

TECHNICAL MEMORANDUM

To: Andrea Gourdine
Douglas Development

From: Daniel Solomon
Jim Watson, PTP
Erwin Andres, P.E.

Date: February 15, 2016

Subject: Pappas Tomatoes BZA Comprehensive Transportation Review

INTRODUCTION

This memorandum presents the findings of a Comprehensive Transportation Review (CTR) conducted for the Pappas Tomatoes project in support of its Boarding of Zoning Adjustment (BZA) application (BZA Case Number 19200). The site is located in Ward 5 in the Northeast quadrant of the District. The site is bounded by Okie Street to the north, Fenwick Street to the west, and adjacent properties to the south and east as noted on Figure 2. This project consists of redeveloping the site which currently contains a one-story warehouse building with a partial second floor and a cellar, associated surface parking, and abandoned railroad tracks that run from Fenwick Street to the southeast corner of the site. The building was most recently used as a produce repacking warehouse with a certificate of occupancy for wholesale use. The resulting development will be a single structure containing approximately 110,378 square feet of retail and light manufacturing uses.

The Applicant is seeking an area variance from the off-street parking requirements of 11 DCMR § 2101.1. Pursuant to 11 DCMR §§ 2101.1 and 2100.4, 223 on-site parking spaces are required for the proposed retail and light manufacturing uses. However, the Applicant does not propose to provide any on-site parking spaces. Instead, parking will be provided across Okie Street in the Applicant controlled above-ground parking garage on Square 4037. With approximately 1,067 parking spaces in the garage, there is sufficient space to accommodate parking for the retail patrons and employees of the proposed development. As required by zoning, the development is planned to be served by one 55-foot loading berth, two 30-foot loading berths, one 200 square foot platform, one 100 square foot platform, and one service and delivery 20-foot spaces, which will meet the requirements of the development.

The purpose of this study was to evaluate the development based on DDOT's CTR standards and, more specifically, the site's ability to meet the parking demands generated by its proposed uses. Based on a review of the surrounding transportation infrastructure, the site's design, and the parking demands of the development, the project will accommodate the parking demands. The following conclusions were made regarding the Pappas Tomatoes development:

- The abundant supply of on-street and off-street parking options will adequately serve the project, particularly the site's location across the street from the Applicant-controlled parking garage.
- The site's adequate access to transit, as well as improving bicycle and pedestrian facilities and other new development in the area results in a safe and effective environment for non-auto transportation access to the site.
- The development will incorporate the amount of loading required by zoning.
- A TDM plan for the development will include the implementation of on-site services and bicycle amenities.

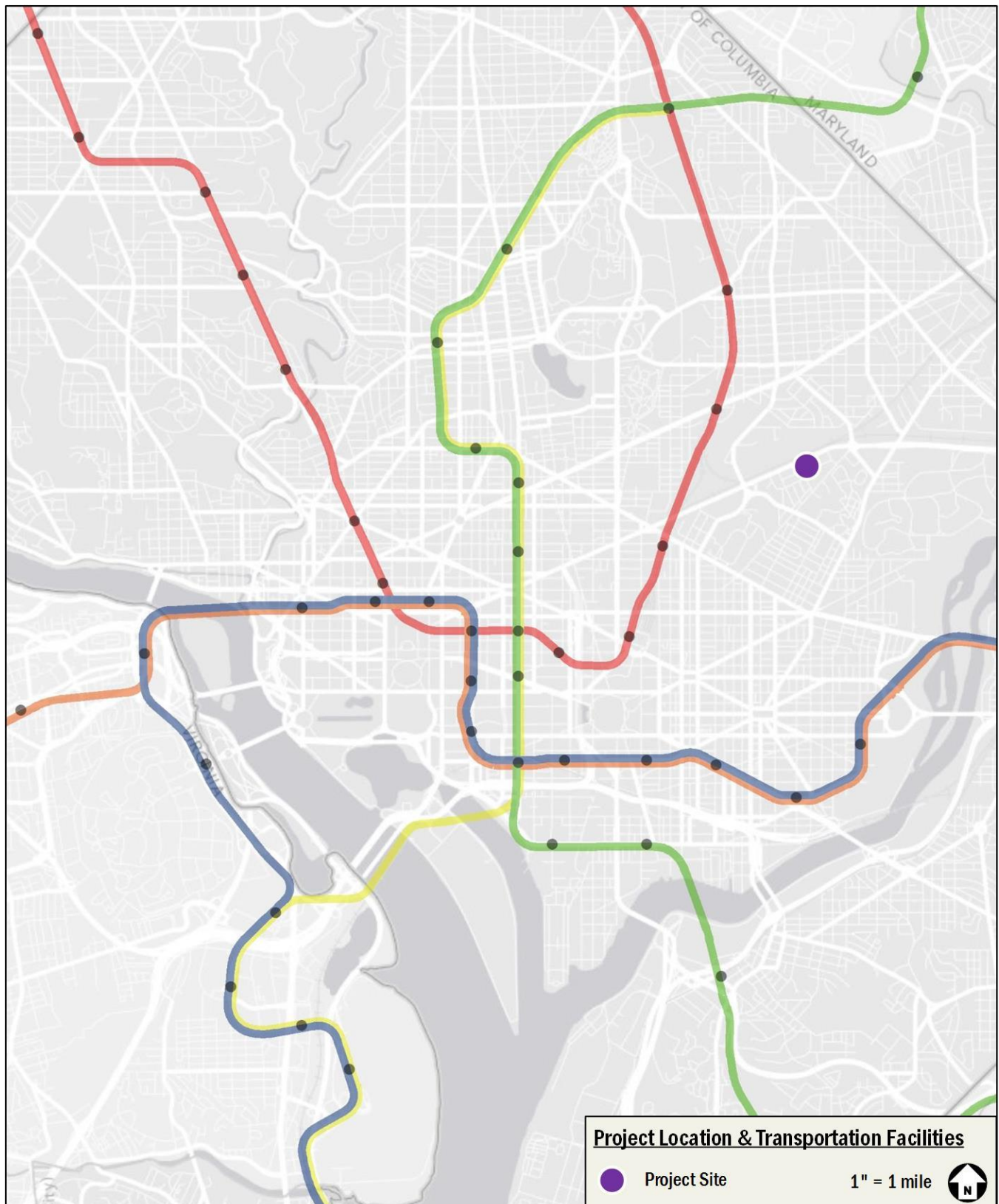


Figure 1: Site Location

EXISTING CONDITIONS

This section provides a review of the existing transit, bicycle, and pedestrian facilities in the vicinity of the site. The site is served by Metrobus, and is within 1.5 miles of the Rhode Island Avenue Metrorail Station. The project site is also served by a pedestrian network consisting of sidewalks and crosswalks along the streets surrounding the project site. Additionally, the site is served by an on-street bicycle network, consisting of signed bicycle routes.

Transit

The site is serviced by Metrobus along multiple primary corridors with multiple bus stops located adjacent to the site. These bus lines connect the site to many areas of the District, Maryland, and Virginia, including several Metrorail stations. The site is currently served by the D3, D4, and E2 routes with stops along Fenwick Street at the New York Avenue and Okie Street intersections and along Fenwick Street adjacent to the site. The following table shows a summary of the bus route information for the routes that serve the site, including service hours, headway, and distance to the nearest bus stop.

