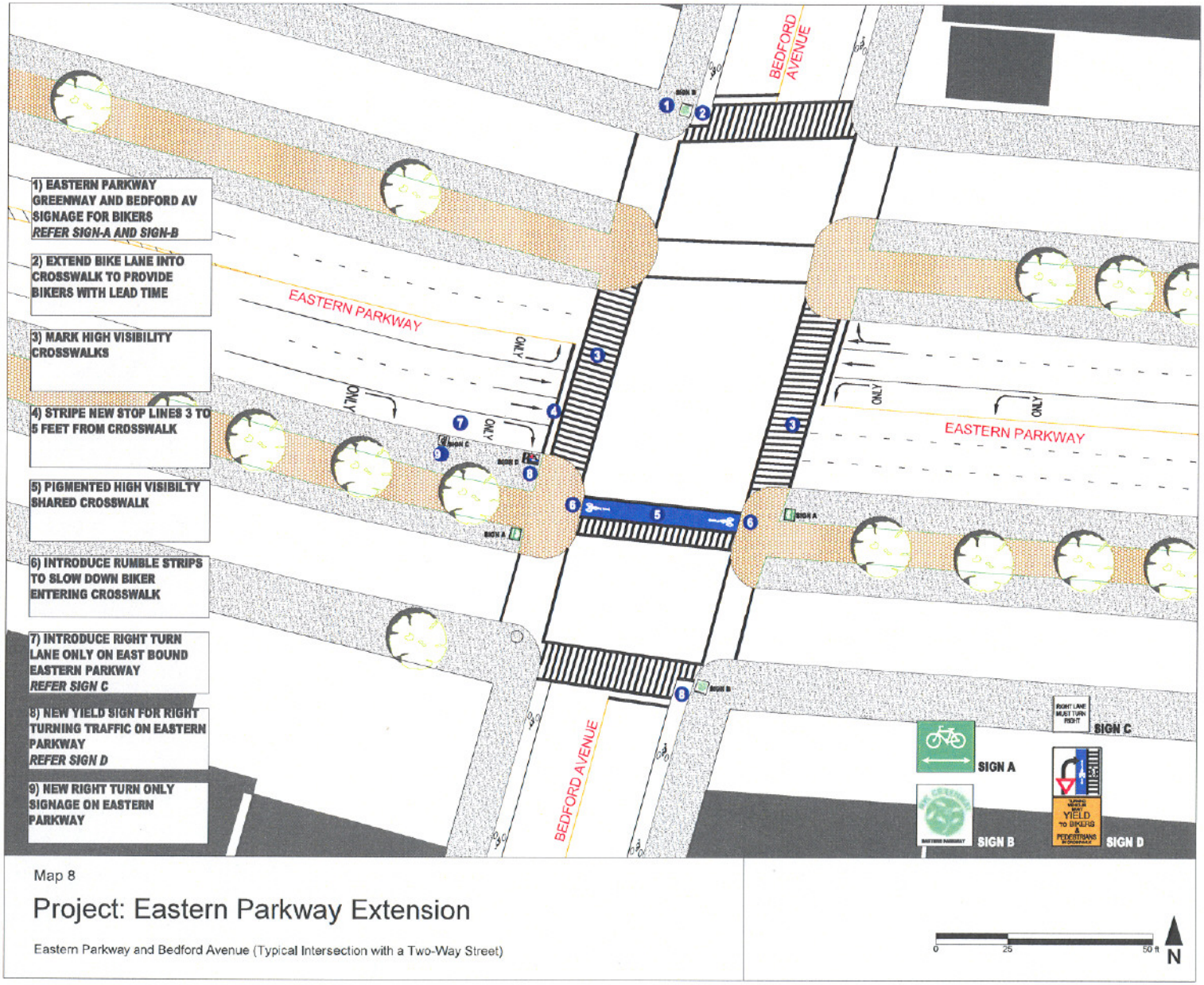


Map 8

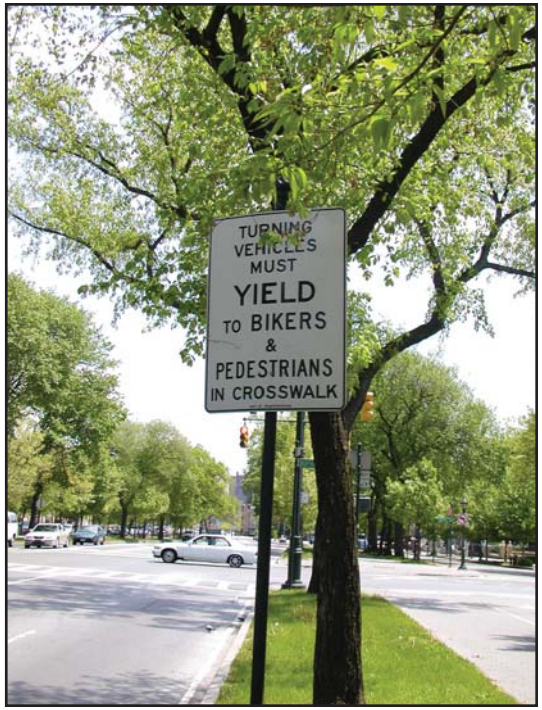
Project: Eastern Parkway Extension

Eastern Parkway and Bedford Avenue (Typical Intersection with a Two-Way Street)

Figure 4: New "Yield to Bikers and Pedestrians" Sign

Install regulatory signs

Regulatory signs should be installed to accompany the proposed crosswalks and stop lines. Stop lines should be paired with a sign instructing vehicles to "Stop Here on Red." As mentioned, new signs with the message "Turning Vehicles Yield to Pedestrians and Cyclists in the Crosswalk" should be placed at every intersection where crosswalks are striped.



"Yield to Bikers and Pedestrians" sign

Designate and mark right turn-only lanes on Eastern Parkway

Currently, the outer lanes of the center roadway are shared by through and turning vehicles. The creation of right turn lanes at intersection approaches would channel traffic. A right turn-only lane would eliminate uncertainty for pedestrians and cyclists attempting to cross the intersection by segregating those vehicles that are going to be turning in front of them, therefore raising the level of awareness (and safety) for both users. The implementation of right-turn lanes is subject to traffic analysis.

Install signalized mid-block crossings at major destinations/accident locations

Cultural and religious institutions, schools, and subway stations are often located in the middle of Eastern Parkway's long blocks. Considering the pedestrian traffic and the number of accidents that occur, signalized mid-block crossings would be appropriate between:

- Nostrand and New York avenues, where there are high numbers of reportable accidents and fatalities involving pedestrians
- New York and Brooklyn avenues at the Oholei Torah Elementary School
- Schenectady and Utica avenues, at the Utica Avenue subway station, which had the highest number of mid-block accidents and a fatality

