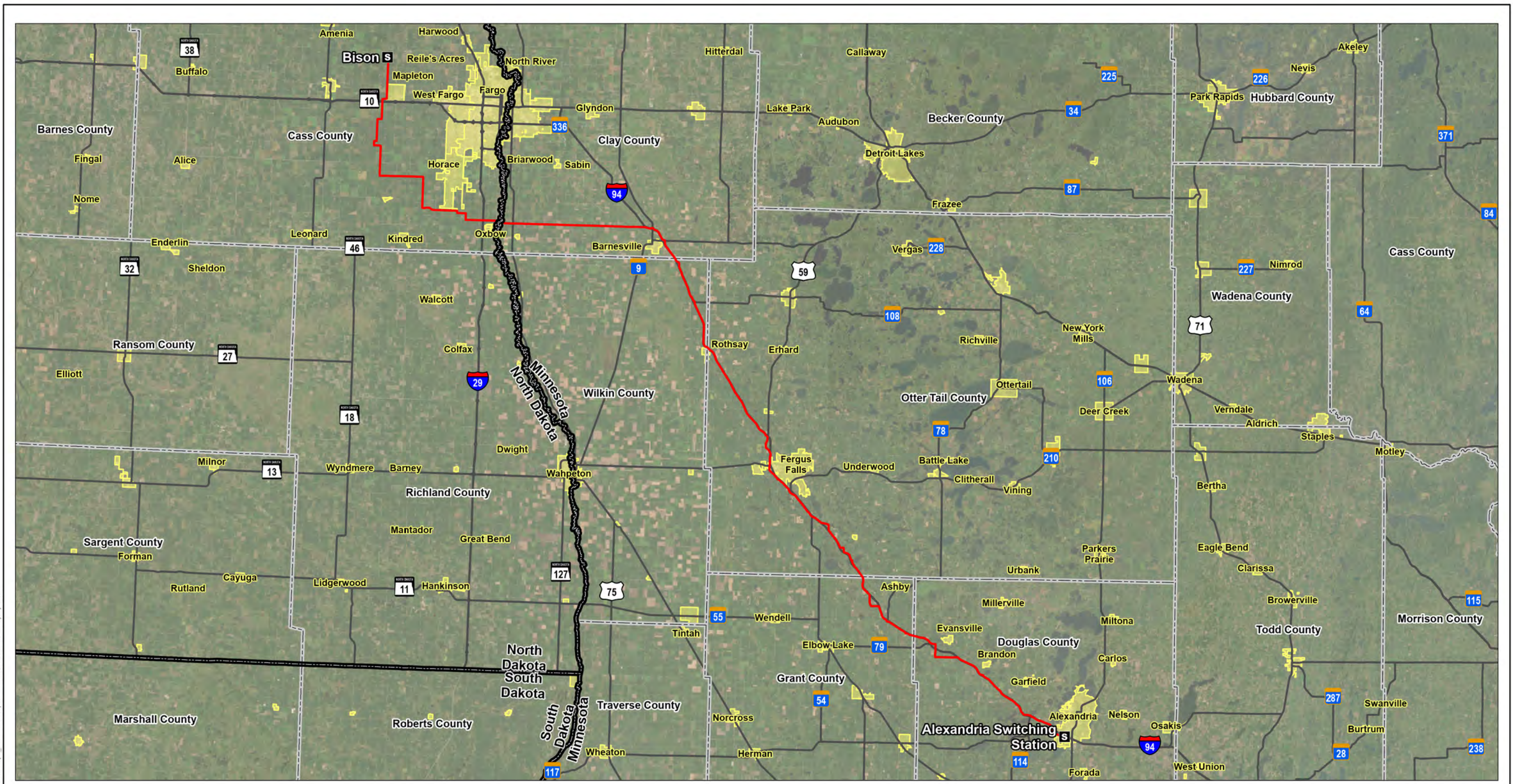


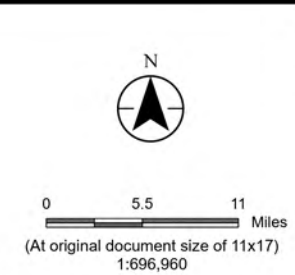
## APPENDIX A

### Maps

# Map 1 Project Overview



- Legend**
- S Project Substation
  - Project Area (Right-of-Way)
  - Municipality
  - County Boundary
  - State Boundary
  - Major Highway



