GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION

d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: Director, Office of Zoning

FROM: Samuel Zimbabwe
Associate Director, PPSA
District Department of Transportation

DATE: February 19, 2013

SUBJECT: **BZA Case #18506,** 1700 Columbia Road, NW

APPLICATION

1700 Columbia Road, LLC (the "Applicant"), pursuant to 11 DCMR §§ 3104.1 and 3103.2, is seeking a special exception from the roof structure provisions under subsection 777.1 (subsections 441.2, 441.3 and 441.5), a variance from the off-street parking requirements under subsection 2101.1, and a variance from the loading berth and delivery space provisions under subsection 2201.1, to allow a mixed-use residential and retail project in the C-2-B District at premises 1700 Columbia Road, N.W. (Square 2565, Lot 52). Specifically, the Applicant is requesting transportation-related zoning relief from all on-site all on-site loading requirements and from 8 of the required 37 on-site vehicle parking spaces.

RECOMMENDATIONS IN BRIEF

The purpose of DDOT's review is to assess the potential impact of the project to determine if it will, "affect adversely, the use of neighboring property in accordance with the Zoning Regulations and Zoning Maps" (§3104.01). The project incorporates a variety of positive features. For example, trash-pick up is curbside along 17th Street; this is a superior alternative to a prior site design, which required backing-up movements across public space – a loading maneuver which DDOT generally opposes. Further, the Applicant is positioning 8 bicycle spaces on the ground floor level for retail employees to encourage transportation modes in line with area's infrastructure and high bike usage. Finally, the Applicant has offered a Transportation Demand Management (TDM) package that DDOT believes will result in a lower single-occupancy-vehicle trip rate.

After an extensive multi-administration review, DDOT has no objection to the variance requests from loading or parking, but requests the following minor changes:

- Secure private bike parking is increased to 1 space per 2 residential units. Bike parking is currently offered at a ratio of approximately one space per 3 units, however as shown in this report, the biking demand is very high for this area of the District.
- The proposed curb cut along 17th Street should be designed such that the driveway width does not exceed 20 feet, the DDOT commercial minimum for 2-way travel, with curb return radii not

to exceed 6 feet. The narrower curb cut will serve the site's occupants and will reduce the risk of pedestrian conflicts in the public space. The need is even more critical in light of the adjacent elementary school on 17th Street.

- Install 16 bike spaces, 8 inverted U-racks, for short term public bike parking on-street. DDOT believes that given the existing biking demand in conjunction with the lack of retail vehicle parking provided by the Applicant, that 8 racks is the minimum needed to serve the retail component of this project.

DDOT believes the above requirements should be made a condition of Zoning Approval.

TRANSPORTATION ANALYSIS

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.

Methodology

As part of the transportation impact assessment, DDOT requests the applicant evaluate the impacts to the pedestrian, transit, and roadway system resulting from the development. Accordingly, the 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. The Comprehensive Transportation Review (CTR) should be performed according to DDOT direction. The evaluation should consider guidance from relevant documents including guidance on the public realm, the pedestrian system, the bicycle system, as well as neighborhood based studies. The Applicant and DDOT coordinated on an agreed-upon scope for the CTR. An evaluation of the basic elements and assumptions of the Applicant's CTR follows.

Site Access

The following figure shows proposed site access to Parcel 5 for pedestrians, bicyclists, and vehicles.

