

TECHNICAL MEMORANDUM

To: Jay Kelly
From: Daniel Solomon
Jim Watson, PTP
Erwin Andres, P.E.
Date: November 11, 2015
Subject: Capitol Point South BZA Comprehensive Transportation Review

The JBG Companies

INTRODUCTION

This memorandum presents the findings of a Comprehensive Transportation Review (CTR) conducted for the Capitol Point South project in support of its Boarding of Zoning Adjustment (BZA) application (BZA Case Number 19121). The site is bounded by N Street NE to the north, 1st Street NE to the east, Patterson Street NE to the south, and North Capitol Street NE to the west, as noted on Figure 1. This project consists of redeveloping the site which currently contains a seven-story office building, a two-story office building, and surface parking lots. The resulting development will be a single mixed-use structure containing 210 residential dwelling units, approximately 28,177 square feet of retail, approximately 381,745 square feet of office space, and an approximately 30,000 square foot below-grade movie theatre with seven theatres.

Phase 1 of the project (33 N Street NE), which will be a single mixed-use building with ground floor retail and approximately 342 residential dwelling units, was approved pursuant to BZA Order No. 18636-A, dated October 22, 2013, and effective on November 10, 2013. BZA Order No. 18636-A granted a variance from the loading requirements of 11 DCMR § 2201.1, among other relief. For the current development, the Applicant is seeking an area variance from the off-street parking requirements of 11 DCMR § 2101.1 and the loading requirements of 11 DCMR § 2201.1.

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 and loading demands generated by its proposed uses. Based on a review of the surrounding transportation infrastructure, the site's design, and the parking and loading demands of the development, the project will accommodate the parking and loading demands with the parking and loading proposed in this application. The following conclusions were made regarding the Capitol Point South development:

- The site is surrounded by an extensive existing network of transit, bike- and car-share, and bicycle and pedestrian facilities that result in an excellent environment for safe and effective non-auto transportation access to the site. Combined with the TDM plan, the on-site proposed parking supply of 245 vehicle parking spaces will adequately serve the anticipated parking demand of approximately 188 parking spaces for the combined mix of uses within the development project;
- Based on an estimation of loading activity for the development, the amount of loading activity expected to take place at the site will be adequately served by the consolidated, central loading area provided in the building; and
- A TDM plan for the development will include the implementation of a TDM coordinator, on-site services, a marketing program, transportation incentives, bicycle amenities, and ride-matching/ridesharing programs.

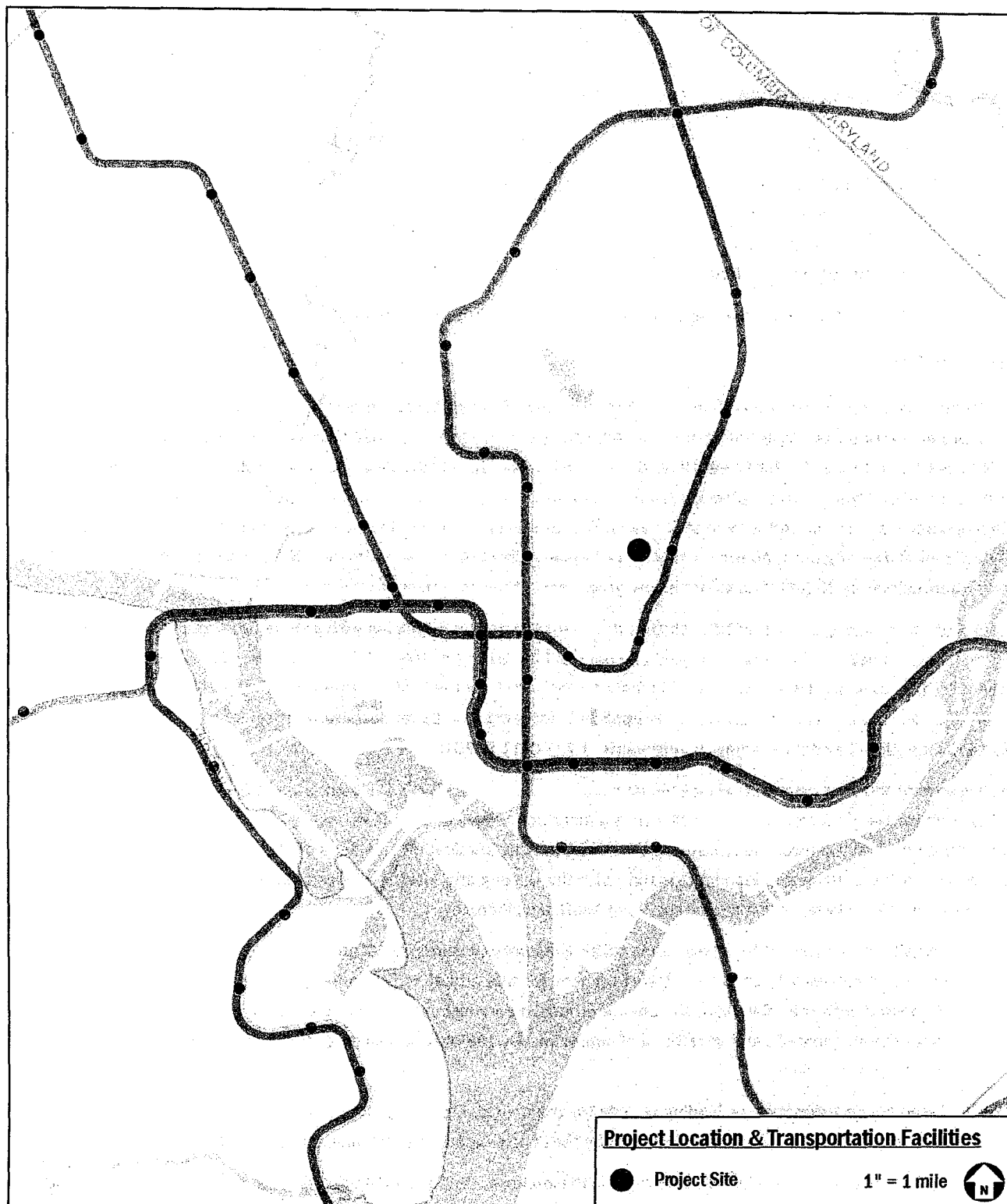


Figure 1: Site Location

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 several public transportation sources, including Metrorail, Metrobus, and the DC Circulator bus system. 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 bike lanes, cycle tracks, and signed bicycle routes.

Transit

Local transit services that provide access to the Capitol Point development site include Metrorail, Metrobus, and the DC Circulator. These services are operated by the Washington Metropolitan Area Transit Authority (WMATA) and DDOT. WMATA operates Metrorail, the nation's second largest heavy rail transit system, as well as Metrobus, the nation's fifth largest bus network. DDOT and WMATA collaborate to operate the DC Circulator, a system of five (5) bus lines that provide frequent service and low fares throughout the city. Existing transit facilities surrounding the site are shown on Figure 2.

The NoMa – Gallaudet U Metrorail station is located less than 0.2 miles from the development site. The NoMa – Gallaudet U Metrorail station is served by the Red Line, which travels south from Glenmont, through downtown DC, and then continues northwards through the District Core to Shady Grove. Trains run approximately every three to six minutes during the morning and afternoon peak hours. They run about every 12 minutes during weekday non-peak hours, every 15-18 minutes on weekday evenings after 9:30PM and 12 to 15 minutes on the weekends.

The site is also serviced by Metrobus along multiple primary corridors. These bus lines connect the site to many areas of the District, Maryland, and Virginia, including several Metrorail stations. 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.

Table 1: Bus Route Information

Route Number	Route Name	Service Hours	Headway	Walking Distance to Nearest Bus Stop
80	North Capitol Street Line	Weekdays: 4:29AM – 1:20AM Weekends: 4:40AM – 2:14 AM	15-30 min	<0.1 miles, 1 minute
90,92,93	U Street-Garfield Line	Weekdays: 4:05AM – 2:04 AM Weekends: 4:05AM – 2:18 AM	7-15 min	0.2 miles, 4 minutes
P6	Anacostia-Eckington Line	Weekdays: 5:25AM – 1:13AM Weekends: 5:20AM – 12:15 AM	15-30 min	<0.1 miles, 1 minute
X3	Benning Road Line	Weekdays: Westbound 6:00AM-8:39AM Eastbound 3:31PM-5:37PM	20-30 min	0.2 miles, 4 minute

Due to growth of population, jobs, and retail in several neighborhoods, the District's infrastructure is challenged with the need for transportation investment to support recent growth and to further strengthen neighborhoods. In order to meet these challenges and capitalize on future opportunities, DDOT has developed a plan to identify transit challenges and opportunities and to recommend investments. This is outlined in DC's *Transit Future System Plan* report published by DDOT in April 2010, which includes the reestablishment of streetcar service in the District.

