Exhibit 52(a)
OZAH Case No: H-159

Local Area Transportation Report

Notley Road

Silver Spring, Maryland

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Executive Summary

This report presents a Local Area Transportation Review (LATR) for the rezoning and redevelopment of the Notley Road parcels in Silver Spring, Maryland within the Colesville (Yellow) Policy Area of Montgomery County, Maryland.

The current application is for a Local Map Amendment (LMA) to allow for a future Preliminary Plan application that would replace the existing single-family detached homes with up to 135 townhomes.

The study has been updated to reflect a decrease in the total number of proposed units, from 150 townhomes to 135 townhomes. The revised site is projected to generate fewer than 65 new peak weekday trips, which places it in the lower tier of the adequacy network distance study area. Previously identified off-site deficiencies have also been revised accordingly.

This revised study addresses the comments received from the community as well as from MCDOT, SHA and Planning Staff. Point by point comment responses that accompanied the second submission are provided in the Technical Attachments. A separate comment response letter is not provided with this revised submission as the remaining comments were minor and editorial in nature and have been addressed through direct coordination with reviewers.

The project includes several improvements that would benefit the surrounding neighborhood and community. Some of the key improvements include:

- A new traffic signal is planned for the intersection of New Hampshire Avenue and Notley Road to provide a protected crossing for pedestrians and bicyclists, with the intention of reducing existing congestion and delays.
- The Neighborhood Park expansion located along Notley Road in the southwest corner of the Property, will serve as a physical and visual expansion of the Colesville Manor Neighborhood Park. This open space will serves as a more pedestrian friendly, public entrance to the adjacent park, with a curvilinear pathway connecting the park from the street (where no such dedicated pedestrian pathway currently exists).
- Additional safety measures related to speed management on Notley Road are under consideration, as the current 85th percentile speed exceeds the posted limit by more than 20%. These measures will be evaluated during the Preliminary Plan Submission. The proposed improvements seek to address concerns regarding speeding and failure to stop at the Sherwood Road and Notley Road intersection.

Proposed Project

The site, which is currently improved with five (5) single family detached houses, is generally bounded by New Hampshire Avenue (MD Route 650) to the east, Notley Road to the south, existing building to the north and the Colesville Manor Neighborhood Park to the west. The Project site is located within the Colesville (Yellow) Policy Area. The Project will replace the existing single-family detached homes with up to 135 townhomes.

Pedestrian facilities along the site frontage on Notley Road and New Hampshire Avenue will be improved and designed to satisfy Montgomery County and American with Disabilities Act (ADA) standards for sidewalks, crosswalks, and curb ramps. This includes new and improved sidewalks that meet or exceed the width requirements, crosswalks at all necessary locations, and curb ramps with detectable warnings. Pedestrian access will be provided for each individual unit directly or via sidewalks connecting to New Hampshire Avenue or Notley Road.

There are currently seven (7) curb cuts on Notley Road, and one (1) curb cut on New Hampshire Avenue. The proposed development will consolidate these vehicular access points to two (2) new full access curbs cut along Notley Road. Vehicles then use private roads and alleys to access the townhome driveways.

The existing and proposed ITE trip generation summary after the M-NCPPC Policy Area-specific adjustment factors is shown in Table 1. More detailed trip generation calculations are provided in the Adequacy determination section of the report.

Adequacy Determination

As the new net vehicle trips generated by the project will be greater than 30, a full LATR study is required to assess the impact of the project and assess the adequacy of the nearby transportation facilities. This includes a review of each of the applicable modes (motor vehicle system adequacy, pedestrian network adequacy, bicycle network adequacy and transit network).

At the time of the Preliminary Plan, the Applicant will work with MCDOT, SHA, and Planning Staff to identify off-site

improvements that align with the County's transportation priorities to meet the requirements to address deficiencies in the Vehicular, Pedestrian, Bicycle, and Bus Transit systems.

Motor Vehicle Adequacy

A capacity analysis was completed to compare the future roadway conditions with and without the proposed development. Based on the results of the CLV analysis, all intersections operate within the acceptable congestion standard under all scenarios analyzed. **As such, the Project's traffic generation does not exceed the critical lane volume standards as applicable under the LATR Guidelines.**

No mitigation is triggered since the Project is located in a yellow policy area and meets the CLV standards. **As such, the project satisfies motor vehicle system adequacy requirements without the need for roadway improvements.**

Please note that the delay-based HCM analysis included in previous versions of this report for reference has been removed from this submission as it does not apply to the project for the purpose of evaluating motor vehicle adequacy. Per the LATR guidelines, HCM analysis is not required for intersections located in a yellow policy area unless they exceed a CLV threshold of 1,350 vehicles per hour. Since none of the study intersections meet this threshold, HCM analysis is not required per the LATR Guidelines.

Pedestrian System Adequacy

A review of the existing pedestrian system was conducted in accordance with the LATR Guidelines. The review covered Pedestrian Level of Comfort (PLOC) adequacy, Americans with Disabilities Act (ADA) compliance, and illuminance adequacy. The illuminance review performed photometric evaluation of the existing streetlights to determine if they meet MCDOT streetlight and illuminance standards.

- *PLOC Walkshed distance: 250 feet*
- *ADA Walkshed distance: 125 feet*
- *Illuminance Walkshed distance: 250 feet*

Bicycle System Adequacy

An evaluation of the existing bicycle system was conducted in accordance with the LATR Guidelines. This review was based on the County's Bicycle Level of Traffic Stress (BLTS) methodology and the Bicycle Master Plan.

- *BLTS Walkshed distance: 400 feet*

Transit System Adequacy

The transit system adequacy test consisted of evaluating the amenities present at bus stops within a specified distance from the project site.

- *Transit Walkshed Distance: 500 feet*

Vision Zero Statement

As part the project's Vision Zero Statement, conditions around the project site were evaluated to determine if safety measures may be needed to address safety issues.

Speed study data was collected along both directions on Notley Road and New Hampshire Avenue (MD 650) to determine the average and 85th percentile speeds in the area along with the 10-mile per hour pace.

Additional safety countermeasures for speed management improvements are warranted based on the existing 85th percentile speed along Notley Road exceeding the posted speed limit by over 20%. The improvements will be reviewed during the subsequent Preliminary Plan Submission.

The project's frontage improvements are anticipated to improve conditions for all roadway users in the area by providing sidewalks, crossings, and ADA curb ramps that meet standards.

Additional off-site improvements would further improve conditions near the site. **The proposed off-site improvements will be discussed with MCDOT, Planning, and SHA Staff during the subsequent Preliminary Plan Submission.**

LATR Proportionality Guide

Based on the current LATR Proportionality Guide, the project is required to mitigate up to $559,215 in off-site improvements consistent with the GIP.

At the time of the Preliminary Plan, the Applicant will work with MCDOT, SHA, and Planning Staff to identify off-site improvements that align with the County's transportation priorities to meet the requirements to mitigate deficiencies in the Vehicular, Pedestrian, Bicycle, and Bus Transit systems.

The cost estimate for the Proportionality Guide reflects a full density build-out. Adjustments may be made during the Preliminary Plan submission based on the actual proposed density and the requirements set forth in the 2024-2028 Growth and Infrastructure Policy (GIP).

Preliminary Traffic Signal Warrant Study

At the request of SHA, the Notley Road and New Hampshire Avenue (MD 650) intersection was evaluated in accordance with MDSHA's (Maryland State Highway Administration) MUTCD (Manual on Uniform Traffic Control Devices) standards and guidelines.

The preliminary traffic signal warrant analysis results indicate **existing traffic volumes at the Notley Road and New Hampshire Avenue (MD 650) intersection meet Warrant 2, Four Hourly Vehicular Volume and Warrant 3, Peak Hour thresholds for signalization under existing conditions without the project.**

Additional correspondence with SHA indicates the MD 650 and Notley Road intersection is included in an OOTS-TEDD single advertisement projects for signalization. **The timing and funding of the Notley Road traffic signal and the proposed off-site improvements will be reviewed in coordination with reviewing agencies and finalized with Staff at the time of Preliminary Plan.**

Table 1: Existing and proposed Trip Generation Summary

Land Use	Size	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Existing Trip Generation								
Single-Family Detached Housing	5 du	1 veh/hr	3 veh/hr	4 veh/hr	3 veh/hr	2 veh/hr	5 veh/hr	51 veh
Proposed Trip Generation								
Single-Family Attached Housing	135 du	13 veh/hr	39 veh/hr	52 veh/hr	36 veh/hr	26 veh/hr	62 veh/hr	782 veh
Net Trip Generation		**12 veh/hr**	**36 veh/hr**	**48 veh/hr**	**33 veh/hr**	**24 veh/hr**	**57 veh/hr**	731 veh

Introduction

This report reviews the transportation elements of the Notley Road parcels located in the Colesville Policy Area of Montgomery County, Maryland.

The purpose of this report is to:

1. Review the transportation elements of the project and assess the adequacy of relevant transportation facilities, as required by Section 7.2.1.E.2.e and as outlined in the County's GIP and LATR guidelines, as applicable.
2. Provide information to the Montgomery County Park and Planning Commission (Maryland-National Capital Park and Planning Commission/M-NCPPC), the Montgomery County Department of Transportation (MCDOT) and Maryland State Highway Administration (SHA) of how the site will influence the local transportation network.
3. Examine the current state of the surrounding multimodal transportation network and identify potential improvement needed, if any, to improve the network to acceptable conditions.

Development Program Overview

The site, which is currently improved with five (5) single family detached houses, is generally bounded by New Hampshire Avenue (MD Route 650) to the east, Notley Road to the south, existing building to the north and the Colesville Manor Neighborhood Park to the west. The Project will replace the existing single-family detached homes with up to 135 townhomes.

Study Area Overview

Overview of Regional Access

Under existing conditions, the proposed development site has access to regional vehicular and transit-based transportation options that connect the site to destinations within Virginia, the District, and Maryland.

The site is located adjacent to New Hampshire Avenue (MD 650) which connects the site to Intercounty Connector (MD-200) to the north and Columbia Pike (US 29) and Capital Beltway (I-495) to the south that surrounds Washington, DC and its inner suburbs.

The site has direct access to WMATA bus route Z2, providing services between Silver Spring Metro Station and Olney, with hourly frequencies during peak hours on weekdays.

Overall, the site has access to several regional roadways and transit, making it convenient to travel between the site and destinations in the District, Virginia, and Maryland.

Overview of Local Access

There are several local transportation options near the site that serve vehicle, transit, walking, and cycling trips under existing conditions.

The site is located adjacent to a state route, New Hampshire Avenue (MD- 650), and is surrounded by Boulevards and Neighborhood Connectors. Table 4 provides a list of roadways near the project area.

There are existing striped bikeways along New Hampshire Avenue. However, the Montgomery County *Bicycle Master Plan* identifies significant planned improvements in the form of sidepaths along the site frontage on Notley Road and New Hampshire Avenue.

In the vicinity of the site, existing pedestrian facilities are present along New Hampshire Avenue and south on Notley Road. Gaps in the form of missing sidewalks and insufficient sidewalk widths along Notley Road and New Hampshire Avenue limit connectivity to and from the site.

Pedestrian facilities are available along anticipated pedestrian routes, such as those to transit stops, nearby residential areas, and community amenities. A detailed review of existing and proposed pedestrian access and infrastructure is provided in a later chapter of this report.

Table 2: Summary of Study Area Roadways

Roadway	Jurisdiction	Functional Classification (MDOT SHA/MPOHT)	Rural vs Urban	# of Lanes	Speed Limit
Notley Road	MCDOT	Neighborhood Connector	Urban	1-2	30 MPH
New Hampshire Avenue (MD 650)	MCDOT/ MDOT SHA	Boulevard/ Principal Arterial (Other)	Urban	6-9	40-45 MPH
Intercounty Connector (MD 200)	MCDOT/ MDOT SHA	Freeway/ Principal Arterial (Other Freeways & Expressways)	Urban	6-8	60 MPH
Randolph Road	MCDOT	Town Center Boulevard - Boulevard	Urban	6-8	40 MPH
Sherwood Forest Drive	MCDOT	Local	Urban	2	30 MPH

Contents of Study

This report contains eight (8) sections as follows:

Section 1: Adequacy Determination

This section reviews the transportation components, travel demands and the adequacy requirements of the Notley Road parcels redevelopment.

Section 2: LATR Vision Zero Statement

This section outlines the required Vision Zero Statement for the project. It includes a review of the traffic speeds around the site to determine if measures to manage safety issues around the project may be warranted.

Section 3: Traffic Operations

This section provides a summary of the existing roadway facilities and an analysis of the existing and future roadway capacity in the study area. This section highlights the vehicular impacts of the project, including presenting mitigation measures as needed.

Section 4: Pedestrian Facilities

This section summarizes existing and future pedestrian access to the site, outlines impact, and presents recommendations, as needed. The pedestrian system adequacy test is also presented in this section. The pedestrian system adequacy test includes a review of the following:

- Pedestrian Level of Comfort (PLOC) adequacy
- American with Disabilities Act (ADA) compliance
- Illuminance adequacy

The findings of each individual component are presented along with specific potential improvements that would achieve adequacy, if deemed necessary and feasible.

Section 5: Bicycle Facilities

This section summarizes existing and future bicycle access to the site, reviews the quality of cycling routes to and from the project site, outlines impact, and presents recommendations, as needed. The bicycle system adequacy test is also presented in this section, including a discussion of potential improvements that would achieve adequacy, if deemed necessary and feasible. The bicycle system adequacy test includes a review of the Bicycle Level of Traffic Stress (BLTS) within the study area.

