


**GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION**



d. Policy, Planning and Sustainability Administration

MEMORANDUM

TO: Sara Bardin
Director, Office of Zoning

FROM: Samuel Zimbabwe 
Associate Director

DATE: October 19, 2015

SUBJECT: Zoning Commission Case No. 15-02 – 3112 7th Street NE, Brookland Townhomes

PROJECT SUMMARY

MHI-Brookland, LLC (the “Applicant”) seeks approval of a Planned Unit Development (“PUD”) and related map amendment to allow construction of 39 townhomes and up to 46 new residential units in the existing Redeptorists’ Building, with 48 new vehicular parking spaces and 23 existing vehicular parking spaces to remain, in the existing R-5-B District at the premises of the existing Holy Redeemer College at 3112 7th Street NE (Square 3645, Lots 802 and 804, and Square 3648, Lot 804 and Parcel 132/89) (the “Site”).

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. After an extensive review of the case materials submitted by the Applicant, DDOT finds:

Site Design

- Vehicular access is proposed via two new driveways serving the Site, one off of 7th Street and the other off of Jackson Street;
- Loading access is proposed via the same driveways, although there is no zoning requirement for loading;

- Access to the Redemptorists' Building will occur from Jackson Street with access-control and one-way circulation; and
- Pedestrian access is provided alongside each driveway, as well as via the lead walks to townhomes along 7th and Jackson, and from the corner of 7th and Jackson.

Travel Assumptions

- The Applicant utilized sound analysis methodology and assumptions; and
- Future residents are likely to utilize transit, walking, and bicycling in a manner similar to projections.

Analysis

- The action is projected to minimally increase travel delay in the area;
- Existing pedestrian infrastructure, bicycle infrastructure, and transit service can accommodate additional project demand; and
- The Applicant proposes a robust Transportation Demand Management (TDM) plan to encourage non-auto travel and support the non-auto mode split assumed in the analysis.

Mitigations

DDOT has no objection to the requested PUD provided the Applicant:

- Adhere to the commitments for a TDM plan as proposed in the Applicant's latest filing;
- Provide at least five short-term bicycle parking spaces within public space or distributed within the Site; and
- Provide the required long-term bicycle parking spaces for the Redemptorists' Building prior to occupancy.

Continued Coordination

The Applicant is expected to continue to work with DDOT on the following matters:

- Design of the public realm, including utility vault location and treatment, and bike rack locations; and
- Coordination on the final design for the entrances and pedestrian connections.

TRANSPORTATION ANALYSIS

DDOT requires applicants who request PUD approval from the Zoning Commission perform a Comprehensive Transportation Review (CTR) in order to determine the PUD'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. The proposed Site plan is shown in *Figure 1*.

