Montgomery Planning

NEELSVILLE MIDDLE SCHOOL

MANDATORY REFERRAL NO. MR2022007

FINAL FOREST CONSERVATION PLAN NO. MR2022007

Description

Construction of a new Neelsville Middle School on the same site as the current school. After the new building has been constructed, the old building will be demolished and replaced with recreational fields and other amenities to make up for similar facilities currently located where the new building will be built. The facility will be built for a capacity of 1,063 students with a master-planned addition of 6 classrooms for a master-planned capacity of 1,190 students.

No. MR2022007 Completed: January 14, 2022	MCPB Item No. 5 January 27, 2022	2425 Reedie Drive Floor 14 Wheaton, MD 20902

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LOCATION

11700 Neelsville Church Road
Germantown, MD 20876

MASTER PLAN

1989 *Germantown Master Plan*

ZONE

R-200

PROPERTY SIZE

29.17 acres

APPLICANT

Montgomery County Public Schools (MCPS)

ACCEPTANCE DATE

December 3, 2021

REVIEW BASIS

§20-301 et seq. of the Land Use Article, Chapter 22A

Summary:

- Staff recommends Approval of the Mandatory Referral with recommendations and approval of the Final Forest Conservation Plan with conditions
- There are two items for Planning Board review for this project: the Mandatory Referral and the Final Forest Conservation Plan.
- Staff suggests additional pedestrian and bicycle improvements to increase safety and provide more direct non-vehicular access.

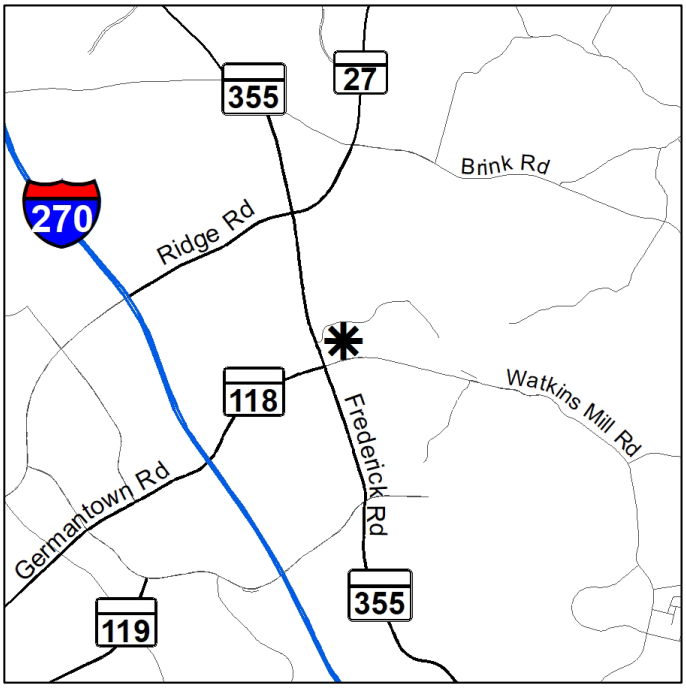

Figure 1 – Location Map

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SECTION 1: RECOMMENDATIONS AND CONDITIONS

MANDATORY REFERRAL PLAN MR2022007

Staff recommends approval of Neelsville Middle School Mandatory Referral Plan No. MR2022007, for construction of a new middle school on 29.17 acres, zoned R-200, in the 1989 *Germantown Master Plan* area, with the following recommendations:

1. Consider additional pedestrian connections via stairs and/or ramp from and to the following locations:
    a. from the northeast corner of the Frederick Road/Germantown Road intersection to connect to the internal pedestrian network;
    b. from the southeast corner of the Frederick Road/Neelsville Church Road intersection to the entry plaza by the student drop-off/pick-up location; and
    c. from Germantown Road to the sidewalk between the basketball courts and the bus loop.
2. Consider adding a natural surface trail between the long straight segment of the bus loop and Shakespeare Boulevard.
3. Provide additional right-of-way dedication to meet applicable master plan road widths.
4. Work with the Montgomery County Department of Transportation, State Highway Administration, and Planning staff to implement improvements to correct deficiencies and safety hazards within the local transportation network. These are identified in the Application's transportation study and include:
    a. addressing known ADA deficiencies;
    b. improving, at a minimum, two bus stops (on Frederick Road closest to Neelsville Church Road—one northbound and one southbound) to include bus shelters;
    c. improving deficient segments of vicinity-wide sidewalks and pedestrian crossings, including at the proposed access point for the bus loop, to a maximum PLOC-2 grade Pedestrian Level of Comfort; and
    d. improving deficient segments of vicinity-wide bicycle network and crossings to a maximum LTS-2 grade Level of Traffic Stress.
5. Work with the Montgomery County Department of Transportation, State Highway Administration, and Planning staff to improve multi-modal safety at the Frederick Road/Germantown Road intersection.
6. Plant additional trees in or near stormwater management areas and within the islands of all parking facilities where possible.

FINAL FOREST CONSERVATION PLAN MR2022007

Staff recommends approval of Neelsville Middle School Final Forest Conservation Plan (FFCP) No. MR2022007 and the Tree Variance Request with the following Conditions:

1. The Applicant must schedule the required site inspections by M-NCPPC Forest Conservation Inspection staff per Section 22A.00.01.10 of the Forest Conservation Regulations.
2. Prior to the start of any demolition, clearing, grading, or construction, whichever comes first, for this development Application, the Applicant must record a Category I Conservation Easement over all areas of forest retention, forest planting, and environmental buffers as specified on the approved Final Forest Conservation Plan. The Category I Conservation Easement must be in a form approved by the M-NCPPC Office of the General Counsel and must be recorded in the Montgomery County Land Records by deed.
3. The Applicant must comply with all tree protection and tree save measures shown on the approved Final Forest Conservation Plan. Tree save measures not specified on the Final Forest Conservation Plan may be required by the M-NCPPC Forest Conservation Inspection Staff.
4. The Limits of Disturbance ("LOD") shown on the Final Sediment and Erosion Control Plan must be consistent with the LOD shown on the approved Final Forest Conservation Plan.

SECTION 2: SITE DESCRIPTION

VICINITY

The Neelsville Middle School site is located at 11700 Neelsville Church Road in Germantown. It is in the northeast quadrant of the intersection of Frederick Road (MD 355) and Germantown Road (MD 118 to the west of MD 355, but not numbered to the east) (see Figure 2). It is bounded on the north by Neelsville Church Road and to the east by Shakespeare Boulevard. Across Neelsville Church Road to the north is the Neelsville Presbyterian Church. Across Frederick Road just north of the Neelsville Church Road intersection is Montgomery County Fire and Rescue Service Station 34. Also, across Frederick Road, in the northwest quadrant of the Frederick Road/Germantown Road intersection, is a small cluster of businesses that includes a gas station, convenience store, car wash, and fast-food restaurant. All other surrounding development is a mix of attached and detached single-family houses and one apartment complex.

Figure 2 - Vicinity Map (2020 aerial image)

PROPERTY DESCRIPTION

The site consists of two parcels on tax map FU13: P220 and P331, which together total approximately 29.17 acres ("Site"). There are 17.85 acres of usable space on the Site, while the eastern 11.32 acres holds a large tree stand on steeply sloped terrain. As can be seen in Figure 3, the Site is on a rise of about 20 feet above Frederick and Germantown Roads and the elevation drops about 50 feet from the school's access road to the southeast corner of the Site.

