

COMPREHENSIVE TRANSPORTATION REVIEW

**Z.C. CASE No. 19-16: MCF WALP PHASE 1, LLC –
1200 5TH STREET, NW PUD**

WASHINGTON, DC

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ZONING COMMISSION
District of Columbia
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Prepared by:



1140 Connecticut Avenue NW
Suite 600
Washington, DC 20036
Tel: 202.296.8625
Fax: 202.785.1276

3914 Centreville Road
Suite 330
Chantilly, VA 20151
Tel: 703.787.9595
Fax: 703.787.9905

15125 Washington Street
Suite 212
Haymarket, VA 20169
Tel: 571.248.0992
Fax: 703.787.9905

www.goroveslade.com

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Contents

Executive Summary.....	i
Introduction	1
Purpose of Study.....	1
Project Summary.....	1
Contents of Study	1
Study Area Overview	5
Major Transportation Features.....	5
Future Projects.....	7
Project Design	12
Site Access and Circulation	12
Loading and Trash.....	12
Parking	13
Bicycle and Pedestrian Facilities	13
Transportation Demand Management (TDM)	13
Trip Generation.....	18
Traffic Operations	19
Study Area, Scope, & Methodology.....	19
Vehicular Analysis Results.....	21
Mitigation Measures.....	22
Transit	39
Existing Transit Service	39
Proposed Transit Service	39
Site Impacts.....	40
Pedestrian Facilities	42
Pedestrian Study Area.....	42
Pedestrian Infrastructure.....	42
Site Impacts.....	42
Bicycle Facilities	46
Existing Bicycle Facilities	46
Proposed Bicycle Facilities	46
Site Impacts.....	47
Safety Analysis	49
Summary of Safety Analysis.....	49
Potential Impacts	49
Summary and Conclusions.....	50

Figures

Figure 1: Site Location.....	3
Figure 2: Site Aerial	4
Figure 3: Summary of Walk and Bikescore	7
Figure 4: Major Regional Transportation Facilities	9
Figure 5: Major Local Transportation Facilities.....	10
Figure 6: Background Developments.....	11
Figure 7: Site Plan	15
Figure 8: Site Access and Circulation	16
Figure 9: Site Before and After Project	17
Figure 10: Study Area Intersections.....	23
Figure 11: Existing Lane Configuration and Traffic Control Devices	24
Figure 12: Existing Peak Hour Traffic Volumes	25
Figure 13: Background Growth Peak Hour Traffic Volumes (2023).....	26
Figure 14: Future without Project Peak Hour Traffic Volume (2023)	27
Figure 15: Outbound and Inbound Trip Distribution	28
Figure 16: Total Future Lane Configuration and Traffic Control Devices (2023).....	29
Figure 17: Project Generated Peak Hour Traffic Volumes	30
Figure 18: Future with Project Peak Hour Traffic Volumes (2023)	31
Figure 19: AM Peak Hour Level of Service Results.....	37
Figure 20: PM Peak Hour Level of Service	38
Figure 21: Existing Transit Facilities	41
Figure 22: Pedestrian Pathways.....	44
Figure 23: Existing Pedestrian Facilities	45
Figure 24: Existing Bicycle Facilities	48

Tables

Table 1: Carshare Locations	6
Table 2: ITE Multi-Modal Trip Generation Summary	18
Table 3: Applied Annual and Total Growth Rates	22
Table 4: LOS Results	32
Table 5: v/c Comparison	33
Table 6: Average and 95 th Percentile Queuing Results (in feet)	35
Table 7: Metrobus Route Information	40
Table 8: Transit Stop Requirements.....	40
Table 9: Sidewalk Requirements.....	43



EXECUTIVE SUMMARY

The following report is a Comprehensive Transportation Review (CTR) on behalf of MCF WALP Phase 1, LLC, the applicable (“Mid-City” or the “Applicant”) for a new consolidated PUD for the property located at 1200 5th Street, NW (the “Site”). This report reviews the transportation aspects of the proposed development of a new, multifamily residential building (the “Project”) on the Site, which Project is the subject of Z.C. Case Number 19-16.

The purpose of this CTR is to evaluate whether the Project will generate a detrimental impact to the transportation network surrounding the Site. This evaluation is based on a technical comparison of the existing conditions, background conditions, and total future conditions. This report concludes that **the Project will not have a detrimental impact** to the surrounding transportation network assuming the proposed site design elements and TDM measures are implemented.

Proposed Project

The Site is located at 1200 5th Street NW, occupying the entire block surrounded by M Street, N Street, 6th Street and 5th Street NW, in the Shaw neighborhood of Northwest DC. The Site is currently occupied by a vacant multi-family apartment complex formerly containing 63 units and approximately 75-80 surface parking spaces.

The Project will develop the Site pursuant to the PUD with:

- A single apartment building containing a total of approximately 363 units with courts between the two halves of the building, and connected by the main residential entrance;
- Approximately 103 below-grade vehicle parking spaces in a parking garage;
- Two (2) 30-foot loading berths, with one (1) berth serving each residential wing; and
- 121 secure long-term and 18 short-term bicycle parking spaces.

Primary access/egress to the Project’s below-grade parking garage will be from the existing curb cut on N Street NW. Loading needs will be served by the existing curb cut on N Street, NW for the northern wing of the Project with an existing curb cut on M Street, NW being relocated to 5th Street, NW to serve the loading needs of the southern wing. Access to the

loading will also utilize the existing or relocated curb cuts at each residential wing providing each wing a dedicated loading area and discouraging street loading and unloading. All truck turning maneuvers will occur on the Site, allowing for head-in, head-out access to and from the public street. The curb cuts along with the number of loading berths meet all zoning and DDOT dimensional requirements.

The Project will satisfy the zoning requirements for bicycle parking by including 18 short-term bicycle parking spaces and 121 long-term bicycle parking spaces. The Project will supply long-term bicycle parking within the parking garage of the Project and short-term bicycle parking along the perimeter of the Site. The vehicular and bicycle parking will also meet the practical needs of the Project’s residents.

Multi-Modal Impacts and Recommendations

Trip Generation

The Project is transit-, pedestrian-, and bicycle-oriented. The Project is expected to generate new trips on the surrounding transportation network across all modes, but at both peak hours, the number of car trips per hour is expected to be the lowest of all modes, equating to less than one new car trip every 2 to 3 minutes. The AM peak hour trip generation is projected to include only 20 cars/hour, well below the 44 transit riders/hour, 26 bicycle trips/hour, and 48 walking trips/hour of the other modes. Similarly, the PM peak hour trip generation is projected to include only 25 cars/hour, also substantially below the 55 transit riders/hour, 32 bicycle trips/hour, and 61 walking trips/hour of the other modes. These projections do not include a reduction for trips that the former use of the Site generated, and thus represent a conservative projection of new trips.

Transit

The Site is served by regional and local transit services via Metrobus and Metrorail. The Site is one block (0.2 miles) from the Mt Vernon Square/7th Street-Convention Center Metro Station, with Metrobus stops located within one block (0.2 miles) of the Site along 7th Street NW off M and N Streets NW.

Although the Project will generate new transit trips, existing facilities have enough capacity to accommodate the new trips.

Pedestrian

The Site is surrounded by a quality pedestrian network. Most roadways within a quarter-mile radius of the Site provide



sidewalks and acceptable crosswalks and curb ramps, particularly along the primary walking routes and to the Mt Vernon Square/7th Street-Convention Center Metro station.

As a result of the Project, pedestrian facilities around the perimeter of the Site will be improved to meet DDOT and ADA standards.

The Project will generate a moderate number of pedestrian trips and the improved facilities will be able to handle the new trips. Notably, the Applicant proposes installing a curb extension with a crosswalk on 5th Street NW at its intersection with Ridge Street to increase pedestrian visibility along 5th Street NW. The proposed curb extension with the crosswalk will provide safer crossings across 5th Street NW to the proposed landscaped courtyard within the Site.

Bicycle

The Site has some connectivity to existing nearby on-street bicycle facilities. Residential low volume streets surrounding the Site provide connectivity to existing bicycle facilities near the Site. Bicycle lanes are available adjacent to the Site on 5th Street NW and one (1) block away from the Site along 7th Street NW. A Capital Bikeshare location is located 0.2 miles away from the Site along 7th Street NW near the Mt Vernon Square/7th Street-Convention Center Metro station.

The Project will provide short-term bicycle parking along the perimeter of the Site. On-site secure long-term bicycle parking will be provided in the below-grade parking garage. The amount of bicycle parking provided meets zoning requirements. Access to the Project's long-term, secure bicycle facilities will occur via the existing curb cut on N Street NW.

The Project will generate a moderate number of new bicycle trips without burdening the existing facilities.

Vehicular

The Site is accessible from regional roadways, such as New York Avenue (Route 50) and Rhode Island Avenue (Route 1) and several principal and minor arterials such as 6th Street NW, 7th Street NW, L Street NW, and New Jersey Avenue NW. These roadways create connectivity to the Capital Beltway (I-495) that surrounds Washington, DC and its inner suburbs, provide connectivity to the District's Downtown.

In order to determine impacts that the Project will have on the transportation network, this report projects future conditions

with and without the Project based on the number of trips the Project is expected to generate. Intersection analyses are performed to obtain the average delay and queue a vehicle will experience. These average delays and queues are compared to the acceptable levels of delay set by DDOT standards as well as existing queues to determine if the Site will negatively impact the study area. The analysis concludes that no mitigation needs to be made as a result of the Project.

Transportation Demand Management (TDM)

Per the DDOT CTR guidelines, the goal of TDM measures is to reduce the number of single occupancy vehicles and vehicle ownership within the District. The promotion of various programs and existing infrastructure includes maximizing the use of transit, bicycle, and pedestrian facilities. DDOT has outlined expectations for TDM measures in their CTR guidelines, and this project has proposed a TDM plan based on these guidelines.

Summary and Recommendations

This report concludes that the Project will not have a detrimental impact on the surrounding transportation network assuming the proposed site design elements and TDM measures are implemented.

The Project has several positive design elements that minimize potential transportation impacts, including:

- The Site's close proximity to transit and existing bicycle infrastructure;
- The inclusion of secure long-term bicycle parking;
- The installation of short-term bicycle parking spaces along the frontage of the Site that meet or exceed zoning requirements;
- The creation of new pedestrian sidewalks that meet or exceed DDOT and ADA requirements, improving the existing pedestrian environment. This includes a curb extension and crosswalk connecting the Site with Ridge Street NW;
- A parking ratio that is within DDOT's CTR guidelines, meaning that the parking supply will meet the practical needs of the Site while not promoting the use of driving as a mode of transportation; and
- A TDM plan that reduces the demand of single-occupancy, private vehicles during peak period travel times or shifts single-occupancy vehicular demand to off-peak periods.
-



INTRODUCTION

This report is a CTR reviewing the transportation aspects of the Project. The Site, shown in Figure 1 and Figure 2, is located at Square 481 and Lot 23 in the Shaw neighborhood in Northwest Washington, DC. The Site is currently zoned RA-2.

PURPOSE OF STUDY

The purpose of this report is to:

1. Review the transportation elements of the Project and demonstrate that it conforms to DDOT's general policies of promoting non-automobile modes of travel and sustainability.
2. Provide information to DDOT and other agencies on how the Project will influence the local transportation network. This report accomplishes this by identifying the potential trips generated by the Project on all major modes of travel and where these trips will be distributed on such network.
3. Determine whether the Project will lead to adverse impacts on the local transportation network.

PROJECT SUMMARY

The Site is currently occupied by a vacant multi-family apartment complex with 63 units and approximately 75-80 surface parking spaces. The Site is located in the northwest quadrant of Washington, DC. The Site is bounded by N Street NW to the north, M Street NW to the south, 5th Street NW to the east, and 6th Street NW to the west.

The Project contains a single apartment building with approximately 363 dwelling units and 103 parking spaces in a below-grade parking garage. Parking spaces will be accessed primarily from an existing curb cut on N Street NW as will loading for the north portion of the building. The existing curb cut on M Street NW will be abandoned and relocated to 5th Street NW to serve the loading needs of the south portion of the residential building.

The two (2) loading areas each consist of one (1) 30-foot loading berth providing access to each wing of the residential building. The two loading berths will discourage street loading and unloading as well as accommodate head-in/head-out movements. A residential development of this size is required to provide one (1) 30-foot loading berth and one (1) 20-foot

service space. The loading facilities will be sufficient to accommodate the practical needs of the Project.

Pedestrian access to the Site will primarily utilize the residential entrance from 6th Street NW with entry accessible from a proposed landscaped courtyard from 5th Street NW. Additionally, entrances to some of the ground floor units will be provided at street level.

As part of the Project, pedestrian facilities surrounding the Site will be improved to meet DDOT and ADA standards. New sidewalks will be installed along the perimeter of the Site, and such sidewalks will meet or exceed the width requirements.

There are existing bicycle facilities near the Site, including bicycle lanes along 5th Street NW, providing one-way northbound connectivity to bicycle lanes on Q and R Streets NW. Additional bicycle lanes are present on 10th Street NW, 7th Street NW and K Street NW near the Site. The Project will include 121 long-term bicycle parking spaces within the residential building and 18 short-term bicycle parking spaces will be provided along the perimeter of the Site. The nearest Capital Bikeshare station is located only one block west of the Site along 7th Street NW near the Mt Vernon Square/7th Street-Convention Center Metro station.

CONTENTS OF STUDY

This report contains nine (9) chapters as follows:

- *Study Area Overview*
This chapter reviews the area near and adjacent to the Project and includes an overview of the Site.
- *Project Design*
This chapter reviews the transportation components of the Project, including the site plan and access. This chapter also contains the proposed Transportation Demand Management (TDM) plan for the Site.
- *Trip Generation*
This chapter outlines the travel demand of the Project. It summarizes the proposed trip generation of the project.
- *Traffic Operations*
This chapter provides a summary of the existing roadway facilities and an analysis of the existing and future roadway capacity in the study area. This section highlights the vehicular impacts of the project, including presenting mitigation measures for minimizing impacts as needed.



- Transit
This chapter summarizes the existing and future transit service adjacent to the Site, reviews how the project's transit demand will be accommodated, outlines impacts, and presents recommendations as needed.
- Pedestrian Facilities
This chapter summarizes existing and future pedestrian access to the Site, reviews walking routes to and from the Project, outlines impacts, and presents recommendations as needed.
- Bicycle Facilities
This chapter summarizes existing and future bicycle access to the Site, reviews the quality of cycling routes to and from the Project, outlines impacts, and presents recommendations as needed.
- Safety Analysis
This chapter summarizes the potential safety impacts of the project. This includes a qualitative review of existing and proposed safety features surrounding the Site.
- Summary and Conclusions
This chapter presents a summary of the recommended mitigation measures by mode and presents overall report findings and conclusions.

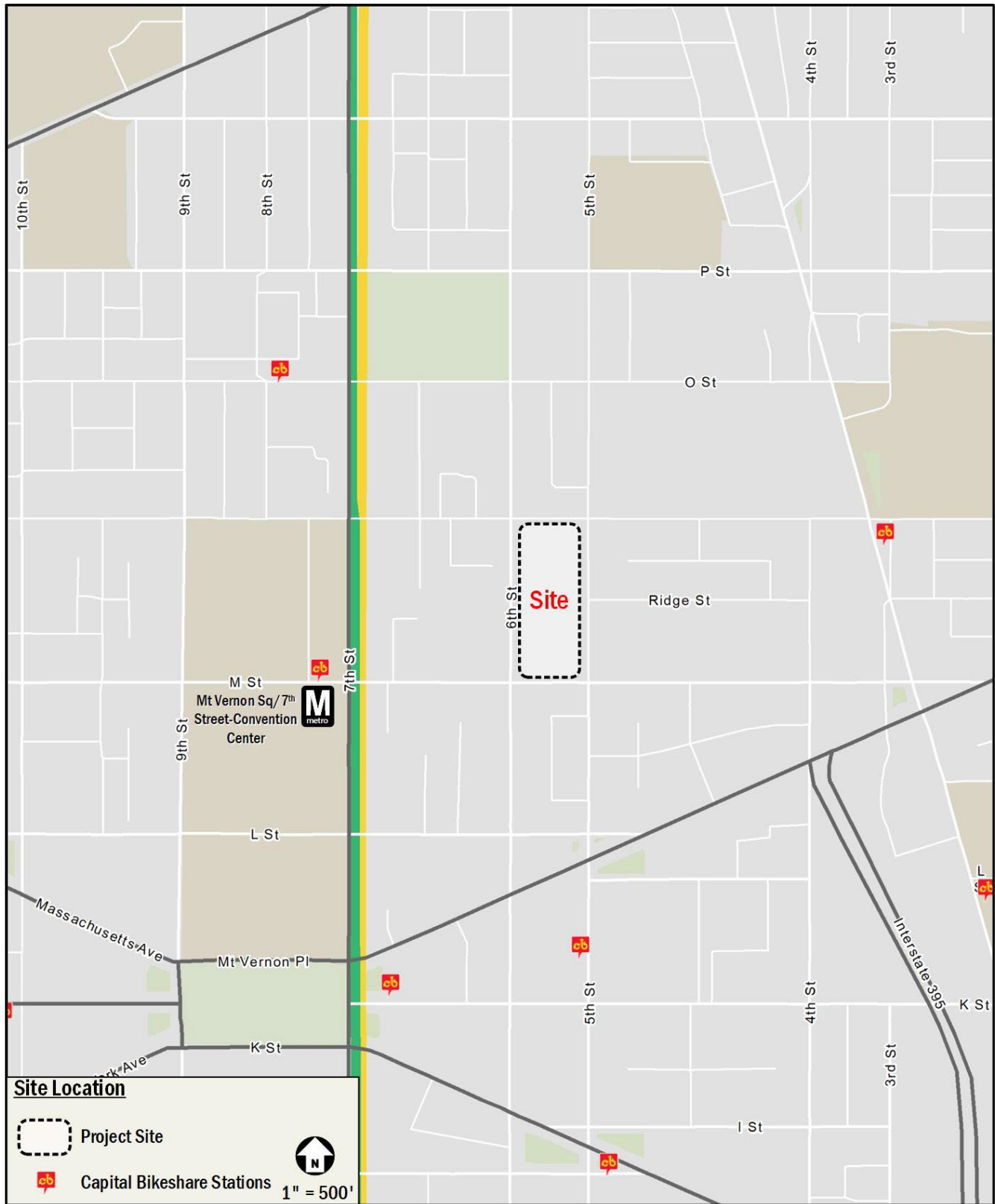


Figure 1: Site Location



Figure 2: Site Aerial



STUDY AREA OVERVIEW

This chapter reviews the study area and includes an overview of the Site location, including a summary of the major transportation characteristics of the area and of future regional projects.