The closest Metrorail stations are the NoMa/Gallaudet and Rhode Island Metro stations which are located approximately 1.5 miles walk from the site. Existing transit facilities surrounding the site are shown on Figure 3.

Table 1: Bus Route Information

Route Number	Route Name	Service Hours	Headway	Walking Distance to Nearest Bus Stop
D3	Ivy City-Dupont Circle Line	Westbound: 6:05AM – 9:15 AM Eastbound: 3:02PM – 5:49 PM	25-30 min	<0.1 miles, 1 minute
D4	Ivy City-Franklin Square Line	Weekdays: 4:11AM – 1:06 AM Weekends: 4:44AM – 1:05 AM	15-30 min	<0.1 miles, 1 minute
E2	Ivy City-Fort Totten Line	Weekdays: 5:55AM – 5:35 AM Weekends: 5:40AM – 12:52 AM	10-30 min	<0.1 miles, 1 minute

Bicycle Facilities

Although the proposed development is located along New York Avenue, a high-volume principal arterial oriented to vehicular commuting traffic, the site is surrounded on all other sides by low-volume local roadways that provide excellent bicycle connections to signed bicycle routes and bicycle lanes. Figure 4 illustrates the existing bicycle facilities in the area.

The existing conditions on local roadways provide a good environment for cycling that includes low traffic volumes and speeds, as well as wide travel lanes. To this end Okie, Fenwick, and 16th Streets provide a connection between the site and West Virginia Avenue, a signed bicycle route. To the north, the West Virginia Avenue bike route continues on to Maryland via 18th Street and can be used to access the Brookland-CUA Metro station and the Metropolitan Branch trail via the 12th Street bike lane and Saratoga Avenue. To the south, the West Virginia Avenue bicycle route provides connections to several bicycle facilities like the 14th/15th Street bike lanes and the 4th/6th Street bike lanes that in turn connect to destinations like Union Station, Downtown, and Capitol Hill. A Capital Bikeshare station with 22 bicycle docks currently exists along Hecht Avenue immediately north of the site.

Using these connections along low-volume local roadways and signed bicycle routes within the study area, bicyclists have access to a number of robust regional bicycle facilities. To accommodate these cyclists, the site is planned to provide adequate bicycle parking both within the parking garage across the street and along the internal private Hecht Avenue, meeting zoning requirements.

Further additions will be made to the bicycle infrastructure present in the vicinity of the site, as shown in the DC Bicycle Master Plan from April 2005. DDOT's proposed bicycle infrastructure for the roadways in the vicinity of the proposed development includes multi-use trails, on-street bike lanes, and signed bicycle routes. Most notably, the plan calls for a shared-use pedestrian and bicycle trail running along the northern side of New York Avenue, which will significantly improve conditions for non-auto modes along this high volume corridor. The plan includes proposed bicycle lanes along Monroe Street and extensions to the Metropolitan Branch Trail. In general, these facilities will significantly improve bicycling conditions in the study area and may lead to higher rates of cycling.

Pedestrian Facilities

Overall, the pedestrian facilities within the study area provide adequate connections to major local destinations, including the commercial establishments along New York Avenue east of the site and the Trinidad neighborhood south of West Virginia Avenue and Mount Olivet Road. A summary of the pedestrian facilities within a 0.25-mile walk of the site is shown in Figure 5.

There are some barriers and areas of concern within the study area that negatively impact the quality and attractiveness of walking, including walking distances between the site and some major destinations, manmade and natural barriers that increase walking distances, and roadway conditions that reduce the quality of walking conditions, including narrow sidewalks along several streets, and lengthy crossings at some intersections. It should be noted, however, that the Applicant is continually improving the sidewalks in the Hecht Warehouse District, including sidewalks along New York Avenue, Fenwick Street and Okie Street.

Within the area shown, most roadways are considered commercial. The sidewalks that do not meet DDOT standards are typically along routes that do not provide an acceptable buffer width, but do maintain the minimum sidewalk width. ADA standards require that all curb ramps be provided wherever an accessible route crosses a curb and must have a detectable warning. Additionally, curb ramps shared between two crosswalks is not desired. As shown in Figure 5, under existing conditions there are some crosswalks and curb ramps near the site that do not meet DDOT and/or ADA standards.

Table 2: Sidewalk Requirements

Street Type	Minimum Sidewalk Width	Minimum Buffer Width
Residential (Low to Moderate Density)	6 ft	4 ft (6 ft preferred for tree space)
Residential (High Density)	8 ft	4 ft (6 ft preferred for tree space)
Commercial (Non-downtown)	10 ft	4 ft
Downtown	16 ft	6 ft

Car Sharing

Three car-sharing companies serve the District: Zipcar, Enterprise CarShare, and Car2Go. All three services are private companies that provide registered users access to a variety of automobiles. Of these, none have vehicles currently placed within a mile of the site. The closest car-sharing vehicles are located over a mile away near the Rhode Island Metro Station, NoMa Metro Station, and along Florida Avenue (south of the site) operated by all car-sharing services. Access to carsharing services in the area surrounding the development is expected to increase with the additional development that is planned nearby.

February 15, 2016

Car-sharing is also provided by Car2Go, which provides point-to-point car sharing. Unlike Zipcar and Enterprise CarShare, which require two-way trips, Car2Go can be used for one-way rentals. Car2Go currently has a fleet of vehicles located throughout the District. Car2Go vehicles may park in any non-restricted metered curbside parking space or Residential Parking Permit location in any zone throughout the defined "Home Area". Members do not have to pay the meter or pay stations. Car2Go does not have permanent designated spaces for their vehicles; however availability is tracked through their website and mobile app, which provides an additional option for car-sharing patrons. Thus, patrons and employees of the site may choose to use Car2Go as an option for accessing the site.

