

TECHNICAL MEMORANDUM

To: John Sekas
Connor Sekas
From: Shashwat Anant, EIT
Ariel Jarvis, PE
Kevin Sitzman, PE
Date: May 8, 2025
Subject: 128 Nutley Street NW
Trip Generation and Transportation Improvements

Introduction

This memorandum presents an overview of the trip generation, roadway volumes, and transportation improvements associated with the 128 Nutley Street NW redevelopment project. The proposed development is located at 128 Nutley Street NW, identified as Parcel # 0383 02 0104, within the Town of Vienna. The site consists of a 29,553 square foot lot, currently zoned RS-12.5. The property is currently developed with a single-family detached home on a large lot, consistent with the area's original low-density residential development.

The development proposal seeks to redevelop the existing single-family lot into a nine-unit multifamily residential project, featuring a mix of flat and vertical unit configurations. The proposed development differs from a traditional single-family subdivision by offering a more compact, diverse housing solution.

The proposed site location is shown in Figure 1.

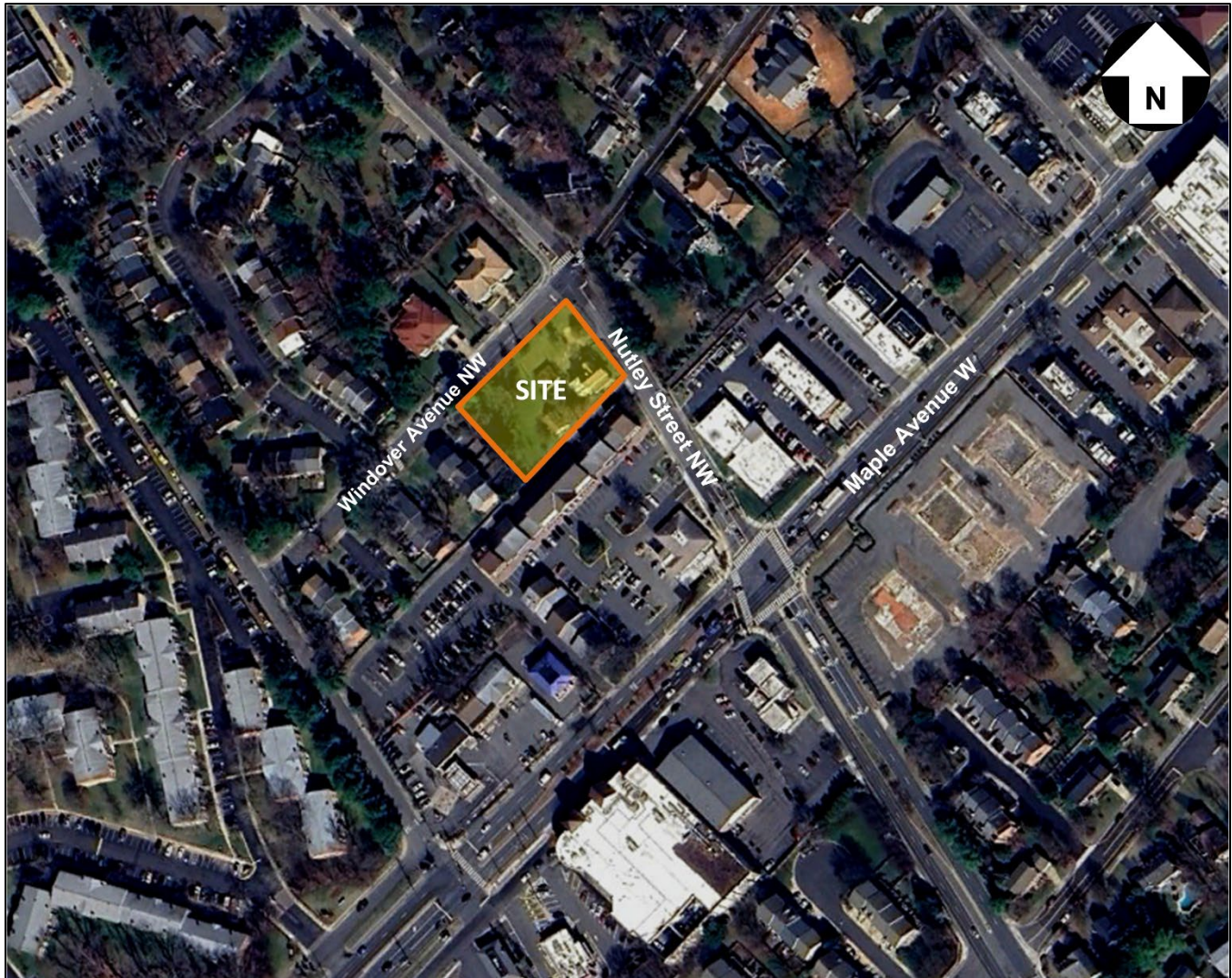


Figure 1: Site Location

Trip Generation Comparison

The Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition was used to determine the existing and proposed trips generated by the site as shown in Table 1.