This chapter concludes:

- The Site is surrounded by an extensive regional and local transportation system that will connect the Project's residents to the rest of the District and surrounding areas.
- The Site is served by public transportation with access to a local Metrobus line and Metrorail.
- There is bicycle infrastructure in the vicinity of the Site, with connectivity to east-west and north-south bicycle facilities.
- Pedestrian conditions are generally good, particularly along anticipated major walking routes with no major barriers impeding anticipated pedestrian routes.

MAJOR TRANSPORTATION FEATURES

Overview of Regional Access

As shown in Figure 4, the Site has ample access to regional, vehicular, and transit-based transportation options that connect the Site to destinations within the District, Virginia, and Maryland.

The Site is accessible from regional roadways, such as New York Avenue (Route 50) and Rhode Island Avenue (Route 1) and several principal and minor arterials such as 6th Street NW, 7th Street NW, L Street NW, and New Jersey Avenue NW. These roadways create connectivity to I-395 and the Capital Beltway (I-495) that surrounds Washington, DC and its inner suburbs, as well as provides connectivity to the District core.

The Site is located one block (0.2 miles) from the Mt Vernon Square/7th Street-Convention Center Metro station (served by the Green and Yellow lines). The Green Line connects Greenbelt, MD with Suitland, MD while providing access to the District core. Connections can be made at the L'Enfant Plaza and Gallery Place-Chinatown stations to access the five other Metrorail lines, allowing access to points in Virginia and Montgomery County, Maryland. The Yellow Line connects Greenbelt, MD with Alexandria, VA while providing access to the District core. Similar to the Green Line, connections can be

made at the L'Enfant Plaza and Gallery Place-Chinatown stations to access five other Metrorail lines. Connection to the Blue Line can also be made at the Pentagon Metrorail Station.

Overall, the Site has access to several regional roadways and transit options, making it convenient to travel between the Site and destinations in the District, Virginia, and Maryland.

Overview of Local Access

There are a variety of local transportation options near the Site that serve vehicular, transit, walking, and cycling trips, as shown on Figure 5. The Site is directly served by a local vehicular network that includes regional roadways, such as New York Avenue (Route 50) and Rhode Island Avenue (Route 1) and several principal and minor arterials such as 6th Street NW, 7th Street NW, L Street NW, and New Jersey Avenue NW.

The Metrobus system provides local transit service in the vicinity of the Site, including connections to several neighborhoods within the District and additional Metrorail stations. As shown in Figure 5, there is one (1) bus route that services the Site. Near the Site, there are four (4) bus stops along 7th Street NW. This bus route connects the Site to areas of the District and Maryland along 7th Street NW and Georgia Avenue NW. A detailed review of transit stops within a quarter-mile walk of the Site is provided in a later chapter of this report.

There are several existing bicycle facilities near the Site that connect to areas within the District. Bicycle lanes are available along 5th Street NW and 7th Street NW, connecting to bicycle lanes on Q Street NW and R Street NW to the north and K Street NW to the south. A detailed review of existing and proposed bicycle facilities and connectivity is provided in a later chapter of the report.

Anticipated pedestrian routes, such as those to public transportation stops, schools, and community amenities, provide adequate pedestrian facilities; however, there are a few sidewalks, generally located several blocks from the Site, that do not meet DDOT standards due to narrow or missing buffer widths. Barriers exist south of the Site due to New York Avenue NW (Route 50). A detailed review of existing and proposed pedestrian access and infrastructure is provided in a later chapter of this report.



Overall, the Site is surrounded by a robust local transportation network that allows for efficient transportation options via transit, bicycle, walking, or vehicular modes.

Carsharing

Three (3) carsharing companies provide service in the District: Zipcar, Free2Move and Car2Go. All three services are private companies that provide registered users access to a variety of automobiles. Of these, Zipcar has designated spaces for their vehicles. Currently, there is one (1) Zipcar location within a quarter-mile of the Site and one (1) location just beyond the quarter-mile walkshed. The locations and the number of available vehicles are listed in Table 1.

Carsharing is also provided by Car2Go and Free2Move, which provide point-to-point carsharing. Car2Go currently has a fleet of vehicles located throughout the District and Arlington, with Free2Move located within select areas of the District. Car2Go and Free2Move vehicles may park in any non-restricted metered curbside parking space or Residential Parking Permit (RPP) location in any zone throughout the defined “Home Area”. Members do not have to pay the meters or pay stations. Car2Go and Free2Move do not have permanent designated spaces for their vehicles; however, availability is tracked through their website and mobile phone application, which provides an additional option for car-sharing patrons.

Table 1: Carshare Locations

Carshare Location	Number of Vehicles
Zipcar	
460 L Street NW	3 Vehicles
800 P Street NW	3 Vehicles
Total	6 vehicles

Bikeshare and Scooter Share

The Capital Bikeshare program provides an additional cycling option for residents, employees, and visitors throughout the District. The Bikeshare program has placed over 500 bicycle-share stations across Washington, DC, Arlington and Alexandria, VA, and most recently Montgomery County, MD with over 4,300 bicycles provided. A Capital Bikeshare station is located one block (0.2 miles) away from the Site along 7th Street NW adjacent to the Mt Vernon Square/7th Street-Convention Center Metro station.

In addition to Capital Bikeshare, DDOT has engaged in pilot programs with several dockless bikeshare and scooter share companies, allowing an additional option for point-to-point

transportation. Bicycle and scooter availability are tracked through mobile phone applications for each company individually.

Walkscore

Walkscore.com is a website that provides scores and rankings for the walking, biking, and transit conditions within neighborhoods of the District. Based on this website, the Site is located in the Logan Circle-Shaw neighborhood. The Site has a walk score of 96 (or “Walker’s Paradise”), a transit score of 90 (or “Rider’s Paradise”), and a bike score of 95 (or “Biker’s Paradise”). Figure 3 shows the neighborhood borders in relation to the Site and displays a heat map for walkability and bikeability. The following conclusions can be made based on the data obtained from Walkscore.com:

- The Site is situated in an area with excellent walk scores because daily errands are within walking distance;
- The Site is situated in an area with excellent transit scores due to its proximity to bus lines and a Metro station; and
- The Site is situated in an area with excellent bike scores due to its proximity to several bike facilities.

Overall, the Site and surrounding Logan Circle-Shaw neighborhood have excellent pedestrian, transit, and bike accessibility. Additionally, other planned developments and roadway improvements will help increase the walk, transit, and bike scores in the Logan Circle-Shaw neighborhood.

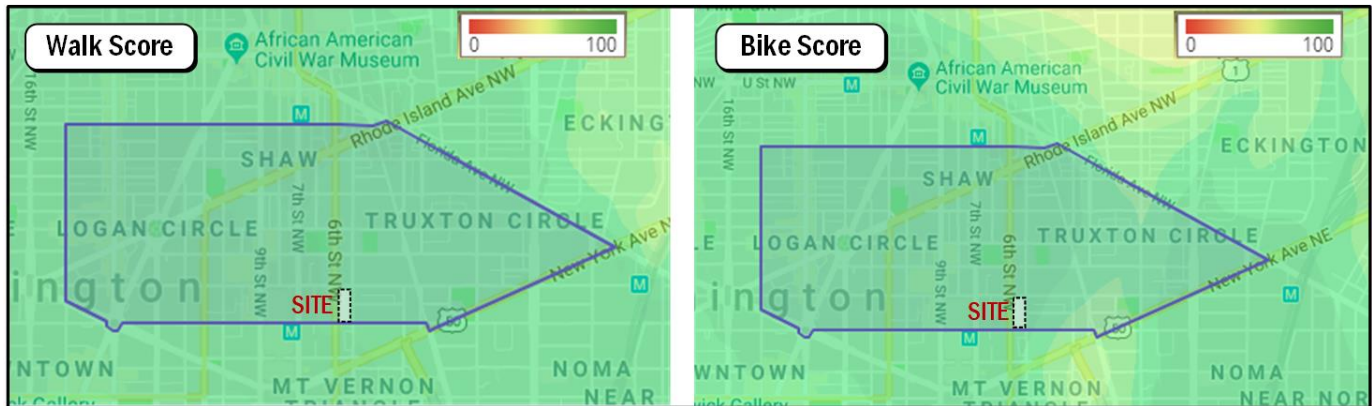


Figure 3: Summary of Walk and Bikescore

FUTURE PROJECTS

There are a few District initiatives and approved developments located in the vicinity of the Site. These planned and proposed projects are summarized below.

Local Initiatives

MoveDC: Multimodal Long-Range Transportation Plan

MoveDC is a long-range plan that provides a vision for the future of DC's transportation system. As the District grows, so must the transportation system, specifically in a way that expands transportation choices while improving the reliability of all transportation modes.

The MoveDC report outlines recommendations by mode with the goal of having them completed by 2040. The plan hopes to achieve a transportation system for the District that includes:

- 70 miles of high-capacity transit (streetcar or bus)
- 200 miles of on-street bicycle facilities or trails
- Sidewalks on at least one side of every street
- New street connections
- Road management/pricing in key corridors and the Central Employment Area
- A new downtown Metrorail loop
- Expanded commuter rail
- Water taxis

Adjacent to the Project, 6th Street, NW 5th Street, NW, and M Street, NW have each been recommended as streets to be redesigned to include a cycle track. These cycle tracks would create greater connectivity to other bicycle facilities throughout the District.

Near the Site along 7th Street NW, a streetcar is proposed that will create north-south connectivity from Navy Yard to the Takoma metro station. The streetcar would also connect to the east-west corridor along K Street NW to H Street NE.

SustainableDC: Sustainable DC Plan

SustainableDC is a planning effort initiated by the Department of Energy & Environment and the Office of Planning that provides the District with a framework of leading Washington DC to become the most sustainable city in the nation. The 2012 report proposes a 20-year timeframe to answer challenges in areas of: (1) Jobs & the economy; (2) Health & Wellness; (3) Equity & Diversity; (4) Climate & Environment; (5) Built Environment; (5) Energy; (6) Food; (7) Nature; (8) Transportation; (9) Waste; and (10) Water. With respect to transportation, the sustainability goals targeted in 20 years include:

- Improving connectivity and accessibility through efficient, integrated, and affordable transit systems;
- Expanding provision of safe, secure infrastructure for cyclists and pedestrians;
- Reducing traffic congestion to improve mobility; and
- Improving air quality along major transportation routes.

A combination of increasing public transit and decreasing vehicular mode shares has been suggested to meet the transportation targets. The transportation demand management (TDM) measures proposed in this CTR will help curtail vehicular mode share.



Planned Developments

There are four (4) potential development projects in the vicinity of the Site. For the purpose of this analysis and consistent with DDOT and industry standards, only approved developments expected to be completed prior to the planned development with an origin/destination within the study should be included. Of the background developments considered, none were ultimately included given the distance from the Site and low expected site generated volumes of the planned developments. Figure 6 shows the location of the developments considered in relation to the Project.

