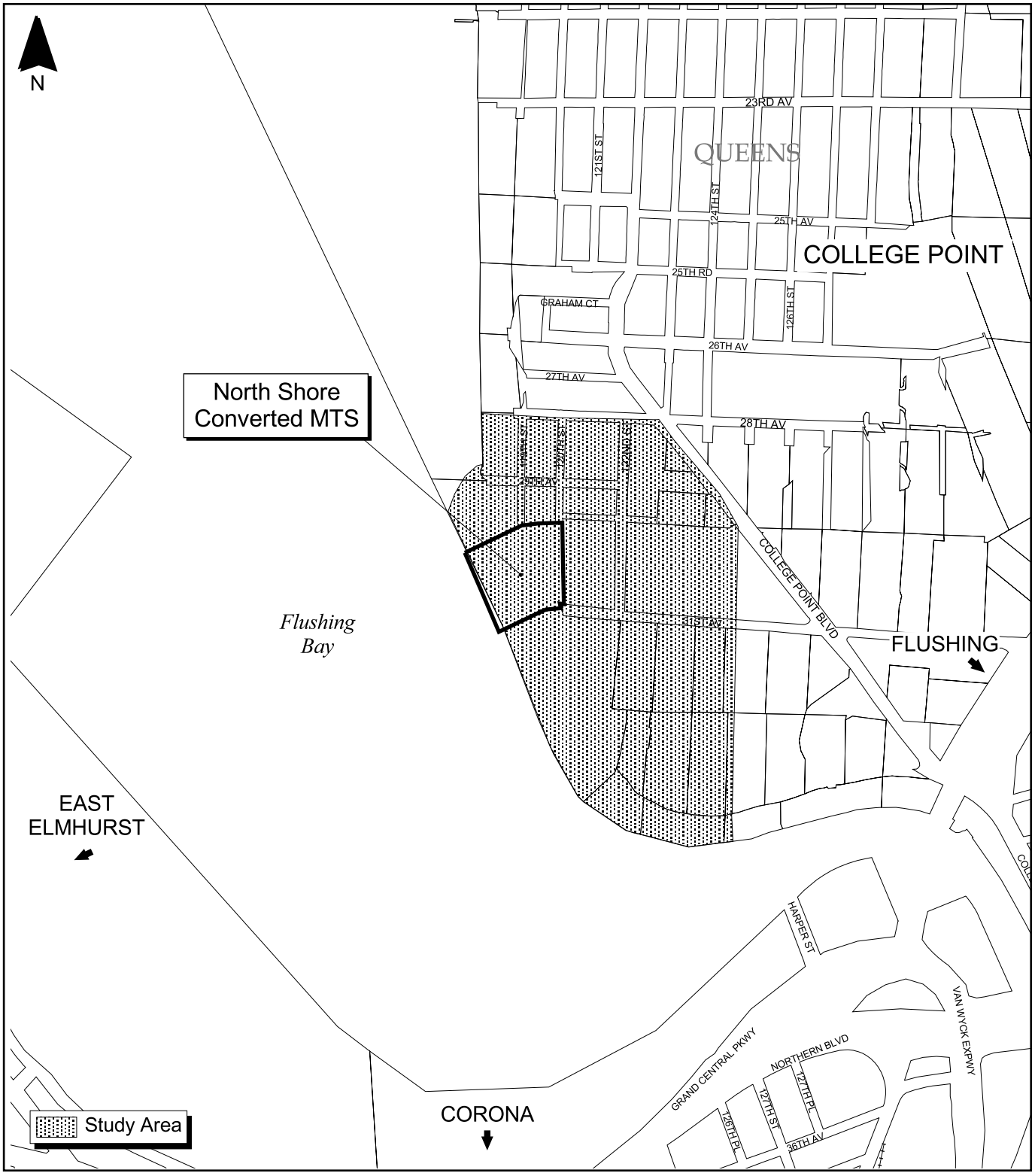
The site is located on the industrial portion of the Flushing Bay waterfront in the College Point neighborhood. The neighborhood character study area is defined by physical landscape elements that distinctly mark the edge of a specific neighborhood, visually insulate the site and study area, or physically obstruct pedestrian and vehicular access to it from outlying areas. In this case, the study area is defined by predominantly industrial activities and related visual quality.

The triangular study area is bounded by 28th Avenue to the north, College Point Boulevard to the northeast, and the continuation of 124th Street extending south to the shoreline (Figure 11.8-1), to the east.

11.8.1.2 Description of Neighborhood Character

Industrial uses, such as the existing MTS and concrete production facilities, characterize most of the land use pattern in the neighborhood study area, with warehouses and vacant lots and vacant buildings in the northern portion. There is, however, a distinctly residential area north of 29th Avenue between 120th Street and the shore, which is a continuation of the residential development pattern that characterizes the area north of the study area. These residential uses are buffered from the site itself by small-lot manufacturing uses and automotive repair shops on the blocks north of and adjacent to the site, similar to the uses that line 120th Street. Located amid the industrial uses south of the Ferrara Brothers Building Materials Company is the former Metropolis nightclub, which is near the waterfront.

The site and the other industrial uses in the study area are destination points and there is limited through-access for automobiles. In fact, several mapped roads serve private industrial uses exclusively. There is through-access for automobiles and pedestrians between the residential northern portion of the study area and the site, but it appears that when it was in operation, the site had been accessed exclusively by DSNY employees in automobiles and collection trucks..



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

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Figure 11.8-1 Neighborhood Location

North Shore Converted MTS

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The residential character of the northern portion of the study area is most similar to the neighborhood north of the study area, both in type of land use and in visual quality. These two residential blocks are divided into small lots with trees and residential landscapes. They are generally well maintained and are not congruent with the overall industrial character of the rest of the study area.

The visual quality in the remainder of the study area is generally not aesthetically pleasing, but it is consistent with the industrial nature of the area. There are no community facilities or public open spaces within the neighborhood study area. Additionally, while the houses and industrial uses along the shore have waterfront access, there is no public waterfront access in the study area and there are no views that would be considered visually sensitive. While the residences north of the site and the entrance to the offices of the Ferrara Brothers property south of the site are landscaped, there are no particularly sensitive elements of overall landscape design within the study area.

11.8.2 Future No-Build Conditions

There are no known plans for development of the site or the study area that would potentially lead to changes in neighborhood character. The Future No-Build Conditions are, therefore, expected to be the same as Existing Conditions.

11.8.3 Potential Impacts with the North Shore Converted MTS

No change to the industrial neighborhood character would be expected with the reactivation of the site to handle waste transfer activities. The fairly isolated neighborhood, characterized by industrial uses, including the DSNY garage (and related activities) that would continue under Future No-Build Conditions, would not be noticeably affected by the construction and operation of the North Shore Converted MTS.

11.9 Traffic and Transportation

11.9.1 Introduction

The North Shore 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.)

11.9-2 Existing Conditions

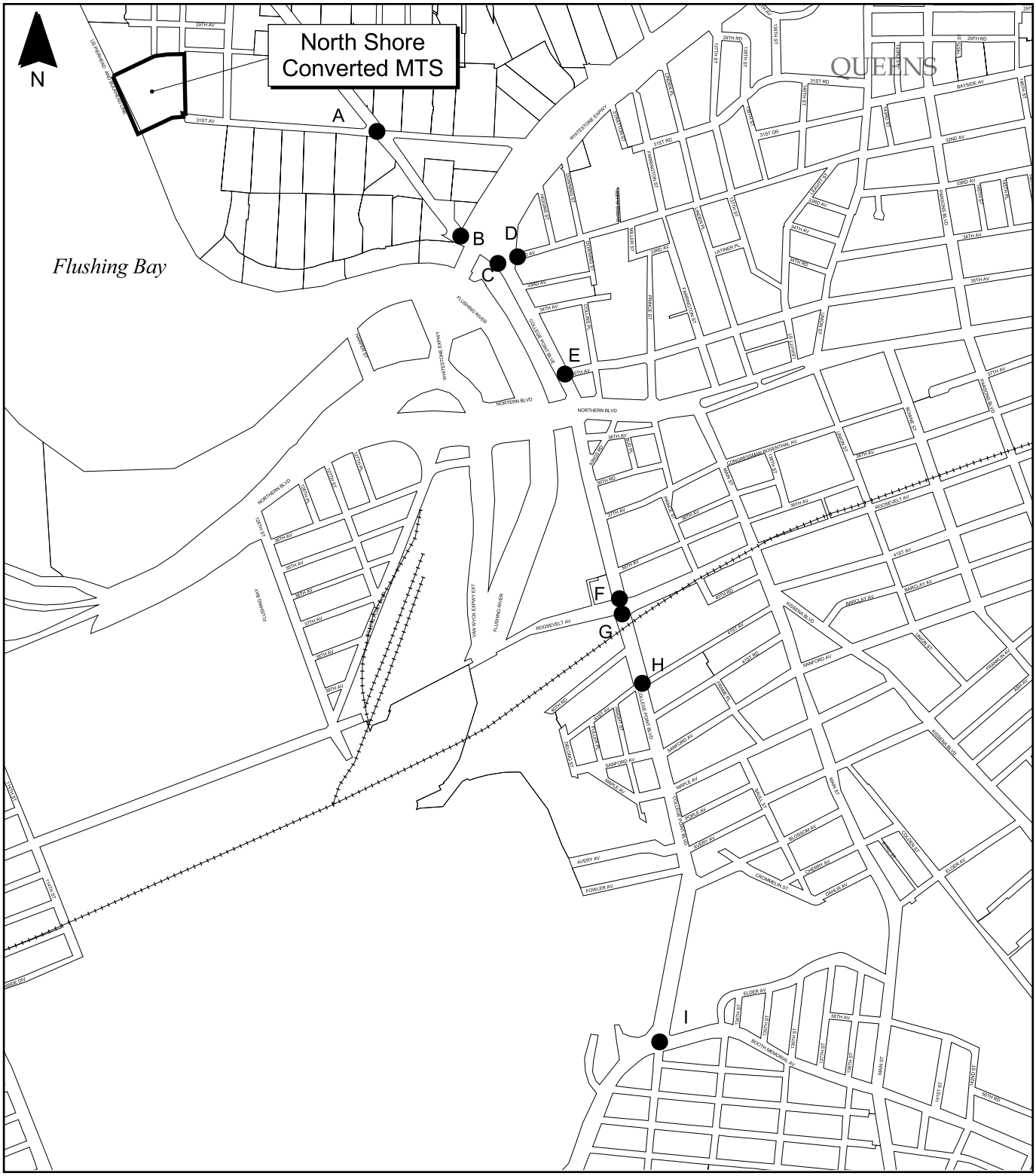
11.9.2.1 Definition of Study Area

The traffic analysis study area is broad, covering portions of the College Point, Flushing, and Queensboro Hill sections of Queens. It includes the corridor along College Point Boulevard that is bounded by 31st Avenue on the north and Booth Memorial Avenue on the south. Commercial, industrial, and residential areas are included in the traffic study area. There are no CEQR defined areas of concern located within the study area. Figure 11.9-1 shows the locations of the intersections selected for analysis (locations A through I). Intersections analyzed were selected using the procedures defined in Section 3.10.2.

The analysis of collection vehicle routing to the site included highway access points more than ½-mile away in conjunction with local truck routes. Northbound collection vehicles would approach the site on College Point Boulevard and turn onto 31st Avenue. Westbound collection vehicles would take 32nd Avenue to College Point Boulevard and then proceed to 31st Avenue.

11.9.2.2 Surface Network

Two major highways service the traffic analysis study area—the predominantly east-west Long Island Expressway and the predominantly north-south Van Wick Expressway. College Point Boulevard and the Whitestone Expressway Service Roads are local truck routes that provide access from the south and east of the site. A map showing all major truck routes and local truck routes in Queens is provided in Section 3.10.2.1 (Figure 3.10-5).



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

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Figure 11.9-1 Traffic Analysis Study Area
North Shore Converted MTS

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11.9.2.3 Existing Traffic Operations

The nine 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 North Shore Converted MTS. All of them are on major arterials and/ or collection vehicle routes. Diagrams of these intersections are included in Technical Backup submitted to NYCDOT.

- College Point Boulevard and 31st Avenue – Signalized Intersection (Figure 11.9-1 – location A);
- College Point Boulevard and Whitestone Expressway Service Road (Westbound) – Signalized Intersection (Figure 11.9-1 – location B);
- College Point Boulevard and 32nd Avenue – Signalized Intersection (Figure 11.9-1 – location C);
- Whitestone Expressway Service Road (Eastbound) and 32nd Avenue – Signalized Intersection (Figure 11.9-1 – location D)
- College Point Boulevard and 35th Avenue – Signalized Intersection (Figure 11.9-1 – location E);
- College Point Boulevard and Roosevelt Avenue (Westbound) – Signalized Intersection (Figure 11.9-1 – location F);
- College Point Boulevard and Roosevelt Avenue (Eastbound) – Signalized Intersection (Figure 11.9-1 – location G);
- College Point Boulevard and 41st Avenue – Signalized Intersection (Figure 11.9-1 – location H); and
- College Point Boulevard and Booth Memorial Avenue – Signalized Intersection (Figure 11.9-1 – location I).

31st Avenue, 32nd Avenue, 35th Avenue, and 41st Avenue generally serve as collector roads for local traffic and provide access for local and industrial traffic to and from the arterial of College Point Boulevard. College Point Boulevard provides access to and from the Long Island Expressway. The Whitestone Expressway Service Roads are arterials that provided access to and from the Whitestone Expressway. Roosevelt Avenue and Booth Memorial Avenue are east-west arterials that cross College Point Boulevard.

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 November 14, 2002 and November 21, 2002, while ATR counts were conducted between November 18, 2002 and November 24, 2002. Figures 11.9-2, 11.9-3, and 11.9-4 depict the existing traffic volumes for AM, Facility, and PM peaks at the intersections analyzed. The AM peak generally occurred between 7:30 a.m. and 8:30 a.m., the Facility peak between 10:00 a.m. and 11:00 a.m., and the PM peak between 4:30 p.m. and 5:30 p.m. Table 1.9-1 presents the v/c ratio, delay, and LOS for the nine intersections during the AM, Facility, and PM peaks.

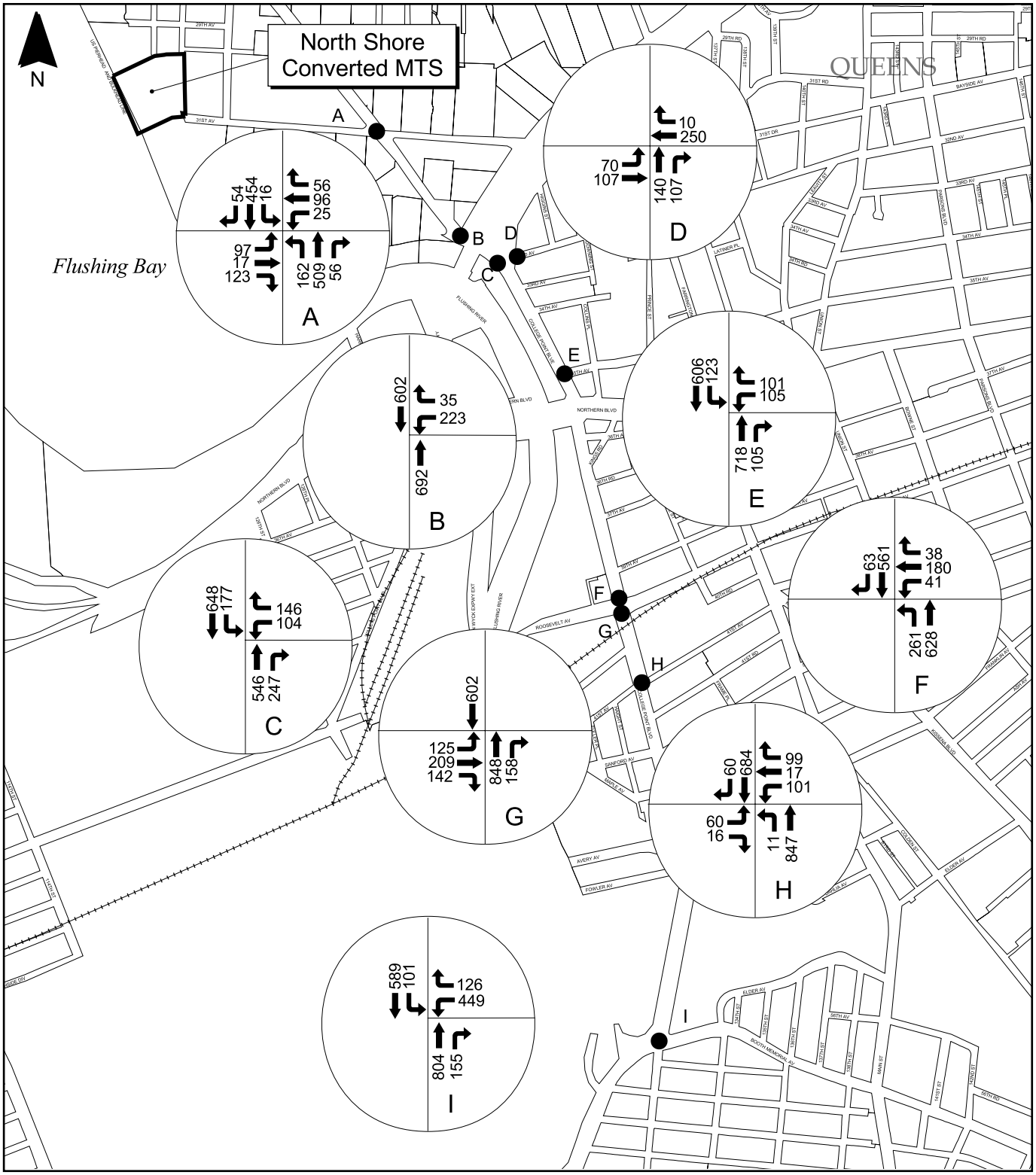
Existing truck traffic through most of the intersections was relatively high. The percentages of trucks increases steadily during the morning hours, remains between 20 percent and 35 percent during mid-day hours, then decreases to 10 percent or lower during the PM peak hours.

11.9.2.3.1 LOS at Signalized Intersections

Table 11.9-1 shows that the existing signalized intersections generally operated at an overall LOS of B or C with the following exceptions. The lane group with the least favorable LOS was the southbound defacto left movement at the intersection of College Point Boulevard and Booth Memorial Avenue. During the PM peak hour, this movement operated at LOS E with a delay of 61.9 seconds. Several other lane groups at various intersections operated at a LOS of D during various peak hours.

11.9.2.3.2 LOS at Unsignalized Intersections

No unsignalized intersections were analyzed.



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

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Figure 11.9-2 Existing Traffic Volumes - AM Peak

North Shore Converted MTS

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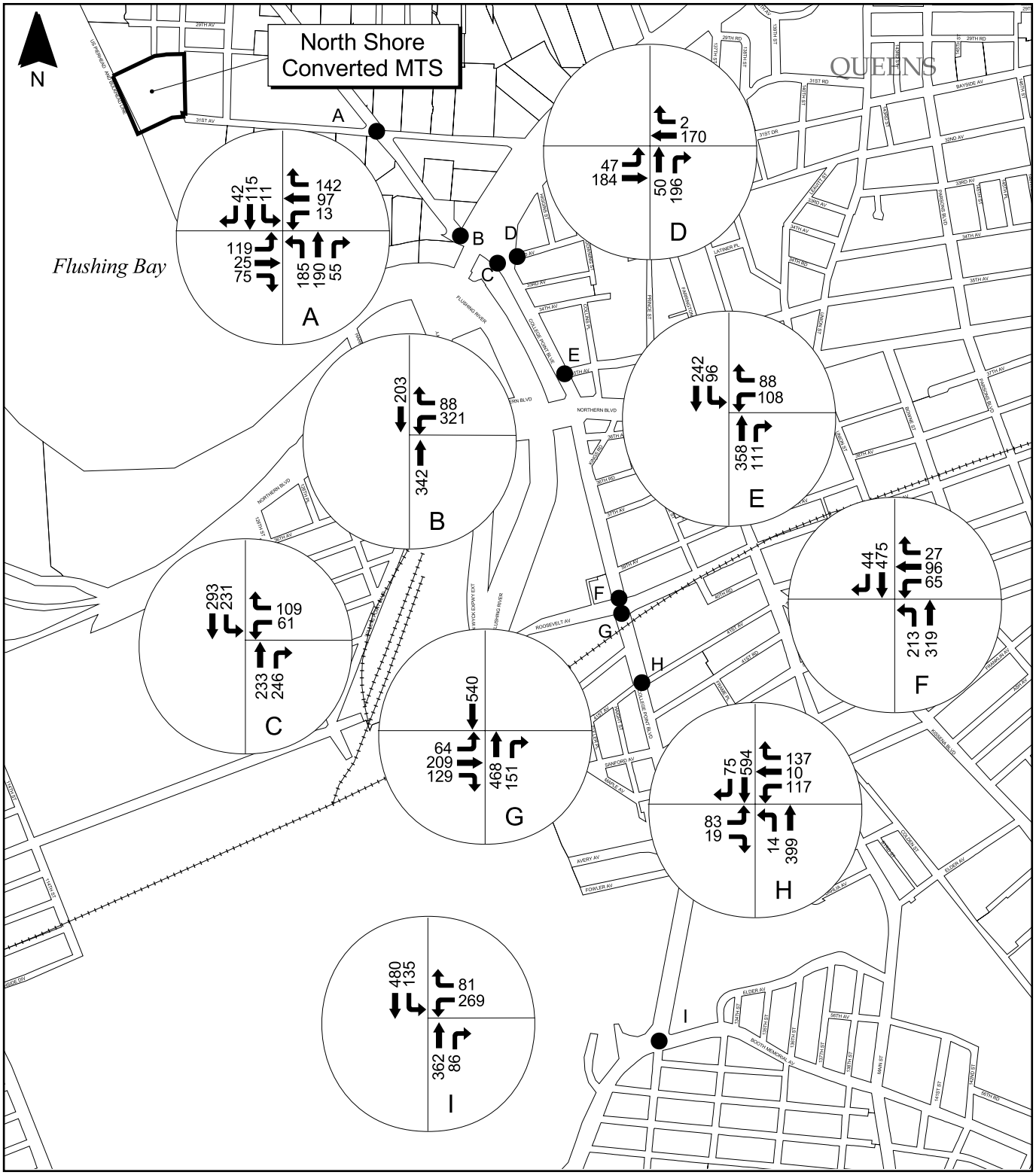

Site delineations are approximate.
Base Map Source: New York City Department of City Planning

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Figure 11.9-3 Existing Traffic Volumes
Facility Peak
North Shore Converted MTS

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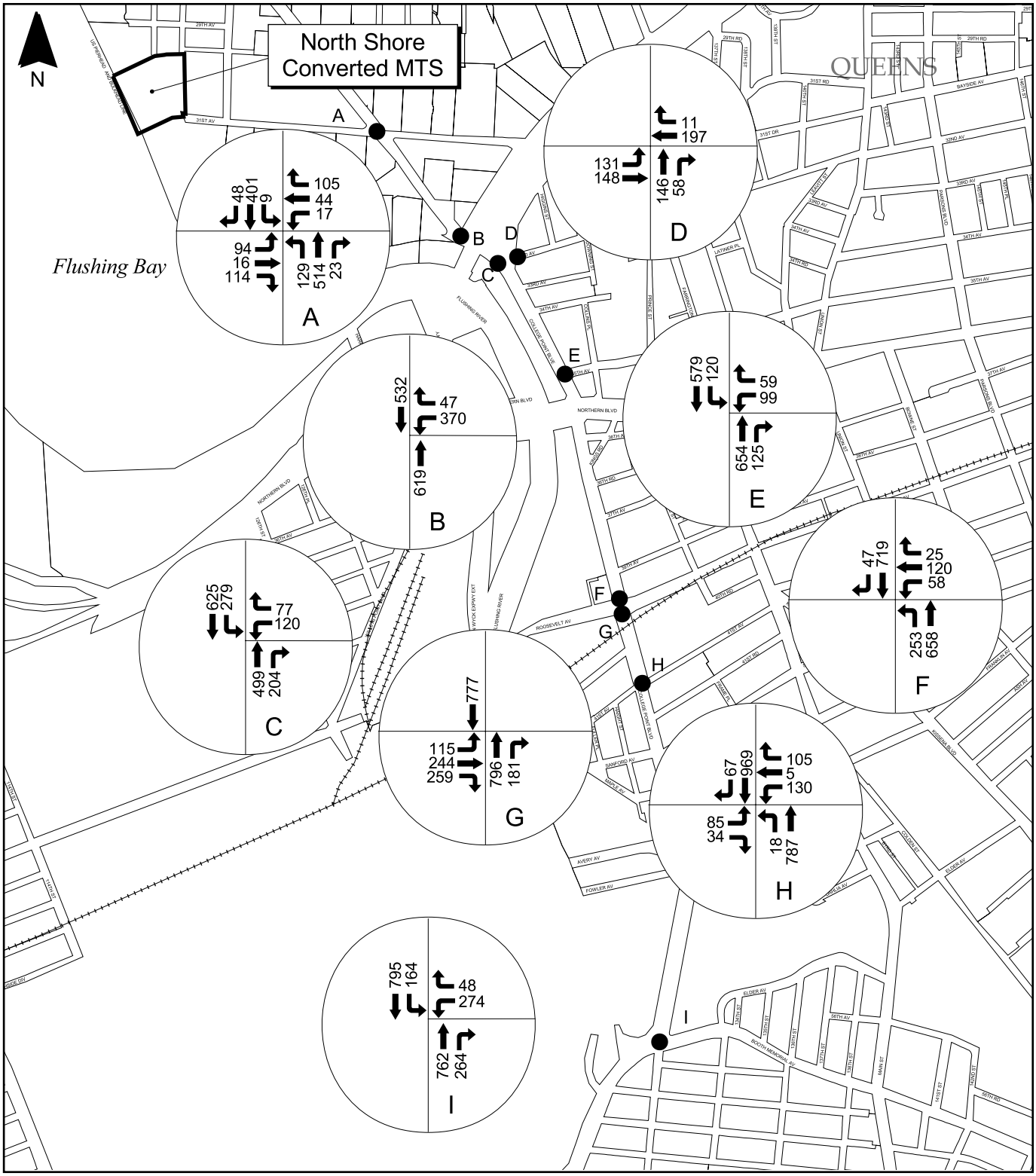