Due to the length of the blocks in this section, the effect of mid-block crosswalks on vehicular traffic should be negligible, but their installation is subject to warrant analysis.

The installation of neckdowns on the malls along the service roads was also considered. The neckdowns would have provided additional space for cars queuing between the main and service roads, thus preventing the cars from blocking the crosswalks between the malls; shortened the crossing distance for pedestrians; and slowed vehicular turning movements. The neckdowns, however, would have compromised the historic design of the Eastern Parkway malls. Given the high demand for parking along the malls, cars parked there are expected to serve some of the same functions as the proposed neckdowns.

Heighten Awareness of Amenities

Eastern Parkway is both culturally and historically significant, exemplified by its landmark malls and cultural institutions. The following corridor-wide recommendations highlight the significance of the malls and access from the greenway to cultural institutions and open spaces along the corridor. Parks & Recreation will design and implement a sign plan along the length of the greenway. In addition to a regulatory function, signs should identify the greenway and its history and local cultural attractions.

Install greenway signs

These signs, developed by DCP in 1995, are used citywide on greenways and greenway connector routes. Greenway medallions should be placed at strategic locations along the path to both identify the greenway and safely separate users [Figure 4].

Install destination signs

Destination signs [Figure 2, page 21] that identify amenities such as parks and cultural institutions should be installed on Eastern Parkway. At the least they should identify: Medgar Evers College at Rogers Avenue; the Jewish Children's Museum at Kingston Avenue; and Lincoln Terrace Park, between Ralph and Buffalo avenues.

