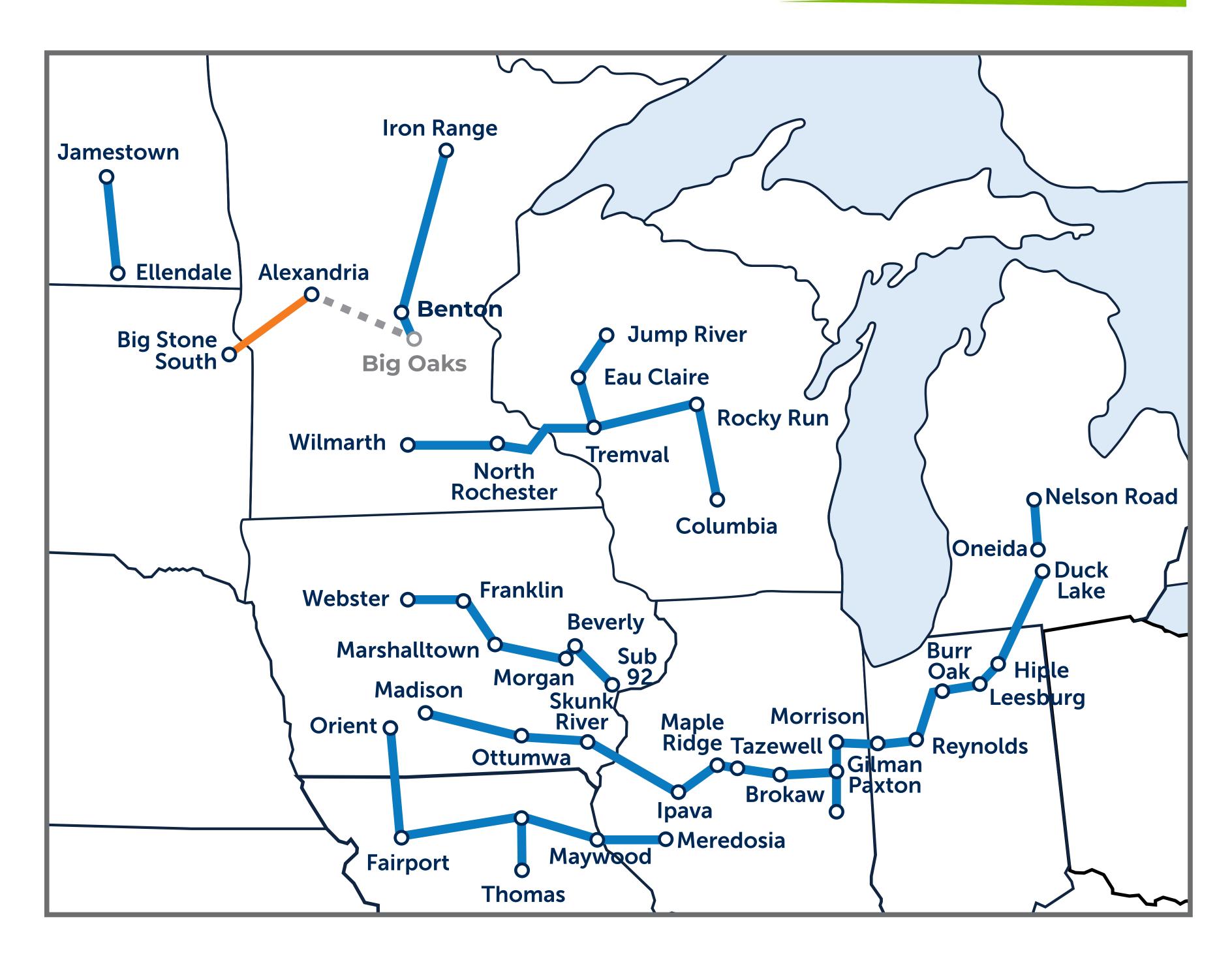
## PROJECT DEVELOPMENT



Both Otter Tail Power Company and Missouri River Energy Services are members of the Midcontinent Independent System Operator, also referred to as MISO.

MISO is a non-profit, member-based regional transmission organization that provides reliable, cost-effective electric systems and operations; dependable and transparent prices; open access to markets; and planning for long-term efficiency.

MISO approved these 18 transmission projects in July 2022 that are needed throughout the Midwest to ensure a reliable and resilient transmission system in the future.







B55>A



### PROJECT BENEFITS

Otter Tail Power Company and Missouri River Energy Services (representing Western Minnesota Municipal Power Agency) are partnering to develop, construct, and co-own a new 345-kilovolt (kV) transmission line. The Big Stone South to Alexandria transmission line (BSSA) will connect Otter Tail Power Company's Big Stone South Substation near Big Stone City, South Dakota, to the Alexandria Substation owned by Missouri River Energy Services near Alexandria, Minnesota.