In direct relation to the development, one streetcar route and two Metro Express bus corridors are expected to travel near the site in the future. The streetcar route will provide a connection between several commercial districts including Woodley

Park, Adams Morgan, U Street NW, NoMa, H Street NE, Barracks Row, Anacostia Waterfront, and Historic Anacostia. The line also will have direct connections to all six Metrorail lines and serve Gallaudet University and the National Zoo. The North Capitol Street/Michigan Avenue Corridor will include service along Michigan Avenue NE from the Brookland/Catholic University Metrorail Station to North Capitol Street and along North Capitol Street from Michigan Avenue NE to Massachusetts Avenue NW and Union Station. The Florida Avenue/U Street NW/8th Street SE Corridor will connect the Anacostia Waterfront, Barracks Row, H Street NE, NoMa, U Street NW, Adams Morgan, and Woodley Park commercial districts. Existing transit facilities can adequately serve the demand that will be generated by the development.

Bicycle Facilities

The site has good access to existing bicycle facilities. North-south connectivity is provided along bike lanes on 1st street NE and the Metropolitan Branch Trail. East-west connectivity is provided along bike lanes on M Street. Figure 3 illustrates the existing bicycle facilities in the area. A small number of short-term bicycle parking racks exist in the vicinity of the site on First Street SE under existing conditions. As described below, the project will include a significant supply of long- and short-term bicycle parking spaces, which will add to the existing inventory in the surrounding neighborhood.

In addition to personal bicycles, the Capital Bikeshare program provides an additional cycling option for employees and patrons of the planned development. The Bikeshare program has placed over 300 bicycle-share stations across Washington, DC, Arlington and Alexandria, VA, and most recently Montgomery County, MD with over 2,500 bicycles provided. Within a quarter-mile of the site there are two Capital Bikeshare stations that house a total of 37 docks.

Pedestrian Facilities

A review of pedestrian facilities surrounding the planned development shows that many facilities meet DDOT standards and provide a quality walking environment. Figure 4 shows a detailed inventory of the existing pedestrian infrastructure surrounding the site. Sidewalks, crosswalks, and curb ramps are evaluated based on the guidelines set forth by DDOT's *Public Realm Design Manual* in addition to ADA standards. Sidewalk widths and requirements for the District are shown below.

Within the area shown, most roadways are considered residential with a low to moderate density or commercial. Some areas along Florida Avenue and New York Avenue are considered commercial and thus require wider sidewalks. Most of the sidewalks surrounding the site comply with DDOT standards, which are set forth in Table 2; however there are some areas which have inadequate sidewalks or no sidewalks at all. Of note, the redevelopment of the NoMa neighborhood will provide ample opportunity for pedestrian infrastructure to be upgraded as part of other redevelopment projects and efforts. For example, Figure 4 indicates that Patterson Street does not currently meet the requirements; however, Patterson Street will be upgraded to meet the requirements as part of this project and the project to the south. This turnover and upgrade process is typical in a redevelopment urban area. All primary pedestrian destinations are accessible via routes with sidewalks, most of which meeting DDOT standards. 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 4, 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. Zipcar and Enterprise CarShare have locations near the project site. Table 3 lists the car-sharing locations in the vicinity of the project and shows that 14 carsharing vehicles are available within a short (1/4 mile) walk of the site with many others within a half mile.

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.

Table 3: Car Share Locations and Vehicles (within a quarter-mile of the Site)

Carshare Location	Number of Vehicles
Zipcar	
1 st & M Apartments	1 Vehicle
Constitution Square (Harris Teeter Garage)	2 Vehicles
66 New York Avenue NE (Tag B Lot)	1 Vehicle
NoMa/Gallaudet Metro @ Elevation (100 Florida Avenue NE)	2 Vehicles
Enterprise CarShare	
66 New York Avenue NE	6 Vehicles
Harry Thomas Way/Eckington Place NE	2 Vehicles
Total Number of Car Share Vehicles in Study Area	14 Vehicles

