

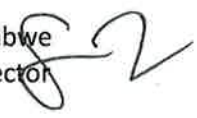
GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION



d. Policy, Planning, and Sustainability Administration

MEMORANDUM

TO: District of Columbia Board of Zoning Adjustment

FROM: Samuel Zimbabwe
Associate Director 

DATE: January 5, 2015

SUBJECT: BZA Case No. 18400A – Jewish Primary Day School, 6045 16th St. NW

APPLICATION

The Jewish Primary Day School (JPDS or the “Applicant”) requests a special exception to increase the student cap on enrollment from 275 students to 350 students and faculty cap from 56 to 72 faculty to allow a building expansion of an existing private school, currently operating with 204 students and 56 faculty and variance from the off-street parking space requirements at premises 6045 16th Street, NW (Square 2726, Lots 825 and 831) within the R-1-B and R-5-A Districts. Zoning requires 48 on-site vehicle parking spaces; the proposed project provides 22 on-site vehicle parking spaces and 25 off-site vehicle parking spaces, for a total of 47 vehicle parking spaces.

SUMMARY OF DDOT REVIEW

The District Department of Transportation (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.

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. DDOT finds:

- Loading and parking access is proposed to occur from one curb cut on Rock Creek Ford Road;
- Previous DDOT review did not object to the use of 16th Street for bus longing or double parking on Fort Stevens Drive. DDOT is concerned about the operational and safety of these continued practices. The Applicant has agreed to work with DDOT to find an alternative location;

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- The Applicant is coordinating with DDOT to designate and sign a school zone, likely on the south side of Fort Stevens Drive and west side of Rock Creek Ford Road, to enable a safe location that does not hinder traffic operations for school bus loading and unloading and for parent pick-up and drop-off when buses are not queued;
- The Applicant has a security guard and staff assist with on-site traffic operations at school arrival and dismissal to ensure safety of children exiting and entering school buses and vehicles, which DDOT finds is necessary for safe operations;
- The on-street vehicle parking, which is predominantly unrestricted spaces, has sufficient availability during school operating hours to meet the school's need;
- A moderate-to-high percentage of students ride the school bus;
- Vehicles picking-up students during dismissal currently create a minimal queue within public streets, but the queue will be exacerbated as the student population grows;
- The Transportation Demand Management (TDM) plan is appropriate;
- The Applicant proposes a Performance Monitoring Plan (PMP) to ensure that the student population growth does not impact the transportation network due to vehicle queueing. DDOT finds the use of PMP appropriate to address DDOT's concerns about vehicle queueing, but a more robust PMP is necessary to prevent vehicle queues from hindering traffic operations and safe pedestrian and bicycle movements; and
- The Applicant intends to stagger dismissal by 15 minutes to minimize the vehicle queue. Details of the staggered dismissal will be needed in a more robust PMP.

DDOT has no objection to approval of the requested special exception and variance with the following conditions:

- Amend the PMP and establish a trip cap to include the following:
 - Conduct counts and provide a monitoring report twice per year (fall and spring semesters, not to coincide within a week before or after any extended school breaks) for two years beginning when the school reaches 275 enrolled students and again when the school reaches the proposed cap of 350 students to DDOT's Policy, Planning, and Sustainability Administration;
 - Trip generation counts and queueing will need to be observed a minimum of 7:00 am to 9:30 am and 2:30 pm to 6:00 pm;
 - Vehicle trip generation shall include all vehicle trips to the site, inclusive of vehicles traveling to the site but not entering the driveway;
 - Establish a vehicle trip generation cap of 271 total trips (ins and outs) during the AM peak hour and 135 total trips during the school PM peak hour (not commuter PM peak hour);
 - Vehicle queueing for pick-up and drop-off must be within the property line. Vehicle queueing cannot extend to block the sidewalk across the driveway or onto any public streets;
 - If vehicle queueing does not meet the above mentioned criteria or the site exceeds the vehicle trip generation caps, the Applicant will need to employ additional TDM measures and continue monitoring twice per year for two years for a total of four successful monitoring reports;
 - The Applicant shall document all current TDM measures;
 - Include any proposed updates to the TDM plan;
 - The Applicant shall return to the BZA to seek relief, lower their student and staff enrollment, or provide additional and more aggressive TDM measures should vehicle queue length not meet the criteria established above or trips generated exceed the 271

total trips during the AM peak hour and 135 total trips during the school PM peak hour threshold for two consecutive monitoring periods.

