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## 6.5 Alignment Modifications

Minor adjustments to the proposed anticipated alignment within a given route or route alternative (i.e., alignment modifications), were proposed during the scoping period as described in Section 4.3. The purpose for each alignment modification is to avoid a specific issue raised by the commenters (e.g., sensitive lands, houses, following existing corridors). In the sections that follow, only the issues that differ between the proposed route and the alignment modification are described. Specific alignment modifications may be incorporated in the MN PUC Route Permit as a special condition should the MN PUC find they are warranted. Details for all the alignment modifications are provided in Appendix E.

### 6.5.1 West Section

There are no alignment modifications identified in the West Section.

### 6.5.2 Central Section

There are four alignment modifications proposed for the Central Section: Silver Creek WMA, Airstrip, Mizpah, and Gravel Pit (Map 4-8). These alignment modifications are described below in sections 6.5.2.1 through 6.5.2.4.

#### 6.5.2.1 Silver Creek WMA Alignment Modification

The Silver Creek WMA Alignment Modification is located in the north-central portion of the Pine Island Variation Area (Map 4-9). The alignment modification is the same length as the comparable segment of the Proposed Blue Route (Table 4-4, Map 6-66). The Proposed Blue Route follows the south side of the existing 230 kV transmission line, which parallels the southern edge of the USFWS Interest Lands and the Silver Creek WMA. Land ownership includes private, state forest, and federal lands.

The Silver Creek WMA Alignment Modification shifts the anticipated alignment approximately 150 feet south onto state forest land and avoids impacts to federal land and the Silver Creek WMA. The alignment modification does not parallel an existing corridor like the Proposed Blue Route so would require creation of new corridor for its entire length (Map 6-66). Because of this, the alignment modification would result in more fragmentation of intact state forest.

#### 6.5.2.2 Airstrip Alignment Modification

The Airstrip Alignment Modification is located in the east portion of the C2 Segment Option Variation Area (Map 4-12). This alignment modification is the same length as the comparable segment of the Proposed C2 Segment Option Route (Table 4-4, Map 6-67). The Proposed C2 Segment Option Route follows the west side of the existing 230 kV transmission line for over half of its length. Land ownership includes private, corporate, county-administered state, and state trust lands.

The Airstrip Alignment Modification shifts the anticipated alignment approximately 725 feet west to avoid impacts to the private airstrip located east of the existing 230 kV transmission line. The height of the proposed transmission line would be taller than the existing 230 kV transmission line and located northwest of the north end of the airstrip, so use of the airstrip may be affected since it has a northwest/southeast orientation. This alignment modification would be located approximately 1,000 feet west of the existing 230 kV transmission line so would provide additional distance for use of the airstrip (Map 6-67). Land ownership remains the same mix of private and state lands as described for the Proposed C2 Segment Option Route.

#### 6.5.2.3 Mizpah Alignment Modification

The Mizpah Alignment Modification is located in the northwest portion of the J2 Segment Option Variation Area (Map 4-13). This alignment modification is the same length as the comparable segment of the Proposed Orange Route (Table 4-4, Map 6-68). Land ownership includes both private, county-administered state, and state forest lands.

The Mizpah Alignment Modification shifts the anticipated alignment north from a mix of private and state lands onto only state lands. Both the Proposed Orange Route and this alignment modification would require creation of new corridor for their entire length (Map 6-68). Because of this, both options would result in fragmentation of intact forest.

#### 6.5.2.4 Gravel Pit Alignment Modification

The Gravel Pit Alignment Modification is located in the southeast portion of the J2 Variation Area (Map 4-13). This alignment modification is the same length as the comparable segment of the Proposed Orange Route (Table 4-4, Map 6-69). The Proposed Orange Route includes an existing private gravel pit and the existing Effie dump (MPCA State Assessment Site SA7836) within 100 feet of the west edge of the ROW (Map 6-69). Land ownership

includes private, corporate, county-administered state, and state fee lands.

