

## MEMORANDUM

To: Rob Donaldson, Project Manager, Land Use Review  
From: Rana Abu Ghazaleh, Senior Planner, Community Planning  
Date: September 22, 2022  
Re: CMPT-2022-0003 & SPEX-2022-0038, Academies of Loudoun Service Center, Community Planning 1st Referral

### BACKGROUND

The applicant, Loudoun County School Board, is requesting a Commission Permit (CMPT) and a Special Exception (SPEX) to allow a public utility service center with outdoor storage and small engine repair to be co-located on The Academies of Loudoun 119-acre property. The proposed utility service center would allow long-term storage of materials, vehicles and equipment to maintain the Loudoun County public schools (LCPS) and other county facilities during inclement weather. The



proposed public utility service center would be located on the same parcel as the existing Academies of Loudoun facility, in the western portion of the property. The site is located at 42075 Loudoun Academy Drive in Leesburg, west of Sycolin Road, east of Gulick Mill Road and southwest of Dulles Greenway (PIN# 194-16-6764). The parcel is adjacent to Goose Creek Bend residential community to the south, a vacant property to the north, a data center and Sycolin Road to the east, and Gulick Mill Road to the west.

The property is within the Transition Residential-10 (TR-10) zoning district, partially within the Airport Impact Overlay District, the Reservoir protection Area, and the steep slopes Overlay District (moderate and very steep).

Natural resources on the property include minor floodplain, wetlands, hydric soils, and forest cover.

The applicant is requesting a SPEX to permit a “public utility service center and storage yard” use type within the TR-10 zoning district. Pursuant to section 6-1100, the Zoning Ordinance requires a CMPT for public utilities or public service facilities to determine if the general location, character, and extent of the proposed use is in substantial accord with the Comprehensive Plan.

The proposed utility service center would consist of the following:

- 20,000 square-foot (SF) facility to store treatment material (road salt, sand, and stone dust) consisting of a partially (2-3) walled structure with a roof and concrete or asphalt floor
- 1,000 SF garage proximate to the storage facility to store loaders
- 350 SF brine tank building
- Five storage pole barns, totaling 52,000 SF, to protect equipment from weather elements
- 500 SF small engine repair facility
- Outside storage area for vehicles and equipment
- A truck/heavy equipment wash station

The proposed utility service center will require partial clearing of the existing forest cover. To preserve some of the trees, a landscape buffer waiver was submitted and is currently being reviewed. The waiver request proposes to utilize evergreen tree plantings in lieu of a six-foot high fence, wall or berm. The applicant’s Statement of Justification (SOJ) states that the proposed vegetative buffer would be more effective by filling in any gaps, be taller than the required fence/wall/berm and provide a year-round buffer.

The minor floodplain and the small stream on the property lie between Academies of Loudoun and the proposed facility site. The proposed site is also located outside of the moderate and steep slopes area.

A new wetlands study was conducted for the SPEX/CMPT area in April of 2022, which identified approximately 1.5 acres of wetland in the project area. The study was submitted for jurisdictional determination review. The applicant does not anticipate impacting any wetlands, but should that be necessary, the applicant would obtain the needed permits.

Phase IA and Phase IB of the Archaeological Survey conducted by Dovetail Cultural Resource Group revealed Morrisworth Landscape Features (named for the property’s legal description, which indicates the property was previously a part of the Morrisworth Tract). These features include a road trace, dirt road, remains of three stone walls, and a cemetery off-site adjacent to the eastern property boundary. The Cemetery retains its integrity and is walled off while the Morrisworth Landscape were not recommended as eligible for inclusion on the National Register of Historic Places. No additional architectural or archaeological work was recommended following the results and review of the archaeological investigation.

## **CONFORMANCE WITH THE COMPREHENSIVE PLAN**

The subject property is governed under the policies of the *Loudoun County 2019 General Plan* (2019 GP), which places the property in the Transition/Lower Sycolin (TRANLS) Policy Area and within the Transition Large Lot Neighborhood Place Type (2019 GP, Chapter 2, Transition Policy Area Place Types Map). Public Facilities are considered a conditional use for this place type.

As part of this submission, Community Planning Staff reviewed the following for consistency with the 2019 GP: The applicant's SOJ dated August 3, 2022, and the CMPT/SPEX Plat dated July 12, 2022.

## **COMMISSION PERMIT**

### **Location**

The subject property is in an area identified as the Transition Large Lot Neighborhood Place Type and the proposed public utility service center is considered a conditional use in the place type, meaning it is considered on a case-by-case basis.

The 2019 GP envisions the Transition Policy Area (TPA) as "visually distinct from adjoining policy areas, providing expansive open space with publicly accessible recreational opportunities while accommodating a residential development pattern, consistent with the appropriate place types, that promotes environmental protection, housing diversity, quality design, economic growth, and protection of natural, environmental, and heritage resources" (2019 GP, Chapter 2, Transition Policy Area, Vision). Specifically, the 2019 GP requires maintaining 50% of the site as open space for recreational, agricultural and/or natural, and environmental and heritage uses.

