



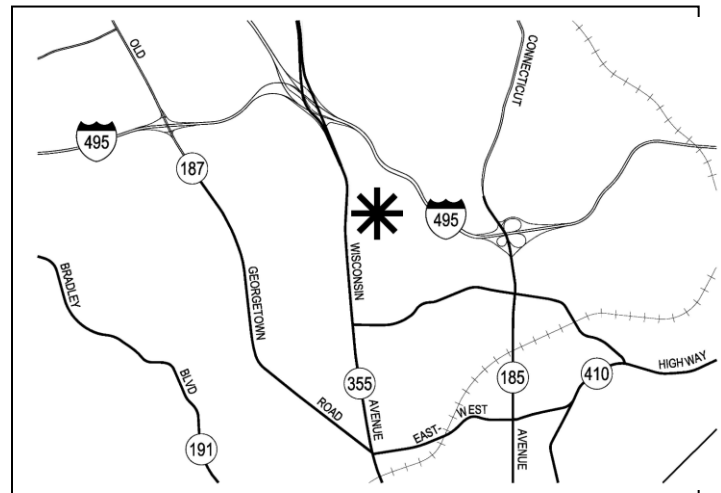
Stone Ridge School of the Sacred Heart, Final Forest Conservation Plan Amendment, # SC1995001

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Staff Report Date: 6-17-19

Description

- Proposed abandonment of forest conservation easement area, with 1:1 replacement onsite along with various environmental enhancements and partial offsite replacement, on 34.29 acres in the R-60 Zone; located at 9101 Rockville Pike (MD 355), Bethesda MD within the Bethesda-Chevy Chase Master Plan area.
- Application accepted on 11/13/2017
- Applicant: Stone Ridge School of the Sacred Heart
- Review Basis: Chapter 22



Summary

- Staff Recommendation: Approval with conditions**
- The project includes the release of 0.53 acres of existing Category 1 Conservation Easement, to be mitigated by 0.33 acres of new Category 1 Conservation Easement resulting in a 4.57-acre total area.
- One of the existing Category II Conservation Easement areas will be expanded by 0.04 acres for a total contiguous Category II Conservation Easement area of 0.27 acres.
- The project also includes a forest conservation variance request and provides a number of onsite environmental enhancements.

RECOMMENDATION: Approval of the Final Forest Conservation Plan Amendment, subject to the following conditions:

1. Prior to any clearing, grading or demolition necessary to construct the project, the Applicant must:
 - a. obtain Planning Department approval of a Certified Final Forest Conservation Plan Amendment.
 - b. provide a financial surety addressing the invasives control, soil decompaction work, supplemental plantings, reforestation, split-rail fence, deer protection and signage. The amount of the bond is to be determined in coordination with DARC Staff.
2. Prior to the release of the first building permit, the Applicant must execute a 5-year Maintenance and Management Agreement for the invasive species control work, supplemental plantings, and reforestation areas. A copy of the Maintenance and Management Agreement must be kept at the Stone Ridge School of the Sacred Heart and given to the maintenance staff to ensure compliance with conditions of the Forest Conservation Plan Amendment. The work must cover all of the conservation easement settings and the individual areas targeted outside of the easement settings.
3. Within 30 days from the approval of the Certified Final Forest Conservation Plan Amendment, the Applicant must record, in the Land Records of Montgomery County, an M-NCPPC approved Certificate of Compliance for an M-NCPPC approved off-site forest bank to satisfy the offsite easement requirements of 0.16 acres of mitigation credit (0.16 acres of planted forest or 0.32 acres of existing forest); OR provide an equivalent payment of fee-in-lieu.
4. Easement Abandonment/Recordation
 - a. The Applicant must record a standard Category I Conservation Easement over Areas B through G identified on the Final Forest Conservation Plan, in addition to the remaining existing forested setting, for a total contiguous easement area of 4.57 acres, or as determined by Staff. Recordation must occur within 60 days of the Certification of the Final Forest Conservation Plan Amendment.
 - b. The Applicant must record a Category II Conservation Easement over Area A identified on the Final Forest Conservation Plan for a total contiguous Category II Conservation Easement area of 0.27 acres, or as determined by Staff. Recordation must occur within 60 days of the Certification of the Final Forest Conservation Plan Amendment.
 - c. The applicant must submit the abandonment documents for the entire portion of the conservation easement recorded under Liber 48650 Folio 149 (non-standard easement) within 30 days from the recordation of the new easement boundaries, and record the abandonment in the Land Records of Montgomery County within 30 days of receipt of the executed abandonment documents.

5. Any easement plantings must occur no later than March 30, 2020. However, Staff may permit a minor portion of the overall plantings to be delayed until the first growing season after completion of the site work that may otherwise conflict with some of the plantings.
6. The Applicant must install conservation easement signposts and sections of split-rail fence concurrent with timing of recordation of the easements to reflect the revised location of the easements.
7. Variance Mitigation Trees:
 - a. The Applicant must mitigate for the loss of tree #189 by providing four native canopy trees which are a minimum of 3" caliper each.
 - b. The Applicant must provide the mitigation for the loss of trees #303 & #304 within and/or as near to their existing setting as reasonably possible (in/along the reconfigured parking lot).
 - c. Mitigation trees must be planted on the Subject Property outside of any right-of-way, or utility easements, including stormwater management easements, and within the first growing season after completion of the reconfigured parking area.
 - d. All variance mitigation tree plantings must consist of native canopy trees. If any credited mitigation tree dies or is otherwise removed, the replacement must consist of a native canopy tree.
8. Plan Revision/Corrections/Updates:

Prior to Certification of the Final Forest Conservation Plan Amendment, the following items must be addressed:

 - a. Update all tables, notes and references to consistently reflect the variance trees which are shown as being impacted by this amendment.
 - b. Consistently show/provide the "mitigation replacement criteria" across the various tables and update any associated notes/references as applicable.
 - c. Remove any remaining "future credited plantings" from the plans. Such credit will no longer carry over to a future approval and new plantings would need to be proposed.
 - d. Correctly/consistently show the trees which are subject to the variance by updating all applicable plan symbols tables and notes. For example, Tree 305 is a 21"/22.5" DBH tree and is not subject to the variance (although the plan symbol, CRZ and overall table reference suggest otherwise).
 - e. Tree 285 was not approved for removal under previous plans and is not recognized as an approved removal by this plan; update notes/symbols accordingly.
 - f. Restore the Note 5 reference which has been cut off from the plan near the north arrow on sheet 1 of 3.
 - g. Delete the *Specimen Tree Replacement Planting Schedule for the 2014 Construction*, from sheet 2 of 3.