Section 6: Transit Facilities

This section summarizes the existing and future transit service adjacent to the site, reviews how the project's transit demand will be accommodated, outlines impact, and presents recommendations, as needed. The transit system adequacy test is also presented in this section, including a discussion of potential improvements that would achieve adequacy, if deemed necessary and feasible.

Section 7: Preliminary Signal Warrant Study

This section summarizes the preliminary signal warrant study conducted at the Notley Road and New Hampshire Avenue intersection in accordance with MDSHA's (Maryland State Highway Administration) MUTCD (Manual on Uniform Traffic Control Devices) standards and guidelines.

Section 8: LATR Proportionality Off-Site Improvements

This section summarizes both auto and non-auto system deficiencies and the applicable LATR Proportionality Guide.

Figure 1: Site Aerial

Section 1: Adequacy Determination

This section reviews the transportation components, travel demands and the adequacy requirements of the Notley Road Project.

Project Description

The proposed development of the Notley Road parcels in Silver Spring, Maryland, is bound by New Hampshire Avenue (MD Route 650) to the east, Notley Road to the south, existing building to the north and the Colesville Manor Neighborhood Park to the west. The Project will replace the existing single-family detached homes with up to 135 townhomes.

Access and Circulation

Pedestrian and Bicycle Access

Pedestrian access will be provided for each individual unit directly or via sidewalks connecting to the private streets/alleys, New Hampshire Avenue (MD 650) or Notley Road. New sidewalks and trails will be constructed along the site frontage, as shown in Figure 2.

The new sidewalk along the site frontage will establish a crucial connection between Colesville Manor Neighborhood Park and New Hampshire Avenue, addressing an existing gap in accessibility. This development will provide improved access to the area that previously lacked such infrastructure.

Bicycle access to the site is available via frontage sidewalks and existing shoulder bike lanes along New Hampshire Avenue.

Vehicular Access

Access to the site is proposed via two (2) full access curb cuts along Notley Road. Vehicles then use private alleys and streets to access the townhome driveways.

The concept site plan is shown in Figure 2.

Trip Generation

The proposed development plan includes up to 135 townhomes.

Weekday peak hour trip generation is calculated based on the methodology outlined in the 11th Edition of the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*. This methodology is supplemented in accordance with the M-NCPPC Local Area Transportation Review (LATR) guidelines to account for the context-sensitive trip generation adjustment factors associated with each policy area in Montgomery County.

The project is located within the Colesville Transportation Policy Area (Yellow). Based on Appendix Table 1a of the M-NCPPC January 2025 LATR Guidelines, the adjustment factor used to determine the existing site and the proposed project's trip generation is 80% for residential land use.

Existing trip generation for the use was calculated using ITE Land Use Code 210 "Single-Family Detached Housing" and the proposed trip generation was calculated using ITE Land Use Code 215 "Single-Family Attached Housing". The ITE trip generation was then adjusted using the Policy Area-specific residential adjustment factor of 80%.

Following the removal of existing trips, the proposed development will generate 48 net new vehicle trips during the morning peak hour and 57 net new vehicle trips during the afternoon peak hour, as outlined in Table 3. Detailed calculations are provided in the Technical Attachments.

Table 3: Trip Generation Summary

Land Use	Size	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Existing Trip Generation								
Single-Family Detached Housing	5 du	1 veh/hr	3 veh/hr	4 veh/hr	3 veh/hr	2 veh/hr	5 veh/hr	51 veh
Proposed Trip Generation								
Single-Family Attached Housing	135 du	13 veh/hr	39 veh/hr	52 veh/hr	36 veh/hr	26 veh/hr	62 veh/hr	782 veh
Net Trip Generation		**12 veh/hr**	**36 veh/hr**	**48 veh/hr**	**33 veh/hr**	**24 veh/hr**	**57 veh/hr**	731 veh

Figure 2: Concept Site Plan

Section 2: Vision Zero Statement

This chapter outlines the project's Vision Zero Statement. The purpose of this statement is to assess high-injury roadways and safety issues in the vicinity of the project site. This chapter also reviews traffic speeds around the site and describes site access in relation to existing safety issues.

The following conclusions are reached within this chapter:

- No High Injury Network designated roadway segments were located near the project site.
- The 85th percentile speed along both directions on Notley Road exceeded the posted speed limit by 20 percent on both days.
- The 85th percentile speed along both directions on New Hampshire is within 5 mph of the posted speed limit.
- Speed management measures are warranted along Notley Road. The Applicant will review speed management improvements that can reduce speeds along Notley Road in connection with the subsequent Preliminary Plan Submission.

For any project subject to LATR, a Vision Zero Statement must be developed to assess roadway speeds as follows:

- High Injury Network (HIN) Review to determine if the project is located within a specified proximity of any roadway segments with a designated HIN designation.
- Crash History Review to review crash data within a specified distance near the project site.
- Speed Studies within specified distance from the site frontage to document the average and 85th percentile speeds in the area along with the 10-mile per hour pace.

These are discussed in detail in the following section.

High Injury Network Review

Based on the proposed trip generation of 48 net trips during the morning peak hour and 57 net trips during the afternoon peak hour and the current LATR guidelines, High Injury Network (HIN) segments within 250-foot walkshed beyond the site frontage must be documented and reviewed.

No High Injury Network segments were identified within the 250-foot walkshed from the Project.

There are no Vision Zero projects located within the 250-foot walkshed, as shown in Figure 3. Beyond the 250-foot walkshed there is one (1) High Injury Network along Randolph Road and one (1) vision zero scheduled traffic signal project at Randolph Road and Bregman Road.

Proximate Safety Issues

Using Montgomery County's Interactive Crash Map for crashes between 2020 and 2025, about 22 crashes were reviewed within a 250-foot walkshed beyond the project site frontage. The reviewed crashes are shown in Figure 4. The reviewed collision data is summarized as follows:

- 20 crashes are minor/no injury crashes
- 2 crashes are serious injury crashes
- Modes of incidents:
  - 95% (21 crashes) are vehicle(s) only
  - 5% (1 crash) involved non-vehicles:
    - One (1) pedestrian involved

Speed Study

As part of the LATR Vision Zero Statement, speed studies were conducted at the following locations as shown in Figure 5:

- New Hampshire Avenue, between Notley Road and Orchard Way
- Notley Road, between Petwyn Court and Shannon Drive

The 48-hour speed data was collected on Tuesday April 1, 2025, and Wednesday April 2, 2025. Schools were in session on the days speed data were collected. The speed data collected is included in the Technical Attachments.

Table 4 summarizes the observed speed data, including the 50th and 85th percentile speeds for each observation day and each direction at the study locations. The plotted cumulative distributions and the density distributions of the speed data are included in the Technical Attachments.

The speed study results indicate the following:

- The upper limit of the 10-mile pace in the eastbound and northbound direction on Notley Road exceeded the posted speed limit by 20 percent on both days.

- The 85th percentile speed on Notley Road in the eastbound and westbound directions exceeded the posted limit by 20 percent on both days.

The upper limit of the 10-mile pace and the 85th percentile speed along both directions on Notley exceed the 20 percent threshold, warranting additional speed management measures.

At the time of the Preliminary Plan, the Applicant will work with MCDOT, Planning, and SHA Staff to identify off-site improvements.

Table 4: Speed Data Summary

Roadway	Posted Speed Limit	Approach & Lane	Day 1			Day 2		
			50%	*85th %*	*Pace*	*50%*	*85th %*	*Pace*
Notley Road, between Sherwood Forest Drive and New Hampshire Avenue	30 mph	EB	33 mph	39 mph	31-41 mph	33 mph	39 mph	31-41 mph
		WB	33 mph	39 mph	31-41 mph	32 mph	38 mph	29-39 mph
New Hampshire Avenue, between Orchard Way and Notley Road	45 mph	NB	41 mph	48 mph	37-47 mph	41 mph	48 mph	37-47 mph
		SB	42 mph	49 mph	39-49 mph	42 mph	49 mph	39-49 mph

Figure 3: Vision Zero Projects

Figure 4: Crash Data near Project Site

Figure 5: Speed Study Location

Section 3: Traffic Operations

This section provides a summary of an analysis of the existing and future roadway capacity in the study area. Included is an analysis of potential vehicular impacts of the Notley Road project and a discussion of potential improvements as needed.

The purpose of the capacity analysis is to:

- Determine the existing capacity of the study area roadways; and
- Determine the overall impact of the project on the study area roadways; and
- Discuss potential improvements and mitigation measures to accommodate the additional vehicular trips, if necessary.

The capacity analysis focuses on the morning and afternoon commuter peak hours as determined by the existing traffic volumes in the study area.

The following conclusions are reached within this chapter:

- The study area intersections operate well below the CLV thresholds per LATR guidelines during all analysis scenarios for the morning and afternoon peak hours.
- All study intersections meet CLV standards and do not meet the mitigation criteria per LATR guidelines.
- As requested by SHA, a queueing analysis was conducted and results indicate there are queues that exceed available storage capacity along a few road segments in the study area in existing and background conditions even before introducing the site-generated trips.
- A new traffic signal which shown to be warranted by the preliminary Traffic Signal Warrant Analysis and existing traffic volumes at Notley Road and New Hampshire Avenue significantly improves queueing along the study area network.

Study Area, Scope, & Methodology

This section outlines the vehicular trips generated in the study area along the vehicular access routes and defines the analysis assumptions.

The scope of the analysis contained within this report was discussed with and agreed to by M-NCPPC and SHA as detailed in the approved scoping form. The scoping form document is included in the Technical Attachments. The general methodology of the analysis follows national and Montgomery County/LATR guidelines on the preparation of transportation impact evaluations of site development, unless stated otherwise.

Capacity Analysis Scenarios

The vehicular analyses are performed to determine if the proposed development will lead to adverse impacts on traffic operations. This is accomplished by comparing future scenarios: (1) without the proposed development (referred to as the Background condition) and (2) with the proposed development (referred to as the Future condition).

Specifically, the roadway capacity analysis examined the following scenarios:

- 2025 Existing Conditions
- Future Conditions without the development (Background)
- Future Conditions with the development (Total Future)

Study Area

The study area of the analysis is a set of intersections where detailed capacity analyses are performed for the scenarios listed above. The set of intersections decided upon during the study scoping process with M-NCPPC Staff are those intersections most likely to have potential impacts or require changes to traffic operations to accommodate the proposed development.

The number of study intersections analyzed in this report meet the LATR criteria and are based on the maximum number of new weekday peak-hour vehicle trips generated by the proposed project. For the Notley Road development, a minimum one (1) intersection in each direction was required.

Based on the projected future trip generation and the location of the site access points, the following intersections were chosen for analysis:

1. New Hampshire Avenue (MD 650) and the ICC (MD 200) interchange
2. New Hampshire Avenue (MD 650) and Notley Road
3. New Hampshire Avenue (MD 650) and Randolph Road
4. Notley Road and East Site Access
5. Notley Road and West Site Access
6. Notley Road and Sherwood Forest Drive

Figure 6 shows a map of the study area intersections.

Geometry and Operations Assumptions

The following section reviews the roadway geometry and operations assumptions made and the methodologies used in the roadway capacity analyses.

Existing Geometry and Operations Assumptions

The geometry and operations assumed in the existing conditions scenario are those present when the main data collection occurred. Gorove Slade made observations and confirmed the existing lane configurations and traffic controls at the intersections within the study area. Existing signal timings and offsets were obtained from Montgomery County and confirmed during field reconnaissance. The signal timing data provided by MCDOT is included in the Technical Attachments.

The lane configurations and traffic controls for the Existing conditions are shown on Figure 7.

Background Geometry and Operations Assumptions

Following national and Montgomery County/LATR methodologies, a background improvement must meet the following criteria to be incorporated into the analysis:

- Be funded; and
- Have a construction completion date prior or close to the proposed development.

Based on these criteria, there are no funded projects which will affect the geometry of the study intersections.

Total Future Geometry and Operations Assumptions

As part of the project, two (2) site access are proposed along Notley Road.

The lane configurations and traffic controls for the Total Future condition are shown in Figure 8.

Traffic Volume Assumptions

The following section reviews the traffic volume assumptions and methodologies used in the roadway capacity analyses.

Existing Traffic Volumes

The existing traffic volumes were collected at the study intersections on Tuesday, February 25, 2025.

For all study intersections, the system peak hours were used. The morning peak hour is 7:30 – 8:30 AM and the afternoon peak hour is 5:00 – 6:00 PM. The existing peak hour traffic volumes are presented in Figure 9.

Traffic volume data can be found in the Technical Attachments.

Background Traffic Volumes (without the project)

Traffic projections for the background conditions typically consist of the existing volumes with the addition of traffic generated by approved but unbuilt developments in the study area (known as background developments).

Following LATR guidelines, “background traffic from approved but unbuilt developments will be in the same geographic area as the intersections to be studied if that background development is estimated to contribute at least 5 peak-hour trips.” No background developments were identified based on these criteria.

The total background traffic volumes are similar to the existing traffic volumes and are shown in Figure 9.

Total Future Traffic Volumes (with the project)

The Total Future traffic volumes consist of the Background volumes and the addition of the traffic volumes generated by the proposed project (site-generated trips).

