

Figure 7: Existing Transit Facilities

Board of Zoning Adjustment District of Columbia CASE NO.20291 EXHIBIT NO.33A2

Future Projects

There are several District initiatives located in the vicinity of the site. These planned and proposed projects are summarized below.

MoveDC

MoveDC is an implementation-based 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 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; and
- Water taxis.

In direct relation to the proposed development, the MoveDC plan recommends the following:

- Cycle tracks that are currently under design on 21st Street between Florida Avenue NW and Constitution Avenue NW;
- Support for WMATA implementation of a new Potomac River Metrorail tunnel between Rosslyn and Georgetown and a new downtown Metrorail loop that separates the Orange/Blue/Silver lines and the Yellow/Green lines; and
- An East-West Corridor streetcar line connecting Georgetown to the Benning Road Metrorail Station, currently under design as a transitway on K Street NW.

DC Comprehensive Plan

The DC Comprehensive Plan is a high-level guiding document that sets a positive, long-term vision for the District, through the lens of its physical growth and change. The Comprehensive Plan's Near Northwest Element contains the following policy themes which are supported by the proposed development:

- "Sustain and enhance the neighborhood, community, and regional shopping areas of Near Northwest... Sustain these areas as diverse, unique, pedestrian-oriented shopping streets that meet the needs of area residents, workers, and visitors." The proposed development supports this goal with a project design that includes expanded neighborhood-serving ground-floor retail and modernized frontages that enhance the adjacent public space with improvements, such as outdoor seating.
- "Improve safety for pedestrians and bicycles, and the security of parked bicycles." The proposed development supports this goal by providing new long-term bicycle parking facilities available to the users of the site and short-term bicycle parking facilities available on the public space.

In Addition to the District-wide initiatives presented above, there are localized initiatives advancing MoveDC's and the DC Comprehensive Plan with projects in the vicinity of the site. These planned and proposed projects are summarized below.

M Street and New Hampshire Avenue NW Safety Improvements

DDOT is implementing pedestrian and bicycle improvements at the M Street and New Hampshire Avenue NW intersection to address safety concerns related to pedestrian crossing distances and vehicle-bicycle conflicts between turning vehicles and westbound bicycle traffic. The redesigned intersection, included in the Technical Attachments, includes corner pedestrian refuge islands on the northern and eastern crosswalks (southwest corner of Duke Ellington Park/northeast corner of the intersection), a curb-protected bike lane on the south side of Duke Ellington Park, green-colored pavement markings for the bike lane crossing across the north leg of New Hampshire Avenue NW, and a motorist yield zone on the southwest corner of Duke Ellington Park/northeast corner of Duke Ellington Park/northeast corner of the intersection. In addition, DDOT's plans indicate the possibility of a realigning the crosswalk on the eastern leg of the intersection into a shortened crosswalk across M Street as part of a separate project.

These improvements are expected to be in place prior to the proposed redevelopment and will enhance safety and connectivity for users of the site.

K Street Transitway Plans

The K Street Transitway project reconfigures the K Street NW corridor with multimodal improvements for a more efficient and effective use of the right of way. The project includes a dedicated two-way busway, separated by medians, along the center of K Street from 12th Street to 21st Street NW. The Transitway will also feature protected one-way cycle tracks on both sides of the busway between the busway and travel lanes. The redesigned corridor eliminates the existing service lanes and includes improvements to the pedestrian environment.

The project is currently in the design phase with construction scheduled for completion in 2024. These facilities will enhance the multimodal network in the vicinity of the site with improved transit and vehicular operations and increased access to protected bicycle facilities.

Downtown West Transportation Study/Pennsylvania Avenue West Streetscape Project

The Downtown West Transportation Planning Study was conducted to improve east-west travel conditions for pedestrians, cyclists, and buses along Pennsylvania Avenue between 17th Street NW and Washington Circle and H and I Streets between New York Avenue NW and Pennsylvania Avenue NW. The study area is located less than 0.5 miles south of the project site.

This study builds on WMATA and DDOT's 2013 H/I Street Bus Improvements Technical Report and further advances MoveDC's recommendations to transform Pennsylvania Avenue NW into a cycle track corridor and H Street NW into a high-capacity transit corridor.

Along with improvements to the pedestrian environment, the study's recommended improvements include one-way cycle tracks on both sides of Pennsylvania Avenue between 17th Street NW and Washington Circle and a contraflow bus lane in the westbound direction on H Street NW between 19th Street and New York Avenue NW.

The Pennsylvania Avenue West Streetscape Project is currently underway taking the Pennsylvania Avenue NW portion of the recommendations from the Downtown West Transportation Study through the final design phase with construction scheduled to begin no later than 2022.

These planned facilities will provide users of the site additional transit connectivity and access to protected bicycle facilities.