Figure 3 - Subject Property, showing tree canopy (2018) and contour lines. Note in particular the very steeply sloped corner of the site at the Frederick Road/Germantown Road intersection, where the Site rises over 20 feet.

SECTION 3: PROJECT DESCRIPTION

PREVIOUS REVIEWS

CONCEPT PLAN

Concept Plan No. 520210130 was reviewed by Planning staff and other regulatory review agencies and comments were provided to the Applicant on April 28, 2021. The comments at the time were supportive of the Application, with most of the requests for revisions being related to transportation and circulation issues. As a result of some of these comments, the proposed school has been shifted about nine feet to the east to accommodate the planned right-of-way (ROW) for Frederick Road, primarily to provide space for the planned Bus Rapid Transit service on that road. The proposal has also been updated to indicate the extent of the master-planned bike improvements along Shakespeare Boulevard. Some requested changes to pedestrian circulation, however, were not provided. These changes are discussed as part of the transportation analysis below.

PROPOSAL

Montgomery County Public Schools ("Applicant") is proposing to raze the existing school and replace it with a newly constructed Neelsville Middle School ("Application"). The project will be implemented in two phases. Phase 1, which is primarily the construction of the new building, is planned to be completed in the summer of 2024. Phase 1 also includes the construction of a second site entrance off Neelsville Church Road, a new parking lot and student drop-off/pick-up loop, an extension of the existing access road that serves the bus loop, and some of the school's recreation amenities. The existing school will remain in operation during Phase 1.

Phase 2 is planned to be completed in the summer of 2025. This phase includes the demolition of the existing school and construction of the remaining athletic facilities, including softball and soccer fields and tennis courts. These facilities will be located where the current parking lot and school building are today. Figure 4 below shows how the positions of the school, parking lot, and athletic facilities are all switching places as part of the project.

Figure 4 - New Versus Existing Layout. The proposed new school building and paved areas are to be constructed on top of the existing ballfields, while the new athletic facilities will replace the current school and parking lot.

The completed building will be approximately 162,684 square feet with an additional 630-foot trash/storage building; the new building replaces a 131,432-square-foot structure built in 1981. The current capacity of the school is for 956 students with a 2020 enrollment of 842 students (88.1% utilization), although this is a significant drop from the 2019 enrollment of 945 students (98.7% utilization). The facility will be built for a capacity of 1,063 students with a master-planned addition of six classrooms for a final master-planned capacity of 1,190 students. There is no timeline for the construction of this addition.

On-site parking areas in Phase 1 will provide spaces for approximately 130 vehicles. The on-site traffic circulation has been designed to provide safer access to the school for pedestrians and to maximize on-site vehicle stacking to minimize overflow traffic onto Neelsville Church Road. New exterior lighting has been designed to shield adjacent residences from glare and to limit night sky light pollution while still maintaining light levels necessary for safety and security.

The project also includes a new stormwater management system, which has been designed to provide both quantity and quality control measures. The Applicant will provide micro-scale water quality facilities to comply with environmental site design regulations, and an underground detention system has been included to reduce peak flow rates as compared to the current conditions.

SECTION 4: ANALYSIS

SITE DESIGN

The new school building will be located near the center frontage of Frederick Road at the top of a steep embankment. The main school site rises about 20 feet above the road. Play areas, ball courts, and the parking lot and bus loop will surround the new school along its south, east, and north frontages. Beyond the courts and parking lot areas, dense woods slope downward to the adjacent streets on the eastern half of the site. Vehicles and pedestrians will access the new school from Neelsville Church Road using a new access road and sidewalks.

After the Concept Plan review, the school building, recreational areas, loading area, and parking and drop-off areas were shifted slightly eastward on the Site to accommodate the possible future master-planned improvements to the MD 355 right-of-way. The shifted features will not encroach on any of the wooded areas. The final site design proposal is shown in Figure 5.

Figure 5 - Overall Site Design

Even with the steep slopes, wooded areas, and revisions to the location of the building, the school will still provide a civic presence along Frederick Road (see Figure 6). However, staff requests that additional and more direct access paths be provided to promote walking and biking to the school from the surrounding neighborhoods. The extent of the possible pathways could be as follows:

- from the northeast corner of the Frederick Road/Germantown Road intersection to connect to the internal pedestrian network;
- from the southeast corner of the Frederick Road/Neelsville Church Road intersection to the entry plaza by the student drop-off/pick-up location;
- from some point along Germantown Road to the sidewalk between the basketball courts and the bus loop; and
- along a possible natural surface trail located between the long straight segment of the bus loop and Shakespeare Boulevard.

Figure 6 - The new school building as seen across Neelsville Church Road from Frederick Road

BUILDING/ARCHITECTURE

The main school entrance, with student drop-off and pick-up, is located on the north side of the building. A secondary entrance adjacent to the bus drop-off is located on the south side (see Figure 7).

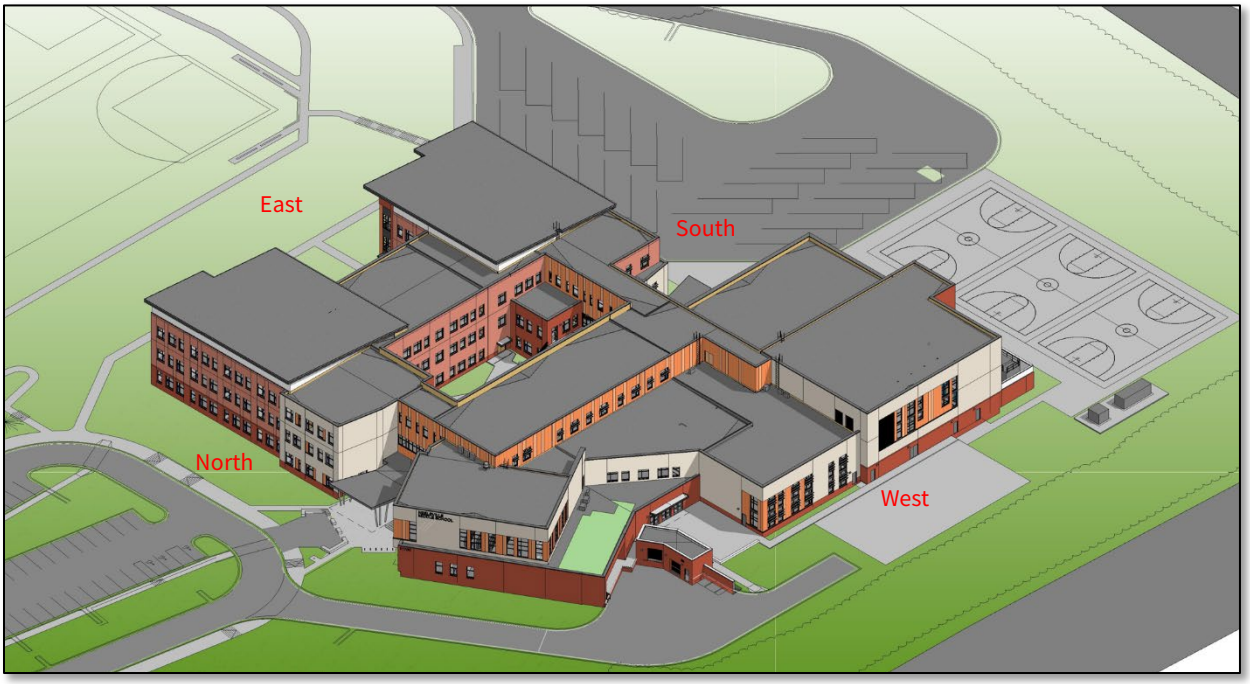

Figure 7 – Bird's-eye View Northwest

The internal spaces of the Neelsville Middle School are organized around a central courtyard (see Figure 8), which provides natural light to the adjacent corridors in the building. The courtyard space is designed for outdoor classes and gathering.

