Government of the District of Columbia
Department of Transportation

d. Planning and Sustainability Division

MEMORANDUM

TO: Sara Bardin
Director, Office of Zoning

FROM: Jim Sebastian
Associate Director

DATE: November 22, 2019

SUBJECT: ZC Case No. 06-11Q/06-12Q/01-17E/06-11R – 2025 F Street NW (George Washington University Thurston Hall)

PROJECT SUMMARY

George Washington University (the "Applicant") seeks campus plan Modification of Significance to modify an approved Planned Unit Development ("Campus Plan/PUD") (06-11) in order to renovate Thurston Hall as part of the Foggy Bottom Campus and temporarily relocate student housing during renovation. The site is located at 1900 F Street NW (Square 0122, Lots 825). The Applicant is seeking to maintain the existing Thurston Hall building, but reduce the number of beds and gross floor area, and add a dining hall. During construction students will be located at One Washington Circle Hotel and The Aston which are not designated for undergraduate use as part of the Campus Plan. The modifications include:

- 850 beds (reduced from 1,080 existing beds);
- 186,789 SF (reduced from 190,430 SF);
- Maintain one (1) loading berth and platform;
- Zero (0) off-street vehicle parking spaces; and
- 36 long-term and 36 short-term bicycle parking spaces.

SUMMARY OF DDOT REVIEW

The District Department of Transportation (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, review of the case materials submitted by the Applicant, DDOT finds:

- Thurston Hall is undergoing internal renovation. The building is to remain with fewer beds and less square footage of usable space;
- No vehicle parking is proposed on site, which DDOT supports;
- The site is located in a pedestrian-oriented neighborhood and is well served by two (2) Metrorail stations and a campus shuttle;
- The Applicant is proposing 36 long-term in the cellar and 36 short-term bicycle parking facilities which exceeds the requirements of ZR16 Subtitle C § 802.6;
- Loading for the site is not proposed to change from the existing configuration with a curb cut on 19th Street NW. The current loading design is not consistent with modern DDOT standards because trucks are not able to maneuver head-in and head-out across public space. The Applicant has proposed a Loading Management Plan (LMP), which DDOT finds acceptable; and
- The action is expected to generate a small number of vehicle, transit, bicycle, and pedestrian trips in either the temporary or final condition. Accordingly, DDOT did not require a traffic impact analysis (TIA);
- The assumed non-auto modes splits are achievable as the campus is predominately pedestrian oriented;
- The action is projected to minimally impact existing travel delay in the temporary condition and reduce trips at Thurston Hall in the final condition;
- The proposed Transportation Demand Management (TDM) Plan in the October 18, 2019 CTR for the temporary relocation of students is sufficient; and
- The Traffic Management Program (TMP) for the overall campus will cover the renovated Thurston Hall and does not need to be updated with this application. DDOT looks forward to revisiting the TMP during the next Campus Plan update.

Recommendation

DDOT has no objection to the requested Modifications with the following conditions included in the Zoning Order:

- Implement the proposed LMP for the life of the project, as outlined in the Draft Conditions of Approval (Exhibit 17B); and
- Implement the proposed TDM Plan for the temporary relocation of students, as outlined later in this report.

Continued Coordination

The Applicant is expected to continue to work with DDOT outside of the Zoning Commission process on the following matters:

- 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. Careful attention should be paid to pedestrian and bicycle connections along the site's perimeter and adjacent infrastructure;

- Provide a curbside management and signage plan, assumed to include multi-space meter installation at the Applicant's expense, consistent with current DDOT policies; and

TRANSPORTATION ANALYSIS

DDOT requires applicants requesting an action from the Zoning Commission complete 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. A capacity analysis was not warranted because trips do not meet the threshold. The CTR submission focused on a Loading Management Plan and the temporary and final conditions.

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 October 18, 2019 CTR, prepared by Gorove/Slade Associates, 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 bounded by F Street to the north, 19th Street to the east, George Washington University Alumni House to the west, and mixed-use to the south. Access to the main pedestrian entrance is on F Street NW and the project is proposing two new emergency egress areaways: one on F and 19th Streets NW. There is no on-site vehicle parking and loading is proposed to occur where it currently does from a curb cut on 19th Street NW. Long-term bicycle parking is located in a bicycle room on the ground floor. A site plan is shown in Figure 1.