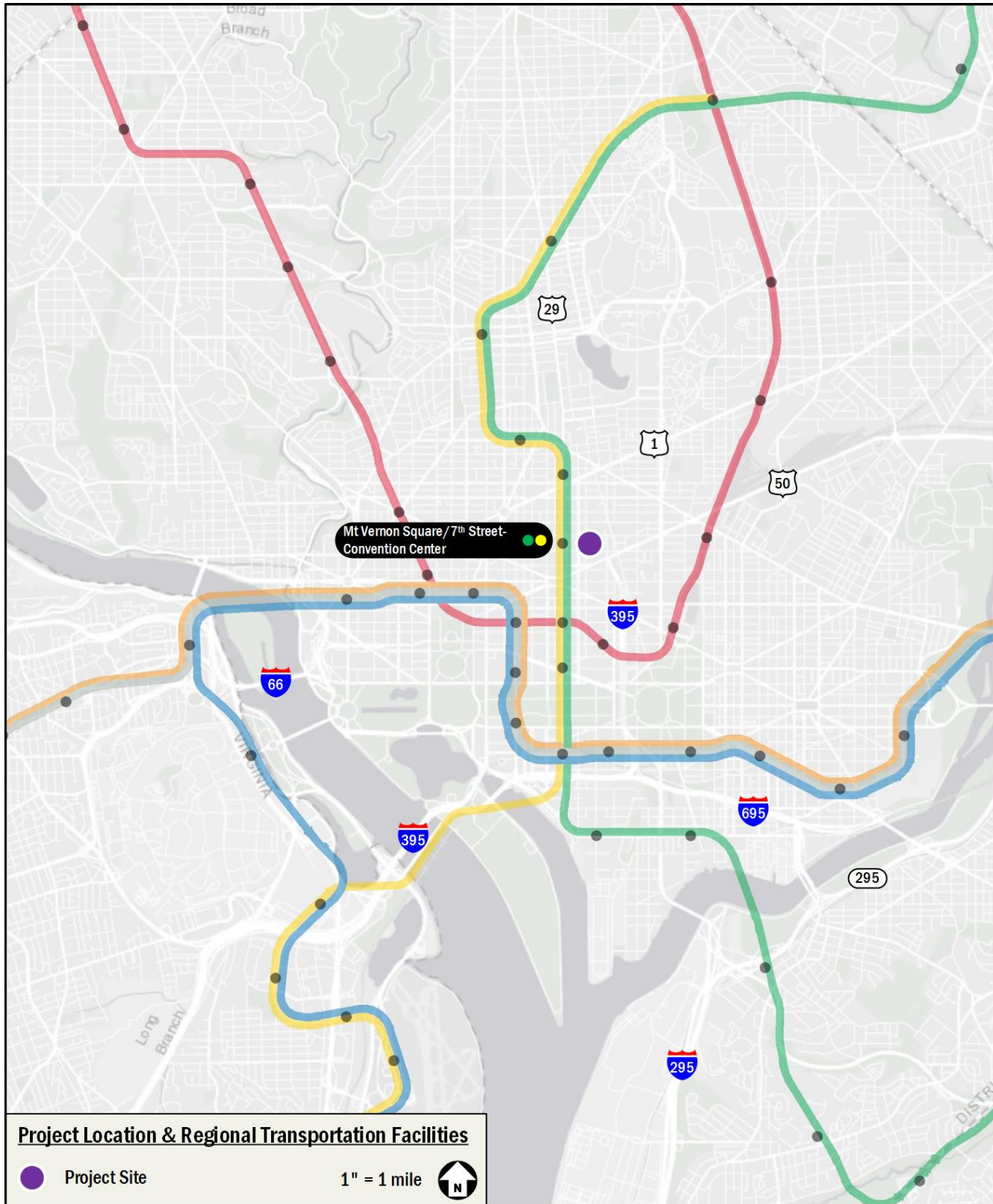


Figure 4: Major Regional Transportation Facilities

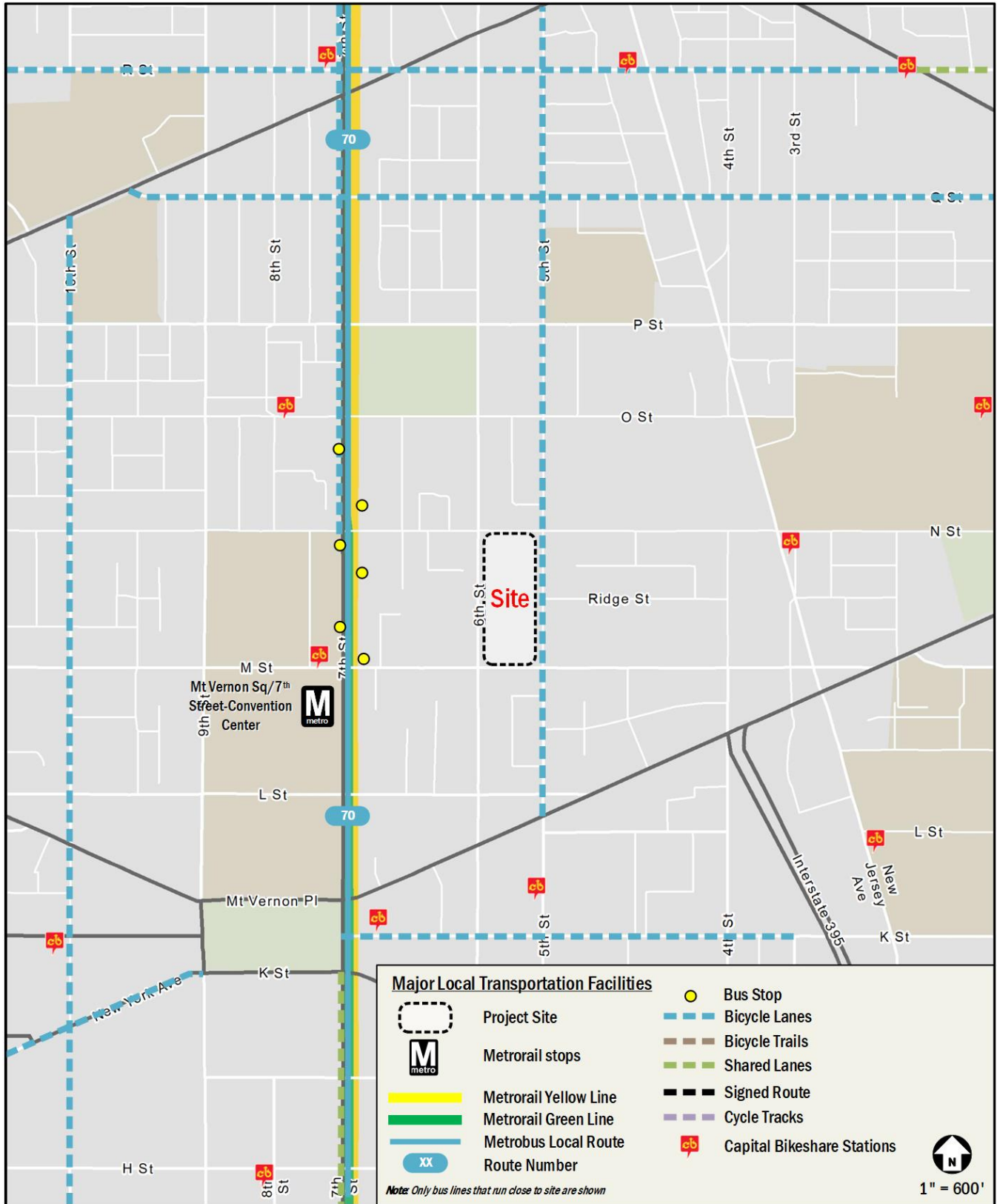


Figure 5: Major Local Transportation Facilities

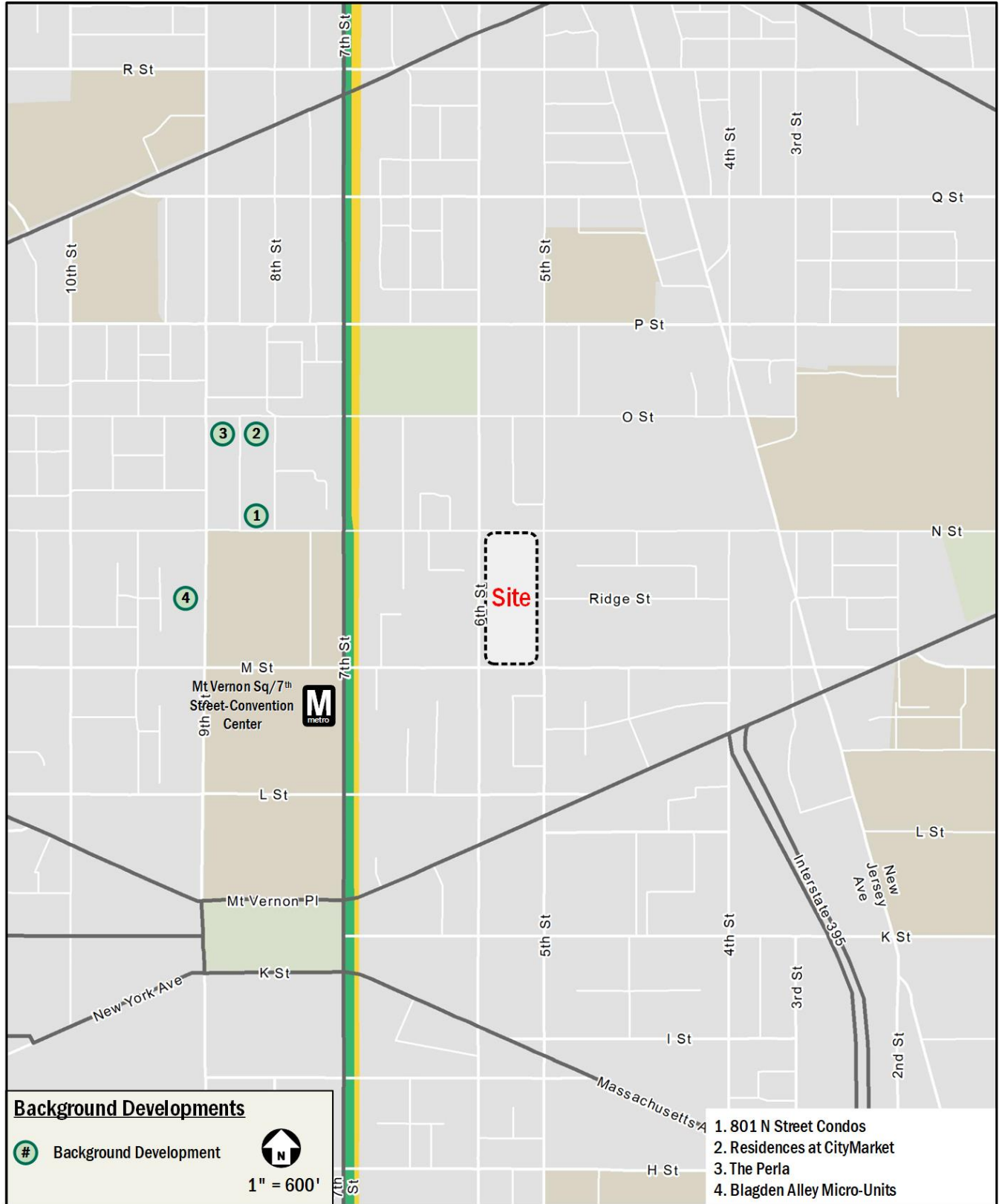


Figure 6: Background Developments



PROJECT DESIGN

This chapter reviews the transportation components of the Project, including the proposed site plan and access points. It includes descriptions of the Project's vehicular access, loading, parking, bicycle and pedestrian facilities, and TDM plan.

The Site is currently occupied by a vacant multi-family apartment complex formerly with 63 units and approximately 75-80 surface parking spaces. The Applicant will develop the existing lot with a single apartment building containing approximately 363 dwelling units and approximately 103 parking spaces in a below-grade parking garage. Parking will be accessible from the existing curb cut on N Street NW and the relocated curb cut on 5th Street NW.

Figure 7 shows an overview of the development program and site plan elements.

SITE ACCESS AND CIRCULATION

Pedestrian Access

Pedestrian access to the Site will primarily utilize the planned entrances from 5th and 6th Streets NW. The primary pedestrian entrance for the building will be off of 6th Street NW.

Greenspace around the 5th Street NW entrance to the Project will enhance the pedestrian experience. Private residential entrances will be provided to some units located at ground level.

Additionally, the Applicant has agreed to include a crosswalk on 5th Street NW that connects to Ridge Street NW. The crosswalk will connect to a curb extension creating higher visibility for pedestrians attempting to cross 5th Street NW.

Bicycle Access

Bicycle access to the secure long-term bicycle parking on the first level of the below-grade parking garage will primarily utilize the planned driveway on N Street NW. The 121 long-term secure bicycle spaces will be provided in a dedicated storage room. The 18 short-term bicycle parking spaces will be provided at various locations surrounding the Site. Figure 8 shows a circulation plan with pedestrian and bicycle routes.

Vehicular Access

Primary vehicular access to the Project will be provided by the existing curb cut and driveway on N Street NW between 5th and

6th Streets NW. This access/egress point will provide access to parking spaces provided in the below-grade on-site parking garage. The site plan is shown on Figure 7.

Access to the loading facilities, consisting of one (1) 12-foot wide, 30-foot long loading berth in each wing of the building will utilize the existing curb cut on N Street NW and the relocated curb cut on 5th Street NW. Access to each wing for loading activities will be provided via interior entrances at each residential building.

Truck routing to and from the Site will be focused on designated primary truck routes, such as 7th Street NW as well as M Street, NW and 5th Street, NW.

A circulation plan with vehicular and loading routes is shown on Figure 8.

Curbside Management

The Applicant is committed to ensuring all existing curbside designations remain as they exist today. The minor changes that will occur surrounding the Site are related to the relocation of the curb cut from M Street NW to 5th Street NW. The other alterations that will affect parking surrounding the Site occurs in relation to the proposed curb extension on 5th Street NW. The current and proposed curbside conditions around the Site are shown on Figure 9. These parking restrictions will remain the same with the buildout of the Project. A vehicular loading zone is proposed adjacent to the entry court providing a space for pick-ups/drop-offs.

LOADING AND TRASH

Loading

The proposed loading facilities will accommodate all move-ins/move-outs and delivery demand without any detrimental impact to the surrounding network. As required by the Zoning Regulations, the Project is planned to be served by two (2) 12-foot wide, 30-foot long loading berths.

The Project is expected to generate up to five (5) loading trips per day, consisting of daily trash removal services, mail and parcel delivery, and residential move-in and move-out trips. One (1) trash removal truck, two (2) mail and parcel delivery trucks, and up to one (1) residential move-in or out trucks (calculated using an average of 18 months average turnover per unit), will service the project on a daily basis. Figure 7 shows the location of the access points, loading zone, and trash



removal services. The loading facilities provided by the Project will be sufficient to accommodate this demand.

DDOT standards stipulate that truck movements for a site should be accommodated without back-in movements through public space. The Project has been designed to accommodate all truck turning maneuvers on-site, allowing for front-in, front-out access for trucks to the public street for the 30-foot trucks. Truck turning diagrams using AutoTURN are provided in the Appendix.

Trash

Trash for the Project will be accommodated using trash receptacles next to the loading area of the building. No trash will be stored in public space.

PARKING

The parking provided by the Site should accommodate all parking needs on-site. Based on the Zoning Regulations' requirements for the proposed residential building, the building is required to provide one (1) space per three (3) dwelling units in excess of four (4) units, for a total of 121 spaces. As allowable by 11-C DCMR § 702.1(b), a 50% reduction in required parking is warranted as the Site is within 0.5 miles of a Metrorail station, in this case the Mt Vernon Square/7th Street-Convention Center Metro station. With the applicable reduction, the Project is required to provide 61 parking spaces. The Project will include 103 parking spaces, satisfying the Zoning Regulations and yielding a parking ratio of 0.28 parking spaces per residential unit.

BICYCLE AND PEDESTRIAN FACILITIES

Bicycle Facilities

Per the Zoning Regulations, the Project is required to supply one (1) short-term bicycle parking space for every 20 dwelling units; therefore, the Project is required to supply 18 short-term bicycle spaces. These short-term spaces will include inverted U-racks placed around the perimeter of the Site.

Per the Zoning Regulations, the Project is also required to supply one (1) long-term bicycle parking space for every three (3) dwelling units, resulting in a total of 121 long-term bicycle parking spaces. The project will meet the required number of secure long-term spaces for residents in the below-grade parking garage.

Pedestrian Facilities

As part of the Project, pedestrian facilities around the perimeter of the Site will be improved to meet DDOT and ADA standards. New sidewalks will be installed around the perimeter of the Site that will meet or exceed the width requirements, as well as curb ramps with detectable warnings and crosswalks at the new site entrance as needed.

TRANSPORTATION DEMAND MANAGEMENT (TDM)

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.

The TDM plan for the Project is based on DDOT's CTR guidelines for developments of this type and size. The Applicant proposes the following TDM measures:

- The Applicant will unbundle the cost of residential parking from the cost of lease or purchase of each unit and charge a minimum rate based on the average market rate within a quarter mile of the Site.
- The Applicant will identify Transportation Coordinators for the planning, construction, and operations phases of development. The Transportation Coordinators will act as points of contact with DDOT, goDCgo, and Zoning Enforcement.
- The Applicant will provide the Transportation Coordinators' contact information to goDCgo, conduct an annual commuter survey of employees on site, and report TDM activities and data collection efforts to goDCgo once per year.
- The Transportation Coordinators will develop, distribute, and market various transportation alternatives and options to the residents, including promoting transportation events (i.e. Bike to Work Day, National Walking Day, Car Free Day) on the Project's website and in any internal building newsletters or communications.
- Transportation Coordinators will receive TDM training from goDCgo to learn about the TDM conditions for this project and available options for implementing the TDM plan.
- The Applicant will provide welcome packets to all new residents that should, at a minimum, include the Metrorail



pocket guide, brochures of local bus lines (Circulator and Metrobus), carpool and vanpool information, CaBi coupon or rack card, Guaranteed Ride Home (GRH) brochure, and the most recent DC Bike Map. Brochures can be ordered from DDOT's goDCgo program by emailing

info@godcgo.com.

- Provide residents who wish to carpool with detailed carpooling information and will be referred to other carpool matching services sponsored by the Metropolitan Council of Governments (MwCOG) or other comparable service if MwCOG does not offer this in the future.
- The Transportation Coordinator will subscribe to goDCgo's residential newsletter.
- Post all TDM commitments on website, publicize availability, and allow the public to see what commitments have been promised.
- The Applicant will satisfy the Zoning Regulations by providing 121 long-term bicycle parking spaces in the Project garage.
- Long-term bicycle storage rooms will accommodate non-traditional sized bikes including cargo, tandem, and kid's bikes.



Figure 8: Site Access and Circulation



Figure 9: Site Before and After Project



TRIP GENERATION

This chapter outlines the Project’s transportation demand. It summarizes the projected trip generation of the Project by mode, which forms the basis for the chapters that follow. These assumptions were vetted and approved by DDOT as a part of the scoping process for the study. Traditional ITE rates were used to calculate trip generation for an apartment development of this type. As such, this analysis uses traditional trip generation methodologies.

Traditionally, weekday peak hour trip generation is calculated based on the methodology outlined in the Institute of Transportation Engineers’ (ITE) *Trip Generation Manual*, 10th Edition. This methodology was supplemented to account for the urban nature of the Project (the *Trip Generation Manual* provides data for non-urban, low transit use Sites) and to generate trips for multiple modes, as vetted and approved by DDOT.

Residential trip generation was calculated based on ITE land use 221, Multifamily Housing (Mid-Rise), splitting trips into different modes using assumptions derived from census data for the residents that currently live near the Site. A summary of the multimodal trip generation for the Project, based on ITE, is provided in Table 2 for both peak hours. Detailed calculations are included in the Technical Attachments.

Table 2: ITE Multi-Modal Trip Generation Summary

Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Auto	5 veh/hr	15 veh/hr	20 veh/hr	16 veh/hr	9 veh/hr	25 veh/hr
Transit	11 ppl/hr	33 ppl/hr	44 ppl/hr	34 ppl/hr	21 ppl/hr	55 ppl/hr
Bike	7 ppl/hr	19 ppl/hr	26 ppl/hr	20 ppl/hr	12 ppl/hr	32 ppl/hr
Walk	13 ppl/hr	35 ppl/hr	48 ppl/hr	37 ppl/hr	24 ppl/hr	61 ppl/hr

The Project is expected to generate new trips on the surrounding transportation network across all modes. The AM peak hour trip generation is projected to include 20 cars/hour, 44 transit riders/hour, 26 bicycle trips/hour, and 48 walking trips/hour. The PM peak hour trip generation is projected to include 25 cars/hour, 55 transit riders/hour, 32 bicycle trips/hour, and 61 walking trips/hour.

For both peak hours the number of car trips per hour is expected to be the lowest of all modes, equating to less than one new car every 2 to 3 minutes. The Project is expected to generate 20 vehicular trips (5 in, 15 out) during the morning peak hour and 25 vehicular trips (16 in, 9 out) during the afternoon peak hour.

These projections also do not include a reduction for trips that the former use of the Site generated, and thus represent a conservative estimation of new trips.



TRAFFIC OPERATIONS

This chapter provides a summary of an analysis of the existing and future roadway capacity surrounding the Site. Included is an analysis of potential vehicular impacts of the Project and a discussion of potential improvements.

The purpose of the capacity analysis is to:

- Determine the existing capacity of the study area roadways;
- Determine the overall impact of the Project on the study area roadways; and
- Discuss any potential improvements and mitigation measures to accommodate the additional vehicular trips.

This analysis was accomplished by determining the traffic volumes and roadway capacity for Existing Conditions, Background Conditions, and Total Future Conditions.

The capacity analysis focuses on the weekday morning and afternoon commuter peak hours, as determined by the existing traffic volumes in the study area.

This chapter concludes:

- Under Existing Conditions, all study intersections operate at acceptable levels of service.
- Background developments near the Site do not directly affect study intersections. Any traffic generated by those developments are accounted for by inherent growth in the network.
- The addition of trips generated by inherent growth do not affect the delays or queuing at the study area intersections.
- The Project will not have a detrimental impact to the surrounding vehicular network.
- The addition of site generated trips does not affect the delays or queuing at any intersections.
- The relocation of the site driveway from M Street, NW to 5th Street NW does not negatively affect traffic in the network as it functions for loading needs.

STUDY AREA, SCOPE, & METHODOLOGY

This section outlines the vehicular trips generated in the study area along the vehicular access routes and defines the analysis assumptions.

The scope of the analysis contained within this report was extensively discussed with and agreed upon by DDOT. The general methodology of the analysis follows national and DDOT guidelines on the preparation of transportation impact evaluations of site development.

Capacity Analysis Scenarios

The vehicular capacity analyses were performed to determine whether the Project will lead to adverse impacts on traffic operations. A review of potential impacts to each of the other modes is outlined later in this report. This is accomplished by comparing two future scenarios: (1) without the Project (referred to as the “Background condition” and (2) with the Project approved and constructed (referred to as the Total Future condition).

Specifically, the roadway capacity analysis examined the following scenarios:

1. 2019 Existing Conditions (Existing Conditions);
2. 2023 Future Conditions without the Project (2023 Background Conditions); and
3. 2023 Future Conditions with the Project (2023 Total Future)

Study Area

The study area of the analysis is a set of intersections where detailed capacity analyses were performed for the scenarios listed above. The set of intersections decided upon during the study scoping process with DDOT are those intersections most likely to have potential impacts or require changes to traffic operations to accommodate the Project. Although it is possible that impacts will occur outside of the study area, those impacts are neither significant enough to be considered a material adverse impact nor worthy of mitigation measures.

Based on the projected future trip generation and the location of the Site access points, the following intersections were chosen and agreed upon by DDOT for analysis:

1. 6th Street & N Street NW
2. 5th Street & N Street NW
3. 6th Street & M Street NW
4. 5th Street & M Street NW
5. 5th Street & Ridge Street NW
6. N Street & Site Driveway (Future)

Figure 10 shows a map of the study area intersections.



Traffic Volume Assumptions

The following section reviews the traffic volume assumptions and methodologies used in the roadway capacity analyses.

Existing Traffic Volumes

The existing traffic volumes are comprised of turning movement count data, which was collected on: Tuesday, September 10, 2019 from 6:30 to 9:30 AM and 4:00 to 7:00 PM. The results of the traffic counts are included in the Technical Attachments. For all intersections, the intersection morning and afternoon peak hours were used. The existing intersection peak hour traffic volumes are shown on Figure 12. The system morning peak hour occurred from 8:15 am to 9:15 am and the system evening peak hour occurred from 5:00 to 6:00 pm.

2023 Background Traffic Volumes (without the project)

The traffic projections for the 2023 Background Conditions consist of the existing volumes with two possible additions:

- Inherent growth on the roadway (representing regional traffic growth) and
- The impacts of “background” developments, if any (none were included in this analysis).