- Construct three ADA-compliant curb ramps at the intersection of Fort Stevens Drive and Rock Creek Ford Road; and
- Provide 10 long-term bicycle parking spaces.

CONTINUED COORDINATION

Given the proposed development and action and these recommendations, the Applicant is expected to continue to work with DDOT on the following matters:

- The Applicant must work with DDOT to designate and sign a School Zone in front of the site;
- Public space, including curb and gutter, street trees and landscaping, street lights, sidewalks, bike parking, and other features within the public rights of way, are expected to be designed and built to DDOT standards.

TRANSPORTATION ANALYSIS

DDOT requires applicants requesting certain actions from the Board of Zoning Adjustment 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, Circulation, and School Bus Loading

Current access to the site is provided at three locations: 16th Street and Fort Stevens Drive for school bus drop-off and pick-up and the parking lot accessed from Rock Creek Ford Road for parent drop-off and pick-up. According to the Applicant, a security guard facilitates the flow of traffic at the gate and school staff assist in the dismissal process to provide safe access into vehicles. DDOT finds security

School buses park along 16th Street, NW in the northbound direction during the drop-off on Monday through Friday and pick-up on Monday and Wednesday through Friday. Tuesday afternoons, due to a late dismissal that occurs during rush hour restrictions on 16th Street, school buses double park on Fort Stevens Drive. Such operations impact road capacity and cause a safety hazard by effectively reducing a two-way street to operating with a single lane as vehicles drive in the oncoming lane to get around the buses; additionally, sight distance is reduced for vehicles entering and exiting the school driveway. As such, DDOT finds that a signed school zone (i.e., “No Parking, 8 am to 4 pm, School Days” signs) is necessary for effective bus loading and unloading operations, and the Applicant has agreed. This school zone will also enable vehicles to temporarily stop to pick-up and drop-off students reducing vehicle queuing on- and off-site when buses are not queuing. Further coordination with DDOT is necessary to designate and sign school zones.



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.

DDOT expects the Applicant to design and build the streetscape surrounding the property to current DDOT standards. 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. Final design of the public space will be determined during DDOT's public space permitting process.

Specifically, at the intersection of Fort Stevens Drive and Rock Creek Ford Road, three American with Disabilities Act (ADA) compliant curb ramps are necessary to enable federally required pedestrian access from Fort Stevens Drive from east of the site and align with the existing crosswalks.

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 account for future growth in traffic on the network or what is referred to as background growth. There are not any entitled projects with an origin or destination within the study area; therefore, no background development was included in the analysis.

DDOT also requires applicants account for regional growth. This can be done by assuming a general growth rate, by evaluating growth patterns forecast in MWCOG's regional travel demand model, or by comparing existing and past average annual weekday traffic volume obtained from DDOT and applying an average growth rate. The Applicant's analysis used DDOT traffic volumes. Since average daily traffic volumes decreased from 2010 to 2013, no regional growth rate was applied throughout the study area. DDOT agrees with these assumptions.

Vehicle Parking

Due to the site design, the Applicant requests relief from the zoning requirement of 48 on-site parking spaces. The site includes eight fully compliant on-site vehicle parking spaces and an additional 28 tandem spaces, which are not considered zoning compliant. For purposes of DDOT's review, DDOT considered 14 of these 28 tandem parking spaces as dedicated and accessible spaces. DDOT did not consider these other 14 tandem spaces in its analysis because they prevent vehicle accessibility of the first 14 tandem spaces and hinder vehicle circulation during school pick-up and drop-off. The Applicant

has agreed not to use these 14 tandem spaces during school pick-up and drop-off; they are intended for use during school events when vehicle parking demand increases and students are accompanied to their parents' vehicles. Additionally, the Applicant has contracted with Ohr Kodesh Synagogue, located at 8300 Meadowbrook Lane, Chevy Chase, MD, for the use of 25 off-site vehicle parking spaces. Designated staff will carpool from the off-site parking facility to JPDS and receive a designated on-site parking space as a benefit. In total, the Applicant proposes 47 on- and off-site dedicated and accessible vehicle parking spaces.

