

Green Hedges Campus Plan

The Town of Vienna Council Vision, as expressed in the 2019 Strategic Plan, asserts an aspiration to build on Vienna's "strong hometown culture and treasured traditions while enhancing its reputation as a premier destination for connected and healthy living as well as notable economic development within a safe and inviting setting." While education appears, in passing, in the strategic goal of "Vienna as a safe community," we would like to suggest that a vibrant educational landscape, providing families with a range of options for schooling their children, is essential to the Council Vision.

For 70 years, Green Hedges School has been an important part of that educational landscape, which includes public, parochial, and private schools. As the only independent school located in Vienna, Green Hedges has the immense good fortune to call this town its home. Likewise, Vienna has the immense good fortune to recognize Green Hedges as an important entity in its robust educational landscape.

The Campus Plan presented here is an essential next step in maintaining and enhancing the excellence of this important institution in the Town of Vienna. We must recognize that the education of young people has not remained static across the almost 85 years that Green Hedges has worked to provide the very best experience for young learners in a small-school setting. Fresh thinking, innovations in teaching and learning, the ongoing emergence of new technologies, educators' aspirations for the learners in their care, and the imperatives of the marketplace work to shape our thinking with respect to the educational program that Green Hedges offers and the physical plant in which such a program, like the young people themselves, can thrive.

Now is the time for Green Hedges to implement this Campus Plan and update its Conditional Use Permit (CUP) with respect to student enrollment and faculty and staff size. The two most recent projects, 2000's expansion of Kilmer Hall and 2013's construction of the Karen Wiechelt Stable, were 13 years apart—and the latter was almost 13 years ago—and the current student enrollment cap has been in place since 1985. The imperative is two-fold. First, it is well past time to provide fresh educational spaces, throughout our program, that meet current standards for today's learners; that are designed and equipped in a manner that inspires students' engagement, active learning, and creativity; and that are located and organized across our campus in ways that promote coherence, collaboration, and community, all while maintaining the level of intimacy that characterizes our small-school setting.

Second, and obviously related to that set of needs, we must recognize that a truly vibrant educational landscape, of which Green Hedges is such an important part, is also a competitive educational landscape, and we need to ensure that Green Hedges can maintain, and even enhance, its standing in that marketplace. While Green Hedges is the only independent school located in Vienna, it competes for students and families, and for faculty and staff, well beyond the Town of Vienna, with independent schools in Northern Virginia and the District of Columbia and, to a lesser degree, suburban Maryland, as well as with well-regarded and -resourced public schools. Therefore, we

compete on our educational offerings as well as our cost of attendance. Without the higher enrollment cap envisioned in this proposal, Green Hedges will be hampered by a fixed tuition base at 190 students, putting us at a significant risk relative to competitor schools with respect to the ever-increasing cost of education. The modest proposed increase in the enrollment cap will provide Green Hedges with the necessary financial flexibility to keep tuition competitive for its long-term viability.

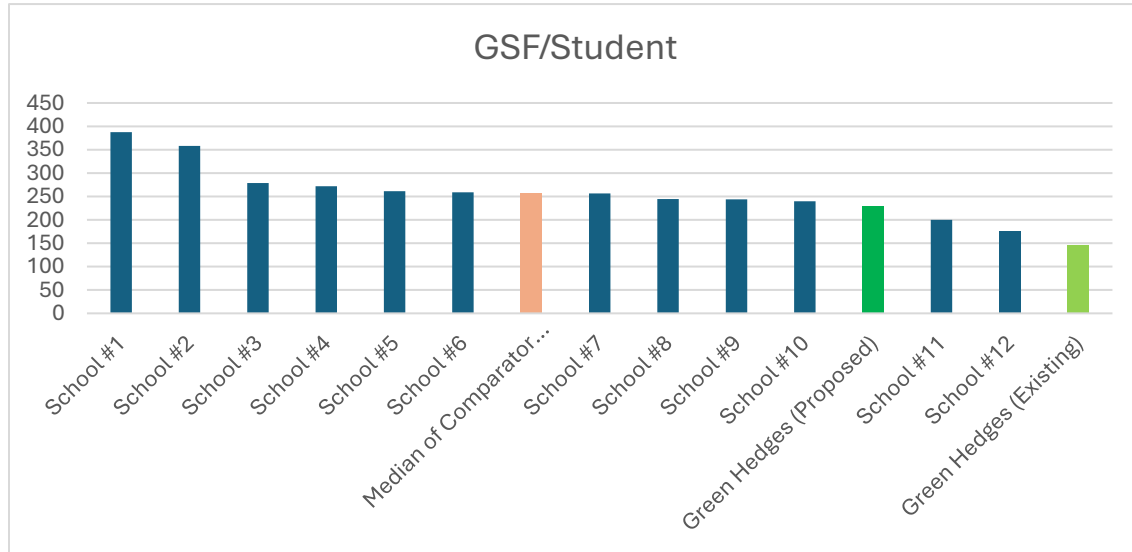
No discussion of the enrollment cap at Green Hedges would be complete without acknowledging a critical feature of our identity, namely that Green Hedges has always been, and intends to remain, a small school—in our language, a Small Wonder. In a culture that disproportionally prizes size and scale, Green Hedges recognizes the value of the kinds of relationships—and the enthusiastic and deep learning they encourage—that become possible in smaller school settings, designed with the young learner in mind. The Green Hedges campus both reflects and underscores the importance of a level of intimacy in the physical environment as well as in the teaching and learning process. Green Hedges would be a small school at its enrollment cap of 190 students, and it would still be a small school at the proposed enrollment of 225 students, true in absolute terms as well as at each grade level.

As we wrote to Town of Vienna leaders in July 2025, looking toward our future, Green Hedges will strive to provide a best-in class setting for preschool, elementary, and middle school education, with a physical plant that enhances the excellence of the student experience; remain a small school . . . a Small Wonder; and commit to physical plant developments that maintain the intimacy of our current campus and the character of the neighborhood of which we are such an important part.

Additional Educational Footprint

The existing Green Hedges School is significantly undersized (56% vs. median) relative to peer preschool-Grade 8 independent schools in the DMV area. Understanding that we operate in a residential neighborhood within Vienna and have limited lot expansion opportunities, our goal is to remain small but have facilities that position us closer to the median gross square footage (GSF)/student for comparable schools (~91% of median).