The Gravel Pit Alignment Modification shifts the anticipated alignment approximately 750 feet east to avoid impacts to the private gravel pit and no privately-owned land would be located within the ROW. In addition, the Effie dump would be located more than 100 feet west and outside of the ROW (Map 6-69). Land ownership includes corporate, county-administered state, and state fee lands.

### 6.5.3 East Section

There are five alignment modifications proposed for the East Section: Bass Lake, Wilson Lake, Grass Lake, Dead Man's Pond, and Trout Lake (Map 4-14). These alignment modifications are described below in Section 6.5.3.1 through Section 6.5.3.5.

#### 6.5.3.1 Bass Lake Alignment Modification

The Bass Lake Alignment Modification is located in the central portion of the Effie Variation Area (Map 4-15). This alignment modification is slightly longer (0.1 mile) than the comparable segment of the Proposed Blue/Orange Route (Table 4-5, Map 6-70). The Larson Lake State Forest Campground (George Washington State Forest) is located south of the Proposed Blue/Orange Route on the west side of Larson Lake. The Bass Lake County Park and Campground (managed by the Itasca County Land Department Park System, Grand Rapids, Minnesota) is located to the north of the Proposed Blue/Orange Route and surrounds Bass Lake. The Proposed Blue/Orange Route crosses lands designated as Outstanding Rank for the Preliminary MBS Sites of Biodiversity Significance (for more details, see Section 6.4.1). Land ownership includes corporate and state forest lands.

The Bass Lake Alignment Modification shifts the anticipated alignment approximately 750 feet southwest and away from the Bass Lake Itasca County Park (which includes a campground); however, it shifts the alignment closer to the Larson Lake State Forest campground (Map 6-70). This alignment modification crosses lands designated as Outstanding Rank for the Preliminary MBS Sites of Biodiversity Significance (for more details, see Section 6.4.1). Land ownership includes slightly more state land and less private corporate land compared to the Proposed Blue/Orange Route.

#### 6.5.3.2 Wilson Lake Alignment Modification

The Wilson Lake Alignment Modification is located in the central portion of the Effie Variation Area

(Map 4-15). This alignment modification is the same length as the comparable segment of the Proposed Blue Route (Table 4-5, Map 6-71). The Proposed Blue Route crosses lands designated as Moderate Rank for the Preliminary MBS Sites of Biodiversity Significance (for more details, see Section 6.4.1). Land ownership includes corporate and state forest.

The Wilson Lake Alignment Modification shifts the anticipated alignment approximately 500 feet east from corporate and state forest lands onto an alignment with a greater percentage of state forest land (Map 6-71). This alignment modification crosses lands designated as Moderate Rank for the Preliminary MBS Sites of Biodiversity Significance (for more details, see Section 6.4.1).

#### 6.5.3.3 Grass Lake Alignment Modification

The Grass Lake Alignment Modification is located in the northeast portion of the Balsam Variation Area (Map 4-17). The alignment modification is the same length as Proposed Blue Route (Table 4-5, Map 6-72). The Proposed Blue Route crosses Grass Lake, a MnDNR PWI waterbody and also a wild rice waterbody. There is one residence located within 1,000 feet west of the Proposed Blue Route, south of Grass Lake. Land ownership includes private, corporate, and county-administered state lands; part of the Proposed Blue Route follows a boundary between private and corporate lands.

The Grass Lake Alignment Modification shifts the anticipated alignment approximately 900 feet east to avoid crossing Grass Lake (Map 6-72). In addition, this alignment modification also shifts the transmission line east and away from one residence on the south end of Grass Lake, but shifts the alignment closer to six residences on the west side of Bray Lake. Land ownership includes corporate and state forest lands, and avoids private land.

