

Loudoun County School Board
Academies of Loudoun Service Center
CMPT-2022-0003 & SPEX-2022-0038
Response to First Referral Comments (October 3, 2022)
December 7, 2022

Department of Building and Development - Land Development

Comments Dated September 22, 2022

Comment 1: The Department of Building and Development, Land Development Planning Division, has completed its first review of this application and has no comments.

Response: Acknowledged.

Department of Planning and Zoning – Community Planning

Comments Dated September 22, 2022

Comment 1: At this time, Community Planning Staff does not find the general location of the proposed public utility service center 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.

Response: The proposed public utility service center is proposed in the Transition Policy Area, Large Lot Neighborhood Place Type, which conditionally allows public uses. The proposed service center is appropriate in this location because the facility has been designed to ensure the protection of natural, environmental, and heritage resources. Further, it has been situated to minimize impacts to the adjacent uses, including the residential neighborhood to the south.

The existing inclement weather facility, located at the County’s government center on Sycolin Road, is of inadequate size. LCPS grounds operation are also located on Sycolin Road on a separate site. Neither of these facilities meet today’s needs efficiently and will not be able to meet the future service demand. The Sycolin Road property has always been a temporary location. These facilities need to be relocated as soon as possible to accommodate other County programed facility needs.

LCPS and the County have developed a process for the review of sites needed for new school and associated support facilities, such as the proposed public utility service center. As a part of the Capital Improvement Plan the service area for planned facilities is identified along with the development scope to determine the site requirements (acreage, access, building square footage, parking, and similar project needs). Potential sites are then identified within the desired service area and evaluated to determine feasibility. LCPS staff initially identifies potential sites, conducts an analysis of these properties, and presents the sites to the Land Matrix Team (LMT). The LMT is comprised of County and LCPS staff from various departments to provide a comprehensive review. The LMT considers the sites,

offers input, and may suggest additional sites for evaluation. Collectively, the LMT determines the sites to be taken forward to the decision makers (School Board and Board of Supervisors) for consideration.

The desired location for the proposed public utility service center is Central Loudoun because it affords good access to the overall County. This proposed facility was first identified in the FY2018-FY2023 School Board Adopted Capital Improvement Program (CIP), dated November 29, 2016. Initially, a site was to be provided within the County government center property on Sycolin Road. However, after consideration of various sites at this location, in 2020 it was determined an alternate site would be needed. (A change in the Countywide Transportation Plan placed a future road alignment through one desired site and physical constraints on other sites did not allow for all the service center components to be accommodated.) A search within the Central Loudoun area was undertaken to identify potential properties. **Twenty-three** sites were considered, many of which could not be utilized due to insufficient size. Other sites could not be utilized because of topography, vehicular access, insufficient utilities, zoning requirements, easements, and/or purchase by others during the study period.

After five years of searching for a site, the Academies of Loudoun property was selected because it:

- is centrally located
- possesses good access
- is physically suited for development
- is of sufficient size to combine the LCPS grounds maintenance and inclement weather operations
- will support the County's inclement weather operations
- is large enough to be developed and protect the site's environmental resources
- will allow the use to be effectively buffered from adjacent properties and Gulick Mill Road
- is already owned by LCPS (no additional land costs), and
- will meet the service needs for the foreseeable future (30 years plus).

In terms of use, the service center is predominately storage. For most of the year, the service center operates with 20 employees, 16 of which report to the site to switch into their work trucks and go to other locations for the day. Four employees will work at the small engine repair shop. The typical workday (M-F) hours are 6:30 a.m. to 3 p.m. The use generates minimal traffic, lighting, and noise. During snow and ice events, the site will be utilized as an inclement weather facility for LCPS and County facilities. These hours are typically from 4 a.m. to 8 p.m. On average, the inclement weather facility component is mobilized ten times a year. The inclement weather facility has been intentionally positioned away from the residential neighborhood located to the south and is 960 feet from the common property boundary with the Goose Creek Bend community.

LCPS operates and maintains over 100 schools and support facilities. As the County's growth continues, so will the LCPS and County facilities necessary to meet public service demands. This facility is designed to support the current and future needs of LCPS for centralized grounds and inclement weather operations as well as the County's inclement weather operations. All aspects of the use will be addressed as a part of the site design and operation including environmental protection, a comprehensive stormwater management plan, the provision of substantial buffering, and minimized

lighting. Additional detail on these measures is provided in the Community Planning Comment Responses # 2 and 3 below.

Comment 2: 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.

Response: The site design recognizes the Reservoir Protection Area (RPA) and provides for its protection. The service center project will be located outside of the River and Stream Corridor Resource (RSCR) except for the small, perpendicular encroachments necessary to provide adequate drainage outfall. The on-site RSCR ranges in width from approximately 300-445 feet. Please reference the Special Exception and Commission Permit Plan.