Preschool-Grade 8 Independent Schools in the DMV Area*



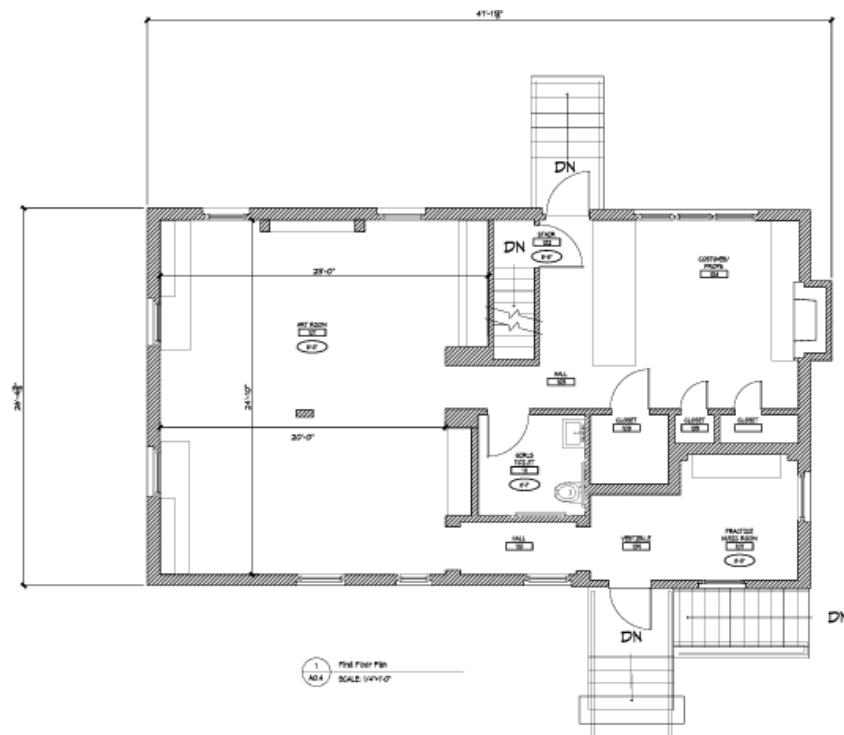
* Comparator school Gross Square Footage based on The Stonehouse Group database and last published enrollment. Schools include: Alexandria Country Day School, Browne Academy, Burgundy Farm Country Day School, Capitol Hill Day School, Congressional School, Flint Hill LS+MS, Harford Day School, Langley School, Lowell School, The River School, Westminster School, Woods Academy.

To achieve this goal, we will replace our existing Rice Arts Building with a multi-level New Academic Building that is consistent with the look and feel of The Stable so that it blends nicely with nearby homes. The following section provides a detailed look at the existing and proposed building footprints/floor plans to provide more insight as to how the new gross square footage will be used to enhance the Green Hedges teaching and learning experience.

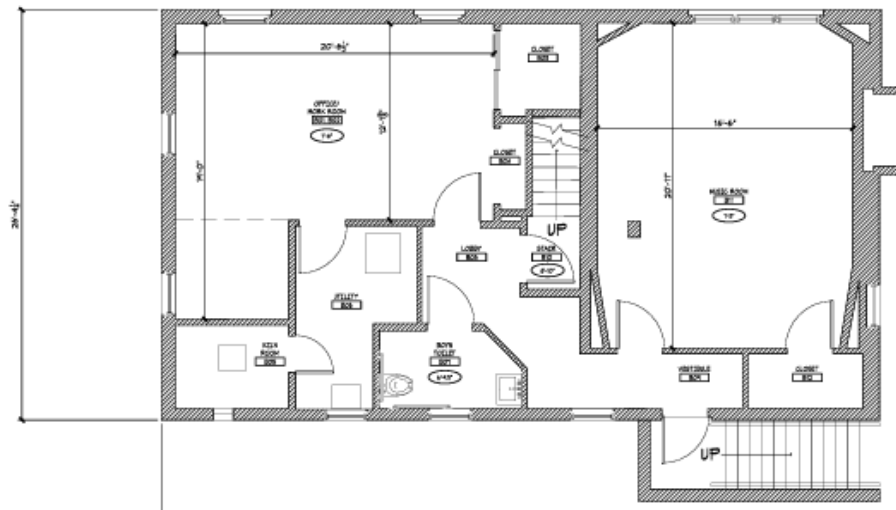
RICE ARTS CENTER (Existing Floor Plan)

Note: This building will be replaced in the proposed plan by the New Academic Building.

FIRST FLOOR



BASEMENT/GARDEN LEVEL



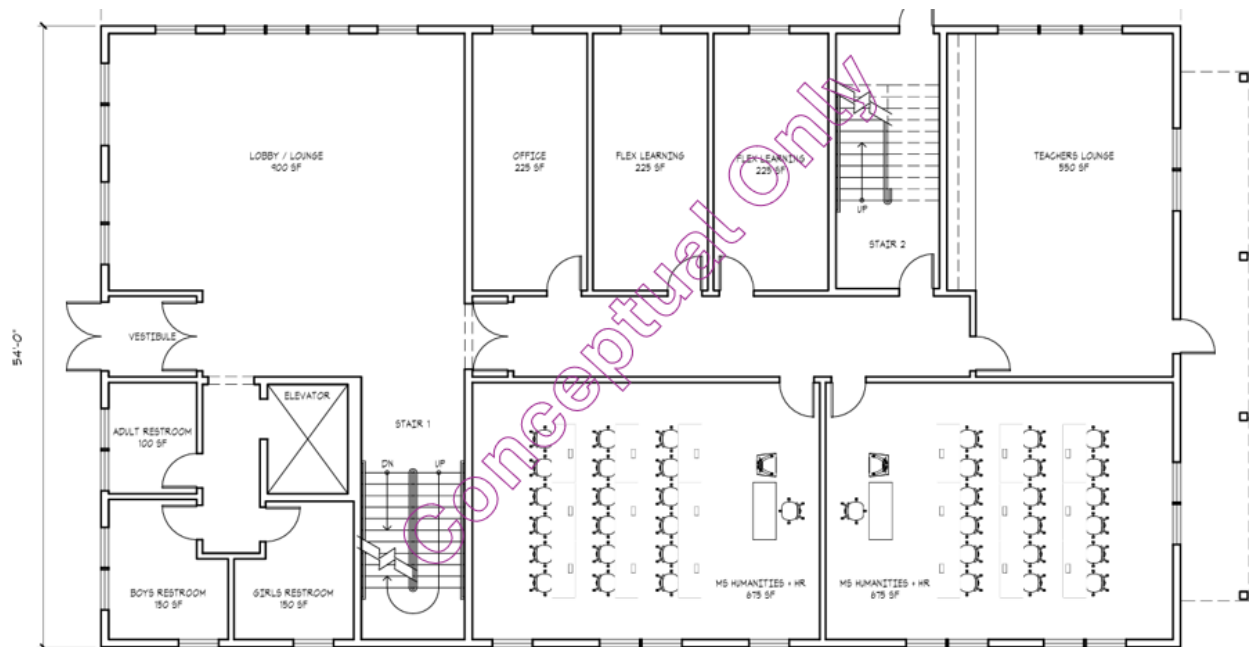
While the aging Rice Arts Center has served Green Hedges well since the early 2000's—and been the home of cherished teachers and programs in English, art, and music—it was never intended to be an educational building. The instructional spaces are small, with limited storage for art and music supplies, limited movement space in the music room (really in all three rooms), and limited natural

light throughout. As one faculty member humbly observed, “Our facilities aren’t fabulous, so we have to be,” an assessment that Rice Arts lives into on a daily basis. It is also worth noting that the gifted Middle School English teacher, located in the Rice Arts basement, is at the farthest possible remove from other Middle School teachers in Kilmer Hall, an unwelcome current reality in an institution that values professional collaboration.

