Appendices

Appendix A

Scoping Decision Document

COMMERCE DEPARTMENT

In the Matter of the Certificate of Need and Route Permit Application of Minnesota Power and Great River Energy for the Northland Reliability Transmission Line Project in North Central Minnesota

ENVIRONMENTAL ASSESSMENT SCOPING DECISION

DOCKET NO. E015, ET2/CN-22-416
DOCKET NO. E015, ET2/TL-22-415

The above matter has come before the Commissioner of the Department of Commerce (Department) for a decision on the scope of the environmental assessment (EA) that will be prepared for the Northland Reliability 345 kV transmission line project, proposed by Minnesota Power and Great River Energy (Applicants) in north central Minnesota.

Project Description

The Applicants submitted a joint certificate of need and route permit application to the Commission for construction of the Northland Reliability Project (Project). The Applicants proposed a route located along existing high voltage transmission lines for more than 85 percent of its length (See Map 1).

The Project consists of two major segments:

1. Segment 1: construction of a new, approximately 140 mile long, double-circuit 345 kilovolt (kV) transmission line connecting the existing Iron Range Substation, a new Cuyuna Series Compensation Station (described below), and the existing Benton County Substation; and

2. Segment 2: replacement of two existing high-voltage transmission lines:
    a. Replace an approximately 20 mile long 230 kV line with two 345 kV circuits from the Benton County Substation to the new Xcel Energy Big Oaks Substation along existing high-voltage transmission right-of-way on double-circuit 345 kV structures; and
    b. Replace an approximately 20 mile long 345 kV line from the Benton County Substation to the existing Xcel Energy Sherco Substation in Sherburne County along existing high-voltage transmission right-of-way using double-circuit 345 kV structures.

The Project will also make two improvements to the power grid:

1. Expansion of the existing Iron Range Substation, located near Grand Rapids, and expansion of the existing Benton County Substation, located near St. Cloud, and rerouting existing transmission lines at the Iron Range Substation and Benton County Substation; and
2. Construction of a new Cuyuna Series Compensation Station near the existing Riverton Substation and the rerouting of existing transmission line in the Riverton area.

Project Purpose

The Applicants proposed Project will address transmission system reliability issues in central and northern Minnesota, particularly regional voltage, and transient stability issues. The Applicants have explained that the Project will provide voltage support, improve transmission system strength, and provide local sources of power delivery, and increase the ability to move power across regions, ensuring electric power resources during extreme weather events. The Project was studied, reviewed, and approved as part of the Long-Range Transmission Plan Tranche 1 Portfolio by the Midcontinent Independent System Operator. The Project, as proposed, is anticipated to be in service by June 2030.

Regulatory Background

The Project requires two approvals from the Commission – a certificate of need and a route permit.[1] The Commission authorized joint hearings and combined environmental review to support both approvals.[2] Accordingly, Department of Commerce, Energy Environmental Review and Analysis (EERA) staff will prepare an environmental assessment (EA) to address the Applicants' certificate of need and route permit application. The initial EA preparation phase involves scoping, a process designed to afford citizens, local governments, tribal governments, and agencies the chance to focus on the pertinent issues and alternatives concerning the proposed project.[3]

Scoping Process

The EA scoping process has two primary purposes: (1) to gather public input on the impacts, mitigation measures, and alternatives to study in the EA, and (2) to focus the EA on those impacts, mitigation measures, and alternatives that will aid in the Commission's decisions on a certificate of need and route permit.

EERA staff gathered input on the EA scope through seven public meetings and an associated comment period. This scoping decision identifies the impacts and mitigation measures that will be analyzed in the EA, including routing alternatives for the project. Additionally, this scoping decision identifies alternatives to the project itself that will be analyzed in the EA.

Public Scoping Meetings

Commission and EERA staff held seven joint public information and environmental assessment scoping meetings. Six of the meetings were in-person, and one virtual meeting. The in-person meetings began on October 23, 2023, at the Spang Town Hall, Hill City, Minnesota, followed by meetings on October 24, 2023, at Ironton and Brainerd, Minnesota, October 25, 2023, at Pierz and Clear Lake, Minnesota, and October 26, 2023, at Sauk Rapids, Minnesota. The virtual meeting was held on October 27, 2023. Total attendance at these meetings was approximately 232 persons. Comments were received from 62 persons at these meetings,[4] who expressed concern about a variety of potential impacts associated with the project, including impacts to property value and land use, human health, satellite and mobile phone interference, noise, changes in the local aesthetic and quality of life, loss of habitat and wildlife, increased trespass, reduced climate resiliency due to tree loss, and the likelihood of future high voltage transmission lines in the area.

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[1] November 15, 2023, Commission Order Accepting Applications as Complete and Establishing Procedural Requirements (Hereinafter Commission Completeness Order, see eDockets numbers 202311-200529-01 and 202311-200529-02).

[2] Ibid.

[3] Minnesota Rules, part 7850.3700, subpart 2.

[4] See eDockets numbers 202311-200862-01 and 202311-200862-02.

Public Comments

A 47-day comment period, which began on October 5, 2023, and closed on November 21, 2023, provided the public an opportunity to submit comments to EERA staff on potential impacts and mitigation measures for consideration during the EA scope development process. Comments were received from one Tribal government,[5] two state agencies,[6] seven nonprofits,[7] the applicants,[8] and from 65 citizens.[9] Several of these comments proposed specific route or alignment alternatives for consideration in the EA. In accordance with the Commission's November 15, 2023, order, comments received prior to the Northland Reliability Project on application acceptance were included with the EA scoping comments.[10]

Agency Comments

The Minnesota Department of Transportation (MnDOT) provided feedback on the application, highlighting potential impacts on various state and US highways. MnDOT emphasized the need for coordination regarding highway construction activities and oversize load transportation, suggesting regular communication with MnDOT's District 1 and District 3. Additionally, MnDOT's Office of Environmental Stewardship (OES) reviewed the application and outlined potential environmental concerns and permit requirements, including a request for visual simulations in areas designated as scenic byways.[11] The Applicants and their contractors were advised to adhere to MnDOT's utility

[5] Written Tribal Comments on the EA Scope received from the Leech Lake Band of Ojibwe (eDockets numbers 202311-200866-15 and 202311-200866-16) [hereinafter Tribal Comments].

[6] Written Agency Comments on the EA Scope: Minnesota Department of Natural Resources, (eDockets numbers 202311-200866-09 and 202311-200866-10) [August 22, 2023 Minnesota Department of Natural Resources comment, eDocket number 20238-198420-01], and the Minnesota Department of Transportation, (eDockets numbers 202311-200867-01 and 202311-200867-02) [hereinafter Agency Comments].

[7] Written Nonprofit Organization Comments on the EA Scope: Citizens Utility Board of Minnesota (eDockets numbers 202312-201585-01 and 202312-201585-02), Crow Wing County Historical Society (eDockets numbers 202311-200866-07 and 202311-200866-08), International Union of Operating Engineers – North Central States Regional Council of Carpenters (eDockets numbers 202311-200866-12 and 202311-200866-13), Laborers' International Union of North America (eDockets numbers 202311-200866-13 and 202311-200866-14), Minnesota Mississippi Parkway Commission (eDockets numbers 202311-200867-03 and 202311-200867-04), and the National Loon Center (eDockets numbers 202312-201583-01 and 202312-201583-02), and, No CAPX 2020 (eDocket number 20238-198415-02) [hereinafter Nonprofit Group Comments].

[8] Applicants' Comments on the EA Scope (eDockets numbers 202311-200866-17 and 202311-200866-18) [hereinafter Applicants' Comments].

[9] Written Citizen Comments on the EA Scope are found in eDocket numbers 202311-200421-01, 202311-200492-02, 202311-200662-01, 202311-200858-02 (through -18), 202311-200859-01 (through -17), 202311-200862-02, 202311-200866-02 (through -06), 202311-200867-05 (through -09), 202312-201003-02 (through -04), 202312-201003-02 (through -04), 202312-200984-01, 20235-195779-01, 20235-196183-02, 20237-197708-01, 20238-198274-02, 20238-198282-01, 20238-198595-01, 20238-198596-01, 20238-198597-01, 20238-198603-01, 20239-198898-01, 20239-199165-02, and, 20239-199245-01 (through -03) [hereinafter Written Public Comments].

[10] See Commission Completeness Order, Order #10, p. 4.

[11] From the November 21, 2023, Minnesota Department of Transportation (eDockets numbers 202311-200867-01 and 202311-200867-02) comment letter, the OES cited under the National Scenic Byways Program (Title 23, USC, Section 162), and requested "An analysis of the physical and visual impact on each of these six intrinsic qualities should be conducted at each proposed crossing locations and/or collocated segments and where the proposed utility is within 7 miles of a byway to determine the route with the least adverse impact on the byway routes and corridors." Per the OES, the analysis should include street view imagery or on-the-ground photographs, and photo /visual simulations (documenting existing conditions and simulating post-construction). (See Attachment

accommodation policies and obtain necessary permits for pole placement and aerial encroachments. MnDOT underscored the importance of continued coordination throughout the project's lifespan and provided contact information for district specialists. MnDOT expressed its commitment to collaborating with relevant stakeholders to address potential impacts on the state highway system, public safety, and environmental areas of concern.

The Minnesota Department of Natural Resources (DNR) noted several potential natural resource impacts that should be analyzed in the EA, including impacts to state lands and School Trust Fund lands.[12] The DNR offered comments on specific routes and suggested route and alignment alternatives based on the information contained in the Applicants' route permit application. After close of the comment period, EERA staff conferred with the Applicants and the Minnesota Department of Natural Resources (DNR) on proposed route alternatives for study in the EA, consistent with the Commission Completeness Order.[13]

Applicants' Comments

Per the Commission's November 15, 2023, order the Applicants explored route alternatives for a new double-circuit 345 kV transmission line, with a focus on consolidating it with existing transmission lines.[14] The Applicants commented and suggested various route alternatives and consolidation opportunities for inclusion in the EA, along with considerations such as route width expansions and alignment changes, that will be included for evaluation in the EA.[15]

Alternatives to the ProjectA citizen presented several alternatives to the project itself (system alternatives).[16] The first alternative suggested creating new generating capacity on the Northern Range, including solar, to offset the need for the Northland Reliability Project.[17] The second alternative promoted connecting transmission to Alexandria, Minnesota, where power is brought into Minnesota from Big Stone, South Dakota, rather than constructing the Northland Reliability Project.[18] The last alternative offered would abandon the Great River Energy MR 230 kV Transmission Line, and rebuild the existing grid, adding lines to existing structures, to displace the need for the Northland Reliability Project.[19]

1, p. 3). The topic will be included in the EA; however, further analysis will determine if a visual simulation is necessary to support the review.

[12] November 21, 2023, comment letter from the Minnesota Department of Natural Resources on the Northland Reliability Project EA scope (eDockets numbers 202311-200866-09) and (202311-200866-10).

[13] See Commission Completion Order, Order #7, p. 4.

[14] Ibid.

[15] November 21, 2023, Applicants' scoping comments, Northland Reliability Project, Environmental Assessment Scoping Comments & Proposed Alternative Routes (eDocket number 202311-200866-18).

[16] September 25, 2023, and November 20, 2023, comments from Jonathan Winkelman (See eDocket numbers 20239-199165-020 and 20242-203464-02).

[17] See Winkelman, September 25, 2023 (eDocket number 20239-199165-020).

[18] See Winkelman, November 20, 2023 (eDocket number 20242-203464-02).

[19] Ibid.

Commission Review

After close of the public comment period, EERA staff conferred with DNR staff and the Applicants on the alternatives proposed for study in the EA. On February 13, 2024, EERA staff provided the Commission with a summary of the EA scoping process.[20] The summary discussed the routing alternatives that were proposed during the scoping process and those alternatives that the Department intended to recommend for inclusion in the scope of the EA. On February 29, 2024, the Commission deliberated on the recommended route and alignment alternatives for evaluation in the EA. The Commission adopted EERA staff's route and alignment recommendations, also accepting three alternatives received from the public after the close of the public comment period, for further analysis in the EA.[21]

HAVING REVIEWED THE MATTER, consulted with Department staff, and in accordance with Minnesota Rule 7850.3700, I hereby make the following scoping decision:

MATTERS TO BE ADDRESSED

The issues outlined below will be analyzed in the EA for the proposed Northland Reliability 345 kV transmission line project. The EA will describe the project and the human and environmental resources of the project area and will provide information on the potential project impacts as they relate to the topics outlined in this scoping decision, as well as possible mitigation measures. It will identify impacts that cannot be avoided, irretrievable commitments of resources, as well as permits from other government entities that may be required for the project. The EA will discuss the relative merits of the route alternatives studied in the EA using the routing factors found in Minnesota Rule 7850.4100.

The EA will include a description and analysis of the human and environmental impacts of the proposed project and project alternatives that would have otherwise been required by Minnesota Rule 7849.1500 in an environmental report.

I. GENERAL DESCRIPTION OF THE PROJECT

- A. Project Description
- B. Project Purpose
- C. Route Description
  1. Route Width
  2. Right-of-Way
- D. Project Costs

II. REGULATORY FRAMEWORK

- A. Certificate of Need
- B. High Voltage Transmission Line Route Permit

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[20] Minnesota Department of Commerce, EERA Comments and Recommendations on the Scoping Process and Routing Alternatives for the Northland Reliability 345 Transmission Line Project (eDocket number 20242-203365-02).

[21] In their March 6, 2024, order (eDocket number 20243-204135-01), the Minnesota Public Utilities Commission (PUC) accepted route and alignment alternatives submitted after the close of the November 21, 2023, public comment deadline. Specifically, the PUC accepted Option 8, items A-C (Route K; Alternative Alignment 14; Karen Burthwick 1), identified in the PUC Staff Briefing Papers (eDocket number 20242-203684-02).

C. Environmental Review Process
D. Other Permits and Approvals

III. ENGINEERING AND DESIGN

A. Transmission Line Structures
   1. Paralleling and Double-Circuiting
B. Transmission Line Conductors

IV. CONSTRUCTION

A. Right-of-Way Acquisition
B. Construction
C. Restoration
D. Damage Compensation
E. Operation and Maintenance

V. AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATIVE MEASURES

The EA will include a discussion of the human and environmental resources potentially impacted by the proposed project and the routing alternatives described herein (Section VI). Potential impacts, both positive and negative, of both the project and each alternative will be described. The EA will describe mitigation measures that could reasonably be implemented to reduce or eliminate the identified impacts. The EA will also describe any unavoidable impacts resulting from proposed project implementation.

The EA data and analyses will be commensurate with the importance of potential impacts and the relevance of the information for consideration of mitigation measures.[22] Additionally, EERA staff will consider the relationship between the cost of data and analyses and the relevance and importance of the information in determining the level of detail of information to be prepared for the EA. Less important material may be summarized, consolidated, or simply referenced.

If relevant information cannot be obtained within timelines prescribed by statute and rule, or if the costs of obtaining such information is excessive, or the means to obtain it is not known, EERA staff will include a statement in the EA that such information is incomplete or unavailable and the relevance of that information in evaluating potential impacts.[23]

A. Environmental Setting
B. Socioeconomics
   1. Environmental Justice
C. Human Settlements
   1. Noise
   2. Aesthetics
   3. Displacement
   4. Property Values
   5. Zoning and Land Use Compatibility
   6. Public Services

[22] The Minnesota 7850 rules are silent on this point. The EERA relies on Minnesota Rule 4410.2300 to inform EA practice.
[23] Ibid, see Minnesota Rule 4410.2500.

