

Appendix B

Analysis of Potential Cumulative Effects through Proximate Siting of More than One Waste Transfer Station

Introduction

Under the Department of Sanitation's proposed amendments to its siting rules for solid waste transfer stations, such facilities may be located in M1 (light manufacturing) zoning districts in some Community Districts. This is the only element of the new rules less restrictive than the 1998 siting rules, which did not permit waste transfer stations to locate in M1 zones. (However, under the 1998 rules, operators proposing to open waste transfer stations in M1 zones that had initiated the permitting application process prior to October 1998 were grandfathered and would have been allowed to obtain permits despite not conforming with those rules. The rules that are currently being proposed do not allow for grandfathering in this manner). Any new waste transfer station located in an M1 zone would require a CEQR environmental review in order to evaluate its independent impacts. Such a review would not take into account the potential for cumulative impacts from multiple waste transfer stations. Therefore, it is appropriate to perform an assessment of the potential for cumulative environmental impacts from the potential siting of more than one waste transfer station within geographical proximity in an M1 zone, unless it can be demonstrated that such a phenomenon would not be feasible within the City. To be conservative, this analysis assumes that the potential for two stations to locate in proximity to one another in an M1 zone under the proposed rules is worth investigating for potential cumulative impacts.

To determine this feasibility, a thorough inventory was conducted of M1 zoning districts and existing waste transfer stations in all of the Community Districts where the new siting rules permit waste transfer stations. Then, the potential for proximate siting of more than one waste transfer station in each of these M1 zoning districts was determined. An initial screening took into account the siting rules described above, and specifically the required buffer distance separating new waste transfer stations from other transfer stations and from sensitive receptors. Based on this screening, areas within the M1 districts were eliminated to the extent that locating a waste transfer station in these areas would violate the proposed siting rules.

A secondary screening was performed in sub areas within M1 districts that were not eliminated from consideration in the initial screening. In this step, aerial photographs and land use data were used to identify potential sites where a waste transfer station might feasibly locate. The following guidelines were used:

- The site must be for the most part free of structures,
- The site must be vacant or clearly underutilized (e.g., surface parking lot, junkyard, etc.), and

- The site must be at least 20,000 square feet to allow for all operations to be contained on site.

In addition to these guidelines, general professional planning judgment was used. Sites within a New York City Economic Development Corporation (EDC) In-Place Industrial Park were eliminated from consideration. That EDC Program seeks to provide a high-grade industrial park environment for industrial enterprises within the city that is competitive with suburban industrial parks. Introducing a waste transfer station to an in-place industrial park would be inconsistent with the goals of the program, which would seek to add higher value-added manufacturing.

If the site met all these criteria and there did not appear to be any other clear obstacles to implementation, then it was considered to be feasible for waste transfer siting under the proposed rules. However, in the next step of the analysis, potential cumulative effects were considered possible only in the following circumstances:

- If two feasible sites were identified within a M1 district, far enough away from one another to be permitted under the new rules, but close enough to potentially have cumulative effects (using a 1/4 mile threshold, which is consistent with CEQR practices)¹. In some instances, two sites closer than 1/4 mile were considered not to have cumulative effects because they are separated by a major barrier, such as a railroad cut or elevated highway.
- If one feasible site was located in proximity to an existing waste transfer station, meeting these same criteria.

The results of this analysis are presented below for each Community District where new waste transfers stations (WTSS) would be permitted within M1 zoning districts according to the proposed siting rules amendments. All Manhattan community districts were excluded from the analysis, based on the assumption that no new commercial transfer stations would be located in that borough's M1 districts, as a practical matter, due to comparatively high land costs, the scarcity of suitable vacant land, and the density of development there. Also presented below are maps of each relevant Community District, indicating shaded M1 districts (light shading) as well as existing waste transfer stations.

¹CEQR provides no specific guidance regarding proximities and cumulative effects. However, 1/4 mile is typically used by CEQR as the distance that a single site is evaluated for in terms of potential environmental effects. For that reason, it is assumed here that two or more sites located at a distance greater than 1/4 from one another would not have cumulative effects.

Bronx Community District #1 (6 transfer stations, 8.6% of City total)

Proposed rules would not currently permit a new waste transfer station in M1 districts within this community district. Nevertheless, to be conservative, the analysis included this district.

600' Buffer to sensitive receptors; 400' buffer between transfer stations.

M1 Area 1 – Most land east of Park Ave within 600' of residential zone; existing WTS in surrounding M2 zones eliminate smaller sections; Health Opportunities Program HS on 350 Gerard Avenue eliminates most land west of Grand Concourse, north of East 138th. The proximate siting of more than one waste transfer station might be possible if sites were located between Grand Concourse and Park Avenue near 138th Street and 144th Street, respectively.

Secondary Screening – Just south of East 144th Street there is undeveloped land within the rail right-of-way between buildings and gas stations fronting Grand Concourse and the railroad. There is also a parcel used for parking between Grand Concourse and Walton Avenue, also immediately south of East 144th Street. There are no underutilized lots close to 20,000 s.f. in the identified area in the vicinity of East 138th Street. For this reason, the proximate siting of more than one waste transfer station of waste transfer stations is not a potential outcome in this area.

M1 Area 2 – Area too small for the proximate siting of more than one waste transfer station.

M1 Area 3 - Area too small for the proximate siting of more than one waste transfer station.

M1 Area 4 – Area west of Triboro Bridge is within 600' of a Residential (R6) district and/or within 400' of existing WTS on 132nd Street. Northeast of Bruckner Expressway, northeast half is within buffer of a residential zone, southwest half appears to be viable. Some areas immediately east of Bruckner are within buffer of residential zone, but around Willow Avenue and to its east siting would be possible.

Secondary Screening

Several vacant or underutilized sites were identified in the areas that fall outside of the sensitive receptor buffers. Of these, ones that are larger than 20,000 may include a vacant area between East 133rd and East 134th streets, immediately west of the railroad, and two areas between East 144th and East 147th, one on the west side of Bruckner Boulevard and another that is one block over on the west side of Austin Place. The proximate siting of more than one waste transfer station could not occur in these M1 zone because the two northern sites are within 400' of one another, making it against the proposed rules for two

waste transfer stations to locate there, and the southern site and the northern sites are too far from one another (greater than ¼ mile) to create cumulative effects.

Bronx Community District #2 (8 transfer stations, 13.8% of City total)

Proposed rules would not permit a new waste transfer stations in M1 districts within this community district.

Bronx Community District #3 (0 transfer stations)

400' Buffer to sensitive receptors; 400' buffer between transfer stations

M1 Area 1 – This area is occupied by Bathgate Industrial Park, a showcase park managed by the New York City Economic Development Corporation (NYCEDC). Waste transfer stations would not be encouraged in these areas.

M1 Area 2 – This area is surrounded on all sides by residential districts. Only siting possibility for a WTS would be a small area between Washington and Webster Aves, 164th, and 166th Streets. On an initial screening, two transfer stations could potentially be located, one just south of East 166th Street and one just north of East 164th Street.

Secondary Screening – North of East 164th street east of Washington Avenue is a large uninterrupted vacant area. Immediately south of East 166th Street is an open vacant area interspersed with buildings. A waste transfer site could only be developed here if the buildings were razed. For this reason, the proximate siting of more than one waste transfer station is not a potential outcome in this area.

M1 Area 3 – Portion of this M1 district within Bronx CD3 is narrow and surrounded by residential areas. The feasibility of the M1 district as a whole will be considered as part of the analysis of CD6.