- h. Correct the date of the NRI/FSD approval noted near the lower right corner of sheet 1 of 3 and add references to the full list of other plan approvals/revisions.
- i. Update the invasive program specifications to address the mile-a-minute species which was recently observed near tree 282.
- j. Add plan notes indicating that the existing large hedge of barberry (invasive species) located in the LOD for the new building (Student Life Center) shall not be transplanted elsewhere on campus.
- k. Clarify/correct the locations and methods of the removal work for the invasive ailanthus trees.
- l. Add notes to the invasive species control specifications, clarifying that best efforts shall be made to control each of the applicable invasive species per the Maintenance and Management Agreement to be recorded.
- m. Rectify the conflicting notes regarding the quantities of restoration plantings in the table at the lower center of sheet 2 of 3.

9. Environmental Enhancement Work

- a. The Applicant must begin the invasive control work no later than September 15, 2019.
 - b. The Applicant must begin the soils decompaction work associated with previous activity within conservation easement areas no later than 1 month after the pre-construction meeting.
10. The Applicant must comply with all tree protection and tree save measures shown on the approved Final Forest Conservation Plan. Tree save measures not specified on the Final Forest Conservation Plan may be required by the M-NCPPC forest conservation inspector.
11. The limits of disturbance shown on the sediment and erosion control plan and stormwater management plan must be consistent with the limits of disturbance and the associated tree/forest preservation measures of the Final Forest Conservation Plan. If the limits of disturbance is not consistent, the applicant will need to revise the sediment and erosion control plan and stormwater management plan.
12. Prior to any land disturbing activities, the Applicant must hold a pre-construction meeting with the M-NCPPC Forest Conservation Inspector.

SITE DESCRIPTION

The Subject Property is a platted parcel (plat 4179) and currently measures approximately 34.29 acres. The property is located at 9101 Rockville Pike (MD 355) at the south east side of its intersection with Cedar Lane. The property contains a school and associated outbuildings and recreational facilities. The site is zoned R-60 and has residential homes toward the east and the Naval Medical Center along the southern boundary.

The environmental features include a channelized stream along the northwest corner of the property. The stream is a tributary of Lower Rock Creek and is a use I watershed¹. The site contains forest areas within Category I Easements, native plantings within areas of Category II Easements, and pockets of steep slopes that are mostly associated with man-made grading. The site also contains numerous significant and specimen trees; two areas of highly erodible soils occur within portions of the site. No wetlands, floodplains, or rare, threatened and endangered plant species are associated with the property.



Figure 1 - Subject property and vicinity

¹ Use I:

WATER CONTACT RECREATION & PROTECTION OF AQUATIC LIFE

Waters that are suitable for: water contact sports: play and leisure time activities where the human body may come in direct contact with the surface water; fishing; the growth and propagation of fish (other than trout); other aquatic life, and wildlife; agricultural water supply and industrial water supply.

PROJECT HISTORY

The Stone Ridge School has been subject to several administrative final forest conservation plan approvals. Onsite Category I Forest Conservation Easements and Category II Conservation Easements were established as part of the reviews and consist of retained forest, reforestation areas, and native landscape plantings. The previous FFCP approvals are outlined below:

- The original forest conservation plan was approved on May 23, 1994 (for a soccer field).
- A revised FFCP was approved on June 5, 1995 (for an expanded gymnasium and parking).
- The 1st forest conservation plan amendment was approved on May 6, 2014 for an artificial turf field and changes related to a State Highway Administration (SHA) project for Base Realignment and Closure (BRAC) roadway modification project on 355 and Cedar Lane. The associated conservation easements were subsequently granted to the Planning Board as recorded in the land records, in three parts, under Liber 48650 Folio 168, Liber 48650 Folio 149 & Liber 48699 Folio 185.

PROPOSED AMENDMENT

The Final Forest Conservation Plan Amendment proposes to reconfigure the Category 1 and Category 2 Conservations easements associated with the site for the construction of a Student Life Center, as well as reconfigured parking lot, site circulation, and new stormwater management facilities (see Attachment A). The proposal includes the release of 0.53 acres of the existing Category 1 Conservation Easement, which the Applicant will mitigate through various environmental enhancements, including:

- New Category I Conservation Easement areas of approximately 0.33 acres will be added to create a total contiguous easement area of 4.57 acres;
- The existing Category II Conservation Easement will be expanded by 0.04 acres for a total contiguous Category II Conservation Easement area of 0.27 acres;
- The Applicant will eliminate any remaining portions of the non-standard easement beyond the areas proposed for permeant release (approximately 1.68 acres) and replace with a standard Category I Conservation Easement;
- Areas of invasive plant control and restoration plantings; and
- Acquiring 0.16 acres of mitigation bank credit in an approved forest mitigation bank.

The proposed work also includes the removal and impact to trees subject to a forest conservation variance.

FOREST CONSERVATION

The site is subject to the Montgomery County Forest Conservation Law (Chapter 22A of the County Code). The Application is stand-alone forest conservation plan which is not tied to other regulatory reviews such as a Preliminary Plan. The previous plan approvals are referenced in the Project History section of this report. As conditioned, the application continues to meet all of the requirements of Chapter 22A. The application maximizes reasonable opportunities for the conservation easement settings. For example, the areas nearest to the channelized stream already contain extensive

Stormwater management facilities and associated stormwater management easements and therefore are not suitable locations for overlapping conservation easements.

Forest Conservation Variance

Section 22A-12(b)(3) of Montgomery County Forest Conservation Law provides criteria that identify certain individual trees as high priority for retention and protection. Any impact to these trees, including removal of the subject tree or disturbance within the tree's critical root zone (CRZ), requires a variance. An applicant for a variance must provide certain written information in support of the required findings in accordance with Section 22A-21 of the County Forest Conservation Law. Unless the variance is granted, the law requires no impact to trees that measure 30 inches DBH or greater; are part of a historic site or designated with a historic structure; are designated as national, state, or county champion trees; are at least 75 percent of the diameter of the current State champion tree of that species; or to trees, shrubs, or plants that are designated as Federal or State rare, threatened, or endangered species.

The affected resources that have been identified on the current Plan include trees with a DBH of 30 inches or greater. The Applicant submitted the variance request package on June 4, 2019, for the impacts and removals of subject trees (see Attachment B for variance request). The Applicants' request is to impact (but retain) fifteen trees and remove seventeen subject trees that are considered high priority for retention under Section 22A-12(b) (3) of the County Forest Conservation Law (affecting a total of thirty-two trees). Note: Tree 200 was inadvertently listed as both to be removed and preserved; however, the proposed impacts are minor and the inadvertent request for the removal is not supported. Therefore, tree 200 will be preserved and is not approved for removal under this application/request.