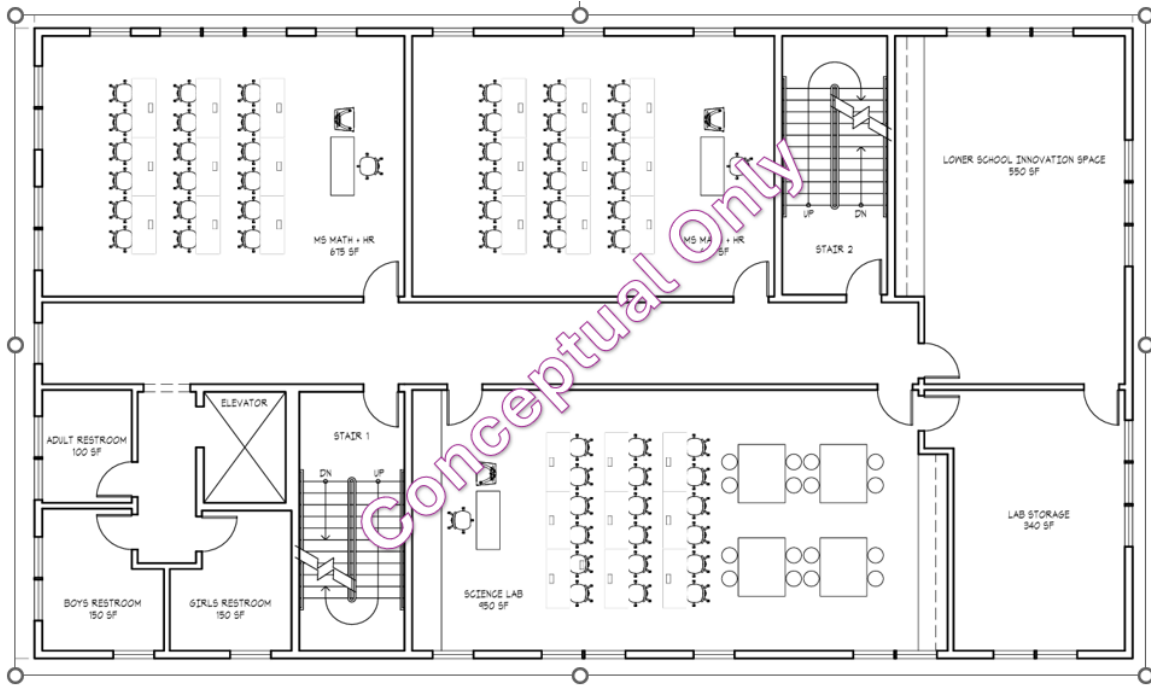
NEW ACADEMIC BUILDING: (Proposed Floor Plans)

