



TOWN COUNCIL WORK SESSION AGENDA

Town Council Chambers
765 Lynn Street, Herndon, VA 20170

Tuesday, January 16, 2024 | 7:00 PM

1. Call to Order

2. Public Hearings

- a. Resolution to approve Special Exception SE #23-01, 630 Dranesville Road, Herndon Elementary School Renovation & Addition, to allow an addition to the existing public school building
- b. Resolution to approve an amendment to Special Exception SE #21-03, 1315 and 1317 Monroe Street, to allow the placement of fill in order to construct two new single-family dwellings on two existing lots within the Floodplain Overlay District

3. General

- a. Resolution to provide Town Council Guidance on the development of the Town Manager's Proposed FY 2025 Budget
- b. Resolution to approve a revision to the approved master plan, for the Chestnut Grove Cemetery, an element within the Comprehensive Plan of the Town of Herndon
- c. Resolution to repeal Resolution 23-G-52 and to endorse and authorize a substitute funding amount on VDOT FY2027 and FY2028 Revenue Sharing Program funding application towards the VDOT-administered 'East Elden Street Widening and Improvements (UPC 50100)'
- d. Ordinance to amend the Herndon Town Code, Chapter 2 (ADMINISTRATION), Article I (In General), Section 2.1 to clarify the rescheduling of meetings

4. Consent

- a. Ordinance to approve and authorize the mayor to sign a lease agreement between the Town and Board of Supervisors of Fairfax County, Virginia, for office space at 397 Herndon Parkway

5. Discussion

- a. Ad Hoc Committees - Review Establishing Guidelines for PBAC and HDEIC
- b. Chapter 2 Amendment, Attendance Process - Define and Record "Good Cause" - Vice Mayor Hedrick

6. Roundtable

7. Closed Meeting

- a. A closed meeting pursuant to the Code of Virginia Section 2.2-3711(A)(1) of the Code of Virginia for discussion of prospective candidates relative to appointments to boards and commissions

8. Adjournment

Agenda Item: Resolution to approve Special Exception SE #23-01, 630 Dranesville Road, Herndon Elementary School Renovation & Addition, to allow an addition to the existing public school building

Meeting Date: January 16, 2024

Category: Public Hearings

Prepared by: Ben Schitter, Development Program Manager

Description:

SE #23-01 is an application for a special exception to allow renovation and expansion of an existing public school land use. An approval would allow the applicant to build a permanent addition to the existing public school building as part of a comprehensive renovation project that will bring the school up to applicable building code standards and educational requirements. The proposal also includes removal of the existing trailer/modular classrooms, expansion and redesign of parking to accommodate the school design capacity, installation of the Town standard streetscape, updated recreational facilities, installation of stormwater facilities, and enhancement of the landscaping. See attachment titled, "SE #23-01 SE Plan" for the physical improvements to the site.

The applicant submitted a traffic study. See attachment titled, "SE #23-01 Traffic Study". The study includes an assessment of the project's proposal to improve its internal vehicle circulation was the primary purpose of the traffic study. The study also provided an operational analysis which concluded that the intersection of Dranesville Road and the two entrances would continue to operate at an acceptable level of service.

Staff has generated recommended conditions for this Special Exception, which are included as an attachment. See attachment titled, "SE #23-01 Draft Conditions". The conditions of this special exception are required to be recorded in the land records of Fairfax County to ensure any future property owners are aware of the restrictions.

Background:

The existing site is located at 630 Dranesville Road and has an area of approximately 13.89 acres. The existing school building has received several additions since it's original development in 1961 and is currently over 85,000 square feet of gross floor area.

Overcrowding continued to be an issue at the school. Two legislative actions were previously approved for this property. In 1998, a conditional use permit (CU #97-6) was approved by town council. This use permit allowed for the continued use of the elementary school and to allow for modular structures. In 2014 a special exception (SE #13-08) was approved by town council which permitted the use of two temporary portable classrooms trailers to accommodate existing students with the condition that a long-term solution is established.

The case was presented to the Planning Commission regular meeting on November 27, 2023. The commission voted unanimously to continue the application to the December 18, 2023 regular meeting. The decision was made after listening to public comment, which led to the commission requesting the applicant host an additional community outreach meeting. The planning commission recommended approval with conditions at their public hearing on December 18, 2023.

Budget Impact:

None

Recommendation:

Staff recommends that the town council approve the amendment with conditions to Special Exception SE #23-01. Staff believes this proposal with the proposed conditions meets the Zoning Ordinance criteria for approval of a special exception as seen in the staff report.

Attachments:

1. Staff Report
2. Resolution (Proposed)
3. Draft Conditions
4. SE #23-01 SE Plan
5. SE #23-01 Traffic Study

STAFF REPORT

Agenda Item: Resolution to approve Special Exception SE #23-01, 630 Dranesville Road, Herndon Elementary School Renovation & Addition, to allow an addition to the existing public school building

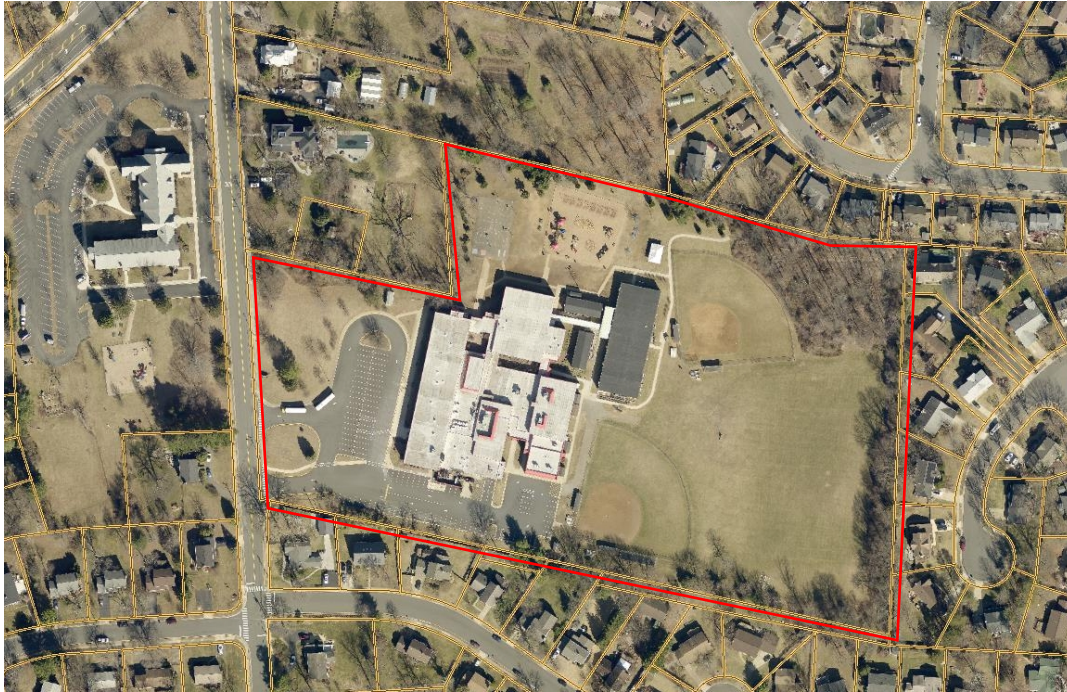
Meeting Date: January 16, 2024

Staff Contact: Ben Schitter, Development Program Planner

Summary Information:

Proposed Modification	An application for a special exception to allow renovation and expansion of an existing public school land use.	
Address	630 Dranesville Road, Herndon, VA	
Fairfax County Tax Map Number	0104 02 0066A	
Owners	School Board of Fairfax County	
Applicant	Fairfax County Public Schools (Najib Hameed, Coordinator III)	
Property Use	Public School	
Zoning District	R-10, Residential Single Family District	
Adjacent Zoning	North: R-10, Residential Single Family East: R-10, Residential Single Family South: R-10, Residential Single Family West: R-10, Residential Single Family Northeast: PD-R, Planned Development Residential	
Total Site Area	~13.89 Acres	
Proposed Density	0.214 FAR	
Existing Building Sizes	School Building: 85,165 sf Modular Classrooms: 15,264 sf	
Comprehensive Plan Land Use Designation	Community Facilities	

Location Map:



Background & Site Description:

The existing site is located at 630 Dranesville Road about 200 feet north of the corner of Dranesville Road and Fillmore Street. The site has an area of approximately 13.89 acres. The site comprises of an 85,165 gross square foot elementary school building and 15,264 gross square foot modular trailer classrooms as well as a parking lot and recreational facilities. The elementary school was built in 1969. The school currently has an enrollment of about 800 students. The existing design capacity based on Fairfax County Public Schools is 1,232 students. A small, wooded area in the northeast and some landscaping also exist on the site.

The site has a parking lot with 103 spaces and is served by two entrances on Dranesville Road. The southern entrance serves both ingress and egress traffic movements and serves as the sole driveway for all entering school buses, staff and student pick-up/drop-off operations. The northern entrance functions as the school bus and limited school staff egress. School bus movements must mingle with staff and pick-up/drop-off vehicular movements. Pedestrians can enter the site from the public sidewalk along Dranesville or through gates in the rear which are accessed by asphalt trails.

In 1998, a conditional use permit (CU #97-6) was approved by Town Council. Conditional use permits were the former name for special exceptions. This use permit allowed for the continued use of the elementary school and to allow for modular structures.

In 2014 a special exception (SE #13-08) was approved by Town Council which permitted the use of two temporary portable classrooms trailers to accommodate existing students with the condition that a long-term solution is established.

Case Details & Proposal:

The applicant is seeking special exception approval to build a permanent addition to the existing public school building as part of a comprehensive renovation project that will bring the school up to applicable building code standards and educational requirements. Educational use is permitted in the R-10 district through a special exception.

The proposal as shown on the special exception plan (see attachment titled SE #23-01 SE Plan) includes removal of the existing trailer/modular classrooms and constructing a new addition to elementary school. The total proposed gross floor area is 129,204 sf. The proposed student design capacity based on Fairfax County Public Schools is 1,050 (178 fewer students allowed than the existing student design capacity). The proposal also includes an increase of the parking onsite to 170 spaces including 6 dedicated accessible spaces to exceed the requirements of the zoning ordinance which is established by the student capacity at one (1) space for every fifteen (15) students. The two vehicular entrances will remain in the proposed conditions but will now be detached internally to separate school buses and student drop-off/pick-up vehicular movements to create a safer more efficient environment. The design of the site also incorporates the Standard Streetscape from the Town of Herndon Streetscape Manual, which includes a 5' wide tree zone, and 5' wide concrete sidewalk. The proposal also includes recreational facilities to replace and enhance the existing onsite amenities as well as provide better onsite pedestrian circulation. The development will preserve a large portion of the wooded area to the northeast as well as provide new landscape plantings. Stormwater requirements will be met onsite.

The applicant has held two "Design Feedback and Engagement Committee" meetings on March 31, 2022 and October 4, 2022 which consisted of school leadership, faculty, PTA representatives, and community members. Additionally, there was a community meeting held on March 20, 2023, at Herndon ES. Per the Planning Commission

recommendation, the applicant held an additional community meeting on December 14, 2023.

Planning Commission

The case was presented to the Planning Commission regular meeting on November 27, 2023. The commission voted to continue the application to the December 18, 2023 regular meeting. The decision was made after listening to public comment which led to the commission requesting the applicant host an additional community outreach meeting. The Planning Commission recommended approval with conditions at their public hearing on December 18, 2023.

Staff Analysis:

Zoning Ordinance Compliance

Section 78-155.3(e)(1) of the zoning ordinance contains standards applicable to all special exceptions as seen below under the review criteria section.

Review Criteria

The table below includes an assessment of compliance with the criteria for review of Zoning Map Amendments found in Zoning Ordinance Section 78-155.3(e)(1), which incorporates the requirements of §15.2-2284 of the Code of Virginia.

Criteria from Section 78-155.3(e)(1)	Meets or Does Not Meet	Why the application meets or does not meet the criteria of Section 78-155.3(e)(1)
Is consistent with the Comprehensive Plan	Meets	The existing and proposed use of public school meets the intent of the community facilities land use designation.
Is free of conflict with any provision of this chapter and related town regulations or any other applicable local, state, or federal laws and regulations.	Meets	The development is not in conflict with any regulations.
Does not adversely affect the health or safety of persons residing or working in the	Meets	The development enhances the safety of pedestrian and vehicular movements through the redesign of the internal vehicular area.

neighborhood of the proposed use.		
Consistent with the purpose and intent of the zoning district in which it is located or will improve compatibility among uses and will ensure efficient development within the Town.	Meets	The development is allowed with special exception approval per the R-10 zoning District.
Minimizes adverse visual impact of the proposed use on adjacent lands.	Meets	The proposal includes additional landscaping beyond the required zoning ordinance requirements to help screen the building on all property lines.
Contributes to a logical and orderly development pattern consistent with accepted or emerging planning practices.	Meets	The development is consistent with accepted planning practices.
Minimizes adverse impact on surrounding lands regarding service delivery, parking and loading, odors, noise, glare, and vibration, and should not create a nuisance.	Meets	The site will be enhanced by the separation of internal traffic and will function more efficiently.
Avoids significant adverse impacts on the property values of surrounding lands or substantially and permanently injures the use of neighboring property for those uses that are permitted in the zoning district.	Meets	The school renovation will improve on the existing site and building.
Does not significantly and adversely impact the natural environment, including but not limited to water, air, noise, stormwater management, wildlife, vegetation, wetlands,	Meets	The required stormwater mitigation will be treated onsite. Existing vegetation is preserved while providing new native landscaping.

and the natural functioning of the environment.		
Results in development that is adequately served by transportation facilities, including whether or not a substantial deterioration of the level of service on the Town's transportation network would occur and whether or not the proposed use is designed to ensure safe ingress and egress onto the site and safe road conditions on and around the site.	Meets	The ingress and egress to the site is redesigned to create a safer environment for pedestrians and vehicular movements. The pick-up/drop-off queuing is improved by the proposed design which will help alleviate the traffic during the peak pick-up/drop-off times.
Results in development that is adequately served by public facilities (roads, potable water and sewage, schools, parks, police, and fire and emergency medical facilities).	Meets	The development is adequately served by public facilities. The standard streetscape will be provided with this development.
If infill and redevelopment is consistent with the redevelopment criteria and other applicable guidelines as stated in the Herndon 2030 Comprehensive Plan (adopted August 12, 2008), as amended.	Meets	The development is consistent with the community facilities land use designation of the comprehensive plan. The development will provide high quality facilities to serve Town residents and those that work in the Town. The facilities will be developed in an environmentally sensitive and sustainable manner.
If located in the floodplain overlay district, meets floodplain overlay standards.	Not Applicable	The site is not located in a floodplain.

Transportation Considerations

The applicant submitted a traffic study (see attachment titled SE #23-01 Traffic Study). An assessment of the project's proposal to improve its internal vehicle circulation was the primary purpose of the traffic study. The study found that the proposal physically separates the bus circulation and student pick-up/drop-off area thereby eliminating

vehicular conflicts and improving safety between users. This also enhances the pedestrian circulation by eliminating the key internal pedestrian/vehicular conflicts that currently exist. The proposal also improves the on-site vehicle stacking distance to provide 42 additional vehicles to a total of 60 vehicles for student pick-up/drop-off and provides a more efficient exiting traffic flow. Reduced vehicle queues will improve the short-term traffic disruptions along Dranesville Road.

The study also provided an operational analysis which concluded that the intersection of Dranesville Road and the two entrances would continue to operate at an acceptable level of service.

The property proposes to add 63 parking spaces to provide a total of 170 spaces on-site. The required parking per zoning ordinance is 70 spaces at a rate of 1 space per 15 students. The additional parking will help alleviate the overcrowding onsite.

Analysis of Conditions

Conditions of approval may be imposed on Special Exceptions to offset impacts and address any particular concerns unique to the proposal. Staff has generated recommended conditions for this Special Exception, which are included as an attachment (see attachment titled SE #23-01 Draft Conditions). The conditions of this special exception are required to be recorded in the land records of Fairfax County to ensure any future property owners are aware of the restrictions. Below is a summary of the conditions.

#	Condition subject	Analysis of condition
1	Substantial Conformity	This is standard legal language that ensures the site plan is within substantial conformance with the SE plan and thus ties the project to the proposal as defined, reviewed and approved through this legislative process
2	Use Permitted	This is standard legal language that describes the use permitted with the special exception.
3	Student Capacity	This condition limits the capacity of the school to 1,050 students. If FCPS seeks to exceed this number, a subsequent special exception will be required.
4	Invasive Vegetation Management	This condition is imposed to ensure the site plan addresses the treatment of invasive plant material

		on-site. Management of invasive plant material is imperative to the long-term health of the forest as the plant material can lead to degradation of forests and eventual tree failure.
5	Landscape Plan	This condition requires that the landscape plan will achieve a greater species diversity than that required by the zoning ordinance and the plant material shall be primarily native as is typical with current environmental practices. Biodiversity is crucial for landscapes to contribute to ecological stability and overall ecosystem health. The condition also ensures the landscape will be maintained in accordance with the plan which will lead to long term aesthetic and ecological value.
6	Screening	This condition ensures no roof mounted equipment can be visible from the property lines or generate noise that would have visual and audible impacts to nearby residential properties.
7	Utility Poles	This condition ensures that no additional utility poles or overhead utility lines will be provided. New utilities must be located underground.
8	Athletic Fields	This condition guarantees the athletic field hours of use for all users shall be limited to 8:00 AM to 9:00 PM and no overhead lighting is allowed for the athletic fields.
9	Modular Trailers	This condition is to ensure all modular trailers are removed from the site prior to release of public facilities surety related to the site plan
10	Traffic Attendant	This condition requires a certified traffic attendant must be present to control traffic in the right-of-way if vehicular queueing extends to the public right-of-way. This will help ensure no deterioration of the level of service at the entrances occurs.
11	Streetscape	This condition guarantees the streetscape is installed with a minimum 5' tree verge and 5' sidewalk to provide a safe and comfortable environment in an area of high pedestrian activity

12	PD-R Zone Fencing	This condition ensures the fencing between the PD-R zone and the subject property is installed if the trees in the buffer area fail or are removed.
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Fiscal Impact:

This proposal does not have a direct fiscal impact on the Town.

Town Council Alternatives:

The following alternatives are available to the Town Council for its decision on SE #23-01.

1. Recommendation for approval.
2. Recommendation for approval with conditions.
3. Recommendation for denial.
4. Continuance of the application to February 13, 2024.

Staff Recommendation:

Staff recommends that the Town Council approve the amendment to Special Exception SE #23-01, in accordance with Alternative #2.

Staff believes this proposal with the proposed conditions meets the criteria for approval of a special exception.

**TOWN OF HERNDON, VIRGINIA
TOWN COUNCIL**

RESOLUTION

JANUARY 23, 2024

**Resolution- to approve Special Exception SE #23-01, 630 Dranesville Road,
Herndon Elementary School Renovation & Addition, to allow an
addition to the existing public school building**

The applicant, Fairfax County Public Schools, has submitted a Special Exception, SE #23-01, on land identified as Fairfax County Tax Map Number 0104 02 0066A, to permit an addition to the existing public school building located at 630 Dranesville Road.

On December 18, 2023, the Planning Commission recommended that the special exception with conditions be approved based upon the finding that the proposed use meets the purpose and intent of the Zoning Ordinance.

The Town Council has reviewed this application and has held a public hearing in accordance with the provisions of §15.2-2204 of the State Code and recommended that the application be approved with conditions based upon the finding that the conditions still meet the purpose and intent of the Zoning Ordinance, in particular Section 78-155.3(f)(3).

THEREFORE, BE IT RESOLVED by the Town Council of the Town of Herndon, Virginia that:

1. The Town Council approves of the Special Exception SE #23-01 in accordance with the special exception plan dated October 18, 2023 that shall run with the land and not be voided or extinguished from a change in ownership of the property in accordance with the conditions set forth below to achieve compliance with the standards found in Section 78-155.3;

[INSERT CONDITIONS]

DRAFT CONDITIONS

SPECIAL EXCEPTION SE #23-01

Herndon Elementary School Renovation & Addition

December 18, 2023

1. Substantial Conformity. The development and maintenance of the special exception use described in Condition 2 below, shall be in substantial conformance with the plan set entitled “Herndon Elementary School Renovation & Addition”, prepared by Rinker Design Associates, P.C. and dated October 18, 2023 (the Plan”) incorporated by reference, and the Town of Herndon Zoning Ordinance (the “Zoning Ordinance”). Approval of this application on the parcel identified as Fairfax County Tax Map Number 0104-020066A, known as the Herndon Elementary School (the “Property”), shall not relieve the applicant or the owners of the Property, or their successors or parties developing, establishing, or operating the approved special exception, from the obligation to comply with and conform to any other Zoning Ordinance, codified ordinance, or regulatory requirement.
2. Use Permitted: This special exception grants approval of an expansion and renovation of an existing public school use in the location shown on Sheet C.04 of the Plan in accordance with Table 78-30.2(c)(3), Section 78-30.2 for the R-10, Residential single-family zoning district, as set forth in the Zoning Ordinance (“Special Exception Use”).
3. Student Capacity. After the construction of the Special Exception Use the capacity of the school is limited to 1,050 students, unless amended by the approval of a subsequent special exception.
4. Invasive Vegetation Mitigation. An invasive vegetation mitigation plan is required at the time of site plan that implements effective onsite mitigation measures to address the presence of invasive plant material that poses a threat to the natural environment. Invasive trees may not count toward meeting landscape requirements. As part of this effort, all non-native invasive vines must be promptly cut and treated to prevent further spread. Additionally, the applicant must undertake the eradication of poison ivy present onsite to ensure the safety and well-being of users.
5. Landscape Plan. The landscape plan included in the site plan must be in substantial conformance with the landscape plan on sheet C.06 of the Plan and shall adhere to the applicable Zoning Ordinance requirements. The landscape plan shall provide a vegetated buffer of the school property to the neighboring properties through the use of a mix of deciduous understory, deciduous canopy and evergreen trees, as determined by the Town Arborist. Landscaping must be maintained in accordance with the approved plan and any dead or diseased trees replaced. Landscaping shall be subject to inspection, upon reasonable notice, by the Town Arborist.

In order to promote biodiversity, a maximum of 10% of each species shall be specified for each category of deciduous canopy trees, understory trees, and shrubs. A maximum 25% of each species shall be specified for each category of evergreen trees and shrubs.

The species selection shall be native plants unless otherwise approved by the Town Arborist.

6. Screening. Roof mounted screening must be provided to ensure that no roof mounted mechanical equipment is visible from any property line and that any noise generated by the equipment is compliant with the maximum limits established in the Zoning Ordinance. An acoustical study shall be provided following installation of mechanical equipment and prior to final occupancy to verify noise levels are compliant with the zoning ordinance.
7. Utility Poles. No additional utility poles or overhead utility lines beyond the existing utility poles and overhead lines shown on sheet C.03 of the Plan, are permitted on-site. Additional utilities must be located underground if the existing poles cannot accommodate required or future improvements.
8. Athletic fields. The athletic field hours for outdoor events and activities shall be limited to 8:00 AM to 9:00 PM daily. Lighting of the athletic fields is prohibited.
9. Modular trailers. All modular or temporary trailers must be removed from the Property prior to release of the public facilities surety related to the site plan for the Property. Any proposed modular trailers must obtain a Temporary Use Permit through the Town of Herndon.
10. Traffic Attendant. When site operations cause vehicular queues to extend into the public right-of-way, the applicant must provide a certified individual to control vehicular operations within the right-of-way.
11. Streetscape. The streetscape improvements as conceptually shown on sheet C.04 of the Plan shall be secured with a public facilities surety and shown on the site plan for the Property. Applicant will provide a minimum 11-foot streetscape easement to incorporate a minimum 5-foot sidewalk, 5-foot verge, landscaping, utilities, and streetlights. Exact locations of the aforementioned components will be determined prior to approval of the site plan and streetscape improvements shall comply with PROWAG (Pedestrian Right of Way Accessibility Guidelines) to the maximum extent practicable.
12. PD-R zone fencing. The fencing required by Sec. 78-110.4(e)(3) of the Zoning Ordinance between the PD-R zoning district properties and the subject property must be installed if the existing trees in the buffer area shown on Sheet C.06 of the Plan, fail or are removed.

NOTES

1. THE METHODS AND MATERIALS USED IN THE CONSTRUCTION OF THE IMPROVEMENTS HEREIN SHALL CONFORM TO THE CURRENT TOWN OF HERNDON STANDARD SPECIFICATIONS, CURRENT FAIRFAX COUNTY DESIGN AND CONSTRUCTION STANDARDS, AND THE CURRENT VDOT ROAD AND BRIDGE SPECIFICATIONS. IN THE EVENT OF CONFLICT BETWEEN THE STANDARDS AND SPECIFICATIONS, PREVAILING GUIDELINES SHALL BE SELECTED BY THE TOWN OF HERNDON.
2. A PERMIT MUST BE OBTAINED FROM THE TOWN OF HERNDON BEFORE ANY CONSTRUCTION IS STARTED IN CONFORMITY WITH THESE PLANS.
3. A PERMIT MUST BE OBTAINED FROM THE OFFICE OF THE RESIDENT ENGINEER, VDOT, FAIRFAX, VIRGINIA, BEFORE ANY CONSTRUCTION IS STARTED ON ANY EXISTING STATE HIGHWAY.
4. THE DEVELOPER IS REQUIRED TO NOTIFY THE TOWN OF HERNDON, PRIOR TO THE BEGINNING OF CONSTRUCTION. THE DEVELOPER SHALL REQUIRE THAT ALL OF HIS CONTRACTORS SPECIFICALLY REQUEST INSPECTION AT LEAST TWENTY FOUR (24) HOURS BEFORE BEGINNING:
- (A) CLEARING AND GRUBBING
- (B) INSTALLATION OF SILTATION AND EROSION CONTROL MEASURES
- (C) EARTHWORK
- (D) INSTALLATION OF ANY UNDERGROUND UTILITY
- (E) INSTALLATION OF ANY FORMS
- (F) PLACING ANY CONCRETE
- (G) BEFORE PLACING SUBBASE, BASE, OR PAVING SURFACE
- FAILURE TO DO SO FOR ANY REASON SHALL CONSTITUTE REJECTION OF SAID WORK.
5. ALL EXISTING UNDERGROUND UTILITIES SHALL BE PHYSICALLY LOCATED BY THE DEVELOPER OR HIS ENGINEER PRIOR TO THE BEGINNING OF ANY CONSTRUCTION IN THE VICINITY OF THESE UTILITIES.
6. ALL UTILITIES INSTALLED AS A PART OF THIS DEVELOPMENT SHALL BE PLACED UNDERGROUND.
7. ALL UNDERGROUND UTILITIES WITHIN THE STREET RIGHT OF WAY AND ALL SERVICE CONNECTIONS SHALL BE INSTALLED TO THE REQUIRED DISTANCE BEYOND THE RIGHT OF WAY LINE PRIOR TO THE INSTALLATION OF ANY SUBBASE MATERIAL, CURB AND GUTTER, OR SIDEWALK.
8. ALL UTILITIES TO BE TAKEN OVER BY THE TOWN FOR MAINTENANCE PURPOSES, MUST BE INSPECTED, TESTED AND APPROVED BY THE TOWN BEFORE BEING ACCEPTED INTO THE TOWN'S SYSTEM.
9. CUT SHEETS SHALL BE SUBMITTED TO AND APPROVED BY THE TOWN OF HERNDON PRIOR TO THE START OF CONSTRUCTION OF ANY UNDERGROUND UTILITIES, STREETS, OR CURBS AND GUTTERS.
10. SANITARY SEWERS: ALL SANITARY SEWER MATERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY WITH THE CURRENT TOWN OF HERNDON STANDARDS AND SPECIFICATIONS AS WELL AS WITH THE FAIRFAX COUNTY PUBLIC FACILITIES MANUAL.
11. STORM SEWERS:
- (A) STORM SEWER AND CULVERT PIPE SHALL BE REINFORCED CONCRETE PIPE TO CONFORM TO THE CURRENT A.A.S.H.T.O. DESIGNATION M 170, UNLESS OTHERWISE DESIGNATED ON THE PLANS. CLASS II PIPE WILL BE PERMITTED BEYOND THE LIMITS OF THE STREET RIGHT OF WAY. CLASS III PIPE WILL BE REQUIRED WITHIN THE LIMITS OF THE RIGHT OF WAY.
- (B) UNDERDRAINS AND/OR CROSSDRAINS SHALL BE INSTALLED BY THE DEVELOPER WHERE DEEMED NECESSARY BY THE TOWN OF HERNDON.
12. STREETS:
- (A) ALL BASE AND SUBBASE MATERIAL SHALL BE COMPACTED TO 95% OF THEORETICAL MAXIMUM DENSITY AS DETERMINED BY A.A.S.H.T.O. T-99 METHOD A, WITHIN PLUS OR MINUS 20% OF OPTIMUM MOISTURE FOR THE FULL WIDTH OF ANY DEDICATED RIGHT OF WAY AND ALL TOWNHOUSE STREETS, COMMERCIAL AND INDUSTRIAL PARKING LOTS, PRIVATE STREETS, PARKING BAYS, CURB AND GUTTER, AND SIDEWALKS ADJACENT TO STREETS AND PARKING LOTS (NOT INTENDED TO INCLUDE LEAD SIDEWALKS).
- (B) SOIL REPORTS AND SUBGRADE SPECIFICATIONS SHALL BE SUBMITTED TO THE TOWN OF HERNDON FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION OF ANY SIDEWALKS, CURB AND GUTTER, STREETS OR PARKING AREAS.
- (C) ROADWAY DESIGN IS BASED ON A CBR OF 10. CBR TESTS OF SUBGRADE SOILS MUST BE CONDUCTED FOR ACTUAL DETERMINATION OF ROADWAY DESIGN. ROADWAY DESIGNS SHALL BE IN ACCORDANCE WITH THE CURRENT VDOT PAVEMENT DESIGN GUIDE FOR SUBDIVISION AND SECONDARY ROADS, AND SHALL BE SUBMITTED TO THE TOWN FOR REVIEW AND APPROVAL.
- (D) STANDARD STREET NAME SIGNS SHALL BE APPROVED BY FAIRFAX COUNTY SIGN SHOP AND SHALL BE INSTALLED AT EACH INTERSECTION BY THE DEVELOPER, AS WELL AS REQUIRED TRAFFIC CONTROL SIGNS IN THE DEVELOPMENT. SIGN FASTENERS SHALL BE 5/16" #18 STAINLESS STEEL HEX BOLTS AND NUTS USS-NO RIVETS PERMITTED.
- (E) WHERE INSTALLATION OF ROADWAY SIGN IS ANYTHING OTHER THAN IN SOIL AREA, A PVC SLEEVE SHALL BE INSTALLED. SLEEVE SHALL BE MINIMUM 18" DEEP. SIZE OF PVC SLEEVE SHALL BE APPROPRIATE TO SIZE OF POST BEING INSTALLED, AND SHALL ALLOW FOR WEDGING TO STABILIZE SIGN POST.
- (F) WHERE SIGN IS DESIGNED TO BE INSTALLED IN CONCRETE MEDIAN, A 12" X 12" AREA SHALL BE LEFT VOID OF CONCRETE. PVC SLEEVE SHALL BE INSTALLED AS INDICATED ABOVE.
- (G) SIGN MATERIAL SHALL BE MINIMUM HIGH INTENSITY SHEETING, AND NO ENGINEER GRADE MATERIAL SHALL BE ALLOWED.
- (H) A MINIMUM OF ONE DRIVEWAY ENTRANCE SHALL BE PROVIDED PER LOT. DRIVEWAY ENTRANCES SHALL BE INSTALLED IN CONFORMITY WITH THE STANDARDS. PIPESTEM LOT DRIVEWAYS ARE SUBJECT TO APPROVAL BY THE TOWN OF HERNDON.
- (I) SURFACED STREETS SHALL BE MAINTAINED IN A CLEAN CONDITION, MUD AND DUST FREE AT ALL TIMES, AND ADEQUATE MEANS SHALL BE PROVIDED TO CLEAN TRUCKS AND OTHER EQUIPMENT USING THE COMPLETED STREETS.
- (J) PRIOR TO COMMENCING NEW WORK, THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING ADJACENT AREAS. A PRE-CONSTRUCTION SURVEY SHALL OCCUR WITH CONSTRUCTION AND INSPECTION STAFF TO DOCUMENT EXISTING CONDITIONS. IF TOWN'S EXISTING PUBLIC INFRASTRUCTURE IS DAMAGED DURING CONSTRUCTION, THE APPLICANT SHALL REPAIR THE SAME TO THE SATISFACTION OF THE TOWN.
- (K) ALL STREET CUT AND PATCH WORK LOCATED IN PUBLIC RIGHTS OF WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN OF HERNDON STANDARDS AND SPECIFICATIONS. LIMITS OF ASPHALT OVERLAY TO BE DETERMINED BY TOWN INSPECTOR.
- (L) STREET LIGHTS SHALL BE INSTALLED ACCORDING TO TOWN OF HERNDON STANDARDS.
- (M) ALL WORK IN THE RIGHT-OF-WAY SHALL BE CONDUCTED BETWEEN 9AM AND 3PM, MONDAY THROUGH FRIDAY, EXCEPT HOLIDAYS.
- (N) DEVELOPER SHALL COMPLY WITH STREET CUT PERMIT REQUIREMENTS. COPY OF APPROVED STREET CUT PERMIT MUST BE KEPT ON SITE AT ALL TIMES.
- (O) DEVELOPER SHALL COORDINATE ALL TRAFFIC CONTROL ACTIVITIES WITH THE STREET CUT PERMIT INSPECTION SECTION (703-435-6860).
13. WATER DISTRIBUTION:
- (A) ALL WATER MAIN MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE REGULATIONS OF THE STANDARD SPECIFICATIONS AND PLANS OF THE TOWN OF HERNDON AND THE CURRENT WATERWORKS REGULATIONS OF THE VIRGINIA STATE BOARD OF HEALTH.
- (B) ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 4.0 FEET. WATER MAINS SHALL BE INSTALLED EIGHT (8) FEET NORTH OR EAST OF THE CENTERLINE OF THE STREET UNLESS OTHERWISE DESIGNATED ON THE PLANS.
- (C) WORKING PRESSURE SHALL BE >20.0 PSI.
14. LAND CONSERVATION NOTES:
- (A) MEASURES TO CONTROL EROSION AND SILTATION SHALL BE PROVIDED PURSUANT TO AND IN COMPLIANCE WITH CURRENT STATE AND LOCAL REGULATIONS. HOWEVER, THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE DEVELOPER OR HIS AGENT OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA OR ANY ORDINANCE ENACTED BY THE TOWN OF HERNDON.
- (B) TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS.
- (C) ALL EROSION AND SILTATION CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- (D) ALL STORM AND SANITARY SEWER TRENCHES NOT IN STREETS ARE TO BE MULCHED AND SEEDED WITHIN 7 DAYS AFTER BACKFILL. NO MORE THAN 500 FEET ARE TO BE OPEN AT ANY ONE TIME.
- (E) ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES ARE TO BE COMPACTED, SEEDED AND MULCHED, WITHIN 7 DAYS AFTER BACKFILL.
- (F) ALL TEMPORARY EARTH BERM DIVERSIONS AND SILT DAMS ARE TO BE MULCHED AND SEEDED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED. THE SAME APPLIES FOR ALL STOCKPILES.
- (G) DURING CONSTRUCTION, ALL STORM SEWER INLETS WILL BE PROTECTED BY SILT TRAPS, MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS.
- (H) ALL DISTURBED AREAS NOT PAVED, SODDED, OR BUILT UPON BY NOVEMBER 1, OR DISTURBED AFTER THAT DATE, IS TO BE SEEDED WITHIN 7 DAYS WITH OATS, ABRUZZI RYE, OR EQUIVALENT AND MULCHED WITH HAY OR STRAW AT THE RATE OF 2 TONS PER ACRE.
- (I) PRIOR TO BEGINNING OF ANY WORK ON THIS SITE, THE CONTRACTOR MUST READ AND ADHERE TO THE "VEGETATION PRESERVATION AND PLANTING" GUIDELINES OF FAIRFAX COUNTY PUBLIC FACILITIES MANUAL, AND SECTION 26, ARTICLE II OF THE TOWN CODE.
- (J) PRIOR TO THE PROJECT'S PRE-CONSTRUCTION MEETING AND PRIOR TO ANY LAND DISTURBANCE OF THE SITE, A CONSTRUCTION GENERAL PERMIT REGISTRATION STATEMENT MUST BE SUBMITTED TO THE TOWN FOR APPROVAL FOR ALL PROJECTS THAT DISTURB GREATER THAN OR EQUAL TO ONE ACRE.
- (K) IF REQUIRED BY LAW, THE OWNER/DEVELOPER SHALL PROVIDE STATEMENT CERTIFYING THAT ALL WETLANDS PERMITS WILL BE OBTAINED PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES.
- R-10
15. THESE PLANS AND SPECIFICATIONS ARE BASED ON THE MINIMUM REQUIREMENTS FOR _____ ZONING. THIS PLAN CONTAINS _____ DWELLING UNITS.
16. ALL ELEVATIONS MUST BE BASED ON THE U.S.G.S. & OR THE N.G.S. MEAN SEA LEVEL DATUM.
17. PRIOR TO ANY APPROVED CLEARING AND GRADING ON A SITE, TREE PROTECTION FENCE SHALL BE ERECTED IN ACCORDANCE WITH FENCE DETAIL ON THE APPROVED LANDSCAPE PLAN, AND BE INSPECTED AND APPROVED BY THE URBAN FORESTER.

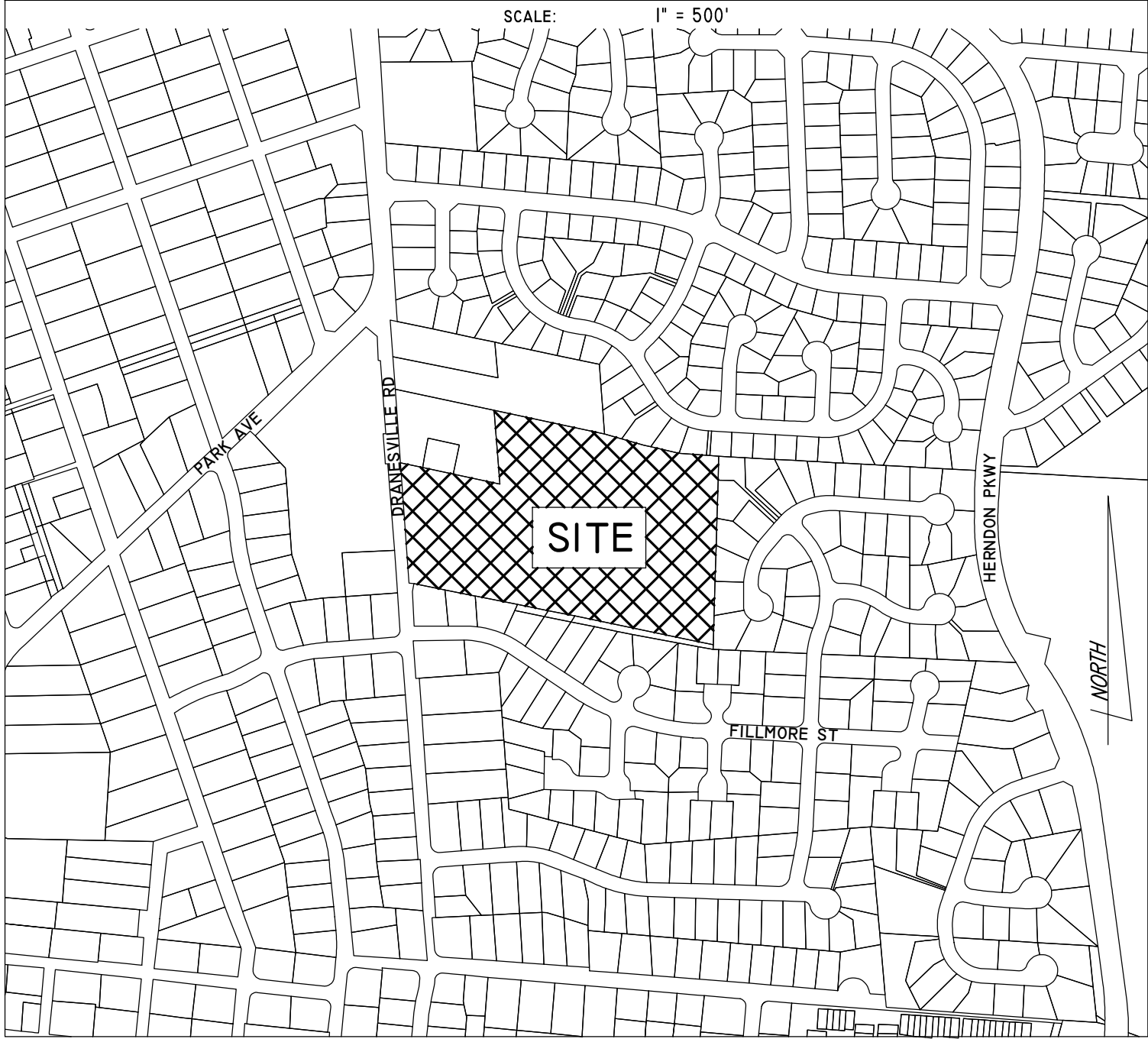
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VICINITY MAP



LOCATION OF BENCHMARKS

Point	Northing	Easting	Elevation	Description
1	7040648.810	11801798.241	397.86	GPSM 1
2	7040241.912	11801895.240	373.64	GPSM 2
3	7040243.522	11802212.678	368.56	TRV 3
4	7040155.279	11802395.503	362.56	TRV 4
5	7040128.453	11802517.714	358.50	TRV 5
6	7040093.912	11802843.788	351.84	TRV 6
7	7040182.725	11802869.009	352.13	TRV 7
8	7040388.636	11802501.771	363.21	TRV 8
9	7040686.832	11802538.239	362.03	TRV 9
10	7040720.880	11802332.511	366.74	TRV 10
11	7040653.689	11802189.127	373.72	TRV 11
12	7040543.033	11802048.907	375.48	TRV 12

WAIVER REQUESTS

(DESIGNATE EACH SECTION OF THE ZONING ORDINANCE, PUBLIC FACILITIES MANUAL OR SUBDIVISION ORDINANCE FROM WHICH A WAIVER IS REQUESTED. PLEASE NOTE THAT A LETTER OF JUSTIFICATION FOR EACH WAIVER MUST ACCOMPANY THE INITIAL PLAN SUBMISSION)

FEE = \$200.00 PER REQUEST

WAIVER FROM SECTION: TABLE 2-2 OF VDOT ROAD DESIGN MANUAL = \$200.00

WAIVER FROM SECTION: 78.110.4(e)(3)a OF ZONING ORDINANCE = \$200.00

NUMBER OF REQUESTS: 2 X \$200.00 = \$400.00

DATE FEE COLLECTED (Official Use Only):

EXISTING CONDITION SURVEY NOTES

1. HORIZONTAL DATUM VCS 1983 — NORTH ZONE
VERTICAL DATUM NAVD 88
2. UTILITY INFORMATION, AS SHOWN ON THIS PLAN, IS TAKEN FROM THE RECORDS AND/OR FIELD SURVEY COMPLETED BY RINKER DESIGN ASSOCIATES, P.C.
DATED MAY 02, 2022 AND CANNOT BE GUARANTEED. FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MISS UTILITY" AT 1-800-552-7001, 72 HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION.
3. LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
CONTRACTOR/ENGINEER SHOULD DIG TEST PITS BY HAND AT ALL UTILITY CROSSINGS TO VERIFY EXACT LOCATION.

TOWN PLAN #: SE#23-01

TOWN OF HERNDON, VIRGINIA
COVER SHEET



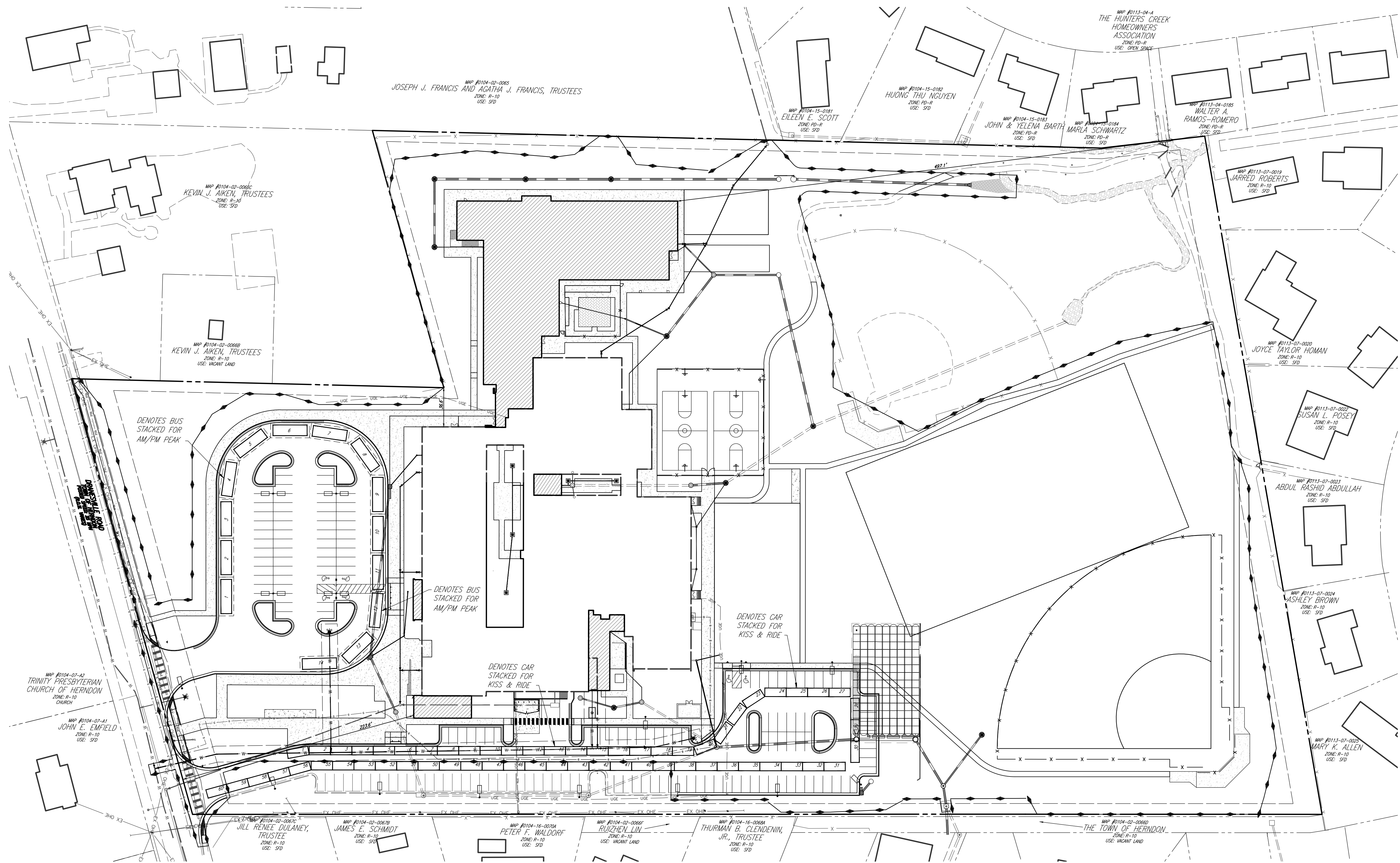
SUBDIVISION OR SITE PLAN NAME		HERNDON ELEMENTARY SCHOOL RENOVATION & ADDITION	
		SPECIAL EXCEPTION	
OWNER, ADDRESS, INCLUDE ZIP CODE AND TELEPHONE NUMBER	8115 GATEHOUSE ROAD, SUITE 3500, FALLS CHURCH, VA 22042	FAIRFAX COUNTY SCHOOL BOARD	571-423-2227
DEVELOPER, ADDRESS, INCLUDE ZIP CODE AND TELEPHONE NUMBER	8115 GATEHOUSE ROAD, SUITE 3500, FALLS CHURCH, VA 22042	FAIRFAX COUNTY SCHOOL BOARD	571-423-2227
CERTIFIED ENGINEER, ARCHITECT OR SURVEYOR SUBMITTING PLAN, ADDRESS, INCLUDE ZIP CODE AND TELEPHONE NUMBER	11100 ENDEAVOR COURT, SUITE 200 MANASSAS, VA 20109	RINKER DESIGN ASSOCIATES, P.C.	703-368-7373
FAIRFAX COUNTY TAX MAP NUMBER	010-4 ((02)) 0066A		
TOTAL AREA	13.89 AC	PRESENT ZONING	R-10
REVISED: JULY 2014		PAGE 1 OF 16 PAGES	

LEGEND

PROPOSED	EXISTING	DESCRIPTION
		SANITARY MANHOLE
		SANITARY STRUCTURE NUMBER
		SANITARY CLEAN OUT NUMBER
		SANITARY CLEANOUT
		TELEPHONE MANHOLE
		LIGHT POLE
		WATER VALVE
		FIRE HYDRANT
		WATER METER
		STREET SIGN
		BOLLARD
		STORM SEWER STRUCTURE NUMBER
		HANDICAP SPACE
		FLOW ARROW
		GUY WIRE
		SPOT ELEVATION
		WATERLINE
		LIMITS OF DISTURBANCE
		EXISTING PROPERTY LINE
		EXISTING EDGE OF PAVEMENT
		CURB & GUTTER (CG-6)
		STORM SEWER DRAIN
		TREE LINE
		UTILITY POLE
		VEHICLES PER DAY COUNT
		TEST PIT REQUIRED
		PROPOSED TREE
		KISS & RIDE STACKING SPOT
		BUS STACKING SPOT

ABBREVIATIONS

APPROX.	APPROXIMATE
A=	ARC LENGTH
B.O.V.	BLOW OFF VALVE
B.R.L.	BUILDING RESTRICTION LINE
C.	CENTER LINE
C.O.	CLEAN OUT
CONC.	CONCRETE
C&G	CURB AND GUTTER
E.B.	EDGE BLOCK
DRN.	DRAINAGE
D.I.P.	DUCTILE IRON PIPE
E.S.T.	EASEMENT
E.P.	EDGE OF PAVEMENT
ENT.	ENTRANCE
EX.	EXISTING
ELEV.	ELEVATION
FR	FACE OF CURB RADIUS
H.	HEAD
H.H.	HAND HOLE
INST.#	INSTRUMENT NUMBER
INV.	INVERT
LAT.	LATERAL
L.P.	LIGHT POLE
LD.	LOADING DOCK
L.S.	LOADING SPACE
M.H.	MAN HOLE
M.E.	METRIC/ELECTRICAL/PLUMBING
M.L.S.A	MULCHED LANDSCAPE AREA
N/F	NOW/FORMERLY
O.D.	OVERHEAD DOOR
PG.	PAGE
PMT.	PAVEMENT
PVC	POLYVINYL CHLORIDE
PROP.	PROPOSED
RCF	REINFORCED CONCRETE PIPE
R/W	RIGHT OF WAY
R/W	RIGHT OF WAY
SAN.	SANITARY
SEW.	SEWER
S.W.	SIDEWALK
S.F.	SQUARE FEET
SFD	SINGLE FAMILY DEVELOPMENT
STM.	STORM
T.B.	TAX MAP
TEMP.	TEMPORARY
T.M.	TO BE ABANDONED
T.B.R.	TO BE REMOVED
TP.	TYPICAL
V.A.	VAN ACCESSIBLE
W/L	WATERLINE
W/M	WATERMAIN



GENERAL NOTES

1. ANY PERMANENT STRUCTURES, INCLUDING OUTDOOR RECREATION FACILITIES, ARE SUBJECT TO ARB APPROVAL.
2. EXTERIOR LIGHTING SHALL COMPLY WITH ZONING ORDINANCE SECTION 78-130.9(C) AND LIGHTING GUIDELINES IN THE TOWN OF HERNDON STREETSCAPE MANUAL AT THE TIME OF SITE PLAN APPROVAL.
3. GRADING STEEPER THAN 3:1 WILL BE ACCEPTED ONLY ON THE RECOMMENDATION OF A GEOTECHNICAL ENGINEER. RECOMMENDATIONS MUST BE PROVIDED AT THE TIME OF SITE PLAN AS PART OF A GEOTECHNICAL REPORT.
4. THE SWM SYSTEM AND BMP PRACTICES PROPOSED ON THE PLAN WILL MEET ALL STATE AND LOCAL TOWN OF HERNDON REQUIREMENTS.
5. ALL SWM VOLUME AND QUANTITY REQUIREMENTS FOR THE PROJECT WILL BE MET ON SITE INCLUDING THE REQUIREMENT FOR ANY OFFSITE DISTURBED AREA.
6. ALL PROPOSED SWM FACILITIES WILL BE PRIVATELY MAINTAINED.
7. SWM COMPUTATIONS ON THIS GOP ARE FOR INFORMATIONAL PURPOSES ONLY AND THE TOWN'S REVIEW OF THE COMPUTATIONS ARE PRELIMINARY.

SURVEY NOTE

1. RDA FOUND AND REVIEWED THE RECORD PLATS/DESCRIPTIONS FOR BOTH THE SCHOOL AND THE SUBDIVISION AND BEST-FIT PLACED THOSE SHAPES ON THE MONUMENTS FOUND FOR EACH RESPECTIVE PARCEL/GROUP OF PARCELS. VERY RARELY DOES A BOUNDARY FIT PERFECTLY WITH ITS ADJOINING PARCEL. IN ALMOST EVERY CASE, THE SURVEYOR WILL CLEAN UP OVERLAPPING/CONTINUOUS LINES AND HOLD THE SUBJECT PARCEL LINES OF THE SITE SURVEY (IN THIS CASE THE SCHOOL). HOWEVER, THE DIFFERENCE BETWEEN THE SUBDIVISION AND THE SCHOOL WAS SIGNIFICANT ENOUGH AND SUPPORTED BY FIELD RECOVERED MONUMENTS THAT RDA ELECTED TO SHOW BOTH PROPERTY LINES AND THE RECORDING GAP. SHOWING THE GAP IN THE CLEAN DOES NOT MEAN IT EXISTS ANY OTHER. THE DISCREPANCY BETWEEN THE RECORDING GAP AND THE MONUMENTS FOUND IN THE FIELD, NO SPITE PARCEL EXISTS ADJACENT TO HERNDON ELEMENTARY SCHOOL.

PARKING SUMMARY

USE: PUBLIC ELEMENTARY SCHOOL
 REQUIREMENT: 1 SPACE PER 15 STUDENTS
 MAXIMUM STUDENT CAPACITY: 1,050 STUDENTS
 PARKING REQUIRED: 1,050 STUDENTS / 15
 = 70 SPACES
 PARKING PROVIDED: 170 (164 REGULAR)
 ACCESSIBLE PARKING REQUIRED: 6 SPACES (1-VA)
 ACCESSIBLE PARKING PROVIDED: 6 SPACES (6-VA)
 BUS PARKING PROVIDED: 0 SPACES

R-10 DIMENSIONAL STANDARDS

	<u>REQUIRED</u>	<u>PROVIDED</u>
MAXIMUM GROSS DENSITY:	N/A	N/A
MINIMUM LOT AREA:	15,000 SF	13.89 AC
LOT WIDTH:	90'	>90'
MINIMUM SETBACK:	35' FROM ROW or 60' FROM C/L or BUILDING HEIGHT	223.60'
MINIMUM SIDE YARD:	10' or BUILDING HEIGHT	36.60'
REAR YARD:	25' or BUILDING HEIGHT	49.10'
MAXIMUM HEIGHT:	45'	30'
MINIMUM OPEN SPACE:	30%	62%
MAXIMUM LOT COVERAGE:	25%	13%
MAXIMUM IMPERVIOUS AREA:	50%	38%
MAXIMUM PAVED PARKING:	N/A	
DISTANCE BETWEEN PAVED SURFACE AND P/L:	N/A	N/A

EXISTING INFORMATION

USE: ELEMENTARY SCHOOL
TOTAL EXISTING GROSS FLOOR AREA: 100,429 SF
EXISTING GFA (BUILDING): 85,165 SF
EXISTING GFA (TRAILERS): 15,264 SF
EXISTING PARKING: 103 (98 REGULAR) SPACES
EXISTING ACCESSIBLE PARKING: 5 SPACES

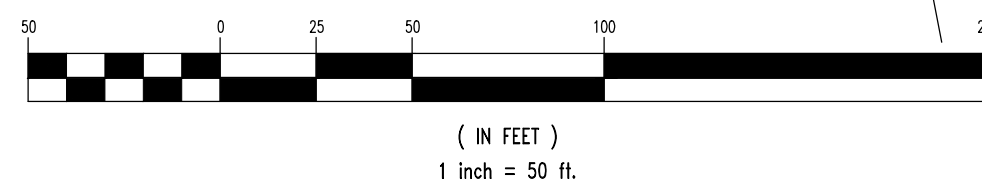
SITE SUMMARY

LOT AREA:	13.89 AC
USE: PUBLIC SCHOOLS	604,984 SF
DISTURBED AREA:	100%
	10.85 AC
EXISTING BUILDING FOOTPRINT:	63,339 SF
EXISTING TRAILER FOOTPRINT:	15,264 SF
AREA TO BE REMOVED:	15,264+4,664 SF
PROPOSED BUILDING FOOTPRINT:	20,165 SF
TOTAL FOOTPRINT AREA:	78,840 SF
EXISTING GROSS FLOOR AREA:	85,165 SF
EXISTING TRAILER GFA:	85,264 SF
AREA TO BE REMOVED:	7,080+15,264 SF
PROPOSED GROSS FLOOR AREA:	51,119 SF
TOTAL GROSS FLOOR AREA:	129,204 SF

129 204/604 984-0 214

FLOOR AREA RATIO	129,204/604,984=0.214
NUMBER OF FLOORS	2
BUILDING HEIGHT:	VARIABLE-(MAX 30')
LOT COVERAGE:	78,840/604,984=0.130
IMPERVIOUS AREA:	228,562 SF (37.78%)
OPEN SPACE AREA:	376,422 SF (62.22%)

GRAPHIC SCALE



1983 HLAB 1983

OVERALL SHEET

HERNDON ELEMENTARY SCHOOL
RENOVATION & ADDITION

DRANESVILLE ELECTION DISTRICT
TOWN OF HERNDON

REVISIONS:

PLAN DATE:
OCTOBER 18, 2023

DESIGN BY: AAG/TAP/SAW

CHECKED BY: JDC

ARCHITECT: Cooper Carry

ARCHITECT: Cooper Carry

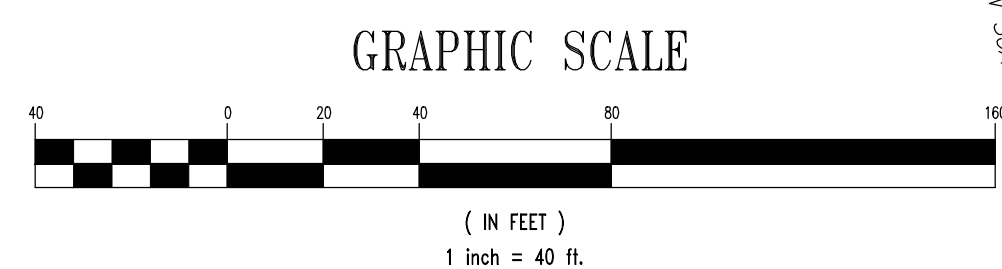
JURISDICTIONAL PLAN NO. _____

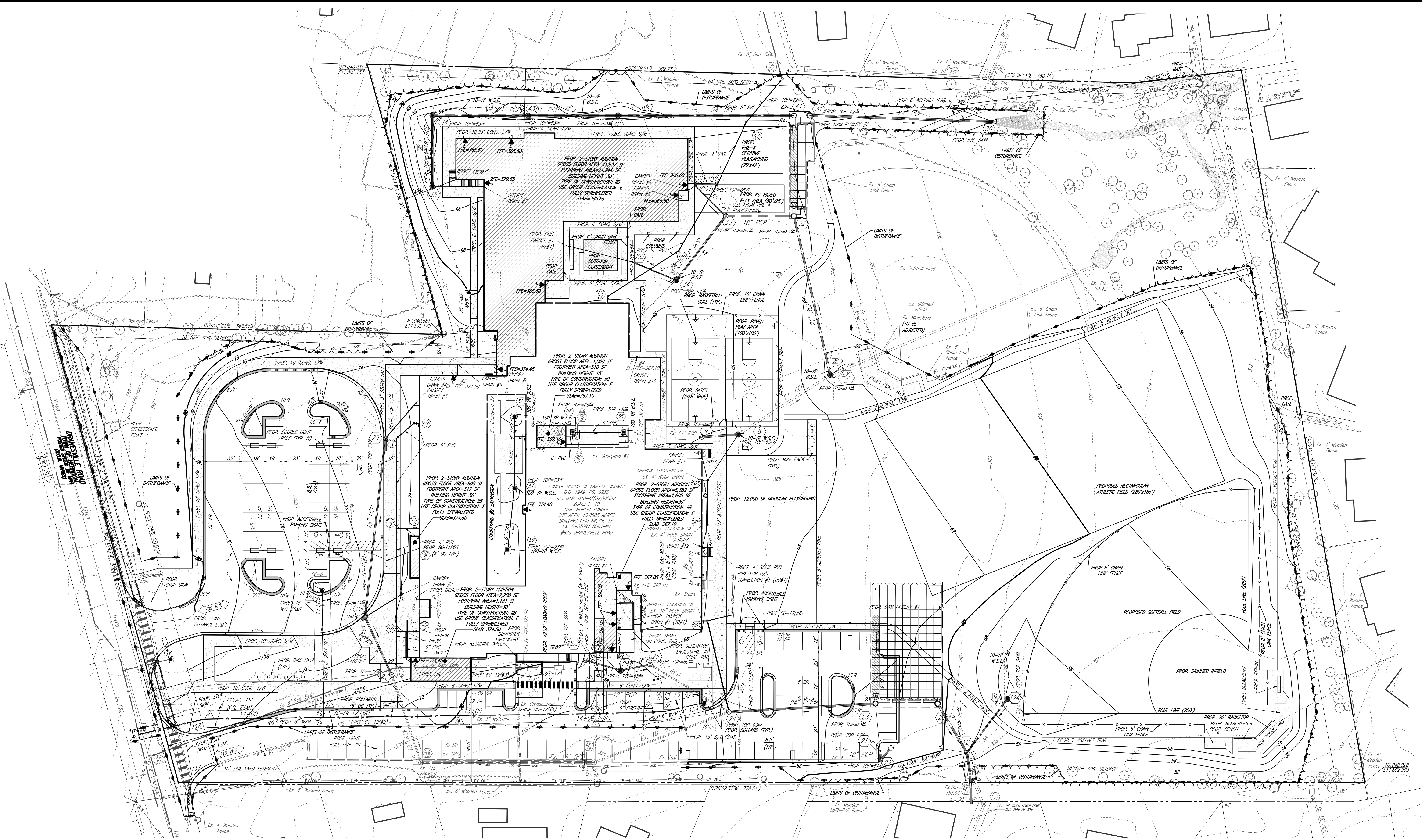
SE#23-01

RDA PLAN #: 22029

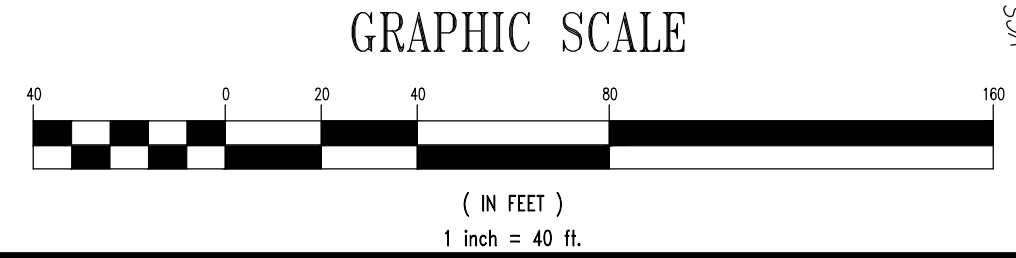
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SHEET NUMBER: C.02





NOTES
1. ALL GRADING INFORMATION WILL BE REVIEWED IN ACCORDANCE WITH APPLICABLE REGULATIONS AT THE TIME OF THE SITE PLAN.