Following national and DDOT methodologies, a background development must meet the following criteria to be incorporated into the analysis:

- Be located in the study area, defined as having an origin or destination point within the cluster of study area intersections;
- Have entitlements; and
- Have a construction completion date prior or close to the proposed development.

Based on these criteria, and as discussed with and agreed upon by DDOT, four (4) developments were considered but ultimately determined to not meet the above criteria. These developments are accounted for in the inherent growth of the study intersections.

While the background developments represent local traffic changes, regional traffic growth is typically accounted for using growth rates. The growth rates used in this analysis are derived using the Metropolitan Washington Council of Government’s (MWCOC) currently adopted regional transportation model, comparing the difference between the year 2019 and 2023

model scenarios as vetted and agreed to by DDOT. The growth rates observed in this model served as a basis for analysis assumptions. The applied growth rates are shown in Table 3. The background growth volumes are shown in Figure 13.

The traffic volumes generated by the inherent growth along the network were added to the existing traffic volumes in order to establish the 2023 Background traffic volumes. The traffic volumes for the 2023 Background conditions are shown on Figure 14.

2023 Total Future Traffic Volumes (with the Project)

The 2023 Total Future traffic volumes consist of the 2023 Background volumes with the addition of the traffic volumes generated by the Project. Thus, the 2023 Total Future traffic volumes include traffic generated by: the existing volumes, background developments (if any), the inherent growth on the study area roadways, and the Project.

Trip distribution for the site-generated trips was determined based on: (1) CTPP TAZ data, (2) existing and future travel patterns in the study area, and (3) the location of the parking access.

Based on this review and the Site access locations, the Project-generated trips were distributed through the study area intersections. A summary of trip distribution assumptions and specific routing is provided on Figure 15 for inbound and outbound trips.

The traffic volumes for the 2023 Total Future conditions were calculated by adding the Project-generated traffic volumes to the 2023 Background traffic volumes. Thus, the future condition with the Project scenario includes traffic generated by existing volumes, inherent growth on the network, and the Project. The Project generated traffic volumes are shown on Figure 17. The 2023 Total Future traffic volumes are shown on Figure 18.

Peak Hour Factors

The TRB *Highway Capacity Manual (HCM)* and the AASHTO *Policy on Geometric Design of Highways and Intersections* recommend evaluating traffic conditions during the worst 15 minutes of either a design hour or a typical weekday rush hour. Peak Hour Factor (PHF) is used to convert the hourly volume into the volume rate representing the busiest 15 minutes of the hour. The existing guidelines provide typical values of PHF and advise using the PHF calculated from vehicle counts at analyzed



or similar locations. The HCM recommends a PHF of 0.88 for rural areas and 0.92 for urban areas and presumes that capacity constraints in congested areas reduce the short-term traffic fluctuation. The HCM postulates 0.95 as the typical PHF for congested roadways.

For the Existing Conditions analysis, the PHF was calculated from the turning movement data that was collected in the field, using a minimum PHF of 0.85 for each intersection. Per DDOT guidelines, the intersection PHF remained the same through all study scenarios.

Geometry and Operations Assumptions

The following section reviews the roadway geometry and operations assumptions made and the methodologies used in the roadway capacity analyses.

Existing Geometry and Operations Assumptions

The geometry and operations assumed in the existing conditions scenario are those present when the main data collection occurred. Gorove/Slade made observations and confirmed the existing lane configurations and traffic controls at the intersections within the study area. Existing signal timings and offsets were obtained from DDOT and confirmed during field reconnaissance.

The lane configurations and traffic controls for the Existing Conditions are shown on Figure 11.

2023 Background Geometry and Operations Assumptions

Following national and DDOT methodologies, a background improvement must meet the following criteria to be incorporated into the analysis:

- Be funded; and
- Have a construction completion date prior or close to the Project.

Based on these criteria, there are no background improvements within the vicinity of the Site. The 2023 Background Geometry is that of the 2019 Existing Geometry.

2023 Total Future Geometry and Operations Assumptions

The configurations and traffic controls for the 2023 Future Conditions were based on those for the Existing and 2023 Background Conditions with the addition of the Site driveway on N Street, NW as an intersection leg.

The lane configurations and traffic controls for the 2023 Total Future Conditions are shown on Figure 16.

VEHICULAR ANALYSIS RESULTS

Intersection Capacity Analysis

Intersection capacity analyses were performed for the three scenarios outlined previously at the intersections contained within the study area during the morning and afternoon peak hours. Synchro version 9.2 was used to analyze the study intersections based on the HCM 2000 methodology.

The results of the capacity analyses are expressed in level of service (LOS) and delay (seconds per vehicle) for each approach. An LOS grade is a letter grade based on the average delay (in seconds) experienced by motorists traveling through an intersection. LOS results range from “A” being the best to “F” being the worst. LOS D is typically used as the acceptable LOS threshold in the District; although LOS E or F is sometimes accepted in urbanized areas if vehicular improvements would be a detriment to safety or non-auto modes of transportation.

The LOS capacity analyses were based on: (1) the intersection peak hour traffic volumes; (2) the lane use and traffic controls; and (3) the HCM methodologies (using *Synchro* software). The average delay of each approach and LOS is shown for the signalized intersections in addition to the overall average delay and intersection LOS grade. The HCM does not give guidelines for calculating the average delay for a two-way stop-controlled intersection, as the approaches without stop signs would technically have no delay. Detailed LOS descriptions and the analysis worksheets are contained in the Technical Attachments.

Table 4 shows the results of the capacity analyses, including LOS and average delay per vehicle (in seconds) for the Existing, 2023 Background, and 2023 Total Future scenarios. Table 5 shows a comparison of the volume to capacity (v/c) ratios for each scenario. The capacity analysis results are shown on Figure 19 for the morning peak hour and Figure 20 for the afternoon peak hour.

Queuing Analysis

In addition to the capacity analyses presented above, a queuing analysis was performed at each of the study intersections. The queuing analysis was performed using *Synchro* software. The 50th percentile and 95th percentile maximum queue lengths are shown for each lane group at the study area signalized



intersections. The 50th percentile maximum queue is the maximum back of queue on a typical cycle. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. For unsignalized intersections, the 95th percentile queue is reported for each lane group (including free-flowing left turns and stop-controlled movements) based on the HCM calculations.

Table 6 shows the queuing results for the study area intersections. Two (2) of the study intersections exhibit one lane group that exceeds the given storage length during the existing conditions:

- 6th Street & N Street NW (Eastbound)
 - Eastbound Right (AM & PM)
- 6th Street & M Street NW (Eastbound)
 - Eastbound Right (AM & PM)

The two (2) movements identified above as having exceeded the provided storage lengths are not provided a full turn lane but rather use space where parked vehicles are not permitted

to park. Given the urban nature of the area, these right turns are not anticipated to undergo any mitigation measures.

MITIGATION MEASURES

Based on DDOT standards, the Project is considered to have an impact at an intersection within the study area if any of the following conditions are met:

- The capacity analyses show a LOS E or F at an intersection or along an approach in the future with conditions with the Project where one does not exist in the background conditions;
- There is an increase in delay at any approach or overall intersection operating under LOS E or F of greater than 5 percent when compared to the background conditions; or
- There is an increase in the 95th percentile queues by more than 150 feet at an intersection or along an approach in the future conditions with the Project where one does not exist in the background scenario.

Following these guidelines, there are no impacts as a result of the Project; therefore, no mitigation measures needed to be made.

Table 3: Applied Annual and Total Growth Rates

Road	Intersections	Proposed Annual Growth Rate		Proposed Total Growth Rate 2019-2023	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
6 th Street NW- NB	1,3	0.10%	0.10%	0.40%	0.40%
6 th Street NW- SB	1,3	0.10%	0.10%	0.40%	0.40%

