SP20240026 Woolen Mills Industrial Fill in Floodplain

Board of Supervisors Public Hearing June 4, 2025 Staff: Rebecca Ragsdale, Planning Manager Tony Edwards, Deputy County Engineer, CFM



SP202400026 Vicinity Map



SP202400026 Proposal

7.08 acres total site

Request is for Fill in the Floodplain special use permit to allow 1.496 usable area adjacent to Franklin Street 5.58 acres remain in Floodplain

1.3 acres dedicated for public use







Looking north on Franklin St. and adjacent industrial





Looking west to residential in City



SP202400026 Zoning Map



SP202400026 Floodplain Map



SP202400026 Comprehensive Plan



SP202400026 Zoning Districts

Flood Hazard Overlay -

- Agricultural, Natural Resources, and Recreational Uses and Structures
- Flood and Water Related Uses and Structures
- Stream Crossings
- Grading Activities, including fill

<u>LI – Light Industrial</u> – industrial, office, and limited commercial uses (no residential use), including:

- Manufacturing/Processing/Assembly/Fabrication/Recycling
- Storage/Warehousing/Distribution/Transportation
- Laboratories/Research and Development/Experimental Testing

Overla

Zoning

Property

Regulatory Process



SP202400026 Concept Plan



SP202400026 Special Use Permit Criteria

Factors for Consideration (Chapter 18 Section 33.40):

1. No substantial detriment.

Whether the proposed special use will be a substantial detriment to adjacent parcels.

2. Character of the nearby area is unchanged.

Whether the character of the adjacent parcels and the nearby area will be changed by the proposed special use.

3. Harmony.

Whether the proposed special use will be in harmony with the purpose and intent of this chapter, with the uses permitted by right in the district, with the regulations provided in Section 5 as applicable, and with the public health, safety, and general welfare.

4. Consistency with the Comprehensive Plan.

Whether the proposed special use will be consistent with the Comprehensive Plan.

SP202400026 Public Comments

- Rivanna River and Moore's Creek impacts
- Recreational value of stream corridor and visitors to area
- Watershed protection
- Benefits of floodplain
- Cumulative floodplain changes
- Wetlands and habitat impacts
- Historic Resources
- Run-off and stormwater management from additional impervious
- Comment in support





Flood Hazard Overlay

Any land area susceptible to being inundated by water from any source.

The floodplain consists of two areas:

• Floodway fringe-

The portion of the floodplain subject to a one percent or greater chance of flooding in any given year that lies between the regulatory floodway and the outer limits of the special flood hazard area depicted on the Flood Insurance Rate Map.

• Regulatory floodway-

The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.



Floodplain – Backwater Conditions

Placing fill in a backwater area may not cause a rise in the floodplain because backwater areas are typically low-energy zones with minimal flow connectivity to the main river channel during normal or flood conditions. Here are some common backwater characteristics.

1. **Hydraulic Isolation**: Backwater areas, such as oxbow lakes or wetlands, are often disconnected or have limited interaction with the main river's flow. Adding fill in these areas doesn't significantly alter the main channel's capacity to convey floodwaters, so the floodplain's water levels remain unaffected.

2. **Low Flow Velocity**: These areas experience stagnant or slow-moving water, meaning they don't contribute substantially to floodwater movement. Fill placement here may have no impact on the overall flood dynamics.

3. **Floodplain Storage**: The floodplain's storage capacity is primarily determined by the main channel and adjacent low-lying areas actively involved in floodwater conveyance. Backwater zones often lie outside this active zone, so modifying them with fill doesn't reduce the floodplain's ability to store or convey water.

Floodplain with Backwater



Figure 2: Base Flood Elevations from Rivanna River Backwater

Floodplain without Backwater



Figure 6: Resulting 100-YR WSEL With Addition of Ineffective Flow Area in Cross Section 3995.50

Flood Hazard Overlay-Fill in Floodplain

Sec. 30.3.14 Encroachment standards; fill in the floodway fringe.