### The project will benefit the region by helping to:



Ensure electric reliability



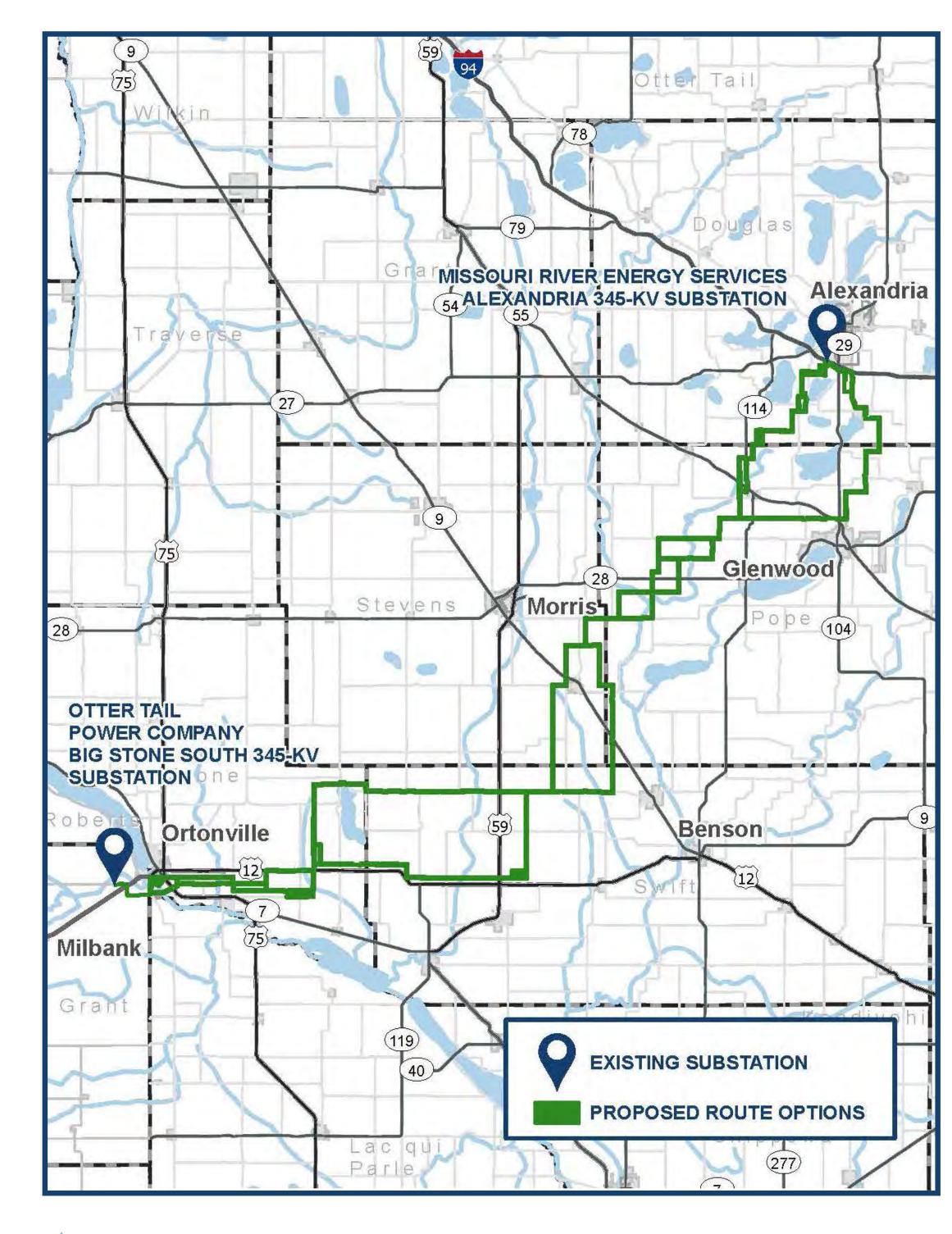
Reduce transmission congestion



Increase access to low-cost energy



Increase resiliency to extreme weather events



Proposed Route Options included in our Route Permit Application. Final decision pending MN PUC approval.





## TRANSMISSION BASICS





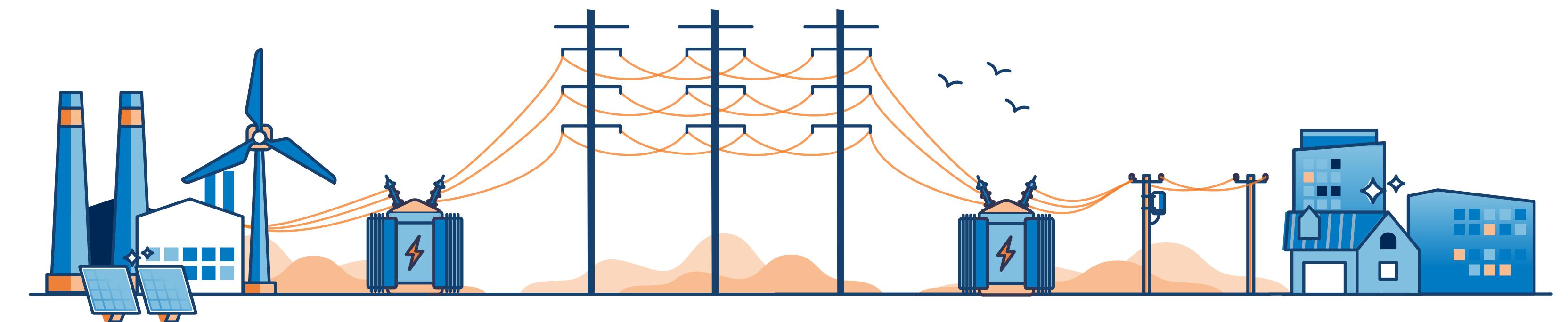




Electricity can be generated in many ways, including coal-fired plants, wind power, combustion turbines, solar power, and hydroelectric plants.

Transmission lines move high-voltage electricity long distances from where it's generated to where it'll be used.

Distribution lines move low-voltage electricity to neighborhoods and communities.



Electricity connects to the high-voltage transmission system through a transformer.

Transformers lower the voltage of electricity for homes and businesses

Generation

Transmission

Distribution



## PROJECT DEVELOPMENT STEPS



**Engagement Opportunities** 

### STEP 1 STEP 2 STEP 3 STEP 4 STEP 5 STEP 6

- DataGathering
- Public Engagement
- Routing
- Preliminary Surveys
- Preliminary Right of Way
- Preliminary Engineering
- MN Certificate of Need Filed

- Right of Entry
- Surveys
- Filed SD Facility Permit Application – approved January 2025
- Filed MN Route Permit Application

#### WE ARE HERE

**Environmental Permits** 

- Start Construction in 2028
- In Service in 2030-2031
- Restoration
- Right of Way

Permit

Final Engineering
Complete in 2027

Decisions in 2026



Communicate Project Updates Throughout Construction

Processes and timing may vary from Minnesota to South Dakota. Our project team will refine the timing of these steps to comply with each respective state's requirements.







### REGULATORY PROCESS

The BSSA transmission line will be constructed in both Minnesota and South Dakota, and the two states have different processes and timelines. Both states consider compliance with relevant laws and rules, as well as its potential impacts on the environment, residents in the routing area, and orderly development of the region. After we've filed the necessary applications, the Minnesota Public Utilities Commission (MN PUC) and the South Dakota Public Utilities Commission (SD PUC) will each provide opportunities for additional feedback through public meetings and hearings.



### MINNESOTA

Two major approvals must be obtained from the MN PUC before a high-voltage transmission line can be built: a Certificate of Need and a Route Permit. The Certificate of Need proceeding examines whether the proposed facilities are necessary and what the appropriate size, configuration and timing of the project should be. In a separate Route Permit proceeding, the MN PUC determines the route and design of the line.