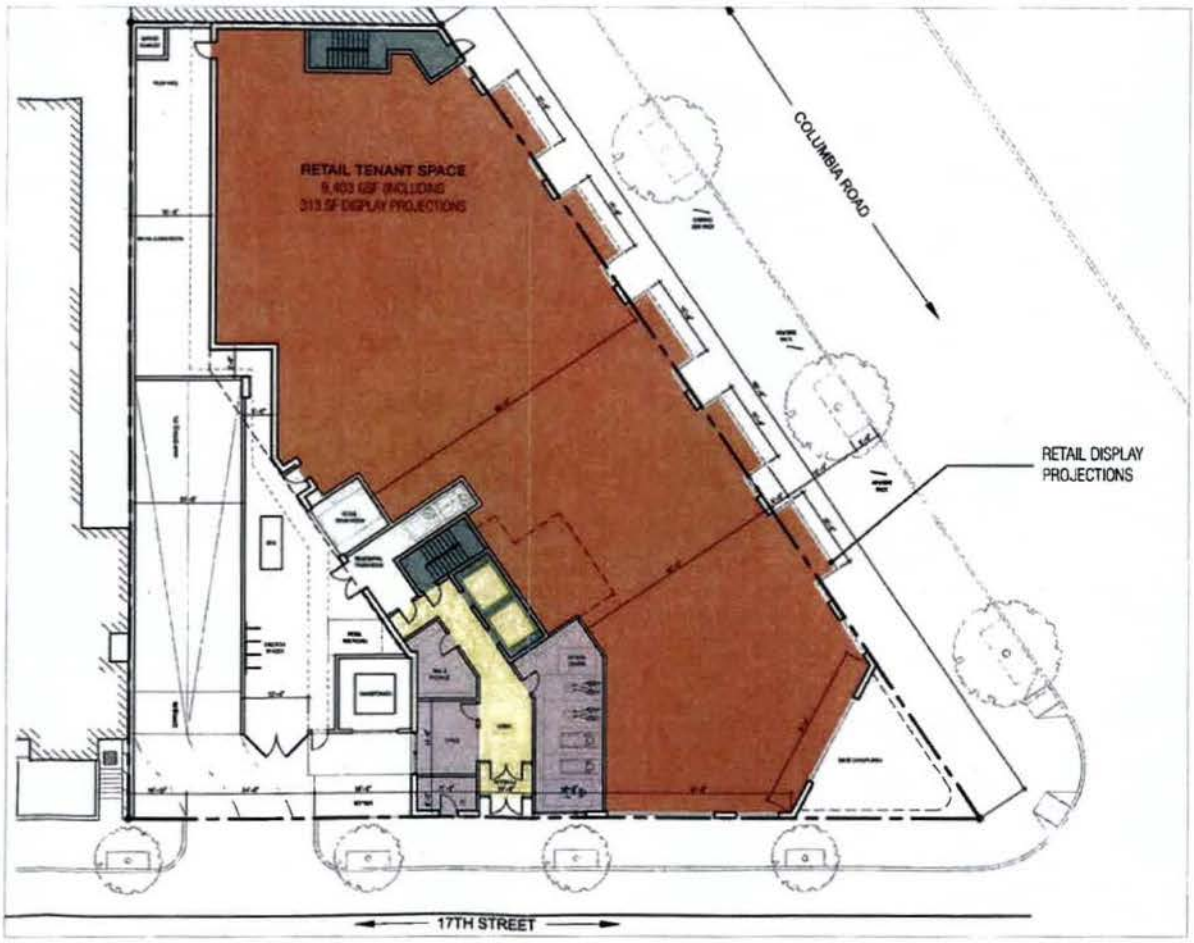

Figure 1: Proposed Site Layout and Access.

As shown in Figure 1, a curb cut is proposed on 17th Street for vehicle access to below-grade residential parking. This access also serves long-term bike parking as well. Pedestrian access to retail is from the sidewalk frontage along 17th Street and along Columbia Road. Pedestrian access to the residential units is via the ground floor lobby.

DDOT notes that the proposed 24' curb cut along 17th Street may be a residual design from a prior site plan that incorporated loading *on-site*. DDOT's preferred driveway width is 20 feet which coincides with the DDOT minimum for two-way vehicle traffic. While the curb cut is subject to the Public Space permitting process, DDOT notes that the given the proximity of the Site to a school and the high pedestrian activity in the area, the narrower curb cut is needed to reduce the speeds of vehicles as they ingress and egress across the sidewalk, and will not adversely impact the operations of the project.