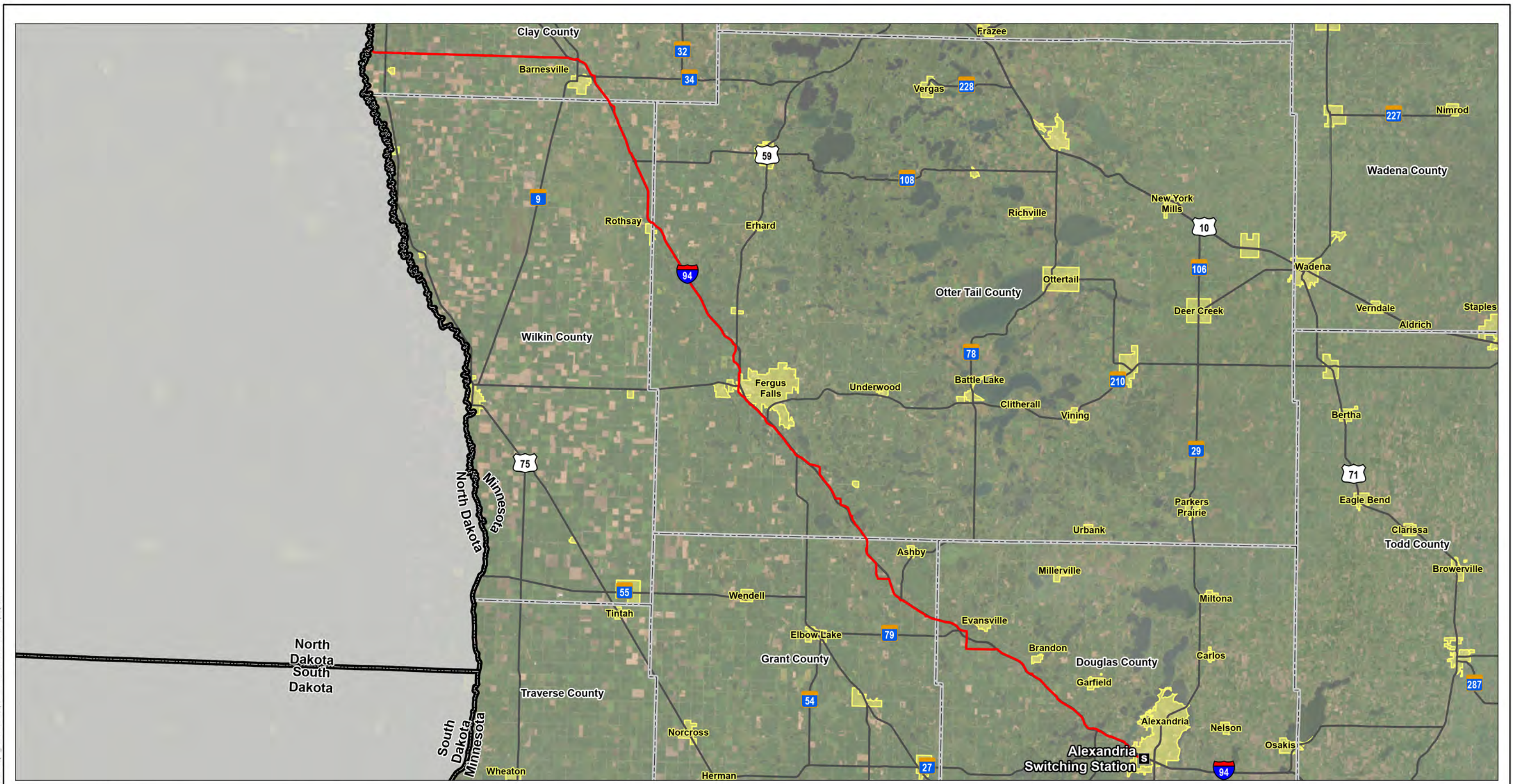
*Project Location*  
Clay, Wilkin, Otter Tail, Grant  
and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-24  
TR by AR on 2026-01-16  
IR by NP on 2026-01-16