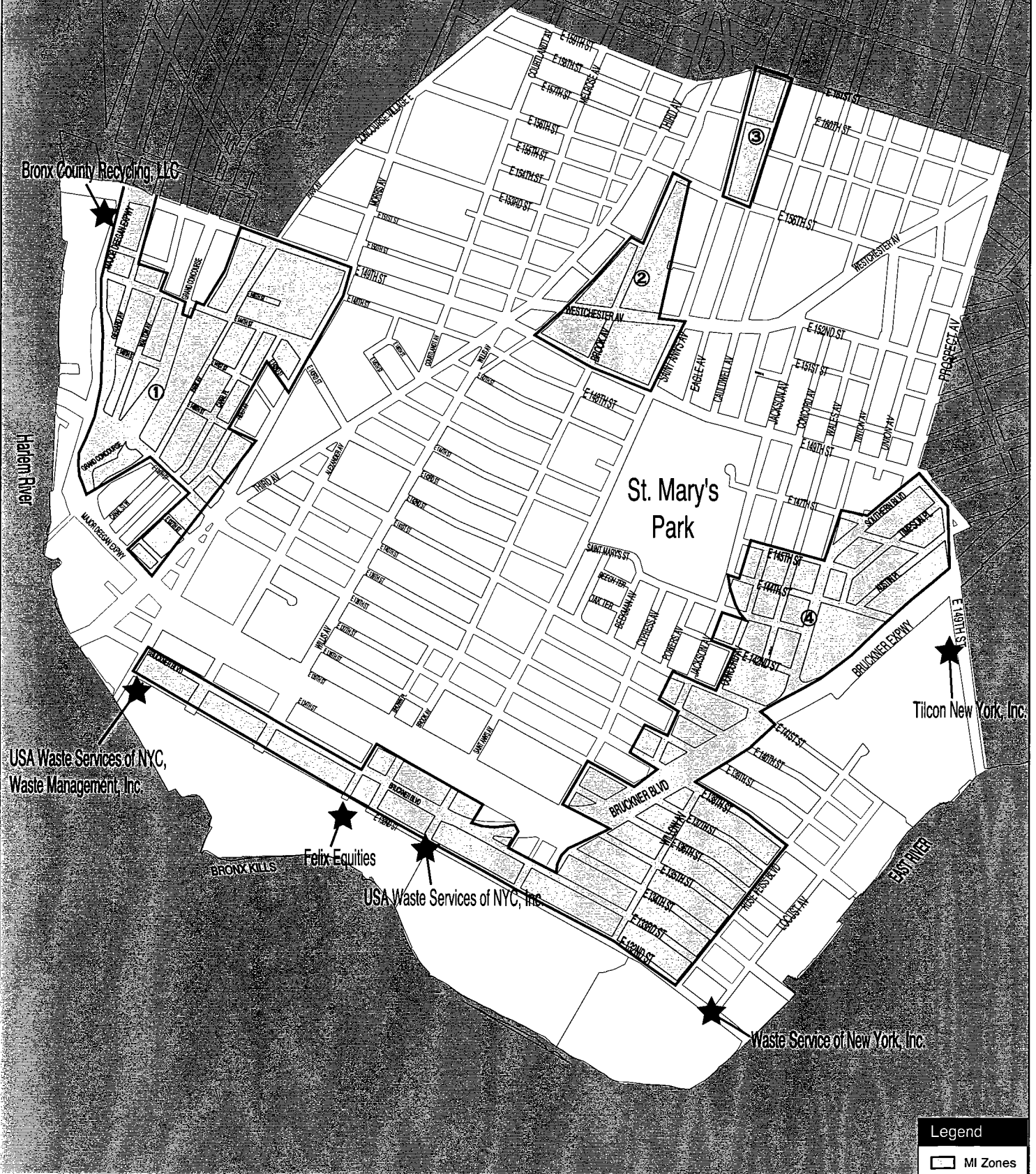
Bronx Community District #4 (0 transfer stations)

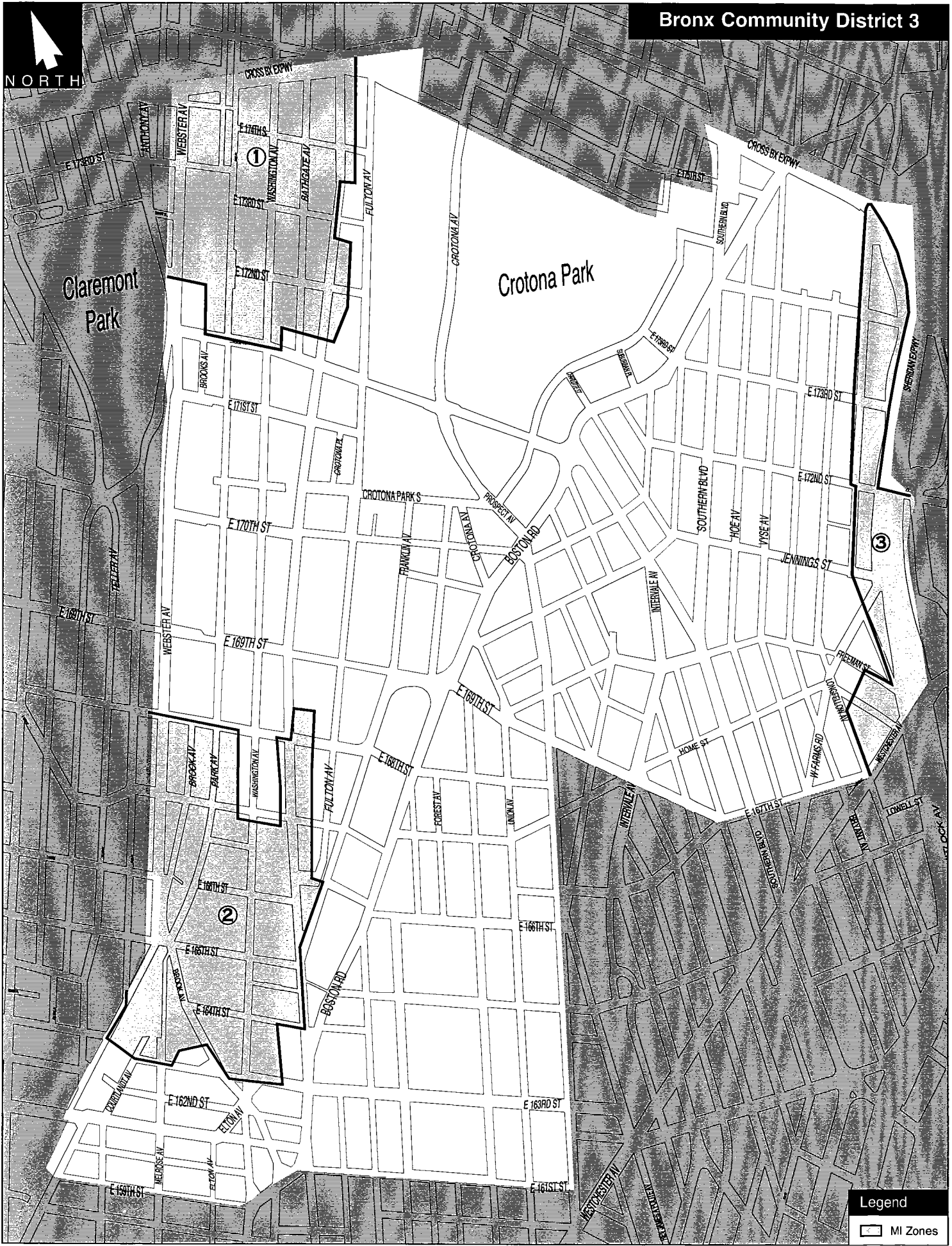
400' Buffer to sensitive receptors; 400' buffer between transfer stations

M1 Area 1 – Area is bordered by an R7 (residence) district and there is not sufficient land outside the 400' buffer from it to permit development of a WTS.