Figure 5: Eastern Parkway Greenway sign

Install informational signs

Signs that highlight the history and significance of the landmarked malls should also be placed along the greenway. The single existing historical sign, on the north mall at the start of the greenway, should be replicated and placed at appropriate intervals along the parkway.

Connect the greenway with bicycle facilities on Bedford Avenue

The Class 1 greenway on Eastern Parkway connects to a Class 2 bicycle lane on Bedford Avenue that runs from Emmons Avenue in Sheepshead Bay to Dean Street in Prospect Heights. It is difficult to see the Bedford Avenue bike lane from Eastern Parkway and vice versa, and few signs indicate the presence of a connecting bicycle facility. Use of the northbound bicycle lane is frequently disrupted by standing vehicles being hand-dried by employees of the car wash on the corner.

Sign detailing the history of the Eastern Parkway malls

Install greenway connector signs

Signs indicating the greenway and the bike lane should be installed on the Eastern Parkway malls and on Bedford Avenue. In addition, the Bedford Avenue bicycle lane striping should be extended into the intersection; the lane is not currently visible from the greenway.

Install advance bicycle boxes

Bike boxes should be installed on Bedford Avenue to allow cyclists to approach and enter the intersection before parallel vehicular traffic. This would better regulate what is common practice already: cyclists moving into the crosswalk all the way. Stop lines should also be marked.

Enforce regulations prohibiting cars from occupying the bike lane

The Bedford Avenue bicycle lane should be kept free of vehicles occupying the bicycle lane through aggressive enforcement.

Bike crosswalk in northern Manhattan

Section 3: Buffalo Avenue to Highland Park (Eastern Parkway Extension and East New York Avenue/Liberty Avenue)

Eastern Parkway Extension just off of Eastern Parkway

Introduction

The streetscape changes significantly in this section. Eastern Parkway terminates, the greenway ends, the subway continues aboveground, and the landscape changes from low-density residential uses to blocks dominated by industry, utilities, transportation infrastructure, and vacant lots and buildings.

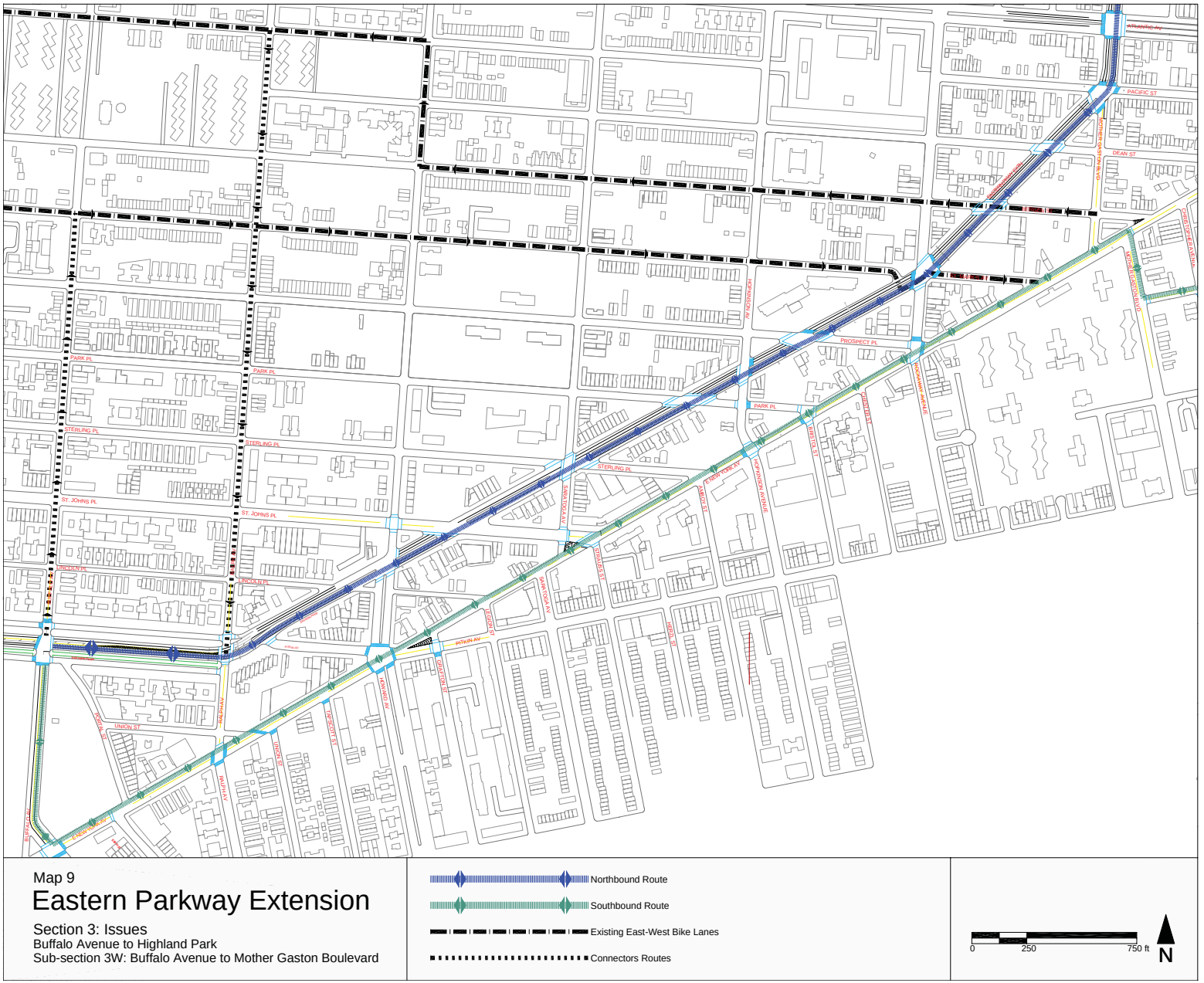
Three alternate routes have been developed to connect the 2.25-mile gap between the Eastern Parkway malls and Highland Park and thus complete the Brooklyn/Queens Greenway. The northern and southern routes primarily follow two parallel arterial streets – Eastern Parkway Extension and East New York Avenue, respectively– that create irregular intersections as they run diagonally in a northeasterly direction through the street grid [Map 9].