Table 1: Site Trip Generation

Land Use	ITE Code	Size	----- Week day -----						Daily Total
			AM Peak Hour			PM Peak Hour			
			In	Out	Total	In	Out	Total	
Existing Development									
Single-Family Detached Housing	210	1 DU	0	1	1	1	0	1	15
Proposed Development									
Multifamily Housing (Low-Rise)	220	9 DU	6	20	26	15	9	24	133
Net New Site Trips (Proposed - Existing)			6	19	25	14	9	23	118

As shown in Table 1, the proposed redevelopment is anticipated to generate approximately 25 additional trips during the AM peak hour, 23 additional trips during the PM peak hour, and 118 additional trips on a typical weekday.

Given the size of the existing lot, it could be subdivided into two (2) large single-family lots. Similar homes in the area often have up to six (6) bedrooms. Additionally, accessory dwelling units could be built on the subdivided lots, bringing the potential number

of bedrooms to 16. The proposed total of 23 bedrooms in the nine (9) multifamily units represents an increase of seven (7) units or 44 percent over the by-right condition.

Roadway Volume Comparison

As shown in Figure 2, the proposed site generated trips will contribute no more than 2.1 percent of daily traffic on surrounding major roadways. Nutley Street NW, which carries approximately 4,700 to 5,700 vehicles per day (vpd), would see an increase of 0.2 to 2.1 percent. Maple Avenue W, which carries approximately 23,000 to 28,000 vehicles per day (vpd), would see an increase of 0.2 to 0.3 percent. Given the low percentage of site trips relative to the average daily traffic, the redevelopment is anticipated to have minimal impacts on traffic operations of the surrounding roadways.



Figure 2: Average Daily Traffic (ADT) and Site Trip Distribution

Roadway Improvements

The segment of Windover Avenue NW along the site's frontage will be upgraded to have curb and gutter, consistent with the north and south side (west of the site) of Windover Avenue NW. As shown in the Pavement Marking and Signing Plan for 128 Nutley Street NW, street parking will be provided on Windover Avenue NW along the site's frontage.

The Pavement Marking and Signing Plan is shown in Figure 3.

Alternate Design

The Applicant is proposing an alternate design with the site access on Nutley Street NW, consistent with the existing site driveway location. Maintaining the site access on Nutley Street NW would allow the Applicant to provide a historic pocket park in the northwest corner of the site. The park would include a gazebo and serve as an amenity for residents of the site.

Relocating the site entrance to Nutley Street NW would allow for additional street parking on Windover Avenue NW along the site's frontage. This design would also locate the access to the multifamily units on the higher-classified street. Together, these modifications would provide a more consistent street section along Windover Avenue NW and reduce vehicular turning movements at the intersection of Nutley Street NW and Windover Avenue NW.

It is noted that the Town of Vienna may require an access management exception for the intersection spacing along Nutley Street NW between Windover Avenue NW and the site entrance.

If possible, the Applicant will restripe Nutley Street NW along the site's frontage to provide two (2) southbound and one (1) northbound travel lanes. This improvement would increase vehicular capacity along southbound Nutley Street NW and potentially reduce vehicular conflicts.

Pedestrian Network Improvements

As shown in the Conceptual Layout Plan for 128 Nutley Street NW, a 5-foot sidewalk will be constructed along the site's property frontages on Windover Avenue NW and Nutley Street NW. The new 5-foot sidewalk will provide a direct connection to the existing pedestrian network in the vicinity of the site, which includes existing sidewalks on the south side of Windover Avenue NW (west of the site) and the west side of Nutley Street NW (south of the site). A crosswalk and associated curb ramps will also be provided on the west leg of the intersection of Windover Avenue NW and Nutley Street NW.

New residents of the site as well as existing residents in the vicinity of the site will be able to use the existing and proposed pedestrian network to access nearby schools and a variety of commercial uses including restaurants and salons.