Site delineations are approximate.
Base Map Source: New York City Department of City Planning

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Figure 11.9-4 Existing Traffic Volumes - PM Peak

North Shore Converted MTS

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Table 11.9-1
HCM Analysis[(1)]— Existing Conditions
North Shore Converted MTS

Intersection & Lane Group	AM Peak Hour (7:30 a.m. – 8:30 a.m.)			Facility Peak Hour (10:00 a.m. – 11:00 a.m.)			PM Peak Hour (4:30 p.m. – 5:30 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point & 31st Avenue (signalized)									
EB LTR	0.52	31.6	C	-	-	-	0.43	29.4	C
EB DFL	-	-	-	0.63	41.2	D	-	-	-
EB TR	-	-	-	0.29	27.9	C	-	-	-
WB LTR	0.37	28.2	C	0.44	29.3	C	0.29	27.1	C
NB L	0.46	12.2	B	0.39	10.3	B	0.31	9.8	A
NB TR	0.30	8.8	A	0.16	7.8	A	0.27	8.5	A
SB L	0.06	13.4	B	0.03	12.9	B	0.04	13.1	B
SB TR	0.32	16.0	B	0.14	13.7	B	0.33	15.5	B
OVERALL		17. 2	B		20.0	C		16.2	B
College Point and Whitestone Expressway Service Road – North (signalized)									
WB L	0.46	18.4	B	0.59	20.9	C	0.67	22.9	C
WB LR	0.07	13.8	B	0.36	17.0	B	0.09	14.1	B
NB T	0.43	9.8	A	0.26	8.5	A	0.39	9.4	A
SB T	0.39	9.5	A	0.14	7.8	A	0.36	9.2	A
OVERALL		11.1	B		13.5	B		12.5	B
College Point and 32nd Avenue (signalized)									
WB LR	0.47	18.2	B	0.35	16.5	B	0.35	16.5	B
NB TR	0.85	28.5	C	0.62	20.5	C	0.74	22.8	C
SB L	0.41	18.5	B	0.48	15.9	B	0.60	22.4	C
SB T	0.44	9.3	A	0.22	7.5	A	0.44	9.2	A
OVERALL		19.5	B		15.8	B		17.1	B
Whitestone Expressway Service Road – South and 32nd Avenue (signalized)									
EB DFL	0.19	6.8	A	-	-	-	0.26	7.0	A
EB T	0.26	1.8	A	-	-	-	0.22	1.5	A
EB LT	-	-	-	0.20	1.1	A	-	-	-
WB TR	0.64	23.3	C	0.39	17.5	B	0.48	19.0	B
NB TR	0.57	20.9	C	0.53	20.3	C	0.40	17.9	B
OVERALL		17.1	B		12.5	B		12.9	B
College Point and 35th Avenue (signalized)									
WB LR	0.46	19.0	B	0.59	22.5	C	0.39	17.6	B
NB TR	0.57	11.5	B	0.39	9.6	A	0.50	10.6	B
SB LT	0.82	19.9	B	0.39	10.0 -	A	0.78	17.6	B
OVERALL		15.9	B		12.5	B		14.5	B
College Point and Roosevelt Avenue - Westbound (signalized)									
WB LTR	0.25	22.6	C	0.20	22.0	C	0.21	22.1	C
NB L	0.54	26.5	C	0.43	22.0	C	0.48	25.9	C
NB T	0.46	13.1	B	0.25	11.0	B	0.41	12.5	B
SB TR	0.86	43.8	D	0.76	38.5	D	0.95	54.5	D
OVERALL		27.0	C		26.1	C		32.6	C

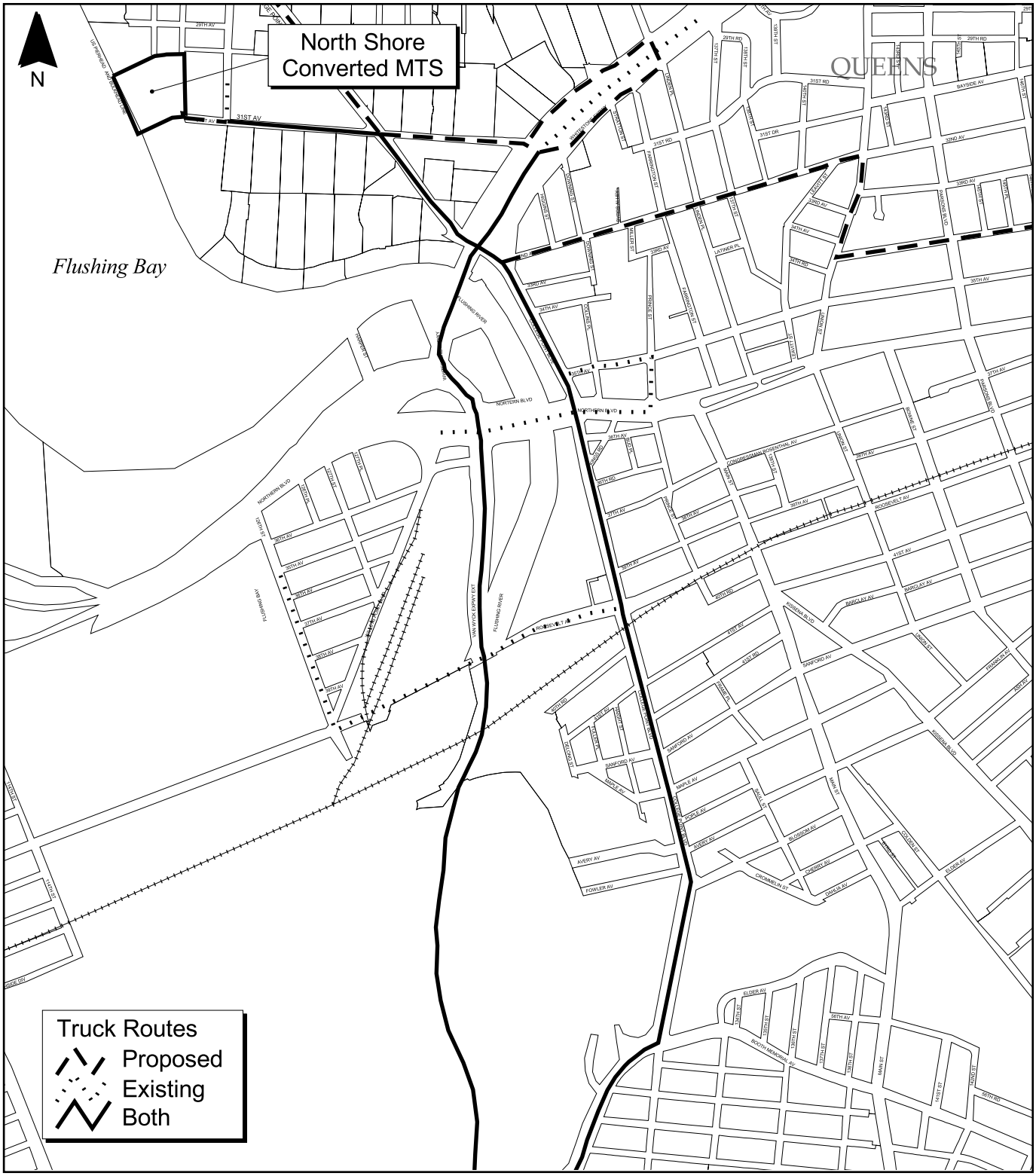
Table 11.9-1 (continued)
HCM Analysis[(1)]— Existing Conditions
North Shore Converted MTS

Intersection & Lane Group	AM Peak Hour (7:30 a.m. – 8:30 a.m.)			Facility Peak Hour (10:00 a.m. – 11:00 a.m.)			PM Peak Hour (4:30 p.m. – 5:30 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point and Roosevelt Avenue - Eastbound (signalized)									
EB LTR	0.37	16.0	B	0.32	15.5	B	0.49	17.6	B
NB TR	0.60	22.2	C	0.40	19.4	B	0.55	21.3	C
SB T	0.52	21.6	C	0.48	20.9	C	0.63	23.4	C
OVERALL		20.5	C		18.8	B		20.9	C
College Point and 41st Avenue (signalized)									
EB LR	0.37	28.1	C	0.60	37.2	D	0.51	32.1	C
WB LTR	0.66	35.3	D	0.85	49.6	D	0.69	36.3	D
NB L	0.07	8.8	A	0.17	9.9	A	0.16	10.5	B
NB T	0.53	12.7	B	0.30	10.2	B	0.47	11.9	B
SB TR	0.41	11.1	B	0.40	11.0	B	0.52	12.3	B
OVERALL		15.6	B		20.5	C		16.2	B
College Point and Booth Memorial Avenue (signalized)									
WB L	0.77	36.7	D	0.51	27.1	C	0.54	27.6	C
WB LR	0.42	25.3	C	0.29	23.1	C	0.22	22.2	C
NB TR	0.47	13.5	B	0.24	11.2	B	0.45	13.3	B
SB DFL	0.67	32.1	C	0.40	14.9	B	0.93	61.9	E
SB T	0.37	12.5	B	0.32	12.0	B	0.45	13.3	B
OVERALL		19.3	B		15.8	B		19.6	B

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

11.9.2.4 Existing DSNY-Related Traffic

Under Queens' interim export, Tully Environmental, a commercial vendor located close to the North Shore Converted MTS, accepts waste originating from CDs in Queens. Queens CDs delivering to Tully Environmental are QN7, QN12, and E-Z Pack loads from QN2, QN7, and QN14. Additionally, duel bin school trucks, basket trucks, SHBLK, street dirt, LC, and OCD loads from all Queens CDs are delivered to Tully Environmental. Existing DSNY -related traffic in the traffic study area is located on College Point Boulevard, 35th Street, and Roosevelt Avenue. The existing routes to the commercial vendors are presented in Figure 11.9-5.



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

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PB
HydroQual
EEA

Figure 11.9-5 Existing and Proposed Sanitation Truck Routes North Shore Converted MTS

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11.9.2.5 Public Transportation

Public transportation in the study area consists predominantly of bus trips. The Q48 runs east-west along Roosevelt Avenue; and the Q58 and Q65 run north-south along College Point Boulevard. Bus stops are located at some of the study area intersections analyzed, and scheduled stops occur at various times during the day.

11.9.2.6 Pedestrian Activity

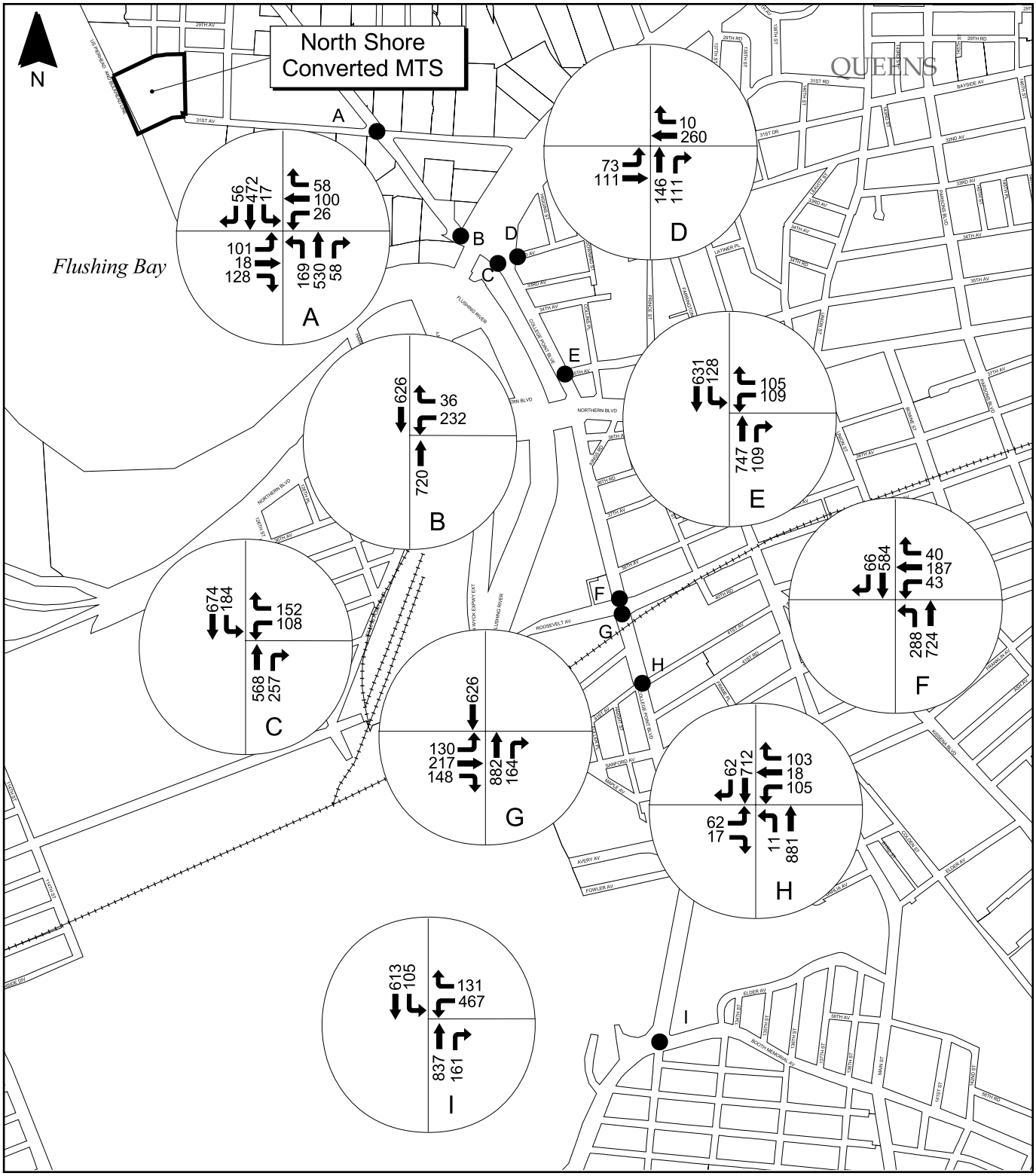
Light pedestrian activity occurs along College Point Boulevard in the center section of the study area where restaurants and commercial and residential areas produce and attract pedestrians throughout the day. During several field visits, pedestrian activity was minimal and it is not expected to affect the capacity analysis significantly.

11.9.3 Future No-Build Conditions

11.9.3.1 Traffic Conditions

Future No-Build traffic volumes were determined by applying a growth rate of 1% per year to existing traffic volumes in accordance with the 2001 CEQR Technical Manual. Additional traffic generated in the Future No-Build year (2006) generally amounted to less than 100 vehicles per intersection. There are no new developments planned in the study area that would affect Future No-Build traffic volumes in the study area.

Figures 11.9-6, 11.9-7 and 11.9-8 depict the Future No-Build traffic volumes for AM, Facility, and PM peaks at the intersections analyzed. Table 11.9-2 (Future No-Build Conditions) shows the Future No-Build v/c ratio, delay and LOS for the studied intersections. Overall, signalized intersections experienced relatively small increases in delay (less than 5 seconds) and are projected to remain at their existing condition LOS, with the following exceptions:



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

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Figure 11.9-6 Future No-Build Traffic Volumes
AM Peak
North Shore Converted MTS

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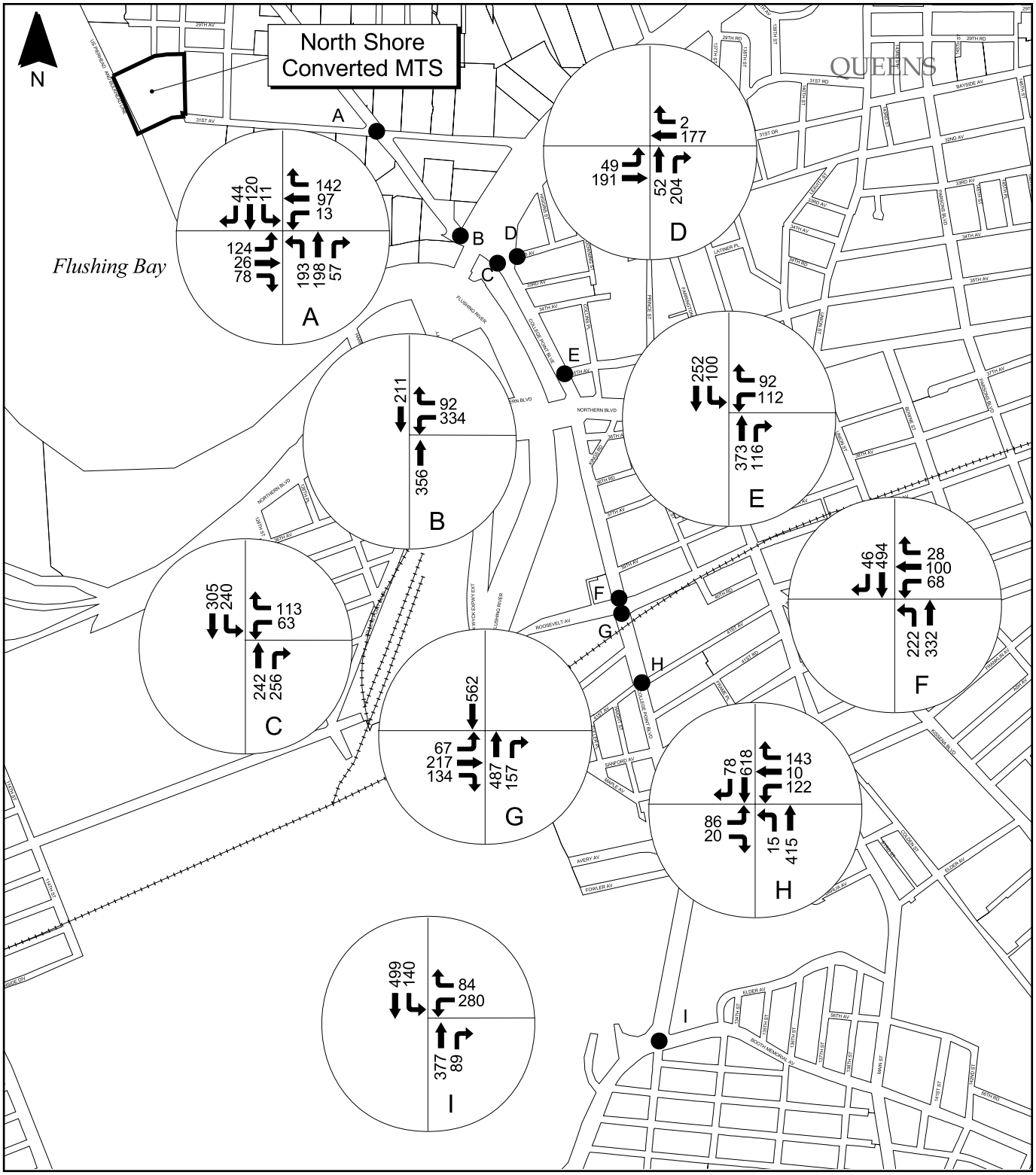

Site delineations are approximate.
Base Map Source: New York City Department of City Planning

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Figure 11.9-7 Future No-Build Traffic Volumes
Facility Peak
North Shore Converted MTS

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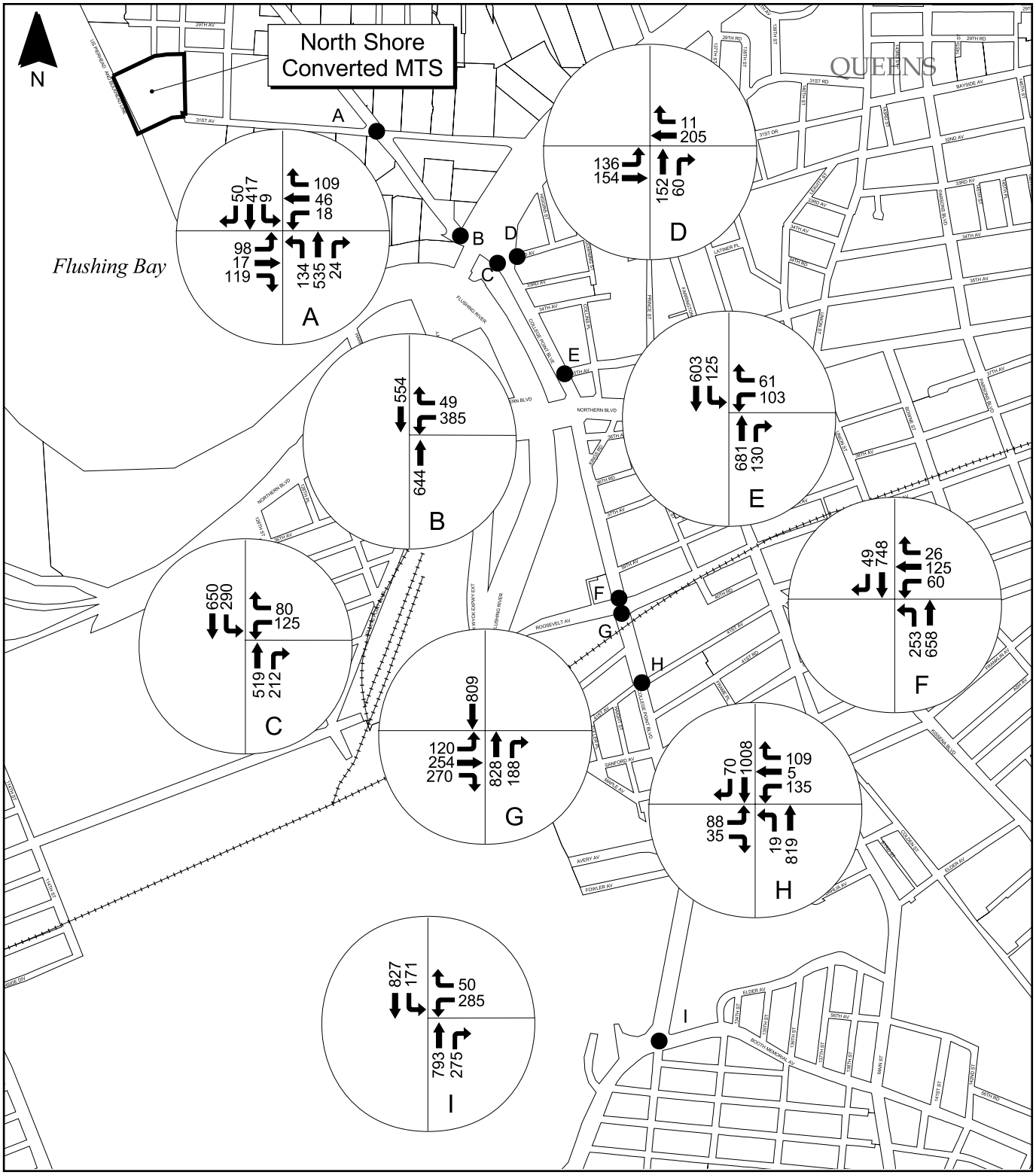

Site delineations are approximate.
Base Map Source: New York City Department of City Planning

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Figure 11.9-8 Future No-Build Traffic Volumes
PM Peak
North Shore Converted MTS

