

**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: October 10, 2017

SUBJECT: ZC Case No. 17-08 – 601 50th Street NE, Providence Place

for

PROJECT SUMMARY

Providence Place I, LP (the “Applicant”) seeks approval of a Consolidated Planned Unit Development (“PUD”) and Zoning Map Amendment in order to construct an affordable residential building at 601 50th Street NE (Square 5194, Lot 824). The existing site is on the western edge of the Progressive National Baptist Convention (PNBC) campus and is currently not developed. The site is bounded by PNBC campus to the west, north, and south, and 50th Street NE to the east. The PUD includes:

- 100 residential dwelling units;
- 48 off-street vehicle parking spaces; and
- 34 long-term and three (3) 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, multi-administration review of the case materials submitted by the Applicant, DDOT finds:

Site Design

- Vehicular and loading access is proposed to occur from a curb cut on 50th Street NE due to steep elevation changes on the site;
- Loading is accommodated with front-in/front-out movements through public space, consistent with DDOT standards;
- The Applicant is proposing 48 on-site vehicle parking spaces in an underground garage;
- The Applicant is proposing to provide sidewalks surrounding the site to DDOT standards;
- Primary residential access is proposed along Fitch Place NE and auxiliary entrances are proposed on 50th Street NE and through a rear door located on private property, on the PNBC campus;
- Preliminary public space plans are consistent with DDOT standards; and
- The Applicant proposes to provide 34 long-term bicycle parking spaces in the below-grade parking garage and six (6) short-term bicycle parking spaces in public space, which meets or exceeds the amount of parking required by District code.

Travel Assumptions

- The action is expected to generate a moderate number of vehicle, transit, bicycle, and pedestrian trips and thus requires an appropriate Transportation Demand Management (TDM) plan;
- The amount of vehicle parking for the building is appropriate; and
- Background growth, mode split, and trip generation assumptions proposed by the Applicant are reasonable.

Analysis

- The Applicant utilized sound methodology to perform the analysis;
- The action is projected to slightly increase travel delay and queuing in the area. However, the intersection 49th Street and Nannie Helen Burroughs Avenue NE is projected to operate at failing levels under background conditions and remain at failing levels as a result of the action and mitigation TDM will be required; and
- The Applicant proposes a Transportation Demand Management (TDM) plan intended to promote non-auto trips, which requires some enhancements to provide best-practices for managing auto travel demand.

Mitigations

DDOT received confirmation from the Applicant of changes they are making to the site design to improve connectivity, which DDOT finds appropriate. DDOT has no objection to the requested PUD provided that these changes are formally included as part of their Application. These changes include:

- Continue the pedestrian connection along 50th Street NE to the bus stops along Nannie Helen Burroughs Avenue NE. Given the property line and steep grade, the sidewalk along 50th Street NE will require regrading of both public and private property;

- Continue the sidewalk internal to the site along the existing rear drive rather than terminating it at the building's edge. This sidewalk would connect to the campus' existing sidewalk network and provide access to the Marvin Gaye Trail;
- Construct a 6-foot wide sidewalk and 4-foot wide tree box to extend the building length along 50th Street NE and along Fitch Place extending from the intersection of Fitch Place NE and 50th Street NE to Nannie Helen Burroughs Avenue NE;
- Enhance the TDM plan to include the following elements:
 - Offer each apartment a Capital Bikeshare membership for a period of three years; and
 - Work with goDCgo in order to implement the TDM management plan proposed in the CTR.

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 curb and gutter, street trees and landscaping, street lights, sidewalks, curb ramps, and other features within the public rights of way, are expected to be designed and built to DDOT standards;
- Work with the Urban Forestry Division to plan relocation of a healthy Heritage tree; and
- A curbside management and signage plan consistent with current DDOT policies.

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.

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 Applicant proposes vehicular and loading access from a curb cut on 50th Street NE to south of the site. While DDOT’s preference would be for vehicle access to take place from the rear, DDOT has no objection to the proposed curb cut given the steep elevation changes on site. The Applicant is proposing a curb cut that does not meet DDOT’s standards for 60-foot offset from the adjacent intersection which could create access concerns relating to sight distance and crosswalks at Foote Street NE. The Applicant explored alternative curb cut options that were undesirable from a public space perspective and also created safety concerns. While DDOT prefers a garage entrance that lines up with Foote Street NE, DDOT does not object to the proposed site access given the grade limitations of the site and the sight distance analysis provided by the Applicant. Curb cuts concerns will be addressed at permitting and Public Space Committee approval is needed for the curb cut particularly since it does not meet DDOT standards.