Figure 8 - Rendering of Courtyard

The designers of the school chose warm, neutral colors for the building façades that blend in with the wooded context of the site, especially during autumn. The massing and defining colors on the façades of the building reflect the program occurring inside the building. The main entrance to the building on the north side is composed of warm-toned metal panels and glass (see Figure 9). Tall, one-story canopies with a wood finish underneath mark the two entrances.

Figure 9 - Front (North) Façade

The public spaces, which include the library and administration offices, flank the entry and are clad in a combination of earth-toned/red and light-colored brick. This color scheme continues on the south façade of the building. The gymnasium is composed of light brick and the warm-toned metal panels. The remaining portions of the administrative offices are also light brick. The classroom wings have sloped roofs and are connected to one another by the science labs between the two wings. These façades are clad in red brick.

The proposal includes a future three-story addition to accommodate six classrooms at the east end of the front classroom wing of the building (see Figure 10).

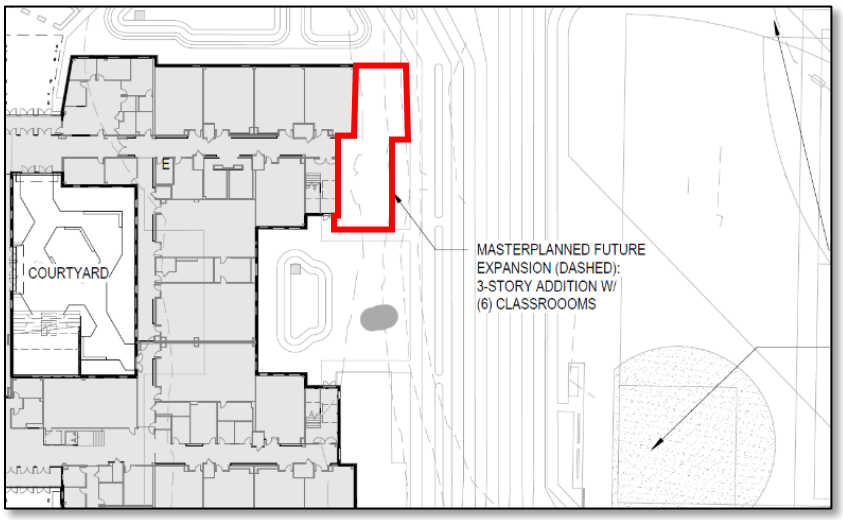

Figure 10 - Future Classroom Addition

The school building is well designed for the intended use.

SUSTAINABILITY

The Applicant has oriented the building, optimized the façades, and selected the building systems to best align with the county's energy goals while remaining within the MCPS design and construction budget. The Applicant is targeting two Green Globes as part of the Green Building Initiative's Green Globes certification process, "with a focus on maximizing energy efficiency, occupant comfort, human wellness, and sustainable site design." A new on-site stormwater management system designed to treat the impervious areas of the site includes micro-bio retention facilities to comply with environmental site design (ESD) regulations.

LANDSCAPE AND LIGHTING

The submitted landscape plan proposes 125 canopy trees, 31 ornamental trees, and 93 evergreen screening trees to be planted throughout the Site. The ornamental trees have been generally placed near the school entrances and along the accessible path from the school to the recreational facilities east of the school, which are roughly 15-20 feet higher than the base elevation of the school. Canopy

trees are proposed along Neelsville Church Road, the student drop-off drive, along the bus loop, and within the stormwater filtration areas. The evergreens are proposed at the top of the embankment along the Site's northwest Neelsville Church Road frontage. The lighting plan proposes a mixture of lighting types including fixtures on poles and various wall mounted lighting. The lighting plan shows no light spill at the Site boundaries.

Additional trees should be planted in or near the stormwater management areas and within the islands of all parking facilities if possible.

OPERATING HOURS

The school's hours of operation vary and comply with the standard MCPS school schedule. On typical school days, the hours of operation are 8:15 a.m. to 3 p.m. The facility will be available in the evenings and on weekends for community use.

PARKING

Staff and visitor parking, along with a student drop-off and pick-up loop, will be accessed from Neelsville Church Road on the north side of the Site. A parking lot within the drop-off loop and another lot east of the loop will provide access to the main entrance of the building and the athletic facilities. The bus loop is striped for buses and after-hours use by cars, and there are parking spaces for the tennis courts along this access road. The proposed site design provides on-site staging areas for buses, 130 parking spaces, and on-site student drop-off queuing. There are no standard parking rates for middle schools and final determination of parking adequacy is at the discretion of MCPS. The proposed parking is adequate to serve the facility.

NEIGHBORHOOD COMPATIBILITY

The Site is currently occupied and being used as the existing Neelsville Middle School. The new building is well placed given the topographical constraints of the site and provides a commanding presence on top of a low hill. The parking, bus loop, and vehicular circulation are located to optimally serve the Site and have been designed to have a minimal impact on the forested part of the Site. The character of the proposed building will create an attractive amenity for the community and the building is architecturally compatible with the surrounding neighborhood.

MASTER PLAN CONFORMANCE

The Site is located within the 1989 *Germantown Master Plan* ("Master Plan"); roadway recommendations for Frederick Road (MD 355) that impact it are also addressed in the 2009 *Germantown Employment Area Sector Plan* ("Sector Plan"). Some of the bicycle recommendations from the 1989 and 2009 plans have been superseded by recommendations in the *Bicycle Master Plan* and are discussed in the transportation section below.

The Master Plan places the Site in the Neelsville Village plan neighborhood; a map of the area in the Master Plan shows a middle school in the same location as the subject school, although the name of the school at the time was Martin Luther King, Jr. Middle School. (That school has since relocated to the Churchill Village section of Germantown.) The Master Plan does not make any specific recommendations for the Site.

Broad objectives of the 1989 Master Plan that apply here include:

- providing a safe, efficient, and adequate transportation system;
- increasing transit serviceability;
- providing public facilities such as parks and schools on a timely and adequate basis; and
- encouraging the preservation of natural resources.

The proposed plan helps further these Master Plan objectives.

The Master Plan also recommends implementing streetscape guidelines that include sidewalks, priority for pedestrians and handicapped access, and buries utilities. Most of these recommendations have been addressed with the proposed plan. However, the objectives of the Master Plan would be better met if pedestrian and bicycle access were provided from more than one direction. Recommendations for additional pedestrian connections are addressed in the site design discussion above and the transportation section below.

Another Master Plan objective for the Neelsville Village plan neighborhood is to protect the water quality in the streams and wetlands. The Applicant proposes retaining 11.16 acres of forest on the Site in a Category I conservation easement, which will help protect water quality of streams in the area. The other Master Plan objectives for Neelsville Village do not apply to this project.

The 2009 Sector Plan recommends a 250-foot right-of-way for Frederic Road, and the Applicant has shifted the school nine feet to the east to accommodate this future right-of way. The Sector Plan also recommends a grade-separated interchange at Frederick Road and Germantown Road. The Sector Plan does not provide a specific design or timeline for this improvement, so the Applicant has not provided right-of-way for this improvement. There is, however, some space available on the site in the northeast quadrant of this intersection that could still be used for a future interchange.