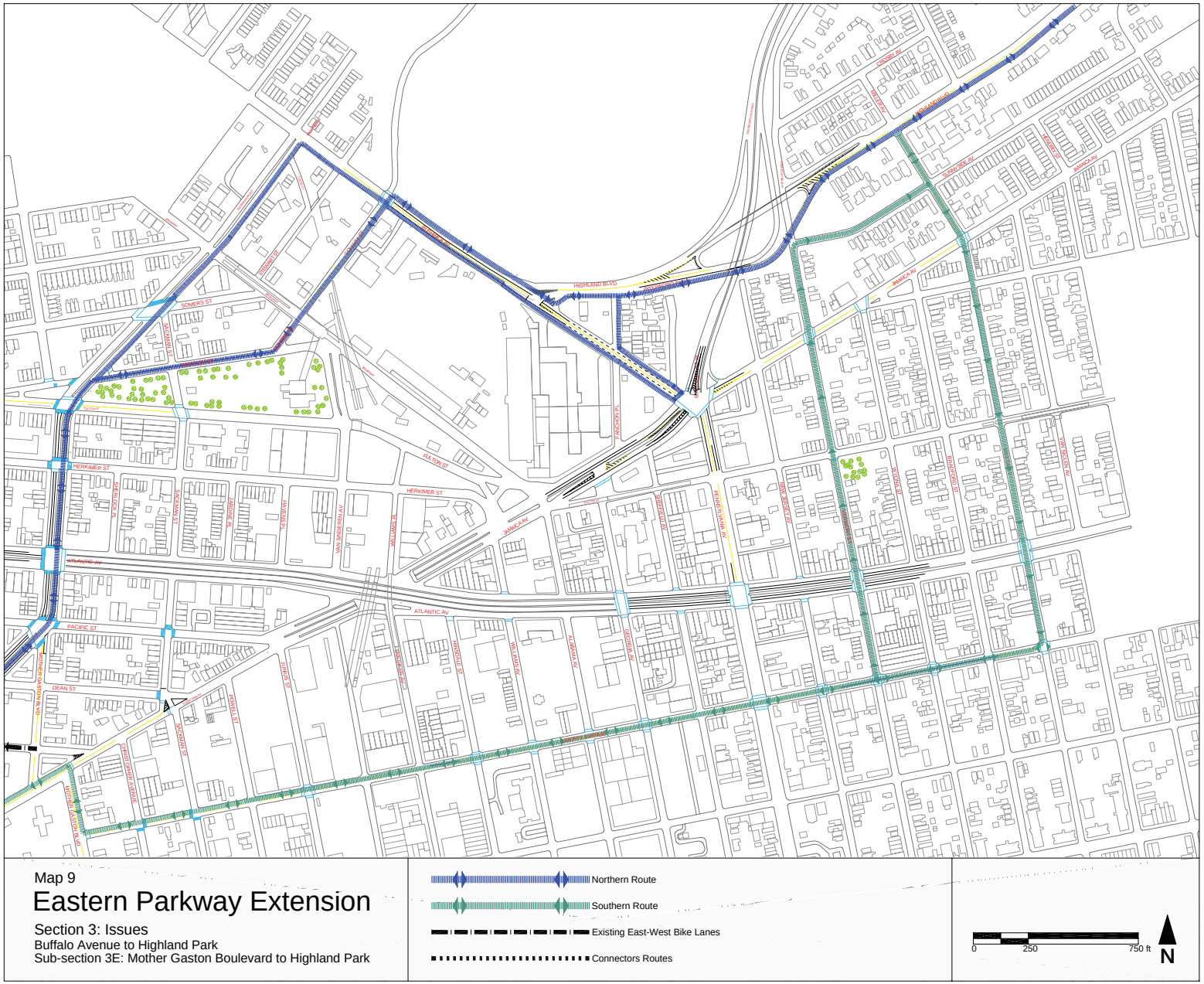
While both proposed routes connect major open spaces and avoid transportation infrastructure south of Highland Park, neither is ideal. The irregular street geometry at intersections results in confusion and uncertainty for vehicles, pedestrians and cyclists. The streets are narrow and governed by inconsistent curbside parking regulations. High traffic volumes and vehicle speeds contribute to high numbers of accidents along both routes. Some streets were eliminated from the planned routes for safety considerations [See Appendix 3: Accident Analysis].