**Map 1**  
**Project Overview Map**  
Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit  
Transmission Project  
Route Permit Amendment

Notes  
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB  
3. Background: ESRI World Imagery

## Map 2 Minnesota Project Overview



- Legend**
- S Project Substation
  - Project Area (Right-of-Way)
  - Municipality
  - County Boundary
  - State Boundary
  - Major Highway



0 4 8 Miles  
 (At original document size of 11x17)  
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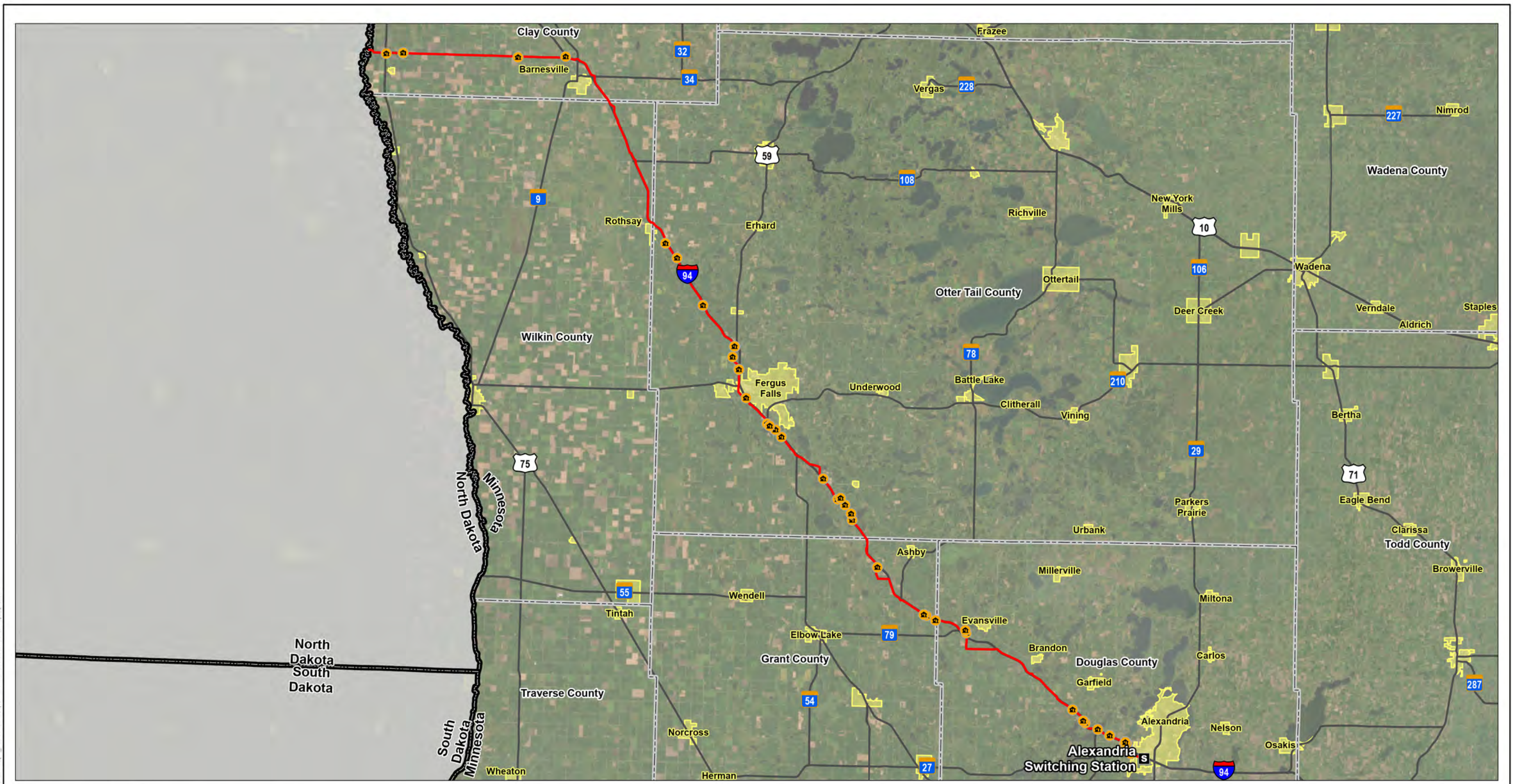
*Project Location*  
 Clay, Wilkin, Otter Tail, Grant  
 and Douglas Counties, Minnesota