Although the Site would be better served by additional pedestrian and bicycle connections, the new building is in substantial conformance with the 1989 *Germantown Master Plan* and the 2009 *Germantown Employment Area Sector Plan*.

TRANSPORTATION

MASTER-PLANNED ROADWAYS, TRANSITWAYS, AND BIKEWAYS

The Application fronts four public roads, three of which are identified in the 2018 *Master Plan of Highways and Transitways*: 1) Germantown Road, a Major Highway with a recommended 150-foot ROW; 2) Frederick Road (MD 355), a Controlled Major Highway with Planned BRT and a 250-foot ROW; and 3) Shakespeare Boulevard, an Arterial Road with an 80-foot ROW. The fourth road, Neelsville Church Road, is an unclassified public road that operates as a Primary Residential street with an 80-foot ROW.

The MD 355 Bus Rapid Transit (BRT) Study has presented three possible alignments for the BRT through this corridor (see Figure 11), with Alternative C passing immediately adjacent to the Application on Frederick Road. As studied, this alignment would operate in mixed traffic through the corridor and provide nearby stops at Oxbridge Drive (roughly 900 feet to the south) and Shakespeare Boulevard (roughly 1,600 feet to the north). Alternatives A and B would similarly provide a stop adjacent to the Shakespeare Boulevard/Frederick Road intersection but would not follow an alignment immediately adjacent to the school.

Figure 11 - Map of Studied Clarksburg/Germantown MD 355 BRT Alignments. Alternative A is in yellow (primarily along Snowden Farm Parkway/Shakespeare Boulevard/Seneca Meadows Parkway), Alternative B is in red (primarily along Observation Drive), and Alternative C is in green (primarily along Frederick Road).

The 2021 *Corridor Forward: The I-270 Transit Plan* Planning Board Draft ("*Corridor Forward*") recommends retaining Alternative A with a slightly modified alignment, still bypassing the Site boundary (see Figure 12).

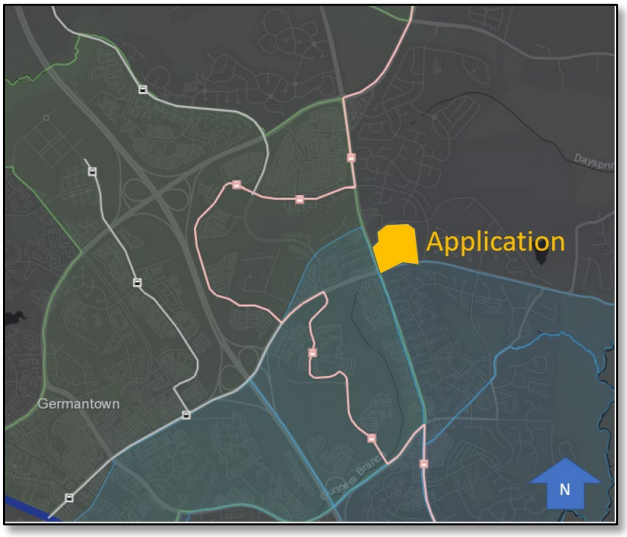

Figure 12 - Map of Recommended Corridor Forward BRT Alignment

This Application does not propose any additional right-of-way dedication along Frederick Road. However, the school building has been set back at a minimum 110 feet from the existing right-of-way line, and a minimum of 180 feet from the centerline, which would not preclude additional right-of-way dedication in the future should that become necessary. This is likely sufficient for current BRT plans, as only Alternative C, which has not been endorsed by the *Corridor Forward* plan, runs adjacent to the application. Furthermore, Alternative C would operate in 'mixed traffic', utilizing the existing cross section of the road, with no bus stop proposed along the frontage.

The 1989 *Germantown Master Plan* and the 2009 *Germantown Employment Area Sector Plan* recommend that Frederick Road be expanded through the Plan area to add additional highway capacity to accommodate all future development. Additionally, both plans recommend that the intersection of Frederick Road and Germantown Road be improved to a major grade-separated interchange. To date, no study has been conducted or design produced for this facility and no funding has been secured to further implementation. While limited dedication has been provided for ramp improvements on the southeast quadrant of the intersection through earlier development at that location, similar dedication is not available on either quadrant on the west side of the intersection, with both properties currently encumbered with structures (see Figure 13).

Figure 13 - Dedication in SE quadrant of Frederick Road/Germantown Road intersection. No such dedication has been provided in the other three quadrants.

The results of the Applicant's transportation study (Attachment A), discussed in additional detail below, indicate that this section of Frederick Road will continue to operate within acceptable congestion standards even after accounting for all known approved developments. Therefore, it is unlikely that significant improvements will be necessary in the near to medium term to address congestion. The lack of funding, study, and design for either the expansion of Frederick Road or the implementation of an interchange reduces the likelihood of either project within the foreseeable future. Additionally, with the implementation of the new 2020 Growth and Infrastructure Policy (GIP), which prioritizes multi-modal safety and bike and pedestrian movement, it is unlikely that these capacity improvements can be accommodated without unacceptable impacts to the bike and pedestrian network. The Applicant has responded to the right-of-way concerns by shifting the placement of the school building, as mentioned above, a minimum of 180 feet from the centerline of Frederick Road, and a minimum of 290 feet from the centerline of Germantown Road. However, some non-structural elements, such as basketball courts and the bus loop, will be present adjacent to the right-of-way (see Figure 14), which could be an encumbrance should dedication become necessary.

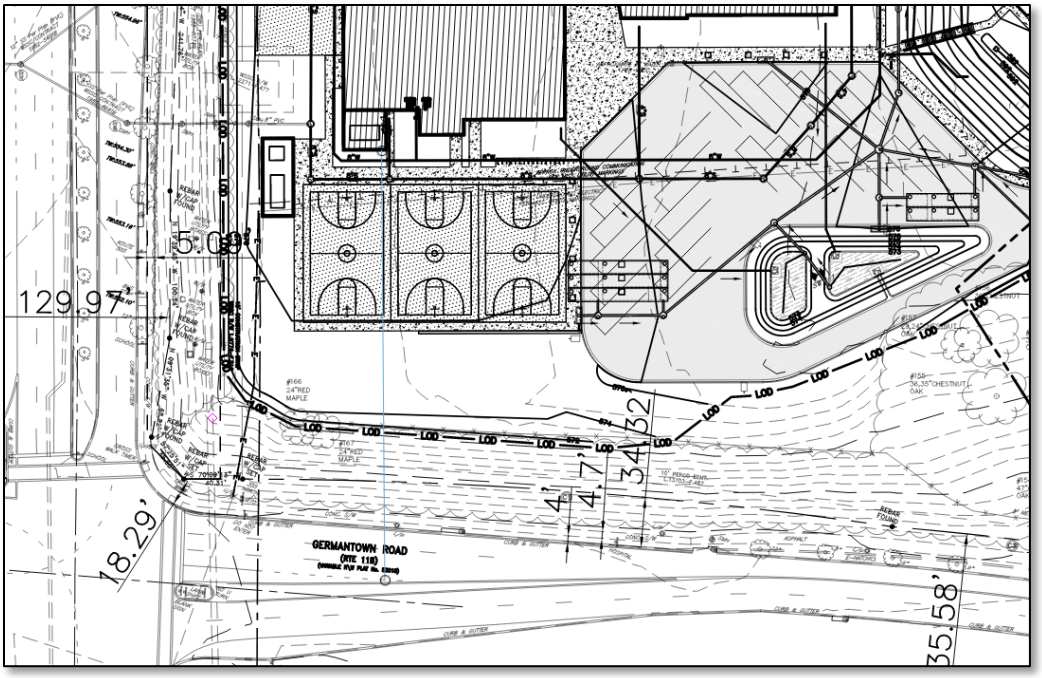

Figure 14 - Non-structural Elements Adjacent to Right-of-Way

The steep, 20-foot vertical grade adjacent to the right-of-way will also present a long-term challenge. Any improvement to either Frederick Road or Germantown Road will require extensive regrading along with the construction of retaining walls, which may require additional right-of-way dedication.

