

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: Sara Bardin
Director, Office of Zoning

FROM: Samuel Zimbabwe 
Associate Director

DATE: May 26, 2015

SUBJECT: ZC Case No. 15-01 – Highline (320 Florida Ave NE)

PROJECT SUMMARY

Level 2 Development (the “Applicant”) proposes a consolidated Planned Unit Development (“PUD”) and related map amendment to construct a mixed-use development within the Florida Avenue Market (the Market) at the premises 320 Florida Avenue NE (Sq. 3587, Lot 4). The development proposal includes:

- 315 residential units
- 9,880 square feet of retail
- 143 vehicle parking spaces
- 105 long-term bicycle parking spaces

SUMMARY OF DDOT REVIEW

DDOT is committed to achieving an exceptional quality of life in the nation’s capital by encouraging sustainable travel practices, constructing safer streets, and providing outstanding access to goods and services. As one means to achieve this vision, DDOT works through the zoning process to ensure that impacts from new developments are manageable within, and take advantage of, the District’s multimodal transportation network.

The purpose of DDOT’s review is to assess the potential safety and capacity impacts of the proposed action on the District’s transportation network and, as necessary, propose mitigations that are commensurate with the action. After an extensive, multi-administration review of the case materials submitted by the Applicant on May 20, 2015 (revised Comprehensive Transportation Review) May 22, 2015 (updated site plan), DDOT finds:

Site Design

- The proposal is generally consistent with DDOT's recent Florida Avenue Multimodal Study. The Study will soon move into preliminary design, and final design of the streetscape will need to be coordinated.
- Vehicle access is proposed from the existing Florida Avenue/3rd Street signalized intersection, and improvements to the traffic signal such as hardware upgrades and retiming may be needed;
- The proposed park on District-owned land to the west of the site should be designed with adequate pedestrian and bicycle facilities to facilitate non-auto connections within the Market;
- Florida Avenue does not include any space for curbside uses such as parking or loading, and therefore loading from the curbside is prohibited;
- All loading activities are required to be accommodated on-site. The loading management plan as proposed is acceptable; and
- Non-compliant canopies are proposed that may require a waiver from the building code. The final design of the canopies will be addressed during permitting.

Travel Assumptions

- Appropriate travel assumptions were made; and
- The action is expected to generate a significant number of new vehicle, transit, and pedestrian trips and a moderate number of bicycle trips.

Analysis

- The Applicant utilized sound methodology to perform the analysis;
- No intersections within the study area are substantially degraded as a result of the action, however three intersections in the study area operate under unacceptable conditions during background conditions – Florida Avenue/4th Street NE, Florida Avenue/6th Street, and Florida Avenue/New York Avenue/O Street;
- A robust Transportation Demand Management (TDM) plan is proposed, which will support the expected high non-auto mode split;
- Pedestrian infrastructure within the study will be improved as part of pipeline developments in the vicinity; and
- The site is well-served by rail and bus services, as well as a robust network of bicycle facilities.

Mitigations

DDOT has no objection to the requested action with the condition the Applicant install at least 9 short-term bicycle racks in public space near building entrances.

Continued Coordination

Given the complexity and size of the action, the Applicant is expected to continue to work with DDOT on the following matters outside of the zoning process:

- Public space, including curb and gutter, street trees and landscaping, street lights, sidewalks, and other features within the public rights of way, are expected to be designed and built to DDOT standards. Public space plans are required to be compatible with changes from the Florida Avenue Multimodal Study;
- Utility vaults locations and treatment;
- Short-term bicycle parking locations and treatment;

- Traffic signal at Florida Avenue/3rd Street/site driveway, which may require hardware upgrades, retiming, or other changes. Changes will be determined during permitting;
- Design of the park to the west of the site. The park should be designed with at least 8 foot sidewalks and staircases. Additionally, staircases should be designed with bicycle channels to facilitate bike connectivity;
- Construction scheduling and sequencing with other developments in the Market. The substantial amount of anticipated development in the Market will require close coordination on various aspects of the projects, including implementation of mitigations, construction staging, and traffic control plans; and
- Installation of two 240-volt electric car charging stations in the parking garage.