Global trip distribution for the proposed project is summarized in Table 5. A summary of trip distribution assumptions and routing for the development is provided in Figure 10.

Table 5: Global Trip Distribution

To/From	Percentage
Intercounty Connector (from/to west)	10%
Intercounty Connector (from/to east)	15%
Randolph Road (from/to southwest)	20%
Randolph Road (from/to southeast)	10%
New Hampshire Avenue (from/to north)	10%
New Hampshire Avenue (from/to south)	30%
Notley Road (from/to west)	5%
Total:	**100%**

The site-generated trips summarized in Table 3 were then applied to the study area roadway network based on the trip distributions described above. The resulting site-generated primary traffic volumes during peak hours are shown in Figure 11.

Note that since the existing site generated low trips, the full trip generation of the proposed development was conservatively added to the road network rather than the net increase in trips between the existing use potential and the proposed development.

The total future traffic volumes are shown in Figure 12.

Vehicular Analysis Results

Intersection Capacity Analysis

Intersection capacity analyses were performed for the three (3) scenarios outlined previously at the study intersections shown in Figure 6 for the morning and afternoon peak hours.

As outlined in the LATR Guidelines, and required for an LMA by Section 7.2.1.E.2.e of the Zoning Ordinance, the Critical Lane Volume (CLV) methodology was used to analyze intersection capacity for study intersections located within a yellow policy area. For the study intersections located in the Colesville policy area, a CLV of 1,350 or less is considered acceptable and the HCM delay standards of 59 seconds per vehicle apply to study intersections with a CLV of more than 1,350.

Table 6 presents the CLV results. Detailed CLV analysis sheets are in the Technical Attachments.

As shown in Table 6, all intersections operate well within the congestion standards under all three (3) analyzed scenarios and no further motor vehicle adequacy analysis or mitigation is required to satisfy the County's adequacy standards.

As such the Project's traffic generation will not exceed the critical lane volume standard as applicable under the LATR Guidelines, without the need for any mitigation.

Please note that the delay-based HCM analysis included in previous versions of this report for reference has been removed from this submission as it does not apply to the project for the purpose of evaluating motor vehicle adequacy. Per the LATR guidelines, HCM analysis is not required for intersections located in a yellow policy area unless they exceed a CLV threshold of 1,350 vehicles per hour. Since none of the study intersections meet this threshold, HCM analysis is not required per the LATR Guidelines.

Queuing Analysis

While the analyses indicate the LATR Motor Vehicle Test is passed without the need for improvements, operations were further analyzed at the request of SHA to review queues along the MD 650 corridor.

It is important to note that this corridor is a heavy commuter route and the queuing deficiencies identified below are a result of that baseline commuter traffic flow. The proposed development does have some layered impact; however, the corridor capacity is not exceeded based on the policy area congestion standards, which recognize that higher levels of congestion are acceptable in Yellow policy areas.

The queueing analysis was performed using SimTraffic microsimulation. The 50th and 95th Percentile queue lengths are shown for each lane group at each study intersection. The 50th (average) percentile queue is the maximum back of queue on a median cycle. The 95th percentile queue is the maximum back of queue that is exceeded five percent of the time.

Table 7 presents the 50th and 95th percentile for all study intersections. Queueing analysis results are also included for a "Total Future Conditions with Signal" scenario to show queueing along New Hampshire Avenue based on results from the preliminary traffic signal warrant analysis requested during the scoping process.

The detailed queuing analysis worksheets are provided in the Technical Attachments.

The Total Future with Signal scenario includes a new warranted traffic signal at Notley Road and New Hampshire Avenue (MD 650) intersection. The traffic signal, which has been preliminarily shown to be warranted at Notley Road and New Hampshire Avenue (MD 650) (based on existing traffic volumes) significantly reduces queues of commuter traffic flow along Notley Road and New Hampshire Avenue. **While it is noted that through queues increase and decrease at some locations, the simulations show that progression at the intersections would overall improve.**

Mitigation Measures

LATR guidelines specify that intersections exceeding the policy area congestion standard be mitigated. Adequacy is achieved when the CLV or average intersection vehicle delay in the total future with mitigation condition does not exceed either the congestion standard or the background condition's CLV or average intersection vehicle delay, whichever is higher. **As shown in Table 6 and per the LATR guidelines, the project does not warrant mitigation measures at any of the study intersections.**

Based on the intersection capacity analysis results, the proposed project satisfies motor vehicle system adequacy without detrimental impact to the surrounding roadways.

The New Hampshire Avenue (MD 650) and Notley Road intersection does not trigger mitigation as the CLV is well within

the CLV standard. However, a preliminary traffic signal warrant study was conducted as requested by SHA and results indicate that **a new traffic signal is warranted at this intersection under existing conditions without the project.** A new traffic signal would improve overall performance of the intersection and would reduce queues for vehicles along Notley Road in background conditions and in total future conditions.

The construction timeline and funding of the traffic signal will be reviewed in close coordination with SHA as part of the Preliminary Plan application for this project.

Table 6: Intersection CLV Delay Results

AM Peak Hour	Existing (2025) and Background (2030)		Total Future (2030)		CLV Triggers HCM?
Intersection	CLV	LOS	CLV	LOS	
1. New Hampshire Ave (MD650) / ICC MD 200	919	A	923	A	N
2. New Hampshire Ave (MD650) / Notley Road	1165	C	1198	C	N
3. New Hampshire Ave (MD650) / Randolph Road	1163	C	1170	C	N
4. East Site Access / Notley Road	221	A	259	A	N
5. West Site Access / Notley Road	220	A	240	A	N
6. Sherwood Forest Drive / Notley Road	301	A	302	A	N
PM Peak Hour	**Existing (2024)**		**Total Future (2029)**		**CLV Triggers HCM?**
Intersection	CLV	LOS	CLV	LOS	
1. New Hampshire Ave (MD650) / ICC MD 200	696	A	701	A	N
2. New Hampshire Ave (MD650) / Notley Road	1090	B	1133	B	N
3. New Hampshire Ave (MD650) / Randolph Road	1191	C	1200	C	N
4. East Site Access / Notley Road	313	A	360	A	N
5. West Site Access / Notley Road	309	A	340	A	N
6. Sherwood Forest Drive / Notley Road	383	A	384	A	N

Table 7: SimTraffic (Queues)

	Intersection and Lane Group	Storage Length (ft)	Existing and Background				Total Future				Total Future with Signal			
			AM Peak		*PM Peak*		*AM Peak*		*PM Peak*		*AM Peak*		*PM Peak*	
			50th	95th	50th	95th	50th	95th	50th	95th	50th	95th	50th	95th
1.	**New Hampshire Ave (MD 650) and ICC (MD 200)**													
	Eastbound Left	800	27	63	43	95	20	57	46	96	19	43	47	103
	Eastbound Right	780	57	236	2	34	45	197	5	53	-	-	-	-
	Westbound Left	700	188	288	100	168	170	270	108	165	171	278	97	158
	Northbound Left	400	388	448	391	436	390	444	375	477	232	383	217	377
	Northbound Thru	860	764	1211	851	1403	914	1388	766	1314	171	338	239	425
	Southbound Left	305	105	229	64	123	122	267	61	110	102	187	51	111
	Southbound Thru	1830	255	348	188	266	267	395	182	251	235	325	197	265
2.	**New Hampshire Ave (MD 650) and Notley Road**													
	Eastbound Left	180	47	131	33	82	202	300	163	280	27	107	28	109
	Eastbound Thru Right	390	334	535	114	229	351	514	193	403	213	372	230	396
	Westbound LTR	860	164	333	14	43	105	270	151	293	18	50	15	46
	Northbound Left	250	334	339	208	359	332	362	294	406	137	272	170	262
	Northbound Thru	480	499	512	129	421	491	563	328	669	99	282	62	186
	Northbound Thru Right	480	3	61	3	62	12	125	2	19	99	283	72	150
	Southbound Left	125	2	11	9	32	2	11	11	38	3	17	16	77
	Southbound Thru	1021	0	3	1	15	-	-	2	24	223	421	178	334
	Southbound Thru Right	1021	2	19	3	21	2	12	5	27	259	468	203	370
3.	**New Hampshire Ave (MD 650) and Randolph Road**													
	Eastbound Left	285	276	478	245	369	343	529	269	411	183	287	239	383
	Eastbound Thru	870	322	817	288	394	422	1094	289	425	216	323	307	458
	Eastbound Thru Right	870	166	246	277	386	159	245	270	363	182	282	290	424
	Westbound Left	435	138	226	132	224	133	232	126	214	120	190	111	182
	Westbound Thru	945	286	387	248	327	285	386	243	331	294	369	241	326
	Westbound Right	390	120	264	148	262	123	250	144	246	108	186	148	239
	Northbound Left	375	224	387	209	328	228	404	212	347	182	306	246	375
	Northbound Thru	810	h	731	311	425	362	775	321	431	243	387	300	413
	Northbound Right	375	19	105	27	72	57	269	24	68	6	29	21	62
	Southbound Left	250	178	299	195	305	176	295	186	294	129	244	148	237
	Southbound Thru	820	307	456	257	414	285	421	255	369	226	368	258	381
	Southbound Right	310	237	390	106	281	244	383	120	288	136	306	110	273
4.	**Notley Road and Petwyn Court/East Site Access**													
	Eastbound Thru Right (EX/BG) / LTR (TF)	1085	386	1258	1	11	304	664	65	318	5	34	10	64
	Westbound Thru Left (EX/BG)/ LTR (TF)	380	-	-	0	4	0	4	0	5	-	-	1	11
	Northbound LR (EX, BG)/ LTR (TF)	170	1	8	2	13	3	17	2	14	1	11	-	-
	Southbound LTR (TF)	120	-	-	-	-	50	103	15	52	15	40	14	41
5.	**Notley Road and West Site Access**													
	Eastbound LTR (TF)	550	-	-	-	-	379	1071	25	199	-	-	-	-
	Westbound LTR (TF)	890	-	-	-	-	-	-	-	-	-	-	-	-
	Southbound LTR (TF)	100	-	-	-	-	68	196	10	33	15	42	12	36
6.	**Notley Road and Sherwood Forest Drive**													
	Eastbound Thru Right	990	96	421	50	76	247	829	48	73	42	61	55	73
	Westbound Thru Left	355	49	78	69	111	48	76	68	105	62	100	71	120
	Northbound LR	620	23	45	29	47	70	276	27	46	26	50	27	44