Site Trip Generation

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 site (the Trip Generation Manual provides data for non-urban, low transit use site) and to generate trips for multiple modes, as vetted and approved by DDOT.

Trip generation was calculated based on ITE Land Use 710 (Office) and ITE Land Use 820 (Shopping Center) using the corresponding sizes for the existing site and the proposed development program.

The calculated office trips were split into different modes using assumptions derived from census data at the Traffic Analysis Zone (TAZ) level for commuters with destinations in the TAZ in which the project is located. The mode splits applied to the retail trips are primarily based on the neighborhood-serving characteristic of this component of the project. The mode split assumptions applied to the analysis are presented in Table 4.

A summary of the multimodal trip generation for the existing building and the proposed project is provided in

Table 5. Detailed calculations are included in the Technical Attachments.

Table 4: Mode Split Assumptions

	Mode					
Land Use	Drive	Transit	ansit Bike Walk			
Office	25%	65%	5%	5%		
Retail	5%	5%	5%	85%		

Table 5: Multimodal Trip Generation Summary

Mode			AM Peak Hour			PM Peak Hou	r	Weekday
		In	Out	Total	In	Out	Total	Total
Auto	Existing	59 veh/hr	9 veh/hr	68 veh/hr	12 veh/hr	60 veh/hr	72 veh/hr	685 veh
	Proposed	81 veh/hr	12 veh/hr	93 veh/hr	17 veh/hr	84 veh/hr	101 veh/hr	968 veh
	Difference	22 veh/hr	3 veh/hr	25 veh/hr	5 veh/hr	24 veh/hr	29 veh/hr	283 veh
Transit	Existing	178 ppl/hr	29 ppl/hr	207 ppl/hr	36 ppl/hr	183 ppl/hr	219 ppl/hr	2076 ppl
	Proposed	245 ppl/hr	41 ppl/hr	286 ppl/hr	50 ppl/hr	255 ppl/hr	305 ppl/hr	2924 ppl
	Difference	67 ppl/hr	12 ppl/hr	79 ppl/hr	14 ppl/hr	72 ppl/hr	86 ppl/hr	848 ppl
Bike	Existing	15 ppl/hr	2 ppl/hr	17 ppl/hr	5 ppl/hr	16 ppl/hr	21 ppl/hr	196 ppl
	Proposed	20 ppl/hr	4 ppl/hr	24 ppl/hr	7 ppl/hr	23 ppl/hr	30 ppl/hr	287 ppl
	Difference	5 ppl/hr	2 ppl/hr	7 ppl/hr	2 ppl/hr	7 ppl/hr	9 ppl/hr	91 ppl
Walk	Existing	24 ppl/hr	9 ppl/hr	33 ppl/hr	35 ppl/hr	46 ppl/hr	81 ppl/hr	822 ppl
	Proposed	35 ppl/hr	14 ppl/hr	49 ppl/hr	61 ppl/hr	76 ppl/hr	137 ppl/hr	1355 ppl
	Difference	11 ppl/hr	5 ppl/hr	16 ppl/hr	26 ppl/hr	30 ppl/hr	56 ppl/hr	533 ppl

As shown on

Table 5, the building is expected to generate 25 (22 inbound, 3 outbound) additional vehicle trips during the morning peak hour and 29 (5 inbound, 24 outbound) vehicle trips during the afternoon peak hour following the renovation and expansion. Per DDOT guidelines, and as vetted and approved by DDOT during the scoping process, the number of net new trips does not exceed the number of trips that would require a vehicular capacity analysis (25 trips in the peak direction).

Design Review

This section provides an overview of the transportation features of the proposed development, including the proposed site plan and access points. It includes descriptions of the project's pedestrian and bicycle accommodations, site access, and parking and loading facilities. The proposed development expands the existing office space by approximately 107,398 square feet and the ground-floor retail by 8,051 square feet, resulting in a proposed project size of 364,933 square feet of office space and 19,440 square feet of neighborhood-serving ground-floor retail. The project introduces a secure bicycle storage room to the building, accessible to office users and retail staff, with a storage capacity of 100 long-term bicycle parking spaces. The project will also provide 16 short-term bicycle parking spaces in public space around the perimeter of the building. The renovation also includes a reduction of five (5) vehicle parking spaces to the existing garage. The renovated garage will provide 266 vehicle parking spaces an additional 21 spaces are provided in public space vaults adjacent to the property. The loading area will be renovated to include an additional loading berth for a total of three (3) loading berths. One (1) new loading berth will be sized as a 12- by 30-foot loading berth and the other two (2) existing berths to remain will be sized as 8- by 30-foot loading berths. Note that the 12-foot berth will be able to accommodate a 55' truck.