The Applicant conducted an on-street vehicle occupancy study on Wednesday, June 3, 2015 at 10:00 am and Tuesday, June 9, 2015 at 2:00 pm of the blocks immediately surrounding the site (see Figure 2). Parking peak for this residential area was presumed to be in the evening when the majority of residents are home and the school is closed. Of the 128 total parking spaces inventoried, 57% were utilized during the morning and 66% in the evening (see Figure 3). There were a total of 22 spaces available in the morning and 21 spaces in the afternoon that were unrestricted parking spaces. While a school zone will remove some of those unrestricted parking spaces, there is an adequate supply of on-street vehicle parking spaces to meet the school's daytime needs. Parking for occasional evening special events will be accommodated on-site – including the use of all 28 tandem spaces – and off-site through street parking, satellite parking at Ohr Kodesh Synagogue via shuttle service, and valet service to the golf course across 16th Street. Based on the provided number of on- and off-site parking spaces and availability of on-street parking, DDOT finds that the expected parking demand can be accommodated and supports the vehicle parking variance.

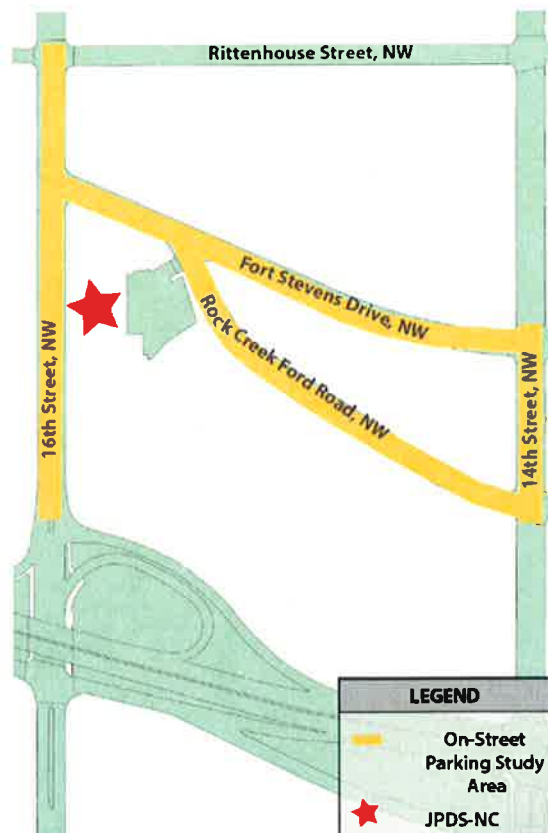


Figure 2: On-Street Parking Study Area (Source: Applicant)

Space Type	Spaces	10:00 AM			Peak Hour Occupancy (2:00 PM)		
		Occupancy	% Utilization	Available	Occupancy	% Utilization	Available
RPP	39	21	54%	18	30	77%	9
Unrestricted	74	52	70%	22	53	72%	21
Unrestricted (outside of rush hours)	15	0	0%	15	1	7%	14
All On-Street spaces	128	73	57%	55	84	66%	44

Figure 3: On-Street Peak hour Parking Utilization (Source: Applicant)

Vehicle Trip Generation and Mode Split

In order to determine the vehicle trip generation of the proposed increase in student and faculty enrollment, the Applicant conducted traffic (vehicles and passengers on school buses) pedestrian, bicycle, Metrobus, and vehicle occupancy counts at the school driveway and along Ford Stevens Drive, Rock Creek Ford Road, and 16th Street. These counts were used to determine the existing mode split and vehicle trip generation. Subsequently, the existing mode splits for students and faculty were applied to the proposed increase in student enrollment and faculty cap in order to estimate new vehicle trips resulting from the increase in students and faculty.

The student and staff mode split (see Figures 4 and 5) were based on Wednesday, June 3, 2015 counts when the school enrollment was 188 students and 56 staff. It should be noted that not all 56 staff were on-site at the time of the count as some staff split their time with another JPDS facility south of this site. While a total of 104 students were driven in the morning and 101 students in the afternoon, 76 vehicles were used in the morning and 75 in the afternoon due to carpooling.