7. Electronic Interference

D. Public Health and Safety
   1. Electric and Magnetic Fields
   2. Implantable Medical Devices
   3. Stray Voltage
   4. Induced Voltage

E. Land Based Economies
   1. Agriculture
   2. Forestry
   3. Mining
   4. Recreation and Tourism

F. Archaeological and Historic Resources

G. Natural Environment
   1. Air Quality / Greenhouse Gases
   2. Climate Change and Project Resilience
   3. Water Resources
      a) Surface Waters
      b) Groundwater
      c) Wetlands
   4. Soils
   5. Vegetation
   6. Wildlife

H. Threatened / Endangered / Rare and Unique Natural Resources

I. Electric System Reliability

J. Operation and Maintenance Costs that are Design Dependent

K. Adverse Impacts that Cannot be Avoided

L. Irreversible and Irretrievable Commitments of Resources

M. Cumulative Potential Effects

VI. ROUTES AND ROUTE ALTERNATIVES TO BE EVALUATED IN THE ENVIRONMENTAL ASSESSMENT

The EA will evaluate the route proposed in the Applicants' route permit application and as modified by the Applicants' comments (See Map 1).[24] Additionally, the EA will evaluate the route and alignment alternatives accepted by the Commission in its order of March 6, 2024, as summarized below, proceeding from north to south:

Route A1

Route A1 follows the Applicants' route but shifts to the west of the state property and onto the Applicants' property at the northern Iron Range Substation terminus. This alternative turns south and crosses County Road 10 southeast of the Applicants' route, then follows County Road 221 south, crossing the Swan River at a previously disturbed bridge crossing (See Map 2).

[24] The Applicants November 21, 2023, comment letter identified several right of way modifications that will be addressed in the EA. While not explicitly noted as alternatives during the EERA review, the Applicants modifications were incorporated by reference in the EERA Comments and Recommendations on the Scoping Process and Routing Alternatives for the Northland Reliability 345 Transmission Line Project (eDocket number 20242-203365-02).

Route A2

Route A2 follows the Applicants' route, shifting to the west of the state property and onto the Applicants' property at the northern Iron Range Substation terminus, turning south and crossing County Road 10 southeast of the Applicants' route, then following County Road 445, connecting to a long driveway/edge of an agricultural field south, then crossing the Swan River (See Map 2).

Route A3

This route alternative extends from the 90-degree turning point of the Applicants' route in Section 30, Trout Lake Township, Itasca County, joining the existing Minnesota Power 92 Line (230 kV), then following the existing 92 Line to the southwest until it reconnects with the Applicants' route (See Map 2).

Route A4

Route A4 follows Route A2 from Section 31, Trout Lake Township, Itasca County, running due south for seven miles, then turning 90 degrees to the west in Section 6, Feeley Township, Itasca County, running approximately eight miles until it reconnects with the Applicants' route (See Map 2)

Alignment Alternative 15

This alignment alternative extends the Applicants' alignment further west for approximately one-half mile, beginning on the south side of Itasca County Road 436, along the north edge of Section 11, Blackberry Township, Itasca County, extending to the west approximately 80 yards, running parallel to the Applicants' alignment, before rejoining it (See Map 3).

Alignment Alternative 16

This alignment alternative begins in Section 18, Blackberry Township, Itasca County, and follows the Applicants' alignment, terminating at Section 2, Hill Lake Township, Aitkin County (See Map 4).

Route B

This route alternative begins at the Applicants' route in Section 2, Hill Lake Township, Aitkin County, where it then departs to the west and runs parallel to the south until it reconnects with the Applicants' line in Section 26, Little Pine Township, Crow Wing County (See Map 5).

Route C

The route alternative begins at the Applicants' route on the northeast corner of Section 3, Ross Lake Township, Aitkin County, running to the west along the north edge of the section line for approximately one and two-thirds mile, then south, for approximately two and one-half miles, rejoining the Applicants' route in Section 9 of Ross Lake Township (See Map 6).

Alignment Alternative 1

The alignment alternative begins at the Applicants' route in Section 10, Perry Lake Township, Crow Wing County, extending to the west approximately 100 yards, then running parallel to the Applicants' route for approximately one and one-quarter miles, rejoining the Applicants' route at Section 16, Perry Lake Township (See Map 7).

Alignment Alternative 2

Like Alignment Alternative 1, this alignment alternative departs from the Applicants' route at Section 10, Perry Lake Township, Crow Wing County, extending approximately 100 yards to the west, and rejoins the Applicants' route following state road Minnesota 6, in Section 9, Perry Lake Township (See Map 7).

Route D3

This route alternative departs from the Applicants' route's east side, heading due south for approximately two miles, then turning due west to reconnect with the Applicants' route for approximately one and one-third miles (See Map 8).

Alignment Alternative 3

This alignment alternative begins in Section 16, Wolford Township, Crow Wing County, and involves consolidating the existing transmission 92 Line and 11 Line on the same structures, facilitating the placement of the Project on the right-of-way currently utilized by the 92 Line in this area. This alignment runs approximately five miles, terminating in Section 7, Irondale Township (See Map 9).

Alignment Alternative 4

This alignment is like Alternative Alignment 3, consolidating the existing transmission 92 Line and the 11 Line; however, is less than a mile in length. It begins in Section 16, Wolford Township, and following the Applicants' route, this alignment rejoins the Applicants' alignment in Section 29, Wolford Township, Crow Wing County (See Map 10)

Alignment Alternative 6

The alignment alternative begins in Section 16, Wolford Township, Crow Wing County, running south through Section 21 and 28, for approximately two and one-half miles, then turning due west to rejoin the Applicants' route (See Map 10).

Route E1

For Route E1, the existing Line 92 (230 kV) would be double circuited with another existing line for approximately seven miles. Route E1 would put the Project's double-circuit 345 kV line in the ROW previously used by Line 92. The existing Minnesota Power Riverton 115 kV/34.5 kV Substation will be removed to make way for transmission line reconfigurations. The nearby Riverton 230 kV/115 kV Substation will be expanded to accomodate connections from the removed substation, including transformers and feeders. (See Map 11).

Route E2

The route alternative begins at the northeast corner of Section 36, Irondale Township, running to the southwest one and three-quarter miles, then due south approximately two and one-half miles where it reconnects with the Applicants' route in the northwest quarter of Section 13, Oak Lawn Township, Crow Wing County (See Map 12).

Route E3

This route alternative follows the same path as route E1; however, it extends to the southeast approximately one-third mile south of State Highway 210, where it departs route E1 then travels approximately one-mile to the southeast, crossing Hay Creek, where it then reconnects with the Applicants' route (See Map 13).

Route E4

The route alternative begins at the Applicants' route southwest of the Cole Lake area, heading southwest following the Misty Trail, then shifting to a more southerly orientation for approximately two and one-half miles. North of Sunde Road, the route begins a sinuous path edging to the west where two Mississippi River crossings are required, eventually rejoining with route E1 to the east. Route E4 follows the same path as route E1 until it terminates north of Woodrow Road, rejoining the Applicants' route (See Map 14).

Route E5

Route E5 departs the Applicants' route through a westward three and half mile long polygonal path that features two Minnesota River crossings, rejoining route E1 south until it reconnects with the Applicants' route. Route E5 is approximately eight and one-half miles in length and is a shorter version of Route E4 (See Map 15).

Alignment Alternative 7

This alignment alternative is in Section 7, Irondale Township, Crow Wing County, adjusting the Applicants' route by extending the northeast-southwest trending alignment further south, avoiding state land near a newly proposed substation (See Map 16).

Alignment Alternative 8

This alignment alternative follows along the eastern side of Crow Wing County Road 59 (See Map 17). The alignment is approximately one and two-thirds miles in length and is oriented in a north-south direction.

Alignment Alternative 9

Similar in length and orientation to Alignment Alternative 8, this alignment is located along the western edge of Crow Wing County Road 59 (See Map 17).

Alignment Alternative 10

The alignment alternative begins about a quarter mile north of Woodrow Road, and extends west, perpendicular to the Applicants' alignment for approximately three quarters of a mile, then due south for about a quarter of a mile until it resumes connection with the Applicants' alignment (See Map 18).

Route F

The route alternative departs the Applicants' route approximately one-quarter mile south of Woodrow Road, traveling south for approximately two and one-half miles, before rejoining the Applicants' route (see Map 18).

Route G

The route alternative runs between Oak Lawn and Nokay Lake Township, then follows existing right of way, until crossing at the edge of agricultural fields (See Map 19). The overall route length is approximately three and three-quarter miles.

Route H1

This route alternative shifts eastward from the Applicants' route, running north of North Long Lake, then follows an alternative transmission line corridor north of County Road 24 SE for 0.25 miles, eventually heading south along Schilling Road for 2 miles before turning southwest for 1.9 miles back to the Applicants' route (See Map 20).

Route H2

The route alternative shifts the Applicants' route eastward, closely tracing the edges of agricultural fields and uplands for 1.2 miles, then heading south along Highway 8 for 1.75 miles, continuing to Highway 108, and reaching County Road 22 SE. Here, it turns west for 2.75 miles, eventually intersecting withan existing transmission line and proceeds south to reconnect with the Applicants' route (See Map 20).

Route H3

The route alternative is located east of Upper and Lower Long Lake and departs the Applicants' line approximately one-eighth mile south of County Road 24, in a southeast direction, for approximately three-quarters of a mile. From there, it follows back to the southwest approximately one and three-quarter miles to rejoin the Applicants' route (See Map 20).

Route H4

This route alternative re-routes the Applicants' route through tax-forfeited land in Maple Grove Township. The Applicants' route follows a north-south direction at this location, approximately one-mile east of County Road 108, crossing County Road 22 to the south, for approximately one-mile, then turning 90 degrees to the west for approximately one and three-quarter miles (See Map 21).

Alignment Alternative 12

This alignment alternative shifts the Applicants' route to the east approximately one-quarter mile, beginning in Section 21, Maple Grove Township, and rejoins the Applicants' route in Section 28, Maple Grove Township, Crow Wing County (See Map 21)

Route H5

This route alternative modifies the Applicants' route near the intersection of County Road 108 and 22, in Maple Grove Township, Crow Wing County (See Map 21).

Route H6

The route alternative begins where the Applicants' route crosses County Road 22, Section 21 and 28, Maple Grove Township, and follows the road right of way for approximately one-half mile to the west, combining with an existing transmission line for approximately another one-half mile to the west, then south where it rejoins the Applicants' route (See Map 21).

Route H7

This route alternative proceeds south from the Applicants' route in Section 28, Maple Grove Township, and runs approximately one-half mile to the southwest, then turns due west where it rejoins the Applicants' route (See Map 21).

Alignment Alternative 13

The alignment alternative follows a similar path, parallel to Route H7, located approximately one-quarter mile north of the route H7 path (See Map 21).

Alignment Alternative 17

This alternative is located where the Project route crosses County Highway 2, in Crow Wing County, Platte Lake Township, and shifts the Applicants' alignment to the west approximately 80 yards, beginning north of County Highway 2, extending south for approximately one mile, then rejoining the Applicants' alignment (See Map 22).

Route K

Route K departs the Applicants' route at Section 25 Oak Lawn Township, and follows the existing Great River Energy MR Line (230 kV) running south through the same section and Section 36, crossing in to Sections 1, 12, and 13, of Long Lake Township, then crossing between South and North Long Lake through Section 18 of Maple Grove Township, then running south through Sections 19 and 30 of the same township until rejoining the Applicants' route (See Map 23).

AA14

This alignment alternative, beginning in Section 4, Maple Grove Township, is oriented north-south for approximately 375 yards, then changes orientation to the southeast, for approximately one-half miles. The alternative extends the Applicants' alignment southeastern orientation point an additional 220 yards, then rejoining the Applicants' alignment (See Map 23)

Route J1

This route alternative deviates from the Applicants' route, initially heading west along 75th Street NE for 0.5 miles, then turns south onto 55th Avenue NE, covering a two-mile distance. Upon reaching 55th Street NE, facing a one-mile stretch of agricultural fields or pasture, the alternative angles slightly south around residences, then follows a westward half-mile-wide corridor. Route J1 merges with Golden Spike Road NE, traveling south for 0.8 miles. The route follows the curve of Golden Spike Road, angles across an agricultural field, intersects with 55th Avenue NE for 0.33 miles, turns east along 35th Street NE, and finally reconnects with the Applicants' preferred route (See Map 24).

Route J2

This route continues south after crossing Golden Spike Road NE, departing from the Applicants' route. Navigating through an agricultural field, it aligns with 25th Street NE for approximately 1.25 miles, avoiding the Elk River corridor and residential structures. As 25th Street NE turns sharply west, the route crosses agricultural fields and pastures for one mile before reaching MN Trunk Highway 23. It then rejoins 55th Avenue NE (Quail Road) for 1.33 miles, eventually turning east to connect with the Benton County substation (See Map 24).

Route J3

The route alternative deviates from the Applicants' route to follow MN Trunk Highway 23. Continuing south, it would then connect with and follow Route J2. Collaborating with Route J1, this approach aligns with the Applicants' route for an additional 1.3 miles (See Map 24).

VII. ALTERNATIVES TO THE PROPOSED TRANSMISSION LINE PROJECT

The EA, in accordance with Minnesota Rule 7849.1500, will describe and analyze the feasibility of the following system alternatives, and the human and environmental impacts and potential mitigation measures associated with each:

A. No-build Alternative
B. Demand Side Management
C. Purchased Power
D. Transmission Line of a Different Size
    1. Higher and Lower Voltage Lines
E. Upgrading of Existing Facilities
    1. Reconductoring of Existing Lines
    2. Double-Circuiting of Existing Lines
F. Generation Rather Than Transmission
G. Use of Renewable Energy Sources

VIII. IDENTIFICATION OF PERMITS

The EA will include a list and description of permits from other government entities that may be required for the proposed project.

ISSUES OUTSIDE THE SCOPE OF THE ENVIRONMENTAL ASSESSMENT

The EA will not consider the following:

A. Any route, route segment, or alignment alternative not specifically identified for study in this scoping decision.
B. Any system alternative (an alternative to the proposed transmission line project) not specifically identified for study in this scoping decision.
C. Policy issues concerning whether utilities or local governments should be liable for the cost to relocate utility poles when roadways are widened.
D. The manner in which land owners are paid for transmission line right-of-way easements.
E. The following alternatives, proposed to mitigate potential impacts of the project during the scoping process, will not be included for further study in the EA:

System Alternative – Building more generating capacity on the North Range
A citizen proposed new generating capacity on the Northern Range, including solar, to offset the need for the Northland Reliability Project.[25] New generating capacity would still require new transmission infrastructure and does not address the substation connection issues, which would be supported through the Northland Reliability Project. This alternative does not meet project needs and would not aid in the Commission's decision on the CN application.

System Alternative – Connecting to Alexandria, Minnesota
A citizen suggested connecting the existing grid to Alexandria, Minnesota, where power is brought into Minnesota from Big Stone, South Dakota, rather than construct the Northland Reliability Project.[26] The proposed Alexandria, Minnesota, transmission line connection would not provide for the Iron Range Substation, Cuyuna Series Compensation Station, and the Benton County Substation transmission connections. This alternative does not meet project needs and would not aid in the Commission's decision on the CN application.