Rinker Design Associates, P.C.
11100 Endeavor Court, Suite 200, Manassas, VA 20109
Telephone: (703) 368-7373 www.rdacivil.com
Engineering * Surveying * Transportation * Environmental Services

GENERALIZED DEVELOPMENT PLAN

**HERNDON ELEMENTARY SCHOOL
RENOVATION & ADDITION**

DRANESVILLE ELECTION DISTRICT
TOWN OF HERNDON

REVISIONS:

NO.	DATE	DESCRIPTION

PLAN DATE:
OCTOBER 18, 2023

DESIGN BY: AAC/TAP/SAW

CHECKED BY: JDC

ARCHITECT: Cooper Carry

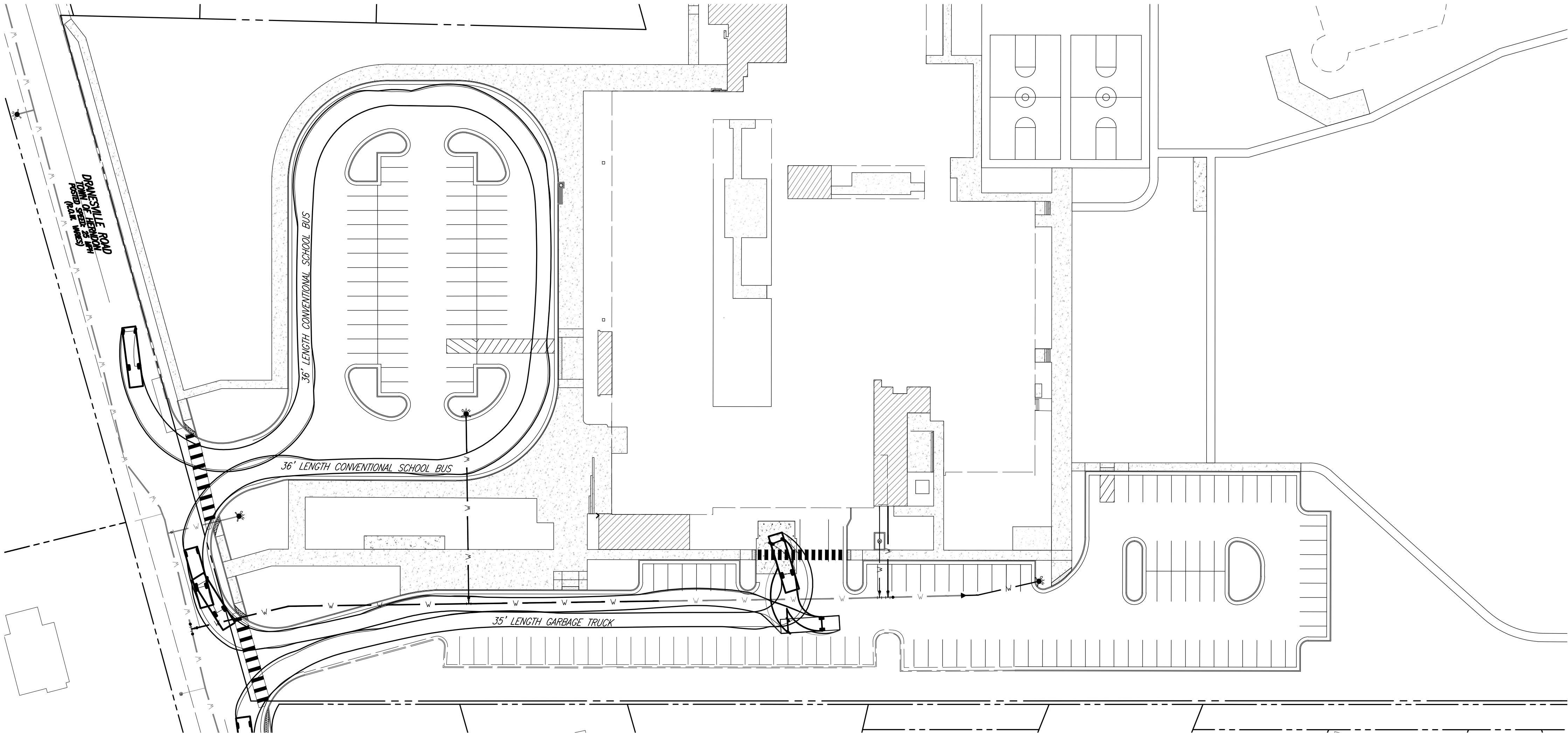
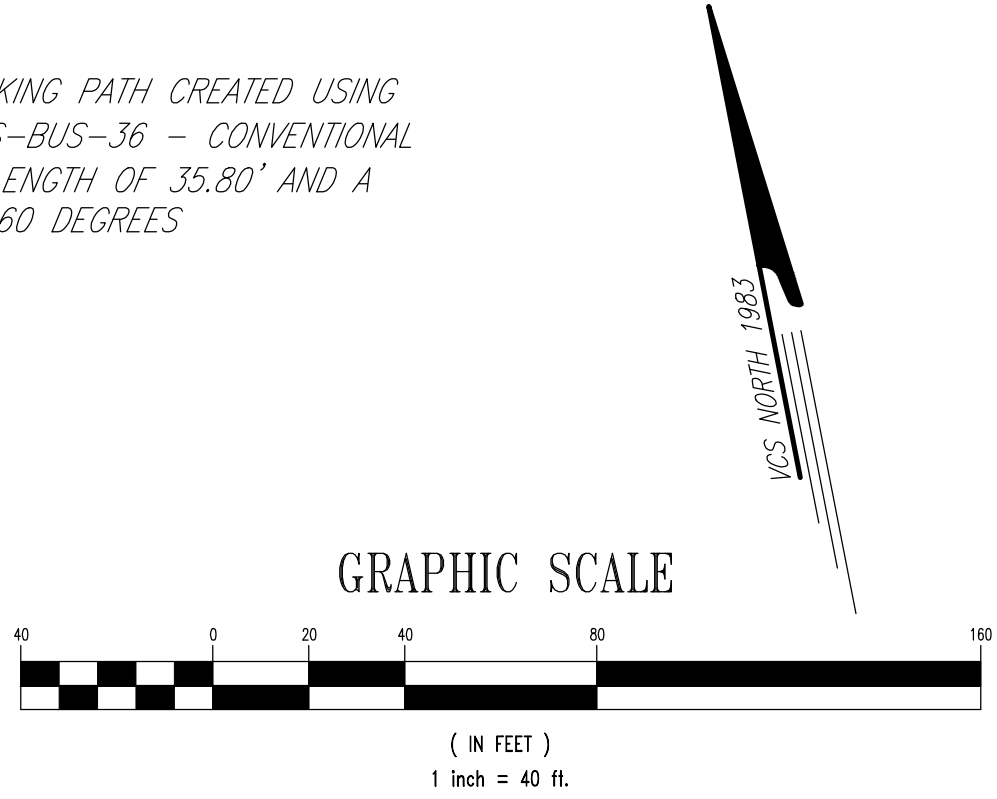
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SE#23-01

RDA PLAN #: 22029

SHEET NUMBER: C.04

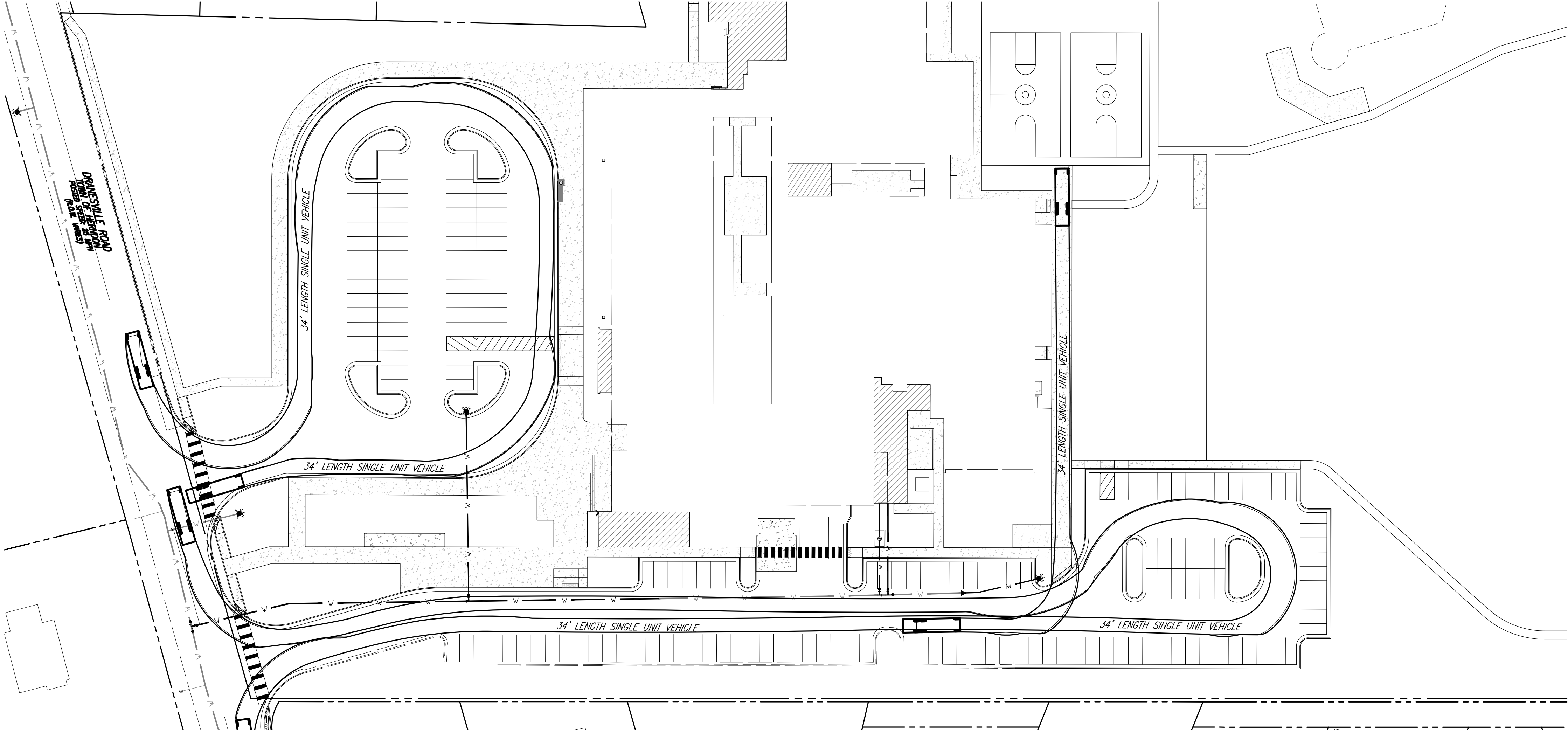
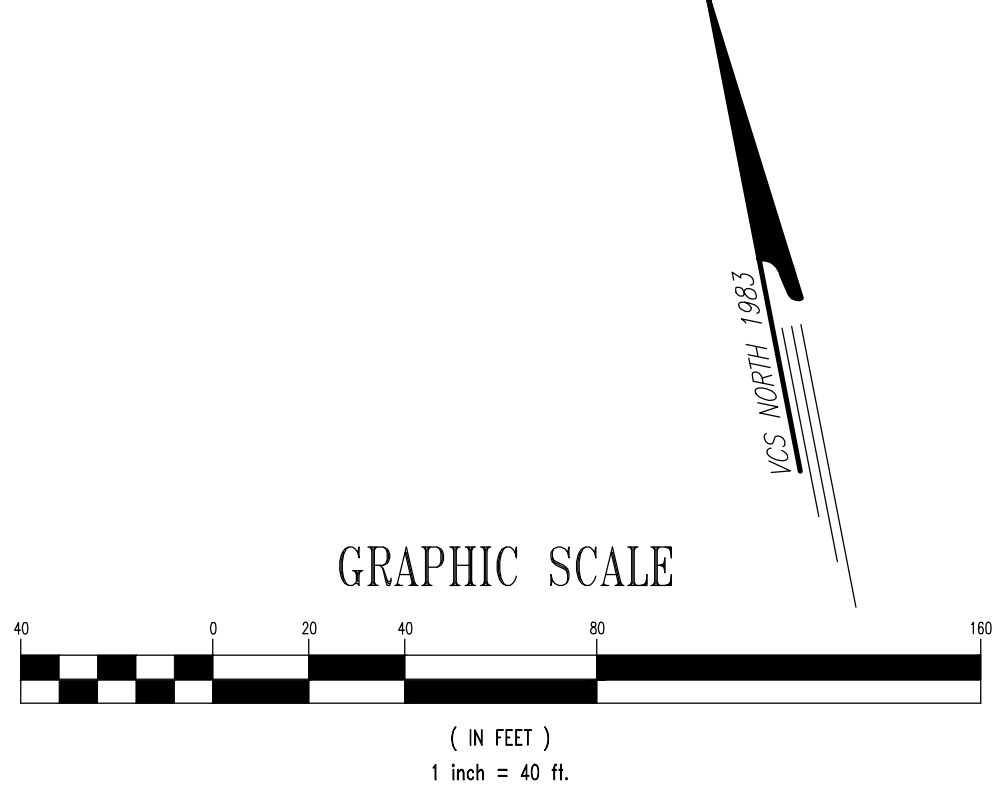
SCHOOL BUS & GARBAGE TRUCK
VEHICLE TRACKING PATHS

NOTES:
1. GARBAGE TRUCK VEHICLE TRACKING PATH CREATED USING NCHRP 659 (2010) GROUND CLEARANCE VEHICLES, REAR-LOAD GARBAGE TRUCK WITH A LENGTH OF 35' AND A CURB TO CURB RADIUS OF 29.30' (DIMENSIONS=35'x8.375').
2. SCHOOL BUS VEHICLE TRACKING PATH CREATED USING AASHTO 2011 (US CUSTOMARY), S-BUS-36 - CONVENTIONAL SCHOOL BUS (65 PASS) WITH A LENGTH OF 35.80' AND A MAXIMUM STEERING ANGLE OF 37.60 DEGREES (DIMENSIONS=35.8'x8').



FIRE TRUCK VEHICLE
TRACKING PATHS

NOTES:
1. FIRE TRUCK VEHICLE TRACKING PATHS CREATED USING A MODIFIED SU-40 VEHICLE WITH A LENGTH OF 34' AND A MAXIMUM STEERING ANGLE OF 35 DEGREES (DIMENSIONS=34'x8').



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VEHICLE PATH PLAN

**HERNDON ELEMENTARY SCHOOL
RENOVATION & ADDITION**

DRAVESVILLE ELECTION DISTRICT
TOWN OF HERNDON

REVISIONS:

PLAN DATE:
OCTOBER 18, 2023

DESIGN BY: AAC/TAP/SAW

CHECKED BY: JDC

ARCHITECT: Cooper Carry

JURISDICTIONAL PLAN NO.
SE#23-01

RDA PLAN #: 22029

SHEET NUMBER: C.05

 -DENOTES CANOPY TREE

 -DENOTES TREE FOR VEHICULAR USE AREA

 -DENOTES UNDERSTORY TREE

 -DENOTES EVERGREEN TREE

 -DENOTES SHRUB

 -DENOTES EX. TREE LINE

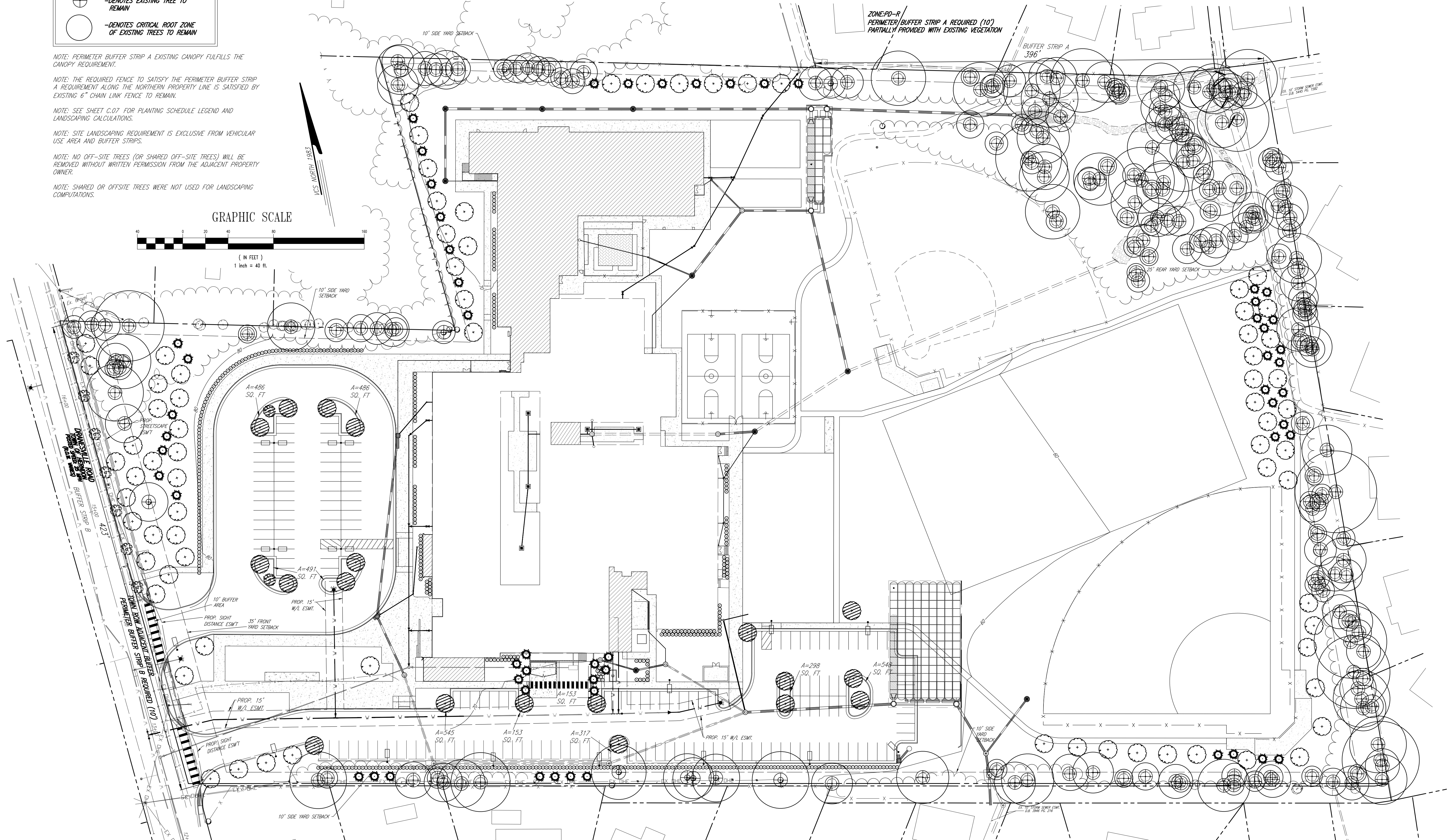
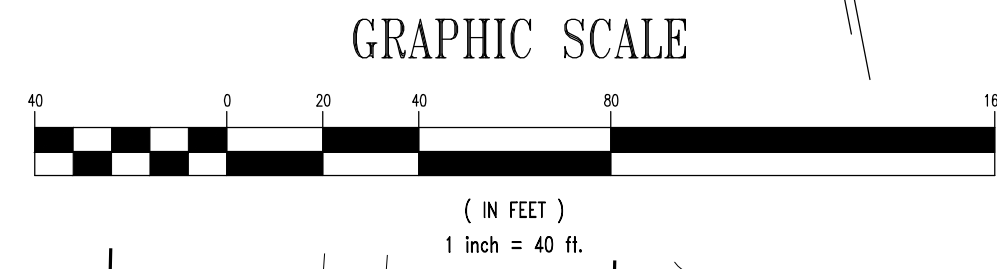
 -DENOTES PROP. TREE LINE

 -DENOTES EXISTING TREE TO REMAIN

 -DENOTES CRITICAL ROOT ZONE OF EXISTING TREES TO REMAIN

NOTE: SHARED OR OFFSITE TREES WERE NOT USED FOR LANDSCAPING COMPUTATIONS.

1. DUMPSTER & GENERATOR HAVE THEIR OWN ENCLOSURES, BUT EVERGREEN TREES HAVE BEEN PROPOSED TO HELP AUGMENT THE SCREENING OF THESE FACILITIES FROM THE ROW AND SOUTHERN PROPERTY LINE. THE TRANSFORMER WILL BE SCREENED FROM THE ROW BY THE BUILDING AND THESE SAME EVERGREEN TREES SHALL SCREEN THE TRANSFORMER FROM THE PROPERTY LINE.



**HERNDON ELEMENTARY SCHOOL
RENOVATION & ADDITION**
DRANESVILLE ELECTION DISTRICT

DRANESVILLE ELECTION DISTRICT
TOWN OF HERNDON

[illegible]

SHEET NUMBER: C.06

Engineering * Surveying * Transportation * Environmental Services



TREE CONSERVATION PLAN LEGEND:

- LIMITS OF DISTURBANCE
- EX. TREE/ TREE TO BE REMOVED
- XX TREE PROTECTION FENCE
- RP ROOT PRUNING
- EX. TREE CRITICAL ROOT ZONE

NOTE: TREE PROTECTION WILL BE COORDINATED WITH THE TOWN ARBORIST AT THE TIME OF SITE PLAN.

CERTIFIED ARBORIST

Brian Howard
ISA Certified Arborist - MA 4677A
ISA Certified Tree Risk Assessor - CTRA 916

B.H.

Rinker Design Associates, P.C.

11100 Endeavor Court, Suite 200, Manassas, VA 20109
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Engineering * Surveying * Transportation * Environmental Services

TREE SURVEY

HERNDON ELEMENTARY SCHOOL RENOVATION & ADDITION

DRANESVILLE ELECTION DISTRICT
TOWN OF HERNDON

REVISIONS:

PLAN DATE: OCTOBER 18, 2023
DESIGN BY: AAC/TAP/SAW
CHECKED BY: JDC
ARCHITECT: Cooper Carry
JURISDICTIONAL PLAN NO. SE#23-01
RDA PLAN #: 22029
SHEET NUMBER: C.08

TREE INVENTORY - Herndon Elementary School																						
TREE TO BE COUNTED TOWARD CREDIT	Tree #	Species	Size	CRZ	SRZ	Condition	Canopy Position	Crown Radius	Crown Density					Status	Activities	Root Problems	Trunk Problems	Scaffold Branch Problems	Small Branch and Twig Problems	CRZ impacts (critical root zone)	Notes	
			dbh	Critical Root Zone (radius ft)	Structural Rooting Zone (radius ft)	%		Avg. Radius (ft)	%	* Dead Tree	* Poor Condition	* Assessment obscured	* Off Site/Co-Owned		* Tree Protection Fence	* Root Prune	* Vine removal	* Monitor/Risk Assess	* Hand Removal			
	1725	Norway spruce	15	15	5.0	80	Isolated	10	90					REMOVE								
✓	1726	white mulberry	16, 14, 13	25	8.3	55	Codominant	10	30		X			PRESERVE								
1	1727	black cherry	9	9	3.0	65	Codominant	10	80					PRESERVE								
	1728	white mulberry	16			0				X			*X	REMOVE				*X			N/A	Dead tree. Possible elevated risk. *Located along shared boundary, ownership not determined. Do not remove off site trees without written permission. Arborist recommends removal.
✓	1729	white mulberry	12, 8, 8	16	5.3	50	Codominant	5	10		X			PRESERVE								
✓	1730	black cherry	9	9	3.0	55	Intermediate	5	60		X			PRESERVE								
✓	1731	hickory species	17	17	5.6	55	Intermediate	15	40		X			PRESERVE		X	X					Decline. Large limb overhands off site properties. Possible elevated risk. Monitoring/risk assessment is recommended.
✓	1732	white mulberry	16, 14	21	6.9	55	Intermediate	10	50		X		*X	PRESERVE		X						*Located along shared boundary, ownership not determined.
✓	1733	white mulberry	20, 16	26	8.6	50	Intermediate	15	60		X			PRESERVE		X	X					Monitoring/risk assessment is recommended.
	1734	black cherry	28	28	9.2	40	Intermediate	15	60		X			REMOVE				X				Decline. Significant scaffold branch decay and trunk decay overhands off site properties. Possible elevated risk. Arborist recommends removal.
	1735	white mulberry	16	16	5.3	65	Codominant	15	60			X		PRESERVE			X					Off site tree.
2	1736	pin oak	24	24	7.9	65	Codominant	20	40					PRESERVE								
3	1737	eastern white pine	21	21	6.9	75	Codominant	20	80					PRESERVE	X	X						
4	1738	eastern white pine	18	18	5.9	75	Codominant	15	60					PRESERVE	X	X						
5	1739	eastern white pine	17, 12	21	6.9	75	Codominant	15	80					PRESERVE	X	X						
6	1740	black walnut	21, 14	25	8.3	80	Isolated	25	80					PRESERVE	X	X						
7	1741	red maple	18	18	5.9	75	Intermediate	20	70				*X	PRESERVE	X	X						
8	1742	red maple	12, 11, 11, 10, 6, 4	23	7.6	75	Codominant	25	80					PRESERVE	X	X	X					
9	1743	arborvitae	9	9	3.0	80	Intermediate	15	80					PRESERVE	X	X						
10	1744	red maple	16, 8	18	5.9	75	Codominant	15	40					PRESERVE	X	X						
11	1745	red maple	16, 14, 10	23	7.6	75	Codominant	25	70					PRESERVE	X	X						
12	1746	white mulberry	11, 11	16	5.3	65	Codominant	10	50					PRESERVE	X	X	X					
	1747	common persimmon	15, 6	16	5.3	85	Isolated	20	80					REMOVE								
13	1748	red maple	9, 8, 8, 8, 7	18	5.9	70	Codominant	15	80					PRESERVE	X	X						
14	1749	Leyland cypress	8	8	2.6	80	Intermediate	10	80					PRESERVE	X	X						
15	1750	eastern red cedar	12	12	4.0	80	Codominant	15	70					PRESERVE	X	X						
	1751	black walnut	11	11	3.6	80	Codominant	15	70					REMOVE				X				
16	1752	eastern red cedar	13, 8	15	5.0	65	Codominant	10	70					PRESERVE	X	X						
17	1753	hackberry	8	8	2.6	75	Suppressed	5	40					PRESERVE	X							
	1754	black cherry	13			0				X			*X	REMOVE				*X			N/A	Dead tree. Possible elevated risk. *Located along shared boundary, ownership not determined. Do not remove off site trees without written permission. Arborist recommends removal.
18	1755	pin oak	23	23	7.6	75	Codominant	20	60				*X	PRESERVE	X	X						
19	1756	white mulberry	9	9	3.0	65	Codominant	10	30				*X	PRESERVE		X						
20	1757	white mulberry	11	11	3.6	65	Codominant	15	30					PRESERVE	X	X	X					
21	1758	black cherry	9	9	3.0	70	Codominant	10	40					PRESERVE	X							
22	1759	black cherry	11	11	3.6	70	Codominant	15	40					PRESERVE	X	X	X					
23	1760	eastern red cedar	16	16	5.3	70	Codominant	15	70					PRESERVE	X	X	X					
	1761	pin oak	25	25	8.3	75	Codominant	30	80					REMOVE				X				
	1762	red maple	12	12	4.0	70	Codominant	20	40					PRESERVE	X	X						
	1763	eastern red cedar	10	10	3.3	65	Codominant	10	40					PRESERVE	X	X						
24	1764	yellow buckeye	9	9	3.0	70	Codominant	15	60					PRESERVE	X	X						
25	1765	sassafras	12	12	4.0	75	Codominant	15	80					PRESERVE	X	X						
26	1766	black walnut	15	15	5.0	80	Codominant	15	80					PRESERVE	X							
	1767	blackgum	10	10	3.3	70	Codominant	10	60					PRESERVE	X	X						
27	1768	sweet cherry	8	8	2.6	75	Codominant	15	60					PRESERVE	X							
28	1769	sweet cherry	20, 9	22	7.3	70	Codominant	20	50					PRESERVE	X		X					
	1770	black cherry	25	25	8.3	55	Codominant	20	40					REMOVE				X				
29	1771	southern red oak	15	15	5.0	80	Codominant	20	50					PRESERVE	X							
	1772	oak species	12			0						X		REMOVE								
30	1773	black oak	34	34	11.2	80	Codominant	40	80					PRESERVE	X							
31	1774	American elm	25	25	8.3	80	Codominant	40	60					PRESERVE	X	X						
32	1775	scarlet oak	10	10	3.3	70	Intermediate	10	40					PRESERVE	X	X						
33	1776	red maple	20	20	6.6	75	Codominant	20	70					PRESERVE	X	X						
34	1777	black oak	25	25	8.3	80	Codominant	25	70					PRESERVE	X							
35	1778	black cherry	16	16	5.3	70	Codominant	15	50					PRESERVE	X							
36	1779	sassafras	9	9	3.0	75	Intermediate	10	50					PRESERVE	X							
37	1780	scarlet oak	32	32	10.6	80	Codominant	30	80					PRESERVE	X							
38	1781	blackgum	15	15	5.0	75	Codominant	15	60					PRESERVE	X							
39	1782	pin oak	32	32	10.6	80	Codominant	35	80					PRESERVE	X	X						
40	1783	common persimmon	11	11	3.6	65	Codominant	15	30					PRESERVE	X	X						
41	1784	black locust	18	18	5.9	70	Codominant	20	30					PRESERVE	X	X						
42	1785	black locust	9	9	3.0	60	Suppressed	5	20					PRESERVE	X	X						
43	1786	pin oak	15	15	5.0	75	Codominant	20	60					PRESERVE	X	X						
44	1787	sassafras	10	10	3.3	75	Codominant	15	40					PRESERVE	X	X						
45	1788	sassafras	9	9	3.0	75	Codominant	15	40					PRESERVE	X	X						
46	1789	sassafras	10	10	3.3	75	Codominant	10	50					PRESERVE	X	X						
47	1790	pin oak	15	15	5.0	75	Codominant	20	70					PRESERVE	X	X						
48	1791	eastern red cedar	10, 8, 6	14	4.6	70	Codominant	10	70					PRESERVE	X	X						
49	1792	eastern red cedar	20	20	6.6	80	Codominant	20	60					PRESERVE	X	X						
50	1793	white mulberry	14	14	4.6	65	Codominant	15	50					PRESERVE	X	X						
51	1794	sassafras	10	10	3.3	75	Codominant	15	70					PRESERVE	X							

* NOTE: THIS TREE CANNOT BE REMOVED WITHOUT A LETTER OF PERMISSION FROM THE ADJACENT OWNER.

✓ NOTE: THIS TREE IS PROPOSED TO REMAIN, HOWEVER, DUE TO ITS POOR CONDITION, IT WILL NOT COUNT TOWARDS THE SITE LANDSCAPING REQUIREMENTS.



Brian Howard
ISA Certified Arborist -
MA 4677A
ISA Certified Tree Risk
Assessor - CTRA 916

B.H.



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Engineering * Surveying * Transportation * Environmental Services

TREE INVENTORY

HERNDON ELEMENTARY SCHOOL
RENOVATION & ADDITION
DRANESVILLE ELECTION DISTRICT
TOWN OF HERNDON

REVISIONS:

PLAN DATE:
OCTOBER 18, 2023

DESIGN BY: AAC/TAP/SAW

CHECKED BY: JDC

ARCHITECT: Cooper Carry

JURISDICTIONAL PLAN NO.
SE#23-01

RDA PLAN #: 22029

SHEET NUMBER: C.09

TREE INVENTORY - Herndon Elementary School																										
TREE TO BE COUNTED TOWARD CREDIT	Tree #	Species	Size	CRZ	SRZ	Condition	Canopy Position	Crown Radius	Crown Density					Status	Activities				Root Problems	Trunk Problems	Scaffold Branch Problems	Small Branch and Twig Problems	CRZ impacts (critical root zone)	Notes		
			dbh	Critical Root Zone (radius ft)	Structural Rooting Zone (radius ft)	%		Avg. Radius (ft)	%	* Dead Tree	* Poor Condition	* Assessment obscured	* Off Site/Co-Owned		*Tree Protection Fence	*Root Prune	*Vine removal	*Monitor/Risk Assess	*Hand Removal							
	52	1795	black cherry	8	8	2.6	60	Codominant	10	30				PRESERVE	X						poor form, poor structure, decay	asymmetric crown, poor form, poor structure, deadwood		No impact		
		1796	white mulberry	8	8	2.6	75	Codominant	15	50				REMOVE							vines	asymmetric crown		100%		
		1797	oak species	10			0			X				REMOVE					X				N/A		Dead tree, leaning on off site tree. Possible elevated risk. Arborist recommends removal.	
53	1798	black cherry	8	8	2.6	70	Codominant	10	40					PRESERVE	X		X				vines	asymmetric crown, vines		No impact		
54	1799	black cherry	12	12	4.0	70	Codominant	15	50					PRESERVE	X	X	X				vines	asymmetric crown, vines, major branch decay		15%		
55	1800	black cherry	9	9	3.0	60	Codominant	10	30					PRESERVE	X	X	X				vines	asymmetric crown, vines	poor vigor	17%		
56	1801	white oak	9	9	3.0	70	Intermediate	5	30					PRESERVE	X	X					vines	vines	poor vigor	No impact		
57	1802	southern red oak	36	36	11.9	80	Codominant	40	80					PRESERVE	X	X	X				vines	vines		7%		
58	1803	white mulberry	8	8	2.6	70	Codominant	15	40					PRESERVE	X		X				vines	asymmetric crown, deadwood		No impact		
59	1804	black cherry	22	22	7.3	65	Codominant	20	40					PRESERVE	X		X				vines, decay, cavities	asymmetric crown, deadwood		No impact		
60	1805	white mulberry	10	10	3.3	75	Codominant	15	50					PRESERVE	X	X	X				vines	asymmetric crown, vines		20%		
		1806	oak species	13			0			X				REMOVE					X				N/A		Dead tree. Possible elevated risk. Arborist recommends removal.	
61	1807	eastern red cedar	11	11	3.6	75	Codominant	10	50					PRESERVE	X						asymmetric crown		No impact			
62	1808	eastern red cedar	18	18	5.9	65	Codominant	15	70					PRESERVE	X						decay, cavities	deadwood, broken branch		No impact		
63	1809	American elm	9	9	3.0	70	Codominant	10	40					PRESERVE	X						poor form, poor structure	poor form, poor structure		No impact		
64	1810	pin oak	8	8	2.6	70	Codominant	15	30					PRESERVE	X							asymmetric crown, vines		No impact		
65	1811	pin oak	19	19	6.3	80	Codominant	20	80					PRESERVE	X	X					lean			11%		
66	1812	eastern red cedar	11	11	3.6	70	Codominant	15	40					PRESERVE	X						decay	asymmetric crown		No impact		
67	1813	blackgum	10	10	3.3	80	Codominant	20	70					PRESERVE	X							asymmetric crown		No impact		
68	1814	black walnut	11	11	3.6	60	Codominant	5	20					PRESERVE	X						included bark	asymmetric crown, vines	dead twigs, poor vigor, dieback	No impact	Decline.	
69	1815	eastern red cedar	13	13	4.3	65	Codominant	15	30					PRESERVE	X		X				vines	asymmetric crown, vines, deadwood	dead twigs, poor vigor, dieback	No impact	Decline.	
70	1816	eastern red cedar	16	16	5.3	75	Codominant	25	60					PRESERVE	X	X								No impact		
71	1817	eastern red cedar	9	9	3.0	80	Codominant	10	80					PRESERVE	X						vines	asymmetric crown, vines		No impact		
72	1818	eastern red cedar	14, 14, 10	22	7.3	70	Codominant	15	80					PRESERVE	X		X				multiple leaders, weak crotch, vines	deadwood		No impact		
73	1819	black cherry	11	11	3.6	80	Codominant	20	80					PRESERVE	X	X					vines			No impact		
74	1820	eastern red cedar	10	10	3.3	65	Codominant	10	40					PRESERVE	X			X			decay, unsound wood	asymmetric crown, vines, deadwood		No impact	Significant trunk decay. Monitoring/risk assessment is recommended.	
		1821	American elm	17			0			X				REMOVE					X				N/A		Dead tree. Trail and off site properties within 1x height. Possible elevated risk. Arborist recommends removal.	
75	1822	eastern red cedar	12	12	4.0	70	Codominant	15	60					PRESERVE	X						basal decay	asymmetric crown, vines		No impact		
76	1823	eastern red cedar	16, 12	20	6.6	75	Codominant	15	70					PRESERVE	X						multiple leaders, weak crotch	deadwood		No impact		
77	1824	American elm	11	11	3.6	75	Codominant	20	40					PRESERVE	X		X				vines	asymmetric crown		No impact		
✓	1825	blackgum	8	8	2.6	55	Codominant	5	20		X			PRESERVE	X								poor vigor, epicormic sprouts	No impact	Decline.	
		1826	eastern red cedar	15, 15	21	6.9	75	Codominant	20	70				PRESERVE	X						multiple leaders, weak crotch			No impact		
78	1827	eastern red cedar	12	12	4.0	75	Codominant	15	60					PRESERVE	X									No impact		
79	1828	common persimmon	10	10	3.3	75	Codominant	15	70					PRESERVE	X						sunken area			No impact		
80	1829	American elm	9	9	3.0	65	Suppressed	15	20					PRESERVE	X						poor form, poor form	asymmetric crown, poor form, poor structure		No impact		
		1830	eastern red cedar	10			0			X				REMOVE										No impact	Dead tree. Leans back towards site.	
81	1831	scarlet oak	28	28	9.2	80	Codominant	40	80					PRESERVE	X							deadwood		No impact		
82	1832	red maple	8, 8, 6	13	4.3	65	Codominant	10	60					PRESERVE	X						decay			No impact		
83	1833	red maple	11, 11	16	5.3	75	Codominant	20	60					PRESERVE	X		X				vines			No impact		
84	1834	red maple	11	11	3.6	65	Intermediate	10	30					PRESERVE	X		X				vines			No impact		
85	1835	white oak	26	26	8.6	80	Codominant	30	80					PRESERVE	X									No impact		
86	1836	red maple	11, 8	14	4.6	75	Codominant	20	60					PRESERVE	X									No impact		
87	1837	red maple	12, 11, 11, 10	22	7.3	75	Codominant	25	70					PRESERVE	X									No impact		
88	1838	American elm	18	18	5.9	75	Codominant	20	60					PRESERVE	X									No impact		
89	1839	white oak	18	18	5.9	80	Codominant	25	70					PRESERVE	X									No impact		
		1840	red maple	10			0			X				REMOVE					X				No impact	Dead tree. Trail and off site properties within 1x height. Possible elevated risk. Arborist recommends removal.		
90	1841	red maple	13	13	4.3	75	Codominant	20	60					PRESERVE	X									No impact		
91	1842	blackgum	18, 10	21	6.9	80		0						PRESERVE	X									No impact		
92	1843	red maple	12, 12	17	5.6	75	Codominant	15	40					PRESERVE	X									No impact		
93	1844	red maple	14	14	4.6	75	Codominant	15	60					PRESERVE	X									No impact		
94	1845	red maple	17	17	5.6	80	Codominant	25	70					PRESERVE	X									No impact		
95	1846	American elm	15	15	5.0	75	Codominant	15	40					PRESERVE	X									No impact		
96	1847	red maple	8, 8	11	3.6	75	Codominant	10	60					PRESERVE	X									No impact		
97	1848	red maple	9	9	3.0	70	Codominant	10	40					PRESERVE	X		X				vines			No impact		
98	1849	red maple	8	8	2.6	65	Codominant	10	40					PRESERVE	X		X				vines			No impact		
99	1850	red maple	17, 14	22	7.3	75	Codominant																			

TREE INVENTORY - Herndon Elementary School																									
TREE TO BE COUNTED TOWARD CREDIT	Tree #	Species	Size	CRZ	SRZ	Condition	Canopy Position	Crown Radius	Crown Density					Status	Activities				Root Problems	Trunk Problems	Scaffold Branch Problems	Small Branch and Twig Problems	CRZ impacts (critical root zone)	Notes	
			dbh	Critical Root Zone (radius ft)	Structural Rooting Zone (radius ft)	%		Avg. Radius (ft)	%	* Dead Tree	* Poor Condition	* Assessment obscured	* Off Site/Co-Owned		*Tree Protection Fence	*Root Prune	*Vine removal	*Monitor/Risk Assess	*Hard Removal						
	1885	American elm	15			0				X				REMOVE	X								No impact	Dead tree.	
130	1886	red maple	22	22	7.3	75	Codominant	25	70					PRESERVE	X								No impact		
	1887	white oak	9			0				X				REMOVE					X				No impact	Dead tree. Trail and off site properties within 1x height. Possible elevated risk. Arborist recommends removal.	
131	1888	red maple	9	9	3.0	80	Intermediate	15	70					PRESERVE	X								No impact		
132	1889	red maple	10	10	3.3	80	Codominant	15	70					PRESERVE	X								No impact		
133	1890	red maple	8	8	2.6	75	Codominant	15	40					PRESERVE	X								No impact		
134	1891	red maple	13, 9, 8	18	5.9	60	Codominant	20	30					PRESERVE	X	X	X			multiple leaders, weak crotch, decay, cavities, lean	asymmetric crown, vines		No impact	Significant trunk decay, 13" leader leans toward off site properties. Possible elevated risk. Monitoring/risk assessment is recommended.	
135	1892	scarlet oak	28	28	9.2	80	Codominant	35	70					PRESERVE	X								No impact		
136	1893	red maple	13, 11, 6	18	5.9	75	Codominant	20	60					PRESERVE	X								No impact		
137	1894	red maple	25	25	8.3	75	Codominant	30	70					PRESERVE	X								No impact		
138	1895	red maple	16	16	5.3	70	Codominant	20	60					PRESERVE	X								No impact		
✓	1896	white oak	18, 18	25	8.3	45	Codominant	30	60		X			PRESERVE	X		X			decay, cavities, unsound wood, multiple leaders, included bark	major branch decay, deadwood	poor vigor, dieback, epicormic sprouts	No impact	Significant internal decay detected. Trail and off site properties within 1X height. Possible elevated risk. Monitoring/risk assessment is recommended	
139	1897	white oak	14	14	4.6	70	Codominant	15	60					PRESERVE	X								No impact		
140	1898	hickory species	10	10	3.3	80	Codominant	15	70					PRESERVE	X								No impact		
141	1899	pin oak	10	10	3.3	75	Intermediate	10	50					PRESERVE	X								No impact		
142	1900	scarlet oak	24	24	7.9	65	Codominant	20	50					PRESERVE	X					major branch decay, deadwood	poor vigor, dieback	No impact	Decline.		
143	1901	hickory species	8	8	2.6	75	Codominant	10	70					PRESERVE	X								No impact		
144	1902	black locust	12	12	4.0	65	Codominant	15	40					PRESERVE	X		X	X		decay	basal decay, vines	asymmetric crown, deadwood	poor vigor, dieback	No impact	Significant internal decay detected. Trail within 1X height. Possible elevated risk. Monitoring/risk assessment is recommended
145	1903	red maple	10	10	3.3	75	Codominant	15	60					PRESERVE	X								No impact		
✓	1904	red maple	9	9	3.0	55	Intermediate	5	20		X			PRESERVE	X					decay, cavities	deadwood	poor vigor, dieback	No impact	Decline.	
146	1905	red maple	12	12	4.0	75	Codominant	15	70					PRESERVE	X								No impact		
147	1906	white oak	13	13	4.3	70	Codominant	15	70					PRESERVE	X								No impact		
148	1907	red maple	11	11	3.6	75	Codominant	15	70					PRESERVE	X								No impact		
149	1908	black oak	23	23	7.6	80	Codominant	25	70					PRESERVE	X								No impact		
150	1909	pin oak	29	29	9.6	80	Codominant	40	70					PRESERVE	X								No impact		
151	1910	American elm	10	10	3.3	70	Codominant	15	40					PRESERVE	X								No impact		
152	1911	scarlet oak	20	20	6.6	80	Codominant	30	70					PRESERVE	X								No impact		
153	1912	pin oak	22	22	7.3	80	Codominant	25	80					PRESERVE	X								No impact		
154	1913	sourwood	8	8	2.6	60	Intermediate	10	30					PRESERVE	X								No impact	Decline.	
155	1914	white oak	23	23	7.6	80	Codominant	35	70					PRESERVE	X								No impact		
156	1915	white oak	11, 8	14	4.6	75	Codominant	15	60					PRESERVE	X								No impact		
157	1916	white oak	10	10	3.3	70	Codominant	10	30					PRESERVE	X								No impact		
158	1917	white oak	24	24	7.9	70	Codominant	20	60					PRESERVE	X		X			decay, cavities	asymmetric crown		No impact	Significant internal decay detected. Possible elevated risk. Monitoring/risk assessment is recommended	
159	1918	black locust	9	9	3.0	70	Intermediate	10	40					PRESERVE	X								No impact		
160	1919	American elm	15, 15, 12	24	7.9	80	Codominant	25	70					PRESERVE	X								No impact		
	1920	eastern white pine	14	14	4.6	80	Codominant	15	80					REMOVE	X								No impact		
161	1921	Leyland cypress	14	14	4.6	80	Codominant	15	80					PRESERVE	X		X			vines			No impact		
162	1922	Leyland cypress	13	13	4.3	75	Codominant	15	70					PRESERVE	X		X			vines			No impact		
163	1923	Leyland cypress	15	15	5.0	75	Codominant	15	80					PRESERVE	X	X							23%		
	1924	black locust	10			0				X				REMOVE									N/A	Dead tree.	
	1925	red maple	10	10	3.3	75	Isolated	10	80					REMOVE						surface roots, compaction, mower damage			100%		
164	1926	Leyland cypress	12	12	4.0	80	Intermediate	10	90					PRESERVE	X								No impact		
165	1927	Leyland cypress	11	11	3.6	80	Intermediate	10	90					PRESERVE	X	X							30%		
	1928	eastern white pine	12	12	4.0	75		15	80					REMOVE						surface roots, mower damage			100%		
166	1929	Leyland cypress	9	9	3.0	80	Intermediate	10	80					PRESERVE	X	X							11%		
	1930	arborvitae	11	11	3.6	80		10	80					REMOVE									100%		
167	1931	Leyland cypress	11	11	3.6	80	Intermediate	10	80					PRESERVE	X								No impact		
168	1932	Leyland cypress	11	11	3.6	80	Intermediate	10	80					PRESERVE	X								No impact		
169	1933	Leyland cypress	13	13	4.3	80	Intermediate	10	80					PRESERVE	X								No impact		
170	1934	Leyland cypress	12	12	4.0	80	Intermediate	10	80					PRESERVE	X								No impact		
171	1935	Leyland cypress	9	9	3.0	75	Intermediate	10	60					PRESERVE	X								No impact		
	1936	arborvitae	9	9	3.0	80		10	80					REMOVE									100%		
	1937	red maple	10	10	3.3	80	Intermediate	15	80					REMOVE						surface roots			100%		
172	1938	eastern white pine	11	11	3.6	80	Codominant	15	70					PRESERVE	X							dead twigs	No impact		
173	1939	eastern white pine	17	17	5.6	80	Codominant	20	70					PRESERVE	X	X						dead twigs	10%		
174	1940	eastern white pine	14	14	4.6	80	Codominant	20	70					PRESERVE	X	X						dead twigs	3%		
175	1941	eastern white pine	15	15	5.0	80	Codominant	20	70					PRESERVE	X							dead twigs			

TREE INVENTORY - Herndon Elementary School																									
TREE TO BE COUNTED TOWARD CREDIT	Tree #	Species	Size	CRZ	SRZ	Condition	Canopy Position	Crown Radius	Crown Density					Status	Activities	Root Problems	Trunk Problems	Scaffold Branch Problems	Small Branch and Twig Problems	CRZ impacts (critical root zone)	Notes				
			dbh	Critical Root Zone (radius ft)	Structural Rooting Zone (radius ft)	%		Avg. Radius (ft)	%	* Dead Tree	* Poor Condition	* Assessment obscured	* Off Site/Co-Owned		*Tree Protection Fence	*Root Prune	*Vine removal	*Monitor/Risk Assess	*Hand Removal						
	1963	black cherry	13	13	4.3	50	Codominant	10	20		X	X	*X	PRESERVE	X	X	X			vines	asymmetric crown, vines, deadwood	poor vigor, dieback	No impact	*Located along shared boundary, ownership not determined. Decline. Assessment obscured by heavy vines.	
180	1964	black cherry	14	14	4.6	60	Codominant	20	60			X	*X	PRESERVE	X	X	X			vines	asymmetric crown, vines, deadwood	poor vigor, dieback	No impact	*Located along shared boundary, ownership not determined. Decline. Assessment obscured by heavy vines.	
181	1965	American elm	12	12	4.0	60	Codominant	10	20			X	*X	PRESERVE	X	X	X			vines	asymmetric crown, vines, deadwood	poor vigor, dieback	No impact	*Located along shared boundary, ownership not determined. Decline. Assessment obscured by heavy vines.	
	1966	black walnut	18	18	5.9	70	Codominant	30	80			X	*X	PRESERVE	X	X	X			vines	vines	borers	No impact	*Located along shared boundary, ownership not determined. Assessment obscured by heavy vines.	
	1967	Norway spruce	25	25	8.3	75	Isolated	20	70					REMOVE						vines	vines	dead twigs	100%		
182	1968	black walnut	10	10	3.3	60	Codominant	10	30			X	*X	PRESERVE	X	X	X			vines	asymmetric crown, vines, broken branch, deadwood	borers	No impact	Decline. Assessment obscured by heavy vines.	
	1969	black walnut	11	11	3.6	70	Codominant	20	40			X	*X	PRESERVE	X	X	X			vines	asymmetric crown, vines		No impact	*Located along shared boundary, ownership not determined. Decline. Assessment obscured by heavy vines.	
	1970	black cherry	18, 15	23	7.6	70	Codominant	20	70			X	X	PRESERVE	X	X	X			vines, mower damage, weak crotch	asymmetric crown, vines, deadwood		No impact	*Located along shared boundary, ownership not determined. Decline.	
	* 1971	black cherry	10	10	3.3	60	Suppressed	5	20			X	*X	REMOVE				*X		vines, lean, poor structure	asymmetric crown, poor form, poor structure		No impact	Decline. Extreme lean towards site, leaning in crown of tree 1967. Arborist recommends removal. *Located along shared boundary, ownership not determined. Do not remove off site trees without written permission.	
	* 1972	sweet cherry	15			0				X			*X	REMOVE				*X					N/A	Dead tree. Arborist recommends removal. *Located along shared boundary, ownership not determined. Do not remove off site trees without written permission.	
	* 1973	sweet cherry	9			0				X			*X	REMOVE				*X					N/A	Dead tree. Arborist recommends removal. *Located along shared boundary, ownership not determined. Do not remove off site trees without written permission.	
183	1974	American elm	21	21	6.9	70	Codominant	30	60			X	*X	PRESERVE	X	X	X			vines	asymmetric crown, vines		No impact	*Located along shared boundary, ownership not determined. Assessment obscured by heavy vines.	
	1975	black walnut	12	12	4.0	65	Codominant	20	40			X	*X	PRESERVE	X	X	X			vines	asymmetric crown, vines		No impact	*Located along shared boundary, ownership not determined. Assessment obscured by heavy vines.	
	1976	black cherry	10	10	3.3	55	Codominant	5	10		X	X	*X	PRESERVE	X	X	X			vines	vines	poor vigor, dieback	No impact	Decline. *Located along shared boundary, ownership not determined. Assessment obscured by heavy vines.	
	1977	black cherry	17	17	5.6	55	Codominant	20	40		X	X	*X	PRESERVE	X	X	X			vines	asymmetric crown, vines, major branch decay, deadwood	poor vigor	No impact	Decline. *Located along shared boundary, ownership not determined. Assessment obscured by heavy vines.	
	* 1978	black cherry	10			0				X			*X	REMOVE				*X					No impact	Dead tree. Arborist recommends removal. *Located along shared boundary, ownership not determined. Do not remove off site trees without written permission.	
	* 1979	black cherry	15, 14	21	6.9	60	Codominant	20	40				*X	REMOVE				*X		multiple leaders, vines, decay, unsound wood	asymmetric crown, poor form, poor structure, vines	poor vigor	No impact	Decline. Extreme lean towards site Arborist recommends removal. *Located along shared boundary, ownership not determined. Do not remove off site trees without written permission.	
184	1980	sweet cherry	8	8	2.6	75	Intermediate	10	80					PRESERVE	X	X	X			vines	asymmetric crown		No impact		
	1981	silver maple	18, 16, 16, 16, 10	35	11.6	70	Codominant	35	80					PRESERVE	X	X	X			multiple leaders, multiple weak crotches, vines	vines		No impact	*Located along shared boundary, ownership not determined.	
	* 1982	black cherry	8			0				X			*X	REMOVE				*X					No impact	Dead tree. Arborist recommends removal. *Located along shared boundary, ownership not determined. Do not remove off site trees without written permission.	
	1983	black cherry	10	10	3.3	55	Codominant	15	20		X	X	*X	PRESERVE	X	X	X			vines	asymmetric crown, poor form, vines		No impact	*Located along shared boundary, ownership not determined. Decline.	
	1984	black cherry	7, 6, 6, 5	12	4.0	60	Codominant	10	30			X	*X	PRESERVE	X	X	X			vines, multiple leaders, multiple weak crotches	asymmetric crown, major branch decay, vines		No impact	*Located along shared boundary, ownership not determined. Decline.	
185	1985	scarlet oak	31	31	10.2	70	Codominant	30	60			X	*X	PRESERVE	X	X	X			vines	asymmetric crown, poorly pruned, vines		No impact	*Located along shared boundary, ownership not determined.	
186	1986	black cherry	6, 6, 6, 5, 5	13	4.3	60	Codominant	15	40					PRESERVE	X	X	X			multiple leaders, multiple weak crotches, vines	asymmetric crown, major branch decay, vines		No impact	Decline.	
187	1987	black cherry	10, 6	12	4.0	60	Codominant	15	30					PRESERVE	X	X	X			multiple leaders, weak crotch, vines	asymmetric crown, vines		No impact	Decline.	
188	1988	pin oak	10	10	3.3	65	Codominant	10	30					PRESERVE	X	X	X			vines	asymmetric crown, poor structure, vines, poor form		No impact	Decline.	
189	1989	black cherry	15	15	5.0	70	Codominant	15	40					PRESERVE	X	X	X			vines, lean, poor form	asymmetric crown, deadwood		No impact		
190	1990	pin oak	24	24	7.9	75	Codominant	25	80					PRESERVE	X	X	X			vines	deadwood, vines		No impact		
	1991	white mulberry	8, 6			0				X				REMOVE				X					No impact	Dead tree. Arborist recommends removal.	
191	1992	white mulberry	11	11	3.6	70	Codominant	15	30					PRESERVE	X						asymmetric crown		No impact		
192	1993	black cherry	8	8	2.6	65	Codominant	5	30					PRESERVE	X					lean, poor form	asymmetric crown, poor structure		No impact		
193	1994	pin oak	25	25	8.3	80	Codominant	35	80					PRESERVE	X	X	X			vines			No impact		
194	1995	black cherry	15, 6, 5	17	5.6	65	Codominant	15	60					PRESERVE	X	X	X			surface roots, mower damage	multiple leaders, vines	asymmetric crown, major branch decay, deadwood	poor vigor, dieback	No impact	
195	1996	pin oak	17	17	5.6	85	Isolated	20	90					PRESERVE	X								No impact		
	1997	eastern white pine	25			0				X				REMOVE				X					N/A	Dead tree. Arborist recommends removal.	
	1998	Norway spruce	17	17	5.6	85	Codominant	15	80					REMOVE				X					48%	High CRZ and SRZ impacts. Arborist recommends removal.	
	1999	cherry	11	11	3.6	75	Codominant	20	80					REMOVE						surface roots, mower damage	basal decay		100%		
	2000	red maple	10	10	3.3	75	Codominant	15	80					REMOVE						girdling, surface roots, mower damage			100%		
	2001	Gallery pear	15	15	5.0	75	Isolated	15	80					REMOVE						multiple leaders, multiple weak crotches			100%		
dbh = Diameter at Breast Height (measured 4.5 feet above ground).																									
CRZ = Critical Root Zone = 1.0 foot radius per inch of tree diameter. Estimated radius of area containing majority of tree roots. TRZ values for trees with multiple stems were calculated using the diameter of a tree with the basal area equivalent to the sum of the basal areas for all stems.																									
SRZ (Structural Rooting Zone). Calculation - dbh x 0.33 = radius feet. Estimated radius of area containing tree roots that must be protected to ensure tree health and structural stability. Impact/root loss within SRZ may result in compromised structure, whole tree failure or decline in health.																									
* CONDITION RATING - provided as percentages based on methods outlined in the 10th edition of the Guide for Plant Appraisal, published by the International Society of Arboriculture.																									
* DEAD TREE - tree is dead or near dead and will likely not survive long term. No tree canopy credit taken.																									
* POOR CONDITION TREE - Tree has been assessed with condition of < 40 or Arborist has determined that tree will likely not survive long term due to poor health, structure or other contributing factors.																									
*ASSESSMENT OBSCURED - Proper assessment of root flare, trunk, scaffold branches and leaf/twigs obscured by presence of vines, limited access, or similar obstacle. Condition of these trees is estimated and if preserved may require additional assessment or arboricultural treatments.																									
* OFF SITE/CO-OWNED TREE - Tree is either off site or co-owned or definitive ownership could not be determined during initial tree inventory. Ownership shall be determined during pre-construction phase of development. Removal or arboricultural treatment of off site trees is prohibited without written permission from landowner. Location																									
TREE PRESERVATION ACTIVITIES																									
*TREE PROTECTION FENCING - Tree protection fencing shall be installed where indicated on plan sheets. See tree preservation notes and tree protection fencing detail.																									
* ROOT PRUNING - Trees shall be root pruned where indicated on plan sheets. See tree preservation notes and root pruning detail.																									
* TREE MULCHING - Mulch shall be applied where indicated on plan sheets. Mulch to be spread on grade within tree save areas where root pruning has occurred. Mulch shall be applied to a depth of 4" inches extending 5' feet into the tree save area. Chips or shredded hardwood mulch from clearing operation may be used. See tree																									
* PRUNE - Prune tree for health & maintenance. Deadwood prune dead, dying or diseased branches 2" in diameter or greater. All pruning work shall meet or exceed standards most recently publish standard by American National Standards Institute (ANSI A300 (Part1)-2017 Pruning).																									
* FERTILIZE -																									
* CAMBISTAT -																									
* VINE REMOVAL - Removal of vines that impact roots, trunk, or canopy. Vines impacting roots/trunk shall be cut at base of tree and 4' section removed from trunk. Vines impacting tree canopy shall be cut free of canopy. Care shall be taken not to damage tree trunk, bark or crown branches. Vines remaining on trunk or tangled in crown																									
* REMOVE DEBRIS - Remove foreign debris from trunk, root flare or root zone of tree.																									
* TRIM GIRDLING ROOTS - See "General Tree Health Notes" for girdling root removal procedures.																									
* EXPOSE ROOT FLARE - Tree root flare covered in soil. See "General Tree Health Notes" for soil removal procedures.																									
* MONITOR/RISK ASSESSMENT - Tree to be impacted by construction or exhibits pre-existing condition(s) that may present elevated risk of decline or failure in the future. Tree should be evaluated by certified Arborist post construction and inspected long term on a bi-annual basis.																									
* UFMD REVIEW - Tree may require additional assessment at time of construction. County/Town Urban Forestry Management Division or Project Arborist should evaluate tree during pre-construction meeting to determine preservation/removal status or additional tree preservation measures required.																									
* HAND REMOVAL - Trees to be removed within tree save areas or directly adjacent to but within the limits of clearing and grading shall be felled by hand with a chain saw. Stumps shall remain in place or shall be ground out. See tree preservation notes.																									
*RISK ASSESSMENTS - No formal risk assessment were performed on trees included within this tree inventory or any other trees located on or adjacent to the subject property.																									
Tree Survey Information Completed by Tree Preservation Consultants, LLC - Arborist Brian Howard - ISA #MA-4677A																									

* NOTE: THIS TREE CANNOT BE REMOVED WITHOUT A LETTER OF PERMISSION FROM THE ADJACENT OWNER.