Primary residential access is proposed along Fitch Place NE and auxiliary entrances are proposed on 50th Street NE and through a rear door located on private property, on the PNBC campus. Long-term bicycle parking is proposed in the parking garage and can be accessed via 50th Street NE.

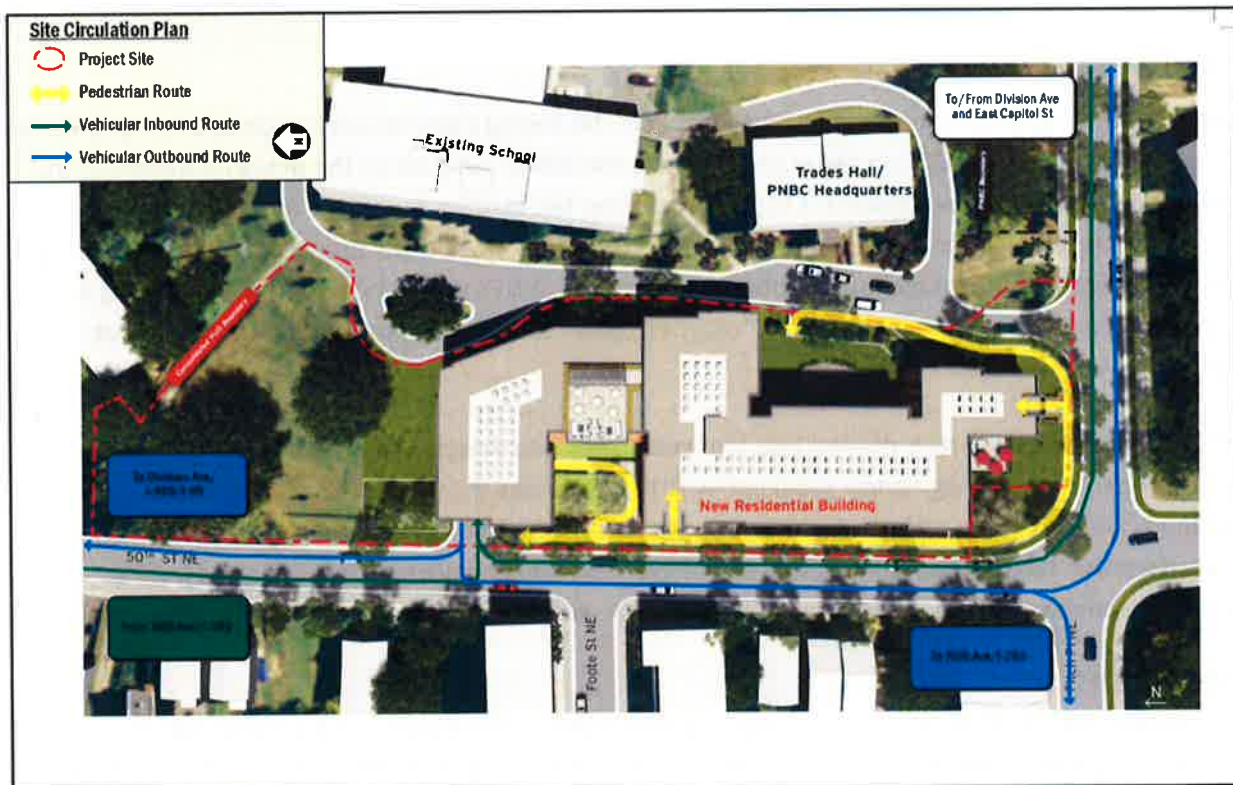


Figure 1 – Site Design and Access (Source: CTR, Gorove/Slade, Figure 9, August 21, 2017)

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's proposed loading locations comply with DDOT's loading requirements. No back-in loading movements occur in the public realm.

Zoning requires one 30-foot loading berth and one 20-foot service and delivery space for the proposed uses, both of which the Applicant proposes to provide. If the residents require moving trucks larger than 30-feet in length, they will need to seek public space permits to load from the street via Emergency No Parking signs.

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.

DDOT expects utility vaults to be accommodated on private property. The Applicant will need to coordinate with DDOT on the vault location and treatment during the public space permitting process.

All proposed curb cuts are subject to the public space permitting process. Final design of the public space will be determined during DDOT's public space permitting process. DDOT notes the importance of accommodating pedestrian connectivity from the site to surrounding areas.