System Alternative – Abandon Great River Energy MR Line and Rebuild Existing Line
A citizen proposed that the Applicants' abandon the Great River Energy MR 230 kV Transmission Line, and rebuild the existing grid, adding lines to existing structures, to displace the need for the Northland Reliability Project.[27] The Great River Energy MR Line is still needed in addition to replacing existing transmission lines between the Benton County Substation and a new Big Oaks Substation and the Sherco Substation. Co-locating the Project with the existing Great River Energy MR 230 kV transmission line would not be viable as locating all lines on a common structure would not meet Project reliability needs. This alternative does not meet project needs and would not aid in the Commission's decision on the CN application.

[25] September 25, 2023, comment from Jonathan Winkelman (eDocket number 20239-199165-020).
[26] November 20, 2023, comment from Jonathan Winkelman (eDocket number 20242-203464-02).
[27] Ibid.

Route I

A citizen provided a route alternative to address quality of life issues, property values, potential electronic interferences, stray voltage, impacts to cattle grazing, forestry resources, and wildlife habitat.[28] Beginning at the southern half of Section 31, Pulaski Township, Morrison County, the route runs east for six miles, then turns south for six miles, and then west for six miles, surrounding Granite Township, in Morrison County. The Commission has determined that Route I would have substantially more human and environmental impacts than the Applicants' route in this area, and would not aid in the Commission's decision on a route permit.

Alignment Alternative 5

A citizen provided Alignment Alternative 5, which follows existing right-of-way to avoid impacts to property use and value, as well as aesthetics, around Cole Lake Way, located along the eastern edge of the current transmission line right-of-way.[29] Beginning in Section 16, Wolford Township, and following the Applicants' route, this alignment rejoins the Applicants' alignment in Section 20, Wolford Township, Crow Wing County. Alignment Alternative 5 is nearly identical to Alignment Alternative 4 in this area and addresses the same impacts as Alignment Alternative 4. Having two alignment alternatives that offer the same potential benefits, analysis of both alignment alternatives in the EA would be redundant. Thus, Alignment Alternative 5 would not aid in the Commission's decision on a route permit.

Alignment Alternative 11

Members of the public provided Alignment Alternative 11, located in Section 4, Maple Grove Township, Crow Wing County, that modifies the Applicants' alignment by routing the line from the point where the Applicants' alignment diverts to the southeast, and extending the alignment further south, approximately one-tenth of a mile, returning and rejoining the Applicants' alignment.[30] Alignment Alternative 11 and Alignment Alternative 14 are nearly identical; they address the same impacts and offer the same potential benefits. Because Alignment Alternative 14 is the later-submitted alternative and an improvement on Alternative Alignment 11, Alternative Alignment 11 would not aid in the Commission's decision on a route permit.

Route D1

A member of the public provided Route D1, located in Sections 16 and 20 in Wolford Township, Crow Wing County, which diverges from the Applicants' route to the west.[31] It first proceeds southeast for about two-tenths of a mile, then shifts due west for approximately one-third of a mile, and subsequently turns due south for around one-half mile before reconnecting with the Applicants' route. This route requires crossing over existing transmission infrastructure and then crossing back. These crossings introduce construction, maintenance, and reliability concerns along with additional costs. Because other routing options in this area mitigate the same impacts without crossing existing transmission lines, this route would not aid in the Commission's decision on a route permit.

[28] November 21, 2023, comment from Mr. Nathan Britz (eDocket number 202311-200858-02).
[29] October 24, 2023, comment from Mr. Donald Boucher (eDocket number 202311-200859-03).
[30] October 24, 2023, and October 31, 2023, comments from Mr. Kevin and Ms. Linda Schilling (eDocket number 202311-200858-18).
[31] October 24, 2023, comment from Mr. Donald Boucher (eDocket number 202311-200859-03).

Route D2

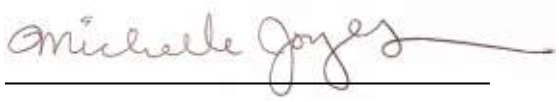
A member of the public provided Route D2, located in Sections 16, 17, and 20 in Wolford Township, Crow Wing County. Route D2 departs from the Applicants' route on the west, heading due west approximately one-quarter mile, then heading due south approximately one-half mile, changing direction again to the southeast for approximately one-third mile, where it rejoins the Applicants' route.[32] This route requires crossing over existing transmission infrastructure and then crossing back, introducing construction, maintenance, and reliability concerns along with additional costs. Because other routing options in this area mitigate the same impacts without crossing existing transmission lines, this route would not aid in the Commission's decision on a route permit.

SCHEDULE

The EA is anticipated to be completed and available in June 2024. Public hearings are anticipated to be held during July 2024 and will be held in the project area.

Signed this ___22___ day of _____March____, 2024

STATE OF MINNESOTA
DEPARTMENT OF COMMERCE



Michelle Gransee, Deputy Commissioner

[32] November 21, 2023, comment from Mr. Donald Boucher (eDockets numbers 202311-200859-01 and 202311-200859-03).

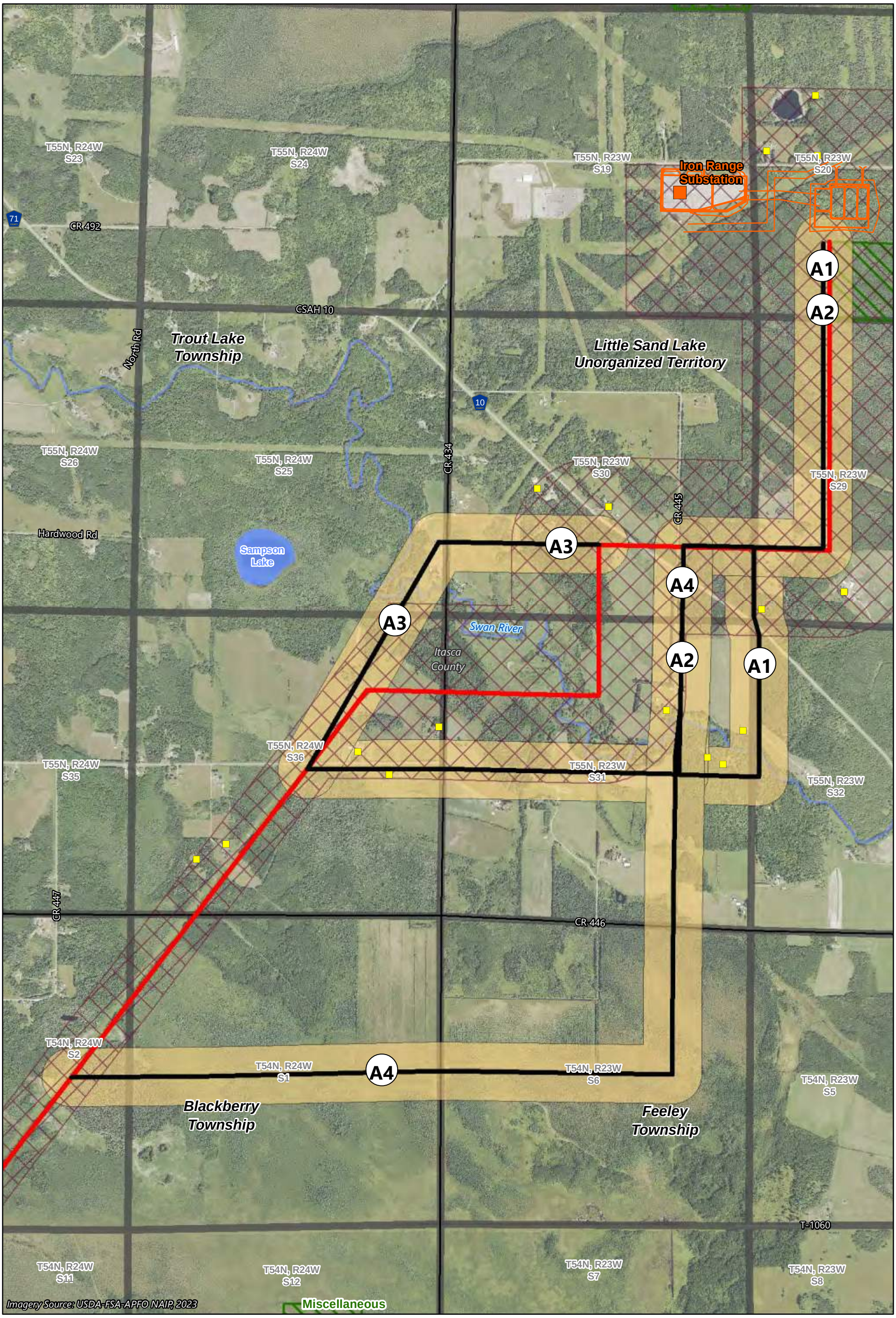
Iron Range Substation
Itasca County
Hubbard County
Walker
Saint Louis County
Cass County
Wadena County
Crow Wing County
Aitkin County
Carlton County
Nisswa
Crosslake
Cuyuna Series Compensation Station
Staples
Brainerd
Todd County
Morrison County
Long Prairie
Little Falls
Mille Lacs County
Kanabec County
Pine County
Benton County
Benton County Substation
Stearns County
Albany
Sherburne County
Sherco Substation
Wright County
Meeker County
Anoka County
Isanti County
Chisago County

Proposed Route Segment 1
Proposed Route Segment 2
Existing Transmission Line
Benton County Substation
Iron Range Substation
Sherco Substation
Cuyuna Series Compensation Station

Miles
0 5 10

Map 1

APPLICANT'S PROPOSED PROJECT
Scoping Decision
Northland Reliability Project

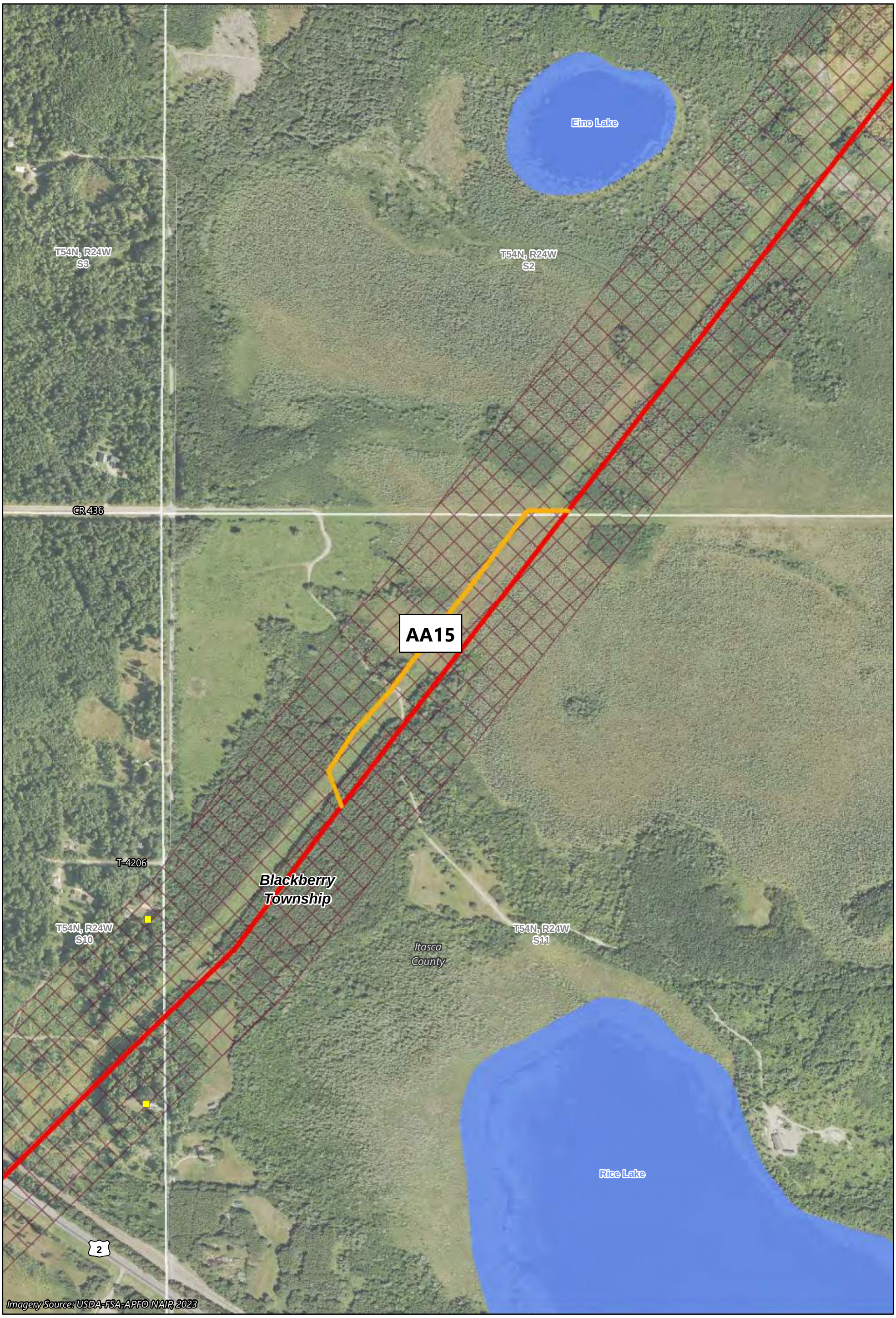


Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Iron Range Substation
Residence Location
PWI Waterway
PWI Basin
Other DNR Land

Feet
0 800 1,600

Map 2

ROUTE ALTERNATIVES A1 - A4
Scoping Decision
Northland Reliability Project

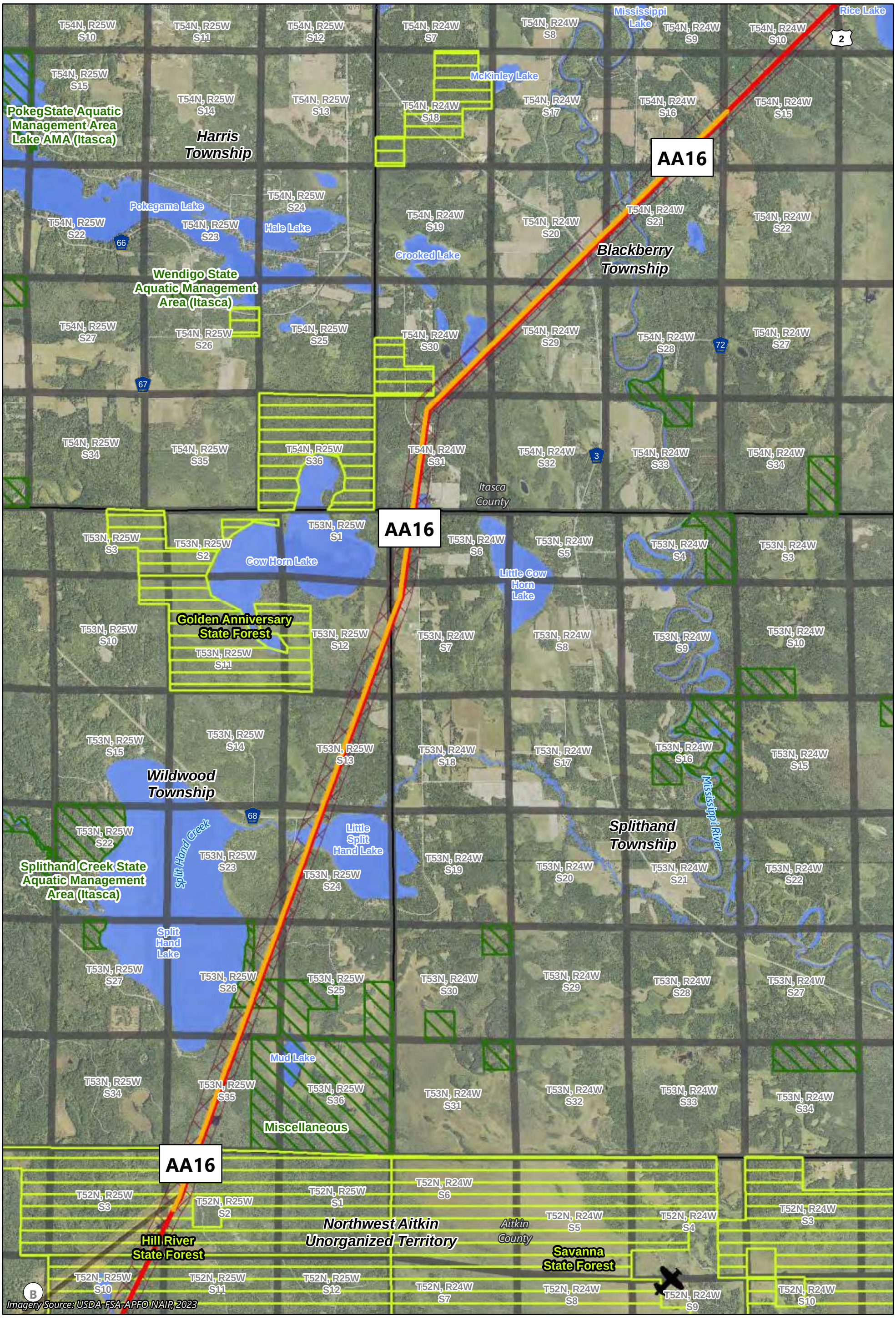


Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Residence Location
PWI Basin