Comprehensive Stormwater Management Plan

A comprehensive stormwater management plan addressing water quality and quantity will be provided as a part of the site plan submission for the project. Water quality for the project will be provided by multiple manufactured treatment devices compliant with Virginia Stormwater BMP Clearinghouse (the "Clearinghouse") Practice 17 for Filtering Devices, and the creation of significant areas of Virginia Runoff Reduction Method (VRRM) land cover easement over onsite undisturbed open space and wooded areas, to be determined as a part of final engineering. This easement will ensure that no development will occur within these areas, which will include the RSCR. Additional water quality treatment methods may include extended detention volumes designed in accordance with Clearinghouse Practice 15 in one or both proposed above ground ponds or by other methods approved by the Clearinghouse and Loudoun County.

All water quality requirements for the project will be met onsite, without the purchase of offsite nutrient credit as allowed by State and Loudoun County regulations.

Water quantity for the project will be provided by two above ground detention ponds. Both ponds will be designed to reduce peak flow rates to meet the Channel Protection and Flood Protection requirements of Section 5.230 of the Loudoun County Facilities Standard Manual (FSM). Since both ponds will discharge to a natural conveyance system, Channel Protection requirements will be demonstrated per the Energy Balance methodology of FSM 5.230.A.2.c. The maximum peak flow rate of the 1-year, 24-hour rainfall event from the proposed improvements will be reduced to less than the flow that would be generated from the same area in a completely forested condition.

The proposed service center includes the parking of trucks, a truck/equipment wash, and small engine repair facility. Under the County's FSM (Section 5.230.C.1.) these uses are considered to be stormwater hotspots. There will be a comprehensive treatment train in place for all runoff from these hotspot areas. A treatment train utilizes multiple processes to maximize the control and treatment of pollutants.

Before the runoff is allowed to leave the site, it will be directed first to hydrodynamic separators where the runoff will be cleaned of oil, trash, debris, and other materials that are undesirable in the natural environment. As noted in the Table 10 of FSM Section 5.230, hydrodynamic separators are Loudoun County's preferred treatment method for runoff from areas subject to oil and hydrocarbons because of their efficient separation of oil, sediment, and debris and their relative ease of maintenance.

Discharge from the hydrodynamic separators, which will have been cleaned of oil, other hydrocarbons and other debris, will then be directed to water quality filtering devices, which will provide for phosphorous removal. Finally, the discharge from the water quality devices will be directed to the above ground stormwater management ponds where peak flow reduction will occur prior to discharge into the drainage channel. The proposed treatment train will ensure that stormwater runoff from the site will strictly comply with all channel protection and flood protection requirements mandated by the County and State.

Salt Storage and Handling Management

The northern portion of the site is to be utilized for the storage of materials (salt, sand, and stone dust) that will be used to treat LCPS and County facilities during snow and ice events. The average number of yearly mobilizations for inclement weather treatment from 2016-2021 was ten. While limited in use, this facility is critical to the operations of LCPS and the County and is part of the overall County emergency response plan.

The storage and use of salt requires special handling. The proposed facility has been consciously designed for salt containment, limiting salt exposure, and capturing any stormwater runoff proximate to the salt storage, loading, and unloading area. The salt will be stored inside a roofed, walled building that will be completely protected from the elements. Salt deliveries to the facility and salt loading to individual salt trucks will occur under roof and on a partially roofed "salt pad" that will be surrounded by a containment berm. No runoff in this area will be allowed to leave the salt pad uncontrolled. The salt pad will drain to an inlet or series of inlets within the pad. Pipe(s) leading from the inlet(s) will convey the water to a valve specially designed for use in salt water. Prior to the beginning of "salt season", which is generally defined as November through March, the valve will be pre-positioned such that all runoff from this area is directed to underground double-walled tanks. The tanks will be made of fiberglass or other material that is impervious to the effects of salt. The tanks will be completely self-contained and will not have any possibility of discharge to the downstream or natural drainage systems. The tanks will function as cisterns to capture and hold all runoff that comes from the salt storage/pad area. The tanks will be equipped with overflow and leak detection systems to prevent potential salt water from inadvertently escaping the tanks into the natural environment. As is customary for salt handling sites, the tanks will be sized such that they will be pumped out on an as needed basis to either onsite brining operations or offsite to an approved receiver of salt-water during "salt season". The estimate of pumping operations is based on historical weather precipitation data provided by the National Weather Service, but actual pumping operations will be determined by measured precipitation and the water levels in the tanks.

