# GOVERNMENT OF THE DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

#### **MEMORANDUM**

TO:

District of Columbia Board of Zoning Adjustment

FROM:

Samuel Zimbabwe

**Associate Director** 

DATE:

March 8, 2016

SUBJECT:

BZA Case No. 19217 - 618 T Street NW

#### PROJECT SUMMARY

MR 608 T Contract, LLC (the "Applicant") requests variances from the loading requirements under § 2201 and the height requirements under § 2604.2 to permit construction of a seven-story mixed-use building in the ARTS overlay C-2-B District at premise 608,610,614 and 618 T Street NW (Square 441, Lots 32, 33, 35, and 852). The proposed development includes:

- 59-79 residential dwelling units
- 7,420 square feet of retail
- 26-43 below grade parking spaces
- 21-31 long-term bicycle parking spaces

#### SUMMARY OF DDOT REVIEW

DDOT is committed to achieve an exceptional quality of life in the nation's capital by encouraging sustainable travel practices, safer streets, and 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, DDOT finds:

## Site Design

- Access to the parking garage will be via proposed curb cut at Wiltberger Street, which has already been conceptually approved by the Public Space Committee; and
- Loading for the retail and residential units is proposed to occur from the existing public alley.

## **Travel Assumptions**

- The action is expected to generate a low number of new vehicle, transit, bicycle, and pedestrian trips; and
- The site is well served by Metrobus and Metrorail.

## **Analysis**

- The Applicant utilized sound methodology to perform the analysis;
- The action is projected to minimally impact the capacity at surrounding intersections;
- Existing transit service should have capacity to accommodate future demand;
- The Applicant shows adequate long-term bicycle parking facilities;
- The Applicant proposes an insufficient Transportation Demand Management (TDM) plan intended to further promote the use of non-auto travel options.

# Mitigations

DDOT finds the requested variances are appropriate provided that the Applicant:

- Provide a loading management plan required by DDOT at the time of permitting;
- Provide six additional short-term bicycle parking spaces;
- Install a Transit Screen or similar device displaying real-time transportation schedules; and
- Provide Capital Bikeshare and carshare annual memberships to all residential tenants and retail employees for a period of one year.

## **Continued Coordination**

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

- Public space, including design of the curb cut, 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. These elements will be further coordinated as part of the public space permitting process; and
- Provisions for a Loading Management Plan to be submitted during DDOT's permitting process.

#### TRANSPORTATION ANALYSIS

DDOT required a Comprehensive Transportation Review (CTR) in order to determine the action'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 abuts Ellington Plaza to the north and Wiltberger Street to the west, with public alleys to south and east. Florida Avenue is the major street to the north of the site, adjacent to Ellington Plaza. The Applicant proposed primary pedestrian and bicycle access from Ellington Plaza. Vehicular access to the site is from Wiltberger Street or Florida Avenue. Wiltberger is a one-way street that can be accessed via the T Street/ 7<sup>th</sup> Street intersection. Access to below-grade parking is proposed via a curb cut from Wiltberger Street that has been approved by the Public Space Committee as shown.

All service vehicles including delivery and trash trucks are proposed to access the site via the public alley east of the site from Florida Avenue. Truck back-in maneuvers will occur within the public alley.

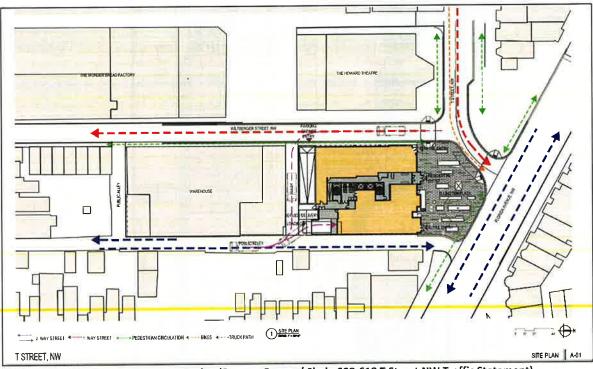


Figure 1 Site Access Plan (Source: Gorove/ Slade 608-618 T Street NW Traffic Statement)

## 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.

The Applicant is requesting relief from loading requirements; proposing to include one 30-foot loading berth and one 20-foot service/ delivery space in lieu of the required provisions for residential (one 55-foot loading berth and one 20-foot service/ delivery space) and retail (one 30-foot loading berth and one 20-foot service/delivery space). The loading and service/ delivery space is proposed to be located at the southeast corner of the site with direct access from the south and east public alleys. The Applicant's analysis includes truck turning diagrams showing that truck maneuvers can accommodate movements without backing into public space consistent with DDOT standards. DDOT finds a 30-foot loading berth and a 20-foot service/ delivery space are sufficient to accommodate loading demand and will have no adverse impacts on the travel conditions of the District's transportation network.

Considering that the Applicant is seeking a loading variance and due to congested alley conditions, DDOT will require the Applicant to submit a Loading Management Plan as part of the public space permitting process to minimize congestion and ensure efficient loading.