Unwarranted Hardship for Variance Trees

Per Section 22A-21, a variance may only be granted if the Director or Planning Board as applicable, finds that leaving the requested trees in an undisturbed state will result in unwarranted hardship. Staff has determined that the Applicant has shown that enforcement of the Law for the designated trees would result in an unwarranted hardship for the following reasons: Not granting the variance would severely limit the site's buildable area, due to the extensive cover of the critical root zones of subject trees throughout the property. Furthermore, two of the trees proposed for removal under the variance (trees 303 & 304) are listed in poor condition, and retention of the trees would create a significant maintenance burden and potential liability.

Variance Findings - Based on the review of the variance request and the proposed amended Forest Conservation Plan, staff makes the following findings:

- 1. Granting the variance will not confer on the applicant a special privilege that would be denied to other applicants.*

Granting this variance will not confer a special privilege on the Applicant since the property is considerably constrained by protected forest and the remaining buildable area is largely interspersed with subject trees and their associated critical root zones, nearly any notable development of the property would require impacts and removals. The tree impacts and removals associated with the site are within the buildable area established by the site's constraints of buffering for the adjacent residential uses, and existing/proposed conservation

easements. Therefore, the variance request would be granted to any applicant in a similar situation.

2. The need for the variance is not based on conditions or circumstances which are the result of the actions by the applicant.

The requested variance is based on the need to maintain a viable school facility and provide stormwater management controls for the new construction while balancing the site constraints, and not based on conditions or circumstances which are the result of actions of the applicant. The Applicant has designed the proposed school buildings/facilities to minimize tree impacts and forest clearing to the degree possible under the circumstances. The variance can be granted under this condition if the impacts are avoided or minimized and that any necessary mitigation is provided.

3. The need for the variance is not based on a condition relating to land or building use, either permitted or non-conforming, on a neighboring property.

The requested variance is a result of the proposed site design and layout of the Subject Property and the impacts are not as a result of land or building use on a neighboring property.

4. Granting the variance will not violate State water quality standards or cause measurable degradation in water quality.

The onsite environmental enhancements including the planting, invasive control, and soil decompaction work will improve water infiltration and physically result in “woods in good condition” of which the associated effects are a standard measure for water quality. The proposed stormwater management facilities will also improve the quality over the existing conditions.

Trees 303 and 304 are both in poor condition and growing in a parking lot with little or no stormwater management. The proposed removal of these two subject trees will facilitate the parking lot reconfiguration and associated grading that provides substantial new stormwater management facilities. The reconfigured parking is approximately the same size as the current lot, however significant benefit for water quality will be gained through the new stormwater management facilities, rather than retaining two trees in poor condition, which have limited and diminishing benefits toward water quality (and create a potential liability for the existing structures/parking).

The subject areas are not directly associated with any streams, wetlands or related buffers. The DPS review and ultimate approval of the sediment and erosion control and storm water management plans will ensure that appropriate standards are met. Additionally, the mitigation plantings will contribute to these goals. Therefore, the State water quality standards will not be violated.

Mitigation for Trees Subject to the Variance Provisions

There are seventeen subject trees proposed for removal in association with the project that are supported by Staff. Planting mitigation for the removal should be at a rate that approximates the form

and function of the trees removed, at a ratio of approximately 1" DBH for every 4" DBH removed, using trees that are a minimum of 3" caliper. Mitigation at this rate will be addressed by onsite plantings credited for this purpose, however a condition of approval is also recommended to provide the required mitigation trees for 303 and 304 in and along the reconfigured parking lot associated with their existing location. Staff does not recommend mitigation plantings for variance trees that are not removed or overly impacted.

County Arborist's Recommendation on the Variance

In accordance with Montgomery County Code Section 22A-21(c), the Planning Department is required to refer a copy of the variance request to the County Arborist in the Montgomery County Department of Environmental Protection for a recommendation prior to acting on the request. The County Arborist has not commented on this variance as of the date of this staff report.

Variance Recommendation

Staff recommends that the variance be granted.

Conclusion

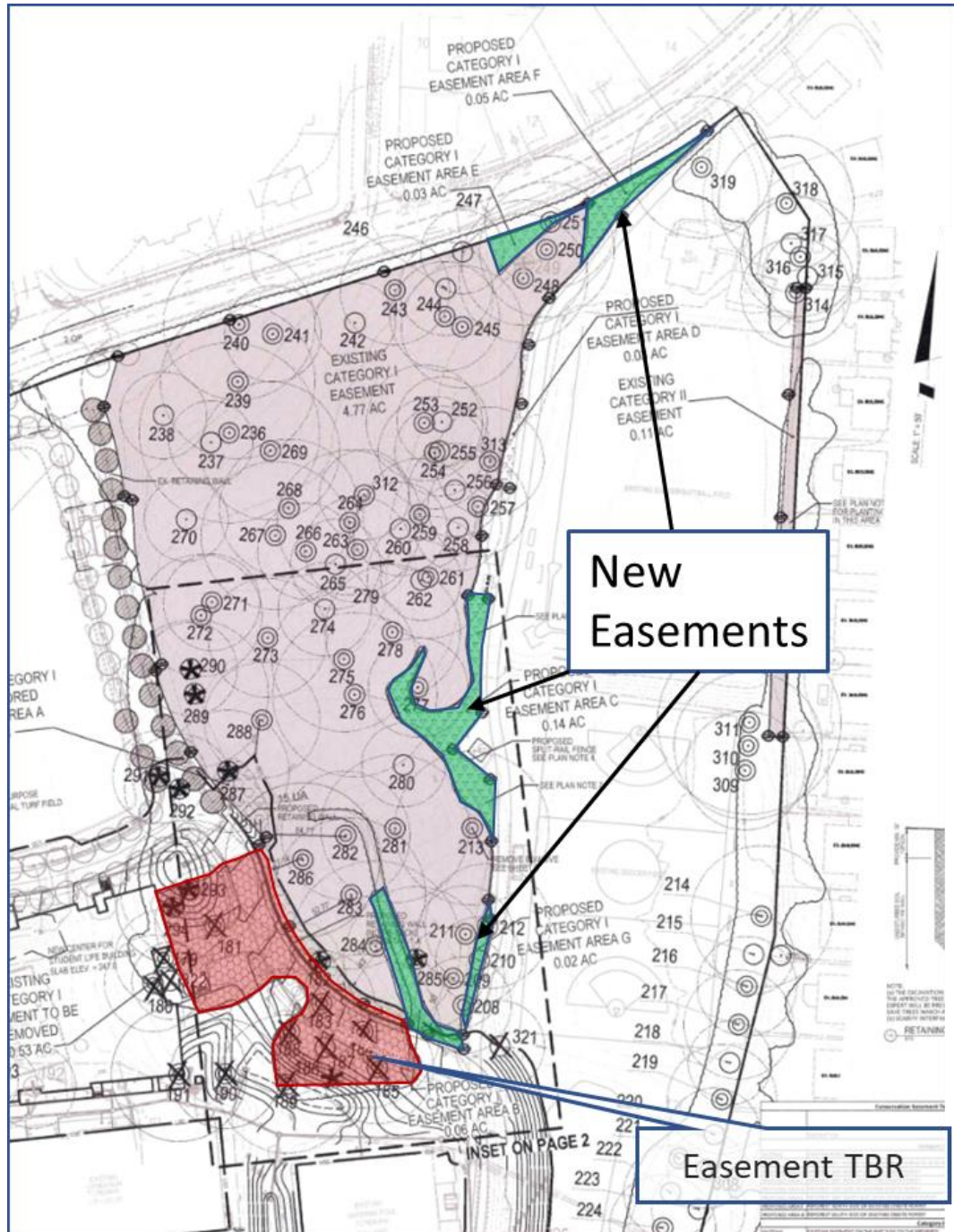
Staff recommends approval of the amendment with conditions as enumerated in the staff report. Implementation of the proposal will include considerable environmental enhancements which would not be provided otherwise. The current abandonment was implicit in the previous plan approval since the easement language includes a non-standard provision to facilitate the future removal. Additionally, the existing access route was shown/installed with a dead-end stub to facilitate the physical connection to the ultimate driveway extension. The Applicant will eliminate any remaining portions of the non-standard easement beyond the areas proposed for permanent release and replace with a standard Category I Conservation Easement. The loss of easement areas are mitigated in kind onsite to the extent reasonably possible. A 5-year maintenance and management agreement will be implemented to ensure the success of the environmental enhancements.