Heritage Trees

Heritage Trees are defined as a tree with a circumference of 100 inches or more and are protected by the Tree Canopy Protection Amendment Act of 2016. Non-Hazardous Heritage Trees may not be damaged or removed. A preliminary assessment by DDOT's Urban Forestry Division (UFD) identified three (3) Heritage Trees on site. One (1) tree is deemed hazardous and may be removed, one (1) is an exempt species, and the other is a non-hazardous tree. The Applicant has met with the Urban Forestry Division to discuss a plan to relocate the remaining healthy heritage tree in order to meet the requirements of the Tree Canopy Protection Amendment Act to proceed with the development project.

Additional information is needed to evaluate the feasibility of relocating the tree. The Applicant must continue to coordinate with UFD to assess the relocation proposal. Inability to relocate the tree may necessitate changes to the building design.

DDOT expects the Applicant to continue to work with UFD to identify appropriate street trees as well as determine the appropriate steps necessary to accommodate the existing Heritage trees. With approval by the Mayor and the Urban Forestry Administration, Heritage Trees might be permitted to be relocated.

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 is not proposing any sustainable transportation elements, such as electric vehicle charging stations or dedicated carshare spaces, which are common with PUD applications. There is one (1) car-share location within a quarter of a mile of the site and DDOT finds this satisfactory.

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. Only projects that were both approved and included an origin or destination within the study area were included in the analysis. One background development was included in the analysis, the Deanwood Hills PUD.

DDOT also requires applicants account for regional growth. This can be done by assuming a general growth rate or by evaluating growth patterns forecast in MWCOC's regional travel demand model. The Applicant coordinated with DDOT on an appropriate measure to account for regional growth.

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.

Based on parking requirements prescribed in the zoning regulations, a minimum of 32 parking spaces are required for the proposed development. The Applicant is not seeking relief from the minimum parking requirements and is providing excess parking. The November 2017 CTR stated that the Applicant proposed 48 vehicle parking spaces. DDOT does not object to the number of parking spaces proposed.

There is on-street parking on 50th Street NE which should be removed due to sight distance concerns. Turn maneuvers will be blocked if vehicles are parked adjacent to Foote Street NE. DDOT will require coordination with curbside management on the signing and marking plan during permitting.

Trip Generation

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 provided trip generation estimates utilizing the Institute of Traffic Engineers (ITE) Trip Generation Manual, the Census, 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 following ITE land uses in their trip generation estimation:

- Residential: Code 220 (Apartment)

DDOT finds the use of ITE codes appropriate, but notes the lack of dependable information on trip generation in urban contexts. Thus, the methodology was supplemented to account for the urban nature of the Site and to split the trips into the appropriate mode. Figure 2 shows the Applicant developed mode split assumptions.

Land Use	Mode			
	Drive	Transit	Bike	Walk
Residential	60%	35%	2%	3%

Figure 2 – Summary of Mode Split Assumptions (Source: CTR, Gorove/Slade, Table 2, August 21, 2017)

These mode splits are reasonable, based on the expected behavior of residents in the area, but must be supported by commensurate TDM and infrastructure facilities investment. Based on the trip generation and mode split assumptions discussed above, the Applicant predicted the following level of weekday peak hour trip generation:

Mode	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Auto (Vehicles/Hour)	6	26	32	28	15	43
Transit (People/Hour)	4	17	21	19	10	29
Bike (People/Hour)	0	1	1	1	1	2
Walk (People/Hour)	0	2	2	2	0	2

Figure 3 – Multi-Modal Trip Generation (Source: CTR, Gorove/Slade, Figure 9, August 21, 2017)

The proposed action is expected to generate a moderate number of new transit, vehicular, and walking trips during the morning and evening peak hours. Many of the pedestrian trips will be routed to the nearest transit location.

Based on the anticipated level of trip generation, a full vehicle traffic analysis was conducted to assess impacts to the surrounding vehicle network.

Study Area and Data Collection

The Applicant in conjunction with DDOT identified six (6) intersections where detailed vehicle, bicycle, and pedestrian counts would be conducted and a level of service analysis would be performed. These intersections are immediately adjacent to the site and include intersections radially outward from the site that have the greatest potential to see moderate to significant increases in vehicle delay. DDOT acknowledges that not all affected intersections are included in the study area and there will be intersections outside of the study area which realize new trips. However, DDOT expects minimal to no increase in delay outside the study area as a result of the proposed action. The study area intersections include:

1. 49th Street & Nannie Helen Burroughs Avenue, NE
2. 50th Street & Nannie Helen Burroughs Avenue, NE
3. 50th Street & Foote Street, NE
4. 50th Street & Fitch Place, NE
5. 50th Street & Site Driveway, NE
6. Fitch Place and Relocated PNBC Driveway, NE