TRANSPORTATION ANALYSIS

DDOT requires applicants who request PUD approval from the Zoning Commission perform a Comprehensive Transportation Review (CTR) in order to determine the PUD's impact on the overall transportation network. Accordingly, an applicant is expected to show the existing conditions for each transportation mode affected, the proposed impact on the respective network, and any proposed mitigations, along with the effects of the mitigations on other travel modes. A CTR should be performed according to DDOT direction. The Applicant and DDOT coordinated on an agreed-upon scope for the CTR that is consistent with the scale of the action.

The review of the analysis is divided into four categories: site design, travel assumptions, analysis, and mitigations. The following review provided by DDOT evaluates the Applicant's CTR to determine its accuracy and assess the action's consistency with the District's vision for a cohesive, sustainable transportation system that delivers safe and convenient ways to move people and goods, while protecting and enhancing the natural, environmental, and cultural resources of the District.

Site Design

Site design, which includes site access, loading, and public realm design, plays a critical role in determining a proposed action's impact on the District's infrastructure. While transportation impacts can change over time, the site design will remain constant throughout the lifespan of the proposed development, making site design a critical aspect of DDOT's development review process. Accordingly, new developments must provide a safe and welcoming pedestrian experience, enhance the public realm, and serve as positive additions to the community.

Site Access

The site is located in the Florida Avenue Market, which is home to many wholesale, production, and warehousing business that generate significant numbers of truck trips and loading activities.

Vehicle site access is proposed from the existing Florida Avenue/3rd Street signalized intersection, in compliance with DDOT standards. Further study will be required during permitting to determine if improvements to the existing traffic signal may be needed. The Applicant will be responsible for any needed improvements.

The Florida Avenue Market Small Area Plan (SAP) identified a north-south pedestrian gateway in the vicinity of the site. The connection was envisioned as part of an expanded bicycle and pedestrian

network to serve development within the Market. The Applicant proposes to accommodate this connection in a proffered park to the west of the site adjacent to the train tracks. The land for the proposed park is owned by the Department of General Services. Future developments to the north will be expected to create a bicycle and pedestrian connection between Morse Street and the park. The Applicant has committed to funding and constructing the park. The park is located on a hill slope and will require substantial system of stairways in order to accommodate the grade. In order to ensure the park makes adequate pedestrian and bicycle connections, sidewalk widths of at least 8 feet should be provided throughout. Additionally, a bike channel should be provided on all staircases to assist with cyclists walking their bicycles up or down the hill.