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Table 11.9-2
HCM Analysis[(1)]— Future No-Build Conditions
North Shore Converted MTS

Intersection & Lane Group	AM Peak Hour (7:30 a.m. – 8:30 a.m.)			Facility Peak Hour (10:00 a.m. – 11:00 a.m.)			PM Peak Hour (4:30 p.m. – 5:30 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point & 31st Avenue (signalized)									
EB LTR	0.55	32.2	C	-	-	-	0.45	29.8	C
EB DFL L	-	-	-	0.67	44.5	D	-	-	-
EB TR	-	-	-	0.31	28.1	C	-	-	-
WB LTR	0.38	28.4	C	0.47	29.7	C	0.30	27.3	C
NB L	0.49	12.9	B	0.41	10.6	B	0.33	10.1	B
NB TR	0.31	8.9	A	0.17	7.3	A	0.28	8.6	A
SB L	0.07	13.4	B	0.03	13.0	B	0.04	13.1	B
SB TR	0.38	16.2	B	0.15	13.8	B	0.34	15.7	B
OVERALL		17.4	B		20.6	C		16.4	B
College Point and Whitestone Expressway Service Road – North (signalized)									
WB L	0.48	18.8	B	0.61	21.6	C	0.69	23.8	C
WB LR	0.07	13.9	B	0.38	17.3	B	0.10	14.1	B
NB T	0.45	10.0+	B	0.27	8.6	A	0.40	9.5	A
SB T	0.41	9.6	A	0.15	7.8	A	0.38	9.3	A
OVERALL		11.3	B		13.8	B		12.8	B
College Point and 32nd Avenue (signalized)									
WB LR	0.49	18.5	B	0.36	16.6	B	0.37	16.7	B
NB TR	0.89	31.4	C	0.64	21.0	C	0.76	23.6	C
SB L	0.43	19.1	B	0.51	16.9	B	0.62	23.2	C
SB T	0.46	9.4	A	0.23	7.6	A	0.46	9.3	A
OVERALL		20.9	C		16.2	B		17.6	B
Whitestone Expressway Service Road – South and 32nd Avenue (signalized)									
EB Defl L	0.20	7.0	A	-	-	-	0.28	7.2	A
EB T	0.27	1.9	A	-	-	-	0.23	1.5	A
EB LT	-	-	-	0.21	1.1	A	-	-	-
WB TR	0.66	24.2	C	0.40	17.7	B	0.50	19.4	B
NB TR	0.59	21.4	C	0.55	20.9	C	0.42	18.0	B
OVERALL		17.6	B		12.8	B		13.1	B
College Point and 35th Avenue (signalized)									
WB LR	0.48	19.4	B	0.61	23.2	C	0.40	17.8	B
NB TR	0.60	11.9	B	0.40	9.8	A	0.52	10.8	B
SB LT	0.88	24.1	C	0.41	10.2	B	0.83	20.4	C
OVERALL		17.9	B		12.8	B		15.8	B
College Point and Roosevelt Avenue - Westbound (signalized)									
WB LTR	0.26	22.7	C	0.21	22.1	C	0.22	22.2	C
NB L	0.56	27.3	C	0.45	23.0	C	0.50	26.5	C
NB T	0.48	13.4	B	0.26	11.1	B	0.42	12.6	B
SB TR	0.90	47.2	D	0.80	40.0	D	0.99	62.7	E
OVERALL		28.4	C		26.9	C		36.1	D

Table 11.9-2 (continued)
HCM Analysis[(1)]— Future No-Build Conditions
North Shore Converted MTS

Intersection & Lane Group	AM Peak Hour (7:30 a.m. – 8:30 a.m.)			Facility Peak Hour (10:00 a.m. – 11:00 a.m.)			PM Peak Hour (4:30 p.m. – 5:30 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point and Roosevelt Avenue - Eastbound (signalized)									
EB LTR	0.39	16.2	B	0.33	15.6	B	0.51	17.9	B
NB TR	0.62	22.6	C	0.41	19.6	B	0.57	21.7	C
SB T	0.55	21.9	C	0.50	21.7	C	0.65	24.0	C
OVERALL		20.9	C		19.1	B		21.3	C
College Point and 41st Avenue (signalized)									
EB LR	0.39	28.8	C	0.63	38.6	D	0.54	33.1	C
WB LTR	0.69	36.6	D	0.88	52.5	D	0.72	37.8	D
NB L	0.08	8.9	A	0.19	10.2	B	0.18	11.0	B
NB T	0.55	13.0	B	0.31	10.3	B	0.49	12.2	B
SB TR	0.42	11.2	B	0.41	11.2	B	0.54	12.6	B
OVERALL		16.0	B		21.3	C		16.7	B
College Point and Booth Memorial Avenue (signalized)									
WB L	0.81	38.7	D	0.53	27.5	C	0.56	28.1	C
WB LR	0.44	25.7	C	0.20	23.2	C	0.24	22.3	C
NB TR	0.49	13.7	B	0.25	11.3	B	0.47	13.4	B
SB DFL	0.73	38.9	D	0.42	15.3	B	1.01	85.1	F
SB T	0.39	12.7	B	0.33	12.1	B	0.47	13.6	B
OVERALL		19.3	B		15.8	B		19.6	B

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

- During the AM peak hour, the overall LOS of the College Point Boulevard and 32nd Avenue intersection and the College Point Boulevard and Booth Memorial Avenue intersection deteriorated from B to C.
- During the PM peak hour, the overall LOS of the College Point Boulevard and Roosevelt Avenue (Westbound) intersection deteriorated from C to D.

11.9.3.2 Public Transportation

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

11.9.3.3 Pedestrian Activity

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

11.9.4 Potential Impacts with the North Shore Converted MTS

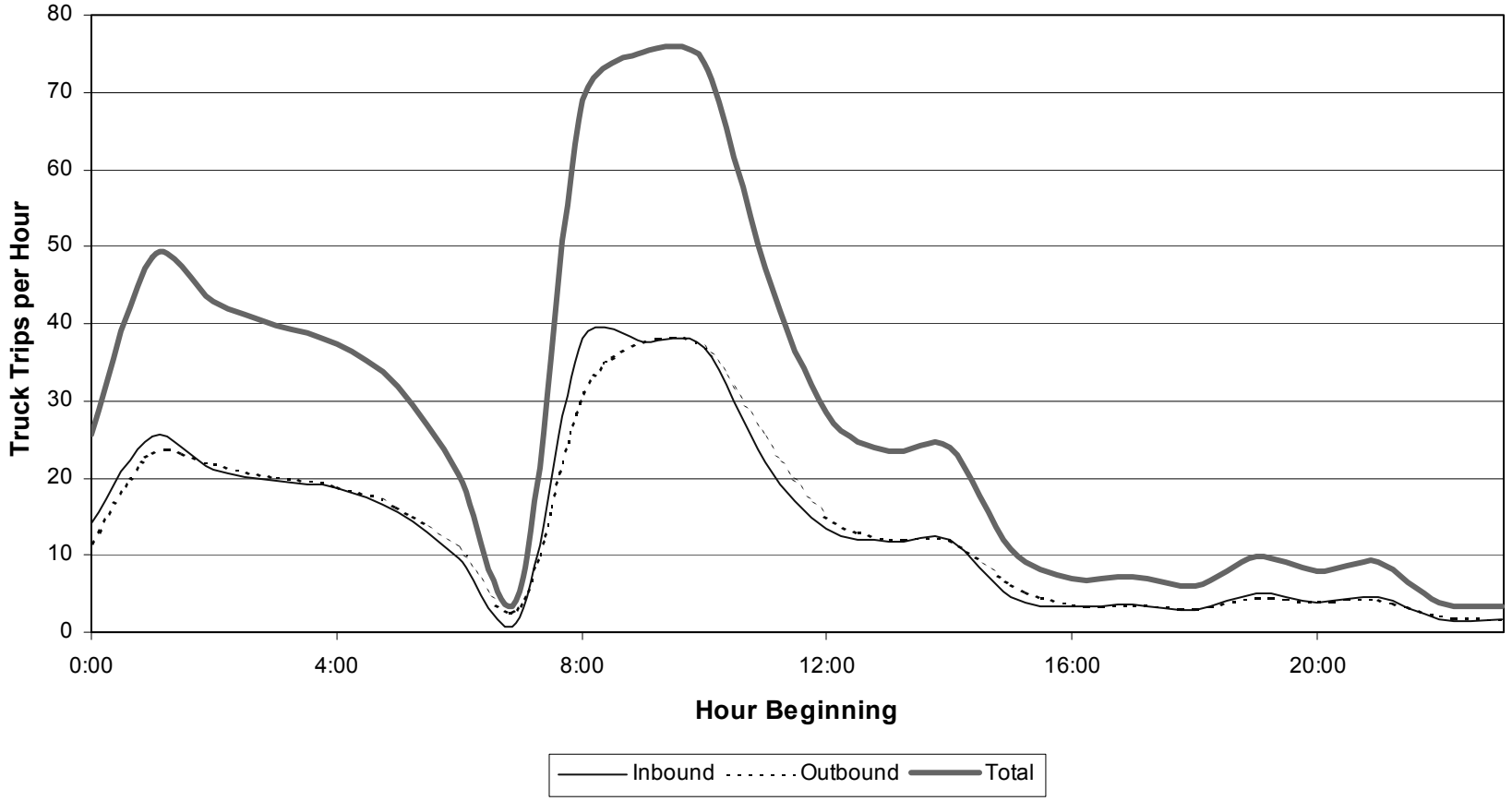
The North Shore Converted MTS would receive waste from nine CDs in Queens—QN 7 through QN 15. Additionally, the waste collected from Queens AFF and SHBLK operations would be delivered to the North Shore Converted MTS. Potential traffic impacts may result from the increase in DSNY and other agency collection vehicle trips to and from the site during all peak hours. Additionally, employee trips to and from the site may result in traffic impacts during the AM peak hour.

11.9.4.1 2006 Build Traffic Conditions

The 2006 Future Build Conditions assume that the North Shore Converted MTS would generate 329 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 of 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 North Shore Converted MTS are shown in Figure 11.9-5.

Figure 11.9-9 presents the average peak day temporal distribution of collection vehicles for the North Shore 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 North Shore Converted MTS is expected to vary between approximately 1 to 25 truck trips per hour in the late evening / early morning, 10 to 38 truck trips per hour in the mid-morning/early afternoon, and 1 to 5 truck trips per hour in the late afternoon /early evening. The peak hourly number of collection vehicle truck trips (38) occurs at approximately 10:00 a.m.

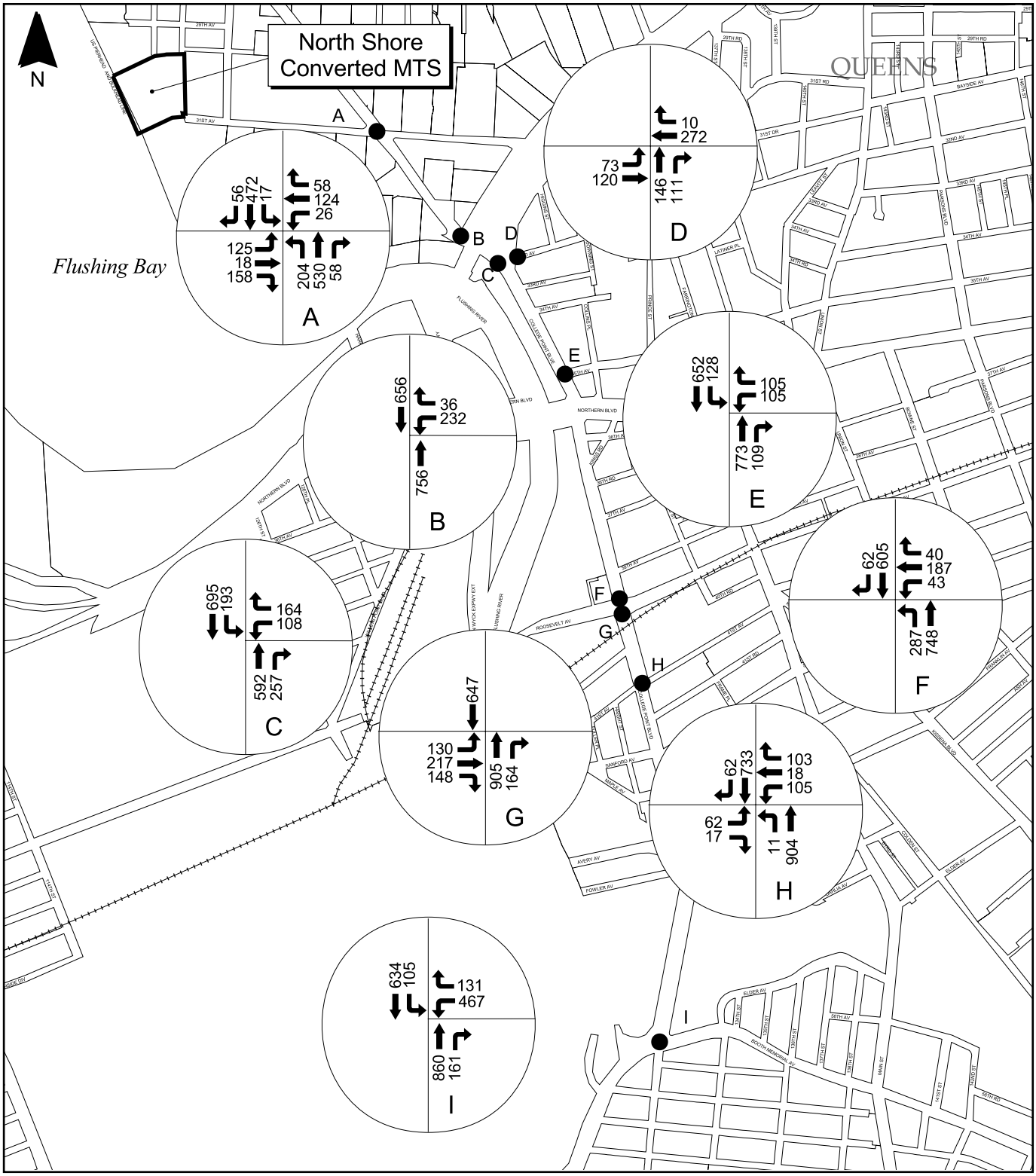
Figure 11.9-9
Truck Trips Per Hour
North Shore Converted MTS



Employee trips generated as a result of the North Shore Converted MTS are expected to be about 44 per shift (22 coming in and 22 leaving). Employee shifts are projected to run from 8:00 a.m. to 4:00 p.m., 4:00 p.m. to 12:00 a.m., and 12:00 a.m. to 8:00 a.m. Therefore, during shift changes employees would arrive about ½ hour before the start of a shift and leave about ½ hour after the end of a shift. With these projections, employee trips are expected between 7:30 a.m. and 8:30 a.m., 3:30 p.m. and 4:30 p.m., and 11:30 p.m. and 12:30 a.m.

Because only the AM peak (7:30 a.m. – 8:30 a.m.) coincided with a projected employee shift change (7:30 a.m. to 8:30 a.m.), employee trips both to and from the North Shore Converted MTS during the shift change (44) were considered as part of the net increase in site-generated traffic. Figures 11.9-10, 11.9-11, and 11.9-12 show the intersections analyzed with the net increase in site-generated traffic added to the Future No-Build traffic levels. Figures 11.9-13, 11.9-14, and 11.9-15 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 North Shore Converted MTS. These projected net increases were routed through the intersections for each of the three peak hours. The highest net increase in trucks in the ingress or egress direction was 38. The highest net increase at any one intersection was 76 trucks. Both of these net increases occurred at the intersection of College Point Boulevard and 31st Avenue.

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 86 percent of the inbound loads delivered during a typical average peak day. Additionally, traffic data indicated that the weekend background traffic volumes were approximately 64 percent of weekday traffic volumes. Table 11.9-3 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 North Shore Converted MTS would not operate on Sundays. It was, therefore, judged that peak weekday analysis would represent the worst overall case conditions.



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

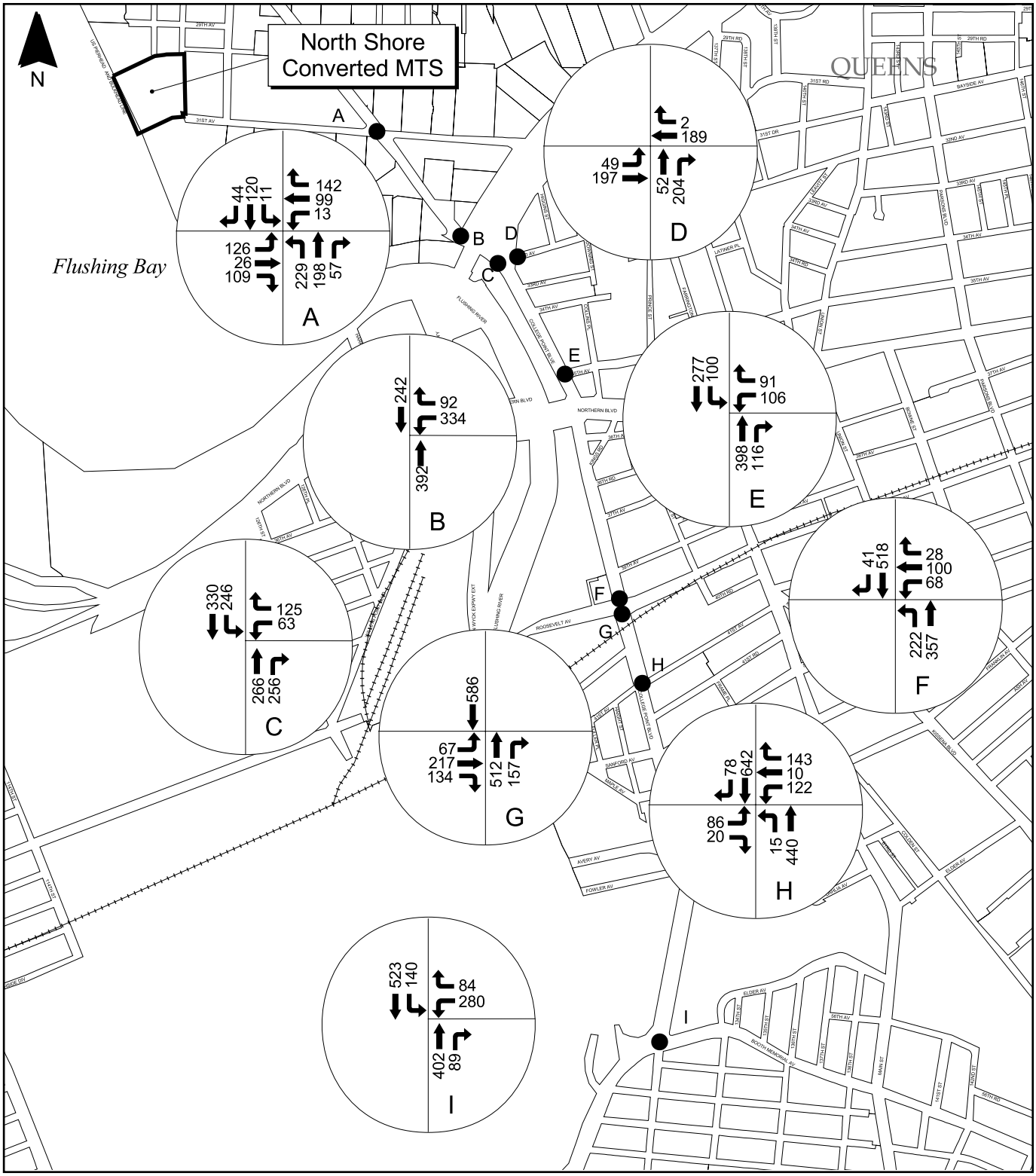
500 0 500 Feet

HDR PB HydroQual EEA

Figure 11.9-10 2006 Build Traffic Volumes
AM Peak
North Shore Converted MTS

CITY OF NEW YORK
DEPARTMENT OF SANITATION

THE CITY OF NEW YORK DEPARTMENT OF SANITATION

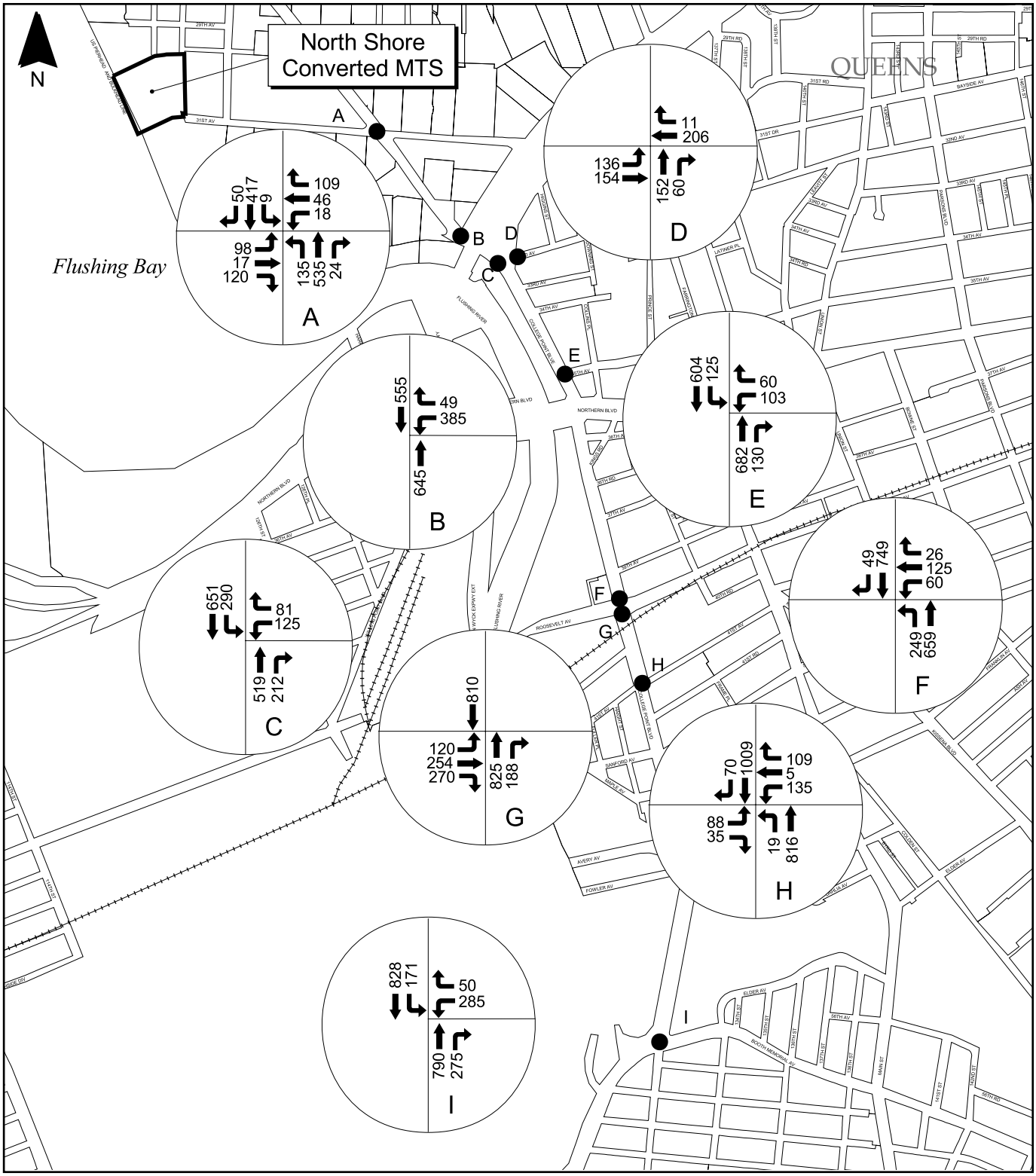


Site delineations are approximate.
Base Map Source: New York City Department of City Planning

500 0 500 Feet

Figure 11.9-11 2006 Build Traffic Volumes
Facility Peak
North Shore Converted MTS