The 2018 *Bicycle Master Plan* recommends the implementation of a minimum 11-foot-wide shared use path along both the Frederick Road and Germantown Road frontages. Currently, Frederick Road is improved with a 4-foot-wide sidewalk with an inadequate 5-foot-wide buffer from the road (see Figure 15). The frontage on Germantown Road is improved with a 5-foot-wide sidewalk for the first 350 feet east of Frederick Road and a sub-standard 8-foot-wide shared-use path for the remaining approximately 725 feet to Shakespeare Boulevard.

Figure 15 - Frederick Road Existing Conditions from Google Street View

The *Bicycle Master Plan* recommends on-street separated bike lanes along the Site's Shakespeare Boulevard frontage.

The Applicant does not propose constructing any of these pedestrian or bicycle improvements to fully meet the master plan recommendations. Given the location of these improvements along two major roads with significant current and future transit, the highly populated, mixed-use community surrounding the Site, and connectivity to the school itself, it is recommended that the Applicant work with the State Highway Administration and Montgomery County Department of Transportation to implement these master-planned improvements. The lack of proposed right-of-way dedication along Frederick Road and Germantown Road, along with the difficult grade, will be a major hurdle for any future bike and pedestrian improvements. Additional right-of-way dedication is recommended to be provided along Frederick Road, Germantown Road, and Shakespeare Boulevard to facilitate these improvements.

LOCAL AREA TRANSPORTATION REVIEW

The proposed expansion from a 956-student middle school to a 1,190-student middle school will result in a net new increase of 142 and 72 person-trips in the AM and PM peak periods, respectively, exceeding the 50-person threshold requiring a multi-modal study. As a result, the Applicant included a transportation study, dated October 25, 2021, to meet the requirements of the 2021 Local Area Transportation Review Guidelines (LATR) guidelines under the 2020 Growth and Infrastructure Policy. While the study found a number of significant deficiencies, under the LATR guidelines,

recommendations for Mandatory Referral applications are advisory; mitigation is not required. As such, this Application does not propose mitigation. However, due to the significance of some of these issues, it is recommended that the Applicant work with the State Highway Administration and Montgomery County Department towards long term, incremental solutions.

Trip Generation and CLV Analysis

The transportation study analyzed the following intersections and used combined historic count data from 2019, prior to the Covid-19 pandemic:

Table 1. Existing and Future CLV Counts, October 25, 2021 Transportation Study, The Traffic Group

Intersection	Critical Lane Volume (CLV)			
	Existing CLV		Total Future CLV	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
MD 355 at Shakespeare Blvd	1,244	866	1,261	876
MD 355 at Neelsville Church Rd	1,167	947	1,181	1028
MD 355 at Germantown Rd	1,140	889	1,166	977
Germantown Rd at Shakespeare Blvd	861	795	965	1,052
Neelsville Church Rd at School Access (non-bus vehicles)	534	363	795	464
Neelsville Church Rd at School Access (new bus access)	--	--	450	340

All intersections are found to operate at a CLV level below the 1,425 CLV threshold and no improvements are necessary.

ADA, Streetlight, and Transit Adequacy

The transportation study found 15 ADA deficiencies in the Application vicinity, most in and around intersections. All 75 streetlights are found to be in working condition within the study boundary. Five bus stops are located within the studied 1,000-foot radius of the Application. Only one of these stops includes a bus shelter, with four remaining unsheltered; two shelters are recommended to be improved with shelters in line with LATR guidelines: at the current bus stops on Frederick Road (both northbound and southbound) closest to the Neelsville Church Road intersection.

Vision Zero

The Vision Zero statement compiles several data points to highlight potential road hazards. The Site is adjacent to two "High Injury Network" segments as identified by Montgomery Planning: one on Frederick Road from Germantown Road to Ridge Road, and one on Germantown Road from I-270 to Frederick Road. A total of 11 severe and fatal crashes were recorded between 2012 and 2016 along this segment of Frederick Road; nine percent of these crashes involved pedestrians or bicyclists with one pedestrian injured. Six severe and fatal crashes were recorded along this segment of Germantown

Figure 16). Approximately 60 percent of crashes are rear-end collisions, although injury-causing crashes are reported at all study intersections. There were 90 recorded crashes at the Frederick Road/Germantown Road intersection alone, 24 of which resulted in injury.

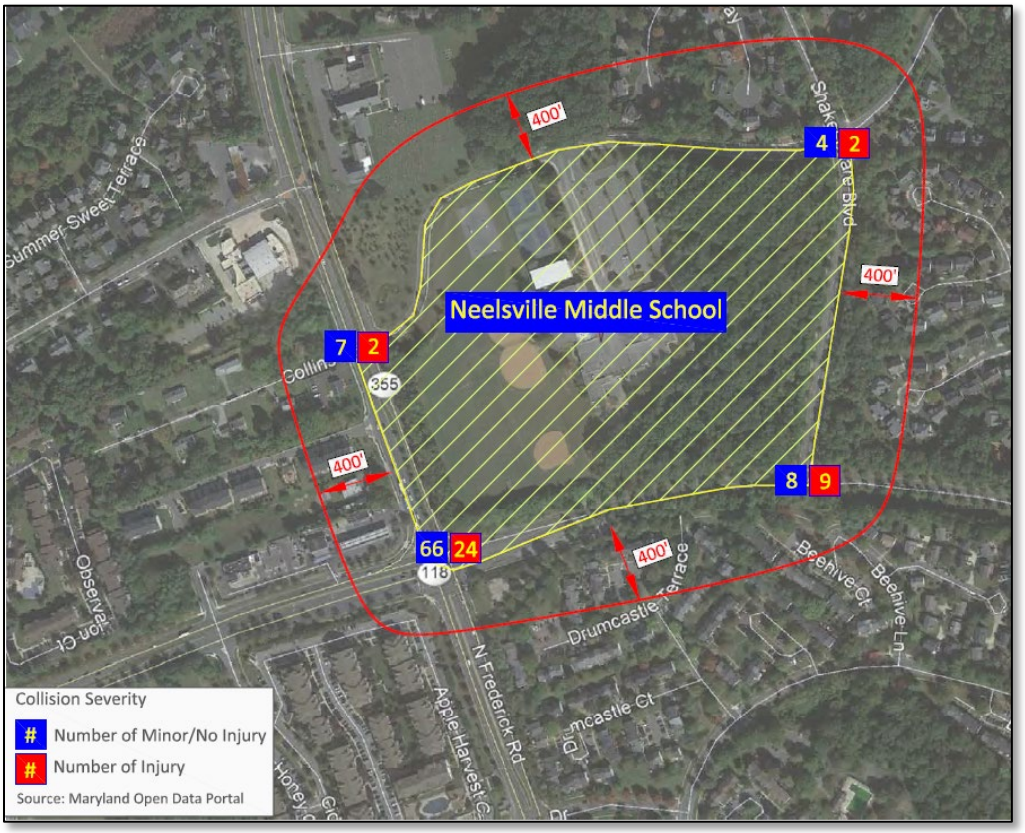

Figure 16 - Vicinity Reported Crash Data, 2015 - Q2 2021

Local Pedestrian Adequacy

The Pedestrian Adequacy test was conducted within 400 feet of the Site. Significant areas are found to be deficient, classified as either “uncomfortable” or “undesirable” as determined by the Pedestrian Level of Comfort methodology. This includes approximately 1,630 feet along the east side of Frederick Road; 660 feet on the west side of Frederick Road; and approximately 530 feet along the north side of Germantown Road (see Figure 17).