Feet
0 250 500

Map 3

ALIGNMENT ALTERNATIVE AA15
Scoping Decision
Northland Reliability Project

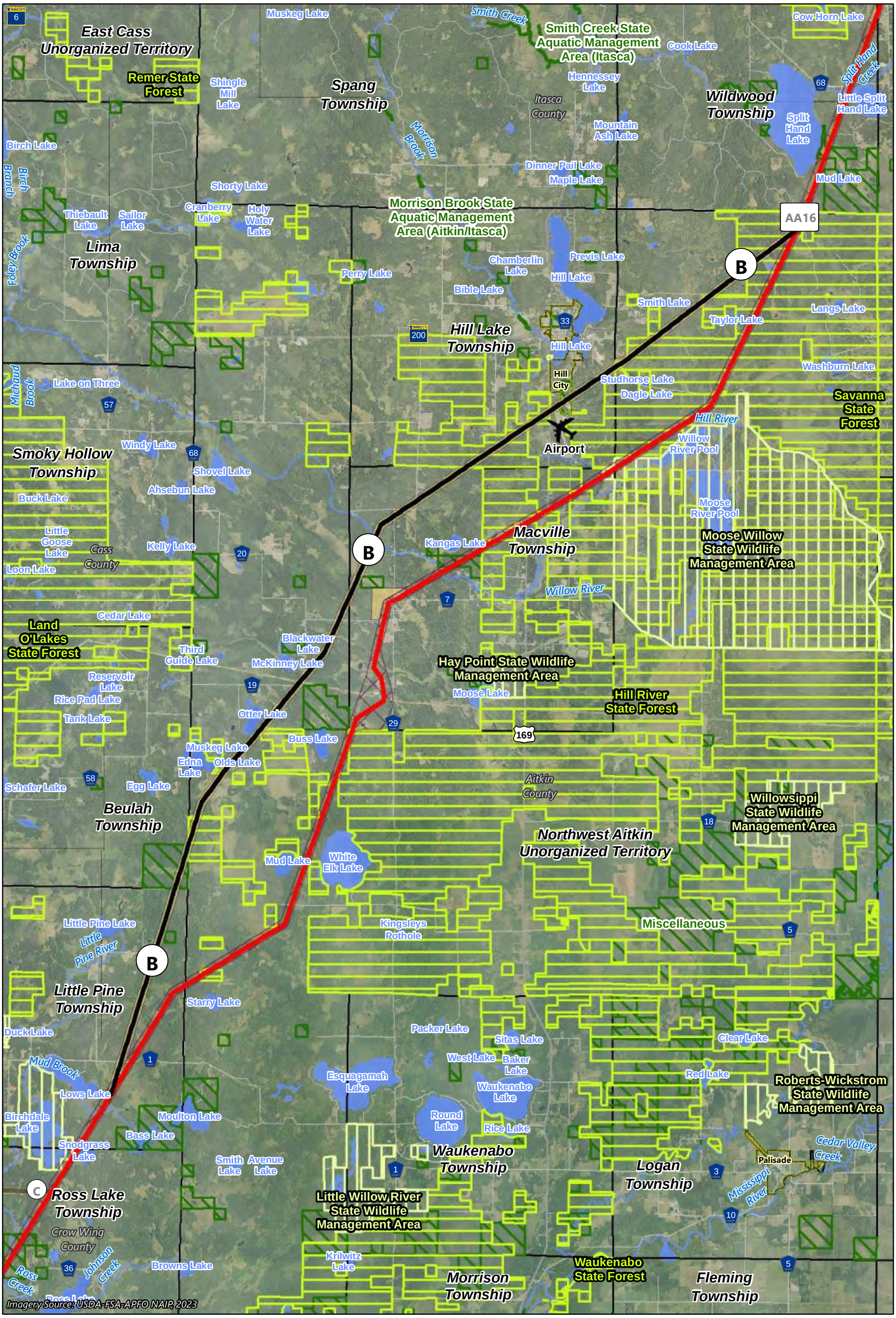


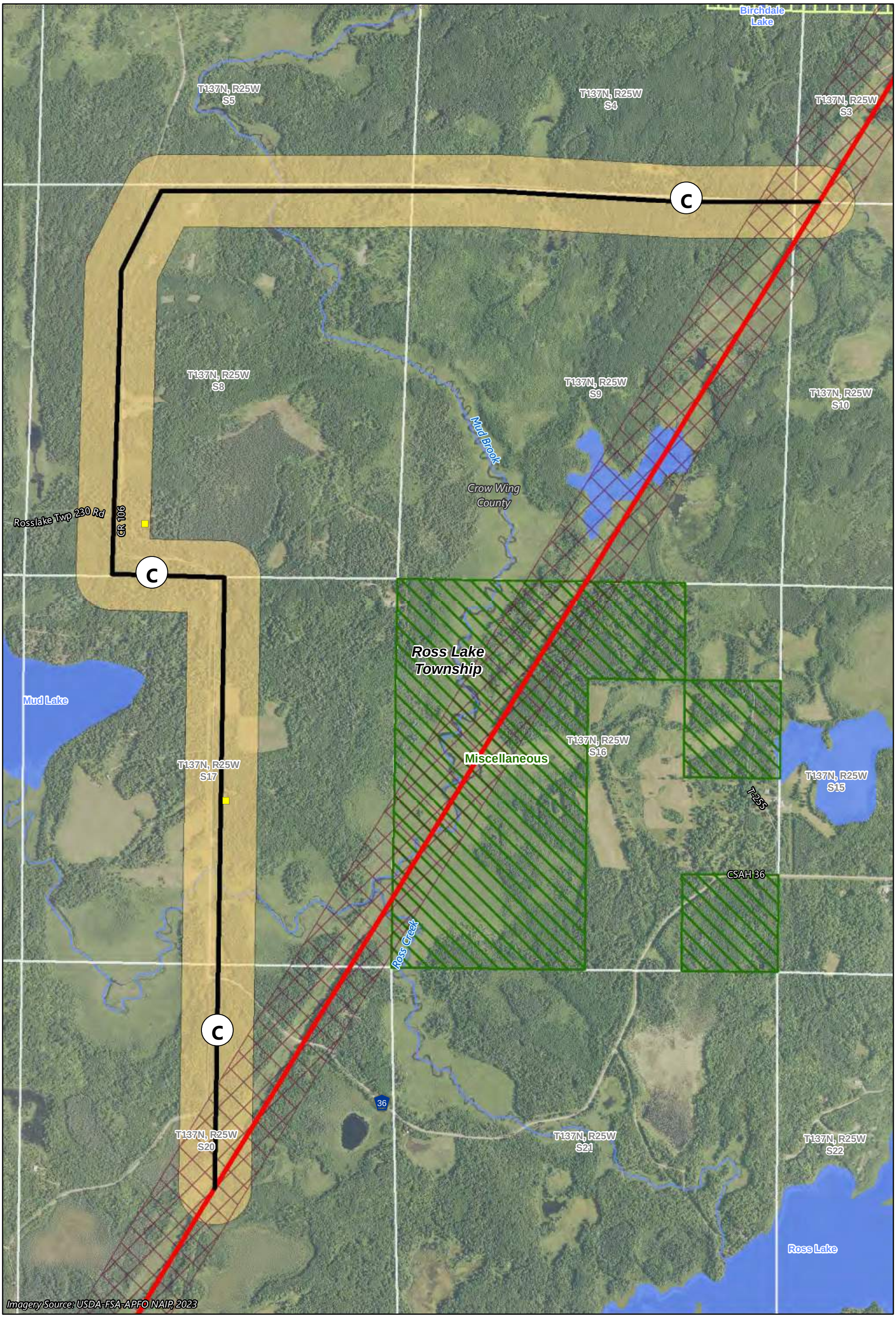
Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Private Airport
PWI Waterway
PWI Basin
State Forest
Other DNR Land

Feet
0 2,000 4,000

Map 4

ALIGNMENT ALTERNATIVE AA16
Scoping Decision
Northland Reliability Project


East Cass Unorganized Territory
Remer State Forest
Muskeg Lake
Smith Creek
Smith Creek State Aquatic Management Area (Itasca)
Cook Lake
Cow Horn Lake
Shingle Mill Lake
Spang Township
Hennessey Lake
Itasca County
Wildwood Township
Split Hand Creek
Little Split Hand Lake
Split Hand Lake
Mountain Ash Lake
Morrison Brook
Birch Lake
Birch Branch
Dinner Pail Lake
Maple Lake
Mud Lake
Shorty Lake
Cranberry Lake
Holy Water Lake
Morrison Brook State Aquatic Management Area (Aitkin/Itasca)
AA16
Thiebault Lake
Sailor Lake
Lima Township
Foley Brook
Chamberlin Lake
Previs Lake
Perry Lake
Hill Lake
Bible Lake
Smith Lake
Langs Lake
Taylor Lake
Hill Lake Township
Hill Lake
Washburn Lake
Michaud Brook
Lake on Three
Hill City
Studhorse Lake
Dagle Lake
Savanna State Forest
Hill River
Airport
Windy Lake
Smoky Hollow Township
Shovel Lake
Ahsebun Lake
Buck Lake
Willow River Pool
Moose River Pool
Little Goose Lake
Kelly Lake
Cass County
Kangas Lake
Macville Township
Moose Willow State Wildlife Management Area
Loon Lake
Willow River
Cedar Lake
Land O'Lakes State Forest
Third Guide Lake
Blackwater Lake
McKinney Lake
Hay Point State Wildlife Management Area
Reservoir Lake
Rice Pad Lake
Moose Lake
Hill River State Forest
Tank Lake
Otter Lake
Buss Lake
Muskeg Lake
Edna Lake
Olds Lake
Schafer Lake
Egg Lake
Aitkin County
Willowsippi State Wildlife Management Area
Beulah Township
Northwest Aitkin Unorganized Territory
Mud Lake
White Elk Lake
Little Pine Lake
Little Pine River
Kingsleys Pothole
Miscellaneous
Little Pine Township
Starry Lake
Packer Lake
Sitas Lake
Clear Lake
Duck Lake
Mud Brook
West Lake
Baker Lake
Esquagamah Lake
Red Lake
Roberts-Wickstrom State Wildlife Management Area
Lows Lake
Waukenabo Lake
Birchdale Lake
Moulton Lake
Round Lake
Rice Lake
Bass Lake
Snodgrass Lake
Cedar Valley Creek
Palisade
Waukenabo Township
Smith Lake
Avenue Lake
Logan Township
Mississippi River
Ross Lake Township
Little Willow River State Wildlife Management Area
Crow Wing County
Johnson Creek
Krilwitz Lake
Browns Lake
Ross Creek
Waukenabo State Forest
Morrison Township
Fleming Township
Imagery Source: USDA-FSA-APFO NAIP, 2023
Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Public Airport
PWI Waterway
PWI Basin
State WMA
State Forest
Other DNR Land
Municipal Boundary
Miles
0 1 2
Map 5
ROUTE ALTERNATIVE B
Scoping Decision
Northland Reliability Project



Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Residence Location
PWI Waterway
PWI Basin
State WMA
Other DNR Land

Feet
0 600 1,200

Map 6

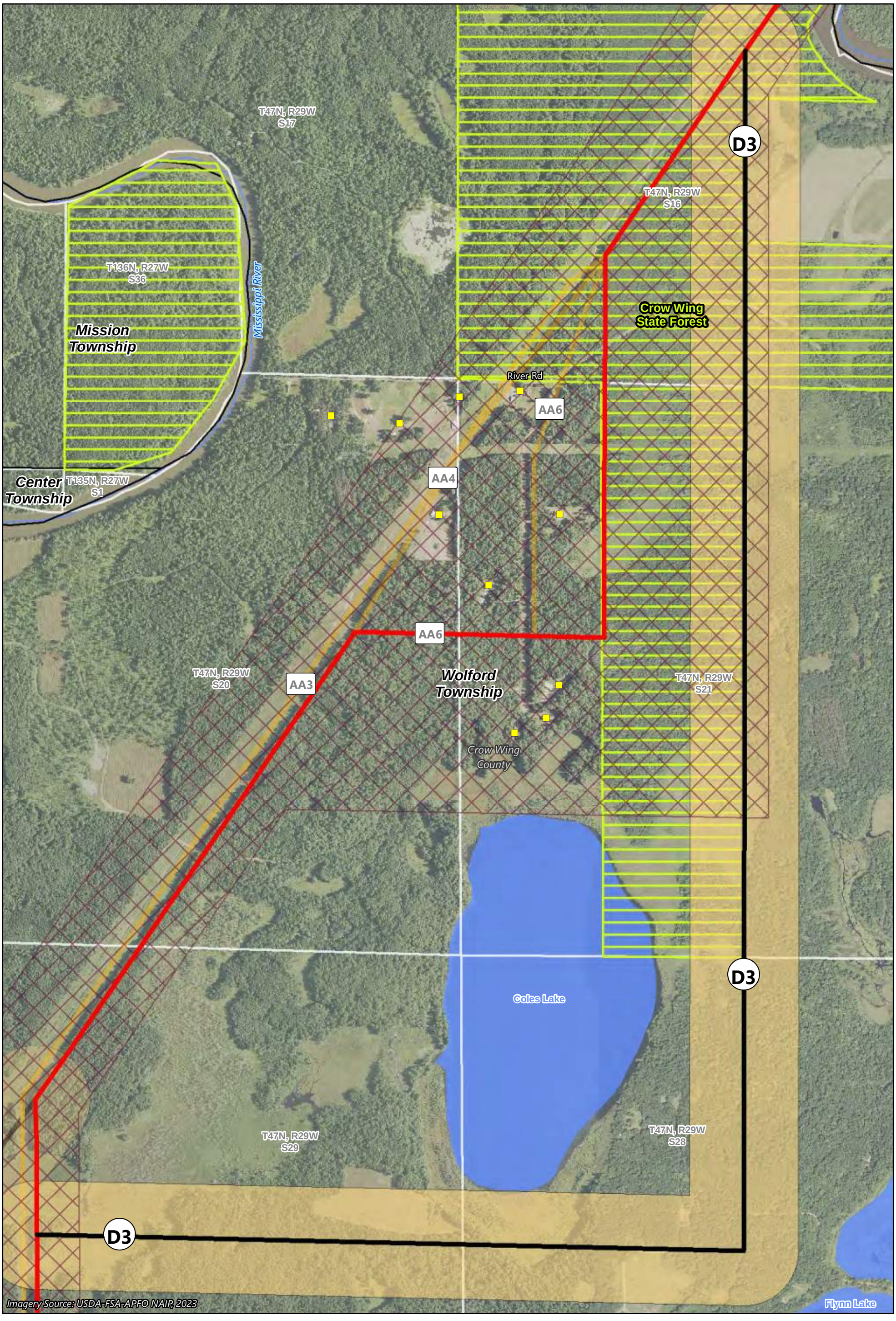
ROUTE ALTERNATIVE C
Scoping Decision
Northland Reliability Project

