time frame, collection dates, and method to grow volumes. None of the collection dates occurred during Congressional recess or outside of the DC Public School calendar.

Analysis

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

Roadway Capacity and Operations

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

Analysis provided by the Applicant shows that vehicle traffic impacts from the action will minimally impact the operations of intersections in the study area as measured by Level of Service (LOS).

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 0.25 miles, roughly a five minute walk, from the Tenleytown – AU Metro Station on the Red Line. The site is also well-served by high-frequency bus routes with headways ranging from four to 39 minutes. Bus stops within one-quarter mile of the site include: 30N, 30S, 31, 33, 37, 96, N2, and W47.

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.



Figure 4 – Pedestrian Facilities (Source: CTR, Wells and Associates, Figure 4A, November 2016)

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.

One Capital Bikeshare stations with a total of 25 docks is located across from the site on Wisconsin Avenue at Brandywine Street. Another 15 dock station is located within one-quarter mile of the site at Wisconsin Avenue and Albermarle Street.

Zoning requires 50 long-term (49 for residential and one for retail) and 10 short-term (seven for residential and 3 for retail) bicycle parking spaces. The Applicant proposes 82 long-term (78 for residential and four for retail) and 10 short-term bicycle parking spaces. The long-term bicycle parking spaces are proposed on the first floor of the vehicle parking garage in two secure bicycle parking rooms. The exact location of short-term bicycle facilities will be determined during the public space permitting process.

Several bicycle facilities are located near the site, including along Fessendon Street and Albermarle Street (see Figure 5).





<u>Safety</u>

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 one intersection (Brandywine Street and 42nd Street) within the study area that has a crash rate of 1.0 Million Entering Vehicles (MEV) or higher. A majority (50 percent) of the crashes of the crashed occurred with park cars. Left turn collisions and collisions while backing made up 17 percent of collisions at the intersection. One crash involved a bicycle. The Applicant proposes to implement the Rock Creek West II Livability Plan recommendations for Brandywine and 42nd Street.

| Intersection | Type of Control | No. of Crashes (3 Years) | ADT (veh/day) | Crash Rate (MEV) |
|--|--------------------|--------------------------------|------------------|------------------------|
| Chesapeake Street/Wisconsin Avenue | One-way Stop | 7 | 19,900 | 0.32 |
| Chesapeake Street/42nd Street* | All way Stop | 0 | 4,990 | 0 |
| River Road/42nd Street | Signal | 5 | 8,750 | 0.52 |
| Brandywine Street/42nd Street | Two way Stop | 6 | 5,090 | 1.08 |
| Brandywine Street/River Road | Three way Stop | 5 | 5,580 | 0.82 |
| Brandywine Street/Wisconsin Avenue | Signal | 22 | 24,780 | 0.81 |
| * No crashes reported for the years 2013 - 2015. | | | | |

Figure 6 – Crash Data Summary (Source: CTR, Wells and Associates, Table 7, November 2016)

Proposal to Close Segment of Brandywine Street

As part of the Applicant's PUD benefits and amenities package, the Applicant proposes to close a segment of Brandywine Street between 42nd Street and River Road, as was recommended in the Rock Creek West II Livability Plan. DDOT requested additional analysis of this segment closure. While DDOT supports this proposal, the design requires modifications to safely and effectively route pedestrians, bicyclists, and vehicles. Modifications will be further coordinated during the public space permitting process.

The conversion to all-way stop control (AWSC) at the intersection of River Road and Brandywine Street may be warranted due to sight distance concerns. However, given its proximity to the signal at River Road and 42nd Street, stop signs on River Road would likely have low compliance. This is also a concern at the intersection of 42nd Street and Brandywine Street. Instead, the non-standard 3-way stop, which is proposed as a 2-way stop, should be changed at both intersections so that the northbound approaches are free-flow as the stop signs are within 100-feet of a signal and may have low compliance. A pedestrian beacon or raised crosswalk on 42nd Street may also be appropriate.

With the closure of Brandywine Street, DDOT would like the Applicant to remove the two north-side crosswalks at 42nd Street and Brandywine Street, as well as across River Road at Brandywine Street. The south-side crosswalks can remain. These crosswalks are too close to the signal at River Road and 42nd Street to ensure compliance.

The Applicant should not construct the curb extensions shown in the Livability Study as Brandywine Street is too narrow and will interfere with turns by large passenger vehicles, including SUVs. Instead, curb extensions may be desired at the north-east and south-east curbs at the intersection of River Road and Brandywine Street. With the diagonal orientation of River Road and since Brandywine St is one-way, curb extensions may be feasible here. Additionally, altering the east-side curb on River Road would result in the shifting of the crosswalk and stop bar on Brandywine Street, increasing site distance enable a safer intersection.

Mitigations

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

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

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

Transportation Demand Management

As part of all major development review cases, DDOT requires the Applicant to produce a comprehensive 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 November 2016 CTR:

- A member of the property management team will be designated as the Transportation Management Coordinator (TMC). The TMC will be responsible for ensuring that information is disseminated to tenants of the building;
- The property management website will include information on and/or links to current transportation programs and services, such as Capital Bikeshare, Car-sharing services, Uber, Ridescout, Commuter Connections Rideshare Program, Commuter Connections Guaranteed Ride Home, and Commuter Connections Pools Program;
- An electronic display will be provided in a common, shared space in the building and will provide public transit information such as nearby Metrorail stations and schedules, Metrobus stops and

schedules, car-sharing locations, and nearby Capital BikeShare locations indicating the number of bicycles available at each location; and

• Convenient and covered secure bike parking facilities will be provided in excess of the minimum required by zoning for residential and retail long-term bike parking.

JS:ei