Figure 17 – Transportation Study Area Pedestrian Level of Comfort. Red lines are classified as undesirable, orange lines are uncomfortable, light blue lines are somewhat comfortable, and darker blue lines are very comfortable. (The darkest, dashed blue lines demarcate the study area boundary.)

Of particular note, all pedestrian crossing points at the intersection of Frederick Road and Germantown Road are found to be deficient. Combined with the known crash history, this large, high-speed, and high-capacity intersection serves as a major barrier to all non-vehicular movement at a crossroads that serves as a significant focal point in this densely populated area of east Germantown. At its widest point on the western leg of Germantown Road, pedestrians must cross 10 lanes of traffic and 130 feet of pavement (see Figure 18). Still, the intersection accommodates nearly 100 pedestrians over the course of a day (although no cyclists were found crossing in the most recent count in 2019). Major geometric intersection improvements are needed to address these significant deficiencies, and it is recommended that the Board of Education coordinate with the State Highway Administration and Montgomery County Department of Transportation to further this conversation.

Figure 18 – Google Street View of Intersection of Frederick Road and Germantown Road, Viewing Site

Local Bicycle Adequacy

Figure 19).

Figure 19 - Transportation Study Area Bicycle Level of Traffic Stress

Significant areas are found to be deficient with this study as well, classified as either “Moderate” or “High” stress. This includes approximately 1,500 and 1,000 linear feet along the east and west side of Frederick Road, respectively, including the Site frontage; 2,000 and 1,000 linear feet along the north and south side to Germantown Road, respectively, including a portion of the Site frontage; and approximately 1,400 linear feet on both sides of Shakespeare Boulevard. As with the pedestrian test, all crossing points at the intersection of Frederick Road and Germantown Road are found to be deficient; this certainly contributes to the absence of bicyclists found during recent counts.

SITE ACCESS AND CIRCULATION

Site Circulation Plan

The Site Circulation Plan is shown in Figure 20 and discussed below.

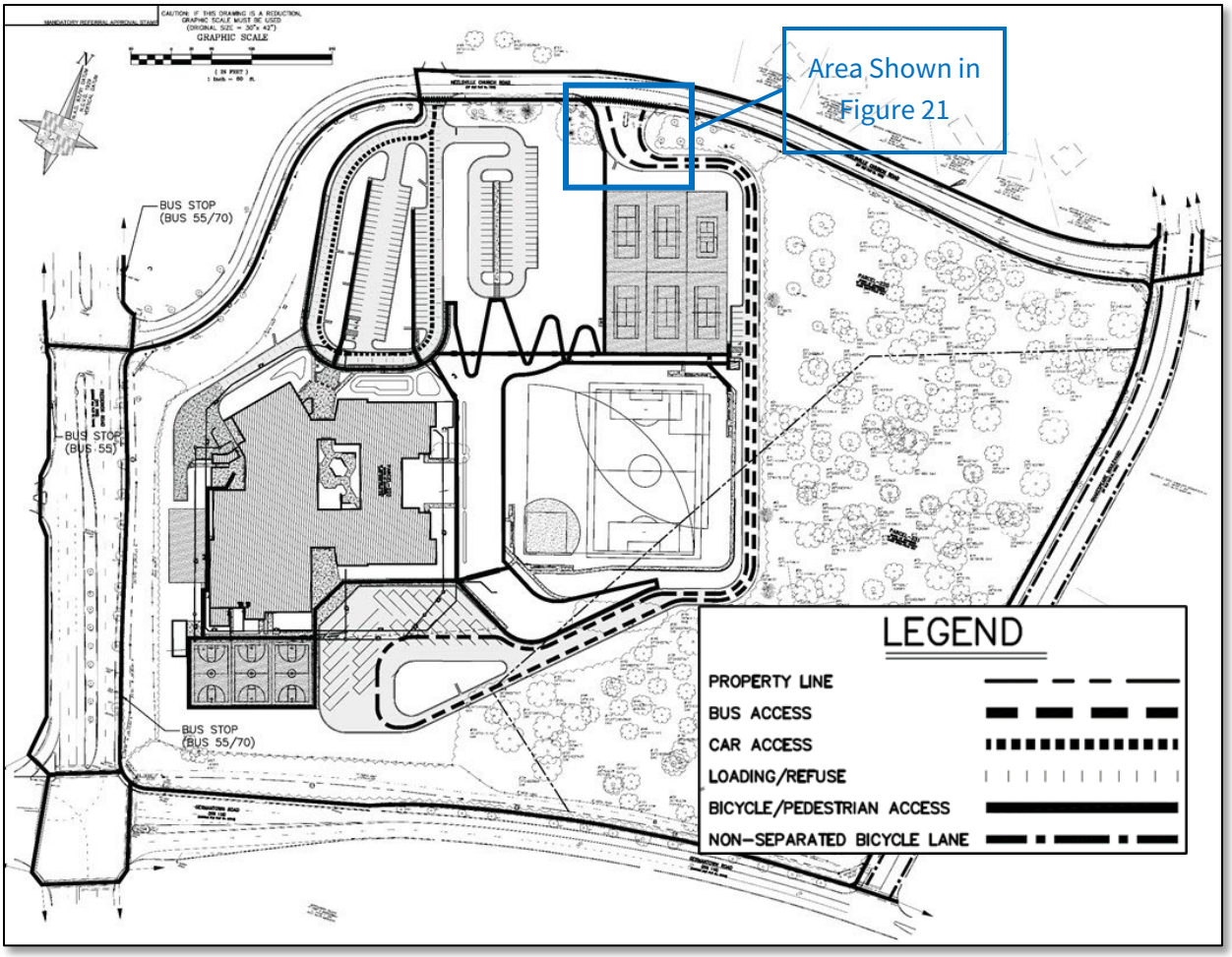

Figure 20 - Site Circulation.

Figure 21). This will continue to present a significant pedestrian obstacle. Efforts to reduce the size of this access point to a more pedestrian scale are strongly encouraged.