	AM		PM	
	%	Students Counted	%	Students Counted
Driven Alone	28%	51	27%	53
Carpool (two-student)	25%	44	20%	38
Carpool (three-student)	5%	9	3%	6
Carpool (four-student)	0%	0	2%	4
Metrobus	0%	0	0%	0
School Bus	39%	69	48%	93
Walk	3%	5	0%	0
Bike	0%	0	0%	0
Total	100%	178	100%	194³
AM (6:30-9:30)				
PM (2:30-6:30)				

Figure 4: Student Mode Split (Source: Applicant)

Staff Transportation Mode Share		
	%	Staff
Drove Alone	81%	34
Carpool	5%	2
Metrobus	2%	1
Walk	10%	4
Bike	2%	1
Total	100%	42

Figure 5: Staff Mode Split (Source: Applicant)

The existing trip generation was based on Wednesday, October 21, 2015 counts when the school enrollment was 204 students and 56 staff. The morning school peak was from 7:45 am to 8:45 am, coinciding with morning rush hour. The afternoon peak of trips generated by the school was from 3:00 pm to 4:00 pm, while the afternoon commuter rush hour peak was from 5:15 pm to 6:15 pm. Assuming the student and staff mode shares are maintained as the school enrollment increases to the existing cap, and eventually proposed cap, Figures 6, 7, and 8 show the predicted trip generation for each of those caps. The school generates 158 vehicle trips in the morning peak hour and 83 trips in the afternoon school peak hour with an enrollment of 204 students and 56 staff. A 35% increase in students, to the currently permitted cap of 275 students, results in 213 vehicle trips in the morning and 112 trips in the afternoon school peak. An increase in students from the currently permitted cap to the proposed cap of 350 students and 72 staff results in a trip generation of 271 vehicle trips in the morning and 143 trips in the afternoon school peak. The total net increase in trip generation from the existing to the proposed future cap on enrollment (see Figure 8) was used for the capacity analysis.

	School AM Peak			School PM Peak			Commuter PM Peak		
	In	Out	Total	In	Out	Total	In	Out	Total
Existing Trip Generation	91	67	158	40	43	83	15	18	33
Increase permitted under current cap (204 to 275 students; 35% growth)	32	23	55	14	15	29	5	6	11
Baseline (Existing Permitted)	123	90	213	54	58	112	20	24	44

Figure 6: Existing, Current Cap and Baseline Peak Hour Trip Generation

Future	School AM Peak			School PM Peak			Commuter PM Peak		
	In	Out	Total	In	Out	Total	In	Out	Total
Baseline (Existing Permitted)	123	90	213	54	58	112	20	24	44
BZA Net Increase (275 to 350 students; 27% growth)	33	25	58	15	16	31	5	6	11
Total Future JPDS-NC (350 students)	156	115	271	69	74	143	25	30	55

Figure 7: Future Peak Hour Trip Generation

	School AM Peak			School PM Peak			Commuter PM Peak		
	In	Out	Total	In	Out	Total	In	Out	Total
Total Future JPDS-NC (350 students)	156	114	271	69	74	143	25	30	55
Existing Trip Generation	91	67	158	40	43	83	15	18	33
Total Net Increase in Trip Generation from Existing	65	47	113	29	31	60	10	12	22

Figure 8: Net Increase in Peak Hour Trip Generation

Study Area and Data Collection

The Applicant identified four 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 that realize new trips. However, DDOT expects minimal to no increase in delay outside the study area as a result of the proposed action.

Counts were conducted on Wednesday, October 21, 2015 from 6:30 AM to 9:30 AM and from 2:30 PM to 6:30 PM, while Congress and DC Public Schools were in session. DDOT agrees with the time frame and collection date.

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.

All intersections in the study area are expected to operate at an acceptable level of service with the added trips from the proposed project. The proposed project will have a minimal impact to the intersections in the study area.

Vehicle Queuing for Pick-Up and Drop-Off

Field observations were conducted on Wednesday, June 3, 2015 from 6:30 AM to 9:30 AM and 2:30 PM to 6:30 PM. At that time, the Applicant observed two parent vehicles queued along Fort Stevens Drive at any one time during dismissal. According to the Applicant's counts for mode share, conducted when 188 students were enrolled, 53 students were driven alone and 44 students carpooled in the PM dismissal (see Figure 4) for a total of 75 vehicles. As the school reaches the proposed cap of 350 students (86% increase in population), that means an additional 65 cars would access the site if the mode split is maintained, exacerbating the off-site queue. The increased student capacity translates to 130 total new vehicle trips generated into and out of the site, which would be spread out over the several hours (or 143 total school PM peak hour trips, as seen in Figure 7). As a result of the building expansion and introducing an on-site sidewalk to connect the new school entrance at rear of the school to the public sidewalk along Rock Creek Ford Road, the on-site vehicle storage capacity is reduced from 20 vehicles to 18 vehicles, further adding to vehicle queuing on public streets (see Figure 9).