#### Certificate of Need – Approved Oct. 3, 2024

Public hearings



#### Route Permit Application – Filed Oct. 22, 2024

Public hearings



#### **Route Permit Decision**

Estimated timeline is 18-24 months from time of Route Permit application filing.



### SOUTH DAKOTA

There is one major approval that needs to be obtained from the **SD PUC** before a high-voltage transmission line can be built: a Facility Permit. The SD PUC reviews routing applications for high-voltage transmission lines, and if approved, issues an order granting a Facility Permit authorizing the construction and operation of the facility.



#### Facility Permit Application – Filed April 15, 2024

Public hearings



#### **Facility Permit Decision**

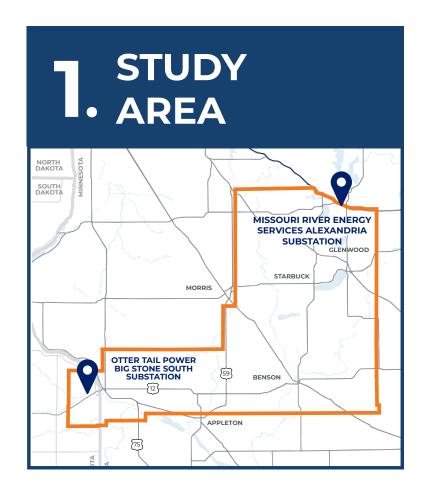
To be completed within 12 months from time of Facility Permit application filing.







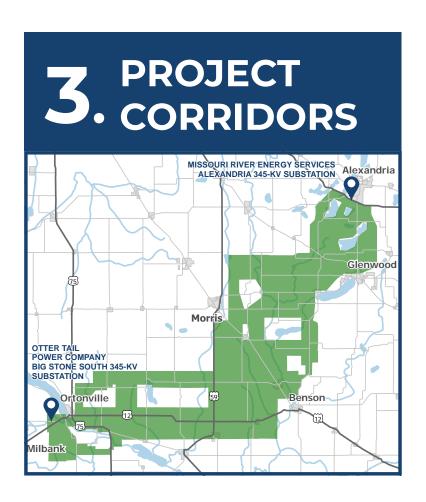
### ROUTING PROCESS



With an established project need from MISO, we identified a large study area that contained both substations.



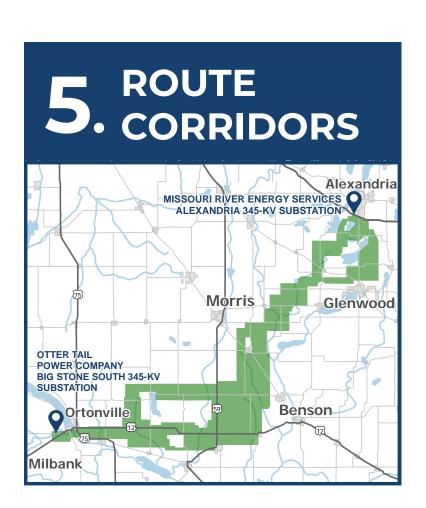
We held open houses in April 2023 to introduce the project and provide stakeholders an opportunity to ask questions and provide input.



The team utilized the input gathered to identify project corridors where construction may be possible.



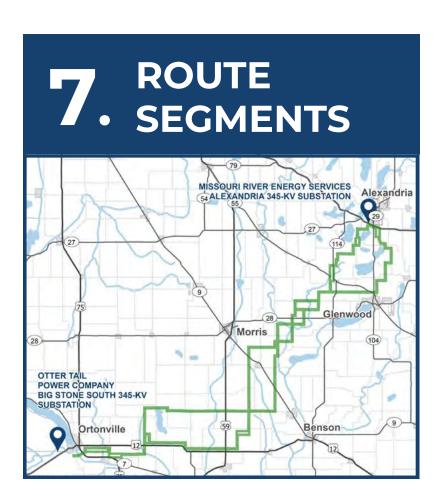
We held another series of open houses in October 2023 to gather input from stakeholders to help the team identify opportunities and constraints within the project corridors.



The project team used the feedback received to continue narrowing the project corridors into proposed route corridors.



We held another series of open houses in February 2024 to gather feedback on the route corridors to help us develop route segments.



The project team used the feedback received to continue narrowing the route corridors into proposed routes.



A fourth series of open houses was held in June 2024 to show and gather feedback on the proposed routes we planned to file in our Route Permit application.

#### WE ARE HERE



We made some adjustments and filed the route permit application on October 22, 2024. The MN PUC will review and hold public hearings before deciding on the route permit.