The control valve will remain in its “salt season” position (directing all water to the tanks) until at least April 1 each year. Before the valve position is changed at the end of “salt season”, the “salt pad” will be thoroughly swept, washed down and cleaned of salt. After the final cleaning and rinsing of the pad, the tanks will be pumped one final time for the season so that salt water is not allowed to sit stagnant in the tanks. Once the salt pad is cleaned and the tanks are pumped empty, the valve will be positioned to direct water from the now-clean pad to the onsite storm drainage system. The storm drainage system will route runoff to a manufactured water quality filtering device and eventually into one of the above ground stormwater management ponds that will provide the required peak flow reductions. No salt deliveries, loading, unloading, or other handling operations will occur while the valve is set to the non “salt season” position. Should any salt activities need to occur outside of “salt season”, the valve will first be set back to the “salt season” position. Upon completion of the out of season salt activities, the pad shall be thoroughly cleaned as described and the tanks pumped before returning the valve to its non “salt season” position.

There are two additional areas on the south side of the site that will require capture and storage of runoff from areas that may be subject to salt activities. Salt trucks will be parked in the three large pole barns at the south and west side of the site. Even though the pole barns will be roofed and only limited precipitation will fall on the stored salt trucks, the floor of the pole barns will be sloped such that all runoff from under the pole barn roofs will be contained and directed to an underground tank(s). Likewise, the truck wash bay will be surrounded by a small berm or depressed slightly such that all wash water will be contained and directed to an underground tank(s). As with the salt containment system on the north side of the site, these tanks will be pumped regularly and will be provided with a diverter valve so runoff from areas subject to salt is only allowed to flow into the underground tanks during the salt season. In non-salt season periods, once these areas have been thoroughly cleaned of salt, the valves may be switched so that the runoff is directed to the hydrodynamic separators, manufactured treatment devices, and stormwater management ponds.

Stormwater Pollution Prevention Plan

A comprehensive stormwater pollution prevention plan (SWPPP) will be developed by the applicant and submitted to and approved by Loudoun County prior to issuance of the Virginia Stormwater Management Program (VSMP) Permit and the approval of the Site Plan application for the improvements proposed with this Special Exception and Commission Permit. The SWPPP will contain detailed information much of which will be specifically related to the hotspot and salt storage and handling areas noted above, as well as stormwater controls related to construction of the proposed improvements and the day-to-day use of the site once construction is complete. The SWPPP will provide detail on spill prevention, control, and cleanup measures, in the unlikely event of a spill or accident. The SWPPP will provide names and contact information of responsible parties in the event of any emergencies. Detailed operation and maintenance instructions for the hydrodynamic separators and the entire system designed to capture and hold salt water will be included in the SWPPP.

Lighting:

Lighting will be located such that the entire Academies of Loudoun Service Center facility will be fully compliant with all requirements of 5-1504 of the Loudoun County Zoning Ordinance, including less than 0.25 foot-candle measurement above background light levels at the property line, and all lighting will be directed downward and inward to the site with cutoff and fully shielded fixtures. Lighting will be provided inside the pole barns and materials storage building, affixed to the ceiling, directed downward toward the inside of the buildings. There will be parking lot and access road lighting and low-level security lighting at the entry doors to the small machine repair shop and loader garage. During mobilization the inclement weather facility will be fully lighted to allow for the loading of trucks and to provide for safety in maneuvering of vehicles. Operation for this facility begins at 4 a.m.

A lighting plan depicting the proposed location of lights for this facility has been included in the Special Exception/Commission Permit Plan, Reference Sheet 8.

Operational Safety:

LCPS personnel are trained to operate the equipment and vehicles used for grounds and inclement weather maintenance. This training includes safe handling of all substances utilized in this facility such as fluids in the equipment being repaired and the management of salt. The grounds facility will be fenced and the salt storage will be contained within an enclosed structure.

There will be no conflict between the use and the adjacent Academies of Loudoun. The hours differ with the grounds operations beginning at 6:30 a.m. and finishing by 3 p.m. The Academies of Loudoun start time is 9:30 a.m. with dismissal at 3:30 p.m. The mobilization of the inclement weather facility begins at 4 a.m. and ends by 8 p.m. and is typically on days when schools are either delayed or closed. The Academies of Loudoun and the proposed service center will be separated by over 600 feet (measured from the rear of the Academies building to the proposed project area).

Comment 3: 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.

Response: As noted in Comment Response #2 above, significant water quality controls will be provided to ensure compliance with State and County stormwater quality (and quantity) requirements, stormwater hotspot requirements, and additional containment of runoff associated with the area proximate to the salt storage and handling. There will be loss of forest cover in order to develop the site. However, significant areas of mature forests are being preserved in close proximity to the existing Academies of Loudoun and the proposed facility. A total of approximately 2,500,000 square feet of the site will remain wooded after development, which exceeds by a factor of almost 2.5 the County's requirement (20% of the site per TR-10 regulations). The proposed landscaping and buffering plan provides for the planting of 600+ evergreen trees around the proposed facility to afford a year round screen.