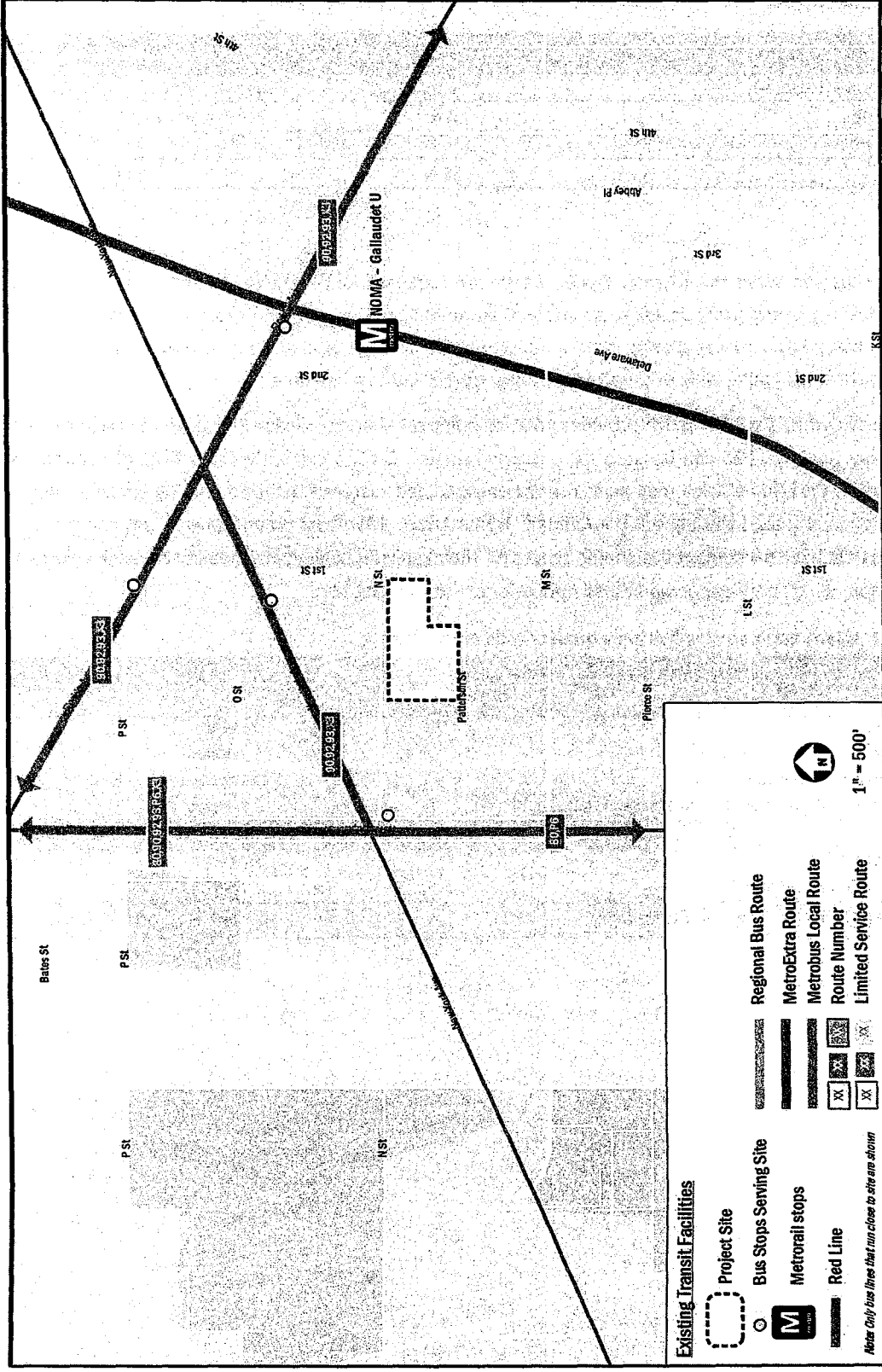


Figure 2: Existing Transit Service

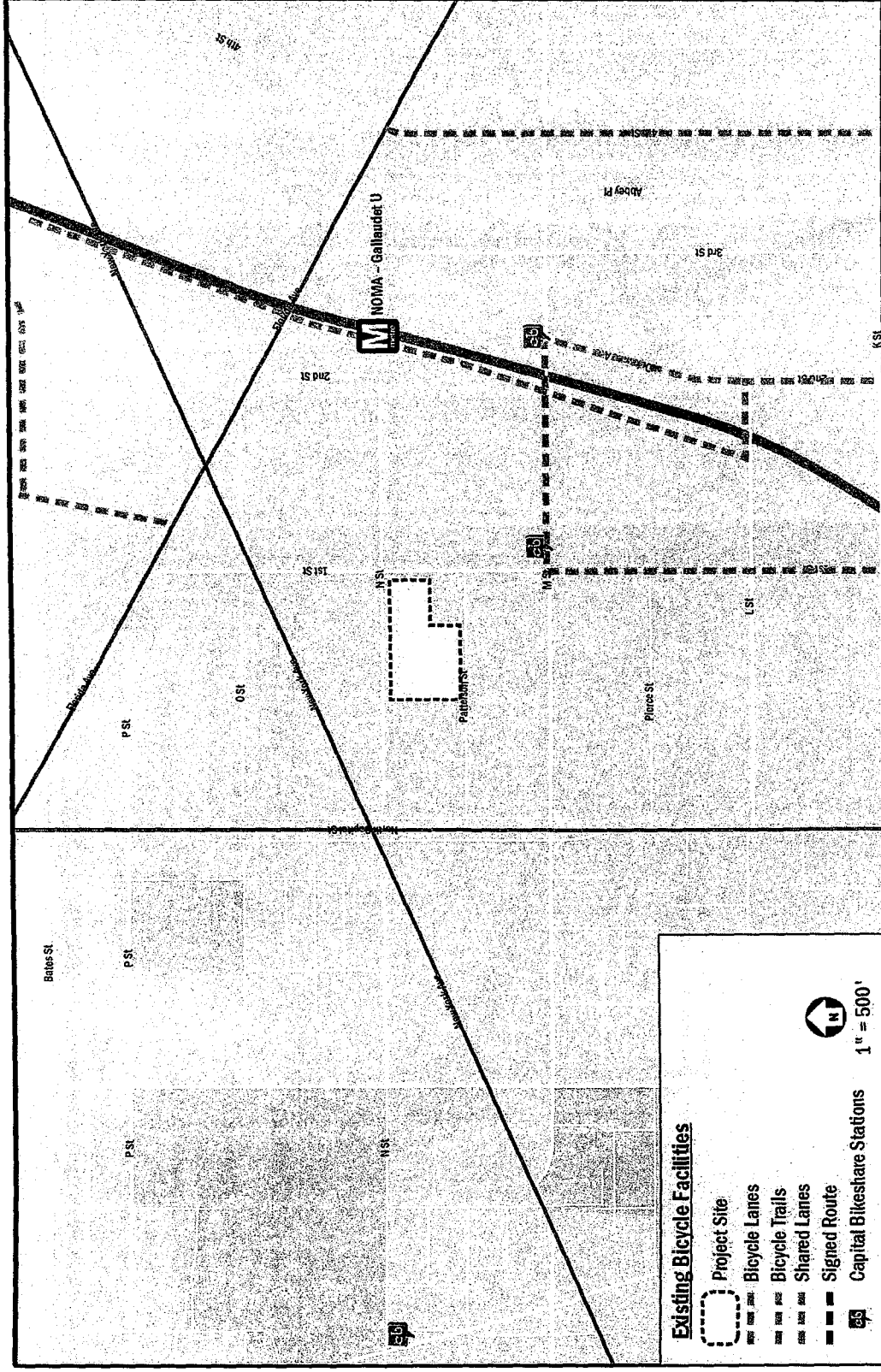


Figure 3: Existing Bicycle Facilities

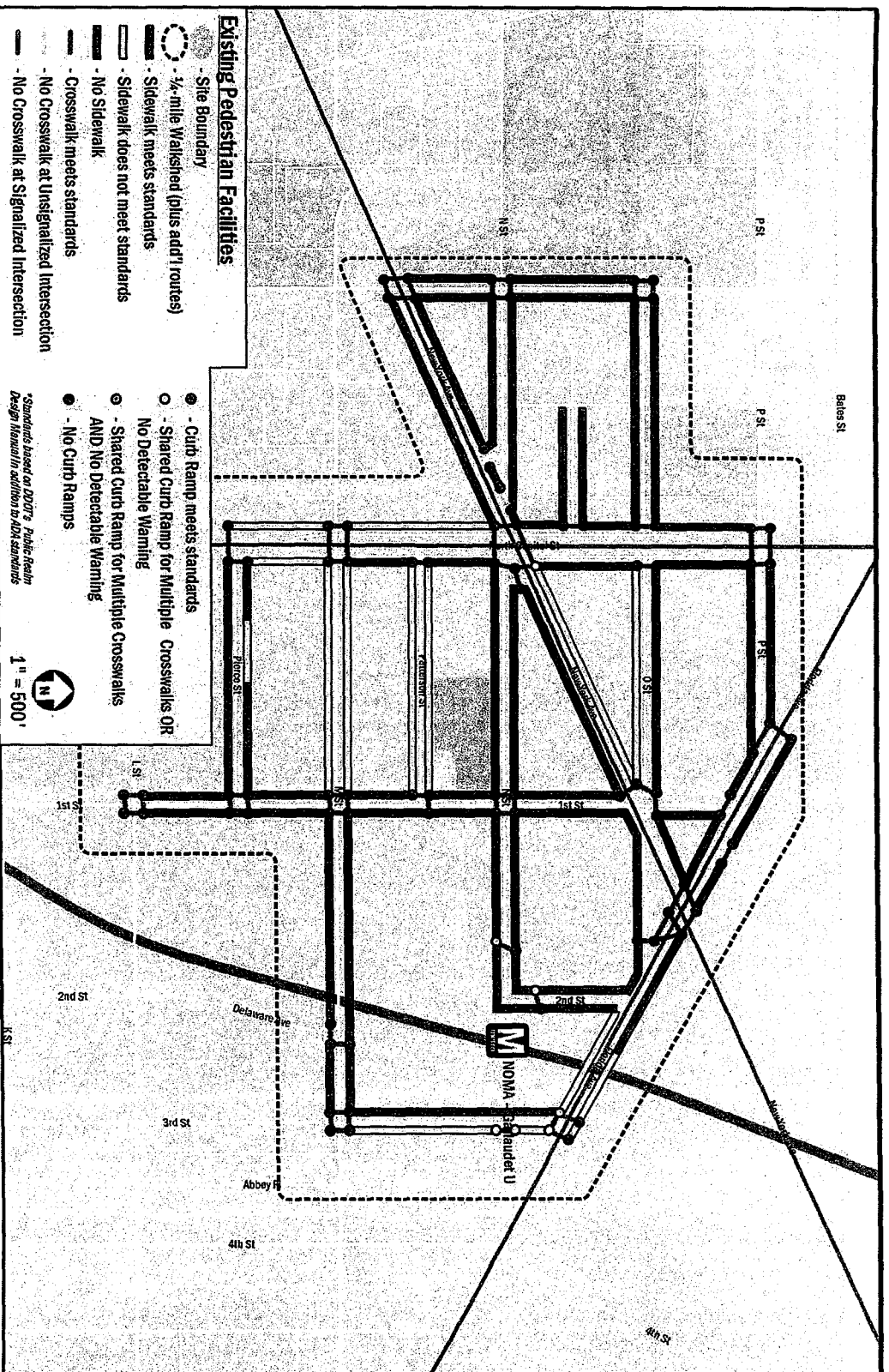


Figure 4: Pedestrian Infrastructure

DESIGN REVIEW

This section provides an overview of the transportation features of the proposed development. The development program consists of a single mixed-use structure containing 210 residential dwelling units, approximately 28,177 square feet of retail, approximately 381,745 square feet of office space, and an approximately 30,000 square foot, below-grade, seven-theatre movie theatre. The site plans includes 245 below grade parking spaces accessed via a ramp from Patterson Street. All loading and trash pick-up will take place on the south side of the site via the loading facilities accessible from Patterson Street. Given the presence of numerous transit option, bike- and car-share facilities, good pedestrian and bicycle infrastructure, and given the site's location in a walkable, mixed-use neighborhood, the proposed number of parking spaces will be adequate to serve the needs of the development's residents, guests, employees, and patrons. Figure 5 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 4 below. Trips were calculated based on ITE Trip Generation rates for Apartment (LU 220), Shopping Center (LU 820), General Office (LU 710) and Multiplex Movie Theater (LU 445).

A review of census data suggests that 70 percent of residents in the surrounding neighborhoods use non-auto modes for commuting, with 30 percent using auto modes. Given that the development will provide parking and is considerably closer to the NoMa Metro Station than many other existing residential units in the census tract, a conservative 25 percent auto mode split was applied.

For retail trips, the retail planned for this site was deemed to be most similar to the retail examined along the U Street corridor in the WMATA Development Related Ridership Survey (DRRS). The WMATA DRRS noted a 19 percent auto mode share for retail along the U Street corridor. For purposes of this study, a 25 percent auto modal split was applied to the retail trip generation.