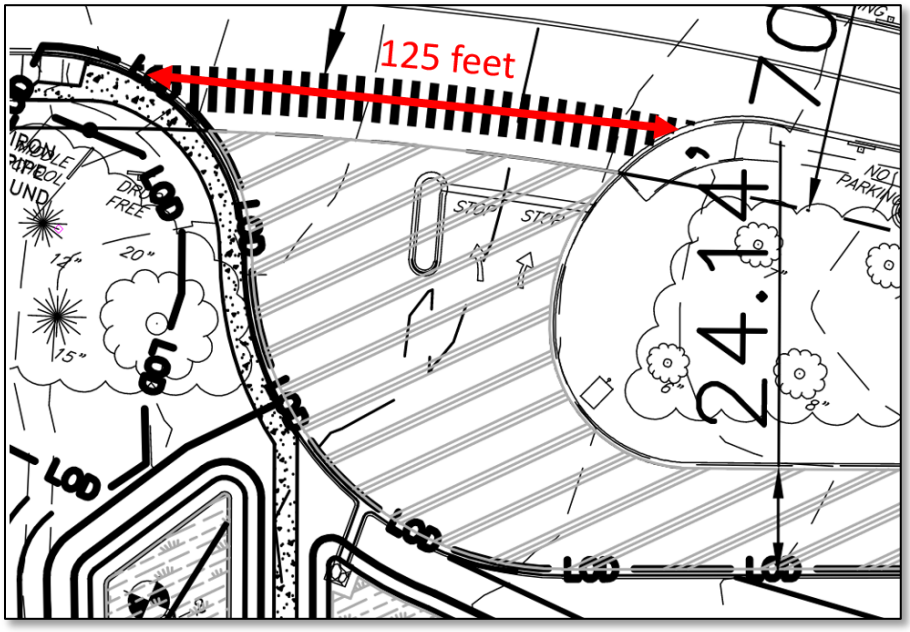

Figure 21 - Bus Loop Access Point to Neelsville Church Road

This bus circulation system will wrap from the north Site access to the south, around the eastern perimeter of the school grounds and recreation facilities, terminating in a high-capacity bus drop-off/pick-up point, parking area, and loop on the south side of the school building (see Figure 22). Most of the bus access drive utilizes the existing school's access drive.

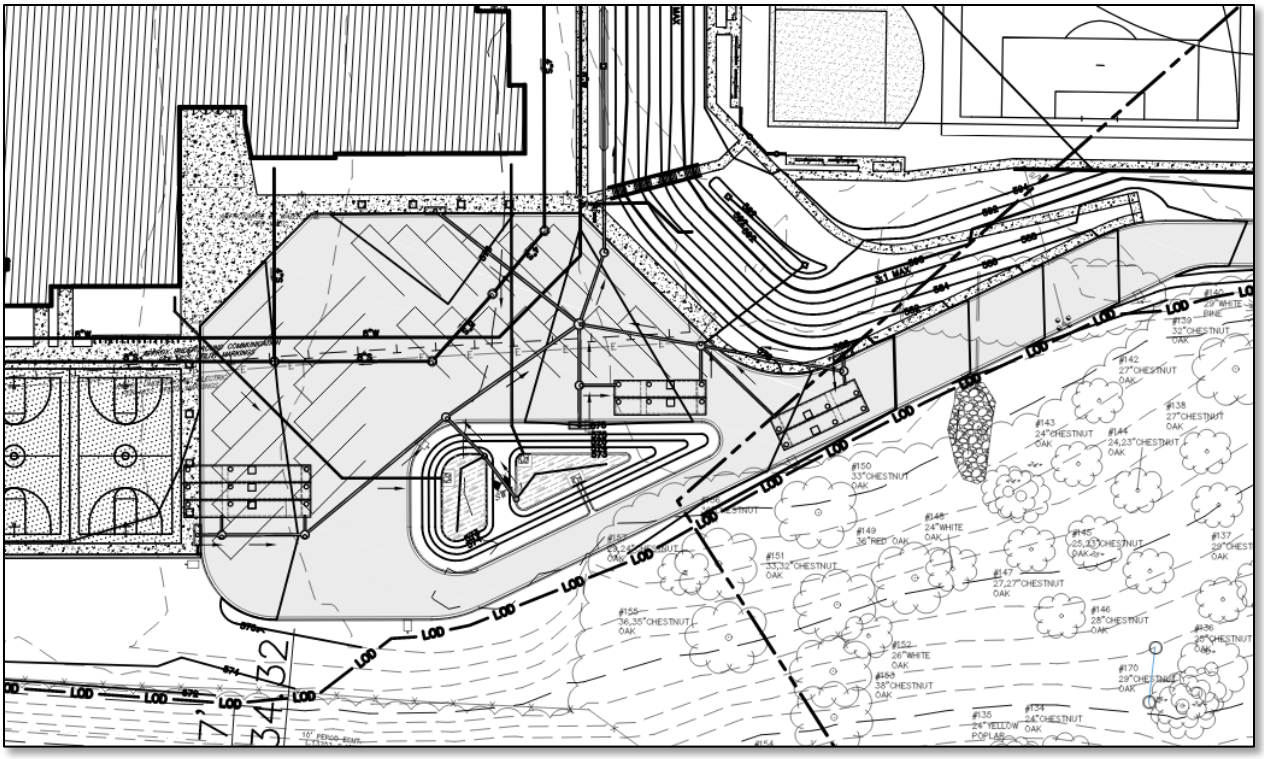

Figure 22 - Bus Pickup and Drop-Off Loop and Parking Lot

An additional vehicular access point will be provided on Neelsville Church Road to the west of the bus entrance. This entry/exit point provides access to the two main school parking lots, to a circulation loop for a drop-off/pick-up location at the north side of the school, and to trash and delivery facilities on the western side of the school fronting Frederick Road.

Bike and Pedestrian Circulation

An internal network of sidewalks, stairs, and ramps connect all points of the main school grounds, including the main school building, parking lots, drop-off and pick-up points, and recreation facilities. However, external pedestrian connectivity is limited to two sidewalk links on the western side of the vehicular access points on Neelsville Church Road. Additionally, no dedicated bike access is proposed. Furthermore, no pedestrian connection is proposed along the frontage with Frederick Road, Germantown Road, or Shakespeare Boulevard. The lack of direct bike and pedestrian connectivity to these major thoroughfares will significantly reduce non-vehicular trips.

Recommendations were provided in the Concept Plan review to provide a ramp or stairway in the vicinity of the Frederick Road/Germantown Road intersection as well as a pedestrian connection through the forested eastern half of the property to Shakespeare Boulevard, though the Applicant has noted the challenges of climbing a steep 20 ft. grade. Without additional connections, pedestrians attempting to access the site from the Frederick Road/Germantown Road intersection will be detoured up to 10 minutes by walking much of the perimeter and back down through the center of the site through the closest pedestrian access point (see Figure 23).

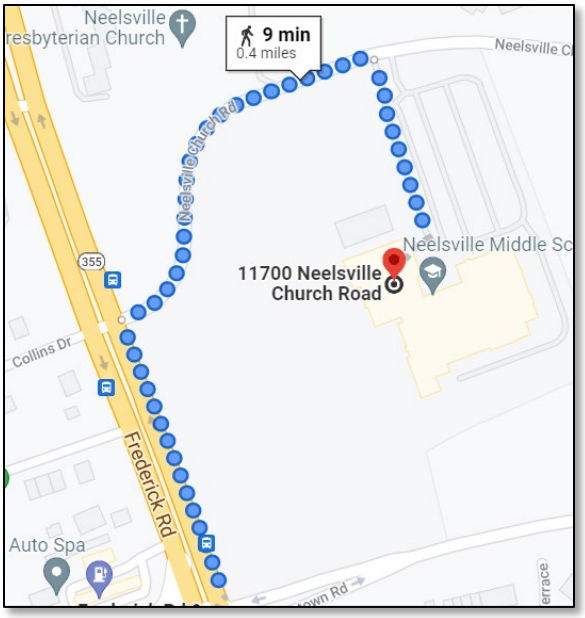

Figure 23 - Example pedestrian detour to existing school building from Google Maps. A trip on foot to the new building will take a similar amount of time, even though the building has been moved closer to MD 355.

Under current middle school district boundaries, the school serves relatively few students in the immediate vicinity of the Site, for the most part, encompassing an area beyond a feasible walkshed. This presents a condition that significantly limits the number of students capable of walking to school overall. Additionally, the Applicant has noted the safety concerns of the surrounding roadways and has expressed a desire to avoid aggravating the hazardous conditions by encouraging greater use.