✓ NOTE: THIS TREE IS PROPOSED TO REMAIN, HOWEVER, DUE TO ITS POOR CONDITION, IT WILL NOT COUNT TOWARDS THE SITE LANDSCAPING REQUIREMENTS.



Brian Howard
ISA Certified Arborist -
MA 4677A
ISA Certified Tree Risk
Assessor - CTRA 916

B.H.



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TREE INVENTORY

HERNDON ELEMENTARY SCHOOL
RENOVATION & ADDITION

DRANESVILLE ELECTION DISTRICT
TOWN OF HERNDON

REVISIONS:

PLAN DATE:	OCTOBER 18, 2023
DESIGN BY:	AAG/TAP/SAW
CHECKED BY:	JDC
ARCHITECT:	Cooper Carry
JURISDICTIONAL PLAN NO.:	SE#23-01
RDA PLAN #:	22029
SHEET NUMBER:	C.12

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) → 10.85

Maximum reduction required:	20%
The site's net increase in impervious cover (acres) is:	1.2
Post-Development TP Load Reduction for Site (lb/yr):	4.49

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				6.85	6.85
Impervious Cover (acres)				4.00	4.00
					10.85

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				5.65	5.65
Impervious Cover (acres)				5.20	5.20
Area Check	OK.	OK.	OK.	OK.	10.85

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre		
Pre-ReDevelopment	Listed	Adjusted ¹
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	6.85	5.65
Weighted Rv(turf)	0.25	0.25
% Managed Turf	63%	59%
Impervious Cover (acres)	4.00	4.00
Rv(impervious)	0.95	0.95
% Impervious	37%	41%
Total Site Area (acres)	10.85	9.65
Site Rv	0.51	0.54

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.4594	0.4344
Pre-ReDevelopment Treatment Volume (cubic feet)	20,010	18,921
Pre-ReDevelopment TP Load (lb/yr)	12.57	11.89
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	1.16	1.23
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		3.96

¹ Adjusted Land Cover Summary:
Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column 1 shows load reduction requirement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)

4.49

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)

89.94

Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)

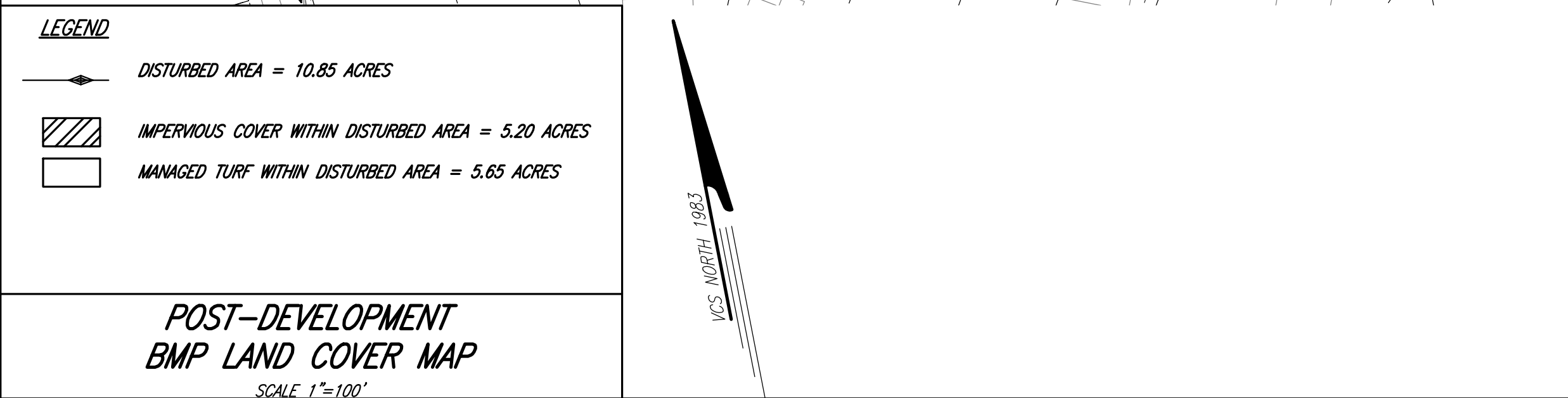
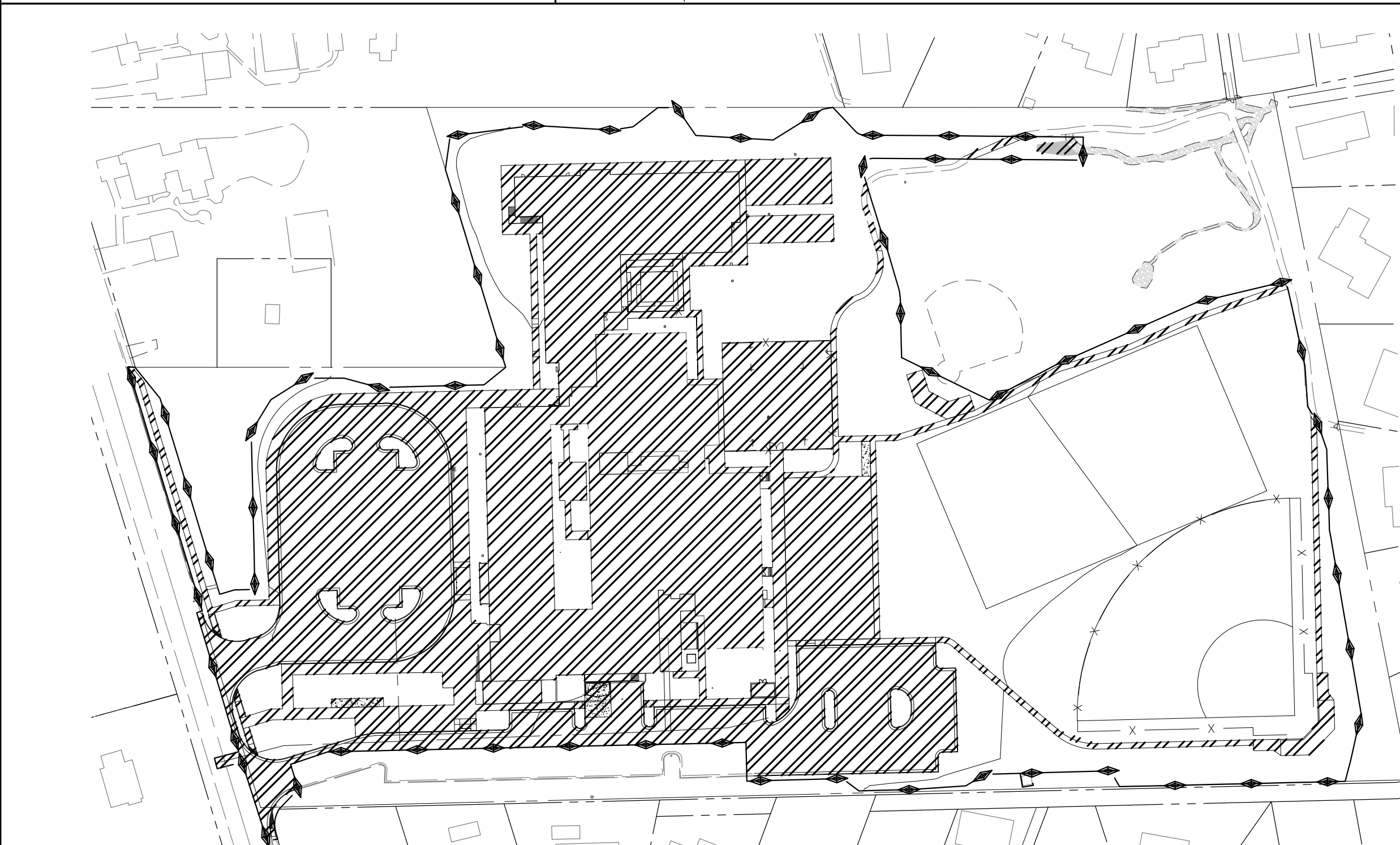
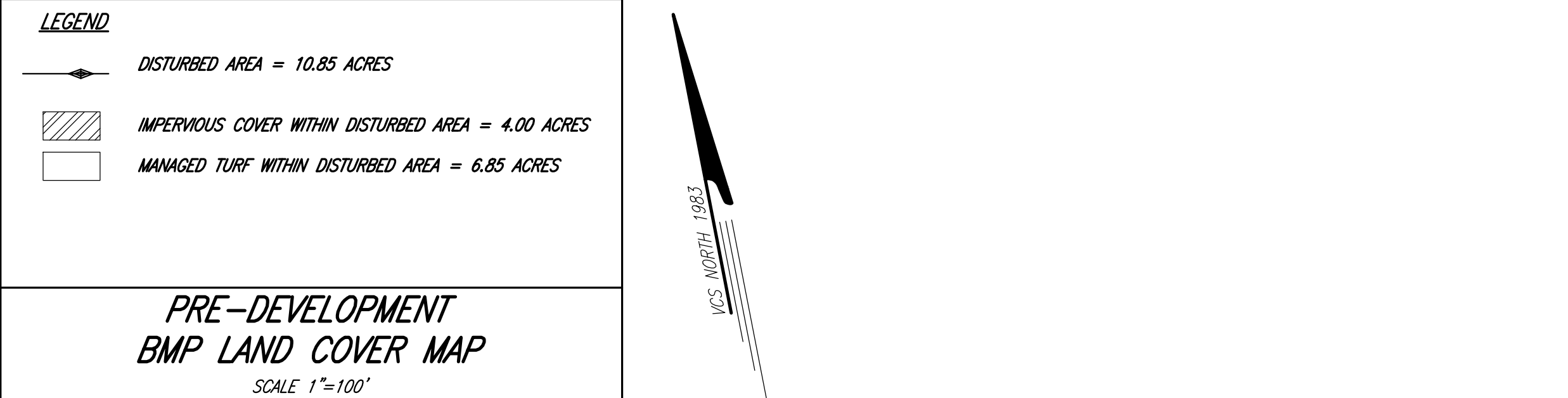
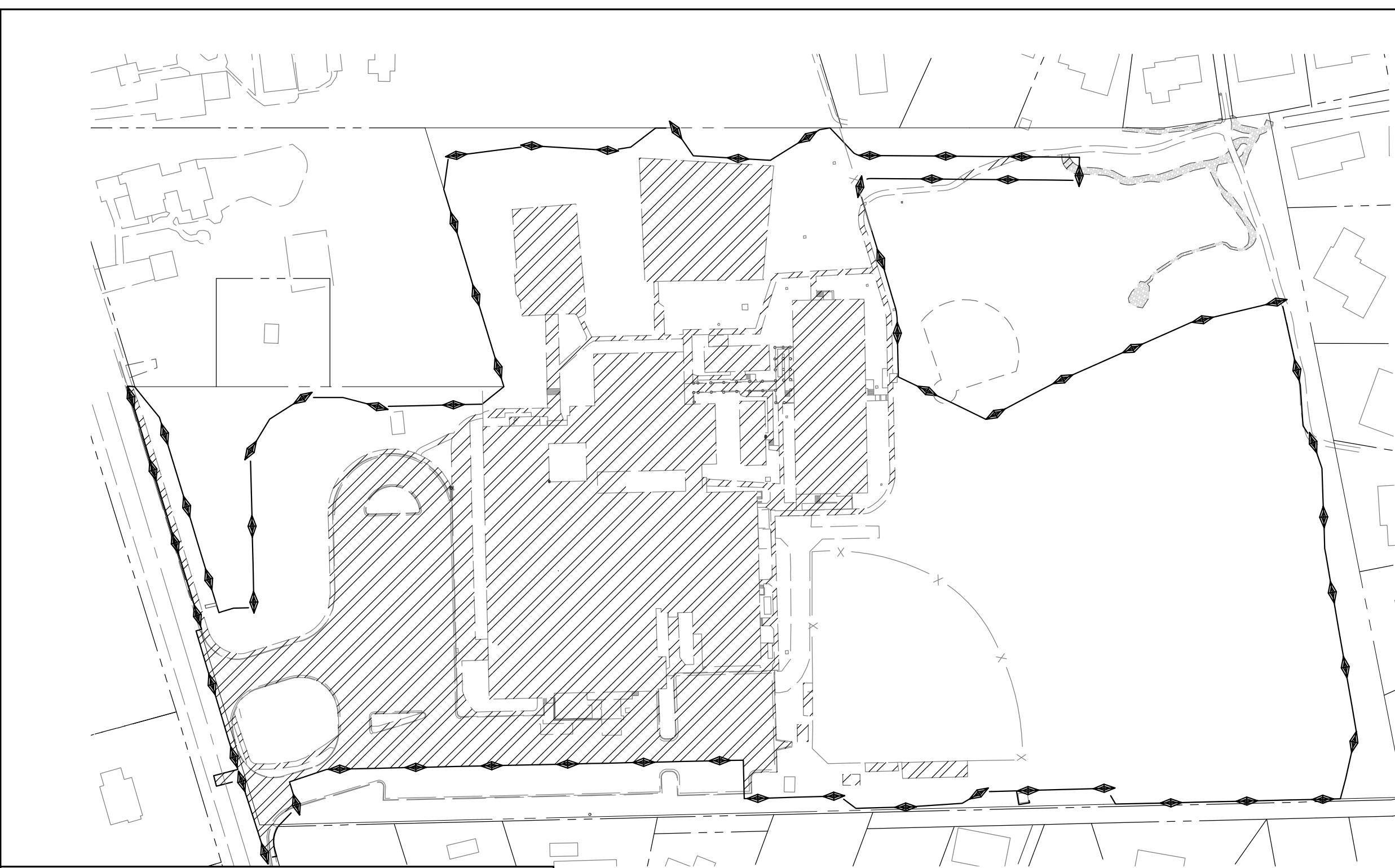
103.65

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)		Land Cover Summary-Post		Land Cover Summary-Post	
Post ReDev. & New Impervious		Post-ReDevelopment		Post-Development New Impervious	
Forest/Open Space Cover (acres)	0.00	Forest/Open Space Cover (acres)	0.00		
Weighted Rv(forest)	0.00	Weighted Rv(forest)	0.00		
% Forest	0%	% Forest	0%		
Managed Turf Cover (acres)	5.65	Managed Turf Cover (acres)	5.65		
Weighted Rv (turf)	0.25	Weighted Rv (turf)	0.25		
% Managed Turf	52%	% Managed Turf	59%		
Impervious Cover (acres)	5.20	ReDev. Impervious Cover (acres)	4.00		
Rv(impervious)	0.95	Rv(impervious)	0.95		
% Impervious	48%	% Impervious	41%		
Final Site Area (acres)	10.85	Total ReDev. Site Area (acres)	9.65		
Final Post Dev Site Rv	0.59	ReDev Site Rv	0.54		
				New Impervious Cover (acres)	1.20
				Rv(impervious)	0.95

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.5294	Post-ReDevelopment Treatment Volume (acre-ft)	0.4344	Post-Development Treatment Volume (acre-ft)	0.0950
Final Post-Development Treatment Volume (cubic feet)	23,060	Post-ReDevelopment Treatment Volume (cubic feet)	18,921	Post-Development Treatment Volume (cubic feet)	4,138
Final Post-Development TP Load (lb/yr)	14.49	Post-ReDevelopment Load (TP) (lb/yr)*	11.89	Post-Development TP Load (lb/yr)	2.60
Final Post-Development TP Load per acre (lb/acre/yr)	1.34	Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.23		
		Max. Reduction Required (Below Pre-ReDevelopment Load)	20%		
		TP Load Reduction Required for Redeveloped Area (lb/yr)	2.38	TP Load Reduction Required for New Impervious Area (lb/yr)	2.11



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BMP LAND COVER SUMMARY

**HERNDON ELEMENTARY SCHOOL
RENOVATION & ADDITION**
DRAVESVILLE ELECTION DISTRICT
TOWN OF HERNDON

REVISIONS:

PLAN DATE:	OCTOBER 18, 2023
DESIGN BY:	AAG/TAP/SAW
CHECKED BY:	JDC
ARCHITECT:	Cooper Carry
JURISDICTIONAL PLAN NO.	SE#23-01
RDA PLAN #:	22029
SHEET NUMBER:	C.13

SWM NARRATIVE

TWO SEPARATE STORMTECH MC-3500 CHAMBER FACILITIES WITH ISOLATOR ROWS ARE PROPOSED TO SATISFY ADEQUATE OUTFALL REQUIREMENTS ONSITE. ALL STORMWATER MANAGEMENT DETENTION FACILITIES SHALL BE MAINTAINED BY FAIRFAX COUNTY PUBLIC SCHOOLS.

BMP NARRATIVE

THE DISTURBED AREA PROPOSED WITH THE PROJECT IS 10.85 ACRES. THE NET INCREASE IN THE IMPERVIOUS AREA IS 1.20 ACRES. THE TOTAL TP REDUCTION REQUIRED FOR THE PROJECT IS 4.49 LB/YR. STORMTECH MC-3500 CHAMBERS WITH ISOLATOR PLUS ROWS ARE PROPOSED TO ACHIEVE THE BMP REQUIREMENTS. STORMTECH ISOLATOR ROWS ARE DEQ APPROVED AND HAVE BEEN AWARDED 40% TP REMOVAL EFFICIENCY. ONE STORMTECH MC-3500 CHAMBER SYSTEM WITH ISOLATOR ROWS WILL CAPTURE DRAINAGE AREA A AND A SECOND STORMTECH MC-3500 CHAMBER SYSTEM WITH ISOLATOR ROWS WILL CAPTURE DRAINAGE AREA B AS SHOWN ON THE PROPOSED BMP DRAINAGE MAP (SEE THIS SHEET.) VRRM SPREADSHEET RESULTS SHOW TP REDUCTION ACHIEVED BY DRAINAGE AREA A TO BE 2.17 LB/YR AND TP REDUCTION ACHIEVED BY DRAINAGE AREA B TO BE 2.34 LB/YR FOR A TOTAL OF 4.51 LB/YR. THEREFORE, THE ENTIRE REDUCTION REQUIREMENT IS MET ON-SITE.

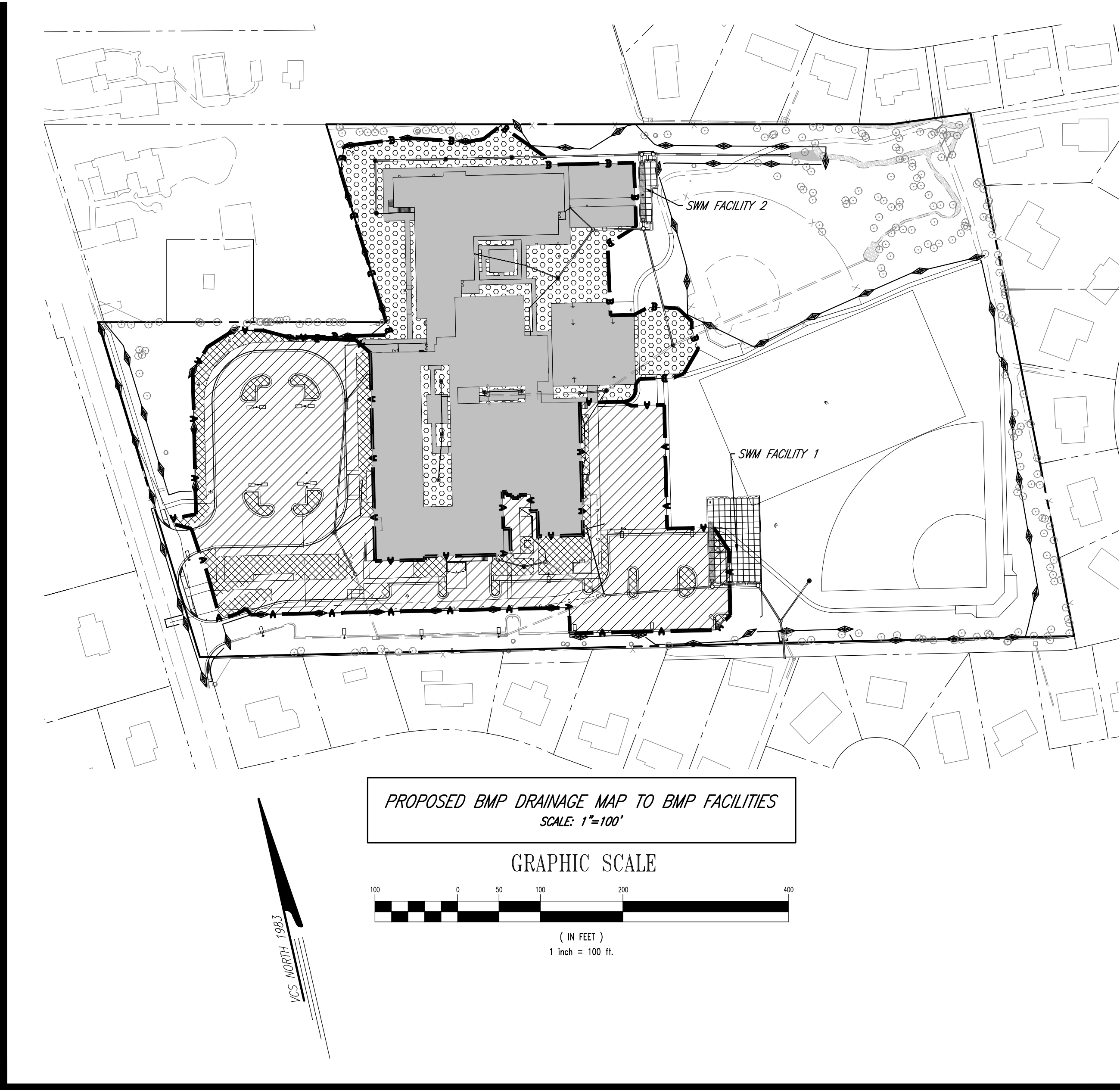
SW-10 CERTIFICATION

THERE ARE NO WATER IMPOUNDMENTS LOCATED WITHIN THE INFLUENCE AREA OF THIS PROJECT.

RPA CERTIFICATION

THIS PROJECT CONFORMS TO THE CHESAPEAKE BAY PRESERVATION ORDINANCE AMENDMENT WHICH WAS ADOPTED BY THE BOARD OF SUPERVISORS ON JULY 7, 2003; EFFECTIVE NOVEMBER 18, 2003 AND AMENDMENTS THROUGH JULY, 2005. THERE ARE NO AREAS OF RPA'S ON THIS SITE PER CURRENT COUNTY MAPPING.

Site Compliance Summary			
Maximum % Reduction Required Below Pre-ReDevelopment Load		20%	
Total Runoff Volume Reduction (ft ³)	0	** TARGET TP	
Total TP Load Reduction Achieved (lb/yr)	4.51		
Total TN Load Reduction Achieved (lb/yr)	0.00		
Remaining Post Development TP Load (lb/yr)	9.98		
Remaining TP Load Reduction (lb/yr) Required	0.00		

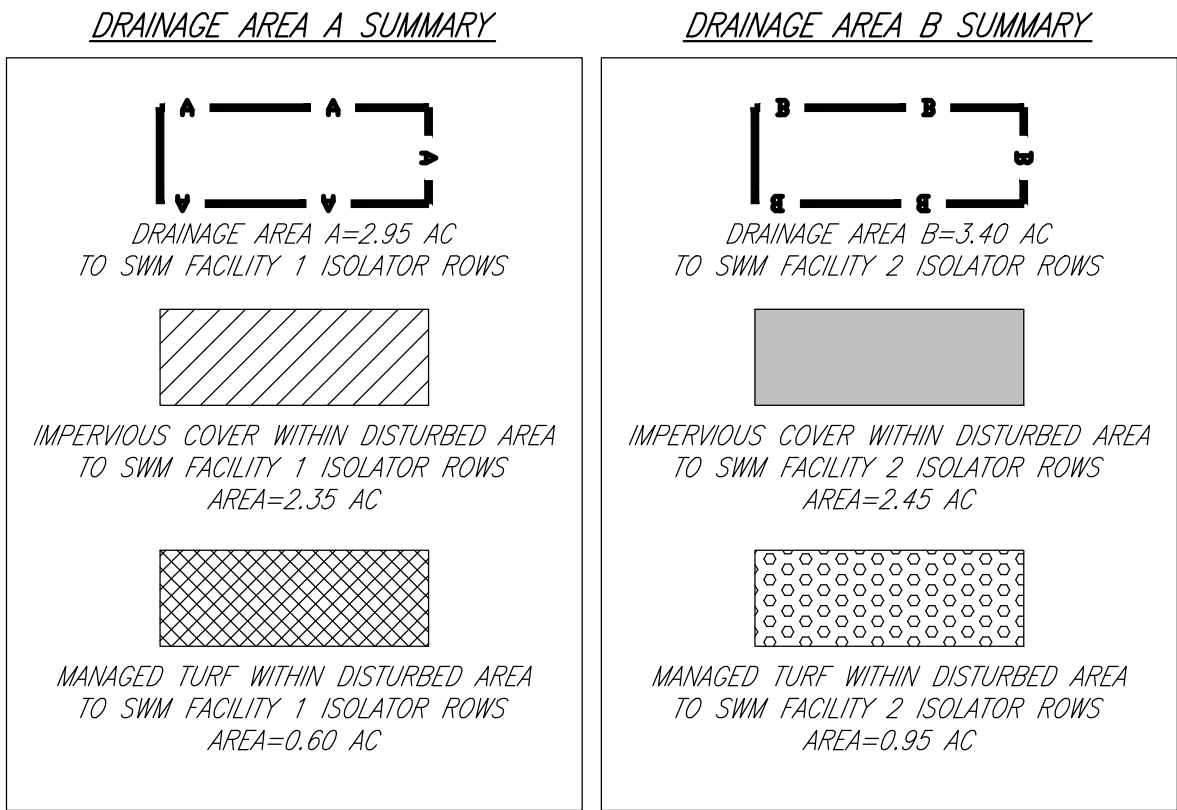


DRAINAGE AREA A VRRM INFORMATION

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft ³)	Runoff Reduction (ft ³)	Remaining Runoff Volume (ft ³)	Total BMP Treatment Volume (ft ³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
14. Manufactured Treatment Devices (no RR)													
14.b. Manufactured Treatment Device-Filtering	0	0.60	2.35	0	0	8,648	8,648	40	0.00	5.43	2.17	3.26	None

DRAINAGE AREA B VRRM INFORMATION

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft ³)	Runoff Reduction (ft ³)	Remaining Runoff Volume (ft ³)	Total BMP Treatment Volume (ft ³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
14. Manufactured Treatment Devices (no RR)													
14.b. Manufactured Treatment Device-Filtering	0	0.95	2.45	0	0	9,311	9,311	40	0.00	5.84	2.34	3.51	



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SWM -BMP NARRATIVE & COMPUTATIONS

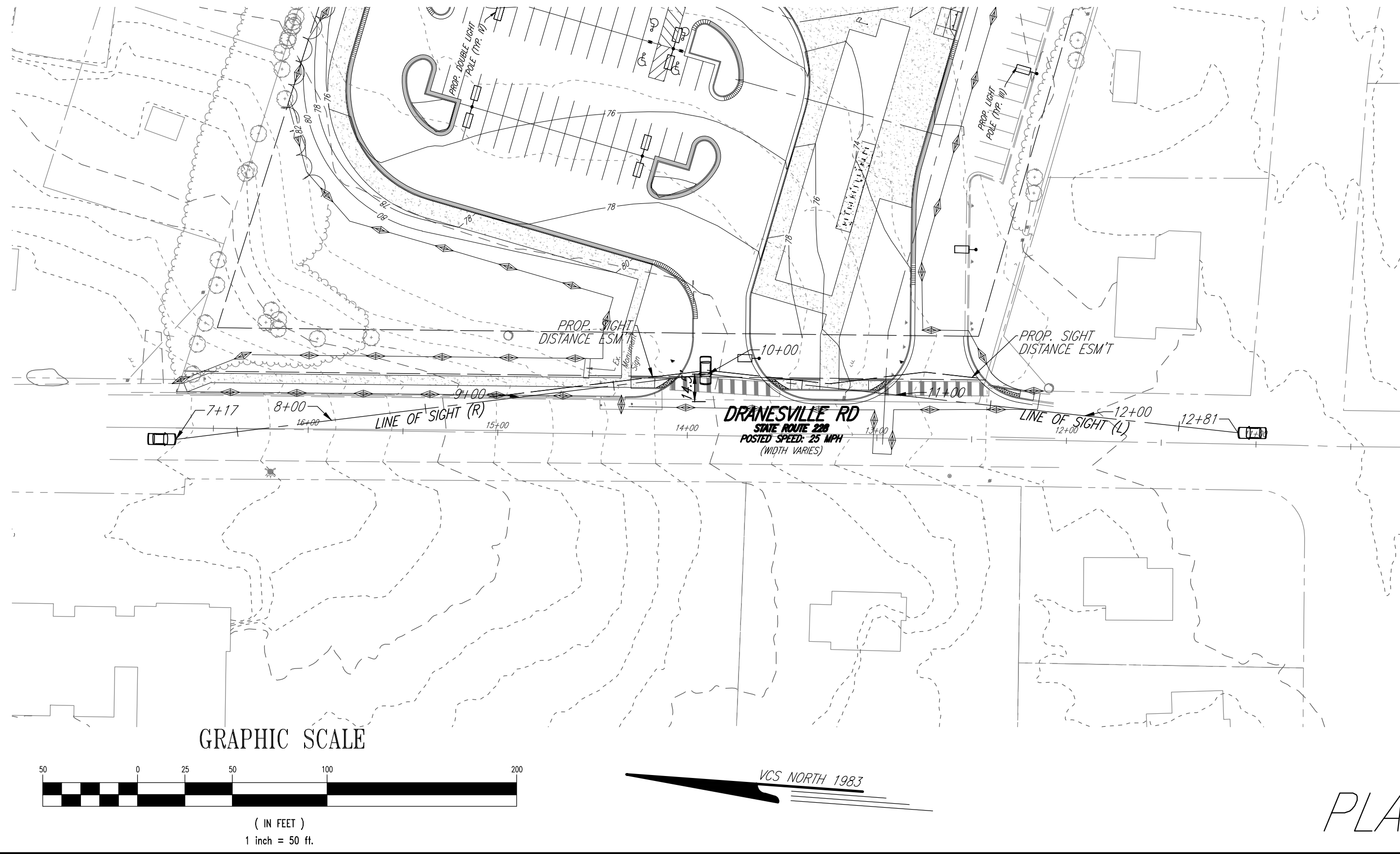
HERNDON ELEMENTARY SCHOOL
RENOVATION & ADDITION

DRANESVILLE ELECTION DISTRICT
TOWN OF HERNDON

REVISIONS:

PLAN DATE:	OCTOBER 18, 2023
DESIGN BY:	AAG/TAP/SAW
CHECKED BY:	JDC
ARCHITECT:	Cooper Carry
JURISDICTIONAL PLAN NO.:	SE#23-01
RDA PLAN #:	22029
SHEET NUMBER:	C.14

DRANESVILLE ROAD NORTH ENTRANCE

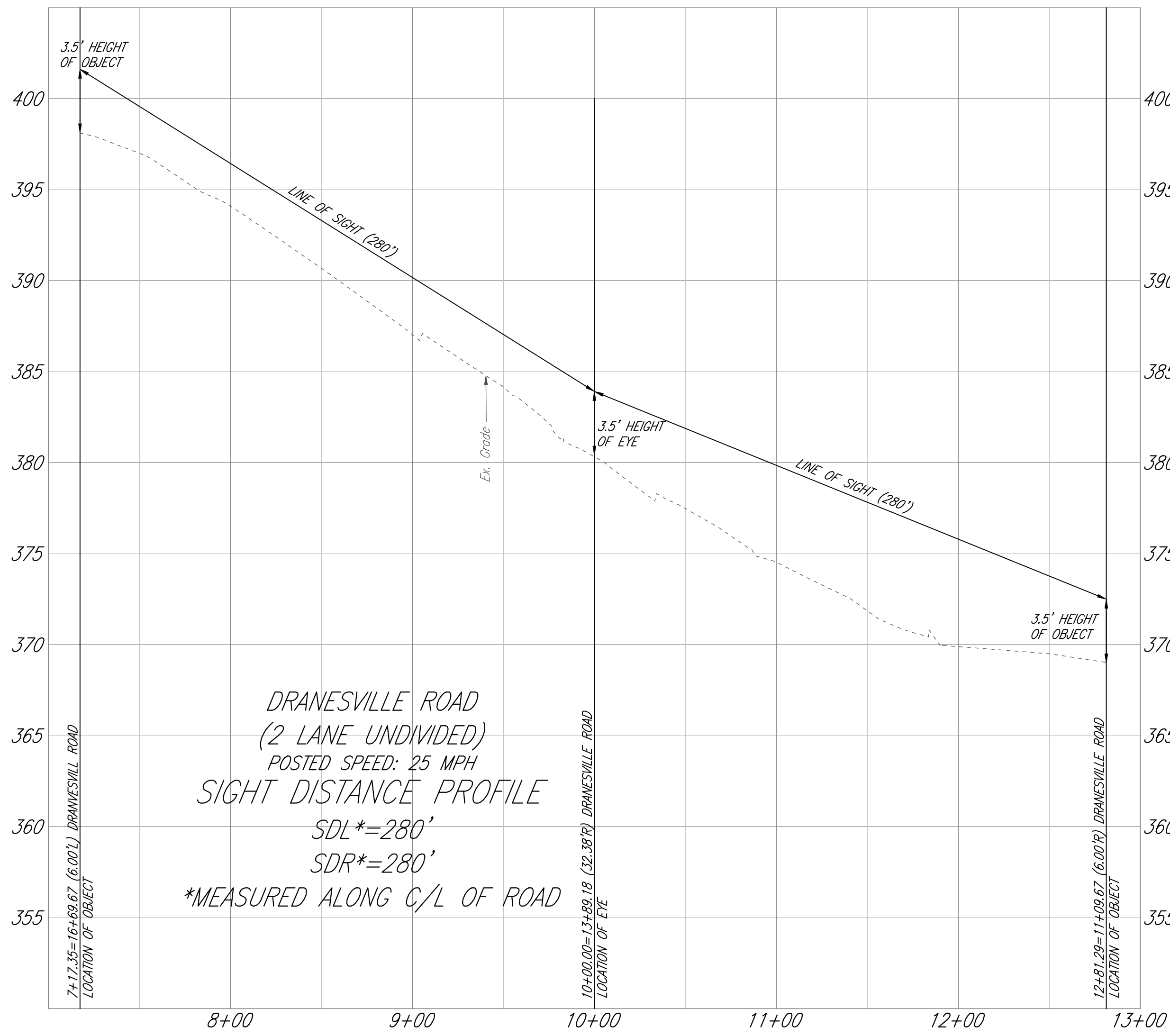


DRANESVILLE ROAD SOUTH ENTRANCE

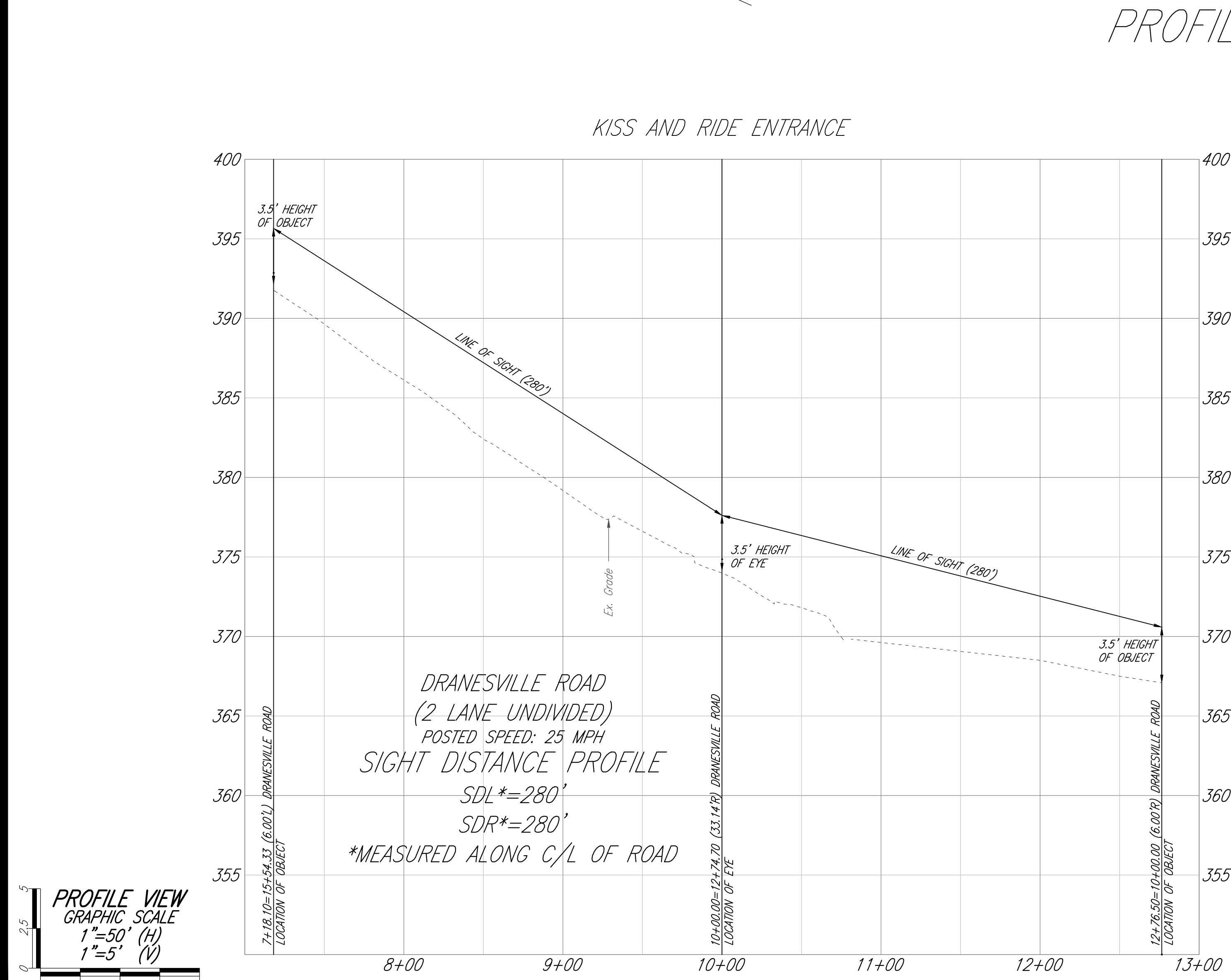


BUS LANE ENTRANCE

PROFILE



KISS AND RIDE ENTRANCE



Rinker Design Associates, P.C.
11100 Endeavor Court, Suite 200, Manassas, VA 20109
Telephone: (703) 368-7373 www.rdacivil.com
Engineering * Surveying * Transportation * Environmental Services

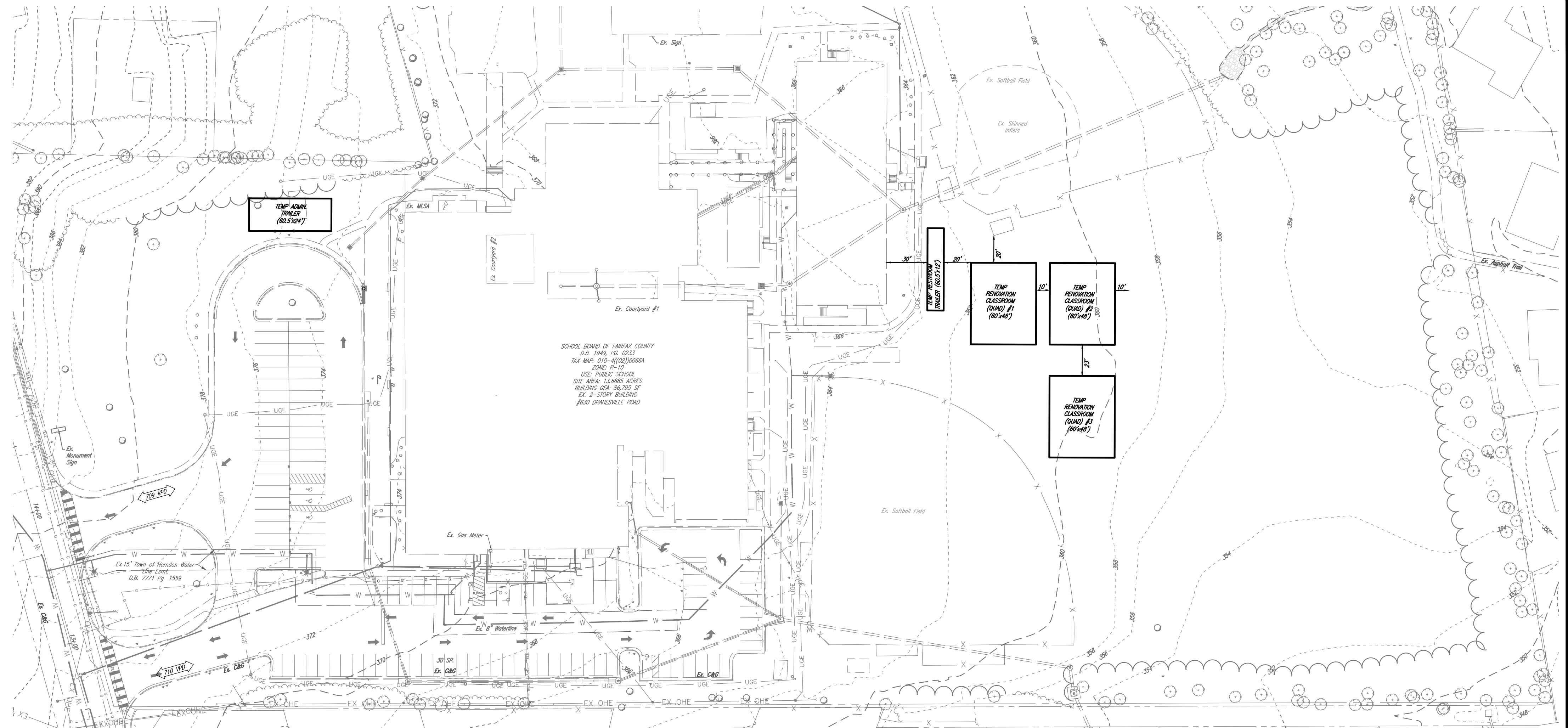
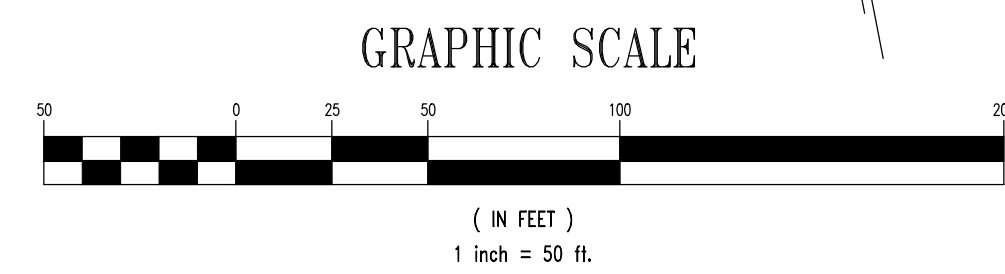
SIGHT DISTANCE PROFILES

**HERNDON ELEMENTARY SCHOOL
RENOVATION & ADDITION**
DRANESVILLE ELECTION DISTRICT
TOWN OF HERNDON

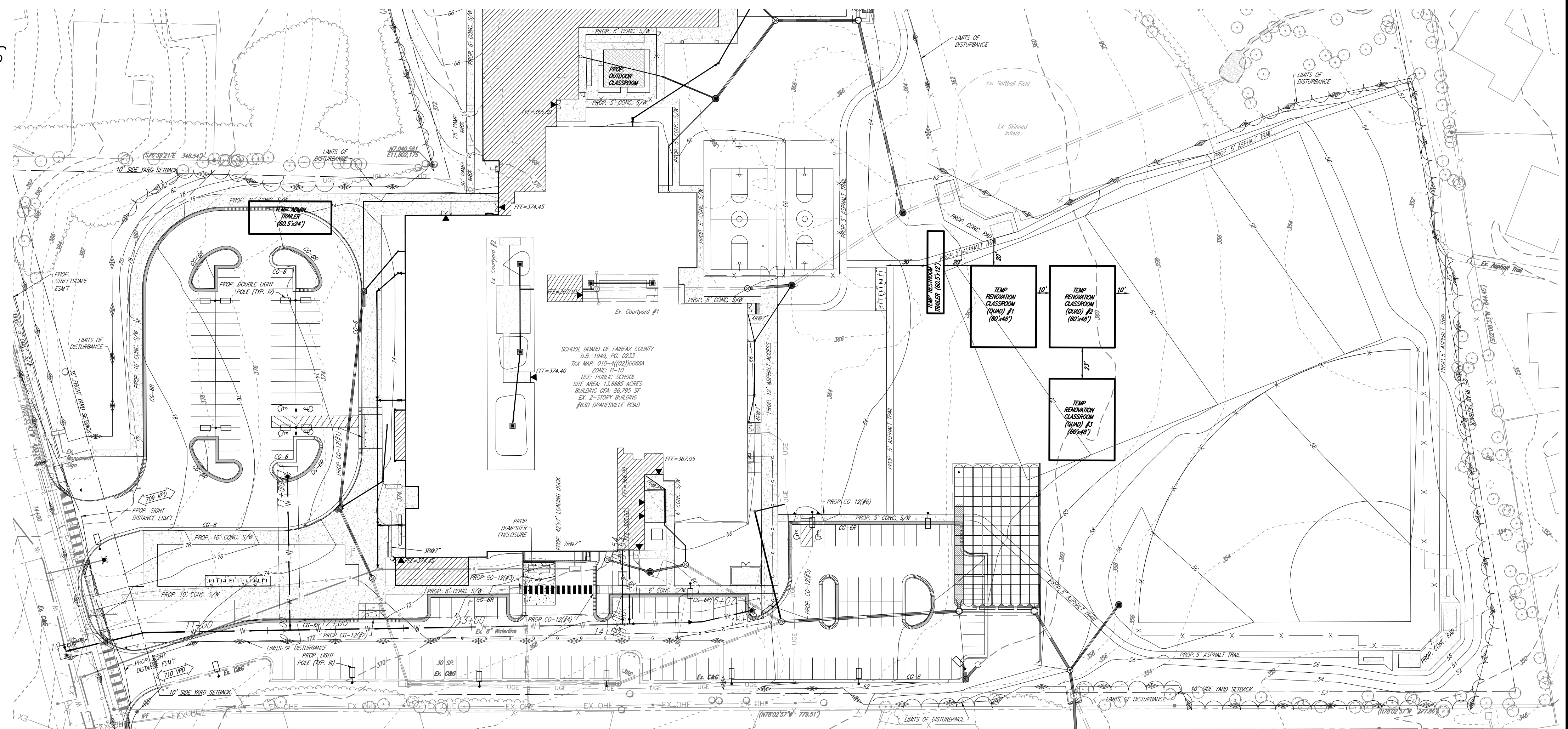
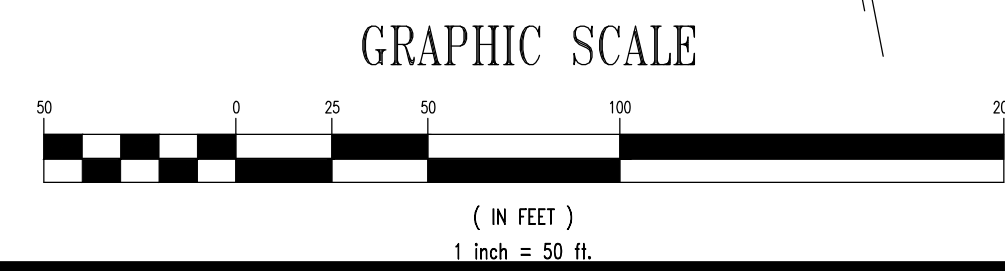
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RDA PLAN #:	22029
SHEET NUMBER:	C.15

EXISTING CONDITIONS



PROPOSED CONDITIONS



NOTE: THE FINAL LOCATION FOR THESE TEMPORARY FACILITIES WILL BE DETERMINED AT THE TIME OF THE TEMPORARY USE PERMIT.





WELLS + ASSOCIATES

HERNDON ELEMENTARY SCHOOL

SE#23-01

TRAFFIC STUDY – 2ND SUBMISSION

March 28, 2023

As Revised Through October 17, 2023



HERNDON ELEMENTARY SCHOOL TRAFFIC STUDY TOWN OF HERNDON, VIRGINIA

2nd Submission

SE# 23-01

Prepared for:

Fairfax County Public Schools (Applicant)

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March 28, 2023

As Revised Through October 17, 2023

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**HERNDON ELEMENTARY SCHOOL
TRAFFIC STUDY
TOWN OF HERNDON, VIRGINIA**

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HERNDON ELEMENTARY SCHOOL
TRAFFIC STUDY
TOWN OF HERNDON, VIRGINIA

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HERNDON ELEMENTARY SCHOOL
TRAFFIC STUDY
TOWN OF HERNDON, VIRGINIA

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**HERNDON ELEMENTARY SCHOOL
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**HERNDON ELEMENTARY SCHOOL
TRAFFIC STUDY
TOWN OF HERNDON, VIRGINIA**

LIST OF APPENDICES

APPENDIX	TITLE
A	Scope of Work Agreement Letter & Comment/Response Memo
B	Levels of Service Descriptions
C	Traffic Count Data
D	Existing Synchro Worksheets
E	Future Synchro Worksheets
F	Crash Data

Section 1 INTRODUCTION

PURPOSE

This report presents the results of a traffic study in support of a Special Exception application that seeks to renovate the existing Herndon Elementary School as well as incorporate additional information to address comments received from Town of Herndon staff based on their review of the 1st submission Traffic Study. The renovation project would remove the school's existing trailer/modular educational space that currently serves existing student design capacity totals. The new permanent building area that is proposed as part of a comprehensive renovation project will bring the overall Herndon Elementary School up to applicable building code standards and educational requirements where in part it will not fully replace the student design capacity lost with the removal of existing trailer/modular space resulting. The proposed new student design capacity is proposed to be reduced and limited to 1,050 students. The renovation project also seeks to improve the site's on-site stacking and internal vehicle circulation by eliminating on-site vehicular conflicts between school buses and parent pick-up/drop-off activities. An assessment of the project's proposal to improve its internal vehicle circulation is the primary purpose of this traffic study.

SITE LOCATION

As shown in Figure 1-1, the Herndon Elementary School site is generally located in the northeast quadrant of the Dranesville Road (Route 2492)/Fillmore Street (Route 2561) intersection with a street address of 630 Dranesville Road in the Town of Herndon, Virginia. The ±13.885-acre property is also identified as Parcel # 010-4 ((02)) 66A.

EXISTING CONDITIONS

The existing Herndon Elementary School is comprised of the following:

- Fixed Building Area* = ±85,165 square feet of gross floor area (GFA)
- Trailer/modular Area* = ±15,264 GFA
- Total Existing Building Area* = ±100,429 GFA
- Current Enrollment* = ±805 students
- Existing Student Design Capacity = ±1,232 students (includes trailer/modular area)
- Regular School Hours: Monday – Friday, 9:20 AM – 4:05 PM
- Office Hours: Monday – Friday, 8:00 AM – 4:30 PM

** Subsequent to the traffic study scoping meeting and 1st submission traffic study, the Application required minor updates to the presented floor areas and current student enrollment based on new project information and refinements. The current student enrollment provided in this traffic study specifically correlates to the school enrollment on the day that traffic counts and field observations were collected on Wednesday, February 01, 2023.*

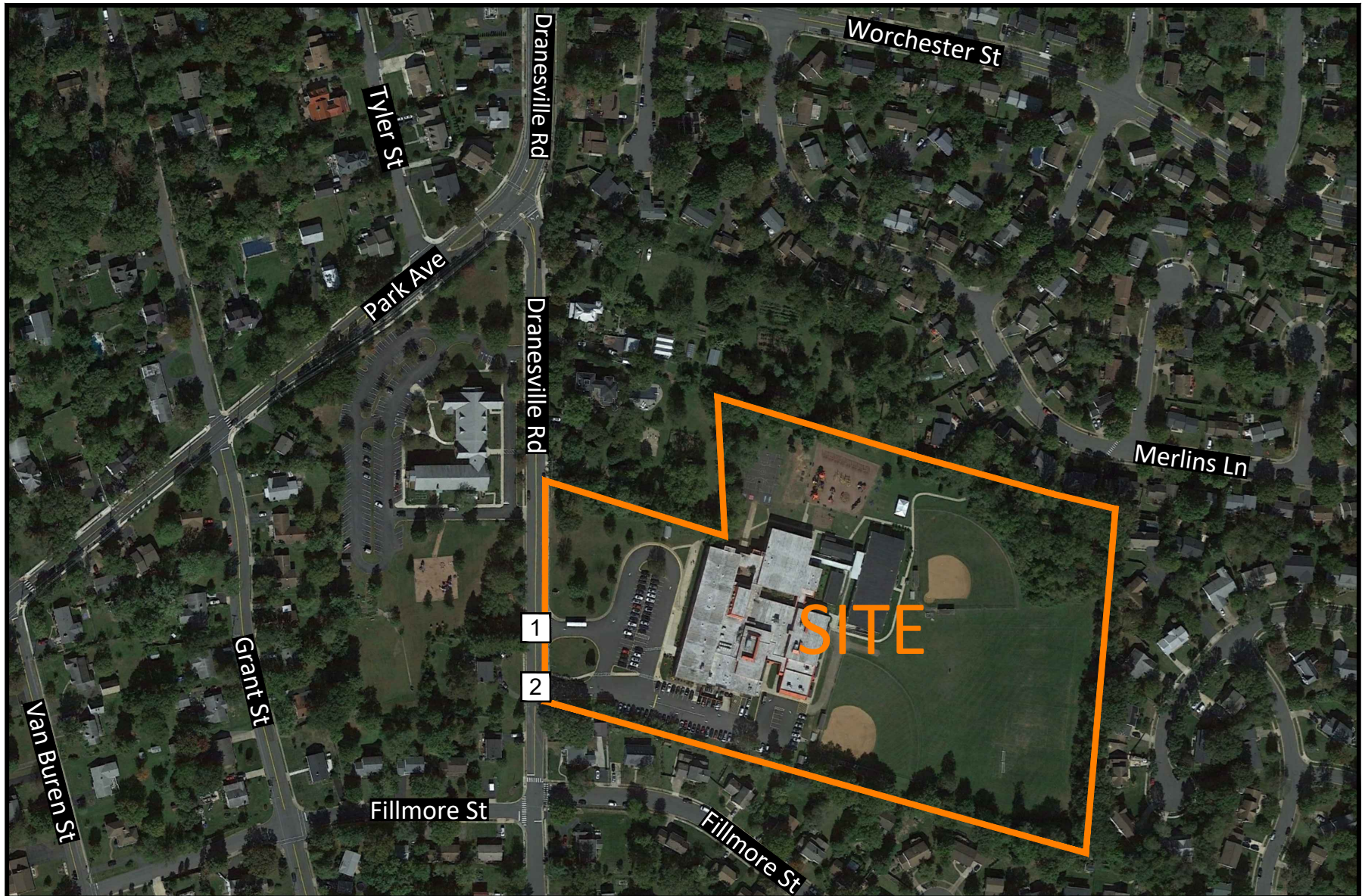


Figure 1-1
Site Location and Study Intersections



NORTH

Herndon Elementary School
Town of Herndon, Virginia



Study Intersection

2

Existing Site Access: As shown on Figure 1-2, access is currently provided by two (2) existing driveways on Dranesville Road. The northern driveway serves as an egress only for school buses and limited school staff. The nearby southern driveway serves both ingress and egress traffic movements and serves as the sole driveway for all entering school buses, staff, and student pick-up/drop-off operations. Egress movements at the southern site driveway includes all user types except for school buses.

PROPOSED CONDITIONS

As stated previously, the renovation project proposes to remove the school's existing trailer/modular educational space that currently serves existing student design capacity totals. The new permanent building area that is proposed as part of a comprehensive renovation project will bring the overall Herndon Elementary School up to applicable building code standards and educational requirements where in part it will not fully replace the student design capacity lost with the removal of existing trailer/modular space resulting. The proposed new student design capacity is proposed to be reduced and limited to 1,050 students.

The proposed renovation project ("the Project") will result in the following development program:

- Existing Fixed Building Area* = ±85,165 GFA
- Proposed New Building Area* = ±44,039 GFA
- Total Proposed Building Area * = ±129,204 GFA [or ±28,775 more GFA than the total existing building area (fixed + modular)]
- Proposed Student Design Capacity = ±1,050 students (or ±182 fewer students than the existing design capacity)

** Subsequent to the traffic study scoping meeting and 1st submission of the traffic study, the Application required minor updates to the presented floor areas based on new project information and refinements.*

Proposed Site Access: As shown on Figure 1-3, the site would continue to be served by two (2) separate driveways on Dranesville Road at the same locations that exist today. However, the internal site layout will be modified to meet FCPS' current standards by physically separating the bus circulation area from the student drop-off/pick-up area thereby eliminating vehicular conflicts and improving safety between these key users. To improve on-site vehicle queuing (or stacking), the drop-off/pick-up area will be relocated to the front of the school with an enhanced and longer queueing area. Pedestrian circulation will also be enhanced by removing the key internal vehicular/pedestrian conflicts that exist today between pedestrians and school buses turning internally into the school bus drop-off-/pick-up zone.





Herndon Elementary School
Town of Herndon, Virginia

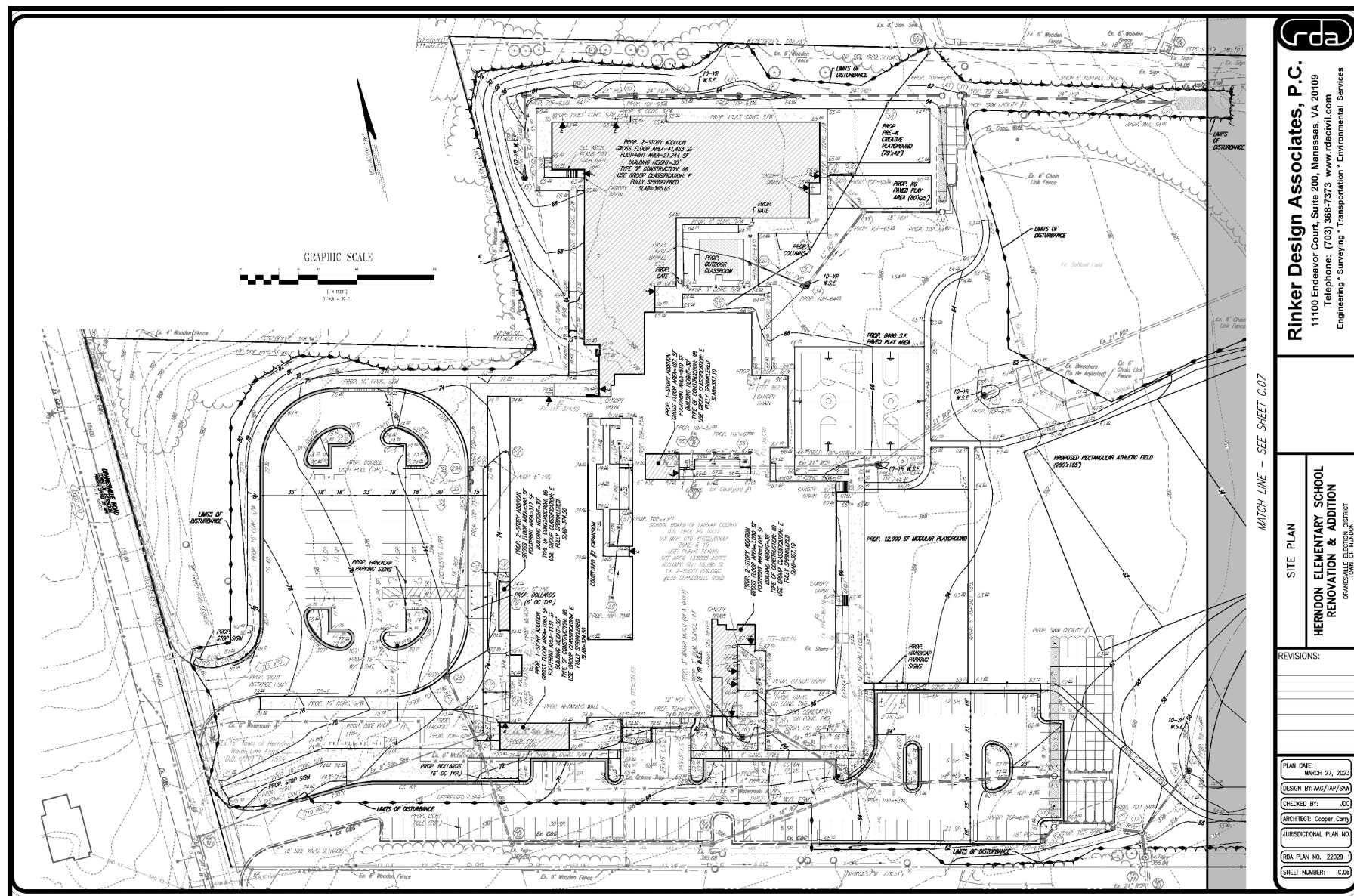


Figure 1-3
Proposed Conditions Plan (Reduction)

SCOPING MEETING

In the Commonwealth of Virginia, all land development proposals which meet certain specific trip generation thresholds, are subject to the regulations outlined in VDOT's *Traffic Impact Analysis Regulations Administrative Guidelines* dated August 2022 (the "Administrative Guidelines" or "Guidelines"). According to the Guidelines, a development proposal is generally considered to substantially impact the transportation network if it generates 5,000 or more daily vehicle trips. Based on a review of the Applicant's proposed development plan, a Chapter 870 compliant TIA was **not** required.