Attachments:

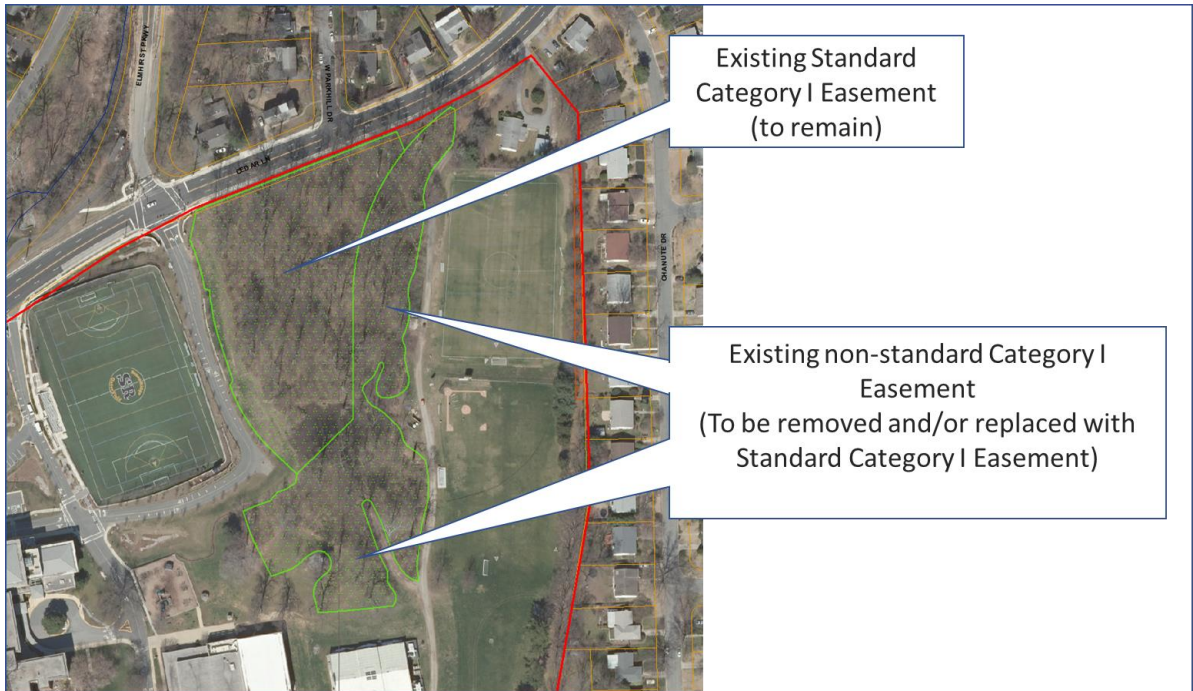
Attachment A – Easement modifications

Attachment B – Variance request

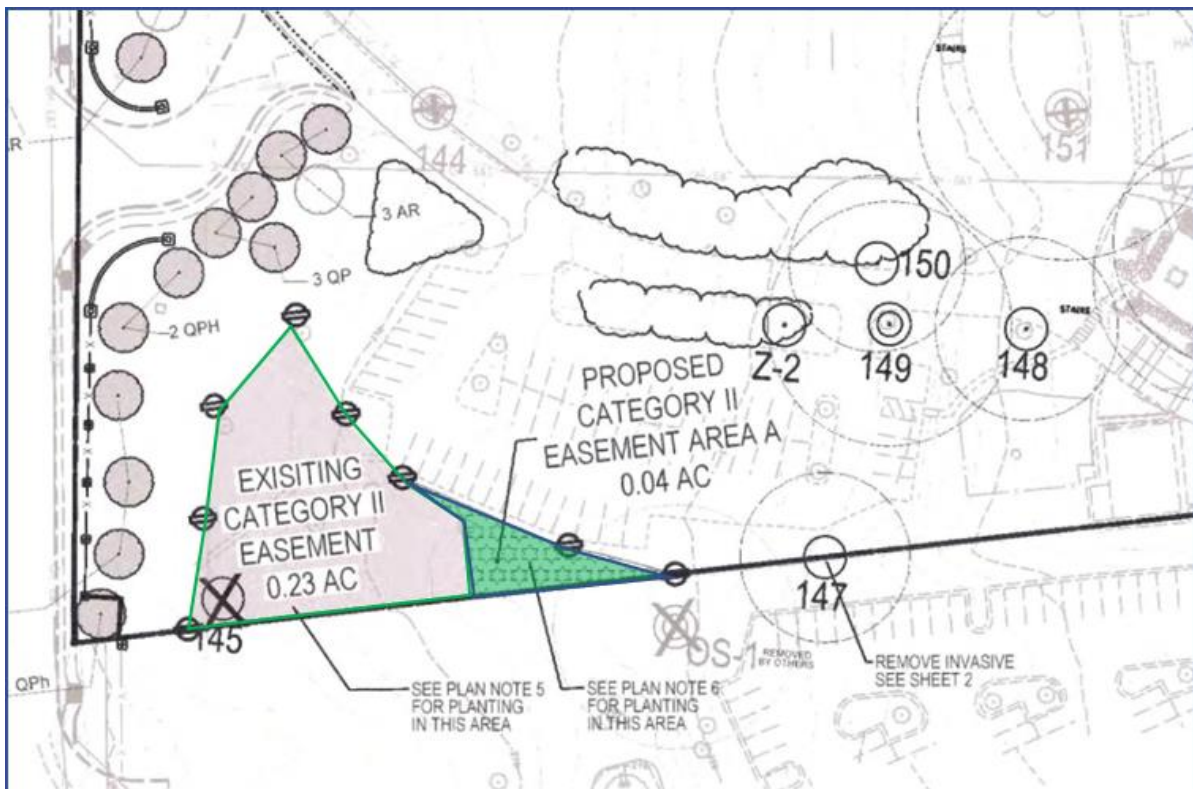
Attachment A – Easement modifications



Existing & Proposed Category I Conservation Easements **NORTH ↑**



Existing & Category I Easements



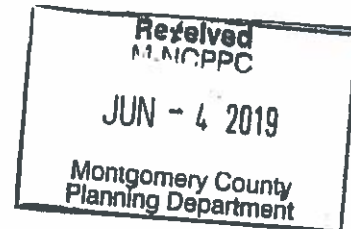
Existing & Proposed Category II Easements

**SOLTESZ**

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May 31, 2019

Marco Fuster
M-NCPPC
Planning Area 1
8787 Georgia Avenue
Silver Spring, MD 20910



Re: Stone Ridge School of the Sacred Heart
Final Forest Conservation Plan Amendment SC1995001 - Variance Request
SOLTESZ Project #0598-00-01/02

Dear Mr. Fuster;

On behalf of Stone Ridge School of the Sacred Heart, SOLTESZ is requesting a variance for the removal of eighteen (18) specimen trees and impact to seven (7) specimen trees. All the trees for which the variance is requested are 30-inches or greater in DBH in accordance with Section 22A-21 of Montgomery County's Forest Conservation Law and the 2010 revisions to the State Forest Conservation Law enacted by State Bill 666 where it notes the variance pertains to "Trees having a diameter measured at 4.5 feet above the ground of 30-inches diameter or 75% of the diameter of the current state champion tree of that species as designated by the department". The removal or impact of these trees is for the school access road, parking lot, and new Student Life Center.

Project Information

The subject property consists of one parcel containing 34.52 acres in the R60 zone. The property is located at the southeast corner of the intersection of Maryland Route 355 (Wisconsin Avenue) and Cedar Lane in Bethesda, Maryland and is developed as an institutional use for the campus of the Stone Ridge School of the Sacred Heart.

The School proposes to construct an access road and re-configure an existing parking lot to provide better pedestrian and vehicular circulation for the school property. The school also proposes to build a new Student Life Center. The location and related grading of the road, parking lot, and the new building will displace existing forest and impact existing specimen trees.

Previous approval

The property received previous Forest Conservation Plan and Variance Request approvals for nine (9) specimen trees on May 6, 2014. Specimen trees #174,176,177,178, 287, 289, 292, 293 and 294 were approved for removal with proper mitigation planting.

Amendment proposal