Map 7

ALIGNMENT ALTERNATIVES AA1 AND AA2

Scoping Decision

Northland Reliability Project

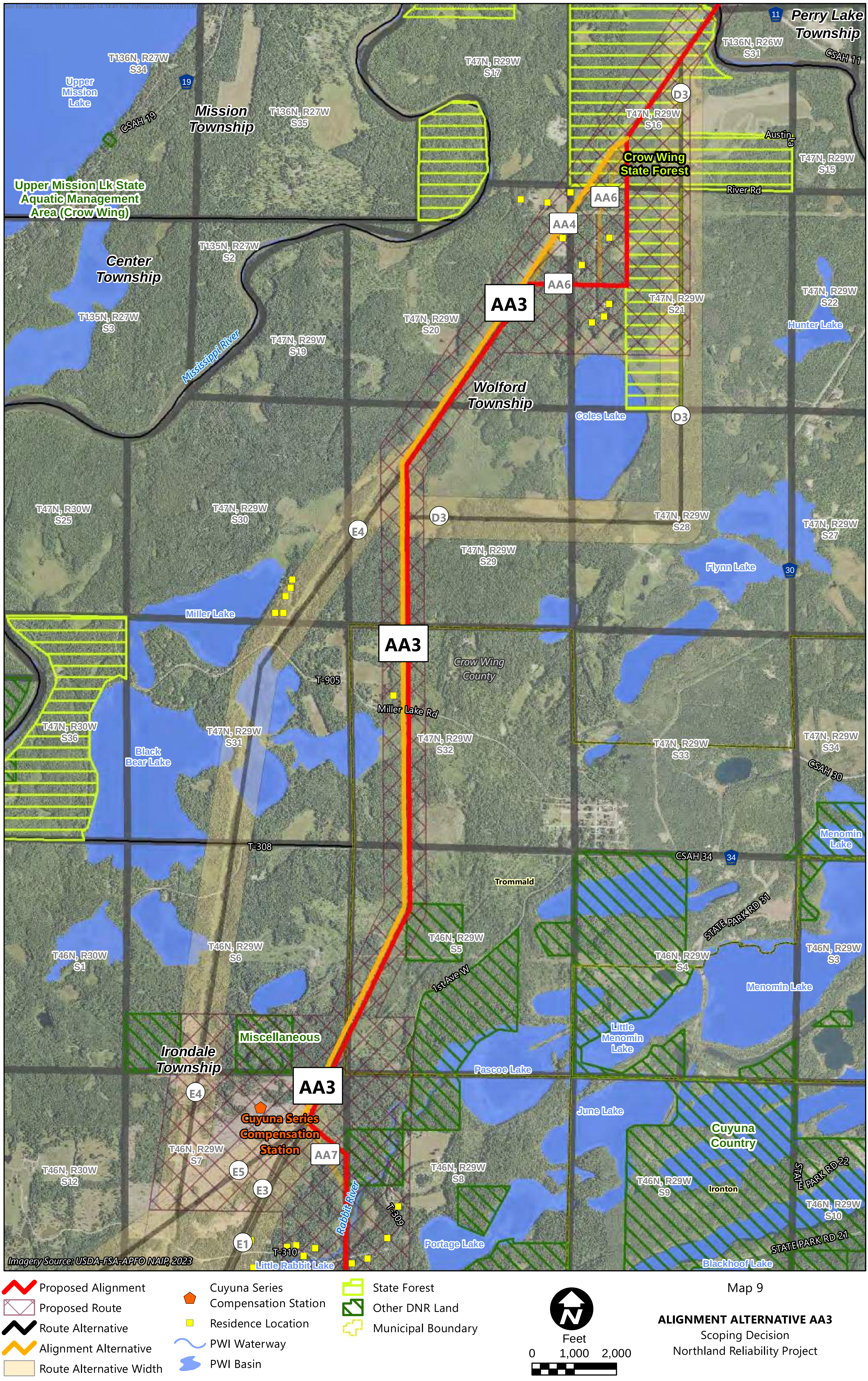


Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Residence Location
PWI Waterway
PWI Basin
State Forest

Feet
0 400 800

Map 8

ROUTE ALTERNATIVE D3
Scoping Decision
Northland Reliability Project

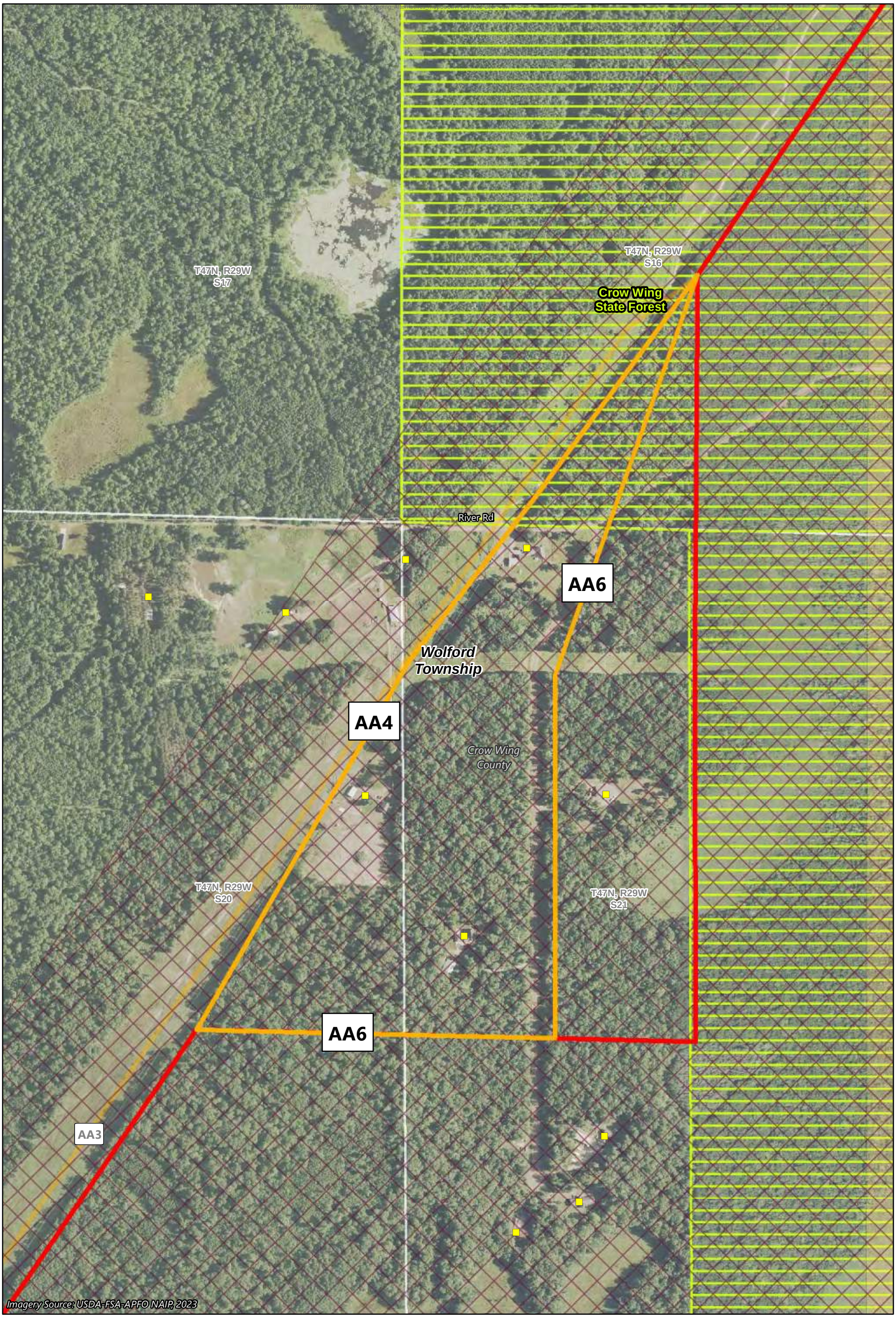


Map 9

ALIGNMENT ALTERNATIVE AA3

Scoping Decision

Northland Reliability Project

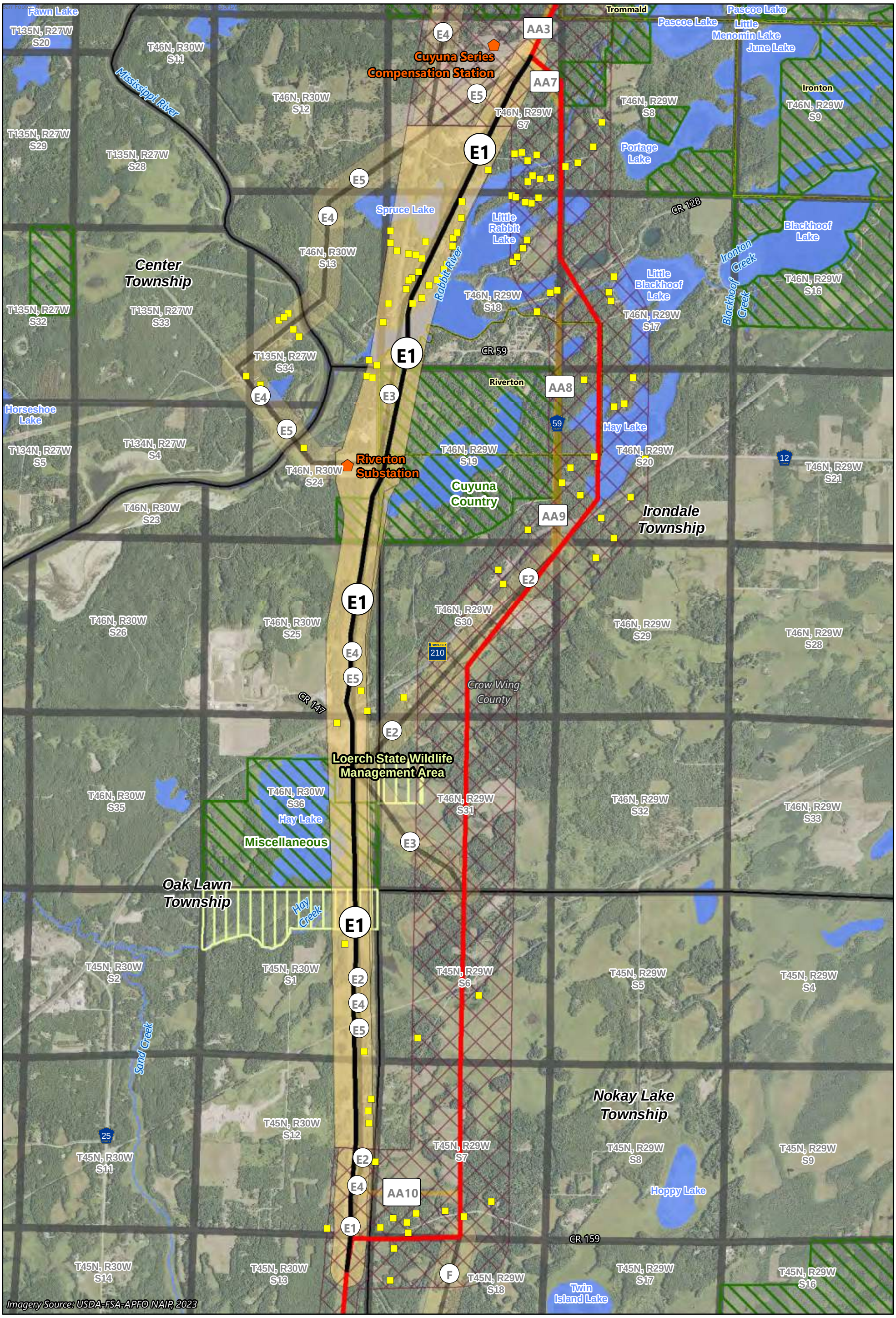


Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Residence Location
State Forest

Feet
0 200 400

Map 10

ALIGNMENT ALTERNATIVES AA4 AND AA6
Scoping Decision
Northland Reliability Project



Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width

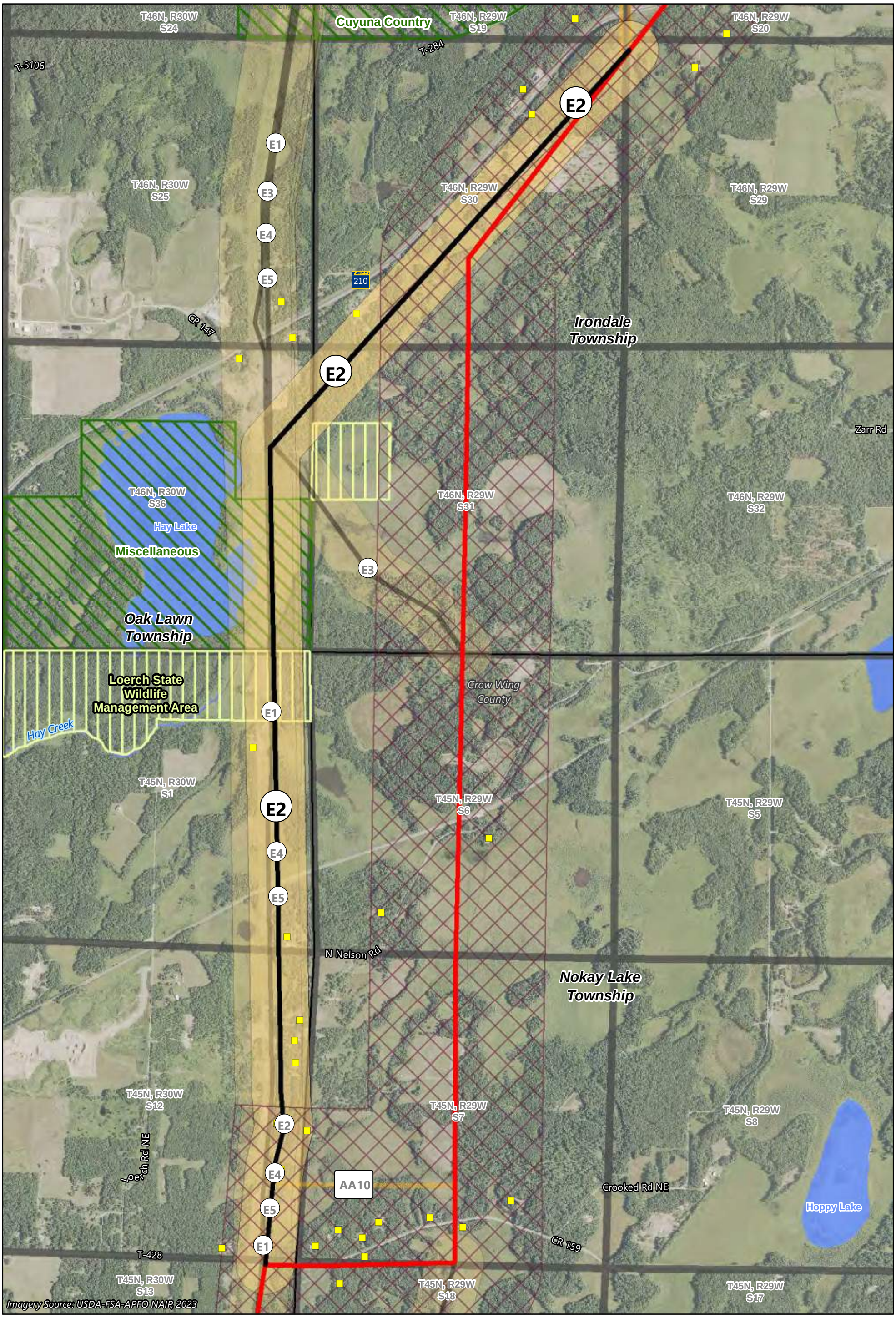
Riverton Substation
Cuyuna Series Compensation Station
Residence Location
PWI Waterway