However, a traffic study is required by the Town of Herndon in order to assess the impacts, if any, associated with the renovation project. The purpose of this report is then to address the results of such an analysis. To that end, representatives of the development team met with Town of Herndon staff on January 20, 2023 to identify the study scope and agree on certain specific study parameters. A copy of the scoping letter is included in Appendix A. This traffic study incorporates additional information to address comments received from Town of Herndon staff and subsequent conversations. Appendix A includes responses to each of the Town's comments.

STUDY AREA

This study was conducted in accordance with the parameters set forth in the scoping letter that was agreed to by the Town of Herndon and the Applicant's representatives (see Appendix A). The study area that was limited to the Project's existing site driveways given the proposed student design capacity would be reduced when compared to existing conditions.

STUDY OBJECTIVES

The primary objectives of the traffic study are to:

- Evaluate the school's existing weekday AM and weekday PM peak hours for year 2023.
- Evaluate future conditions based solely on reassigning the existing measured traffic to the proposed circulation layout.
- Summarize the proposed access layout improvements as compared to the existing condition.
- Identify development-related traffic impacts (if any).
- Evaluate the existing site driveways against VDOT's minimum spacing requirements based on VDOT's Road Design Manual.
- Discuss relative impacts to off-site intersections located outside of the study area intersections.
- Document any available crash data that might be available via VDOT and/or the Town of Herndon at the study intersections.

- Recommend improvements to mitigate potential adverse effects which might be caused by the Project.

Sources of data for this analysis included traffic counts conducted by Wells + Associates; the Institute of Transportation Engineers (ITE); Town of Herndon; VDOT; Fairfax County Public Schools; Rinker Design Associates, PC; Cooper Carry; the Highway Capacity Manual 2000; Synchro version 11; and the files and libraries of Wells + Associates.

The traffic study analysis tasks undertaken in this study included the following:

1. Reviewed the Applicant's proposed plans and other background data.
2. Conducted a field reconnaissance of existing roadway and intersection geometries, and traffic controls.
3. Participated in meetings/correspondence with Town of Herndon staff, and the project team to establish the general study scope and specific analysis parameters.
4. Conducted existing traffic counts at the Project's existing site driveways during the school's weekday AM and weekday PM peak periods.
5. Calculated existing 2023 levels of service and vehicle queues at each site driveway during typical weekday peak hours.
6. Reassigned the existing site driveway traffic based on the proposed internal layout improvements.
7. Calculated peak hour total future levels of service and vehicle queues for each site driveway based on the proposed internal layout and the reassigned existing traffic.
8. For comparison purposes:
 - a. Estimated the number of weekday peak hour trips that would be generated by the school's existing student design capacity versus proposed student design capacity based on standard Institute of Transportation Engineers (ITE) 11th edition, Trip Generation Manual rates and/or equations.
 - b. Estimated the number of weekday peak hour trips that would be generated by the school's current student enrollment based on standard ITE 11th edition, Trip Generation Manual rates and/or equations versus the field measured trip generation.
9. Identified traffic improvements that would be realized by the proposed site layout enhancements.

STUDY METHODOLOGY

Synchro software (version 11) was used to evaluate levels of service at the study intersections during the school's weekday AM and weekday PM peak hours. Synchro is a macroscopic model used for optimizing traffic signal timing and performing capacity analyses. The software can model existing traffic for individual intersections, an arterial, or a complete network. Synchro allows the user to evaluate the effects of changing intersection geometrics, traffic demands, traffic control, and/or traffic signal settings as well as optimize traffic signal timings.

The levels of service reported for the signalized intersections analyzed herein were taken from the Highway Capacity Manual 2000 (HCM) reports generated by Synchro version 11. Level of service descriptions are included in Appendix B.

Section 2 BACKGROUND INFORMATION

ROAD NETWORK

Dranesville Road (Route 2492). In the vicinity of the site, Dranesville Road is a north-south, two-lane roadway classified as a “local” street with a posted speed limit of 25 miles per hour (mph). “No Parking” signs are posted on both sides of Dranesville Road within the immediate vicinity of the school driveways and between the school driveways and Fillmore Street. On-street parking is permitted on the east side of Dranesville Road approximately 50 feet north of the site’s north school driveway, as measured from its northern edge line. On-street parking is also permitted on the west side of Dranesville Road approximately 220 feet north of the site’s northern school driveway, as measured from its northern edge line. Dranesville Road intersects Fillmore Street (Route 2561) to the south at a four-legged, ALL-WAY STOP controlled intersection. Dranesville Road intersects Park Avenue (Route 228) to the north at a T-intersection where Dranesville Road’s northbound approach is the sole STOP controlled approach. There is a single-family detached home on the opposite side of the school’s driveways that is served by two (2) curb cuts.

Fillmore Street (Route 2561). In the vicinity of the site, Fillmore Street is an east-west, two-lane roadway classified as a “local” street that serves a single-family detached neighborhood. A speed limit sign is not posted but the assumed speed limit is 25 mph or less given the character of the residential neighborhood. Parking is typically permitted along both sides of the street. As discussed previously, Dranesville Road intersects Fillmore Street (Route 2561) at a four-legged, ALL-WAY STOP controlled intersection. Fillmore Street’s eastern and western traffic legs have a minor off-set to each other at their intersection with Dranesville Road.

PEDESTRIAN FACILITIES

As shown on Figure 2-1, pedestrian facilities serving the area include approximately four (4) foot wide sidewalks along the east and west sides of Dranesville Road within the immediate vicinity of the site. High visibility crosswalks are striped across each school driveway.

The nearby Dranesville Road/Fillmore Street intersection provides high visibility crosswalks across its north, east, and west traffic legs.

Fillmore Street provides sidewalks along both sides of the street east of the Dranesville Road/Fillmore Street intersection but only on the south side of Fillmore Street along the west side of the Dranesville Road/Fillmore Street intersection.

There are no mid-block crosswalks along Dranesville Road or Fillmore Street within the vicinity of the site. There are off-street pedestrian connections to/from the nearby residential neighborhoods to the north and east of the site.

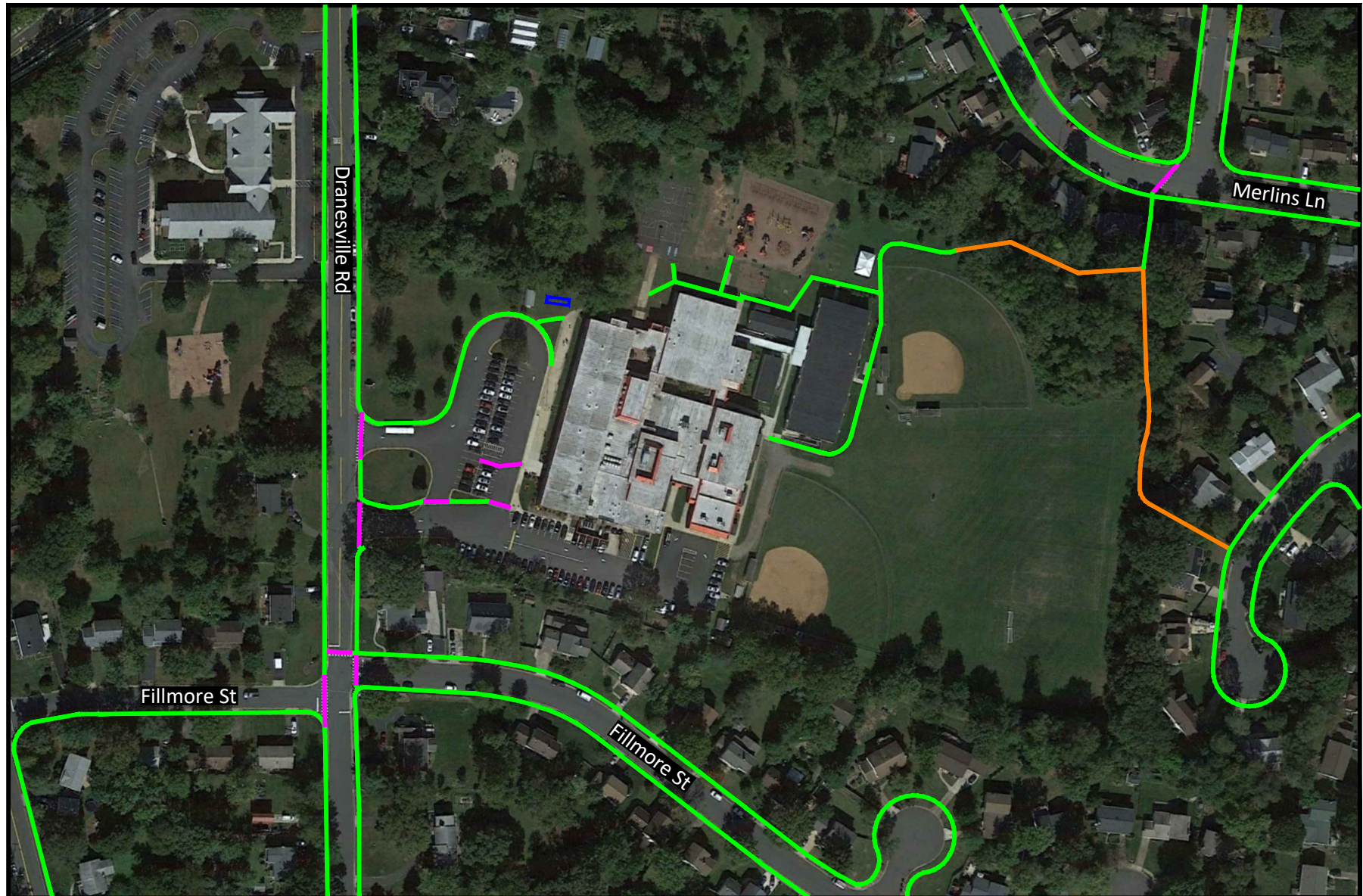


Figure 2-1
Existing Pedestrian Facilities

- Bike Racks Location
- Concrete Sidewalk
- Asphalt Trail
- Marked Crosswalk



NORTH

Herndon Elementary School
Town of Herndon, Virginia



SCHOOL BUS UTILIZATION

According to FCPS, approximately 86 percent of their current student enrollment utilizes school buses to travel to/from school.

TRIP GENERATION ASSESSMENT

The total site generated traffic for existing and future conditions at the Herndon Elementary School were estimated based on standard ITE 11th edition, Trip Generation Manual rates and/or equations using ITE Land Use Code 520 (Elementary School). ITE describes an “Elementary School” as follows:

“An elementary school is a public school that typically serves students attending kindergarten through the fifth or sixth grade. An elementary school is usually centrally located in a residential community to facilitate student access. Bus service is commonly provided to students living beyond a specified distance from the school.”

As shown on Table 2-1, trip generation estimates were based on the school’s current enrollment (± 805 students*), existing design capacity (1,232 students), and Proposed Design Capacity (1,050 students).

** Subsequent to the traffic study scoping meeting, the Application required minor updates to the presented floor areas and current student enrollment based on new project information and refinements. The current student enrollment provided in this traffic study specifically correlates to the school enrollment on the day that traffic counts and field observations were collected on Wednesday, February 01, 2023.*

For the purpose of this trip generation analysis, a comparison between the existing and proposed student capacity was evaluated. The proposal reduces the design capacity by 182 students which results in the following fewer trips according to ITE:

- 136 fewer AM peak hour trips (of the generator)
- 135 fewer AM peak hour trips (of the adjacent street)
- 82 fewer PM peak hour trips (of the generator)
- 413 fewer daily trips

Table 2-1
Herndon Elementary School
Site Trip Generation Summary (1)

Scenario	ITE Land Use	Land Use Code	Amount Units		Weekday									
					AM Peak Hour						PM Peak Hour			
					of the Generator			of the Adjacent Street			of the Generator			Daily Trips
In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	Trips		
Current Enrollment (Field)	Elementary School	Field (2)	805	Students	148	108	256	148	108	256	62	113	175	n/a
Current Enrollment (ITE)	Elementary School	520	805	Students	326 55%	278 61%	604 58%	322 54%	274 61%	596 57%	167 63%	196 42%	363 52%	1,828 n/a
Existing Design Capacity (incl. modulars & 2-duplexes)	Elementary School	520	1,232	Students	499	425	924	492	420	912	255	300	555	2,797
Proposed Design Capacity	Elementary School	520	1,050	Students	426	362	788	420	357	777	218	255	473	2,384
Difference (Proposed Design Capacity minus <u>Current Enrollment</u>)			245	Students	100	84	184	98	83	181	51	59	110	556
Difference (Proposed Design Capacity minus <u>Existing Design Capacity</u>)			(182)	Students	(73)	(63)	(136)	(72)	(63)	(135)	(37)	(45)	(82)	(413)

Note(s):

(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 11th Edition.

(2) Field traffic counts were collected on Wednesday, February 01, 2023.

Section 3 ACCESS AND CIRCULATION ASSESSMENT

CURRENT OPERATIONS

As discussed previously, site access is currently provided by two (2) existing driveways on Dranesville Road. The northern driveway serves as an egress only for school buses and limited school staff. The nearby southern driveway serves both ingress and egress traffic movements and serves as the sole entrance for all entering school buses, staff, and student pick-up/drop-off operations. Egress movements at the southern driveway includes all user types except for school buses. The purpose of this section is to focus on the southern site driveway while understanding multiple means of drop-off and pick-up activities occur surrounding the site on adjacent streets.

FIELD OBSERVATIONS ON WEDNESDAY, FEBRUARY 1, 2023

Traffic Safety Attendant. The Herndon Elementary School utilized a traffic safety attendant at its southern site driveway on Dranesville Road to control vehicular and pedestrian movements during the school's key AM and PM student drop-off/pick-up periods.

AM Peak Period Operations. The key traffic impact period when students arrive for their 9:20 AM arrival (late) bell is generally limited and isolated to an approximate 15-minute period between 9:00 AM and 9:15 AM.

Prior to 9:00 AM, vehicles dropping off students have already queued on-site at the internal drop-off area at the back of the school and school buses continue to arrive.

At 9:00 AM, or just after, is when the on-site drop-off vehicle queue begins to spill back and approach Dranesville Road. The 9:00 AM period is also when a traffic safety attendant takes control of the vehicular and pedestrian movements at the site's southern driveway.

Between 9:00 AM and 9:15 AM, the following key activities and constraints were observed based on the current access and circulation scheme:

- 1) Upon school buses entering the site, school buses must yield their left-turn movements to internal pedestrian traffic that must walk cross an internal drive aisle that connects the student pick-up/drop-off area from the school bus drop-off/pick-up zone.
- 2) When the entering traffic movement at the site's southern driveway is blocked by the drop-off vehicle queue, all arriving school buses must now enter the site using its single egress lane.
- 3) Upon vehicles dropping off students at the back of the school site, those vehicles are held from leaving the site to assure school buses can still efficiently enter the site using the previously noted egress lane. This creates and sustains a growing entering vehicle queue

that spills into and along Dranesville Road. The primary vehicle queue on Dranesville Road was observed to occur along its southbound approach to the site driveway.

- 4) As a result of the off-site vehicle queue along southbound Dranesville Road, arriving school buses must straddle the double yellow line along Dranesville Road to by-pass the vehicle queue.
- 5) The first drop-off vehicles are finally permitted to leave the site by approximately 9:09 AM where they are predominately directed to exit the site as a right-out only on Dranesville Road.
- 6) Within approximately five (5) minutes of the drop-off vehicles having been released to leave the site, the entering drop-off vehicle queue begins to reduce and subsequent arriving school buses begin to position themselves behind the entering vehicle queue.
- 7) At approximately 9:16 AM, or the end of the key 15-minute traffic period, the traffic safety attendant leaves their post and the entering vehicle queue has subsided and no longer impacts Dranesville Road.

PM Peak Period Operations. The key traffic impact period when students leave at their 4:05 PM dismissal bell is generally limited and isolated to an approximate 22-minute period between 3:50 PM and 4:12 PM.

Prior to 3:50 PM, vehicles arriving to pick-up students have already queued on-site at the internal drop-off area at the back of the school and school buses continue to arrive.

At 4:03 PM is approximately when the traffic safety attendant returns to take full control of the vehicular and pedestrian movements at the site's southern driveway on Dranesville Road.

Between 3:50 PM and 4:12 PM, the following key activities and constraints were observed based on the current access and circulation scheme:

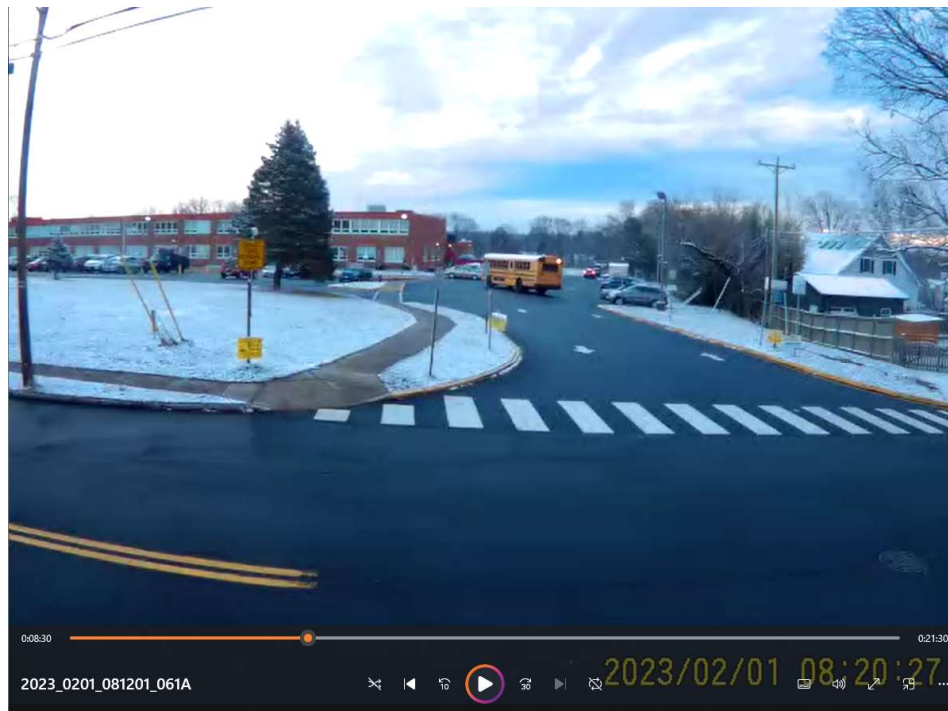
- 1) Similar to the morning drop-off period, upon school buses entering the site, school buses must yield their left-turn movements to internal pedestrian traffic that must walk cross an internal drive aisle that connects the student pick-up/drop-off area from the school bus drop-off/pick-up zone.
- 2) When the entering traffic movement at the site's southern driveway is blocked by the pick-up vehicle queue, all arriving school buses must now enter the site using its single egress lane.
- 3) Upon vehicles picking up students at the back of the school site, those vehicles are held and released from leaving the site pending an internal attendant's visibility of a school bus trying to enter the school site using the egress lane. Holding these exiting vehicles continues to create and sustain a growing entering vehicle queue the spills back and beyond onto Dranesville Road. The primary vehicle queue on Dranesville Road continues to be designated to occur on its southbound direction.

- 4) As a result of the off-site vehicle queue along southbound Dranesville Road, arriving school buses must again straddle the double yellow line along Dranesville Road to by-pass the vehicle queue.
- 5) A school bus was observed to drop-off students from the Dranesville Road southbound travel lane immediately north of the site's southern driveway on Dranesville Road.
- 6) The first pick-up vehicles were observed leaving the site by approximately 4:07 PM where they are again predominately directed to exit the site as a right-out only on Dranesville Road.
- 7) Within approximately five (5) minutes of the drop-off vehicles having been released to leave the site, exiting vehicles were observed held to allow multiple schools buses to enter at the same time the entering drop-off vehicle queue starts to reduce.
- 8) At approximately 4:12 PM, or the end of the key 22-minute traffic period, the traffic safety attendant leaves their post and the entering vehicle queue has subsided and no longer impacts Dranesville Road.

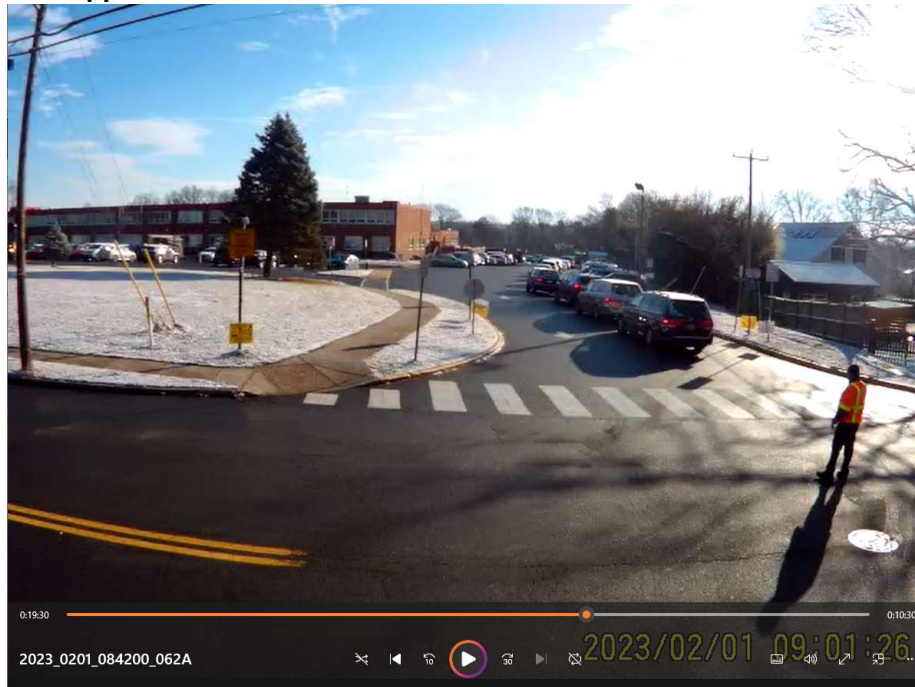
AM and PM Peak Period Field Pictures. Video traffic count equipment was utilized to conduct peak period vehicular and pedestrian counts. Key screenshots from the video footage was captured and shared below to supplement and provide a visual representation of the activities and constraints described above.

AM PEAK PERIOD PICTURES

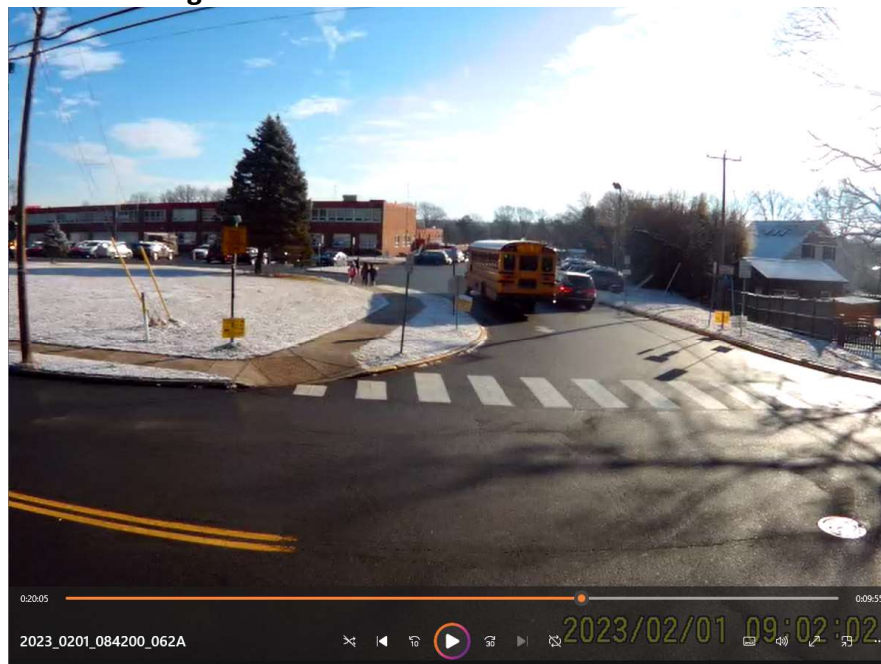
8:20 AM – The first school bus arrives.



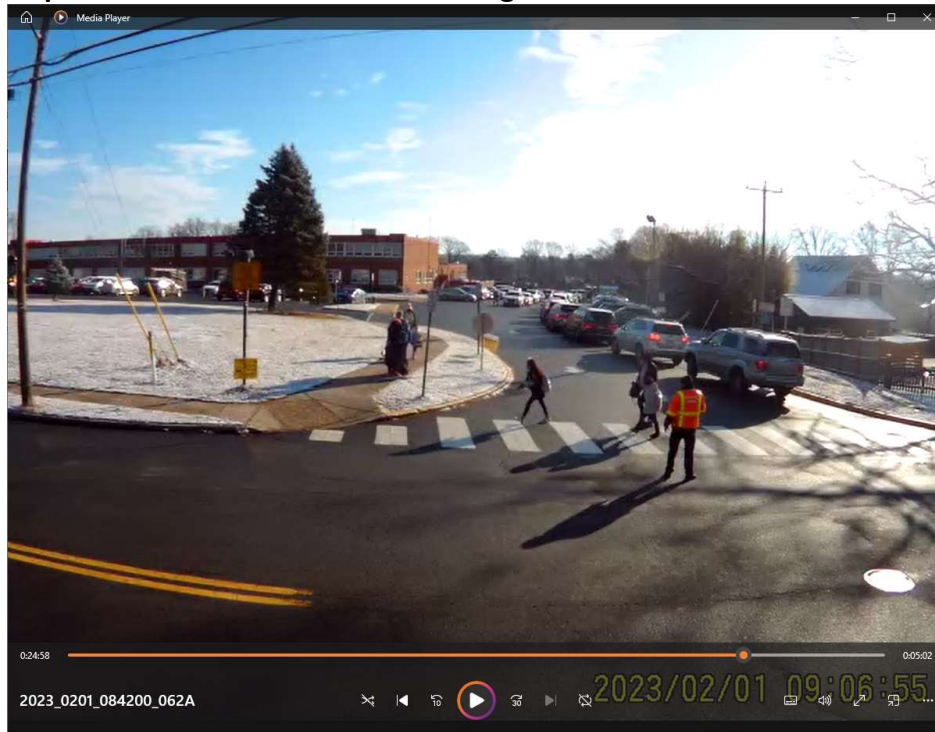
9:01 AM – Traffic safety attendant begins to monitor and control vehicular and pedestrian traffic at the site’s southern driveway. On-site vehicle queues begin to approach Dranesville Road.



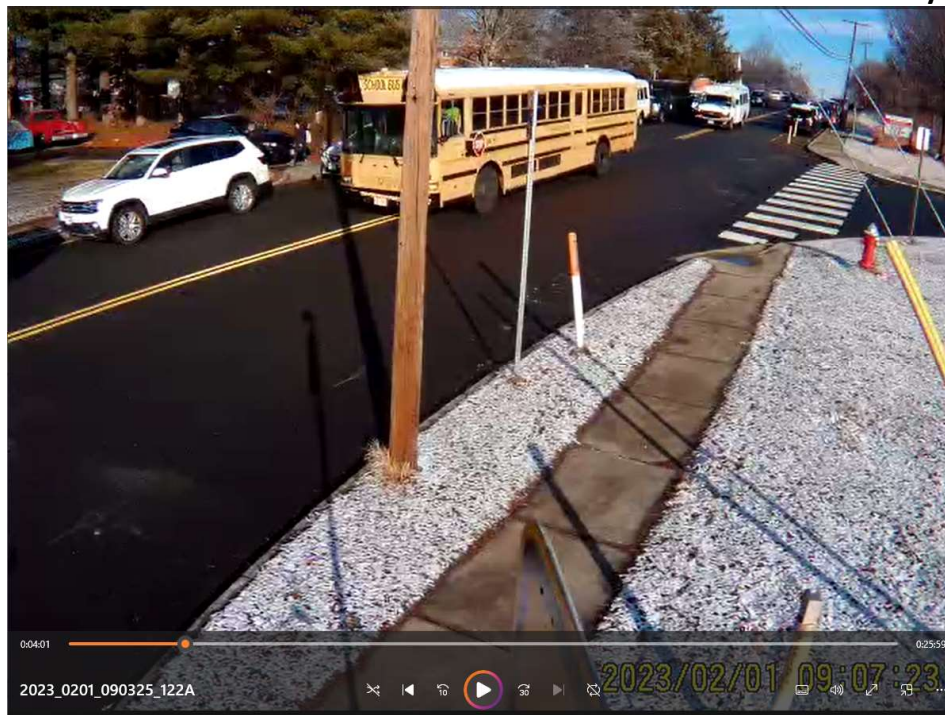
9:02 AM – As a result of morning drop-off queues approaching Dranesville Road, arriving school buses must now use the school’s egress lane at the school’s southern site driveway to enter the site. At this time, drop-off vehicles must remain on-site so they do not impede or prevent school buses from entering the school site.



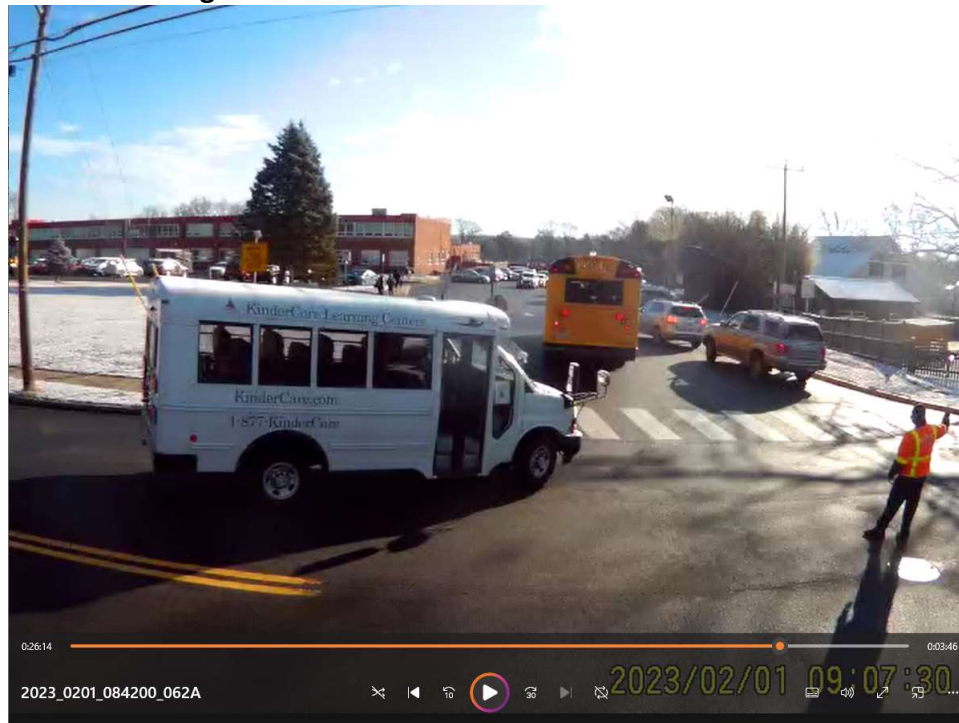
9:06 AM – Vehicles that have dropped off students are being held internal to the site by an on-site attendant to assure egress vehicles to not impede or prevent school buses from entering the site.



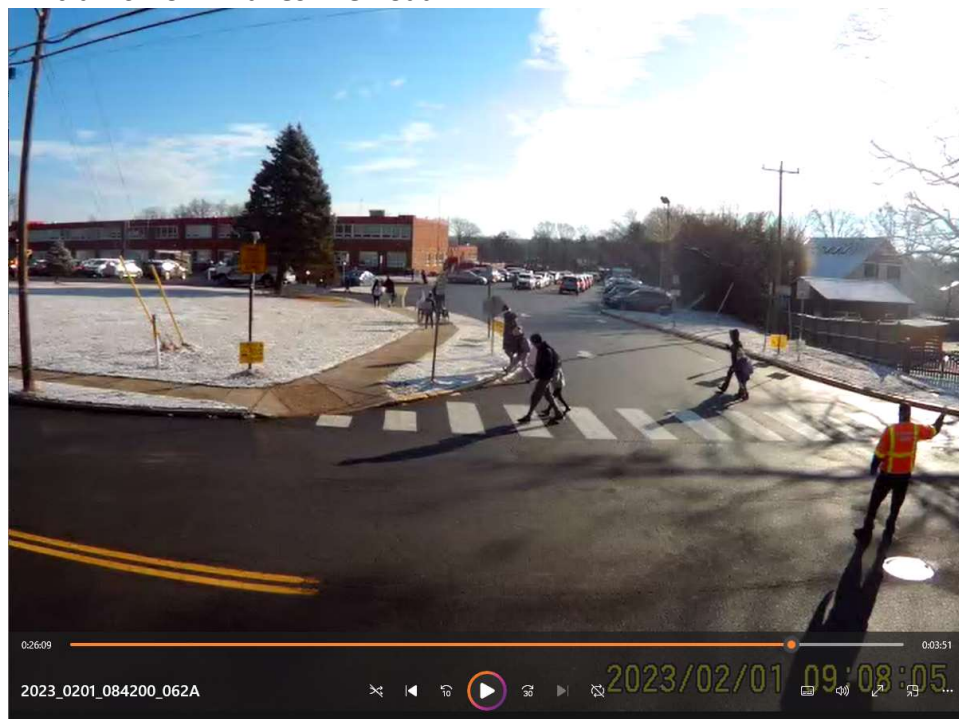
9:07 AM – Arriving school bus and shuttle bus must straddle the double yellow line along southbound Dranesville Road to by-pass vehicle queue as they pass the site's northern bus exit to enter at the site's southern driveway.



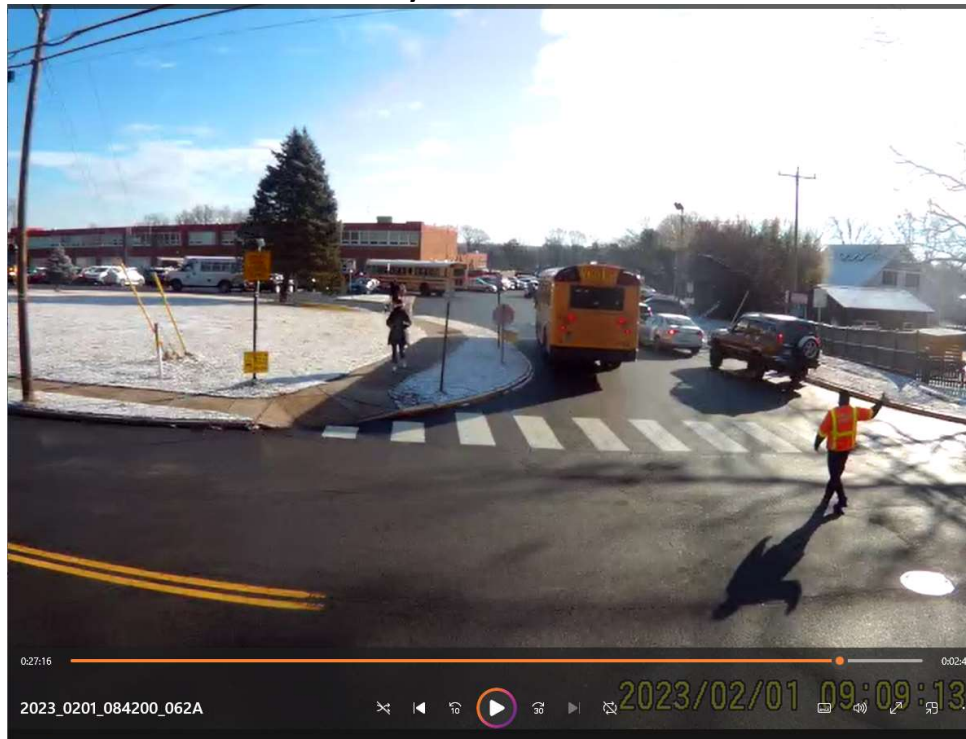
9:07 AM – School buses/KinderCare shuttle continue to arrive using the site’s vehicular egress lane.



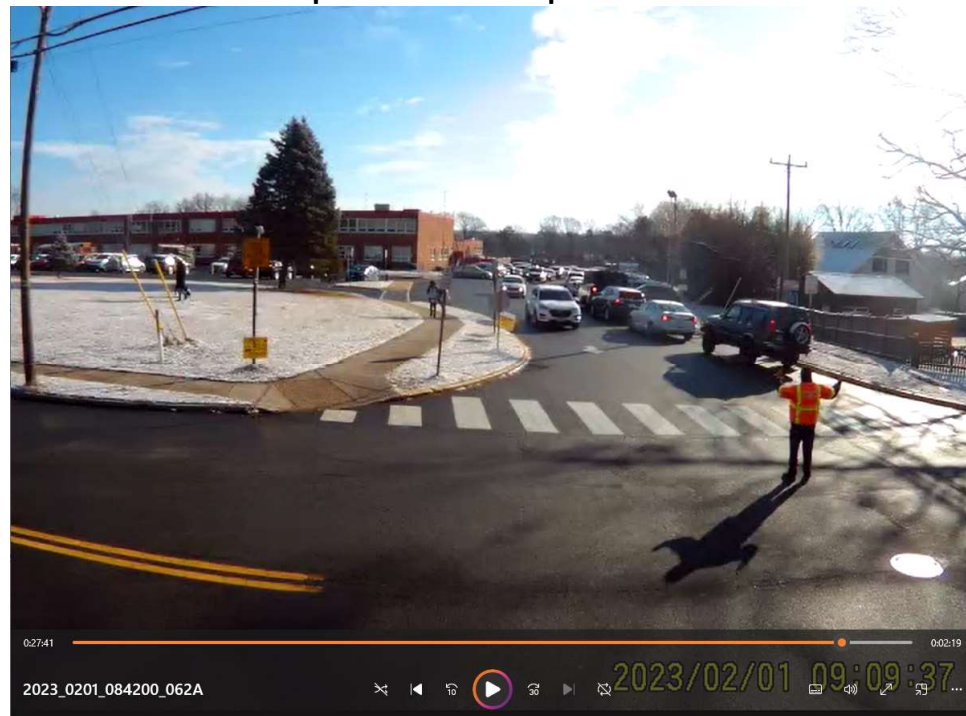
9:08 AM – The ingress queue temporarily shortens as drop-offs continue and the traffic safety attendant supports pedestrian crossings and holds entering traffic from Dranesville Road.



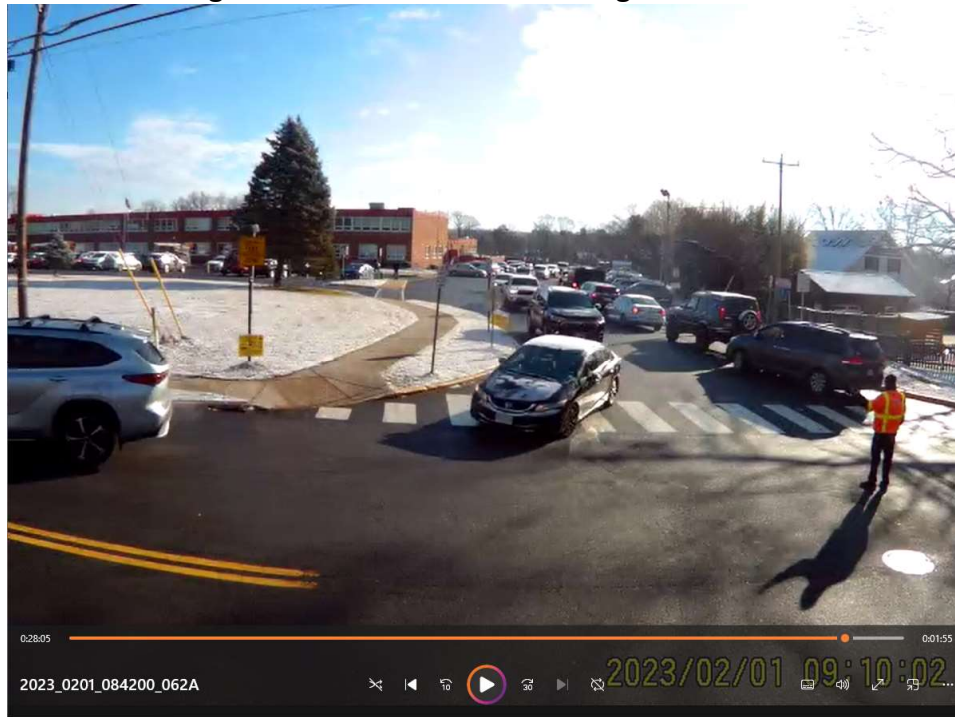
9:09 AM – School buses continue to arrive and an on-site vehicle attendant stops the drop-off vehicles from leaving and blocking the egress lane to assure school buses can efficiently enter the site.



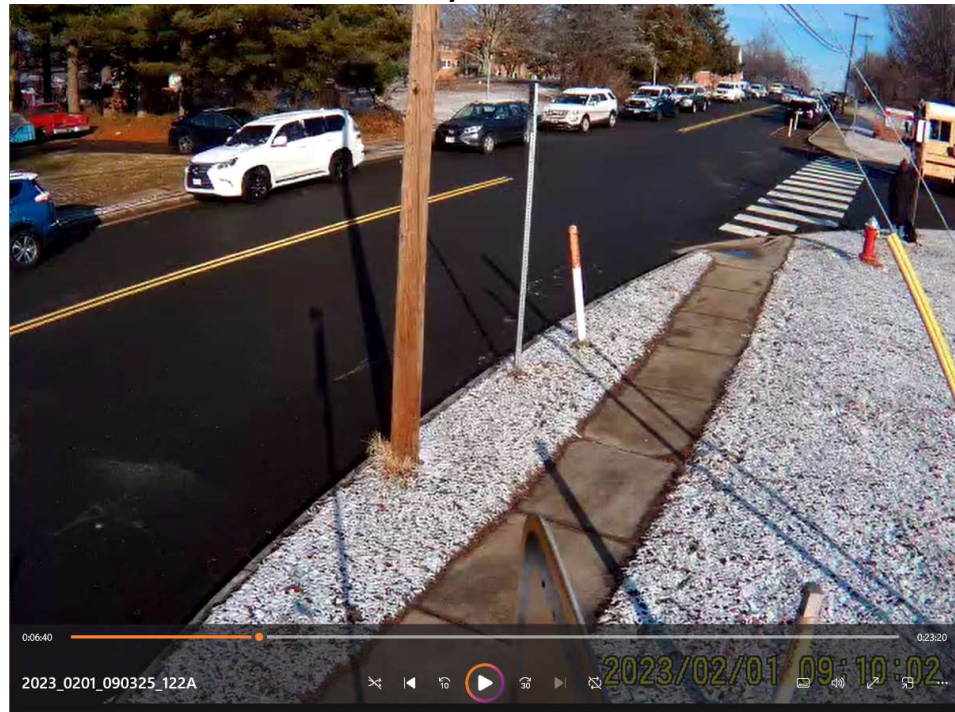
9:09 AM – First drop-off vehicles are permitted to leave the site.



9:10 AM – Egress vehicles exit the site as right-turns out.



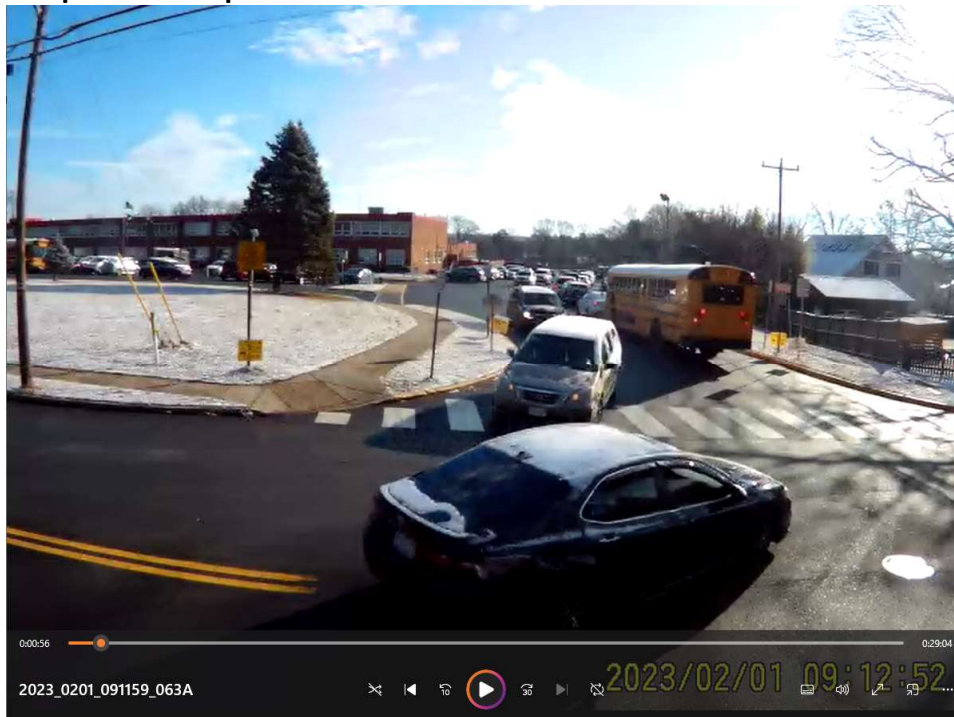
9:10 AM – Vehicle queue along southbound Dranesville Road approaching the schools southern site driveway.



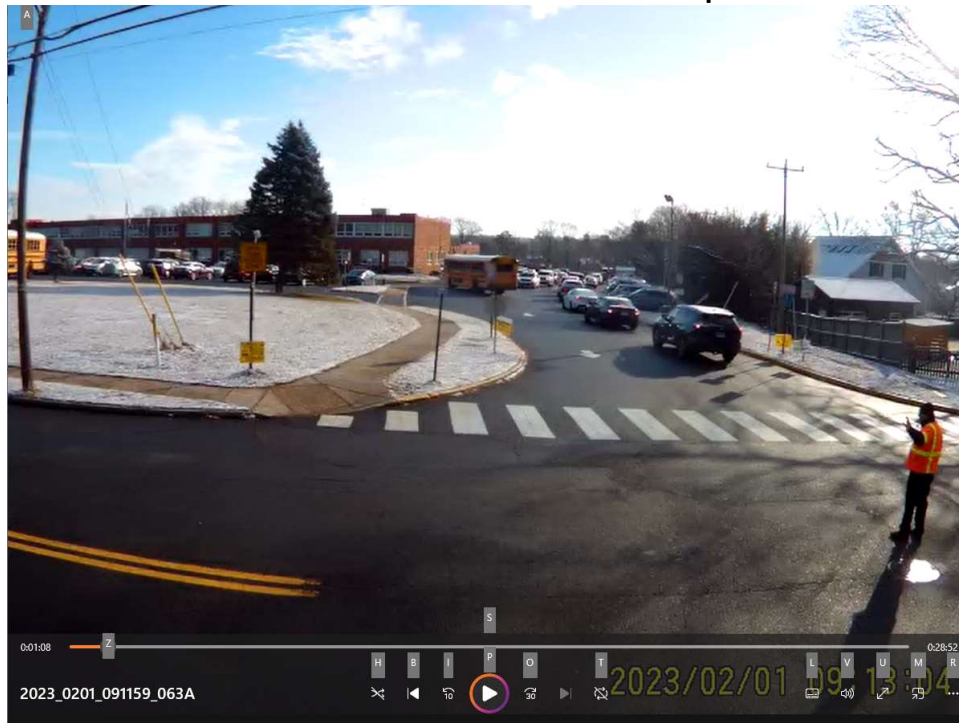
9:10 AM – Vehicle queues along northbound Dranesville Road approaching the schools southern site driveway remained generally minimal when compared to southbound queues.



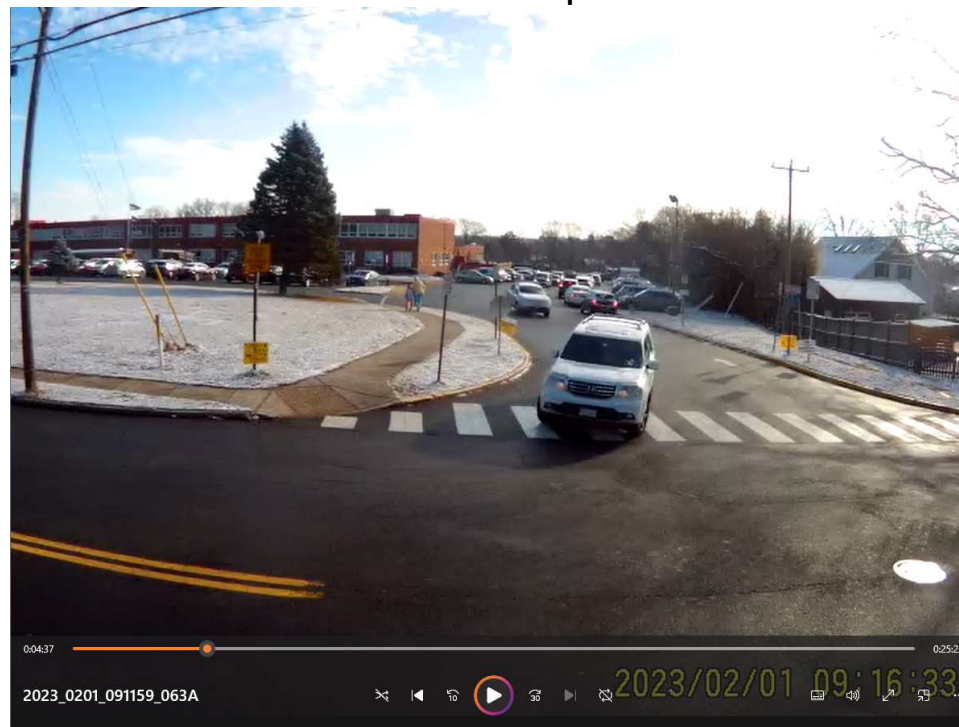
9:12 AM – School bus enters the site and becomes part of entering vehicle queue as drop-off vehicles exit.



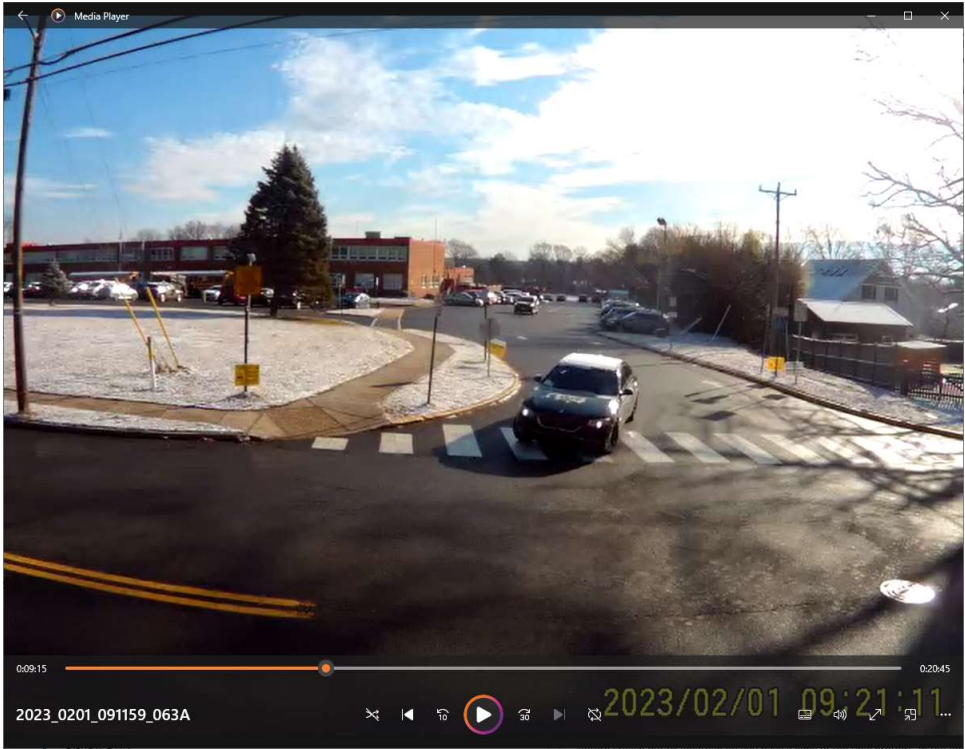
9:13 AM – Vehicles that have dropped off students are held again from leaving to allow school buses to enter the school bus drop-off area.



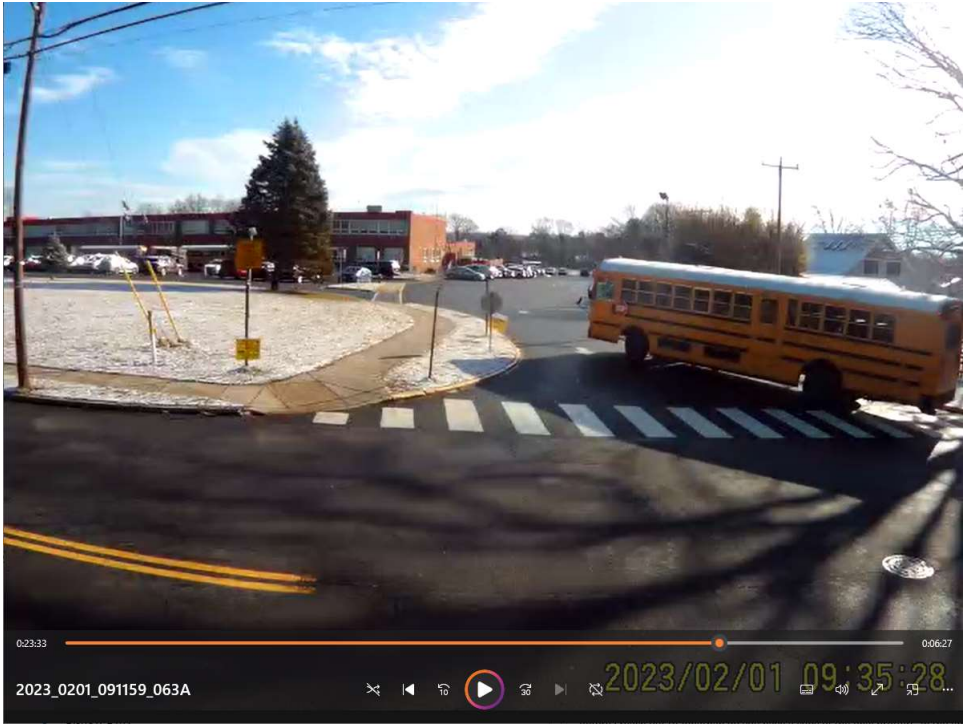
9:16 AM – Ingress vehicle queue begins to recede from backing up to Dranesville Road. Traffic attendant departs.



9:21 AM – Last number of drop-off vehicles leave the site.

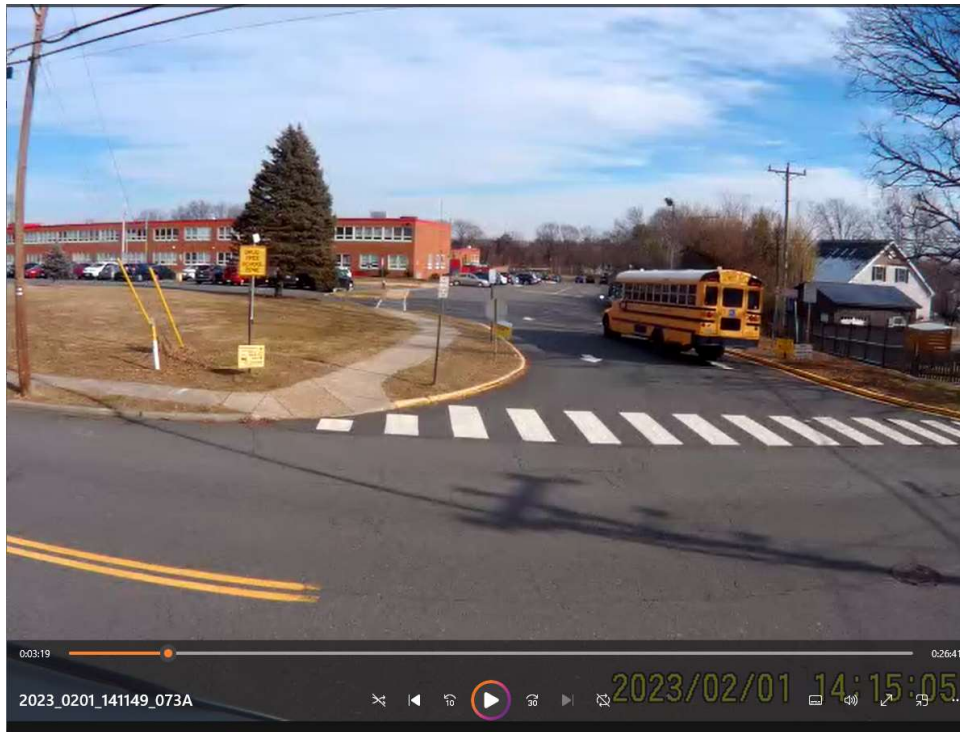


9:35 AM – Final school bus arrives.

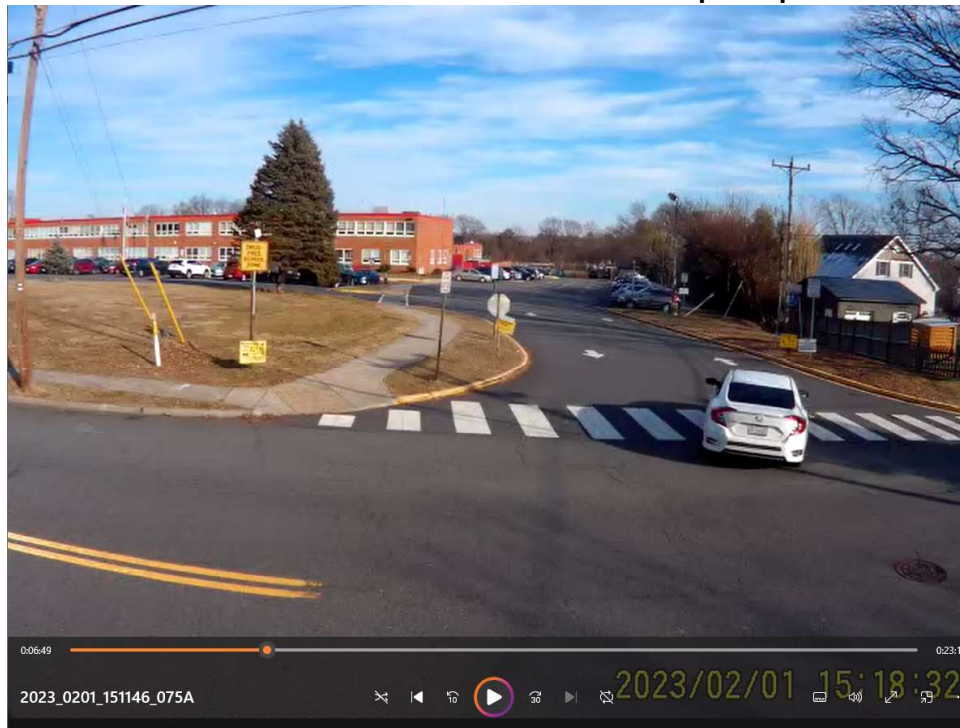


PM PEAK PERIOD PICTURES

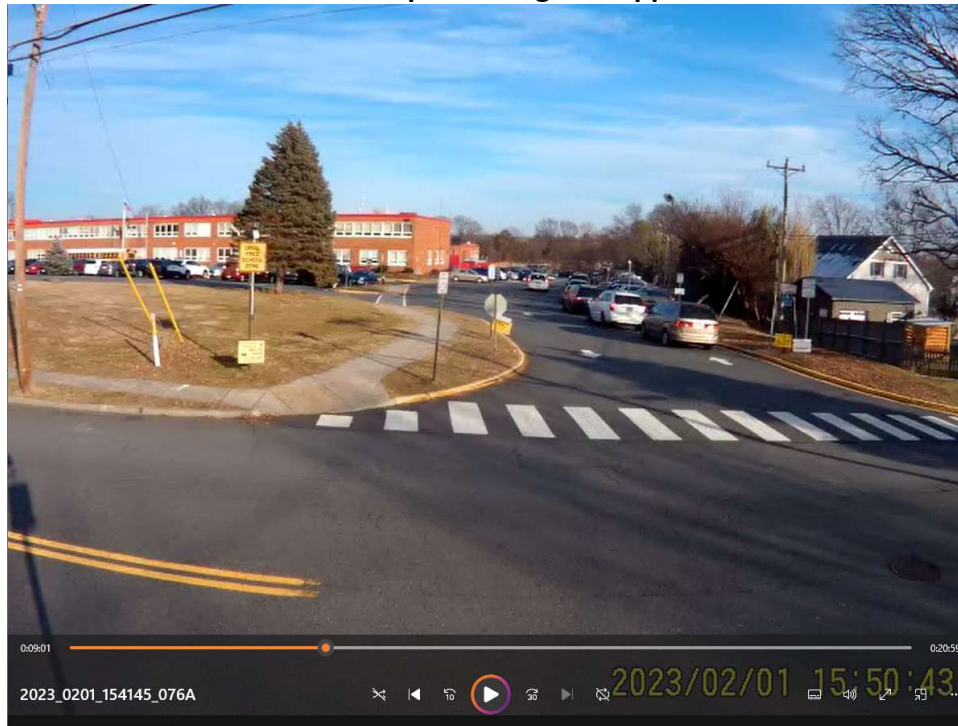
2:15 PM – The first observed school bus arrives.