NOTE: CONCEPTUAL FLOOR PLANS ONLY

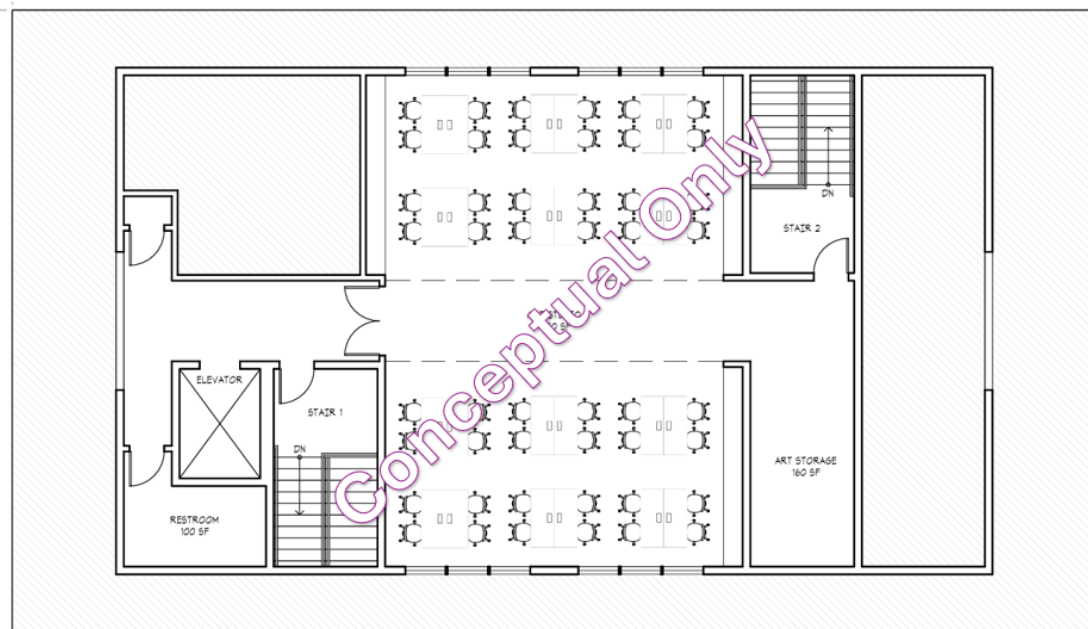
FIRST FLOOR



SECOND FLOOR

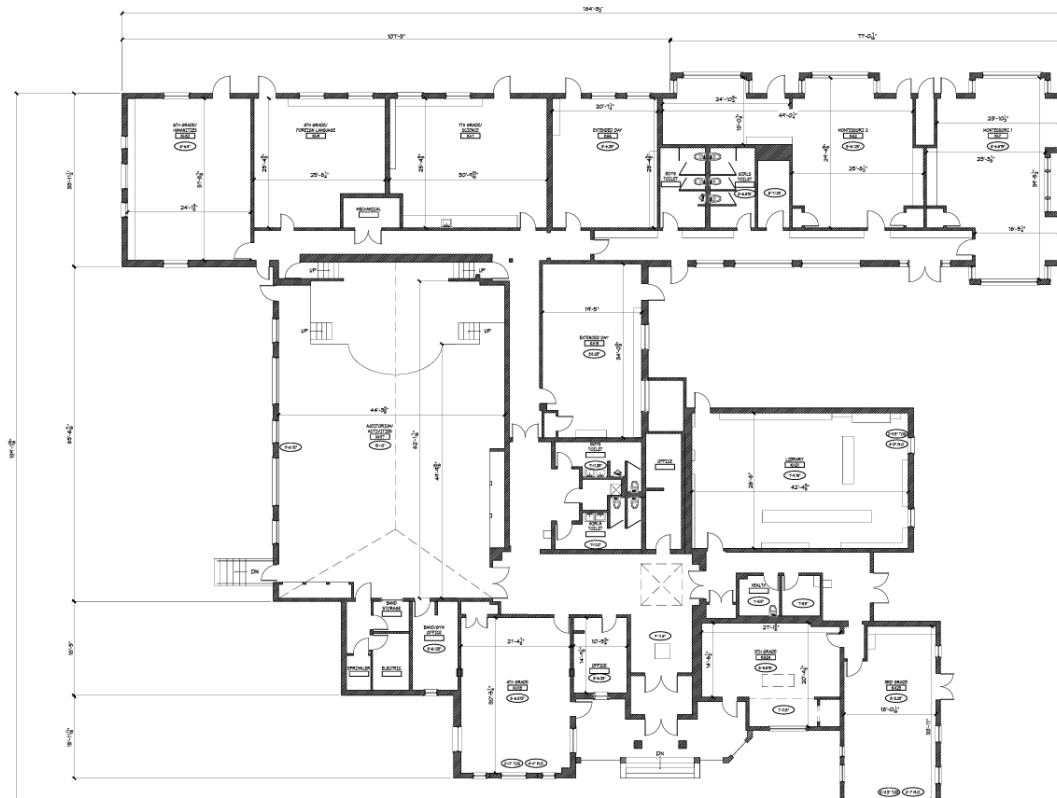


DORMERED THIRD FLOOR



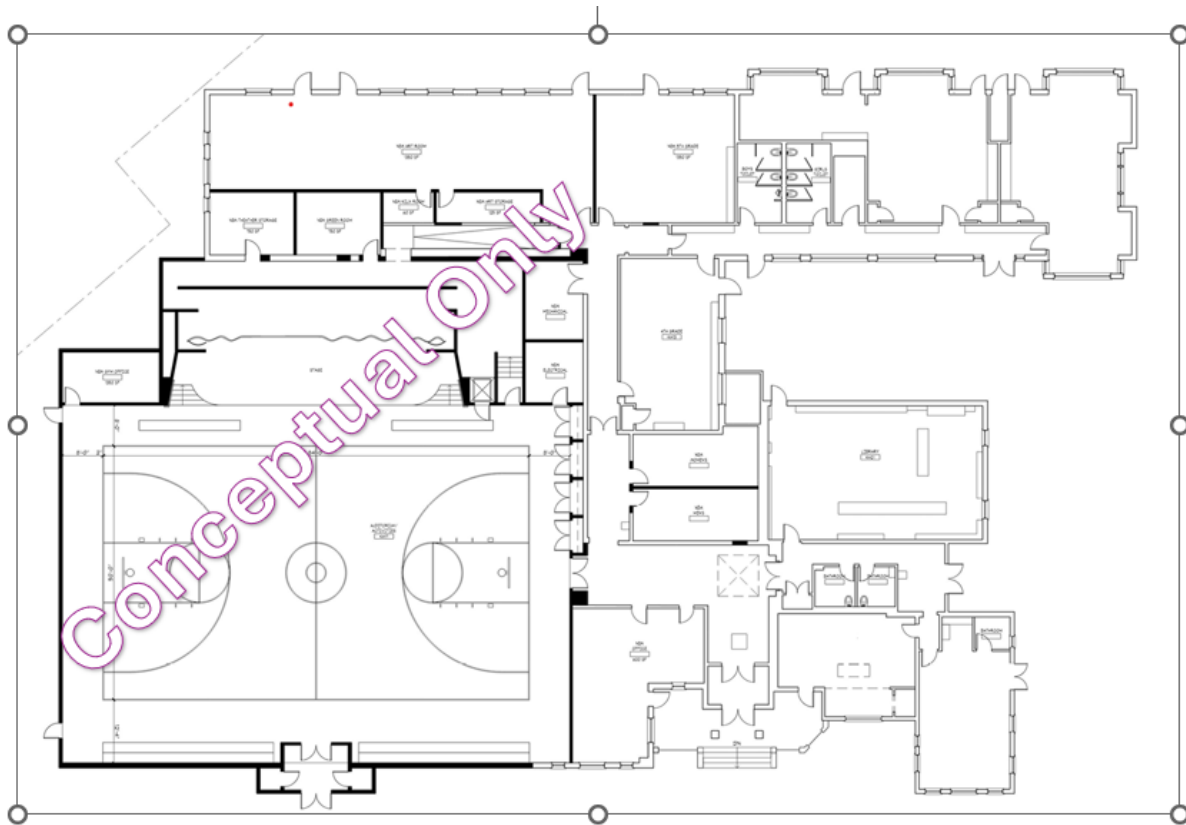
The proposed New Academic Building would replace Rice Arts with exciting, new, purpose-built spaces for teaching and learning; bring real coherence to the Middle School program, much of which would be located here, and enable greater coherence elsewhere for our Montessori and Lower School divisions; and offer the kind of instructional space one would expect in a competitive independent and public school marketplace. While the plans above are still in the conceptual stage,

KILMER HALL (Existing Floor Plan)



KILMER HALL (Proposed Floor Plan with Expanded Multipurpose Room)

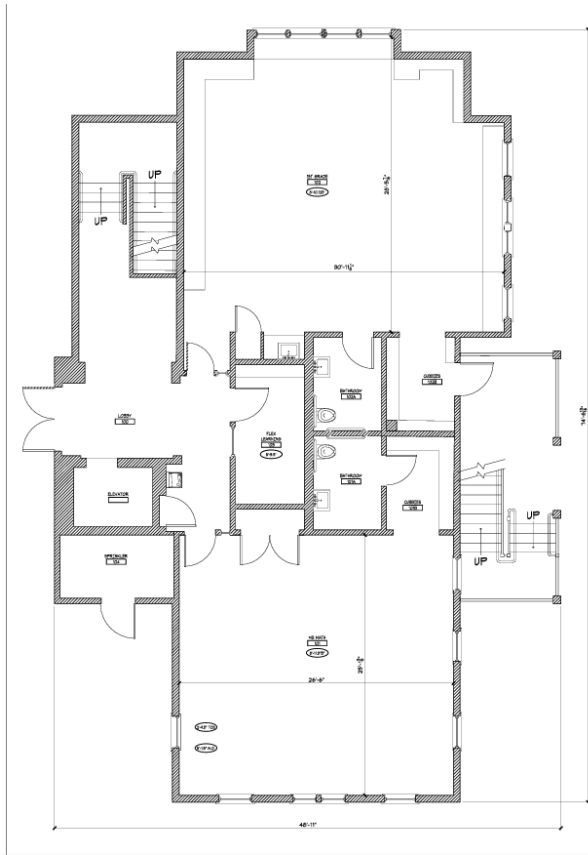
NOTE: CONCEPTUAL FLOOR PLANS ONLY



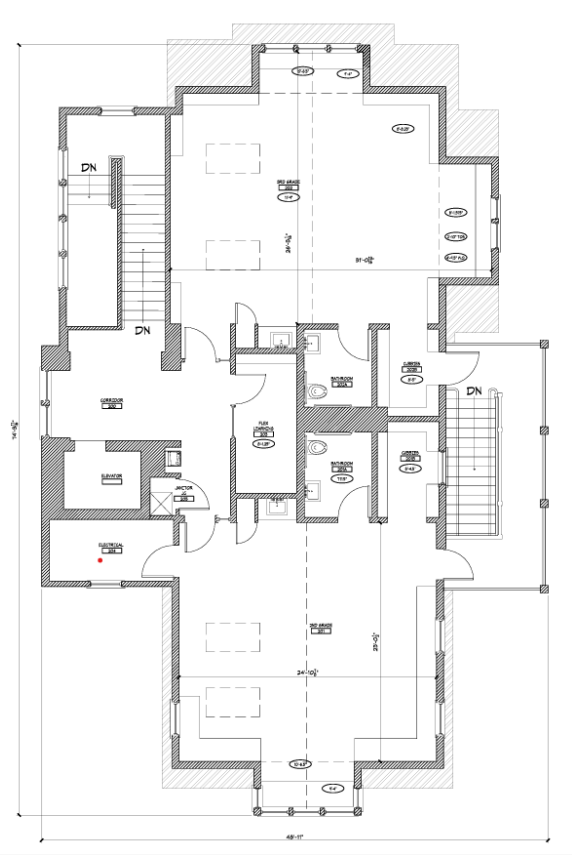
The beloved Kilmer Hall, long the heart of the student experience at Green Hedges, has been added onto, redesigned, and tinkered with over the years to meet immediate and emerging programmatic needs. We propose a more comprehensive redesign, renovation, and expansion that will work hand-in-hand with the proposed New Academic Building to provide greater physical plant and programmatic coherence. In addition to an expansion of the Multi-Purpose Room to create a gymnasium and upgraded performance space, we plan the renovation of the rest of the building to create more modern instructional spaces appropriate to the grade levels that inhabit them; promote creativity, exploration, and engaged and active learning; and achieve greater divisional coherence. Current thinking has the Lower School (Grades 1-5) animating Kilmer Hall, thereby achieving a greater level of collaboration among the talented faculty members who shape that program. In addition to an exceptional academic core, Green Hedges values performing and studio arts and healthy physical and athletic activity. The gymnasium and performance space proposed for the expanded and renovated Kilmer Hall will provide the necessary facilities for those programs to flourish. Current thinking includes creating dedicated instrumental and vocal music classrooms, adjacent to the planned performance space.