For office trips, the site was deemed to be most similar to the average of Central Business District (CBD) offices examined in the WMATA Development Related Ridership Survey (DRRS). The WMATA DRRS noted an average 21 percent auto mode share for CBD offices. For purposes of this study and given the amount of parking provided on-site, a similar 20 percent auto modal split was applied to the trip generation.

For movie theater trips, the site was deemed to be most similar to the Ballston Station Regal Cinema examined in the WMATA Development Related Ridership Survey (DRRS). The WMATA DRRS noted an average 39 percent auto mode share at the Ballston Regal Cinema. It should be noted that the theater proposed at the subject property is in a more urban context and closer to the Metro than the comparable theater. As a result and given the amount of parking provided on-site, a 35 percent auto modal split was applied to the trip generation.

The resulting trip generation projections are given in Table 4 below and show that the development is conservatively anticipated to generate 153 weekday AM peak hour vehicular trips (114 inbound and 39 outbound) and 216 weekday PM peak hour vehicular trips (78 inbound and 138 outbound). The proposed parking supply of 245 spaces are adequate to serve the proposed peak hour vehicular trip generation presented in Table 4.

Table 4: Trip Generation and Mode Split

Trip Gen Summary by Land Use/Mode							
Mode	Land Use	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto	Apartments	5 veh/hr	22 veh/hr	27 veh/hr	21 veh/hr	13 veh/hr	34 veh/hr
Auto	Retail	4 veh/hr	3 veh/hr	7 veh/hr	12 veh/hr	14 veh/hr	26 veh/hr
Auto	Office	105 veh/hr	14 veh/hr	119 veh/hr	20 veh/hr	94 veh/hr	114 veh/hr
Auto	Theatre	0 veh/hr	0 veh/hr	0 veh/hr	25 veh/hr	17 veh/hr	42 veh/hr
Auto	Total	114 veh/hr	39 veh/hr	153 veh/hr	78 veh/hr	138 veh/hr	216 veh/hr
Transit	Apartments	12 ppl/hr	49 ppl/hr	61 ppl/hr	49 ppl/hr	26 ppl/hr	75 ppl/hr
Transit	Retail	11 ppl/hr	6 ppl/hr	17 ppl/hr	31 ppl/hr	34 ppl/hr	65 ppl/hr
Transit	Office	653 ppl/hr	90 ppl/hr	743 ppl/hr	121 ppl/hr	588 ppl/hr	709 ppl/hr
Transit	Theatre	0 ppl/hr	0 ppl/hr	0 ppl/hr	71 ppl/hr	48 ppl/hr	119 ppl/hr
Transit	Total	676 ppl/hr	145 ppl/hr	821 ppl/hr	272 ppl/hr	696 ppl/hr	968 ppl/hr
Bike	Apartments	1 ppl/hr	5 ppl/hr	6 ppl/hr	5 ppl/hr	3 ppl/hr	8 ppl/hr
Bike	Retail	2 ppl/hr	0 ppl/hr	2 ppl/hr	4 ppl/hr	5 ppl/hr	9 ppl/hr
Bike	Office	47 ppl/hr	6 ppl/hr	53 ppl/hr	9 ppl/hr	42 ppl/hr	51 ppl/hr
Bike	Theatre	0 ppl/hr	0 ppl/hr	0 ppl/hr	8 ppl/hr	5 ppl/hr	13 ppl/hr
Bike	Total	50 ppl/hr	11 ppl/hr	61 ppl/hr	26 ppl/hr	55 ppl/hr	81 ppl/hr
Walk	Apartments	5 ppl/hr	19 ppl/hr	24 ppl/hr	19 ppl/hr	11 ppl/hr	30 ppl/hr
Walk	Retail	11 ppl/hr	6 ppl/hr	17 ppl/hr	31 ppl/hr	34 ppl/hr	65 ppl/hr
Walk	Office	47 ppl/hr	6 ppl/hr	53 ppl/hr	9 ppl/hr	42 ppl/hr	51 ppl/hr
Walk	Theatre	0 ppl/hr	0 ppl/hr	0 ppl/hr	24 ppl/hr	16 ppl/hr	40 ppl/hr
Walk	Total	63 ppl/hr	31 ppl/hr	94 ppl/hr	83 ppl/hr	103 ppl/hr	186 ppl/hr

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 capacity analysis was required by DDOT and none conducted for this report.

Site Access and Internal Circulation

Site Access

Vehicular access to the site will be off of Patterson Street NE, which is a local street. As shown in Figure 6, one curb cut will provide vehicular access to the planned development's parking garage and loading facilities and has been approved by the Public Space Committee. As a part of the overall development of the site, the eight (8) curb cuts that currently serve the site have been consolidated into one curb cut for the application site and one curb cut for Phase 1 of the project at 33 N Street NE. Note that the curb cut on Patterson Street will have a minimum of six-feet, four inches (6'4") of separation from the adjacent property, as required by the Public Space Committee.

Pedestrian access to the development will occur off of Patterson Street NE, 1st Street NE, and N Street NE. Pedestrian entrances for the various land uses will be easily accessible. Furthermore, the project will include an important segment of the NoMa Meander.

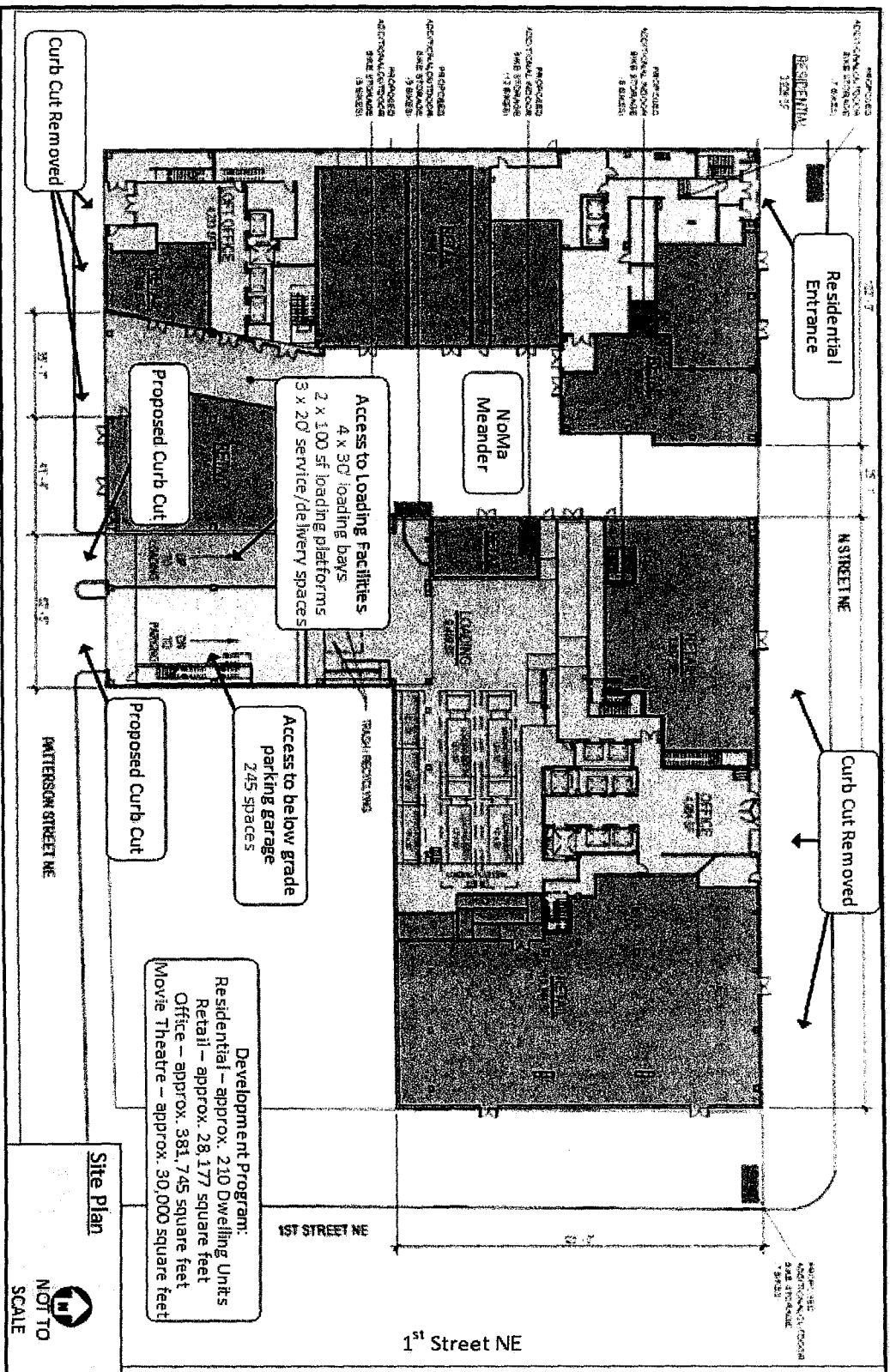
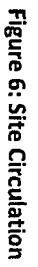


Figure 5: Site Plan



The NoMa Meander is a four-block long pedestrian promenade that is intended to break up the superblocks between North Capitol and 1st Street NE. This segment of the NoMa Meander will provide a pedestrian and retail connection from N Street NE to Patterson Street NE, with a larger internal courtyard and activation from both the entrances to the various retail spaces and movie theatre in the building.