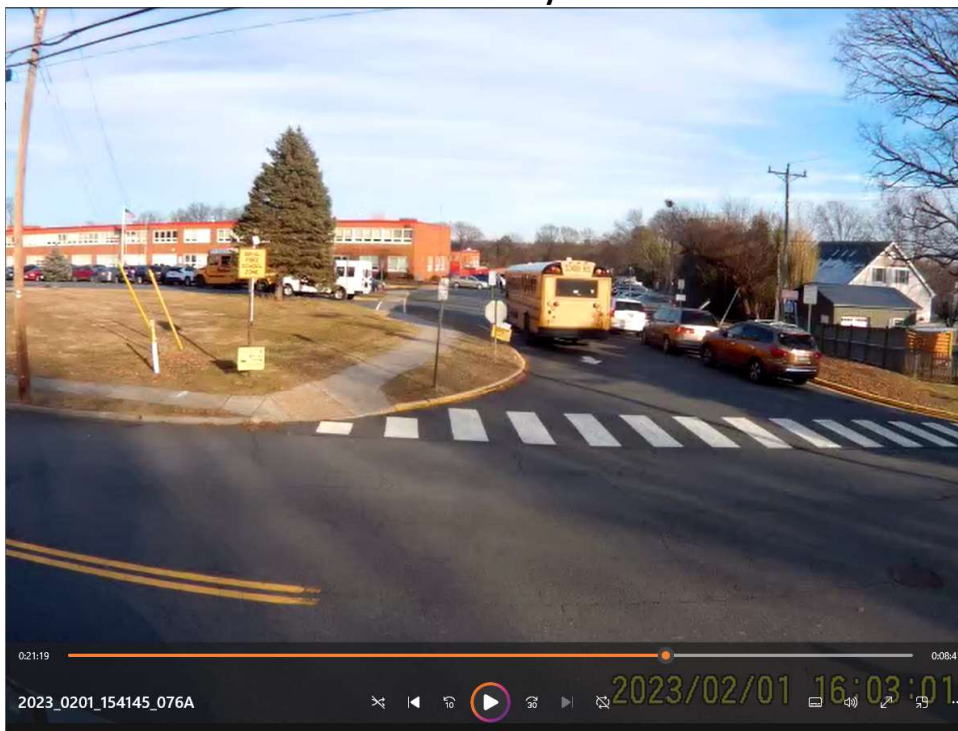
3:18 PM – The first observed vehicle for student pick-up arrives.



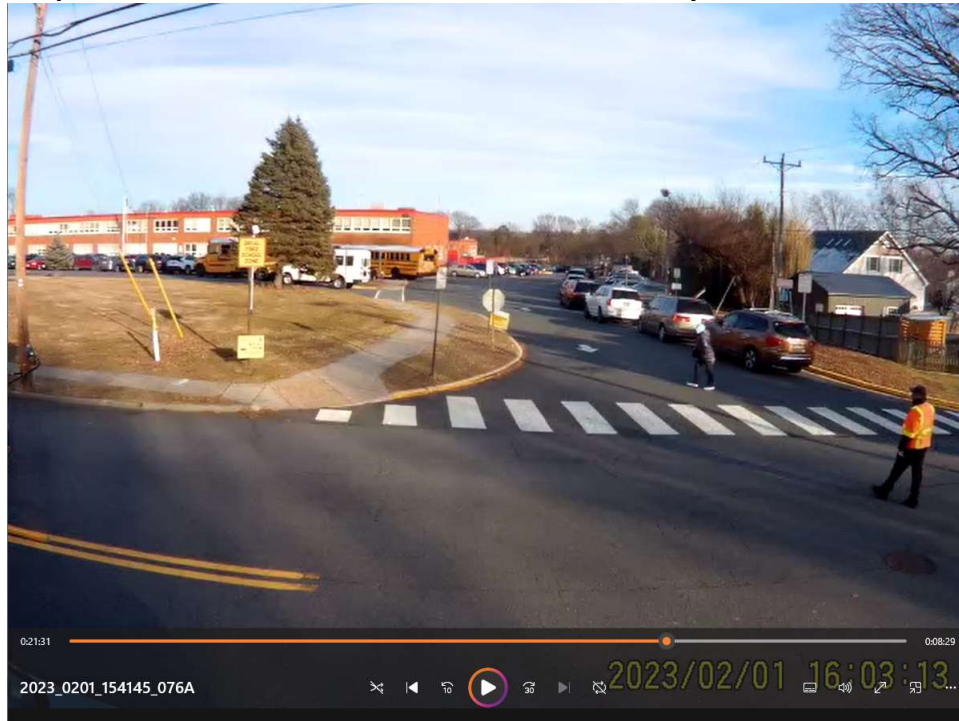
3:50 PM – On-site vehicle queues begin to approach Dranesville Road.



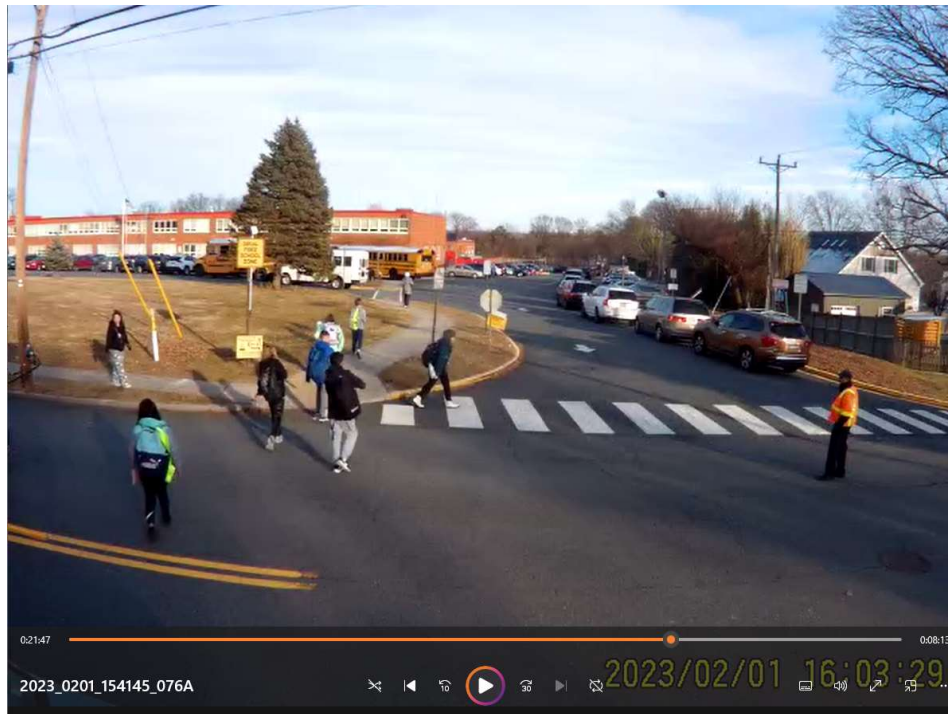
4:03 PM – As a result of on-site afternoon pick-off queues approaching Dranesville Road, arriving school buses must now use the school's egress lane at the school's southern site driveway to enter the site.



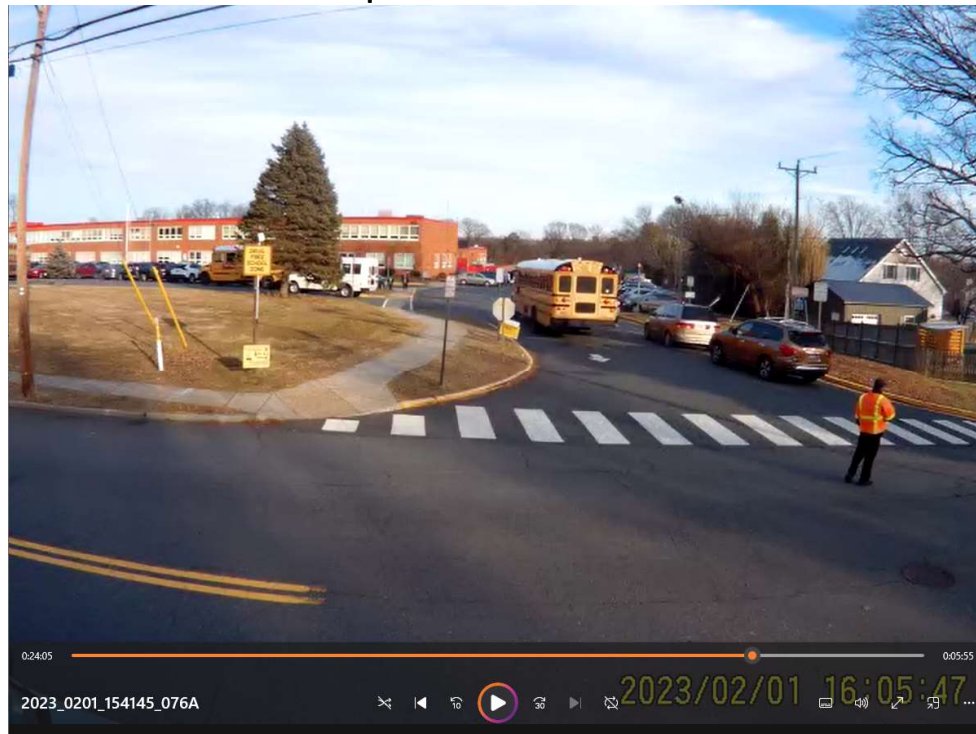
4:03 PM – Traffic attendant begins to monitor and control vehicular and pedestrian traffic at the site's southern driveway.



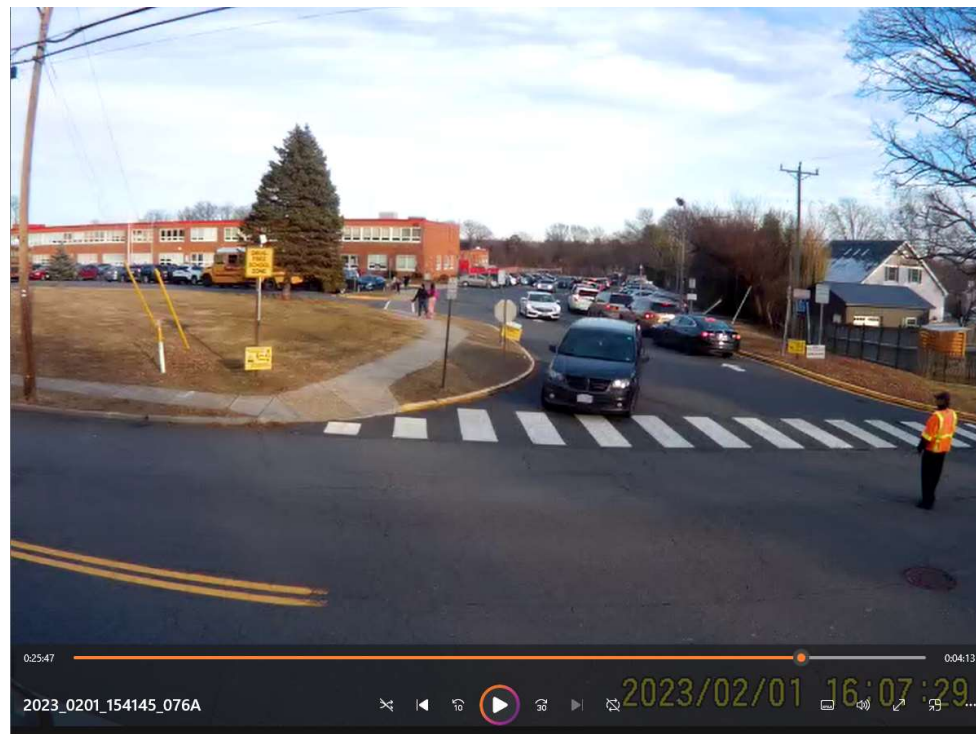
4:03 PM – School bus drops off students from the southbound travel lane on Dranesville Road.



4:05 PM – School buses continue to enter the site via the vehicular egress lane due to on-site vehicle queues. Afternoon bell time occurs.



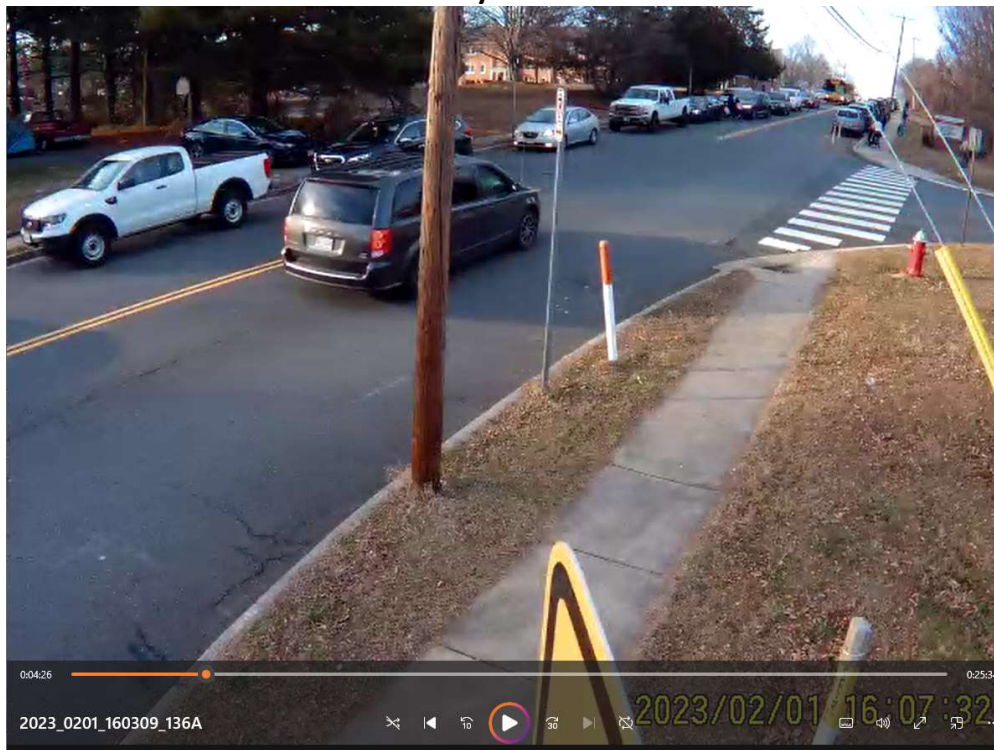
4:07 PM – First pick-up vehicles begin to exit the site. Vehicles make a right turn out of the site.



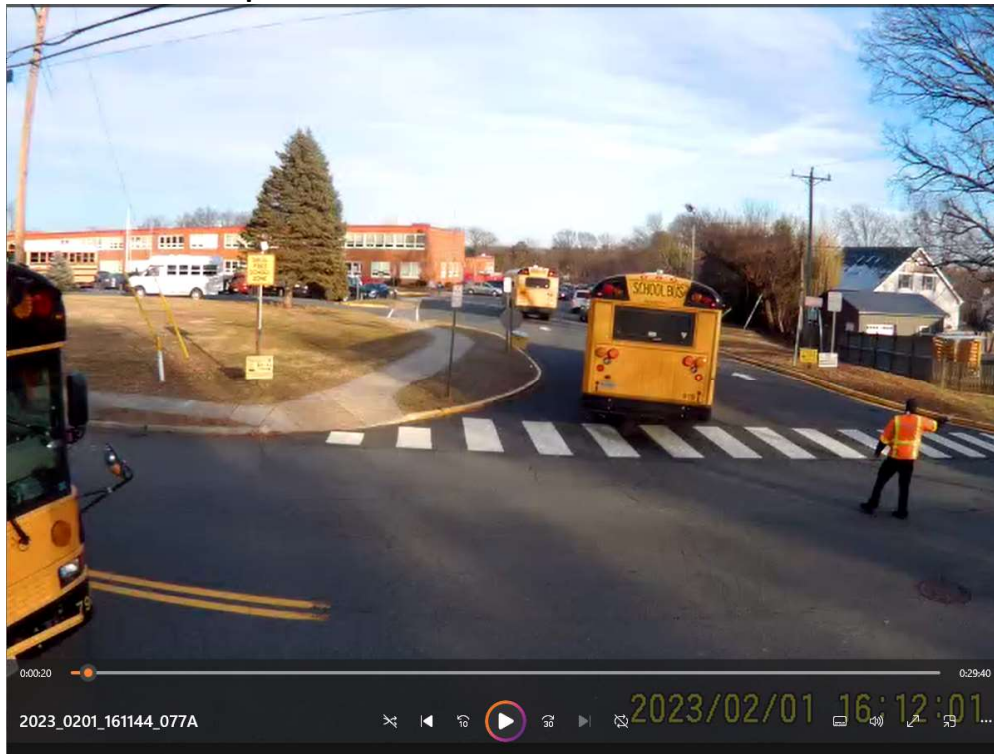
4:07 PM – Approximately five (5) vehicles are queued along northbound Dranesville Road approaching the school's southern site driveway.



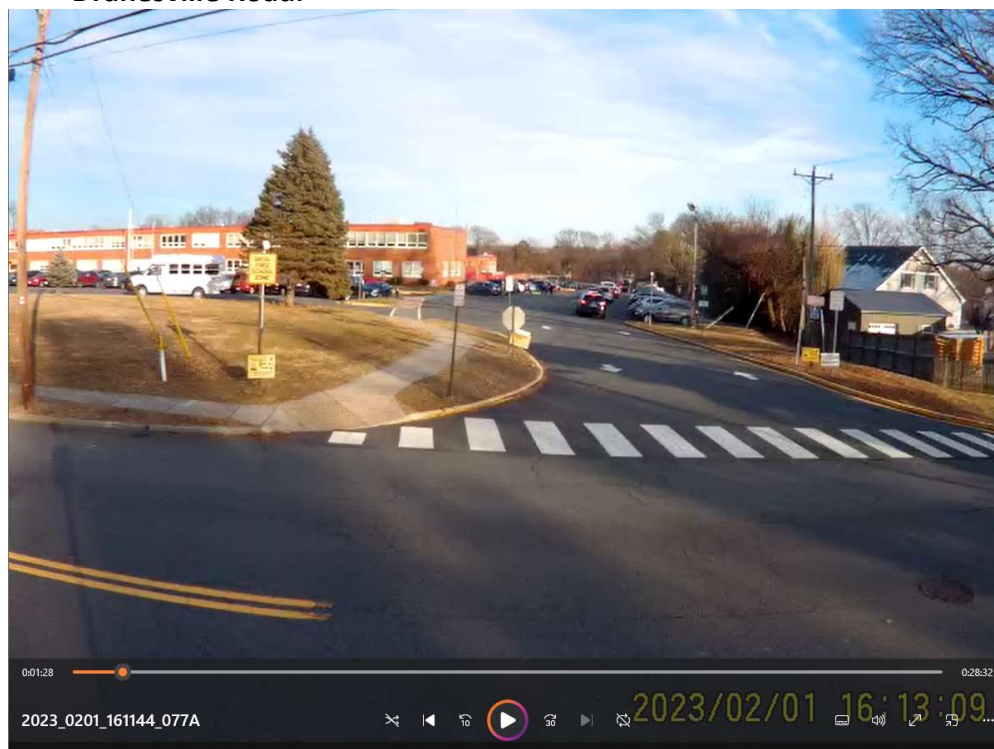
4:07 PM – Vehicle queue along southbound Dranesville Road approaching the school's southern site driveway.



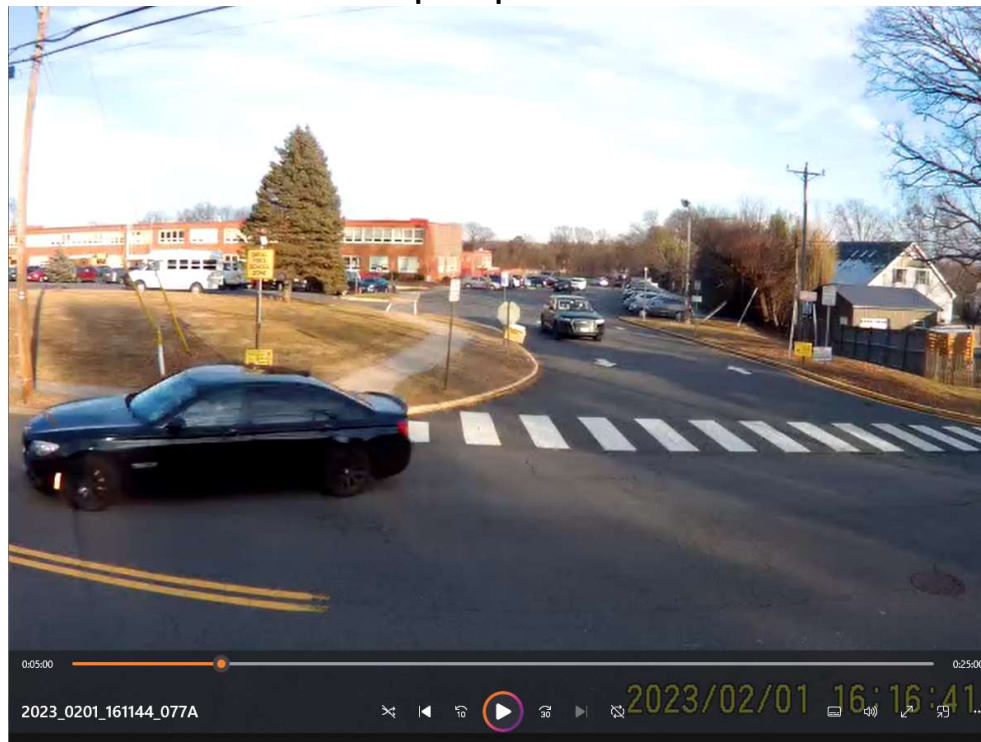
4:12 PM – Vehicles that have picked up students are temporarily held on-site to allow school buses to continue to enter the school bus area. Traffic attendant departs.



4:13 PM – Ingress vehicle queue has receded from backing up to Dranesville Road.



4:16 PM – Last number of pick-up vehicles leave the site.



4:39 PM – Last observed school bus enters the site.



SUPPLEMENTAL FIELD OBSERVATION ON THURSDAY, SEPTEMBER 28, 2023

In light of the field observations in the 1st submission Traffic Study that did not fully document the back-of-queue for the southbound vehicle queues along Dranesville Road that approach the school's driveway, a supplemental field observation was undertaken. In coordination with Town of Herndon staff, the supplemental field observation took place on Thursday, September 28, 2023.

Student Enrollment. It should be noted that the reported student enrollment between the original field observation on Wednesday, February 1, 2023 and the supplemental field observation on Thursday, September 28, 2023 remained generally consistent as follows:

- February 1, 2023 = ±805 students
- September 28, 2023 = ±798 students

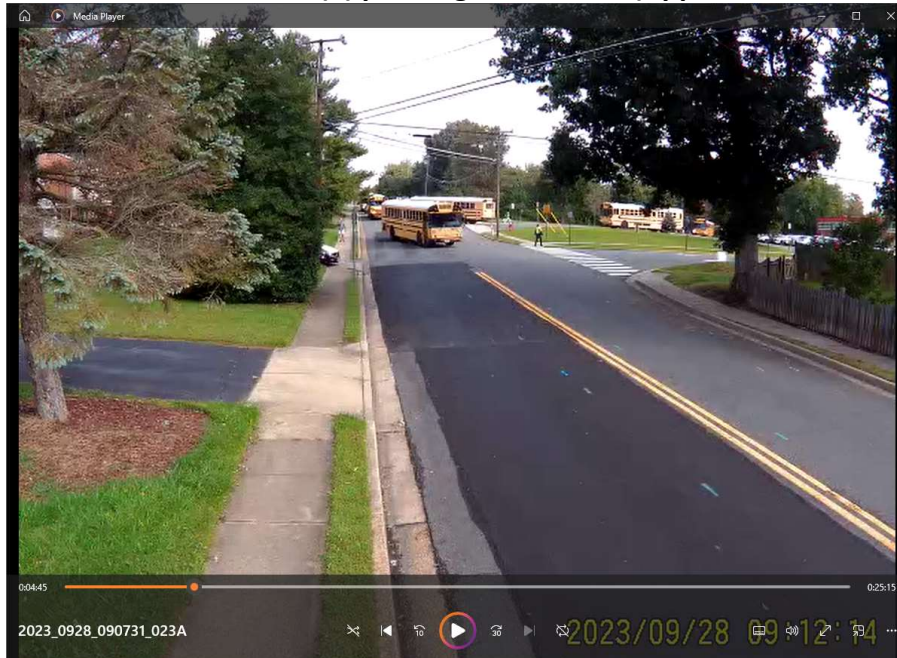
Traffic Safety Attendant. During the supplemental field visit, it was noted that the previously observed traffic attendant on February 1, 2023 has been replaced by Herndon police who were viewed in the field to have better managed school traffic and pedestrians.

AM and PM Peak Period Field Pictures. Video equipment was utilized to conduct a supplemental field review of the southbound vehicle queues along Dranesville Road. The field review confirmed that peak vehicle queues do not exceed 400 feet and were better managed from what was observed in February 2023. Key screenshots of maximum queues and corresponding back-of-queue footage from the video footage was captured and shared below:

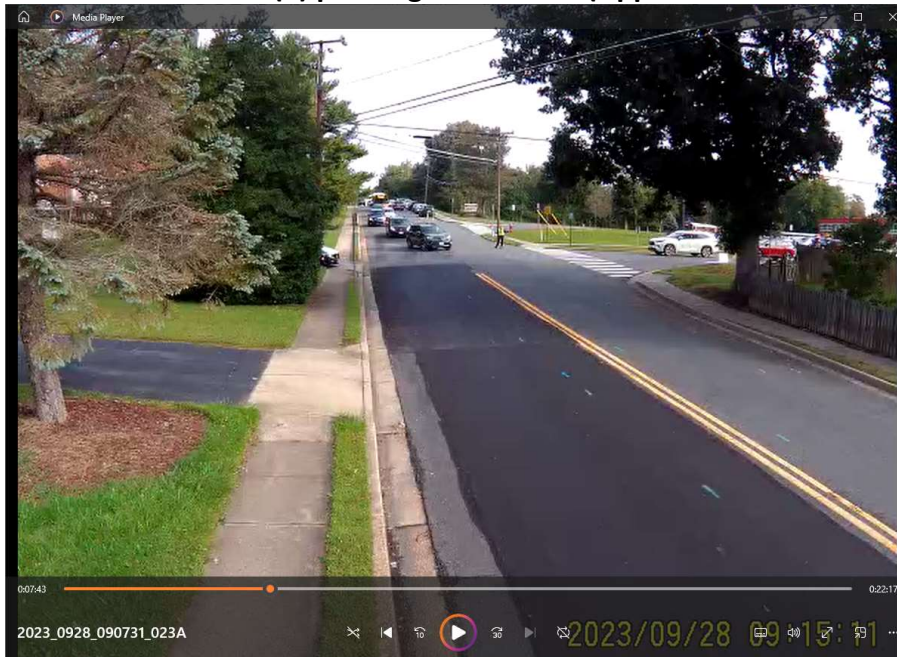
9:06 AM – Three (3) southbound vehicles were queued on Dranesville Road. The school bus is required to enter the school site using the school's egress lane. The officer gives priority to a few egress vehicles to leave before allowing the bus to enter in order to reduce in the inbound vehicle queue.



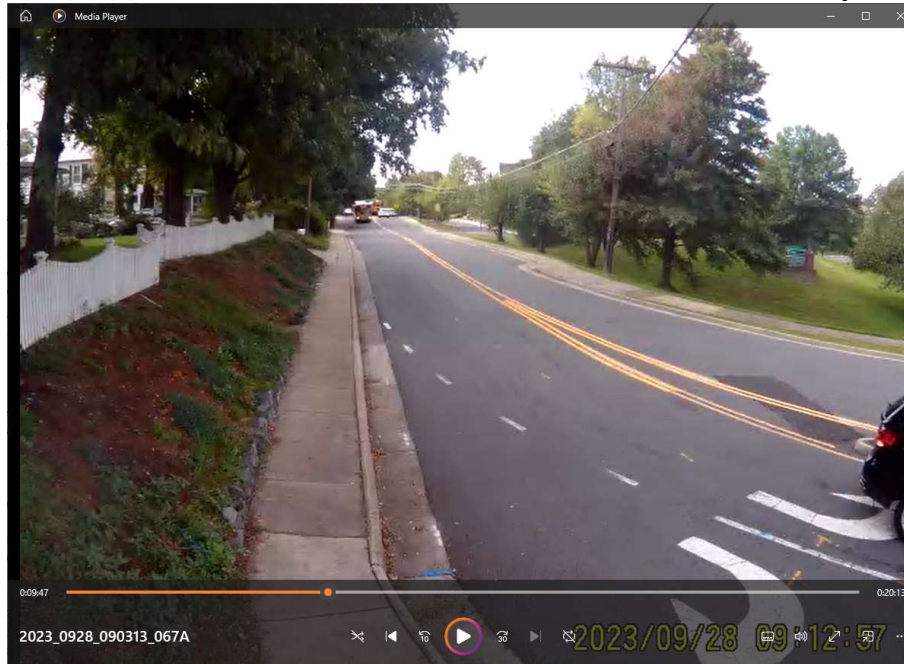
9:12 AM – Five (5) southbound vehicles were queued which included three (3) school buses and two (2) passenger vehicles. (Approx. 200 foot vehicle queue)



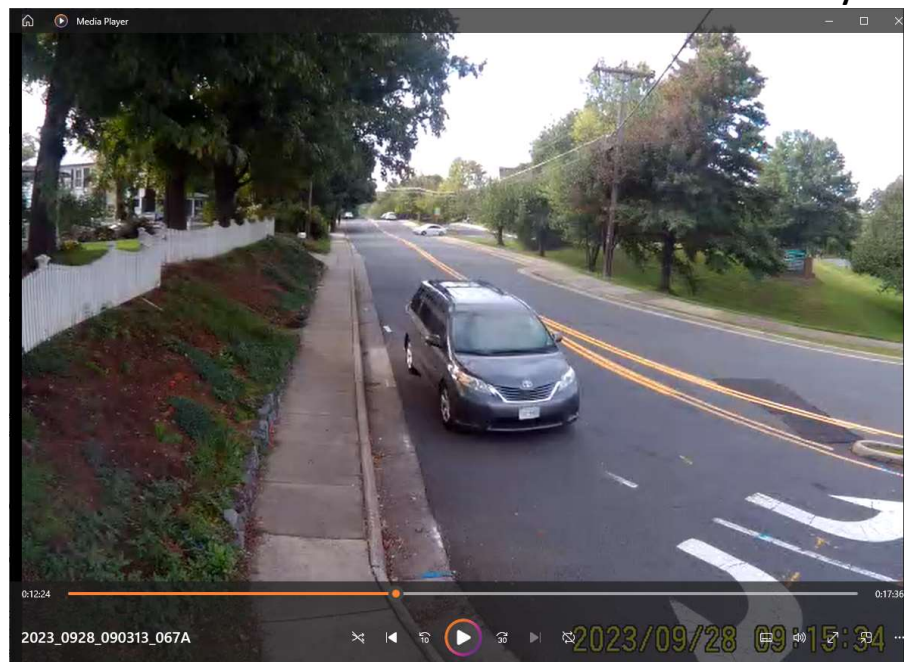
9:15 AM – Seven (7) southbound vehicles were queued which included one (1) school bus and six (6) passenger vehicles. (Approx. 225 foot vehicle queue)



9:12 AM – Southbound (back-of-queue) view of Dranesville Road from the Dranesville Road/Park Avenue intersection. Vehicles queued on this roadway segment would represent queues exceeding 400 feet. This is a screen capture reflecting moving vehicles in the southbound direction where a queue beyond 400 feet does not exist as measured from the school driveway.



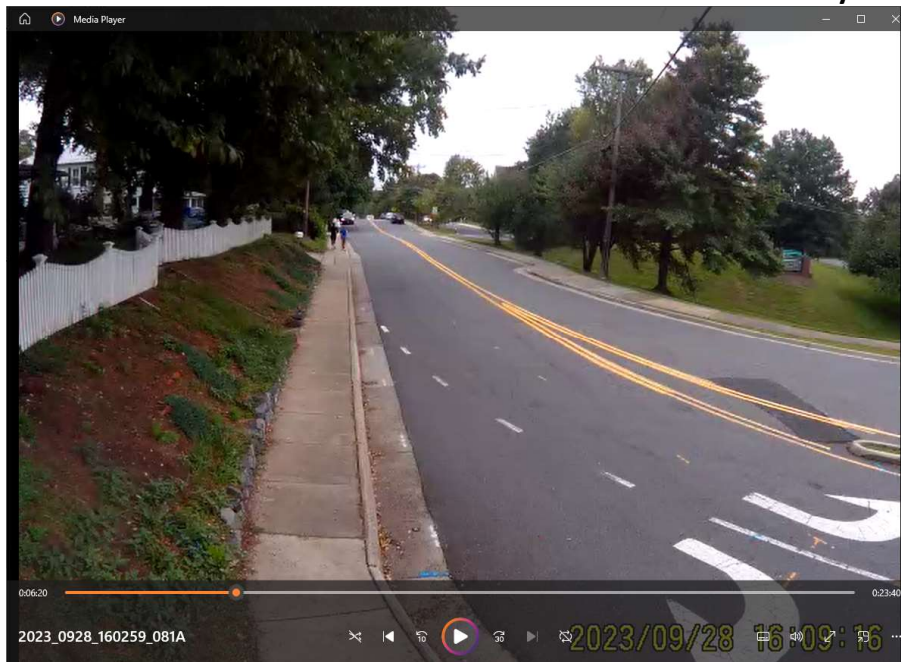
9:15 AM – Southbound (back-of-queue) view of Dranesville Road from the Dranesville Road/Park Avenue intersection. Vehicles queued on this roadway segment would represent queues exceeding 400 feet. This is a screen capture reflecting moving vehicles in the southbound direction where a queue beyond 400 feet does not exist as measured from the school driveway.



4:09 PM – Three (3) southbound passenger vehicles were queued. (Approx. 75 foot vehicle queue)



4:09 PM – Southbound (back-of-queue) view of Dranesville Road from the Dranesville Road/Park Avenue intersection. Vehicles queued on this roadway segment would represent queues exceeding 400 feet. This is a screen capture reflecting moving vehicles in the southbound direction where a queue beyond 400 feet does not exist as measured from the school driveway.



PROPOSED OPERATIONS

As described previously and shown on Figure 1-3, the site would continue to be served by two (2) separate driveways on Dranesville Road at the locations that exist today. A side-by-side comparison between the current and proposed layout is shown on Figure 3-1.

The resulting key transportation improvements realized by the proposed layout are summarized below.

- 1) The internal site layout will be modified to meet FCPS' current standards by physically separating the bus circulation area from the student drop-off/pick-up area thereby eliminating vehicular conflicts and improving safety between these key users.
- 2) Pedestrian circulation will be enhanced by eliminating the key internal vehicular/pedestrian conflicts that exist today between pedestrians and entering school bus traffic.
- 3) The on-site vehicle stacking distance will be improved for a relocated student drop-off/pick-up area. The number of vehicles that are able to stack on-site will be increased from approximately 28 vehicles to 60 vehicles. This will provide stacking for approximately 32 more vehicles than realized today.
- 4) School buses will now have their own dedicated ingress lane at the site's northern driveway.
- 5) Departing drop-off and pick-up vehicles will be able to efficiently leave the site and will no longer be required to yield to entering school buses. This will serve to improve exiting traffic flow and thereby reduce the length and duration that off-site vehicle queues occur on Dranesville Road.
- 6) Reduced vehicle queues on-site will improve the short-term traffic disruptions along Dranesville Road.

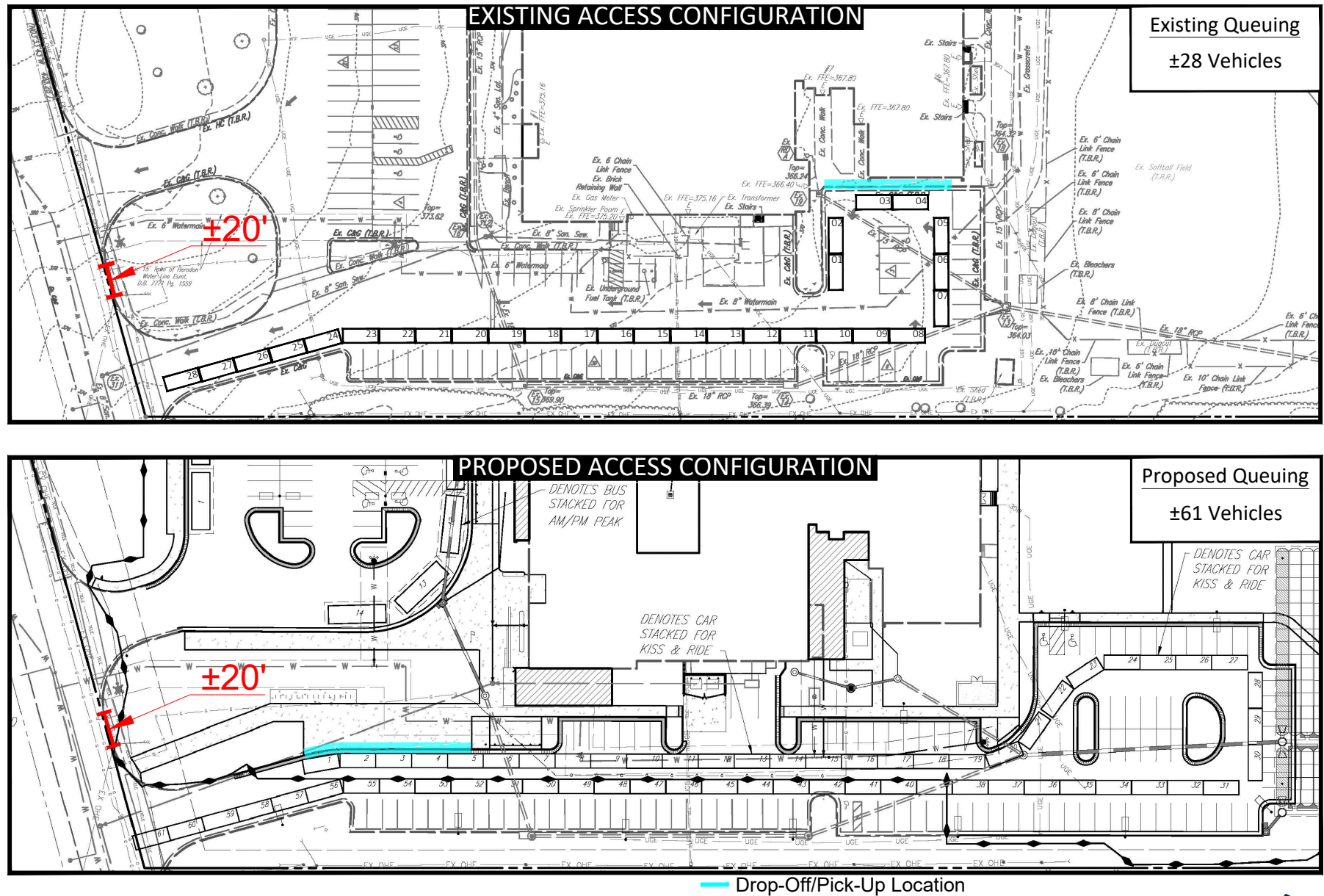


Figure 3-1
Side-by-Side Comparison Between Current and Proposed Conditions



Herndon Elementary School
Town of Herndon, Virginia

Section 4 ANALYSIS OF EXISTING CONDITIONS

TRAFFIC COUNTS

Vehicle turning movement, pedestrian, and bicycle counts were obtained for the site's two (2) existing site driveways as described below:

1. Dranesville Road / North Site Driveway (Egress Only)
2. Dranesville Road / South Site Driveway (Full Movement)

The peak period traffic counts were conducted on Wednesday, February 01, 2023 from 6 AM to 9 AM and from 2 PM to 5 PM when the Herndon Elementary School was in a typical full-day condition without delay. The intersection peak hours generally occurred from 8:30 AM to 9:30 AM and 3:45 PM to 4:45 PM. As discussed previously, the peak period impact of school traffic occurred within the following two (2) narrow distinct periods:

- 9:00 AM to 9:15 AM
- 3:50 PM and 4:12 AM

The individual intersection peak hour traffic volumes were utilized at the study intersections. The resulting baseline peak hour volumes used in this analysis are summarized as follows:

- Figure 4-1: Existing Peak Hour Vehicular Traffic Volumes (All Vehicles)
- Figure 4-2: Existing Peak Hour Vehicular Traffic Volumes (School and Shuttle Buses Only)
- Figure 4-3: Existing Peak Hour Pedestrian Traffic Volumes
- Figure 4-4: Existing Peak Hour Bicycle Traffic Volumes

The count data summary sheets are included for reference in Appendix C.

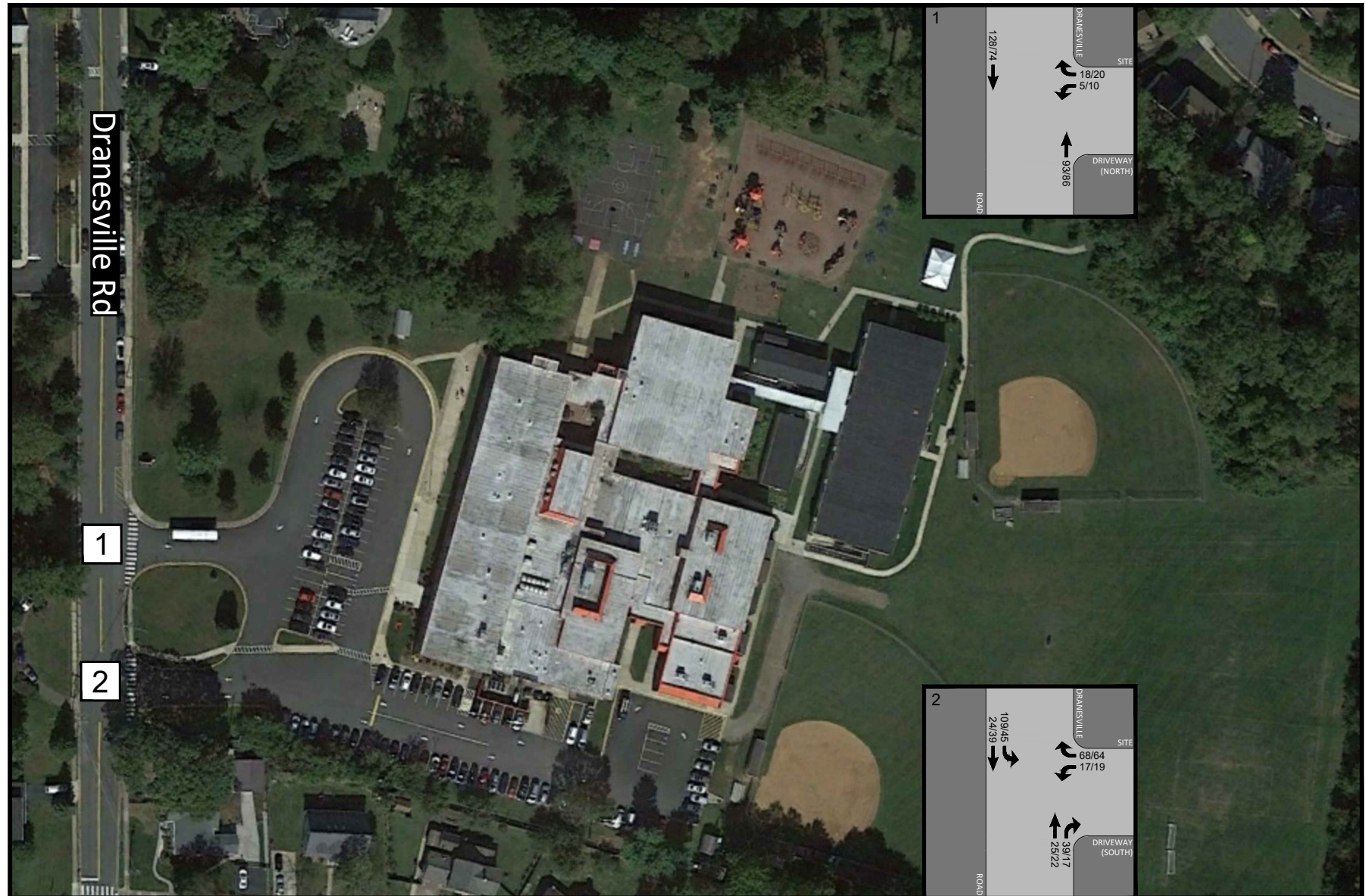


Figure 4-1
Existing Peak Hour Vehicular Traffic Volumes
(All Vehicles)

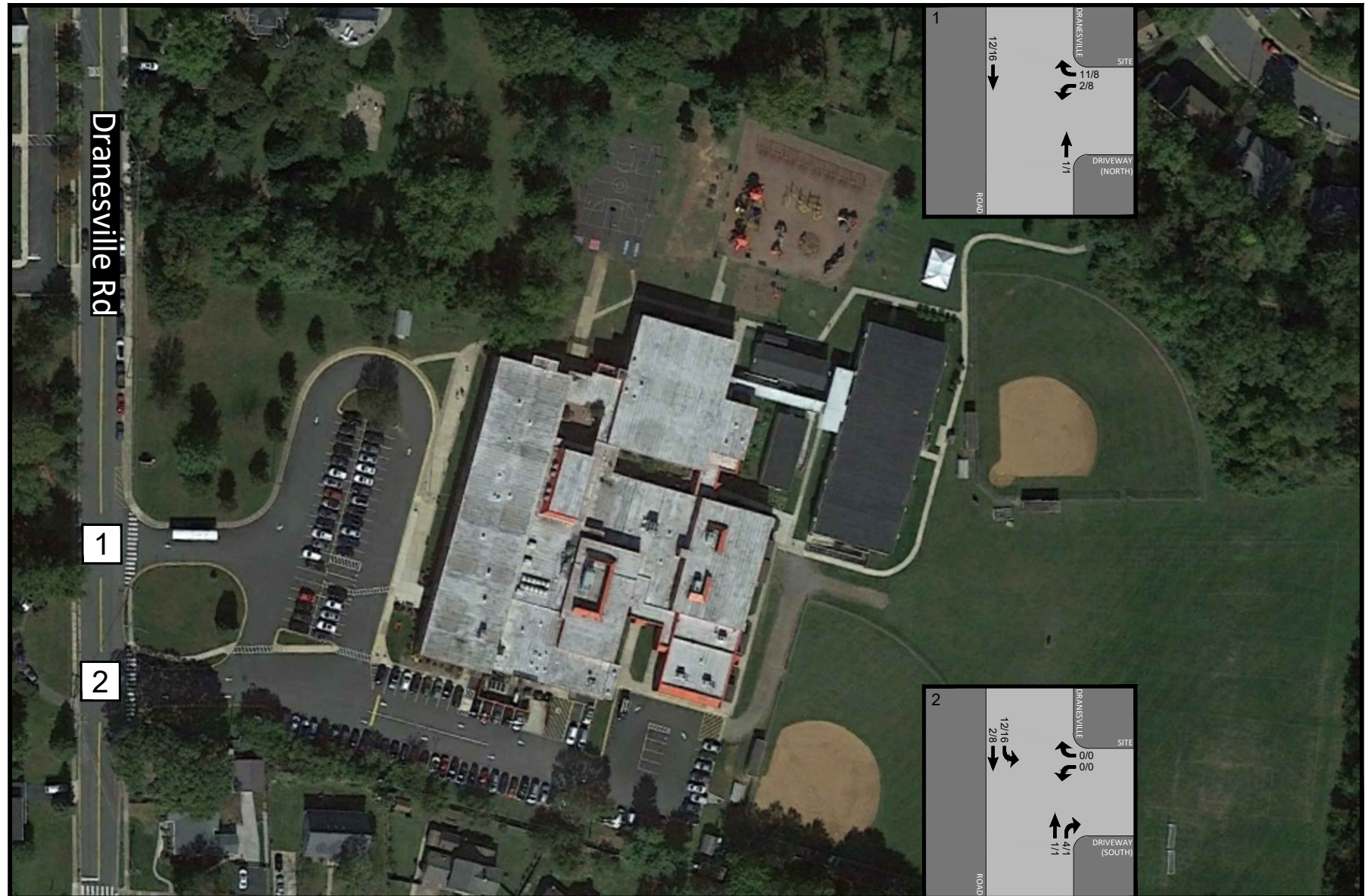


Figure 4-2
Existing Peak Hour Vehicular Traffic Volumes
(School and Shuttle Buses Only)

AM PEAK HOUR (8:30 - 9:30 AM)
PM PEAK HOUR (3:45 - 4:45 PM)
000 / 000



Herndon Elementary School
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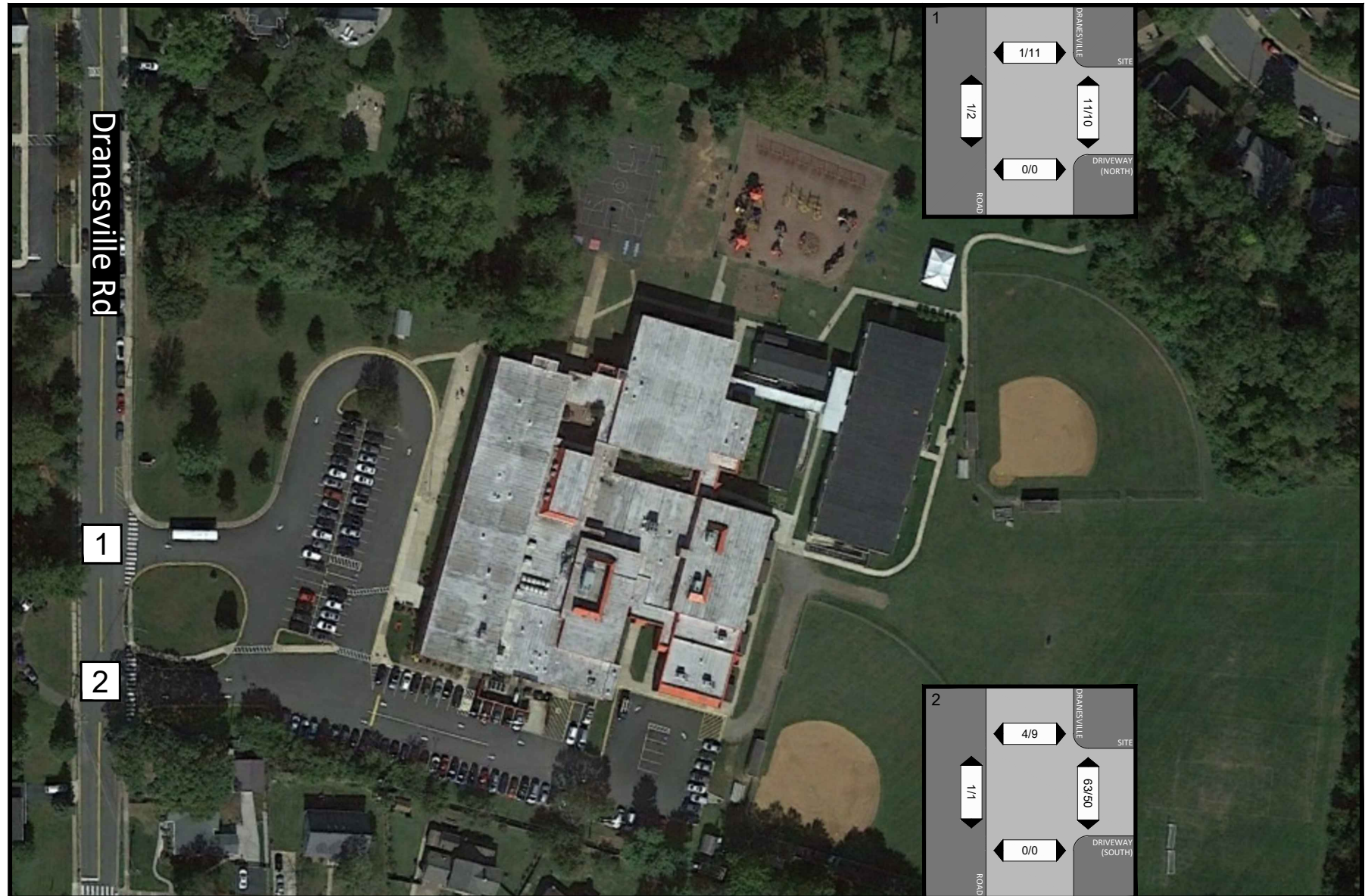


Figure 4-3
Existing Peak Hour Pedestrian Traffic Volumes

AM PEAK HOUR (8:30 - 9:30 AM)
PM PEAK HOUR (3:45 - 4:45 PM)
000/000



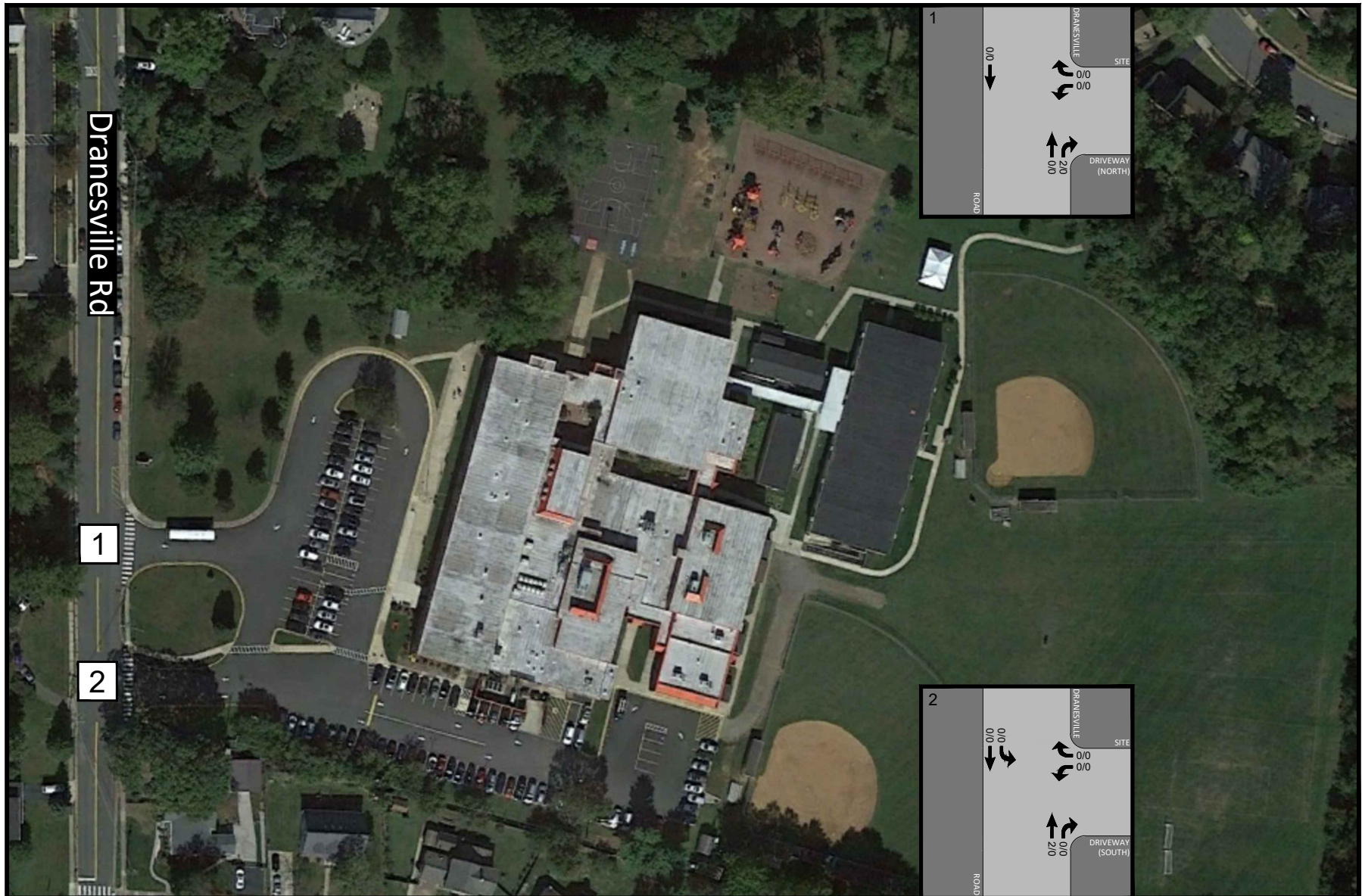


Figure 4-4
Existing Peak Hour Bicycle Traffic Volumes

AM PEAK HOUR (8:30 - 9:30 AM)
PM PEAK HOUR (3:45 - 4:45 PM)
000 / 000



Herndon Elementary School
Town of Herndon, Virginia

OPERATIONAL ANALYSIS

Capacity/level of service (LOS) analyses were conducted at the study intersections based on the, the existing baseline traffic volumes shown on Figure 4-1, the pedestrian counts shown on Figure 4-3, the bicycle counts shown on Figure 4-4, and the existing lane use and traffic controls shown on Figure 4-5.

Synchro software (version 11) was used to evaluate levels of service, the 95th percentile queues at the study intersections during the weekday AM and PM peak hours. Synchro is a macroscopic model used for optimizing traffic signal timing and performing capacity analyses at both signalized and unsignalized intersections. The software can model existing traffic signal timings or optimize splits, offsets, and cycle lengths for individual intersections, an arterial, or a complete network. Synchro allows the user to evaluate the effects of changing intersection geometrics, traffic demands, traffic control, and/or traffic signal settings as well as optimize traffic signal timings.

The levels of service reported for the signalized and unsignalized intersections were taken from the Highway Capacity Manual 2000 (HCM) reports generated by Synchro. Descriptions of level of service are included in Appendix B. The levels of service and 95th percentile queues are presented in Appendix D. Levels of service are summarized in Table 4-1, and the 95th percentile queues are summarized in Table 4-2.

As discussed previously, the Herndon Elementary School utilizes a traffic safety attendant to fully control the Dranesville Road/South Site Driveway over a limited period. Given the narrow extent that the traffic attendant supports the southern site driveway, the traffic analysis presented herein evaluates the intersection without the added attendant support.

Levels of Service. Below is a summary of the level of service results as shown on Table 4-1:

Intersection #1 – Dranesville Road/North Site Driveway: The unsignalized traffic movements currently operate at an acceptable LOS “B” or better during the evaluated weekday AM and PM peak hours.

Intersection #2 – Dranesville Road/South Site Driveway: The unsignalized traffic movements currently operate at an acceptable LOS “B” or better during the evaluated weekday AM and PM peak hours.

It should be noted that the level of service results as summarized by Synchro evaluated a full peak hour and not reflective of the actual vehicle delays that occur during the school’s limited peak 15 to 20-minute traffic periods.