CITY OF NEW YORK
DEPARTMENT OF SANITATION

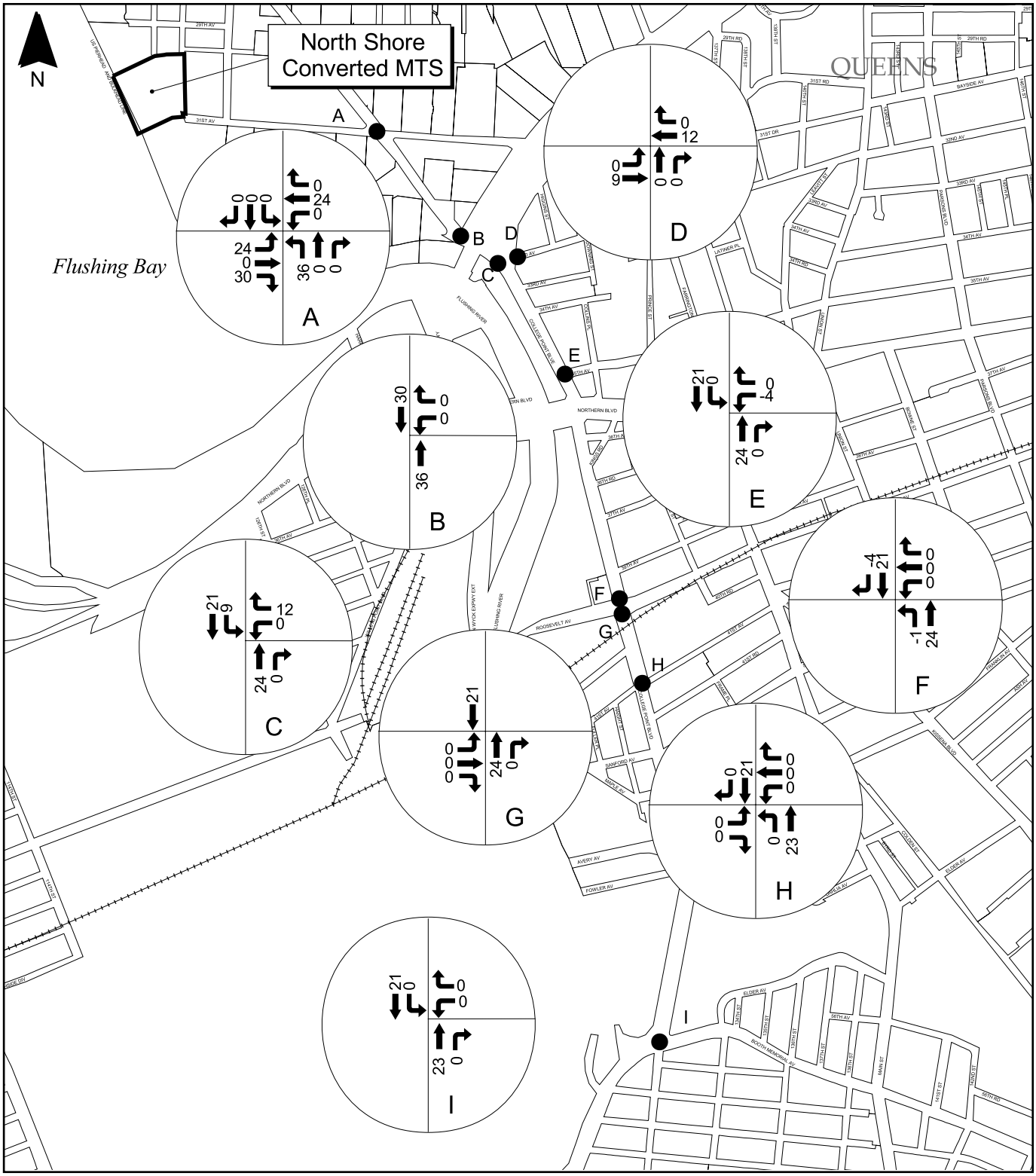


Site delineations are approximate.
Base Map Source: New York City Department of City Planning

500 0 500 Feet

Figure 11.9-12 2006 Build Traffic Volumes
PM Peak
North Shore Converted MTS

CITY OF NEW YORK
DEPARTMENT OF SANITATION



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

500 0 500 Feet

HDR
PB 100 YEARS
HydroQual
EEA

Figure 11.9-13 2006 Net Traffic - AM Peak

North Shore Converted MTS

CITY OF NEW YORK
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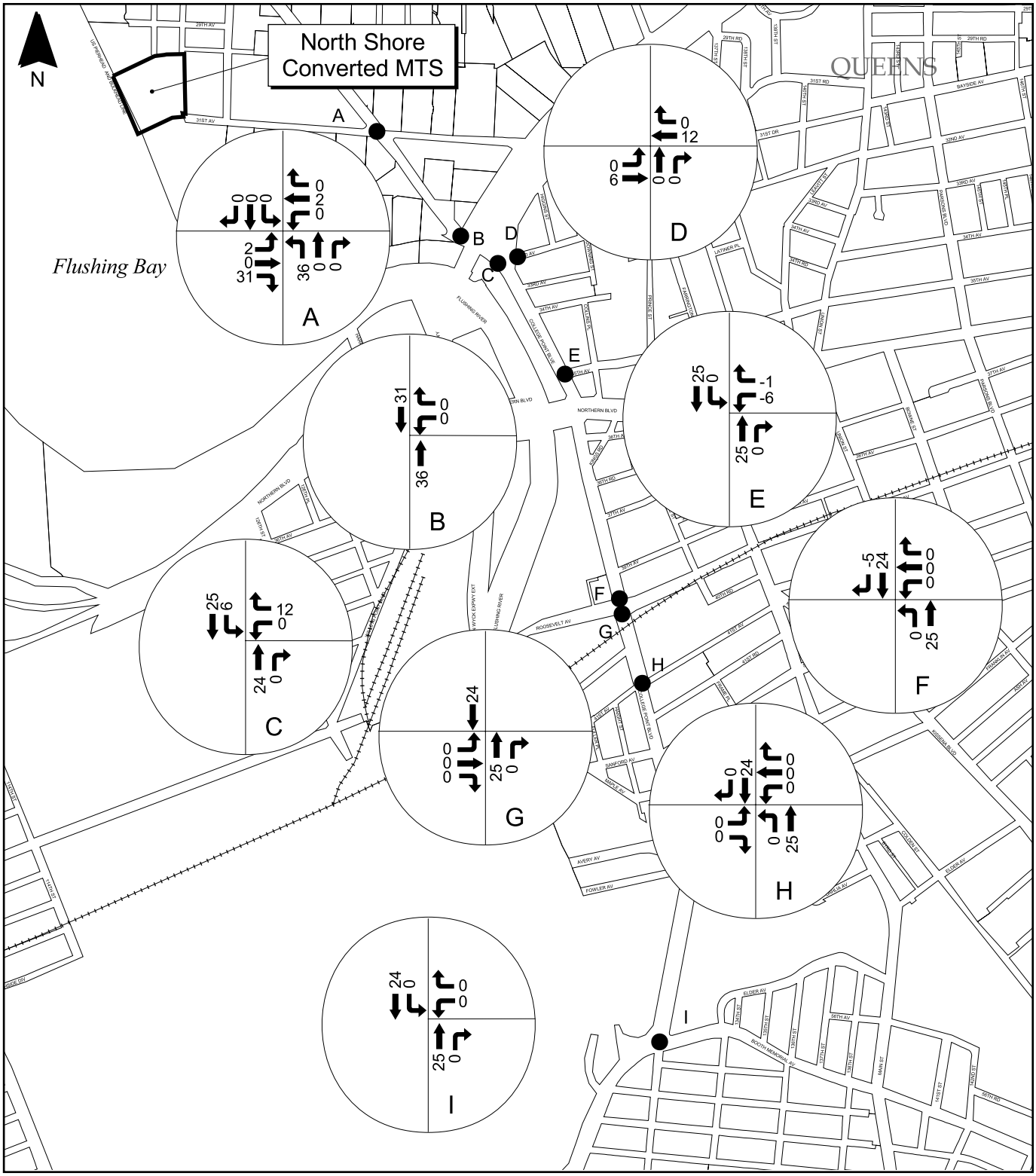

Figure 11.9-14 2006 Net Traffic - Facility Peak

North Shore Converted MTS

CITY OF NEW YORK
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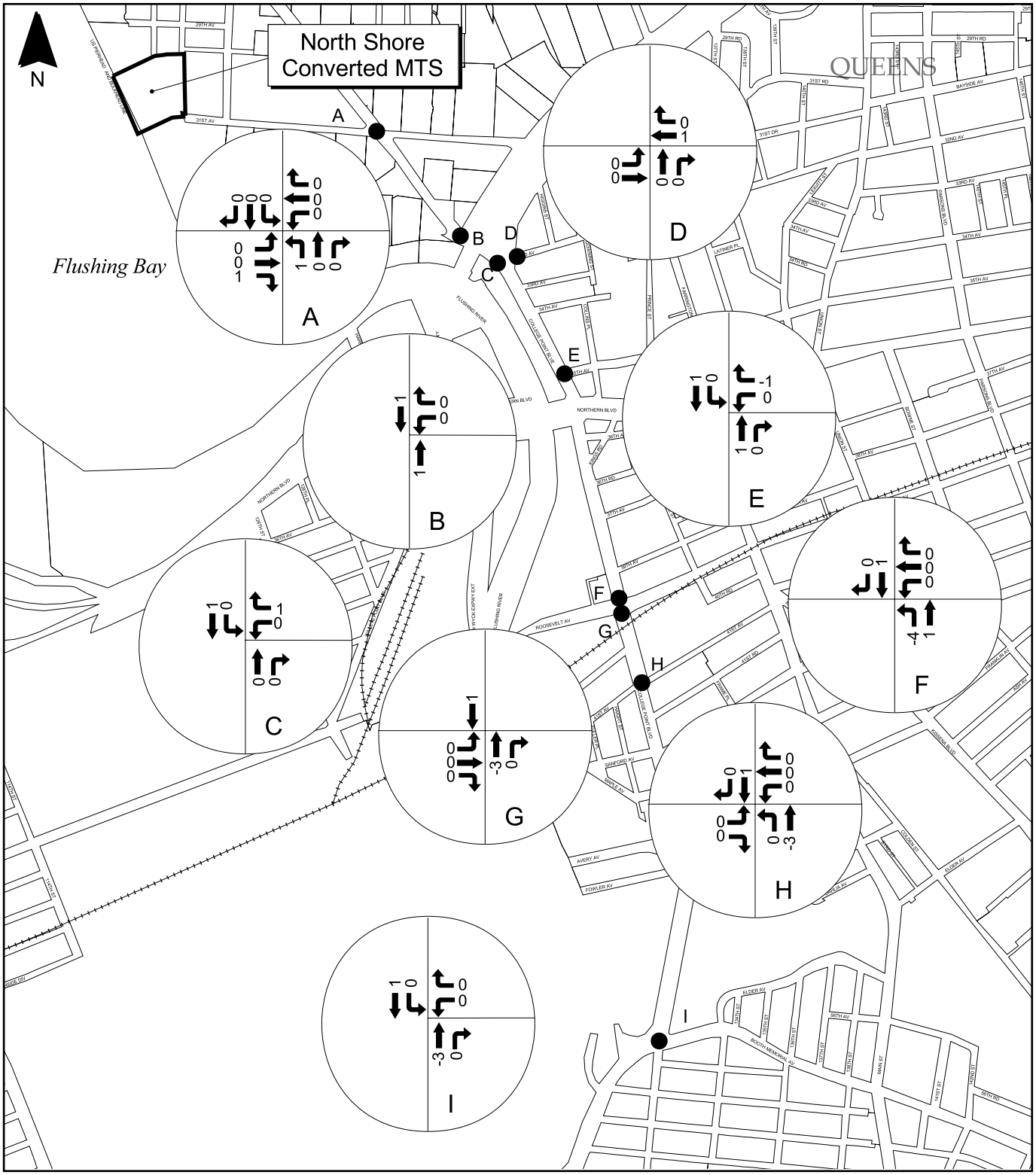


Site delineations are approximate.
Base Map Source: New York City Department of City Planning

500 0 500 Feet

HDR PB HydroQual EEA

Figure 11.9-15 2006 Net Traffic - PM Peak

North Shore Converted MTS

CITY OF NEW YORK
DEPARTMENT OF SANITATION

THE CITY OF NEW YORK DEPARTMENT OF SANITATION

Table 11.9-3
Weekday and Weekend Traffic
North Shore Converted MTS

Department Collection Vehicle Traffic		Background Traffic NB and SB on College Point Boulevard (1)	
Average Peak Day Trucks/ Day	Saturday Trucks/ Day	Weekday average vehicles/Day	Weekend average vehicles/Day
329	282	20,661	13,306

Note:
(1) NB and SB traffic data collected from ATR counts taken on College Point Boulevard between 31st Avenue and Whitestone Expressway Service Road from September 11 to 16, 2003.

Table 11.9-4 shows the 2006 Future Build v/c ratio, delay time and LOS for the intersections analyzed during the AM, Facility, and PM. peak times associated with the North Shore Converted MTS. Over an average peak day, the intersections should not experience an extended increase in delay. The two intersections that may experience potentially significant impacts are discussed in Section 11.9.4.2 and summarized in Table 11.9-5.

11.9.4.2 Impacts and Mitigation

Two of the nine intersections may experience impacts great enough to be considered significant during only one of the peak times analyzed; however, 2001 CEQR Technical Manual Guideline requires mitigation for significant impacts regardless of the duration, as discussed in Section 3.10.1. The potential impacts identified and the mitigation measures analyzed are presented below; their effectiveness is summarized in Table 11.9-5.

College Point Boulevard/31st Avenue – During the AM peak hour, a potential impact was identified on the eastbound left-turn/ through/ right turn lane group when the delay increased from 32.2 seconds to 37.8 seconds (LOS C deteriorated to LOS D). An increase in green time of one second for the eastbound and westbound approaches should eliminate this unacceptable increase in delay. This mitigation measure would detract one second from the northbound and southbound approach green time.. The southbound approach delay would increase by less than one second and the northbound approach delay would increase less than four seconds and the westbound approach delay would decrease by less than one second compared to Future No-build Conditions. This mitigation should not generate any adverse impacts on other lane groups during other time periods.

Table 11.9-4
HCM Analysis[(1)]— Future Build Conditions
North Shore Converted MTS

Intersection & Lane Group	AM Peak Hour (7:30 a.m. – 8:30 a.m.)			Facility Peak Hour (10:00 a.m. – 11:00 a.m.)			PM Peak Hour (4:30 p.m. – 5:30 p.m.)		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point & 31st Avenue (signalized)									
EB LTR	0.71	37.8	D	-	-	-	0.46	29.8	C
EB DFL	-	-	-	0.69	45.8	D	-	-	-
EB TR	-	-	-	0.44	30.8	C	-	-	-
WB LTR	0.43	29.2	C	0.47	29.8	C	0.30	27.3	C
NB L	0.64	21.7	C	0.52	14.3	B	0.33	10.1	B
NB TR	0.31	8.9	A	0.17	7.8	A	0.28	8.6	A
SB L	0.07	13.4	B	0.03	13.0	B	0.04	13.1	B
SB TR	0.38	16.2	B	0.15	13.8	B	0.34	15.7	B
OVERALL		20.2	C		21.7	C		16.4	B
College Point and Whitestone Expressway Service Road – North (signalized)									
WB L	0.48	18.8	B	0.61	21.6	C	0.69	23.8	C
WB LR	0.07	13.9	B	0.38	17.3	B	0.10	14.1	B
NB T	0.48	10.4	B	0.31	8.9	A	0.40	9.5	A
SB T	0.43	9.9	A	0.18	8.0	A	0.38	9.4	A
OVERALL		11.5	B		13.5	B		12.8	B
College Point and 32nd Avenue (signalized)									
WB LR	0.52	19.1	B	0.39	17.1	B	0.37	16.7	B
NB TR	0.93	35.8	D	0.69	22.2	C	0.76	23.6	C
SB L	0.46	19.9	B	0.54	18.5	B	0.62	23.2	C
SB T	0.48	9.6	A	0.26	7.8	A	0.46	9.3	A
OVERALL		22.9	C		17.0	B		17.6	B
Whitestone Expressway Service Road – South and 32nd Avenue (signalized)									
EB DFL	0.21	7.1	A	-	-	-	0.28	7.2	A
EB T	0.30	2.2	A	-	-	-	0.23	1.5	A
EB LT	-	-	-	0.22	1.1	A	-	-	-
WB TR	0.70	25.6	C	0.44	18.3	B	0.50	19.4	B
NB TR	0.59	21.4	C	0.55	20.9	C	0.42	18.0	B
OVERALL		18.1	B		12.9	B		13.1	B
College Point and 35th Avenue (signalized)									
WB LR	0.47	19.2	B	0.59	22.4	C	0.40	17.8	B
NB TR	0.62	12.3	B	0.43	10.1	B	0.52	10.8	B
SB LT	0.92	29.3	C	0.46	10.7	B	0.83	20.5	C
OVERALL		20.2	C		12.7	B		15.9	B
College Point and Roosevelt Avenue - Westbound (signalized)									
WB LTR	0.26	22.7	C	0.21	22.1	C	0.22	22.2	C
NB L	0.55	27.2	C	0.46	23.6	C	0.49	26.2	C
NB T	0.50	13.7	B	0.29	11.4	B	0.43	12.7	B
SB TR	0.92	50.6	D	0.83	41.9	D	1.00	63.3	E
OVERALL		29.6	C		27.7	C		36.4	D

Table 11.9-4 (continued)
HCM Analysis[(1)]— Future Build Conditions
North Shore Converted MTS

Intersection & Lane Group	(7:30 a.m. – 8:30 a.m.)			(10:00 a.m. – 11:00 a.m.)			PM Peak Hour		
	V/C Ratio	Delay	LOS	V/C	Delay (sec/veh)		V/C Ratio	Delay (sec/veh)	LOS
College Point and Roosevelt Avenue - Eastbound (signalized)									
EB LTR	0.39	16.2	B	0.33	15.6	B	0.51	17.9	B
NB TR	0.64	23.0	C	0.44	19.9	C	0.57	21.6	C
SB T	0.57	22.4	C	0.53	21.7	C	0.65	24.0	C
OVERALL		21.2	C		19.4	C		21.3	C
College Point and 41st Avenue (signalized)									
EB LR	0.39	28.8	C	0.63	38.6	D	0.54	33.1	C
WB LTR	0.69	36.6	D	0.88	52.5	D	0.72	37.8	D
NB L	0.08	8.9	A	0.19	10.4	B	0.18	11.0	B
NB T	0.57	13.4	B	0.34	10.6	B	0.49	12.1	B
SB TR	0.44	11.4	B	0.43	11.4	B	0.54	12.6	B
OVERALL		16.1	B		21.0	C		16.7	B
College Point and Booth Memorial Avenue (signalized)									
WB L	0.80	38.1	D	0.53	27.5	C	0.56	28.1	C
WB LR	0.45	26.1	C	0.30	23.2	C	0.24	22.3	C
NB TR	0.51	13.9	B	0.27	11.5	B	0.47	13.5	B
SB DFL	0.78	45.1	D	0.44	15.8	B	1.02	87.9	F
SB T	0.41	12.9	B	0.35	12.3	B	0.47	13.6	B
OVERALL		20.3	C		16.0	B		22.0	C

Notes:

(1) HCM output is included in technical backup submitted to the NYCDOT.

DFL = defacto left

LTR = left, through and right movements

NB = northbound

SB = southbound

EB = eastbound

WB = westbound

Table 11.9-5
HCM Analysis[(1)]— Mitigation
North Shore Converted MTS

Intersection & Lane Group	2006 Future No-Build			2006 Future Build			2006 Future Build after Mitigation		
	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
College Point & 31st Avenue (signalized) – AM Peak									
EB LTR	0.55	32.2	C	0.71	37.8	D	0.68	35.7	D
WB LTR	0.38	28.4	C	0.43	29.2	C	0.41	28.1	C
NB L	0.49	12.9	B	0.64	21.7	C	0.66	23.2	C
NB TR	0.31	8.9	A	0.31	8.9	A	0.32	9.4	A
SB L	0.07	13.4	B	0.07	13.4	B	0.07	14.0	B
SB TR	0.38	16.2	B	0.38	16.2	B	0.39	16.9	B
OVERALL		17.4	B		20.2	C		20.2	C
College Point and Booth Memorial Avenue (signalized) – AM Peak									
WB L	0.81	38.7	D	0.80	38.1	D	0.82	41.0	D
WB LR	0.44	25.7	C	0.45	26.1	C	0.47	27.1	C
NB TR	0.49	13.7	B	0.51	11.9	B	0.50	13.3	B
SB DFL	0.73	38.9	D	0.78	45.1	D	0.76	41.2	D
SB T	0.39	12.7	B	0.41	12.9	B	0.40	12.3	B
OVERALL		20.1	C		20.3	C		20.3	C

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

College Point Boulevard/Booth Memorial Avenue – During the AM peak hour, a potential impact was identified on the southbound defacto left lane group (LOS D) when the delay increased from 38.9 seconds to 45.1 seconds. An increase in the green time of one second for the southbound and northbound approaches should eliminate the delay increase. This mitigation measure decreases the westbound approach green time by one second. The westbound approach delay time would increase by approximately one second and the northbound and southbound approach delay times would decrease by less than one second compared to Future No-build Conditions. This mitigation should not generate any adverse impacts on other lane groups during other time periods.

In addition to the two intersections that may experience impacts, the 31st Avenue and site entrance/ exit intersection may also require low-cost and easily implemented mitigation. Even though traffic operations at this intersection should not affect traffic significantly along 31st Avenue, some improvements near the intersection would need to be considered, such as restricting parking along 31st Avenue within the vicinity of the intersection to improve site distance at the site entrance/ exit. In addition, a stop sign at the site exit would be beneficial. This mitigation should not generate any adverse impacts on other lane groups during any time periods.

Overall, the mitigation measures suggested would greatly enhance the intersection performance by reducing delays to LOSs similar to those under the Future No-Build Condition.

11.9.4.3 Public Transportation

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

11.9.4.4 Pedestrian Activity

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

11.10 Air Quality

11.10.1 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 North Shore Converted MTS. The study area for the off-site air quality analysis is defined as the area or intersections listed in Section 11.10.4.2.

11.10.2 Existing Conditions

11.10.2.1 Air Quality Data

Applicable air quality data collected at the monitoring station(s) nearest to the study area are shown in Table 11.10.1. 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 11.10.1
Representative Ambient Air Quality Data
North Shore Converted MTS

Pollutant	Monitor	Averaging Time	Value	NAAQS
CO	NA	8-Hour	2,635 µg/m^3	10,000 µg/m^3
		1-Hour	3,781 µg/m^3	40,000 µg/m^3
NO_2	College Pt. Post Office	Annual	56 µg/m^3	100 µg/m^3
PM_{10}	Greenpoint	Annual	23 µg/m^3	50 µg/m^3
		24-Hour	57 µg/m^3	150 µg/m^3
SO_2	Queensboro Community College	3-Hour	186 µg/m^3	1300 µg/m^3
		24-Hour	107 µg/m^3	365 µg/m^3
		Annual	18.3 µg/m^3	80 µg/m^3

Source: NYCDEP April 18, 2003.

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 effect may be offset by increases in regional traffic volumes.

11.10.4 Potential Impacts of the North Shore Converted MTS

11.10.4.1 On-Site Analysis

11.10.4.1.1 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 11.10-2. Figure 11.10-1 shows the locations of these sources within the site.

11.10.4.1.2 Results of the Criteria Pollutant Analysis

The highest estimated criteria pollutant concentrations at any of the receptor locations considered are presented in Table 11.10-3. 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 project-generated vehicles at any of the receptor locations considered, which are also presented in Table 11.10-3, are below the STVs. The North Shore Converted MTS would not, therefore, significantly impact air quality in the area.