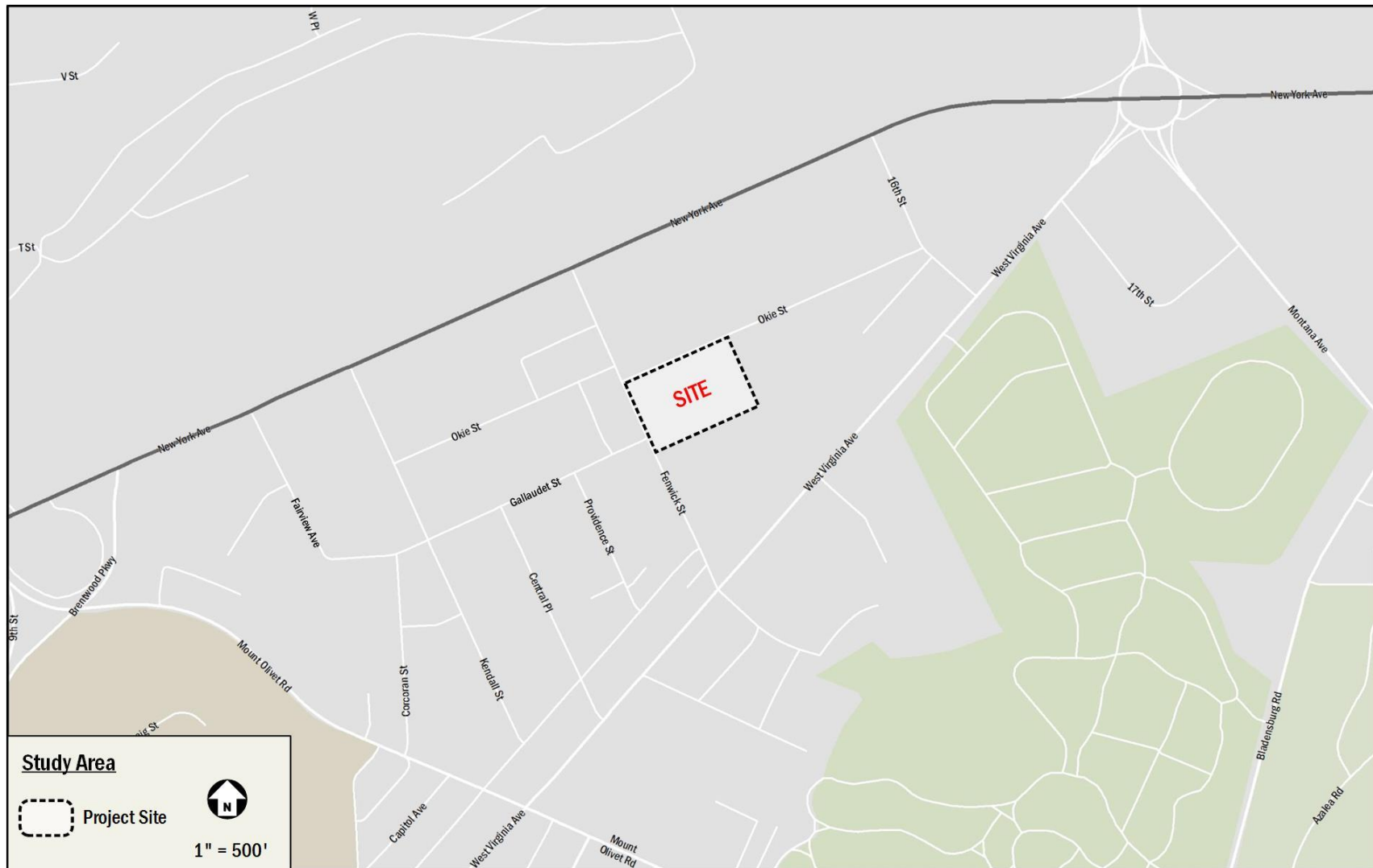


Figure 2: Study Area

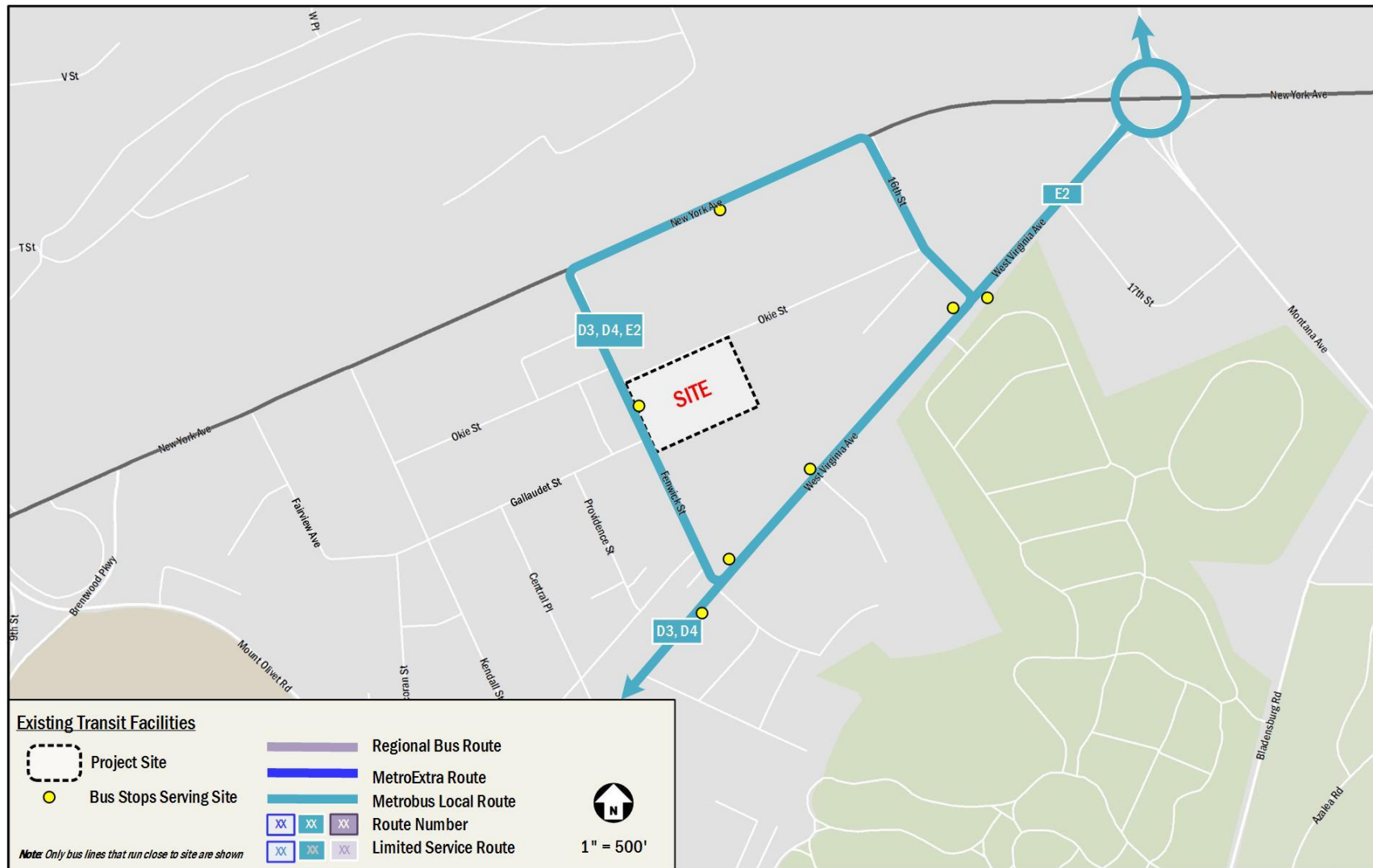


Figure 3: Existing Transit Service

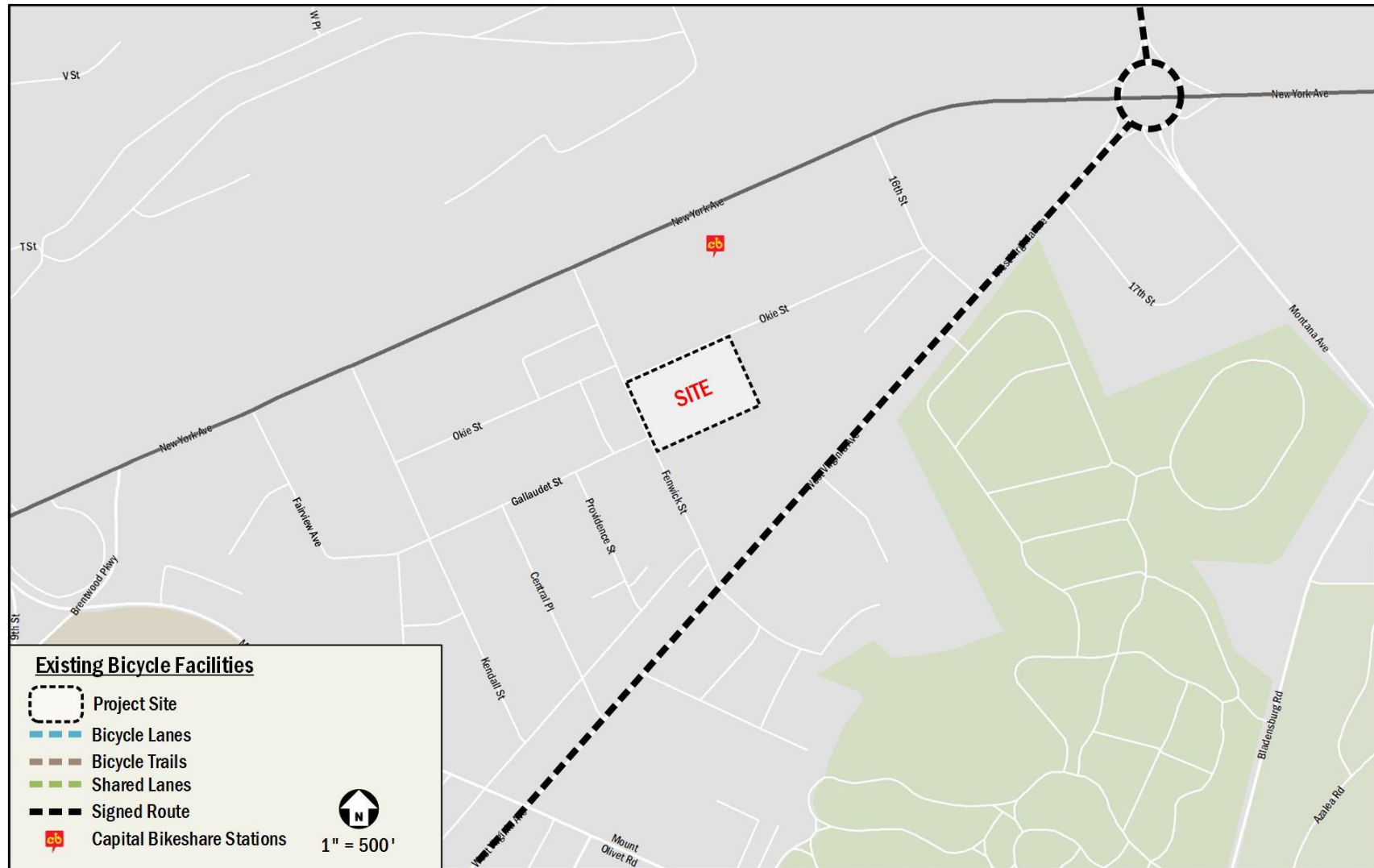


Figure 4: Existing Bicycle Facilities

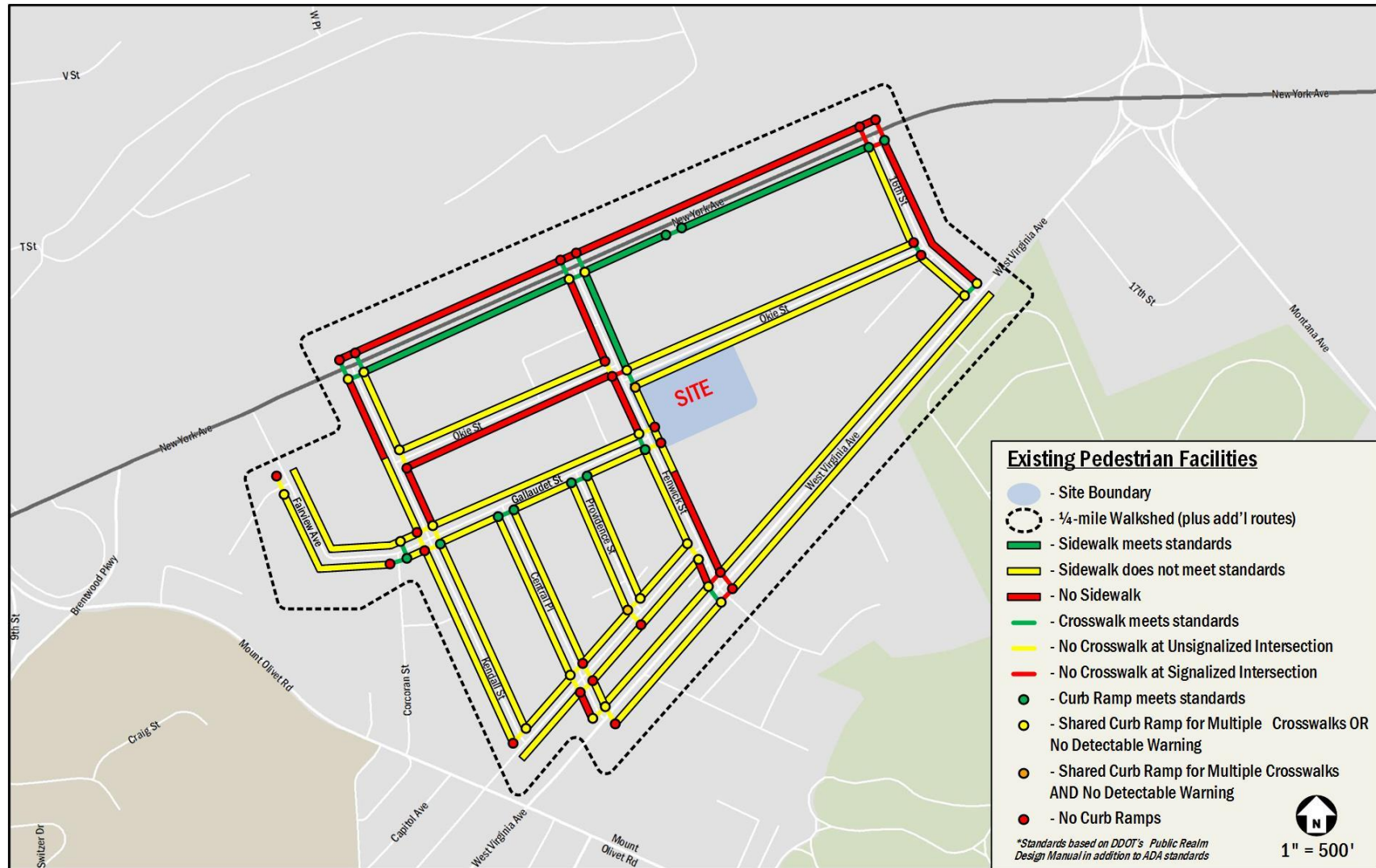


Figure 5: Pedestrian Infrastructure

DESIGN REVIEW

This section provides an overview of the transportation features of the proposed development. The development program consists of a single structure containing approximately 110,378 square feet of retail and light manufacturing use. All loading and trash pick-up will take place on the west side of the site via the loading facilities accessible from Fenwick Street. Figure 6 shows the proposed site plan.