This Forest Conservation Plan Amendment variance request are for eighteen (18) additional on-site specimen trees to be impacted. The trees identified in this variance request for removal or CRZ impacts are shown on the amended Final Forest Conservation Plan. The trees to be removed are either located within the limits of disturbance or the LOD impacts to their critical root zone are too large to expect tree survival.

Trees for Removal

Listed below are the Specimen trees identified for removal on the Final Forest Conservation Plan Amendment.

TREE #	COMMON NAME	BOTANICAL NAME	DBH	CRZ (SF)	CRZ IMPACT	% OF IMPACT	PROPOSED STATUS	SPECIMEN
179	White Oak	<i>Quercus alba</i>	30	6362	6362	100%	Remove	YES
180	Beech	<i>Fagus grandifolia</i>	30	6362	6362	100%	Remove	YES
181	White Oak	<i>Quercus alba</i>	37	9672	9672	100%	Remove	YES
183	Tulip Poplar	<i>Liriodendron tulipifera</i>	34	8167	8167	100%	Remove	YES
184	Tulip Poplar	<i>Liriodendron tulipifera</i>	49.5	17311	17311	100%	Remove	YES
185	Tulip Poplar	<i>Liriodendron tulipifera</i>	36	9156	9156	100%	Remove	YES
188	Tulip Poplar	<i>Liriodendron tulipifera</i>	40	11304	11304	100%	Remove	YES
189	Tulip Poplar	<i>Liriodendron tulipifera</i>	46	14950	14950	100%	Remove	YES
190	White Oak	<i>Quercus alba</i>	36	8167	8167	100%	Remove	YES
191	Tulip Poplar	<i>Liriodendron tulipifera</i>	42	12463	12463	100%	Remove	YES
195	Red Oak	<i>Quercus rubra</i>	44	11882	11882	100%	Remove	YES
197	Red Maple	<i>Acer rubrum</i>	34	8171	2571	31%	Remove	YES
198	Green Ash	<i>Fraxinus pennsylvanica</i>	31	6793	6793	100%	Remove	YES
200	Red Pine	<i>Pinus resinosa</i>	31	6793	6793	100%	Remove	YES
234	Mulberry	<i>Morus Spp.</i>	23/32	6362	6362	100%	Remove	YES
235	Tulip Poplar	<i>Liriodendron tulipifera</i>	50	17671	7733	44%	Remove	YES
303	Red Maple	<i>Acer rubrum</i>	37	9677	9677	100%	Remove	YES
304	Red Maple	<i>Acer rubrum</i>	32	7238	3694	51%	Remove	YES

The specimen trees proposed for removal are either directly within areas that will be graded to accommodate the new roadway, the re-configuration of the existing parking lot, and the new Student Life Center building construction, or the impacts to their critical root zones are significant enough to cause fatality to those trees. The approved Natural Resources Inventory shows 105 trees located on the property. The proposed plan removes eighteen (18) of these trees.

Critical Root Zone Impacts

There are seven (7) on-site specimen trees impacted by the limits of disturbance (LOD) for the proposed development. All of these trees will have less than 30% CRZ impact. Tree protection fencing

will be erected for trees which are impacted. Listed below are the Specimen trees identified to be impacted on the Final Forest Conservation Plan Amendment.