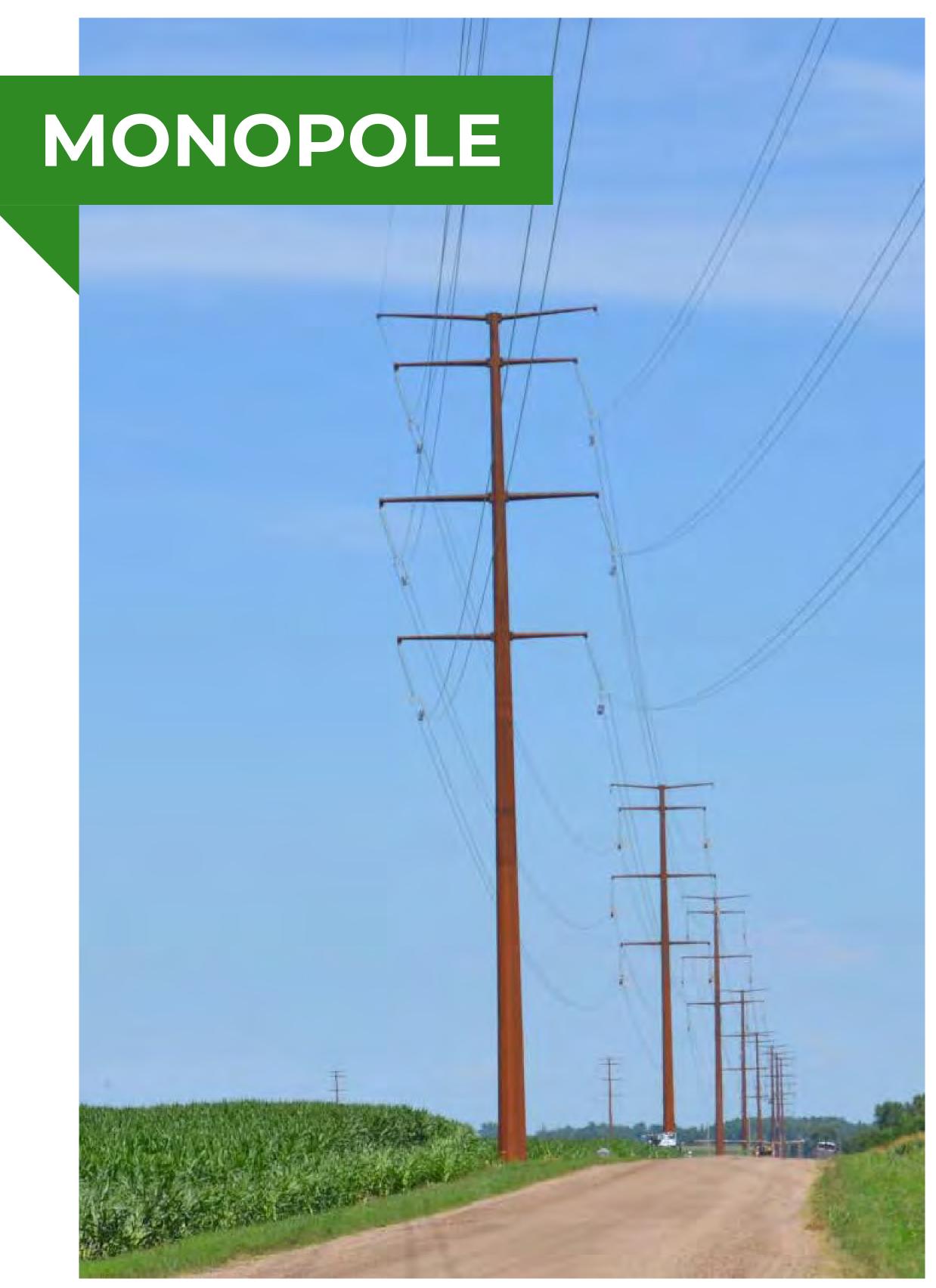


Image shown is an example of a similar double-circuit structure.

# The typical structure will be 150 feet tall.

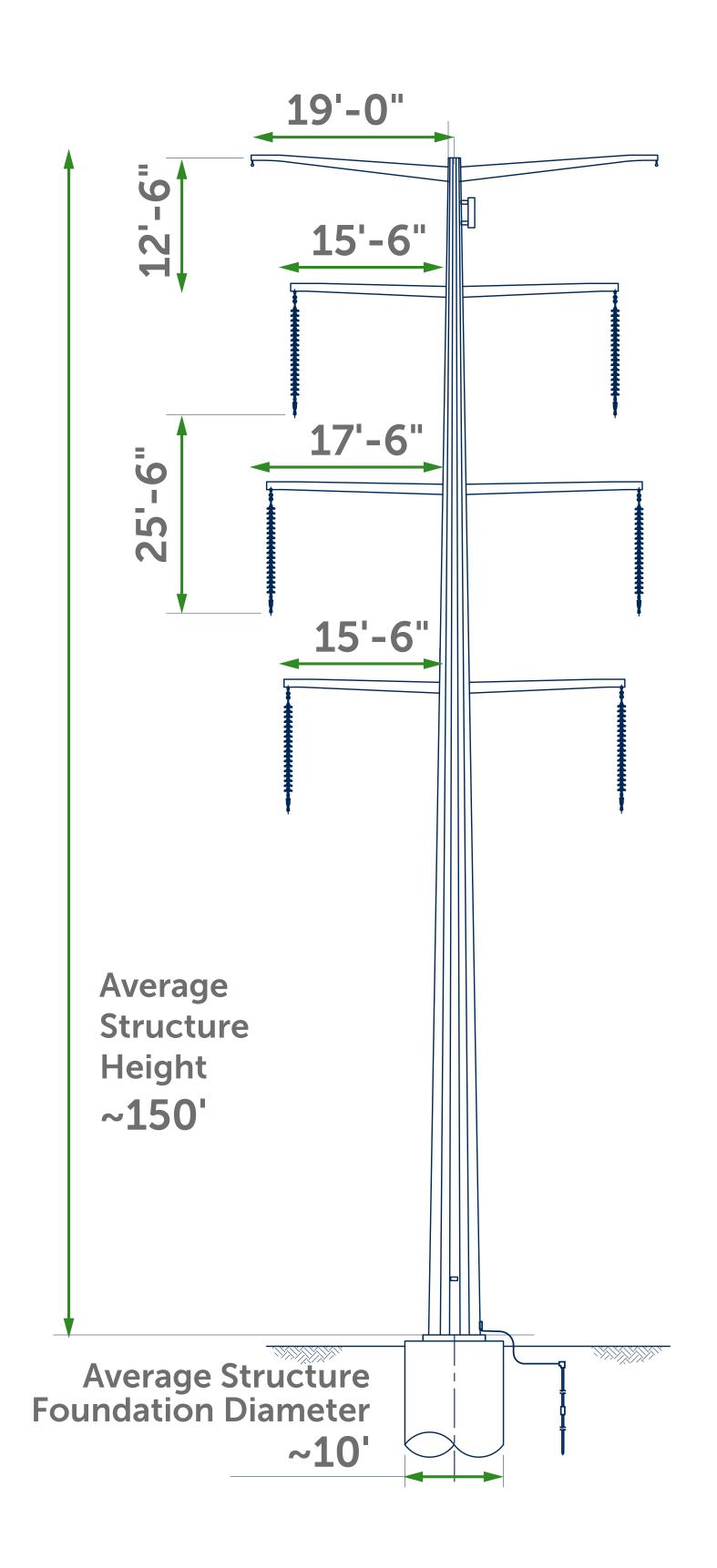
The structure type may vary across the project but primarily will be comprised of single pole, self-weathering steel with double-circuit capability.

Otter Tail Power Company and Missouri River Energy

Services expect to only install

There will be three phases of conductors and two overhead shield wires — one will be an optical ground wire (OPGW) and the other stranded steel (overhead ground wire).

one circuit at this time.









## CONSTRUCTION PROCESS

### ONGOING OUTREACH

Long before construction begins, right-of-way agents will be coordinating with landowners, local government officials, and other stakeholders. You will be involved throughout the process, and if you have any questions or concerns, our project team will work with you!