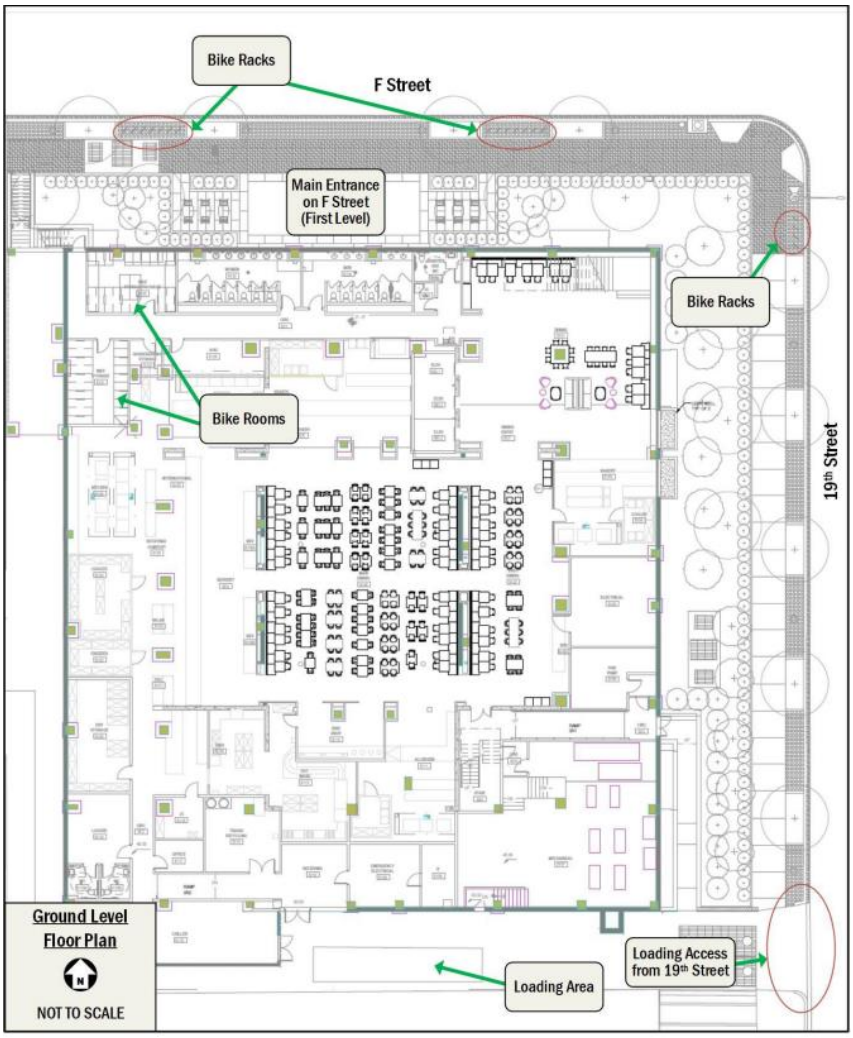

Figure 1 – Site Design and Access (Source: Gorove Slade October 18, 2019 CTR, Figure 6)

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.

Per Subtitle C, Section 901.7, no additional loading is required for a historic resource that is not increasing the gross floor area by at least 50 percent. The site currently has a curb cut on 19th Street NW for loading which contains one 30-ft by 12-ft loading berth and is proposing to maintain this loading configuration in the final design. The loading location does not comply with DDOT's loading requirements as back-up maneuvers occur in public space. The Applicant has submitted a loading management plan (LMP) outlined in the Applicant's October 18th, 2019 CTR and in the Draft Conditions of Approval (Exhibit 17B), which DDOT finds acceptable:

- A loading dock manager will be designated by the University. The dock manager will coordinate with the office of GW Housing and the dining hall operator to schedule deliveries;
- All loading, delivery, and trash collection activity will be required to take place in the alleyway remaining on private property at all times;
- The dock manager will schedule deliveries and ensuring loading area capacity is not exceeded. In the case of unscheduled deliveries arriving while the loading area is full, the driver will be directed to return at a different time so as to not impede traffic flow on any adjacent streets;
- Trucks using the loading area 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 regulations set forth in DDOT's Freight Management and Commercial Vehicle Operations document, and the primary access routes listed in the DDOT Truck and Bus Route System;
- The dock manager will be responsible for disseminating DDOT's Freight Management and Commercial Vehicle Operations document to drivers as needed to encourage compliance with District laws and DDOT's truck routes. The dock manager will also post these documents in a prominent location within the service area; and
- The dock manager and/or a representative of the University will be on call during scheduled deliveries to address compliance issues.