Loudoun County School Board
Public Utility Service Center
CMPT 2022-0003, SPEX 2022-0038
December 7, 2022

Department of Transportation and Capital Infrastructure

Comments Dated September 28, 2022

Comment 1: DTCI has reviewed the Applicant's Trip Generation Memorandum and finds it to be an acceptable evaluation of this development as proposed.

Response: Acknowledged.

Comment 2: The subject property is accessible from Sycolin Road and via an emergency-only access point on Gulick Mill Road. The current application does not propose changes to the site access. The existing access is acceptable to DTCI.

Response: Acknowledged.

Loudoun County Fire and Rescue & Fire Marshal's Office

Comments Dated September 13, 2022

Comment 1: The Loudoun County Fire Marshal's Office (FMO) has no comments or objections to the approval of the commission permit and special exception requests for the project. If there are any changes to the plans include the Fire Marshal's Office in review to ensure fire code compliance.

I. Requirements: From the current Loudoun County Fire Prevention Code (LCFPC) and Loudoun County Facilities Standards Manual (FSM)

1. None.

Response: Acknowledged.

Goose Creek Scenic River Advisory Committee

Comments Not Dated

Comment 1: The proposals by the School Board will introduce hazardous substances that are harmful to the health of the waters of the creek and surrounding vegetation. Further, removing and disturbing the existing natural resources of the site will erode the ecological vitality of the corridor.

Response: All substances that could be considered harmful to the environment will be controlled, either in accordance with requirements already established by Loudoun County, or with measures that are designed specifically for this proposed use.

Tested and proven manufactured treatment devices providing oil and water separation will be used to treat runoff from all areas of the site that are considered to be a stormwater hotspot by Loudoun County. These treatment devices have been approved by the State of Virginia to provide water quality control treatment. The specific devices that are proposed for this project have been approved by the County on numerous prior applications that required runoff control from a use considered to be a stormwater hotspot.

Loudoun County School Board
Public Utility Service Center
CMPT 2022-0003, SPEX 2022-0038
December 7, 2022

During the time of year when salt handling (delivery, storage, loading, etc.) operations are active (“salt season”), all runoff from areas that are subject to salt handling will be directed to containment facilities designed to capture and store the runoff. As they fill with runoff, the containment facilities will be pumped out on an as needed basis each “salt season” to either the onsite brine facility or to tanker trucks and then hauled offsite to other brine facilities. The containment facilities will not discharge to any downstream drainage improvements or to the natural stream, and during “salt season” no runoff from salt handling areas will be allowed to enter the storm drainage system, SWM ponds, or the natural stream.

Please reference Community Planning Responses, pages 1-6.

Comment 2: The proposed plat identifies potential storm water management/best management practice sites, but their use and efficacy is not detailed or outlined. The committee questions whether adequate studies have been performed and examined.

Response: In response to referral comments and in advance of the site plan, the applicant’s engineer has performed preliminary engineering design of the measures required to treat and control stormwater on the project. The stormwater ponds shown on the Special Exception and Commission Permit Plan have been preliminarily sized and will be designed in accordance with all applicable standards and approved by Loudoun County with the Site Plan. All measures will be designed and analyzed in accordance with all applicable State and County requirements such that water quantity and water quality requirements will be satisfied for the site. In addition, all County requirements regarding stormwater hotspots and additional containment of runoff in the area associated with the storage and handling of salt will be provided as part of the project. Please reference the Applicant responses to Community Planning for the details of the comprehensive stormwater management plan on pages 2-5 of this response.

Comment 3: The applicant cites the 2019 comprehensive plan in support of its expansion to this site. The GCSRAC cites the same plan for its concerns for the preservation of open space, natural areas, and old growth forests. Under the applicant’s plans the forested area would be permanently lost, after over a century of standing and growing. Wildlife in the area would suffer a substantial negative setback due to the proposed operations. Noise and light alone will drive many species from the area, and the potential for hydric infiltration threatens lesser species in the chain, all having a negative ripple effect.

Response: It is acknowledged that existing trees will be removed to develop the proposed use. The applicant’s proposal, however, preserves the entire RSCR and associated buffer on the subject property, other than small, perpendicular, linear encroachments to provide adequate outfalls to the drainage channel. Including the proposed project, a wooded corridor of approximately 5,600 feet in length exists from the site’s northern boundary to Goose Creek. There are existing breaks in this corridor at Creek Bend Place, an existing utility crossing near Halprin Court, and the existing access drive on the Academies of Loudoun site. No additional breaks will be created in this corridor with the proposed plan. There will be a minimal 4-foot widening of the existing Academies of Loudoun service drive across the corridor at the very upstream end of the RSCR that represents less than approximately 0.07% of the overall corridor length and which will have negligible impact to the health and quality of the corridor.