THE STABLE (Existing Floor Plan – no proposed changes)

First Floor



Second Floor



The twelve- or thirteen-year-old Stable would remain untouched as the Campus Plan unfolds. However, we are evaluating its use for our Montessori division, which would provide the final element of programmatic/divisional coherence referenced above. In addition, having all of our Montessori classrooms located in The Stable offers important implications for our arrival and dismissal procedures, significantly reducing processing times for vehicles dropping off students at the beginning of the day and picking them up at day's end.

The New Academic Building – View Facing Windover

Conceptual Only



GREEN HEDGES SCHOOL - NEW ACADEMIC BUILDING CONCEPT STUDY - BUILDING HEIGHT CONTEXT

SCALE = 1/16" = 1'-0"



The conceptual elevations for the New Academic Building have been designed to minimize building mass along Windover Avenue and retain a residential neighborhood appearance (similar to the look and feel of the large homes across the street). The New Academic Building has been placed along Windover Avenue to create an attractive street edge. The proposed modifications will further improve conditions on Windover Avenue with the removal of two parking spaces accessed from Windover Avenue, removal of a curb cut on Windover Avenue, and installation of a sidewalk, all of which will be visual and safety improvements over the existing development.

Green Hedges Campus Plan: Supplemental Document

This supplemental document provides detailed analyses of how the Campus Plan improves key conditions while supporting the proposed increase in enrollment and faculty. Specifically, we have proposed details on the following:

1. Traffic and Circulation, particularly at arrival and dismissal times
2. Buffers with contiguous neighbors
3. Sound Management
4. Stormwater Management

Traffic & Circulation

Currently, Green Hedges uses the Windover Avenue entrance for our Montessori and two-year-old children and the Nutley Street entrance for Lower School and Middle School students. For reference, please see the chart below for the start times for Louise Archer Elementary School and James Madison High School in comparison to Green Hedges.

School	Start Time	End Time
Louise Archer (Nutley Street)	9:00am	4:00pm
James Madison (Sunrise Road, James Madison Drive, & Nutley Street)	8:10am	2:55pm
Green Hedges (Nutley Street & Windover Avenue)	8:15am	3:15-3:30pm (depending on grade)

Data Collection Methodology: Data was collected on multiple days for each entrance from October 1, 2025, to October 14, 2025. To get an accurate representation, data collection took place on different days of the week and under different weather conditions. Since faculty and staff arrive prior to students and leave after students, they are not included in the traffic analysis presented below.

Existing Conditions

Windover Avenue: Montessori

The following tables highlight the arrival and dismissal patterns for Montessori and two-year-old children.

Drop-off time: 7:55-8:20am

Arrival Time	Multi-day average	High
7:55-8:00am	5	10
8:00-8:05am	9	17
8:05-8:10am	10	13
8:10-8:15am	8	11
8:15-8:20am	1	2

Dismissal time (full-day); 3:00-3:15pm

Dismissal Time	Multi-day average	High
2:55-3:00pm	6	8
3:00-3:05pm	3	4
3:05-3:10pm	5	6
3:10-3:15pm	3	4
3:15-3:20pm	1	1

Stroller/Walker	1	2
Total vehicles	34	
Total children	54	
Children/Vehicle	1.5	

Stroller	1	1
Total vehicles	19	
Total children*	29	
Children/Vehicle	1.5	

*Note that we have eight (8) half-day and seventeen (17) extended day students, so the afternoon traffic burden is reduced by 44%. After-school dismissals range from 4:30pm to 6:00pm.

Drop-off and dismissal procedures are actively managed by multiple staff members to ensure safety and traffic flow. Processing time varies for this age group based on the number of children per vehicle and walk time to the classroom. On average, it takes 4.5-5 minutes/vehicle. Based on the current circulation, stacking (see image below), and processing time for the children, the Windover Avenue entrance can handle sixteen (16) vehicles at drop-off and fourteen (14) vehicles at afternoon dismissal per 5-minute interval. Based on the above charts, there was one morning where we had overflow onto Windover for approximately one minute. Overflow onto Windover during arrival and dismissal times is exceedingly infrequent, brief in duration, and quickly resolved.

Nutley Street: Lower School & Middle School

The following tables highlight the arrival and dismissal patterns for Lower School & Middle School:

Drop-off time: 7:45-8:20am

Arrival Time	Multi-day average	High
7:40-7:45am	3	5
7:45-7:50am	4	5
7:50-7:55am	7	10
7:55-8:00am	11	14
8:00-8:05am	12	15
8:05-8:10am	12	15
8:10-8:15am	11	12
8:15-8:20am	3	6
Walker/Biker	2	3
Faculty with children (park)	2	3
Total vehicles	65	
Total children	113	
Children/Vehicle	1.7	