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* (DCMR), the *Design and Engineering Manual* (DEM) and DDOT's *Public Realm Design Manual* will serve as the primary public space references for the Applicant. DDOT staff will be available to provide additional guidance during the public space permitting process. The Applicant attended a PDRM on August 29th, 2019 and received feedback about the public space design:

- The below grade dining space requires two (2) points of emergency egress: one on F Street NW and the other on 19th Street NW. These areaways project beyond 6.5 feet and do not comply with public space regulations. The Applicant should reduce the areaways as much as possible, but will likely need to apply for a code modification with DCRA.
- The new light wells on 19th Street NW appear to meet the areaway projection requirements.
- There is an existing berm around the site that should not be regarded with the exception of the new seating area on F Street NW. Any retaining walls in the sitting area should not be taller than the existing grade they are retaining.
- Any special paving at the entrance will require a Covenant of Maintenance.

- The sidewalk materials should show brick on F Street NW and concrete on 19th Street NW.
- The bike racks will need to be positioned in such a way to ensure the wheels do not project into the pedestrian clear path.
- Existing parking meters may be required to be upgraded to multi-space meters at the Applicant's expense.

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

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 provided information for the temporary and final conditions.

The proposed project requires temporary relocation of students at other campus locations during construction. The Temporary Housing Plan which includes (1) a temporary decrease in enrolment; (2) utilizing existing capacity in existing student housing with available capacity; and (3) relocating different student groups across existing GWU properties. The Applicant has identified 11 temporary housing facilities for student relocation. Out of the 11 facilities, only three proposed facilities require a change in use or are proposed to accommodate student sub-groups currently restricted: 1959 E Street Residence hall is currently limited to 3rd and 4th year students, The Aston is currently limited to graduate students, and One Washington Circle is currently a hotel.

The Applicant provided trip generation estimates utilizing the Institute of Transportation Engineers (ITE) *Trip Generation Manual* and the assumed mode split to convert base vehicular trips to base person trips using average auto occupancy data and then back to vehicular trips. The Applicant utilized the Residential Student Housing (Code 225) and Hotel (Code 310) ITE land use categories in the generation estimation.

Mode split assumptions used in the subject analysis were informed by the Census, the State of the Commute report, and the WMATA Ridership Survey. Figure 2 shows the assumed mode split assumptions.

User Group	Mode			
	Drive	Transit	Bike	Walk
Students	7%	15%	5%	73%
Staff	13%	85%	0%	2%

Figure 2. Mode Split (Source: Gorove Slade October 18, 2019 CTR, Table 3)

These mode splits are reasonable based on the expected behavior of students in the area, but must be supported by commensurate TDM. These modes were applied to the existing condition, a temporary

housing option at One Washington Circle, and the proposed final condition. Based on the trip generation and mode split assumptions discussed above, the Applicant predicted the following level of peak hour trip generation changes from the existing to proposed condition as shown in Figure 3:

Mode	Scenario	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto	Existing	4 veh/hr	4 veh/hr	8 veh/hr	10 veh/hr	10 veh/hr	20 veh/hr
	Proposed	4 veh/hr	5 veh/hr	9 veh/hr	9 veh/hr	9 veh/hr	18 veh/hr
	Net Total	**0 veh/hr**	**1 veh/hr**	**1 veh/hr**	**-1 veh/hr**	**-1 veh/hr**	**-2 veh/hr**
Transit	Existing	13 ppl/hr	17 ppl/hr	30 ppl/hr	36 ppl/hr	35 ppl/hr	71 ppl/hr
	Proposed	16 ppl/hr	21 ppl/hr	37 ppl/hr	35 ppl/hr	35 ppl/hr	70 ppl/hr
	Net Total	**3 ppl/hr**	**4 ppl/hr**	**7 ppl/hr**	**-1 ppl/hr**	**0 ppl/hr**	**-1 ppl/hr**
Bike	Existing	4 ppl/hr	6 ppl/hr	10 ppl/hr	12 ppl/hr	12 ppl/hr	24 ppl/hr
	Proposed	3 ppl/hr	5 ppl/hr	8 ppl/hr	10 ppl/hr	9 ppl/hr	19 ppl/hr
	Net Total	**-1 ppl/hr**	**-1 ppl/hr**	**-2 ppl/hr**	**-2 ppl/hr**	**-3 ppl/hr**	**-5 ppl/hr**
Walk	Existing	61 ppl/hr	86 ppl/hr	147 ppl/hr	174 ppl/hr	173 ppl/hr	347 ppl/hr
	Proposed	50 ppl/hr	73 ppl/hr	123 ppl/hr	140 ppl/hr	140 ppl/hr	280 ppl/hr
	Net Total	**-11 ppl/hr**	**-13 ppl/hr**	**-24 ppl/hr**	**-34 ppl/hr**	**-33 ppl/hr**	**-67 ppl/hr**