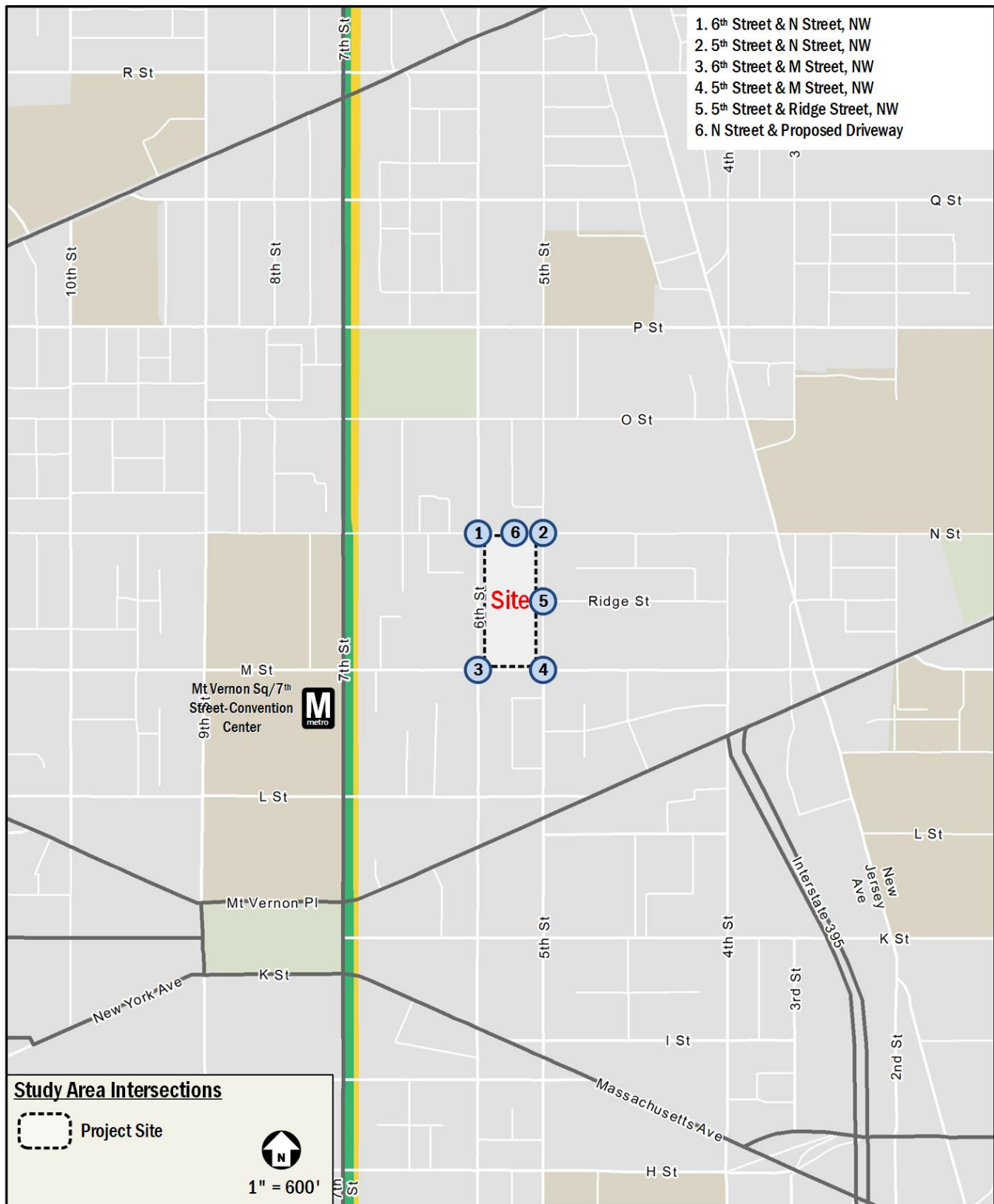


Figure 10: Study Area Intersections

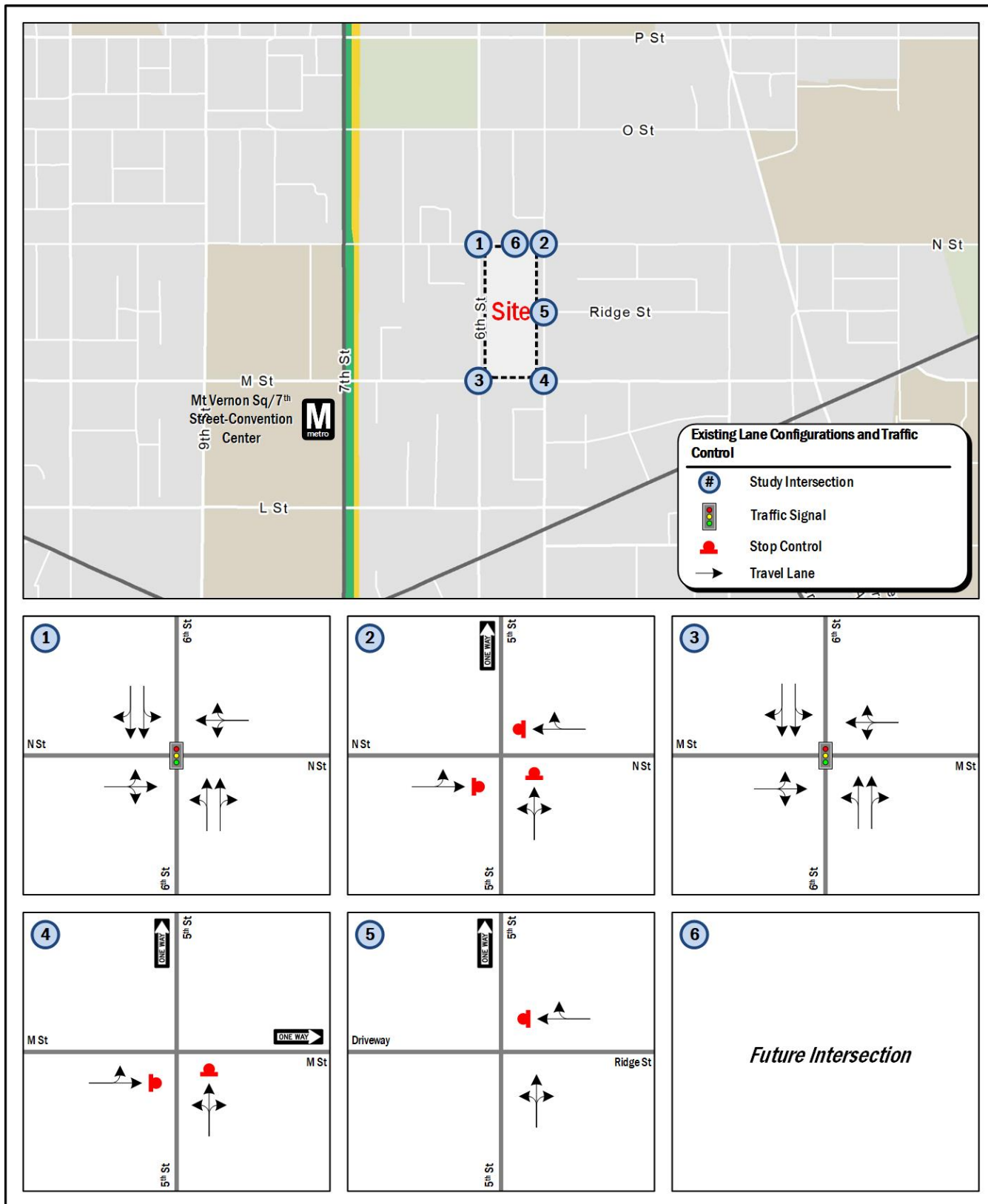


Figure 11: Existing Lane Configuration and Traffic Control Devices

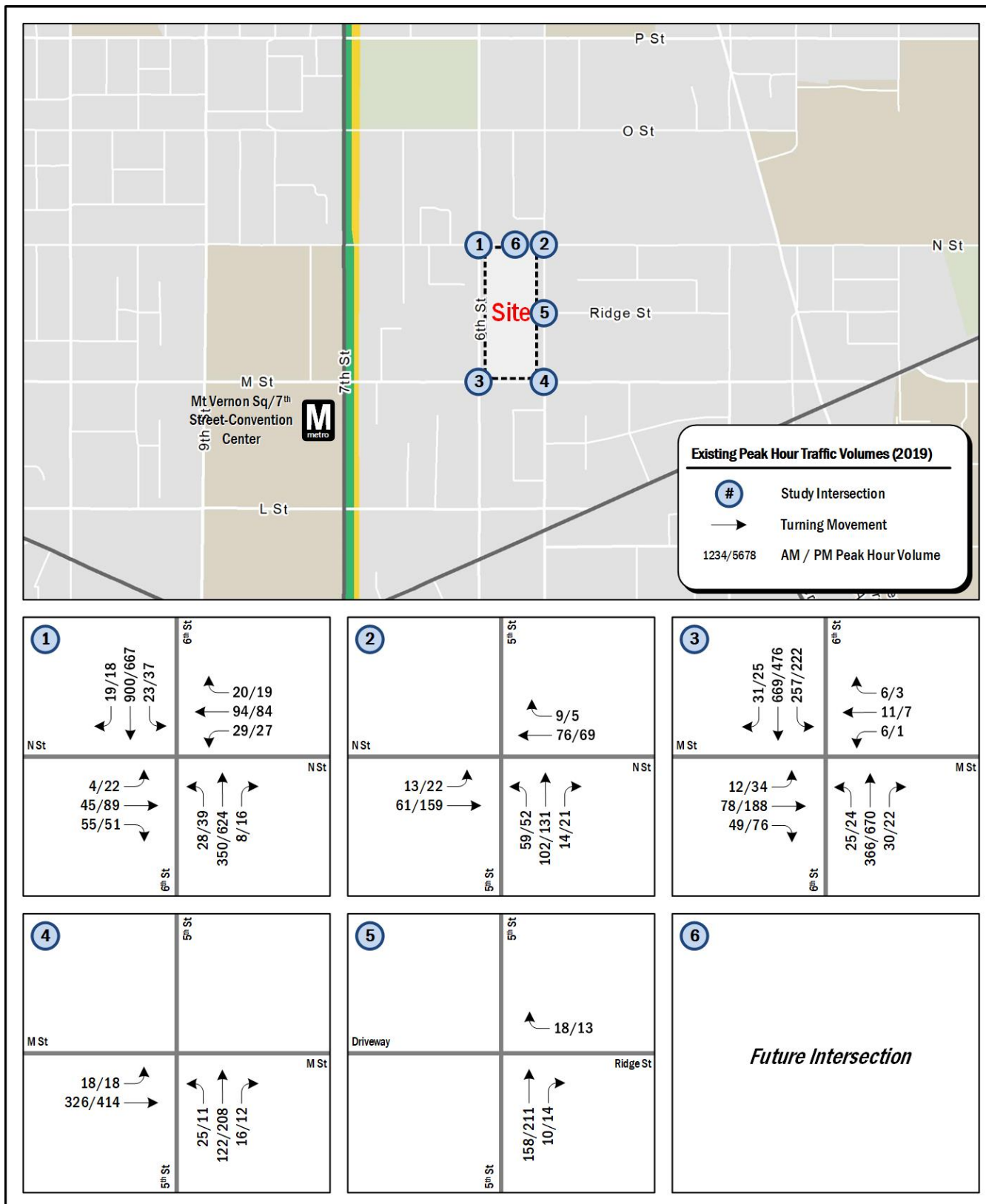


Figure 12: Existing Peak Hour Traffic Volumes

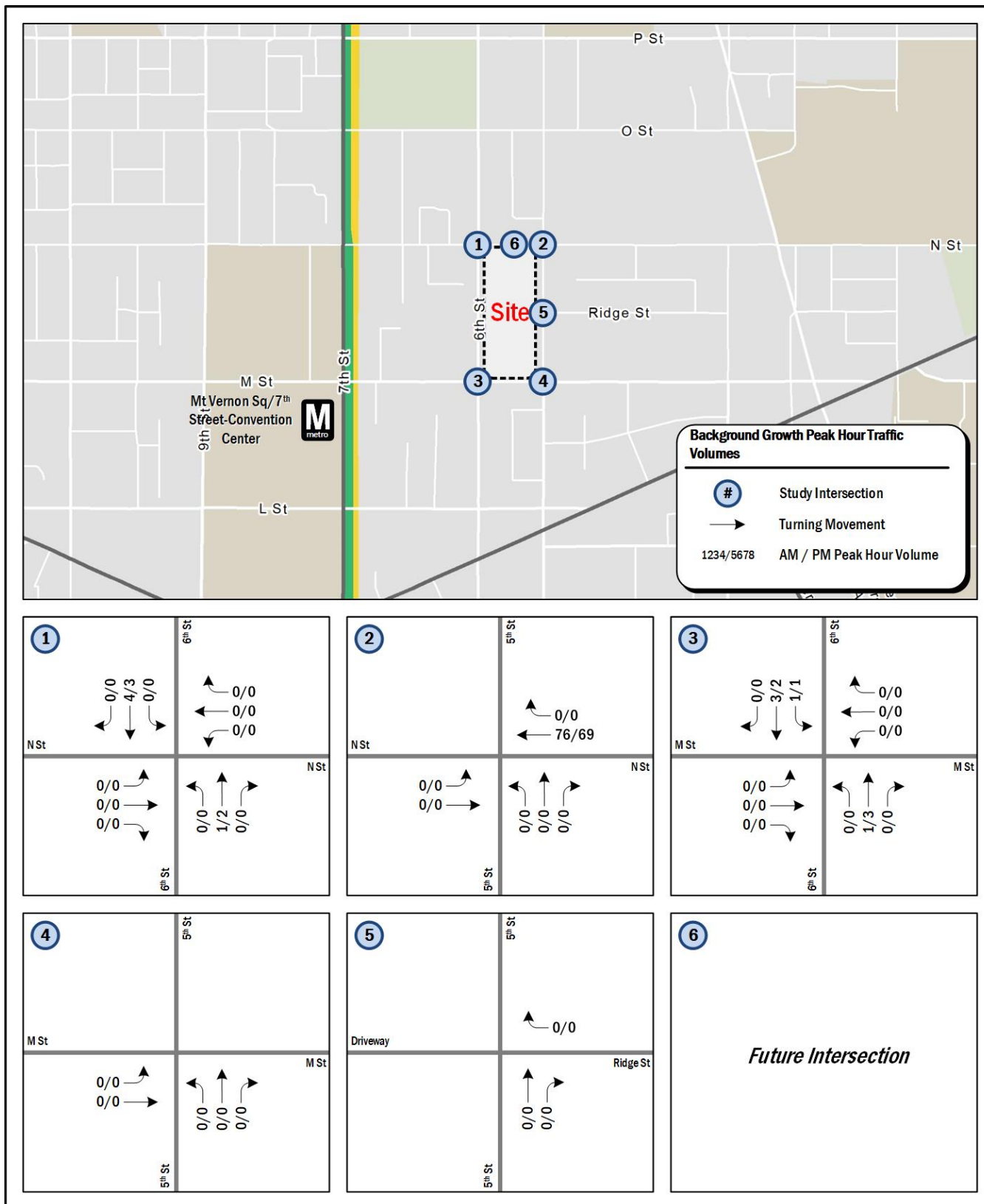


Figure 13: Background Growth Peak Hour Traffic Volumes (2023)

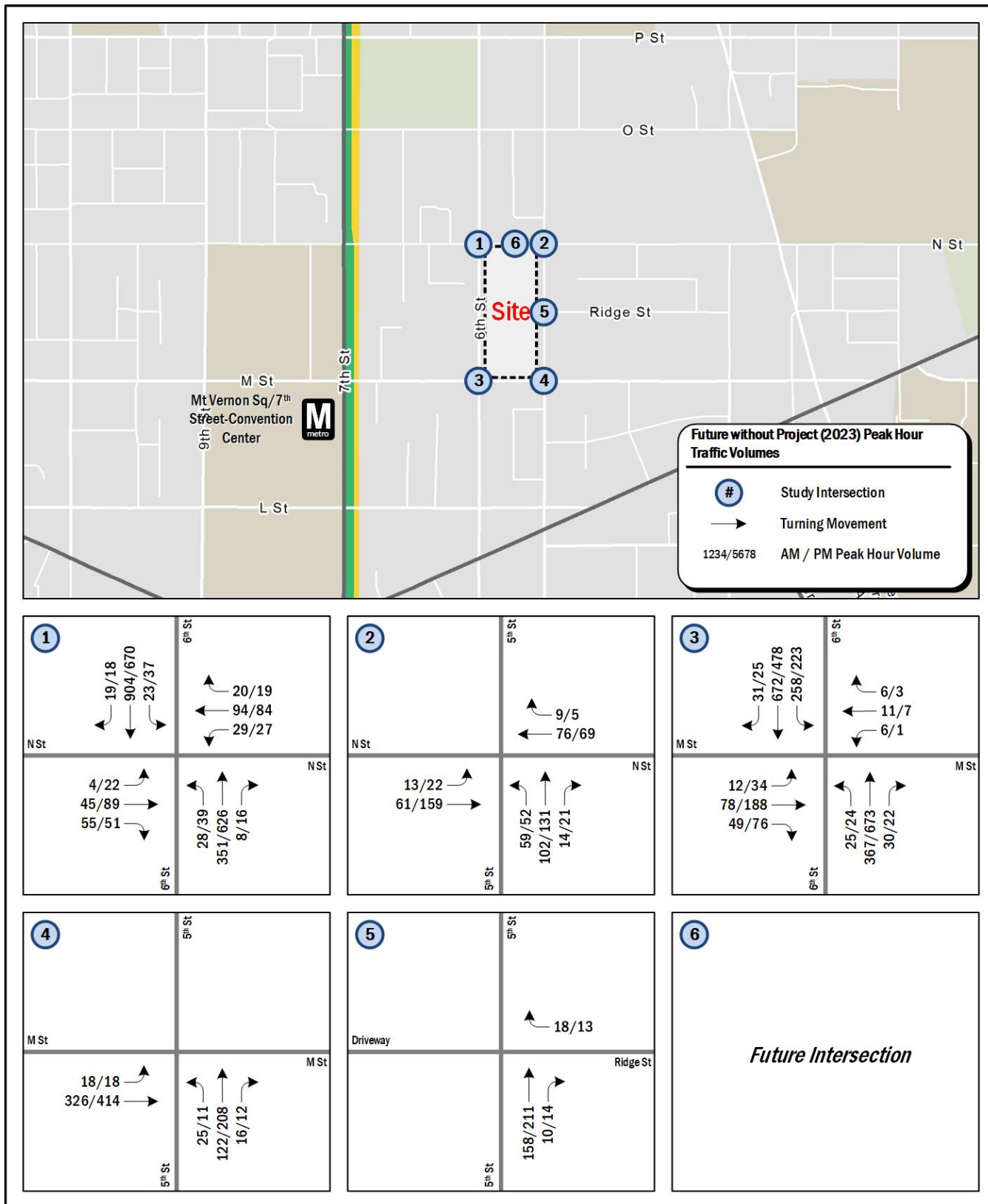


Figure 14: Future without Project Peak Hour Traffic Volume (2023)

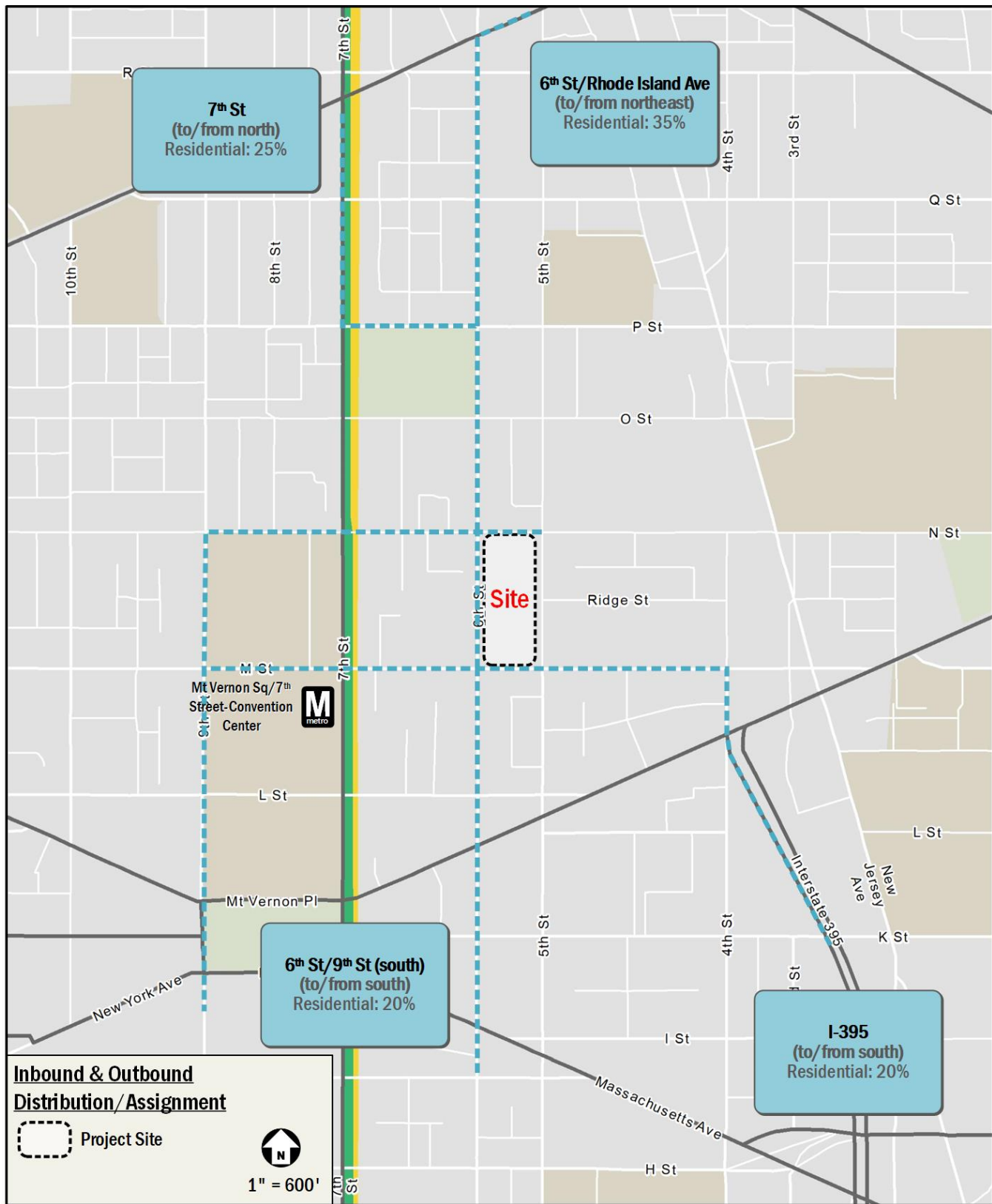


Figure 15: Outbound and Inbound Trip Distribution

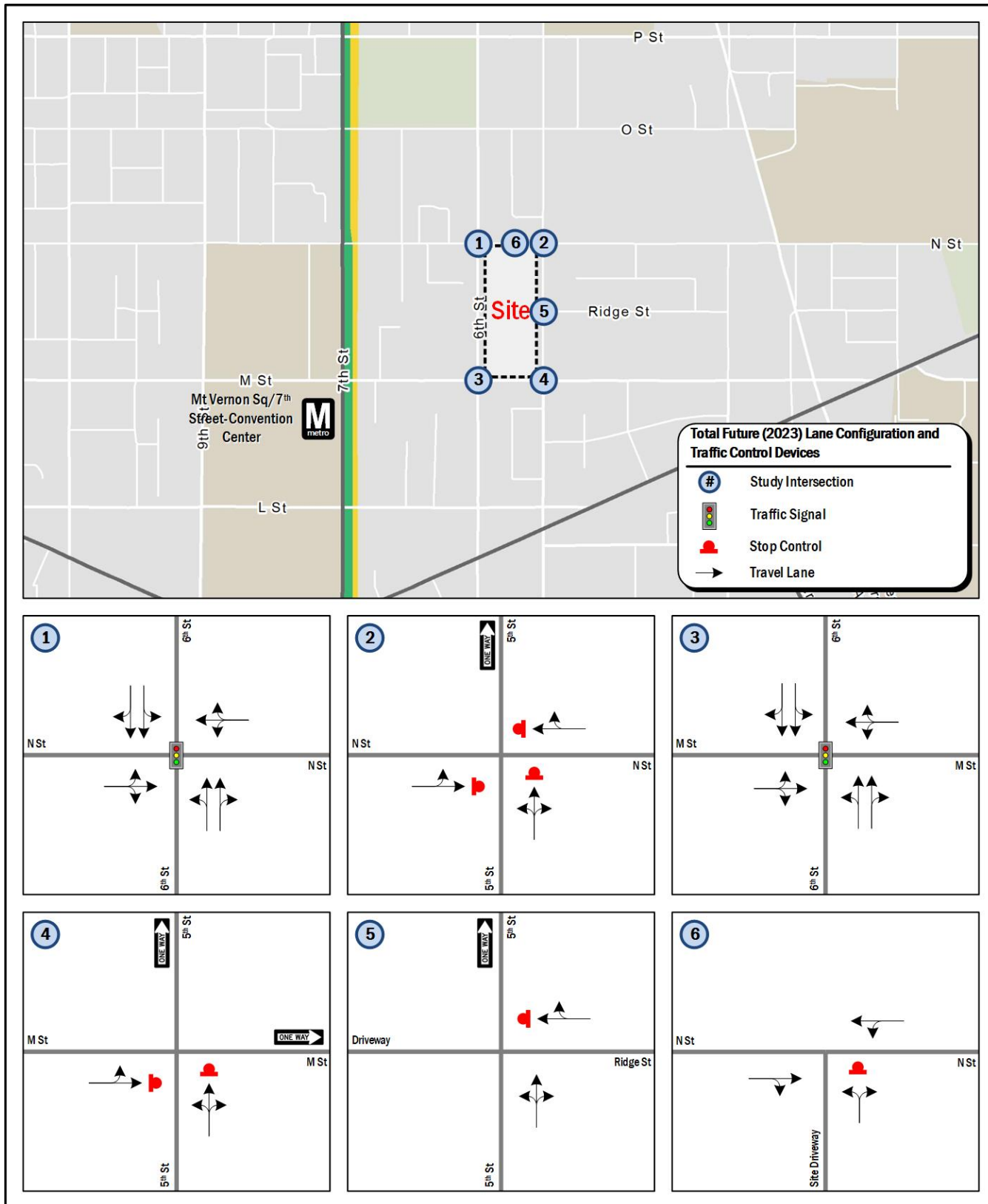


Figure 16: Total Future Lane Configuration and Traffic Control Devices (2023)