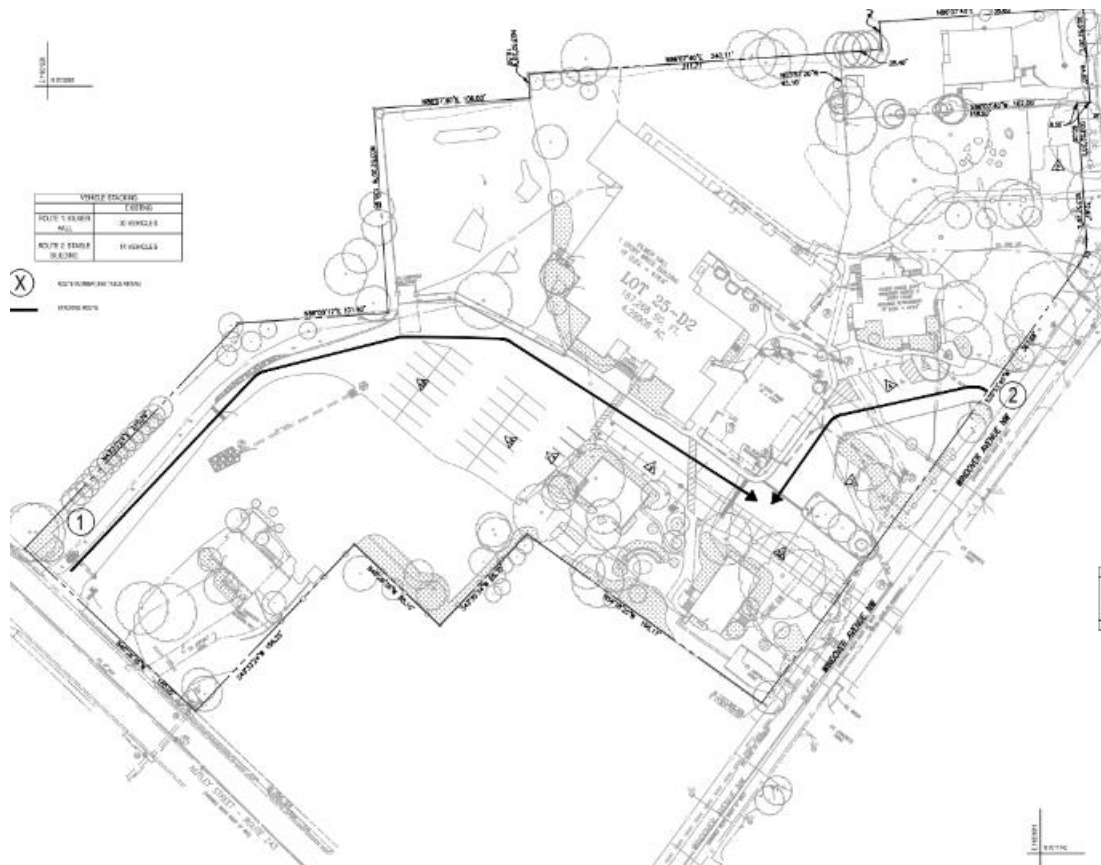
Dismissal time (full-day); 3:15-3:45pm

Dismissal Time	Multi-day average	High
3:05-3:10pm	2	5
3:10-3:15pm	5	10
3:15-3:20pm	7	9
3:20-3:25pm	7	8
3:25-3:30pm	8	10
3:30-3:35pm	6	10
3:35-3:40pm	5	7
3:40-3:45pm	4	6
Walker/Biker	2	2
Faculty with children (park)	2	3
Total cars	44	
Total children*	75	
Children/Vehicle	1.7	

*Note that there are twenty (20) extended day students, so the afternoon traffic burden is reduced by 32%. Furthermore, there are afternoon athletic practices and games, on average twice a week, which pull students out of dismissal activity. Participating students are dismissed from an alternate location (game-/sport-dependent).

Drop-off and dismissal procedures are actively managed by multiple staff members to ensure safety and traffic flow. Processing time varies for this group based on number of children per vehicle. On average, it takes three (3) minutes/vehicle at drop-off and five (5) minutes/vehicle at dismissal. Based on the current circulation, stacking (see image below), and processing time for the children,

the Nutley Street entrance can handle fifty (50) vehicles per five-minute interval at drop-off and thirty (30) vehicles per five-minute interval at pick-up. With excess capacity, there were no instances of overflow onto Nutley Street during the data collection period.



Proposed Conditions

Windover Avenue: Montessori

Using the current vehicle arrival and dismissal patterns, we projected the following at our proposed enrollment of 65 in our Montessori & two-year-old program (at the proposed CUP enrollment of 225 for the entire school).

Drop-off time: 7:55-8:20am

Dismissal time (full-day); 3:00-3:15pm

Arrival Time	Multi-day average	High
7:55-8:00am	6	12
8:00-8:05am	11	21
8:05-8:10am	13	16
8:10-8:15am	10	13
8:15-8:20am	1	2
Stroller	1	2

Dismissal Time	Multi-day average	High
2:55-3:00pm	8	10
3:00-3:05pm	4	5
3:05-3:10pm	6	7
3:10-3:15pm	3	4
3:15-3:20pm	1	1
Stroller	1	1

Total vehicles	42	
Total children	65	
Children/Vehicle	1.5	

Total vehicles	23	
Total children*	35	
Children/Vehicle	1.5	

*Note that this assumes we have the same percentage of half-day and extended day students.

Under the proposed Campus Plan, the following changes will be made to improve traffic circulation and stacking (see new circulation and stacking below). In addition, the current plan to consolidate all of the Montessori classrooms in The Stable for educational purposes will have the effect of decreasing processing time per vehicle, as parents would no longer walk children to classrooms in Kilmer Hall each morning. The proposed site updates allow eighteen (18) cars to queue from Windover Avenue. Based on the proposed circulation, stacking, and processing time for the children, the Windover Avenue entrance will be able to handle twenty-six (26) vehicles at arrival and eighteen (18) vehicles at dismissal per five-minute interval. This increased capacity will make those already infrequent and transitory moments of overflow onto Windover exceedingly rare.

Nutley Street: Lower School & Middle School

Using the current vehicle arrival and dismissal patterns, the following table highlights *projected* vehicles at an enrollment of 160 in our Lower School & Middle School (at the proposed CUP enrollment of 225 for the entire school).