As previously noted, improvement of the surrounding deficient conditions to address these safety concerns and to improve access for residents, employees, and students is strongly recommended. While an increase in student walk trips is limited by the large school catchment area beyond walking distance, it is reasonable to expect the school to employ nearby residents who live within walking distance. Future redistricting may include more students from the immediate densely populated vicinity. Additionally, the school will serve an important public function for recreation activities and as a likely venue for public meetings and other events that could be pedestrian accessible.

SECTION 5: FOREST CONSERVATION AND ENVIRONMENT

REVIEW FOR CONFORMANCE TO THE FOREST CONSERVATION LAW

The Application is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code) under Section 22A-4(d) as a project by "a government entity subject to a mandatory referral on a tract of land 40,000 square feet or larger…" The Site included in the Application is 29.17 acres in size, with an address of 11700 Neelsville Church Road, Germantown, MD 20876.

ENVIRONMENTAL GUIDELINES

Natural Resources Inventory and Forest Stand Delineation (NRI/FSD) Plan No. 420211360 was approved by Planning staff on March 25, 2021. The Site is within the Great Seneca Creek watershed, a Use IV-P designation on western portion of the Site and Use I-P designation on the eastern portion of the Site. The Site contains 11.53 acres of forest, no Stream Valley Buffer (SVB), and no 100-year Floodplain. The Site is not located within a Special Protection Area or the Patuxent Management Area.

FOREST CONSERVATION

The Application meets the requirements of Chapter 22A of the Montgomery County Forest Conservation Law ("FCL"). As required by Chapter 22A, a Final Forest Conservation Plan ("FFCP") was submitted with this Mandatory Referral application. The total net tract area for forest conservation purposes is 28.95 acres, which subtracts 0.29 acres of right-of-way not being improved as part of this project. The Property is zoned R-200 and is classified as High Density Residential ("HDR") as defined in Section 22A-3 of the FCL and specified in the Trees Technical Manual. The Site contains 11.53 acres of forest and the Applicant proposes clearing or counted as cleared 0.37 acres in the forest conservation worksheet. This results in no afforestation requirement as calculated in the Forest Conservation Worksheet. All forest retained will be placed in a Category I Conservation Easement.

FOREST CONSERVATION VARIANCE

Section 22A-12(b)(3) of the FCL provides criteria that identify certain individual trees and other vegetation as high priority for retention and protection. The law requires that there be no impact to: trees that measure 30 inches or greater diameter breast height ("DBH"); are part of an historic site or designated with an historic structure; are designated as national, State, or County champion trees; are at least 75 percent of the diameter of the current State champion tree of that species; or trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species. Any impact to high priority vegetation, including disturbance to the critical root zone ("CRZ") requires a variance. An applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the FCL. Staff determined that development of the Site requires impact to trees identified as high priority for retention and protection ("Protected Trees"). The Applicant has submitted a variance request for these impacts.

Variance Request

The Applicant submitted a variance request in a letter dated September 30, 2021 (Attachment B) for the impact to three (3) Protected Trees. Details of the Protected Trees to be impacted are provided in Table 2.

Table 2: Variance Tree Request

Tree #	Species (Scientific Name)	Species (Common Name)	D.B.H (inches)	Tree Condition	Comments	Disposition	Variance Required	Mitigation Required
34	QUERCUS MONTANA	CHESTNUT OAK	41	GOOD		SAVE/ PROTECT	YES	NO
150	QUERCUS MONTANA	CHESTNUT OAK	33	GOOD		SAVE/ PROTECT	YES	NO
156	QUERCUS MONTANA	CHESTNUT OAK	36	GOOD		SAVE/ PROTECT	YES	NO

Unwarranted Hardship Basis

Pursuant to Section 22A-21, a variance may only be considered if the Planning Board finds that leaving the Protected Trees in an undisturbed state would result in an unwarranted hardship, denying an applicant reasonable and significant use of the Subject Property. The Applicant contends that an unwarranted hardship would be created due to existing conditions on the Site and the stormwater management that is required. The Site contains three (3) trees subject to the variance provision which will be impacted by this Application.

If MCPS is not allowed to impact the trees, the school will not be able to be constructed due to not being able to provide adequate stormwater management as required. As such, this would cause an unwarranted hardship to the community that it serves.

Variance Findings

Section 22A-21 of the FCL sets forth the following findings that must be made by the Planning Board or Planning Director, as appropriate, for a variance to be granted and to approve the Forest Conservation Plan:

1. *Will not confer on the applicant a special privilege that would be denied to other applicants*.

   Granting the variance will not confer a special privilege on the Applicant as the disturbance to the Protected Trees is due to required stormwater management. Granting a variance to allow for construction of required stormwater management facilities is not unique to this Applicant.

2. *Is not based on conditions or circumstances which are the result of the actions by the applicant.*

   The need for the variance is not based on conditions or circumstances which are the result of actions by the Applicant. The requested variance is based on existing site conditions, including the location of the Protected Trees in proximity to required stormwater management.

3. *Is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.*

The surrounding land uses do not have any inherent characteristics or conditions that have created or contributed to this need for a variance.

4. *Will not violate State water quality standards or cause measurable degradation in water quality.*

   The Variance will not violate State water quality standards or cause measurable degradation in water quality. The Protected Trees being impacted are not located within a stream buffer, wetland, or a special protection area. Additional trees will be planted on the Subject Property as part of the forest conservation requirements.

   In addition, the Montgomery County Department of Permitting Services (MCDPS) is reviewing a stormwater management concept for the proposed project. The stormwater management concept incorporates Environmental Site Design standards.

Mitigation for Protected Trees

No Protected trees are proposed to be removed, and no mitigation is required.

Variance Recommendation

Staff has reviewed the variance request and recommends Approval of the requested tree variance.

FOREST CONSERVATION LAW ANALYSIS AND FINDINGS

The Application meets all applicable requirements of Chapter 22A of the Montgomery County Forest Conservation Law.

SECTION 6: COMMUNITY OUTREACH

NOTICING

The Applicant held schematic design meetings on five dates in August through December 2020. The final design development meeting was held on April 21, 2021. The project was also presented to the PTSA on November 9, 2021.

A rendered fly-over video of the new building can be seen on YouTube at the following link: https://youtu.be/nnSsCMsDaqM

The new school is part of the county's Capital Improvements Project (CIP). The total expected budget for the project is $64.91M. More information about the budgeting can be found at the following link:

https://apps.montgomerycountymd.gov/BASISCAPITAL/Common/Project.aspx?ID=P652112

COMMUNITY CORRESPONDENCE

As of date of this Staff Report, no correspondence from community members has been received.

SECTION 7: CONCLUSION

Based on information provided by the Applicant and the analysis contained in this report, Planning staff concludes that the proposed facility is a well-designed building that is well suited for its intended purpose. The new school will become an attractive focal point for the community and the proposed vehicular circulation is a great improvement over the current design. Providing additional pedestrian and bicycle connections would go even further in making this a great project.

Staff recommends approval of the Mandatory Referral with the recommendations list above and recommends this be transmitted to Montgomery County Public Schools.

Staff recommends the Planning Board approve the Final Forest Conservation Plan and the Tree Variance Request with the conditions specified above.

ATTACHMENTS

Attachment A: Transportation Study

Attachment B: Tree Variance Request

Attachment C: Plan Drawings