M1 Area 2 – Area is bordered by an R7 district and entirely within a 400' buffer from it.

M1 Area 3 – Area is bordered by residential districts on east and west sides and entirely within a 400' buffer of either district.

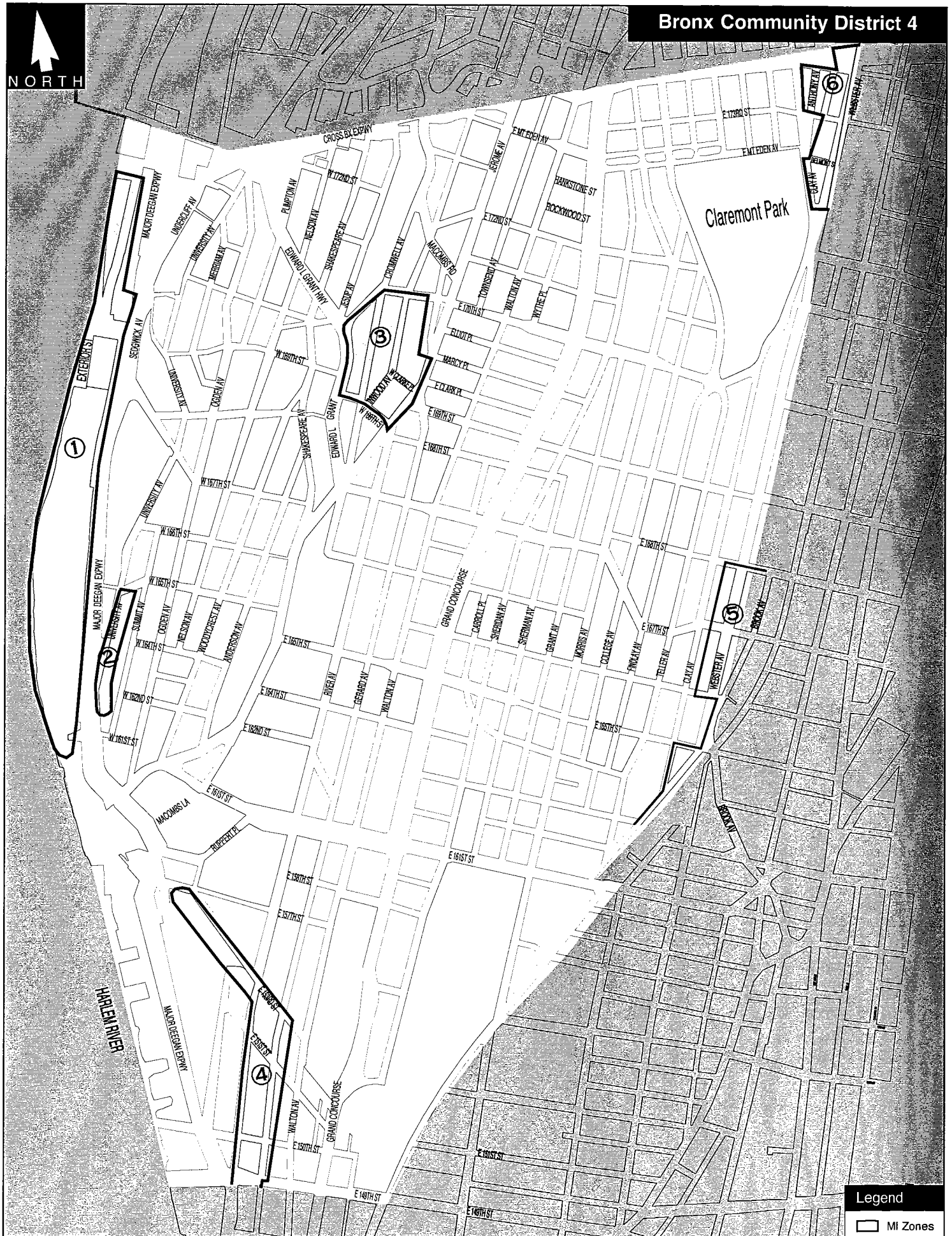




Legend

MI Zones

Bronx Community District 4



Legend

MI Zones

M1 Area 4 – Area east of River Avenue is bordered by residential districts to the east and entirely within a 400' buffer of them. Area west of River Avenue is bordered by residential districts to the north and south and entirely within a 400' buffer of them.

M1 Area 6 – This area is occupied by Bathgate Industrial Park, a showcase park managed by NYCEDC. Waste transfer stations would not be encouraged in these areas, as higher value added uses are typically sought for such locations.

Bronx Community District #5 (0 transfer stations)

400' Buffer to sensitive receptors; 400' buffer between transfer stations

M1 Area 1 – Entire area is within 400' buffer of R7 zone to the east.

M1 Area 2 - This area is occupied by Bathgate Industrial Park, a showcase park managed by NYCEDC. Waste transfer stations would not be encouraged in these areas, as higher value added uses are typically sought for such locations.

Bronx Community District #6 (0 transfer stations)

400' Buffer to sensitive receptors; 400' buffer between transfer stations

M1 Area 1 – North of 179th street, the M1 area is entirely within the 400' buffer of the R7 district to the east. South of 179th Street, the M1 area is entirely within 400' buffer of the R7 district to the east or the R7 district to the west.

M1 Area 2 - This area is occupied by Bathgate Industrial Park, a showcase park managed by NYCEDC. Waste transfer stations would not be encouraged in these areas, as higher value added uses are typically sought for such locations.

M1 Area 3 – The M1 area is entirely within a 400' buffer of the surrounding residential district.

M1 Area 4 - The M1 area is entirely within a 400' buffer of the surrounding residential district.

M1 Area 5 - The M1 area is entirely within a 400' buffer of the surrounding residential district.

M1 Area 6 – The east, west, and north perimeters of this M1 district are surrounded by residential districts and parks. It is bordered by a commercial zone to the south. This leaves an area outside of the buffer, extending from east 177th Street north to Lebanon Street, and encompassing both sides of Morris Park Ave. and Bronx Park Ave.

Secondary Screening - Given the requirement of a 400' buffer between waste transfer stations, locating two waste transfer stations would necessitate the existence of two appropriate sites on either side of the M1 Area 6. Based on an investigation of aerial photographs and land use maps, there appears to be only one available site, block 3907 between E 177th and Wyatt Streets. All other sites are occupied by residential or other buildings and would require razing in order to site a waste transfer station. For this reason, the proximate siting of more than one waste transfer station is not a potential outcome in this area.

Bronx Community District #7 (0 transfer stations)

400' Buffer to sensitive receptors; 400' buffer between transfer stations

M1 Area 1 – The only part of M1 district not within buffer of R6 district to its east is a small western section. This section is not large enough to contain more than one waste transfer station.

M1 Area 2 – Area surrounded by residential districts and within the 400' buffer of these sensitive receptors.

Bronx Community District #8 (0 transfer stations)

400' Buffer to sensitive receptors; 400' buffer between transfer stations

M1 Area 1 - Area surrounded by residential districts and within the 400' buffer of these sensitive receptors.

M1 Area 2 – Area surrounded by residential districts and within the 400' buffer of these sensitive receptors.

