

DEPARTMENT OF BUILDING AND DEVELOPMENT

COUNTY OF LOUDOUN

MEMORANDUM

DATE: January 20, 2023

TO: Rob Donaldson, Project Manager, Department of Planning and Zoning

FROM: Alexander Darr, Natural Resources Engineer

THROUGH: Anna Dougherty, Natural Resources Team Leader

CC: Mike Ronayne, County Urban Forester
Todd Taylor, Floodplain Administrator
Rana Abu Ghazaleh, Community Planner, Department of Planning and Zoning
Hilary Richardson, Zoning Planner, Department of Planning and Zoning

SUBJECT: CMPT-2022-0003, SPEX-2022-0038 2nd Submission

The Natural Resources Team (NRT) reviewed the Commission Permit 2nd submission, received on January 4, 2023 and offers the following comments:

Floodplain:

Requirements:

- 1) Comments submitted with the first submission have been addressed, there are no further floodplain management comments at this time.

Natural Resources:

Requirements:

1. Please correct mathematical error in GFA outdoor storage tabulation. Total should be 72,080 SF, rather than 720,801 SF as stated on plan.

Recommendations

- 1) Please delineate the 50-foot River and Stream Corridor Resource management buffer surrounding the minor floodplain on site. (General Plan RSCR Policy 2, Strategy 2.2, Action B)

i) Comment Addressed

- 2) **Repeat comment: Staff remains strongly concerned about fragmentation of this ecological core and respectfully disagrees with the applicants response that the proposed development will result in minimal disturbance to this feature identified by the Department of Conservation and Recreation. Staff further notes that the ecological value of the floodplain is not the only consideration with regards to the General plan policy nor the DCR findings. Mature, healthy forests are critical to preserving habitat and movement for wildlife. The proposed 60% increase to impervious area on the site is a major impact to the ecological value of the site and causes significant fragmentation to the existing wildlife corridor between Goose Creek and habitat areas to the west.**

Advisory Comment: Staff notes the location of the proposed facility within an Ecological Core, as determined by the Department of Conservation and Recreation. The particular ecological core that is the subject of this determination offers significant habitat value as well as providing a significant migration and wildlife route within the Goose Creek watershed, as well as to catoctin mountain and rural areas to the west. Preservation of such wildlife corridors has been prioritized in General Plan Policy 6.2. Actions associated with this strategy include:

- a) Require development proposals to create links to adjacent open space and natural resources to help prevent habitat fragmentation and foster biodiversity.
- b) Identify essential wildlife corridors and encourage protection of these areas through conservation easements acquired by the County or others, participation in the Open Space Preservation Program, development design, and other means.
- c) Ensure that new development, redevelopment, and infill development incorporates existing native vegetation and plantings of native vegetation to protect pollinators, migrant birds, and other wildlife.

- 3) **Repeat Comment: Staff remains concerned about impacts to existing mature forest and recommends selection of an alternative or redesign of proposed use to reduce impervious surface and impacts to existing forest.**

The impact of the proposed project on existing vegetation is a matter of consideration as part of a special exception application (RZO 6-1309(4)). Consistent with Forest, Trees, and Vegetation Strategy 4.1 Action B of the 2019 General Plan and to minimize the impact of the proposed project on existing vegetation staff recommends preserving forest cover within the site. Staff recommends that Tree Conservation Areas (TCA) be added to the plat sheets.

- a) Staff strongly suggests reconsideration of the design to reduce habitat fragmentation and consolidate stormwater impacts outside of Reservoir Protection Area.

- 4) Staff requests a calculation of the site's impervious surface area in its existing condition, compared with its proposed condition.

Comment Addressed

- 5) **Repeat Comment: Staff appreciates the additional detail provided with the second submission but remains concerned about the presence of the proposed use and associated loading and mixing activities in close proximity to sensitive natural resources including the forested wetlands on site as well as the broader reservoir protection area.** Staff notes the close proximity of the proposed salt mixing area to existing forested wetlands, as delineated in the included Wetland Delineation Report, and notes the potential for ground and surface water contamination, as well as habitat degradation due to this proposed use.
- 6) **Repeat Comment: Staff respectfully differs with the applicant's opinion that proposed use will not impact existing or future programming at the Academies of Loudoun. Proposed use will eliminate the highest quality forests on site, in which there are active and ongoing educational activities, attested to by Community planning as well as Natural Resources Team staff that are actively engaged in such programming on the site.** Staff questions the impacts of the proposed use on existing or future programming at the Academies of Loudoun, existing mature forests and forested wetlands have potential for curriculum enhancement and environmental education opportunities that may be disrupted by proposed use.