Figure 3. Trip Gen Summary for Thurston Hall (Source: Gorove Slade October 18, 2019 CTR, Table 4)

The proposed renovation is not expected to generate a significant number of new transit, vehicular, or walking trips during the morning and evening peak hours, and in many cases the number of trips is expected to decrease. Based on the anticipated level of trip generation, DDOT did not require a traffic impact analysis.

The relocation of first- and second- year students to existing student lodging facilities is expected to have minimal transportation impacts, as they are all existing student housing facilities, but the change of use at One Washington Circle from a hotel to student housing was reviewed as the use will temporarily change. Based on the trip generation and mode split assumptions above, the Applicant predicted the following level of peak hour trip generation for One Washington Circle as shown in Figure 4:

Mode	Scenario	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Auto	Existing	12 veh/hr	9 veh/hr	21 veh/hr	10 veh/hr	11 veh/hr	21 veh/hr
	Proposed	7 veh/hr	5 veh/hr	12 veh/hr	7 veh/hr	7 veh/hr	14 veh/hr
	Net Total	-5 veh/hr	-4 veh/hr	-9 veh/hr	-3 veh/hr	-4 veh/hr	-7 veh/hr
Transit	Existing	23 ppl/hr	17 ppl/hr	40 ppl/hr	19 ppl/hr	21 ppl/hr	40 ppl/hr
	Proposed	26 ppl/hr	18 ppl/hr	44 ppl/hr	25 ppl/hr	25 ppl/hr	50 ppl/hr
	Net Total	3 ppl/hr	1 ppl/hr	4 ppl/hr	6 ppl/hr	4 ppl/hr	10 ppl/hr
Bike	Existing	3 ppl/hr	2 ppl/hr	5 ppl/hr	2 ppl/hr	3 ppl/hr	5 ppl/hr
	Proposed	9 ppl/hr	6 ppl/hr	15 ppl/hr	8 ppl/hr	9 ppl/hr	17 ppl/hr
	Net Total	6 ppl/hr	4 ppl/hr	10 ppl/hr	6 ppl/hr	6 ppl/hr	12 ppl/hr
Walk	Existing	12 ppl/hr	8 ppl/hr	20 ppl/hr	10 ppl/hr	10 ppl/hr	20 ppl/hr
	Proposed	126 ppl/hr	87 ppl/hr	213 ppl/hr	123 ppl/hr	119 ppl/hr	242 ppl/hr
	Net Total	114 ppl/hr	79 ppl/hr	193 ppl/hr	113 ppl/hr	109 ppl/hr	222 ppl/hr

Figure 4. Proposed Trip Gen Summary for One Washington Circle (Source: Gorove Slade October 18, 2019 CTR, Table 6)

The proposed temporary change in use for One Washington Circle is not expected to generate a significant number of new transit or vehicular trips during the morning and evening peak hours, but the number of walking trips will increase. Based on the anticipated level of trip generation, DDOT did not require a traffic impact analysis for this temporary condition.

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. The site is not required to provide, nor proposing, on-site vehicle parking, which DDOT supports.

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.

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 site is located approximately 0.4 miles, roughly an eight minute walk from the Farragut West station and 0.6 miles from the Foggy Bottom-GWU metro rail station. The site is also well-served by high-frequency bus routes. These routes are adjacent to the site. Adjacent bus routes are shown in Figure 5:

Route Number	Route Name	Service Hours	Headway	Walking Distance to Nearest Bus Stop
31	Wisconsin Avenue Line	Weekdays: 6:26 AM-11:30 PM Weekends: 6:10 AM-12:40 AM	10-87 min	0.2 miles, 3 minutes
32, 36	Pennsylvania Avenue Line	Weekdays: 5:10 AM-11:29 PM Weekends: 5:34 AM-12:34 AM	1-38 min	0.2 miles, 3 minutes
33	Wisconsin Avenue Line	Weekdays: 5:31 AM-9:24 PM Weekends: 5:31 AM-9:24 PM	10-46 min	0.3 miles, 6 minutes
39	Pennsylvania Avenue Limited Line	Eastbound: 3:43 PM-6:58 PM	16-20 min	0.3 miles, 6 minutes
80	North Capitol Street Line	Weekdays: 5:07 AM-1:36 AM Weekends: 5:16 AM-1:40 AM	12-36 min	<0.1 miles, 1 minute
N4	Massachusetts Avenue Line	Eastbound: 8:20 AM-9:19 AM Westbound: 4:35 PM-5:45 PM	24-40 min	<0.1 miles, 1 minute
S1	16th Street-Potomac Park Line	Southbound: 6:29 AM-10:05 AM Northbound: 3:54 PM-7:00 PM	5-20 min	<0.1 miles, 1 minute
3Y	Lee Highway-Farragut Square Line	Eastbound: 7:00 AM-9:17 AM Westbound: 4:24 PM-7:23 PM	15-30 min	<0.1 miles, 1 minute
7Y	Lincolnia-North Fairlington Line	Northbound: 5:31 AM-9:35 AM Southbound: 3:33 PM-6:30 PM	4-32 min	<0.1 miles, 1 minute
11Y	Mt. Vernon Express Line	Northbound: 7:12 AM-9:03 AM Southbound: 4:10 PM-6:15 PM	5-30 min	<0.1 miles, 1 minute
16Y	Columbia Pike-Farragut Square Line	Eastbound: 6:22 AM-9:37 AM Westbound: 3:38 PM-7:28 PM	6-20 min	<0.1 miles, 1 minute
LCT	Loudoun County Transit	Eastbound: 5:58 AM-9:24 AM Westbound: 3:16 PM-6:57 PM	1-34 min	<0.1 miles, 1 minute
699	Fairfax County Connector Government Center-Downtown D.C.	Eastbound: 6:23 AM-9:08 AM Westbound: 3:34 PM-6:43 PM	15-25 min	<0.1 miles, 1 minute
GWU	Vern Express Shuttle	Weekdays: 7:00 AM-3:00 AM Weekends: 7:00 PM-3:00 AM	5-30 min	0.2 miles, 3 minutes
GWU	VSTC Shuttle	Weekdays: 7:15 AM-7:30 PM	130-170 min	0.4 miles, 7 minutes

Figure 5. Bus Route Information (Source: Gorove Slade October 18, 2019 CTR, Table 1)

In addition to WMATA transit services, there are two (2) University-operated campus shuttles that provide service between the Foggy Bottom campus and the Mount Vernon campus, in the Foxhall neighborhood of Washington DC, and the Virginia campus. Both shuttles (Vern Express and VSTC Express) serve the Foggy Bottom campus at G Street between 22nd and 23rd Streets. The Vern Express serves a stop on E Street between 20th Street and 21st Street, approximately one (1) block southwest of the site.

Pedestrian Facilities

The District is committed to enhancing 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 site.

The Applicant preformed a sidewalk inventory in the vicinity (Figure 6). The inventory identified that standard pedestrian facilities are largely present along the likely walking paths to transit stops/stations and destinations.