The proposed increased in student and staff enrollment will exacerbate the queue on public streets if not appropriately mitigated. The Applicant intends to stagger dismissal by 15 minutes to minimize the vehicle queue. Additionally, a school zone will also enable vehicles to temporarily stop to pick-up and drop-off students reducing vehicle queuing on- and off-site when buses are not queuing. The Applicant has proposed a Performance Monitoring Plan (PMP) as a means to address vehicle queuing on public streets during arrival and dismissal. A PMP gives the Applicant flexibility in managing site generated trips and vehicle queuing without having prescriptive criteria set forth by DDOT. However, the proposed PMP needs to be strengthened in order to provide certainty to DDOT that the proposed increase in student enrollment will not create queuing problems on the transportation network, and should problems arise, they will be addressed in a timely fashion (see PMP section below for more details).

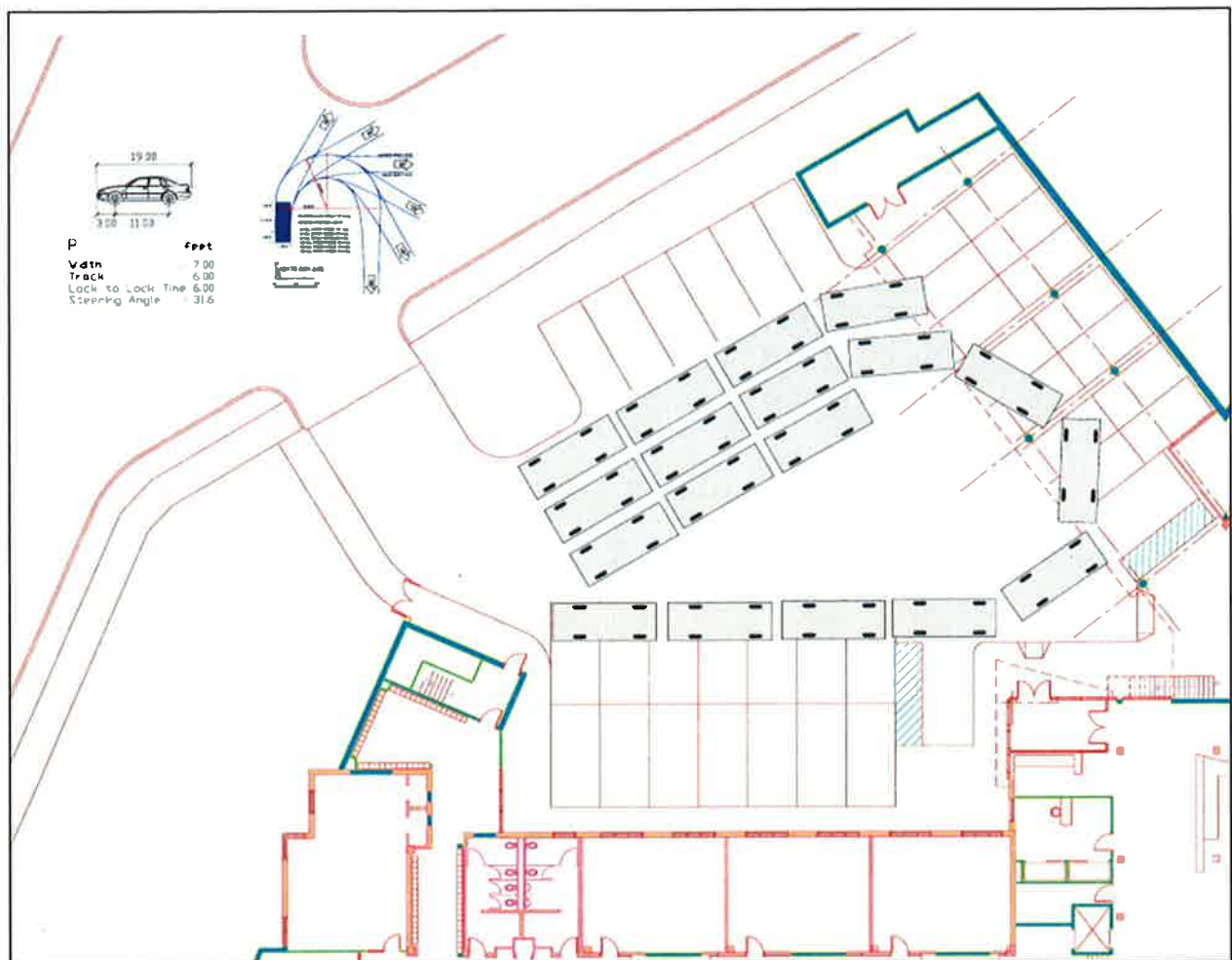


Figure 9: Future Vehicle Pick-Up Circulation and Maximum Queuing Capacity (Source: Applicant)

Transit Service

The District and the 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.

A northbound bus stop is designated in public space in front of the site on 16th Street, and two southbound bus stops, including one bus shelter, are across the street from the site on 16th Street less than 200 feet away. These bus stops are served by four bus lines (i.e., S1, S2, S4, and S9). Additionally, another six bus lines are within the vicinity of the site (i.e., Military Road-Crosstown Lines: E2, E3, and E4 and 14th Street Lines: 52, 53, and 54).

Pedestrian and Bicycle Facilities

Based on the Applicant's field observations and inventory of the pedestrian facilities (see Figure 5), it was observed that the network does not provide adequate facilities to promote connectivity between land uses and transit facilities. Sending and receiving curb ramps are missing at the intersection of Fort Stevens Drive and Rock Creek Ford Road. DDOT requires that the Applicant install three ADA-compliant curb ramps at that intersection, where three are missing (as shown in Figure 10). Since a section of

sidewalk is incomplete along the south side of Fort Stevens Drive between Rock Creek Ford Road and 14th Street, the curb ramps are necessary to provide federally required pedestrian accessibility from east of the site.

Within a half-mile radius of the site, bicycle lanes exist along 14th Street and span from Aspen Street to Columbia Road. Additionally, an on-street signed route along 13th Street from Piney Branch Road to New York Avenue.