Roadway Capacity and Operations

The Applicant and DDOT coordinated on scoping parameters for the roadway capacity and operations analysis, including study area, trip generation, travel distribution and data collection requirements.

Study Area and Data Collection

Based on the size of the project and existing conditions, the following intersections were identified for study:

- Ontario Road/Columbia Road
- 17th Street/Columbia Road
- 17th Street/Fuller Street
- 17th Street/Euclid Street

The Applicant collected existing pedestrian, bike and vehicle traffic during the AM and PM peak weekday commuting periods – 7:00 AM to 10:00 AM and 4:00 PM to 7:00 PM. This existing traffic data is utilized in conjunction with background growth\developments and site-generated trips to determine future build-out conditions. The future build-out conditions are compared with and without the trips generated by the site in order to determine the site's impact on the study area intersections.

Mode Split Site Trip Generation

The Applicant utilized the Institute of Traffic Engineer's (ITE) Trip Generation Manual to estimate the total trips generated by the site and then assumed vehicle trip reductions based on an estimate of the percentage of trips that would be made by biking or walking (or walking from transit). Mode split assumptions were based on WMATA's *2005 Development-related Ridership Survey*. The Applicant estimated that of the total trips generated for restaurant portion, 10% would be made by vehicle; for the residential portion, 61% would be made by vehicle; and for the retail portion, 100% would be made by vehicle. The Applicant utilized the "Specialty Retail" ITE code, without any trip reductions, to determine total *vehicle* trips. DDOT notes that this methodology does not yield *total* retail trips – only vehicle trips. Accordingly, the total trip estimation, while conservatively estimated for vehicles, will be significantly underestimated for non-vehicle trips. As noted by the Applicant, the retail will be "neighborhood serving," resulting in most trips generated by either walking or biking. The following table of vehicle and non-vehicle trips stems from the Applicant's estimated trip generation table.

Table 1: Trip Generation for vehicle trips and non-vehicle trips

Mode	Land Use	AM Peak Hour		PM Peak Hour	
		In	Out	In	Out
Vehicle Trips	Retail	9	9	15	18
	Restaurant	3	2	3	2
	Residential	5	22	26	13
	total	*17*	*33*	*44*	*33*
		50		*77*	
Non-vehicle Trips	Retail	0	0	0	0
	Restaurant	24	20	23	16
	Residential	4	14	16	9
	total	*28*	*34*	*39*	*25*
		62		*64*	

The Applicant further delineates the non-vehicle trips into walking (including walking from transit) and biking trips. The Applicant estimated that, of the 62 AM and 64 PM non-vehicle trips, only 5 would be biking in each peak hour, with the remaining being walking (or walking from transit).

DDOT notes that while the vehicle trip generation is conservative, the trip generation estimation neglected the *non-vehicle* trip generation of the "neighborhood serving" retail, resulting in a lower overall trip generation estimation than what DDOT expects. Further, DDOT believes that the percentage of non-vehicle trips allocated to biking is very low. The Applicant's existing conditions data (collected in

January 2013) shows that 38% of the AM non-motorized traffic that travels past the site is by bike and 19% of the PM non-motorized traffic is by bike[1]. It is reasonable to expect that the percentage of non-vehicle trips that are made by bike would be even higher in non-winter months.

DDOT believes that while the vehicle trip generation estimate is conservative, the estimated non-vehicle trip generation is significantly underestimated. This underestimation of non-vehicle trips, bike trips in particular, means that the Applicant is potentially underparked with regard to long-term and short-term bike parking.

Vehicle Level of Service Analysis
The Applicant utilized the Highway Capacity Manual software to analyze the Level of Service (LOS) and vehicle delay of the study area intersections, per DDOT's *Design and Engineering Manual*. The Applicant analyzed the projected levels of service for all approaches for each study area intersections, as well as each intersection's overall LOS. In order to determine the effect of Parcel 5 on the roadway capacity, the Applicant compared the levels of service for 2016, with and without the proposed project. A review of all intersections and their approaches showed minimal changes in average vehicle delay and no changes in LOS between the *build* and *no-build* condition at the study area locations. DDOT concurs that based on the conservative vehicle trip generation that the site expects to have minimal impact on the roadway network.