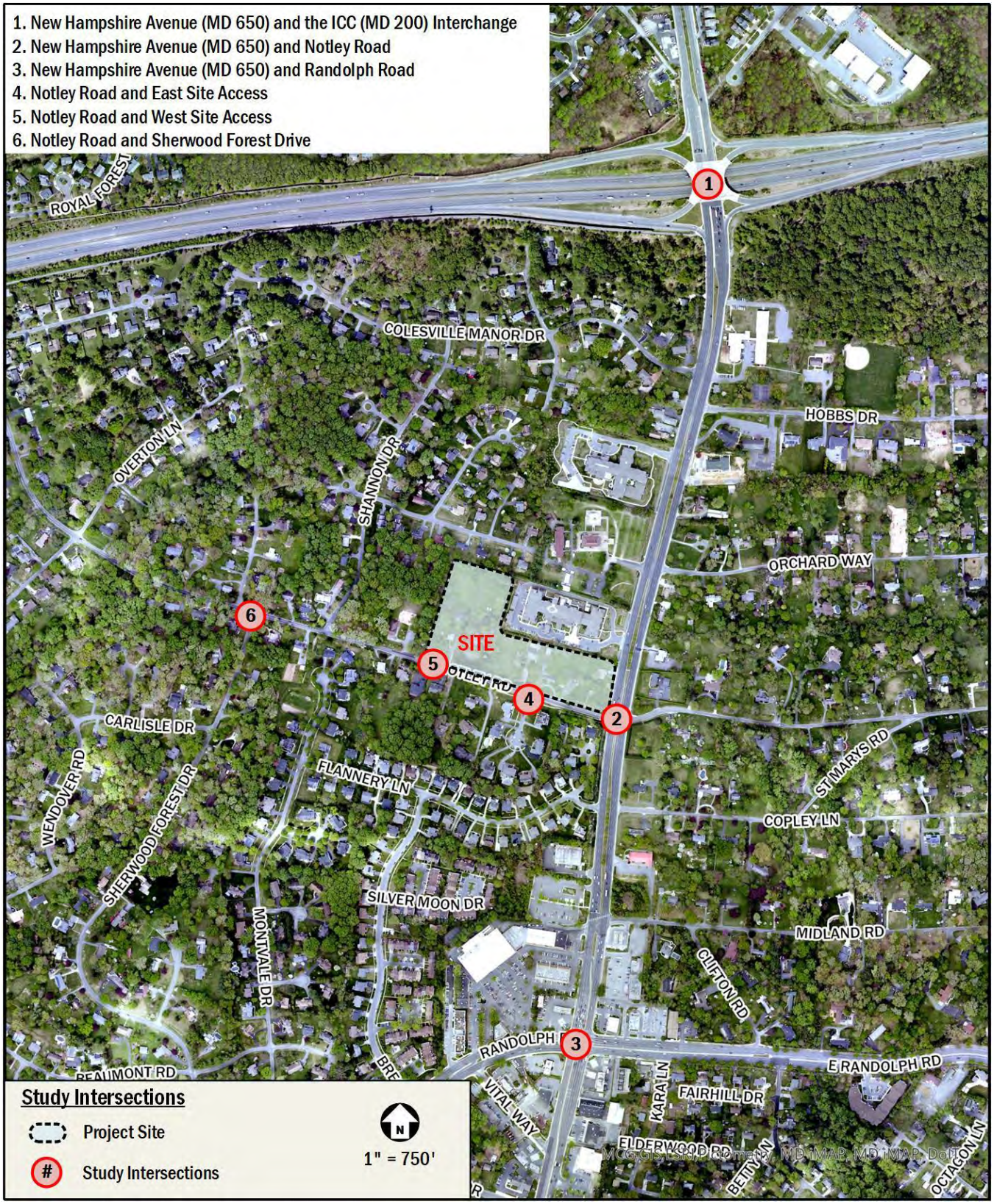

Figure 6: Study Intersections

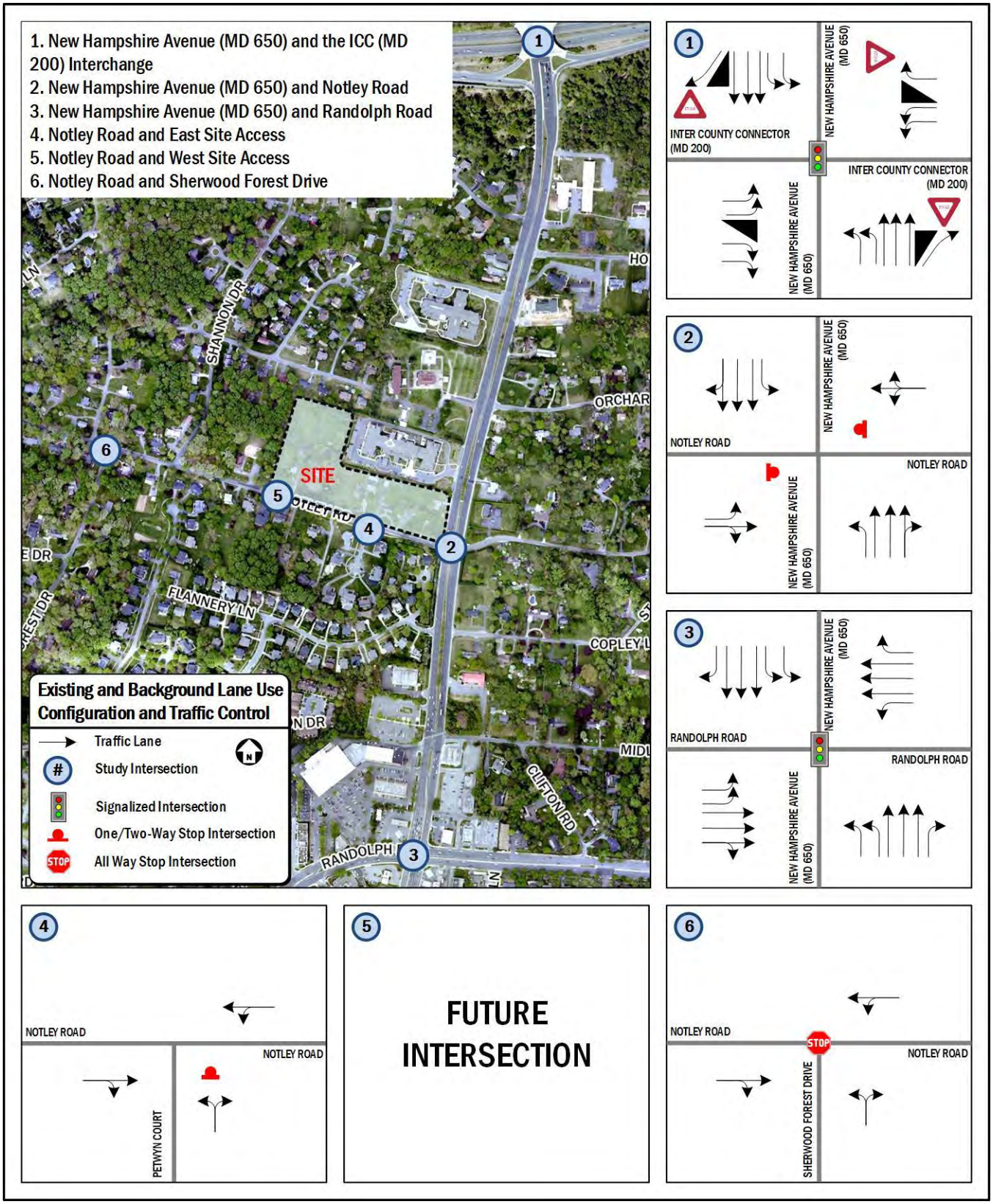

Figure 7: Existing and Background Lane Use Configuration and Traffic Control

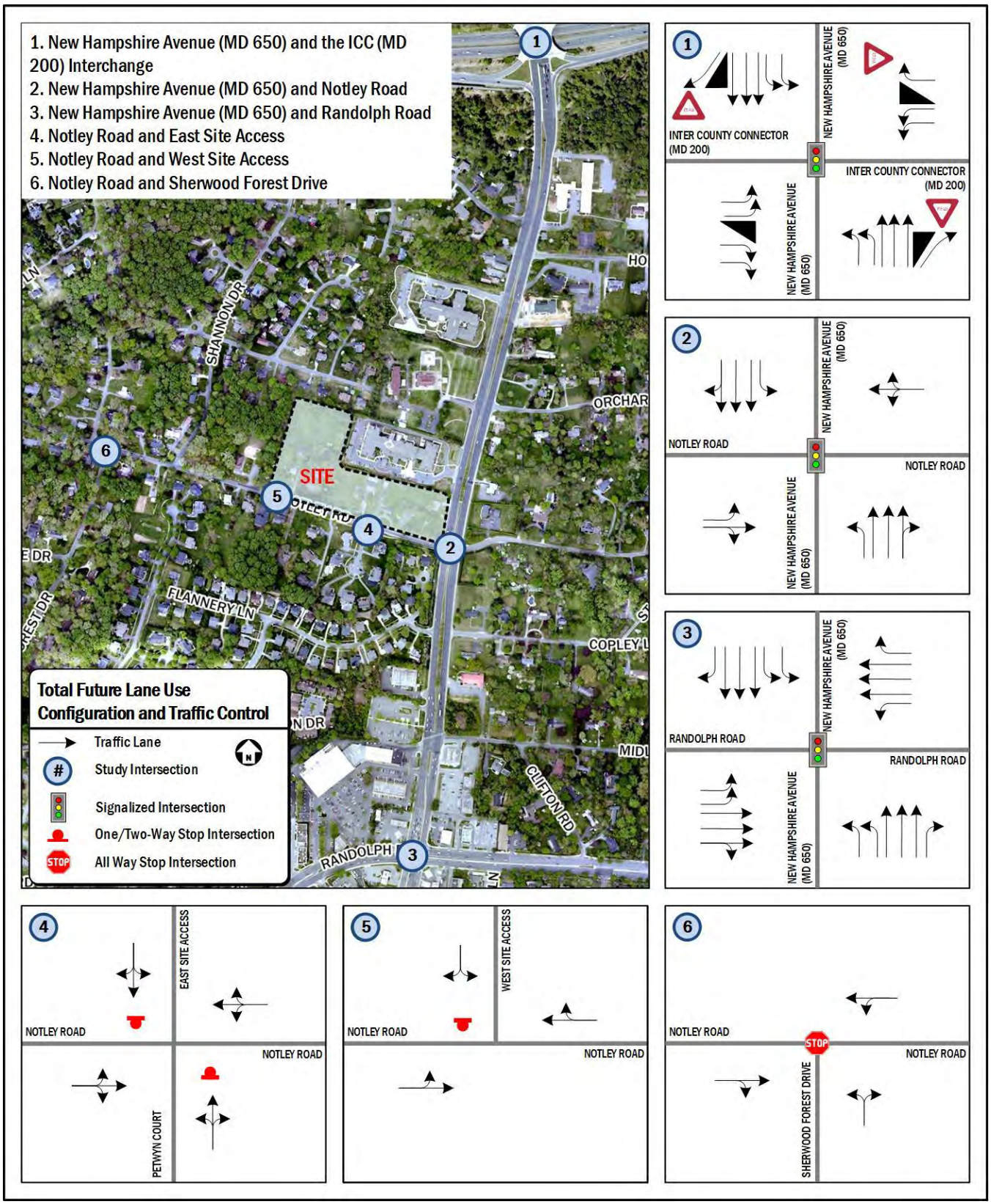

Figure 8: Total Future Lane Use Configuration and Traffic Control

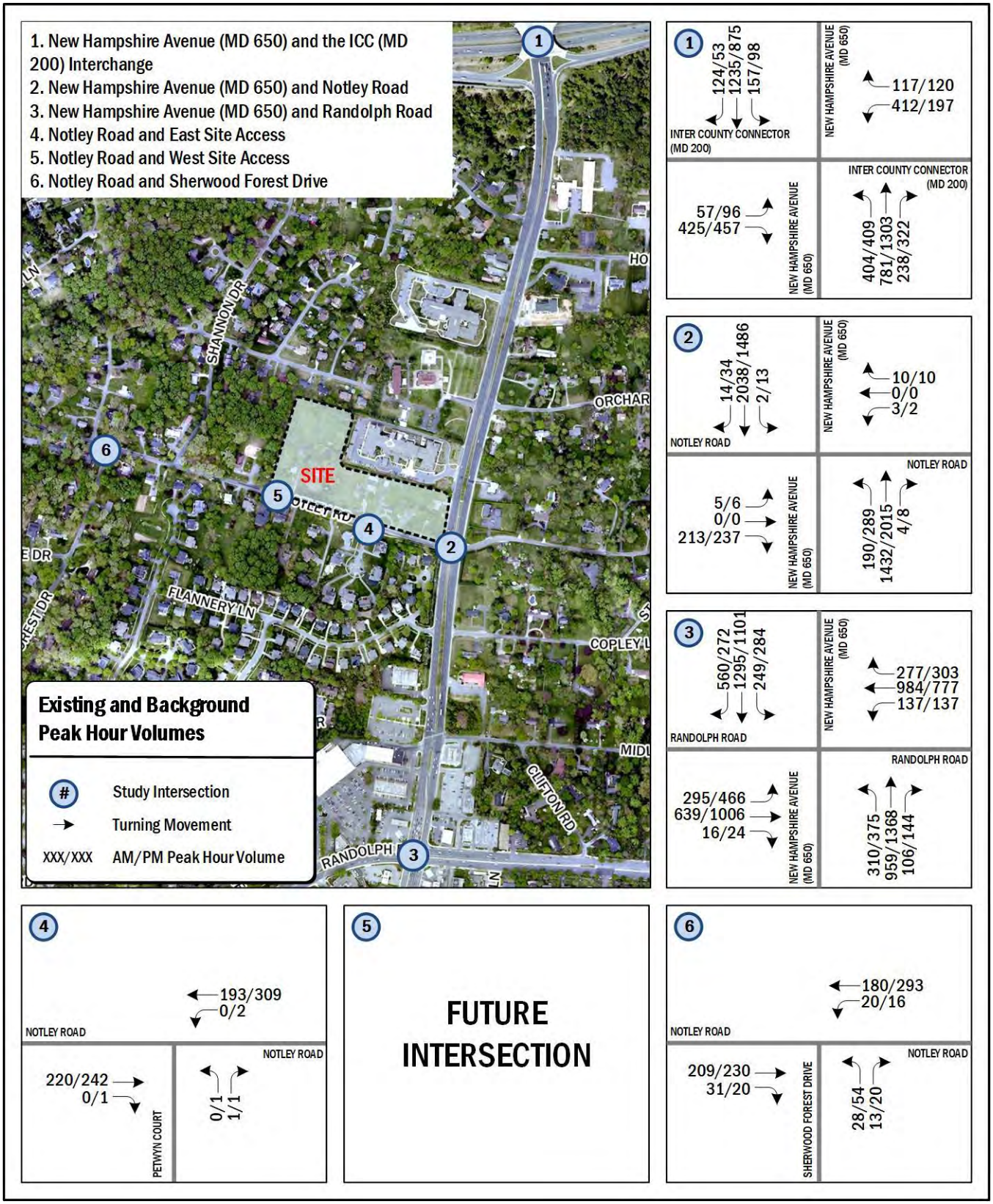

Figure 9: Existing and Background Peak Hour Traffic Volumes

Figure 10: Proposed Trip Distribution

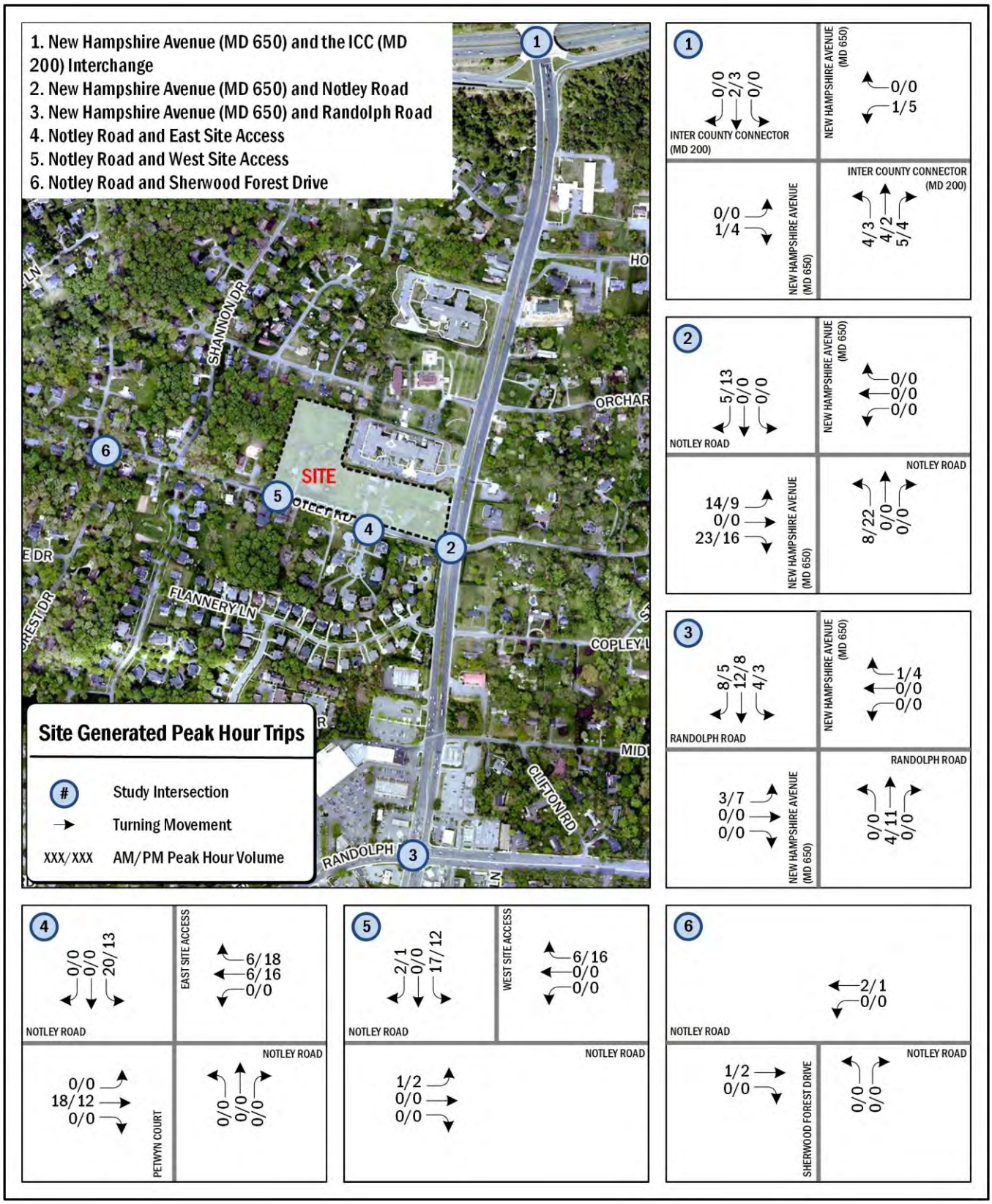

Figure 11: Site Generated Peak Hour Trips

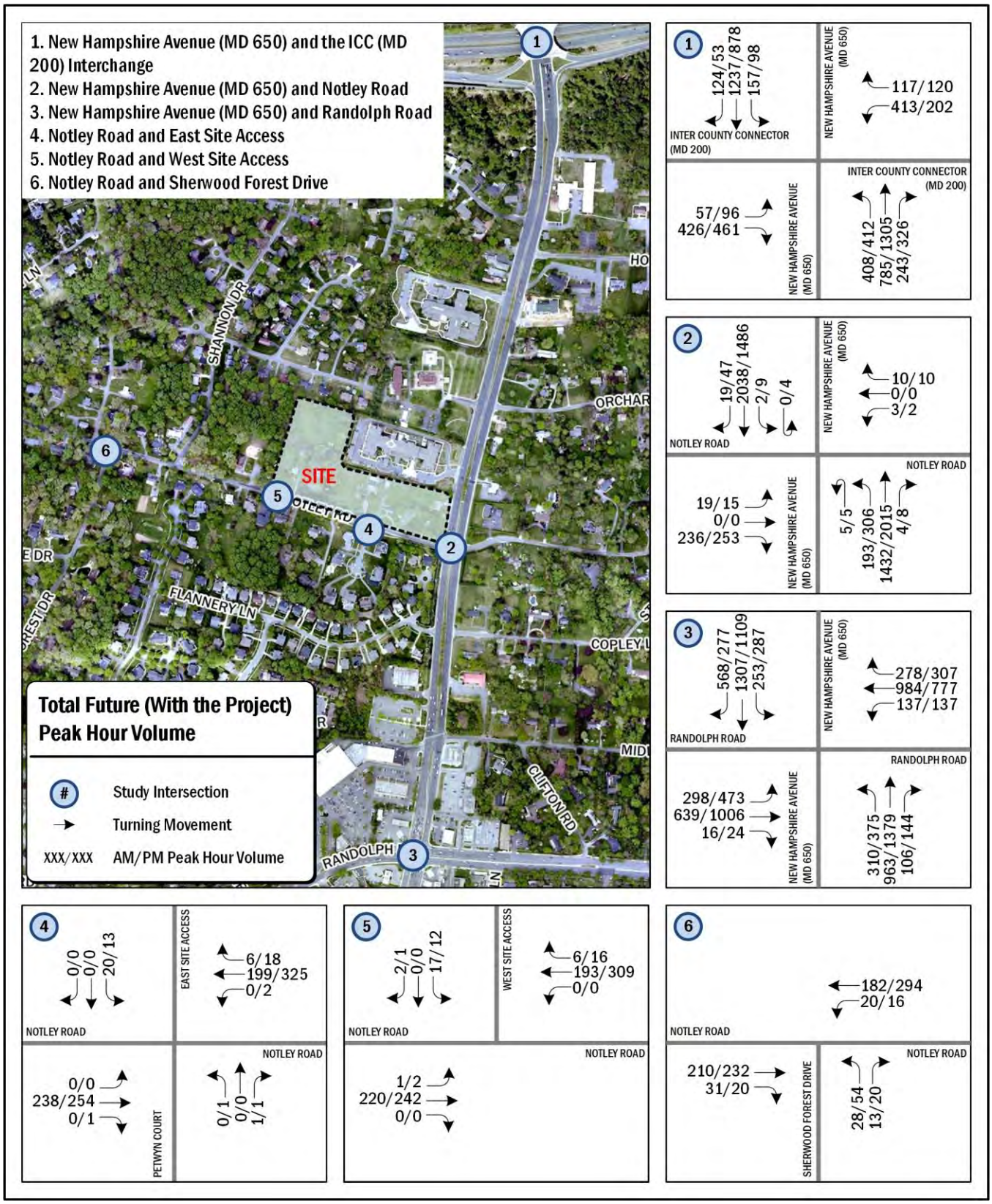

Figure 12: Total Future (With the Project) Peak Hour Volumes

Section 4: Pedestrian Facilities

This chapter reviews the existing and future pedestrian access to the site and reviews walking routes to and from the site. A review of the pedestrian system adequacy is also provided in this chapter.

The following conclusions are reached within this chapter:

- The existing pedestrian infrastructure surrounding the site requires improvements to provide an adequate walking environment in all directions.
- There are no existing sidewalks along the frontage of the project site along Notley Road. However, the project will provide the required pedestrian facilities along the site frontage and connecting to the existing pedestrian network to the east.
- There are gaps in the pedestrian network in the form of narrow sidewalks, missing buffers, deficient streetlighting, missing sidewalks, missing crossings and curb ramp deficiencies.

Existing Facilities Overview

As part of the multi-modal adequacy review included in this LATR, pedestrian, bicycle, and transit facilities around the proposed project site were evaluated.

In the vicinity of the site, the area has existing pedestrian facilities to the east and south of the site. Gaps in the form of missing sidewalks and insufficient sidewalk widths along Notley Road and New Hampshire Avenue (MD 650) limit connectivity to and from the site.

Pedestrian Circulation

Pedestrian access will be provided for each individual unit directly or via sidewalks connecting to the internal private streets/alleys, New Hampshire Avenue (MD 650) or Notley Road.

The new sidewalk along the site frontage will establish a crucial connection between Colesville Manor Neighborhood Park and New Hampshire Avenue, addressing an existing gap in accessibility. This development will provide improved access to the area that previously lacked such infrastructure.

Project Pedestrian Infrastructure Improvements

As part of the proposed project, the pedestrian environment will be significantly improved. New sidewalks will be installed along site frontage, with new curb ramps built along site frontage to meet ADA standards.

Pedestrian System Adequacy

For any project generating 30+ net new vehicle trips, quantitative pedestrian system adequacy analysis is required to assess the existing system's adequacy along with the project's trip generation.

The Pedestrian System Adequacy Test consists of three (3) components:

- Pedestrian Level of Comfort (PLOC),
- ADA Compliance, and
- Illuminance.

PLOC Review and Methodology

The Pedestrian Level of Comfort (PLOC) Review is based on an analysis of how comfortable it is to navigate pedestrian pathways within the project study area. Streets in Montgomery County are ranked from PLOC-1 ("Very Comfortable") to PLOC-4 ("Undesirable"). These ratings are based on several factors, including pathway width, width of buffer between the pathway and the street, speed limit of the adjacent street, and the presence of on-street buffers such as parking lanes or separated bike lanes. PLOC ratings are also given to street crossings and are determined by the number of lanes in the street to be crossed, the speed limit of that street, and the existing conditions of the crossing (if there are marked crosswalks, medians, etc.).

The goal of the PLOC Review is to identify any locations within the study area that are either a PLOC-3 ("Uncomfortable") or a PLOC-4 ("Undesirable") and find improvements to bring them to a PLOC-1 or PLOC-2.

PLOC Study Area