Surveying



**Temporary Access** 



Foundation Drilling & Pouring



**Structure Setting** 



**Conductor Stringing** 



Restoration





## RIGHT-OF-WAY ACQUISITION

### **What is Right of Entry?**

To assess potential routes and conduct the necessary environmental and engineering studies/surveys, right-of-way agents will work with landowners and residents to acquire a temporary right-of-entry agreement. This agreement does not give permission for construction.

### What is Right of Way?

Right of way is a portion of land needed for the construction, operation, and maintenance of the transmission line. Typically a width of 150 feet is needed for a 345-kilovolt (kV) transmission line. Right of way is usually secured through negotiation and acquisition of an easement agreement.

### **What is an Easement?**

An easement is the legal document that allows Otter Tail Power Company and Missouri River Energy Services to construct, operate, and maintain transmission structures and lines on your property.

A 150-foot-wide easement

will be necessary to construct, operate, and maintain the proposed 345-kV transmission line.







Right-of-way agents will reach out to landowners in potential routing areas to discuss right-of-way needs. You'll be involved throughout the process, and if you have any questions or concerns, our project team will work with you!



Landowners in the project area will be notified of the project, and right-of-way agents will reach out to begin the right of entry and acquisition process.



A right-of-way agent will work with landowners to resolve any questions or concerns.



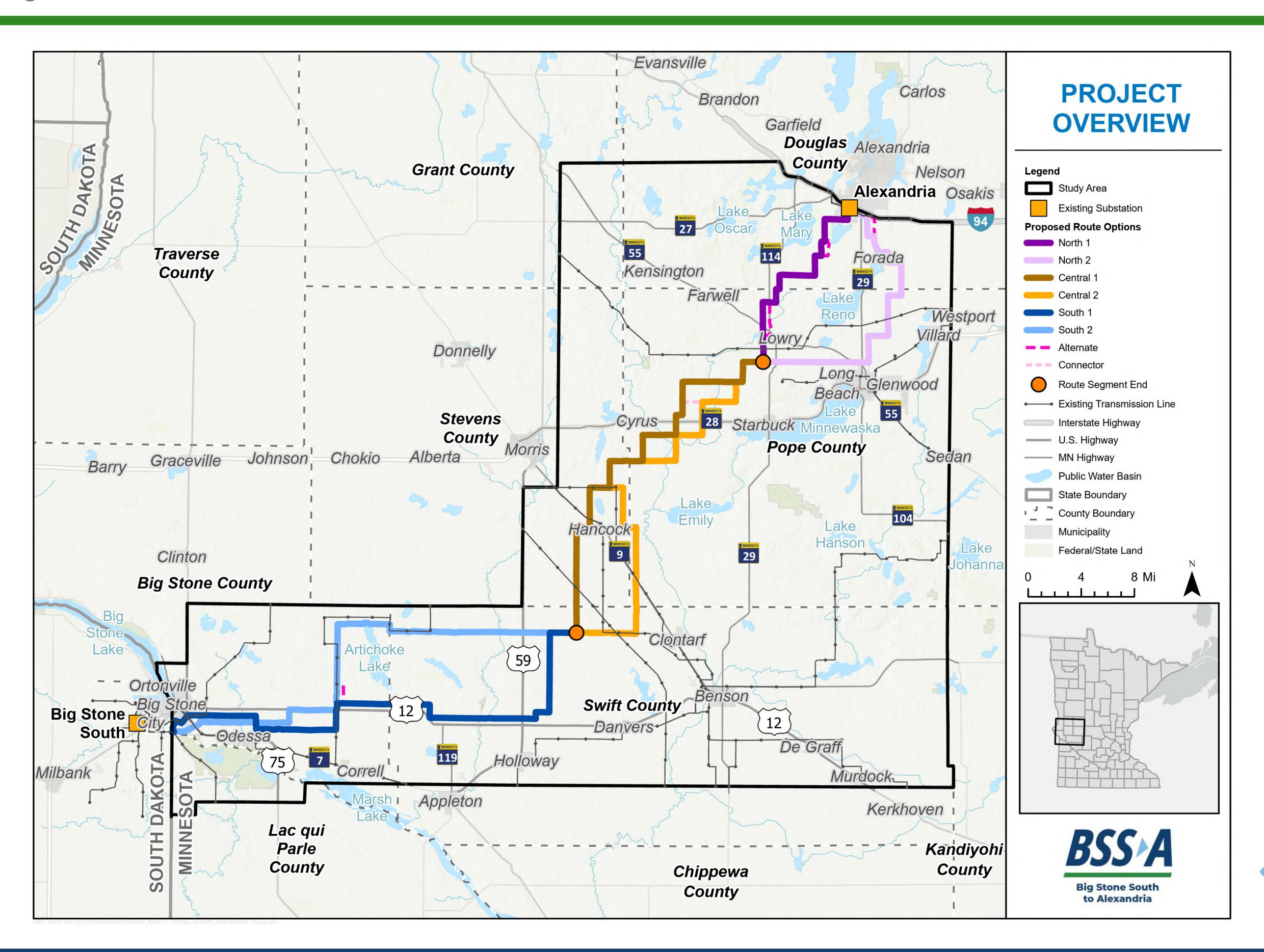
Once the project receives final approval, we'll present the landowner an easement offer based on the fair market value.



Once we reach an agreement to grant an easement, the utilities will construct, operate, and maintain the transmission line.