While the Applicant indicated that 16 short-term bicycle parking racks are planned around the site, no long-term bicycle parking spaces (i.e., bicycle parking protected from weather elements and kept in a secure location) are located within the school property. As there are no bikeshare facilities within a half-mile of the site, long-term bicycle parking and short-term bicycle parking will facilitate non-automobile use among students, staff, and visitors and are required for schools as per DDOT policy. While not yet in effect, the recently approved Zoning Regulations Review (ZRR) brings zoning requirements into compliance with DDOT policy for the amount of bicycle parking. The Applicant has indicated that one staff member bikes to work; given the residential distribution of staff by jurisdiction and the zoning request to increase the staff cap, providing long-term bicycle spaces is a means to increasing the mode share, decrease dependency on vehicles, and decrease vehicle parking demand. As such, DDOT requires the provision of 10 long-term bicycle parking spaces.



Figure 10: Pedestrian and Transit Facilities

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 conditions for inclusion in the BZA Order.

In addition to the TDM measures, trip cap, and Performance Monitoring Plan (PMP) outlined below, DDOT proposes the following mitigation as a condition of approval in order to improve the pedestrian facilities:

- Construct three ADA-compliant curb ramps at the intersection of Fort Stevens Drive and Rock Creek Ford Road.

Transportation Demand Management

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 previously implemented the following TDM measures:

- Subsidized School Bus Program – The Applicant subsidizes 40% of the cost of ridership. 75% of students are enrolled and utilized the service at least one day per week;
- Carpool Program – The school maintains and updates the online a zip-code roster and carpool registry throughout the school year, which is available to all parents;

- Intercampus School Bus Connection – The Applicant provides a free shuttle service between its two campuses so that families who drive to school with siblings in both campuses have a single drop off point;
- Annual Parent Transportation Surveys – The Applicant issues transportation surveys to parents annually to reevaluate the transportation options;
- School TDM Coordinator – The Applicant designates a TDM Coordinator to manage the school’s TDM program and awareness initiatives; and
- Public Transportation Subsidy for Staff – The Applicant offers staff 50% reimbursement (up to \$50) for monthly transit costs. There are 13 staff members actively participating in this program.