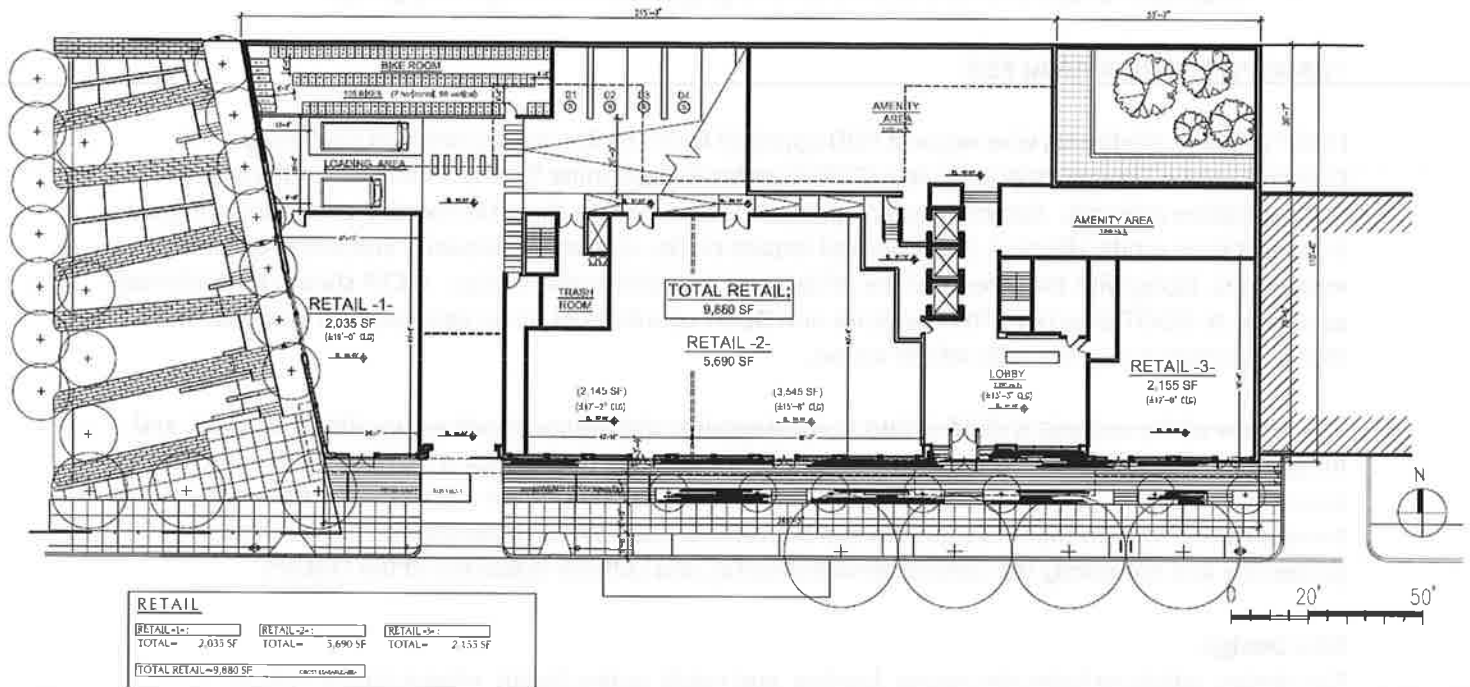


Figure 1 Site Design and Access (Source: Gorove/Slade)

Loading

DDOT's practice is to accommodate vehicle loading in a safe and efficient manner, while at the same time preserving safety across non-vehicle modes and limiting any hindrance to traffic operations. For new developments, DDOT requires that loading take place in private space and that no back-up maneuvers occur in the public realm. This often results in loading being accessed through an alley network.

Loading access is proposed from the existing Florida Avenue/3rd Street signalized intersection. The loading facilities are designed such that loading is accommodated with front-in/front-out movements in compliance with DDOT standards.

Florida Avenue does not include any space for curbside uses such as parking or loading, and therefore there are no opportunities load from the curbside. Thus, all loading must be accommodated on-site and loading activities from Florida Avenue will be prohibited. As currently designed, "Retail 3" does not have

direct access to the loading facilities via an interior service corridor, but it is accessible via the residential lobby. Loading materials will be required to be brought through the lobby.

Zoning requires that the Applicant provide at least one 30' berth for the retail use in addition to one 55' berth and a 20' service and delivery space for the residential use. The Applicant proposes one 30' berth and one 20' service and delivery space. In order to ensure that the requested loading relief does not adversely impact the surrounding roadway network, a loading management plan is proposed with the following elements:

- Designate a loading facility manager, who will coordinate with residents and retail vendors to schedule deliveries;
- Require that all residential and retail tenants schedule deliveries that utilize the loading dock.
- Schedule residential move-in/move-out activity so as not to conflict with regular retail deliveries or other day-to-day loading activities; and
- Prohibit trucks from delivering from Florida Avenue.

The final element of the plan should be clarified to make it explicit that loading shall not take place from the Florida Avenue curbside. Trucks accessing the on-site loading berths should route to the site using Florida Avenue since it is a designated truck route.

DDOT finds that the loading management plan as proposed sufficiently addresses loading impacts.

Streetscape and Public Realm

In line with District policy and practice, any substantial new building development or renovation is expected to rehabilitate streetscape infrastructure between the curb and the property lines. This includes curb and gutters, street trees and landscaping, street lights, sidewalks, and other appropriate features within the public rights of way bordering the site.