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. For this development, three traffic scenarios were assumed for capacity analyses. These scenarios include:

1. 2017 Existing Conditions
2. 2019 Background Conditions (without the project)
3. 2019 Total Future Conditions (with the project)

Analysis provided by the Applicant shows that there is a vehicle traffic impact at one of the intersections in the study area as measured by Level of Service (LOS). This intersection is 50th Street NE and Nannie Helen Burroughs Avenue, where the northbound approach worsens during the morning peak period. The 50th Street NE and Nannie Helen Burroughs Avenue intersection did not reach capacity. The Applicant proposed to mitigate the impact by changing the traffic signal timing. DDOT does not agree with the proposed signal timing change as this can disrupt traffic flow in other areas so the Applicant is proposing to provide additional TDM mitigation.

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 0.8 miles from the Benning Road Metrorail station which serves the Blue and Silver lines. The site is also well-served by bus stops within one-quarter mile of the site: U5, U6, V2, V4, W4, and X9.

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 development.

The Applicant performed an inventory of the pedestrian infrastructure in the vicinity and noted any substandard conditions. The existing pedestrian facilities generally meet DDOT standards. The Applicant proposes to improve the sidewalks adjacent to the site in order to meet DDOT standards.

Preliminary site plans show improved pedestrian facilities surrounding the site, as shown in Figure 4. The Applicant is proposing to meet DDOT sidewalk standards. DDOT prefers a 6-foot wide sidewalk and 4-foot wide tree box to extend the building length along 50th Street NE and along Fitch Place extending from the intersection of Fitch Place NE and 50th Street NE to Nannie Helen Burroughs Avenue NE. The proposed sidewalk along 50th Street NE extends to Nannie Helen Burroughs Avenue NE, the primary connection to the bus stops. The Applicant is proposing a connection to the bus stops along Nannie Helen Burroughs Avenue NE which DDOT finds appropriate. The Applicant also proposes to continue the sidewalk internal to the site along the existing drive rather than terminating it at the building's edge.

This sidewalk will connect to the campus' existing sidewalk network and provide access to the Marvin Gaye Trail as well.

The CTR proposed a crosswalk at 50th and Foote Streets NE. Given the intersection has sight distance concerns, a crosswalk should not be implemented.

Crosswalks are proposed at 50th and Foote Streets NE, but given the intersection has sight distance concerns, a crosswalk should not be implemented.

The Applicant is also proposing to install a curb ramp on the northeast corner of the Fitch Place NE and 50th Street NE intersection. DDOT also recommends improving the curb ramp at the northwest corner to complete intersection connectivity.