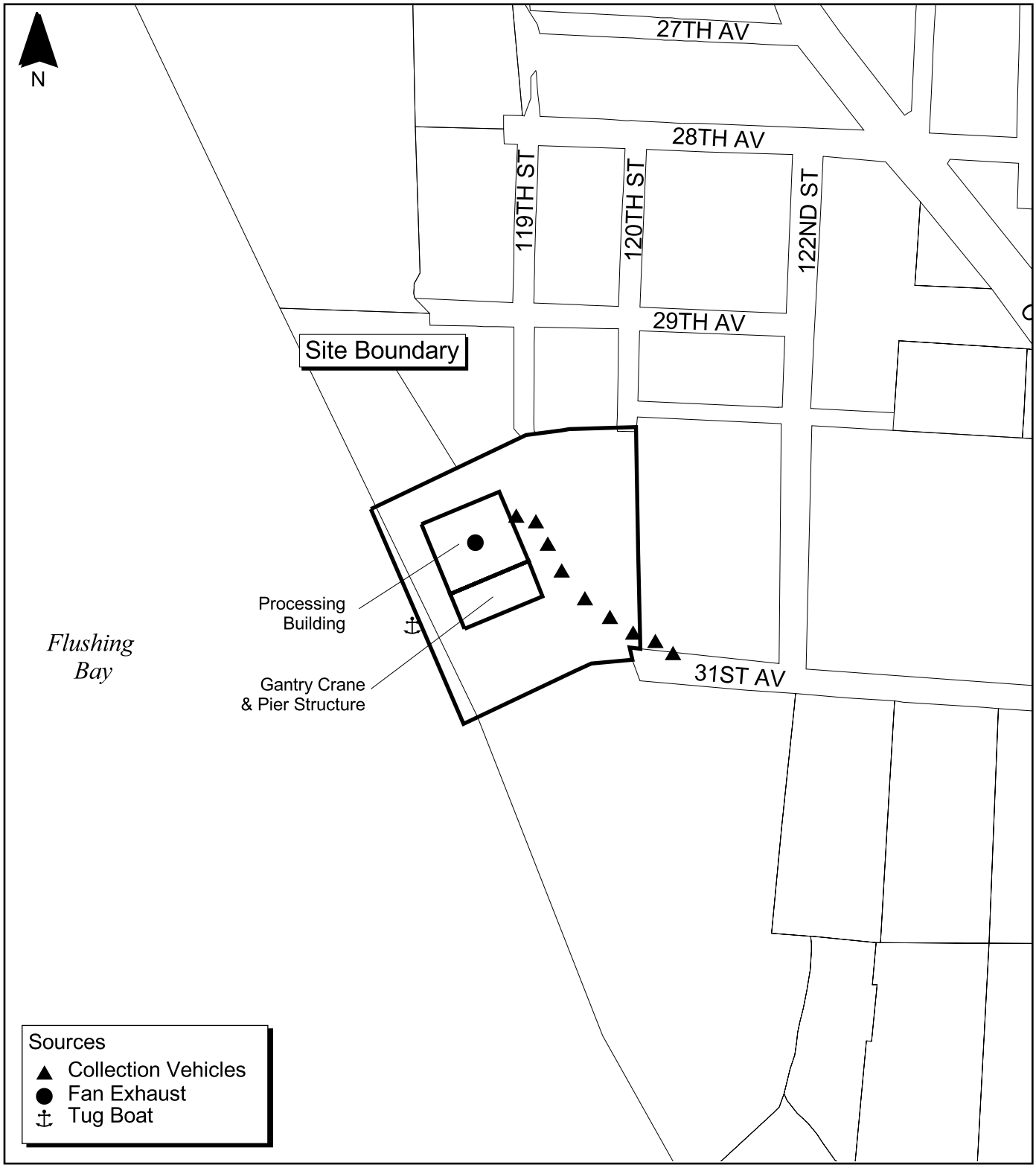
Table 11.10-2
Emission Sources Considered for On-site Air Quality Analysis[1]
North Shore Converted MTS

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	46	18
Space Heaters	10	10
Boiler	1	1
Outside Processing Building		
Moving Collection Vehicles	46	18
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. Peak 8-hour and 3-hour average number of queuing collection vehicles outside building is 5.



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

Figure 11.10-1 On-Site Air Quality Analysis

North Shore Converted MTS

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Table 11.10-3
Highest Estimated Concentrations of the Criteria Pollutants from On-site Emissions
North Shore 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]	1,261	3,781	5,042	40,000	NA
	8-hour[6]	194	2,635	2,829	10,000	NA
Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual	3	56	59	100	NA
Particulate Matter (PM_{10}), $\mu g/m^3$	24-hour[7]	17	57	74	150	NA
	Annual	2	23	25	50	NA
Particulate Matter ($PM_{2.5}$), $\mu g/m^3$	24-hour	1	-	-	NA	5
	Annual Neighborhood Average	0.019[5]	-	-	NA	0.1
Sulfur Dioxide (SO_2), $\mu g/m^3$	3-hour[6]	49	186	235	1,300	NA
	24-hour[6]	5	107	112	365	NA
	Annual	1	18.3	19.3	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 18, 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 PM_{10} NAAQS is based on a 99th percentile concentration, which means that the high, 4th high concentration is appropriate for comparison with the standard. Therefore, the use of the overall highest concentration in this comparison is quite conservative.

NA = Not Applicable

11.10.4.1.3 Results of the Toxic Pollutant Analysis

The results of the toxic pollutant analysis are summarized in Table 11.10-4. 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 North Shore Converted MTS are not considered to be significant.

11.10.4.2 Off-Site Analysis

11.10.4.2.1 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:

- An analysis of the intersections of College Point Boulevard at 31st Avenue, College Point Boulevard at Booth Memorial Avenue, and College Point Boulevard at 32nd Avenue and Whitestone Expressway Service Road, to determine whether North Shore Converted MTS-generated traffic has the potential to cause exceedances of NYCDEP's 8-hour CO de minimus value or a violation of the 8-hour NAAQS;
- An analysis of the intersections of College Point Boulevard at 31st Avenue, College Point Boulevard at Booth Memorial Avenue, and College Point Boulevard at 32nd Avenue and Whitestone Expressway Service Road, to determine whether North Shore Converted MTS-generated traffic has the potential to cause exceedances of NYCDEP's and NYSDEC's 24-hour and annual $PM_{2.5}$ STVs; and
- An analysis for the intersections of College Point Boulevard at 31st Avenue, College Point Boulevard at Booth Memorial Avenue, and College Point Boulevard at 32nd Avenue and Whitestone Expressway Service Road, to determine whether North Shore Converted MTS-generated traffic has the potential to cause exceedances of the 24-hour and annual PM_{10} NAAQS.

The roadway intersections selected for the mobile source analysis are shown in Figure 11.10-2.

Table 11.10-4
Highest Estimated Non-Cancer Hazard Index and Cancer Risk of Toxic Air Pollutant from On-site Emissions
North Shore Converted MTS

No.	Toxic Air Pollutants	Acute Non-Cancer Risk			Chronic Non-Cancer Risk			Cancer Risk		
		Highest Estimated Short-Term (1-hr) Pollutant Conc.[1] ($\mu g/m^3$)	Short-Term (1-hr) Guideline Conc. (SGCs) [2] ($\mu g/m^3$)	Acute Non-Cancer Hazard Index[3]	Highest Estimated Long-Term (Annual) Pollutant Conc.[4] ($\mu g/m^3$)	Long-Term (Annual) Guideline Conc. (AGCs) [5] ($\mu g/m^3$)	Chronic Non-Cancer Hazard Index [6]	Highest Estimated Long-Term (Annual) Pollutant Conc. [4] ($\mu g/m^3$)	Unit Risk Factors [7] ($\mu g/m^3$)	Max. Cancer Risk [8,9]
Carcinogenic Pollutants										
1	Benzene	4.06E-01	1.30E+03	3.12E-04	3.11E-03	1.30E-01	2.39E-02	3.11E-03	8.30E-06	2.58E-08
2	Formaldehyde	5.13E-01	3.00E+01	1.71E-02	3.93E-03	6.00E-02	6.55E-02	3.93E-03	1.30E-05	5.11E-08
3	1,3 Butadiene	1.70E-02	-	-	1.30E-04	3.60E-03	3.62E-02	1.30E-04	2.80E-04	3.65E-08
4	Acetaldehyde	3.33E-01	4.50E+03	7.41E-05	2.56E-03	4.50E-01	5.68E-03	2.56E-03	2.20E-06	5.62E-09
5	Benzo(a)pyrene	8.17E-05	-	-	6.26E-07	2.00E-03	3.13E-04	6.26E-07	1.70E-03	1.06E-09
6	Propylene	1.12E+00	-	-	8.60E-03	3.00E+03	2.87E-06	8.60E-03	NA	NA
Non-Carcinogenic Pollutants [10]										
7	Acrolein	4.02E-02	1.90E-01	2.12E-01	3.08E-04	2.00E-02	1.54E-02	3.08E-04	NA	NA
8	Toluene	1.78E-01	3.70E+04	4.81E-06	1.36E-03	4.00E+02	3.41E-06	1.36E-03	NA	NA
9	Xylenes	1.24E-01	4.30E+03	2.88E-05	9.49E-04	7.00E+02	1.36E-06	9.49E-04	NA	NA
10	Anthracene	8.13E-04	-	-	6.23E-06	2.00E-02	3.11E-04	6.23E-06	NA	NA
11	Benzo(a)anthracene	7.30E-04	-	-	5.60E-06	2.00E-02	2.80E-04	5.60E-06	NA	NA
12	Chrysene	1.53E-04	-	-	1.18E-06	2.00E-02	5.88E-05	1.18E-06	NA	NA
13	Naphthalene	3.69E-02	7.90E+03	4.67E-06	2.83E-04	3.00E+00	9.42E-05	2.83E-04	NA	NA
14	Pyrene	2.08E-03	-	-	1.59E-05	2.00E-02	7.96E-04	1.59E-05	NA	NA
15	Phenanthrene	1.28E-02	-	-	9.79E-05	2.00E-02	4.90E-03	9.79E-05	NA	NA
16	Dibenz(a,h)anthracene	2.54E-04	-	-	1.94E-06	2.00E-02	9.71E-05	1.94E-06	NA	NA
		Total Estimated Acute Non-Cancer Hazard Index		**2.29E-01**	**Total Estimated Chronic Non-Cancer Hazard Index**		**1.54E-01**	**Total Estimated Combined Cancer Risk**		**1.20E-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 11.10-4:

(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.

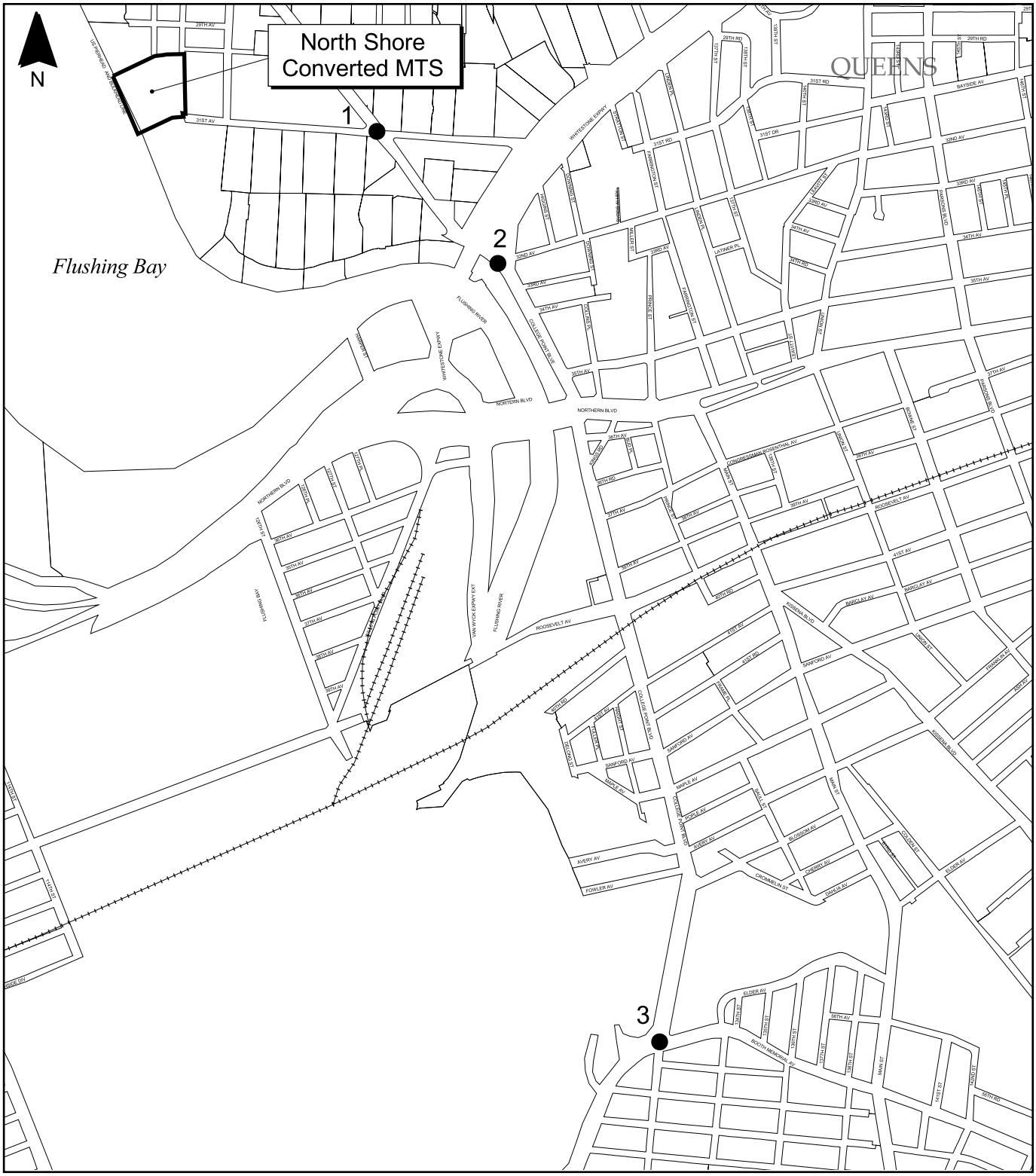
(7) Unit risk factors established by USEPA and other governmental agencies for the inhalation of carcinogenic air pollutants.

(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

500 0 500 Feet

HDR
PB 100 YEARS
HydroQual
EEA

Figure 11.10-2 Off-Site Air Quality Intersections Studied North Shore Converted MTS

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11.10.4.2.2 Results of the Off-Site Analysis

Applicable pollutant concentrations estimated near each selected intersection, which are shown in Table 11.10-5, 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 intersections at College Point Boulevard at 31st Avenue was necessary 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 North Shore Converted MTS are not, therefore, considered to be significant.

Table 11.10-5
Estimated Pollutant Concentration Near Selected Roadway Intersection
North Shore Converted MTS

Air Quality Receptor Site	CO	PM_{10}		24-hr PM2.5 Impacts			Max Annual Neighborhood PM2.5 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 $\mu g/m^3$)
College Pt Blvd. & 31st Avenue									
Existing Conditions	4.4	87	35						
Future No Build Conditions	4.8	88	35						
Future Build Conditions	4.3	91	36						
Future Build Incremental				0.31	0.4[5]	0.71	0.004	0.07[5]	0.07
College Pt Blvd & Booth Memorial Ave.									
Existing Conditions	5.1	100	41						
Future No Build Conditions	4.5	102	42						
Future Build Conditions	4.9	102	42						
Future Build Incremental				0.05	0.4	0.45	0.001	0.1	0.10
College Pt Blvd, 32nd Ave. & WSE Service Road									
Existing Conditions	5.0	96	39						
Future No Build Conditions	4.9	97	39						
Future Build Conditions	4.9	98	40						
Future Build Incremental				0.18	0.5	0.68	0.003	0.1	0.10

Notes for Table 11.10-5:

(1) CO and PM_{10} concentrations are the maximum concentrations estimated using the AM, midday, and PM peak traffic information plus background concentration (8-hr CO=2.75ppm; 24-hr PM_{10} = 57 $\mu g/m^3$; Annual PM_{10}=23$\mu g/m^3$).

(2) The maximum incremental concentrations of the on-site emissions at 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 information.

(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 information.

(5) Results determined by performing a TIER II analysis.

ppm = Parts per million

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

11.11 Odor

11.11.1 Existing Conditions

The existing MTS is not in operation, and 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 a residential house on 29th Avenue west of 119ths Street, approximately 280 feet from the site boundary.

11.11.2 Future No-Build Conditions

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

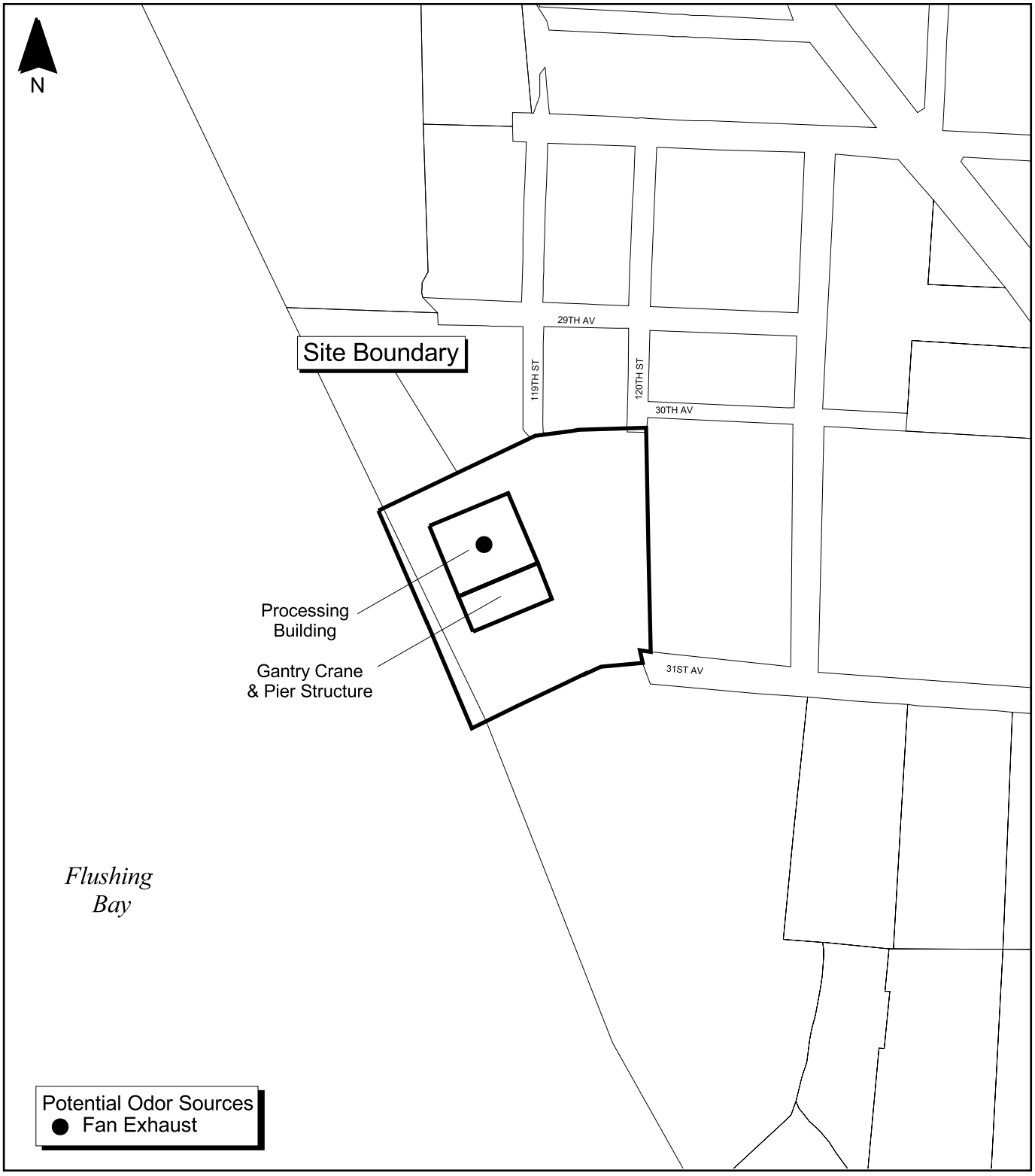
11.11.3 Potential Impacts with the North Shore Converted MTS

11.11.3.1 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 North Shore Converted MTS are provided in Table 11.11-1. Figure 11.11-1 shows the locations of these sources within the site.

Table 11.11-1
Odor Sources Included in Odor Analysis
North Shore 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

300 0 300 Feet

Figure 11.11-1 Potential Odor Sources

North Shore 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 North Shore Converted MTS.

11.11.3.2 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 11.11-2. 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 North Shore Converted MTS at any nearby sensitive receptor is less than 1, so odors from the North Shore 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 11.11-2
Highest Predicted Odor Concentration(s) from On-site Sources
North Shore Converted MTS

Parameter	Resulting Odor Unit[1]
Estimated Detectable Concentration	1.0
Highest Result Type of Receptor Location of Receptor[2]	0.13 Discrete Receptor Over Water
Closest Sensitive Receptor Result Type Of Receptor Distance To Receptor[3]	0.07 Residential House 280 Feet

Notes:
(1) Odor Unit is dimensionless.
(2) Measured from the site boundary.
(3) Measured from the site property line.

11.12 Noise

The noise analysis addresses on-site and off-site sources of noise emissions from North Shore 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.

11.12.1 Existing Conditions

11.12.1.1 Introduction

Figure 11.12-1 shows the location of the North Shore Modified MTS and the surrounding area. The nearest noise-sensitive receptor is a residential house on 29th Avenue west of 119th Street, approximately 85 meters (280 feet) from the North Shore Converted MTS property line. Additional residential areas exist immediately west and north of these residences.

11.12.1.2 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 receptors. Noise monitoring data recorded hourly included: L_{eq}, L_{min}, L_{max},[3] and the statistical metrics of L_{10}, L_{50}, and L_{90}.[4] Table 11.12-1 presents monitored noise levels. As shown, the quietest hour at the monitoring location occurred between 11:00 p.m. and 12:00 a.m. and had n L_{eq}(h) of 57.0 dBA on January 9, 2003. Activities and events that contribute to the on-site noise levels are as follows:

[3] Terms L_{eq}, L_{min}, L_{max} are defined in Section 3.13.2. [4] Terms L_{10}, L_{50}, L_{90} are defined in Section 3.14.2.

Table 11.12-1
Existing Hourly (Monitored) Noise Levels On-site[(1)]
North Shore Converted MTS

Time of Measurement	L_{eq} (h) (dBA)	L_{90} (dBA)	L_{50} (dBA)	L_{10} (dBA)	L_{min} (dBA)	L_{max} (dBA)
3:00-4:00 p.m.	68.7	62.6	65.5	70.9	59.7	85.1
4:00-5:00 p.m.	69.6	62.6	68.0	71.8	57.8	86.0
5:00-6:00 p.m.	67.2	61.2	65.5	69.0	57.4	81.6
6:00-7:00 p.m.	67.9	62.2	65.8	69.7	59.6	85.2
7:00-8:00 p.m.	67.3	62.4	65.5	69.0	60.1	85.3
8:00-9:00 p.m.	67.7	63.3	66.3	69.9	60.3	83.2
9:00-10:00 p.m.	65.5	60.1	64.0	67.6	56.5	78.7
10:00-11:00 p.m.	68.1	55.7	60.0	65.6	54.0	98.8
11:00-12:00 a.m.	57.0	54.2	55.5	57.7	53.4	73.4
12:00-1:00 a.m.	59.9	53.4	55.8	63.0	51.8	74.3
1:00-2:00 a.m.	65.6	53.2	59.8	65.8	51.0	95.4
2:00-3:00 a.m.	68.5	59.3	61.3	68.1	56.9	98.0
3:00-4:00 a.m.	58.3	52.6	55.5	59.7	50.4	79.6
4:00-5:00 a.m.	57.8	52.2	55.6	60.7	48.9	73.1
5:00-6:00 a.m.	62.0	55.5	59.5	62.3	52.2	90.7
6:00-7:00 a.m.	67.3	62.5	65.0	68.7	59.7	88.0
7:00-8:00 a.m.	69.0	62.6	66.6	70.9	59.3	85.3
8:00-9:00 a.m.	67.5	63.5	66.2	69.3	60.7	80.9
9:00-10:00 a.m.	70.3	65.1	68.1	72.3	61.4	87.9
10:00-11:00 a.m.	71.1	63.2	67.7	74.7	60.4	87.5
11:00-12:00 p.m.	68.9	60.2	64.5	73.0	57.2	84.0
12:00-1:00 p.m.	66.4	59.3	62.9	69.9	55.4	81.7
1:00-2:00 p.m.	66.0	58.2	62.4	69.4	54.5	79.8
2:00-3:00 p.m.	65.8	57.7	61.2	69.5	54.8	85.8

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.

- Airplanes, including jets, that arrive and depart from LaGuardia Airport regularly;
- A DSNY salt shed that is used during the winter; and
- An active DSNY garage that is used regularly.

11.12.1.3 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 North Shore 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 Section 3.14.5.2, off-site noise monitoring was required and, was therefore conducted. Table 11.12-2 presents monitored noise levels near noise sensitive receptors during the hour expected to receive the largest change in noise levels (when the difference between traffic noise levels and background noise levels is greatest) based on second level screening.

Table 11.12-2
Existing Noise Levels at the Nearest Noise-Sensitive Receptor
North Shore Converted MTS

Roadway ID	Existing Noise Levels During Quietest Hour (dBA)[1]
College Point Boulevard North of Roosevelt Avenue [2]	60.5
College Point Boulevard South of Sanford Avenue [3]	68.0

Notes:
(1) A one hour noise level reading was measured at the closest sensitive receptor during the hour expected to receive the largest change in noise levels (when the difference between traffic noise levels and background noise levels is greatest).
(2) The Existing noise level was measured on May 15, 2003 between 3:00 a.m. and 4:00 a.m.
(3) The Existing noise level was measured on May 14, 2003 between 3:00 a.m. and 4:00 a.m.

11.12.2 Future No-Build Conditions

11.12.2.1 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.