The Applicant must work closely with DDOT and the Office of Planning to ensure that the design of the public realm meets current standards and will substantially upgrade the appearance and functionality of the streetscape for public users needing to access the property or circulate around it. In conjunction with the District of Columbia Municipal Regulations, DDOT's *Design and Engineering Manual* will serve as the main public realm references for the Applicant. The proposal is generally consistent with the Florida Avenue Multimodal Safety Study, which will soon move into preliminary design. Final design of the streetscape will need to be coordinated to ensure compatibility with the Study. DDOT staff will be available to provide additional guidance during the public space permitting process. DDOT suggests that the Applicant participate in a Preliminary Design Review Meeting (PDRM) to address design related issues prior to the submission of public space permit applications.

Preliminary site plans show utility vaults in the public space along Florida Avenue. DDOT's approach to utility vaults is to allow vaults in public space only when they cannot be located on private property. If in public space, vaults must be surrounded by landscaping on at least three sides or solid-cover vaults must be used. If vaults are proposed as shown in the site plan, the Applicant will be required to install solid-cover vaults. The Applicant will need to coordinate with DDOT on the vault location and treatment during the public space permitting process.

The Applicant's plans show a series of canopies extending laterally along a significant portion of the building façade and projecting a maximum of 9 feet from the building façade. The canopies, as shown, do not meet regulations for canopies and will require a modification from the Building Code. The final design of the canopies will be addressed during permitting.

Sustainable Transportation Elements

Sustainable transportation measures target to promote environmentally responsible types of transportation in addition to the transportation mode shift efforts of TDM programs. These measures can range anywhere from practical implementations that would promote use of vehicles powered by alternative fuels to more comprehensive concepts such as improving pedestrian access to transit in order to increase potential use of alternative modes of transportation. Within the context of DDOT's development review process, the objective to encourage incorporation of sustainable transportation elements into the development proposals is to introduce opportunities for improved environmental quality (air, noise, health, etc.) by targeting emission-based impacts.

The Applicant has pledged to provide electric vehicle car charging capability in up to 5% of garage parking spaces, which equates to 2-3 spaces. DDOT finds this level of charging station provision to be appropriate.

Travel Assumptions

The purpose of the CTR is to inform DDOT's review of a proposed action's impacts on the District's transportation network. To that end, selecting reasonable and defensible travel assumptions is critical to developing a realistic analysis.

Background Developments and Regional Growth

As part of the analysis of future conditions, DDOT requires applicants to account for future growth in traffic on the network or what is referred to as background growth. The Applicant coordinated with DDOT on the appropriate background developments to include in the analysis. Projects that were reasonably expected to be approved and constructed were included in the analysis. Thirteen background developments were included.

DDOT also requires applicants account for regional growth. This can be done by assuming a general growth rate, evaluating growth forecasts in MWCOC's regional travel demand model, or analyzing DDOT's historical average daily traffic (ADT) rates. Analysis of historical ADT revealed no vehicular growth on roadways in the study area, thus no regional growth was assumed.

Off-Street Vehicle Parking

The overall parking demand created by the development is primarily a function of land use, development square footage, price, and supply of parking spaces. However, in urban areas, other factors contribute to the demand for parking, such as the availability of high quality transit, frequency of transit service, and proximity to transit.

A total of 143 off-street parking spaces are proposed for the site compared to 88 spaces required by zoning. No parking is proposed for retail shoppers, but several spaces may be available for retail employees.

A summary of the site's parking is included below:

Land Use	Required	Proposed	# of Spaces in Excess of Zoning
Residential	79	143	64
Retail	9	0	[9]
TOTAL	88	143	55

The residential parking provision of about one space per two units is generally consistent with but slightly higher than other recent projects in similar walkable, transit-friendly neighborhoods.

Trip Generation

The Applicant provided trip generation estimates utilizing the Institute of Traffic Engineers (ITE) Trip Generation Manual. The Applicant utilized the following ITE land uses in their trip generation estimation:

- Residential: Apartment (Land Use Code 220)
- Retail: Shopping Center (Land Use Code 820)

No pass-by reduction was utilized. DDOT finds the use of these ITE codes appropriate.