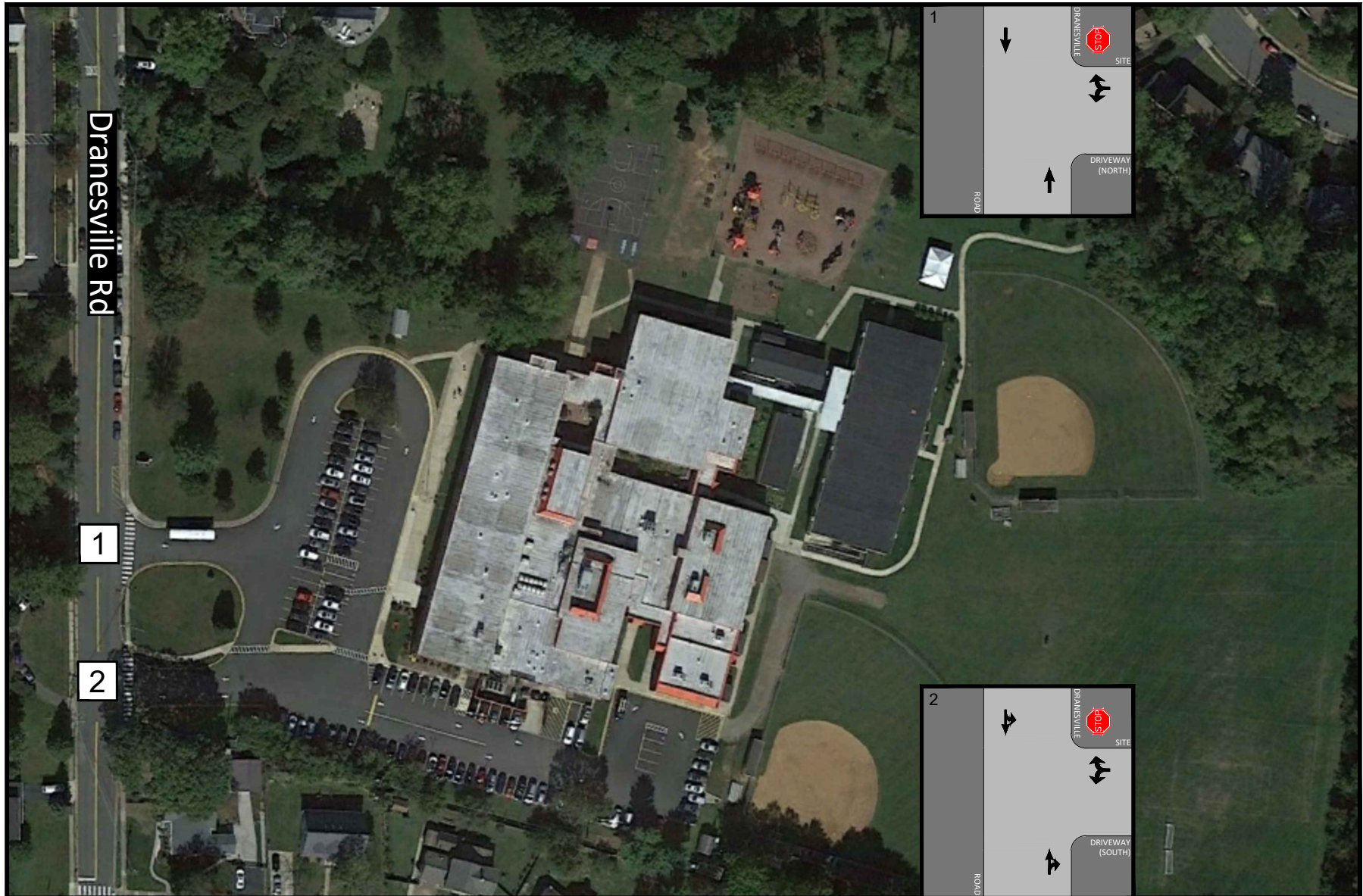


Figure 4-5
Existing Lane Use and Traffic Controls

← Represents One Travel Lane
 Stop Sign



Herndon Elementary School
Town of Herndon, Virginia

Table 4-1
 Herndon Elementary School
 Intersection Levels of Service Summary⁽¹⁾⁽²⁾

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing Condition		Future Condition	
				AM	PM	AM	PM
1 Dranesville Road /Site Driveway (North)	STOP	Site Driveway (North) Dranesville Road Dranesville Road	WBLR NBT SBT	B [10.2] A [0.0] A [0.0]	B [10.1] A [0.0] A [0.0]	B [10.1] A [0.0] A [2.1]	B [10.1] A [0.0] A [2.2]
2 Dranesville Road /Site Driveway (South)	STOP	Site Driveway (South) Dranesville Road Dranesville Road	WBLR NBTR SBLT	B [10.7] A [0.0] A [6.8]	A [10.0] A [0.0] A [4.5]	B [10.1] A [0.0] A [6.1]	A [9.6] A [0.0] A [3.0]

Notes: (1) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
 (2) Roadway names in bold are considered north/south for purposes of this analysis.

Table 4-2
Herndon Elementary School
Intersection Queuing Summary⁽¹⁾⁽²⁾

Intersection	Operating Condition	Street Name	Approach/Movement	Available Storage (ft)	Existing Condition		Future Condition	
					AM	PM	AM	PM
1 Dranesville Road /Site Driveway (North)	STOP	Site Driveway (North)	WBLR	N/A	3	4	3	4
		Dranesville Road	NBT	N/A	0	0	0	0
		Dranesville Road	SBT	N/A	0	0	2	1
2 Dranesville Road /Site Driveway (South)	STOP	Site Driveway (South)	WBLR	N/A	14	11	10	8
		Dranesville Road	NBTR	N/A	0	0	0	0
		Dranesville Road	SBLT	N/A	10	4	5	2

Notes: (1) Queue length is based on the 95th percentile queue in feet as reported by Synchro, Version 11.

(2) Roadway names in bold are considered north/south for purposes of this analysis.

Queues. The calculated 95th percentile queues associated with existing conditions are used to establish a datum against which to compare future conditions. The 95th percentile queue is defined as the maximum back of queue with 95th percentile traffic volumes. The 95th percentile queue is not necessarily observed, it is simply based on statistical calculations. The results are summarized in Table 4-2 and included in Appendix D. As shown in Table 4-2, existing queues were reported to be minimal with vehicle queues less than one (1) vehicle in length for both study intersections. The calculated peak hour queues were determined to not reflect the observed peak period school queues that have a 15-to-20-minute duration.

Based on field observations on Wednesday, February 1, 2023, the northbound vehicle at the school's southern driveway were observed to be minimal at approximately five (5) vehicles or less. The southbound peak vehicle queues for entering school traffic spilled back into and beyond along Dranesville Road with excessive vehicle queues exceeding to, or at least, 400 feet in the southbound direction disrupting typical vehicle travel along Dranesville Road. The school's peak traffic period occurs over a 15-to-20 minute period during the school's weekday AM period drop-off and PM period pick-up.

A supplemental field observation was undertaken on Thursday, September 28, 2023 in coordination the Town of Herndon staff. The supplemental field observation confirmed that the southbound vehicle queues on Dranesville Road do not extend to, nor exceed 400 feet. It was noted that the previous observed traffic attendant in February 2023 has been replaced by a police officer who appeared to have better managed the school's traffic.

Section 5 ANALYSIS OF FUTURE CONDITIONS

TRAFFIC VOLUMES

Methodology/Assumptions. Traffic forecasts with the proposed site improvements were derived based solely on a reassignment of existing traffic to account for the proposed internal site improvements. Given the proposal will result in a net reduction in student capacity, this analysis is limited to a reevaluation of existing traffic that is reassigned to reflect a new circulation pattern.

Site Traffic Reassignments. As shown on Figure 1-3, the site would continue to be served by two (2) separate driveways on Dranesville Road at the locations that exist today. However, the internal site layout will be modified to meet FCPS' current standards by physically separating the bus circulation area from the student drop-off/pick-up area thereby eliminating vehicular conflicts and improving safety between these key users. All school bus and shuttle bus traffic was oriented to the site's north driveway and all drop-off/pick-off traffic will continue to utilize the site's south driveway.

Observations of internal traffic flows supported the reassignments. The reassignment of existing site traffic is reflected on Figure 5-1. The resulting reassignment of the existing peak hour traffic volumes is shown on Figure 5-2 (=Figure 4-1 + Figure 5-1).

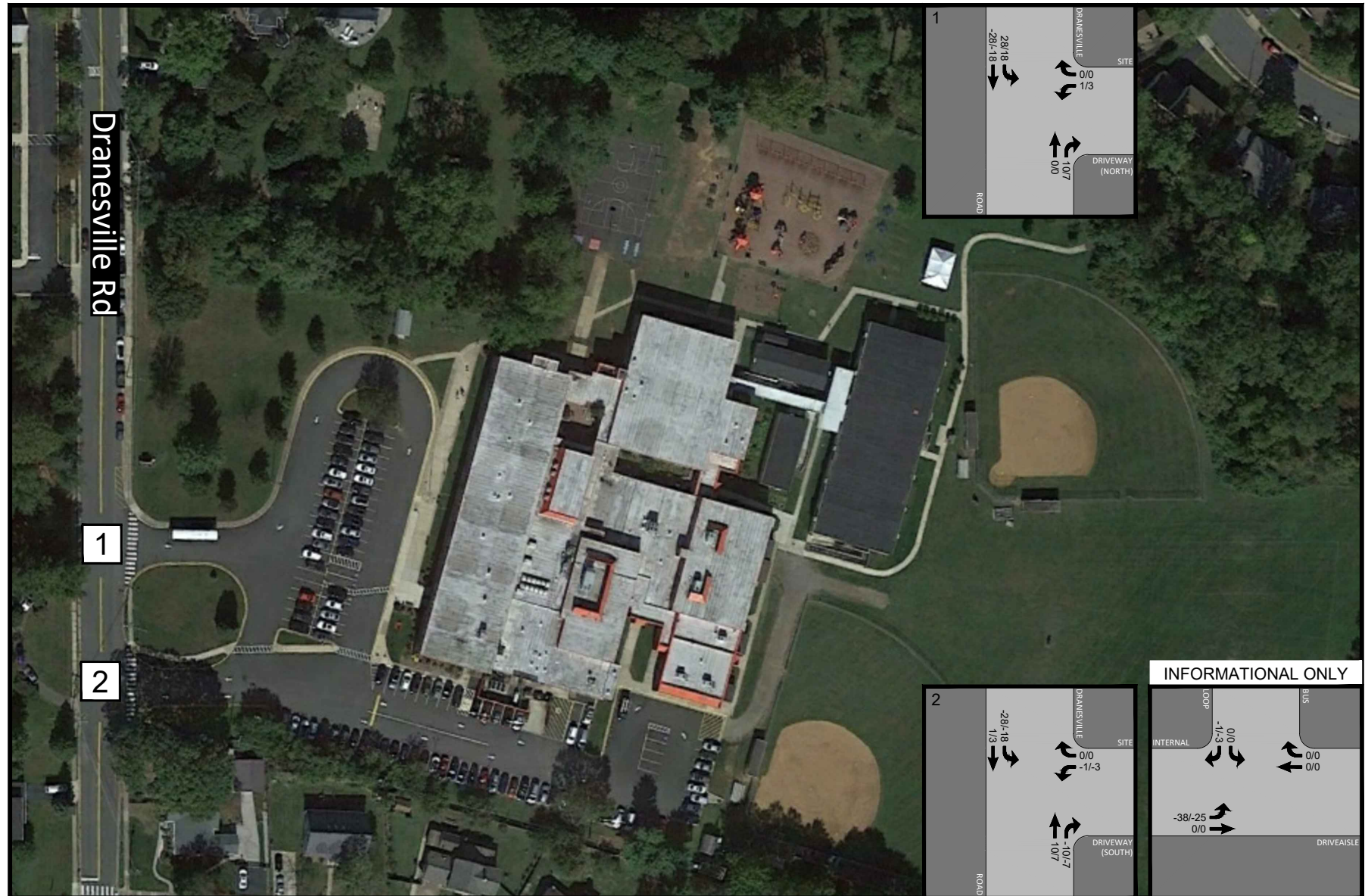


Figure 5-1
Reassignments of Existing Site Traffic
Reflecting Proposed Site Improvements

AM PEAK HOUR
PM PEAK HOUR
000 / 000



Herndon Elementary School
Town of Herndon, Virginia

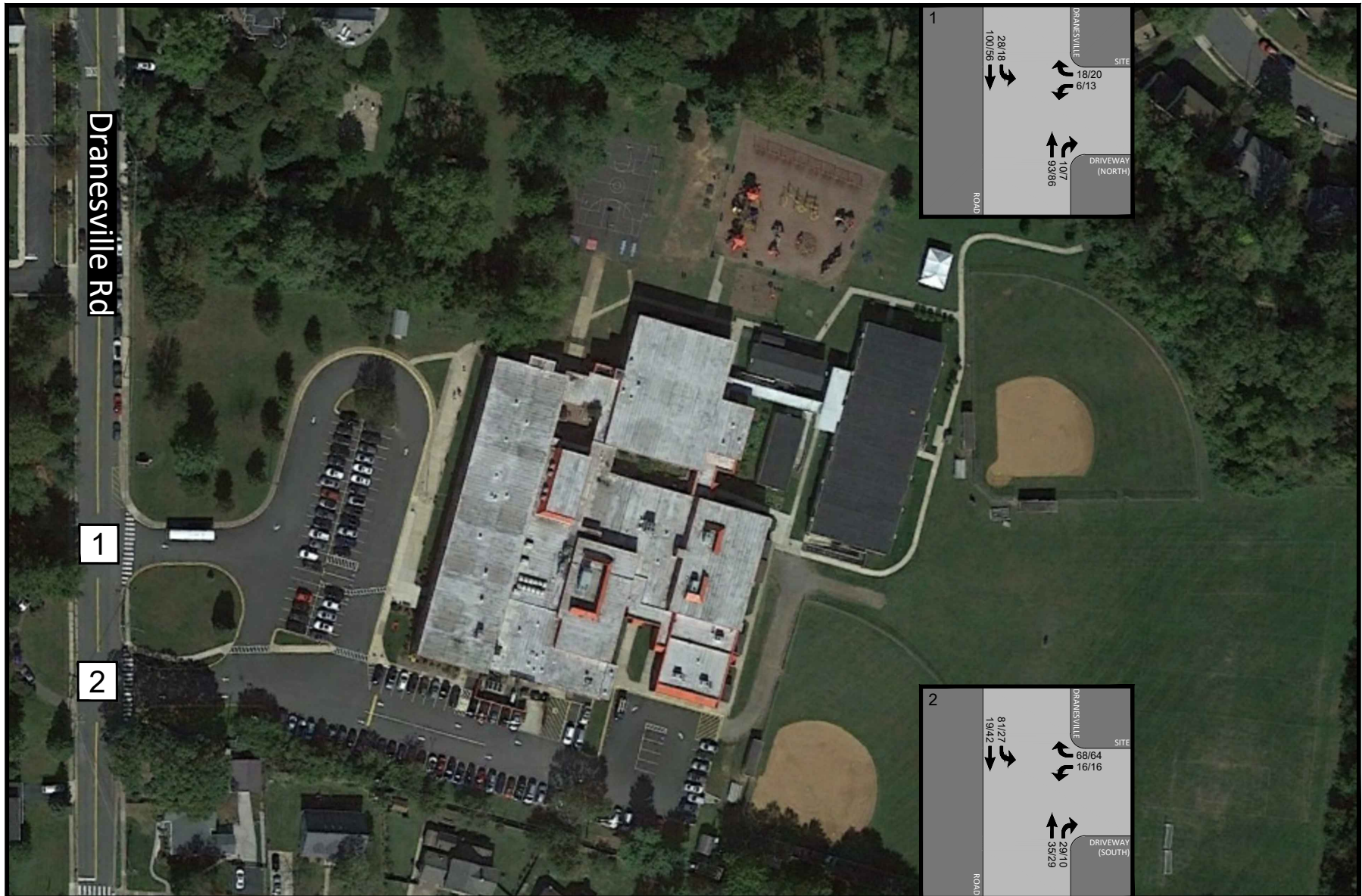


Figure 5-2
Reassigned, Existing Peak Hour Vehicular Traffic Volumes

AM PEAK HOUR
PM PEAK HOUR
000 / 000



Herndon Elementary School
Town of Herndon, Virginia

OPERATIONAL ANALYSIS

Capacity analyses with proposed circulation/site access improvements were performed for the study intersections using the future lane use and traffic controls shown on Figure 5-3, the reassigned existing traffic shown on Figure 5-2, and the observed pedestrian/bicycle counts. Levels of service are summarized in Table 4-1 and the 95th percentile queues are summarized in Table 4-1. The levels of service and the 95th percentile queue results are presented in Appendix E.

Levels of Service. Below is a summary of the level of service results as shown on Table 4-1:

Intersection #1 – Dranesville Road/North Site Driveway: The unsignalized traffic movements would continue to operate at an acceptable LOS “B” or better during the evaluated weekday AM and PM peak hours.

Intersection #2 – Dranesville Road/South Site Driveway: The unsignalized traffic movements would continue to operate at an acceptable LOS “B” or better during the evaluated weekday AM and PM peak hours.

Consistent with existing conditions, it should be noted again that the level of service results as summarized by Synchro evaluated a full peak hour and not reflective of the actual vehicle delays that occur during the school’s limited peak 15 to 20-minute traffic periods.

Queues. The calculated 95th percentile queues associated with the reassigned existing traffic are summarized in Table 4-2 and included in Appendix E. As shown in Table 4-2, vehicle queues were reported again to be minimal with vehicle queues less than one (1) vehicle in length for both study intersections. Consistent with the existing conditions analysis, the calculated peak hour queues for future conditions were determined to not reflect the peak school period queues that have a 15-to-20-minute duration.

Proposed Operational Improvements. The observed vehicle queues discussed under Section 3 and Section 4 are anticipated to be reduced and mitigated by the proposed on-site improvements. The key improvements include providing additional on-site vehicle stacking for approximately 32 more vehicles beyond the current ±28 vehicles which will provide approximately 600 feet of additional vehicle stacking to contain the previously discussed 400 feet of off-site vehicle queues. The supplemental field observations on September 28, 2023 suggest a lesser vehicle queue impact on Dranesville Road than previously reported in February 2023. The proposed on-site improvements will also eliminate the existing vehicle conflicts that occur between the drop-off/pick-up vehicles and entering school buses. This existing conflict disrupts the efficient flow of vehicles entering and exiting the school site, exacerbating vehicle queues during the school’s peak traffic periods. As discussed previously, the school’s peak traffic period occurs over a 15-to-20 minute period during the school’s weekday AM period drop-off and PM period pick-up.

OFF-SITE INTERSECTION IMPACTS

Given the subject proposal will ultimately reduce the school's student design capacity over existing conditions, the proposal will result in net fewer trips added to the area road network and in turn reduce traffic impacts beyond the evaluated study intersections.

Further, in the short term, based on a review of the proposed site circulation improvements that will improve how vehicles enter and exit the site along with additional on-site vehicle queuing area, the improved site circulation patterns will in part mitigate existing off-site queues in length and duration while improving off-site intersections not evaluated in this study.

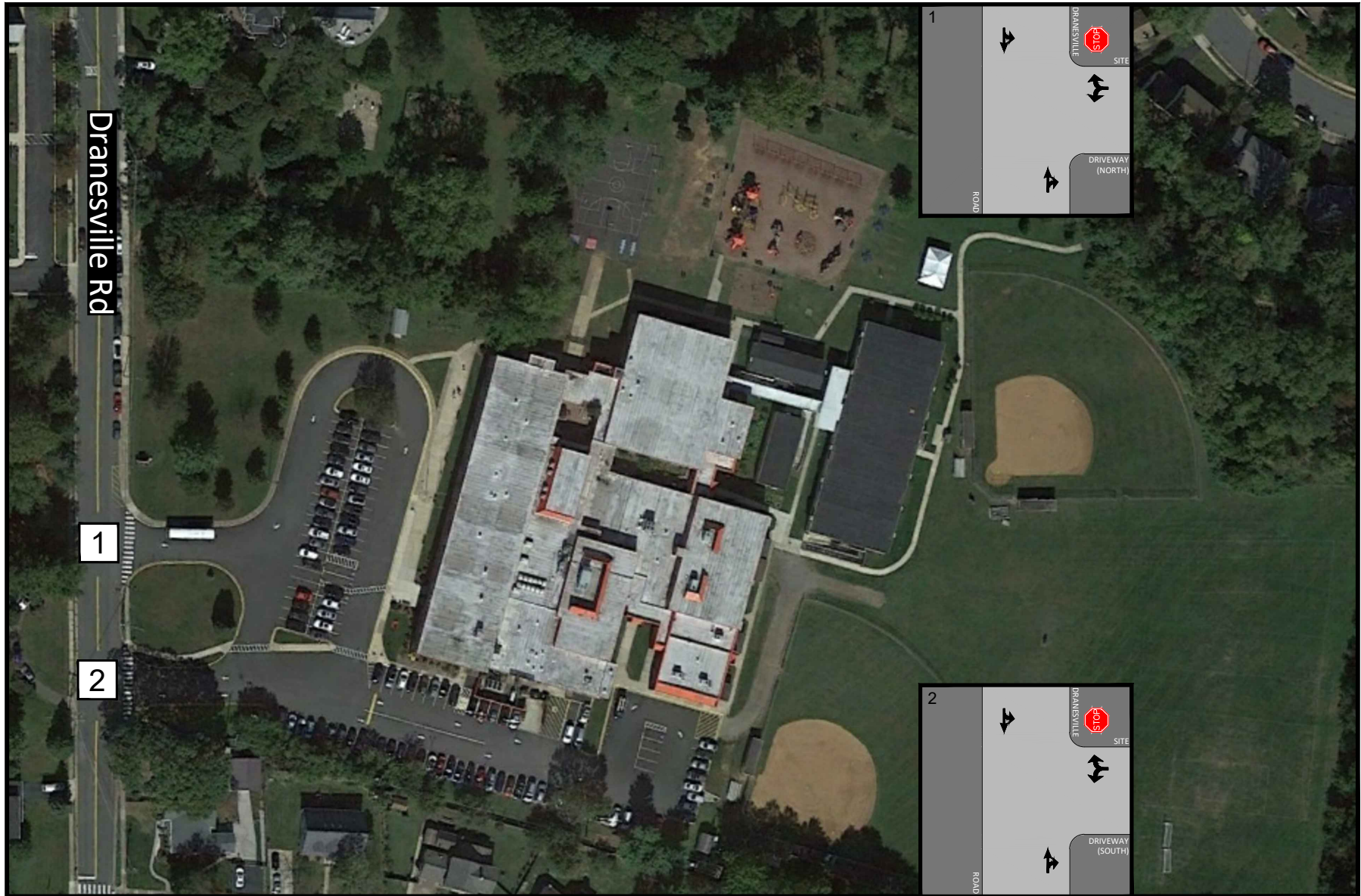


Figure 5-3
Future Lane Use and Traffic Controls

← Represents One Travel Lane
 Stop Sign



Herndon Elementary School
Fairfax County, Virginia

Section 6 ACCESS MANAGEMENT

According to the Federal Highway Administration (FHWA), access management is “the proactive management of vehicular access points to land parcels adjacent to all manner of roadways. Good access management promotes safe and efficient use of the transportation network.” In 2007, the Virginia General Assembly approved legislation to direct the VDOT commissioner to develop and implement access management regulations and standards with the goals of:

- Reducing traffic congestion,
- Enhancing public safety by decreasing traffic crash rates,
- Supporting economic development by promoting the efficient movement of people and goods,
- Reducing the need for new highways and road widening by maximizing the performance of the existing state highways, and
- Preserving the public investment in new highways.

Appendix F of the VDOT Road Design Manual (RDM) establishes the access management criteria for various types of roadways within the Commonwealth.

Roadway Classifications. Based on both VDOT and Town of Herndon criteria, Dranesville Road (Route 2492) and Fillmore Street (Route 2561) within the immediate vicinity of the site are classified as “Local” streets.

Corner Clearance. Corner Clearance is the measured distance between a major roadway and a site access point along the connecting street. Given VDOT’s Corner Clearance standard does not apply to the intersection of two functionally classified local streets, the Corner Clearance spacing between the school’s southern driveway and Fillmore Street does not apply.

Driveway Spacing. For commercial entrances on local streets (not individual private entrance driveways to homes), a spacing distance of 50 feet between entrance radii is specified to assure a minimum separation. The existing and proposed spacing between the site’s existing north and south site driveways on Dranesville Road will generally remain consistent with existing conditions. However, the existing ±20-foot spacing between these two (2) driveways does not meet the VDOT 50-foot spacing standard along a local street (see Figure 3-1). Given the subject proposal does not change the existing use nor increase the student design capacity, VDOT would typically not require an Access Management Exception or Waiver to be submitted.

Section 7 CRASH DATA

Crash data for the study intersections were obtained from both the Town of Herndon and VDOT under separate requests. The reports are provided in Appendix F.

TOWN OF HERNDON CRASH DATA

The Town of Herndon provided a “Crash Statistic Report” for the approximate 0.2 mile (or 1,056 foot) segment of Dranesville Road (Route 2492) between Park Avenue (Route 228) to the north and Fillmore Street (Route 2561) to the south.

Date Range: Year 2019 through January 2023 (± 3 years)

Summary: According to the crash report, there were no reported crashes within the immediate proximity of the site driveways on Dranesville Road that serve the Herndon Elementary School nor at the adjacent Dranesville Road/Fillmore intersection.

Two (2) crashes were reported at the Dranesville Road/Park Avenue intersection. Both occurred on a Saturday or Sunday when the public school was closed.

VDOT CRASH DATA

VDOT provided a Crash Report for an approximate 250-foot radius as measured from each school driveway on Dranesville Road (Route 2492) and the Dranesville Road (Route 2492)/Fillmore Street (Route 2561) intersection.

Date Range: Year 2017 through December 2022 (± 6 years)

Summary: According to the crash report, there were no reported crashes within the immediate proximity of the site driveways on Dranesville Road that serve the Herndon Elementary School.

One (1) crash was reported on Fillmore Street (Route 2561) just west of the Dranesville Road/Fillmore Street intersection. The crash occurred at 1:27 AM on a Sunday when the public school was closed.

Section 8 CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Based on this assessment, the overall conclusions are as follows:

Existing Conditions

1. The existing Herndon Elementary School program is summarized as follows:

- Fixed Building Area = ±85,165 square feet of gross floor area (GFA)
- Trailer/modular Area = ±15,264 GFA
- Total Existing Building Area = ±100,429 GFA

- Current Enrollment = ±805 students (*Wednesday, February 01, 2023*)
- Existing Student Design Capacity = ±1,232 students

- Regular School Hours: Monday – Friday, 9:20 AM – 4:05 PM
- Office Hours: Monday – Friday, 8:00 AM – 4:30 PM

2. Access is currently provided by two (2) existing driveways on Dranesville Road. The northern driveway serves as an egress only for school buses and limited school staff. The nearby southern driveway serves both ingress and egress traffic movements and serves as the sole entrance for all entering school buses, staff, and student pick-up/drop-off operations. Egress movements at the southern driveway includes all user types except for school buses.

3. The existing driveway configuration requires the mixing of multiple users creating conflict points between the different operations. For example, entering school buses may block or be blocked by vehicles seeking to pick-up or drop-off students and there are pedestrian and school bus conflicts as school buses turn into the designated school bus area.

4. The school's key traffic impact periods when students are dropped off in the morning and picked-up in the afternoon generally occur within a short-defined period (±15-20 minutes) when vehicle queues spill into and along Dranesville Road. The key traffic impact periods were generally observed to occur at the following times:

- 9:00 AM to 9:15 AM
- 3:50 PM to 4:12 PM

5. The existing layout provides on-site stacking for approximately 28 vehicles to queue up to the student drop-off/pick-up area before the queue approaches or spills into Dranesville Road.

6. During the key traffic impact periods when on-site vehicle queues spill back to Dranesville Road, entering school buses are directed to enter the site using the egress lane at the south site driveway. When this occurs, exiting drop-off/pick-up vehicles are prevented from leaving the site which exacerbates existing vehicle queues.
7. Based on field observations on Wednesday, February 1, 2023, the northbound vehicle at the school's southern driveway were observed to be minimal at approximately five (5) vehicles or less. The southbound peak vehicle queues for entering school traffic spilled back into and beyond along Dranesville Road with excessive vehicle queues exceeding to, or at least, 400 feet in the southbound direction disrupting typical vehicle travel along Dranesville Road.
8. During a supplemental field observation on Thursday, September 28, 2023, it was observed that southbound vehicle queues were better managed along Dranesville Road where they did not extend to, nor exceed 400 feet.
9. As observed during the February 2023 field visit, the Herndon Elementary School provided a traffic safety attendant to control traffic and pedestrian movements during the following observed times:
 - 9:02 AM to 9:16 AM
 - 4:03 PM to 4:12 PM

During the supplemental field visit in September 2023 when the off-site vehicles queues appeared to be better managed, it was observed that the Herndon police have taken over the control of school traffic during its peak drop-off and pick-up periods.

Proposed Conditions

10. The proposed access and circulation plan will improve overall traffic flow between student drop-off/pick-up vehicles, school buses, and pedestrians while also improving the length and duration of existing off-site queues along Dranesville Road.
11. The proposed renovation project will result in the following development program:
 - Existing Fixed Building Area = ±85,165 GFA
 - Proposed New Building Area = ±44,039 GFA
 - Total Proposed Building Area = ±129,204 GFA (or ±28,775 more GFA than the total existing building area)
 - Proposed Student Design Capacity = ±1,050 students (or ±182 fewer students than the existing design capacity)

12. The proposed access and circulation plan would continue to utilize the existing two (2) separate driveways on Dranesville Road at the locations that exist today. However, the internal site layout will be modified to meet FCPS' current standards by physically separating the bus circulation area from the student drop-off/pick-up area thereby eliminating vehicular conflicts and improving safety between these key users. Pedestrian circulation will also be enhanced by removing the key internal vehicular/pedestrian conflicts that exist today between on-site pedestrians and school buses.
13. The proposed layout provides on-site stacking for approximately 60 vehicles to queue up to the relocated student drop-off/pick-up area before the queue approaches or spills into Dranesville Road. This doubles the current stacking area by providing stacking for approximately 32 more vehicles beyond the approximately 28 vehicles that can stack on-site today which is anticipated to mitigate the vehicles that spill back onto Dranesville Road.
14. School buses will now have their own dedicated ingress lane at the site's northern driveway.

General Conditions

15. From a level of service perspective that evaluates the peak hour (not partial 15 to 20-minute period), both proposed site driveways along Dranesville Road operate at acceptable levels of service. Based on field observations, extended vehicle delays and extensive disruptions predominately occur along southbound Dranesville Road during the school's peak AM and PM traffic periods, but they are limited to only 15 to 20 minutes.
16. The existing two (2) site driveways that will generally remain as currently designed do not meet VDOT's access management spacing requirements for a "local" street. Given the site does not propose a change in use nor plans to intensify the site beyond its current student design capacity, a separate submission to address access management standards is not deemed necessary.
17. Corner clearance spacing between the site's south driveway on Dranesville Road and Fillmore Street is not applicable given that both Dranesville Road and Fillmore Street are intersecting "local" streets.
18. Based on reported crash data provided by the Town of Herndon and VDOT, there have been no recorded crashes in the vicinity of the school's driveways on Dranesville Road nor as a direct result of school related traffic or activities.

RECOMMENDATIONS

1. The project should modify its access and circulation as proposed to improve safety, school traffic operations, and reduce on-site/off-site vehicle queues.

2. The Herndon Elementary School should continue to utilize a traffic safety attendant(s) to control the school's driveways on Dranesville Road, as needed, if consistent vehicle queues spill back onto Dranesville Road. The traffic attendant should be certified to control traffic within the public right-of-way.
3. The school should continue to monitor traffic operations as current enrollment levels may increase to its planned design capacity.
4. The school should continue to promote carpooling, school bus ridership, and safe pedestrian/bicycle routes to/from school.
5. The school should also continue regular communication with the school's community to make them aware of future and upcoming changes to the site's access and circulation.

APPENDIX A

SIGNED SCOPING AGREEMENT & COMMENT/RESPONSE MEMO



11220 Assett Loop
Suite 202,
Manassas, VA 20109
703-365-9262
WellsandAssociates.com

January 25, 2023

VIA ELECTRONIC DELIVERY

Bryce Perry
Deputy Director of Community Development
Town of Herndon
777 Lynn Street
Herndon, Virginia 20170-4602

RE: Herndon Elementary School
Traffic Study Scope;
Town of Herndon, Virginia

Dear Mr. Perry,

The purpose of this letter is to summarize the traffic study scoping meeting that is associated with the proposed Herndon Elementary School improvement project within the Town of Herndon.

Meeting Date/Time: Friday, January 20, 2023/10:30 AM

Meeting Location: WebEx Virtual Meeting

Meeting Attendees: Bryce Perry, Town of Herndon
Holli McKinley, FCPS
Najib Hameed, FCPS
Vincent Santmyer, FCPS
Andrew Peterson, FCPS
John Cummings, RDA Civil
Maureen Wiechert, Cooper Carry
Kevin Fellin, Wells+Associates

Applicant: Fairfax County Public Schools (FCPS)

Site Location: The Herndon Elementary School site is generally located in the northeast quadrant of the Dranesville Road (Route 2492)/Fillmore Street (Route 2561) intersection at 360 Dranesville Road in the Town of Herndon, Virginia (**see ATTACHMENT I**). The ±13.885-acre property is also identified as **Parcel # 010-4 ((02)) 66A**.

WELLS + ASSOCIATES

Background: The Herndon Elementary School is an existing operating school that is currently zoned to the R-10 District and improved with the following development program:

- Existing Fixed Building Area = ±86,895 square feet of gross floor area (GFA)
- Trailer/Modular Building Area = ±14,682 GFA
- Total Existing Building Area = ±101,477 GFA
- Current Enrollment = ±754 students
- Existing Design Capacity = ±1,232 students

Existing Site Access (see ATTACHMENT 2). Access is currently provided by two (2) existing driveways on Dranesville Road. The northern driveway serves as an egress only for school buses and limited school staff. The nearby southern driveway serves both ingress and egress traffic movements and serves as the sole entrance for all entering school buses, staff, and student pick-up/drop-off operations. Egress movements at the southern entrance includes all user types except for school buses.

Proposal: FCPS is seeking an application to remove the existing trailer/modular educational space and replace it with permanent new building area under a comprehensive renovation project that will bring the overall Herndon Elementary School up to applicable building code standards and educational requirements. The proposed school site will result in the following development program:

- Existing Fixed Building Area = ±86,895 square feet of gross floor area (GFA)
- Proposed New Building Area = ±44,027 GFA
- Total Proposed Building Area = ±130,922 GFA
- Proposed Design Capacity = ±1,050 students (or 182 fewer students)

Proposed Site Access (see ATTACHMENT 3). The site would continue to be served by two (2) separate driveways on Dranesville Road at the locations that exist today. However, the internal site layout will be modified to physically separate the bus circulation area from the student drop-off/pick-up area thereby eliminating vehicular conflicts and improving safety between these key users. Pedestrian circulation will also be enhanced by removing the key internal vehicular/pedestrian conflicts that exist today.

TRAFFIC STUDY SCOPE

Overview. Given the subject proposal will effectively reduce the existing student design capacity by approximately 182 students [=1,050 students (proposed) – 1,232 students (existing)], the subject proposal will not intensity the site beyond existing design capacity conditions. As a result,

the subject scope of work outlines a limited traffic study to evaluate key elements discussed at the scoping meeting held on January 20, 2023.

A. Study Period(s) to be Addressed in the Traffic Study

- Existing Year: 2023

B. Study Intersections (see ATTACHMENT I)

1. Dranesville Drive/North Site Entrance
2. Dranesville Drive/South Site Entrance

Peak period traffic counts will be collected on a typical weekday (Tuesday, Wednesday, or Thursday) from 6 AM to 9 AM and 2 PM to 5 PM when public schools are in full-day session. Peak period intersection traffic counts will include vehicular, school bus, pedestrian, and bicycle counts.

C. Trip Generation

The existing (current enrollment & existing design capacity) and proposed (proposed design capacity) vehicular trip generation estimates as estimated by the Institute of Traffic Engineers (ITE) Trip Generation Manual, 11th edition are shown in **ATTACHMENT 4**. The traffic study will amend the ITE trip generation assessment by documenting the measured vehicular trip generation based on existing traffic counts and day-of attendance of the Herndon Elementary School. No trip adjustment factors are assumed for this traffic study.

D. Use of the current Highway Capacity Software (HCS) version or other software

The Synchro capacity analysis software (Version 11) will be used to analyze the aforementioned intersections based on existing and future conditions during the key AM peak hour of the adjacent street and the PM peak hour of the Generator. Future conditions will be forecasted solely by reassigning the measured existing traffic to the proposed circulation layout. If the traffic analysis indicates volumes exceeding capacity, SimTraffic will be used to calculate queueing.

E. Currently Programmed or Planned Traffic Improvements

No future planned improvements were identified in the general vicinity of the site, there for no future improvements will be considered beyond the proposed site access layout.

WELLS + ASSOCIATES

F. Critical Points for the Traffic

Given the proposal will de-intensify the site by reducing the site's existing student design capacity, no critical points for the traffic were identified.

G. Other Developments nearby which should be considered in the Traffic Study

- In the immediate vicinity of the site, there are no other future off-site developments and/or regional growth factors that were identified for this limited traffic study scope.

H. Special Considerations

- Town of Herndon staff will confirm the Town's roadway classification for Dranesville Road within the immediate vicinity of the site.
- The traffic study will evaluate the existing site driveways against VDOT's minimum spacing requirements based on VDOT's Road Design Manual.
- If the traffic study finds the existing site driveways do not meet minimum spacing requirements, an access management exception will be filed under separate cover if requested by the Town to justify the long-standing substandard condition.
- The traffic study will summarize the proposed access layout as compared to the existing condition.
- The traffic study will discuss relative impacts to off-site intersections located outside of the study area intersections.
- The traffic study will document any available crash data that might be available via VDOT and/or the Town of Herndon at the study intersections.

Concurrence with Proposed Scope of Work.

SIGNED:



Local Government Representative

DATE: 2/2/23

PRINT NAME: Bryce A. Perry, Deputy Director, Community Development
Local Government Representative

WELLS + ASSOCIATES

Feel free to call or email me at 703-676-3652 or krfellin@wellsandassociates.com with any questions and/or comments.

Sincerely,



Kevin R. Fellin, P.E.
Principal



ATTACHMENT I

300 ft

PARK AVE

DRANESVILLE RD
(ROUTE 2492)

1

2

HERNDON
ELEMENTARY
SCHOOL

FILLMORE ST

Google Earth

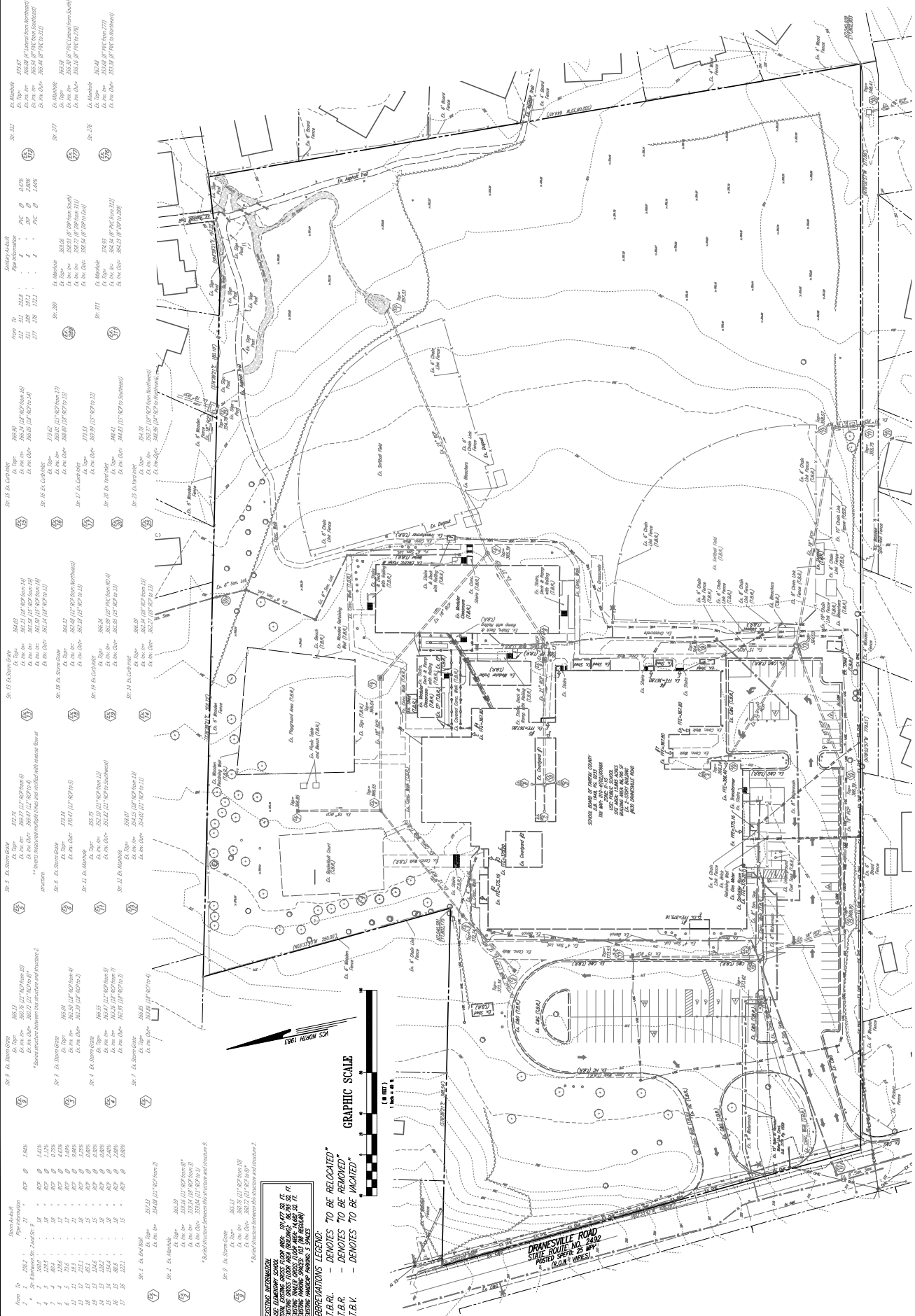


Rinker Design Associates, P.C.
11100 Endeavor Court, Suite 200, Manassas, VA 20109
Telephone: (703) 368-7373 www.rinker.com
Engineering • Surveying • Transportation • Environmental Services

EXISTING CONDITIONS
HERNDON ELEMENTARY SCHOOL
RENOVATION & ADDITION
DRAKESVILLE ELECTION DISTRICT
TOWN OF HERNDON

REVISIONS:
2/29/22-40 SUBMISSION

PLAN DATE: AUGUST 24, 2022
DESIGN BY: AG, TP, BP
CHECKED BY: JSC
ARCHITECT: Cooper Carry
JURISDICTIONAL PLAN NO.
SHEET NO. 22029-001
SHEET NUMBER



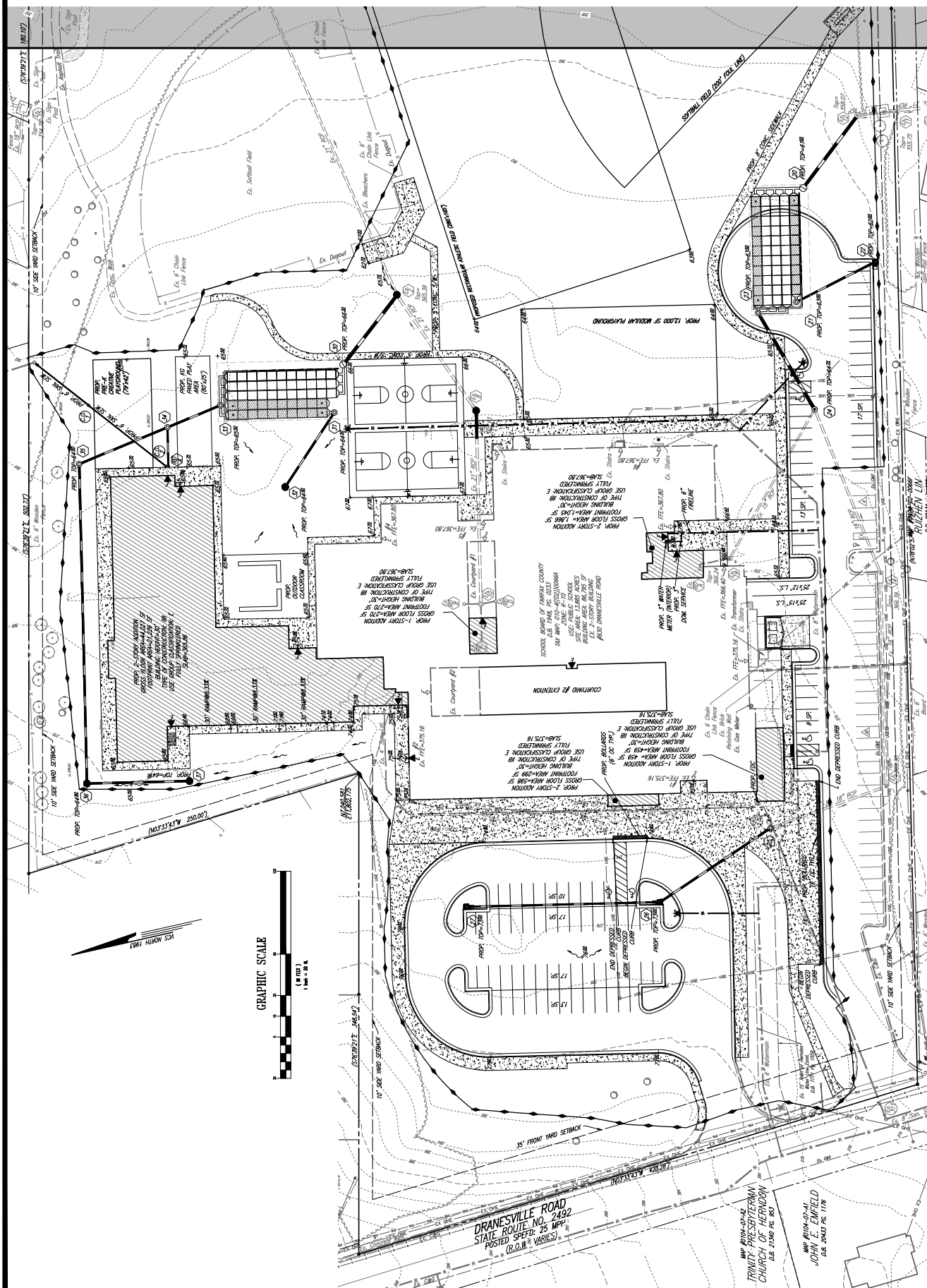


Table 1
Herndon Elementary School
Site Trip Generation Summary (1)

Scenario	ITE Land Use	Land Use Code	Amount		Units	Weekday											
						AM Peak Hour of the Generator			of the Adjacent Street			of the Generator			PM Peak Hour of the Adjacent Street		
						In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Current Enrollment	Elementary School	520	754	Students	306	260	566	301	257	558	156	184	340	56	65	121	1,712
Existing Design Capacity (incl. modulars & 2-duplexes)	Elementary School	520	1,232	Students	499	425	924	492	420	912	255	300	555	91	107	198	2,797
Proposed Design Capacity	Elementary School	520	1,050	Students	426	362	788	420	357	777	218	255	473	77	91	168	2,384
Difference (Proposed Design Capacity minus <u>Current Enrollment</u>)			296	Students	120	102	222	119	100	219	62	71	133	21	26	47	672
Difference (Proposed Design Capacity minus <u>Existing Design Capacity</u>)			(182)	Students	(73)	(63)	(136)	(72)	(63)	(135)	(37)	(45)	(82)	(14)	(16)	(30)	(413)

Note(s):

(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 11th Edition.



WELLS + ASSOCIATES

MEMORANDUM

To: Ben Schitter, RLA
Development Program Planner
Town of Herndon

From: Kevin R. Fellin, P.E.

RE: Herndon Elementary School – Traffic Study (1st Submission)
SE#23-01

Subject: Responses to the Town’s Traffic Study Comments

Date: October 4, 2023

11220 Assett Loop
Suite 202
Manassas, Virginia 20109
703-365-9262
703-917-0739 FAX

www.WellsandAssociates.com

This memorandum serves as a response to each of the Town of Herndon’s comments based on their review of the 1st submission Traffic Study dated March 28, 2023 as prepared by Wells + Associates, Inc. (W+A). A copy of the Town’s comment letter dated July 24, 2023 is included as **Attachment I**. Each comment is reproduced below along with a response:

Comment 1: Ensure all computations are coordinated between the traffic study and Special Exception. The existing enrollment and existing gross floor area listed on the traffic study do not match those on the SE.

Response 1: The traffic study will be resubmitted to reflect 15,264 GSF for the existing outdoor trailers/modular classrooms to be removed as shown in the SE versus 14,682 GSF as shown in the traffic study. It should be noted that difference between the traffic study and SE is only 582 SF which has no appreciable impact to the traffic study results. The traffic study evaluates the vehicular trip generation for the school based on number of students, not floor area.

The current student enrollment of 805 students that was referenced in the traffic study correlates to the school’s current student enrollment at the time the traffic counts were collected. This will be clarified in the revised traffic study.

Transportation Consultants
INNOVATION + SOLUTIONS



WELLS + ASSOCIATES

MEMORANDUM

Comment 2: In the traffic study, explain why the student capacity is reduced with the proposed conditions even though there is an increase in gross floor area. The Special Exception will need to provide a condition that limits the student enrollment to the design capacity.

Response 2: As part of the “Purpose” narrative on page 1 of the traffic study, it states “the renovation project would remove existing trailer/modular educational space that currently serves the school and replace it with new permanent building area as part of a comprehensive renovation project that will bring the overall Herndon Elementary School up to applicable building code standards and educational requirements.”

In other words, the removed existing trailer/modular classroom space that serves existing student capacity numbers will in part not be replaced with the new permanent building area that is proposed to be added to support educational requirements. This results in fewer students in terms of student capacity. Additional language will be provided in the revised traffic study for additional clarification.

The Special Exception will include a condition that limits student enrollment to the design capacity subject to FCPS confirmation.

Comment 3: The analysis states that the current kiss n’ ride backup onto Dranesville is beyond 400’ in the southbound lane and does not provide the backup distance on the northbound lane. Please verify, based on the on-site video data collected, how long the backup is on the northbound lane and how far past 400’ the backup is on the southbound lane.

Response 3: The revised submission of the traffic study will expand the analysis description to referenced video observations for northbound lane queues. Under Section 3 of the traffic study, there was assessment of existing conditions based on video footage that identified the critical queues approaching the main site driveway approached from the north (southbound queues).

Based on the AM Peak Period assessment of the video footage, on Page 20 under the “9:10 AM” field note, it described the northbound Dranesville Road approach to remain generally minimal when compared to the southbound queues.

Based on the PM Peak Period assessment of the video footage, on Page 27 under the “4:07 PM” field note, it described the northbound Dranesville Road approach to be limited to approximately five (5) vehicles.



WELLS + ASSOCIATES

MEMORANDUM

Based on the field observations, the primary vehicle queue was identified to occur on Dranesville Road's southbound approach to the school's driveway which received repeated emphasis under the "Analysis of Existing Conditions" section of the traffic study on Page 41. On the bottom of Page 37 of the traffic study, the Synchro analysis results were described as evaluating a full peak hour which was not reflective of the actual peak field conditions that are limited to a 15 to 20-minute period. This was the primary purpose for making video field observations to supplement the Synchro analysis results.

Given the limitations of video footage in the original traffic study to fully document the existing southbound back-of-queue, a supplemental field observation was undertaken on Thursday, September 28, 2023 in coordination the Town of Herndon staff. The supplemental field observation confirmed that the southbound vehicle queues on Dranesville Road do not extend to, nor exceed 400 feet. It will also be noted that the previous observed traffic attendant in February 2023 has been replaced by a police officer. The revised traffic study will include a summary of the supplemental field observation.

Comment 4: With the verifications requested on the previous comment, please identify and assess the reduced backups onto Dranesville for both lanes based on the proposed site circulation improvements on-site.

Response 4: The "Proposed Operations" section on Page 30 of the traffic study provides a summary of the resulting transportation and queuing improvements that would be realized with the proposed layout. Figure 3-1 on page 31 will be revised to quantify that the on-site queuing would increase from approximately 28 vehicles under current conditions to approximately 60 vehicles under the proposed conditions.

Based on the requested supplemental field verification, it will be noted in the revised traffic study that the on-site site improvements that will effectively provide approximately 600 feet of additional on-site vehicle queuing (or 32 additional vehicles) is anticipated to contain the observed vehicle queues of 400 feet or less.

Providing additional on-site queueing along with the described operational improvements on Page 30 will further support improving the short-term traffic disruptions along Dranesville Road that occur today. The key operational improvements as documented in the traffic study are reproduced below:

- 1) The internal site layout will be modified to meet FCPS' current standards by physically separating the bus circulation area from the student drop-off/pick-up area thereby eliminating vehicular conflicts and improving safety between these key users.

**WELLS + ASSOCIATES****MEMORANDUM**

- 2) Pedestrian circulation will be enhanced by eliminating the key internal vehicular/pedestrian conflicts that exist today between pedestrians and entering school bus traffic.
- 3) The on-site vehicle stacking distance will be improved for a relocated student drop-off/pick-up area. The number of vehicles that are able to stack on-site will be increased from approximately 28 vehicles to 61 vehicles. This will provide stacking for approximately 33 more vehicles than realized today.
- 4) School buses will now have their own dedicated ingress lane at the site's northern driveway.
- 5) Departing drop-off and pick-up vehicles will be able to efficiently leave the site and will no longer be required to yield to entering school buses. This will serve to improve exiting traffic flow and thereby reduce the length and duration that off-site vehicle queues occur on Dranesville Road.
- 6) Reduced vehicle queues on-site will improve the short-term traffic disruptions along Dranesville Road.

We trust that the responses provided in this memorandum address the Town's comments on the 1st submission traffic study. Any questions or requests for clarification should be directed to Kevin Fellin at krfellin@wellsandassociates.com or 703.676.3652.

July 24, 2023

Najib Hameed, Coordinator III
Fairfax County Public Schools
8115 Gatehouse Road, Suite 3400
Falls Church, VA 22042

RE: Herndon Elementary School, SE #23-01, Traffic Study, 1st Submission

Dear Najib Hameed:

Town staff has completed its review of the first submission of the Herndon Elementary School Special Exception Traffic Study and provides you with the following comments.

Traffic Study Comments:

1. Ensure all computations are coordinated between the traffic study and Special Exception. The existing enrollment and existing gross floor area listed on the traffic study do not match those on the SE.
2. In the traffic study, explain why the student capacity is reduced with the proposed conditions even though there is an increase in gross floor area. The Special Exception will need to provide a condition that limits the student enrollment to the design capacity.
3. The analysis states that the current kiss n' ride backup onto Dranesville is beyond 400' in the southbound lane and does not provide the backup distance on the northbound lane. Please verify, based on the on-site video data collected, how long the backup is on the northbound lane and how far past 400' the backup is on the southbound lane.
4. With the verifications requested on the previous comment, please identify and assess the reduced backups onto Dranesville for both lanes based on the proposed site circulation improvements on-site.

Once you and the development team have reviewed these comments, please let me know if you would like to meet to discuss any of the comments.

Sincerely,



Ben Schitter, RLA
Development Program Planner

APPENDIX B

LEVELS OF SERVICE DESCRIPTIONS

Level of Service Criteria for Stop Sign Controlled Intersections

The level of service criteria are given in Table 17-2. As used here, control delay is defined as the total elapsed time from the time a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position, including deceleration of vehicles from free-flow speed to the speed of vehicles in queue.

The average total delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation. . . .

Table 17-2. Level of Service Criteria for TWSC Intersections

LEVEL OF SERVICE	AVERAGE CONTROL DELAY (sec/veh)
A	≤ 10
B	$> 10 \text{ and } \leq 15$
C	$> 15 \text{ and } \leq 25$
D	$> 25 \text{ and } \leq 35$
E	$> 35 \text{ and } \leq 50$
F	> 50

Average total delay less than 10 sec/veh is defined as Level of Service (LOS) A. Follow-up times of less than 5 sec have been measured when there is no conflicting traffic for a minor street movement, so control delays of less than 10 sec/veh are appropriate for low flow conditions. To remain consistent with the AWSC intersection analysis procedure described later in this chapter, a total delay of 50 sec/veh is assumed as the break point between LOS E and F.

The proposed level of service criteria for TWSC intersections are somewhat different from the criteria used in Chapter 16 for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection. Additionally, several driver behavior considerations combine to make delays at signalized intersections less onerous than at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, where drivers on the minor approaches to unsignalized intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized than signalized intersections. For these reasons, it is considered that the total delay threshold for any given level of service is less for an unsignalized intersection than for a signalized intersection. . . .

LOS F exists when there are insufficient gaps of suitable size to allow a side street demand to cross safely through a major street traffic stream. This level of service is generally evident from extremely long total delays experienced by side street traffic and by queueing on the minor approaches. The method, however, is based on a constant critical gap size - that is, the critical gap remains constant, no matter how long the side street motorist waits. LOS F may also appear in the form of side street vehicles' selecting smaller-than-usual gaps. In such cases, safety may be a problem and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior. The latter is more difficult to observe on the field than queueing, which is more obvious.

Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

APPENDIX C

TRAFFIC COUNT DATA

Wells + Associates, Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

PROJECT: Herndon ES		DATE: 2/1/2023		SOUTHBOUND ROAD: Dranesville road																							
W+A JOB NO: 8996		DAY: Wednesday		NORTHBOUND ROAD: Dranesville road																							
INTERSECTION: Dranesville Rd. & School Entr.- North		WEATHER: clear		WESTBOUND ROAD: School Entrance - North																							
LOCATION: Fairfax County,VA		COUNTED BY: Agan		EASTBOUND ROAD: 0																							
INPUTED BY: agan																											
Time Period	Southbound Dranesville road					Westbound School Entrance - North					Northbound Dranesville road					Eastbound 0					North East & & Total						
	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	South	West	
15 Minute Volumes																											
8:00 AM - 8:15 AM	0	25	0	0	25		4	0	1	0	5		0	7	0	0	7		0	0	0	0	0		32	5	37
8:15 AM - 8:30 AM	0	14	0	0	14		3	0	0	0	3		0	14	0	0	14		0	0	0	0	0		28	3	31
8:30 AM - 8:45 AM	0	39	0	0	39		2	0	1	0	3		0	6	0	0	6		0	0	0	0	0		45	3	48
8:45 AM - 9:00 AM	0	30	0	0	30		3	0	0	0	3		0	10	0	0	10		0	0	0	0	0		40	3	43
9:00 AM - 9:15 AM	0	39	0	0	39		9	0	1	0	10		0	32	0	0	32		0	0	0	0	0		71	10	81
9:15 AM - 9:30 AM	0	20	0	0	20		4	0	3	0	7		0	34	0	0	34		0	0	0	0	0		54	7	61
9:30 AM - 9:45 AM	0	12	0	0	12		2	0	1	0	3		0	6	0	0	6		0	0	0	0	0		18	3	21
9:45 AM - 10:00 AM	0	7	0	0	7		3	0	3	0	6		0	4	0	0	4		0	0	0	0	0		11	6	17
10:00 AM - 10:15 AM	0	3	0	0	3		0	0	2	0	2		0	6	0	0	6		0	0	0	0	0		9	2	11
10:15 AM - 10:30 AM	0	3	0	0	3		0	0	0	0	0		0	3	0	0	3		0	0	0	0	0		6	0	6
10:30 AM - 10:45 AM	0	7	0	0	7		1	0	0	0	1		0	5	0	0	5		0	0	0	0	0		12	1	13
10:45 AM - 11:00 AM	0	6	0	0	6		1	0	3	0	4		0	2	0	0	2		0	0	0	0	0		8	4	12
2:30 PM - 2:45 PM	0	6	0	0	6		0	0	0	0	0		0	5	0	0	5		0	0	0	0	0		11	0	11
2:45 PM - 3:00 PM	0	5	0	0	5		1	0	0	0	1		0	3	0	0	3		0	0	0	0	0		8	1	9
3:00 PM - 3:15 PM	0	13	0	0	13		1	0	1	0	2		0	6	0	0	6		0	0	0	0	0		19	2	21
3:15 PM - 3:30 PM	0	10	0	0	10		1	0	0	0	1		0	3	0	0	3		0	0	0	0	0		13	1	14
3:30 PM - 3:45 PM	0	19	0	0	19		0	0	1	0	1		0	12	0	0	12		0	0	0	0	0		31	1	32
3:45 PM - 4:00 PM	0	20	0	0	20		3	0	0	0	3		0	5	0	0	5		0	0	0	0	0		25	3	28
4:00 PM - 4:15 PM	0	22	0	0	22		5	0	2	0	7		0	26	0	0	26		0	0	0	0	0		48	7	55
4:15 PM - 4:30 PM	0	15	0	0	15		10	0	5	0	15		0	32	0	0	32		0	0	0	0	0		47	15	62
4:30 PM - 4:45 PM	0	16	0	0	16		2	0	3	0	5		0	22	0	0	22		0	0	0	0	0		38	5	43
4:45 PM - 5:00 PM	0	4	0	0	4		4	0	3	0	7		0	9	0	0	9		0	0	0	0	0		13	7	20
5:00 PM - 5:15 PM	0	6	0	0	6		0	0	2	0	2		0	11	0	0	11		0	0	0	0	0		17	2	19
5:15 PM - 5:30 PM	0	11	0	0	11		2	0	0	0	2		0	6	0	0	6		0	0	0	0	0		17	2	19
Total	0	352	0	0	352		61	0	32	0	93		0	269	0	0	269		0	0	0	0	0		621	93	714
One Hour Volumes																											
8:00 AM - 9:00 AM	0	108	0	0	108	0.7	12	0	2	0	14	0.7	0	37	0	0	37	0.7	0	0	0	0	0		145	14	159
8:15 AM - 9:15 AM	0	122	0	0	122	0.8	17	0	2	0	19	0.5	0	62	0	0	62	0.5	0	0	0	0	0		184	19	203
8:30 AM - 9:30 AM	0	128	0	0	128	0.8	18	0	5	0	23	0.6	0	82	0	0	82	0.6	0	0	0	0	0		210	23	233
8:45 AM - 9:45 AM	0	101	0	0	101	0.6	18	0	5	0	23	0.6	0	82	0	0	82	0.6	0	0	0	0	0		183	23	206
9:00 AM - 10:00 AM	0	78	0	0	78	0.5	18	0	8	0	26	0.7	0	76	0	0	76	0.6	0	0	0	0	0		154	26	180
9:15 AM - 10:15 AM	0	42	0	0	42	0.5	9	0	9	0	18	0.6	0	50	0	0	50	0.4	0	0	0	0	0		92	18	110
9:30 AM - 10:30 AM	0	25	0	0	25	0.5	5	0	6	0	11	0.5	0	19	0	0	19	0.8	0	0	0	0	0		44	11	55
9:45 AM - 10:45 AM	0	20	0	0	20	0.7	4	0	5	0	9	0.4	0	18	0	0	18	0.8	0	0	0	0	0		38	9	47
10:00 AM - 11:00 AM	0	19	0	0	19	0.7	2	0	5	0	7	0.4	0	16	0	0	16	0.7	0	0	0	0	0		35	7	42
2:30 PM - 3:30 PM	0	34	0	0	34	0.7	3	0	1	0	4	0.5	0	17	0	0	17	0.7	0	0	0	0	0		51	4	55
2:45 PM - 3:45 PM	0	47	0	0	47	0.6	3	0	2	0	5	0.6	0	24	0	0	24	0.5	0	0	0	0	0		71	5	76
3:00 PM - 4:00 PM	0	62	0	0	62	0.8	5	0	2	0	7	0.6	0	26	0	0	26	0.5	0	0	0	0	0		88	7	95
3:15 PM - 4:15 PM	0	71	0	0	71	0.8	9	0	3	0	12	0.4	0	46	0	0	46	0.4	0	0	0	0	0		117	12	129
3:30 PM - 4:30 PM	0	76	0	0	76	0.9	18	0	8	0	26	0.4	0	75	0	0	75	0.6	0	0	0	0	0		151	26	177
3:45 PM - 4:45 PM	0	73	0	0	73	0.8	20	0	10	0	30	0.5	0	85	0	0	85	0.7	0	0	0	0	0		158	30	188
4:00 PM - 5:00 PM	0	57	0	0	57	0.6	21	0	13	0	34	0.6	0	89	0	0	89	0.7	0	0	0	0	0		146	34	180
4:15 PM - 5:15 PM	0	41	0	0	41	0.6	16	0	13	0	29	0.5	0	74	0	0	74	0.6	0	0	0	0	0		115	29	144
4:30 PM - 5:30 PM	0	37	0	0	37	0.6	8	0	8	0	16	0.6	0	48	0	0	48	0.5	0	0	0	0	0		85	16	101

Wells + Associates, Inc.