Urban Forestry

Recommendations:

Environmental impacts are a matter of consideration with this proposal. According to the Tree Survey and SOJ, the forested area being impacted is 25-50 years in age and is of generally good quality. Consistent with Strategy 4.2 and Strategy 1.1.I of the 2019 General Plan, staff encourages the applicant to explore options to recapture natural resources on-site or reduce impacts associated with proposal.

1. Staff suggests the applicant commit to the following Conditional Approval regarding Tree Conservation Areas:
 - a. Within the areas identified on the SPEX Plat sheet 5 as "Tree Conservation Area" the Owner shall preserve healthy trees provided, however, that trees may be removed to the extent necessary for the construction of trails, passive recreational amenities, and stormwater management facilities that are required pursuant to the Proffers and/or shown on the approved Construction Plans and Profiles as lying within

such Tree Conservation Areas and for the construction of utilities necessary for the development of the Property. Notwithstanding the previous sentence, a minimum of 80% of the canopy within the cumulative Tree Conservation Areas depicted on the CDP willshall be preserved, exclusive of stands of Virginia Pine over 25 years in age. In the event that the 80% canopy threshold cannot be achieved within the designated Tree Conservation Areas, such lost canopy willshall be recaptured elsewhere on-site in locations to be designated at the discretion of the Owner in consultation with the County. Boundaries of all Tree Conservation Areas shall be clearly marked in the field prior to land disturbing activities and shall be delineated on each site plan and record plat containing any portion of a Tree Conservation Area.

- b. If, during construction on the Property, it is determined by the Owner's certified arborist and/or the County Urban Forester that any healthy tree located within the boundaries of any of the Tree Conservation Areas described in this Conditional Approval has been damaged during construction and willshall not survive, then, prior to bond release on any section of the Property containing or immediately adjacent to such Tree Conservation Area, the Owner shall remove such tree and replace each such tree with two (2) 1-inch caliper native, non-invasive deciduous trees. The species of such replacement trees shall be determined by the Owner's certified arborist or landscape architect in consultation with the County Urban Forester or Zoning Administrator. The placement of the replacement trees shall be proximate to the area of each such damaged tree so removed, or in another area as requested by the County.
- c. POA documents shall include a provision that prohibits the cutting and/or removal of trees in the Tree Conservation Areas as shown on the site plan or record plat after construction has been completed by the Owner without specific permission of the County Urban Forester or Zoning Administrator except as necessary to accommodate tree hazard mitigation or forest management techniques, performed by or recommended by a professional forester or certified arborist, that are necessary to protect or enhance the viability and/or regeneration potential of the canopy. Such management techniques may include, without limitation, pruning and cutting of vines, invasive species, trees uprooted or damaged by extreme weather conditions, and trees or limbs that are diseased, insect-infested, dead, or are considered a hazard to life or property.

2. Staff suggests the following Conditional Approval for Specimen Tree Preservation:

- a. The Owner shall engage a Certified Arborist to prepare a tree preservation plan for the specimen trees ("Specimen Trees") identified as Tree Number 1193 and 1195 shown on Sheet 5 of the SPEX Plat. For the purposes of this Conditional Approval, the Critical Root Zone ("CRZ") for these

specimen trees shall be increased to one and half times the total diameter of the trees at breast height. A tree preservation plan shall be provided to the County for review and approval prior to the approval of the first site plan, including any site plan amendments, for the Property. Such tree preservation plan shall identify the tree protection measures that shall be employed to protect the Specimen Trees during construction activities, which measures shall include, without limitation, providing for (i) placing of fencing outside the CRZ of such Specimen Trees if near the LOD, (ii) avoiding construction activities within such CRZ to the greatest extent possible, and (iii) requiring that construction plans for all permitted improvements on the Property shall clearly define the limits of the CRZ and that the limits of the CRZ shall be clearly marked in the field. If construction activities within the CRZ of the Specimen Trees are unavoidable or unintentional encroachments occur, then the Owner and/or their Certified Arborist will develop a remediation plan to be approved by the County Urban Forester and implemented thereafter. In addition, any utility line that must be located within the CRZ of the Specimen Trees shall be installed using a boring technique supervised by a Certified Arborist. In the event any one of the Specimen Trees are damaged during construction and in the opinion of a Certified Arborist and/or the County Urban Forester cannot be saved, the Owner shall replace the damaged Specimen Tree with four one-inch caliper native non-invasive deciduous trees. The placement of the replacement trees shall be proximate to the area of the damaged Specimen Tree so removed, or in another area as requested by the County Urban Forester or Zoning Administrator.