Each trip a person makes is made by a certain means of travel, such as vehicle, bicycle, walking, etc. The means of travel is referred to as a "mode" of transportation. A variety of elements impact the mode of travel, including density of development, diversity of land use, design of the public realm, availability and cost of parking, among many others.

The Applicant utilized mode splits used in analyses of other PUDs in the vicinity. Of note, the Applicant did not claim any vehicle trip reductions from internal capture, pass-by, or diverted link trip percentages as these are captured in the peak hour mode splits.

Based on the trip generation and mode split assumptions discussed above, the action is expected to generate a significant number of new vehicle, transit, and pedestrian trips and a moderate number of bicycle trips.

Total Trip Gen Summary

Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Auto	20 veh/hr	66 veh/hr	86 veh/hr	74 veh/hr	44 veh/hr	118 veh/hr
Transit	19 veh/hr	59 veh/hr	78 veh/hr	68 veh/hr	41 veh/hr	109 veh/hr
Bike	3 veh/hr	4 veh/hr	7 veh/hr	7 veh/hr	4 veh/hr	11 veh/hr
Walk	5 veh/hr	11 veh/hr	16 veh/hr	16 veh/hr	10 veh/hr	26 veh/hr

Figure 2 Peak Hour Trip Generation (Source: Gorove/Slade)

Study Area and Data Collection

The Applicant in conjunction with DDOT identified seven intersections where level of service and vehicle queuing analysis would be performed. These intersections are immediately adjacent to the site and include intersections radially outward from the site that has the greatest potential to see moderate to significant increases in vehicle delay.

The Applicant utilized some data collected as part of the Gateway Market PUD (ZC 06-40C) and additional intersection data collected in 2014 and 2015. In general, DDOT agrees with the time frame and collection dates. None of the collection dates occurred during Congressional recess or outside of the DC Public School calendar.

Roadway Improvements

DDOT is currently studying the area in the vicinity of the site as part of the Florida Avenue Multimodal Study. The study is likely to recommend changes to the road network in order to better and more safely accommodate multiple modes of travel. The Applicant coordinated with DDOT on the roadway conditions to assume in the background and future scenarios, which included likely recommendations for Florida Avenue and 6th Street cross sections from the study.

Analysis

To determine the action's impacts on the transportation network, a CTR includes an extensive multi-modal analysis of the existing baseline conditions, future conditions without the proposed action, and future conditions with the proposed development. The Applicant completed their analysis based on the assumptions described above.

Roadway Capacity and Operations

DDOT aims to provide a safe and efficient roadway network that provides for the timely movement of people, goods and services. As part of the evaluation of travel demand generated by the site, DDOT requests analysis of traffic conditions for the agreed upon study intersections for the current year and after the facility opens both with and without the site development or any transportation changes.

Analysis provided by the Applicant shows that three intersections within the study area operate under failing conditions as measured by Level of Service (LOS) in the analysis years during one or more peak periods. However, none of these intersections are substantially degraded as a result of the action. The action is expected to minimally exacerbate failing conditions at these intersections:

- Florida Avenue/4th Street
- Florida Avenue/6th Street
- Florida Avenue/New York Avenue/O Street

A number of signal timing adjustments are suggested. DDOT will review the proposed signal timing changes to determine their appropriateness during permitting.

Transit Service

The District and Washington Metropolitan Area Transit Authority (WMATA) have partnered to provide extensive public transit service in the District of Columbia. DDOT's vision is to leverage this investment to increase the share of non-automotive travel modes so that economic development opportunities increase with minimal infrastructure investment.

The northern edge of the site is located approximately 0.2 miles, roughly a 4 minute walk, from the NoMa-Gallaudet U Metro Station. The station is served by the Red Line.

The site is well-served by high-frequency bus routes. Bus routes include:

- 90, 92, 93 – U Street – Garfield Line
- X3 – Benning Road Line

These bus routes provide frequent service with peak hour headways less than 10 minutes. The closest bus stops are adjacent to the site at 3rd Street/Florida Avenue. The site is approximately 0.5 miles from the future H Street Streetcar Line.