Tysons, Virginia

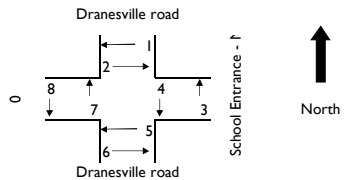
Turning Movement Count - Bicycles

PROJECT: Herndon ES		DATE: 2/1/2023		SOUTHBOUND ROAD: Dranesville road														
W+A JOB NO: 8996		DAY: Wednesday		ORTHBOUND ROAD: Dranesville road														
INTERSECTION: Dranesville Rd. & School Entrance		WEATHER: clear		WESTBOUND ROAD: School Entrance - North														
LOCATION: Fairfax County,VA		COUNTED BY: Agan		EASTBOUND ROAD: 0														
		INPUTED BY: agan																
Time Period	Southbound Dranesville road				Westbound School Entrance - North				Northbound Dranesville road				Eastbound 0				North & East & Total	
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West
15 Minute Volumes																		
8:00 AM - 8:15 AM				0				0				0				0	0	0
8:15 AM - 8:30 AM				0				0				0				0	0	0
8:30 AM - 8:45 AM				0				0				0				0	0	0
8:45 AM - 9:00 AM				0				0				0				0	0	0
9:00 AM - 9:15 AM				0				0		2		2				0	2	2
9:15 AM - 9:30 AM				0				0				0				0	0	0
9:30 AM - 9:45 AM				0				0				0				0	0	0
9:45 AM - 10:00 AM				0				0				0				0	0	0
10:00 AM - 10:15 AM				0				0				0				0	0	0
10:15 AM - 10:30 AM				0				0				0				0	0	0
10:30 AM - 10:45 AM				0				0				0				0	0	0
10:45 AM - 11:00 AM				0				0				0				0	0	0
2:30 PM - 2:45 PM				0				0				0				0	0	0
2:45 PM - 3:00 PM				0				0				0				0	0	0
3:00 PM - 3:15 PM				0				0				0				0	0	0
3:15 PM - 3:30 PM				0				0				0				0	0	0
3:30 PM - 3:45 PM				0				0				0				0	0	0
3:45 PM - 4:00 PM				0				0				0				0	0	0
4:00 PM - 4:15 PM				0				0				0				0	0	0
4:15 PM - 4:30 PM				0				0				0				0	0	0
4:30 PM - 4:45 PM				0				0				0				0	0	0
4:45 PM - 5:00 PM				0				0				0				0	0	0
5:00 PM - 5:15 PM				0				0				0				0	0	0
5:15 PM - 5:30 PM				0				0				0				0	0	0
Total	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	2	2
One Hour Volumes																		
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 9:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	2	2
8:30 AM - 9:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	2	2
8:45 AM - 9:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	2	2
9:00 AM - 10:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	2	2
9:15 AM - 10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM - 10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM - 10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM - 11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Wells + Associates, Inc.

Tysons, Virginia

Pedestrian Volume Survey

PROJECT: Herndon ES		W + A JOB NO: 8996		INTERSECTION: Dranesville Rd. & School Entr.- Nc		LOCATION: Fairfax County,VA		DATE: 2/1/2023		DAY: Wednesday		WEATHER: clear		COUNTED BY: Agan		INPUTED BY: agan			
Time Period		Movement								1 + 2	3 + 4	5 + 6	7 + 8	Total					
15 Minute Volumes																			
8:00 AM - 8:15 AM										0	0	0	0	0					
8:15 AM - 8:30 AM										0	0	0	0	0					
8:30 AM - 8:45 AM					2				1	0	2	0	1	3					
8:45 AM - 9:00 AM					4					0	4	0	0	4					
9:00 AM - 9:15 AM					3					0	3	0	0	3					
9:15 AM - 9:30 AM		1		2						1	2	0	0	3					
9:30 AM - 9:45 AM								1	1	0	0	0	2	2					
9:45 AM - 10:00 AM										0	0	0	0	0					
10:00 AM - 10:15 AM										0	0	0	0	0					
10:15 AM - 10:30 AM									1	0	0	0	1	1					
10:30 AM - 10:45 AM										0	0	0	0	0					
10:45 AM - 11:00 AM										0	0	0	0	0					
2:30 PM - 2:45 PM										0	0	0	0	0					
2:45 PM - 3:00 PM										0	0	0	1	1					
3:00 PM - 3:15 PM		1		1	2				2	1	3	0	2	6					
3:15 PM - 3:30 PM					6					0	6	0	0	6					
3:30 PM - 3:45 PM				1	2					0	3	0	0	3					
3:45 PM - 4:00 PM		6	1		1					7	1	0	0	8					
4:00 PM - 4:15 PM		3	1	2	5					4	7	0	0	11					
4:15 PM - 4:30 PM				1						0	1	0	0	1					
4:30 PM - 4:45 PM					1				2	0	1	0	2	3					
4:45 PM - 5:00 PM				2	1			1	2	0	3	0	3	6					
5:00 PM - 5:15 PM		1		3					1	1	3	0	1	5					
5:15 PM - 5:30 PM								1	1	0	0	0	2	2					
Total		12	2	12	27	0	0	3	12	14	39	0	15	68					
One Hour Volumes																			
8:00 AM - 9:00 AM		0	0	0	6	0	0	0	1	0	6	0	1	7					
8:15 AM - 9:15 AM		0	0	0	9	0	0	0	1	0	9	0	1	10					
8:30 AM - 9:30 AM		1	0	2	9	0	0	0	1	1	11	0	1	13					
8:45 AM - 9:45 AM		1	0	2	7	0	0	1	1	1	9	0	2	12					
9:00 AM - 10:00 AM		1	0	2	3	0	0	1	1	1	5	0	2	8					
9:15 AM - 10:15 AM		1	0	2	0	0	0	1	1	1	2	0	2	5					
9:30 AM - 10:30 AM		0	0	0	0	0	0	1	2	0	0	0	3	3					
9:45 AM - 10:45 AM		0	0	0	0	0	0	0	1	0	0	0	1	1					
10:00 AM - 11:00 AM		0	0	0	0	0	0	0	1	0	0	0	1	1					
2:30 PM - 3:30 PM		1	0	1	8	0	0	0	3	1	9	0	3	13					
2:45 PM - 3:45 PM		1	0	2	10	0	0	0	3	1	12	0	3	16					
3:00 PM - 4:00 PM		7	1	2	11	0	0	0	2	8	13	0	2	23					
3:15 PM - 4:15 PM		9	2	3	14	0	0	0	0	11	17	0	0	28					
3:30 PM - 4:30 PM		9	2	4	8	0	0	0	0	11	12	0	0	23					
3:45 PM - 4:45 PM		9	2	3	7	0	0	0	2	11	10	0	2	23					
4:00 PM - 5:00 PM		3	1	5	7	0	0	1	4	4	12	0	5	21					
4:15 PM - 5:15 PM		1	0	6	2	0	0	1	5	1	8	0	6	15					
4:30 PM - 5:30 PM		1	0	5	2	0	0	2	6	1	7	0	8	16					

Wells + Associates, Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

PROJECT:		Herndon ES										DATE:		2/1/2023										SOUTHBOUND ROAD:		Dranesville road																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
W+A JOB NO:		8996										DAY:		Wednesday										NORTHBOUND ROAD:		Dranesville road																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
INTERSECTION:		Dranesville Rd. & School Entr.- South										WEATHER:		clear										WESTBOUND ROAD:		School Entrance - South																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
LOCATION:		Fairfax County,VA										COUNTED BY:		Agan										EASTBOUND ROAD:		0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

Wells + Associates, Inc.

Tysons, Virginia

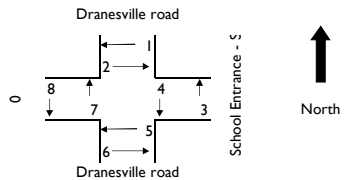
Turning Movement Count - Bicycles

PROJECT: Herndon ES		DATE: 2/1/2023		SOUTHBOUND ROAD: Dranesville road														
W+A JOB NO: 8996		DAY: Wednesday		ORTHBOUND ROAD: Dranesville road														
INTERSECTION: Dranesville Rd. & School Entrance		WEATHER: clear		WESTBOUND ROAD: School Entrance - South														
LOCATION: Fairfax County,VA		COUNTED BY: Agan		EASTBOUND ROAD: 0														
		INPUTED BY: agan																
Time Period	Southbound Dranesville road				Westbound School Entrance - South				Northbound Dranesville road				Eastbound 0				North & East & Total	
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West
15 Minute Volumes																		
8:00 AM - 8:15 AM				0				0				0				0	0	0
8:15 AM - 8:30 AM				0				0				0				0	0	0
8:30 AM - 8:45 AM				0				0				0				0	0	0
8:45 AM - 9:00 AM				0				0				0				0	0	0
9:00 AM - 9:15 AM				0				0		2		2				0	2	2
9:15 AM - 9:30 AM				0				0				0				0	0	0
9:30 AM - 9:45 AM				0				0				0				0	0	0
9:45 AM - 10:00 AM				0				0				0				0	0	0
10:00 AM - 10:15 AM				0				0				0				0	0	0
10:15 AM - 10:30 AM				0				0				0				0	0	0
10:30 AM - 10:45 AM				0				0				0				0	0	0
10:45 AM - 11:00 AM				0				0				0				0	0	0
2:30 PM - 2:45 PM				0				0				0				0	0	0
2:45 PM - 3:00 PM				0				0				0				0	0	0
3:00 PM - 3:15 PM				0				0				0				0	0	0
3:15 PM - 3:30 PM				0				0				0				0	0	0
3:30 PM - 3:45 PM				0				0				0				0	0	0
3:45 PM - 4:00 PM				0				0				0				0	0	0
4:00 PM - 4:15 PM				0				0				0				0	0	0
4:15 PM - 4:30 PM				0				0				0				0	0	0
4:30 PM - 4:45 PM				0				0				0				0	0	0
4:45 PM - 5:00 PM				0				0				0				0	0	0
5:00 PM - 5:15 PM				0				0				0				0	0	0
5:15 PM - 5:30 PM				0				0				0				0	0	0
Total	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	2	2
One Hour Volumes																		
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM - 9:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	2	2
8:30 AM - 9:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	2	2
8:45 AM - 9:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	2	2
9:00 AM - 10:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	2	2
9:15 AM - 10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM - 10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM - 10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM - 11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM - 3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM - 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM - 4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM - 4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM - 4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM - 4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Wells + Associates, Inc.

Tysons, Virginia

Pedestrian Volume Survey

PROJECT: Herndon ES													
W + A JOB NO: 8996													
INTERSECTION: Dranesville Rd. & School Entr.- So													
LOCATION: Fairfax County,VA													
DATE: 2/1/2023													
DAY: Wednesday													
WEATHER: clear													
COUNTED BY: Agan													
INPUTED BY: agan													
Time Period	Movement												
	1	2	3	4	5	6	7	8	1 + 2	3 + 4	5 + 6	7 + 8	Total
15 Minute Volumes													
8:00 AM - 8:15 AM									0	0	0	0	0
8:15 AM - 8:30 AM				1					0	1	0	0	1
8:30 AM - 8:45 AM			4	1				1	0	5	0	1	6
8:45 AM - 9:00 AM			3						0	3	0	0	3
9:00 AM - 9:15 AM		4	40	8					4	48	0	0	52
9:15 AM - 9:30 AM			1	6					0	7	0	0	7
9:30 AM - 9:45 AM							1	2	0	0	0	3	3
9:45 AM - 10:00 AM									0	0	0	0	0
10:00 AM - 10:15 AM									0	0	0	0	0
10:15 AM - 10:30 AM								1	0	0	0	1	1
10:30 AM - 10:45 AM									0	0	0	0	0
10:45 AM - 11:00 AM									0	0	0	0	0
2:30 PM - 2:45 PM									0	0	0	0	0
2:45 PM - 3:00 PM				1				2	0	1	0	2	3
3:00 PM - 3:15 PM				2					0	2	0	0	2
3:15 PM - 3:30 PM				6					0	6	0	0	6
3:30 PM - 3:45 PM									0	0	0	0	0
3:45 PM - 4:00 PM			3						0	3	0	0	3
4:00 PM - 4:15 PM		9	29						9	29	0	0	38
4:15 PM - 4:30 PM			12						0	12	0	0	12
4:30 PM - 4:45 PM			6					1	0	6	0	1	7
4:45 PM - 5:00 PM		2	1					3	2	1	0	3	6
5:00 PM - 5:15 PM			2					2	0	2	0	2	4
5:15 PM - 5:30 PM							1		0	0	0	1	1
Total	0	15	101	25	0	0	2	12	15	126	0	14	155
One Hour Volumes													
8:00 AM - 9:00 AM	0	0	7	2	0	0	0	1	0	9	0	1	10
8:15 AM - 9:15 AM	0	4	47	10	0	0	0	1	4	57	0	1	62
8:30 AM - 9:30 AM	0	4	48	15	0	0	0	1	4	63	0	1	68
8:45 AM - 9:45 AM	0	4	44	14	0	0	1	2	4	58	0	3	65
9:00 AM - 10:00 AM	0	4	41	14	0	0	1	2	4	55	0	3	62
9:15 AM - 10:15 AM	0	0	1	6	0	0	1	2	0	7	0	3	10
9:30 AM - 10:30 AM	0	0	0	0	0	0	1	3	0	0	0	4	4
9:45 AM - 10:45 AM	0	0	0	0	0	0	0	1	0	0	0	1	1
10:00 AM - 11:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	1
2:30 PM - 3:30 PM	0	0	0	9	0	0	0	2	0	9	0	2	11
2:45 PM - 3:45 PM	0	0	0	9	0	0	0	2	0	9	0	2	11
3:00 PM - 4:00 PM	0	0	3	8	0	0	0	0	0	11	0	0	11
3:15 PM - 4:15 PM	0	9	32	6	0	0	0	0	9	38	0	0	47
3:30 PM - 4:30 PM	0	9	44	0	0	0	0	0	9	44	0	0	53
3:45 PM - 4:45 PM	0	9	50	0	0	0	0	1	9	50	0	1	60
4:00 PM - 5:00 PM	0	11	48	0	0	0	0	4	11	48	0	4	63
4:15 PM - 5:15 PM	0	2	21	0	0	0	0	6	2	21	0	6	29
4:30 PM - 5:30 PM	0	2	9	0	0	0	1	6	2	9	0	7	18

APPENDIX D

**2023 EXISTING
SYNCHRO WORKSHEETS**

HCM Unsignalized Intersection Capacity Analysis

1: Dranesville Road & North Site Driveway

Existing Conditions
AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	18	93	0	0	128
Future Volume (Veh/h)	5	18	93	0	0	128
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	7	25	129	0	0	178
Pedestrians	11					1
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	1					0
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	318	141			140	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	318	141			140	
tC, single (s)	6.8	6.8			4.1	
tC, 2 stage (s)						
tF (s)	3.9	3.8			2.2	
p0 queue free %	99	97			100	
cM capacity (veh/h)	597	763			1428	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	32	129	178			
Volume Left	7	0	0			
Volume Right	25	0	0			
cSH	719	1700	1700			
Volume to Capacity	0.04	0.08	0.10			
Queue Length 95th (ft)	3	0	0			
Control Delay (s)	10.2	0.0	0.0			
Lane LOS	B					
Approach Delay (s)	10.2	0.0	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			17.8%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

2: Dranesville Road & South Site Driveway

Existing Conditions
AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	17	68	25	39	109	24
Future Volume (Veh/h)	17	68	25	39	109	24
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74
Hourly flow rate (vph)	23	92	34	53	147	32
Pedestrians	63					4
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	6					0
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	450	128			150	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	450	128			150	
tC, single (s)	6.4	6.2			4.2	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.3	
p0 queue free %	95	89			89	
cM capacity (veh/h)	473	864			1295	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	115	87	179			
Volume Left	23	0	147			
Volume Right	92	53	0			
cSH	741	1700	1295			
Volume to Capacity	0.16	0.05	0.11			
Queue Length 95th (ft)	14	0	10			
Control Delay (s)	10.7	0.0	6.8			
Lane LOS	B		A			
Approach Delay (s)	10.7	0.0	6.8			
Approach LOS	B					
Intersection Summary						
Average Delay		6.5				
Intersection Capacity Utilization		27.1%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis

1: Dranesville Road & North Site Driveway

Existing Conditions
PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	10	20	86	0	0	74
Future Volume (Veh/h)	10	20	86	0	0	74
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Hourly flow rate (vph)	13	26	113	0	0	97
Pedestrians	10					11
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	1					1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	220	134			123	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	220	134			123	
tC, single (s)	7.0	6.6			4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.7			2.2	
p0 queue free %	98	97			100	
cM capacity (veh/h)	649	807			1450	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	39	113	97			
Volume Left	13	0	0			
Volume Right	26	0	0			
cSH	746	1700	1700			
Volume to Capacity	0.05	0.07	0.06			
Queue Length 95th (ft)	4	0	0			
Control Delay (s)	10.1	0.0	0.0			
Lane LOS	B					
Approach Delay (s)	10.1	0.0	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay		1.6				
Intersection Capacity Utilization		20.1%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis

2: Dranesville Road & South Site Driveway

Existing Conditions
PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	19	64	22	17	45	39
Future Volume (Veh/h)	19	64	22	17	45	39
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	25	85	29	23	60	52
Pedestrians	50					9
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	5					1
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	262	100			102	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	262	100			102	
tC, single (s)	6.4	6.2			4.5	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.5	
p0 queue free %	96	91			95	
cM capacity (veh/h)	658	903			1240	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	110	52	112			
Volume Left	25	0	60			
Volume Right	85	23	0			
cSH	833	1700	1240			
Volume to Capacity	0.13	0.03	0.05			
Queue Length 95th (ft)	11	0	4			
Control Delay (s)	10.0	0.0	4.5			
Lane LOS	A		A			
Approach Delay (s)	10.0	0.0	4.5			
Approach LOS	A					
Intersection Summary						
Average Delay		5.8				
Intersection Capacity Utilization		25.9%		ICU Level of Service		A
Analysis Period (min)		15				

APPENDIX E

**2023 FUTURE
SYNCHRO WORKSHEETS**

HCM Unsignalized Intersection Capacity Analysis

1: Dranesville Road & North Site Driveway

Future Conditions
AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	6	18	93	10	28	100
Future Volume (Veh/h)	6	18	93	10	28	100
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	20	101	11	30	109
Pedestrians	11					1
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	1					0
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	286	118			123	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	286	118			123	
tC, single (s)	6.8	6.8			5.1	
tC, 2 stage (s)						
tF (s)	3.9	3.8			3.1	
p0 queue free %	99	97			97	
cM capacity (veh/h)	606	787			1017	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	27	112	139			
Volume Left	7	0	30			
Volume Right	20	11	0			
cSH	730	1700	1017			
Volume to Capacity	0.04	0.07	0.03			
Queue Length 95th (ft)	3	0	2			
Control Delay (s)	10.1	0.0	2.1			
Lane LOS	B		A			
Approach Delay (s)	10.1	0.0	2.1			
Approach LOS	B					
Intersection Summary						
Average Delay			2.0			
Intersection Capacity Utilization			23.8%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

2: Dranesville Road & South Site Driveway

Future Conditions
AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	16	68	35	29	81	25
Future Volume (Veh/h)	16	68	35	29	81	25
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	74	38	32	88	27
Pedestrians	63					4
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	6					0
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	320	121			133	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	320	121			133	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	92			94	
cM capacity (veh/h)	592	871			1365	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	91	70	115			
Volume Left	17	0	88			
Volume Right	74	32	0			
cSH	801	1700	1365			
Volume to Capacity	0.11	0.04	0.06			
Queue Length 95th (ft)	10	0	5			
Control Delay (s)	10.1	0.0	6.1			
Lane LOS	B		A			
Approach Delay (s)	10.1	0.0	6.1			
Approach LOS	B					
Intersection Summary						
Average Delay		5.9				
Intersection Capacity Utilization		25.6%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis

1: Dranesville Road & North Site Driveway

Future Conditions
PM Peak Hour

									
Movement	WBL	WBR	NBT	NBR	SBL	SBT			
Lane Configurations									
Traffic Volume (veh/h)	13	20	86	7	18	56			
Future Volume (Veh/h)	13	20	86	7	18	56			
Sign Control	Stop		Free			Free			
Grade	0%		0%			0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	14	22	93	8	20	61			
Pedestrians	10					11			
Lane Width (ft)	12.0					12.0			
Walking Speed (ft/s)	3.5					3.5			
Percent Blockage	1					1			
Right turn flare (veh)									
Median type			None			None			
Median storage veh)									
Upstream signal (ft)									
pX, platoon unblocked									
vC, conflicting volume	208	118			111				
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	208	118			111				
tC, single (s)	7.0	6.6			5.1				
tC, 2 stage (s)									
tF (s)	4.1	3.7			3.1				
p0 queue free %	98	97			98				
cM capacity (veh/h)	641	824			1031				
Direction, Lane #	WB 1	NB 1	SB 1						
Volume Total	36	101	81						
Volume Left	14	0	20						
Volume Right	22	8	0						
cSH	742	1700	1031						
Volume to Capacity	0.05	0.06	0.02						
Queue Length 95th (ft)	4	0	1						
Control Delay (s)	10.1	0.0	2.2						
Lane LOS	B		A						
Approach Delay (s)	10.1	0.0	2.2						
Approach LOS	B								
Intersection Summary									
Average Delay		2.5							
Intersection Capacity Utilization		23.7%	ICU Level of Service	A					
Analysis Period (min)		15							

HCM Unsignalized Intersection Capacity Analysis

2: Dranesville Road & South Site Driveway

Future Conditions
PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	16	64	29	10	27	42
Future Volume (Veh/h)	16	64	29	10	27	42
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	70	32	11	29	46
Pedestrians	50					9
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	3.5					3.5
Percent Blockage	5					1
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	192	96			93	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	192	96			93	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	92			98	
cM capacity (veh/h)	744	906			1430	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	87	43	75			
Volume Left	17	0	29			
Volume Right	70	11	0			
cSH	869	1700	1430			
Volume to Capacity	0.10	0.03	0.02			
Queue Length 95th (ft)	8	0	2			
Control Delay (s)	9.6	0.0	3.0			
Lane LOS	A		A			
Approach Delay (s)	9.6	0.0	3.0			
Approach LOS	A					
Intersection Summary						
Average Delay		5.2				
Intersection Capacity Utilization		25.7%		ICU Level of Service		A
Analysis Period (min)		15				

APPENDIX F

REPORTED CRASH DATA

CRASH STATISTIC REPORT

Accidents along Dranesville Rd between Park Ave and Fillmore St

2019-2023

CRASH OVERVIEW

Street Location	
DRANESVILLE RD/PARK AVE	2
Grand Total	2

DOW		HOD		Month of Crash Date		Year of Crash Date	
SUN	1	0200	1	September	1	2019	1
SAT	1	1500	1	December	1	2021	1
Grand Total	2	Grand Total	2	Grand Total	2	Grand Total	2

Speed Before Crash		Speed Limit	
35	1	25	1
UNK	1	35	1
Grand Total	2	Grand Total	2

*This data was pulled on 02/03/23. Because the current year is incomplete, use caution when comparing to prior years.

**Certain fields are reported per unit (vehicle/driver/pedestrian/passenger, etc) as opposed to per accident. These fields may have greater counts than those that require selections per accident, as there may be more than one unit involved in each single accident.

***Locations were selected based on cross streets/addresses entered by the officer. For requests spanning along a roadway, accidents at cross streets and street number blocks in this section (when able to be obtained) will be included.

DRIVER / PEDESTRIAN INFORMATION

Driver's Action (P1)		Driver/Pedestrian Condition (P2/P12)	
Fail to Maintain Proper Control	1	No Defects	1
Improper Turn - Wide Right Turn	1	UNK	1
Grand Total	2	Grand Total	2

Driver Vision Obscured (P3)		Driver Distractions (P4)	
Not Obscured	1	N/A	2
UNK	1	Grand Total	2
Grand Total	2		

Driver/Pedestrian Drinking (P5/P11)		Driver/Pedestrian Method of Alcohol Determination (P6/P13)	
Had Not Been Drinking	1	No Test	1
UNK	1	Null	1
Grand Total	2	Grand Total	2

Driver/Ped Drug Use (P7/P14)		Pedestrian Actions (P10)	
No	2	Null	2
Grand Total	2	Grand Total	2

Pedestrian Reflective Clothing (P15)	
Null	2
Grand Total	2

*This data was pulled on 02/03/23. Because the current year is incomplete, use caution when comparing to prior years.

**Certain fields are reported per unit (vehicle/driver/pedestrian/passenger, etc) as opposed to per accident. These fields may have greater counts than those that require selections per accident, as there may be more than one unit involved in each single accident.

***Locations were selected based on cross streets/addresses entered by the officer. For requests spanning along a roadway, accidents at cross streets and street number blocks in this section (when able to be obtained) will be included.

VEHICLE INFORMATION

Vehicle Maneuver (V1)		Skidding/Tire Mark (V2)	
Making Left Turn	1	After Application of Brakes	1
Making Right Turn	1	No Visible Skid Mark/Tire Mark	1
Grand Total	2	Grand Total	2

Vehicle Body Type (V3)		Vehicle Damage (V4)	
Passenger Car	2	Other	2
Grand Total	2	Grand Total	2

Vehicle Condition (V5)		Special Function Motor Vehicle (V6)	
No Defects	2	No Special Function	1
Grand Total	2	Not Applicable	1
		Grand Total	2

EMV In Service (V7)		Truck Cover (V8)	
N/A	2	N/A	2
Grand Total	2	Grand Total	2

*This data was pulled on 02/03/23. Because the current year is incomplete, use caution when comparing to prior years.

**Certain fields are reported per unit (vehicle/driver/pedestrian/passenger, etc) as opposed to per accident. These fields may have greater counts than those that require selections per accident, as there may be more than one unit involved in each single accident.

***Locations were selected based on cross streets/addresses entered by the officer. For requests spanning along a roadway, accidents at cross streets and street number blocks in this section (when able to be obtained) will be included.

CRASH INFORMATION

Location of 1st Harmful Event in Relation to Rdwy (C1)		Weather Conditions (C2)	
Median	2	No Adverse Condition (Clear/Cloudy)	2
Grand Total	2	Grand Total	2
Light Conditions (C3)		Traffic Control Device (C4)	
Darkness - Street Not Lighted	1	No Traffic Control Device Present	1
Daylight	1	Yes- Working	1
Grand Total	2	Grand Total	2
Traffic Control Type (C5)		Roadway Alignment (C6)	
No Traffic Control	1	Curve-Level	2
Traffic Lanes Marked	1	Grand Total	2
Grand Total	2		
Roadway Surface Condition (C7)		Road Surface Type (C8)	
Dry	2	Blacktop, Asphalt, Bituminous	2
Grand Total	2	Grand Total	2
Roadway Description (C9)		Roadway Defects (C10)	
Two-Way, Divided, Positive Median Barrier	2	No Defects	2
Grand Total	2	Grand Total	2
Relation to Roadway (C11)		Intersection Type (C12)	
Intersection Related-Within 150 FT	1	Three Approaches	2
Main-Line Roadway	1	Grand Total	2
Grand Total	2		
Work Zone Related (C13)		Work Zone - Workers Present (C14)	
No	2	Null	2
Grand Total	2	Grand Total	2
Work Zone Location (C15)		Work Zone Type (C16)	
Null	2	Null	2
Grand Total	2	Grand Total	2
School Zone (C17)		Type of Collision (C18)	
No	2	Other	2
Grand Total	2	Grand Total	2

*This data was pulled on 02/03/23. Because the current year is incomplete, use caution when comparing to prior years.

**Certain fields are reported per unit (vehicle/driver/pedestrian/passenger, etc) as opposed to per accident. These fields may have greater counts than those that require selections per accident, as there may be more than one unit involved in each single accident.

***Locations were selected based on cross streets/addresses entered by the officer. For requests spanning along a roadway, accidents at cross streets and street number blocks in this section (when able to be obtained) will be included.

CRASH EVENTS

First Event		Second Event	
Fixed Object - Curb	1	Fixed Object - Curb	1
Fixed Object - Traffic Sign Support	1	Null	1
Grand Total	2	Grand Total	2

Third Event		Fourth Event	
Null	2	Null	2
Grand Total	2	Grand Total	2

1st Harmful Event of Entire Crash that Results in Injury or Damage		Most Harmful Event	
Fixed Object - Curb	1	Fixed Object - Curb	1
Fixed Object - Traffic Sign Support	1	Fixed Object - Traffic Sign Support	1
Grand Total	2	Grand Total	2

*This data was pulled on 02/03/23. Because the current year is incomplete, use caution when comparing to prior years.

**Certain fields are reported per unit (vehicle/driver/pedestrian/passenger, etc) as opposed to per accident. These fields may have greater counts than those that require selections per accident, as there may be more than one unit involved in each single accident.

***Locations were selected based on cross streets/addresses entered by the officer. For requests spanning along a roadway, accidents at cross streets and street number blocks in this section (when able to be obtained) will be included.



Herndon Elementary

12/17/2017

Work Zone Related			0/2. No
Non Pedestrian Injury Count			0
Pedestrian Injury Count			0
Non Pedestrian Fatality Count			0
Pedestrian Fatality Count			0
Crash Severity		property damage crash	
Route Or Street Name		DRANESVILLE RD	
TREDS Jurisdiction		Town of Herndon	
Longitude		-77.378469	
Latitude		38.974862	
Secondary Location		FILLMORE ST	
Route Number			
Route Name		Fillmore ST (PR - Town of Herndon)	
KABCO Severity Code		No Injury (O)	
First Harmful Event Location		20. Motor Vehicle In Transport	
First Harmful Event		1. On Roadway	
Crash Description	As V1 was traveling SB Fillmore St, approaching the intersection of Dranesville Rd, the driver failed to maintain proper control and struck a parked vehicle (V2). It should be noted that there was heavy damage to the front passenger side quarter of V1, and heavy damage to the rear drivers side quarter of V2. In the process of V2 being struck, the gas tank ruptured and began to leak on the roadway. Due to the amount of gas leaking from V2 and no way to stop the leak for the tow, FFX Fire Hazmat 401 responded to clean the spill and make the vehicle safe for removal. The driver of V1 advised that he had been drinking prior to the accident. It should be noted that the driver was ran through SFST 3 and was able to pass without incident. Henry's Wrecker Service responded to remove both vehicles upon the scene being deemed safe by hazmat personnel. The driver of V1 was cited for VA 42-9: Fall to maintain proper control. There were no injuries listed with this incident. Information was exchanged between both parties without incident. Wanted check negative.		
Collision Type		2. Angle	
Day Of Week			12/17/2017 1:27 Sun
Crash Time			
Crash Date			
Document Number			173525068

Agenda Item: Resolution to approve an amendment to Special Exception SE #21-03, 1315 and 1317 Monroe Street, to allow the placement of fill in order to construct two new single-family dwellings on two existing lots within the Floodplain Overlay District

Meeting Date: January 16, 2024

Category: Public Hearings

Prepared by: David Stromberg, Zoning Administrator

Description:

Special Exception SE #21-03 was approved by the Town Council on January 31, 2022, to allow the placement of fill in order to construct two new single-family dwellings on two existing lots within the Floodplain Overlay District. The amended application revises the limits of fill to accommodate revised footprints of the two proposed single family-dwellings.

Background:

The two lots have existed within the Town of Herndon since at least 1960, which predates the establishment of the first flood map for the Town of Herndon in February 1979. Each respective lot is 0.53 acres for a total site area of 1.06 acres. There is an existing house on 1317 Monroe Street that was built in 1970. The Special Flood Hazard Area (identified as Zone AE) runs across both properties and a portion of the existing house. This flood area is associated with Folly Lick Branch.

The already approved special exception concept plan is shown as attachment 2 and the proposed is shown as attachment 3.

The existing concept plan, the subject of the previously approved special exception, has already been approved by FEMA through a CLOMR (Conditional Letter of Map Revision, attachment 4).

The Planning Commission recommended approval with conditions at their public hearing on December 18, 2023.

Budget Impact:

None

Recommendation:

Staff recommends that the Town Council approve the amendment to Special Exception SE #21-03, in accordance with Alternative #2 for the following reasons:

- Approval will not result in an increase in flood heights or an increase in the floodplain.
- Approval will allow the demolition of a house that is partially located within the special flood hazard area.
- Approval will allow for the construction of two, new single-family dwellings on lots that meet the R-10 requirements of the zoning ordinance and are located on an existing public street.

Attachments:

1. Staff Report
2. Resolution (Proposed)
3. Existing Concept Plan
4. Proposed Concept Plan
5. FEMA CLOMR
6. Flood Plain Study Results

STAFF REPORT

Agenda Item: Resolution to approve an amendment to Special Exception SE #21-03, 1315 and 1317 Monroe Street, to allow the placement of fill in order to construct two new single-family dwellings on two existing lots within the Floodplain Overlay District

Meeting Date: January 16, 2024

Staff Contact: David Stromberg, AICP, Zoning Administrator

Summary Information:

Proposed Modification	Special Exception SE #21-03 was approved by the town council on January 31, 2022, to allow the placement of fill in order to construct two new single-family dwellings on two existing lots within the Floodplain Overlay District. The amended application revises the limits of fill to accommodate revised footprints of the two proposed single family dwellings.		
Address	1315 and 1317 Monroe Street, Herndon, VA		
Fairfax County Tax Map Number	0105 02 0001B and 0102 02 0001C		
Applicant/Owners	Dina Abdel-Hamid and David Hawa		
Total Site Area	1.06 acres (1317 Monroe – 0.53 acres and 1315 Monroe – 0.53 acres)		
Property Use	Single-family residential/vacant		
Zoning District	R-10, Single-Family Residential, FPO, Floodplain Overlay District		
Adjacent Zoning	North: R-10		East: R-10
	South: R-10		West: FFX
Land Use Designation	Neighborhood Conservation		
Flood Map Effective Date	September 17, 2010		
Community Flood Number	510052		
Flood Map Panel	51059C0110E		

Location Map:



Background & Site Description:

The two lots have existed within the Town of Herndon since at least 1960, which predates the establishment of the first flood map for the Town of Herndon in February 1979. Each respective lot is 0.53 acres for a total site area of 1.06 acres. There is an existing house on 1317 Monroe Street that was built in 1970. The Special Flood Hazard Area (identified as Zone AE) runs across both properties and a portion of the existing house. This flood area is associated with Folly Lick Branch.

The already approved special exception concept plan is shown in the attachment labeled 'Existing Concept Plan'.

The existing concept plan, the subject of the previously approved special exception, has already been approved by FEMA through a CLOMR (Conditional Letter of Map Revision) and can be found attached labeled as 'FEMA CLOMR'.

Case Details & Proposal:

This amendment will replace condition #1 to reference the new concept plan with the expanded areas of fill (attached and labeled as 'Proposed Concept Plan').

The planning commission recommended approval with conditions at their public hearing on December 18, 2023.

Staff Analysis:

Zoning Ordinance Compliance

A complete background and analysis of this application is contained in the December 6, 2021, town council staff report. Staff, the planning commission, and town council determined that the application complied with the criteria of Section 78-153.3(e), Review Standards for Special Exceptions.

Amending the application to reference the new concept plan is still in complete compliance with all review criteria found in Section 78-153.3(e).

The existing concept plan will remain in effect if the amendment to SE #21-03 is denied.

Flood Regulations

The National Flood Insurance Program (NFIP) is managed by the Federal Emergency Management Agency (FEMA). A community must have a locally adopted floodplain ordinance that complies with the Code of Federal Regulations (44 CFR parts 60, 65, and 72) in order for any property located within that community to be eligible for flood insurance.

Any proposed development in the floodplain that may have an impact on the floodplain must first have a Conditional Letter of Map Revision (CLOMR) submitted and reviewed by FEMA. This review includes whether the proposed development will result in an increase in the Base Flood Elevation (BFE) or an increase in the extent of the floodplain. Following completion of a project, an as-built plan must be submitted with a Letter of Map Revision (LOMR) that is endorsed by the community's floodplain administrator. The floodplain will be officially revised at that point.

FEMA has already issued the CLOMR and will only need to review the as-built conditions upon completion of the project.

Fiscal Impact:

The original approval allowed for physical improvements that add to the residential tax base. The amendment will also result in an increase to the residential tax base.

Town Council Alternatives:

The following alternatives are available to the town council for its decision on SE #21-03 - AMENDMENT

1. Recommendation for approval.
2. Recommendation for approval with conditions.
3. Recommendation for denial.
4. Continuance of the application to February 13, 2024.

Staff Recommendation:

Staff recommends that the town council approve the amendment to Special Exception SE #21-03, in accordance with Alternative #2 for the following reasons:

- Approval will not result in an increase in flood heights or an increase in the floodplain.
- Approval will allow the demolition of a house that is partially located within the special flood hazard area.
- Approval will allow for the construction of two, new single-family dwellings on lots that meet the R-10 requirements of the zoning ordinance and are located on an existing public street.

**TOWN OF HERNDON, VIRGINIA
TOWN COUNCIL**

RESOLUTION

JANUARY 23, 2024

Resolution- to approve an amendment to Special Exception SE #21-03, 1315 and 1317 Monroe Street, to allow the placement of fill in order to construct two new single-family dwellings on two existing lots within the Floodplain Overlay District

The applicants, Dina Abdel-Hamid and David Hawa, have submitted a request for a special exception amendment to revise the limits of fill to accommodate revised footprints of the two proposed single-family dwellings at 1315 and 1317 Monroe Street, further identified as Fairfax County Tax Map # 0102 02 0001B and 0102 02 0001C.

Special exception SE #21-03 was originally approved by the town council on January 31, 2022, to allow the placement of fill in order to construct two new single-family dwellings on two existing lots within the Floodplain Overlay District.

Following the public hearing, the planning commission has recommended that the application to amend the special exception be approved with conditions based upon the finding that the proposed use meets the purpose and intent of the zoning ordinance.

The Town Council has reviewed this application and has held a public hearing in accordance with the provisions of §15.2-2204 of the State Code and recommended that the application be approved with amended conditions based upon the finding that the amended conditions still meet the purpose and intent of the Zoning Ordinance, in particular Section 78-155.3(f)(3).

THEREFORE, BE IT RESOLVED by the Town Council of the Town of Herndon, Virginia, that:

1. The Town Council approves of amending Special Exception Application SE #21-03 that shall run with the land and not be voided or extinguished from a change in ownership of the property in accordance with the conditions set forth below to achieve compliance with the standards found in Section 78-155.3;
 - a) The proposed development shall be in substantial conformance with the concept plan entitled, "BASE PLANS LT 1C AND 1B, HERNDON 1317 & 1315 MONROE STREET HERNDON, VA 20170 3006", prepared by GeoEnv Engineers and dated August, 2023.

- b) A site specific delineation of the Resource Protection Area component of the Chesapeake Bay Preservation Area Overlay shall be provided concurrent with the submission of the single lot Development Plan and approval of this special exception does not approve any unauthorized encroachment in the ROQ as outlined in Section 78-60.4 of the zoning ordinance.
- c) The applicant shall perform new hydraulic and hydrodynamic analysis using the most recently available data.

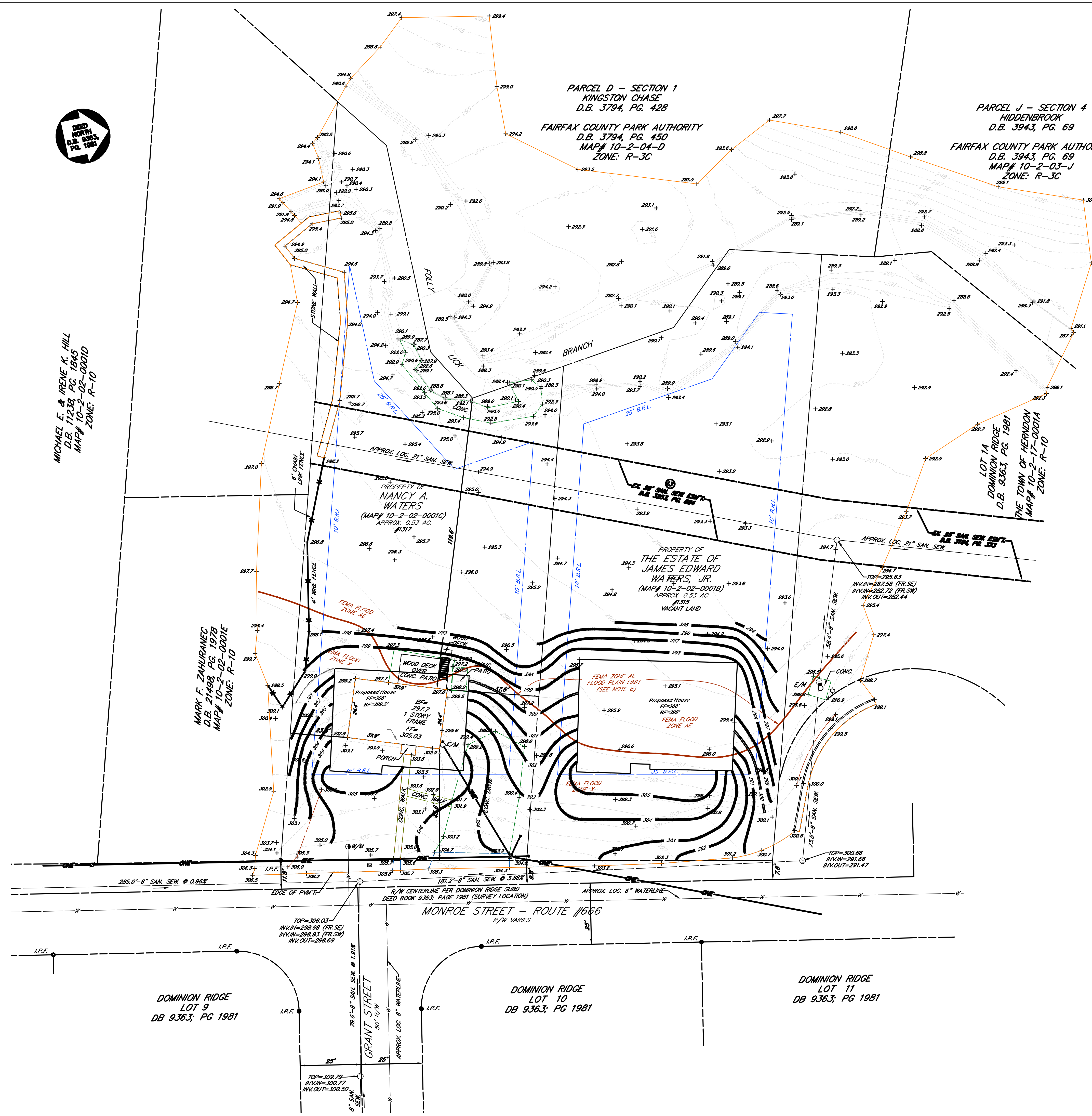


MICHAEL E. & IRENE K. HILL
D.B. 11238, PG. 1845
MAP# 10-2-02-0001D
ZONE: R-10

MARK F. ZAHURANEK
D.B. 21493, PG. 1979
MAP# 10-2-02-0001E
ZONE: R-10

PARCEL D - SECTION 1
KINGSTON CHASE
D.B. 3794, PG. 428
FAIRFAX COUNTY PARK AUTHORITY
D.B. 3794, PG. 450
MAP# 10-2-04-D
ZONE: R-3C

PARCEL J - SECTION 4
HIDDENBROOK
D.B. 3943, PG. 69
FAIRFAX COUNTY PARK AUTHORITY
D.B. 3943, PG. 69
MAP# 10-2-03-J
ZONE: R-3C



NOTES:

- MAP# 10-2-02-0001B & 0001C
- OWNER: THE ESTATE OF JAMES EDWARD WATERS, JR.
D.B. 2757, PG. 440 (MAP# 10-2-02-0001B)
NANCY A. WATERS
D.B. 7892, PG. 184 (MAP# 10-2-02-0001C)
- ZONE: R-10
SETBACKS: FRONT: 35' / SIDE: 10' / REAR: 25'
- TITLE REPORT PROVIDED BY FIRST AMERICAN TITLE INSURANCE COMPANY
FILE NO. FE-VA21-0015, EFFECTIVE DATE: JANUARY 25, 2021 AT 12:08 P.M.
(SEE SCHEDULE B - SECTION 2 EXCEPTIONS BELOW)
- F.E.M.A. / F.I.R.M. FLOOD DATA: COMMUNITY NO: 51059C
H & I PANEL NO: 0110 E
FLOOD ZONE: X, X "SHADED" AND AE
EFFECTIVE: SEPTEMBER 17, 2010
- VERTICAL DATUM = NGVD 29 TIED TO TOWN OF HERNDON AS-BUILT SANITARY SEWER FOR DOMINION RIDGE SUBDIVISION, AND FAIRFAX COUNTY AS-BUILT SANITARY SEWER FOR 21" TRUNK SEWER LINE ALONG FOLLY LICK BRANCH
- TOPOGRAPHIC SURVEY FIELD RUN BY THIS OFFICE JANUARY 2021.
- FLOOD PLAIN LIMIT DETERMINED BY ELEVATION INTERPOLATION AT 0.1' INTERVALS BETWEEN 296 / 297 / 298 FLOOD ELEVATION LINES PER FEMA / FIRM FLOOD MAP.

SCHEDULE B - SECTION 2 EXCEPTIONS:

- ESM'T(S) AND MATTERS AS SHOWN ON AND/OR NOTED ON RECORD PLAT (NONE)
- MINERALS OF WHATSOEVER KIND, SUBSURFACE AND SURFACE SUBSTANCES, INCLUDING BUT NOT LIMITED TO COAL, LIGNITE, OIL, GAS, URANIUM, CLAY, ROCK, SAND AND GRAVEL IN, ON, UNDER AND THAT MAY BE PRODUCED FROM THE LAND, TOGETHER WITH ALL RIGHTS, PRIVILEGES, AND IMMUNITIES RELATING THERETO, WHETHER OR NOT APPEARING IN THE PUBLIC RECORDS OR LISTED IN SCHEDULE B. THE COMPANY MAKES NO REPRESENTATION AS TO THE PRESENT OWNERSHIP OF ANY SUCH INTERESTS. THERE MAY BE LEASES, GRANTS, EXCEPTIONS OR RESERVATIONS OF INTERESTS THAT ARE NOT LISTED. (NO COMMENT)
- TERMS, PROVISIONS AND ESM'T(S)
D.B. 3253, PG. 684 (SANITARY SEWER EASEMENT SHOWN)

LEGEND

- ELECTRIC METER
- MAIL BOX
- LIGHT POLE
- GUY WIRE
- POWER POLE
- WATER METER
- SANITARY MANHOLE
- FENCE
- OVERHEAD ELECTRIC
- WATERLINE
- CURB
- CURB & GUTTER
- PROPOSED GRADING

PROPERTY OF
THE ESTATE OF
JAMES EDWARD WATERS, JR.
D.B. 2257, PG. 440 (MAP# 10-2-02-0001B)
AND
NANCY A. WATERS
D.B. 7892, PG. 184 (MAP# 10-2-02-0001C)
TOWN OF HERNDON
FAIRFAX COUNTY, VIRGINIA

PRELIMINARY / REVIEW ISSUE
TOPOGRAPHIC SURVEY,
FLOOD ELEVATION
AND LOT STUDY

REVISION

DATE

PM: IB SCALE: 1"=20'
PE: IB DATE: June 1, 2021
CO: SMK SHEET 1 OF 1



Federal Emergency Management Agency

Washington, D.C. 20472

CONDITIONAL LETTER OF MAP REVISION COMMENT DOCUMENT

COMMUNITY INFORMATION		PROPOSED PROJECT DESCRIPTION	BASIS OF CONDITIONAL REQUEST
COMMUNITY	Town of Herndon Fairfax County Virginia	GRADING	1D HYDRAULIC ANALYSIS UPDATED TOPOGRAPHIC DATA
	COMMUNITY NO.: 510052		
IDENTIFIER	The Estate James Edward Waters, Jr. & Nancy A. Waters	APPROXIMATE LATITUDE AND LONGITUDE: 38.988, -77.384 SOURCE: Other DATUM: NAD 83	
AFFECTED MAP PANEL			
TYPE: FIRM* NO.: 51059C0110E DATE: September 17, 2010		* FIRM - Flood Insurance Rate Map	

FLOODING SOURCE AND REACH DESCRIPTION

Folly Lick Branch – From approximately 3,420 feet upstream of Dranesville Road to approximately 3,930 feet upstream of Dranesville Road

PROPOSED PROJECT DESCRIPTION

Flooding Source	Proposed Project	Location of Proposed Project
Folly Lick Branch	Grading	On the right overbank from approximately 3,640 feet upstream of Dranesville Road to approximately 3,810 feet upstream of Dranesville Road

SUMMARY OF IMPACTS TO FLOOD HAZARD DATA

Flooding Source	Effective Flooding	Proposed Flooding	Increases	Decreases
Folly Lick Branch	Zone AE	Zone AE	Yes	Yes
	BFEs*	BFEs	Yes	Yes
	Zone X (shaded)	Zone X (shaded)	Yes	Yes

* BFEs - Base (1-percent-annual-chance) Flood Elevations

COMMENT

This document provides the Federal Emergency Management Agency's (FEMA's) comment regarding a request for a CLOMR for the project described above. This document is not a final determination; it only provides our comment on the proposed project in relation to the flood hazard information shown on the effective National Flood Insurance Program (NFIP) map. We reviewed the submitted data and the data used to prepare the effective flood hazard information for your community and determined that the proposed project meets the minimum floodplain management criteria of the NFIP. Your community is responsible for approving all floodplain development and for ensuring that all permits required by Federal or State/Commonwealth law have been received. State/Commonwealth, county, and community officials, based on their knowledge of local conditions and in the interest of safety, may set higher standards for construction in the Special Flood Hazard Area (SFHA), the area subject to inundation by the base flood). If the State/Commonwealth, county, or community has adopted more restrictive or comprehensive floodplain management criteria, these criteria take precedence over the minimum NFIP criteria.

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on the FEMA website at <https://www.fema.gov/flood-insurance>.

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

22-03-0774R

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Federal Emergency Management Agency

Washington, D.C. 20472

CONDITIONAL LETTER OF MAP REVISION COMMENT DOCUMENT (CONTINUED)

OTHER COMMUNITIES AFFECTED BY THIS CONDITIONAL REQUEST

CID Number: 515525

Name: Fairfax County, Virginia

AFFECTED MAP PANELS

TYPE: FIRM

NO.: 51059C0110E

DATE: September 17, 2010

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on the FEMA website at <https://www.fema.gov/flood-insurance>.

Patrick "Rick" F. Sacibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

22-03-0774R

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Federal Emergency Management Agency

Washington, D.C. 20472

CONDITIONAL LETTER OF MAP REVISION COMMENT DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

To determine the changes in flood hazards that will be caused by the proposed project, we compared the hydraulic modeling reflecting the proposed project (referred to as the proposed conditions model) to the hydraulic modeling used to prepare the Flood Insurance Study (FIS) (referred to as the effective model). If the effective model does not provide enough detail to evaluate the effects of the proposed project, an existing conditions model must be developed to provide this detail. This existing conditions model is then compared to the effective model and the proposed conditions model to differentiate the increases or decreases in flood hazards caused by more detailed modeling from the increases or decreases in flood hazards that will be caused by the proposed project.

The table below shows the changes in the BFEs:

BFE Comparison Table

Flooding Source: Folly Lick Branch		BFE Change (feet)	Location of maximum change
Existing vs. Effective	Maximum increase	0.6	Approximately 3,630 feet upstream of Dranesville Road
	Maximum decrease	0.4	Approximately 3,920 feet upstream of Dranesville Road
Proposed vs. Existing	Maximum increase	None	Not Applicable
	Maximum decrease	0.01	Approximately 3,630 feet upstream of Dranesville Road
Proposed vs. Effective	Maximum increase	0.6	Approximately 3,630 feet upstream of Dranesville Road
	Maximum decrease	0.4	Approximately 3,920 feet upstream of Dranesville Road

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on the FEMA website at <https://www.fema.gov/flood-insurance>.

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Engineering Services Branch
Federal Insurance and Mitigation Administration

22-03-0774R

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Federal Emergency Management Agency

Washington, D.C. 20472

CONDITIONAL LETTER OF MAP REVISION COMMENT DOCUMENT (CONTINUED)

COMMUNITY INFORMATION (CONTINUED)

DATA REQUIRED FOR FOLLOW-UP LOMR

Upon completion of the project, your community must submit the data listed below and request that we make a final determination on revising the effective FIRM. If the project is built as proposed and the data below are received, a revision to the FIRM would be warranted.

- Detailed application and certification forms must be used for requesting final revisions to the maps. Therefore, when the map revision request for the area covered by this letter is submitted, Form 1, entitled "Overview and Concurrence Form," must be included. A copy of this form may be accessed at <https://www.fema.gov/flood-maps/change-your-flood-zone/paper-application-forms/mt-2>.
- The detailed application and certification forms listed below may be required if as-built conditions differ from the proposed plans. If required, please submit new forms, which may be accessed at <https://www.fema.gov/flood-maps/change-your-flood-zone/paper-application-forms/mt-2>, or annotated copies of the previously submitted forms showing the revised information.

Form 2, entitled "Riverine Hydrology and Hydraulics Form." Hydraulic analyses for as-built conditions of the base flood, the 10-percent, 2-percent, and 0.2-percent-annual-chance floods must be submitted with Form 2.

- A certified topographic work map showing the revised and effective base and 0.2-percent-annual-chance floodplain boundaries. Please ensure that the revised information ties in with the current effective information at the downstream and upstream ends of the revised reach and any tributaries.
- An annotated copy of the FIRM, at the scale of the effective FIRM, that shows the revised base and 0.2-percent-annual-chance floodplain boundary delineations shown on the submitted work map and how they tie-in to the base and 0.2-percent-annual-chance floodplain boundary delineations shown on the current effective FIRM at the downstream and upstream ends of the revised reach, as well as any tributaries.
- As-built plans, certified by a registered Professional Engineer, of all proposed project elements.
- Documentation of the individual legal notices sent to property owners who will be affected by any widening or shifting of the base floodplain and/or any BFE increases along Folly Lick Branch.

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on the FEMA website at <https://www.fema.gov/flood-insurance>.

Patrick "Rick" F. Sacibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration



Federal Emergency Management Agency

Washington, D.C. 20472

CONDITIONAL LETTER OF MAP REVISION COMMENT DOCUMENT (CONTINUED)

COMMUNITY INFORMATION (CONTINUED)

DATA REQUIRED FOR FOLLOW-UP LOMR (continued)

• FEMA's fee schedule for reviewing and processing requests for conditional and final modifications to published flood information and maps may be accessed at <https://www.fema.gov/flood-maps/change-your-flood-zone/status/flood-map-related-fees>. The fee at the time of the map revision submittal must be received before we can begin processing the request. Payment of this fee can be made through a check or money order, made payable in U.S. funds to the National Flood Insurance Program, or by credit card (Visa or MasterCard only). Please either forward the payment, along with the revision application, to the following address:

LOMC Clearinghouse
Attention: LOMR Manager
3601 Eisenhower Avenue, Suite 500
Alexandria, Virginia 22304-6426

or submit the LOMR and fee using the Online LOMC portal at: <https://hazards.fema.gov/femaportal/onlinelomc/signin>

After receiving appropriate documentation to show that the project has been completed, FEMA will initiate a revision to the FIRM. Because the flood hazard information (i.e., base flood elevations, base flood depths, SFHAs, zone designations, and/or regulatory floodways) will change as a result of the project, a 90-day appeal period will be initiated for the revision, during which community officials and interested persons may appeal the revised flood hazard information based on scientific or technical data.

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on the FEMA website at <https://www.fema.gov/flood-insurance>.

Patrick "Rick" F. Sacibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

22-03-0774R

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Federal Emergency Management Agency

Washington, D.C. 20472

CONDITIONAL LETTER OF MAP REVISION COMMENT DOCUMENT (CONTINUED)

COMMUNITY INFORMATION (CONTINUED)

COMMUNITY REMINDERS

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

April Cummings
Director, Mitigation Division
Federal Emergency Management Agency, Region III
One Independence Mall, Sixth Floor
615 Chestnut Street
Philadelphia, PA 19106-4404
(215) 931-5635

A preliminary study is being conducted for Fairfax County. Preliminary copies of the revised FIRM and FIS report were submitted to your community for review on June 30, 2021, and may become effective before the revision request following this CLOMR is submitted. Please ensure that the data submitted for the revision ties into the data effective at the time of the submittal.

This comment is based on the flood data presently available. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on the FEMA website at <https://www.fema.gov/flood-insurance>.