Loudoun County School Board
Public Utility Service Center
CMPT 2022-0003, SPEX 2022-0038
December 7, 2022

Lighting of the facility will be minimized. Pole barns will be lit from the inside, with ceiling lights that are directed downward and inward within the structure. The pole barn lighting is intended to be operational and will only be illuminated when the staff are on site working in the barn or adjacent area, they will not be illuminated when the facility is not occupied. Low level security lighting will be installed, also directed downward and inward to the site. Except for the few days when the inclement weather operations are mobilized, site activities will be during daylight hours. Daily noise from the site will be similar to surrounding uses. There will be 20 employees that report daily to the site with four remaining and 16 switching to work trucks to travel for work off-site for the day. There will be increased site activity when the inclement weather facility is mobilized. The site will comply with all County regulated noise and light standards. The comprehensive stormwater plan has been detailed in this response, please reference the response to Comprehensive Plan on pages 2-5.

Comment 4: The GCSRAC finds the proposal to be inconsistent with protecting the Goose Creek Scenic River corridor in many regards as noted above. Further, the GCSRAC questions the need for improving the site, especially at the detriment to the creek. Staff is urged to consider these observations and review the proposal more closely for its detrimental aspects.

Response: The measures incorporated to protect the Goose Creek Scenic River corridor, the Reservoir Protection Area, and the RSCR have been detailed in this response to referral comments. The site has been consciously designed to ensure the protection of its natural resources. LCPS respectfully submits that there is a balance necessary to allow development while preserving environmental features.

The need to improve the property stems from the requirements associated with the maintenance and operation of 100+ LCPS facilities, which ultimately serve the greater community. After an extensive review of potential sites (23) in the Central Loudoun area, the Academies of Loudoun property was selected because it affords the size, location, and physical characteristics suitable to accommodate the proposed use. The GCSRAC rightfully requested additional information on how the identified resources would be protected. The additional information has been provided with this response. Please reference the response to Community Planning on pages 1-6.

Loudoun County Health Department

Comments Dated September 21, 2022

Comment 1: This Department reviewed the package and the plat prepared by Urban, LTD dated August 4, 2022. Staff supports the approval of the application with no additional comments.

Response: Acknowledged.

Loudoun County School Board
Public Utility Service Center
CMPT 2022-0003, SPEX 2022-0038
December 7, 2022

Department of Planning and Zoning – Archaeology (Community Planning)

Comments Dated August 24, 2022

Comment 1: Dovetail’s fieldwork and reporting meet the standards for Phase I cultural resource investigation set forth in the County’s HPP and the Virginia Department of Historic Resources’ 2017 Guidelines for Conducting Historic Resources Survey in Virginia. Staff concurs with the consultant’s findings and recommendations. As the Etcher Cemetery lies approximately 2,255 feet (0.43 miles) east of the limits of disturbance proposed by the current application, the buffering required by Section 5-1405 of the County’s 1993 Revised Zoning Ordinance is not triggered. No additional cultural resources investigations of this property are recommended prior to approval of this application.

Response: Acknowledged.

Comment 2: Staff recommends that the applicant amend Note #21 on the plat in conformity with Facilities Standards Manual Section 8.101.A.21 to include the full titles, company names, and completion dates of the Phase I cultural resources survey completed for the property. Staff recommends the existing text of Note #21 be struck and the following inserted in its place: *A Phase I cultural resources survey report, Phase IB Cultural Resource Survey of the 119-Acre Academies of Loudoun Project Area, Loudoun County, Virginia, was prepared for the property by Dovetail Cultural Resource Group in January 2015. The survey identified no archaeological sites, cemeteries, burial grounds, graves, or other significant historic or cultural resources on the property. The Etcher Cemetery (053-6361/PCEM-1998-0048) on adjoining PIN 195-49-0704 is not adjacent to the limits of disturbance and not be impacted.*

Response: Note 21 has been updated as requested.

Department of Building and Development - Natural Resources Team

Comments Dated September 22, 2022

Comment 1: The plat identifies the existing emergency access road being widened and paved and the existing culverts being extended as part of the proposed project. Please note that an approved floodplain alteration (FPAL) for the widening of the existing floodplain crossing will be required prior to approval of the site plan application. (FSM 5.422)

Response: Acknowledged that a new FPAL will be required. A note confirming the applicant’s acknowledged and commitment to preparing a new FPAL has been added to the plan on Sheet 04.

Comment 2: FPST-2015-0002 was approved for the subject property on July 24, 2015. The previous modeling does not account for the updated rainfall standard. Please note that the floodplain study may need to be updated at the time of site plan to account for the correct rainfall and flow conditions. Staff recommends coordination with the Floodplain Management Team in the Department of Building Development regarding the floodplain study requirement. (FSM 5.411)

Response: Acknowledged that a new FPAL will be required. A note confirming the applicant's acknowledgement and commitment to preparing a new FPAL has been added to the plan on Sheet 04.