The study area is limited to roadways classified primary residential and higher and is based on the site's peak-hour vehicle trips. Based on the project's net increase of between 30-64 new vehicle trips, the required PLOC study area is a 250-foot walkshed beyond the site frontage. The PLOC study area is shown in Figure 13. The PLOC study area presented in Figure 13 was reviewed and approved during the scoping process.

PLOC Deficiencies

As part of the PLOC review, the score ratings available from the Montgomery County PLOC Database were reviewed and field verified based on data collection within the study area that included verification of sidewalk and buffer widths, speed limits, and presence of on-street separation.

Based on the PLOC review, approximately 2,300 linear feet off-site did not meet PLOC adequacy standards. More specifically:

- 2,300 linear feet total of pathways did not meet PLOC adequacy standards

Figure 14 presents the location of the identified PLOC deficiencies where facilities do not meet the criteria for a comfortable score. Table 8 outlines the identified deficiencies and improvements required to achieve an adequate PLOC score.

ADA Compliance Review and Methodology

Per the 2025 LATR Guidelines, the project is required to conduct an American Disabilities Act (ADA) Compliance Review using the ADA Curb Ramps Survey form as available directly from the ADA website. The survey includes a detailed assessment of the attributes of every curb ramp located within a specified walkshed. The list of reviewed attributes includes the following:

- Ramp width
- Ramp slopes
  - Cross-slope
  - Running-slope
  - Gutter slope
- Slopes of flared sides
- Landing width
- Sidewalk width
- Presence of a detectable warning surface
- Height of level changes
- Presence of parking lane
- Type of curb ramp

The ADA Compliance Review Study Area is one-half the size of the PLOC Study Area, which is a walkshed determined by the site's vehicle trips generated.

This study identified all locations where the above deficiencies were verified to exist.

ADA Compliance Study Area

The study area is limited to roadways classified as primary residential and higher and is based on the site's peak-hour vehicle trips. Based on the project site's net new vehicle trips between 30-64 peak hour vehicle trips, the required ADA study area is a 125-foot walkshed beyond the site frontage. The ADA study area is presented in Figure 15.

ADA Compliance Deficiencies

Based on the ADA review, two (2) curb ramps do not meet ADA adequacy standards. More specifically, two (2) curb ramps are:

- deficient in their cross slopes
- deficient in the slope of their flares sides

Figure 16 presents the location of the identified ADA deficiencies and Table 9 outlines the identified deficiencies and improvements required to provide ADA-compliant facilities. A detailed review of curb ramps within the ADA study area is included in the Technical Attachments.

Illuminance Review, Methodology, & Study Area

Illuminance adequacy is based on Montgomery County Department of Transportation (MCDOT) standards to ensure proper levels of street lighting are available within the project's study area. Illuminance adequacy was evaluated using photometric analysis in accordance with the June 2025 LATR guidelines and the February 2025 Streetlighting and Illuminance Instructions. Photometric evaluations were performed following the calculation methods detailed in the Illuminating Engineering Society's (IES) RP-8-21, *Recommended Practice: Lighting Roadway and Parking Facilities.*

As part of the photometric evaluation, light levels are measured under existing conditions and compared to MCDOT's target minimum light level criteria by street type for Active Zones and Street Zones (Intersections and Segments). The evaluated criteria include:

- Maintained Average Horizontal Illuminance
- Maintained Average Surface Luminance
- Minimum Horizontal Illuminance
- Maintained Average Vertical Illuminance
- Minimum Horizontal Illuminance
- Uniformity Ratio
- Veiling Luminance

Based on the project's net increase of between 30-64 new vehicle trips, the required Illuminance study area is a 250-foot walkshed beyond the site frontage. The Illuminance study area is presented in Figure 13.