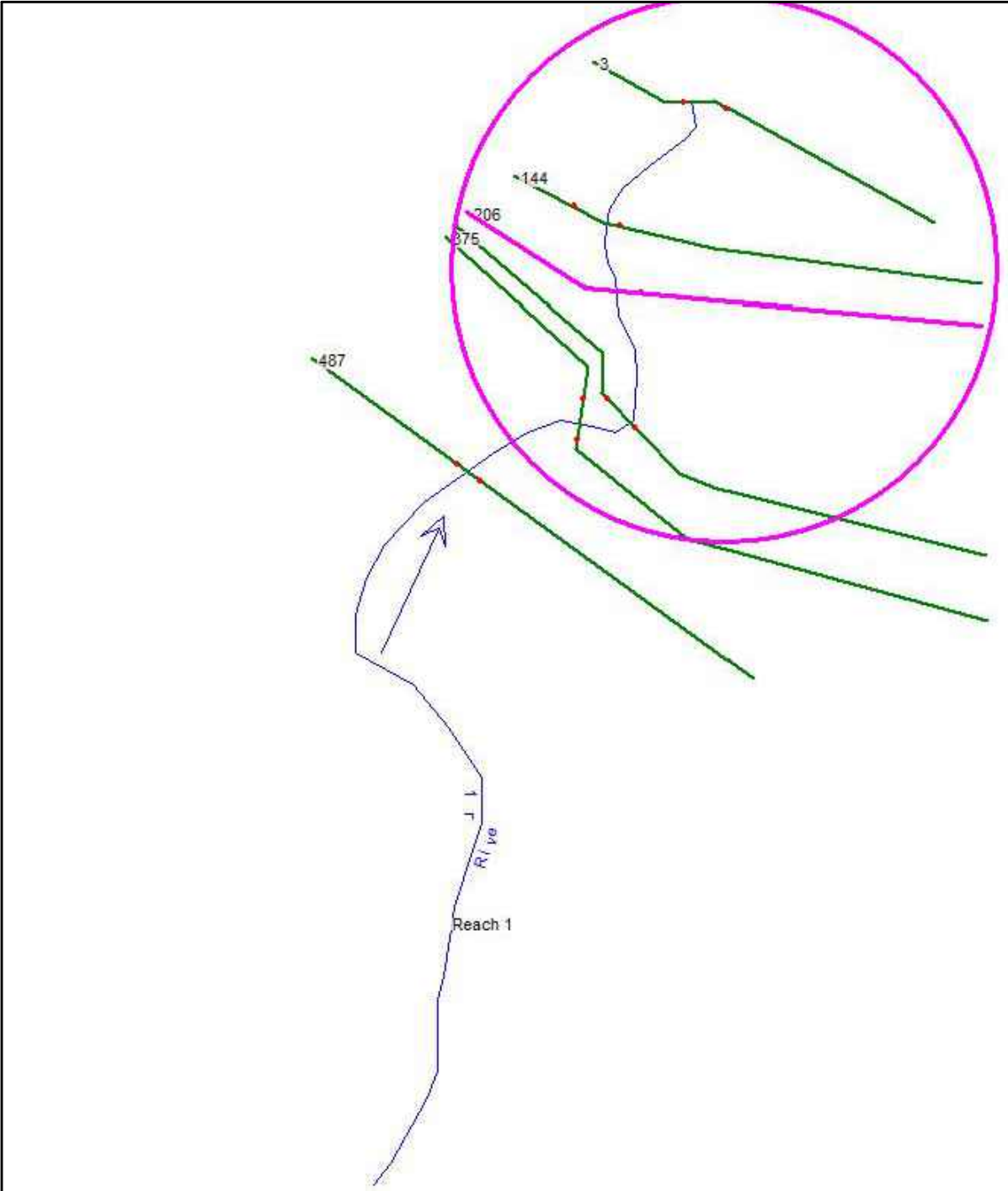
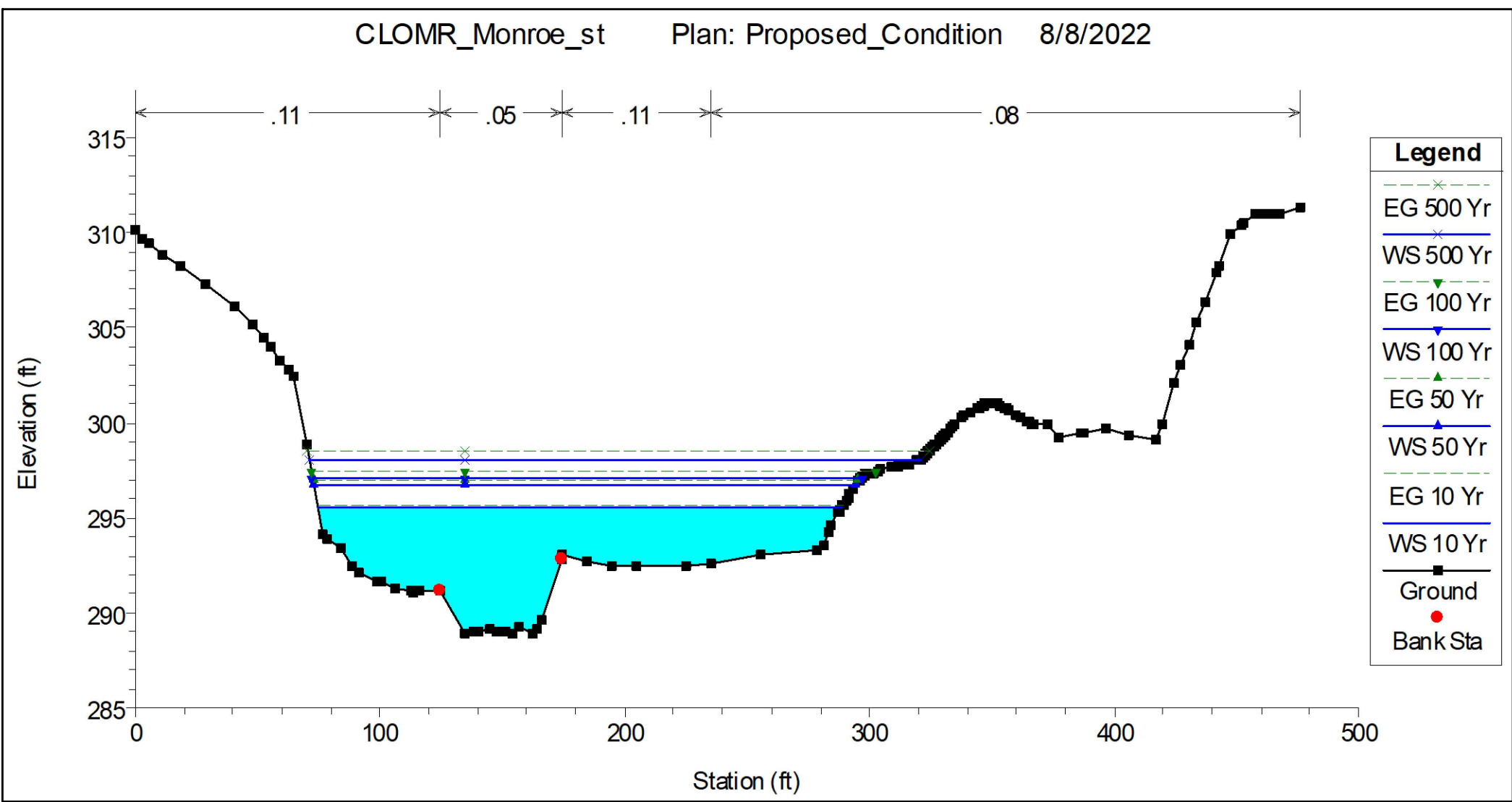
Patrick "Rick" F. Sacibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

22-03-0774R

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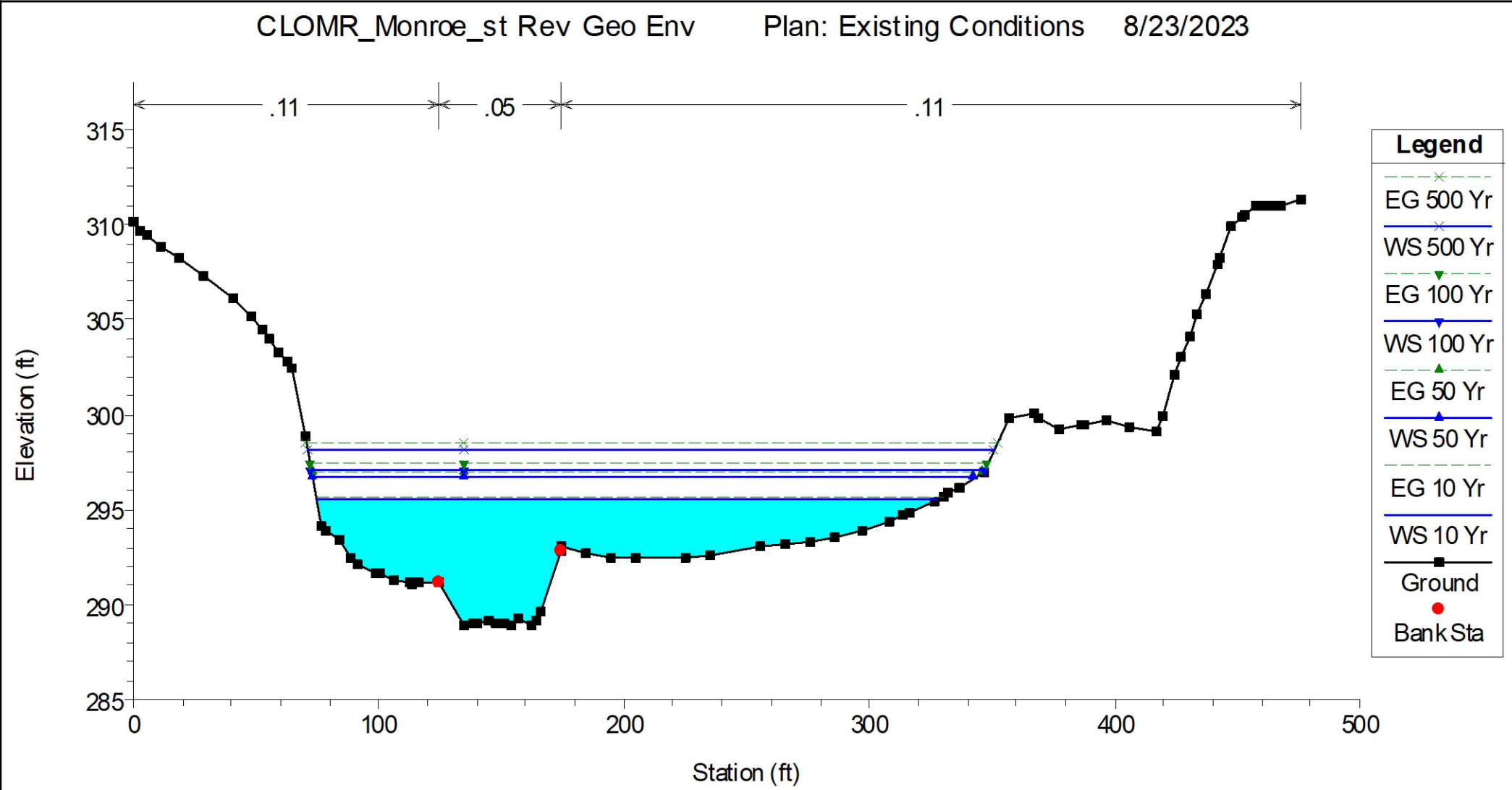
APPROVED RESULTS

HEC-RAS Plan: Proposed River: River 1 Reach: Reach 1												
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Reach 1	487	10 Yr	1800.00	289.90	296.44	296.44	297.77	0.013016	10.47	410.31	191.23	0.78
Reach 1	487	50 Yr	2900.00	289.90	297.22	297.22	299.18	0.017768	13.35	567.94	220.27	0.94
Reach 1	487	100 Yr	3400.00	289.90	298.11	298.11	299.70	0.013128	12.53	786.08	253.86	0.82
Reach 1	487	500 Yr	4700.00	289.90	298.95	298.95	300.80	0.014365	14.11	1005.75	268.44	0.88
Reach 1	375	10 Yr	1800.00	289.30	295.80		296.16	0.003665	5.75	622.90	209.35	0.42
Reach 1	375	50 Yr	2900.00	289.30	297.00		297.47	0.004086	6.87	910.44	271.04	0.46
Reach 1	375	100 Yr	3400.00	289.30	297.47		297.97	0.004171	7.25	1047.37	303.15	0.46
Reach 1	375	500 Yr	4700.00	289.30	298.52		299.08	0.004267	7.99	1373.96	322.70	0.48
Reach 1	327	10 Yr	1800.00	287.67	295.74		295.98	0.002357	4.87	693.67	215.02	0.34
Reach 1	327	50 Yr	2900.00	287.67	296.92		297.26	0.002880	6.01	975.57	259.77	0.38
Reach 1	327	100 Yr	3400.00	287.67	297.39		297.76	0.003020	6.40	1099.49	271.59	0.39
Reach 1	327	500 Yr	4700.00	287.67	298.41		298.87	0.003318	7.25	1383.61	283.91	0.42
Reach 1	206	10 Yr	1800.00	288.93	295.54		295.72	0.001794	4.07	768.80	213.83	0.29
Reach 1	206	50 Yr	2900.00	288.93	296.69		296.94	0.002164	5.03	1017.36	221.20	0.33
Reach 1	206	100 Yr	3400.00	288.93	297.13		297.42	0.002286	5.38	1117.96	224.30	0.35
Reach 1	206	500 Yr	4700.00	288.93	298.09		298.49	0.002723	6.37	1344.98	250.35	0.39
Reach 1	144	10 Yr	1800.00	288.42	295.11	293.71	295.53	0.004600	5.96	525.81	193.11	0.46
Reach 1	144	50 Yr	2900.00	288.42	296.14		296.72	0.005361	7.25	732.67	207.20	0.51
Reach 1	144	100 Yr	3400.00	288.42	296.55		297.19	0.005551	7.70	820.04	212.40	0.53
Reach 1	144	500 Yr	4700.00	288.42	297.42		298.22	0.006188	8.83	1008.49	220.38	0.57
Reach 1	3	10 Yr	1800.00	288.83	294.10	293.59	294.69	0.008397	7.27	475.39	214.22	0.61
Reach 1	3	50 Yr	2900.00	288.83	295.20	294.34	295.85	0.007753	8.11	720.67	230.37	0.61
Reach 1	3	100 Yr	3400.00	288.83	295.70	294.68	296.35	0.007163	8.26	837.18	235.12	0.60
Reach 1	3	500 Yr	4700.00	288.83	296.50	295.37	297.29	0.007821	9.38	1028.09	241.95	0.64



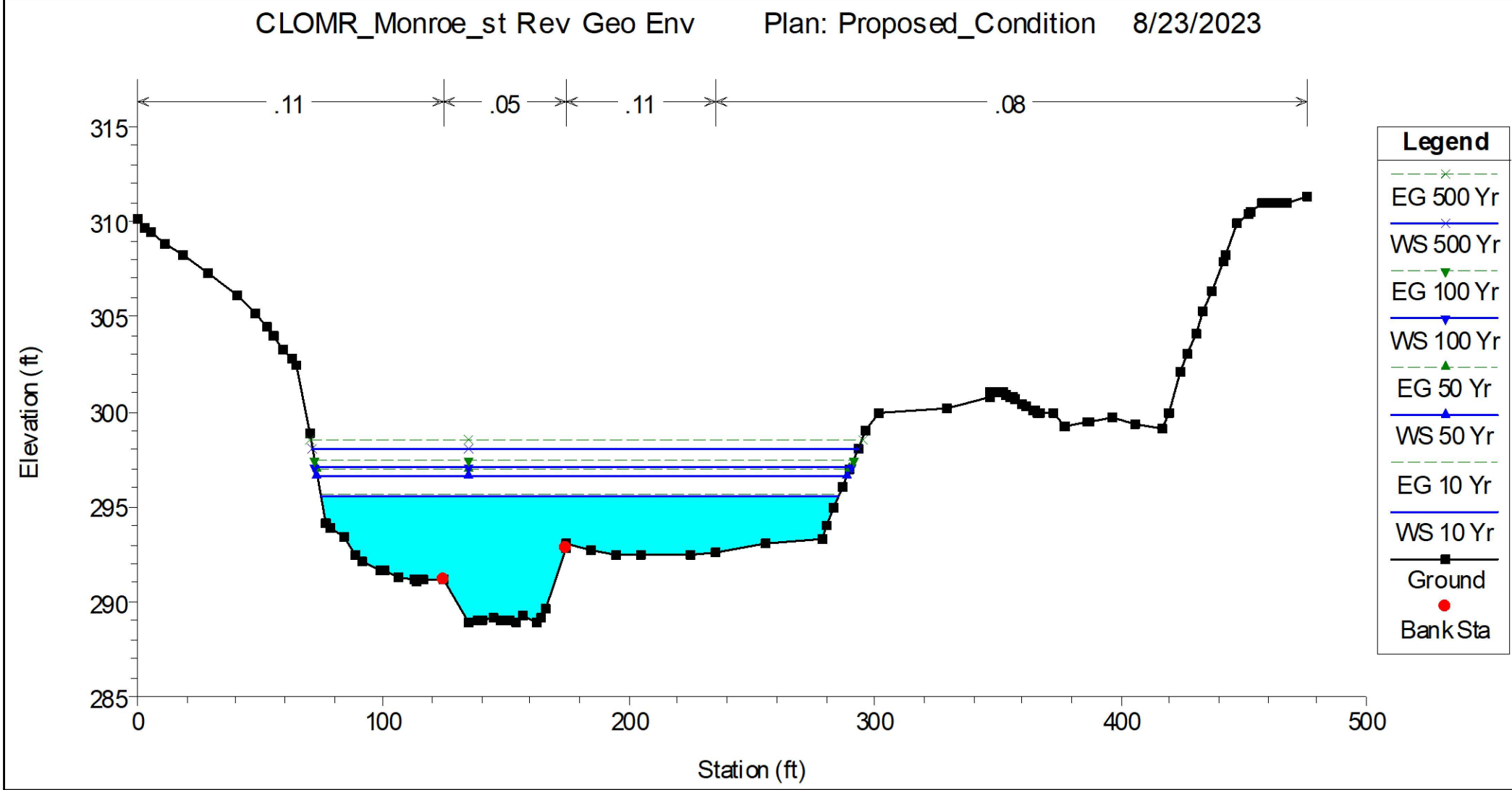
EXISTING CONDITIONS RESULTS

HEC-RAS Plan: Ex_Cond River: River 1 Reach: Reach 1												
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Reach 1	487	10 Yr	1800.00	289.90	296.44	296.44	297.77	0.013016	10.47	410.31	191.23	0.78
Reach 1	487	50 Yr	2900.00	289.90	297.22	297.22	299.18	0.017768	13.35	567.94	220.27	0.94
Reach 1	487	100 Yr	3400.00	289.90	298.11	298.11	299.70	0.013128	12.53	786.08	253.86	0.82
Reach 1	487	500 Yr	4700.00	289.90	298.95	298.95	300.80	0.014365	14.11	1005.75	268.44	0.88
Reach 1	375	10 Yr	1800.00	289.30	295.81		296.16	0.003509	5.63	625.87	210.02	0.41
Reach 1	375	50 Yr	2900.00	289.30	297.01		297.46	0.003965	6.77	912.83	272.58	0.45
Reach 1	375	100 Yr	3400.00	289.30	297.47		297.97	0.004122	7.21	1048.91	303.23	0.46
Reach 1	375	500 Yr	4700.00	289.30	298.51		299.07	0.004234	7.96	1373.21	322.64	0.48
Reach 1	327	10 Yr	1800.00	287.67	295.75		295.99	0.002350	4.86	694.61	215.21	0.33
Reach 1	327	50 Yr	2900.00	287.67	296.93		297.27	0.002877	6.01	976.12	259.83	0.38
Reach 1	327	100 Yr	3400.00	287.67	297.39		297.76	0.003019	6.40	1099.65	271.36	0.39
Reach 1	327	500 Yr	4700.00	287.67	298.40		298.86	0.003359	7.29	1382.68	287.66	0.42
Reach 1	206	10 Yr	1800.00	288.93	295.53		295.72	0.001854	4.13	818.40	253.07	0.30
Reach 1	206	50 Yr	2900.00	288.93	296.68		296.94	0.002182	5.05	1119.30	269.80	0.33
Reach 1	206	100 Yr	3400.00	288.93	297.14		297.42	0.002275	5.37	1243.60	274.69	0.35
Reach 1	206	500 Yr	4700.00	288.93	298.13		298.48	0.002518	6.14	1517.70	279.71	0.37
Reach 1	144	10 Yr	1800.00	288.42	295.11	293.71	295.53	0.004605	5.96	525.53	193.08	0.46
Reach 1	144	50 Yr	2900.00	288.42	296.14		296.72	0.005365	7.25	732.41	207.19	0.51
Reach 1	144	100 Yr	3400.00	288.42	296.55		297.19	0.005556	7.71	819.80	212.38	0.53
Reach 1	144	500 Yr	4700.00	288.42	297.42		298.22	0.006191	8.83	1008.30	220.38	0.57
Reach 1	3	10 Yr	1800.00	288.83	294.10	293.59	294.69	0.008379	7.26	475.39	214.22	0.61
Reach 1	3	50 Yr	2900.00	288.83	295.20	294.34	295.85	0.007739	8.10	720.67	230.37	0.61
Reach 1	3	100 Yr	3400.00	288.83	295.70	294.68	296.35	0.007151	8.25	837.18	235.12	0.59
Reach 1	3	500 Yr	4700.00	288.83	296.50	295.35	297.29	0.007809	9.37	1028.09	241.95	0.63



PROPOSED CONDITIONS RESULTS

HEC-RAS Plan: Proposed River: River 1 Reach: Reach 1												
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Reach 1	487	10 Yr	1800.00	289.90	296.44	296.44	297.77	0.013016	10.47	410.31	191.23	0.78
Reach 1	487	50 Yr	2900.00	289.90	297.22	297.22	299.18	0.017768	13.35	567.94	220.27	0.94
Reach 1	487	100 Yr	3400.00	289.90	298.11	298.11	299.70	0.013128	12.53	786.08	253.86	0.82
Reach 1	487	500 Yr	4700.00	289.90	298.95	298.95	300.80	0.014365	14.11	1005.75	268.44	0.88
Reach 1	375	10 Yr	1800.00	289.30	295.80		296.16	0.003662	5.75	623.11	209.39	0.42
Reach 1	375	50 Yr	2900.00	289.30	297.00		297.47	0.004082	6.87	910.83	271.30	0.46
Reach 1	375	100 Yr	3400.00	289.30	297.47		297.97	0.004167	7.24	1047.82	303.17	0.46
Reach 1	375	500 Yr	4700.00	289.30	298.51		299.08	0.004278	8.00	1372.51	322.58	0.48
Reach 1	327	10 Yr	1800.00	287.67	295.74		295.98	0.002355	4.87	693.69	215.06	0.33
Reach 1	327	50 Yr	2900.00	287.67	296.93		297.26	0.002878	6.01	975.97	259.82	0.38
Reach 1	327	100 Yr	3400.00	287.67	297.39		297.77	0.003018	6.40	1099.92	271.61	0.39
Reach 1	327	500 Yr	4700.00	287.67	298.41		298.86	0.003326	7.26	1382.26	283.85	0.42
Reach 1	206	10 Yr	1800.00	288.93	295.54		295.72	0.001808	4.08	762.61	210.43	0.30
Reach 1	206	50 Yr	2900.00	288.93	296.68		296.94	0.002187	5.05	1006.13	215.92	0.33
Reach 1	206	100 Yr	3400.00	288.93	297.13		297.42	0.002312	5.41	1103.96	218.04	0.35
Reach 1	206	500 Yr	4700.00	288.93	298.10		298.48	0.002661	6.30	1317.48	222.44	0.38
Reach 1	144	10 Yr	1800.00	288.42	295.11	293.71	295.53	0.004600	5.96	525.81	193.11	0.46
Reach 1	144	50 Yr	2900.00	288.42	296.14		296.72	0.005360	7.25	732.68	207.20	0.51
Reach 1	144	100 Yr	3400.00	288.42	296.55		297.19	0.005551	7.70	820.04	212.40	0.53
Reach 1	144	500 Yr	4700.00	288.42	297.42		298.22	0.006188	8.83	1008.49	220.38	0.57
Reach 1	3	10 Yr	1800.00	288.83	294.10	293.59	294.69	0.008397	7.27	475.39	214.22	0.61
Reach 1	3	50 Yr	2900.00	288.83	295.20	294.34	295.85	0.007753	8.11	720.67	230.37	0.61
Reach 1	3	100 Yr	3400.00	288.83	295.70	294.68	296.35	0.007163	8.26	837.18	235.12	0.60
Reach 1	3	500 Yr	4700.00	288.83	296.50	295.37	297.29	0.007821	9.38	1028.09	241.95	0.64



GeoEnv Engineers

Civil, Environmental & Geotechnical Engineering
10875 Main Street, Suite 213
Fairfax, VA 22030
Tel. 703.591.7170
Fax. 703.591.7074
Web Site: geoenvl.com

REVISION BLOCK

NO.	DESCRIPTION	DATE

HEC-RAS 100-YR
FLOODPLAIN MODEL

LT 1C AND 1B, HERNDON
1317 & 1315 MONROE STREET
HERNDON, VA 20170 3006

TAX MAP: 0102 02 0001B
0102 02 0001C

DATE: AUGUST, 2023

PREP. BY: B.S

CHECKED BY:

PROJECT #

SCALE: N.T.S

SHEET: 2

Page 156 of 196

Agenda Item: Resolution to provide Town Council Guidance on the development of the Town Manager's Proposed FY 2025 Budget

Meeting Date: January 16, 2024

Category: General

Prepared by: Marjorie Sloan, Finance Director

Description:

The proposed resolution is to provide the Town Manager, Town Council guidance on the development of the Town Manager's proposed FY 2025 Budget.

Background:

A presentation by Finance on revenue trends and budget guidance was completed at the January 2 Town Council Work Session. Following the presentation, Council discussed the current outlook and priorities for FY 2025. A formal resolution has been prepared to provide the Town Manager guidance by the Town Council for the FY 2025 Budget.

Budget Impact:

None

Recommendation:

Staff recommends adoption of the proposed FY 2025 Budget Guidance Resolution.

Attachments:

1. Resolution (Proposed)
2. Town Council Guidance - Proposed FY 2025 Budget

**TOWN OF HERNDON, VIRGINIA
TOWN COUNCIL**

RESOLUTION

JANUARY 23, 2024

Resolution- to provide the Town Manager, Town Council Guidance on the development of the Town Manager's Proposed FY 2025 Budget.

The Town Council is committed to providing the core services expected of a municipal government, providing quality services and facilities for residents and businesses of the town, and continuously improving town government effectiveness and efficiency.

The Town Council is committed to maintaining the town's fiscal integrity and recognizes the FY 2025 budget priorities for funding must be set.

THEREFORE, BE IT RESOLVED by the Town Council of the Town of Herndon, Virginia that:

1. The "Town Council Guidance for the Town Manager's Proposed FY 2025 Budget" dated January 23, 2024, is adopted.

TOWN OF HERNDON
Town Council Guidance for
Town Manager's Proposed FY 2025 Budget

Continue efforts to develop and maintain a strong fiscal position.

- Prepare a balanced annual budget that addresses the rising costs associated with maintaining competitive workforce, on-going funding for the town-wide service delivery and capital projects along with the additional revenue appropriations needed to meet them.

Develop a revenue plan to meet the various challenges associated with maintaining current levels of service.

- Consider proposed increases to Real Estate and/or Meals tax rates to meet critical expenditure requirements.
- Focus on finding external funding sources for capital expenditures whenever practicable.
- Explore updating fee structures consistent with other jurisdictions.
- Continue executing the previously approved capital expenditure plan that utilizes American Rescue Plan Act (ARPA) funding prior to the sunset dates established by Federal law.

Continue to adequately invest in the town's capital assets.

- Emphasize the funding of life cycle maintenance that provides a comprehensive assessment of the town's overall exposure along with the revenue stream needed to properly maintain town assets.
- Continue targeting American Rescue Plan Act (ARPA) funding toward capital needs.
- Continue to address the impacts of transportation projects.
- Advancing implementation of the town's downtown redevelopment plan.

Address problems with recruiting and retaining employees in a highly competitive labor market.

- Continue emphasis on maintaining a competitive employment position in the local market, to include:
 - Appropriate market-based changes to the salary structure.
 - Continued emphasis on the pay-for-performance program.

- Fund activities that will demonstrate a commitment to, and investment in, the town's employees, to include mental health and personal counselling support, educational reimbursement, supporting certification opportunities, and training.
- Addressing rising health care and pension costs.
- Continuing employee skills development and education, with an emphasis on leadership development and succession planning.

Continue focus on strategic planning.

- Work with Council on strategic concepts, to include developing a fiscal plan to pay to incorporate ideas aligned with the adopted Strategic Plan into town operations.
- Incorporate appropriations consistent with the Community Cultural Festivals Policy

Develop a plan for adverse changes to the economic climate.

- Create flexibility to react to potential negative effects to the economic climate while maintaining service levels.
- Continue forward looking budget preparation in support of creative ways to attract and retain town businesses.

Propose Balanced Enterprise Fund Budgets That Limit the Use of Retained Earnings

Water and Sewer

- Develop a rate plan and propose appropriate rate increases that will balance revenues with cost increases related to higher commodity costs, inflationary pressures, added regulation, and increased need to replace existing infrastructure.
- Proactively address increasing problems with the existing water and sewer infrastructure.

Golf Course

- Account for the various inflationary pressures affecting the Fund; analyze the marketplace and determine price elasticity for the operation.
- Support the Master Plan project and review potential Clubhouse enhancements.

Chestnut Grove Cemetery

- Support the construction of additional acreage that will yield increased inventory.
- Account for the various inflationary pressures affecting the Fund.
- Use best practices to cover operational revenue shortfalls while the additional inventory is being brought online.

Agenda Item: Resolution to approve a revision to the approved master plan, for the Chestnut Grove Cemetery, an element within the Comprehensive Plan of the Town of Herndon

Meeting Date: January 16, 2024

Category: General

Prepared by: Randy Schell Chief Program and Project Manager, Cynthia Hoftiezer, Deputy Director Parks and Recreation

Description:

Revised Master Plan for Chestnut Grove Cemetery.

Background:

Circa 1872, the Chestnut Grove Cemetery was established as a private operation. Circa 1972, the zoning ordinance was revised to require a conditional use permit for the operation of a cemetery.

On June 10, 1997, Conditional Use Permit #97-1 was adopted by the Town Council that required approval of a Master Plan for the cemetery.

The Chestnut Grove Cemetery and its operation were transferred to the Town of Herndon on September 30, 1997 via a deed of gift. The Town then undertook the creation of a master plan for the cemetery.

The original master plan for the cemetery, dated April 1, 1999, and prepared by consultants Lewis Scully Gionet, Inc., Myers Schmalenberger Meisner, and the L. F. Slone Consulting Group, was approved by the Town Council with CPA #99-2 on July 13, 1999 as an addendum to the Town's Comprehensive Plan.

In 2023, due to changing burial customs, Parks & Recreation seeks to revise the original master plan for the remaining 4+ undeveloped acres of the cemetery to meet current requirements. The Tribute Company was contracted to create a new master plan for this area. The master plan by The Tribute Company, dated November 14, 2023, meets the current needs of the cemetery and is being presented to the Town Council for approval as an addendum to the Town's Comprehensive Plan.

Budget Impact:

There is no fiscal impact with approval of this master plan revision. Funds for the construction of the infrastructure to support this new master plan are a part of the current Capital Improvement Program as project #11-PR-15-001, Chestnut Grove Cemetery.

Recommendation:

Staff recommends approval of the Chestnut Grove Cemetery Master Plan revision, dated November 14, 2023 and prepared by consultants The Tribute Company, as an addendum to the Comprehensive Plan of the Town of Herndon.

Attachments:

1. Resolution (Proposed)
2. Revised Master Plan

**TOWN OF HERNDON, VIRGINIA
TOWN COUNCIL**

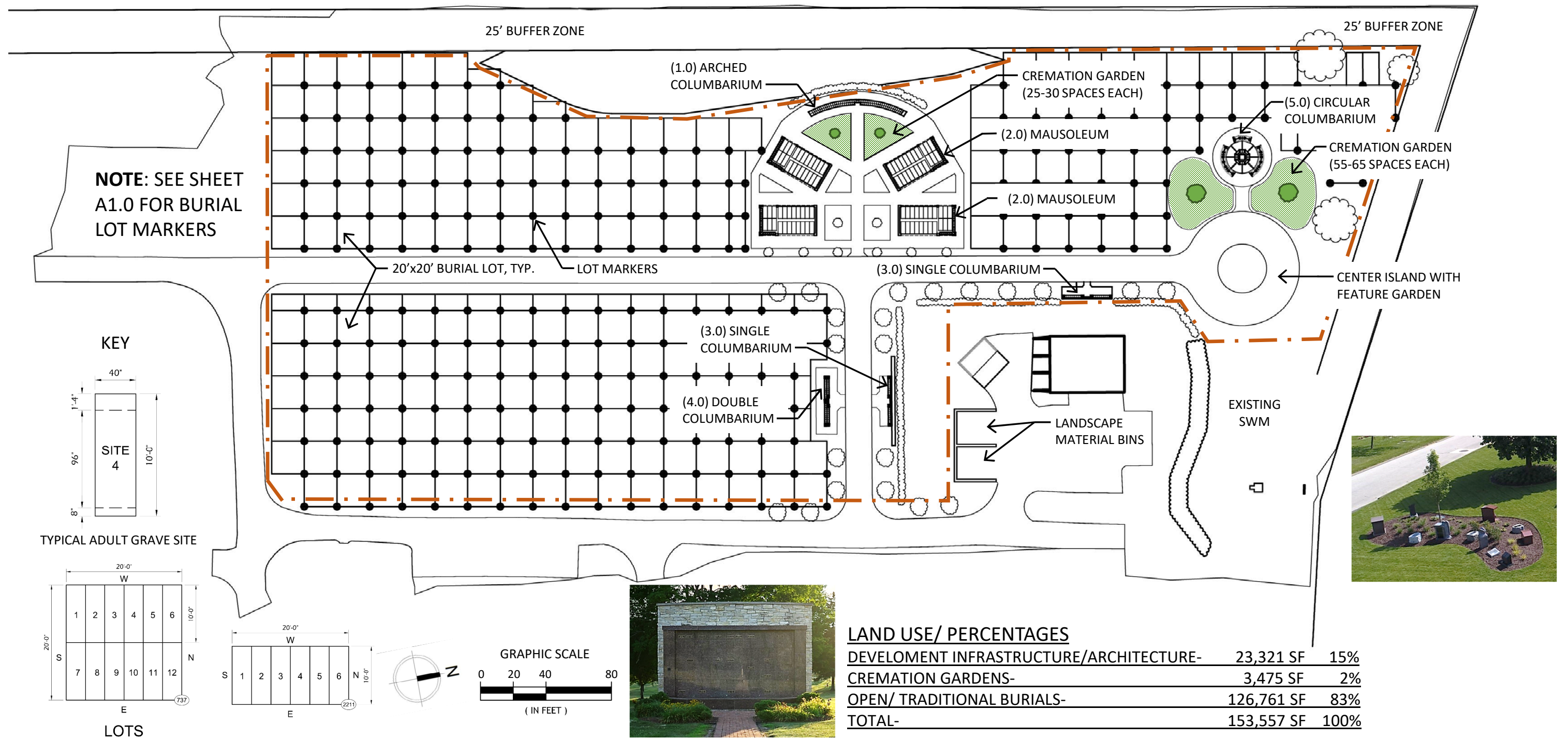
RESOLUTION

JANUARY 23, 2024

Resolution- to approve a revision to the approved master plan, for the Chestnut Grove Cemetery, an element within the Comprehensive Plan of the Town of Herndon.

BE IT RESOLVED by the Town Council for the Town of Herndon, Virginia that:

1. The Town Council approves the Chestnut Grove Cemetery Master Plan revision, dated November 14, 2023 and prepared by consultants The Tribute Company, as an addendum to the Comprehensive Plan of the Town of Herndon.



Chestnut Grove Cemetery Final Master Plan- November 14th, 2023

P.1

Agenda Item: Resolution to repeal Resolution 23-G-52 and to endorse and authorize a substitute funding amount on VDOT FY2027 and FY2028 Revenue Sharing Program funding application towards the VDOT-administered 'East Elden Street Widening and Improvements (UPC 50100)'

Meeting Date: January 16, 2024

Category: General

Prepared by: Jaleh Moslehi, Capital Projects Planner/Engineer

Description:

On October 2, 2023, Town staff had submitted to VDOT a Revenue Sharing funding application to include the Town's resolution with a total request of up to \$10,000,000 for the *East Elden Street Widening and Improvements* (UPC 50100) project to address a funding need for this capital improvement project. However, last month, VDOT staff informed the Town that it could increase its total funding request to \$10,812,110, of which 50%, or \$5,406,055, is to serve as the Town's local match to be directed to the project.

Accordingly, Town staff desires to continue processing this year's Revenue Sharing application of up to \$10,812,110, with a 50% local Town match, per VDOT's advice. The attached revised resolution shows the Town's updated funding request.

Background:

The scope for this VDOT-administered project is to provide congestion relief by widening East Elden Street to six (6) lanes with a raised median between Fairfax County Parkway and Herndon Parkway, continuing as a four (4) lane section with a raised median and dedicated turning lanes between Herndon Parkway and Van Buren Street, transitioning to a two (2) lane section with a left-turn lane when reaching Monroe Street. The project also includes bridge upgrade/flood mitigation measures, improved traffic signalization, bus transit enhancements, ADA pedestrian sidewalks, bike lanes, and cycle tracks on both sides of the roadway with connectivity to three (3) regional trails and the Herndon Metrorail Station.

Budget Impact:

Jurisdictions must commit at least 50% in local matching funds within the two fiscal years after the revenue-sharing allocation. The Town's 50% Local Match would be comprised of Town general funds, Town bond funds, and/or NVTALocal Revenue of up to \$5,406,055 (i.e., \$2,703,027.50 for FY2027 and \$2,703,027.50 for FY2028). If

awarded, the Town's application would be for two fiscal years (FY2027 and FY2028), with funding available on 7/1/2026 and 7/1/2027, respectively.

If the Town successfully obtains these VDOT Revenue Sharing funds, the funds will reduce the amount of funding for which the Town would otherwise be responsible.

Recommendation:

Staff recommends that the Mayor and Town Council adopt the attached resolution to repeal Resolution 23-G-52 and to endorse and authorize a substitute funding amount on VDOT FY2027 and FY2028 Revenue Sharing Program funding application towards the VDOT-administered 'East Elden Street Widening and Improvements (UPC 50100)'

Attachments:

1. Resolution (Proposed)

**TOWN OF HERNDON, VIRGINIA
TOWN COUNCIL**

RESOLUTION

JANUARY 23, 2024

Resolution- To repeal Resolution 23-G-52 and to endorse and authorize a substitute funding amount on VDOT FY2027 and FY2028 Revenue Sharing Program funding application towards the VDOT-administered '*East Elden Street Widening and Improvements (UPC 50100)*'

The Town desires to revise the requested funding on the submitted Revenue Sharing application from \$10,000,000 to \$10,812,110, of which 50% or \$5,406,055 is to serve as the town's local match to be directed to fund the East Elden Street Widening and Improvements (UPC 50100) project.

This resolution repeals Resolution 23-G-52 adopted at the Town Council meeting of the Town of Herndon on July 18, 2023.

The Town's match will be comprised of town general funds, town bond funds, and/or Northern Virginia Transportation Authority (NVTa) Local Revenue funds within the two fiscal years subsequent to allocation along with a Town/VDOT project agreement prior to beginning a VDOT administered project.

THEREFORE, BE IT RESOLVED by the Town Council for the Town of Herndon, Virginia, that:

1. The Town Council supports increasing the previously requested and endorsed funding from \$10,000,000 to \$10,812,110 through the Virginia Department of Transportation Revenue Sharing Program.
2. The Town Manager is authorized to execute project administration agreements and/or addendums for any approved Revenue Sharing projects with the Virginia Department of Transportation.

Agenda Item: Ordinance to amend the Herndon Town Code, Chapter 2 (ADMINISTRATION), Article I (In General), Section 2.1 to clarify the rescheduling of meetings

Meeting Date: January 16, 2024

Category: General

Prepared by: Lesa Yeatts, Town Attorney

Description:

This is a new agenda item to address a necessary housekeeping amendment to Section 2-1 to clarify the rescheduling of meetings of the Town Council due to unforeseen circumstances, like weather. The clarity of the language is particularly important. The language of this amendment was recently included in a more comprehensive amendment of Chapter 2 (24-O-01), that was tabled to allow further review of the attendance language in Section 2-5.

Background:

N/A

Budget Impact:

None

Recommendation:

Recommend adoption of the proposed Ordinance.

Attachments:

1. Ordinance (Proposed)

**TOWN OF HERNDON, VIRGINIA
TOWN COUNCIL**

ORDINANCE

JANUARY 23, 2024

Ordinance- **to amend the Herndon Town Code, Chapter 2 (ADMINISTRATION), Article I (In General), Section 2.1 to clarify the rescheduling of meetings.**

BE IT ORDAINED by the Town Council of the Town of Herndon, Virginia that:

1. The following sections or provisions of the Herndon Town Code (2000), as amended, are repealed, replaced and re-ordained as follows:

CHAPTER 2 (ADMINISTRATION)

Article I. In General

Sec. 2-1 – Meeting schedule.

(c) Should the conduct of a regular meeting be unnecessary due to a lack of items for consideration, or impossible due to the inability to obtain a quorum, or due to weather or other condition such that it is hazardous for members to attend the regular meeting, as declared in writing by the mayor, the regular meeting may be postponed or canceled and notice of such postponement or cancelation **and the rescheduled date**, shall be published by the town clerk. All hearings and other matters previously advertised shall be conducted at the ~~continued~~ **rescheduled** meeting and no further advertisement is required, **unless required by law**.

2. This ordinance shall be effective on and after the date of its adoption.

Agenda Item: Ordinance to approve and authorize the mayor to sign a lease agreement between the Town and Board of Supervisors of Fairfax County, Virginia, for office space at 397 Herndon Parkway

Meeting Date: January 16, 2024

Category: Consent

Prepared by: Lesa Yeatts, Town Attorney, Scott E Robinson, Public Works Director

Description:

The Board of Supervisors currently occupies the office space at 397 Herndon Parkway which is used solely for constituent services. That lease expired on December 31, 2023.

The proposed Ordinance approves a new lease term for 185.4 sq. ft of office space in the Town's building located at 397 Herndon Parkway. The new lease will be effective on January 1, 2024, and expire at the end of the current term of office on December 31, 2025.

Background:

N/A

Budget Impact:

The rent for this space is proposed to remain \$1.00, consistent with other leases for governmental entities at this location.

Recommendation:

Approval of the Ordinance as proposed.

Attachments:

1. Ordinance (Proposed)
2. Lease
3. Exhibit A

**TOWN OF HERNDON, VIRGINIA
TOWN COUNCIL**

ORDINANCE

JANUARY 23, 2023

Ordinance- **to approve and authorize the mayor to sign a lease agreement between the Town and Board of Supervisors of Fairfax County, Virginia, for office space at 397 Herndon Parkway.**

BE IT ORDAINED by the Town Council of the Town of Herndon, Virginia that:

1. The lease agreement dated January 23, 2024, between the Town and the Board of Supervisors of Fairfax County, Virginia, for office space in the town's building located at 397 Herndon Parkway is approved. The lease agreement shall be effective from January 1, 2024, and will expire on December 31, 2025. The rent shall be \$1.00 for the term.
2. The mayor is authorized to sign and deliver the lease agreement and any related documents necessary to evidence or effectuate the lease agreement.
3. This ordinance shall be effective on and after the date of its adoption.

LEASE AGREEMENT

THIS LEASE made on this 23rd day of January 2024, by and between the TOWN OF HERNDON, a municipal corporation (Landlord) and the BOARD OF SUPERVISORS OF FAIRFAX COUNTY, VIRGINIA, a body politic and corporate of the Commonwealth of Virginia ("Tenant").

Recitals

Landlord is the owner of a building and premises located at 397 Herndon Parkway, Herndon, Virginia (the building).

Landlord and Tenant have agreed that Tenant will lease from Landlord, in consideration of the rent and other benefits, and under the terms and conditions specified here, a portion of the premises commonly known as part of the building at 397 Herndon Parkway, (as shown on Exhibit A, attached and incorporated by reference).

THEREFORE, the parties agree as follows:

1. Commencement and Ending Date of Term. Beginning January 1, 2024, Landlord leases the leased premises to Tenant according to the terms of this lease. The Tenant may possess the leased premises with the Tenant having the right to terminate the Lease upon 30 days prior written notice to the Landlord, and the Landlord having the right to terminate the Lease upon 90 days prior written notice to the Tenant. The term of this lease shall expire December 31, 2025.
2. Rent. Tenant shall pay Landlord on demand \$1.00 rent for the entire term.
3. Use of Premises. Tenant shall use the leased premises solely for office use. Tenant shall have access to and from the leased premises and to the restrooms. Landlord retains for itself and its employees, agents, and invitees, a right of access through the leased premises to and from spaces.

Tenant certifies to Landlord that uses of this space are consistent with the Town of Herndon Zoning Ordinance and architectural guidelines or ordinances of the Herndon Town Code.

4. Policy Compliance. Tenant shall comply with all policies regarding the use of Town buildings, including the prohibition of alcohol and the use of recreational drugs or tobacco, as well as the Town building key policy.

5. Utility Charges. Landlord shall maintain and pay the cost of all utilities (except telecommunications) on the leased premises.

6. Liability Insurance. Tenant shall supply the Town with a certificate of self-insurance.

7. Default. Tenant shall be in default upon failure to perform any term of this lease for more than five days after written notice of such failure shall have been given to Tenant or after Tenant's abandonment of the leased premises.

8. Rights and Remedies on Default. Landlord shall have the following rights on default of Tenant, which shall be cumulative, none excluding any other right allowed by this lease or by law.

a. Landlord may enter the leased premises and repossess the leased premises and remove Tenant and any others who may be occupying the leased premises and remove any property.

b. Landlord may seize, remove and sell all of the personal property and fixtures of Tenant on the leased premises or remove and store such property at the cost of and for the account of Tenant.

9. Custodial. Landlord shall provide custodial services, consisting of emptying trash and vacuuming, once a week for the leased premises.

10. Waste or Nuisance. Tenant shall not commit any waste or nuisance upon the leased premises.

11. Maintenance by Tenant. Tenant accepts the leased premises including the improvements and any furnishings and equipment in the leased premises in their existing condition. Tenant shall at all times keep the leased premises in good order, condition, and repair. Tenant shall maintain the leased premises in a clean and sanitary condition. If Landlord is required to make any repairs by reason of Tenant's negligent or intentional act or omission, Tenant shall pay to Landlord the cost of the repairs as additional rent within ten days after written notice. Landlord shall be responsible for roof, structural integrity of the building, and replacement and repair of utility systems related to the leased premises. Except as provided in paragraph 15, Tenant shall return the leased premises to its original condition prior to Tenant's vacation of the premises, normal wear and tear excepted.

12. Notification of Hazard. Tenant and Landlord shall give immediate notice to the other in case of fire, accident, or defect in the leased premises or in any fixtures or personal property comprising the leased premises.

13. Alterations and Improvements. Except as provided in this paragraph, Tenant shall not make or cause to be made any alterations to the leased premises without first obtaining Landlord's written consent.

14. Removal of Improvements and Restoration by Tenant. All alterations except lighting not necessary for normal use of the building or conformance with the Virginia Uniform Statewide Building Code made by Tenant shall remain the property of Landlord at the expiration or termination of the lease. This property will remain part of the leased premises and Tenant shall not have any obligation to remove it.

15. Loss and Damage. Landlord shall not be liable for any loss or damage to property of Tenant located on the leased premises. Landlord shall not be liable for any injury, death, or damage to persons or property associated with Tenant resulting from fire, explosion, falling plaster, steam,

gas, electricity, water, rain, snow, or leaks from any part of the leased premises. Landlord shall not be liable for any latent defect in the leased premises or in the building of which they form a part. All property of Tenant or its subtenants kept or stored on the leased premises shall be so kept or stored at the risk of Tenant or subtenants.

16. Right of Entry. In addition to Landlord's right of access as described in paragraph 3, Landlord, its contractors, agents, or prospective purchasers or lessees, shall have the right to enter the leased premises during normal business hours to examine the same upon reasonable notice, either oral or written.

17. Quiet Enjoyment. Upon the observance of all Tenant's obligations of this lease, Tenant shall peaceably and quietly hold and enjoy the leased premises.

18. Surrender of Premises. At the expiration or termination of the term of this lease, Tenant shall surrender the leased premises in the same condition that the leased premises were in at the commencement of this lease, except as provided in paragraph 15, reasonable wear and tear excepted, and shall surrender all keys for the leased premises to Landlord.

19. Assignment and Subletting. Tenant may not assign this lease without prior written consent of Landlord. This prohibition against assigning or subletting shall be construed to include a prohibition against any assignment or subletting by operation of law.

20. Binding on Successors/Assigns. All of the terms of this lease shall bind the successors and assigns of Landlord and Tenant, except where the assignment is ineffective due to lack of Landlord's consent.

BOARD OF SUPERVISORS OF FAIRFAX
COUNTY, VIRGINIA

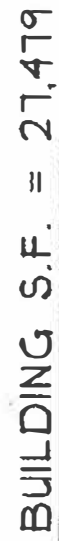
DocuSigned by:
By: Elicia L. Seard-McCormick
Elicia L. Seard-McCormick
Deputy County Executive of Administration

TOWN OF HERNDON, VIRGINIA

By: _____
Sheila A. Olem
Mayor

APPROVED AS TO FORM:

By: Lesa J. Yeatts
Lesa J. Yeatts
Town Attorney

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Agenda Item: Ad Hoc Committees - Review Establishing Guidelines for PBAC and HDEIC

Meeting Date: January 16, 2024

Category: Discussion

Prepared by: Kirstyn Jovanovich, Town Clerk

Description:

This is a request for Council to review and provide recommended changes to the Establishing Guidelines for the Town of Herndon's two current ad hoc committees: Herndon Diversity, Equity, and Inclusion Committee (HDEIC) and the Pedestrian and Bicycle Advisory Committee (PBAC).

Background:

During the November 8, 2023 work session, Town Council discussed a memorandum prepared by Councilmember Scherff regarding the Town Council's ad hoc committees' processes. At the Town Council's December 5, 2023 work session, staff provided an overview of the Town Clerk's Office's Standard Operating Procedure (SOP) on Boards, Commissions, and ad hoc committee logistics.

The SOP indicates that the Council will review the objectives of the Town's ad hoc committees in the first quarter of the Council's term after an election. As the formalization of this SOP occurred after the first quarter of the current Council term, the HDEIC and PBAC Establishing Guidelines are being brought to Council mid-term for review and feedback.

Budget Impact:

None

Recommendation:

This is a discussion item; staff is seeking Council direction on updates to the Establishing Guidelines for the Town's current ad hoc committees, HDEIC and PBAC.

Attachments:

1. HDEIC Establishment, Resolution and Objectives
2. PBAC Establishment, Resolution and Objectives
3. PBAC Expansion (2012)

TOWN OF HERNDON, VIRGINIA

RESOLUTION

FEBRUARY 22, 2022

Resolution- to establish the Town of Herndon Diversity, Equity, and Inclusion Committee.

WHEREAS, on July 6, 2021, the Herndon Town Council directed the formation of a Diversity, Equity, and Inclusion Committee, to promote and enhance the Town of Herndon's diverse community; and

WHEREAS, the committee's purpose is to listen, discuss, and respond to community concerns about diversity, equity and inclusion in the town, and use the information gathered from these discussions to make recommendations to the Town Council that enhance the delivery of services to the minority resident and business communities and to recommend policies and activities that help foster diversity and inclusion within the community at-large; and

WHEREAS, the committee will consist of 11 members from diverse backgrounds and professions, who represent the wide range of the Herndon community: seven members, shall live in the Town of Herndon; two members representing Town businesses who shall own or manage a business in the town and have expertise in the business sector; one non-resident member; and one Councilmember, who shall serve as chair; and

WHEREAS, members will serve two-year terms to coincide with election terms, with the first term extended to end with the subsequent Council's term through December 31, 2024; and

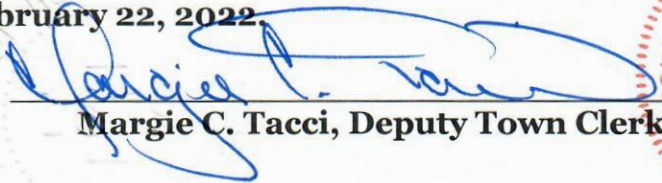
WHEREAS, the committee shall hold meetings as requested by the Chair, legally convened by the Town Clerk to meet town and state law requirements and will operate similar to other existing advisory committees.

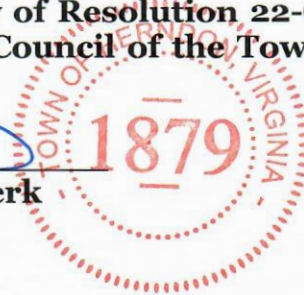
NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Herndon, Virginia, hereby:

- Creates the Town of Herndon Diversity, Equity, and Inclusion Committee as outlined in attachment 1;
- Requests the Chief Communications Officer to issue appropriate media releases regarding the creation of the committee to solicit interest from individuals interested in serving on the Herndon Diversity, Equity, and Inclusion Committee; and

- Requests the Town Clerk to bring forward applications received for Council consideration.

This is certified to be a true and accurate copy of Resolution 22-G-17 adopted at a legally convened meeting of the Town Council of the Town of Herndon on February 22, 2022.


Margie C. Tacci, Deputy Town Clerk



Attached for reference is Attachment 1, titled "Town of Herndon Diversity, Equity, and Inclusion Committee," dated February 22, 2022.

**Town of Herndon
Diversity, Equity, and Inclusion Committee**

Mission:

To promote, engage and enhance the Town of Herndon's diverse community and to connect the community in a partnership that celebrates equity and inclusion.

Purpose:

Listen to and discuss community concerns, and use the information gathered from these discussions to make recommendations to the Town Council that enhance the delivery of services to the minority resident and business communities. Recommend policies and activities that help foster diversity and inclusion within the community at-large.

Objective:

To engage the community by listening and discussing to understand the breadth and depth of issues related to inclusion and equity, and to suggest actionable steps to the Town Council so that under-represented members of our community are seen, heard, and included. The committee's recommendations may include improvements to town services, practices that enhance diversity, and inclusive cultural programming and events.

Member Composition:

1. Members shall be appointed by the Town Council from diverse backgrounds and professions representing the wide range of the Herndon community.
2. Shall consist of 11 members:
 - Seven town residents;
 - Two members representing town businesses, who own or manage a business in the town and have expertise in the business sector;
 - One non-resident member; and
 - One Councilmember who shall serve as chair.
3. Members will serve two-year terms to coincide with election terms, with the first term extended to end with the subsequent Council's term through December 31, 2024.
4. The committee will operate similar to other existing Town Council advisory committees.
5. The committee shall hold meetings as requested by the Chair, legally convened by the Town Clerk to meet Town and state law requirements.

TOWN OF HERNDON, VIRGINIA

RESOLUTION

OCTOBER 14, 2008

Resolution— Town of Herndon Pedestrian and Bicycle Advisory Committee (PBAC).

WHEREAS, on September 9, 2008, the Herndon Town Council established a Pedestrian and Bicycle Advisory Committee (PBAC) to provide advice to the Town Council on matters relating to pedestrian and bicycle matters through the promotion of safe walking and bicycling as a viable means of transportation and physical activity.

NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Herndon, Virginia, hereby:

- Creates the Town of Herndon Pedestrian and Bicycle Advisory Committee (PBAC) as outlined in attachment 1;
- Requests the Town Clerk to contact the chairs of the Architectural Review/Heritage Preservation Review Boards and the Planning Commission for recommendations of a member to represent those bodies on PBAC; and
- Requests the Town Clerk to solicit talent bank applications from individuals interested in serving on PBAC through the Town's website and in the "Talk of the Town."

This is certified to be a true and accurate copy of Resolution 08-G-127 adopted at a legally convened meeting of the Town Council of the Town of Herndon on October 14, 2008.




Amanda M. Kertz, Deputy Town Clerk

Attached is a statement of the mission, objectives, purpose and composition.

08-G-127

October 14, 2008

**Town of Herndon
Pedestrian and Bicycle Advisory Committee (PBAC)**

Mission - To improve the quality of life in the Town of Herndon through the promotion of safe walking and bicycling as a viable means of transportation and physical activity, and provide advice to the appropriate bodies (Town Council, Planning Commission and/or the Town's Transportation Engineering Improvement Committee - TEIC) on matters relating to bicycle and pedestrian issues, to provide health, recreation and transportation benefits for all Town citizens.

Objectives - To facilitate alternative transportation modes within the Town and provide safe streets that are friendly to pedestrians and bicyclists;

To support the integration of pedestrian and bicycle facilities with the street and transit network through the Trail and Sidewalk Program and other components of the Town's Capital Improvement Program involving transportation improvements; and

To support pedestrian and bicycle initiatives and strategies in accordance with the Town's 2030 Comprehensive Plan and the Town's visioning document titled *2027: A Vision for the Town of Herndon*.

Purpose -

- Review pedestrian and bicycle issues, to include matters affecting pedestrian and bicycle transportation and their relationship to parks, schools, transit stops and other major town facilities and, through coordination with Town staff, make recommendations to the appropriate bodies ~ Town Council, Planning Commission and/or the Town's TEIC;
- Perform studies and projects as requested by Town Council on pedestrian and bicycle matters;
- Facilitate citizen participation in the Town's consideration of matters involving pedestrian and bicycle questions;
- Integrate walking and bicycling into the Town's policies and practices;
- Seek funding via the Town Council for pedestrian and bicycle programs and facilities and advocate for the needs of Town pedestrians and bicyclists to applicable county, region, state and Federal departments and agencies;
- Study changes on applicable regulations, laws and best practices concerning pedestrian and bicycle issues;
- Promote safety programs and provide incentives for increasing walking and bicycling and promote physical and mental health benefits of walking and bicycling; and

- Promote intergovernmental and public/private cooperation and coordination on pedestrian and bicycle matters.

Composition -

- 1 Town Council representative, who shall be chair
- 1 Planning Commission representative
- 1 Architectural Review Board/Heritage Preservation Review Board representative
- 6 Citizens
- 1 Department of Community Development staff, who serves as the primary staff
- 1 Department of Parks and Recreation staff, who serves as an "ex-officio" member and support staff
- 1 Department of Public Works staff, who serves as an "ex-officio" member and support staff
- 1 Herndon Police Department staff, who serves as an "ex-officio" member and support staff

TOWN OF HERNDON, VIRGINIA

RESOLUTION

FEBRUARY 28, 2012

Resolution- Appointment of Member to Serve on Town Council's Pedestrian and Bicycle Advisory Committee.

WHEREAS, the Town Council's Pedestrian and Bicycle Advisory Committee provides advice to the Town Council on safety and transportation issues related to walking and bicycling in Herndon, and works to promote the health and recreational benefits of walking and cycling; and

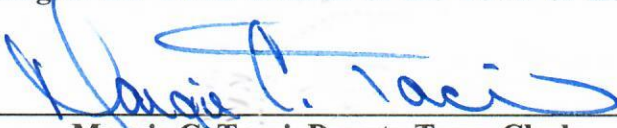
WHEREAS, on July 13, 2010, by Resolution 10-G-96, the Herndon Town Council re-established the committee and expanded the committee's composition to seven citizen members; and

WHEREAS, the Chair of PBAC recommends that the committee's composition be expanded to eight citizen representatives.

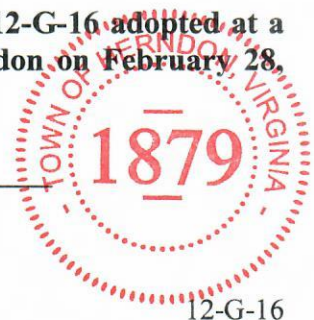
NOW, THEREFORE, BE IT RESOLVED that the Town Council of the Town of Herndon, Virginia, hereby:

- **Expands the composition of the Town Council's Pedestrian and Bicycle Advisory Committee to eight citizen representatives; and**
- Appoints Matthew Dykstra as a citizen representative to the Town Council's Pedestrian and Bicycle Advisory Committee through June 30, 2012, effective February 28, 2012.

This is certified to be a true and accurate copy of Resolution 12-G-16 adopted at a legally convened meeting of the Town Council of the Town of Herndon on February 28, 2012.



Margie C. Tacci, Deputy Town Clerk



Agenda Item: Chapter 2 Amendment, Attendance Process - Define and Record "Good Cause" - Vice Mayor Hedrick

Meeting Date: January 16, 2024

Category: Discussion

Prepared by: N/A

Description:

For consideration as provided by Vice Mayor Hedrick:

"For the purposes of this section, the Council shall consider the term "good cause" according to the term's application in the law of the Commonwealth of Virginia. Unless otherwise determined by the Council in an action taken under this section, absences from meetings shall be presumed to be for good cause when a Member of Council provide prior notification of the absence to the Mayor, the Town Manager, or the Office of the Town Clerk or upon provision of a reason for which prior notification was not possible. Upon an action taken by the Council under this section, the Council shall provide reasons, if applicable, for finding that an absence lacked good cause."

Background:

N/A

Budget Impact:

None

Recommendation:

N/A

Attachments:

1. "How Local Governing Bodies Govern Themselves" PPT Presentation, February 2019

How Local Governing Bodies Govern Themselves

Lesa J. Yeatts, Town Attorney

Sources of Authority

Code of Virginia

- **§ 15.2-1400.** **Governing bodies may fine or punish a member for Disorderly Behavior.**
- **§ 2.2-3103.** **Cannot use public office to retaliate or threaten to retaliate for expressing views.**
- **§ 24.2-231.** **Forfeiture of office by person sentenced for commission of certain crimes.**
- **§ 24.2-233.** **Removal of elected and certain appointed officers by courts.**

Special Authority

Charter Sec. 3.9. - Rules of order and procedure.

The town council shall establish its own rules of order and procedure, and may take appropriate action against its own members and other persons for violations thereof.

Special Authority

Rules Governing Conduct or Behavior

- Philosophical
- Proscriptive
- Combination

Special Authority

Town Code Sec. 2-5. - Code of ethics for the members of the town council and council appointed board and commission members.

(a) Members of the town council and council appointed board and commission members shall perform their duties to the very best of their abilities and demonstrate integrity, honesty, and ethical behavior in the conduct of all town business.

(b) Members of the town council and council appointed board and commission members shall treat the public, town staff and each other in a courteous manner and shall at all times refrain from abusive conduct, threatening or intimidating language or gestures, personal charges, or verbal or written attacks concerning the character or motives of other members of the town council, town boards and commissions, town staff, or the public.

(c) Members of the town council and council appointed board and commission members shall bring any concerns about the performance of a council appointee to the entire council. Concerns about the performance of a town employee shall be discussed privately with the town manager.

(d) Members of the town council and council appointed board and commission members should direct significant requests for information or discussions concerning town business to the town manager, who directs the day-to-day operations of the town and its employees.

(e) Members of the town council and council appointed board and commission members shall fully comply with the provisions of the Virginia Freedom of Information Act, Code of Virginia, §§ 2.2-3700, et seq. and the State and Local Government Conflict of Interests Act, Code of Virginia, §§ 2.2-3100—2.2-3131, as applicable.

(Ord. No. 15-O-45, § 1, 12-8-2015)

Inherent Authority

Whitenet vs. McWatters 112 F.3d 740 (1997)



Robert's Rules

Chapter XX-Disciplinary Procedures



Discipline and Penalties

- Censure
- Fines
- Removal from Committees
- Removal from a Meeting
- Removal from Office (only if authorized by State Code or Charter)