The project modernizes the building and creates a tiered system of terraces activating the public space and enhancing the pedestrian network along the property frontage. Improvements to the public space that facilitate placemaking activities such as outdoor seating will also be included. As part of the pedestrian improvements, ADA access to the building will also be brought up to modern standards. Figure 4 shows the proposed site plan.

Site Access

Following the renovations and expansion of the project, pedestrian access to the ground-floor retail space will remain available from M Street and 21st Street NW, consistent with existing conditions. The main entrance to the office space will be available from 21st Street NW. Retail access will be available from different access points along M Street and 21st Street NW. Pedestrian access and circulation are shown in Figure 8.

Primary bicycle access to the bicycle storage room will be available via the first level of the garage. Site bicycle access and circulation and the locations of short-term bicycle parking racks are shown in Figure 8. Bicycle circulation within the first level garage is shown in Figure 9.

No changes to the site's curb cut or vehicle access point are proposed. The existing 59-foot curb cut on 21st Street NW is proposed to continue providing access to the existing below-grade parking garage and loading area. No modifications to the dimensions of the curb cut are proposed. Access to the loading area will continue to be provided from 21st Street NW (one-way southbound).

Vehicle and loading access and circulation are also shown in Figure 8.

Parking Facilities

The existing below-grade garage contains 261 and an additional 21 spaces are provided in public space vaults adjacent to the property. As part of the proposed renovations, the Applicant is proposing to reduce the garage size by five (5) spaces from 261 to 256, maintaining the 21 spaces provided in public space vaults adjacent to the property. Vehicle parking spaces located partially or completely within vault/public space do not count for zoning purposes. At least five (5) electric vehicle stations will be included. The garage will be shared between the office and public retail uses as consistent with existing conditions. Vehicular access to the underground garage is proposed to remain from 21st Street NW, consistent with existing conditions.

Loading Facilities

The renovated building will improve the existing loading facilities to provide an additional loading berth for a total of three (3) loading berths. Two (2) 8' x 30' loading berths and one (1) 12' x 30' loading berth (which can also accommodate trucks up to 55' in the rare case that is needed) are proposed The loading area will continue to be located on the ground level and accessible from 21st Street NW (one-way southbound). Loading movements will continue to utilize the existing back-in, head-out maneuvers. Inbound and outbound turning maneuvers into the loading area are presented in Figure 10, Figure 11, Figure 12, Figure 13, Figure 14, Figure 15, Figure 16, Figure 17, Figure 18, and Figure 19.

No changes to the structural design of the building are proposed as part of the renovation and a minimum vertical clearance of 12' 5" is proposed for the loading area, consistent with existing conditions, therefore the Applicant is seeking relief from the 14' minimum vertical clearance requirement for the loading berths. A Loading Management Plan is proposed to minimize impact to the surround transportation network.

Loading Management Plan

The project will provide one (1) new 12' by 30' loading berth and maintain the two (2) existing 8' x 30' loading berths, which are to be shared between the project's office and retail uses. As previously discussed, the Applicant is seeking relief from the 14' minimum vertical clearance requirement for loading berths due to structural limitations.

A Loading Management Plan is proposed as part of the project. The goals of this plan are to maintain a safe environment for all users of the site, loading dock, streets, and nearby intersections; minimize undesirable impacts to pedestrians and to building tenants; reduce conflicts between truck traffic using the loading facilities and other street users; and ensure smooth operation of the loading facilities through appropriate levels of management and schedule operations. The components of the loading management plan that will be implemented for the life of the project are as follows:

- A loading dock manager will be designated by the building management who will be on duty during delivery hours. The dock manager will be responsible for coordinating with vendors and office and retail tenants to schedule deliveries.
- The dock manager will monitor inbound and outbound truck maneuvers and will ensure that trucks accessing the loading dock do not block vehicular, bike, or pedestrian traffic along 21st Street NW except during those times when a truck is actively entering or exiting a loading berth.
- Service vehicle/truck traffic interfacing with 21st Street NW traffic will be monitored during peak periods and management measures will be taken, if necessary, to reduce conflicts between truck and vehicular movements.
- The dock manager will schedule deliveries using the berths such that the dock's capacity is not exceeded. In the event that an unscheduled delivery vehicle arrives while the dock is full, that driver will be directed to return at a later time when a berth will be available so as to not compromise safety or impede traffic flows on 21st Street NW.
- Trucks using the loading dock will not be allowed to idle and must follow all District guidelines for heavy vehicle
 operation including but not limited to DCMR 20 Chapter 9, Section 900 (Engine Idling), the goDCgo Motorcoach
 Operators Guide, and the primary access routes shown on the DDOT Truck and Bus Route Map (godcgo.com/freight).
- The dock manager will be responsible for disseminating suggested truck routing maps to the building's tenants and to
 drivers from delivery services that frequently utilize the development's loading dock. The dock manager will also
 distribute flyer materials, such as the MWCOG Turn Your Engine Off brochure, to drivers as needed to encourage
 compliance with idling laws. The dock manager will also post these materials and other relevant notices in a prominent
 location within the loading area.