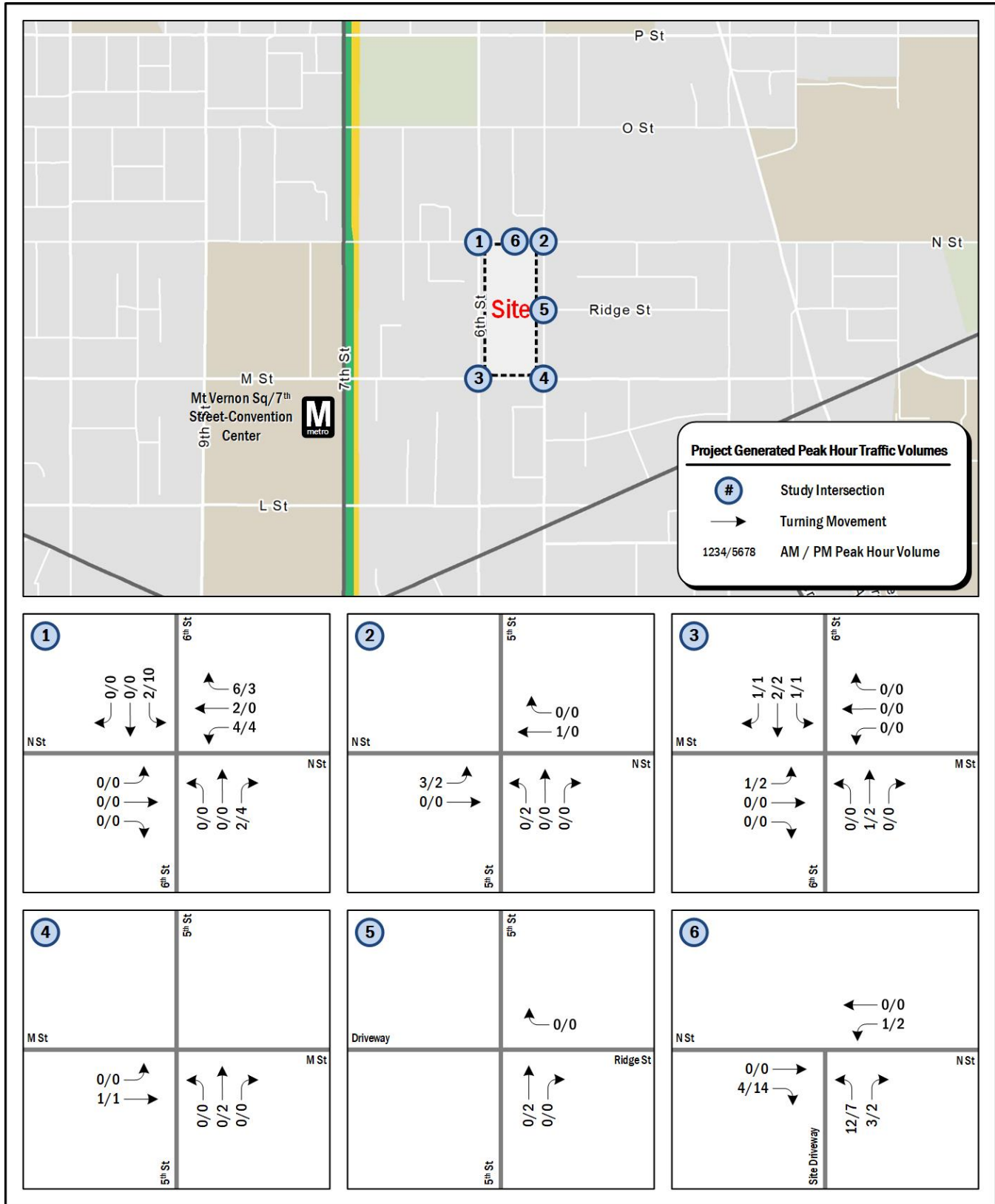


Figure 17: Project Generated Peak Hour Traffic Volumes

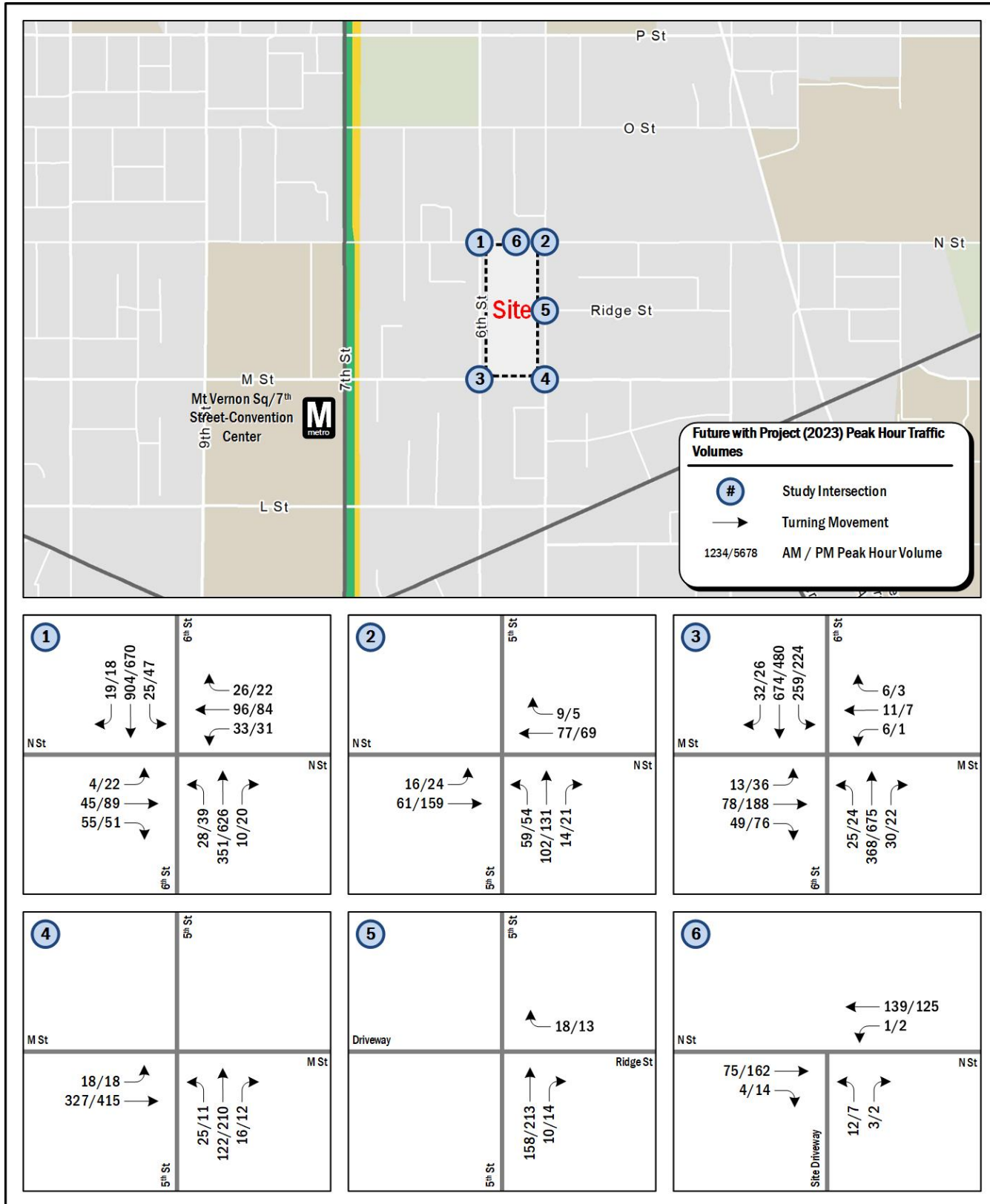


Figure 18: Future with Project Peak Hour Traffic Volumes (2023)



Table 4: LOS Results

Intersection (Movement)	Existing (2019)				Background (2023)				Total Future (2023)			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. 6th Street & N Street, NW												
Overall	15.8	B	11.1	B	15.8	B	11.1	B	16.0	B	11.4	B
Eastbound	26.7	C	37.4	D	26.7	C	37.4	D	26.7	C	37.5	D
Westbound	30.6	C	38.7	D	30.6	C	38.7	D	30.9	C	39.3	D
Northbound	9.6	A	1.9	A	9.6	A	1.9	A	9.6	A	1.9	A
Southbound	14.9	B	9.0	A	15.0	B	9.0	A	15.1	B	9.3	A
2. 5th Street & N Street, NW												
Eastbound	8.1	A	9.0	A	8.1	A	9.0	A	8.1	A	9.1	A
Westbound	8.0	A	8.2	A	8.0	A	8.2	A	8.1	A	8.2	A
Northbound	8.8	A	9.2	A	8.8	A	9.2	A	8.8	A	9.2	A
3. 6th Street & M Street, NW												
Overall	16.1	B	20.3	C	16.3	B	20.4	C	16.4	B	20.4	C
Eastbound	36.4	D	40.3	D	36.4	D	40.3	D	36.5	D	40.7	D
Westbound	33.1	C	27.9	C	33.1	C	27.9	C	33.1	C	27.9	C
Northbound	8.9	A	14.1	B	8.9	A	14.2	B	8.9	A	14.2	B
Southbound	15.9	B	18.0	B	16.3	B	18.2	B	16.3	B	18.1	B
4. 5th Street & M Street, NW												
Eastbound	10.8	B	14.3	B	10.8	B	14.3	B	10.8	B	14.4	B
Northbound	9.1	A	10.8	B	9.1	A	10.8	B	9.1	A	10.8	B
5. 5th Street & Ridge Street, NW												
Westbound	9.6	A	10.3	B	9.6	A	10.3	B	9.6	A	10.3	B
Northbound	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
6. N Street & Site Driveway, NW												
Eastbound	<i>Future Intersection</i>				<i>Future Intersection</i>				0.0	A	0.0	A
Westbound	<i>Future Intersection</i>				<i>Future Intersection</i>				0.1	A	0.1	A
Northbound	<i>Future Intersection</i>				<i>Future Intersection</i>				9.7	A	10.2	B



Table 5: v/c Comparison

Intersection (Lane Group)	Existing (2019)		Background (2023)		Total Future (2023)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
	V/C	V/C	V/C	V/C	V/C	V/C
1. 6th Street & N Street, NW						
Eastbound LT	0.13	0.43	0.13	0.43	0.13	0.43
Eastbound Right	0.05	0.11	0.05	0.11	0.05	0.11
Westbound LT	0.36	0.44	0.36	0.44	0.37	0.47
Westbound Right	0.02	0.02	0.06	0.07	0.08	0.09
Northbound LT	0.29	0.46	0.29	0.46	0.29	0.46
Northbound Right	0.01	0.02	0.01	0.02	0.01	0.02
Southbound LT	0.62	0.48	0.62	0.48	0.63	0.51
Southbound Right	0.02	0.02	0.02	0.02	0.02	0.02
2. 5th Street & N Street, NW						
Eastbound LT	N/A		N/A		N/A	
Westbound TR	N/A		N/A		N/A	
Northbound LTR	N/A		N/A		N/A	
3. 6th Street & M Street, NW						
Eastbound LT	0.34	0.67	0.34	0.67	0.35	0.68
Eastbound Right	0.06	0.13	0.06	0.13	0.06	0.13
Westbound LT	0.08	0.02	0.08	0.02	0.08	0.02
Westbound Right	0.03	0.01	0.03	0.01	0.03	0.01
Northbound LT	0.29	0.50	0.29	0.50	0.29	0.51
Northbound Right	0.03	0.02	0.03	0.02	0.03	0.02
Southbound LT	0.81	0.95dl	0.82	0.96dl	0.82	0.96dl
Southbound Right	0.03	0.02	0.03	0.02	0.03	0.02
4. 5th Street & M Street, NW						
Eastbound LT	N/A		N/A		N/A	
Northbound LTR	N/A		N/A		N/A	



Intersection (Lane Group)	Existing (2019)		Background (2023)		Total Future (2023)	
	<i>AM Peak Hour</i>	<i>PM Peak Hour</i>	<i>AM Peak Hour</i>	<i>PM Peak Hour</i>	<i>AM Peak Hour</i>	<i>PM Peak Hour</i>
	V/C	V/C	V/C	V/C	V/C	V/C
5. 5th Street & Ridge Street, NW Westbound Right Northbound TR	N/A		N/A		N/A	
6. N Street & Site Driveway, NW Eastbound TR Westbound LT Northbound LR	<i>Future Intersection</i>		<i>Future Intersection</i>		N/A	

N/A indicates that the requested results are not reported for the study intersection in HCM 2000, as HCM does not report v/c for all-way stop unsignalized intersections



Table 6: Average and 95th Percentile Queuing Results (in feet)

Intersection (Lane Group)	Storage Length (Feet)	Existing (2019)				Background (2023)				Total Future (2023)			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th
1. 6th Street & N Street, NW													
Eastbound LT	470	27	58	77	130	27	58	77	130	27	58	77	130
Eastbound Right	20	0	30	13	44	0	30	13	44	0	30	13	44
Westbound LT	180	73	73	77	131	73	129	77	131	77	135	81	136
Westbound Right	20	0	0	0	18	0	17	0	18	2	24	1	22
Northbound LT	500	84	0	17	0	84	0	17	0	84	0	18	0
Northbound Right	20	m0	0	m0	0	m0	0	m0	0	m2	0	m0	0
Southbound LT	390	219	285	127	156	220	285	128	157	221	287	133	164
Southbound Right	20	0	7	0	5	0	7	0	5	0	7	0	5
2. 5th Street & N Street, NW													
Eastbound LT	185	N/A				N/A				N/A			
Westbound TR	715	N/A				N/A				N/A			
Northbound LTR	230	N/A				N/A				N/A			
3. 6th Street & M Street, NW													
Eastbound LT	475	59	110	152	245	59	110	152	245	60	111	154	249
Eastbound Right	20	0	29	12	51	0	29	12	51	0	29	12	51
Westbound LT	175	11	31	5	17	11	31	5	17	11	31	5	17
Westbound Right	20	4	16	2	9	4	16	2	9	4	16	2	9
Northbound LT	460	64	90	154	204	64	91	155	205	64	91	156	206
Northbound Right	20	0	2	0	0	0	2	0	0	0	2	0	0
Southbound LT	500	336	460	102	315	342	466	103	318	344	467	104	322
Southbound Right	20	0	m1	0	m0	0	m1	0	m0	0	m1	0	m0
4. 5th Street & M Street, NW													
Eastbound LT	185	N/A				N/A				N/A			
Northbound LTR	450	N/A				N/A				N/A			



Intersection (Lane Group)	Storage Length (Feet)	Existing (2019)				Background (2023)				Total Future (2023)			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th
5. 5th Street & Ridge Street, NW													
Westbound Right	720	--	2	--	2	--	2	--	2	--	2	--	2
Northbound TR	240	--	0	--	0	--	0	--	0	--	0	--	0
6. N Street & Site Driveway, NW		Future Intersection				Future Intersection							
Eastbound TR	135									--	0	--	0
Westbound LT	25									--	0	--	0
Northbound LR	25									--	2	--	1

95th percentile volume exceeds capacity, queue may be longer

m Volume for 95th percentile queue is metered by upstream signal

~ Volume exceeds capacity, queue is theoretically infinite

N/A indicates that the requested results are not reported for the study intersection in HCM 2000, as HCM does not report queues for all-way stop unsignalized intersections