The 2019 GP public facilities policies support the co-location of County facilities to increase operational efficiency and optimize the use of land (2019 GP, Chapter 6, Fiscal Policy, Strategy 1.1, Action B).

Review of the proposed CMPT/SPEX Plat shows that the proposed design and footprint still maintains the 50% of the site as open space on the property as per 2019 GP requirements. However, the applicant should provide a clear calculation pertaining to the total lot coverage resulting from the existing and proposed structure as part of the CMPT/SPEX Plat.

The proposed construction of the utility service center will require ground disturbing activities and the removal of a significant portion of the forest cover, in addition to what was already removed for the construction of the existing Academies of Loudoun facility. While a review of endangered and threatened species (ETS), conducted in April 2022 by WSSI, indicates that no natural heritage resources have been documented in the study area, the site itself lies within an Ecological Core (C5) that provides habitat for a wide range of species. The Virginia Department of Conservation and Recreation (DCR) recommends mitigation measures like incorporating natural

vegetation buffers and retaining natural corridors. The ETS review recognizes species of concern include the green floater, yet no perennial streams are within the site, the northern long-eared bat (no known hibernacula or maternity roosts are present within Loudoun County) and the monarch butterfly.

Following initial discussion with Loudoun County Natural Resources Team (NRT), concerns about severing the link of this continuous ecological corridor by cutting it off from the Goose Creek area with the loss of additional trees, many of which are mature trees over the 30 ft caliber. While the applicant proposes utilizing some of existing vegetation as a part of the planned site buffers, NRT and the Community Planning Staff do not view this as a sufficient measure to preserve the continuity of this ecological wildlife corridor.

The property also lies within the Reservoir Protection Area, delineated to provide "buffering and storm water quality controls" per the 2019 GP recommendations. Note 34 of the CMPT/SPEX Plat states that measures will be taken to address stormwater hot spot concerns and potential contamination from salt handling and oil spills due to engine repairs. Initial discussions with the NRT note the significant impact of salt handling as a pollutant in areas designated for reservoir protection. With salt being soluble in water, it cannot be easily filtered out which could lead to water resources salinization, rendering them undrinkable. While the applicant proposes underground storage tanks as one means of mitigating the impact of salt handling, there is concern about the efficacy, level of effort and cost to ensure proper emptying and disposal of these storage tanks and whether this method is sufficient to mitigate the risk. Furthermore, the applicant does not provide justification in the SOJ for moving this proposed use type facility from a site that is predominantly industrial in nature and does not lie within the reservoir protection area to this site where the risk of water contamination is greater. It is important to note that water separation methods mainly address oil spills while stormwater ponds and enhanced stormwater protection do not help in mitigating potential salt pollution on the site.

***At this time, Community Planning Staff does not find the general location of the proposed public utility service station in conformance with the policies of the 2019 GP, since the Plan highlights consistency with the appropriate place types and the importance of "protection of natural, environmental, and heritage resources". Community Planning staff recommends that the applicant provide further justification about the need to relocate an industrial use type facility into the Reservoir Protection Area.***

### **Character and Extent**

The County's policies require that "Transition Large Lot Neighborhood Place Type" projects be surrounded by natural buffers that visually screen the development from view of surrounding roads and from other developments (2019 GP, Chapter 2, Transition Large Lot Neighborhood).

In keeping with this requirement, the applicant proposes utilizing the existing hardwood tree cover supplemented by an evergreen tree buffer as a visual shield. This is in addition to locating the back wall of the pole barn storage structures to face outward for further screening from the adjacent Gulick Mill Road properties. The applicant plans to direct any security lighting inward and downward to the facility to minimize the overall light and visual impact of the proposed facility on the surrounding area.

The 2019 GP also calls for the "protection of adjacent environmentally sensitive areas such as the reservoirs and stream corridors" as well as protection of "natural and cultural resources". Furthermore, the 2019 GP Natural Heritage Resources Policy emphasizes the importance of "preventing habitat fragmentation; and reinforcing the unique character of the diverse communities in the County." The 2019 GP Plan requires creating "links to adjacent open space and natural resources to help prevent habitat fragmentation and foster biodiversity."

#### River and Stream Corridor Resources

A 50-foot management buffer surrounding the minor floodplain constitutes the River and Stream Corridor Resources (RSCR) on the subject property (*2019 GP, Chapter 3, Water Resources*). The 50-foot management buffer helps to promote river and stream health (streambank/streambed stability, temperature moderation nutrient removal, sediment removal, flood control, and aquatic food and habitat) (*2019 GP, Chapter 3, RSCR Strategy 2.2*).

In keeping with these requirements, the proposed facility steers away from floodplains, the existing water stream, and the moderate and steep slopes area. The applicant also attempts to retain as much of the tree cover as possible and proposes ways to protect the water reservoir through storm water management and addressing stormwater hotspot concerns. The applicant proposes several measures to address stormwater management concerns by proposing water separator treatment measures, salt contaminant ponds and below ground storage tanks to capture and treat runoff from areas subject to salt handling.

As discussed earlier, discussion with NRT highlighted concerns regarding the extent of further loss of trees resulting from building an additional structure and what that does to the continuation of the ecological corridor.