WMATA's analysis of bus load factors revealed overcrowding conditions on the 90 Line. A recent study of the route recommended a WMATA Express route for this line in the future in order to reduce overcrowding and expand capacity. The action will increase demand for transit services on the 90 line.

Pedestrian Facilities

The District of Columbia is committed to enhance the pedestrian accessibility by ensuring consistent investment in pedestrian infrastructure on the part of both the public and private sectors. DDOT expects new developments to serve the needs of all trips they generate, including pedestrian trips. Walking is expected to be an important mode of transportation for this development.

The Applicant's analysis identified the curb ramps at the intersection of Florida Avenue/3rd Street in immediate proximity to the site as being in compliance with DDOT standards. However, all six ramps are missing the required landing area behind the curb ramps and are therefore not up to current DDOT standards. Such deficiencies are an obstacle to a clear and accessible path between the site and the NoMa-Gallaudet U Metro Station. The Applicant will be required to upgrade all adjacent pedestrian facilities to current DDOT standards during the permitting process. The analysis also revealed a gap in the sidewalk network along the west side of 3rd Street between N Street and Florida Avenue and along the north side of N Street between 3rd Street and Florida Avenue. These gaps are expected to be remedied by future developments. Deficiencies along Florida Avenue will be repaired as part of ZC 06-40C as well as the Florida Avenue Multimodal Study implementation.

Significant substandard pedestrian facilities exist in the interior of the Market. Other developments in the Market will upgrade the pedestrian facilities on 4th Street between Florida Avenue and Morse Street, the south side of Neal Place between 4th Street and 5th Street, and along the 5th Street and 6th Street frontages adjacent to ZC 14-12. Such connections between the subject site and other pipeline developments in the Market will allow adequate and safe pedestrian connections between the subject site and other destinations in the Market. Pedestrian infrastructure within the Market will continue to be improved as the area redevelops.

Bicycle Facilities

The District is committed to enhance bicycle access by ensuring consistent investment in bicycle infrastructure by both the public and private sectors. DDOT expects new developments to serve the needs of all trips they generate, including bicycling trips. The closest Capital Bikeshare station with 23 docks is located two blocks from the site at the 6th Street/Neal Place intersection. The site is located in

close proximity to a southbound bicycle lane on 4th Street south of Florida Avenue and a northbound bicycle lane on 6th Street south of Florida Avenue. DDOT recently installed a two-way cycle track on 6th Street north of Florida Avenue. Future plans include a concept for a multiuse trail along New York Avenue that will connect through the Market area via railroad right of way to the west of 4th Street.

The Applicant is required to provide between 105 long-term bicycle parking spaces, which is the minimum required. Site plans indicate a location in the northwest corner of the parking garage's first floor, which will serve as a convenient and easily accessible location for bicycle storage. A walkway within the parking garage will provide a pedestrian connection between the bicycle storage room and the lobby. The Applicant has not specified the proposed number or location of short-term bicycle parking spaces to be located in the public space adjacent to the site.

Safety

DDOT requires that the Applicant conduct a safety analysis to demonstrate that the site will not create new, or exacerbate existing, safety issues for all travel modes. DDOT asks for an evaluation of crashes at study area intersections as well as a site distance analysis along the public space where there is expected to be conflicts between competing modes (e.g. crosswalks, driveway entrances, etc.).

The Applicant's analysis of 2011 to 2013 DDOT crash data reveals three intersections within the study area that have a crash rate of 1.0 Million Entering Vehicles (MEV) or higher. A significant portion of the crashes are designated as "rear end" or "side swipe" crashes.