The existing and proposed pedestrian network will also provide access to existing bus stops on Nutley Street and Maple Avenue. The site is most closely served by Fairfax Connector Route 463, which provides weekday and weekend service between the Vienna Metro Station and Tysons Metro Station. The Vienna Metro Station is served by the Orange line and the Tysons Metro Station is served by the Silver line.

The Conceptual Layout Plan is shown in Figure 4 and Conceptual Layout Plan – Alternate Design is shown in Figure 5. The existing and proposed pedestrian network is shown in Figure 6.

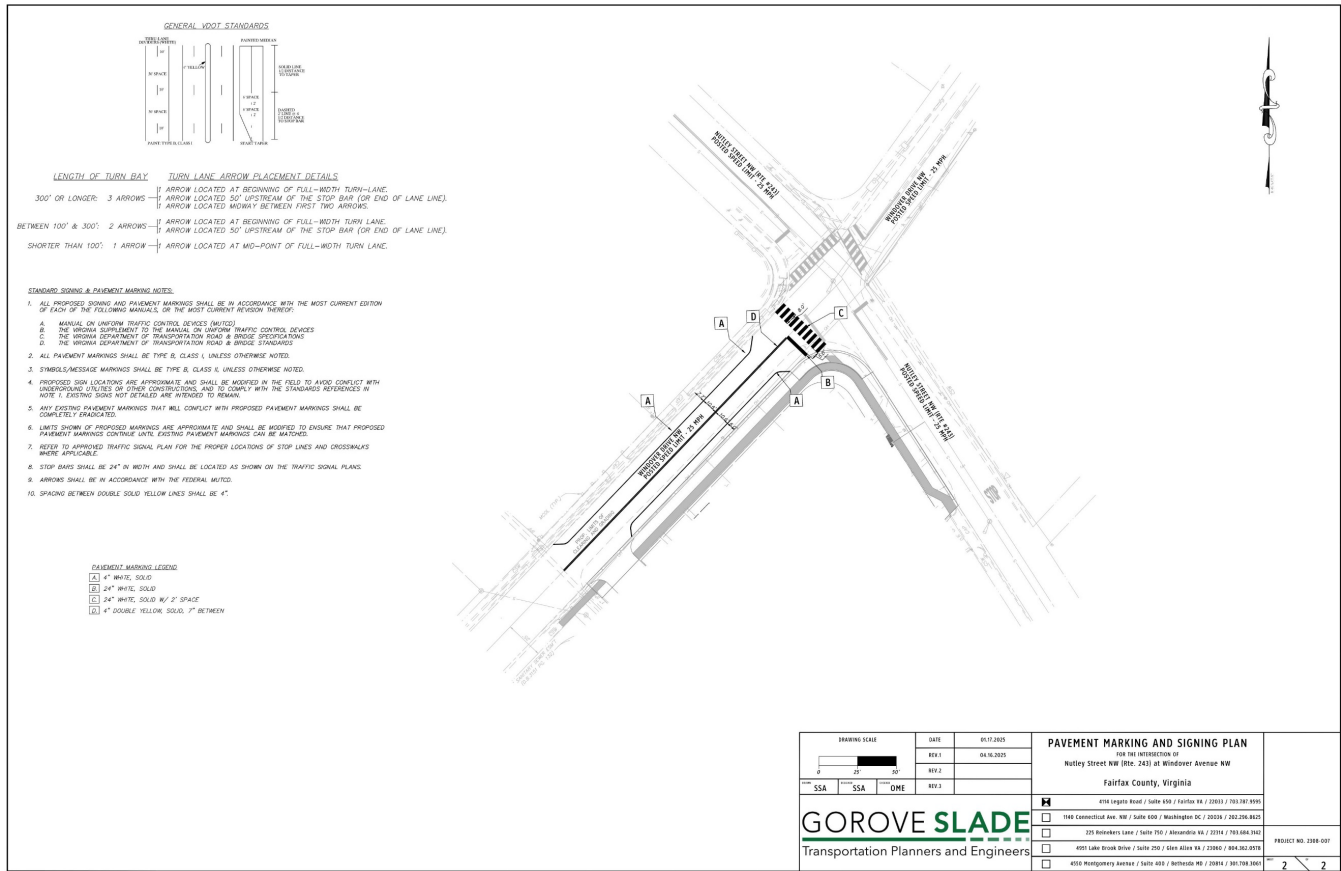
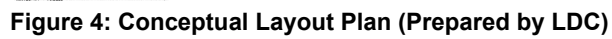
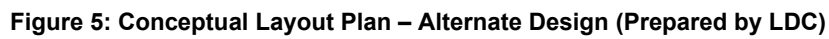