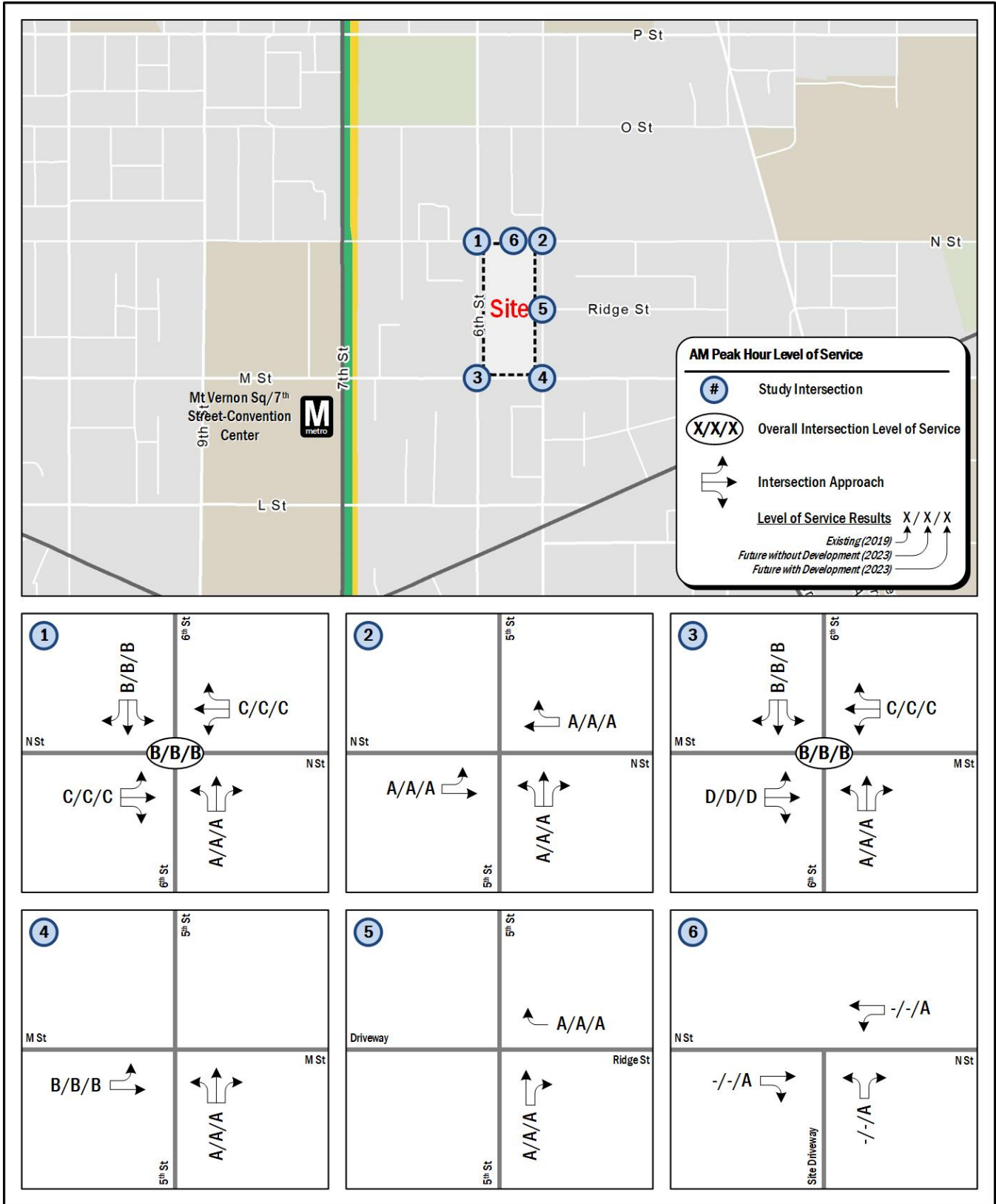


Figure 19: AM Peak Hour Level of Service Results

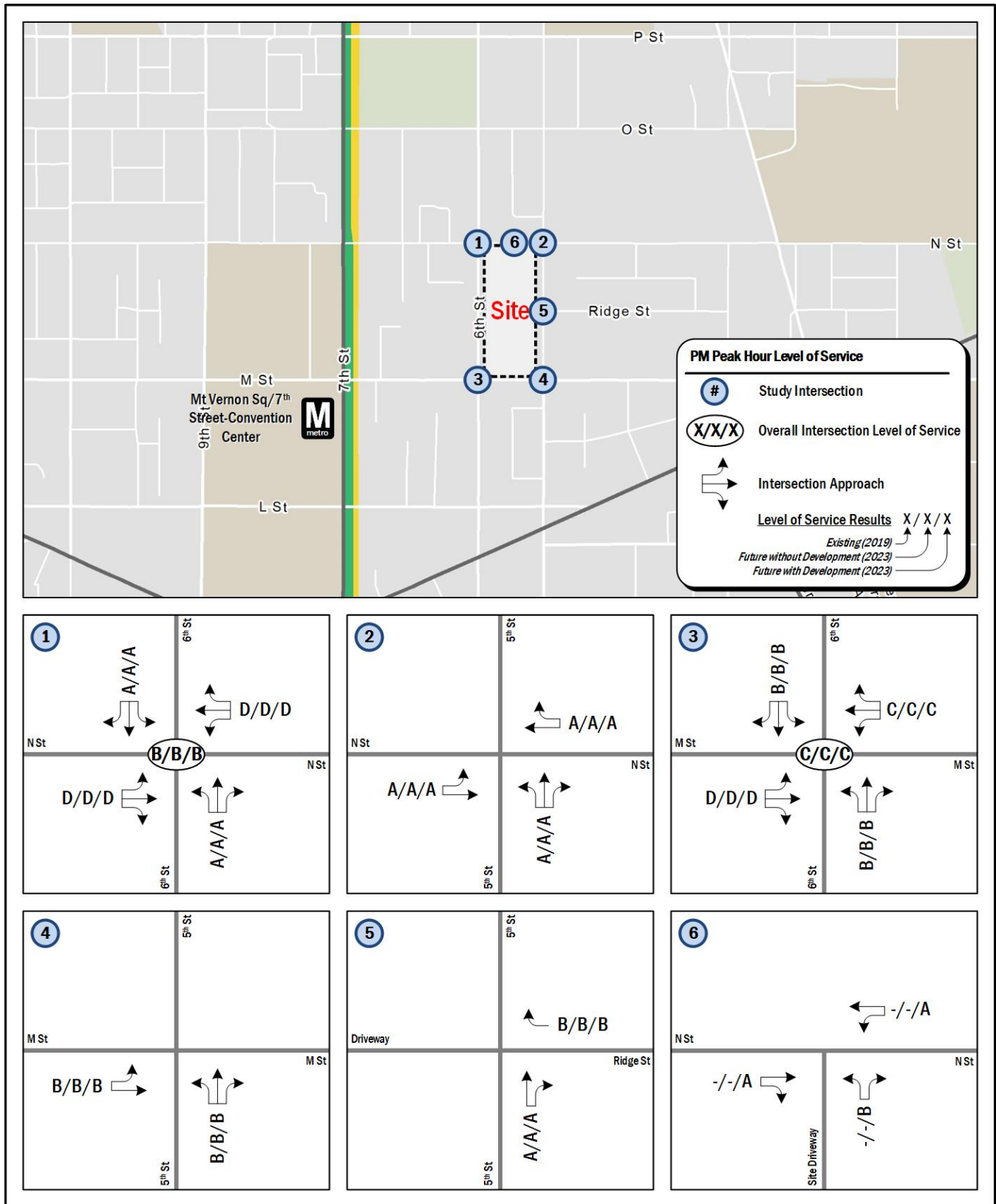


Figure 20: PM Peak Hour Level of Service



TRANSIT

This chapter discusses the existing and proposed transit facilities in the vicinity of the Site, accessibility to transit, and evaluates the overall transit impacts of the Site.

This chapter concludes:

- The Site is well served by existing transit;
- The Site is located one block (0.2 miles) from the Mt Vernon Square/7th Street-Convention Center Metrorail Station;
- The Site is served by one (1) Metrobus route within a five-minute walk that travels along 7th Street NW; and
- The Project is expected to generate a number of transit trips that the existing transit service is capable of handling.

EXISTING TRANSIT SERVICE

The study area is well served by Metrorail and has access to Metrobus. Combined, these transit services provide local, city wide, and regional transit connections and link the Site with major cultural, residential, employment, and commercial destinations throughout the region identifies the major transit routes, stations, and stops in the study area.

The Site is located approximately one block (0.2 miles) from the Mt Vernon Square/7th Street-Convention Center Metrorail Station (serviced by the Yellow and Green Lines). The Green Line travels south from Greenbelt, MD through downtown DC to Suitland, MD. The Yellow Line travels south from Fort Totten, DC through downtown DC to Alexandria, VA. The Green and Yellow Lines provide connections to the Red Line, which provides a direct connection to Union Station, a hub for commuter rail – such as Amtrak, MARC, and VRE – in addition to all additional Metrorail lines, allowing for access to much of the DC Metropolitan area. On the Green and Yellow Lines, trains run every 8 minutes during the morning and afternoon peak periods of 5am - 9:30am and 3pm - 7pm. They run every 12 minutes during weekday non-peak periods and on Saturdays before 9:30pm. They run every 15 minutes on Sundays before 9:30pm. They run every 20 minutes on all days after 9:30pm. The Mt Vernon Square/7th Street-Convention Center station is accessible from the Site by foot via M Street NW and 7th Street NW.

The Site is also serviced by a local Metrobus route, providing the Site with additional connectivity to the downtown core and

other areas of the District, Maryland, and Virginia. The 70 bus route serves the Site directly west at the intersections of 7th Street and M and N Streets NW, providing direct access to and from Silver Spring, Maryland and the National Mall. Table 7 shows a summary of the bus route information for the route that serves the Site, including service hours, headway, and distance to the nearest bus stop.

Figure 21 shows a detailed inventory of the existing Metrobus stops within a quarter-mile walkshed of the Site. Each stop is evaluated based on the guidelines set forth by WMATA's *Guidelines for the Design and Placement of Transit Stops*, as shown in Table 8. A detailed breakdown of individual bus stop amenities and criteria for standards is included in the Technical Attachments.

PROPOSED TRANSIT SERVICE

MoveDC

The MoveDC report outlines recommendations by mode with the goal of having them complete by 2040. The plan hopes to achieve a transportation system for the District that includes:

- 70 miles of high-capacity transit (streetcar or bus)
- 200 miles of on-street bicycle facilities or trails
- Sidewalks on at least one side of every street
- New street connections
- Road management/pricing in key corridors and the Central Employment Area
- A new downtown Metrorail loop
- Expanded commuter rail
- Water taxis

The MoveDC report highlights 7th Street NW as a street to accommodate a future streetcar line that would extend along 7th Street and Georgia Avenue NW to Silver Spring, Maryland and Buzzard Point in the District. No plans that would immediately affect the connectivity of the Project are in place. The proposed streetcar line would directly replace the existing Metrobus route 70.

WMATA and DDOT Transit Studies

WMATA studied capacity of Metrorail stations in its *Station Access & Capacity Study (2008)*. The study analyzed the capacity of Metrorail stations for their vertical transportation, for example the capacity of the station at elevators, stairs, and escalators to shuttle patrons between the street, mezzanine, and platforms. The study also analyzed stations capacity to



process riders at fare card gates. For both analyses, vertical transportation and fare card gates, volume-to-capacity ratios were calculated for existing data (from 2005) and projections for the year 2030. According to the study, the Mt Vernon Square/7th Street-Convention Center station can currently accommodate future growth at all access points.

WMATA has also studied capacity along Metrobus routes. DC's *Transit Future System Plan* (2010) lists the bus routes with the highest load factor (a ratio of passenger volume to bus capacity). A load factor is considered unacceptable if it is over 1.2 during peak periods or over 1.0 during off-peak or weekend

near the Site operate at a load factor that is at or below its capacity during peak periods of the day.

SITE IMPACTS

Transit Trip Generation

The Site is projected to generate 44 transit trips (11 inbound, 33 outbound) during the morning peak hour and 55 transit trips (34 inbound, 21 outbound) during the afternoon peak hour.

Even though it is expected that the majority of new trips will be made via Metrobus and Metrorail, site-generated transit trips will not cause detrimental impacts to Metrobus or Metrorail

Table 7: Metrobus Route Information

Route Number	Route Name	Service Hours	Headway	Walking Distance to Nearest Bus Stop
70	Georgia Avenue-7 th Street Line	Weekdays: 24 hours Weekends: 24 hours	Weekdays: 12-30 minutes Weekends: 15-30 minutes	0.2 miles, 3 min

Table 8: Transit Stop Requirements

Feature	Basic Stop	Enhanced Service Bus Stop	Transit Center
Bus Stop Sign	Yes	Yes	Yes
ADA 5'x8' Landing Pad - at a minimum, a clear, unobstructed, paved boarding area that is 8 feet deep (perpendicular to the curb) by 5 feet wide (parallel to the curb) and compliant with the ADA Accessibility Guidelines (ADAAG)	Yes	Yes	Yes
Sidewalk - connected by a paved sidewalk that is at least 4 feet wide	Yes	Yes	Yes
Lighting - adequate lighting either from street lights, lights from an adjacent business, or shelter lighting (particularly stops that are served in the evenings)	Evening Service	Yes	Yes
Seating	Trip Generator Based	Yes	Yes
Information Case - detailed schedule information on services	Yes	Yes	Yes
Trash Receptacle - trash receptacle (particularly at locations that are close to fast food establishments and convenient stores)	Site Specific	Yes	Yes
Shelter(s) - shelter with interior seating if there are 50 or more boardings per day (including transfers)	1 (50+ boardings/day)	1	2+
System Map	Contingent on Shelter	Yes	Yes
Real-time Display (LED + Audio)	Optional	Yes	Yes
Interactive Phone System On-Site - real time bus arrival information through an interactive phone and push button audio system	No	No	Yes
Expanded Boarding & Alighting Area (Rear-door Access)	No	Site Specific	Yes
Bus Bay (Pull Off)	No	Site Specific	Yes

periods. According to this study Metrobus routes that travel

service.

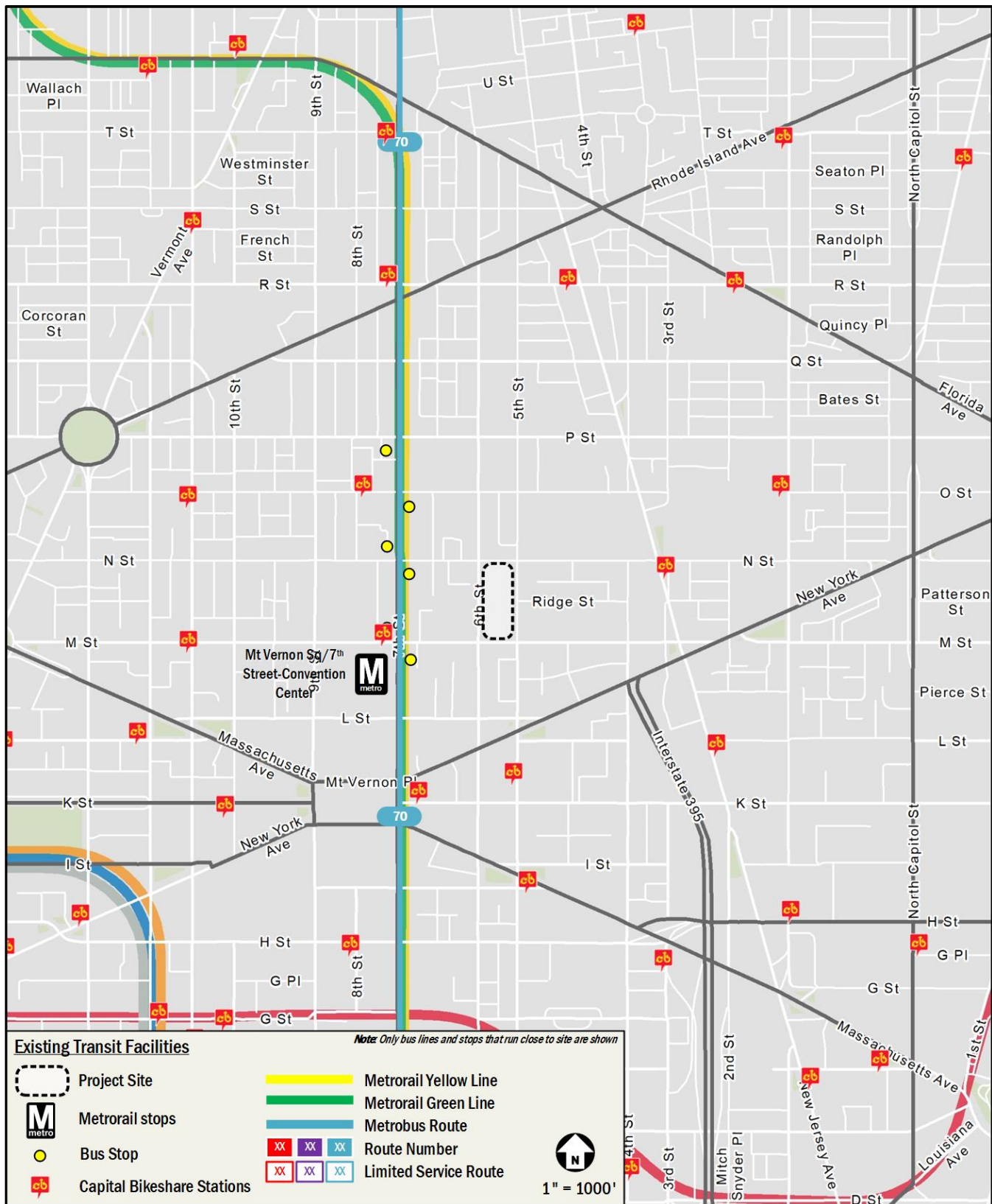


Figure 21: Existing Transit Facilities



PEDESTRIAN FACILITIES

This chapter summarizes the existing and future pedestrian access to the Site and reviews walking routes to and from the Site.

This chapter concludes:

- The existing pedestrian infrastructure surrounding the Site provides a quality walking environment. There are no sidewalks along the majority of primary routes to pedestrian destinations with gaps in the system; and
- The Project is expected to generate pedestrian trips to origins and destinations nearby, in addition to pedestrian trips generated by walking to and from transit stops. The pedestrian facilities surrounding the project can accommodate these new trips.

PEDESTRIAN STUDY AREA

Facilities within a quarter-mile of the Site were evaluated as well as routes to nearby transit facilities. The Site is accessible to transit options such as bus stops one block west of the Site along 7th Street NW and the Mt Vernon Square/7th Street-Convention Center station. There are a minimal number of sidewalks, generally several blocks from the Site, that do not meet DDOT's minimum sidewalk or buffer widths along with shared curb ramps or missing detectable warnings. These few shortcomings do not overall affect the quality or attractiveness of the walking environment within the study area. Figure 22 shows suggested pedestrian pathways, walking time and distances, and barriers and areas of concern.

PEDESTRIAN INFRASTRUCTURE

This section outlines the existing and proposed pedestrian infrastructure within the pedestrian study area.

Existing Conditions

A review of pedestrian facilities surrounding the Project shows that most facilities meet DDOT standards, resulting in a quality walking environment. No roadways within the study area present a challenge for pedestrians by limiting connectivity. Figure 23 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 *Design and Engineering Manual (2019)* in addition to

ADA standards. Sidewalk widths and requirements for the District are shown below in Table 9.

Within the area shown, roadways are classified as principal and minor arterials with collectors and local streets. Sidewalks surrounding the Site generally comply with DDOT standards, with deficiencies due to narrow or missing buffer widths. All primary pedestrian destinations are accessible via routes with sidewalks, all of which met DDOT standards. All sidewalks and most curb ramps that provide direct access to the Mt Vernon Square/7th St-Convention Center Metro station provide comfortable access to the station. No sidewalks within the study area limit connectivity. Insufficient crossings exist at the intersection of New York Avenue NW and the I-395 exit ramp.

ADA standards require that curb ramps be provided wherever an accessible route crosses a curb and must have a detectable warning. Additionally, curb ramps shared between two crosswalks are not desired. As shown in Figure 23, under existing conditions crosswalks and curb ramps with detectable warnings are present throughout the study area.

Pedestrian Infrastructure Improvements

As part of the Project, pedestrian facilities around the perimeter of the Site will be improved to meet DDOT and ADA standards. New sidewalks will be installed along the perimeter of the Site that will meet or exceed the width requirements, as well as curb ramps with detectable warnings and crosswalks at the new Site entrance.

SITE IMPACTS

Pedestrian Trip Generation

The Project is expected to generate 48 walking trips (13 inbound, 35 outbound) during the morning peak hour and 61 walking trips (37 inbound, 24 outbound) during the afternoon peak hour. The origins and destinations of these trips are likely to be:

- Employment opportunities where residents can walk to work;
- Retail locations outside of the Site; and
- Neighborhood destinations such as schools, libraries, and parks in the vicinity of the Site.

In addition to these trips, the transit trips generated by the Site will also generate pedestrian demand between the Site and nearby transit stops, including bus stops and Metrorail stations



within a five-minute walk. The pedestrian network will have the capacity to absorb the newly generated trips from the Site.