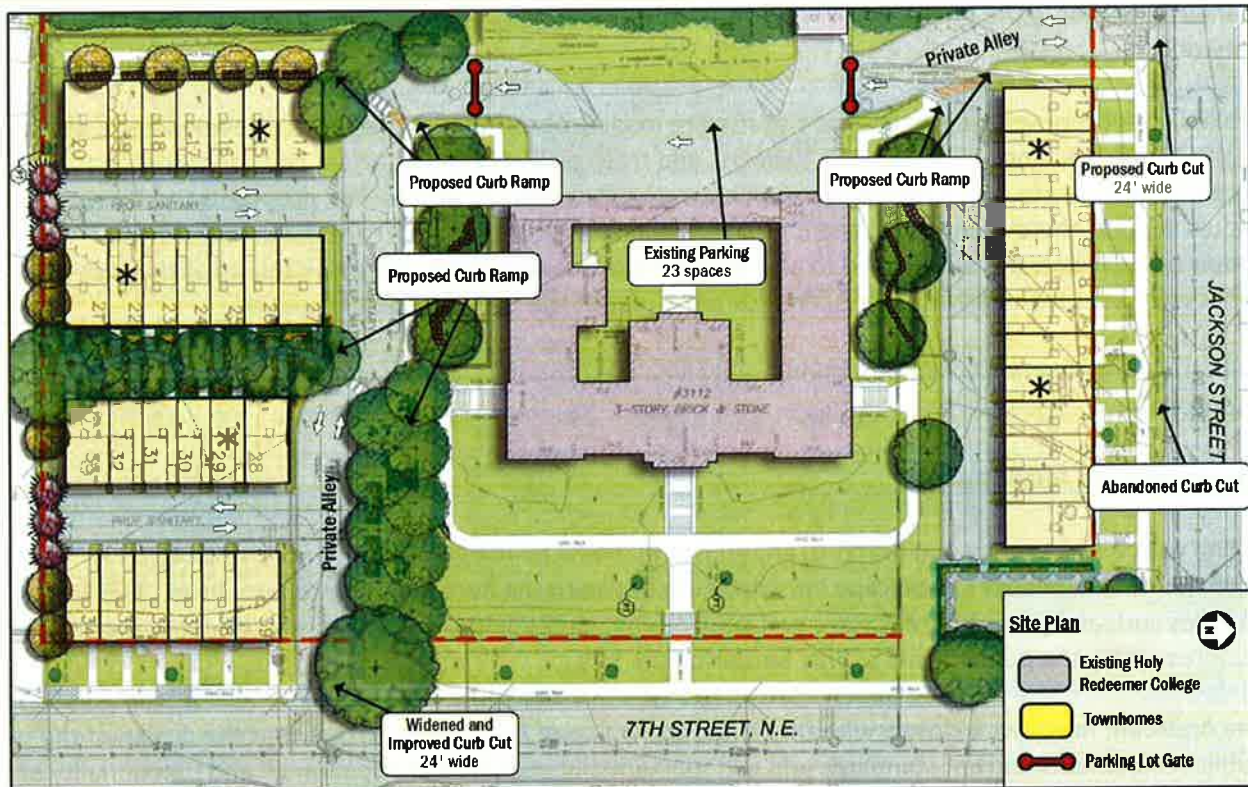


Figure 1. Site Plan (Source: Applicant)

Site Access

This Site is located at the southwest corner of the intersection of 7th Street NE and Jackson Street NE, encompassing the grounds of the existing Holy Redeemer College. The Site currently contains the existing Redemptorists' Building, which will remain and be renovated for new dwelling units, and 39 new townhomes constructed surrounding the building. Vehicular access will occur via driveways from 7th Street and from Jackson Street. Small private alleys are proposed behind the townhomes providing access to the 48 new vehicular parking spaces. The existing lot behind the Redemptorists' Building with 23 spaces will remain and a one-way southbound access to this lot is proposed. Thus, access to the lot will be from the Jackson Street driveway. Any loading access would also occur via these driveways. The proposed Site access is consistent with DDOT's approach to site access, which seeks alley access and that the number of curb cuts be minimized. Two curb cuts for this project is appropriate.

Primary pedestrian access points are located along each driveway, as well as from the corner of 7th and Jackson. Pedestrians will be able to access any building via the proposed pedestrian network. Bicyclists will access the buildings either via the driveways or sidewalk entrances.

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 desires 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.

While District zoning requirements do not require loading accommodations for this development, access to this Site for loading and unloading, delivery, and trash pickup is an important consideration. Loading access is expected to occur via the same driveways as for vehicular access. The proposed Site layout should support these operations, and it is expected that all trucks will turn around on the private property. Deliveries are anticipated to also utilize the driveways. Trash will be picked up at the rear of the townhouses in the private alleys, and from the rear of the Redemptorists' Building.

With the onsite loading accommodations, and given the proposed land uses, the loading proposed is appropriate.

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's preference is for electrical vaults to be located on private space. DDOT staff will be available to provide additional guidance during the public space permitting process.

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 trip generation estimates utilizing the Institute of Traffic 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. DDOT generally finds this method appropriate. Mode split assumptions used in the subject analysis were informed by the building location and program.

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	5 veh/hr	23 veh/hr	28 veh/hr	27 veh/hr	13 veh/hr	40 veh/hr
Transit	4 ppl/hr	19 ppl/hr	23 ppl/hr	21 ppl/hr	11 ppl/hr	32 ppl/hr
Bike	1 ppl/hr	0 ppl/hr	1 ppl/hr	1 ppl/hr	0 ppl/hr	1 ppl/hr
Walk	1 ppl/hr	2 ppl/hr	3 ppl/hr	3 ppl/hr	2 ppl/hr	5 ppl/hr

Figure 2. Weekday Peak Hour Vehicle Trip Generation (Source: Applicant)

Based on this level of trip generation, a 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 three 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 block. 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 Applicant collected weekday intersection data in January 2015. In general, DDOT agrees with the analysis area and collection date.

The following intersections were chosen for analysis:

1. Jackson Street NE/Driveway
2. 7th Street NE/Jackson Street NE
3. 7th Street NE/Irving Street NE/Driveway

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. 2015 Existing Conditions
2. 2017 Background Conditions (without the project)
3. 2017 Future Conditions (with the project)

Analysis provided by the Applicant shows that vehicle traffic impacts at the intersections in the study area, as measured by Level of Service (LOS), are minimal. In fact, all the study intersections operate at acceptable conditions during both peak hours for all three scenarios. The LOS results are shown below in Figure 3.