*Prepared by KJM on 2026-03-24*  
 TR by AR on 2026-01-16  
 IR by NP on 2026-01-16

**Map 2**  
**Minnesota Project Overview Map**  
 Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit  
 Transmission Project  
 Route Permit Amendment

Notes  
 1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
 2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB  
 3. Background: ESRI World Imagery

## Map 3 Proximity to Residences



- Legend**
- Residence within 500 Feet of Centerline
  - Project Substation
  - Project Area (Right-of-Way)
  - Municipality
  - County Boundary
  - State Boundary
  - Major Highway

**Project Location**  
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-24  
TR by AR on 2026-01-16  
IR by NP on 2026-01-16

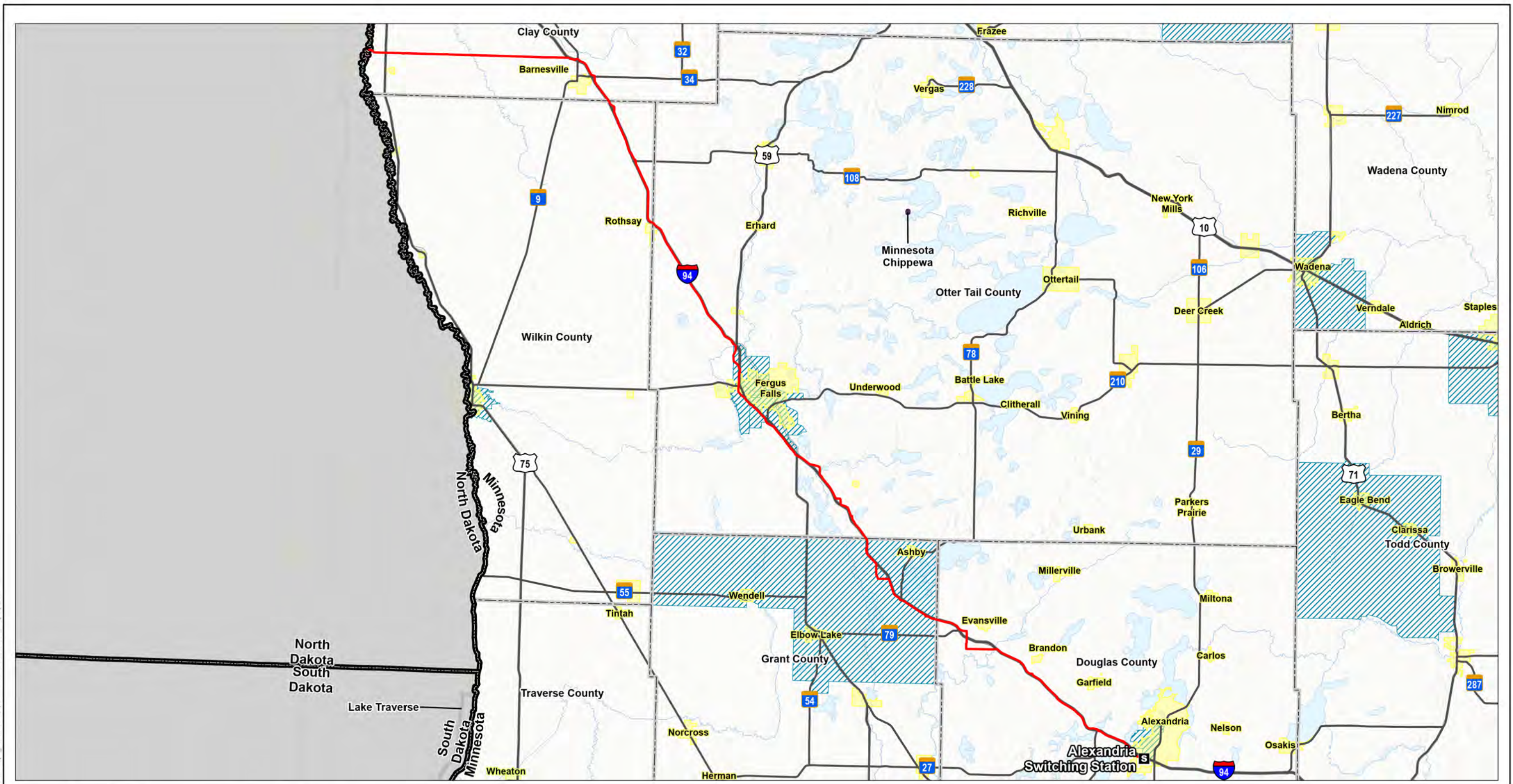


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(At original document size of 11x17)  
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**Map 3**  
**Proximity to Residences Map**  
Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit  
Transmission Project  
Route Permit Amendment

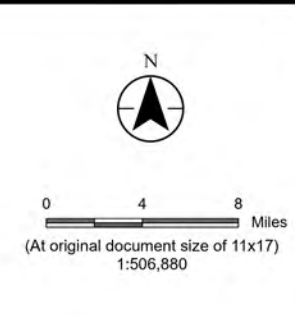
**Notes**  
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB  
3. Background: ESRI World Imagery

**Map 4 Environmental Justice**



- Legend**
- S Project Substation
  - Project Area (Right-of-Way)
  - Municipality
  - County Boundary
  - State Boundary

- Major Highway
- MPCA Environmental Justice Areas
- Census Tribal Areas
- 5 year ACS summary, 35% of people below 200% poverty level
- Consider for poverty issues