Trip Generation

Vehicle trips were calculated for the site to determine whether the site would generate enough trips to warrant a full review of the traffic impacts of the development based on DDOT's CTR guidelines. The results of the trip generation calculations are shown in Table 3 below. Trips were calculated based on ITE Trip Generation rates for Shopping Center (LU 820) in order to present a more conservative trip generation estimate.

The retail planned for this site was deemed to fall under a similar category as the average among retail sites found in the WMATA Development Related Ridership Survey (DRRS). The WMATA DRSS noted an average of 64 percent auto mode share for retail. For purposes of this study, a 65 percent auto modal split was applied to the trip generation.

The resulting trip generation projections are given in Table 3 below and show that the development is conservatively anticipated to generate 149 weekday AM peak hour vehicular trips (110 inbound and 39 outbound) and 214 weekday PM peak hour vehicular trips (80 inbound and 134 outbound). While this conservative trip generation estimate exceeds the number of trips that would typically require additional vehicular study per CTR guidelines, the parking variance being sought for this development results in fewer trips than the development would generate were parking provided at rates that met current Zoning Requirements. Thus, no additional vehicular study was required by DDOT and none conducted for this report.

Table 3: Trip Generation and Mode Split

Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Auto	67 veh/hr	41 veh/hr	108 veh/hr	199 veh/hr	217 veh/hr	416 veh/hr
Transit	9 ppl/hr	6 ppl/hr	15 ppl/hr	27 ppl/hr	30 ppl/hr	57 ppl/hr
Bike	9 ppl/hr	6 ppl/hr	15 ppl/hr	27 ppl/hr	30 ppl/hr	57 ppl/hr
Walk	46 ppl/hr	28 ppl/hr	74 ppl/hr	137 ppl/hr	148 ppl/hr	285 ppl/hr

Site Access and Internal Circulation

Site Access

There will be no direct vehicular access to the site. Vehicular parking will be provided by a recently constructed 1,067 space parking garage owned by the Applicant, which is located approximately 150 feet north of the proposed development and will accommodate the parking needs of the site. The site is currently served via curb cuts along Fenwick Street and Okie Street. The existing curb cuts serving the site along Okie Street are planned to be closed. One existing curb cut along Fenwick Street is planned to be moved approximately 70 feet to south and will be used for loading. No other curb cuts will be used for vehicular traffic to access the site.

Loading access to the site will occur on the western side of the site along Fenwick Street and pedestrian access to the development will occur off of Okie Street and Fenwick Street. A site circulation plan is shown in Figure 7.