## PROPOSED ROUTE OPTIONS



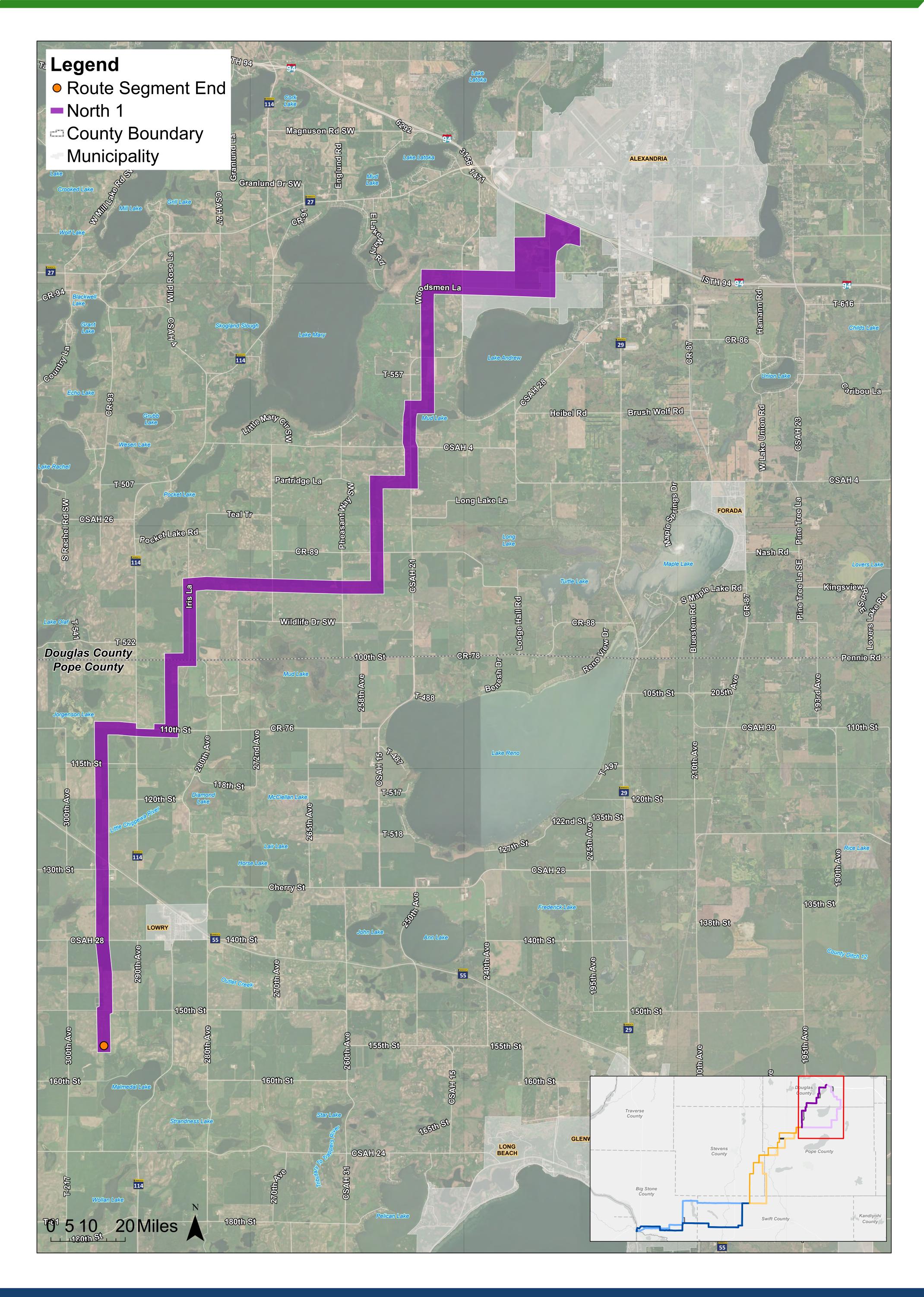
Proposed
Route Options
included in our
Route Permit
Application.
Final decision
pending MN
PUC approval.