11.12.2.2 Off-site Noise Levels

Off-site noise levels for the Future Baseline Conditions in 2006 were calculated utilizing the annual growth rates for traffic volume provided in Section O: Traffic of the CEQR Manual. Table 11.12-3 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.

Table 11.12-3
Off-site Noise Traffic Volume
North Shore Converted MTS

Location	Hour	Existing Traffic Volume	Future No Build Traffic Volume
College Point Boulevard North of Roosevelt Avenue	3:00 a.m.	111	116
College Point Boulevard North of Roosevelt Avenue	9:00 a.m.	1265	1317
College Point Boulevard South of Sanford Avenue	3:00 a.m.	144	150
College Point Boulevard South of Sanford Avenue	9:00 a.m.	1378	1434
College Point Boulevard between 58th and 57th Avenue	3:00 a.m.	299	311

11.12.3 Potential Impacts with the North Shore Modified MTS

11.12.3.1 On-site Noise Levels

Equipment assumed to be operating at the North Shore Converted MTS and its reference noise levels used in the CEQR and Noise Code analysis are shown in Table 11.12-4. Spectral noise levels used in the Performance Standards analysis are shown in Table 11.12-5. The number and type of equipment assumed for this analysis was based on the facility's peak design capacity.

Table 11.12-4
Equipment Modeled in the Noise Analysis and Reference Noise Levels
North Shore 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/Queuing Collection Vehicles (7)	73
Outdoor	
Moving/Queuing Collection Vehicles (21)	67
Container Car Pullers (3)	45
Gantry Cranes (1)	78
Oceangoing Tugboats (1)	73

Note:
(1) See Section 3.14.7.1 for sources.

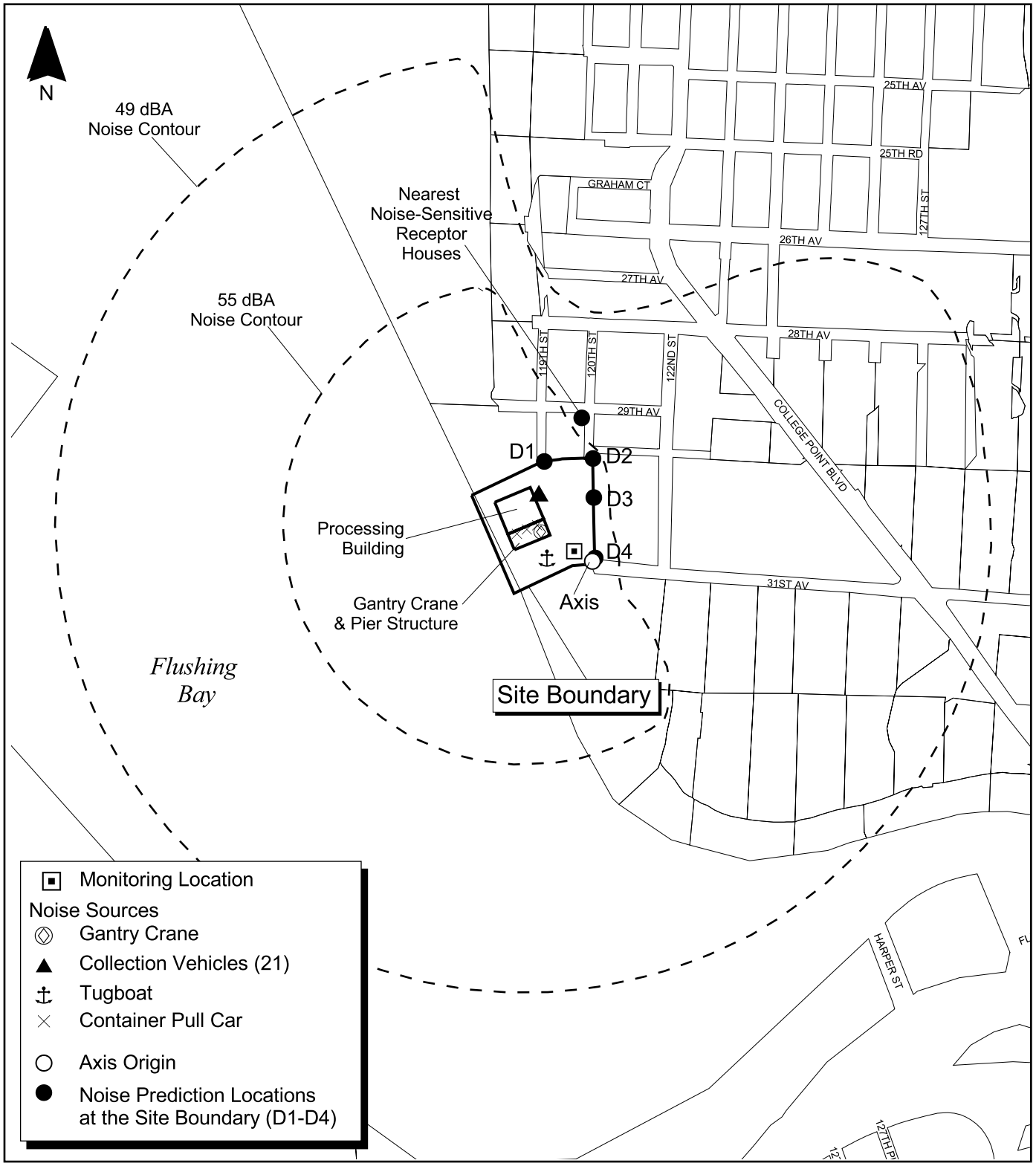
Table 11.12-5
Equipment Modeled in the Noise Analysis and Spectral Noise Levels
North Shore Converted MTS

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 11.12-1 shows the North Shore Converted MTS layout, locations of the points along its boundary where overall noise predictions were calculated, and the predicted 55 dBA contour line.

11.12.3.1.1 CEQR Analysis

A screening analysis was conducted to determine if a detailed noise analysis would be required for the on-site operations at the North Shore 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 85 meters (280 feet) from the property line in the direction of the nearest noise sensitive receptor, which is 85 meters (280 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. Section 3.14.5.1 discusses this concept in greater detail. The results of the screening analysis show that receptors are located within the 55 dBA contour line, therefore, an on-site noise analysis, including noise monitoring at the nearest noise sensitive receptor was required to determine if there would be an impact.



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

400 0 400 Feet

Figure 11.12-1 Noise Sources and Receptors
North Shore Converted MTS

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Noise monitoring was conducted at the receptor during the quietest hour based on monitoring data provided in Table 11.12-1 above. Table 11.12-6 below identifies the existing background noise level during the quietest hour. The table shows the distance from the North Shore Converted MTS to the receptor, North Shore Converted MTS-related noise levels at the receptor, the monitored existing background noise level, and the predicted noise levels with both facility noise and background noise combined. The difference between this combined noise level and the existing noise level at the receptor represents the predicted incremental change in noise level from the North Shore Converted MTS. Because this incremental change is not greater than the CEQR threshold of 3 dBA at the nearest noise sensitive receptor, there is no predicted impact that would be caused by the North Shore Converted MTS on-site operations.

Table 11.12-6
Existing and Predicted Noise Levels
at the Nearest Noise-Sensitive Receptor
North Shore Converted MTS

Receptor ID	Distance from Facility (meters/feet)	Existing Noise Levels During Quietest Hour (dBA)[1][2]	Predicted Facility Noise Level at Sensitive Receptor (dBA)[3]	Combined Facility and Background Noise Level at the Sensitive Receptor (dBA)	Increase over Existing Noise Levels (dBA)	Impact[4] (yes or no)
House	85/280	59.5	56.0	61.0	1.5	No

Notes:

(1) Twenty-minute noise level readings measured at the closest sensitive receptor during the quietest hour determined from the 24-hour noise level readings.

(2) Existing noise levels measured on January 22, 2003 for between 11:00 p.m. and 12:00 a.m.

(3) Predicted noise level calculations at sensitive receptor include on-site and off-site shielding from structures.

(4) According to CEQR, an increase of 3 dBA at nighttime is considered an impact. The impact analysis compares the loudest noise emissions from daily operations at the facility with the quietest background noise levels that occur during facility operation. The quietest hour of background noise levels occurred during the nighttime hours; therefore, only nighttime impact criteria are discussed in this analysis.

11.12.3.1.2 Performance Standards for Zoning Code Analysis

Overall noise predictions were calculated at the locations of the points along the North Shore 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 11.12-7 below). Based on this analysis, no exceedances to the Performance Standards are predicted in the direction of a noise sensitive receptor.

Table 11.12-7
Spectral Noise Analysis
North Shore 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	73.5	64.9	58.4	54.9	52.1	45.6	35.2	24.9
Total Lp dB: D2	64.6	55.6	51.3	47.8	45.5	39.0	26.8	14.7
Total Lp dB: D3	66.1	55.1	50.0	46.3	43.6	37.1	25.8	14.5
Total Lp dB: D4	71.9	62.1	58.0	54.5	52.3	45.9	34.4	23.1

11.12.3.1.3 Noise Code Analysis

Overall noise predictions were calculated at the locations of the points along the North Shore Converted MTS boundary to determine the Total L_{eq} from all indoor and outdoor sources. This is shown in Table 11.12-8 below. Based on this analysis, the Total Leq does not exceed the Noise Code Standard of 70 dBA.

Table 11.12-8
Stationary Noise Analysis
North Shore Converted MTS

Location at Plant Boundary	Total L_{eq} Contribution at Plant Boundary (dBA)
D1	65.6
D2	53.6
D3	50.1
D4	56.9

11.12.3.2 Off-site Noise Analysis

A screening analysis was conducted to determine if a detailed analysis including noise monitoring would be required along the truck routes serving the North Shore Converted MTS. As a result of this screening, which is described in Section 3.14.5.2, 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 are provided in Table 11.12-9 below.

Because the screening results presented above showed that the PCEs would double on a roadway due to DSNY and other agency collection vehicles coming to or going from the North Shore Converted MTS, a detailed off-site noise analysis was performed at that roadway using TNM 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. Figure 11.12-2 shows the intersections analyzed using TNM. TNM results for locations/hours that resulted in an impact are presented in Table 11.12-10 below. The table shows existing background noise levels monitored at the nearest sensitive receptor at the roadway, TNM predicted noise levels for the existing traffic, TNM predicted Future No-Build noise levels for 2006 for the roadway, the number of North Shore Converted MTS-related collection vehicles and employee vehicles, TNM predicted Future Build noise levels for 2006 as a result of the North Shore Converted MTS-related collection and employee vehicles, and the incremental change caused by these trucks, which is calculated by obtaining the difference between this TNM Future Build noise level and the TNM predicted Future No-Build noise level. Because this incremental change is greater than the CEQR threshold of 3 dBA at the

nearest sensitive receptor, an impact is predicted from the North Shore Converted MTS-related collection and employee vehicles.

Table 11.12-9
Off-site Noise Screening Results
North Shore Converted MTS

Location	Hour	Future No-Build PCEs[(1)]	Collection Vehicles	Employee Vehicles	Future Build PCEs[(1)(2)]	Possible Impact[(3)]
College Point Boulevard North of Roosevelt Avenue	3:00 a.m.	305	26	0	1527	Yes
College Point Boulevard North of Roosevelt Avenue	9:00 a.m.	4078	43	0	6099	No
College Point Boulevard South of Sanford Avenue	3:00 a.m.	220	26	0	1442	Yes
College Point Boulevard South of Sanford Avenue	9:00 a.m.	5049	46	0	7211	No
College Point Boulevard between 58th and 57th Avenue	3:00 a.m.	2075	26	0	3297	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.

Table 11.12-10
Off-site Noise Analysis TNM Results
North Shore Converted MTS

Location	Hour	Existing Background Noise Level[(1)] (Measured)	TNM Predicted Noise Level for Existing Traffic	TNM Future No-Build Noise Level	Collection Vehicles	Employee Vehicles	TNM Future Build Noise Level	Impact (Noise Level Difference)
College Point Boulevard North of Roosevelt Avenue	3:00 a.m.	60.5	65.2	60.6	26	0	66.4	Yes (5.8)
College Point Boulevard South of Sanford Avenue	3:00 a.m.	68.0	71.1	68.2	26	0	71.7	Yes (3.5)

Note:
(1) Existing noise level and traffic count used for input into TNM was recorded on May 14, 2003 and May 15, 2003.

To determine if these TNM predicted impacts were accurate, site-specific truck simulations were conducted with DSNY Collection Vehicles, as described in Section 3.14.7, for each roadway and hour that the first stage screening analysis identified to have potential impacts. The truck simulation analysis provides a more realistic determination of DSNY Collection Vehicle noise impacts based on the proposed number of DSNY Collection Vehicles expected to travel through the roadways analyzed during the nighttime hours. Tables 11.12-11 and 11.12-12 below contain the results of the site-specific DSNY Collection Vehicle simulations. For comparison purposes, Table 11.12-13 contains the results for the hours resulting in an impact based on the truck simulations and the TNM results for these hours for the same traffic conditions and background noise levels estimated from recordings during the simulations. As can be seen, TNM also predicts an impact during these hours, however TNM over predicted the incremental change caused by the North Shore Converted MTS-related collection vehicles for the roadways analyzed. As discussed further in Section 3.14.7.2, this can also be attributed to the default assigned noise level for each type of vehicle, which appears to be greater than the actual noise levels that would be emitted by the North Shore Converted MTS-related collection vehicles.

Table 11.12-11
Off-site Noise Analysis Truck Simulation
College Point Boulevard – North of Roosevelt
North Shore Converted MTS

Hour	Existing Background Noise Level (Estimated[(1)])	Collection Vehicles	Truck Simulation[(2)] Noise Level for Existing Traffic plus Collection Vehicles	Impact (Noise Level Difference)
12:00 a.m.	65.5	11	67.5	No (2)
1:00 a.m.	65.7	31	69.3	Yes (3.6)
2:00 a.m.	64.9	22	68.0	Yes (3.1)
3:00 a.m.	67.0	26	69.4	No (2.4)
4:00 a.m.	67.7	24	69.5	No (1.8)
5:00 a.m.	68.2	21	69.6	No (1.4)

Notes:
(1) Existing background noise levels were estimated from noise monitoring performed during the simulations.
(2) Simulations performed on August 12, 2003.

Table 11.12-12
Off-site Noise Analysis Truck Simulation
College Point Boulevard – South of Sanford
North Shore Converted MTS

Hour	Existing Background Noise Level (Estimated[(1)])	Collection Vehicles	Truck Simulation[(2)] Noise Level for Existing Traffic plus Collection Vehicles	Impact (Noise Level Difference)
1:00 a.m.	69.9	31	72.2	No (2.3)
2:00 a.m.	71.0	22	72.3	No (1.3)
3:00 a.m.	66.0	26	69.9	Yes (3.9)
4:00 a.m.	67.3	24	70.5	Yes (3.2)
5:00 a.m.	70.8	21	71.9	No (1.1)

Notes:
(1) Existing background noise levels were estimated from noise monitoring performed during the simulations.
(2) Simulations performed on August 12, 2003.

Table 11.12-13
Off-site Noise Analysis – Comparison of Truck Simulation and TNM Results
North Shore Converted MTS

Location	Hour	Existing Background Noise Level[1] (Measured)	Collection Vehicles	Truck Simulation Noise Level for Existing Traffic plus Collection Vehicles	Simulation Impact (Noise Level Difference)	TNM Predicted Noise Level for Existing Traffic	TNM Predicted Noise Level for Build Condition	TNM Impact (Noise Level Difference)	Noise Level Difference between TNM and Truck Simulation[2]
College Point Boulevard North of Roosevelt Avenue	1:00 a.m.	65.7	31	69.3	Yes (3.6)	64.0	71.4	Yes (7.4)	3.8
College Point Boulevard North of Roosevelt Avenue	2:00 a.m.	64.9	22	68.0	Yes (3.1)	64.6	70.4	Yes (5.8)	2.7
College Point Boulevard South of Sanford Avenue	3:00 a.m.	66.0	26	69.9	Yes (3.9)	70.5	74.5	Yes (4.0)	0.1
College Point Boulevard South of Sanford Avenue	4:00 a.m.	67.3	24	70.5	Yes (3.2)	70.8	74.4	Yes (3.6)	0.4

Notes:

(1) Existing noise level and traffic count used for input into TNM was recorded on August 12, 2003 and August 13, 2003.

(2) The difference between Simulation Impact and TNM Impact demonstrates that TNM overpredicts results.

Since both TNM and the site-specific truck simulations predict an impact at a receptor from 1:00 a.m. to 4:00 a.m. for the College Point Boulevard – North of Roosevelt location and from 3:00 a.m. to 5:00 a.m. for the College Point Boulevard – South of Sanford location, adjustments were made to the truck routes to the North Shore Converted MTS. During these hours, North Shore Converted MTS-related collection vehicles en route to the MTS would be routed further on the Van Wick Expressway to exit 14, Linden Place, rather than the originally proposed route of the Van Wick Expressway or Long Island Expressway to College Point Boulevard, thus avoiding the locations listed in Table 11.12-13 above. However, during these hours, North Shore Converted MTS-related collection vehicles leaving the MTS would continue to be routed along College Point Boulevard to either the Long Island Expressway or Van Wick Expressway. These locations were reanalyzed using the site-specific truck acoustic energy for each hour as described in Section 3.14.7.2 during these hours with the adjustments to confirm that off-site noise impacts would not be caused by the reduced number of collection vehicles. TNM results based on the truck rerouting are presented in Tables 11.12-14 and 11.12-15 below. Based on these results, with the rerouted North Shore Converted MTS-related collection vehicles, there is no predicted impact that would be caused by the North Shore Converted MTS collection vehicles en route to and from the facility.

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

500 0 500 Feet

Figure 11.12-2 Mobile Noise Analysis Intersections Analyzed North Shore Converted MTS

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Table 11.12-14
Off-site Noise Analysis using Truck Simulation Data and Adjusted Collection Vehicles
College Point Boulevard – North of Roosevelt
North Shore Converted MTS

Hour	Existing Background Noise Level (Estimated[(1)])	Adjusted Collection Vehicles based on Linden Exit	Calculated[(2)] Noise Level for Existing Traffic plus Adjusted Collection Vehicles	Impact (Noise Level Difference)
1:00 a.m.	65.7	14	67.9	No (2.4)
2:00 a.m.	64.9	8	66.9	No (1.2)
3:00 a.m.	67.0	12	66.9	No (2.0)
4:00 a.m.	67.7	11	68.2	No (1.2)

Notes:
(1) Existing background noise levels were estimated from noise monitoring performed during the simulations.
(2) Noise Levels for Existing traffic plus adjusted collection vehicles were calculated utilizing the per truck acoustic energy determined from the truck simulation data for this location.

Table 11.12-12
Off-site Noise Analysis using Truck Simulation Data and Adjusted Collection Vehicles
College Point Boulevard – South of Sanford
North Shore Converted MTS

Hour	Existing Background Noise Level (Estimated[(1)])	Adjusted Collection Vehicles based on Linden Exit	Calculated[(2)] Noise Level for Existing Traffic plus Adjusted Collection Vehicles	Impact (Noise Level Difference)
1:00 a.m.	69.9	14	71.1	No (1.2)
2:00 a.m.	71.0	8	71.5	No (0.5)
3:00 a.m.	66.0	12	68.2	No (2.2)
4:00 a.m.	67.3	11	69.1	No (1.8)

Notes:
(1) Existing background noise levels were estimated from noise monitoring performed during the simulations.
(2) Noise Levels for Existing traffic plus adjusted collection vehicles were calculated utilizing the per truck acoustic energy determined from the truck simulation data for this location.

11.13 Infrastructure & Energy

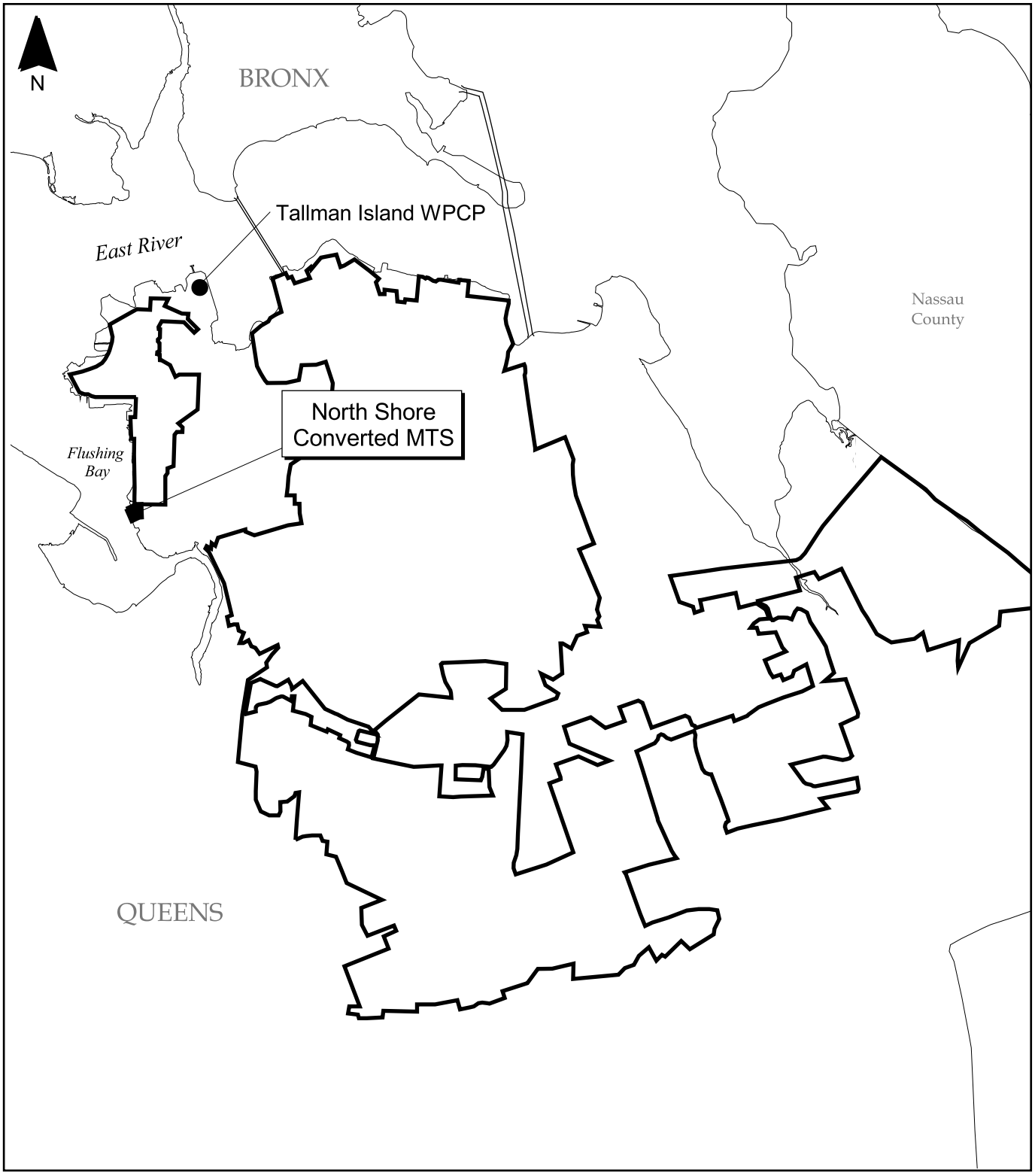
11.13.1 Existing Conditions

11.13.1.1 Water Supply

Water is supplied to the North Shore MTS from the Delaware and Catskill reservoir systems through the City's municipal water distribution system. An off-site 8-inch diameter pipe along 122nd Street north of 30th Avenue provides potable water to the facility for both process 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).

11.13.1.2 Sanitary Sewage and Storm Water

A review of NYCDEP infiltration and inflow (I&I) maps showed that the site is served by the Tallman Island Water Pollution Control Plant (WPCP), which serves portions of Queens. The WPCP drainage area is illustrated in Figure 11.13-1. From July 2001 through June 2002, the WPCP treated an average of 49 million gallons per day (mgd) of wastewater during dry weather flow (Table 11.13-1). The maximum dry weather flow during this period was 56 mgd during August and September 2001. Effluent from the plant is discharged into the East River, and is regulated by the NYSDEC under the State Pollutant Discharge Elimination System (SPDES). The current SPDES permit limit for flow to the Tallman Island WPCP is 80 mgd. It is estimated that current on-site employee water usage at the MTS is about 75 gallons per day (gpd). This estimate is based on three security employees one guard per shift, three shifts per day) using 25 gallons per person per day (CEQR Technical Manual, 2001). As the facility is currently not accepting waste, no other potable water is used and no operational staff are currently assigned to the site.



Site delineations are approximate.