M1 Area 3 - Area surrounded by residential districts and within the 400' buffer of these sensitive receptors.

M1 Area 4 - Area surrounded by residential districts and within the 400' buffer of these sensitive receptors.

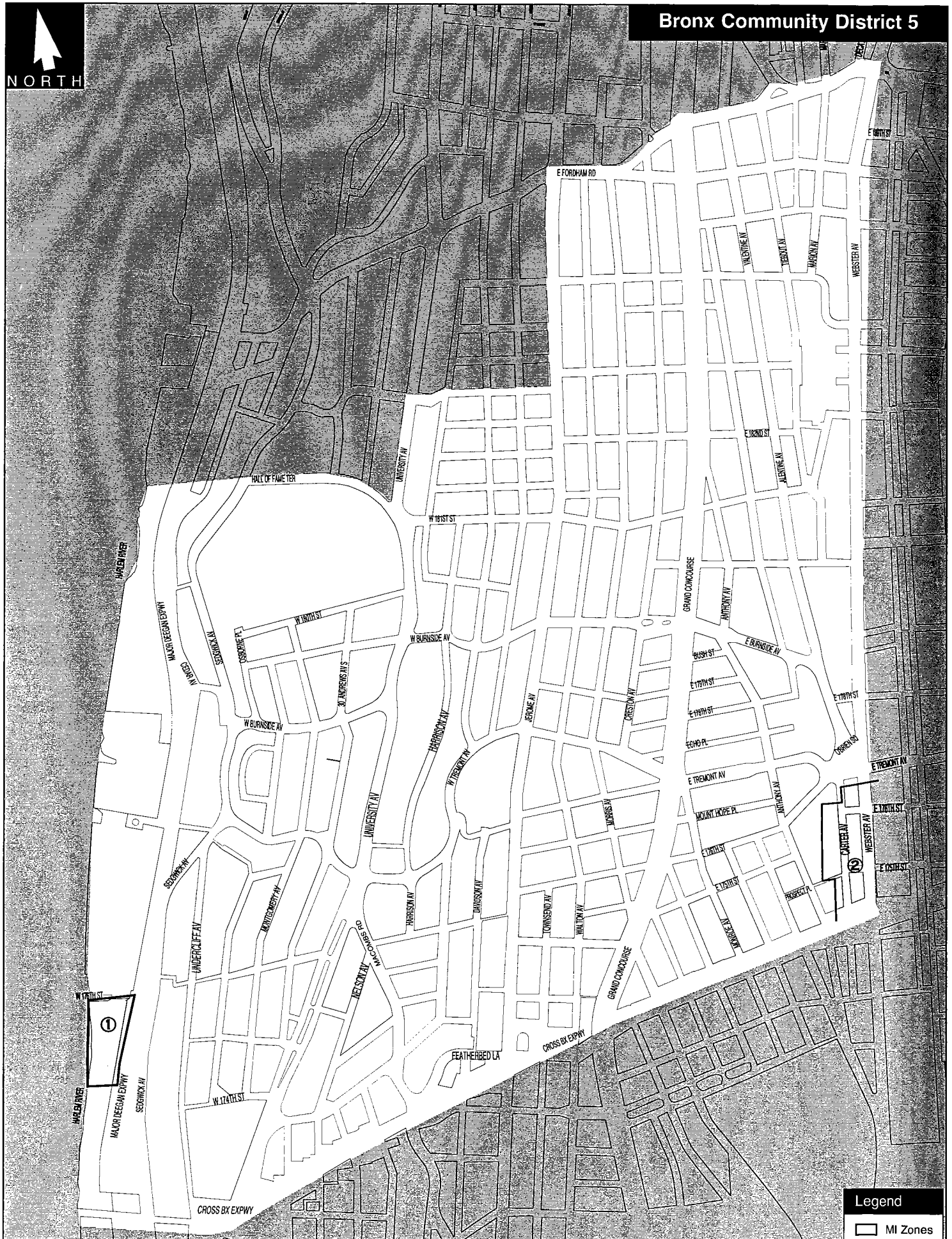
Bronx Community District #9 (1 transfer station)

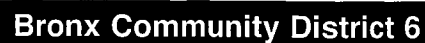
400' Buffer to sensitive receptors; 400' buffer between transfer stations

M1 Area 1 – Area contains an existing waste transfer station and is bordered by residential zones in several locations. The only area outside of the buffers of the existing