## NORTH 1 ROUTE OPTION

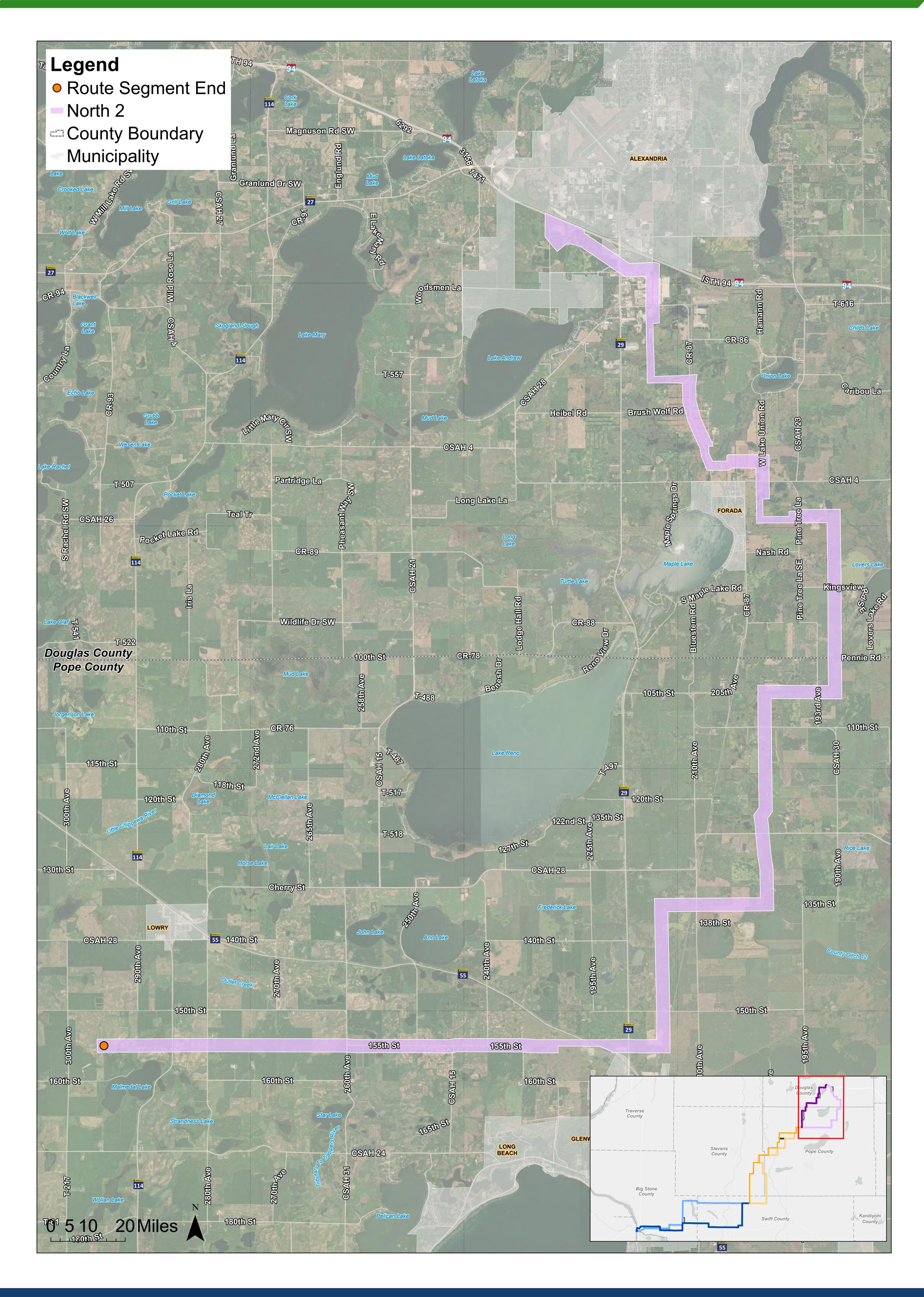








## NORTH 2 ROUTE OPTION

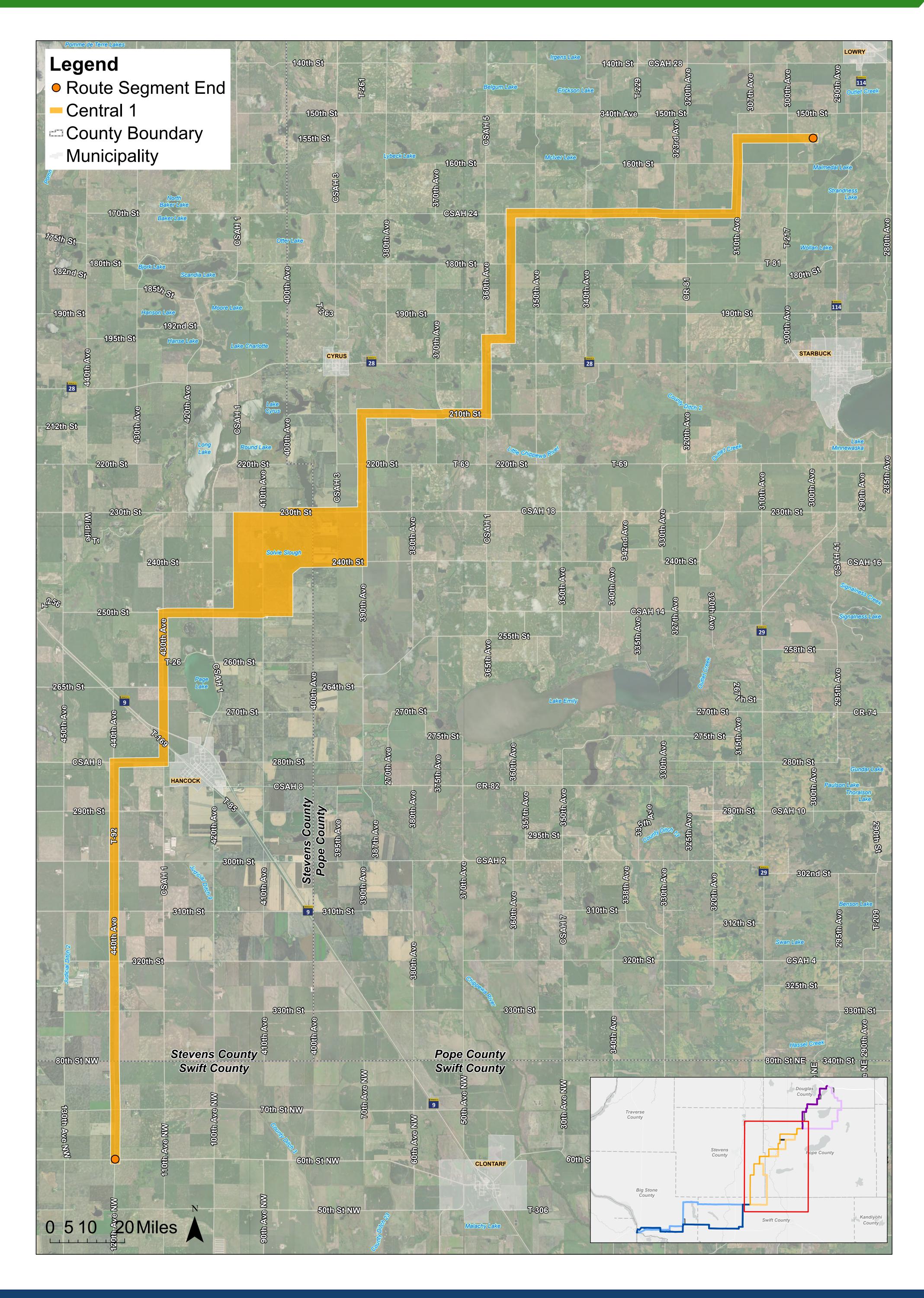