For the purposes of the photometric evaluation, the study area is divided into active zones (sidewalks, buffer zones, separated bike lanes, and building frontage), street zones (parking, conventional and advisory bike lanes, travel lanes, and medians), and intersections.

Illuminance Network Deficiencies

Based on the streetlight network review, the following road segments do not meet streetlight network spacing guidelines:

- New Hampshire Avenue (MD 650) on the west and east sides between Notley Road and Orchard Way
- New Hampshire Avenue (MD 650) on the west side between Copley Lane and Notley Road

Based on the photometric evaluation, the following zones were found to be inadequate based on illuminance standards:

- Zone A1 (W side of New Hampshire Avenue between Notley Road and Orchard Way) has no lights. It should have lights spaced at 150'.
- Zone A2 (E side of New Hampshire Avenue between Notley Road and Orchard Way) has no lights. It should have lights spaced at 150'.
- Zone A3 (W side New Hampshire Avenue between Copley Lane and Notley Road) has no lights. It should have lights spaced at 150'.
- Zone S1 (New Hampshire Avenue between Notley Road and Orchard Way) has no lights. It should have lights spaced at 150'.
- Zone S2 (New Hampshire Avenue between Copley Lane and Notley Road) has no lights. It should have lights spaced at 150'.
- The following zones meet spacing standards but do not meet certain photometric criteria:
    - Zones A1, A2, A3, A4, A5, A6 and I2 have inadequate Minimum Horizontal Illuminance values
    - Zones A1, A2, A3, A4, A5, A6, S3, S4 and I2 have inadequate Maintained Average Horizontal Illuminance values
    - Zones A1, A2, A5, A6, S1, S2, S3, S4, S5, I1 and I2 have inadequate Uniformity Ratio
    - Zones A1, A2, A5, and A6 have inadequate Maintained Average Vertical Illuminance values
    - Zones A1, A2, A3, A4, A5, A6, S1, S3 have inadequate Maintained Average Surface Luminance values.

Detailed results from the photometric evaluations are included in the Technical Attachments.

Streetlights along New Hampshire Avenue do not meet the arterial spacing requirement of 125-150' and the streetlights along Notley Road meet the spacing requirements but do not meet the illuminance criteria. Figure 17 presents the location of the identified spacing deficiencies and Table 10 outlines the identified deficiencies and improvements required.

The addition of five (5) new Pepco cobra head luminaires along New Hampshire Avenue would be necessary to meet the spacing requirements per the 2016 Montgomery County Streetlight Installation Guidelines. The installation of 2 new Pepco with 15' mounting arms along Notley Road one on each side of the New Hampshire Avenue intersection is also recommended to meet illuminance standards.

It should be noted that additional illuminance deficiencies have been identified along New Hampshire Avenue and Notley Road. However, mitigations are not identified for zones that meet spacing guidelines.

The detailed photometric evaluation results for existing conditions and mitigated conditions are included in the Technical Attachments.

Figure 13: Pedestrian System Adequacy PLOC and Streetlights Study Area

Figure 14: PLOC Adequacy Evaluation

Table 8: PLOC Deficiencies

#	Location	Category	Adequacy Mitigation	Mitigation Linear Feet
PLOC - Pathway Links				
1	New Hampshire Avenue (Westside), Wilshire Estate frontage	Pathway	At least 5’ buffer	250'
2	Notley Road (Northside), W of New Hampshire Ave	Pathway	Minimum 5’ pathway with at least 5’ buffer	250'
3	Notley Road (Southside), E of Shannon Drive	Pathway	Minimum 5’ pathway with at least 5’ buffer	600'
4	New Hampshire Avenue (Westside), S of Notley Park	Pathway	Minimum 5’ buffer	200'
5	New Hampshire Avenue (Eastside), S of Notley Park	Pathway	Minimum 5’ buffer	200'
6	Notley Road (Southside), E of New Hampshire Ave	Pathway	Minimum 5’ pathway with at least 5’ buffer	150'
7	Notley Road (Northside), E of New Hampshire Ave	Pathway	Minimum 5’ pathway with at least 5’ buffer	150'
8	New Hampshire Avenue (Eastside), N of Notley Park	Pathway	Minimum 5’ buffer	500'
			Total PLOC Off-Site Deficiencies:	**2300'**

Figure 15: Pedestrian System Adequacy ADA Compliance Study Area

Figure 16: ADA Compliance Adequacy Evaluation

Table 9: ADA Compliance Issues

#	Location	ADA Issue Category	ADA Issue	Mitigation
1	Notley Road and Petwyn West Curb Ramp	Curb Ramp	Cross slope >2% & Flared Side Slope > 8.33%	Rebuild curb ramp with cross slope < 2% & flared side slope < 8.33%
2	Notley Road and Petwyn East Curb Ramp	Curb Ramp	Cross slope >2% & Flared Side Slope > 8.33%	Rebuild curb ramp with cross slope < 2% & flared side slope < 8.33%

Figure 17: Illuminance Adequacy Evaluation

Table 10: Illuminance Deficiencies

#	Location	PLOC Issue Category	Illuminance Issue	Mitigation
1	New Hampshire Road, North of Notley Road (Eastside)	Illuminance	Insufficient Spacing and Substandard Illuminance	Install 3 Pepco streetlights spaced at 150’ along New Hampshire Avenue and Install 1 Pepco streetlight on Notley Road near intersection
2	New Hampshire Road, South of Notley Road (Westside)	Illuminance	Insufficient Spacing and Substandard Illuminance	Install 2 Pepco streetlights spaced at 150’ along New Hampshire Avenue and Install 1 Pepco streetlight on Notley Road near intersection

Section 5: Bicycle Facilities

This chapter summarizes existing and future bicycle access and reviews the quality of cycling routes to and from the site. A review of the adequacy of the existing bicycle system is also provided in this chapter.

The following conclusions are reached within this chapter:

- The Bike Master Plan bicycle facilities for Notley Road adjacent to the site do not currently exist.
- A striped bikeway along both directions on New Hampshire Avenue exits near the site, with sidepaths at the edge of the property to the north and along E Randolph Road.
- Sidepaths are proposed per the Montgomery County Bike Master Plan along New Hampshire Avenue and Notley Road along to the site frontage but are not yet constructed.

Existing Bicycle Facilities

The site will have access to striped bikeways on New Hampshire Avenue and the sidepaths at the edge of the property and E Randolph Road.

Planned Bicycle Facilities

According to the planned bicycle network from the Montgomery County Bicycle Master Plan, there are designations for sidepath along New Hampshire Avenue, Notley Road and Randolph Road.

The transition from striped bikeways to the proposed sidepath along the site frontage will be discussed during the Preliminary Plan Submission.

The existing and planned bicycle facilities around the project site are shown in Figure 18.

On-Site Bicycle Elements

Along the site frontage, a sidepath with buffer will be provided that will connect to the existing sidepath that was constructed with the project just north of the site.

Bicycle System Adequacy

The bicycle system adequacy test requires that the Applicant identify any conditions where the Bicycle Level of Traffic Stress (BLTS) is above a BLTS score of two (2) “low stress”. The BLTS, like the PLOC, is a measure that quantifies the amount of discomfort that people feel due to vehicle traffic when they bicycle on different types of streets. The BLTS for a roadway segment is a number between zero (0) and five (5), where BLTS-0 represents no traffic stress present, such as on an off-street trail, and BLTS-5 represents a very high level of stress, such as on a high-speed road with no dedicated bicycle facilities. This score is determined through roadway characteristics such as the road’s speed limit, the presence of a center line, parking turnover, the presence of bike lanes and paths, and any physical separation between these lanes/paths and vehicular traffic. Wherever the BLTS is greater than two (2), improvements should be identified to improve it to the Bicycle Master Plan facility or to BLTS-2 or BLTS-1 where no facility is identified.

Bicycle System Adequacy Study Area

The Bicycle System Adequacy Study Area is determined by the site’s net new vehicle trips. Unlike ADA, PLOC, or Streetlight compliance, the bikeshed is not limited to roadways classified primary residential and higher—any public roadway is applicable.

Given the site’s trip generation of between 30-64 net new vehicle trips, the Bicycle System Adequacy study area is 400 feet beyond the site frontage. The Bicycle Adequacy study area is presented in Figure 19.

Bicycle System Adequacy Deficiencies

As part of the BLTS review, the score ratings available from the Montgomery County BLTS Database were confirmed through verification of sidewalk/sidepath widths and presence of on-street facilities.

Based on the Bicycle System Adequacy review, the following do not meet adequacy standards:

- 1,300’ linear feet of deficient bicycle facilities

Per the County’s Bicycle Master Plan, sidepaths are designated along the section on New Hampshire Avenue and Notley Road. These planned sidepaths lanes will improve the BLTS to 2, meeting adequacy standards.

A summary of the Bicycle System Adequacy review is outlined in Table 11 and Figure 20.