TREE #	COMMON NAME	BOTANICAL NAME	DBH	CRZ (SF)	CRZ IMPACT	% OF IMPACT	PROPOSED STATUS	SPECIMEN
200	White Pine	<i>Pinis strobus</i>	31	6793	321	5%	Save	YES
208	Tulip Poplar	<i>Liriodendron tulipifera</i>	30	6361	990	14%	Save	YES
283	Red Oak	<i>Quercus rubra</i>	35	15615	1809	9%	Save	YES
284	Tulip Poplar	<i>Liriodendron tulipifera</i>	53	19856	4921	23%	Save	YES
285	Beech	<i>Fagus grandifolia</i>	45	14307	1133	8%	Save	YES
286	Tulip Poplar	<i>Liriodendron tulipifera</i>	51	18376	4782	26%	Save	YES
288	White Oak	<i>Quercus alba</i>	36	9156	244	3%	Save	YES

Listed below are the Offsite Specimen trees identified to be impacted on the Final Forest Conservation Plan Amendment. Three (3) trees will be impacted by more than 30% but extra measures recommended by Certified Arborist (Proper Tree Care) per May 24th, 2019 letter (attached) to be implemented for those trees.

TREE NUMBER	COMMON NAME	BOTANICAL NAME	STATUS	SQ FT CRZ IMPACTED	TOTAL SQ FT CRZ	CRZ IMPACT	SHA TREE	DBH IN INCHES	MITIGATION REPLACEMENT CRITERIA
OS3	WILLOW OAK	<i>QUERCUS PHELLOS</i>	N/A	124	14950	1%	N/A	46	N/A
OS4	BLACK WALNUT	<i>JUGLANS NIGRA</i>	N/A	3549	9156	39%	N/A	36	N/A
OS5	AMERICAN SYCAMORE	<i>PLATANUS OCCIDENTALIS</i>	N/A	1789	9156	20%	N/A	36	N/A
OS6	BLACK WALNUT	<i>JUGLANS NIGRA</i>	N/A	2964	6789	44%	N/A	31	N/A
OS7	AMERICAN SYCAMORE	<i>PLATANUS OCCIDENTALIS</i>	N/A	1682	6359	26%	N/A	30	N/A
OS10	AMERICAN ELM	<i>ULMUS AMERICANA</i>	N/A	3477	14307	24%	N/A	45	N/A
OS13	BLACK WALNUT	<i>JUGLANS NIGRA</i>	N/A	3094	7235	43%	N/A	32	N/A
OS14	SYCAMORE	<i>PLATANUS OCCIDENTALIS</i>	N/A	1185	6359	19%	N/A	30	N/A

Additional Application Requirements

Per Montgomery County's Forest Conservation Law Section 22A-21(b) of the *Application Requirements* states that the applicant must:

- (1) describe the special conditions peculiar to the property which would cause the unwarranted hardship;

- (2) describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas;
- (3) verify that state water quality standards will not be violated or that a measurable degradation in water quality will not occur as a result of the granting of the variance; and
- (4) Provided any other information appropriate to support the request.

Pursuant to: Item *“(1) describe the special conditions peculiar to the property which would cause the unwarranted hardship; and”* Item *“(2) describe how enforcement of these rules will deprive the landowner of rights commonly enjoyed by others in similar areas”*:

The current land use is institutional and is the campus for a Kindergarten through grade 12 school. The property has several academic and athletic buildings; open areas used for outdoor classrooms, recess activities, and athletic competitions; and parking lots that serve school activities.

An unwarranted hardship exists for the applicant because the property has an unusually large number of specimen trees. The applicant would need to impact large specimen trees in every location that is available to accommodate the access road improvements, the re-configured parking lot, and the Student Service Center. The school is seeking to improve its campus accessibility, circulation and pedestrian safety for students, staff and visitors and provide better student life quality and safer academic and athletic opportunities to its students which are already provided by at other similar schools in the area.

Prohibiting the removal and impact of the specimen trees would deprive the applicants of the rights commonly enjoyed by others who are in similar areas that have many of the same features as the subject property.

Pursuant to *“(3) verify that state water quality standards will not be violated or that a measurable degradation in water quality will not occur as a result of the granting of the variance”*

The trees proposed for removal are not directly connected to any streams, or part of a riparian buffer system. The proposed stormwater management plan for the campus improvements makes provision for stormwater runoff that would have been intercepted by these trees. The stormwater management design will meet current State and Local stormwater management standards. The state water quality standards will not be violated. A measurable degradation in water quality will not occur as a result of the granting of the variance.

Pursuant to *“(4) Provided any other information appropriate to support the request.”*

The proposed project improves site circulation and reduces existing student and pedestrian conflicts with vehicular traffic. The decision where to locate the new Student Life Center, creates a campus quad primarily to be used by pedestrians and eliminates through traffic and limits vehicular access to specific times during the day and for emergency vehicles. The proposed siting of the new facilities takes advantage of existing school infrastructure while minimizing impacts to existing trees.

Minimum criteria for Variance

As further basis for its variance request, the applicant can demonstrate that it meets the Section 22A-21(d) *Minimum criteria*, which states that a variance must not be granted if granting the request:

- (1) Will confer on the applicant a special privilege that would be denied to other applicants;*
- (2) Is based on conditions or circumstances which are the result of actions by the applicant;*
- (3) Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; or*
- (4) Will violate State water quality standards or cause measurable degradation in water quality*

Pursuant to *"(1) Will confer on the applicant a special privilege that would be denied to other applicants."*

The use of this site is for a school campus. Building a road, re-configuring the existing parking lot and adding a Student Service Center to provide for safe access to the campus and better student life are not special privileges to be conferred on the applicant because all these are standard features on an academic campus in Montgomery County.

Pursuant to *"(2) Is based on conditions or circumstances which are the result of actions by the applicant; and (3) Arises from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property."*

The applicant has taken no actions leading to the conditions or circumstances that are the subject of this variance request. Furthermore, the surrounding land uses do not have any inherent characteristics that have created this particular need for a variance.

Pursuant to *"(4) Will violate State water quality standards or cause measurable degradation in water quality"* The applicant cites the reasoning in the previous response to requirement 22A-21 (b)(3), and restates its belief that granting this variance request will not violate State water quality standards or cause measurable degradation in State water quality standards.

For these reasons listed above, we believe it is appropriate to grant this request for a variance. Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,
Soltesz, Inc.