*Project Location*  
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

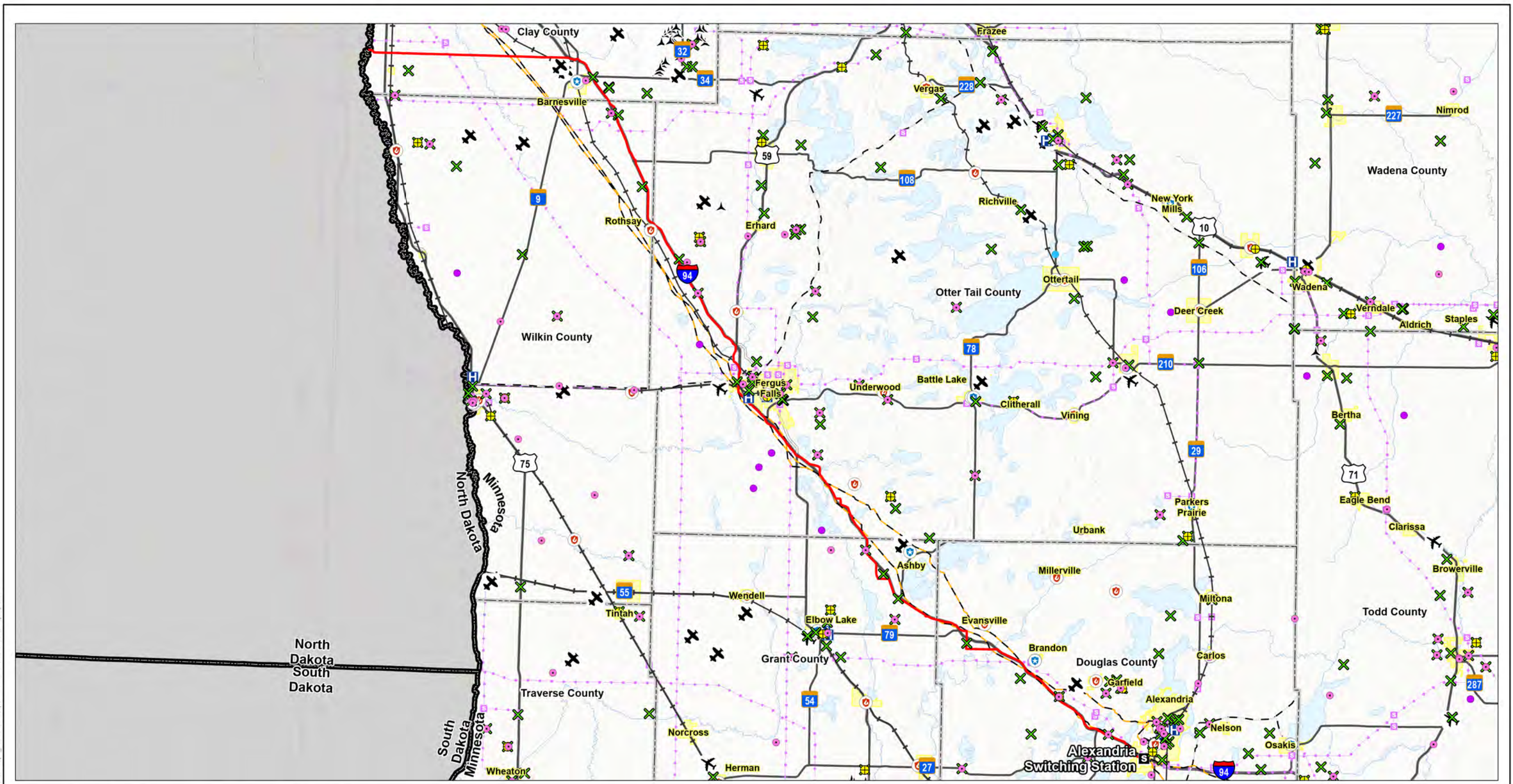
Prepared by KJM on 2026-03-24  
TR by AR on 2026-01-16  
IR by NP on 2026-01-16

**Map 4**  
**Environmental Justice Map**  
Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit  
Transmission Project Route Permit  
Amendment

Notes  
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, NLCD, USCB  
3. Background: ESRI World Imagery

Page 1 of 1

**Map 5      Public Services and Transportation**



**Legend**

Project Substation	Cellular Tower	Private Airport
Project Area (Right-of-Way)	FM Transmission Tower	Public Airport
Municipality	Microwave Service Tower	Existing Substation
County Boundary	Hospitals	Existing Electric Transmission Line
State Boundary	Fire Station	Approximate Pipeline Location
Major Highway	Police Station	Gas Transmission Pipelines
Railroad	Existing Wind Turbines	Hazardous Liquid Pipelines
Antenna Structure		