Parking

Vehicle and long-term bicycle parking will be located within the four-level below-grade garage that is accessed from Patterson Street NE. The development will supply 245 parking spaces. The applicant is seeking variance relief from the parking requirements of 11 DCMR § 2101.1, which under current zoning requirements, the development would need to supply a total of 419 spaces for the combined residential, office, and retail, and movie theatre.

The proximity of the development to Metrorail, Metrobus, car- and bike-share, and pedestrian and bicycle facilities in the vicinity of the site, will reduce the dependency and use of personal vehicles as a mode of travel to and from the development. Furthermore, the physical constraints of the site limit the amount of parking that can be supplied on-site. The Applicant has maximized the number of parking spaces that can reasonably fit on the site. Due to the irregular shape, narrow dimensions, and wide variety of uses proposed for the development (most notably the below-grade movie theater), it is practically difficult to construct additional levels of the below-grade garage to add 174 more parking spaces in order for the project to be in compliance with 11 DCMR § 2101.1. The Applicant cannot provide additional parking levels below the proposed parking garage on the eastern portion of the Site, because at four levels below grade the elevation is already below the water table. Full compliance with 11 DCMR § 2101.1 would require three additional levels of below-grade parking (a total of seven below-grade levels), which would make the development of the site practically difficult. The Applicant also cannot provide below-grade parking on the western portion of the Site because this is the location proposed for the movie theater, and excavating further would result in the same practical difficulties associated with digging at a negative elevation under the parking garage.

It should also be noted that the ZRR would change the amount of vehicle parking required by Zoning. The amount of parking required for the development by the ZRR is **zero, since the site is located in a DD zone, which does not require any parking spaces**. The required parking under the ZRR if the project was not located in the DD District is outlined in Table 5 below and shows that the development will have more parking spaces than required under the base ZRR requirement (176 spaces required vs. 245 spaces supplied).

Table 5: ZRR Parking Requirements

Use Requirement (under ZRR)	Ratio	Parking Spaces
Residential	1 per 3 dwelling units, in excess of 4	69
Office	0.5 per 1,000 square feet, in excess of 3,000 square feet	189
Retail	1.33 per 1,000 square feet, in excess of 3,000 square feet	33
Movie Theater	2 per 1,000 square feet	<u>60</u>
Total Required (Base)		351
50% Reduction for Metro Proximity		<u>-175</u>
Total Required (under ZRR)		176

In addition, the parking demands of the site were reviewed using DC Zoning Requirements, ITE Parking Generation, and ULI Shared Parking principles. In addition, base parking demands were factored for proximity to transit and the overall multimodal nature of the surrounding area. Since the parking area is planned to be shared between all uses, the demands

of each use were examined on a weekday/weekend, hourly, and seasonal basis. Shared parking principals take into account the natural peaks of various usages to share parking among complementary users. For instance, office parking is expected to see a peak demand during the mid-morning and midafternoon hours, theater parking is expected to see its peak demand during the evening (between 8:00 and 9:00 PM) and residential parking is expected to realize its peak demand overnight (between 9:00 PM and 6:00 AM).

As shown below in Table 6, the peak overall demand of the parking facility is anticipated to be 188 parking spaces between 2:00 and 3:00 PM on a weekday when the office parking is expected to be most utilized and the potential for matinees exists at the theater as well as usual residential and retail users during the day. As noted above and depicted below on Figure 7, the demand varies for each use throughout the day.

Table 6: Shared Parking Demand

Use	Parking Demand
Residential	25 spaces
Office	143 spaces
Retail	4 spaces
Movie Theater	<u>16 spaces</u>
Total Peak Shared Parking Demand	188 spaces
Parking Provided	<u>245 spaces</u>
Remainder	63 spaces

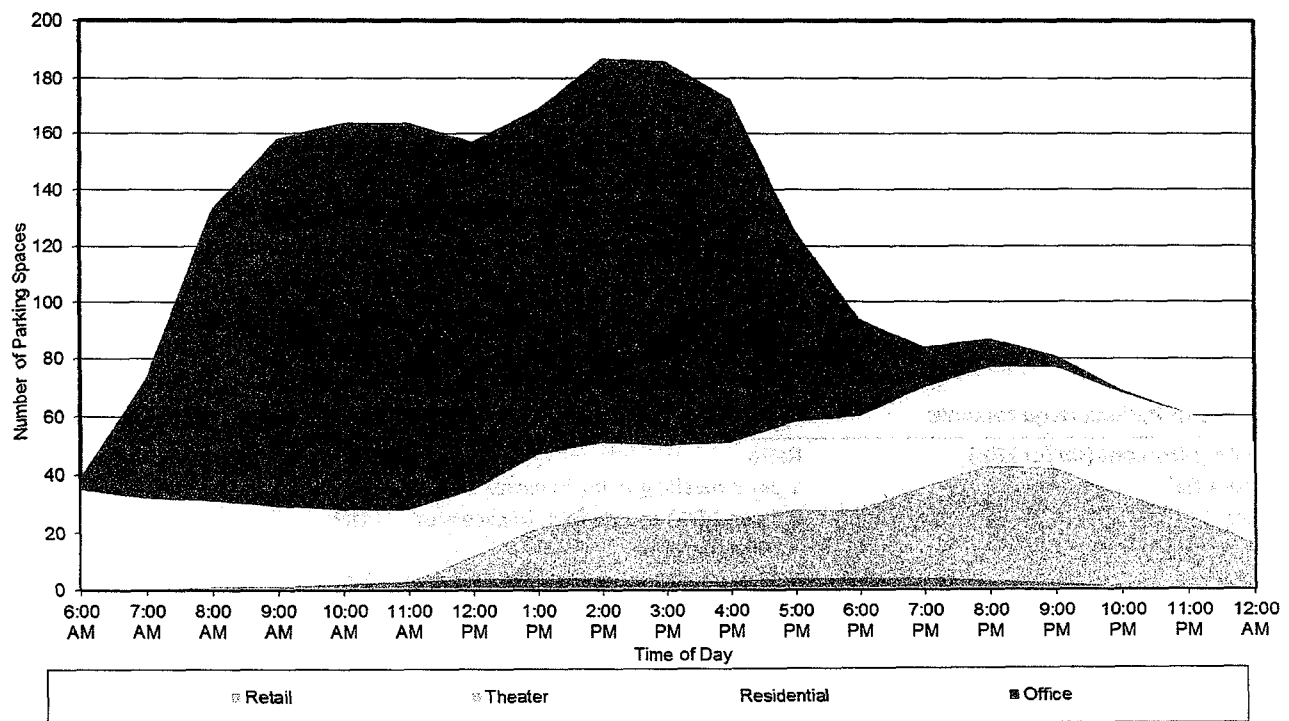


Figure 7: Weekday Hourly Parking Demand

The development is projected to adequately serve the demands of the site due to the following various considerations:

- Well-situated to be served by the NoMa/Gallaudet Metrorail station, within walking distance of the site.

- Served by multiple bus routes within a quarter-mile walking distance of the site.
- Capital Bikeshare has two existing bike share locations very near the site containing 37 docks for bicycles.
- The applicant will incorporate bicycle parking within the site. The design of these spaces will reflect similar dimensions as currently incorporated in other developments throughout the District and the amount will meet current District requirements.
- The site area has a walkability score of 91 as calculated by WalkScore.com, which is referred to as a “Walker’s Paradise”, due to the site’s location and proximity to a mix of uses and amenities which do not require a vehicle to access.

Given the urban nature of the site and its proximity to many non-auto modes of transportation as well as the nature of the development’s uses providing complementary parking demands that can be shared within the garage, the proposed supply of off-street parking (245 spaces) will adequately serve the vehicular needs of the development (188 spaces) based on the proposed use of the site.

Bicycle Facilities

As mentioned previously, long-term bicycle parking spaces are proposed on-site on the ground level and in the underground parking garage exceeding required minimums, with 20 bicycle parking spaces on the ground level and 147 bicycle parking spaces in the underground garage. Short term outdoor bicycle parking along the perimeter of the development site will be provided in coordination with DDOT, also exceeding required minimums.