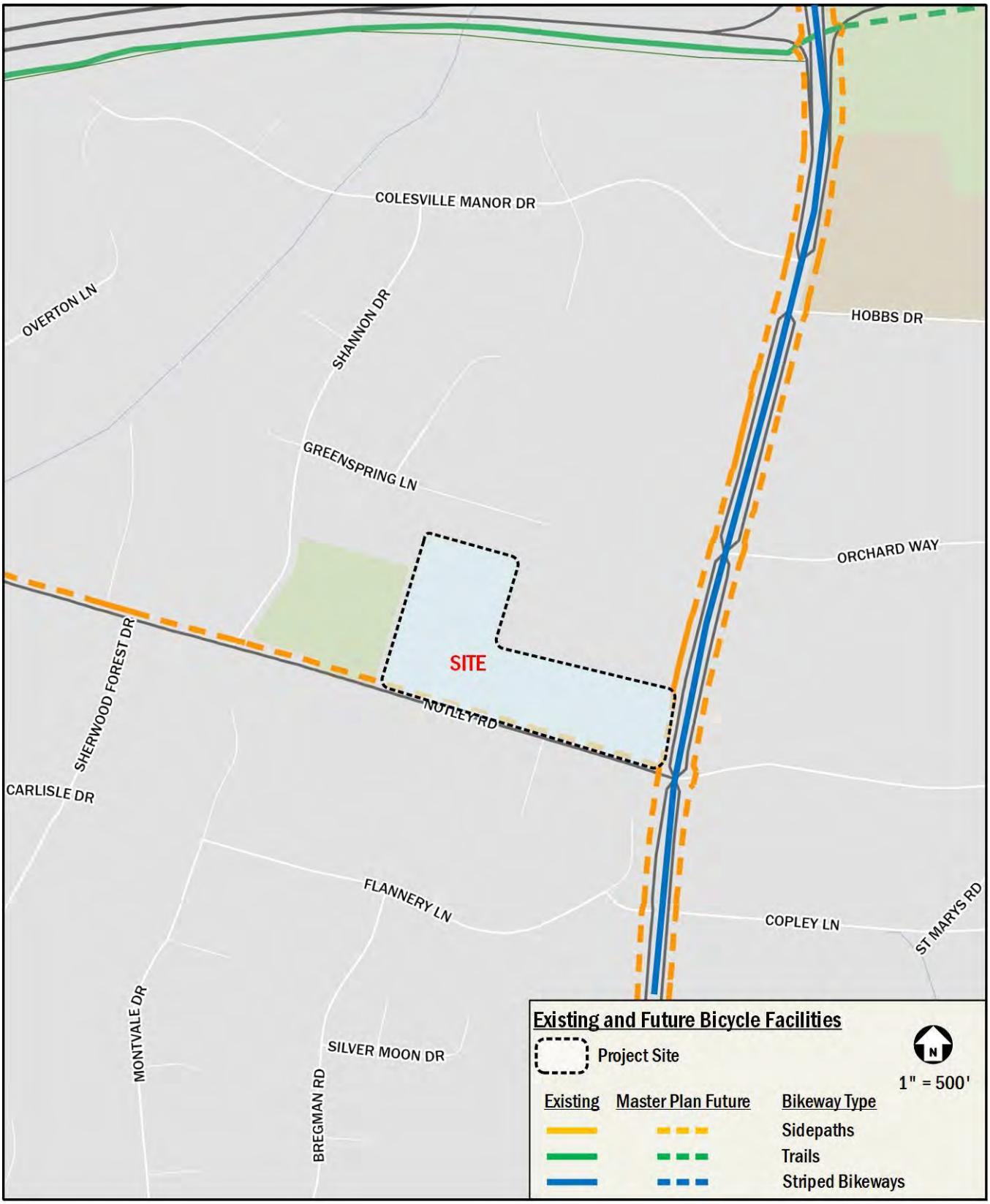

Figure 18: Existing and Future Bicycle Facilities

Figure 19: Bicycle Adequacy Study Area

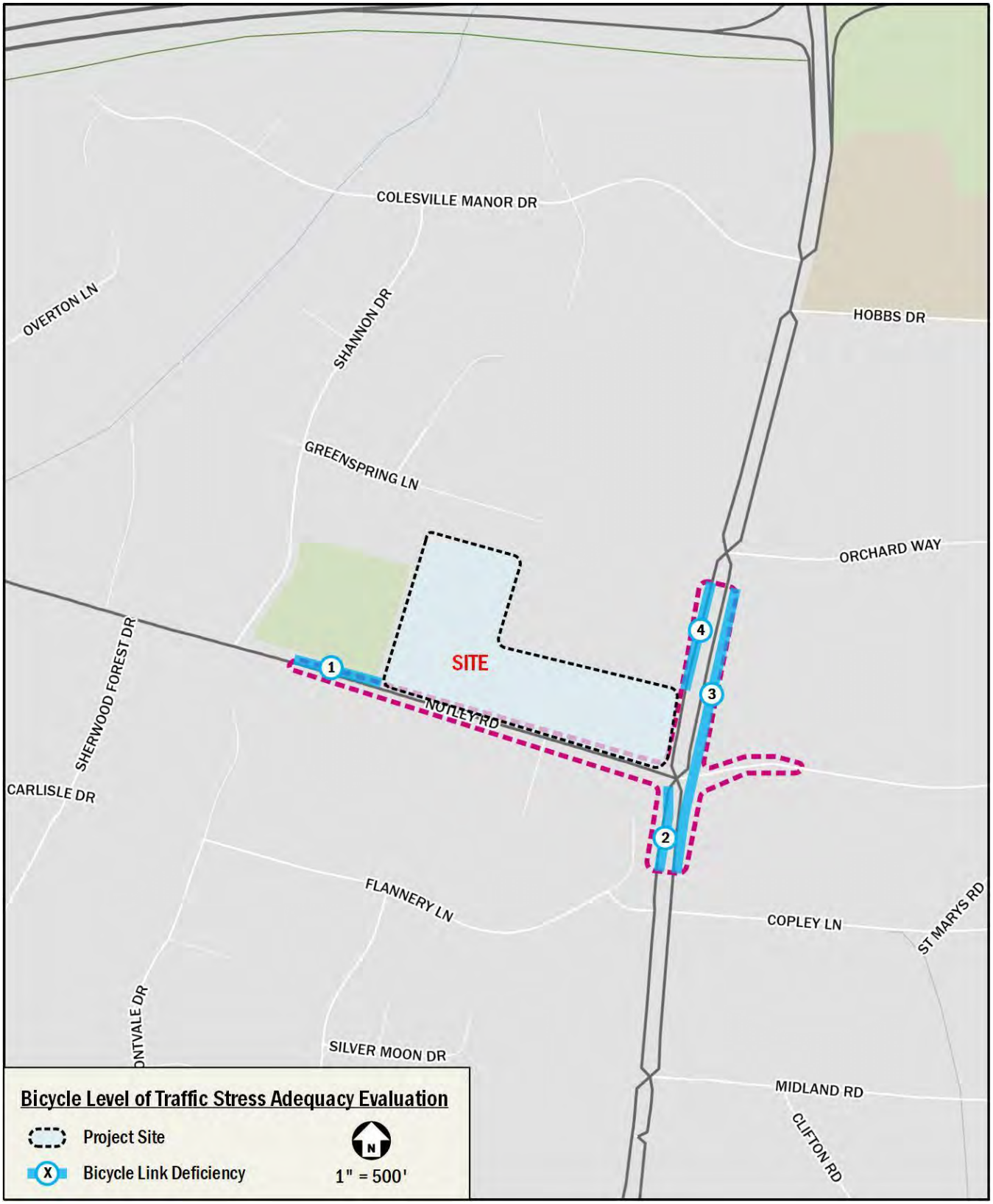

Figure 20: Bicycle Level of Traffic Stress Adequacy Evaluation

Table 11: BLTS Deficiencies

#	Location	BLTS Issue	Mitigation to LTS-2	Mitigation Linear Feet	Notes
1	Notley Road	BLTS Score - High	Sidepaths	400’	Sidepaths along northside of Notley Road are designated per the Bicycle Master Plan
2	New Hampshire Avenue	BLTS Score - High	Sidepaths	350’	Sidepaths along both directions are designated per the Bicycle Master Plan
3	New Hampshire Avenue	BLTS Score - High	Sidepaths	1150’	Sidepaths along both directions are designated per the Bicycle Master Plan
4	New Hampshire Avenue	BLTS Score - High	Sidepaths	400’	Sidepaths along both directions are designated per the Bicycle Master Plan
			Total BLTS Deficiencies:	**1,300’**	

Section 6: Transit Facilities

This chapter discusses the existing transit facilities in the vicinity of the site, accessibility to transit, and evaluates the overall transit impacts of the project.

The following conclusions are reached within this chapter:

- The project site has access to regional and local transportation that will accommodate the residents of the proposed project.
- There are currently no bus stops within a quarter-mile of the Project.

Existing Transit Service

The project site has access to local transit services such as WMATA. The site is located approximately 0.5 miles or a 11-minute walk from WMATA Bus Stops along New Hampshire Avenue and Randolph Road which connects to other transit services. These transit services provide local, city wide, and regional transit connections and link the site with major cultural, residential, employment, and commercial destinations throughout the region.

It should be noted that there are currently no bus stops within the study area. However, bus stops half-mile away from the site are services by two (2) WMATA routes M42 and M44. These bus routes provide connections to the North Bethesda, Glenmont, College Park and Hyattsville Crossing Metro Stations with a weekday headway of 30 minutes and a weekend headway of 60 minutes.

Bus Transit System Adequacy

The Bus Transit System Adequacy Test requires that the applicant identify the need for new ADA-accessible bus shelters and amenities.

Bus Transit System Adequacy Study Area

The Bus Transit System Adequacy Study Area is determined by the site's net new vehicle trips. The study area is limited to the area just beyond a site's frontage.

Given this site's vehicle trip generation 30-64 net new trips, the Bus Transit System Adequacy study area is 500 feet beyond the site frontage. The Bus Transit Adequacy study area can be seen in Figure 21.

Bus Transit System Adequacy Deficiencies

Based on the Bus Transit System Adequacy review, shown in Figure 21, there are no bus stops within the 500-feet walkshed study area.

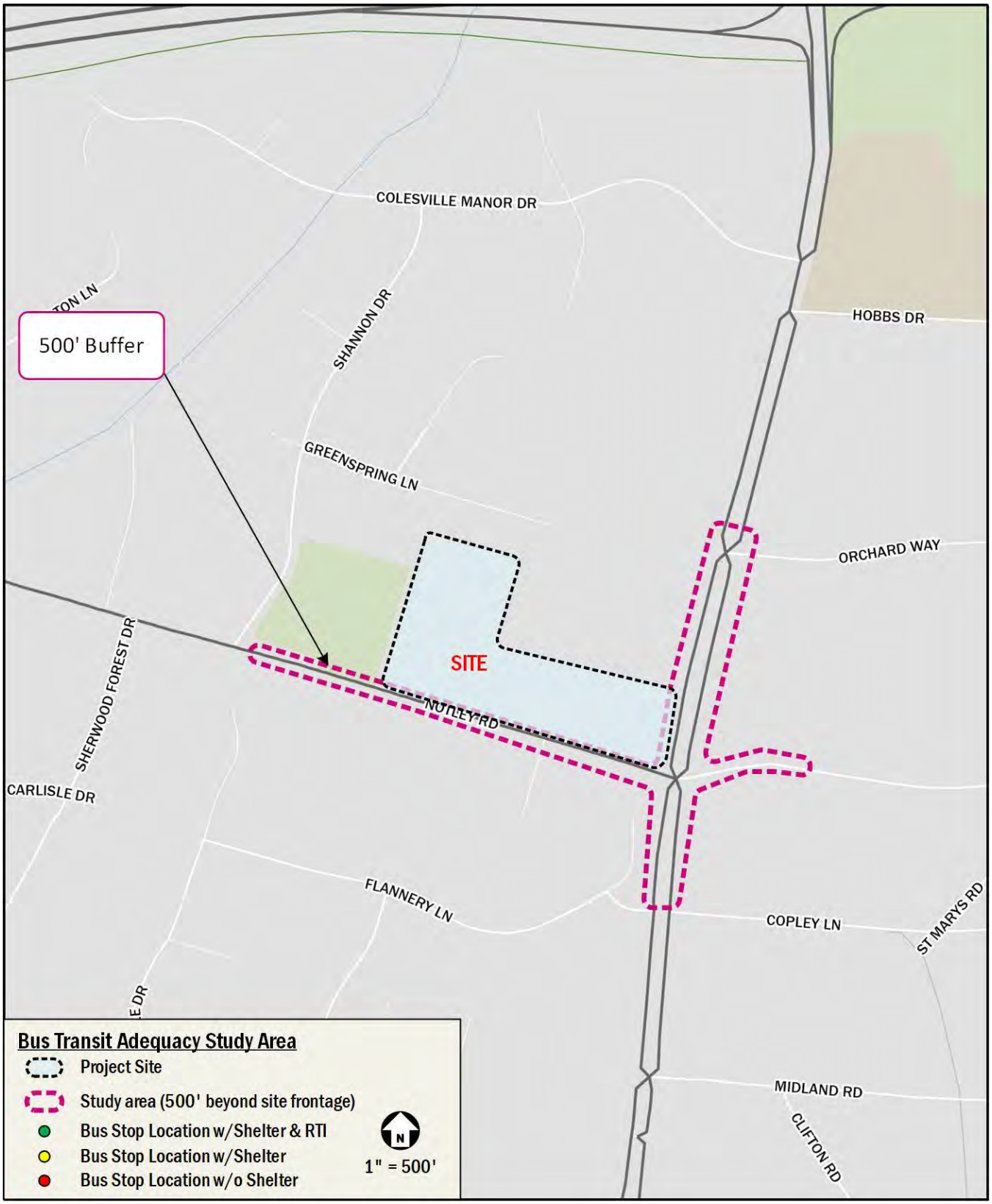

Figure 21: Bus Transit Adequacy Study Area

Section 7: Preliminary Signal Warrant Study

Traffic Signal Warrant Study was conducted at Notley Road and New Hampshire Avenue (MD 650) intersection to determine if a new traffic signal is warranted. It should be noted that SHA identifies this intersection as a location for a traffic signal.

The intersection was evaluated based on the existing volumes and in accordance with MDSHA's (Maryland State Highway Administration) MUTCD (Manual on Uniform Traffic Control Devices) standards and guidelines for Warrant 2, Four Hour Vehicle Volume and Warrant 3, Peak Hour.

Warrant 2: Four Hour Vehicular Volume with major approach speed limit greater than 40MPH

- *The need for a traffic control signal shall be considered if an engineering study finds that, for each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) all fall above the applicable curve in Figure 22 for the existing combination of approach lanes. On the minor street, the higher volume shall not be required to be on the same approach during each of these 4 hours.*

Warrant 3: Peak Hour Volume with major approach speed limit greater than 40MPH

- *The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 23 for the existing combination of approach lanes.*

Since at least four hourly volumes fall above the applicable curve, both Warrant 2 and Warrant 3 are met for the intersection with existing traffic volumes. With the addition of the site-generated trips, the volumes at the intersections are only likely to increase. Hence, the analysis preliminarily concludes that a traffic signal would be warranted at this intersection. The desirability of this signal will be discussed with SHA during the subsequent Preliminary Plan, in connection with the evaluation and prioritization of off-site improvements.

The signal warrant worksheets is included in the attachments.

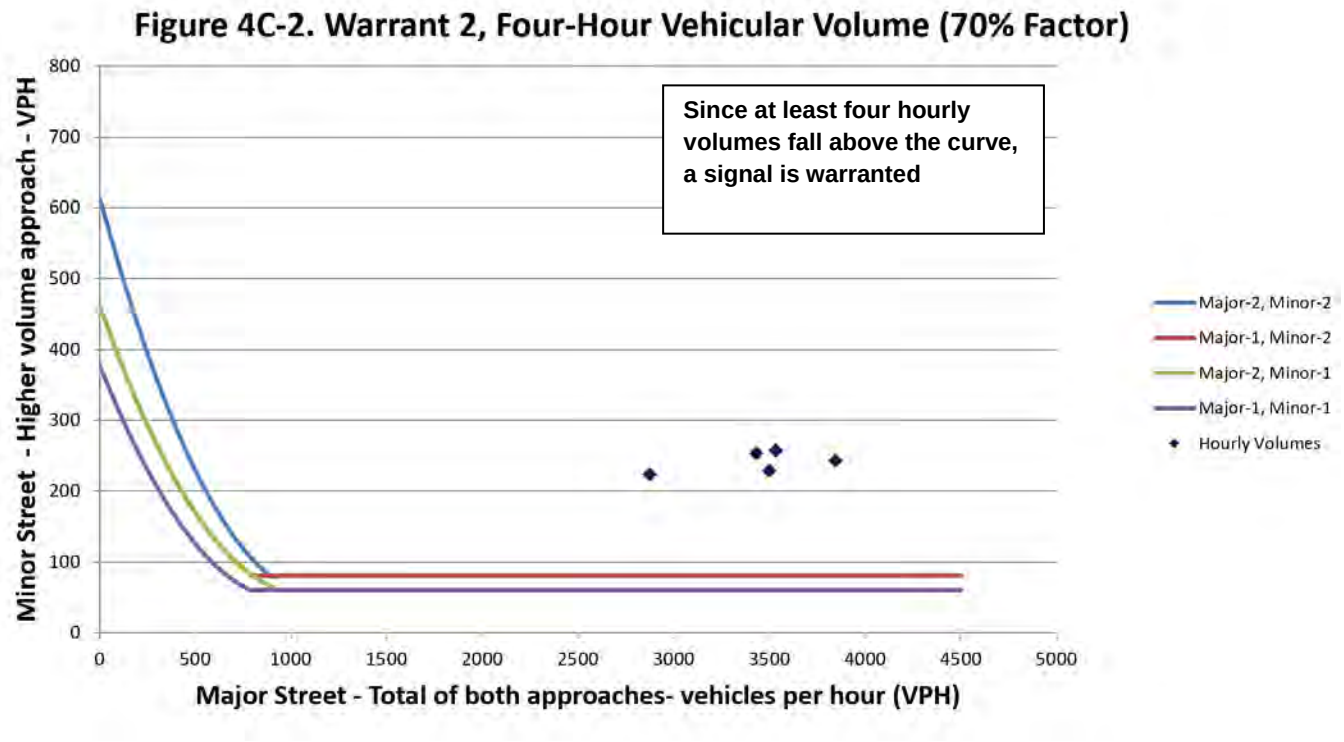

Figure 22: Warrant 2, Four-Hour Vehicular Volume (Existing Traffic Volumes)