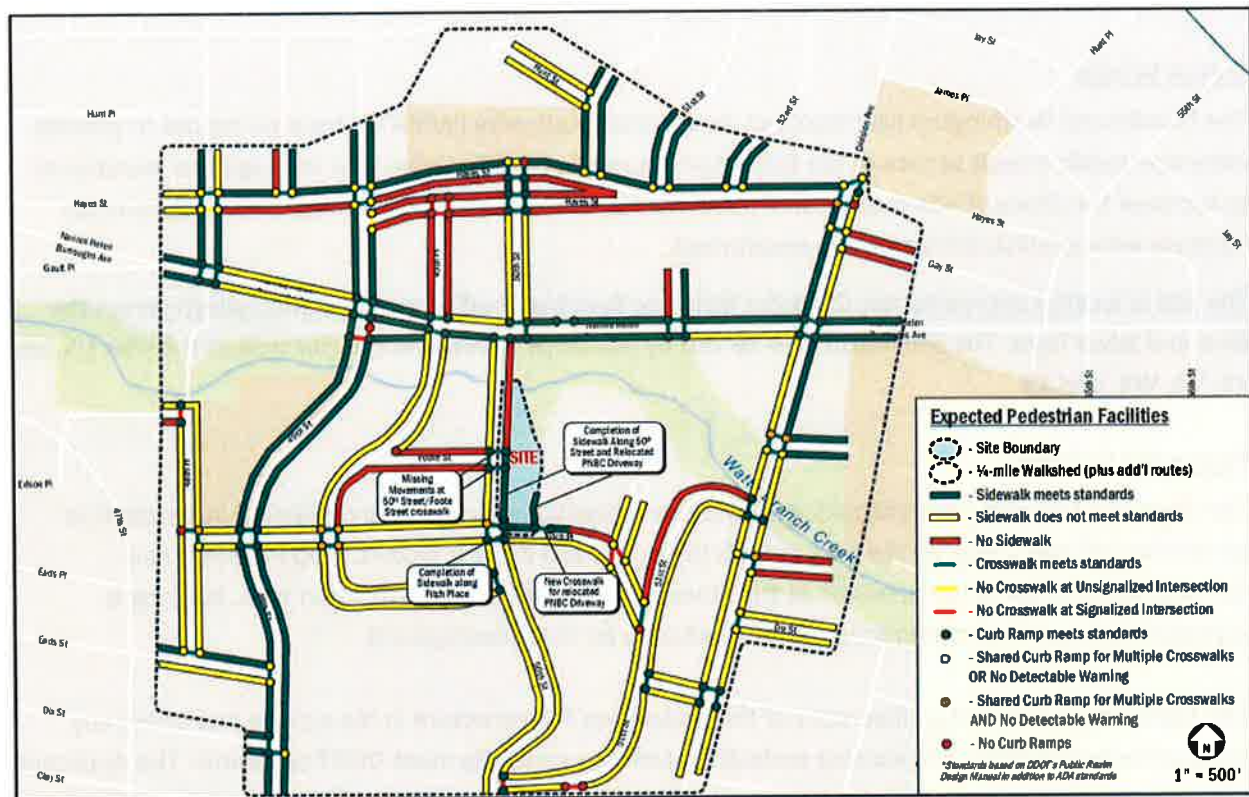


Figure 4 – Pedestrian Facilities (Source: CTR, Gorove/Slade, Figure 24, August 21, 2017)

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.

Two Capital Bikeshare stations with a total of 22 docks are located within one-quarter mile of the intersection of Nannie Helen Burroughs Avenue NE and 49th Street NE and the intersection of Division Avenue NE and Foot Street NE.

Zoning requires 34 long-term and six (6) short-term bicycle parking spaces. The Applicant proposes 34 long-term and six (6) short-term bicycle parking spaces. The long-term bicycle parking spaces are proposed in the vehicle parking garage. The exact location of short-term bicycle facilities will be determined during the public space permitting process.

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 sight 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 DDOT crash data reveals no intersections within the study area had a crash rate of 1.0 Million Entering Vehicles (MEV) or higher.

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.

Pedestrian Improvements

Continue the pedestrian connection along 50th Street NE to the bus stops along Nannie Helen Burroughs Avenue NE. Given the property line and steep grade, the sidewalk along 50th Street NE will require regrading of both public and private property. Additionally, continue the sidewalk internal to the site along the existing drive rather than terminating it at the building's edge. This sidewalk would connect to the campus' existing sidewalk network and provide access to the Marvin Gaye Trail. As proposed, install DDOT standard curb ramps at the intersection of Fitch Place and 50th Street NE in the northeast. DDOT also suggests improving the northwest corner of the intersection to make it ADA

compliant. Of note, the Applicant will be expected to install the curb ramps as part of the Public Space permitting process.

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 strategies in the TDM Plan included with the August 2017 CTR:

- The Applicant will identify a TDM Leader (for planning, construction, and operations) at the building, who will act as a point of contact with DDOT/Zoning Enforcement with annual updates. The TDM Leader will work with residents to distribute and market various transportation alternatives and options;
- The Applicant will provide TDM materials to new residents in the Residential Welcome Package materials;
- The Applicant will unbundle the cost of residential parking from the cost of lease or purchase of each unit;
- The Applicant will meet Zoning requirements to provide bicycle parking facilities at the proposed development. This includes 34 secure long-term parking spaces located on-site and a minimum of 6 short-term parking spaces around the perimeter of the site (in the form of 3 bicycle racks);
- The Applicant will offer each unit's incoming residents with either a one-year membership to Capital Bikeshare or a one-year membership to a Carsharing service. A proactive marketing strategy will be provided to ensure residents are aware of this benefit;
- The Applicant will provide a bicycle repair station to be located in the secure long-term bicycle storage room;
- The Applicant will provide an onsite business center to residents with access to copier, fax, and internet services; and
- The Applicant will install a Transportation Information Center Display (electronic screen) within the residential lobbies containing information related to local transportation alternatives.

The Applicant is also proposing to include the following TDM measures as mitigation for traffic impacts which DDOT considers sufficient for the development proposed.

- The Applicant will offer each unit's incoming residents with either a 3-year membership to Capital Bikeshare or a one year membership to a Carsharing service; and
- Work with goDCgo in order to implement the TDM management plan proposed in the CTR.

JS:kb