The Applicant proposed the following TDM strategies:

- Provide shower and locker facilities to encourage staff to commute by bicycling;
- Provide bikes and bike helmets for staff members whom have expressed interest in traveling by bike between the North and South Campuses;
- Implement a Safe Routes to School Program and coordinate with DDOT’s Safe Routes to School Coordinator;
- Enroll the school in the Commuter Connections program;
- Increase School Bus Ridership by promoting the program and coordinating with parents on the efficiency of the schools’ routes and stops. The middle school component also presents the opportunity for increased ridership as older children would likely take the school bus to school;
- Encourage participation in carpool and other transportation programs by distributing literature and publications

These TDM measures are a good basis for reducing dependency on single occupancy vehicles. As the school population increases, additional measures may be needed to ensure the Applicant does not surpass its trip cap and ensure compliance with the performance monitoring plan outlined below. Some additional TDM measures may include:

- Fully subsidize the school bus program;
- Provide students a public transit benefits;
- Provide 100% reimbursement for public transit up to the maximum federal limit (as of the date of this memo, \$255);
- Offer guaranteed rides home to transit users and those who carpool or bike in case of an emergency; and
- Provide all staff who bike \$40 per month towards repairs or purchase of a new bike.

Performance Monitoring Plan and Trip Generation Cap

Due to the growth in vehicle trip generation associated with the proposed increase in student and staff enrollment, DDOT is concerned about the impact of vehicles queuing on the transportation network during pick-up, and particularly drop-off. The Applicant proposed a PMP, but the PMP needs to be strengthened in order to provide certainty to DDOT that the proposed increase in student enrollment will not create queuing problems on the transportation network and should problems arise, they will be addressed in a timely fashion. Accordingly, DDOT recommends a vehicle trip generation cap as a means to ensure that site generated trips do not expand beyond reasonable levels, exacerbating vehicle queuing on public streets. This cap is calculated using the existing trip generation and the proposed

growth of the student and staff population for the AM peak hour (see Figure 8) while decreasing the proposed trip growth by 10% for the school PM peak hour.

The Applicant proposed the following PMP, which DDOT agrees with:

- The monitoring report will outline the school's existing enrollment and associated off-site vehicle queuing;
- Existing trip generation to include driveway counts during arrival and dismissal periods;
- Travel mode split for students and staff;
- Average and maximum on-site and off-site queue and duration of off-site queue; and
- Description of any adverse transportation conditions associated with drop-off and pick-up.

DDOT recommends the adding the following parameters to the PMP as a condition of approval for the requested special exception and variance:

- Conduct counts and provide a monitoring report twice per year (fall and spring semesters, not to coincide within a week before or after any extended school breaks) for two years beginning when the school reaches 275 enrolled students and again when the school reaches the proposed cap of 350 students to DDOT's Policy, Planning, and Sustainability Administration;
- Trip generation counts and queuing will need to be observed a minimum of 7:00 am to 9:30 am and 2:30 pm to 6:00 pm;
- Vehicle trip generation shall include all vehicle trips to the site, inclusive of vehicles traveling to the site but not entering the driveway;
- Establish a vehicle trip generation cap of 271 total trips (ins and outs) during the AM peak hour and 135 total trips during the school PM peak hour (not commuter PM peak hour);
- Vehicle queuing for pick-up and drop-off must be within the property line. Vehicle queuing cannot extend to block the sidewalk across the driveway or onto any public streets;
- If vehicle queuing does not meet the above mentioned criteria or the site exceeds the vehicle trip generation caps, the Applicant will need to employ additional TDM measures and continue monitoring twice per year for two years for a total of four successful monitoring reports;
- The Applicant shall document all current TDM measures;
- Include any proposed updates to the TDM plan;
- The Applicant shall return to the BZA to seek relief, lower their student and staff enrollment, or provide additional and more aggressive TDM measures should vehicle queue length not meet the criteria established above or trips generated exceed the 271 total trips during the AM peak hour and 135 total trips during the school PM peak hour threshold for two consecutive monitoring periods.

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