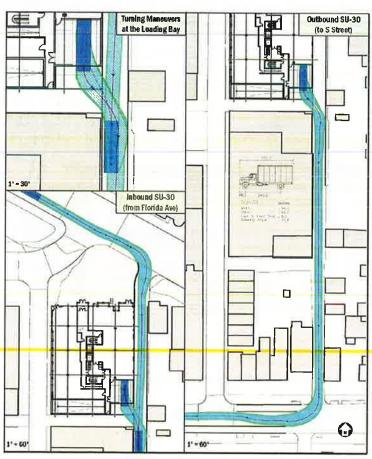


Figure 2: 30' Truck Maneuverability Diagram (Source: Gorove/ Slade 608-618 T Street NW Traffic Statement)

## 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. DDOT staff will be available to provide additional guidance during the public space permitting process.

## **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.

#### Trip Generation

The Applicant provided trip generation estimates utilizing the Institute of Traffic Engineers (ITE) Trip Generation Manual. The site is located in a highly urbanized setting, with area with a robust transit network, pedestrian access to goods and services within a quarter-mile of site, and an adequate bicycle network; as such, DDOT finds the trip generation methodology appropriate.

Each trip a person makes is made by a certain means of travel, such as vehicle, bicycle, walking, and transit. 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 used census data for residential mode split assumptions and used WMATA's 2005 Development-Related Ridership Survey and mode splits used for recently developed sites.

	Mode Split								
Land Use	Auto	Transit	Bike	Walk					
Residential	40%	40%	5%	15%					
Retail	25%	50%	5%	20%					

Figure 3: Mode Split Summary (Source: Gorove/ Slade 608-618 T Street NW Traffic Statement)

Of note, trip generation for the residential used were based on the previous upper limit of 69 dwelling units in lieu of the revised upper limit of 79 dwelling units submitted on 3/1/16. Based on the trip generation and mode split assumptions discussed above, the Applicant predicted the following level of weekday peak hour trip generation:

Mode Land Use	THE PARTY OF	AM Peak Hou	ar and	PM Peak Hour					
	Lund OSC	In	Out	Total	In	Out	Total		
Auto	<b>Apartments</b>	4 veh/hr	11 veh/hr	15 veh/hr	14 veh/hr	8 veh/hr	22 veh/hr		
Auto	Retail	1 veh/hr	1 veh/hr	2 veh/hr	3 veh/hr	4 veh/hr	7 veh/hr		
Auto	Total	5 veh/hr	12 veh/hr	17 veh/hr	17 veh/hr	12 veh/hr	29 veh/hr		
Transit	Apartments	4 ppl/hr	13 ppl/hr	17 ppl/hr	16 ppl/hr	9 ppl/hr	25 ppl/hr		
Transit	Retail	4 ppl/hr	2 ppl/hr	6 ppl/hr	12 ppl/hr	13 ppl/hr	25 ppl/hr		
Transit	Total	8 ppl/hr	15 ppl/hr	23 ppl/hr	28 ppl/hr	22 ppl/hr	50 ppl/hr		
Bike	Apartments	0 ppl/hr	2 ppl/hr	2 ppl/hr	2 ppl/hr	1 ppl/hr	3 ppl/hr		
Bike	Retail	0 ppl/hr	1 ppl/hr	1 ppi/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr		
Bike	Total	0 ppl/hr	3 ppl/hr	3 ppl/hr	3 ppl/hr	3 ppl/hr	6 ppl/hr		
Walk	Apartments	1 ppl/hr	5 ppl/hr	6 ppl/hr	6 ppl/hr	3 ppl/hr	9 ppl/hr		
Walk	Retail	1 ppl/hr	1 ppl/hr	2 ppl/hr	5 ppl/hr	5 ppl/hr	10 ppl/hr		
Walk	Total	2 ppl/hr	6 ppl/hr	8 ppl/hr	11 ppl/hr	8 ppl/hr	19 ppl/hr		

Figure 4: Multi-Modal Trip Generation Summary (Source: Gorove/ Slade 608-618 T Street NW Traffic Statement)

DDOT guidance suggests that a more comprehensive vehicular traffic analysis be completed if various thresholds for added traffic are met, which could signify the potential for impacts to the surrounding street network. Trip generation based on the revised 79 dwelling units will increase by two trips in the morning peak hour and three trips in the afternoon peak hour, which does not meet DDOT's threshold of 25 vehicles in the peak direction. As such, a more comprehensive vehicle traffic analysis was not required, as impacts to the surrounding vehicle network are expected to be minimal. However, the Applicant did include analysis of the four nearest intersections.

## 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.

The Applicant performed a capacity analysis based on traffic volume scenarios for existing conditions, background conditions, and future conditions. The following four intersections were analyzed for capacity:

- T Street & Wiltberger Street;
- Florida Avenue and T Street;
- Florida Avenue and Public Alley east of the site; and
- S Street and Public Alley east of the site.

The capacity analysis shows that, with the proposed development, the surrounding intersections will continue to operate at acceptable levels.

