Central Virginia Electric Cooperative
115kV Midway Transmission Line Rebuild
Midway Substation to Martin's Store Substation
Phase 2

Corporate Headquarters

DECEMBER 4, 2024

CENTRAL VIRGINIA ELECTRIC COOPERATIVE

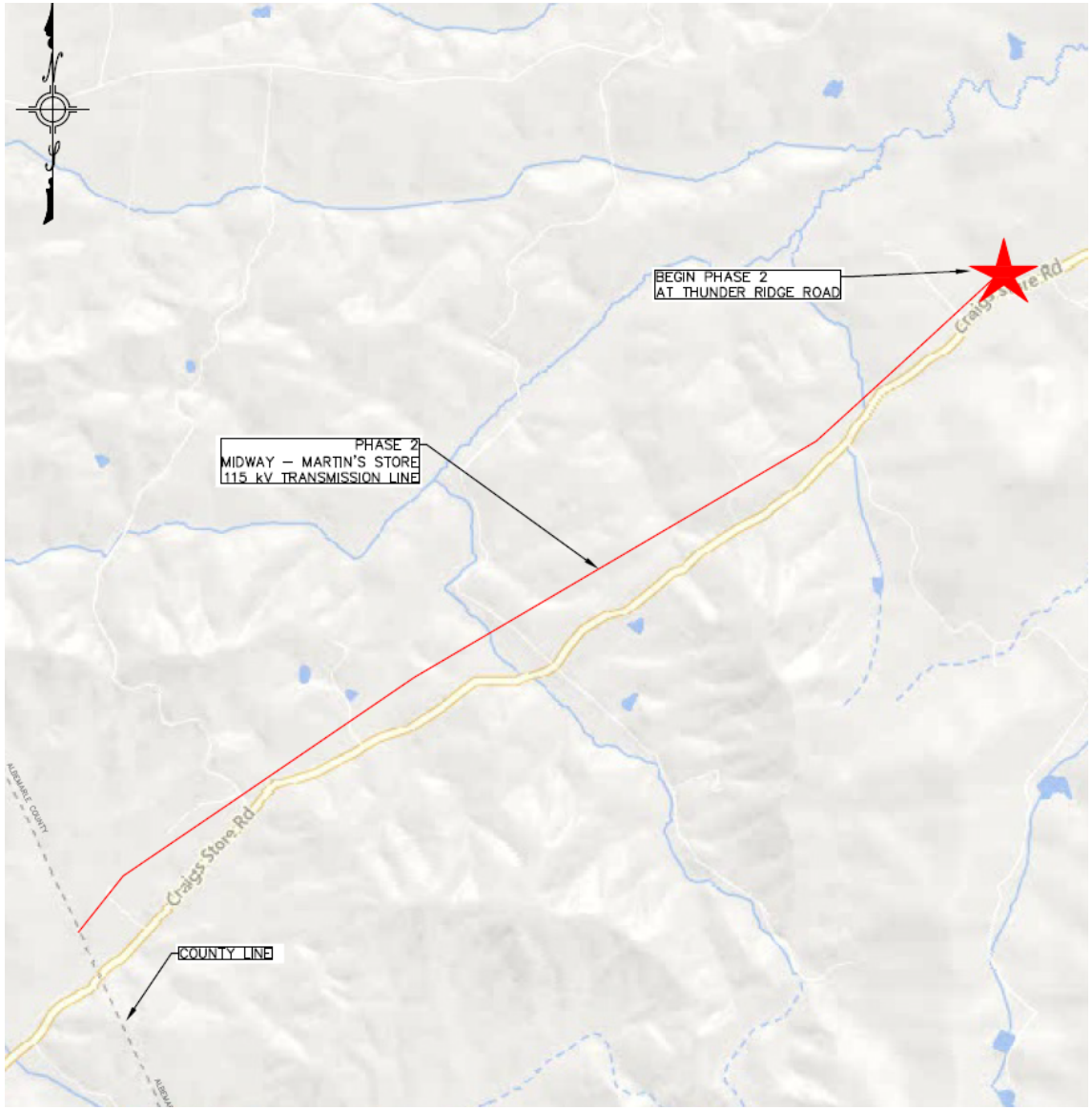
Permit #SP202400002

Albemarle County

Board of Supervisors

December 4, 2024

VICINITY MAP



Existing 115 kV Transmission Line:

- Extends from Midway Substation in Albemarle County to Martin's Store Substation in Nelson County.