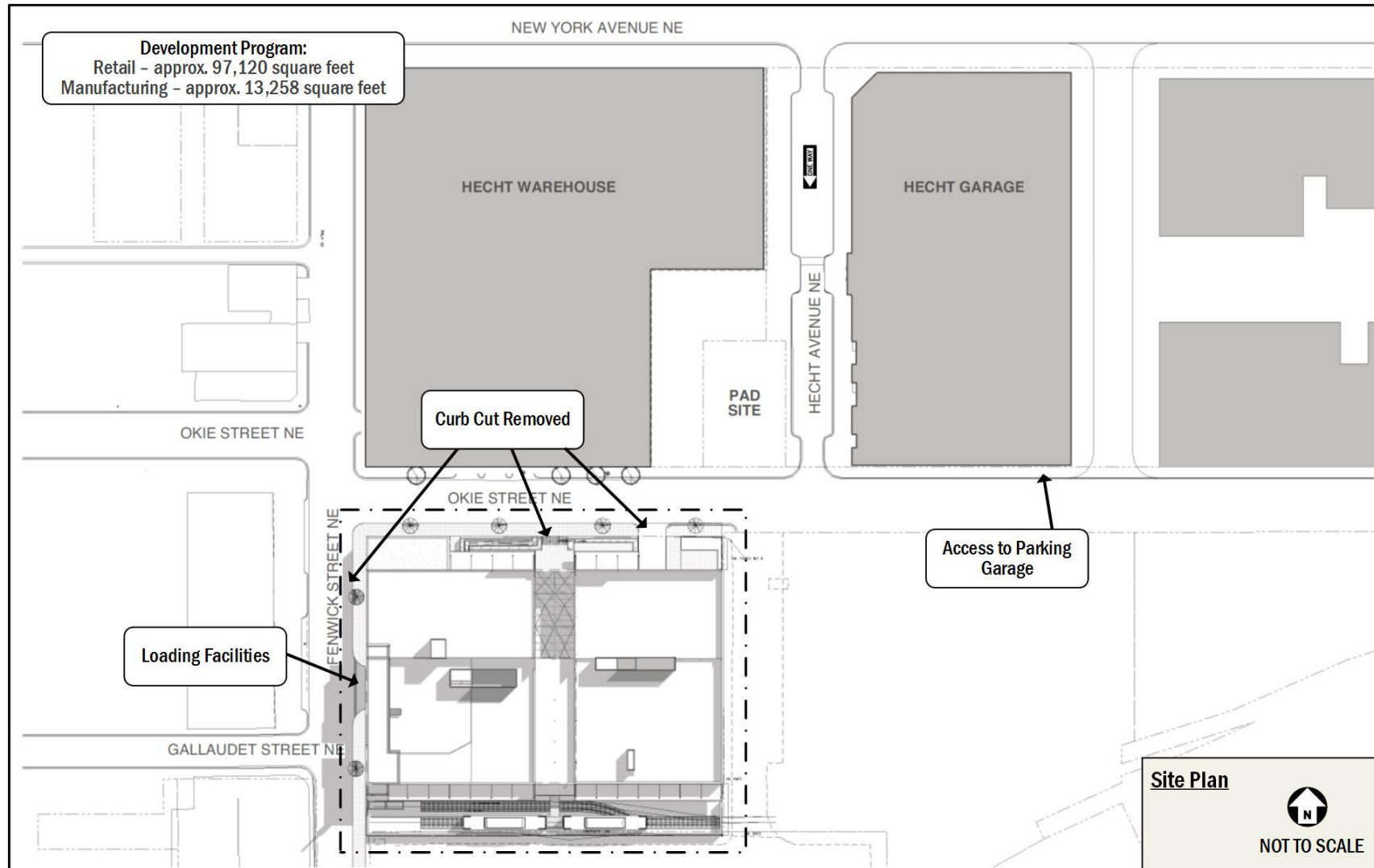


Figure 6: Site Plan

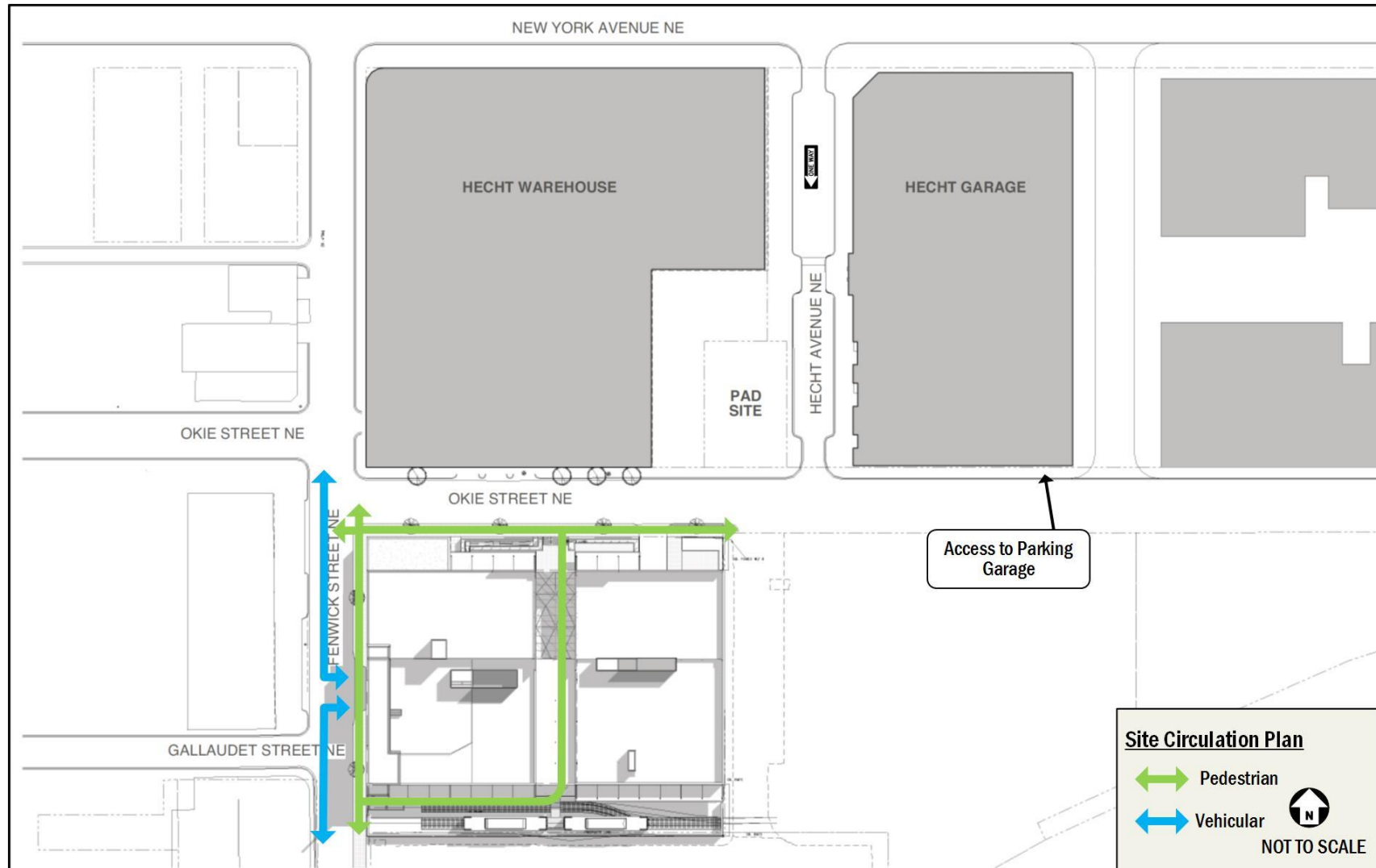


Figure 7: Site Circulation

Parking

As mentioned previously, parking for the site will be provided in the adjacent previously approved 1,067 space parking garage across Okie Street. Hecht Avenue is a new roadway that provides a one-way southbound connection through the site from New York Avenue to Okie Street. Vehicular access to the parking garage is provided from Okie Street via a curb cut east of the Hecht Avenue/Okie Street intersection.

The Applicant is seeking variance relief from the parking requirements of 11 DCMR § 2101.1, which under current zoning requirements the proposed development would need to supply a total of 223 spaces. In this case, the practical difficulty of supplying off-street parking due to the constrained nature of the site as well as the large supply of available on-street and off-street parking satisfy the requirements for the seeking relief from the parking requirements of 11 DCMR § 2101.1.

In order to assess whether the parking garage has available capacity to accommodate the increase in parking demand that the proposed development would generate, a parking occupancy study was conducted on Friday, January 21, 2016. The parking occupancy study for the parking garage consisted of hourly sweeps of the six levels of the garage between the hours of 5:00 PM and 10:00 PM. The results of the study indicate that the parking garage has the ability to absorb any anticipated demand that the proposed development may generate. As shown in Figure 8, the highest demand observed in the parking garage was between 6:00PM and 7:00PM, where only 83 (7.8%) of the 1,067 available parking spaces were occupied. Currently, 34 percent (or 361 of the 1,067 available spaces) are allocated for specific uses from other nearby buildings.