Comment 3: 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)

Response: RSCR has been added to the plan on Sheet 4 and a separate exhibit has been included as Sheet 07.

Comment 4: 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.

Response:

a & b: There will be minimal disturbance to the ecological core around the floodplain. The entire RSCR is being preserved other than minor disturbances that are required for adequate outfalls to the drainage channel. The applicant has provided detailed information regarding this corridor in the response to the Comprehensive Planning and the Goose Creek Scenic River Advisory Committee comments. Please reference pages 2-8.

c: Trees native to Virginia will be used in all landscaping to provide for pollinators, migrant birds and other wildlife.

Comment 5: 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) Include all Tree Conservation Areas and specimen trees on Concept Development Plan Sheet. (SPEX Checklist J.1)
- b) In addition to the TCA, Staff further recommends a condition consistent with the Tree Conservation Area proffer template.

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

Response: a & b: Tree conservation areas and specimen trees are shown on the Special Exception and Commission Permit plan. The applicant will incorporate a VRRM Land Cover easement over onsite undisturbed open space and wooded areas. The size and configuration of the VRRM easement is to be determined as a part of final engineering. This easement will ensure that no development will occur within these areas which will include the RSCR.

c: The site layout locates the proposed service center outside of the RSCR except for the small, perpendicular encroachments necessary to provide adequate storm drainage outfall. All efforts have been made to minimize impacts. The on-site RSCR ranges in width from approximately 300-445 feet. Including the proposed project, a wooded corridor of approximately 5,600 feet in length exists from the site's northern boundary to Goose Creek providing an extensive habitat corridor. There are existing breaks in this corridor at Creek Bend Place, an existing utility crossing near Halprin Court, and the existing access drive on the Academies of Loudoun site. No additional breaks will be created in this corridor with the proposed plan.

The entire site is located in the Reservoir Protection Area. As such, it is not possible to locate stormwater controls outside of this area. As noted above, stormwater controls are located outside of the RSCR except for required outfalls. A comprehensive stormwater plan is proposed for this facility addressing stormwater quality, quantity, hotspots, and control of runoff associated with the salt storage and handling. Please reference the responses to Comprehensive Planning on pages 2-5.

Comment 6: Staff notes that there are multiple specimen trees identified on CDP.

a) For any specimen trees that are to be preserved, staff recommends a proffer consistent with the Specimen Tree proffer template.

Response: The Applicant will preserve specimen trees where feasible and has provided a development note consistent with the proffer template on the proposed plan. (Reference Sheet 06)

Comment 7: The property drains to Goose Creek. Goose Creek has been listed by the Virginia Department of Environmental Quality (DEQ) as impaired for aquatic life (aquatic insects and other small organisms that live on the stream bottom). In addition, the County's 2009 Stream Assessment Project found Goose Creek to be suboptimal for habitat and stressed for aquatic life. Impacts to water quality are an issue for consideration as part of the application. Consistent with the River and Stream Corridor Resources Strategy 2.3 Action B and Strategy 2.4 Action A of Chapter 3 of the 2019 General Plan staff recommends the following:

a) Staff requests additional information regarding how stormwater will be addressed within the site, recent research from Virginia Tech suggests that "that modern stormwater management practices are not protecting surface waters from road salt contamination and suggest they create contaminated plumes of groundwater that deliver Cl⁻ and Na⁺ to streams throughout the year." (J. Snodgrass, 2017) This research suggests that stormwater ponds will not be an appropriate strategy for managing saline runoff from this facility.

b) Staff has significant concerns about locating a proposed use with strong potential for water pollution stemming from vehicle maintenance, salt mixing and storage in a sensitive area in close vicinity to Goose Creek, and within the reservoir protection area. Staff would encourage consideration of alternative sites, with less potential for habitat loss and impact to sensitive watersheds.

c) Salinization of urban water supplies due to road salt runoff is an increasing and serious concern in drinking water sources throughout the region, without clear solutions beyond avoiding introduction of salt into water bodies used for drinking water. See further documentation: *Salt in fresh water sources becoming worrisome in D.C. region, experts say - The Washington Post*

Response to parts a, b, and c:

- a. The proposed stormwater management plan provides specific measures to address salt storage and the handling of salt. The applicant agrees that stormwater ponds do not address salt storage, nor are they intended to. Please reference the proposed stormwater management for the inclement weather facility under the Community Planning referral response on page 4.
- b. The proposed facility has been designed to prevent impacts to the sensitive areas on site and within the Resource Protection Area. (Please note that on site vehicle maintenance is not part of the proposed project. A small engine repair facility is proposed to maintain grounds and similar equipment.) LCPS considered numerous sites within the Central Loudoun area for the proposed facility. The Academies of Loudoun site was selected because it affords the opportunity to provide land area for the predominately storage use while protecting the environmental features. Please reference pages 1-6 for details on the comprehensive stormwater plan, the storage and handling of salt, and the site selection.
- c. Please reference page 4 for the management of salt storage and handling on-site.