- Radial Feed of approximately 11 miles (6.2 miles in Albemarle County and 4.8 miles in Nelson County)

- Line and Structures are 40+ years of age.

Existing 115 kV Transmission Line:

- Existing structures are mostly 2-pole wood structures (H-Frame) with wood cross-arms.

- The existing 115 kV poles in Albemarle County range in height from 45’ to 70’.

PROJECT DESCRIPTION:

- The Phase II project consists of replacing approximately 2.8 miles of the existing line and structures remaining in Albemarle County with a new line and structures.

- Phase I consisted of replacing 3.4 miles and was completed in 2023.

- The total project was divided into two phases due to financial and manpower restraints.

- New 115 kV single-pole transmission line will be constructed near the center of the existing 150’ CVEC easement.

PROJECT DESCRIPTION:

- No additional easement will be required.
- CVEC easement is maintained & will not require any cutting.
- The transmission line project is an upgrade to the poles only.
- The new 115 kV poles in Albemarle County will range in height from 58’ to 82.5’ due to vertical construction.

PROJECT DESCRIPTION:

- New 115 kV Transmission Line: Single-pole design on ductile iron poles with vertical construction.

- Existing 115 kV H-frame transmission line will be removed once the new line is constructed.

NEED FOR UPGRADE:

- The existing 115 kV transmission line is 40+ years of age
- Needs to be replaced due to deterioration of the wood poles and wood cross-arms.
- Serves 6,750 members through 4 other substations, all on the radial feed.

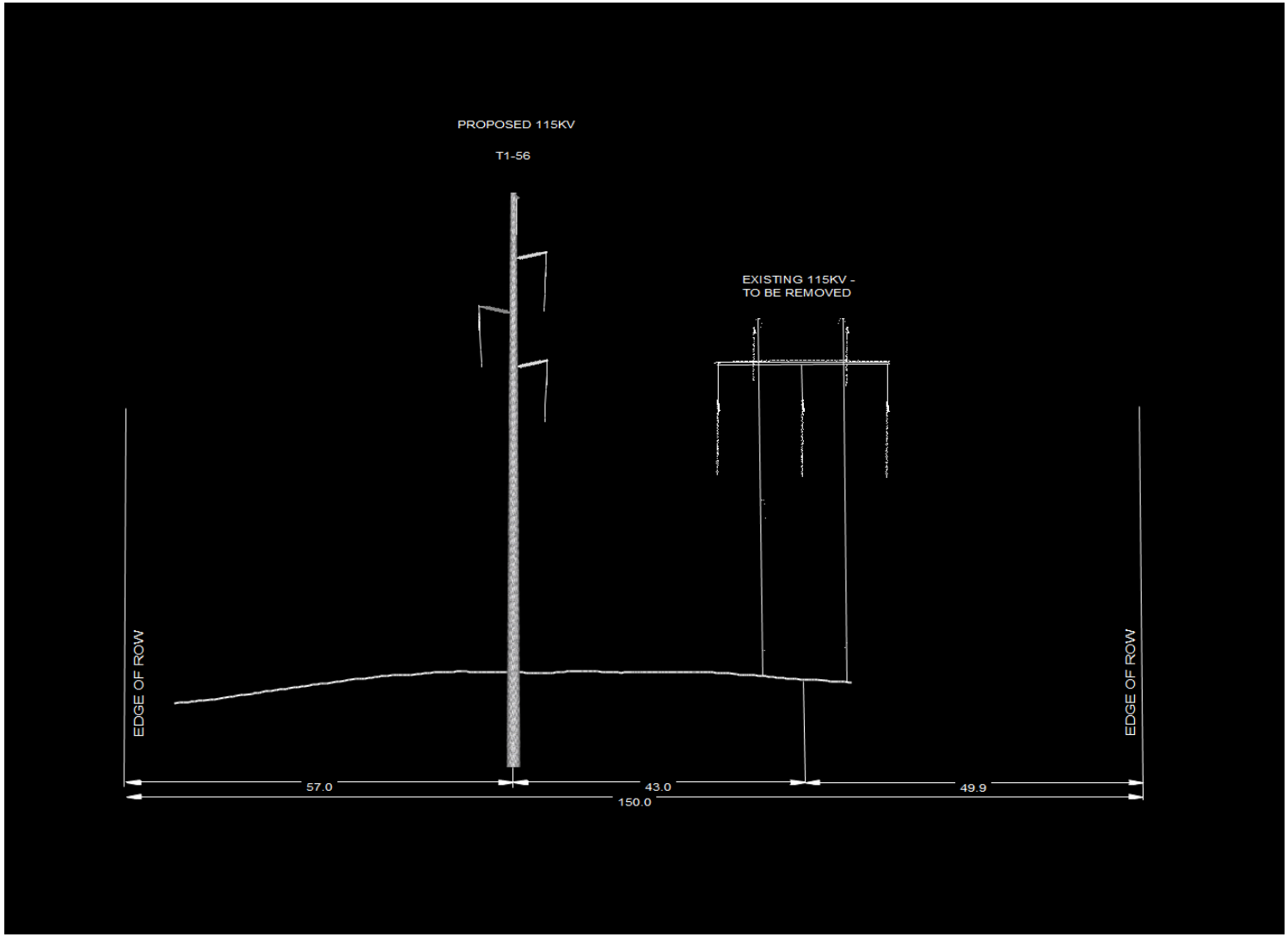
NEED FOR UPGRADE:

- CVEC has had several outages within the past several years which affected all 6,750 customers.
- This upgrade will increase the reliability to our members and to the CVEC system.
- Ductile iron poles are resistant to woodpeckers, insects, and rot, and has a weathered Natural Finish, which is bare iron and looks similar to a wood pole finish.

IMPACTS ON PUBLIC FACILITIES AND PUBLIC INFRASTRUCTURE:

Properties surrounding the transmission line are rural with a mix of vacant, residential, farmland, hunting property, etc. All Right-Of-Way is clear with a mix of maintained fields.

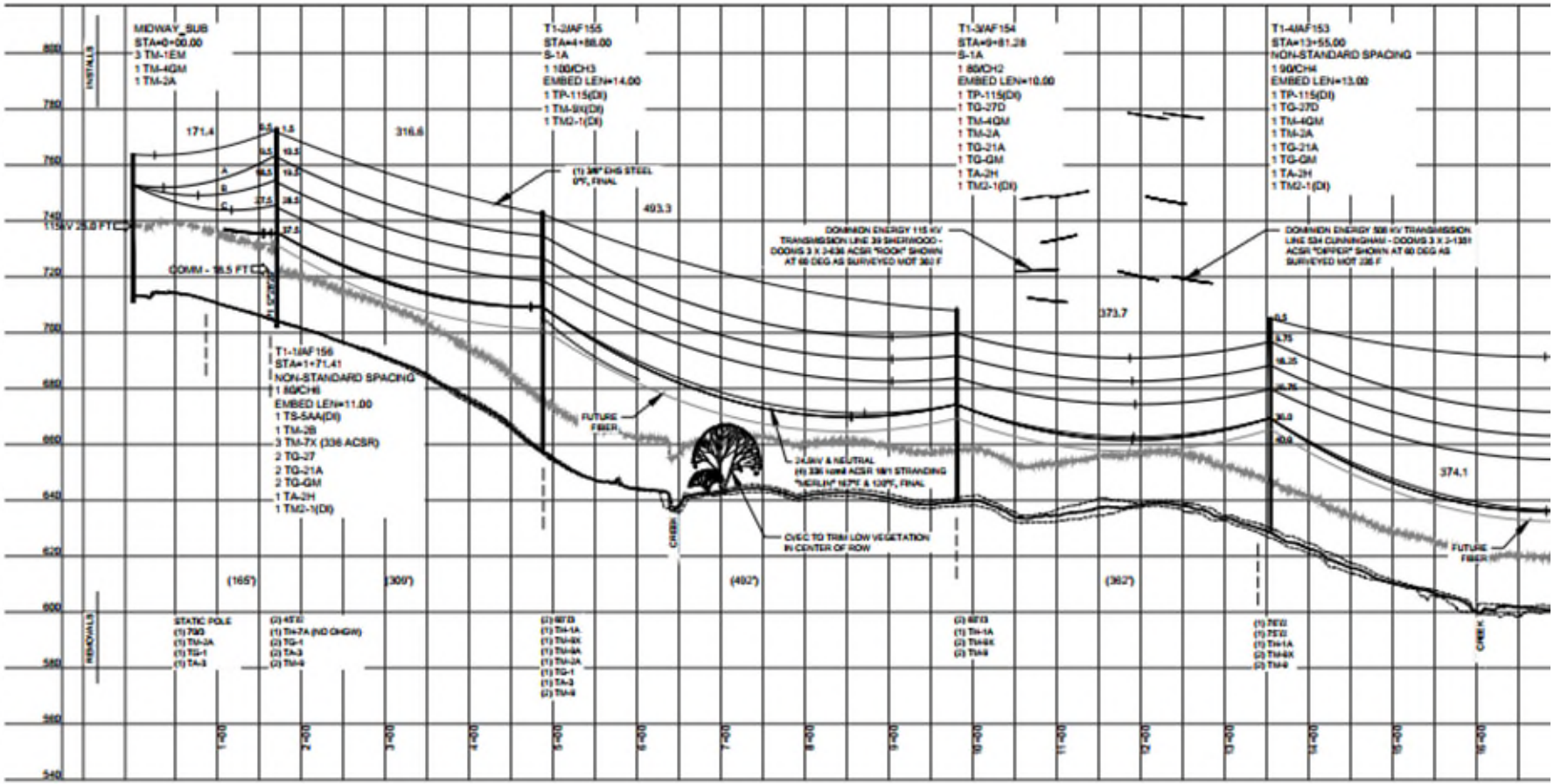
TYPICAL CROSS SECTION



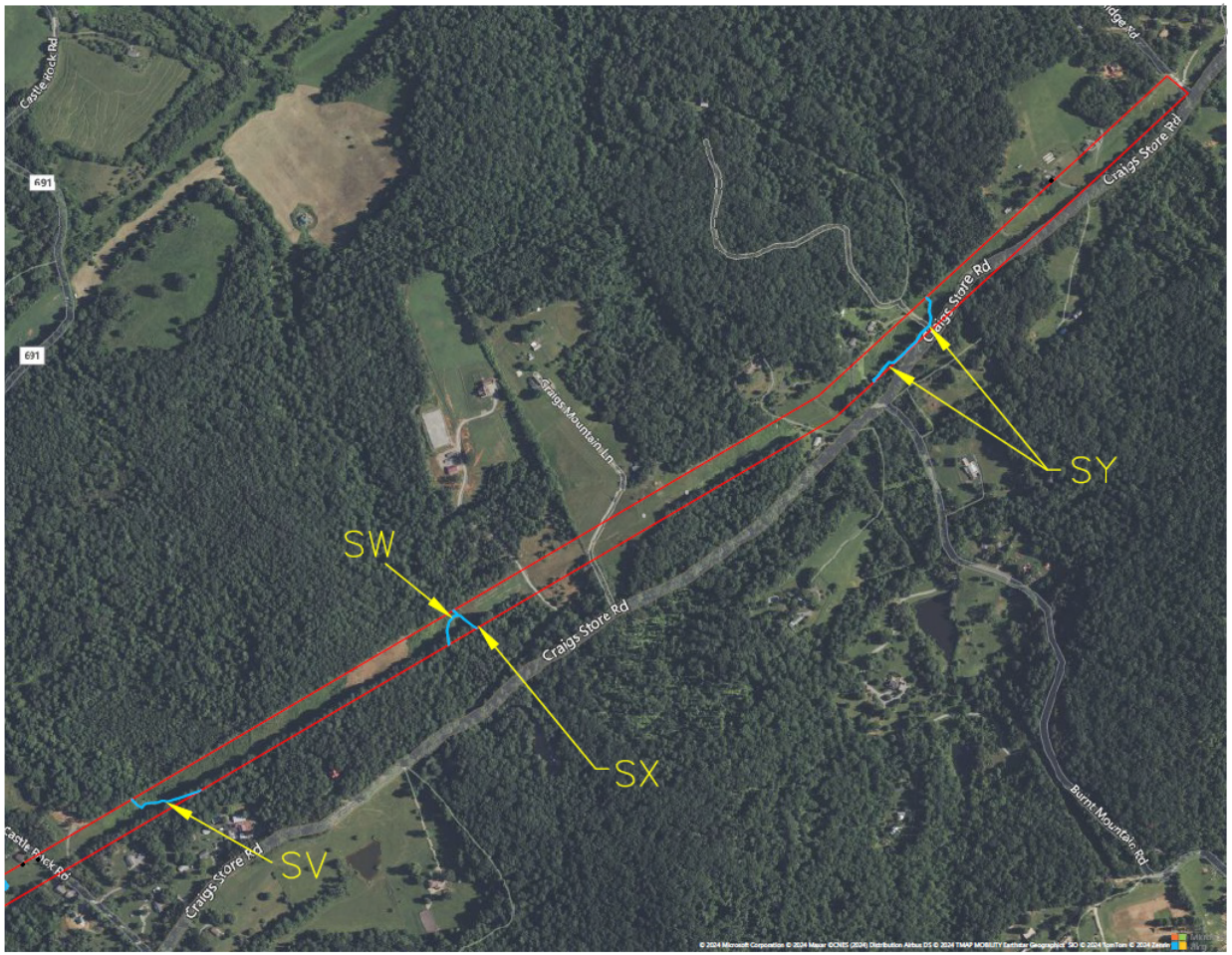
IMPACTS ON ENVIRONMENTAL FEATURES

- No impacts are expected from the proposed project due to the work being performed in an existing Right-of-Way.
- The design will avoid sensitive areas.
- All work will be performed with a rubber-tracked vehicle throughout the project length.