Intersection	Approach	Existing Conditions				Future Background Conditions (2017)				Total Future Conditions (2017)			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Jackson St & Driveway	Overall	0.7	A	0.0	A	0.7	A	0.0	A	1.6	A	1.8	A
	Eastbound	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A
	Westbound	0.0	A	0.0	A	0.0	A	0.0	A	1.0	A	2.6	A
	Northbound	--	--	--	--	--	--	--	--	8.7	A	8.8	A
	Southbound	9.1	A	0.0	A	9.1	A	0.0	A	9.3	A	0.0	A
Jackson St & 7th St	Overall	7.9	A	7.7	A	7.9	A	7.7	A	8.0	A	7.8	A
	Eastbound	7.9	A	7.7	A	8.0	A	7.7	A	8.0	A	7.8	A
	Westbound	7.4	A	7.4	A	7.4	A	7.4	A	7.5	A	7.5	A
	Northbound	8.0	A	7.8	A	8.0	A	7.8	A	8.1	A	7.9	A
	Southbound	7.9	A	7.7	A	7.9	A	7.7	A	7.9	A	7.8	A
7th St & Irving St	Overall	1.8	A	1.6	A	1.7	A	0.5	A	2.3	A	1.1	A
	Eastbound	0.0	A	0.0	A	0.0	A	0.0	A	9.9	A	9.8	A
	Westbound	10.3	B	10.1	B	10.3	B	10.1	B	10.5	B	10.3	B
	Northbound	0.0	A	0.0	A	0.0	A	0.0	A	0.1	A	0.3	A
	Southbound	0.4	A	0.2	A	0.4	A	0.0	A	0.4	A	0.2	A

Figure 3. LOS Summary (Source: Applicant)

Pedestrian Facilities

The District is committed to enhance 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 Site has good existing pedestrian access to nearby destinations and transit. The proposed improvements to the pedestrian network onsite will create an excellent pedestrian network throughout the Site.

Bicycle Facilities

The District is committed to enhance bicycle access by ensuring consistent investment in bicycle 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 bicycling trips.

The Site is currently well-served by bicycle infrastructure. North-south bicycle connections are provided on 4th Street NE, 12th Street NE, and the Metropolitan Branch Trail. East-west bicycle accommodations are provided on Irving Street and Newton Street. A Capital Bikeshare station is also located just south of the Site.

To serve bicycling needs, the Applicant will be expected to provide at least five short-term bicycle parking spaces on Jackson Street or 7th Street within public space or distributed within the Site. The exact location of short-term bicycle facilities will be determined during the public space permitting process. The townhomes will have room for long-term bicycle parking within the units or garages. Based on the proposed 46 units, DDOT would seek provision of 16 long-term bicycle parking spaces within the Redemptorists' Building, and the Applicant agrees to provide these prior to occupancy.

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 ½ of a mile from the Brookland-CUA Metro station, roughly a 10 minute walk. The Metro station is served by Metro's Red line. The Site is also well-served by high-frequency bus routes. Bus routes include:

- 80 – North Capitol Street Line
- D8 – Hospital Center Line
- G8 – Rhode Island Avenue Line
- H1 – Brookland-Potomac Park Line
- H2,H3,H4 – Crosstown Line

Vehicle Parking

The proposed townhomes require one parking space per unit per zoning code, for a total of 39. The Redemptorists' Building will require 23 vehicular parking spaces, for a total of 62 on the Site. Overall, the project is providing 71 spaces, with 48 for townhome use and 23 in the existing Redemptorists' Building lot.

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 any suggested conditions by DDOT 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 proposes the following TDM strategies:

- "The Applicant will identify TDM Leaders (for planning, construction, and operations). The TDM Leaders will work with residents to distribute and market various transportation alternatives and options.
- The Applicant will establish a TDM marketing program that provides detailed transportation information and promotes walking, cycling, and transit. An effective marketing strategy should consist of a multi-modal access guide that provides comprehensive transportation information. This information can be compiled in a brochure for distribution. The marketing program should also utilize and provide website links to CommuterConnections.com and goDCgo.com, which provide transportation information and options for getting around the District.
- The Applicant will encourage all alternative transportation modes including bicycling. Bicycling will be promoted with the provision of on-site outdoor temporary bicycle parking spaces. The marketing program will include brochures on bicycling in the District and for Capital Bikeshare.
- The Applicant will be providing 'Welcome Packages' to each resident that include: (1) info on local routes, (2) \$50 Smartrip card, (3) a one-year membership to Capital Bikeshare, and (4) a one-year membership and \$50 to Zipcar."

These TDM measures, if implemented as planned, will encourage the use of alternative modes of transportation. DDOT thus agrees with these measures and finds the TDM plan to be robust in its encouragement of non-auto travel, thus supporting the non-auto mode split assumed in the analysis.

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