Intersection	Approach	Existing Conditions			Future Background Conditions (2017)			Total Future Conditions (2017)					
		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
T St & Wiltberger St	Eastbound	0.0	Α	0.0	Α	0,0	Α	0.0	Α	0.0	Α	0.0	Α
Florida Ave & T St	Northbound	11.6	В	12.9	В	12.1	В	13.1	В	12.1	В	13.1	В
Florida Ave & Alley	Westbound Left	0.2	Α	0.3	Α	0.2	Α	0.3	Α	0.2	Α	0.3	A
	Northbound	15.7	С	15.4	C	16.4	С	15.6	С	16.4	C	15.6	С
S St & Wiltberger St	Southbound	14.1	В	14.4	В	14.2	В	14.6	В	14.5	В	14.9	В
S St & Alley	Eastbound Left	0.1	Α	0.1	Α	0.1	Α	0.1	A	0.1	A	0.1	Α
	Southbound	12.9	В	13.7	В	13.0	В	13.8	В	13.0	8	13.9	В

Figure 5: Vehicular Capacity Analysis Results (Source: Gorove/ Slade 608-618 T Street NW Traffic Statement)

#### **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 is site located approximately 0.1 miles, roughly a one minute walk, from the Shaw-Howard Metro Station that serves the Green and Yellow Line.

The site is also well-served by high-frequency bus routes. The closest bus stop is located approximately 348 feet, roughly a one minute walk, at 7<sup>th</sup> Street and T Street. Additional bus routes the site is served by include:

- 90, 92, 93 U Street-Garfield
- 96 East Capitol Cardozo
- X3 Benning Road Line
- 70 Georgia Avenue/ 7<sup>th</sup> Street
- 79 Georgia Avenue MetroExtra Line

#### Pedestrian Facilities

The District 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 performed an inventory of the pedestrian infrastructure within a quarter-mile of the site and noted that most of the pedestrian infrastructure is within acceptable conditions. The five-foot wide sidewalks along Wiltberger Street does not meet current DDOT Standards of 6-feet wide; however, due to the narrow right-of-way and allocation of private space, the Applicant may leave the sidewalk in existing condition which meets ADA minimum clearance.

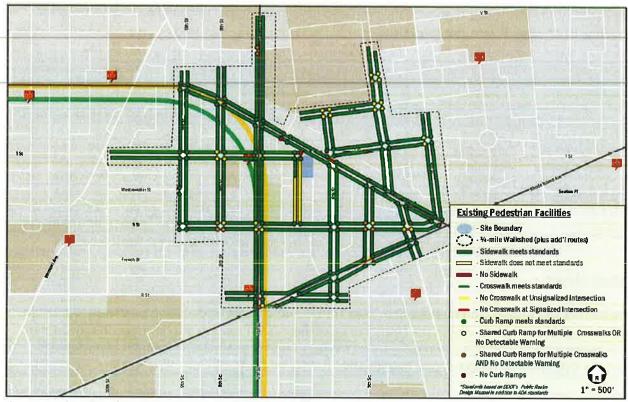


Figure 6: Pedestrian Infrastructure (Source: Gorove/ Slade 608-618 T Street NW Traffic Statement)

## **Bicycle Facilities**

The District of Columbia 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.

Ellington Plaza directly north of the site has six existing short term bicycle parking spaces. DDOT requests that the Applicant provides six additional short-term parking spaces as part of the Transportation Demand Management (TDM) strategies discussed in Mitigations.

The Applicant is proposing 21-28 long-term bicycle parking spaces within the parking garage, which meets existing zoning requirements.

Two Capital Bikeshare stations are located within a quarter-mile from the site. The station at 7<sup>th</sup> and T Street has 14 docks and the station at 7<sup>th</sup> and R Street has 13 docks.

#### Off-Street Vehicle Parking

The overall parking demand created by the development is primarily a function of land use, development square footage, and price/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.

The Applicant proposes 26 – 43 off-street parking spaces are proposed for the site. The upper limit of proposed off-street parking exceeds zoning requirements by 11 spaces.

# 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 DDOT's suggestions for inclusion.

#### Transportation Demand Management

As part of all major development review cases, DDOT requires the Applicant to produce a comprehensive 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 Applicant proposed the following TDM strategies:

- Provisions for bicycle parking/storage facilities that meet or exceed zoning requirements;
- Restrict the project from being included as RPP eligible;
- Unbundling the cost of residential parking from the cost of lease or purchase for the majority of the units; and
- Identifying a TDM Leader that will work with residents in the building to distribute and market various transportation alternatives and options.

DDOT finds these measures insufficient, and some should not be considered TDM measures. Specifically, the bicycle parking required by zoning is not a TDM measure. In addition, DDOT observes the Applicant

is proposing a Residential Permit Parking (RPP) restriction, which is not a strictly enforceable condition by the District and therefore the restriction may not realize its intended outcome. As such, DDOT requests the following additions to the Applicant's TDM plan:

- Provide six additional short-term bicycle parking spaces;
- Install a Transit Screen or similar device displaying real-time transportation schedules; and
- Provide Capital Bikeshare and carshare memberships to all residential tenants and retail employees for a period of one year.

These TDM measures, if implemented as planned, will encourage the use of alternative modes of transportation.

SZ:rj