CAREFUL DESIGN CONSIDERATIONS



STREAMS & PONDS

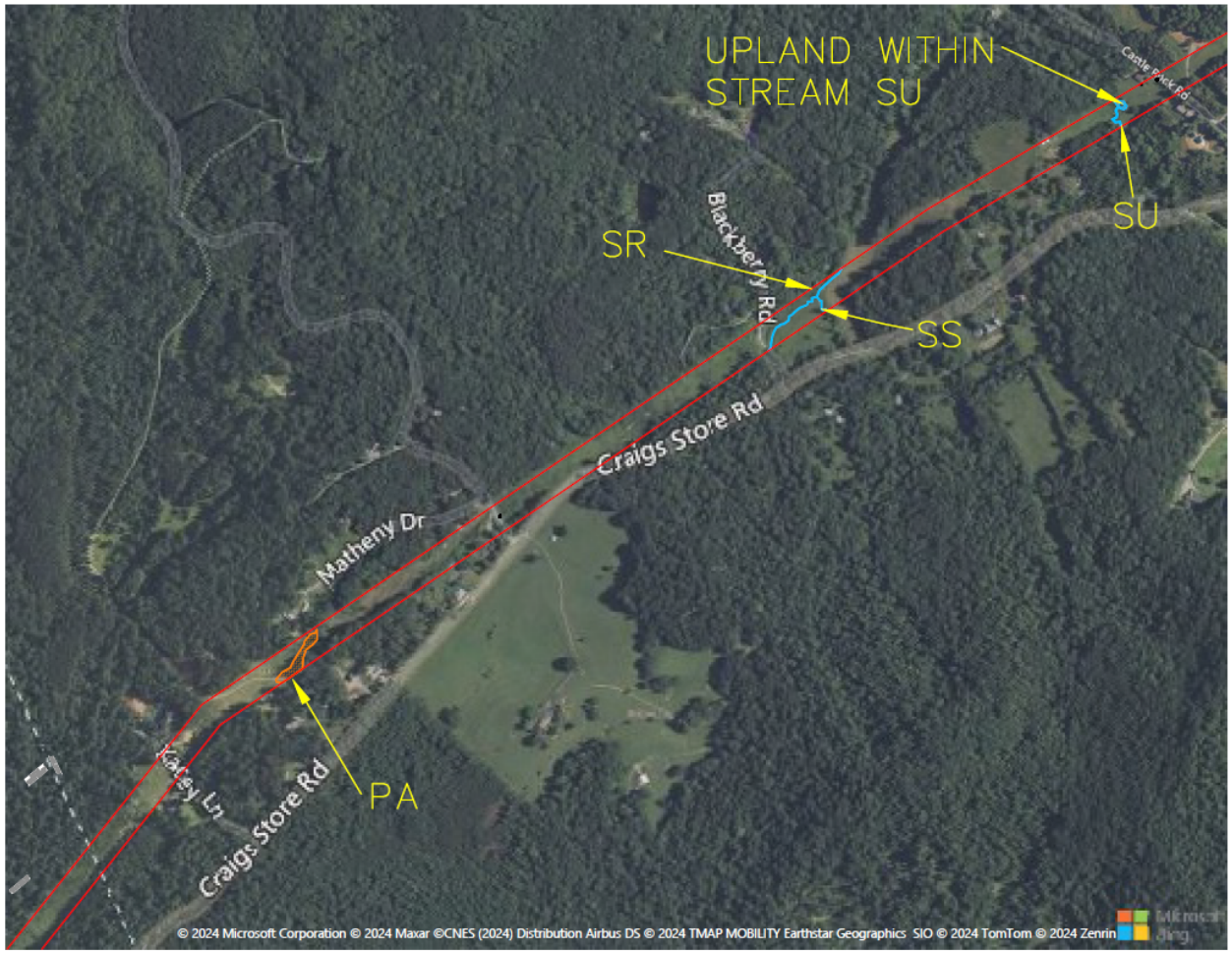


LEGEND

PROJECT AREA

STREAM

STREAMS & PONDS



LEGEND

- PROJECT AREA
- STREAM
- POND

VEGETATION MANAGEMENT

- Central Virginia Electric Cooperative (CVEC) performs extensive work each year to cut and maintain rights-of-way for new and existing electric lines along its 4,500-mile system utilizing Integrated Vegetation Management (IVM).

- CVEC invests more than $2.5 million annually in its vegetation management system, in order to increase reliability for its members and to remove danger trees from areas near the electric lines.

PROUD TO BE CARETAKER OF THE ENVIRONMENT

The Virginia Department of Game and Inland Fisheries

hereby bestows this

Habitat Partners© Certificate

upon

Central Virginia Electric Cooperative

Lovingston, Virginia

In Recognition of

Your large-scale habitat management efforts on utility right-of-ways to control invasive exotic species, minimize mowing and herbicide applications, and promote the growth of native perennial flowers, grasses, and sedges, which support a great diversity of wildlife species such as pollinators and quail.

Given under the seal of the Department of Game and Inland Fisheries this 1st day of October, two thousand and nineteen.

Carol A. Heiser
Habitat Education Coordinator
Education Program Section Manager

VIRGINIA HABITAT PARTNERS

Thank You

Questions?