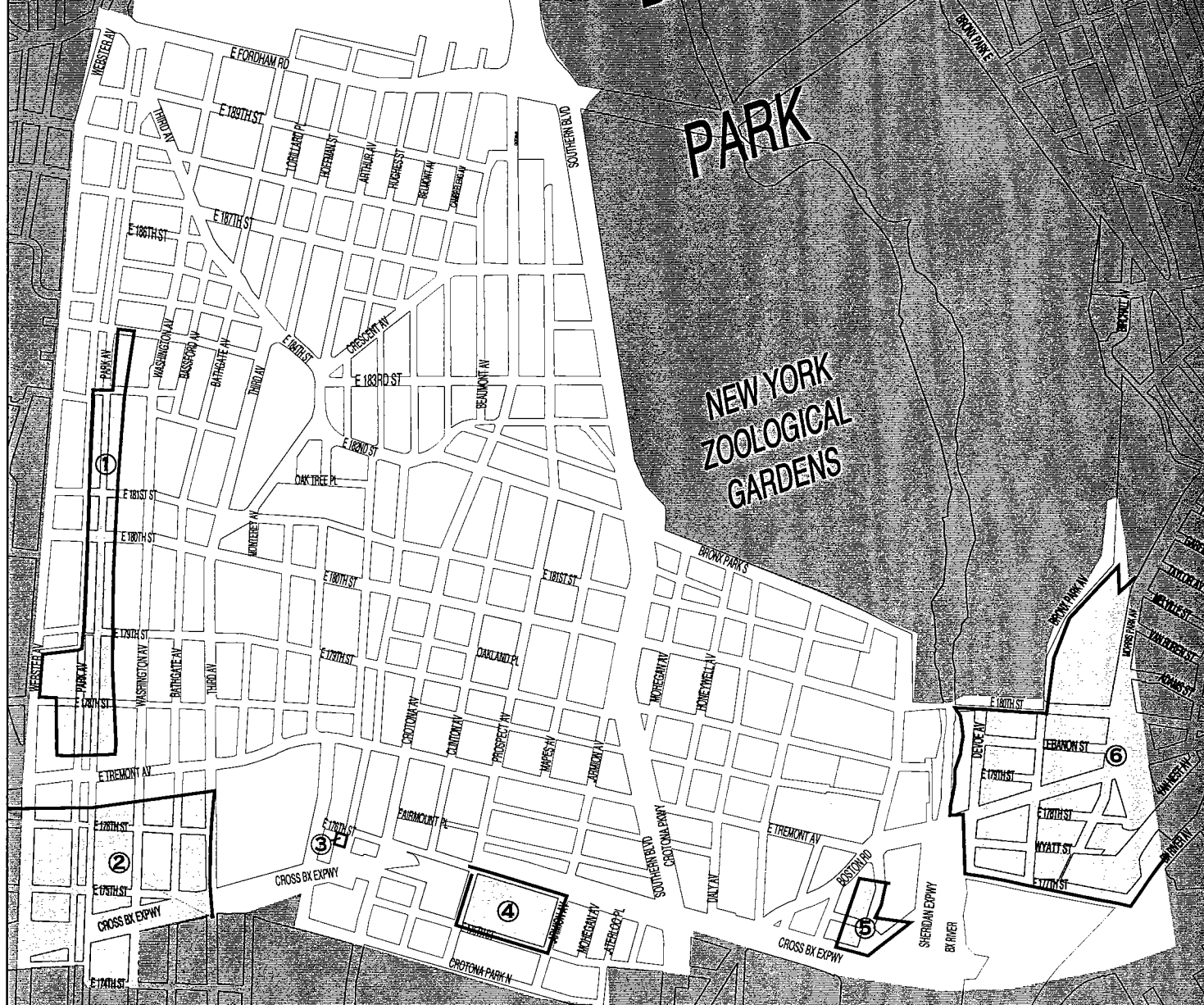
Bronx Community District 5





**NEW YORK
BOTANICAL
GARDENS**

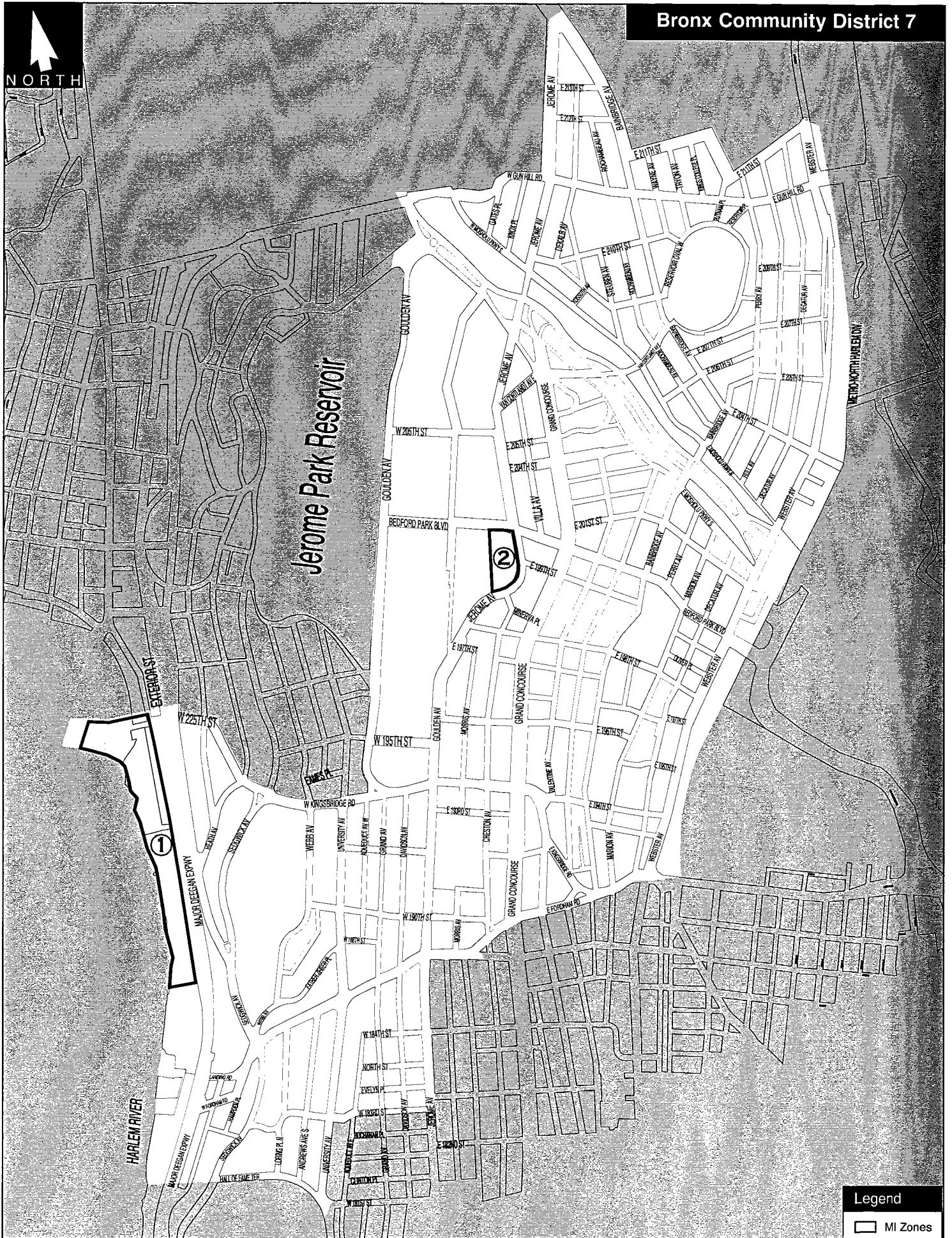
**NEW YORK
ZOOLOGICAL
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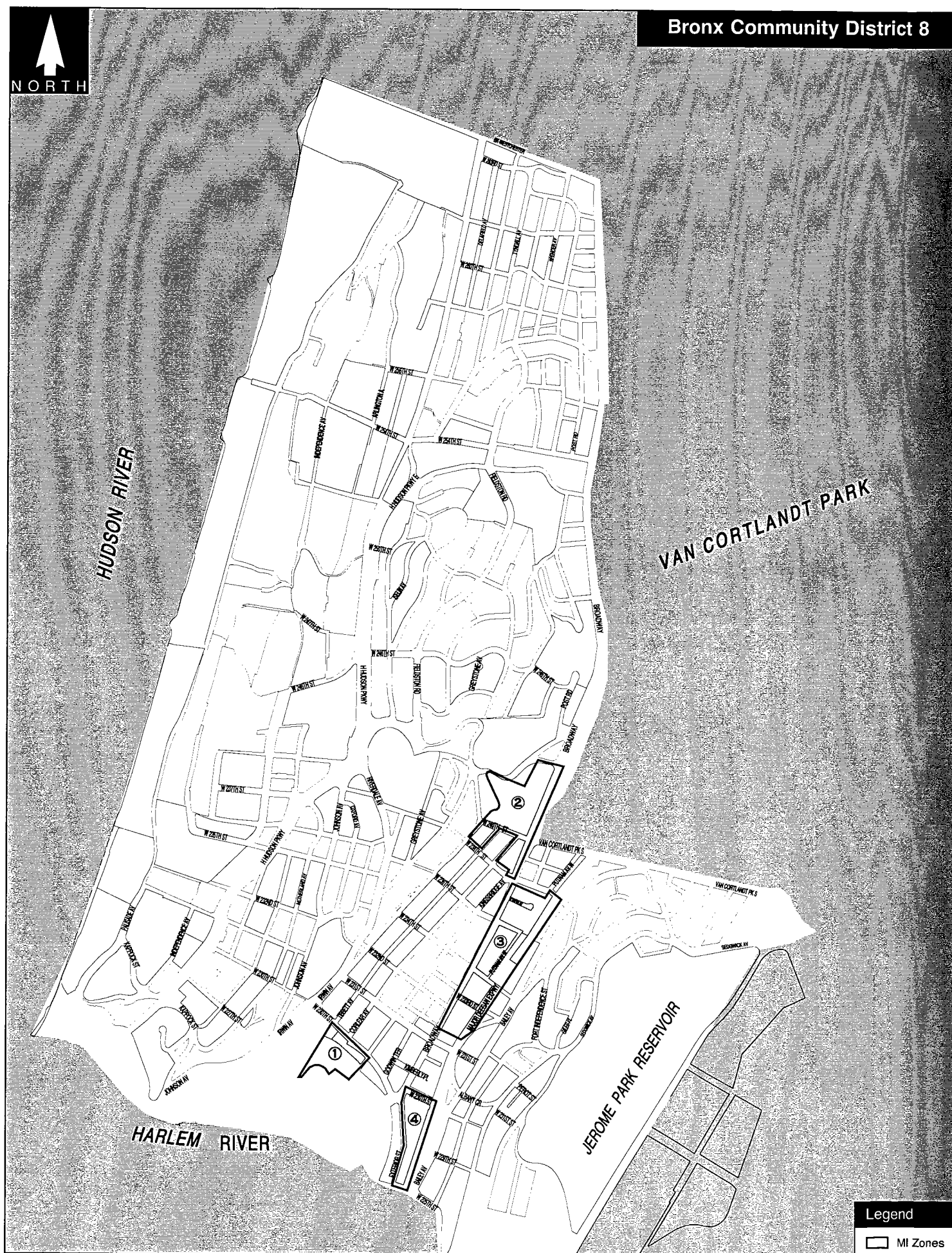