3000 0 3000 Feet

Figure 11.13-1 Existing WPCP Drainage Area

North Shore Converted MTS

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Table 11.13-1
Average Monthly Dry Weather Flows
Tallman Island WPCP
Fiscal Year 2002

Month	Dry Weather Flow (mgd)
July 2001	54
August	56
September	56
October	55
November	50
December	46
January 2002	45
February	44
March	45
April	44
May	45
June	46
Average Effluent	**49**

Wastewaters generated at the existing North Shore MTS are currently routed to a 12-inch sanitary sewer line flowing from west to east along 29th Avenue. Stormwater runoff flows into a 24-inch storm sewer line running from 31st Avenue to College Point Boulevard. Wastewater is discharged to the municipal sewer system from the site via a pump station on 122nd Street.

11.13.1.3 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 27 pounds per week (approximately 4 pounds per day). The solid waste is collected by DSNY personnel and is transported by truck to an appropriately licensed solid waste management facility.

11.13.1.4 Energy

Based on a review of applicable utility service plans, Consolidated Edison of New York supplies electricity to the facility via lines running along 31st Avenue. The existing North Shore MTS utilizes a negligible amount of energy due to the low staffing levels providing only security for the facility. There is currently no gas supplied directly to the facility.

11.13.2 Future No-Build Conditions

The North Shore MTS would continue to not accept waste. Potable water use, process and sanitary wastewater generation, solid waste generation and energy use would remain at or near the Existing Conditions levels for security employees.

11.13.3 Potential Impacts with the North Shore Converted MTS

11.13.3.1 Water Supply

The North Shore 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 1,605 gpd above current consumption levels.

The North Shore Converted MTS would have no impact on the existing system's ability to supply water reliably. According to NYCDEP, the water pressure in the distribution lines in the area is about 45 pounds per square inch (psi). Under worst case conditions, the increased usage would not have significant impacts on water pressure in the system.

11.13.3.2 Sanitary Sewage

Based on the estimated water usage of 1,680 gpd for the West 135th Street Converted MTS, the small quantities of wastewater sent to the Tallman Island WPCP would not significantly impact the sewage flow rate or the ability of the Tallman Island WPCP to meet its SPDES permit limits. The Tallman Island WPCP treated an average of 49 mgd in fiscal year 2002 and has a design operating capacity of 70 mgd.

11.13.3.3 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, 468 pounds of solid waste would be generated per week (78 lbs/day) and would represent an incremental increase of approximately 444 pounds per week (74 lbs/day) above current waste generation levels. This volume would be managed at North Shore Converted MTS and would not significantly impact the system.

The North Shore 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 North Shore Converted MTS facility, if incorporated in the Plan, would be subject to permitting as a solid waste management facility by NYSDEC and DSNY.

11.13.3.4 Energy

The North Shore Converted MTS would require an additional 1.11E+10 BTU/year of electricity to operate the facility. Natural gas heating would be used with an estimated demand of 1.34E+08 BTU/year.

Consolidated Edison has been notified of the power requirements of the North Shore Converted MTS and has stated that all demands generated by the facility could be met without any 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 North Shore Converted MTS and has stated that the facility could be supplied with natural gas with no adverse impact on the utility.

11.14 Natural Resources

11.14.1 Existing Conditions

Existing Conditions include stressed aquatic and terrestrial communities typical of this area of Queens. 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 North Shore Converted MTS.

11.14.1.1 Definition of Study Area

The study area includes the site and the waterfront section that is bounded by Flushing Bay to the west (Figure 2.9-1). The upland sections of the study area are occupied with a salt storage shed and a parking area. This part of the study area and surrounding neighborhood are completely developed and therefore, have very limited terrestrial natural resources. Such resources that do exist will be discussed in following sections. Because Future Build Conditions would include dredging of bottom sediments and construction of a new MTS, a description of aquatic communities is included.

11.14.1.2 Geology

According to the permit renewal report prepared by the Department in October 1995, bedrock was not encountered in borings conducted at the site.[5] Sand and silt were found to a depth exceeding 65 feet. This layer is overlain by approximately 35 feet of dark gray, soft organic silt, which is in turn overlain by approximately 20 feet of sand. Surface sediment collected from the site in 2003 indicates light grey to grayish black sludge consisting primarily of grey to black hard clay, some silt, and trace sand, with approximately 44,000 mg/Kg total organic carbon. Sediment was found to be somewhat degraded due to contaminants in the sample material.

[5] Engineering Report North Shore MTS Solid Waste Management Facility filed with NYSDEC, October 1995.

Historically, the banks of Flushing Bay were comprised of extensive intertidal marshes covering more than 100 acres. The sediments under and around the site are silty muds, while extensive filling and hardening of the upland areas has taken place and the geology has little, if any, resemblance to its former state.

11.14.1.3 Floodplains

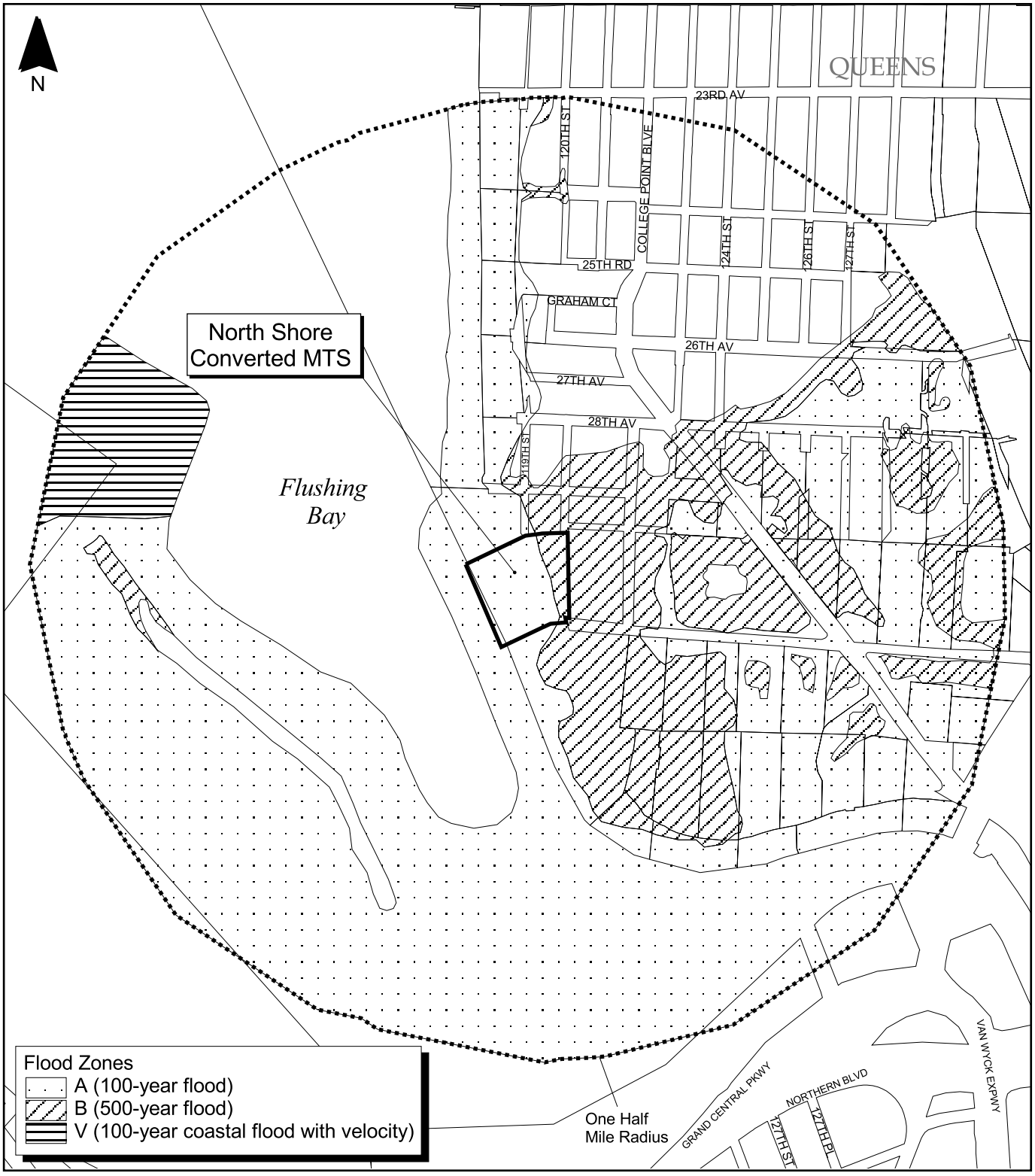
The existing MTS and salt shed are within the 100-year coastal floodplain (Figure 11.14-1). Flushing Bay is the only surface water body on or adjacent to the study area. Other than Flushing Bay, a NYSDEC-designated littoral zone, no other wetlands are in the study area (Figure 11.14-2).

11.14.1.4 Ecosystems

Flushing Bay is a shallow, highly impacted water body that has been greatly altered by human activities over the past century. Almost the entire shoreline is hardened and the hydrodynamics of Flushing Bay have been changed by the creation of LaGuardia Airport, which led to extensive filling and placement of jetties and groins.

Much of the upland area on and around the site consists of fill material placed over an intertidal marsh. The original marsh was extensive, covering more than 100 acres that reached as far north as 20th Avenue. The existing MTS was built on pilings over the water with a short causeway that connects it with the shore.

At present, there is little vegetation of significance on the site because most of the surface is covered by buildings, roadways, or other hard surfaces. Vegetative cover on the site, which was confined to the shoreline near the existing MTS, was too sparse to be mapped. Various opportunistic plant species are present on the site including mugwort (*Artemesia vulgaris*), Queen Anne's lace (*Daucus carota*), poor-man's pepper (*Lepidium virginicum*) and seaside goldenrod (*Solidago semper virens*). Saplings of tree-of-heaven (*Ailanthus altissima*) were observed in the vicinity of the ramp to the existing MTS.



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

500 0 500 Feet

HDR
PB
HydroQual
EEA

Figure 11.14-1 Floodplains

North Shore Converted MTS

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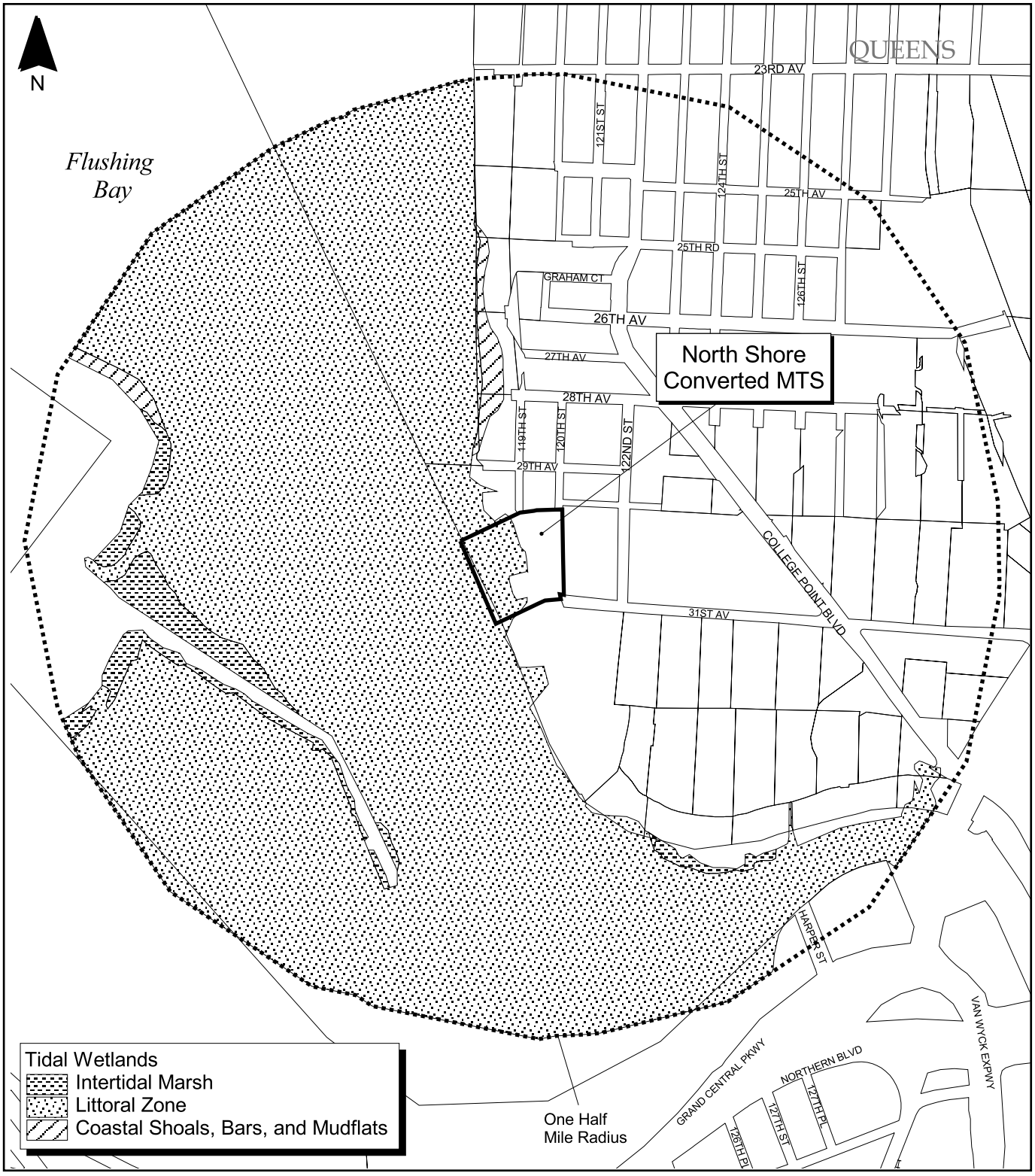

Site delineations and study area boundaries are approximate.
Base Map Source: New York City Department of City Planning

500 0 500 Feet

HDR
PB
HydroQual
EEA

Figure 11.14-2 Wetlands

North Shore Converted MTS

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The sediment under and around the existing MTS are silty muds, typical of the soft depositional types found in quiescent areas in Flushing Bay. Flushing Creek contains a large combined sewer outfall (CSO) that contributes substantial organic loading to lower Flushing Bay waters. The bay itself is known for highly enriched sediments that contribute to odor problems during warm weather. While specific biological data on the benthic invertebrate fauna are lacking, these types of sediments and conditions are known to support communities that contain small opportunistic species, including ampeliscids and polychaete worms, in other areas with similar features and inputs.

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

While the study was not complete at the time of writing, a number of finfish species have been identified, including EFH listed species: Atlantic herring (*Clupea harengus*) and winter flounder (*Pseudopleuronectes americanus*), as well as Atlantic silverside (*Menidia menidia*) and northern pipefish (*Syngnathus fuscus*). Larval fish collected include the EFH listed winter flounder (*Pseudopleuronectes americanus*), as well as rock gunnel (*Pholis gunnelus*), sculpin (*Myoxocephalus sp.*), and grubby (*Myoxocephalus aeneus*). Invertebrates collected include say mud crabs (*Dyspanopeus sayi*), blue crabs (*Callinectes sapidus*), eastern mudsnails (*Ilyanassa obsoleta*), Atlantic oyster drills (*Urosalpinx cinerea*), sevenspine bay shrimp (*Crangon septemspinosa*), mantis shrimp (*Squilla empusa*), red beard sponges (*Microciona prolifera*), and hydroids. Preliminary results indicate the presence of the polychaete worms (*Streblospio benedicti, Haloscolopos robustus, Capitellidae, Hapaniola grayi and Etone sp.)*.

NYSDEC Breeding Bird Atlas records list the horned lark (*Eremophila alpestris*) as a species with a probable breeding status near the study area. The state legal status of the horned lark 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. The peregrine falcon (Falco peregrinus), a federally listed endangered species, was not listed as present for this site in the recent response from the U.S. Department of the Interior Fish and Wildlife Service.

11.14.2 Future No-Build Conditions

The study area would remain as is. The limited aquatic and terrestrial natural resources would remain, and the study area would continue to be an ecologically unproductive and stressed urban area.

11.14.2 Potential Impacts with the North Shore Converted MTS

11.14.2.1 Geology

The geology of the study area would not be changed as a result of the implementation of the North Shore Converted MTS, other than for the removal of dredge spoil to accommodate the barges and tugboats. The dredging activity would remove layers of sediment deposited over time and further alter the submarine geological features of the study area, but not result in any significant impact.

11.14.2.2 Floodplains

Implementation of the North Shore Converted MTS would have no affect on the elevation of the site. It would be constructed within the 100-year floodplain and it would not include any provisions for raising any portions of the site over this level.

11.14.2.3 Ecosystems

The North Shore Converted MTS would also be a pile-supported structure and would result in a net gain of 0.68 acre over the water. During the demolition of the existing MTS, the upper organic silts lying beneath the structure that was above water would be disturbed to some degree, resulting in resuspension of the sediment. However, the amount of resuspended sediment is expected to be low, and the impacts, if any, highly localized. Turbidity and short-term, lowered, dissolved oxygen are possible, but not measurable against the normal background fluctuations. Construction would involve installing piles for the foundation supports and dredging to accommodate the deeper draft of the coastal barges. The benthic and finfish community would be temporarily disrupted during this phase of the project. It can be anticipated that the benthic invertebrates would recolonize the area within 6 months to 12 months and that finfish would return to the area immediately following completion of the construction.

An overall increase in the amount of shading over the aquatic environment would occur as a result of the new facility. Experts have differing opinions regarding the effects of shading. A field study conducted on the Hudson River reported no statistical difference in benthic populations in inter-pier and under-pier areas in New York Harbor waters.[6] Another study conducted on the Hudson River reported that there we no significant differences in benthic population biomass under or between piers, but benthos were smaller and numerically more abundant underneath piers than alongside or between them. Also, juvenile winter flounder (*Pseudopleuronectes americanus*), were reported to have depressed feeding on the benthos beneath piers as compared to feeding activity along side and between piers.[7] However, because the increase in shading over water is very small, there are not expected to be significant deleterious results and any perceived adverse impacts would be negated by the removal of the existing MTS.

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

[7] Duffy-Anderson, J.T. & Able, K.W. 2001. "An Assessment of the Feeding Success of Young-of-the-Year Winter Flounder (*Pseudopleuronectes americanus*) Near a Municipal Pier in the Hudson River Estuary, U.S.A."

The North Shore Converted MTS would not have any significant impact on the few areas of vegetation present on the site. Vegetation observed on the site were invasive species that are not rare, endangered, or particularly important from an ecological perspective.

The horned lark, a species of special concern, is listed by the NYSDEC as having probable breeding status in the area surrounding the site. However, this bird is only found in open areas with bare ground or short grass.[8] This bird, therefore, would not be found breeding on or using the site and any plans for the site would not impact the bird.

Estuaries. Vol. 24, No. 3, p. 430-440.

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

11.15 Water Quality

11.15.1 Existing Conditions

11.15.1.1 Definition of the Study Area

The water quality study area encompasses Flushing Bay and the East River, and includes discharges from CSOs and point sources within ½ mile of the site.

11.15.1.2 Water Quality

The water quality data for the following monitoring stations, shown in Figure 11.15-1, are generally representative of water quality conditions in the study area:

- NYCDEP Harbor Survey Program – Stations E-6 off of College Point in the East River and E-15 in Flushing Bay; and
- Battelle's 1991 Metals Survey – Stations E-4 and E-4B[9] in the East River off of Hunt's Point.

These data, along with NYSDEC's water quality standards and guidance values, are presented in Table 11.15-1. These 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 11.15-1, the data indicate that, on average, NYSDEC standards and guidance values are met. For NYCDEP Harbor Survey Station E-6, however, the minimum surface and bottom dissolved oxygen between June 1, 2002, and September 30, 2002, did not meet the water quality standards for dissolved oxygen. In addition, the mercury concentration for Battelle Stations E-4T and E-4B did not conform to the water quality standard for mercury.

[9] Stations E-4T and E-4B are located at the same longitude and latitude. Station E-4T is located at the surface of the East River. Station E-4B is located at the bottom of the East River.

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

1000 0 1000 Feet

Figure 11.15-1 Ambient Water Quality Stations
North Shore Converted MTS

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Table 11.15-1
Existing Water Quality Conditions and Standards
North Shore Converted MTS Study Area

Average Concentrations						
Parameter	**Units**	**Station E6[1]**	**Station E15[2]**	**Station E4T[3]**	**Station E4B[4]**	**NYS Class I Standards**
Dissolved Oxygen (surface/minimum)	mg/L	6.0 [5]/2.9 [6]	7.3 [7]/4.1 [8]	-------	-------	4.0
Dissolved Oxygen (bottom/minimum)	mg/L	5.1 [9]/3.0 [6]	6.3 [7]/4.1 [8]	-------	-------	4.0
BOD (surface)	mg/L	3.1 [10]	3.4 [10]	-------	-------	-------
BOD (bottom)	mg/L	3.3 [10]	3.4 [10]	-------	-------	-------
Total Coliform (surface)	MPN/100 mL	1,171 [11]	8,458 [11]	-------	-------	10,000
Total Coliform (bottom)	MPN/100 mL	1003 [11]	5,034 [11]	-------	-------	10,000
Fecal Coliform (top)	MF	85	156	-------	-------	2,000
Fecal Coliform (bottom)	MF	96 [12]	489 [12]	-------	-------	2,000
Total Suspended Solids (surface)	mg/L	21	7	-------	-------	-------
Total Suspended Solids (bottom)	mg/L	23	7	-------	-------	-------
NH3-N	mg/L	0.452	0.444	-------	-------	-------
(NO3 + NO2)	mg/L	0.364	0.273	-------	-------	-------
Total Phosphorous	mg/L	0.293 [13]	0.379 [13]	-------	-------	-------
Dissolved PO4	mg/L	-------	-------	-------	-------	-------
Chlorophyll-a	µg/L	5.9	20.8	-------	-------	-------
Arsenic	µg/L	-------	-------	-------	-------	36 [14,15]
Cadmium	µg/L	-------	-------	0.07 [14]	0.06 [14]	7.7 [14,15]
Chromium	µg/L	-------	-------	-------	-------	-------
Copper	µg/L	-------	-------	1.83 [16]	1.83 [16]	5.6 [15,16]
Lead	µg/L	-------	-------	0.20 [14]	0.19 [14]	8.0 [14,15]
Mercury	µg/L	-------	-------	0.0028 [14]	0.0029 [14]	0.0026 [14,15]
Nickel	µg/L	-------	-------	1.50 [14]	1.46 [14]	8.2 [14,15]
Silver	µg/L	-------	-------	0.0083 [14]	0.0078 [14]	-------
Zinc	µg/L	-------	-------	5.32 [14]	5.11 [14]	66 [14,15]
Cyanide	µg/L	-------	-------	-------	-------	1.0 [15]

Notes:

[1] Average concentrations for 2002 NYCDEP Harbor Survey Station E-6, located off College Point in the East River.

[2] Average concentrations for 2000 NYCDEP Harbor Survey Station E-15, located at Flushing Bay.

[3] Average concentrations for 1991 Battelle Ambient Survey Station E4T, located off Hunt's Point on the surface of the East River.

[4] Average concentrations for 1991 Battelle Ambient Survey Station E-4B, located off Hunts's Point on the bottom of the East River.

[5] Represents average between February and December 2002.

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

[7] Represents average between May and September 2000.

[8] Minimum between June 1, 2000 and September 30, 2000.

[9] Represents average between May and December 2002.

[10] Latest available data 1997.

[11] Latest available data 1996.

[12] Latest available data 1999.

[13] Latest available data 1998.

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

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

11.15.1.3 Permitted Discharges

A review of the most recently available NYSDEC and USEPA databases indicated that there are three permitted discharges in the vicinity of the site. Those within a ½-mile radius are shown in Figure 11.15-2 and listed in Table 11.15-2. They consist of two combined sewer outflows (CSOs), and one industrial site, all of which are permitted by the NYSDEC.