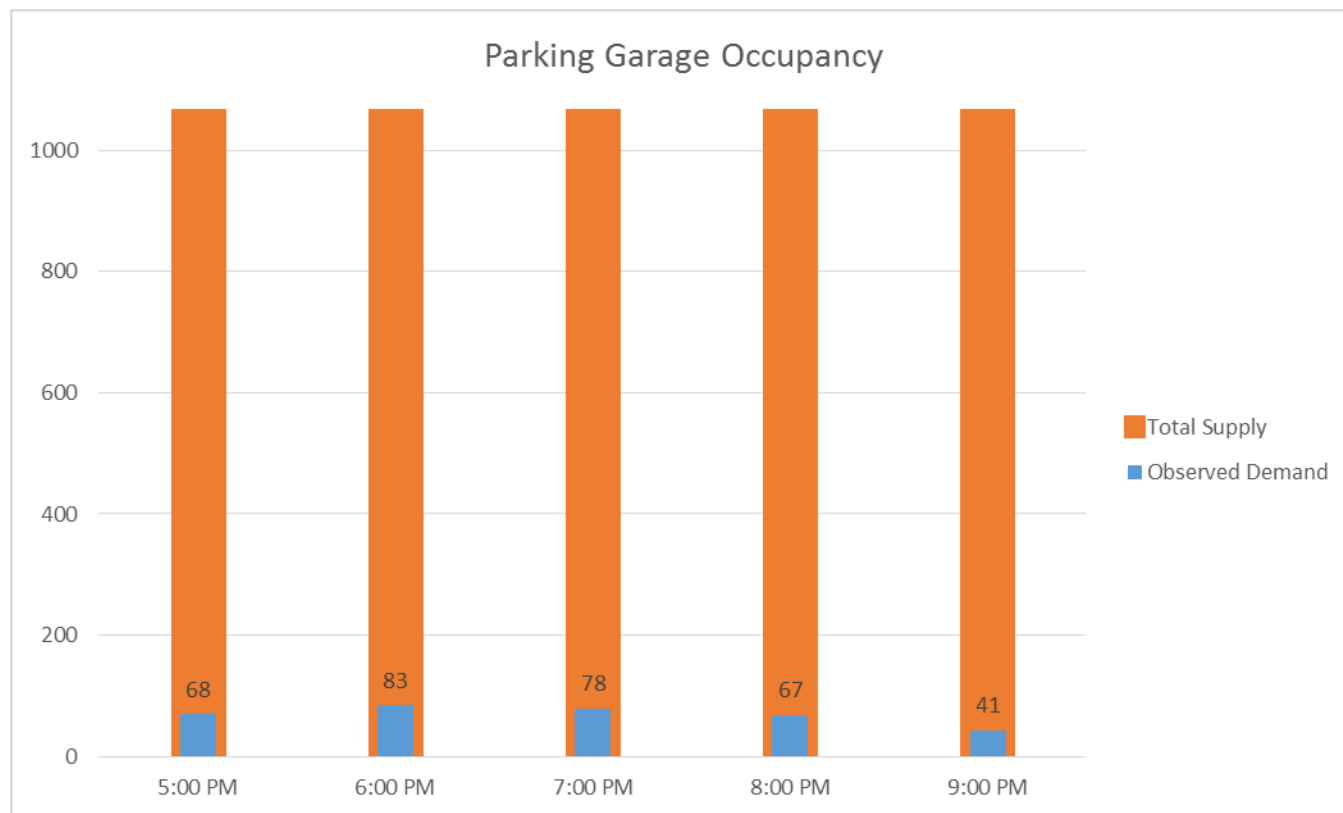


Figure 8: Parking Garage Occupancy

In addition to the parking occupancy study conducted on the parking garage, an on-street parking study was performed to better assess how on-street parking is being utilized within the vicinity of the site. The on-street parking study was conducted across an area considered to be within walking distance of the development site, roughly a two-block radius in all directions. An inventory of available on-street parking facilities was conducted that included tabulating the number of parking spaces by block face and identifying any relevant parking restrictions. The number of parking spaces inventoried within the study area totaled 569 on-street parking spaces. The majority of the study area included unrestricted parking spaces centered around industrial uses adjacent to the site.

Parking occupancy data was collected on Friday, January 21, 2016 from 5:00 PM to 10:00 PM to gather information on the parking occupancies of Friday conditions when retail patrons and visitors would most likely park on nearby streets. Table 4 gives a summary of the hourly utilization percentages for the weekday study period and Table 5 gives a summary of the hourly utilization percentages broken down by parking restrictions. It was determined that the weekday parking peak occurs from 5:00 PM to 6:00 PM with a parking utilization of 49 percent (or 280 vehicles occupying the 569 available spaces).

Parking restrictions by block are shown on Figure 9 and the peak hour occupancy by block is shown on Figure 10. During the peak hour, occupancies by block varied greatly, but generally the most densely occupied street parking facilities were located along Kendall Street and Okie Street (between Fenwick Street and Kendall Street). Most block faces along these streets realized peak hour occupancies of 95 percent or higher. Central Place had the lowest occupancy, averaging 31 percent or lower over the entire study period.

Table 4: Peak Parking Occupancy

	PM				
	5:00	6:00	7:00	8:00	9:00
Occupancy	280	214	173	173	167
Total Spaces	569	569	569	569	569
Utilization	49%	38%	30%	30%	29%

Table 5: Peak Hour Inventory and Occupancy Summary

Space Type	Peak Period (5:00PM-6:00PM)			
	Spaces	Occupancy	Utilization	Available
Metered	0	--	--	--
Non-RPP	40	5	13%	35
RPP	131	47	36%	84
Unrestricted	398	228	57%	170
All On-Street Spaces	569	280	49%	20

The abundant supply of available on-street and off-street parking will adequately serve the vehicular needs of the development based on the proposed use of the site.

Loading Facilities

As required by zoning, the development is planned to be served by one 55-foot loading berth, two 30-foot loading berths, one 200 square foot platform, one 100 square foot platform, and one service and delivery 20-foot spaces, which will adequately serve the loading demands of the development. A loading management plan will be implemented to ensure that the loading facilities are most efficiently used and no truck queuing or loading occurs curbside from Fenwick Street. This will include a loading manager to coordinate operations among other details.

Transportation Demand Management

Transportation Demand Management (TDM) is the application of policies and strategies used to reduce travel demand or to redistribute demand to other times or spaces. TDM typically focuses on reducing the demand of single-occupancy private vehicles during peak period travel times or on shifting single-occupancy vehicular demand to off-peak periods. TDM's importance within the District is highlighted within section T-3.1 of the DC Comprehensive Plan, where it has its own dedicated section including TDM policies and actions.

Proposed TDM Plan

Based on the DDOT expectations for TDM programs, and analyzing the specific attributes of the development site, the following outlines the proposed TDM plan for the development.

- *On-Site Services*
Printed materials related to local transportation alternatives available visitors and employees will be available at a kiosk within the pedestrian walkway area. These printed materials may include, but are not limited to, Metrorail and Metrobus maps and schedules, Capital Bikeshare maps, DC Circulator maps, and other non-auto services.
- *Bicycle Amenities*
The operator will encourage all alternative transportation modes including bicycling. Bicycling will be promoted for employees. Eleven (11) interior secure bicycle parking spaces will be available for employees and patrons will have access to 32 exterior temporary bicycle parking spaces around the perimeter of the project. These spaces will be provided at a rate that exceeds current requirements.