PWI Basin
State WMA
Other DNR Land
Municipal Boundary

Miles
0 0.25 0.5

Map 11

ROUTE ALTERNATIVE E1
Scoping Decision
Northland Reliability Project

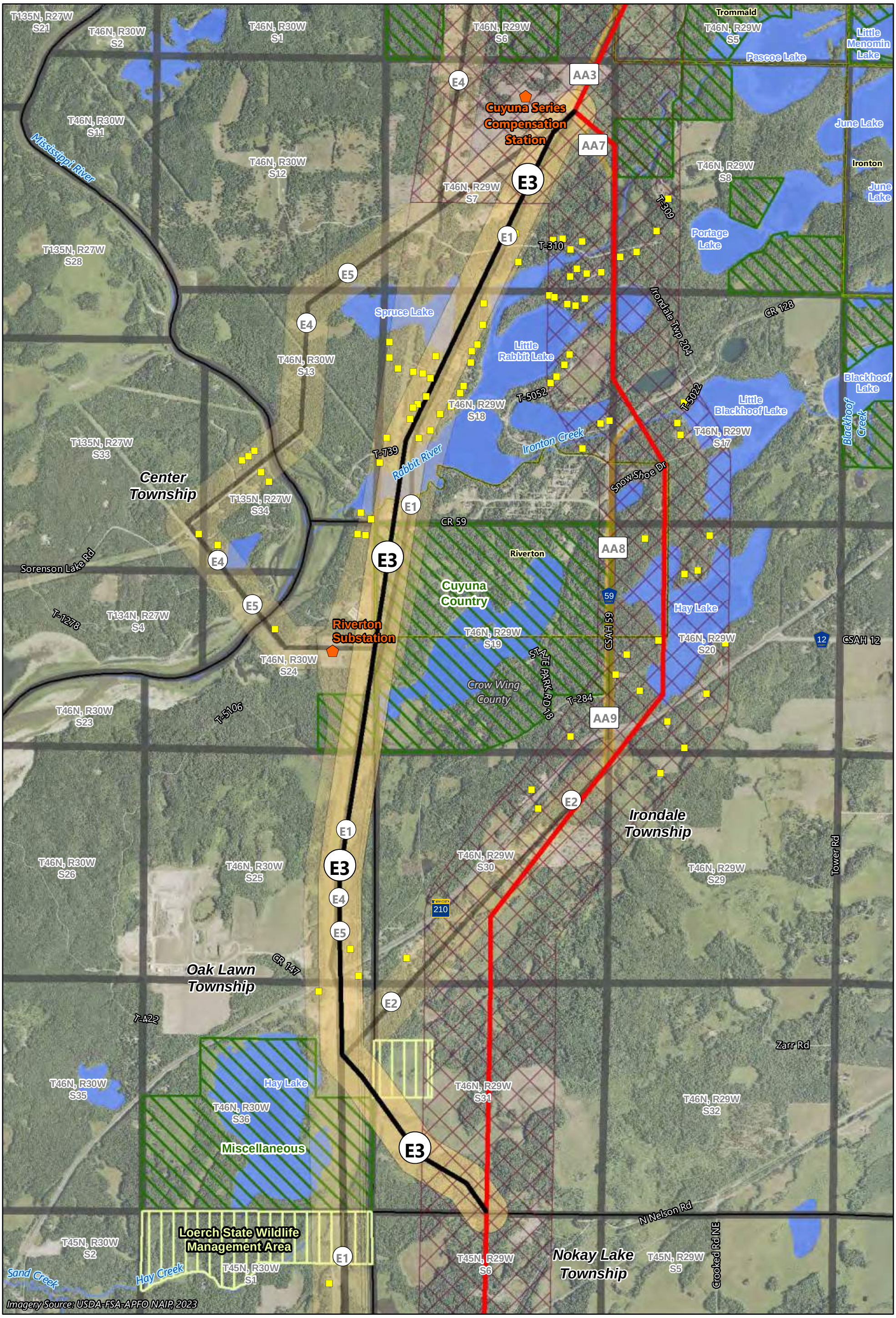


Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Residence Location
PWI Waterway
PWI Basin
State WMA
Other DNR Land

Feet
0 800 1,600

Map 12

ROUTE ALTERNATIVE E2
Scoping Decision
Northland Reliability Project

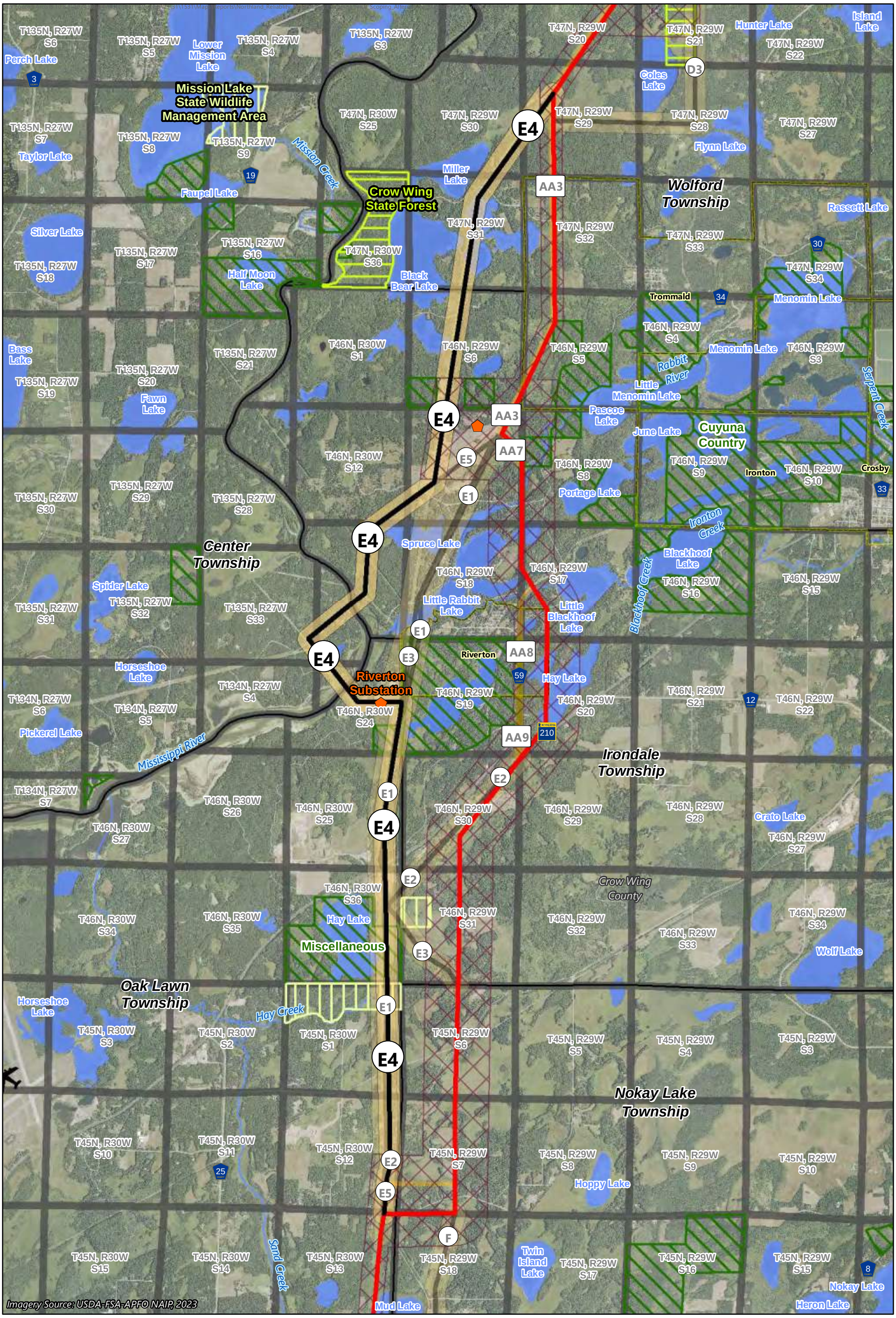


- Proposed Alignment
- Proposed Route
- Route Alternative
- Alignment Alternative
- Route Alternative Width
- Riverton Substation
- Cuyuna Series Compensation Station
- Residence Location
- PWI Waterway
- PWI Basin
- State WMA
- Other DNR Land
- Municipal Boundary

Feet
0 1,000 2,000

Map 13

ROUTE ALTERNATIVE E3
Scoping Decision
Northland Reliability Project



Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width

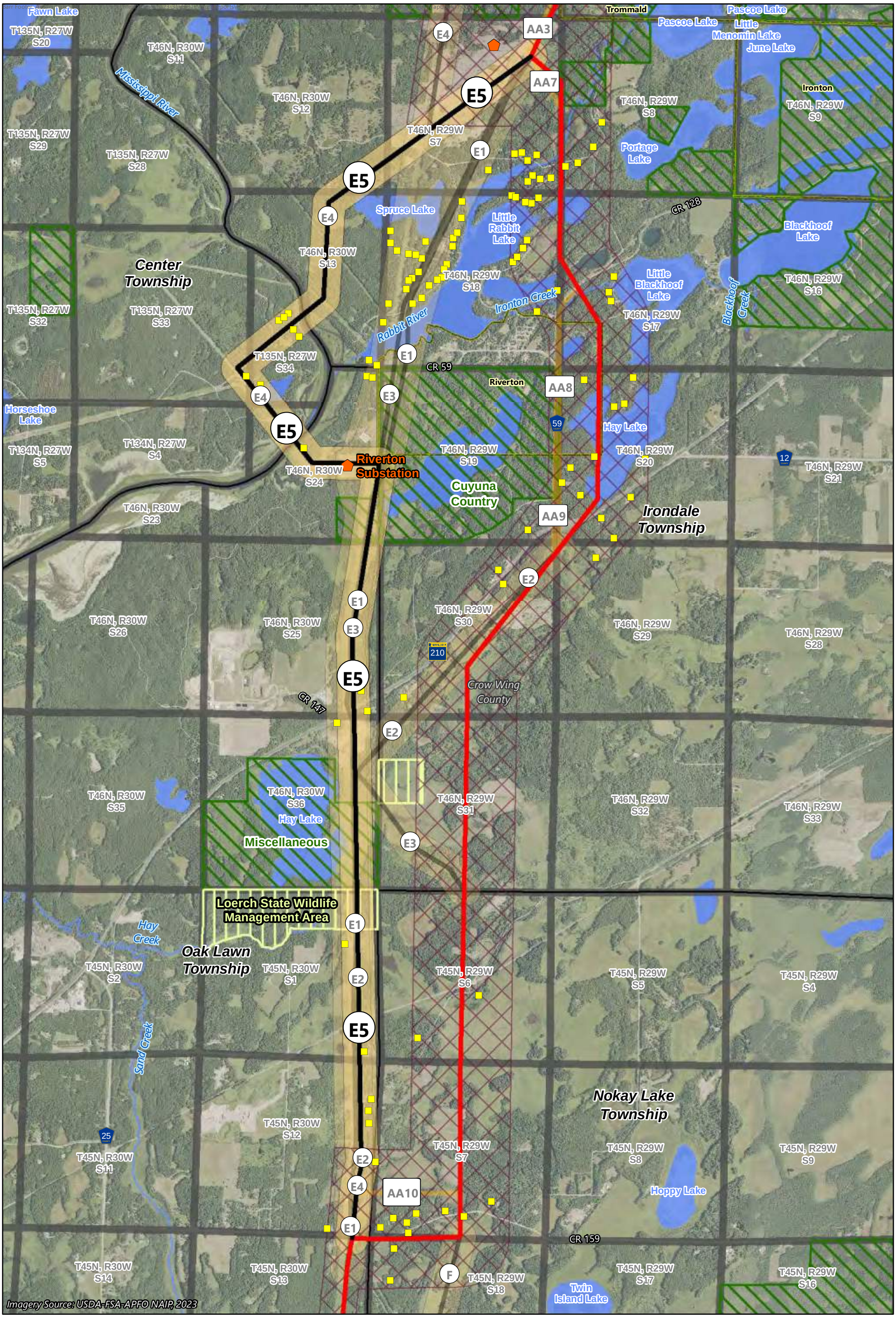
Riverton Substation
Cuyuna Series Compensation Station
Public Airport
PWI Waterway

PWI Basin
State WMA
State Forest
Other DNR Land
Municipal Boundary

Feet
0 2,000 4,000

Map 14

ROUTE ALTERNATIVE E4
Scoping Decision
Northland Reliability Project



Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width

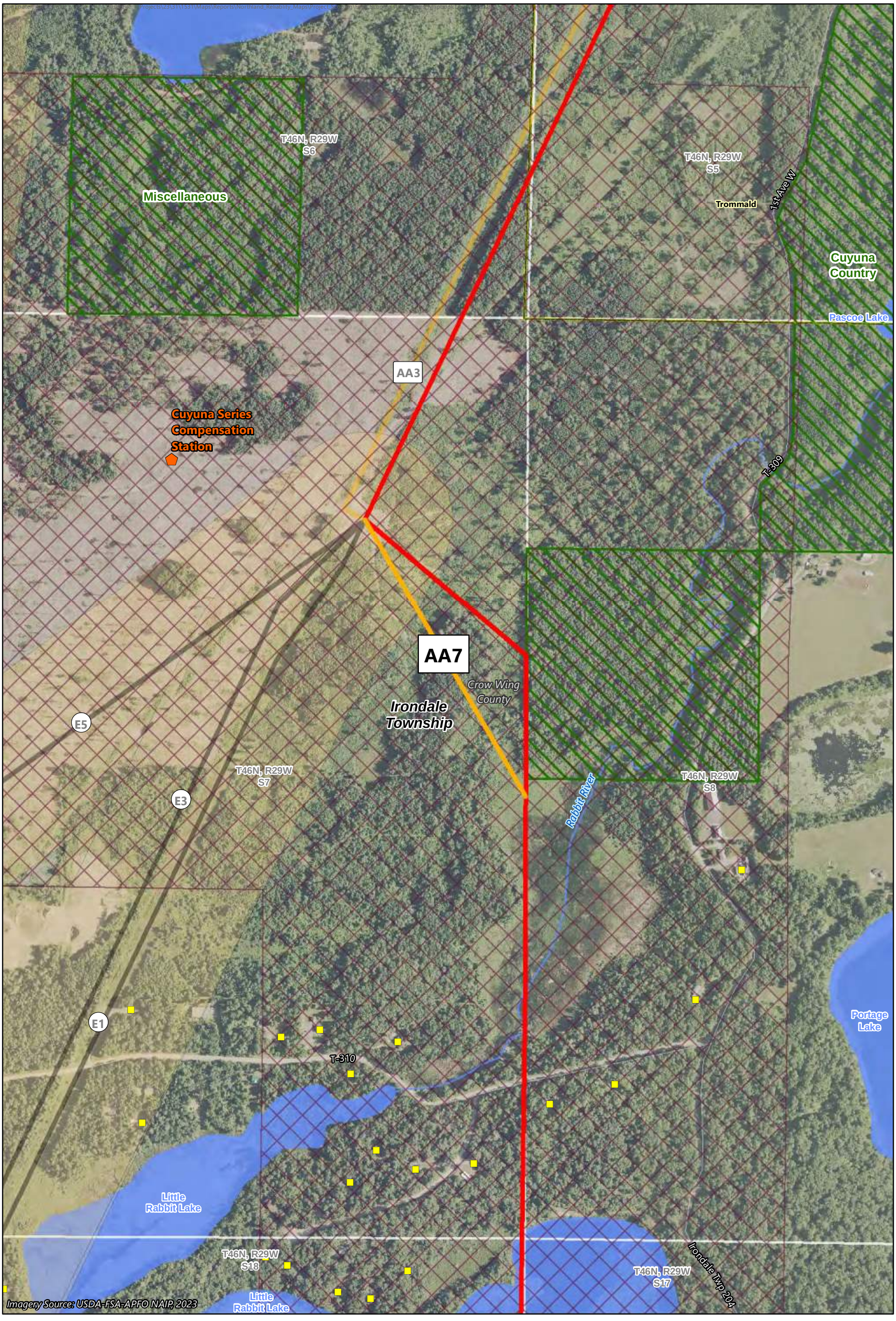
Riverton Substation
Cuyuna Series Compensation Station
Residence Location
PWI Waterway