A. *Minimize obstruction*. The fill shall be designed and constructed to minimize obstruction to and effect upon the flow of water such that:

(i) the fill will not, in the opinion of the floodplain administrator, result in any increase in the base flood elevation above that authorized in section 30.3.13; and

(ii) no fill is placed in the regulatory floodway.

- **B**. *Protect against erosion*. The fill shall be effectively protected against erosion by vegetative cover, riprap, gabions, bulkhead or another method acceptable to the floodplain administrator. Any structure, equipment or material installed to protect against erosion shall be firmly anchored to prevent dislocation due to flooding.
- **C.** *Non-polluting*. The fill shall be of a material that will not pollute surface water or groundwater.
- **D.** Additional information. The floodplain administrator may require any owner to submit additional topographic, engineering and other data or studies as the administrator deems necessary to determine the effect of flooding on a proposed structure or fill, the effect of the structure or fill, or both, on the flow of water during a flood.
- E. Certification by floodplain administrator. No fill activity shall occur before the owner submits a site plan for review, the floodplain administrator certifies that the requirements of subsections (A) through (D), and all other applicable requirements of the Code, have been satisfied.

SP202400026 Concept Plan



SP202400026 Special Use Permit Conditions

- The fill in the floodplain must be shown on a site development plan and must be in general accord with the "Special Use Permit Application Plan for Woolen Mills Light Industrial Park, Tax Map 77, Parcels 44B2, Scottsville District, Albemarle County, Virginia," dated December 20, 2024, except as may be modified in order to meet the requirements of the County's Water Protection Ordinance, as determined by the County Engineer. The site must be elevated/filled to at least one foot above the Base Flood Elevation.
- 2. Prior to commencement of the use under this Permit, the owner(s) must demonstrate each of the following:
 - a. The County Engineer's approval of an erosion and stormwater management plan.
 - b. The County Engineer's receipt of proof of compliance with Federal and State regulations of activities affecting wetlands and watercourses. The applicant must obtain and provide to the County Engineer a letter of map revision for fill in the floodplain (LOMR-F), as required from the Federal Emergency Management Agency.
 - c. The County Engineer's approval of a mitigation plan outlining mitigation measures for any encroachments into the stream buffer.
 - d. The County Engineer's approval of computations and plans documenting changes to the floodplain. Computations must demonstrate compliance with Albemarle County Code § 18-30.3 (flood hazard overlay district). Plans must show the existing and proposed floodplain boundaries and elevations along with the applicable "No Rise" signed certification statement.
- 3. A phase I archeological survey must be conducted prior to approval of a floodplain development permit.
- 4. Stormwater treatment must be provided on-site and for phosphorus reduction equal to twice the total phosphorus load reduction provided by 1.496 acres of forest cover, as calculated using the Virginia Department of Environmental Quality's Runoff Reduction Method-New Development Compliance Spreadsheet (Version 4.1).

SP202400026 Special Use Permit Summary

Staff finds the following positive aspects to this request:

- 1. The applicant has shown that fill in the floodplain is possible without raising the flood elevation or detriment to neighboring properties.
- 2. This will allow use of a property already zoned LI Light Industrial for industrial uses.

Staff has the following concerns with this request.

1. The property is designated Parks and Green Systems and industrial use is not consistent with that designation. Preservation of stream buffers, floodplains and steep slopes adjacent to rivers and streams is recommended. However, proposed development is limited to 1.496 acres and the majority of the 5.58 property will remain consistent with the designation.



Questions?



Proposed Motion SP202400026

PROPOSED MOTION:

To Approve:

I move to adopt the resolution attached to the staff report as Attachment D.

| | SP199700039 the | 1.62 acres according to GIS adjacent to this request was approved on 07700-00-00-04000 to allow fill in floodplain for warehouse uses in Woolen Mills |
|--|-------------------------|---|
| Special Use Permit History Fill in the Floodplain | SP201600028 | Woolen Mills construction of flood wall primarily to preserve historic structure, some non-conformities on this impacted site already |
| | SP200400036 | Charlottesville Power Equipment- Fill in the Floodplain and Rezone from C1 to HC on Pantops |
| | SP201300001 | Riverside Village on Pantops |
| | SP199900059 | 4 acres from floodplain on LI and HC zoned site on 5 th Street |
| | Residential areas prima | arily stream crossings such as North Pointe, Brookhill, Crozet, West Glen |