Bronx Community District 7

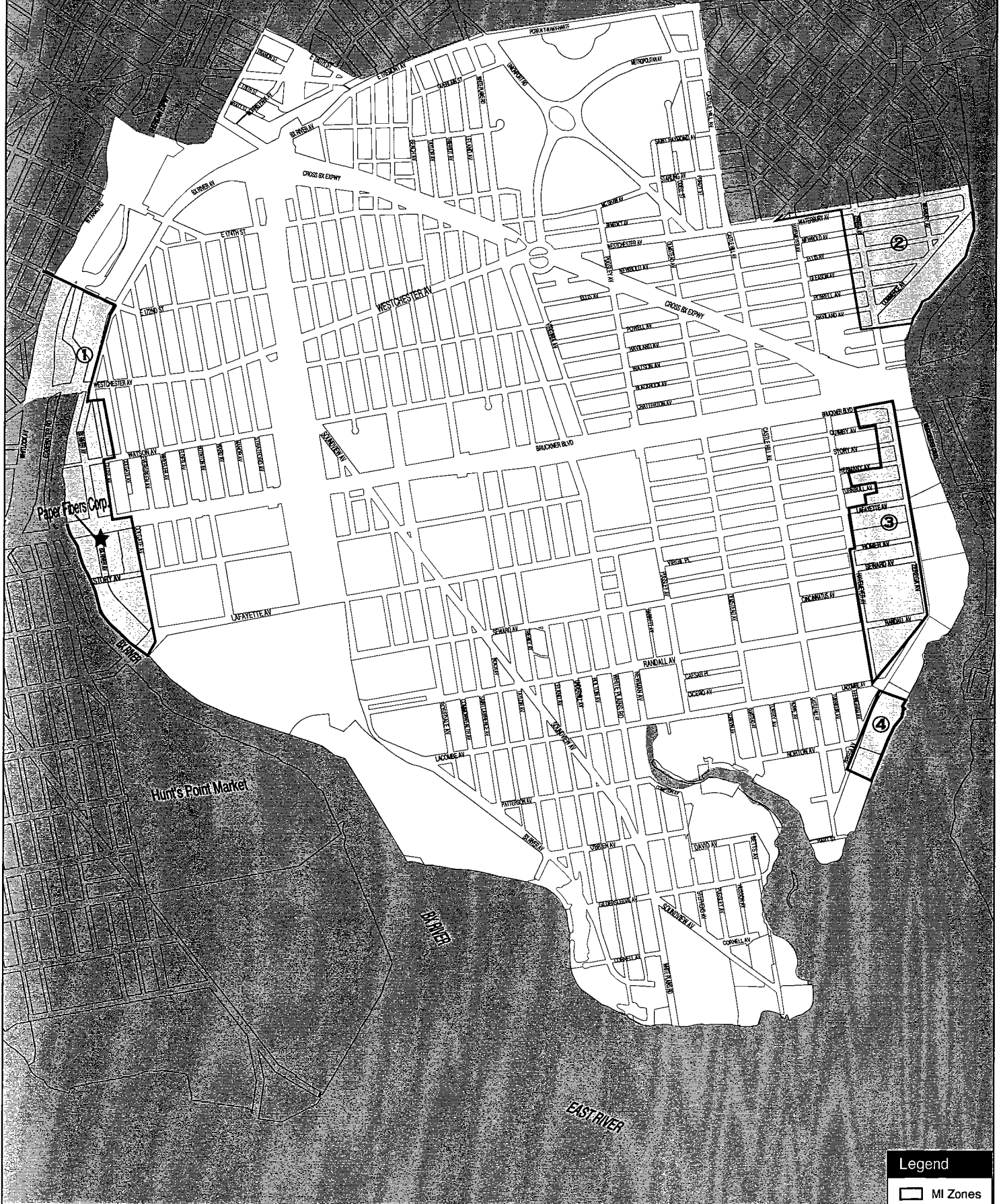


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MI Zones



Bronx Community District 9



waste transfer station and the residential districts is a small section south of Story Avenue and an area north of Bruckner Expressway and east of Bronx River Avenue.

Secondary Screening – In the area south of Story Avenue there is an industrial use with a few buildings and a lot of empty space. There is a possibility that a parcel larger than 20,000 square feet could be subdivided for a waste transfer station near the intersection of Story Avenue and Bronx River Avenue. However, the site is within a 400' buffer of Garrison Park on the other side of the River, making it ineligible.

North of Bruckner Expressway, there is an underutilized area where Watson Ave dead ends into Bronx River Avenue, currently being used for parking. However, this lot appears to be too small for a waste transfer station

Just below Westchester Avenue, between Bronx River Avenue and the Bronx River, there is a narrow but long lot that is currently being used for parking. This appears to be large enough to accommodate a waste transfer station.

Finally, there is a paved parking lot wedged into a location just north of Westchester Avenue, west of the River, and east of the railroad bridge. However, it too is within 400' of Garrison Park.

Of the locations discussed above, only one appears to be a realistic candidate for the siting of a waste transfer station. The site is well north of the existing waste transfer station in this district (Paper Fibers Corp) and separated from it by the Bruckner Expressway. For that reason, the siting of a waste transfer station would not result in cumulative effects.

M1 Area 2 – Note: This M1 district extends into Community District 10. The entire M1 district is assessed in this section. Area contains an existing waste transfer station and a park and is bordered by residential zones in several locations. The only area outside of the buffers of the existing waste transfer station and the residential districts surrounds Seabury Avenue between Halsey Street and Commerce Avenue.

Secondary Screening – A section of a lot on the southwest corner of Waterbury and Seabury Ave now used for parking appears to be slightly smaller than 20,000 square feet. There are no other vacant or underutilized lots in the area under consideration. For this reason, the proximate siting of more than one waste transfer station is not a potential outcome in this area.

M1 Area 3 – This area is bordered to the west by residential districts. M1 areas north of Lafayette Avenue fall within a residential buffer, as does the western half of blocks between Havermeyer and Zarega Avenues south of Lafayette Avenue. Therefore only a small section remains available.

Secondary Screening- There is an extremely large vacant block bordered by Seward, Havermeyer, Zarega, and Randall Avenues, and given the initial screening discussed above, a waste transfer station could locate on the eastern half of this block. However, it

would not be possible for two stations to locate on this facility and maintain the 400' buffer requirement between on another. There are no other potential sites in the defined area. For this reason, the proximate siting of more than one waste transfer station is not a potential outcome in this area.

M1 Area 4 – This section is bordered by residential districts to the west and is entirely within the buffer of those districts.

Bronx Community District #10 (1 transfer station)

400' Buffer to sensitive receptors; 400' buffer between transfer stations

M1 Area 1 – The feasibility of the M1 district as a whole will be considered as part of the analysis of Bronx CD#11.