Comment 8: Staff requests additional information within the statement of justification that addresses the need for locating this use on a previously undeveloped site as opposed to alternative options for co-locating the use on an alternative site that would not result in the natural resource impacts proposed by this application.

Response: Additional information regarding the site selection and the protection of natural resources is provided in this referral response (reference pages 1-6) and has been added to the Statement of Justification. While the proposed location of the service center is undeveloped, it is important to note that the 119-acre Academies of Loudoun site is not undeveloped. The front portion of the site is the home to a 340,000+ square foot educational center. The property is large which allows for a co-located use that will protect environmental resources while efficiently utilizing public resources. As with every development there will be changes to the existing natural resources. The Applicant respectfully submits that there should be a balance between preservation of resources and allowing development to occur in a responsible manner with the protection of significant environmental resources.

Loudoun County School Board
Public Utility Service Center
CMPT 2022-0003, SPEX 2022-0038
December 7, 2022

Comment 9: Staff requests a calculation of the site's impervious surface area in its existing condition, compared with its proposed condition.

Response: Impervious area measurements have been added to Sheet 01 of the plan.

Comment 10: 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.

Response: The salt storage and mixing area has been designed to contain both the materials and runoff around this area. No adverse impacts are anticipated. Please reference the response to Community Planning, page 4).

Comment 11: 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.

Response: The proposed facility will not impact the existing or future programming of the Academies of Loudoun. Significant areas of mature forests are being preserved in closer proximity to the Academies of Loudoun, including areas directly adjoining the building and the area of the floodplain, which could serve for potential curriculum purposes, if desired. As noted previously, the RSCR are being preserved with a width of 300-445 feet.

Loudoun County Fire and Rescue

Comments Dated October 6, 2022

Comment 1: Thank you for the opportunity to review the above captioned application. The Fire and Rescue Planning Staff has no comments. The Fire-Rescue GIS and Mapping coordinator offered the following information regarding estimated response times: PIN 194-16-6764; Ashburn, Station 6 Travel Time, 3 minutes. Travel times are determined using ESRI GIS network analyst along the county's street centerline with distance and speed limit being the criteria. Travel time is reported in minutes. For the approximate response time two minutes is added for turnout time. Approximate Response Time for Ashburn, Station 6, 5 minutes.

Response: Acknowledged.

Loudoun Water

Comments Dated September 22, 2022

Comment 1: Loudoun Water has reviewed the referenced referral application and offers no objection to its approval. Please note that proposed water and sewer construction will need to be approved by Loudoun Water through the UER process. Public water and sanitary sewer service would be contingent upon the developer's compliance with the Authority's Statement of Policy; Rates, Rules and Regulations; and Design Standards.

Loudoun County School Board
Public Utility Service Center
CMPT 2022-0003, SPEX 2022-0038
December 7, 2022

Response: Acknowledged.

Department of Planning and Zoning – Zoning Administration

Comments Dated August 30, 2022

Comment 1: In the Proposal section of the Statement of Justification, remove any of the references to the buffer landscape waiver (WAIZ-2022-0010) as this was withdrawn and no longer applies.

Response: References to the WAIZ have been removed, and a modification request to permit the use of evergreen tree plantings in lieu of a six foot in height fence, wall or berm is included with this resubmission. The proposed buffers have been included with the landscape plan as part of the Special Exception and a Minor Special Exception has been requested to modify the buffer requirements.

Comment 2: For the Overlay districts, it is recommended that when referencing the Airport Impact Overlay District to state that the subject property is partially in the Airport Impact Overlay District.

Response: AIOD reference has been updated as requested to state that the site is partially within the district.

Comment 3: For the narrative describing the Floodplain Overlay District and Steep Slopes, refer to the districts as “the site contains minor floodplain and moderate and very steep slopes”.

Response: The narrative has been updated, although we note that there are no steep slopes on the portion of the site to be developed with this project.

Comment 4: When discussing the small engine repair facility, add in phrasing describing the use as accessory (incidental/subordinate) to the public utility service center.

Response: The small engine repair has been described as an accessory use in the statement of justification.

Comment 5: In the second submission of the Statement of Justification, include a narrative regarding the proposed SPMI-2022-0006 and address the Issues for Consideration in Section 6-1309 as they relate to the proposed SPMI-2022-0006.

Response: The Statement of Justification has been updated to include a discussion regarding SPMI-2022-0006 and the associated factors for consideration as recommended.

Comment 6: Zoning Administration staff defers to Community Planning Staff regarding whether the proposed commission permit and special exception are consistent with the Comprehensive Plan.

Response: Acknowledged. No response required.