Passenger 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. With the site in relative proximity to high frequency and capacity transit, DDOT expects a significantly reduced need for on-site parking.

The Applicant is proposing to include 29 vehicle spaces in a below-grade garage that will only serve the residential portion of the program. The required amount of on-site parking, by zoning, is 37 spaces – 28 residential spaces and 9 retail spaces. As a result, the Applicant is requesting a variance from the zoning-required on-site spaces.

As noted by the applicant, many trips to and from the site will be made by modes other than passenger vehicle. Accordingly, DDOT has no objection to the parking variance request, provided that sufficient public and private bike parking is provided. A detailed discussion of bike parking needs is in the following section.

At DDOT's request, the Applicant conducted a curbside parking inventory in a two-block radius around the site in order to determine utilization rates at select times of day. Parking occupancy rates were measured in 30 minute intervals from 7:00 PM to 11:00 PM on Tuesday January 22, 2013. Occupancy rates varied between 94% and 97% for study period, indicating that, at peak demand, curbside parking has no practical capacity. Accordingly, the additional 8 spaces requested in the variance would have no measurable impact on the area's curbside parking supply, but could still potentially add vehicle traffic. In addition, the lack of parking availability will translate into many trips being by mode other modes – presumably walking and biking, resulting in the need to provide short term bike parking.

[1] Intersection #2, 17th & Columbia Road, Figures 5 and 6 (existing pedestrian and bike traffic counts) from the *February 1, 2013 Traffic Impact Study* by Wells + Associates.

Pedestrian and Bike Facilities

The District of Columbia is committed to enhancing the walk-ability and bike-ability of the city by ensuring consistent investment in pedestrian and bike infrastructure on the part of both the public and private sectors. DDOT generally expects new developments to serve the needs of all trips they generate, including pedestrian and bicycle trips. As noted previously, pedestrian access to retail and to the residential lobby will be from Columbia Road, which has sufficient clear zone width to accommodate existing and site generated pedestrian trips.

In the *Traffic Impact Study*, the Applicant discussed the Bike Master Plan and how it relates to the site, noting that per the 2005 Plan, the existing bicycling level of service is an "E" along the primary route past the site – Columbia Road. However, since the plan's adoption, bike lanes have been installed along both sides of Columbia Road, resulting in a Bicycle level of service of "A," which can be demonstrated by the relatively-high bicycle usage measured by the Applicant[2].

As further noted by the Applicant, there is a Capital BikeSharing Station at 16th & Harvard and at Adams Mill & Columbia Road. Publicly available usage data indicates that these two stations, combined, accommodated about 250 bike trips per day (150 originating trips and 100 ending destinations) over the last quarter of 2012 (October through December) indicating robust biking demand for this area, even in the colder months.

The Applicant is proposing 30 bike parking spaces in the below-grade garage; this number is in compliance with District law[3], requiring 1 bike space for every three residential units. However, DDOT notes that Adams Morgan has a very high bike commuting mode split, as evidenced by the Applicant's own AM peak hour counts and by the overall bike demand as shown by the Capital Bikeshare usage data. Further, recently-collected data on bike ownership rates at an adjacent neighborhood with similar density and demographics indicate a very high bike ownership rate. The measured ownership rate for bikes was 0.85 per household, which exceeded the car-ownership rate, serves as an additional driver for exceeding the minimum bike parking needs[4]. Accordingly, DDOT encourages the Applicant to supply bike parking at a higher rate, preferably one space for every two units (the proposed zoning regulations, currently in draft form, would require bike parking at a ratio of *one space for every unit*).