M1 Area 2 – This section is bordered by residential districts to the east and west and is entirely within the buffer of those districts.

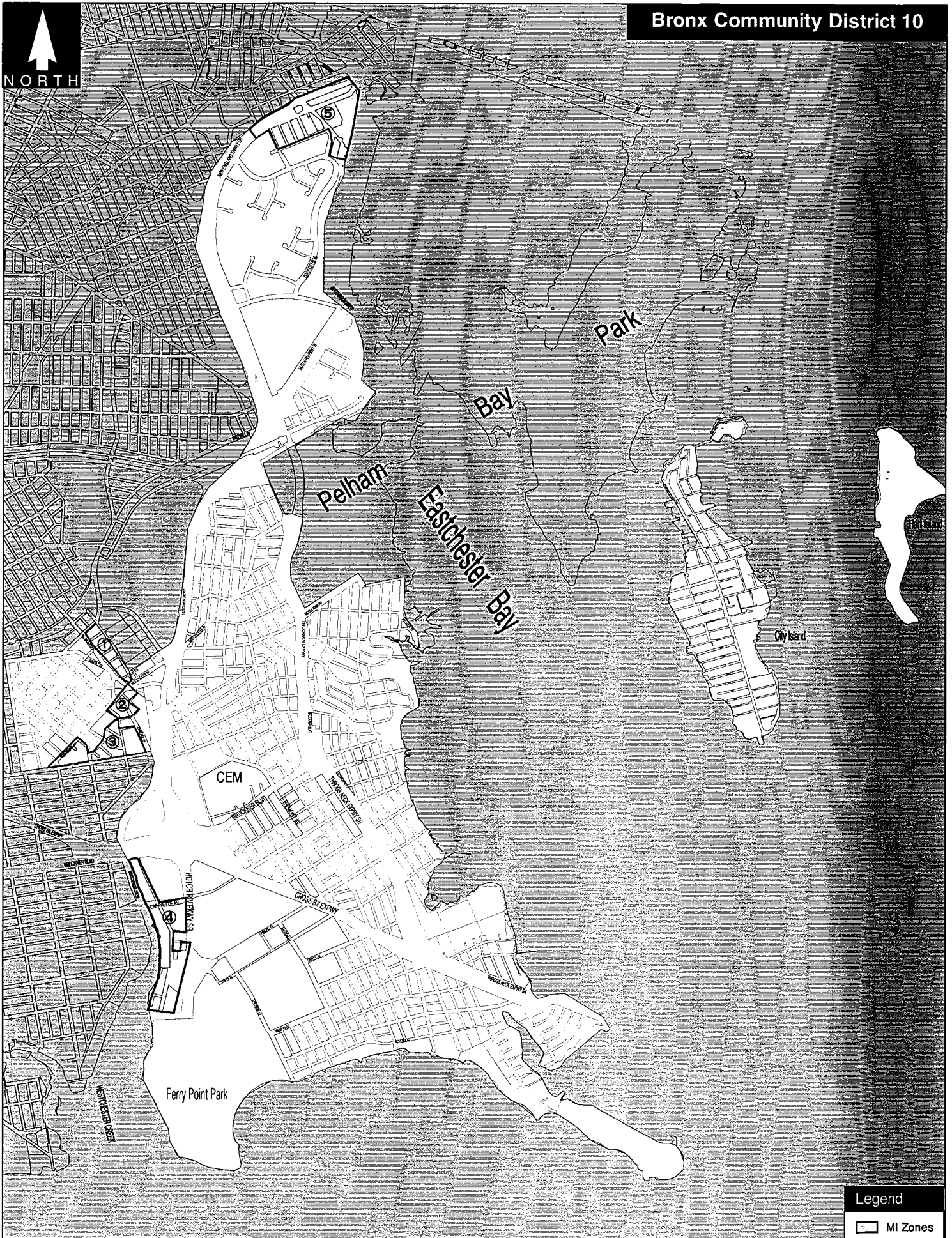
M1 Area 3 – See Bronx CD# 9 for a full assessment of this M1 district.

M1 Area 4 - All lots north of Lafayette Ave are within the buffer of the residential zone to the east and north. Lots south of Lafayette Ave are for the most part bordered by residential zoning districts (not including St. Raymond's Cemetery, which is nominally zoned residential but not classified as a sensitive receptor under the proposed rules) and a park, which create buffers preventing waste transfer station siting except for small areas adjacent to Westchester Creek.

Secondary Screening – Immediately south of Lafayette Ave and adjacent to the Westchester Creek, there is a large undeveloped area where a waste transfer station could be sited. However, much of the block falls within the buffer of an adjacent residential zone, and therefore it cannot be considered eligible for waste transfer station development. Further south, there is vacant land on both sides of Brush Avenue that falls into an area where a new WTS may be located under the proposed rules. This site falls outside of any sensitive receptor buffer. In this M1 area, only one potential site was identified. Therefore, the proximate siting of more than one waste transfer station is not possible.

M1 Area 5 - The feasibility of the M1 district as a whole will be considered as part of the analysis of Bronx CD#12.

Bronx Community District 10



Legend

MI Zones

Bronx Community District #11 (0 transfer stations)

400' Buffer to sensitive receptors; 400' buffer between transfer stations

M1 Area 1 – This section is bordered by residential districts to the east and west and is entirely within the buffer of those districts.

M1 Area 2 – This M1 district is surrounded by residential zones. Buffers from these zones leave only a small area in the center of the M1 District where a waste transfer station would be permitted.

Secondary Screening - This area is not feasible for WTS implementation because it is the middle of an active manufacturing business.

M1 Area 3 – south of Waters Place this area is surrounded by residential zones on three sides. When areas within the buffer of these zones are removed, what is left for consideration is a large block bordered by McAlpin Ave, Ponton Ave, Blondell Ave, and Waters Place. North of Waters Place, this M1 zone is also surrounded by residential zones, but it is much wider, allowing for a fairly large area that would permit WTS development if land were available.

Secondary Screening – The entire area under consideration south of Waters Place is currently being used as a rail yard. To the north, most of the defined available area is occupied by the Bronx Psychiatric Center, which would qualify as a sensitive receptor. Just west of the Center, between the railroad and Industrial Street, there is a large undeveloped lot, but this is within a 400' radius of the hospital grounds. Given the lack of any appropriate development sites, the proximate siting of more than one waste transfer station of waste transfer stations is not a potential outcome in this area.

Bronx Community District #12 (0 transfer stations)

400' Buffer to sensitive receptors; 400' buffer between transfer stations

M1 Area 1 – This section is bordered by residential districts to the east and west and is entirely within the buffer of those districts

M1 Area 2 – This area is surrounded by residential zoning districts. The buffer created by these districts leaves only a small area in the center of the M1 district that would be available for WTS development.

Secondary Screening – The entire area in question is occupied by active rail yards. Therefore, the proximate siting of more than one waste transfer station is not viable.

M1 Area 3 – This M1 district is bordered by a residential district to the northeast. The buffer from that district eliminated from consideration the majority of the M1 district, leaving only a small section of it, adjacent to the Hutchinson River, available.

Secondary Screening – The small area outside the buffer is occupied by a building. Therefore, a waste transfer station could not be located on this site.