Comment 7: Zoning Administration staff defers to the Natural Resources staff regarding whether the proposed special exception adequately protects and mitigates impacts on the environmental or natural features on the site.

Response: Acknowledged. No response required.

Comment 8: Zoning Administration staff defers to the Historic Preservation staff in Community Planning regarding whether the proposed special exception adequately protects and mitigates impacts on archaeological or historic features.

Response: Acknowledged. No response required.

Comment 9: Zoning Administration staff defers to Transportation staff regarding whether the proposed special exception is served adequately by roads, pedestrian connections, and other transportation services.

Response: Acknowledged. No response required.

Comment 10: General Note 3- For all of the of applications related to this site, add in the application names and approval dates.

Response: The approval dates and names of all associated applications have been added to the note.

Comment 11: General Note 4- Add in language regarding the accessory small engine repair.

Response: The small engine repair has been indicated as accessory in the note.

Comment 12: General Note 6- Provide a citation for Section 2-1400 as the site will need to comply with development regulations of that section of the Zoning Ordinance in addition to the additional standards in Section 5-621.

Response: The notes have been updated to denote compliance with 2-1400 and 5-621. This appears in Note 5 on Sheet 01.

Comment 13: General Note 14- Zoning Administration staff recognizes that the proposed use is located on a school site, however, the lighting standards of Section 5-666 do not apply as the proposed use is for a public utility service center and not a school.

Response: Reference to 5-666 has been removed from the note since this proposal is not for a school use.

Comment 14: Zoning Tabulations- For the Zoning, remove the density of 1 residential unit as this application is not for residential development.

Response: The reference to 1 du/10 ac has been removed from the tabulations.

Comment 15: Proposed GFA Table- It appears that the "Total Prop. GPA" is meant to be Total Prop. GFA, clarify if that label is meant to be GFA.

Response: The "GPA" typo has been revised to "GFA"

Comment 16: For the zoning tabulations, recommend showing all gross floor area measurements together and then the outdoor storage tabulation.

Response: The tabulations have been regrouped as requested.

Comment 17: On the CMPT/SPEX Plat, the exact number of parking spaces is provided. Because the cover sheet did not provide specific parking spaces numbers in the Zoning Tabulations, and due to potential future issues with substantial conformance to the plat, it recommended to not include the exact number of parking spaces to be provided. Instead, staff recommends providing a note that final parking tabulations will be provided at time of site plan.

Response: The plan has been changed as recommended in reference to parking.

Comment 18: Clarify, whether on the plat or in the Statement of Justification, the proposed uses of the various pole barns.

Response: The plan has been updated with planned uses for the pole barns which will be utilized for equipment storage and truck parking.

Comment 19: Zoning Administration staff recognizes that the proposed buffers will be determined at site plan, however, be advised pursuant to Section 5-1408(B)(2)(b), a Type C Buffer requires a minimum of 10% and a maximum of 50% of the required plant units to be evergreen trees. Because the proposed plan with 100% provision of evergreen trees in the buffers not meeting the requirements of Section 5-1408(B)(2)(b), a modification as part of the proposed Special Exception pursuant to Section 5-1409(B)(2).

Response: A modification is being requested as permitted by Zoning Ordinance Sections 5-600 and 5-1409 (B) (2) to utilize evergreen tree plantings in lieu of a six foot in height fence, wall or berm. The proposed buffer will be more effective by filling in any gaps, will be taller than the required fence/wall/berm and will provide a year-round buffer. The intent of the plan is to use the existing deciduous vegetation for the full width of the required buffers at the outside perimeter of the site to preserve the appearance of the natural vegetation from outside the site and to supplement the existing trees with evergreen trees inside the buffer in the amount of 100% of the buffer planting units to provide a mix of plant types which approximates the planting unit types mix, and provides an opaque barrier in lieu of the required berm or screen fence.

Loudoun County School Board
Public Utility Service Center
CMPT 2022-0003, SPEX 2022-0038
December 7, 2022

Comment 20: In the Buffer Yard Calculations Table, revise the proposed use group column to a Group 10. The required Buffer Type for all of the adjacent use groups will be a Type C buffer, except for the two Group 5 use groups (buffer segments C-D and D-E) which do not require a buffer pursuant to Table 5-1404(B). Revise the table accordingly.

Response: The Buffer Yard Calculations Table has been revised as requested, except that segments C-D and D-E require the Type C buffer per Section 5-621 and have been shown as such.

Comment 21: As previously mentioned, the types and varieties of plants to be used in the Type C buffer will need to be provided pursuant to Section 5-1408.

Response: As note above in comment 19, a modification is requested to allow the use of the existing deciduous vegetation for the full width of the buffer yard, and to supplement it with 100% evergreens to provide opacity which then will approximate the mixed types of vegetation required by the types and varieties of plant units. The tree species will be provided at the time of site plan pursuant to Section 5-1408.