East New York Avenue

Different facility types and treatments are recommended for each route depending on street geometry, traffic levels, land use and population, sidewalk conditions, and accident data. While it may not be possible to extend the off-street Eastern Parkway malls, different routes for pedestrians and cyclists may offer means to provide safe paths for all users.

The third route takes advantage of recently-striped Class 2 bicycle lanes on east-west streets south of Atlantic Avenue to connect to the proposed northern and southern routes.


Map 9
Eastern Parkway Extension
Section 3: Issues
Buffalo Avenue to Highland Park
Sub-section 3W: Buffalo Avenue to Mother Gaston Boulevard
Northbound Route
Southbound Route
Existing East-West Bike Lanes
Connectors Routes
0
250
750 ft
N



Map 9

Eastern Parkway Extension

Section 3: Issues
Buffalo Avenue to Highland Park
Sub-section 3E: Mother Gaston Boulevard to Highland Park

Northern Route

Introduction

The northern route connects Eastern Parkway and Highland Park via Eastern Parkway Extension, Conway and Truxton streets, and then Bushwick Avenue and Highland Boulevard; it is the most direct and residential of the routes. The project initially examined the feasibility of creating a Class 1 greenway on Eastern Parkway Extension by widening the existing medians. However, Eastern Parkway Extension has irregular intersection geometry, high vehicular volumes, speeds, and traffic accidents, making the safety of a median greenway problematic. Due to the relatively low population density and intensity of land uses along Eastern Parkway Extension, DCP considered an innovative bicycle facility along the corridor that would have permitted wheeled users and pedestrians to share a Class 1 facility on the sidewalk. This, however proved infeasible, and we instead recommend that Eastern Parkway Extension be signed as a pedestrian route and that cyclists use East New York and Liberty avenues. We also propose creating pedestrian facilities at the intersection of Bushwick Avenue and Highland Boulevard, implementing a shared-use sidewalk on Bushwick Avenue next to the Cemetery of the Evergreens, and implementing a new separated bicycle path Highland Boulevard. Implementation of these improvements would require more detailed analysis and reconstruction of the streets involved. When such reconstruction is next scheduled DOT will further examine these recommendations to better asses their feasibility, in the mean time we recommend separate long- and short-term pedestrian routes.