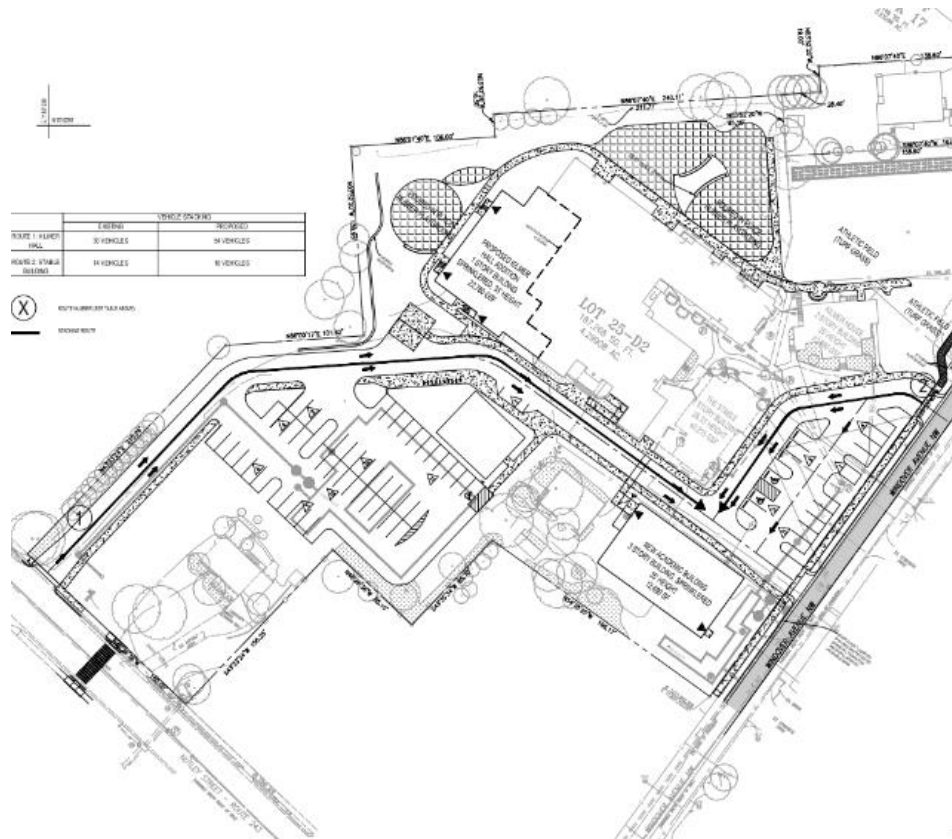
Drop-off time: 7:45-8:20am

Dismissal time (full-day); 3:15-3:45pm

Arrival Time	Projected average	High		Dismissal Time	Projected average	High
7:40-7:45am	5	7		3:05-3:10pm	2	7
7:45-7:50am	6	7		3:10-3:15pm	6	15
7:50-7:55am	11	15		3:15-3:20pm	10	12
7:55-8:00am	16	21		3:20-3:25pm	10	13
8:00-8:05am	18	22		3:25-3:30pm	12	15
8:05-8:10am	18	22		3:30-3:35pm	9	15
8:10-8:15am	16	18		3:35-3:40pm	7	10
8:15-8:20am	4	9		3:40-3:45pm	6	9
Walker/Biker	2	3		Walker/Biker	2	2
Faculty with children (park)	2	3		Faculty with children (park)	2	3
Total vehicles	95			Total cars	62	
Total children	160			Total children*	105	
Children/Vehicle	1.7			Children/Vehicle	1.7	

*Note that this assumes we have the same percentage of extended day students as well as students participating in athletic practices and games.

Under the proposed Campus Plan, the following changes will be made to improve traffic circulation and stacking (see new circulation and stacking below). With the proposed circulation, stacking, and processing time for the children, the Nutley Street entrance will be able to handle ninety (90) vehicles per five-minute intervals at drop-off and fifty-four (54) vehicles at dismissal. Using the projected vehicle pattern charts, there will be excess capacity and no overflow onto Nutley Street.



In summary, the table below shows a comparison of traffic management under the current vs. the proposed plan for Windover Avenue and Nutley Street.

	Windover Avenue		Nutley Street	
	Current	Proposed	Current	Proposed
Vehicle Stacking	14	18	30	54
Processing Time: Drop-off	4.5 mins	3.5 mins*	3 mins	3 mins
Processing time: Dismissal	5 mins	5 mins	5 mins	5 mins
Enrollment	54	65	113	160
Maximum number of vehicles per 5-minute interval: Drop-off	16	26	50	90
Maximum number of vehicles per 5-minute interval: Dismissal	14	18	30	54

*Note: reduced processing time driven by consolidation of Montessori classrooms into the Stable.

Buffers with Adjacent Neighbors

The proposed Campus Plan will add improved fencing and landscaping buffers along our property line as detailed on the Buffer Plan sheet C-010A of the SDP. The following table highlights the buffer conditions currently and in the proposed plan, followed by a narrative detailing those conditions.

Property	Existing Buffer (Approx.)	Proposed Buffer	Commentary
221 Nutley	On average 3' to 5'	15' for 1/3 of property; 3'-10' remaining section	Driveway and parking areas
245 Nutley	Ranges from 0' to 8'	10'	Road width along east of property limits to 10' buffer
434 Knoll	South section 6' to 8'; East 0'	East - 15'; South 10'	Road width along south of property limits to 10' buffer
428 Knoll	0' to 8'	15'	NA
424 Knoll	15'	15'	NA
420 Knoll	15'	15'	NA
416 Knoll	15'	15'	NA
412 Knoll	15'	15'	NA
206 Lewis	0'-9'	9'	Stormwater facilities
435 Windover	10'	15' for most of property	SE section to have only small shrubs due to Stormwater facilities

Currently, there are deciduous plantings along the Green Hedges property with 221 Nutley, including a six-foot-high wood fence. Because of the proposed road and parking improvements, a 15-foot buffer can only be maintained for a section of this border, as shown in the SDP. The areas where the buffer cannot be met will have a three- and ten-foot buffer to contain existing planting, and the addition of new understory trees and shrubs. The border along 245 Nutley is in a similar situation where, due to parking lot improvements and an existing driveway, the fifteen-foot buffer cannot be met. Most of the property will have a ten-foot buffer with a six-foot wood fence, much of which will exist as it is in good condition, and existing heavy deciduous plantings and other vegetation. We are improving this situation by the addition of understory trees and shrubs, along with installing a new section of six-foot wood fencing where indicated.

A six-foot-high chain link fence and a mix of deciduous trees and other plantings form the current border with 434 Knoll. Due to the proposed road improvement, approximately half of this border will have a ten-foot buffer, with the remaining half containing the fifteen-foot buffer. Improvements here include replacing the chain link fence with a new six-foot-high wood fence, with existing vegetation to remain.

Currently, 428 Knoll has a chain link fence that will be replaced with a new six-foot-high wood fence. Existing vegetation will be retained, along with additional understory plantings, and keeping a fifteen-foot buffer.

The borders along 416, 420, and 424 Knoll have existing dense evergreen trees that will be retained. Most of this property also has an existing six-foot chain link fence. The fifteen-foot buffer of evergreen trees will remain, and the condition will be improved with the addition of proposed understory trees and shrubs, and the installation of a six-foot wood fence to replace the chain link fence.

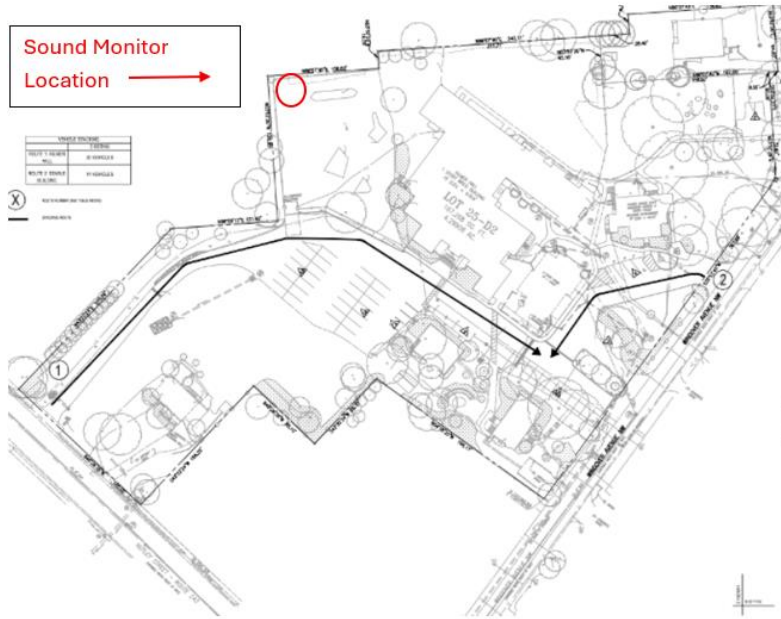
The existing six-foot wood fence at 412 Knoll is in good condition and will be retained, along with the existing vegetation. This fifteen-foot buffer will remain during the project and after.