Intersection	Rate per MEV	Right Angle	Left Turn	Right Turn	Rear End	Side Swiped	Head On	Parked	Fixed Object	Ran Off Road	Ped. Involved	Backing	Non-Collision	Under/Over Ride	Unspecified	Total
Florida Avenue & 3rd Street NE	3.26	6	5	2	18	11	0	0	1	0	1	0	0	0	4	48
		13%	10%	4%	38%	23%	0%	0%	2%	0%	2%	0%	0%	0%	8%	
Florida Avenue & New York Avenue NE	3.82	7	9	4	59	64	2	2	1	1	2	1	1	0	6	159
		4%	6%	3%	37%	40%	1%	1%	1%	1%	1%	1%	1%	0%	4%	
Florida Avenue & 1st Street NE	1.65	1	2	4	4	24	2	0	0	0	0	0	0	0	1	38
		3%	5%	11%	11%	63%	5%	0%	0%	0%	0%	0%	0%	0%	3%	

Figure 3 Elevated Crash Rate Intersections by Crash Type (Source: Gorove/Slade)

The Florida Avenue Multimodal Study will recommend geometric and operational changes to promote safety in the broader study area, particularly on Florida Avenue. Additionally, the removal of an existing high-use curb cut associated with the existing fast food use on the site will promote safety by reducing conflict points and exposure.

Mitigations

As part of all major development review cases, DDOT requires the Applicant to mitigate the impacts of the development in order to positively contribute to the District's transportation network. The mitigations must sufficiently diminish the action's vehicle impact and promote non-auto travel modes. This can be done through Transportation Demand Management (TDM), physical improvements, operations, and performance monitoring.

DDOT preference is to mitigate vehicle traffic impacts first through establishing an optimal site design and operations to support efficient site circulation. When these efforts alone cannot properly mitigate an action's impact, TDM measures may be necessary to manage travel behavior to minimize impact. Only when these other options are exhausted will DDOT consider capacity-increasing changes to the transportation network because such changes often have detrimental impacts on non-auto travel and are often contrary to the District's multi-modal transportation goals.

The following analysis is a review of the Applicant's proposed mitigations and a description of DDOT's suggested conditions for inclusion in the PUD.

Transportation Demand Management

As part of all major development review cases, DDOT requires the Applicant to produce a comprehensive Transportation Demand Management (TDM) plan to help mitigate an action's transportation impacts. TDM is a set of strategies, programs, services, and physical elements that influence travel behavior by mode, frequency, time, route, or trip length in order to help achieve highly efficient and sustainable use of transportation facilities. In the District, this typically means implementing infrastructure or programs to maximize the use of mass transit, bicycle and pedestrian facilities, and reduce single occupancy vehicle trips during peak periods. The Applicant's proposed TDM measures play a role in achieving the desired and expected mode split.

The specific elements within the TDM plan vary depending on the land uses, site context, proximity to transit, scale of the development, and other factors. The TDM plan must help achieve the assumed trip generation rates to ensure that an action's impacts will be properly mitigated. Failure to provide a robust TDM plan could lead to unanticipated additional vehicle trips that could negatively impact the District's transportation network.

The specific elements within the TDM plan vary depending on the land uses, site context, proximity to transit, scale of the development, and other factors. The TDM plan must help achieve the assumed trip generation rates to ensure that an action's impacts will be properly mitigated. Failure to provide a robust TDM plan could lead to unanticipated additional vehicle trips that could negatively impact the District's transportation network.

The Applicant proposes the following TDM strategies:

- Designate a Transportation Management Coordinator responsible for organizing and marketing the TDM plan;
- Price parking at market rates and unbundle parking costs from the price of lease or purchase;
- Provide move-in packets with information about transportation options;
- Hold annual used bicycle drives for residents;
- Provide 105 long-term bicycle parking spaces;
- Install a bicycle maintenance facility in the bicycle room;
- Install a transit information screen in the residential lobby;
- Provide priority parking spaces in the garage for fuel-efficient vehicles; and
- Provide a onetime, one year carshare or bikeshare membership or one year carshare membership to initial residents. The number of memberships will be capped at 315.

DDOT finds the TDM plan to a good basis for encouraging non-auto travel. However, the Applicant should commit to provide at least 9 short-term bicycle parking stations. The final design, including location, of short-term bicycle facilities will be determined during the public space permitting process.

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