#### 6.5.3.4 Dead Man's Pond Alignment Modification

The Dead Man's Pond Alignment Modification is located in the central portion of the Dead Man's Pond Variation Area (Map 4-17). This alignment modification is the same length as the comparable segment of the Proposed Blue Route (Table 4-5, Map 6-73). There is one residence located east of and within 1,000 feet of the Proposed Blue Route. The Proposed Blue Route crosses and then follows the west side of CSAH 8 for about one-third of its length. Land ownership includes private, corporate, and county-administered state forest lands; part of the Proposed Blue Route follows a boundary between private and county-administered state forest lands.

The Dead Man's Pond Alignment Modification shifts the anticipated alignment approximately 1,000 feet west and away from one residence located near CSAH 8. However this modification shifts the alignment closer to two residences located along CSAH 57 and on to more private land. In addition, while this alignment modification crosses the CSAH 8 and CSAH 57, it does not parallel the highway corridors (Map 6-73). The alignment modification crosses Dead Man's Pond, a MnDNR PWI waterbody. In addition, this alignment modification crosses lands designated as Moderate Rank for the Preliminary MBS Sites of Biodiversity Significance (for more details, see Section 6.4.4). Land ownership includes more private, corporate, and county-administered state forest lands; but shifts the alignment west from the boundary between private and county-administered state forest lands onto private land.

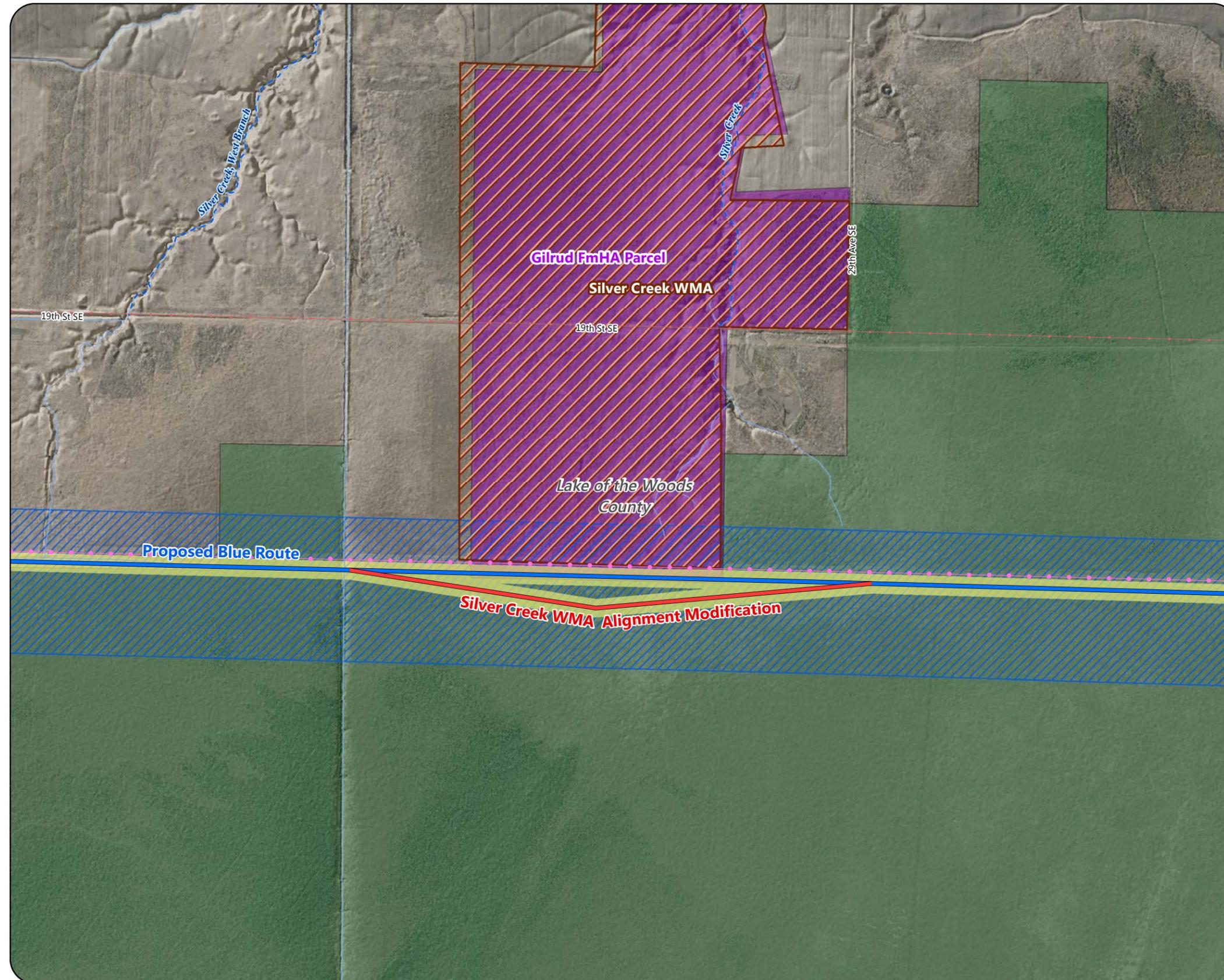
### **6.5.3.5 Trout Lake Alignment Modification**