PWI Basin
State WMA
Other DNR Land
Municipal Boundary

Miles
0 0.25 0.5

Map 15

ROUTE ALTERNATIVE E5
Scoping Decision
Northland Reliability Project



Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width

Cuyuna Series Compensation Station
Residence Location
PWI Waterway
PWI Basin

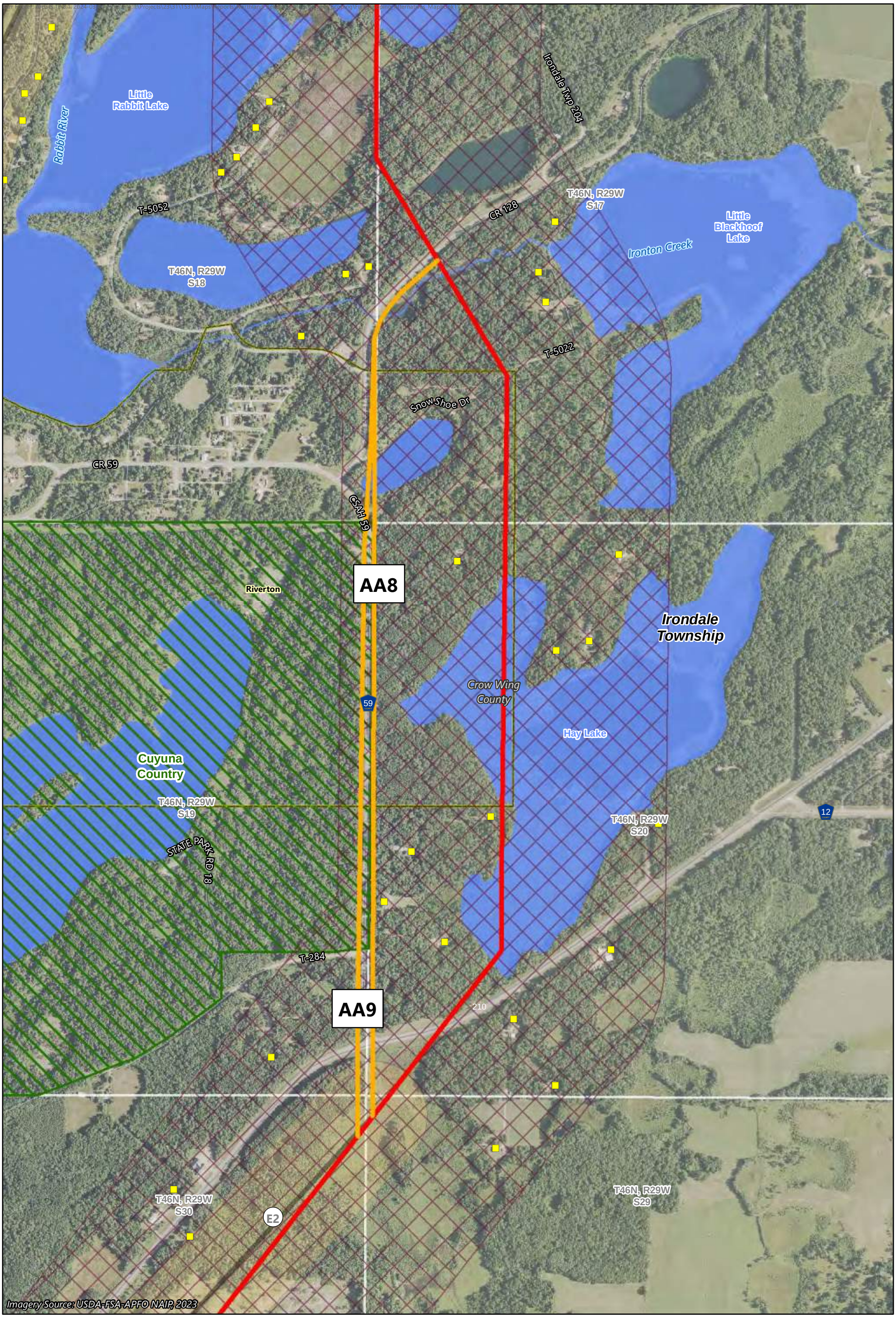
Other DNR Land
Municipal Boundary

N

Feet
0 250 500

Map 16

ALIGNMENT ALTERNATIVE AA7
Scoping Decision
Northland Reliability Project

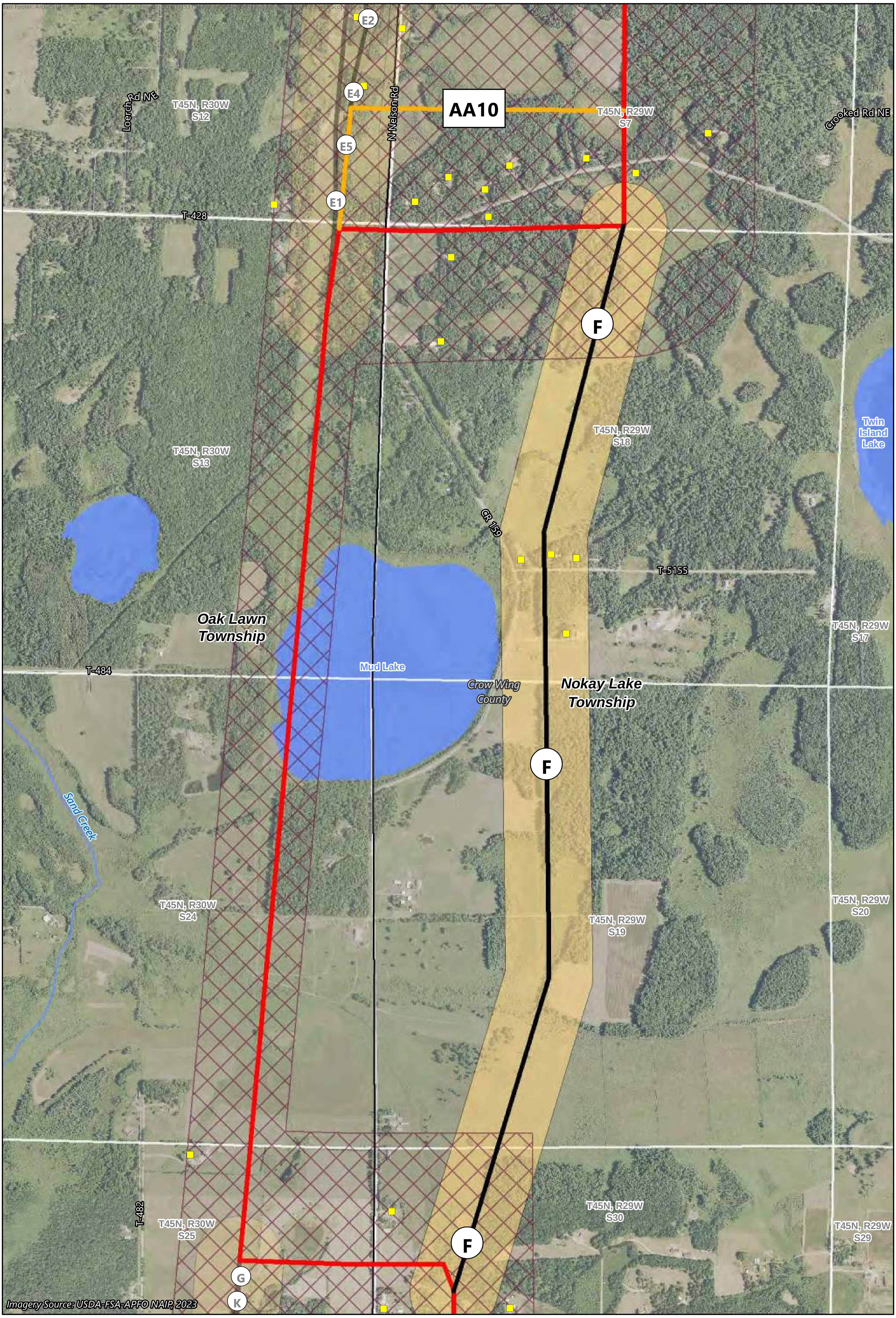


Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Residence Location
PWI Waterway
PWI Basin
Other DNR Land
Municipal Boundary

Feet
0 400 800

Map 17

ALIGNMENT ALTERNATIVES AA8 AND AA9
Scoping Decision
Northland Reliability Project



Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Residence Location
PWI Waterway
PWI Basin

Feet
0 500 1,000

Map 18

ROUTE ALTERNATIVE F AND ALIGNMENT ALTERNATIVE AA10

Scoping Decision

Northland Reliability Project

Sand Creek

T45N, R30W
S24

T45N, R29W
S19

CR 159

F

G

T-482

T45N, R30W
S25

18

T45N, R29W
S30

Oak Lawn
Township

Nokay Lake
Township

Burgwald Rd SE

T-486

Crow Wing
County

T45N, R30W
S36

23

CSAH 23

T45N, R29W
S31

G

T-480

G

Maple Grove
Township

K

Long Lake
Township

T44N, R30W
S1

T44N, R29W
S6

Imagery Source: USDA-FSA-APFO NAIP, 2023

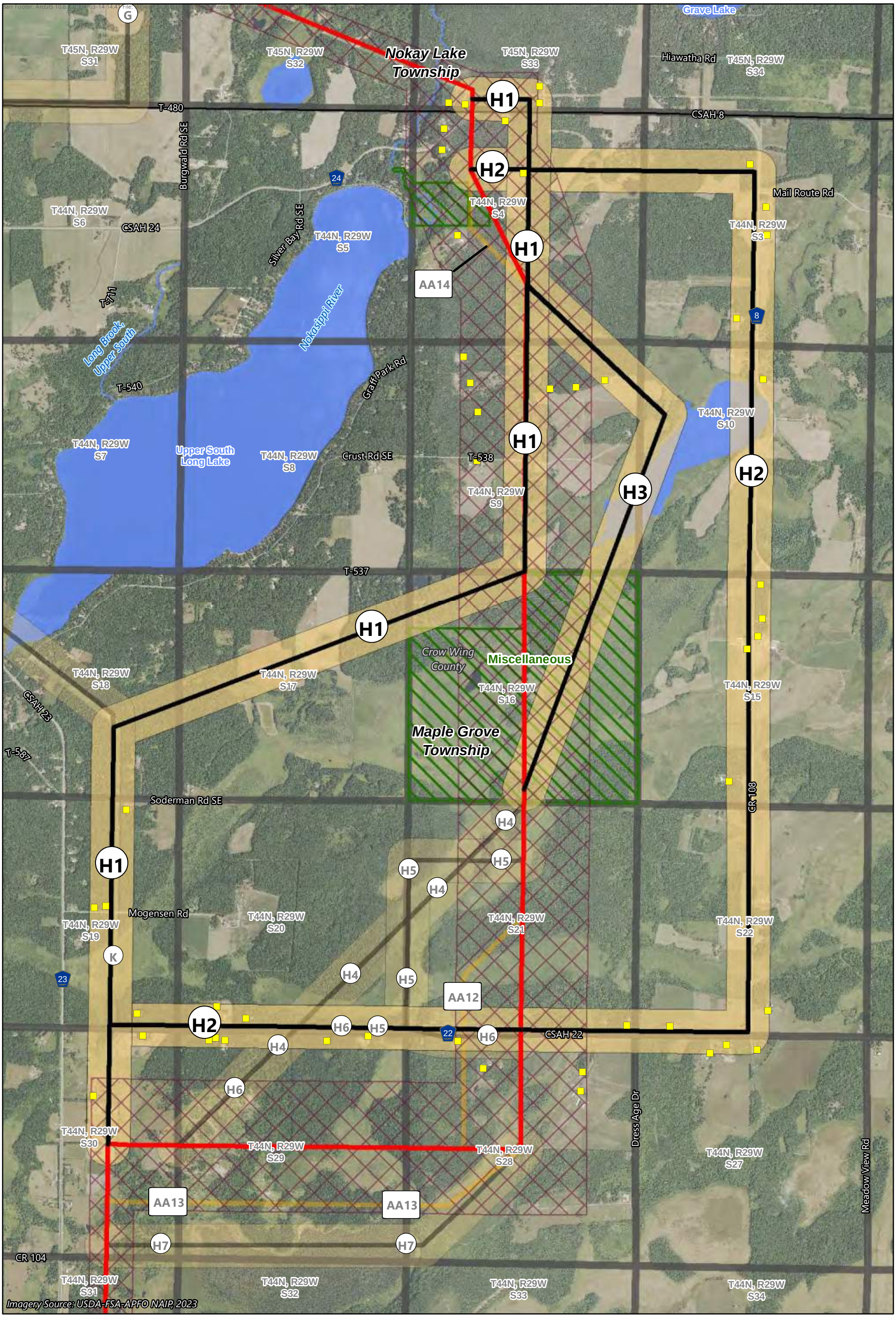
Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Residence Location
PWI Waterway