Table 11.15-2
Existing Permitted Discharges
North Shore Converted MTS Study Area

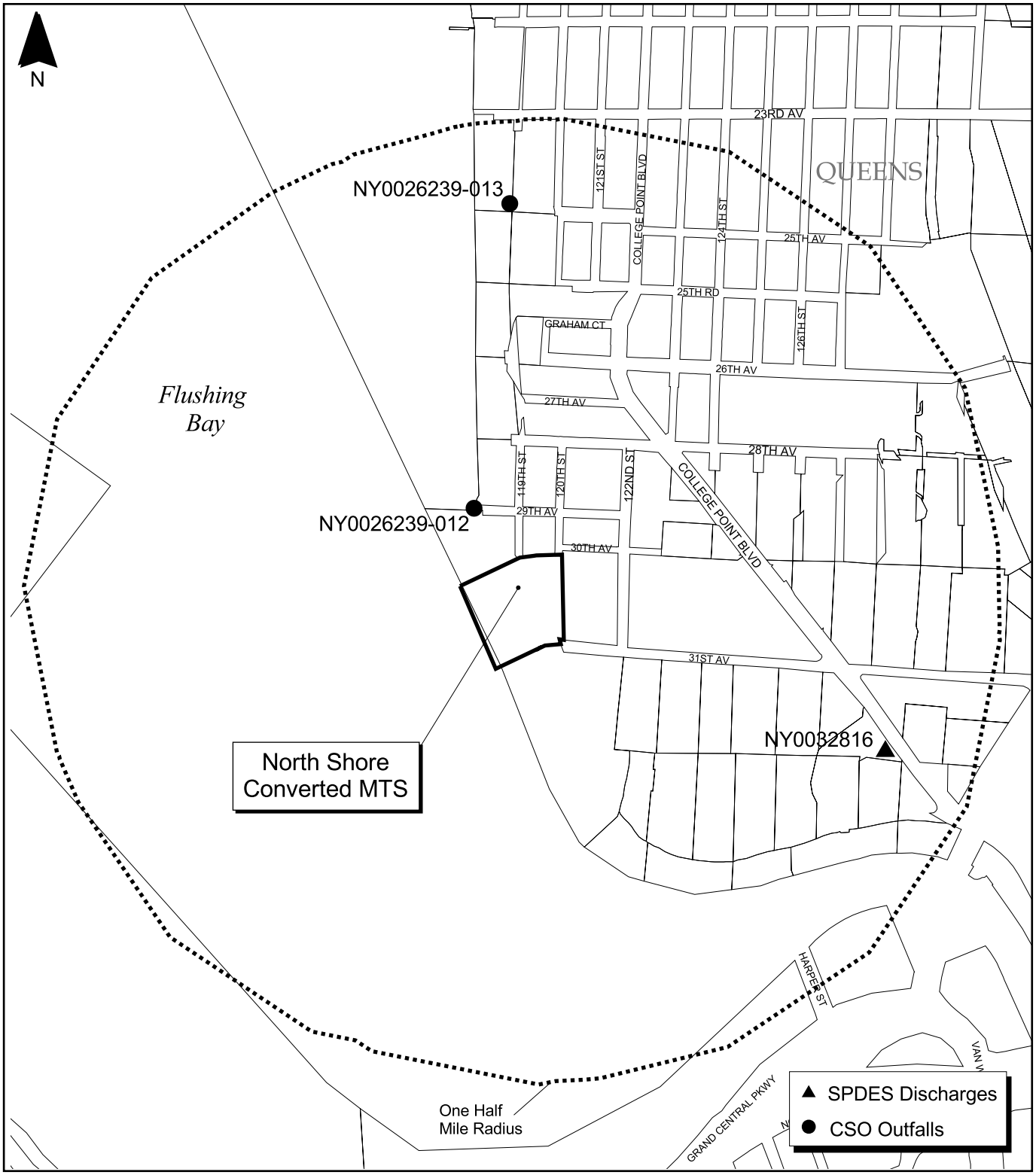
Combined Sewer Outflows (CSOs)			
Outfall Location/WPCP	**Permit Number**	**County**	**Receiving Water Body**
29th Avenue/Tallman Island	NY0026239-012	Queens	Flushing Bay
25th Avenue/Tallman Island	NY0026239-013	Queens	Flushing Bay
Point Sources			
Company Name	**Permit Number**	**County**	**Receiving Water Body**
Lefferts Oil Terminal, Inc.	NY0032816	Queens	Flushing Creek

11.15.1.4 Existing Pollutant Loads and Stormwater Runoff

Using available databases on stormwater pollutant concentrations and local precipitation data, estimates of stormwater pollutant loadings were calculated. The existing paved areas were assumed to be completely impervious, and the existing unpaved areas were assumed to have 100 percent storage and/or infiltration. A runoff flow of 0.514 cfs was calculated using the impervious site area (8.56 acres), an average rainfall intensity of 0.06 inches/hour, and a runoff coefficient set equal to one. The resulting stormwater loads, shown in Table 11.15-3, represent the existing loads at the site.

11.15.2 Future No-Build Conditions

Water quality would be expected to remain the same or improve. Water quality improvements would be due to ongoing water quality improvement programs, such as the NYCDEP CSO Abatement Program, which will reduce untreated discharges to receiving waterways, nitrogen removal activities, which will reduce nitrogen loads from City WPCPs, as well as other programs.



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

500 0 500 Feet

Figure 11.15-2 Permitted Outfalls and CSO Locations North Shore Converted MTS

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Table 11.15-3
Estimated Existing Pollutant Loads and Runoff Flows
North Shore Converted MTS Study Area

Pollutant	Concentration	Pollutant Loading (lbs/day)
Fecal Coliform MPN/100 mL	34,000	94,186[(1)]
BOD mg/L	11	31
Heavy Metals		
Copper µg/L	35	0.097
Lead µg/L	28	0.078
Zinc µg/L	154	0.427
Total Impervious Area (acre) = 8.56		Runoff Coefficient (C) = 1.00
Average Rainfall Intensity per Storm (inches/hour) = 0.06 [(2)]		Runoff Flow (cfs) = 0.514

Notes:
(1) Coliform loads are not shown in pounds/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.

11.15.3 Potential Impacts with the North Shore Converted MTS

With the development and operation of the North Shore Converted MTS, conditions would be similar to Future No-Build Conditions. All solid waste processing 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 Tallman Island WPCP, where it would be treated prior to discharge to the East River and, therefore, would not adversely affect water quality.

Stormwater loads and impervious area, shown in Table 11.15-4, 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.

The North Shore 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 adverse long-term impacts.

Table 11.15-4
Impervious Area and Estimated Pollutant Loads
North Shore 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	8.56	0.0	94,186/NA	31/NA	0.097/NA	0.078/NA	0.427/NA
Future Build Conditions	9.45	0.89	103,932/9,746	34/3	0.107/0.010	0.086/0.008	0.471/0.044

Notes:

(1) Incremental change refers to the difference in pollutant loading between the Existing Conditions and Future Build Conditions.

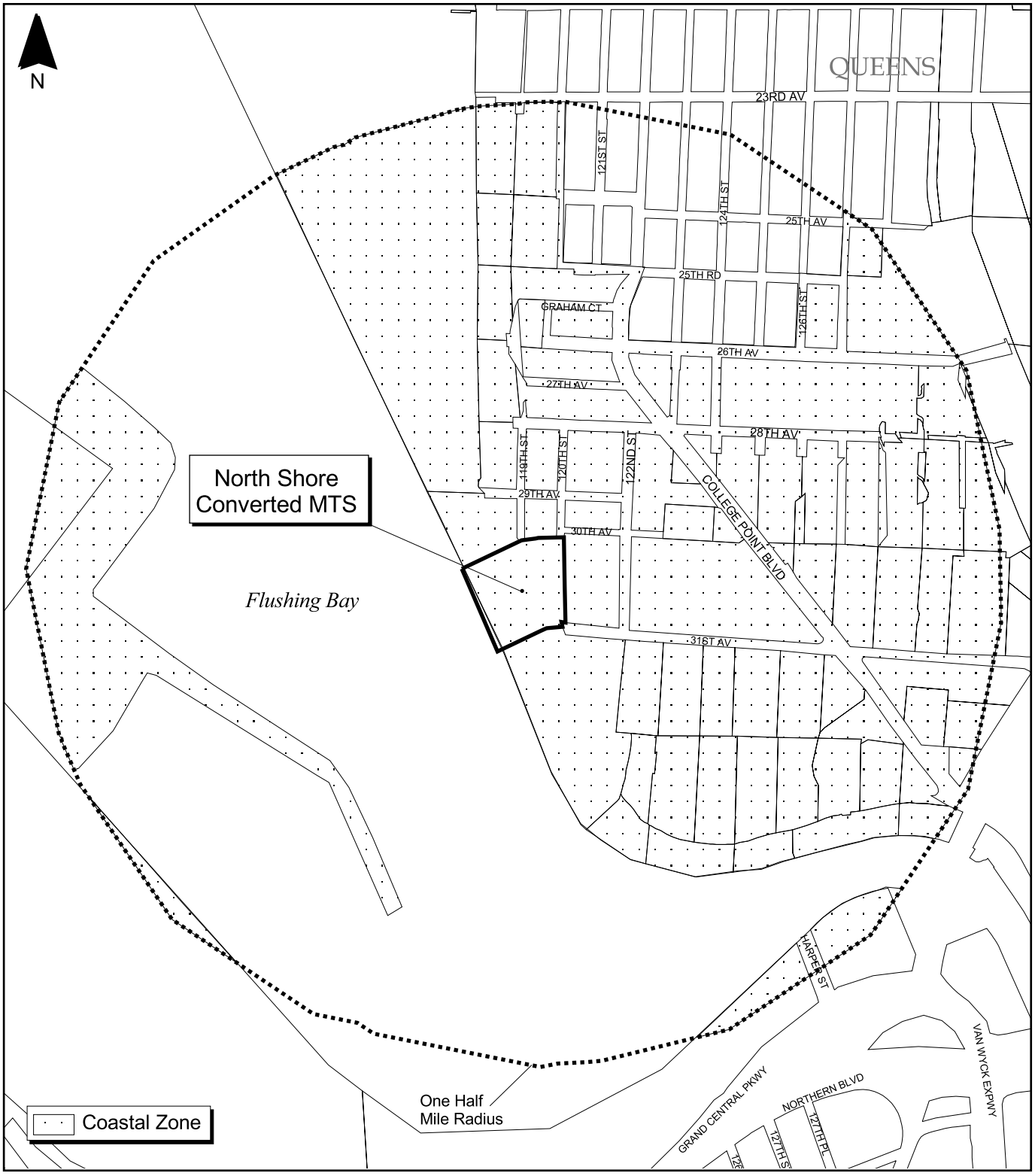
(2) Coliform loads are not shown in pounds/day. Values shown are input to the 208 Model, with output results comparable to MPN/100 mL.

11.16 Waterfront Revitalization Program

11.16.1 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 Flushing Bay, the North Shore Converted MTS would be within New York City's coastal zone boundary (Figure 11.16-1). According to "The New Waterfront Revitalization Program," the North Shore Converted MTS would be classified as a water-dependent, industrial use. It would be located within Reach 10 Queens North Shore as indicated within the "New York City Comprehensive Waterfront Plan" and the "Plan for the Queens Waterfront." It is not currently located within a DCP-designated SNWA or SMIA. The North Shore Converted MTS is 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 North Shore 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 North Shore 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 North Shore Converted MTS is provided in Section 2.9.



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

500 0 500 Feet

HDR PB HydroQual EEA

Figure 11.16-1 Coastal Zone Boundary
North Shore Converted MTS

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11.16.2 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 North Shore Converted MTS. As part of the North Short 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 North Shore MTS is not currently located within a designated SMIA. Its development would involve the demolition of the existing MTS and the construction of a new MTS at and north of the existing MTS site. The North Short Converted MTS would involve the conversion of the existing facility from a truck-to-barge waste transfer station into a TCB MTS station that would transport DSNY-managed waste to remote out-of-City disposal facilities by marine transport.

The demolition and subsequent site redevelopment, as described in Section 2.9.2, would help to restore and revitalize industrial waterfront property and would be compatible with existing and neighboring heavy industrial and maritime uses.

Waterfront development would be comprised of four primary components: (1) an enclosed over-water processing building which would include a tipping floor, loading floor and pier level; (2) an elevated access ramp to the processing building; (3) a gantry crane, outside of the processing building; and (4) a rehabilitated bulkhead and fendering system. A gantry crane would be used in the loading and unloading of DSNY barges at the facility. The North Shore Converted MTS would be consistent with existing land uses in the vicinity of its site and with the "Plan for the Queens Waterfront," which recommends the continued industrial use of the area. Although it would not encourage or facilitate the siting of any additional water-dependent uses, the North Shore Converted MTS would represent an expansion and revitalization of an existing water-dependent use and would be compatible with surrounding uses. The North Shore Converted MTS would be, therefore, consistent with this subpolicy.

2.3 Provide infrastructure improvements necessary to support working waterfront uses.

The North Shore Converted MTS would involve the demolition of the existing MTS structure and the subsequent development of a new MTS at the site. The North Shore Converted MTS would allow for the truck delivery of waste to the facility where waste would be placed in sealed containers, loaded into DSNY barges and transported to out-of-City disposal facilities.

Waterfront development would be comprised of four primary components: (1) an enclosed over-water processing building which would include a tipping floor, loading floor and pier level; (2) an elevated access ramp to the processing building; (3) an outdoor gantry crane; and (4) a rehabilitated bulkhead and fendering system. A gantry crane would be used in the loading and unloading of DSNY barges at the facility. The pilings that support the existing MTS would be removed as part of the demolition activities and new pilings would be installed.

In addition, the North Shore Converted MTS would require dredging to construct the new pier structure, and improve existing water depths at and in the immediate vicinity of the site to allow for the unimpeded operations of barges and tugboats once the North Shore Converted MTS 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 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 North Shore Converted MTS would involve the revitalization of an existing waterfront use and would not interfere with any maritime industrial, commercial or recreational vessel activities in the vicinity of its site. Activities within Flushing Bay resulting from the North Shore Converted MTS would be limited to barge loading along the pier level and the periodic swapping of loaded barges. Approximately four or five barges would be filled on a daily basis at the North Shore Converted MTS. These swapping activities would be in close proximity to the new MTS structure and comparable in nature to previous barge activities at the existing MTS, therefore, no adverse impacts upon other uses within the waterbody would be anticipated. The North Shore Converted MTS would, therefore, 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 existing MTS managed solid waste through a truck-to-barge system where loose waste was placed in open barges. The North Shore Converted MTS would

be a TCB MTS where waste would be transferred into containers that would be sealed and placed onto modified hopper barges that would transport DSNY-managed waste to out-of-City disposal locations and, therefore, would be protective of the aquatic environment and surrounding land and water uses. All solid waste handling would occur within an enclosed processing building. All waste would be placed in sealed containers before leaving the building for loading on barges.

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 also 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 North Shore Converted MTS would be done in accordance with applicable federal, state and local regulations. The North Shore Converted MTS would be protective of the surrounding environment and, therefore, consistent with this subpolicy.

Policy 4: Protect and restore the quality and function of ecological systems within the New York City 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 and Significant Coastal Fish & Wildlife Habitat information, the North Shore

Converted MTS is not within a designated area. The North Shore Converted MTS would represent an expansion in size of a previous use and would not be anticipated to result in any long-term impacts to natural resources in the vicinity of this site. The North Short 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 to determine the presence of wetlands within the site. As noted in Section 11.13.1, the North Shore Converted MTS would be located within Flushing Bay, a NYSDEC-designated littoral zone. No freshwater wetlands exist on the site. The North Short Converted MTS would involve the demolition of the existing MTS structure and development of a new MTS at and in the vicinity of the existing facility. These activities and anticipated dredging would result in limited, short-term impact to these tidal wetlands.

Dredging activities associated with the development of the North Shore Converted MTS are not anticipated to have significant impacts on wetlands in the vicinity of the site, primarily due to previous and ongoing activities and previous dredging that has historically occurred at the existing MTS. Mitigation for potential impacts would be proposed during the environmental review and permitting of the North Shore Converted MTS. This mitigation, if required, would address potential impacts that may occur due to the North Shore Converted MTS and would effectively restore these wetlands and their associated value. The North Shore 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.

The NYSDEC Breeding Bird Atlas identified the Horned Lark (*Eremophila alpestris*), a designated species of Special Concern, as having probable breeding status in the area surrounding the site. However, as discussed in Section 11.14.2, this bird is only found in open areas with bare ground or short grass, therefore, the over-water North Shore Converted MTS would not be anticipated to interfere with this species.

The pilings that support the existing MTS would be removed as part of the demolition and new pilings would be installed to support the North Shore Converted MTS. In addition, dredging would be required to construct the pier structure for the North Shore Converted MTS and to improve existing water depths at and in the immediate vicinity of the site to allow for unimpeded operations of barges and tugboats once it became operational. As stated in Section 11.14.3, modifications to the site would pose little, if any, adverse ecological impacts or loss of habitat to rare or endangered species due to the disturbed nature 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 North Short Converted MTS and the storage of any petroleum products would be conducted in accordance with applicable federal, state and local regulations. Further, the North Shore 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 North Shore 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. Storm water runoff from the North Shore Converted MTS would be managed in accordance with all applicable federal, state and local regulations.

In addition, the majority of activity associated with the North Shore 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 would 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 North Shore 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, including demolition of the existing MTS structure, and operation of the North Shore Converted MTS in order to minimize any nonpoint discharges. The MTS would comply with federal, state and local requirements concerning the management of storm water 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.

As part of the North Short Converted MTS, the pilings that support the existing MTS would be removed and new pilings would be installed to support the new building. In addition, dredging would be required to construct the pier structure for the North Shore Converted MTS and to improve existing water depths at and in the immediate vicinity of the site to allow for the unimpeded operation of barges and tugboats. Any dredging done as part of the construction of the new MTS would result in temporary impacts and would be conducted in a manner to minimize siltation and erosion and other short-term impacts to water quality. Non-structural and, if necessary, structural measures would be employed 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 North Shore 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 North Shore Converted MTS would have no impact on the quality or quantity of surface or ground waters. Sanitary and process wastewaters (e.g. floorwashdown waters, etc.) would be conveyed to an on-site treatment system and would then discharge to the municipal sewer system. Stormwater runoff from the North Shore Converted MTS 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 of water supply. The North Shore 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 site is located entirely within the 100-year floodplain boundary (Zone A). As part of the North Shore Converted MTS, the existing MTS would be demolished and a new MTS constructed at and north of the site. The pilings that support the existing MTS would be removed as part of the demolition and new pilings would be installed to support the new building. To the extent practicable, non-structural measures would be used to minimize impacts due to flooding and erosion during the demolition of the existing MTS and subsequent construction of the new, expanded processing building. Construction of the new North Shore 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 during construction to minimize damage from flooding and erosion.

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 North Shore 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. 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 North Shore Converted MTS. The majority of North Shore Converted MTS activities would occur within an enclosed processing building. 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. Only sealed, air and water tight containers would be used outside of the facility.

On-site storage of petroleum or hazardous materials related to the operation of the North Shore Converted MTS would be minimal and all storage would be in accordance with applicable federal, state and local regulations. The North Shore 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, heavy industrial uses at and in the immediate vicinity of the North Shore 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 North Shore Converted MTS would be a stand alone, water-dependent, industrial facility fronting Flushing Bay. Public access would not be compatible with the North Shore Converted MTS, however, its development would not preclude any future development of public access at other locations along the Flushing Bay waterfront.

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

Development of a new North Shore Converted MTS site would represent 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.

Only one significant, mapped park, Flushing Meadows-Corona Park, was identified approximately one-half mile south of the site. The North Shore Converted MTS, however, would have no effect on this or any other open space resource within the study area. Therefore, it would be consistent with this subpolicy.

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

The new MTS structure would have no significant impact on the site, the urban design or visual quality of the surrounding area or the existing (non-sensitive) view corridors, as noted in Section 11.7.3. Based on the information presented in that section, the North Shore Converted MTS would be consistent with this subpolicy.

9.2 Protect scenic values associated with natural resources.

The North Shore Converted MTS would involve the expansion of an existing use and 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 North Shore Converted MTS will 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 North Shore 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 is, therefore, not applicable.

11.17 Hazardous Materials

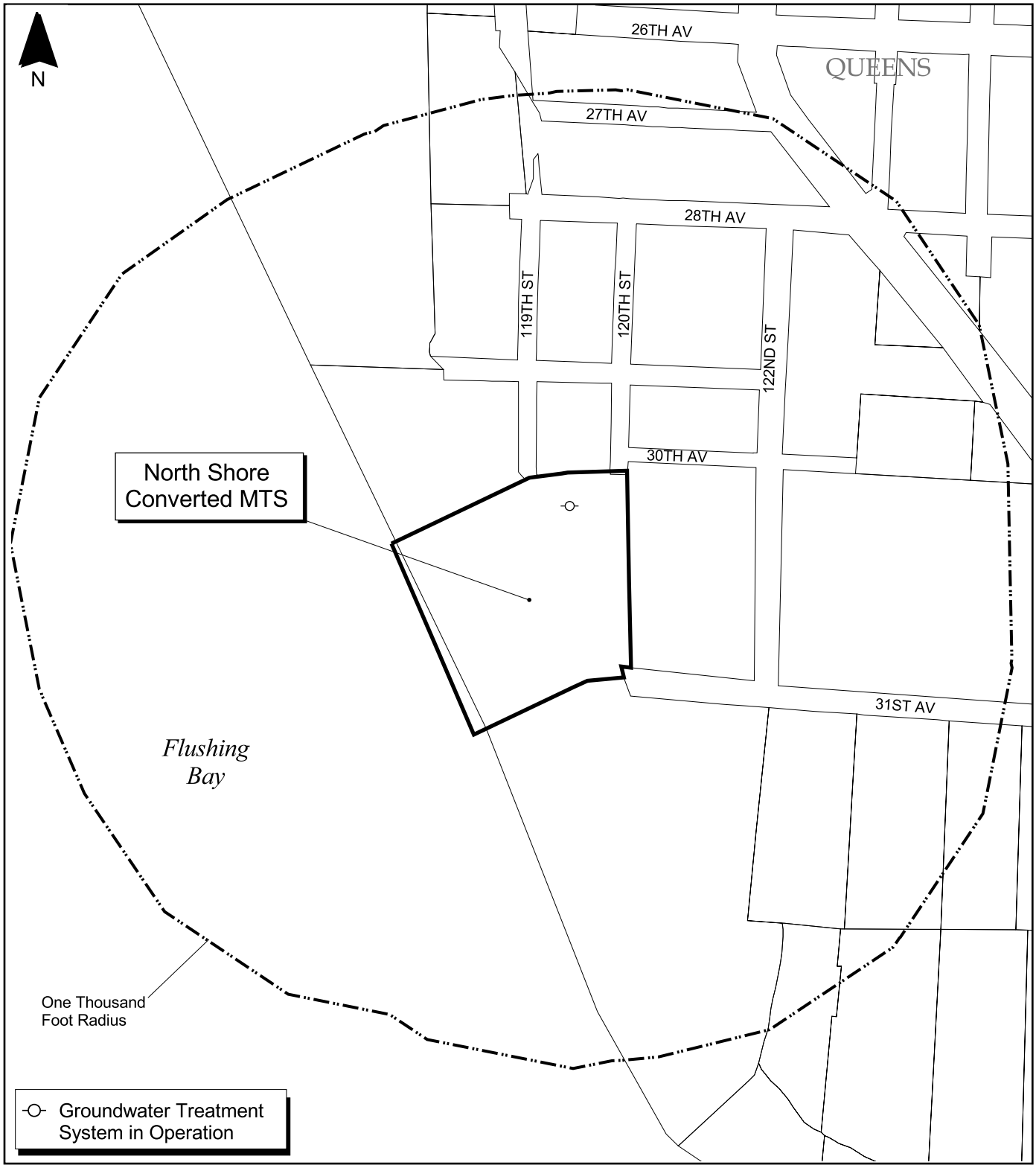
11.17.1 Existing Conditions

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 April 1999 and updated in February 2003. It 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, most recently 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.

11.17.1.1 Definition of Study Area

The study area includes the site and neighboring properties within a 1,000-foot radius (Figure 11.17-1).



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

200 0 200 Feet

Figure 11.17-1 Hazardous Material Sites

North Shore Converted MTS

CITY OF NEW YORK
DEPARTMENT OF SANITATION

11.17.1.2 Delineation of Area of Concern

After review of the applicable databases and an on-site inspection, there is only area of concern note. During the reconnaissance of the study area there was an apparent groundwater remedial system in the parking lot that serves the adjacent DSNY garage. The parking lot would be incorporated into the North Shore Converted MTS. The remedial system was operational in February 2003 and was likely associated with NYSDEC Spill No. 9508111 when, according to regulatory database information, the discovery in 1995 of free petroleum product beneath the DSNY garage led to the installation of a ground-water recovery system. As of November 2001, the recovery system was not working effectively, and NYSDEC asked for improvement or another approach.

11.17.2 Future No-Build Conditions

The existing MTS would remain standing as is, and operation of the groundwater recovery system would continue. The system would require modification or improvement to meet the operational guidelines established by NYSDEC.

11.17.3 Potential Impacts with the North Shore Converted MTS

Implementation of the North Shore Converted MTS may interfere with the groundwater recovery system. If so, the system would require modification to retain or improve its operational capability.

In the event that contaminated soils are encountered during construction, the soil would be excavated and disposed of in a manner that is consistent with the levels of contamination as specified in New York State regulations. The necessary and appropriate health and safety measures would be employed during construction to mitigate and minimize any exposure risk to workers or the general public related to the possible subsurface contamination.