The Trout Lake Alignment Modification is located in the central portion of the Blackberry Variation Area (Map 4-17). This alignment modification is the same length as the comparable segment of the Proposed Blue Route (Table 4-5, Map 6-74). There are three residences within 1,000 feet of the Proposed Blue Route. For about half of its length (north end), the Proposed Blue Route crosses corporate land, and then it follows the boundary between corporate and private land.

The Trout Lake Alignment Modification shifts the anticipated alignment away from the two residences located west of the Proposed Blue Route, so only the one residence located within 1,000 feet to the southeast (south of CSAH 70) is still within 1,000 feet of this alignment (Map 6-74). Land ownership is corporate.

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Map 6-66 Silver Creek WMA Alignment Modification



- Proposed Routes**
- Blue Route Anticipated Alignment
  - Blue Route Corridor
- Alternatives**
- Silver Creek WMA Alignment Modification
  - Anticipated Right-of-Way
- Existing Transmission Lines**
- 69 or 115 kV
  - 230 kV
  - NHD Watercourse
  - PWI Watercourse
  - Wildlife Management Area (WMA)
- Land Ownership (Assumed)**
- Private Land
  - State Land
  - USFWS Interest Lands

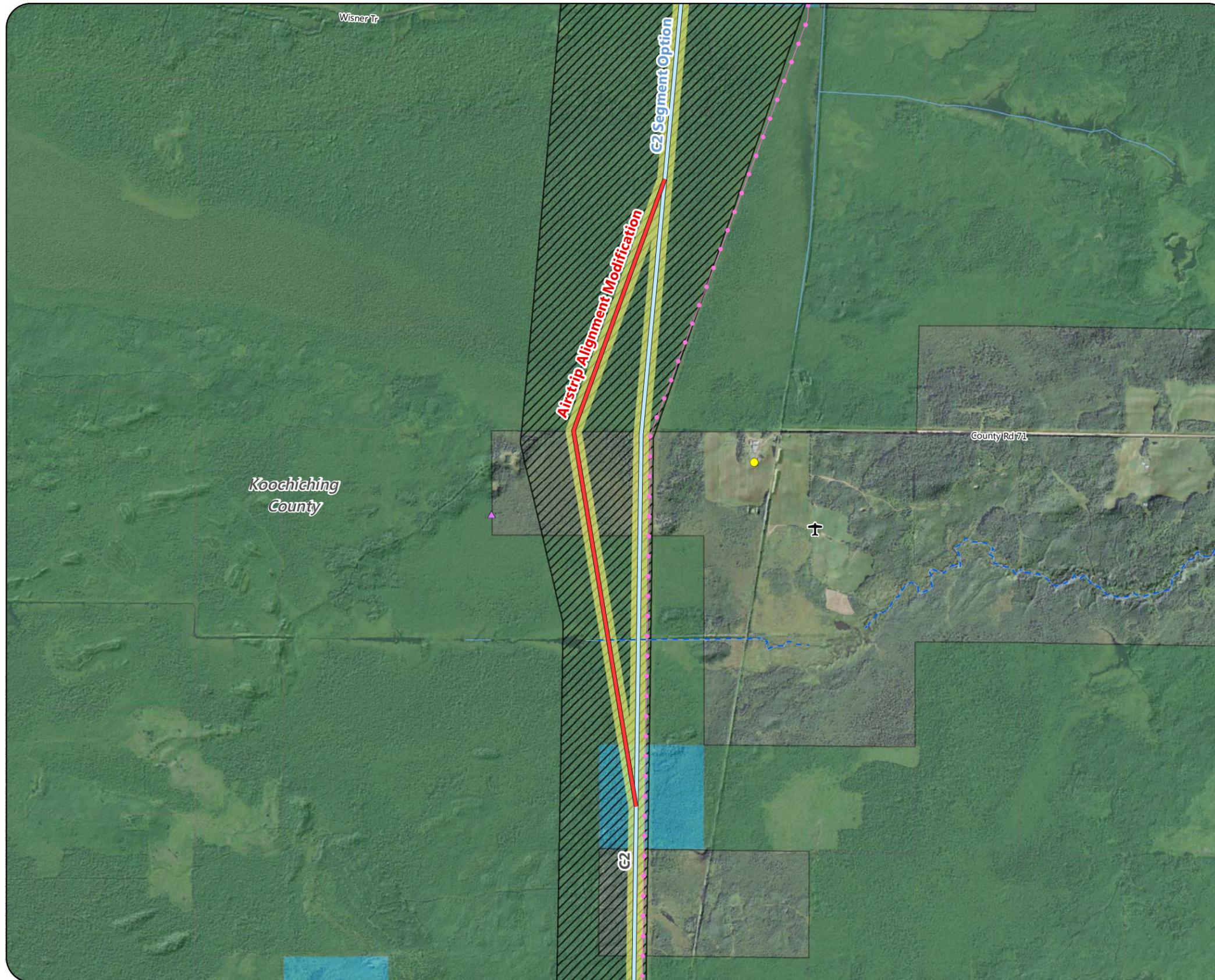


Map 6-66

**SILVER CREEK WMA  
ALIGNMENT MODIFICATION**  
Great Northern Transmission Line  
Final Environmental Impact Statement



Map 6-67 Airstrip Alignment Modification



- Proposed Route**
- C2 Segment Option Anticipated Alignment
  - C2 Segment Option Route Corridor
- Alternatives**
- Airstrip Alignment Modification
  - Anticipated Right-of-Way
- Existing Transmission Lines**
- 230 kV
  - Residence
  - Private Airstrip
  - Aggregate Source Location
  - NHD Watercourse
  - PWI Watercourse
- Land Ownership (Assumed)**
- Private Land
  - Corporate
  - State Land