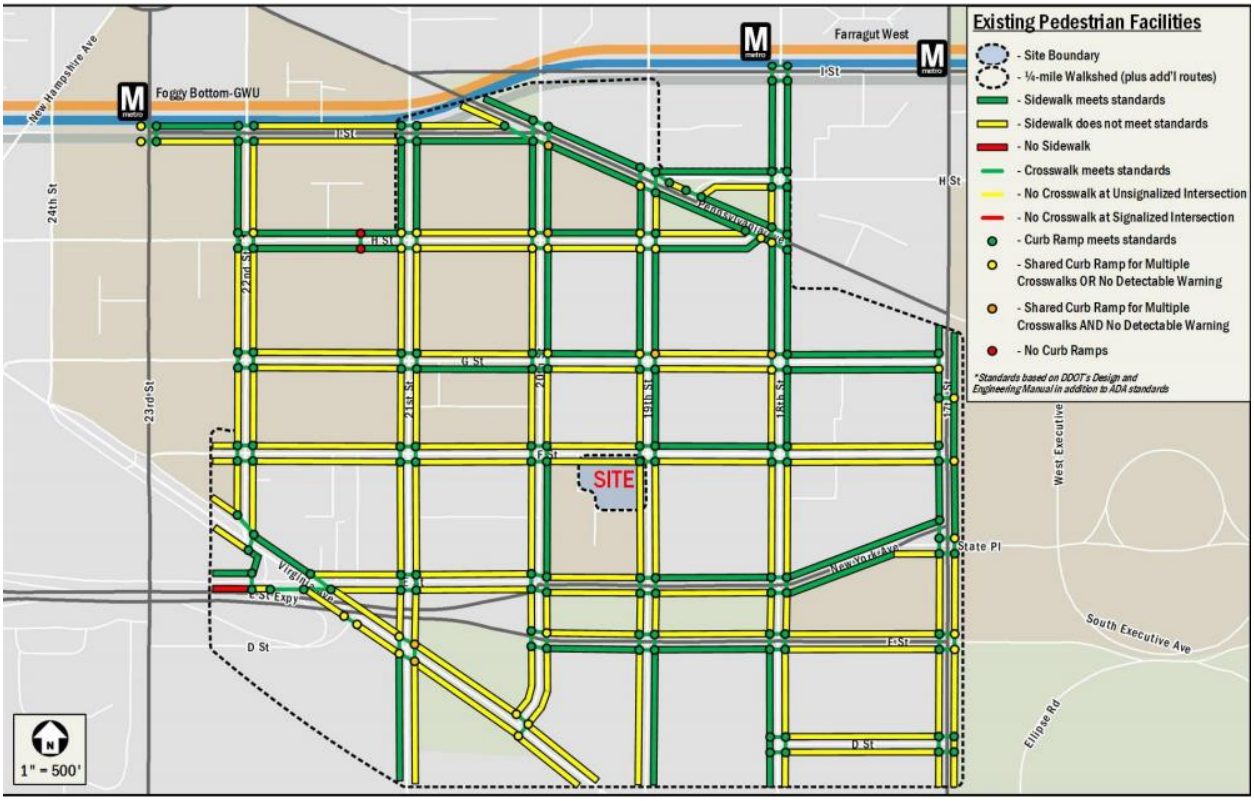

Figure 6 – Pedestrian Facilities (Source: Gorove Slade October 18, 2019 CTR, Figure 5)

Bicycle Facilities

The District is committed to enhancing 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 Applicant performed a bicycle infrastructure inventory. The site is in close proximity to existing cycle tracks on L Street and M Street NW as well as proposed bicycle infrastructure running north-south connecting Dupont Circle and the National Mall. There are two (2) Capital Bikeshare Stations within a two-minute walk.

The Applicant proposes 36 long-term bicycle parking spaces in the lower level, which exceeds what is required per Subtitle C § 802.6 of the Zoning Regulations as the building is historic. Additionally, the proposed 36 short-term bicycle parking spaces exceeds the requirement for a historic structure per Subtitle C § 802.6. The exact location of short-term bicycle facilities will be determined during the public space permitting process.

Curbside Management

For parking relief actions or larger developments that may have a greater impact on the local neighborhood, the CTR must evaluate the supply of and demand for curbside parking spaces. Based on the quantitative analysis provided, the CTR should provide an evaluation of the adequacy of curbside parking to accommodate excess demand generated by an action.

The Applicant is not proposing any changes to the existing curbside signage. There is metered parking around the site and an existing "No Parking" zone on F Street NW which the Applicant is proposing to maintain. The Applicant is not proposing any changes with the existing curbside designations, however, they may need to exchange the existing single meters for multi-space meters during the public space permitting process, which will be at the expense of the Applicant.

Transportation Demand Management

DDOT requires the Applicant to produce a comprehensive TDM plan for all major development review cases 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 2007 Campus Plan requires the George Washington University to implement a Traffic Management Program (TMP) containing numerous strategies to minimize automobile travel and encourage usage of non-auto modes. The TMP is in effect for the entire campus including the future renovated Thurston Hall. DDOT finds it not necessary to update the TDM program with this application but looks forward to revisiting it during the next campus plan update.

For the temporary relocation of students, the Applicant proposed the following TDM strategies in the October 18, 2019 CTR, which DDOT concurs with:

- Students are provided information on transportation options upon move-in that includes details on public transit options, bike facilities locations, and other available programs;

- Alternative transportation modes, carpooling programs, car-sharing, and carpooling programs are promoted through flyers and information provided to students at the subject locations; and
- A transportation factsheet link is posted online to provide information and campus transportation options.

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