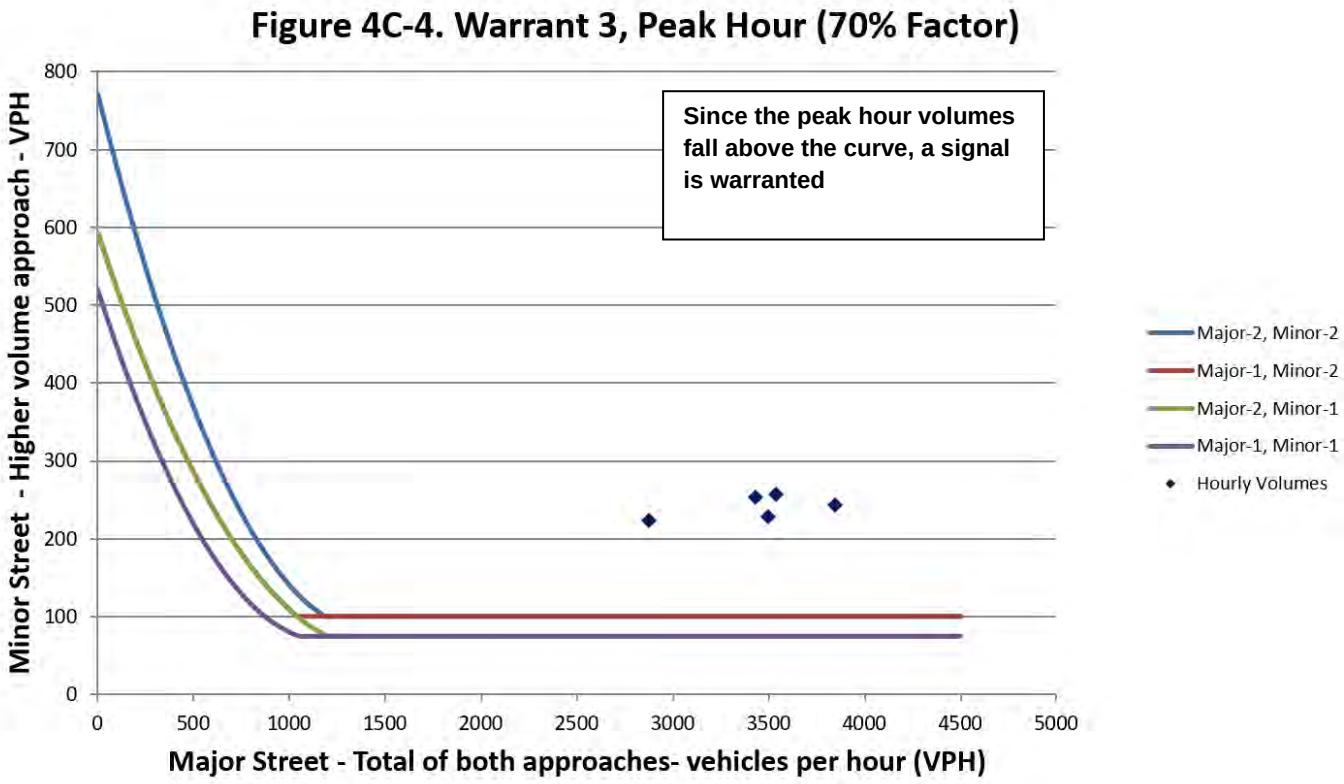

Figure 23: Warrant 3, Peak Hour (Existing Traffic Volumes)

Section 8: LATR Proportionality Guide and Off-Site Deficiencies

This chapter presents the LATR Proportionality Guide, and a summary of the off-site deficiencies based on the motor and non-auto adequacy tests presented in the previous sections.

Auto Deficiencies

A preliminary signal warrant study was conducted as requested by SHA and preliminary results indicate that a traffic signal is warranted at New Hampshire Avenue (MD 650) and Notley Road intersection under existing conditions without the project. A new traffic signal would improve the overall performance of the intersection and would reduce delays for vehicles along Notley Road.

Additional correspondence with SHA indicates the MD 650 and Notley Road intersection is included in an OOTS-TEDD single advertisement projects for signalization.

Additional safety countermeasures for speed management improvements are warranted based on the existing 85th percentile speed along Notley Road exceeding the posted speed limit by over 20%. The improvements will be reviewed during the Preliminary Plan Submission.

Non-Auto Deficiencies

The non-auto modal deficiencies are shown in Figure 24 and described below. Table 12 outlines the identified non-auto deficiencies and the necessary improvements to achieve adequacy along with notes on the feasibility of implementing the necessary improvements.

Pedestrian System Deficiencies Summary

Based on the pedestrian system adequacy test, the following off-site deficiencies were identified:

- 2,300 linear feet of off-site pathways do not meet PLOC adequacy standards
- Two (2) curb ramps are deficient
- Installation of five (5) new streetlights along New Hampshire Avenue to meet spacing standards
- Installation of two (2) new Pepco lights with 15' mounting arms along Notley Road one on each side of the New Hampshire Avenue intersection is also recommended to meet illuminance standards.

Bicycle System Deficiencies Summary

Based on the bicycle system adequacy test, 1,300 linear feet within the study area exceeded BLTS of 2. Per the Montgomery County Bicycle Master Plan, sidepaths are planned along New Hampshire Avenue and Notley Road.

Transit System Deficiencies Summary

Based on the transit system adequacy test, no off-site deficiencies were identified.

LATR Proportionality Guide

Consistent with the 2025 LATR Guidelines, the project's proportionality guide amount is calculated by multiplying the net new daily motor vehicle trips with a Proportionality Guide Rate of $765.

Proportionality Guide Amount = Net New Daily Motor Vehicle Trips x Proportionality Guide Amount ($765)

Proportionality Guide Amount for the Project = 731 X $ 765

= $559,215

The project with up to 135 townhomes is required to improve off-site deficiencies up to $559,215 in total improvements costs.

At the time of the Preliminary Plan, the Applicant will work with MCDOT and Planning Staff to identify which improvement options should be pursued to meet the requirements to mitigate deficiencies in the Vehicular, Pedestrian, Bicycle, and Bus Transit systems.

The cost estimate for the Proportionality Cap reflects a full density build-out. Adjustments may be made during the Preliminary Plan/Site Plan phase based on the actual proposed density and the requirements set forth in the 2024-2028 Growth and Infrastructure Policy (GIP).

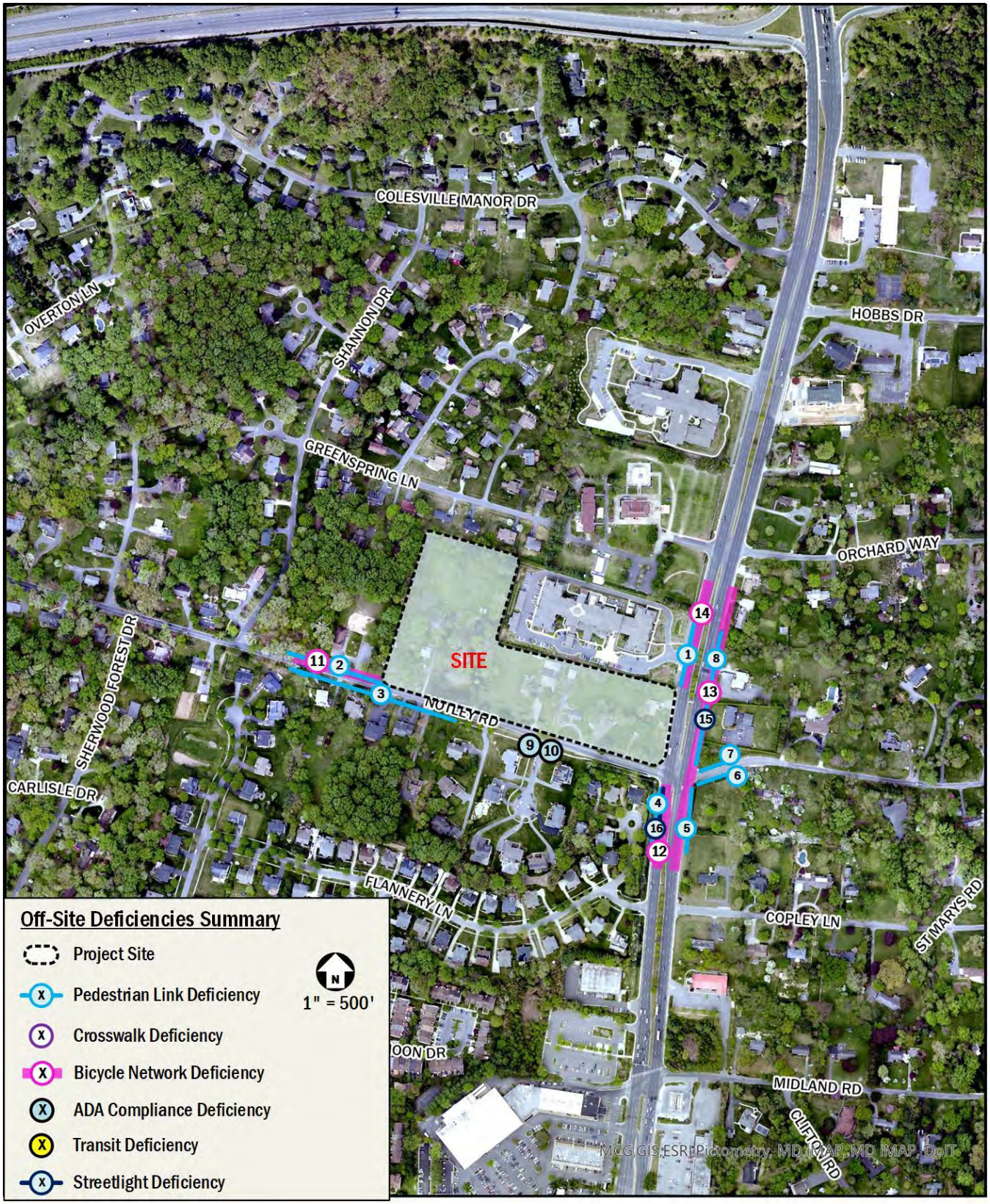

Figure 24: Off-Site Non-Auto Deficiencies Summary

Table 12: Non-Auto Transportation System Deficiencies Summary

#	Location	Category	Adequacy Mitigation	Mitigation Linear Feet
PLOC - Pathway Links				
1	New Hampshire Avenue (Westside), Wilshire Estate frontage	Pathway	At least 5’ buffer	250'
2	Notley Road (Northside), W of New Hampshire Ave	Pathway	Minimum 5’ pathway with at least 5’ buffer	250'
3	Notley Road (Southside), E of Shannon Drive	Pathway	Minimum 5’ pathway with at least 5’ buffer	600'
4	New Hampshire Avenue (Westside), S of Notley Park	Pathway	Minimum 5’ buffer	200'
5	New Hampshire Avenue (Eastside), S of Notley Park	Pathway	Minimum 5’ buffer	200'
6	Notley Road (Southside), E of New Hampshire Ave	Pathway	Minimum 5’ pathway with at least 5’ buffer	150'
7	Notley Road (Northside), E of New Hampshire Ave	Pathway	Minimum 5’ pathway with at least 5’ buffer	150'
8	New Hampshire Avenue (Eastside), N of Notley Park	Pathway	Minimum 5’ buffer	500'
PLOC- ADA				
9	Notley Road and Petwyn West Curb Ramp	Curb Ramp	Rebuild curb ramp with cross slope < 2% & flared side slope < 8.33%	5'
10	Notley Road and Petwyn East Curb Ramp	Curb Ramp	Rebuild curb ramp with cross slope < 2% & flared side slope < 8.33%	5'
BLTS- Network				
11	Notley Road	BLTS	Sidepaths along north of Notley Road are designated per the Bicycle Master Plan	400'
12	New Hampshire Avenue	BLTS	Sidepaths along both directions are designated per the Bicycle Master Plan	350'
13	New Hampshire Avenue	BLTS	Sidepaths along both directions are designated per the Bicycle Master Plan	1150'
14	New Hampshire Avenue	BLTS	Sidepaths along both directions are designated per the Bicycle Master Plan	400'
Illuminance				
15	New Hampshire Road, North of Notley Road (Eastside)	Illuminance	Install 3 Pepco streetlights spaced at 150’ along New Hampshire Avenue and Install 1 Pepco streetlight on Notley Road near intersection	250’
16	New Hampshire Road, South of Notley Road (Westside)	Illuminance	Install 2 Pepco streetlights spaced at 150’ along New Hampshire Avenue and Install 1 Pepco streetlight on Notley Road near intersection	250’