Loading Facilities

The development is planned to be served by four 30-foot loading berths, two 100 square foot platforms, and three service and delivery 20-foot spaces¹. The Applicant is seeking variance relief from the loading requirements of 11 DCMR § 2201.1. Truck access to the site will be possible through North Capitol Street, Florida Avenue, and New York Avenue, which are all designated truck routes. Detailed truck maneuvering diagrams are shown below on Figure 8 and Figure 9. Table 7 below outlines the required and the planned loading facilities.

Table 7: Loading Facilities

Use Requirement	Berth	Platform	Service/Delivery
Residential	1 @ 55'	1 @ 200 sf	1 @ 20'
Office	3 @ 30'	3 @ 100 sf	1 @ 20'
Retail	1 @ 55' and 1 @ 30'	1 @ 200 sf 1 @ 100 sf	1 @ 20'
<u>Movie Theater</u>	<u>1 @ 30'</u>	<u>1 @ 100 sf</u>	<u>1 @ 20'</u>
Total Required	2 @ 55' and 5 @ 30'	2 @ 200 sf and 5 @ 100 sf	4 @ 20'
Total Provided	4 @ 30'	2 @ 100 sf	3 @ 20'

¹ Three service/delivery spaces will be provided. However, pursuant to 11 DCMR § 2204.5, “[f]or a building or structure having three or more required loading berths in one location, the loading berths may be arranged so that access to a loading berth is across the length of one other loading berth.” Therefore, although three service/delivery spaces are provided and will be used for the project, only two count for loading purposes

Given the site's variety of proposed uses and the amount of square footage devoted to each use, the required number and size of loading facilities based on Zoning for the development is more than what would be necessary for practical use on-site. The Applicant is dedicating a significant amount of space to loading facilities in a shared, centrally-located space on the site. Providing the additional facilities would result in a much larger portion of the building's ground floor being devoted to loading rather than to retail use and the NoMa Meander. Given the site's irregular shape and narrow dimensions, providing the required loading facilities would also impede development of a usable ground floor layout, or else take up below-grade space proposed for parking and the movie theater use. In addition, all loading will access the building from Patterson Street, which is not wide enough to permit front-in, front-out maneuvers as required by DDOT for WB-55 trucks and resulting in the accommodation of 30 foot loading berths only. There are also two parking spaces in the garage designated for residential loading.

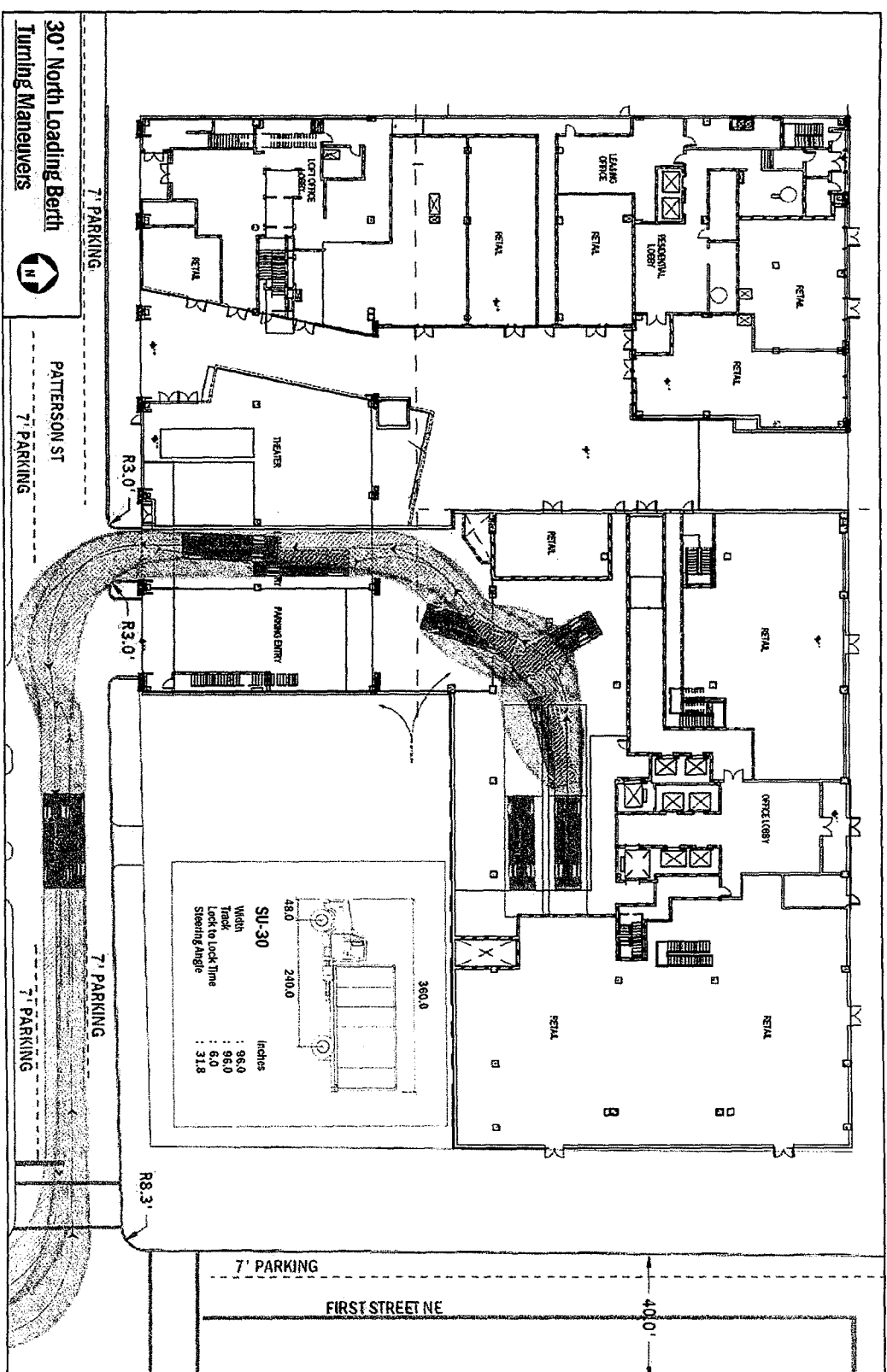
The number of truck trips generated by a project of this scale can be accommodated by the loading facilities planned. Based on previous studies, it is conservatively expected that the new project would generate a maximum of 15 truck trips per day. These are likely to be delivery trucks such as USPS, FedEx, UPS and other smaller delivery vehicles up to six times per day that would utilize the 20 foot service spaces as well as eight to nine (8-9) larger trucks (up to 30 feet) that could be expected per day for residential move-ins and retail/theater/office deliveries that would use the 30 foot loading berths. A loading management plan will be implemented to ensure that the loading berths are most efficiently utilized and the overall demand of the loading activities does not exceed the capacity of the loading facilities.

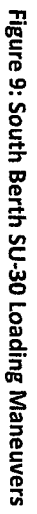
Nearby Parking

This section presents the findings of an on-street parking study, including full inventory of available parking spaces and a parking occupancy count within walking distance of the development 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 375 on-street parking spaces. The majority of the study area included metered parking spaces centered around commercial uses adjacent to the site.

Parking occupancy data was collected on Friday, November 10, 2015 from 7:30 AM to 9:30 PM to gather information on the parking occupancies of Friday conditions when residents, office workers, theater and retail patrons, and visitors would most likely park on nearby streets. Table 8 gives a summary of the hourly utilization percentages for the weekday study period and Table 9 gives a summary of the hourly utilization percentages broken down by parking restrictions. It was determined that the weekday parking peak occurs from 12:30 PM to 1:30 PM with a parking utilization of 77 percent (or 288 vehicles occupying the 375 available spaces).

Parking restrictions by block are shown on Figure 10 and the peak hour occupancy by block is shown on Figure 11. During the peak hour, occupancies by block varied greatly, but generally the most densely occupied street parking facilities were located along 1st Street, Patterson Street, and N Street. Most block faces along these streets realized peak hour occupancies of 78 percent or higher, with many having occupancies of 90 percent or higher. Pierce Street had the lowest occupancy, averaging 50 percent or lower over the entire study period. The metered parking spaces had a peak hour occupancy at 76 percent while the unrestricted spaces realized a peak hour occupancy of only 71 percent.