# BSSA CENTRAL I ROUTE OPTION

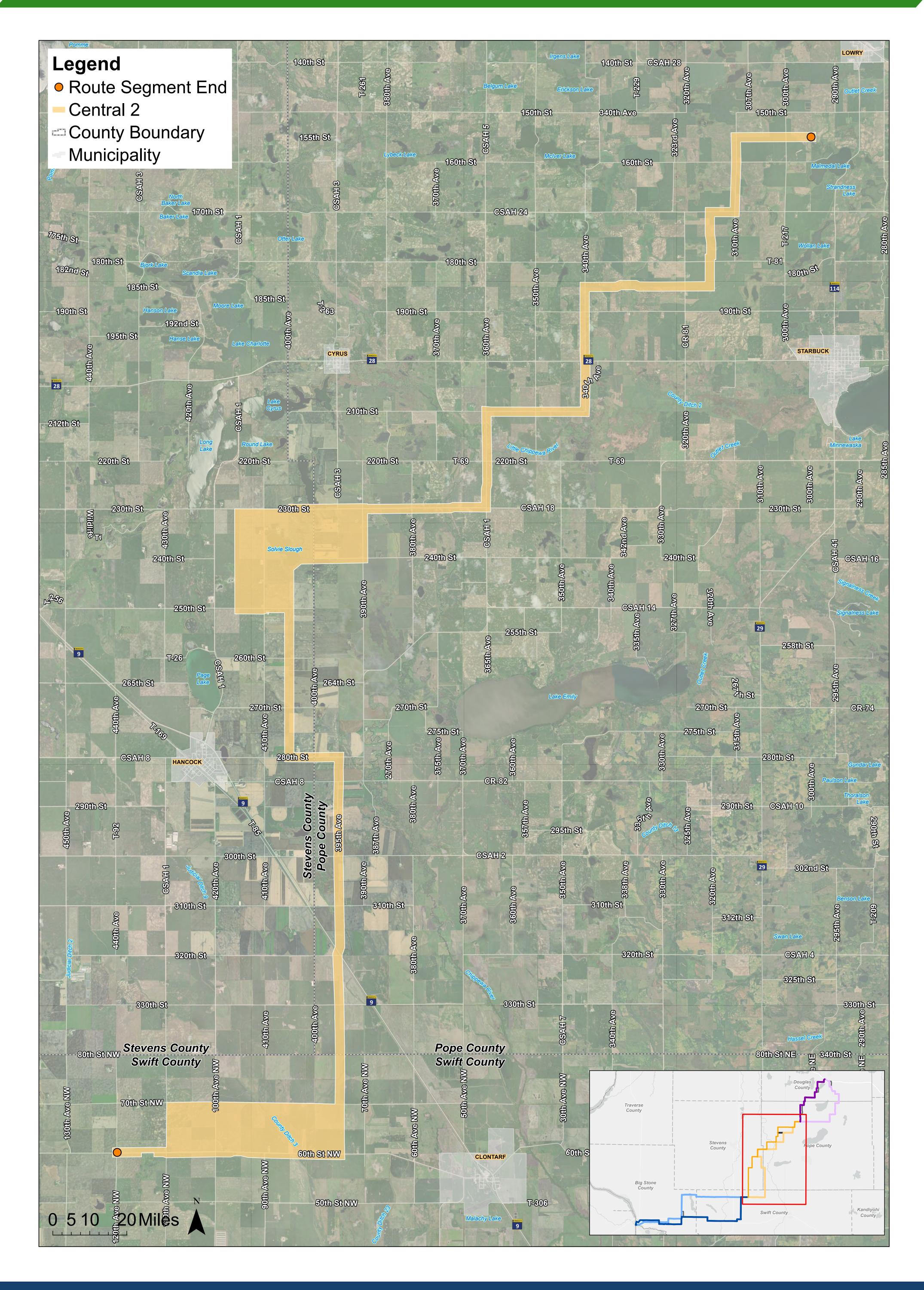








# BSSA CENTRAL 2 ROUTE OPTION

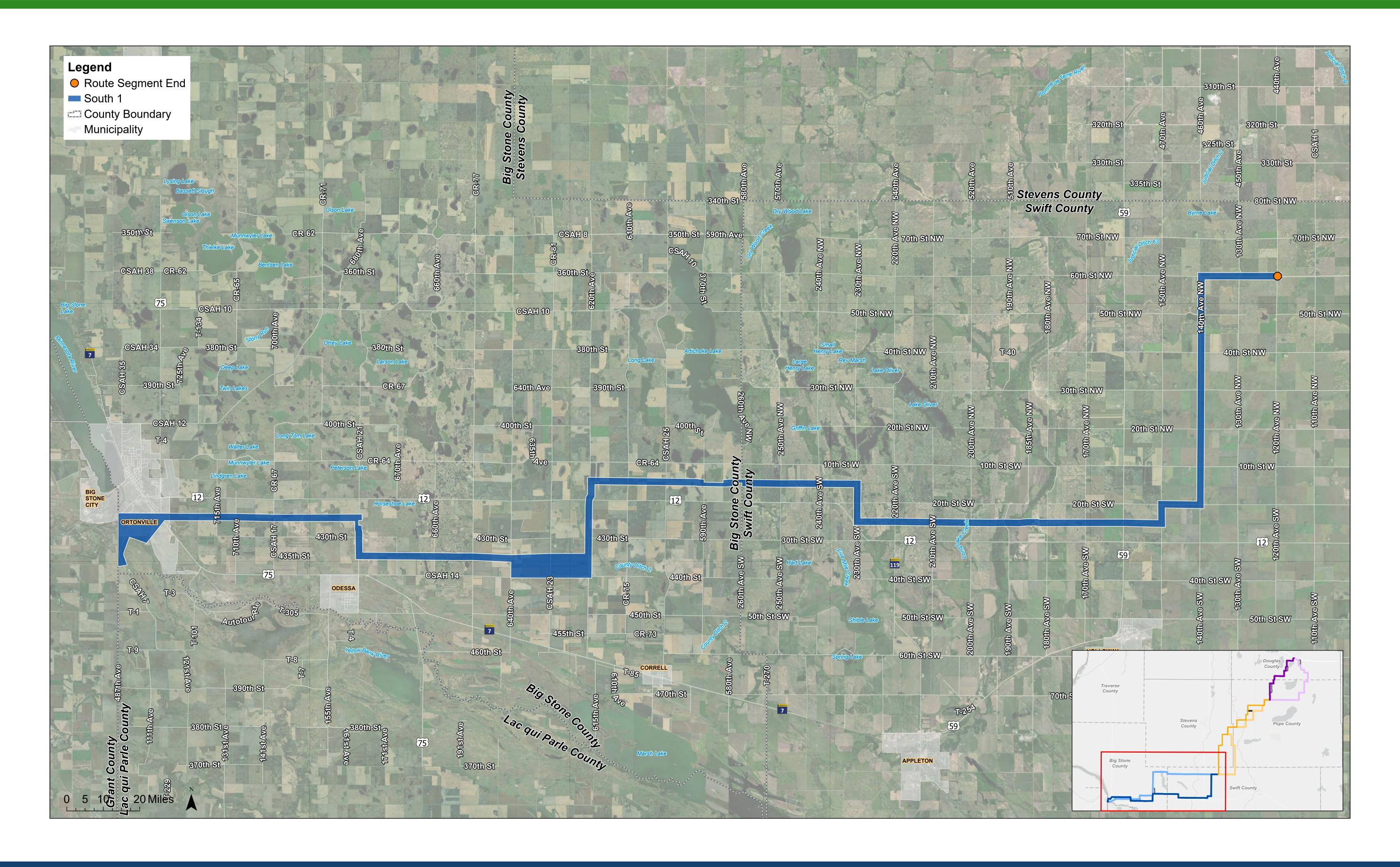


















## SOUTH 2 ROUTE OPTION