Furthermore, while this proposed use supports operational efficiency of the existing building and other public facilities, it is contradictory in nature to the educational and residential uses adjacent to it. It also poses a significant pollution risk to the water supplies due to the nature of its operation. The applicant's proposed mitigation measures do not seem sufficient in addressing the extend of disruption to the site's vegetation nor to the water supply, especially since the applicant does not provide

justification to the need for moving this industrial type of facility from its original location that more appropriately aligns with industrial type uses.

The 50-foot management buffer has not been delineated on the CDP. Community Planning recommends that the applicant demonstrate that all development is proposed to occur outside of the RSCR.

The applicant proposes a site design that addresses compatibility with nearby residential development and mitigates the potential light, glare, odor or other emissions that could negatively impact this area and the surrounding residential community. The closest portion of the proposed facility is to be no less than 250 feet from the common property line of Goose Creek Bend residential neighborhood. The existing hardwood trees supplemented by the planned evergreen tree buffer would act as a visual shield, as well as locating the back wall of the pole barn storage structures to face outward for additional screening. The inclement weather facility is planned toward the northern boundary and is designed to be approximately 1,200 feet from Goose Creek Bend community. The anticipated high activity on the site when mobilization for weather treatment at public facilities should occur only a few days during winter months. No other adverse noise, light, glare or odor impacts are anticipated from the proposed use.

The applicant also plans to direct any security lighting inward and downward to the facility. Community Planning requests that the applicant provide additional information about the lighting types used, height and intensity, as well as the operational safety measures related to this type of facility to ensure these operations do not compromise the health, safety, or welfare of users.

***Community Planning Staff has concerns about the extent of disruption and contamination to the site's natural environment and water resources from proposing an industrial type facility in the Reservoir Protection Area. The proposed public service utility center's visual impact on the surrounding area is generally mitigated by the proposed design and screening. The Community Planning Staff recommends that the applicant provide additional justification and information regarding the need for relocating the facility to this site, as well as provide additional information regarding stormwater controls, avoidance of the RSCR, lighting and operational safety measures.***

## **SPECIAL EXCEPTION**

The "public utility service center and storage yard" use type require a special exception if located within the TR-10 district. The 2019 GP public facilities policies support the co-location of County facilities to increase operational efficiency and optimize the use of land (2019 GP, Chapter 6, Fiscal Policy, Strategy 1.1, Action B).

The purpose of the subject property is to maintain LCPS and County facilities during inclement weather, which directly supports public facilities by keeping them safely accessible during snow and other severe weather conditions. While this co-location follows the 2019 GP preference stated above, locating this type of industrial facility

in the Reservoir Protection Area poses a significant concern regarding water quality controls and contradicts the zoning purpose and intent to “Protect drinking water resources” in TR-10 districts (section 2-1401). This proposal also contradicts the intent to “Facilitate the protection of the 300-foot buffer along the Goose Creek and the Goose Creek Reservoir and the Beaverdam Reservoir” stated in section 5-701 of Transition (TR) Districts Lot Standards.

In addition, further loss of vegetation resulting from another building proposed on this site threatens the continuation of the Ecological Core (C5) that provides habitat for a wide range of species, resulting in the loss of biodiversity and natural habitat.

Lighting, as discussed above, is a potential nuisance to existing nearby residential development. All facility lighting should be identified on the SPEX Plat and the applicant should provide information regarding intended fixtures and how they will ensure that they are not causing compatibility concerns for nearby residential uses. These commitments should be included as Conditions of Approval.

Further detail is needed on the type of loaders and the number/type of heavy equipment to be parked or serviced on site and the level of noise generated by these vehicles and equipment. Community Planning also requests that the applicant provide information pertaining to operational safety, specifically, how will the applicant ensure that the proposed facility will not pose an undue safety risk for students, faculty, staff, and other visitors?

***Community Planning Staff finds the proposed public utility service center supportive to the existing LCPS and County facilities. However, Staff cannot support the request at this time due to the concerns regarding water quality controls and loss of forest cover.***

## **RECOMMENDATIONS**

The proposed public utility service center on the subject property provides the necessary services to increase operational efficiency of public facilities during inclement weather. At this time, Community Planning Staff does not find the general location, character, and extent of the proposed facility to be in conformance with land use policies of the 2019 GP and recommends that the applicant provide further justification regarding the need to relocate this type of facility from an industrial location compatible with its operations to a location within the Reservoir Protection Area. This relocation poses a risk to the protection of environmental features and water quality controls. The Community Planning Team recommends that the applicant provide additional information regarding location justification, stormwater controls, avoidance of the RSCR, lighting and operational safety measures.

While the Community Planning Staff finds the SPEX request to permit the proposed “Public utility service center and storage yard” in keeping with the supportive uses

for existing County facilities, Staff do not support the request due to concerns over the Water Reservoir Area contamination and additional loss of tree cover on the site.

Community Planning Staff would be happy to meet with the applicant to discuss any comments or questions.

Cc: Joshua Peters, AICP, Principal Planner, Community Planning (via e-mail)