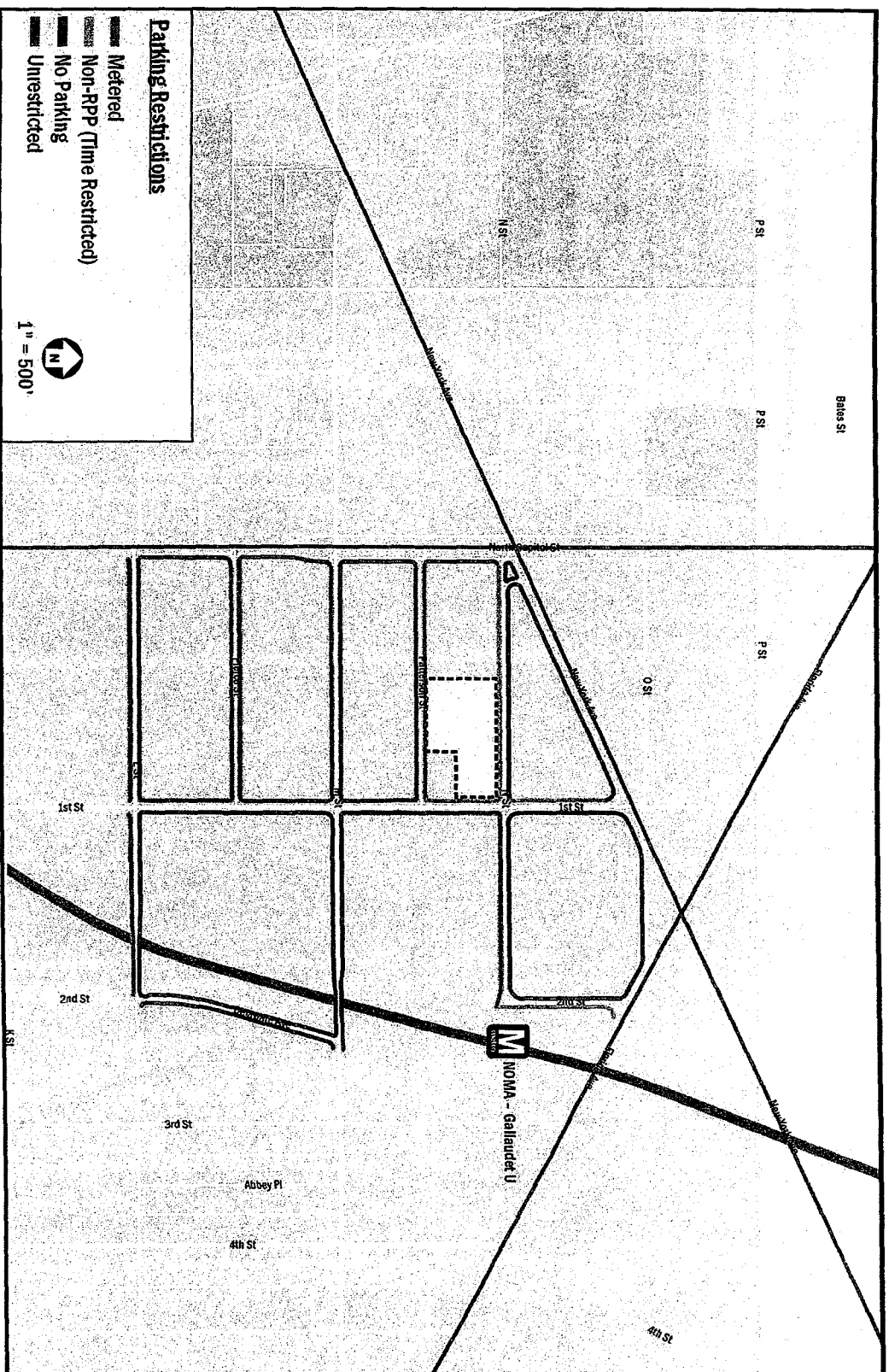


Figure 10: Parking Restrictions by Block Face

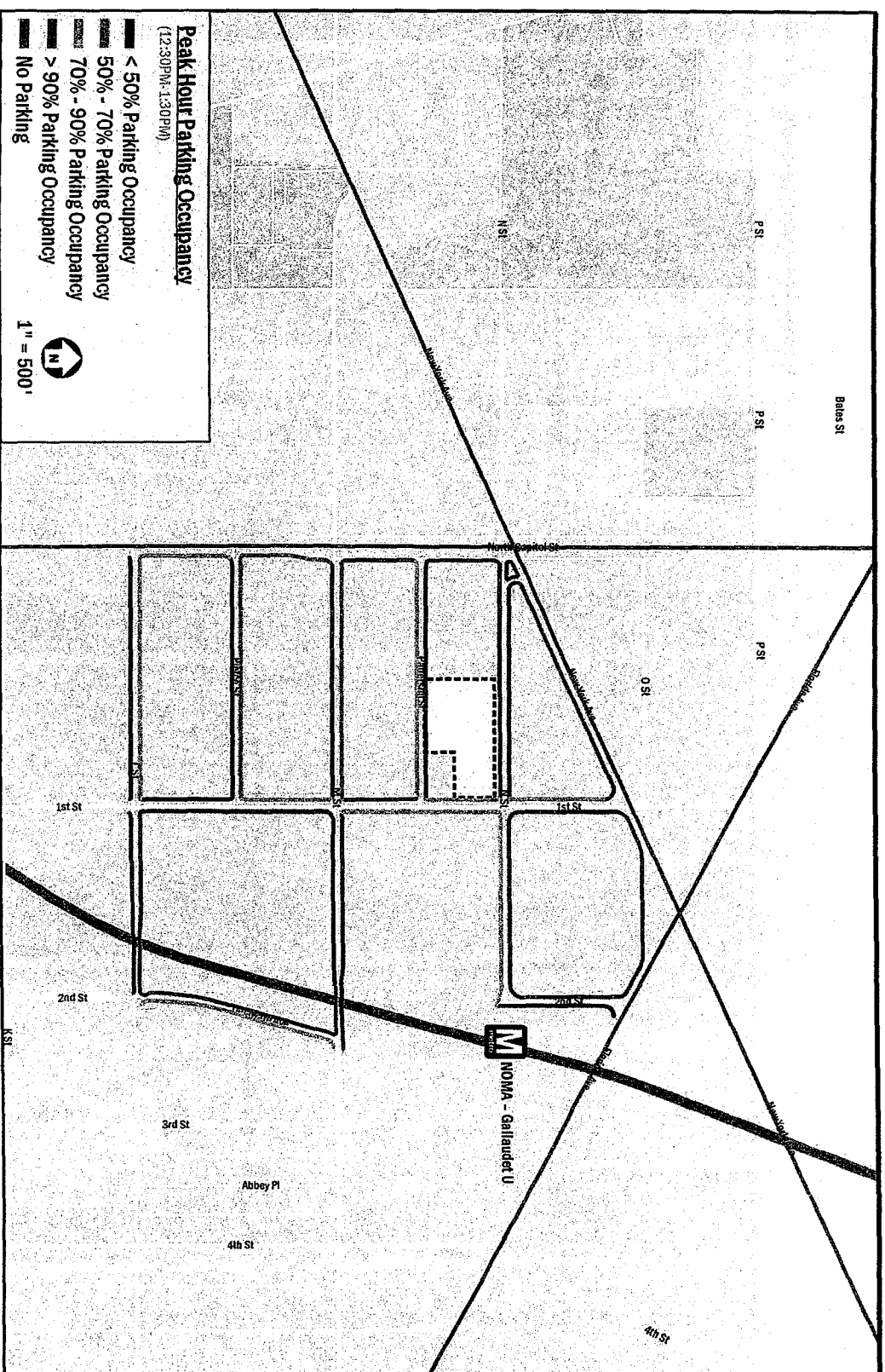


Figure 101: Peak Hour Street Parking Occupancy

Table 8: Peak Parking Occupancy

	AM				PM									
	7:30	8:30	9:30	11:30	12:30	1:30	2:30	3:30	4:30	5:30	6:30	7:30	8:30	9:30
Occupancy	192	236	245	280	288	274	255	229	191	169	174	192	194	186
Total Spaces	375	375	375	375	375	375	375	375	375	375	375	375	375	375
Utilization	51%	63%	65%	75%	77%	73%	68%	61%	51%	45%	46%	51%	52%	50%

Table 9: Peak Hour Inventory and Occupancy Summary

Space Type	Peak Period (12:30PM-1:30PM)			
	Spaces	Occupancy	Utilization	Available
Metered	283	215	76%	68
Non-RPP	60	48	80%	12
Unrestricted	32	25	71%	7
All On-Street Spaces	375	288	77%	20

Of note, the majority of block faces in the study area had ongoing construction during the time of data collection. The results of the parking data collections reflect a depressed number of available parking spaces due to the presence of cordoned off sections of block faces in the study area. Furthermore, the continual redevelopment of the NoMa neighborhood could change parking restrictions and potentially make available additional on-street parking inventory. Based on the 77% maximum utilization rate of on-street parking spaces in the area surrounding the site, there will be adequate on-street parking available to residents, employees, and visitors of the site, in the unlikely event that parking demand exceeds on-site parking supply.