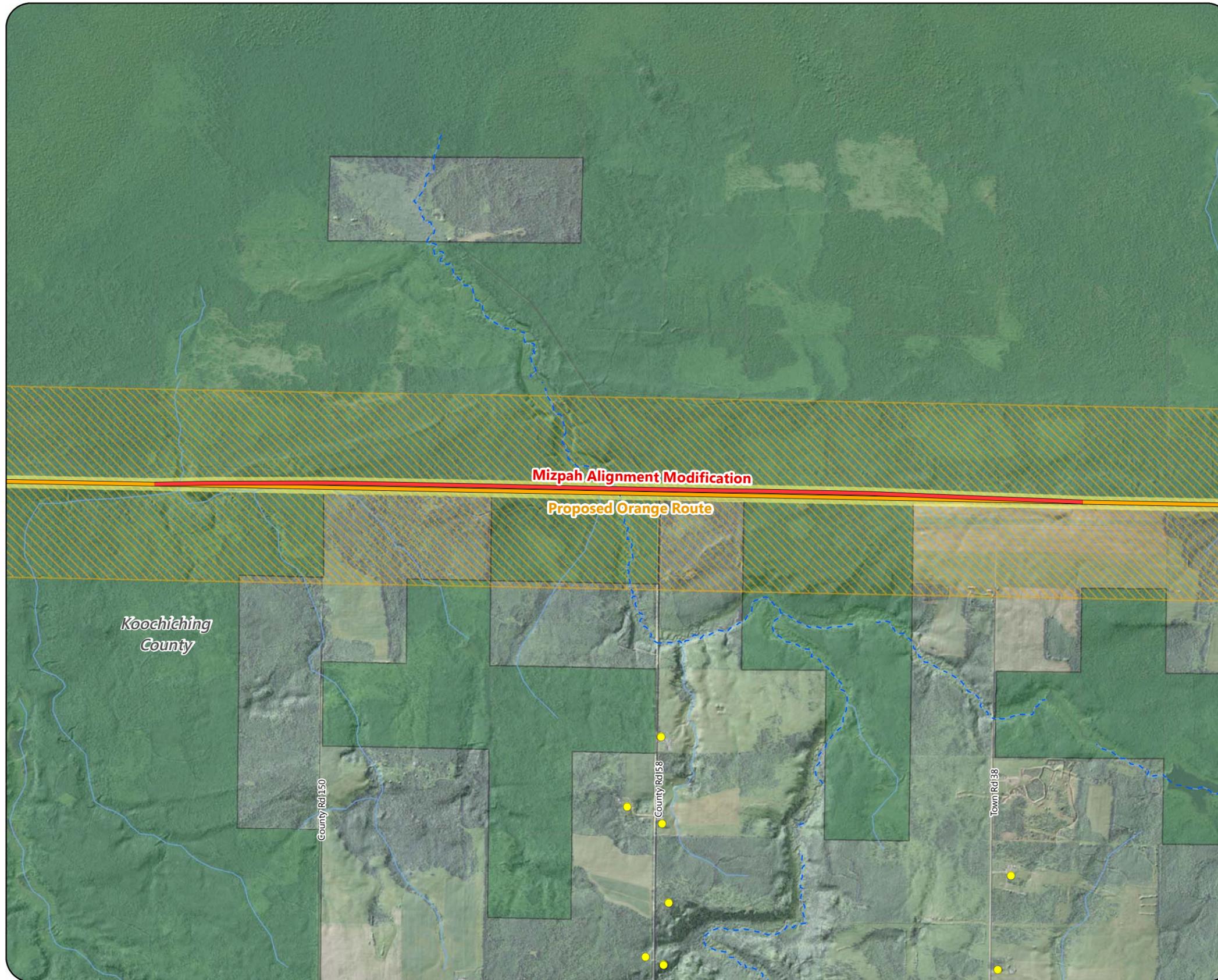


Map 6-67

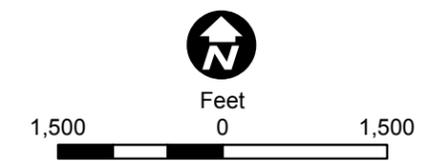
**AIRSTRIP  
ALIGNMENT MODIFICATION**  
Great Northern Transmission Line  
Final Environmental Impact Statement



Map 6-68 Mizpah Alignment Modification



- Proposed Route**
- Orange Route Anticipated Alignment
  - Orange Route Corridor
- Alternative**
- Alignment Modification
  - Anticipated Right-of-Way
  - Residence
  - NHD Watercourse
  - PWI Watercourse
- Land Ownership (Assumed)**
- Private Land
  - State Land



Map 6-68

**MIZPAH**  
**ALIGNMENT MODIFICATION**  
 Great Northern Transmission Line  
 Final Environmental Impact Statement