Rural Area requests have included boat docks and stream crossings for RA uses, recreation such as SOCA

Site Photos



LI Light Industrial-By-right

Manufacturing/Processing/Assembly/Fabrication/Recycling. means the processing and/or converting of goods, materials or products; the assembly of components, pieces or subassemblies into articles or substances of different character, or for use for a different purpose.

Storage/Warehousing/Distribution/Transportation. means an establishment used primarily for the safekeeping, selling or transferring of saleable goods or raw materials to be incorporated into saleable goods including, but not limited to, storage facilities, call centers, data processing facilities or transit; an establishment used as a privately owned and operated waste transfer station; and towing services and the storage of vehicles in conjunction with that service.

Laboratories/Research and Development/Experimental Testing. means scientific research, testing, investigation or experimentation, the development of prototype products, and/or the assembly or manufacture of prototype products and including, but not limited to, bioscience and medical devices research, development and manufacturing, and information technology and defense security research, development and manufacturing; scientific or technical instruction.

LI Light Industrial-Uses Prohibited

Asphalt plant

Cement, lime gypsum manufacture processing

Foundries

Inorganic fertilizer manufacture or processing

Petroleum refining

Pulp or Paper manufacture or processing

Manufacture of certain products-acetylene gas, acid, ammonia, bleaching powder, chlorine, detergent and cleaning preparations made from animal fats, explosives, fireworks, fish meal, nitrogenous tankage, paints, varnish, shellac that requires distillation or heating ingredients, vinegar that is not derived from an agricultural product, phosphates, and turpentine.

Sludge storage

Toxic wastes disposal or storage

Incinerators

Certified Engineers Report

- 1. Nature of the operation. A description of the proposed operation, including all machines, processes, and products.
- 2. Emissions and discharges. The identification of all by-products or wastes, stating the expected levels of emissions or discharges to land, air, and/or water of any liquid, solid or gas, and the emission of electrical impulses and sound under normal operations.
- **3.** Control of emissions and discharges. Descriptions and specifications as to how emissions and discharges will be treated and the equipment and practices that will be used to control emissions and discharges.
- 4. Other information. Any state or federal permits, readings, measurements, plans or documentation necessary to demonstrate that the proposed use will comply with this chapter, other requirements of the Code and all applicable state and federal laws:
 - (a) *Air emissions*. Air emissions subject to the applicable regulations of the State Air Pollution Control Board and the Virginia Department of Environmental Quality.
 - (b) *Water discharges.* Water discharges subject to the applicable regulations of the State Water Control Board and the Virginia Department of Environmental Quality.
 - (c) *Radioactive materials and radiation emissions*. Radioactive materials used in conjunction with, and radiation emissions from, a use that is subject to the applicable regulations of the State Board of Health and all applicable requirements arising from all agreements between the Commonwealth of Virginia and the United States of America, and any department or agency thereof, pertaining to radioactive materials or radiation emissions, and all interstate compacts pertaining to radioactive materials or radiation that would adversely affect the navigation or control of aircraft shall comply with the current regulations of the Federal Aviation Administration.
 - (d) *Flammable, hazardous and explosive materials*. Flammable, hazardous and explosive materials used in conjunction with a use shall comply with the applicable requirements of the county fire marshal and the Virginia Department of Environmental Quality.
 - (e) **Disposal of waste and spill containment**. The disposal of waste and the containment of spills in conjunction with a use shall comply with the applicable requirements of the county fire marshal. Any use required by section 5 to provide a waste management plan shall provide a plan that demonstrates that waste will be disposed of only in strict compliance with state and federal regulations.
 - (f) *Mosquito control plan.* Any use required by section 5 to provide a mosquito control plan shall provide a plan that demonstrates how mosquitoe³⁸will be controlled.



SDP2020-29