Daniel Park, PLA, ASLA
Director of Planning

cc:

Andrew Harrington (Stoneridge School)
Eric Osberg (Stoneridge School)

Jim Wilson (JLW)
Jim Soltesz (Soltesz)
Dan Pino (Soltesz)
Mark Pfefferle (M-NCPPC)
Elza Hisel-McCoy (M-NCPPC)



Proper Tree Care

***10105 Residency Road
Suite 207
Manassas, VA 20110
703.331.3731 Fax: 703.331.1359***

May 24, 2019

Mr. Daniel Park
2 Research Place
Rockville, MD 20850

RE: Stone Ridge School Tree Conservation Plan

Dear Daniel:

Following is a summary of the issues and recommendations discussed at our meeting at Stone Ridge School, 9101 Rockville Pike, Bethesda, MD 20814. These issues included:

1. 51" Tulip Tree (#286) near proposed road extension and retaining wall
2. 36" White oak (#190) near proposed new building
3. 42" tulip tree (#191) near proposed new building
4. Identification of 45" tree near property boundary
5. Proposed 5-year Invasive Management Plan for Garlic Mustard, Tree-of-heaven, winter creeper and honeysuckle.

Following is an evaluation and discussion of these issues for your use in developing the Forest Conservation Plan.

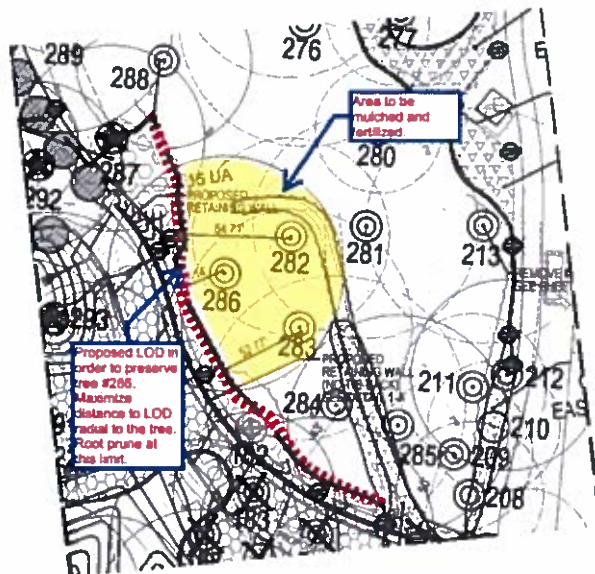
Tree # 286 – 51" tulip tree (*liriodendron tulipifera*): This tree is in good condition (85%) which is quite remarkable for a tulip tree this size and age. It is approximately 35 feet from the proposed retaining wall adjacent to the new road extension. It has a live crown ratio of 70% and a crown density of 80%. The crown is well formed and balanced. There were no readily visible defects identifiable from the ground. This tree is a good candidate for preservation.

It is my opinion that this tree can be preserved if the details of its preservation can be addressed and fine-tuned as the site plans are finalized. Those plans should include the following:

1. Root prune and fence as indicated on inserted plan. Root prune using root cutting machine that is designed for this type of activity. Root pruning should be at the limits of excavation and digging for the retaining and no closer to the tree than absolutely necessary. (Curve road alignment further from tree if possible, although I

believe the tree can be preserved with the road in the current location.) Trenchless erosion and silt control measures, such as filter sock or trenchless super silt fencing, should be used for perimeter controls, if any, in this area.

2. Install tree protection measure at the LOD at the time of root pruning. Welded wire fencing or super silt fencing are the minimum recommended for this tree.
3. Mulch the tree with shredded hardwood mulch. Mulching aids in the reduction of drought stress and provides a better environment for roots to grow. Mulch the root zone on the property, at a minimum.
4. Provide a mechanism to keep the tree watered whenever there is no rainfall for a period of one week or greater. This is a critical item and one of the most important for preserving the tree due to the removal of a portion of the root zone. This should be continued for several seasons. A temporary reservoir might be helpful to irrigate the tree if no water source is available nearby or water service will be interrupted during the growing season.
5. Treat the tree with paclobutrazol (Cambistat[™] or equivalent) to improve drought hardiness and promote strong root growth following root loss.
6. Treat the tree prophylactically for borers and insects to prevent secondary and tertiary stressors.
7. Fertilize the tree with appropriate arboricultural grade fertilizer and a root bio-stimulant. Items 5,6,and 7 should be completed prior to root pruning if possible. Fertilization should be targeted toward improving vigor and promoting healthy root growth. Fertilizer should be arboricultural grade with majority of nitrogen from a slow release source with low salt index and applied consistent with ANSI A300 standards for tree care. An organic humate and plant extract component (bio-stimulant) should be added to the fertilization mix according to label rates. Fertilizer should be applied in liquid form using pressurized soil injection techniques. The entire root zone of the tree should be fertilized at a rate of 1.0 pounds of actual nitrogen per 1000 square feet of root zone treated.
8. Consider a lightning protection system to protect from the loss of other investments made in protecting the tree. Given the importance of this tree and the catastrophic nature of lightning strikes and their effect on trees, this item is highly encouraged. This tree is exposed on a high point of the site and more prone than smaller trees nearby.



If these items are implemented, I am very confident the tree can be preserved. However, as with any tree, there are inherent risks and the risks associated with tulip tree preservation are likely greater than for other species. The inserted sketch shows this tree and the recommended mulching and root pruning indicated above.

Tree #190 - 36" White oak near proposed new building: This tree is in good condition with a healthy crown as well. However, it is well within the foot print of the proposed development and cannot be preserved without significant design changes. Its removal is recommended.

Tree #191 – 42" tulip tree near proposed new building: This tree is in good condition with a healthy crown as well. However, it is well within the foot print of the proposed development and cannot be preserved without significant design changes. Its removal is recommended.

Tree # Z1 – 45" diameter black locust near property line: This tree is in poor condition and should be considered for removal regardless of the plan. It has significant trunk decay, deadwood and is showing signs of stress. It is not a high priority for removal as the only permanent target is the adjacent chain link fence. The area does not currently appear to be frequently occupied. If occupancy of the area increases its removal should be considered a higher priority.

Exotic and Invasive Removal: I have provided a spreadsheet with current recommendations for invasive species commonly found on the property. It includes Garlic Mustard, Tree-of-heaven, winter creeper and honeysuckle. It can be inserted into the Forest Conservation Plan to identify the target species and recommendations. It should be noted that the treatment of exotic and invasive species in this context is of limited utility from sustainability perspective. Therefore, invasive control should be considered from a control and management point of view as eradication is not likely possible for the species present. The school has undertaken steps at this already and they may continue within the context of the FCP, but it is unlikely that eradication will ever result.