Figure 3: Pavement Marking and Signing Plan (Prepared by Gorove Slade)





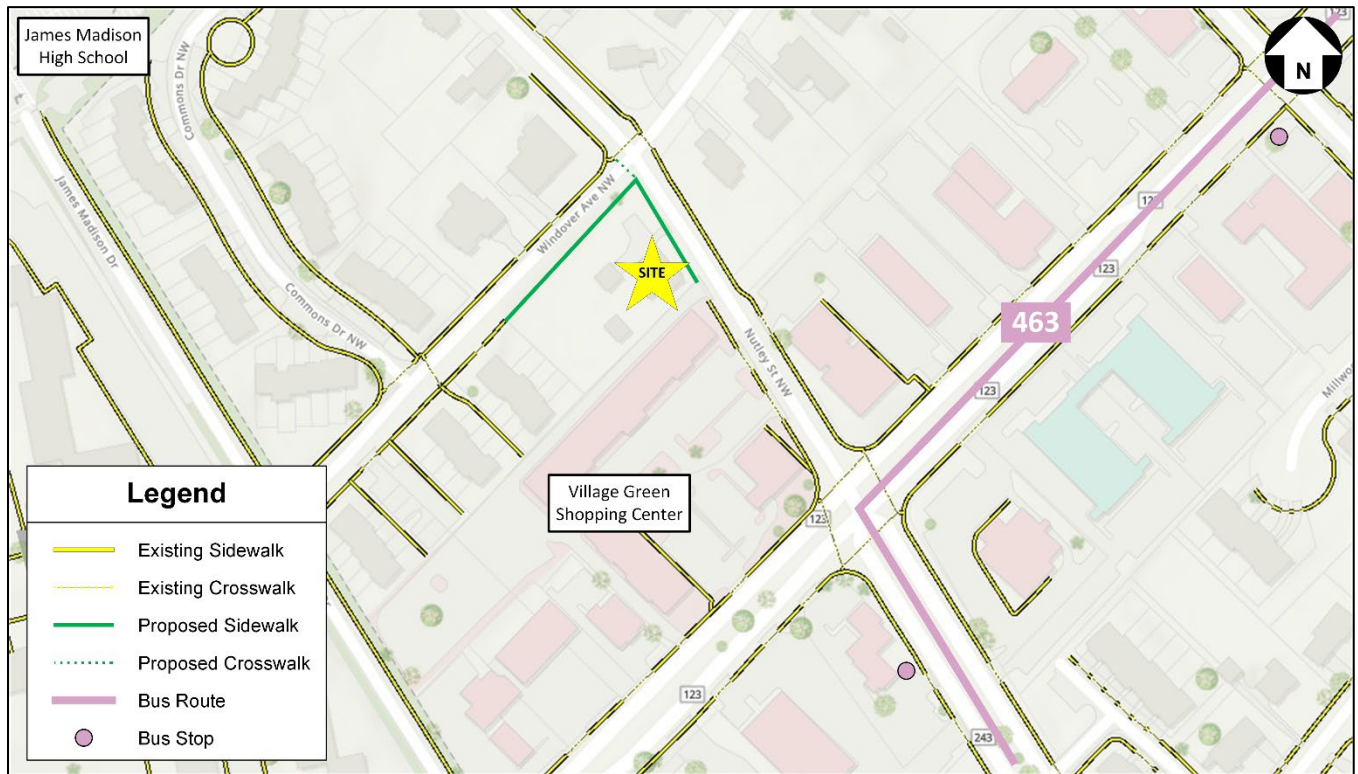


Figure 6: Pedestrian Network

Conclusions

The information presented in this memorandum supports the following conclusions:

- The proposed redevelopment is anticipated to generate approximately 25 additional trips during the AM peak hour, 23 additional trips during the PM peak hour, and 118 additional trips on a typical weekday.
- The proposed site generated trips will contribute no more than 2.1 percent of daily traffic on surrounding major roadways. Given the low percentage of site trips relative to the average daily traffic, the redevelopment is anticipated to have minimal impacts on traffic operations of the surrounding roadways.
- The Applicant is proposing to upgrade Windover Avenue NW along the site's frontage to include curb and gutter and street parking.
- With the alternate design, site access will be provided on Nutley Street NW.
- The Applicant is proposing to provide a 5-foot sidewalk along the site's property frontages on Windover Avenue NW and Nutley Street NW.