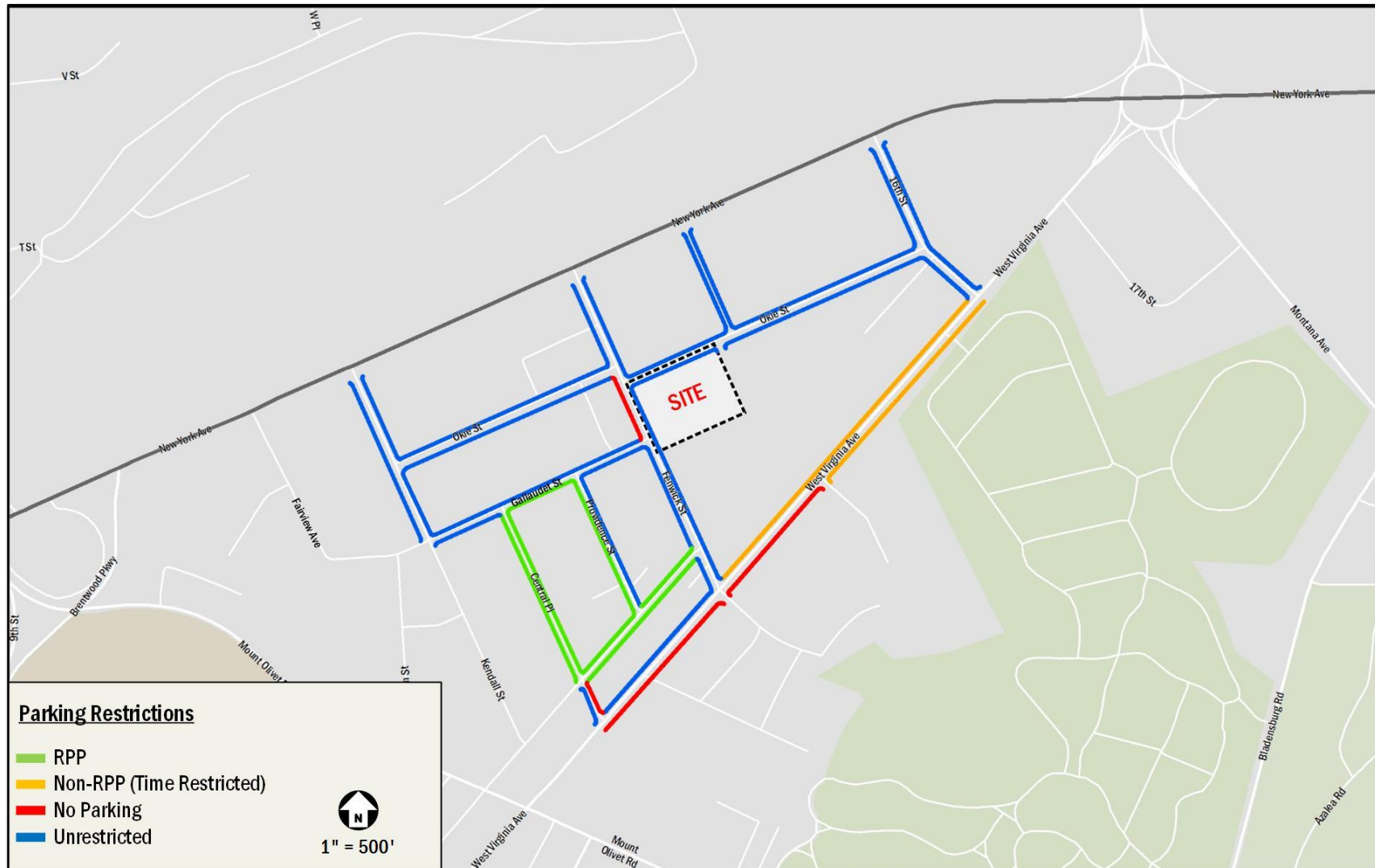


Figure 9: Parking Restrictions by Block Face

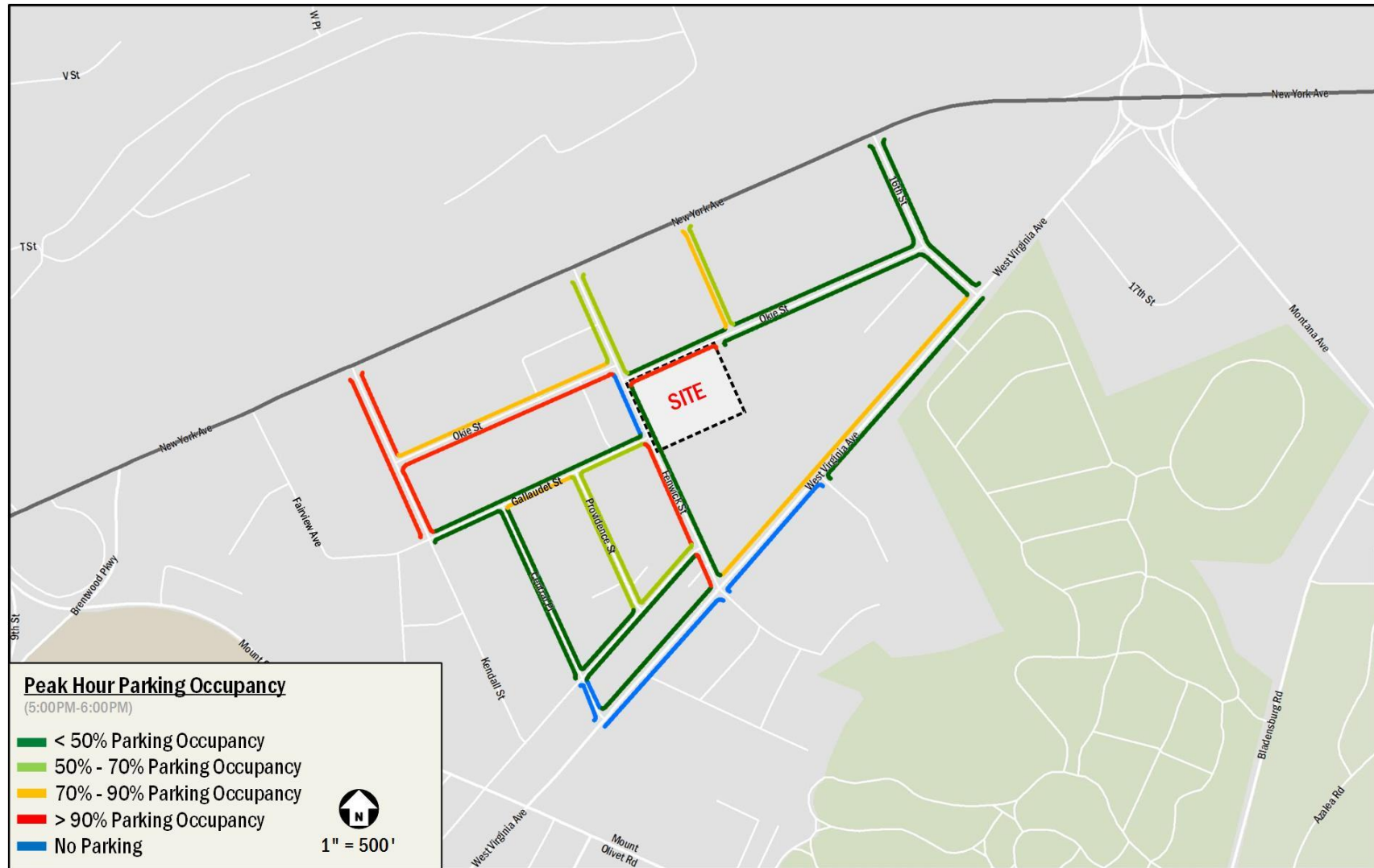


Figure 10: Peak Hour Street Parking Occupancy

Conclusions

This memorandum presents the findings of a parking and loading statement for the Pappas Tomatoes development. The proposed development consists of a single retail structure containing approximately 110,378 square feet of retail and light manufacturing use. The following conclusions were made regarding the Pappas Tomatoes development:

- The abundant supply of on-street and off-street parking options will adequately serve the project, particularly the site's location across the street from the Applicant-controlled parking garage.
- The site's adequate access to transit, as well as improving bicycle and pedestrian facilities and other new development in the area results in a safe and effective environment for non-auto transportation access to the site.
- The development will incorporate the amount of loading required by zoning.
- A TDM plan for the development will include the implementation of on-site services and bicycle amenities.