Eastern Parkway Extension from Buffalo Avenue to Truxton Street

Existing Conditions

Eastern Parkway Extension from Buffalo Avenue to Truxton Street is a predominantly residential corridor dotted with vacant lots. Commercial uses where they exist consist of automobile repair shops. There is heavy commercial activity on the two short blocks between Atlantic Avenue and Fulton Street, and the east sidewalk is often obstructed during business hours by loading and unloading.

Eastern Parkway Extension

Eastern Parkway Extension has a narrow (five- to eight-foot), tree-lined median separating two travel lanes and a curb lane with alternate side of the street parking regulations. The six lanes range in width from 10 to 12 feet. As mentioned, Eastern Parkway Extension cuts diagonally through the street grid, creating irregularly-shaped intersections along its length. As a result, Eastern Parkway Extension is intersected by both east-west and north-south cross streets.

Traffic along the corridor is moderate to heavy at all times of the day. Peak hour traffic volumes are over 1,500 vehicles in each direction. The road is a designated truck route, and vehicles of all classes travel at relatively high speeds. To maximize traffic on-street parking is permitted only during off-peak hours; weekdays parking is prohibited along the south curb from 7:00 to 10:00 in the morning; and along the north curb from 4:00 to 7:00 in the evening [Map 10].

Map 10

Eastern Parkway Extension

Parking Regulations

Reportable accidents occur often: there were on average 317 total and 177 reportable accidents per year between Ralph Avenue and Truxton Street [See Appendix 3: Accident Analysis]. Atlantic Avenue and Eastern Parkway Extension, an extremely wide and heavily-trafficked intersection, had the highest total, reportable, pedestrian, and bicycle accidents of any intersection on Eastern Parkway Extension. High numbers of accidents were clustered at Howard Avenue (the continuation of Kings Highway), Rockaway Avenue, Ralph Avenue, and Saratoga Avenue. Ralph and Hopkinson avenues had high numbers of pedestrian accidents. Hopkinson Avenue also had two fatalities over the five-year period.

The sidewalks on Eastern Parkway Extension carry light pedestrian traffic. They range from 15 to 32 feet wide, and are in fair condition, free of vendors, newspaper boxes, and other obstructions. Street trees planted near the curb line are located at 10- to 15-foot intervals. Striped crosswalks, pedestrian signals, and curb cuts are present at all signalized intersections.

Findings

- Vehicular traffic on Eastern Parkway Extension is heavy, and the road is a designated truck route.
- Peak-hour no parking regulations make bicycle use of the curb lane difficult.
- The median is insufficiently wide for a greenway facility, and traffic volumes do not permit the reallocation of the roadway for pedestrian or bicycle use.
- Irregular intersections create tricky crossings for both pedestrians and cyclists, who must check several directions before navigating the intersection.
- Cyclists often ride on the sidewalk, due to the heavy vehicular traffic in the roadway.
- The street is a high accident corridor. Atlantic Avenue and Eastern Parkway Extension, the most dangerous intersection for pedestrians and cyclists, averaged 50 reportable accidents per year from 1996 to 2000.

Recommendations [Map 11]

Implement a signed pedestrian route on Eastern Parkway Extension

Eastern Parkway Extension was identified as a recommended route in the NOSC master plan for the Brooklyn-Queens Greenway due to its continuity with the existing greenway, its direct connection to Highland Park, its even grade, and proximity to open space and transit connections. However, the operational characteristics of Eastern Parkway Extension make it an inappropriate street for a bicycle facility. Intersections are irregular, traffic is heavy and fast-moving, accidents are many, and the road is a designated truck route. Alternate side of the street parking regulations mean there is no permanent parking lane in which cyclists can take refuge from vehicular traffic.

This combination of tight space, traffic, high speeds, and frequent accidents does not feasibly permit the reuse of the median as a greenway or the installation of a bicycle lane in the roadbed of Eastern Parkway Extension. Instead the route should be solely for pedestrians.

Adjust traffic signal phasing and install regulatory signage

At each intersection a leading pedestrian interval should be incorporated into the phasing of the traffic signals subject to warrant analysis.