N

Feet
0 500 1,000

Map 19

ROUTE ALTERNATIVE G
Scoping Decision
Northland Reliability Project

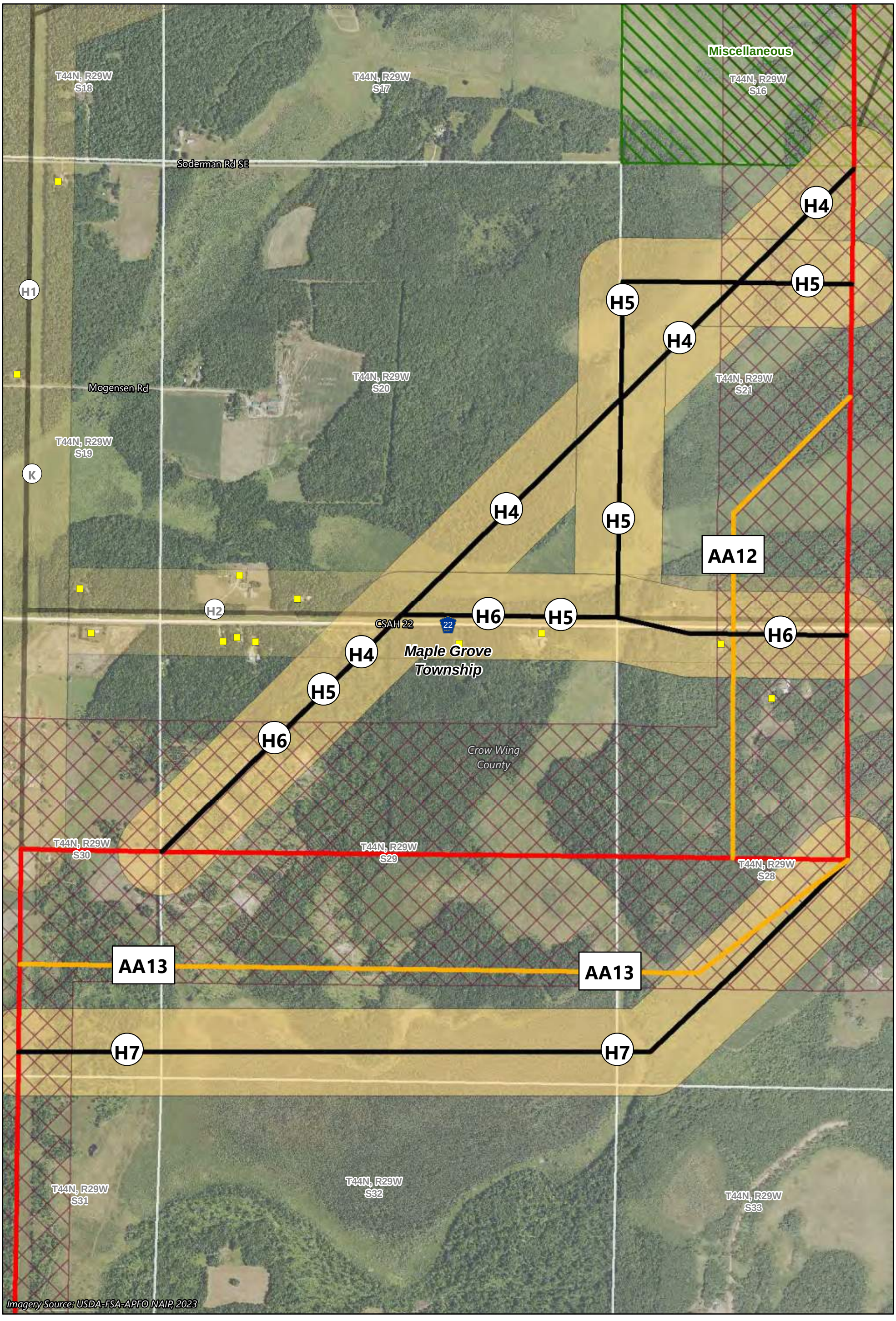


Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Residence Location
PWI Waterway
PWI Basin
Other DNR Land

Feet
0 1,000 2,000

Map 20

ROUTE ALTERNATIVES H1 - H3
Scoping Decision
Northland Reliability Project

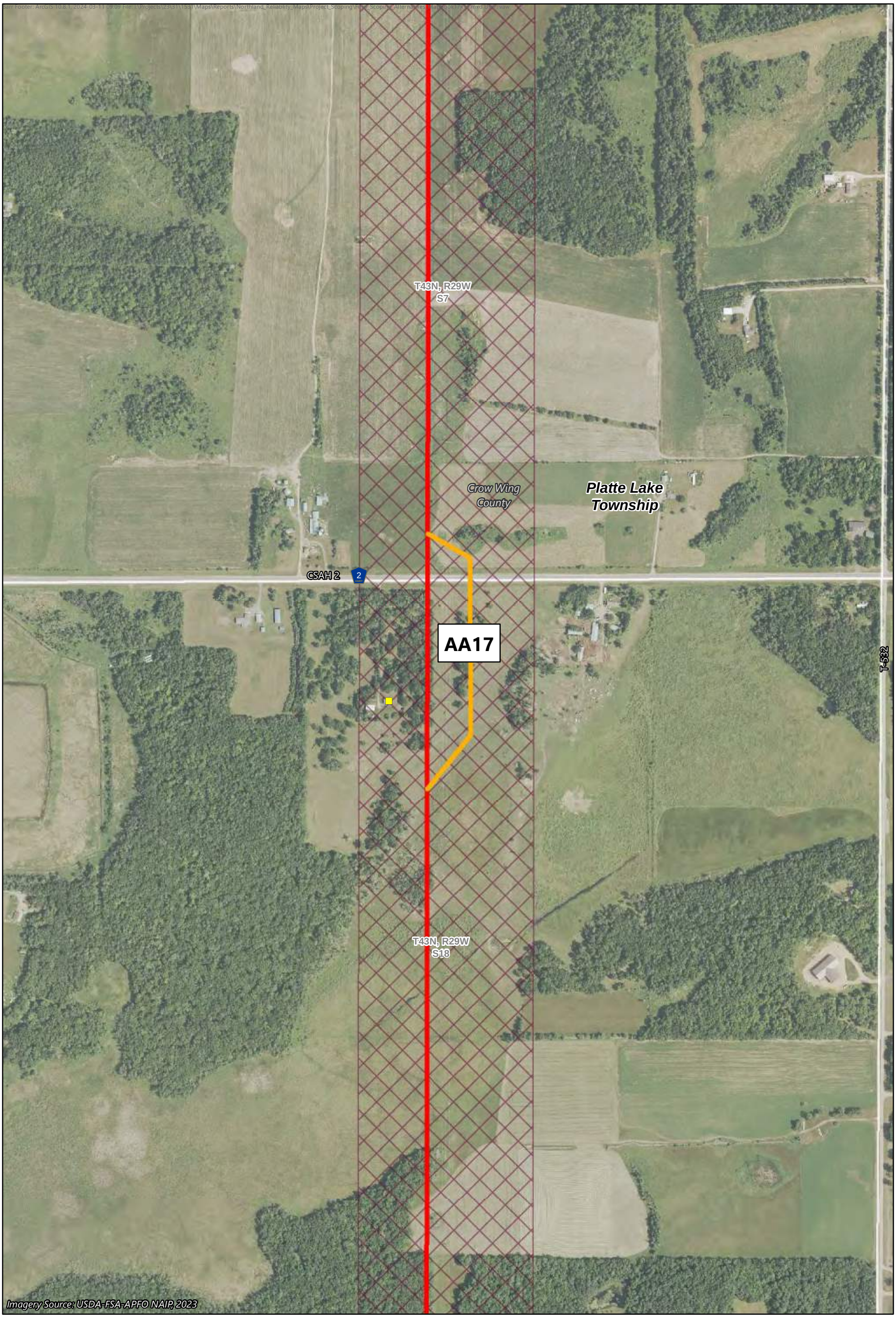


Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Residence Location
Other DNR Land

Feet
0 500 1,000

Map 21

ROUTE ALTERNATIVES H4 - H7 AND ALIGNMENT ALTERNATIVES AA12 AND AA13
Scoping Decision
Northland Reliability Project

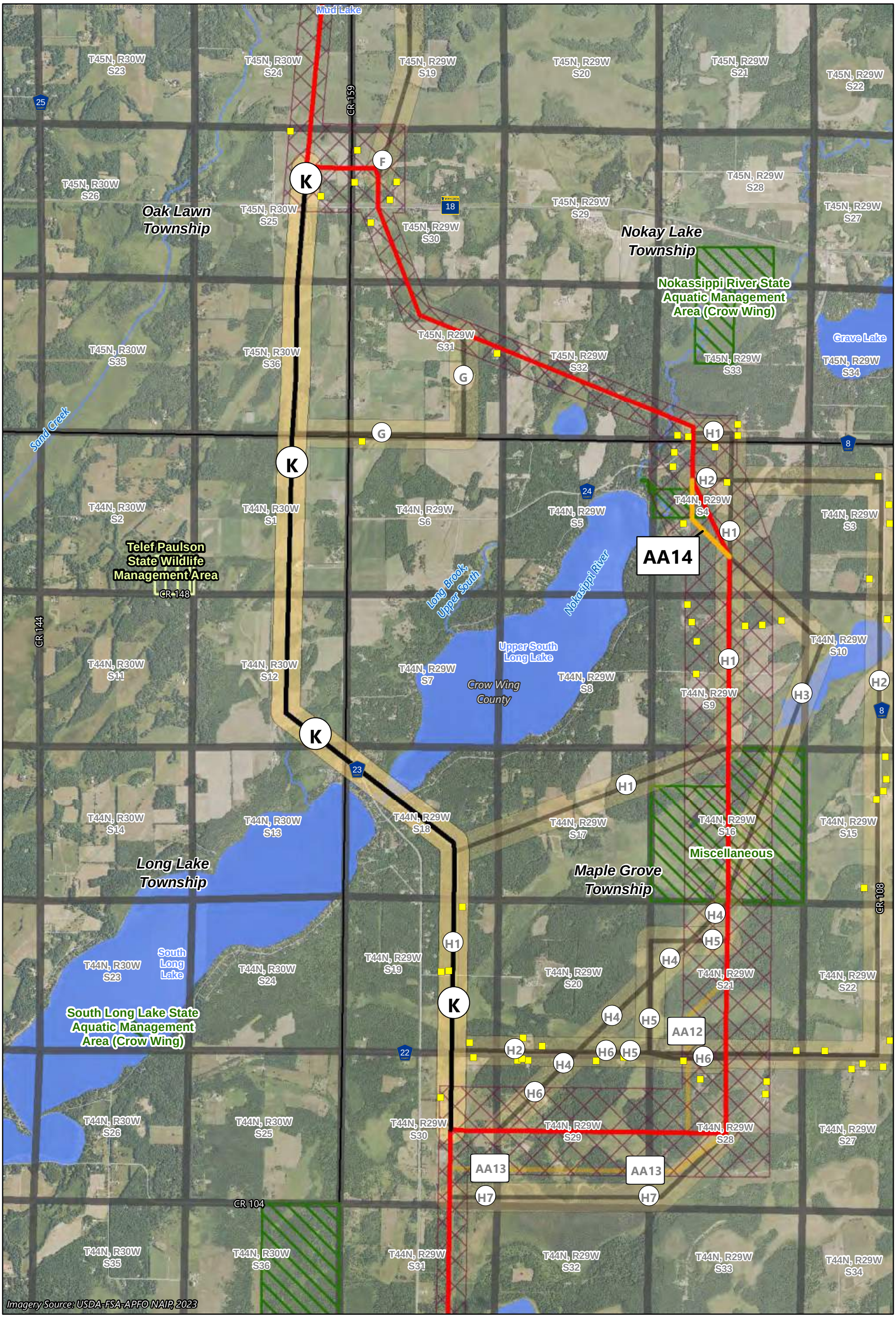


Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Residence Location

Feet
0 250 500

Map 22

ALIGNMENT ALTERNATIVE AA17
Scoping Decision
Northland Reliability Project

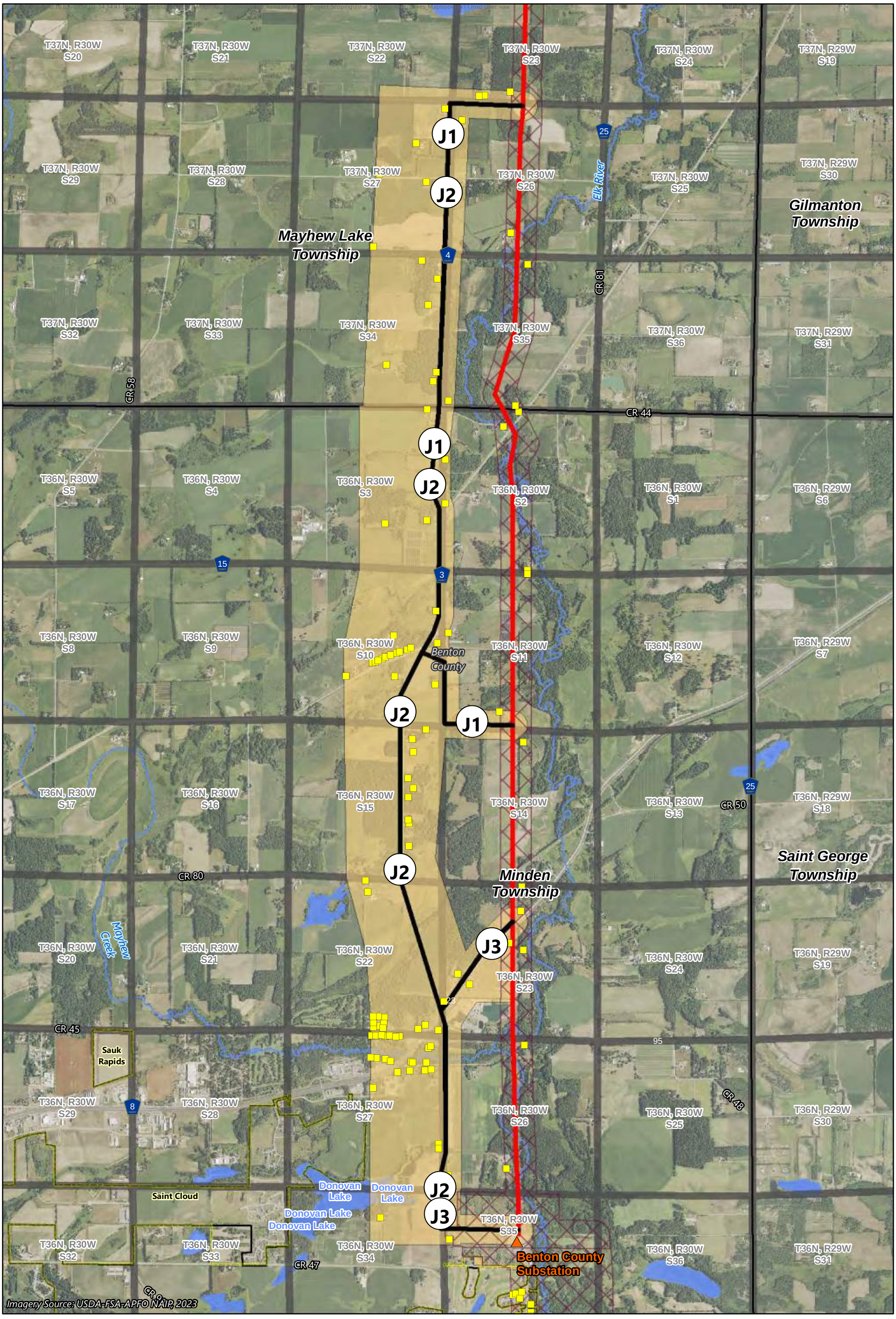


Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Residence Location
PWI Waterway
PWI Basin
State WMA
Other DNR Land

Feet
0 1,500 3,000

Map 23

ROUTE ALTERNATIVE K AND ALIGNMENT ALTERNATIVE AA14
Scoping Decision
Northland Reliability Project



Proposed Alignment
Proposed Route
Route Alternative
Alignment Alternative
Route Alternative Width
Benton County Substation
Residence Location
PWI Waterway
PWI Basin
Municipal Boundary

Feet
0 1,500 3,000

Map 24

ROUTE ALTERNATIVES J1 - J3
Scoping Decision
Northland Reliability Project