Table 9: 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

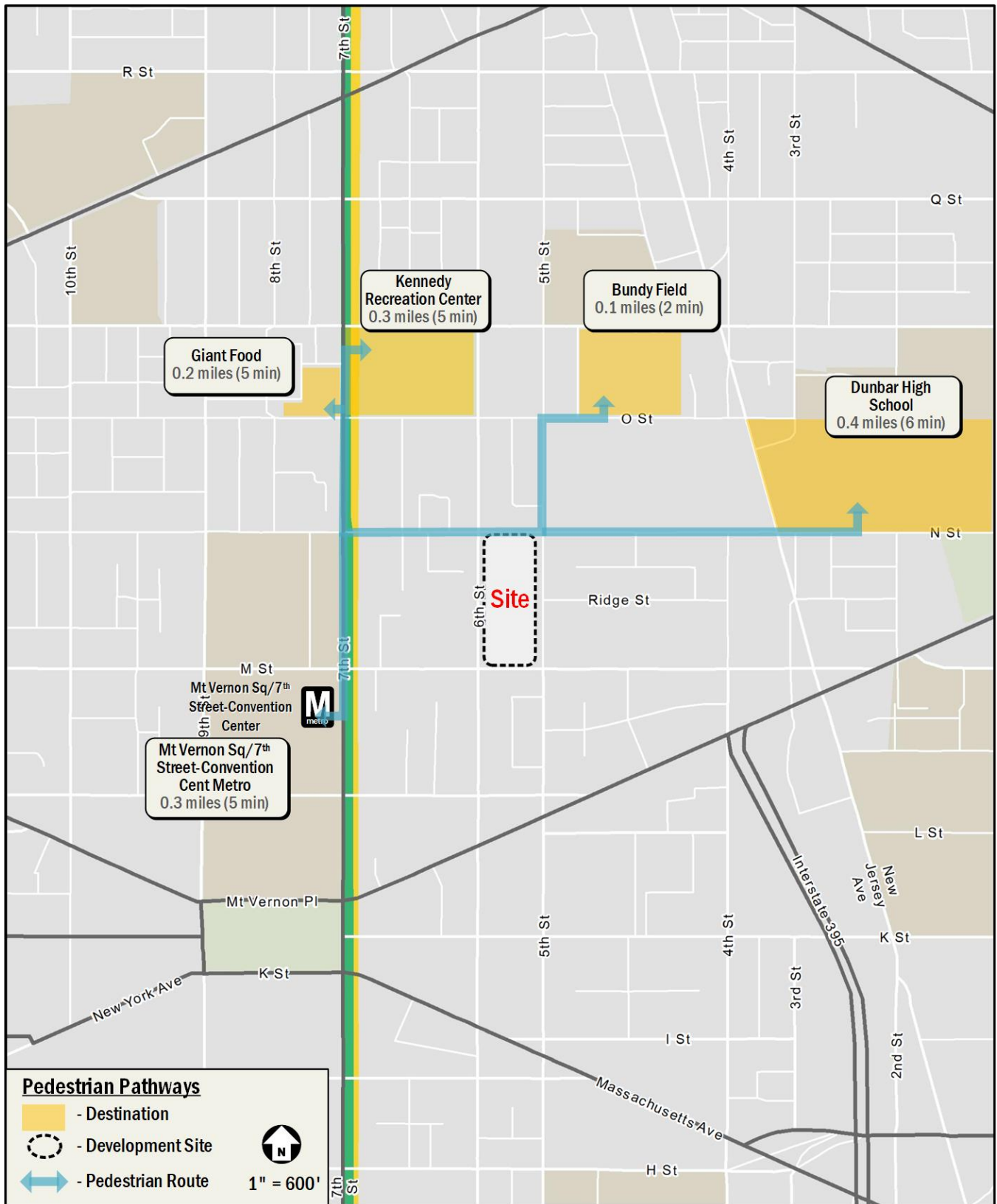


Figure 22: Pedestrian Pathways

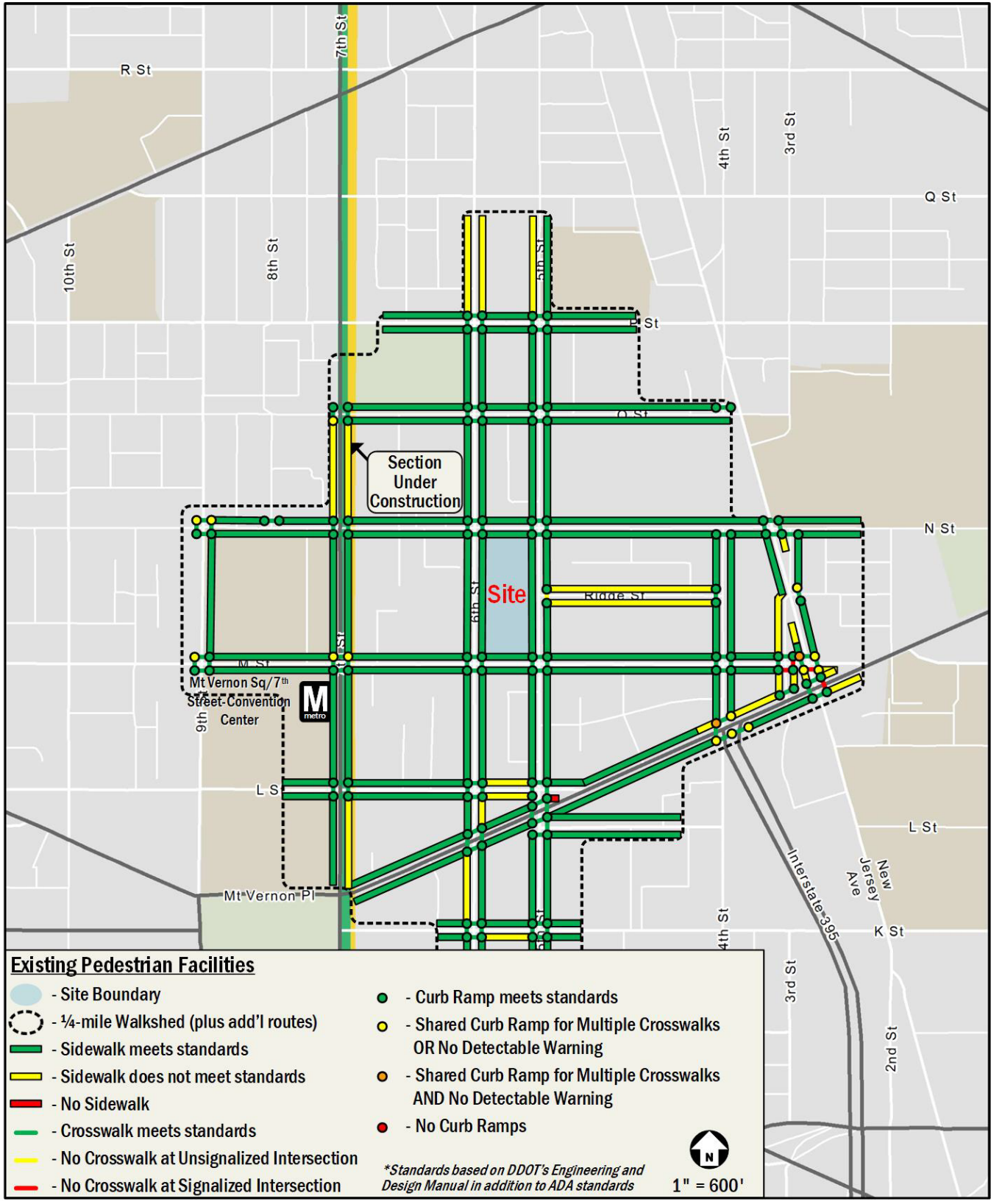


Figure 23: Existing Pedestrian Facilities



BICYCLE FACILITIES

This chapter summarizes existing and future bicycle access, reviews the quality of cycling routes to and from the Site, and presents recommendations.

This chapter concludes:

- The Site has access to several on-street bicycle facilities within the study area;
- The Project is expected to generate a manageable number of bicycle trips; therefore, site-generated bike trips can be accommodated on existing infrastructure;
- The Project will include secure bicycle parking on-site for residents of the Project; and
- The Project will include short-term bicycle racks along the perimeter of the Site.

EXISTING BICYCLE FACILITIES

The Site has connectivity to existing on-street bicycle facilities. Residential low volume streets surrounding the Site provide connectivity to existing bicycle facilities near the Site. Bicycle lanes are available adjacent to the Site along 5th Street NW, providing northbound one-way connectivity to bicycle lanes on Q and R Streets NW. Additional bicycle lanes are present on 10th Street NW, 7th Street NW and K Street NW near the Site.

Under existing conditions there is no short-term bicycle parking located around the perimeter of the Site.

In addition to personal bicycles, the Capital Bikeshare program provides additional cycling options for residents, employees, and patrons of the Project. The Bikeshare program has placed over 500 Bikeshare stations across Washington, DC, Arlington, and Alexandria, VA, Montgomery County, MD, and most recently Fairfax County, VA, with 4,300 bicycles provided. There are five (5) existing Capital Bikeshare stations within a half-mile of the Site, with one station one block (0.2 miles) from the Site along 7th Street NW adjacent to the Mt Vernon Square/7th Street-Convention Center Metro station, providing extensive accessibility to bikeshare facilities.

These bicycle facilities connect the Site to areas within the District. Figure 24 illustrates the existing bicycle facilities in the study area.

PROPOSED BICYCLE FACILITIES

MoveDC

The MoveDC plan outlines several bicycle improvements in the vicinity of the Site. These improvements are broken up into four tiers that rank the priority for implementation. The four tiers are broken down as follows:

- Tier 1
Investments should be considered as part of DDOT's 6-year Transportation Improvement Program (TIP) and annual work program development, if they are not already included. Some projects may be able to move directly into construction, while others become high priorities for advancement through the Project Development Process.

There is one Tier 1 addition planned near the Site that includes a 1.8 mile bicycle lane on M Street from Florida Avenue NE to Thomas Circle NW. This proposed bicycle lane will directly affect east-west connectivity adjacent to the Site.
- Tier 2
Investments within this tier are not high priorities in the early years of MoveDC implementation. These investments could begin moving through the Project Development Process if there are compelling reasons for their advancement.

There is one Tier 2 addition that will positively affect bicycle connectivity to and from the Site. A 1.4-mile bicycle lane along 5th and 6th Streets NW between Indiana Avenue and Rhode Island Avenue NW is planned, adding to and replacing the current bicycle lane in place for a portion of this segment and improving the north-south bicycle connectivity near the Site.
- Tier 3
Investments within this tier are not priorities for DDOT-led advancement in the early years of MoveDC's implementation. They could move forward earlier under circumstances, such as real estate development initiatives and non-DDOT partnerships providing the opportunity for non-District-led completion of specific funding.
- Tier 4
Generally, investments within this tier are not priorities for DDOT-led advancement and are lower priority for project development in the early years of implementation.



Due to the timeline of the Project, this report will focus on the Tier 1 and Tier 2 recommendations within the vicinity of the Site.

Although these projects are discussed in the MoveDC plan, they are not currently funded nor included in DDOT's Transportation Improvement Plan thus they will not be assumed as complete for this report.

On-Site Bicycle Elements

The project will include approximately 18 short-term bicycle spaces along the perimeter of the Site. These short-term spaces will include inverted U-racks placed in high-visibility areas.

The project will also include secure long-term bicycle parking. The plans identify a total of approximately 121 long-term spaces, within the below-grade parking garage which meets the requirements of the Zoning Regulations.

SITE IMPACTS

Bicycle Trip Generation

The Project is expected to generate 26 bicycle trips (7 inbound, 19 outbound) during the morning peak hour and 32 bicycle trips (20 inbound, 12 outbound) during the afternoon peak hour. The number of anticipated bicycle site trips indicates bicycling will be an important mode getting to and from the Site, as expected bicycle trips exceed expected auto trips during peak hours. With adequate facilities located on site and existing routes to and from the Site, the impacts from bicycling will be minimal.



Figure 24: Existing Bicycle Facilities

SAFETY ANALYSIS

This chapter qualitatively reviews any vehicle, pedestrian, or bicycle conflicts at the study area intersections or street links within the study area. This review includes identifying any intersections within the study area that have been identified by DDOT as high crash locations.

SUMMARY OF SAFETY ANALYSIS

A safety analysis was performed to determine if there are any intersections that pose any obvious conflicts with vehicles, pedestrians, or bicyclists. Based on observations and familiarity with the area, one (1) intersection was identified with potential conflicts. The following section details the conflict at the study area intersection.

POTENTIAL IMPACTS

This section reviews the one (1) intersection that was identified to pose potential conflicts to vehicles, pedestrians, or bicyclists.

- 5th Street NW & Ridge Street NW

This intersection operates as a three-legged intersection with 5th Street NW operating as a one-way northbound street. As it currently exists, no east-west cross walk provides pedestrian crossing across 5th Street NW to Ridge Street NW. The Project will generate a higher number of pedestrian volumes with anticipated volumes from Ridge Street NW. The Applicant proposes to install a curb extension with a crosswalk providing safe passage across 5th Street NW at Ridge Street, NW.



SUMMARY AND CONCLUSIONS

This report reviews the transportation aspects of the proposed development of the Project on the Site, which Project is the subject of Z.C. Case Number 19-16.

The purpose of this CTR is to evaluate whether the Project will generate a detrimental impact to the transportation network surrounding the Site. This evaluation is based on a technical comparison of the existing conditions, background conditions, and total future conditions. This report concludes that **the Project will not have a detrimental impact** to the surrounding transportation network assuming the proposed site design elements and TDM measures are implemented.

Proposed Project

The Site is located at 1200 5th Street NW, occupying the entire block surrounded by M Street, N Street, 6th Street and 5th Street NW, in the Shaw neighborhood of Northwest DC. The Site is currently occupied by a vacant multi-family apartment complex formerly containing 63 units and approximately 75-80 surface parking spaces.

The Project will develop the Site pursuant to the PUD consisting of:

- A single apartment building containing a total of approximately 363 units with courts between the two halves of the building, and connected by the main residential entrance;
- Approximately 103 below-grade vehicle parking spaces in a parking garage;
- Two (2) 30-foot loading berths, with one (1) berth serving each residential wing; and
- 121 secure long-term and 18 short-term bicycle parking spaces.

Primary access/egress to the Project's below-grade parking garage will be from the existing curb cut on N Street NW. Loading needs will be served by the existing curb cut on N Street, NW for the northern wing of the Project with an existing curb cut on M Street, NW being relocated to 5th Street, NW to serve the loading needs of the southern wing. Access to the loading will also utilize the existing or relocated curb cuts at each residential wing providing each wing a dedicated loading area and discouraging street loading and unloading. All truck turning maneuvers will occur on the Site, allowing for head-in,

head-out access to and from the public street. The curb cuts along with the number of loading berths meet all zoning and DDOT dimensional requirements.

The Project will satisfy the zoning requirements for bicycle parking by including 18 short-term bicycle parking spaces and 121 long-term bicycle parking spaces. The Project will supply long-term bicycle parking within the parking garage of the Project and short-term bicycle parking along the perimeter of the Site. The vehicular and bicycle parking will also meet the practical needs of the Project's residents.

Multi-Modal Impacts and Recommendations

Trip Generation

The project is expected to generate new trips on the surrounding transportation network across all modes. The AM peak hour trip generation is projected to include 20 cars/hour, 44 transit riders/hour, 26 bicycle trips/hour, and 48 walking trips/hour. The PM peak hour trip generation is projected to include 25 cars/hour, 55 transit riders/hour, 32 bicycle trips/hour, and 61 walking trips/hour. For both peak hours the number of car trips per hour is expected to be the lowest of all modes, equating to less than one new car every 2 to 3 minutes. These projections also do not include a reduction for trips that the former use of the site generated, and thus represent a conservative estimation of new trips.

Transit

The Site is served by regional and local transit services via Metrobus and Metrorail. The Site is one block (0.2 miles) from the Mt Vernon Square/7th Street-Convention Center Metro Station, with Metrobus stops located within one block (0.2 miles) of the Site along 7th Street NW off M and N Streets NW.

Although the Project will generate new transit trips, existing facilities have enough capacity to accommodate the new trips.

Pedestrian

The Site is surrounded by a quality pedestrian network. Most roadways within a quarter-mile radius of the Site provide sidewalks and acceptable crosswalks and curb ramps, particularly along the primary walking routes and to the Mt Vernon Square/7th Street-Convention Center Metro station.

As a result of the Project, pedestrian facilities around the perimeter of the Site will be improved to meet DDOT and ADA standards.



The Project will generate a moderate number of pedestrian trips and the improved facilities will be able to handle the new trips. Notably, the Applicant proposes installing a curb extension with a crosswalk on 5th Street NW at its intersection with Ridge Street to increase pedestrian visibility along 5th Street NW. The proposed curb extension with the crosswalk will provide safer crossings across 5th Street NW to the proposed landscaped courtyard within the Site.

Bicycle

The Site has some connectivity to existing nearby on-street bicycle facilities. Residential low volume streets surrounding the Site provide connectivity to existing bicycle facilities near the Site. Bicycle lanes are available adjacent to the Site on 5th Street NW and one (1) block away from the Site along 7th Street NW. A Capital Bikeshare location is located 0.2 miles away from the Site along 7th Street NW near the Mt Vernon Square/7th Street-Convention Center Metro station.

The Project will provide short-term bicycle parking along the perimeter of the Site for visitors. On-site secure long-term bicycle parking will be provided in the below-grade parking garage. The amount of bicycle parking provided meets zoning requirements. Access to the Project's long-term, secure bicycle facilities will primarily occur via the existing curb cut on N Street NW.

The Project will generate a moderate number of new bicycle trips without burdening the existing facilities.

Vehicular

The Site is accessible from regional roadways, such as New York Avenue (Route 50) and Rhode Island Avenue (Route 1) and several principal and minor arterials such as 6th Street NW, 7th Street NW, L Street NW, and New Jersey Avenue NW. These roadways create connectivity to the Capital Beltway (I-495) that surrounds Washington, DC and its inner suburbs, provide connectivity to the District's Downtown.

In order to determine impacts that the Project will have on the transportation network, this report projects future conditions with and without the Project based on the number of trips the Project is expected to generate. Intersection analyses are performed to obtain the average delay and queue a vehicle will experience. These average delays and queues are compared to the acceptable levels of delay set by DDOT standards as well as existing queues to determine if the Site will negatively impact

the study area. The analysis concludes that no mitigation needs to be made as a result of the Project.

Transportation Demand Management (TDM)

Per the DDOT CTR guidelines, the goal of TDM measures is to reduce the number of single occupancy vehicles and vehicle ownership within the District. The promotion of various programs and existing infrastructure includes maximizing the use of transit, bicycle, and pedestrian facilities. DDOT has outlined expectations for TDM measures in their CTR guidelines, and this project has proposed a TDM plan based on these guidelines.

Summary and Recommendations

This report concludes that the Project will not have a detrimental impact on the surrounding transportation network assuming the proposed site design elements and TDM measures are implemented.

The Project has several positive design elements that minimize potential transportation impacts, including:

- The Site's close proximity to transit and existing bicycle infrastructure;
- The inclusion of secure long-term bicycle parking;
- The installation of short-term bicycle parking spaces along the frontage of the Site that meet or exceed zoning requirements;
- The creation of new pedestrian sidewalks that meet or exceed DDOT and ADA requirements, improving the existing pedestrian environment. This includes a curb extension and crosswalk connecting the Site with Ridge Street NW;
- A parking ratio that is within DDOT's CTR guidelines, meaning that the parking supply will meet the practical needs of the Site while not promoting the use of driving as a mode of transportation; and
- A TDM plan that reduces the demand of single-occupancy, private vehicles during peak period travel times or shifts single-occupancy vehicular demand to off-peak periods.