Figure 8: Site Access and Circulation



Figure 9: Garage Level 1 Bicycle Circulation



Figure 10: Inbound Turning Maneuver into Loading Area – SU-30 Bay 1



Figure 11: Outbound Turning Maneuver from Loading Area – SU-30 Bay 1



Figure 12: Inbound Turning Maneuver into Loading Area – SU-30 Bay 2



Figure 13: Outbound Turning Maneuver from Loading Area – SU-30 Bay 2



Figure 14: Inbound Turning Maneuver into Loading Area – SU-30 Bay 3



Figure 15: Outbound Turning Maneuver from Loading Area – SU-30 Bay 3



Figure 16: Inbound Turning Maneuver into Loading Area – SU-40 Bay 3



Figure 17: Outbound Turning Maneuver from Loading Area – SU-40 Bay 3





Figure 19: Outbound Turning Maneuver from Loading Area – WB-50 Bay 3

Transportation Demand Management (TDM)

Transportation Demand Management (TDM) is the application of policies and strategies used to reduce travel demand or to redistribute demand to other times or spaces. TDM elements typically focus 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 proposed project is based on DDOT expectations for TDM programs for developments of this type and size. As such, the Applicant proposes the following TDM measures for the project:

- Identify Transportation Coordinators for the planning, construction, and operations phases of development. There will be a Transportation Coordinator for each tenant and the entire site. The Transportation Coordinators will act as points of contact with DDOT, goDCgo, and Zoning Enforcement.
- Will provide 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. All employer tenants must survey their employees and report back to the Transportation Coordinator.
- Transportation Coordinators will develop, distribute, and market various transportation alternatives and options to the employees, including promoting transportation events (i.e., Bike to Work Day, National Walking Day, Car Free Day) on property 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.
- Will notify goDCgo each time a new office tenant moves in and provide TDM information to each tenant as they move in.
- Will provide links to CommuterConnections.com and goDCgo.com on property websites.
- Transportation Coordinator will implement a carpooling system such that individuals working in the building who wish to carpool can easily locate other employees who live nearby.
- Distribute information on the Commuter Connections Guaranteed Ride Home (GRH) program, which provides commuters who regularly carpool, vanpool, bike, walk, or take transit to work with a free and reliable ride home in an emergency.
- Provide employees who wish to carpool with detailed carpooling information and will be referred to other carpool
 matching services sponsored by the Metropolitan Washington Council of Governments (MWCOG) or other comparable
 service if MWCOG does not offer this in the future.
- Will meet ZR16 requirements for showers and lockers for use by employees. Six (6) showers and 61 lockers would be required if the project was new construction.
- Will exceed ZR16 short- and long-term bicycle parking requirements. Long-term bicycle parking will be provided free of charge to all employees. 16 short-term and 100 long-term bicycle spaces will be provided.
- Long-term bicycle storage rooms will accommodate non-traditional sized bikes including cargo and tandem bikes.

Summary and Conclusions

The findings of this study conclude the following:

- The Applicant's request of BZA relief from the 14' vertical loading clearance based on structural constrains and the Applicant's continued use of the existing 21st Street NW curb cut are consistent with existing conditions and will not have a detrimental impact on the area's transportation network;
- The 2100 M Street NW site is surrounded by an existing network of transit, bicycle, and pedestrian facilities that creates an excellent environment for safe and effective non-vehicular transportation;

- The proposed project does not result in any significant increase in vehicular travel and will not have a significant impact on the local area's roadways;
- The project introduces bicycle facilities that exceed zoning requirements with the addition of a secure bicycle storage room with 100 long-term parking spaces and 16 short-term bicycle parking spaces along the property's frontage;
- The project reduces the size of the existing parking garage by five (5) parking spaces;
- The proposed loading area location and access do not differ from existing conditions and therefore will not adversely change future conditions;
- The addition of a 30-foot loading berth increases the site's capacity to accommodate loading activity;
- Implementation of a Loading Management Plan minimizes loading-truck related disruptions to traffic flow on adjacent roadways; and
- The TDM measures that will be implemented at the 2100 M Street NW site adequately promote non-vehicular modes of travel for visitors.

The project has several positive elements contained within its design that minimize potential transportation impacts, including:

- The project's proximity to bicycle facilities and transit access;
- The addition of both short-term and secure long-term bicycle parking at the site; and
- The implementation of TDM measures that reduce the demand of single-occupancy, private vehicles.