Therefore, this program should be approached pragmatically with the understanding that the school should put their best effort towards controlling these species, but even given these efforts, some will remain even after the five year program is completed. It is not realistic to expect otherwise for the following reasons:

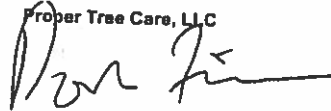
1. The species present are aggressive and pervasive and not easily controlled..
2. Often, the mere cutting of some of these species, even with treatment, encourages their dispersal and spreading rather containment.
3. It is chemically intensive to gain any sort of control. The levels of herbicide use necessary for eradication might outweigh the desire of a facility of this nature to limit the exposure of the students.
4. The species will likely re-invade as soon as treatment ceases.
5. The seedbed longevity of some species cannot be addressed, other than by limiting future contributions by existing plants. Dormant seed persisting beyond the treatment period cannot be readily predicted.

6. The costs of treatment and control must be factored against other program opportunities for the school that may represent a higher priority. Budgets are not unlimited for these or any school activities. It is appropriate to consider this in the context of sustainability for the school and reaching its overall educational mandates. It will be a significant expense to implement this program, even without eradication as a goal.

It is my intent to make certain that the goals associated with the treatment of the invasive treatment is reasonable and does not put the school in a situation where they cannot get approval when the time comes for review of the work. Their efforts to date are consistent with this plan that should be seen as a continuation of those efforts.

Please contact me if you have any questions.

Respectfully,

Proper Tree Care, LLC


Donald E. Zimar
Registered Consulting Arborist #446



Proper Tree Care

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May 24, 2019

Mr. Daniel Park
2 Research Place
Rockville, MD 20850

RE: Stone Ridge School Off Site Trees

Dear Daniel:

I have reviewed the information you sent regarding the off-site trees. I have read the email exchange regarding these trees and the proposed plan modifications to address the off-site preservation. There are two primary issues resulting from this review:

1. The removal of the existing asphalt parking near the property line adjacent to the trees OS-10 and OS13.
2. The grading for the parking drive near OS-4, OS-5, OS-6, and OS-7.

Following are my observations and opinions regarding these trees in relation to removing the asphalt and preserving the trees.

The trees near the asphalt removal include OS-10, a 45" diameter red maple, and OS-13, a 32" diameter black walnut. Both these species grow quite vigorously in this area and are known from experience to tolerate the impact of development, so long as they are not stressed by other biotic or abiotic stressors prior to development. It is my opinion that the removal of the asphalt can become a benefit to these trees if done carefully and the relationship to the trees is considered. The following should be addressed:

1. The removal of the asphalt should be done carefully to avoid the potential for root impact below the existing asphalt surface. This is most efficiently accomplished by using a small excavator that operates on the existing asphalt and peels the asphalt away from the tree by hooking the leading edge and lifting. A good excavator has likely done this with sidewalk replacement or other similar situations where damage to the sub-base is to be avoided. Supervision by the arborist might be helpful in directing the operator while performing this function.
2. Use even greater care when in close proximity to the tree trunks so as not to damage the buttress roots or root collar of any of the trees. Some hand work may be necessary in these areas.
3. Replace the asphalt removed in the hatched area of the plan with high quality topsoil and mulch. The quality of the top soil is more important than the type of mulch.

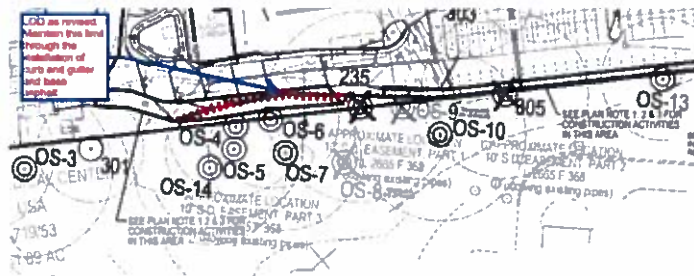
Wood chips, tub grindings, or shredded commercial grade mulch are all acceptable for this purpose. It would be better to just mulch than to use poor quality soil. Top soil stripped from landscape areas can be used, and may be best if it is the same texture as the existing soil and is tested for basic soil fertility and properties. Excavated material from foundations basements or other graded areas should not be used due to the potential for chemicals deposited through the soil profile to become potentially toxic to the tree roots.

4. Coordinate with the off-site tree owners to water and treat the trees as recommended for the tulip trees. These treatments include irrigation, fertilization, paclobutrazol treatment, and insect pest prevention. If few roots are observed or damaged during the removal of the asphalt, these treatments may not be necessary. In most cases, I have not discovered many roots in similar circumstances. We will not know for certain until the asphalt is removed. If many roots are encountered, the tree should be re-evaluated and additional recommendations made regarding the trees.

Since asphalt is being removed and grades are not being changed for the new parking configuration, it is likely these trees will suffer little impact if completed in the manner indicated.

The trees adjacent to the cut area include: OS-4, a 36" diameter black walnut; OS-5 a 36" diameter American sycamore; OS-6, a 31" diameter black walnut; and OS-7, a 30" diameter American sycamore. Again, these are trees that tolerate development impact well if healthy and uninfected prior to construction. I expect these trees can withstand this impact if the items suggested below can be addressed. These include:

1. Tighten the LOD as much as possible through initial clearing and grading phases. The grade is being lowered to accommodate the travel lane. Final grading should be based on field conditions in this area. This will be most helpful in the immediate vicinity of the trunks and root plates of trees OS-4 and OS-6. (This item has been addressed, as shown in this revised insert.)
2. I do not see any advantage to any matting in a minor cut such as this. The grading is so minimal that installation of any such material would be problematic. Mulching of this area and adjacent areas to the property line might be helpful. The most benefit would be achieved by mulching the trees on the owner's site.
3. Coordinate with the off-site tree owners to water and treat the trees as recommended for the tulip trees. These treatments include irrigation, fertilization, paclobutrazol treatment, and insect pest prevention. Mulching and irrigation are likely the two most important.
4. Evaluate the final grading and monitor for root plate damage. If root plate damage can be avoided, the trees can likely be retained and survive. If root plate damage



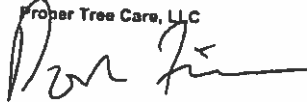
occurs, the trees may need to be removed at some point depending on the extent of that damage.

I expect that if great care is used while developing this area of the site, the trees can be retained. The general contractor should be made aware of these issues. There are numerous examples of where this has been successful in the past when there is a commitment to the protection of the trees paying careful attention to details when working in their proximity. Since the school has a full time staff that tends the grounds, I expect this should be successful on this site.

Please contact me if you have any questions.

Respectfully,

Proper Tree Care, LLC

A handwritten signature in black ink, appearing to read "Don Zimar", written over the company name.

Donald E. Zimar

Registered Consulting Arborist #446