The Applicant is also proposing eight bicycle spaces for retail employees, accessible at the grade-level area in the rear portion of the retail component. DDOT agrees with both the need and the number of indoor bike spaces for retail employees.

Finally, with regard to short term bike parking, the Applicant is proposing 2 bike racks in public space to serve the needs of the retail portion of the project. As discussed previously, DDOT believes the Applicant underrepresented the bike demand for the site, particularly with regard to the retail component. Also, the Applicant is providing no on-site parking for the 9,400 square feet of retail, in area

[2] The Applicant counted over 100 bicyclists travelling past the site in both the AM and PM peak hour, per Figure 6 from the *February 1, 2013 Traffic Impact Study*, Wells + Associates.

[3] Section 8 of the Bicycle Commuter and Parking Expansion Act of 2007, effective February 2, 2008 (D.C. Law 17-103; D.C. Official Code § 50-1641.07) (2012 Supp.) and Mayor's Order 2011-149, dated September 6, 2011.

[4] "2011 TPB Geographically-Focused Household Travel Surveys Initial Results." *Slide 7, Logan Circle/ 14th St NW.* Metropolitan Washington Council of Governments. http://www.mwcog.org/uploads/committee-documents/k11dXIle20120517145044.pdf.

where there is very little curbside parking capacity. Given that the Applicant is required to provide 9 vehicle spaces for the retail component and the non-vehicle mode share is expected to be high, DDOT believes that installing 8 inverted U racks, 16 bicycle parking spaces, will appropriately address the parking demand for short term retail trips and residential guests.

Streetscape

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 & gutter, street trees and landscaping, street lights, sidewalks, and other appropriate features within the public rights of way bordering the site. As part of this process, the Applicant must work closely with DDOT and OP 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 circulating around it. The DDOT Public Realm Design Manual will serve as the main public realm references for the Applicant.

DDOT notes that the proposed curb cut and any alterations or improvements to the public space will have to be permitted through the DDOT. A Preliminary Design Review Meeting is strongly encouraged, prior to permit application.

Loading and Curbside Management

The Applicant is requesting relief from all on-site loading requirements – one 30' bay and one 5' bay and associated platforms. Instead, the Applicant is proposing to load curbside along Columbia Road at an existing loading zone that will be extended. Turning movement diagrams were provided by showing the difficulty in getting delivery trucks onto the site from 17th Street. Further, adding a loading curb cut to Columbia Road would be counter to DDOT's preference for avoiding curb cuts on roads classified as arterials[5]. Accordingly, DDOT has no objection to the Applicant utilizing the existing loading zone along Columbia Road. DDOT is currently planning on extending the specified loading zone. However, if DDOT does not extend the loading zone or if the loading zone has not been extended by the time of building occupancy, the Applicant may have to apply for a permit to extend it to 55 feet. DDOT will review the loading zone during the public space permitting process.

In addition, the Applicant is proposing a loading management plan that:

- Limits deliveries from 7:00 AM to 4:00 PM, Monday through Saturday.
- Prohibits idling of delivery trucks.
- Designates a Loading Coordinator for the site in order to coordinate residential loading.

DDOT agrees with this plan and believes it should be made a condition of Zoning approval.

Transportation Demand Management

As part of all major development review cases, DDOT requires the Applicant to produce a comprehensive Transportation Demand Management (TDM) plan. 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.

[5] Columbia Road is functionally classified as minor arterial.

The Applicant has proposed the following TDM plan:

- Provide $75 to each initial lessee or residential purchaser in the form of a pre-paid SmarTrip card, Capital BikeShare membership; or car sharing service.
- Coordinate with a car sharing service to determine the feasibility of locating car sharing vehicles in the adjacent public space, per DDOT approval and recommendation.
- Unbundle all on-site vehicle parking.

DDOT would prefer to only see an offer of membership to either Capital BikeShare or to a car sharing service as these services are most likely to encourage alternative mode use. However, DDOT agrees that these proposed strategies will assist in the reduction of vehicle trips generated by the site.

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