M1 Area 4 – (Note: This assessment also includes the portion of this M1 district within Bronx CD#10) This M1 district is bordered by an R4 district to the west. Therefore, 400' of land on the west side of the area is off-limits for WTS development. In addition, there is an existing waste transfer station, Justus Recycling, located at 3300 Provost Avenue, within this M1 district. A buffer around this site eliminates most of the area between Light Street, Provost Avenue, Merritt Ave, and Boston Road. Within Bronx CD#12, the Hebrew Hospital off of Co-op City Blvd. eliminates from consideration M1 lots east to De Lavall Street. The rest of the district is available and will be examined in a secondary screening.

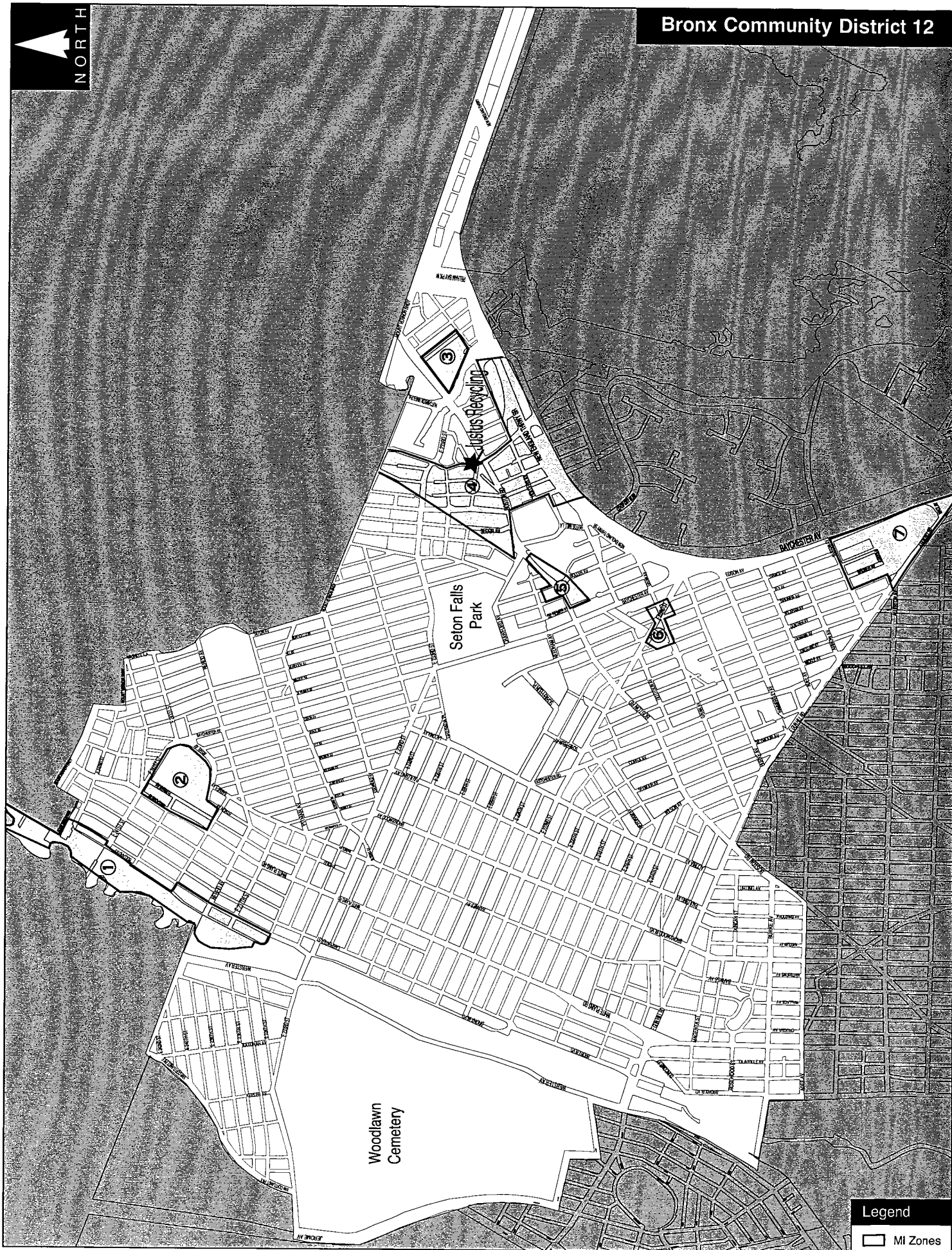
Secondary Screening – The block between Noel Ave., Provost Ave., Hutcheson Ave., and Givins Ave., is occupied by various industrial uses. The southern portion of the lot is vacant, and contains disturbed land and piles of earth. A sign for the Noel Avenue approach identifies it as a Garden Center. However, there does not appear to be a Garden Center at the site, and City land use records identify it as vacant. The owner is identified as Ran Enterprises. The lot is larger than 50,000 square feet and could be used as a waste transfer station. Just northeast of this location, across the New England Thruway, is a large grassy area split by a highway exit road. This property is owned by New York Bus Service, which parks its buses on land it also owns south of the highway. Although there would be sufficient room on the east side of the exit road to locate a waste transfer station, part of the block falls within the buffer of Pelham Bay Park across the Hutchinson River, making this site infeasible.

There are several very small lots at the northeast corner of Hollers Ave. and De Lavell Ave under the same ownership which taken together would have enough square footage (20,000) to hold a small waste transfer station. However, because of the fragmentation of the site into many lots, the existence of buildings on the site, and the presence of an active automobile repair yard, it would be very unlikely that a waste transfer station would locate there under present market conditions.

North of Boston Road, about half of the block between East 233rd Rd, Provost Ave, Light Street, and Merritt Ave, appears to be underutilized, mainly used for car storage. However the block is fragmented and includes small lots under different ownership, as well as active buildings and uses. It does not appear to be feasible for the purposes of a waste transfer station. Finally, north of this location between Provost Ave and Mulvey Avenue, there is an empty lot. However, according to City records, it is slightly smaller than the 20,000 square foot requirement for a waste transfer station.



Bronx Community District 12



The above analysis rules out all but one potential site, the vacant lot between Noel Ave, Provost Ave, Hutcheson Ave, and Givins Ave. If a waste transfer station were implemented here, then there would be two stations overall, including Justus Recycling on 3300 Provost Avenue. However, because the two sites would be separated by more than 1800 feet, as well as a major highway, cumulative impacts would not be an issue.

M1 Area 5 - Area surrounded by residential districts and within the 400' buffer of these sensitive receptors.

M1 Area 6 - Area surrounded by residential districts and within the 400' buffer of these sensitive receptors.

M1 Area 7 – This M1 area is bordered by residential districts to the north, west and south, and the commercial district containing Bay Plaza to the east. After the residential buffers are taken into account, this results in a significant area to be investigated for possible waste transfer station development potential.

Secondary Screening – The area in question is currently occupied by a large MTA bus facility and a golf driving range. Therefore, locating a waste transfer station does not appear to be feasible.

Brooklyn Community District #1 (14 transfer stations, 24.1% of City total)

Proposed Rules would not permit siting of new waste transfer stations in M1 districts within this community district.

Brooklyn Community District #2 (0 transfer stations)

400' Buffer to sensitive receptors; 400' buffer between transfer stations

M1 Area 1 – Note: This area is primarily within Brooklyn CD #3 and is assessed in that section.

M1 Area 2 – Area is bordered by R6 district to the south and west and falls entirely within a 400' buffer of this sensitive receptor.

M1 Area 3 - Area is surrounded by residential districts and within the 400' buffer of these sensitive receptors

M1 Area 4 - This area is bordered by residential districts to the east, west, and south. The resulting buffers eliminate from consideration the majority of land in this M1 district, leaving only a small area surrounding Water Street to the east of the Manhattan Bridge. This area is assessed below