As a result, in the event that the anticipated parking demand exceeds the number of parking spaces provided in the building, there is and will be on-street parking available on nearby streets. There are public off-street parking facilities in the area that are available to building residents, employees and visitors, which could provide additional overflow parking, if necessary, although there is sufficient parking proposed on-site. The off-site public parking facilities are shown on Figure 12.

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 Capitol Point South development.

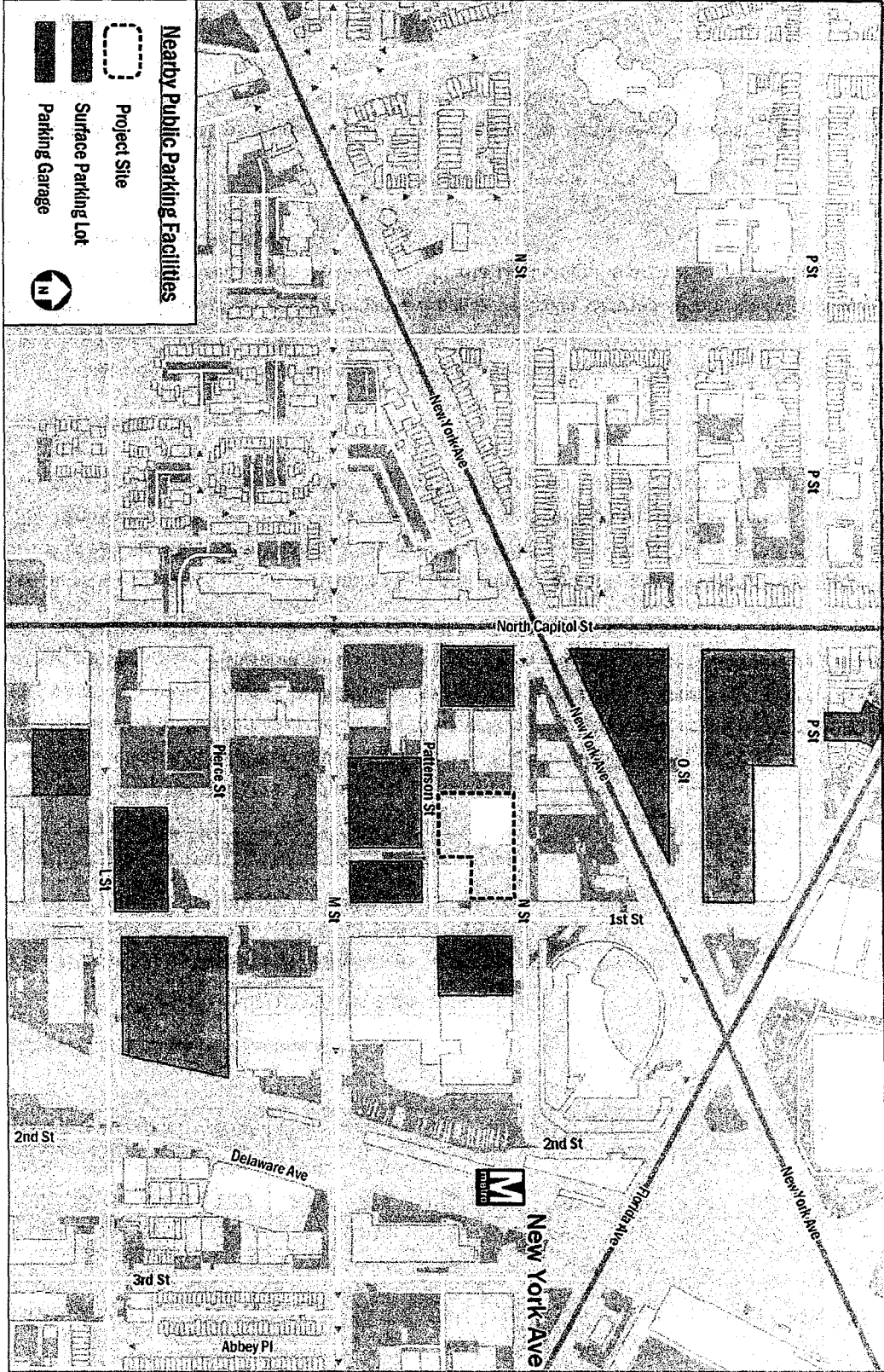


Figure 112: Nearby Public Parking Facilities

- **Transportation Management Coordinator (TMC)**

Effective Transportation Management Programs (TMPs) require a coordinator to implement and manage TDM strategies. The TDM plan is designed to encourage alternate modes of transportation vs. a private vehicle to and from the property. As such, the TDM plan will be implemented and managed by a selected coordinator at the development. A member of the property management group will serve as primary point of contact and will be responsible for coordinating, implementing and monitoring the TDM strategies between all uses on site, as identified below. This responsibility includes the development and distribution of information and promotional brochures to residents, guests, visitors, and employees regarding transit facilities and services, pedestrian and bicycle facilities and linkages, ridesharing (carpool and vanpool), and car sharing. This person will also be responsible for ensuring the plan's effectiveness, and improving upon it over time, if necessary.

- **On-Site Services**

A TransitScreen will be installed in the residential and both office lobbies to provide residents, guests, visitors, and employees available transportation choices and provide real-time transportation updates. The TransitScreen is just one tool for residents, visitors, and employees to utilize, in order to aid them in opting for transit-related modes of transportation vs. driving a private vehicle. In addition, the TMC will make printed materials related to local transportation alternatives available to residents, visitors, and employees upon request. 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.

- **Marketing Program**

The TMC will establish a TDM marketing program that provides detailed transportation information and promotes walking, cycling, and transit. This program will consist of a multi-modal access guide that provides comprehensive transportation information compiled in a brochure for distribution and/or provided on office, residential, and theater websites. The marketing program will also provide website links to CommuterConnections.com and goDCgo.com, which provide transportation information and options for getting around the District. Additionally, this marketing program will promote useful smartphone apps to direct residents, guests, and employees to useful commuting options such as Uber, RideScout, CapitolHop, Embark DC Metro, MyNextBus, and WMATA.com.

- **Transportation Incentives**

To help encourage non-auto transportation uses among residents and employees, the Applicant will offer the first occupant of each residential unit as well as each initial office employee with a one-time, one-year carsharing membership and application fee, a \$100 Smartrip card, or a one-time, one-year Capital Bikeshare membership to help alleviate the reliance on personal vehicles. These incentives will be offered in a move-in and hiring transportation package that includes brochures for transit facilities as well as bicycle and car sharing services for the first occupant of each residential unit and the initial employees on-site.

- **Bicycle Amenities**

The operator will encourage all alternative transportation modes including bicycling. Bicycling will be promoted for employees, visitors, and residents with the provision of 20 secure on-site bicycle parking spaces on the ground level and 147 secure on-site bicycle parking spaces in the garage, as well as exterior temporary bicycle parking. These spaces will be provided at a rate that exceeds current requirements and will be provided consistent with the

rates proposed in the Zoning Regulations Review (ZRR) currently under consideration. The TDM marketing program will include brochures and links to websites on bicycling in the District and for Capital Bikeshare.

- **Ride-matching/Ridesharing Program**

Employees who wish to carpool will be provided detailed carpooling information as part of the TDM marketing program and will be referred to other carpool matching services sponsored by the Metropolitan Washington Council of Governments (MWCOCG), as described above.

Conclusions

This memorandum presents the findings of a parking and loading statement for the Capitol Point South development. The proposed development consists of a single mixed-use structure containing 210 residential dwelling units, approximately 28,177 square feet of retail, approximately 381,745 square feet of office space, and an approximately 30,000 square foot movie theatre. The following conclusions were made regarding the Capitol Point South development:

- The site is surrounded by an extensive existing network of transit, bike- and car-share, and bicycle and pedestrian facilities that result in an excellent environment for safe and effective non-auto transportation access to the site. Combined with the TDM plan, the on-site proposed parking supply of 245 vehicle parking spaces will adequately serve the anticipated parking demand of approximately 188 parking spaces for the combined mix of uses within the development project;
- Based on an estimation of loading activity for the development, the amount of loading activity expected to take place at the site will be adequately served by the consolidated, central loading area provided in the building; and
- A TDM plan for the development will include the implementation of a TDM coordinator, on-site services, a marketing program, transportation incentives, bicycle amenities, and ride-matching/ridesharing programs.