Green Hedges owns the property at 206 Lewis, which is not part of the campus improvement plan. The west section of 206 Lewis has existing vegetation and a chain link fence. Due to proposed and required stormwater management facilities, a fifteen-foot buffer cannot be attained along the south-facing section of the property. This section will contain a nine-foot buffer of shrub plantings only.

The property adjacent to the proposed New Academic Building, 435 Windover, has a mix of no fencing, chain link fencing, and wood fencing alongside its property with Green Hedges. This condition will be improved with the existing fencing being replaced by a six-foot-high wood fence. Most of the border will have a buffer of existing trees and vegetation, but where the required stormwater management facilities are to be constructed, this area would receive a fifteen-foot buffer with only shrubs. The other location along this border to note is a six-foot buffer due to an existing concrete shed foundation.

Sound Management

A sound level monitor was placed in the northwest corner of the playground from October 11 to October 13 and October 27 to October 30, 2025, shown in the figure below. The sound level meter meets the American National Standards Institute (ANSI) Standard S1.4 for a "Type Two" meter and was calibrated prior to usage.



From Saturday, October 11, through Monday, October 13, 2025, school was not in session, so it allowed us to collect baseline data. From Monday, October 27 to Thursday, October 30, 2025, school was in session, allowing us to get a new reading with students outside at their normally scheduled times. The weather was not a factor during any of the monitored days. We mapped the sound data to arrival, playground, lunch, recess, and dismissal times.

In the absence of a Town of Vienna noise ordinance with specific decibel limitations, we looked at the Fairfax County Noise Ordinance (Chapter 108.1-4-2. Noise Ordinance). The Fairfax noise ordinance states that during the hours of 7:00am and 10:00pm in a residential area, the continuous sound monitored level must be below 60 decibels (dBA). At no time during monitoring did the decibel level reach those limits. The following summarizes the findings:

Date	Continuous Sound, dBA 7AM – 10PM (Max 60 dBA)	Impulse Sound, dBA 7AM – 10PM (Max 100 dBA)	Notes
Oct 11, 2025	45	66	No school day
Oct 12, 2025	53*	69	No school day
Oct 13, 2025	42	68	No school day

Oct 27, 2025	53	83	School day
Oct 28, 2025	54	87	School day
Oct 29, 2025	54	84	School day
*Note, the data trend showed gradual increase in decibels representative of yard work around the area			

The proposed Campus Plan will be adding fencing and additional landscape buffers to help manage sound coming from the school. Currently, most of the school perimeter has a chain link fence that provides no sound mitigation. The existing play area currently extends to the limits of the property boundary. The school proposes to retain and supplement existing mature landscaping, add a six-foot wood fence, and move the playground approximately fifteen (15) feet closer to the school building from the property boundary, all of which will mitigate sound impacts. Based on industry standards, the addition of a six-foot wood fencing provides an estimated 5-8 decibel reduction. At the proposed maximum CUP enrollment of 225, there could be 2-4 additional students outside at those key times, but the addition of 2-4 students is estimated to produce a negligible decibel increase. The table below shows the potential reduction in decibel levels, dBA.

<i>Existing: School in session with existing buffers, dBA</i>	<i>Noise Reduction (Fencing + Landscaping), dBA</i>	<i>Proposed: Total projected w/school in session & improved buffers, dBA</i>
53-54	5-8	46-49

Note that a standard single-family home further reduces sound by approximately 25 decibels.

Stormwater Management

Currently, there is one underground detention facility on the site in the existing parking lot closest to Windover Avenue. Most stormwater sheet flows to three (3) existing outfalls. One outfall is on Nutley Street, near the Head of School house, one is on Windover Avenue, northeast of the intersection of Nutley and Windover, and the third is near 206 Lewis Street. The revised plans propose three (3) additional underground detention structures and two (2) manufactured treatment devices to store, release, and treat stormwater.

While the existing system is in compliance with the applicable requirements at the time of its installation, the proposed design will be in accordance with all current applicable Town of Vienna and state DEQ requirements. The following table highlights the stormwater management data under existing vs. the proposed site plan:

CONCENTRATED FLOW	1-YR, 24-HR STORM		10-YR, 24-HR STORM	
	Existing	Proposed	Existing	Proposed
Outfall 1: Flow (cfs)	3.41	1.87	10.86	3.17
Outfall 2: Flow (cfs)	2.38	1.58	5.47	5.19
Outfall 3: Flow (cfs)	0.98	0.71	2.58	2.28
TOTAL FLOW (cfs)	6.77	4.16	18.91	10.64

SHEET FLOW	2-YR, 24-HR STORM		10-YR, 24-HR STORM	
	Existing	Proposed	Existing	Proposed
Sub-Area 4: Runoff Volume (CF)	57	52	111	104
TOTAL RUNOFF VOLUME (CF)	57	52	111	104

*Values are sourced from sheet C-034 of the Green Hedges School Site Development Plan (dated October 24, 2025).

**CFS (cubic feet / second); CF (cubic feet)

***the periodic storm events cited are the recognized standards used in stormwater calculations

Concentrated Flow (1-Yr and 10-Yr, 24-Hr Storms):

- Concentrated flow is runoff that has entered designed channels or rills
- Outfall 1 (Existing Storm Sewer along Nutley St): Flow decreases from 3.41 cfs (existing) to 1.87 cfs (proposed) for the 1-Yr storm, and from 10.86 cfs to 3.17 cfs for the 10-Yr storm.
- Outfall 2 (Existing Storm Sewer along Windover Ave): Flow decreases from 2.38 cfs to 1.58 cfs for the 1-Yr storm, and slightly decreases from 5.47 cfs to 5.19 cfs for the 10-Yr storm.

- Outfall 3 (Existing Storm Sewer along Lewis St): Flow decreases from 0.98 cfs to 0.71 cfs for the 1-Yr storm, and from 2.58 cfs to 2.28 cfs for the 10-Yr storm.
- Total Flow: Overall flow decreases from 6.77 cfs to 4.16 cfs for the 1-Yr storm, and from 18.91 cfs to 10.64 cfs for the 10-Yr storm.

Sheet Flow (2-Yr and 10-Yr, 24-Hr Storms):

- Sheet Flow is shallow, uniform runoff over a plane surface. Some examples of sheet flow runoff occur over paved surfaces or relatively flat grassy areas.
- Sub-Area 4 (Overland flow to south adjacent properties): Runoff volume decreases from 57 CF (existing) to 52 CF (proposed) for the 2-Yr storm, and from 111 CF to 104 CF for the 10-Yr storm.
- Total Runoff Volume: Matches Sub-Area 4 values, showing a decrease from 57 CF to 52 CF for the 2-Yr storm, and from 111 CF to 104 CF for the 10-Yr storm.

In summary:

- Both concentrated flow and sheet flow values decrease significantly in the proposed condition compared to the existing condition across all storm scenarios.
- Post-development stormwater flows to the existing storm sewer systems along Nutley Street and Windover Avenue are decreased from the pre-development flow rates for the 1-yr and 10-yr storm events.
- Post-development stormwater flows that leave the site as sheet flow to the south adjacent properties are decreased from the pre-development volume for the 2-yr and 10-yr storm events.
- The site is designed in accordance with all applicable Town of Vienna and state DEQ requirements for allowable stormwater discharges in the post-development condition.