**Project Location**  
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

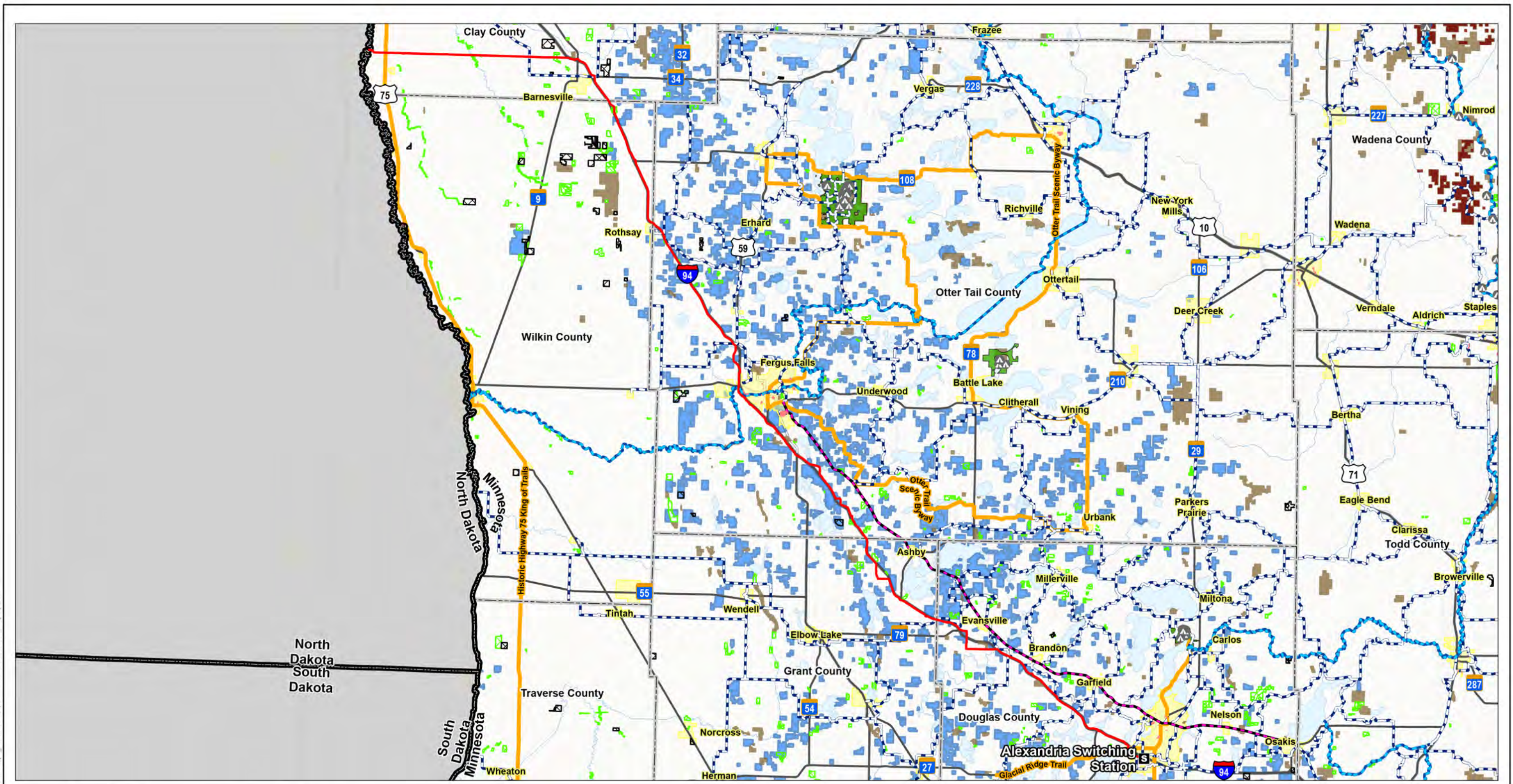
Prepared by KJM on 2026-03-24  
TR by AR on 2026-01-16  
IR by NP on 2026-01-16

**Map 5**  
**Public Services and Transportation Map**  
Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit  
Transmission Project Route Permit  
Amendment

**Notes**  
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
2. Data Sources: Xcel, Stantec, FAA, MnDOT, MNDNR, NPMS, USGS, USGS  
3. Background: ESRI World Hillshade

Scale: 0 4 8 Miles  
(At original document size of 11x17)  
1:506,880

**Map 6 Recreation and Land Use**



- Legend**
- Project Substation
  - Project Area (Right-of-Way)
  - Municipality
  - County Boundary
  - State Boundary
  - Major Highway
  - MNDNR Campsite
  - Scenic Byways in Minnesota
  - State Trail
  - Water Trail
  - Snowmobile Trail
  - MNDNR Walk in Access Sites
  - BWSR Conservation Easements (RIM Reserve)
  - City/County Owned Land
  - Forest Inventory
  - MNDNR Management Units
  - State Forest
  - State Park
  - State Wayside
  - USFWS Interest
  - Waterfowl Production Area

**Project Location**  
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-24  
TR by AR on 2026-01-16  
IR by NP on 2026-01-16

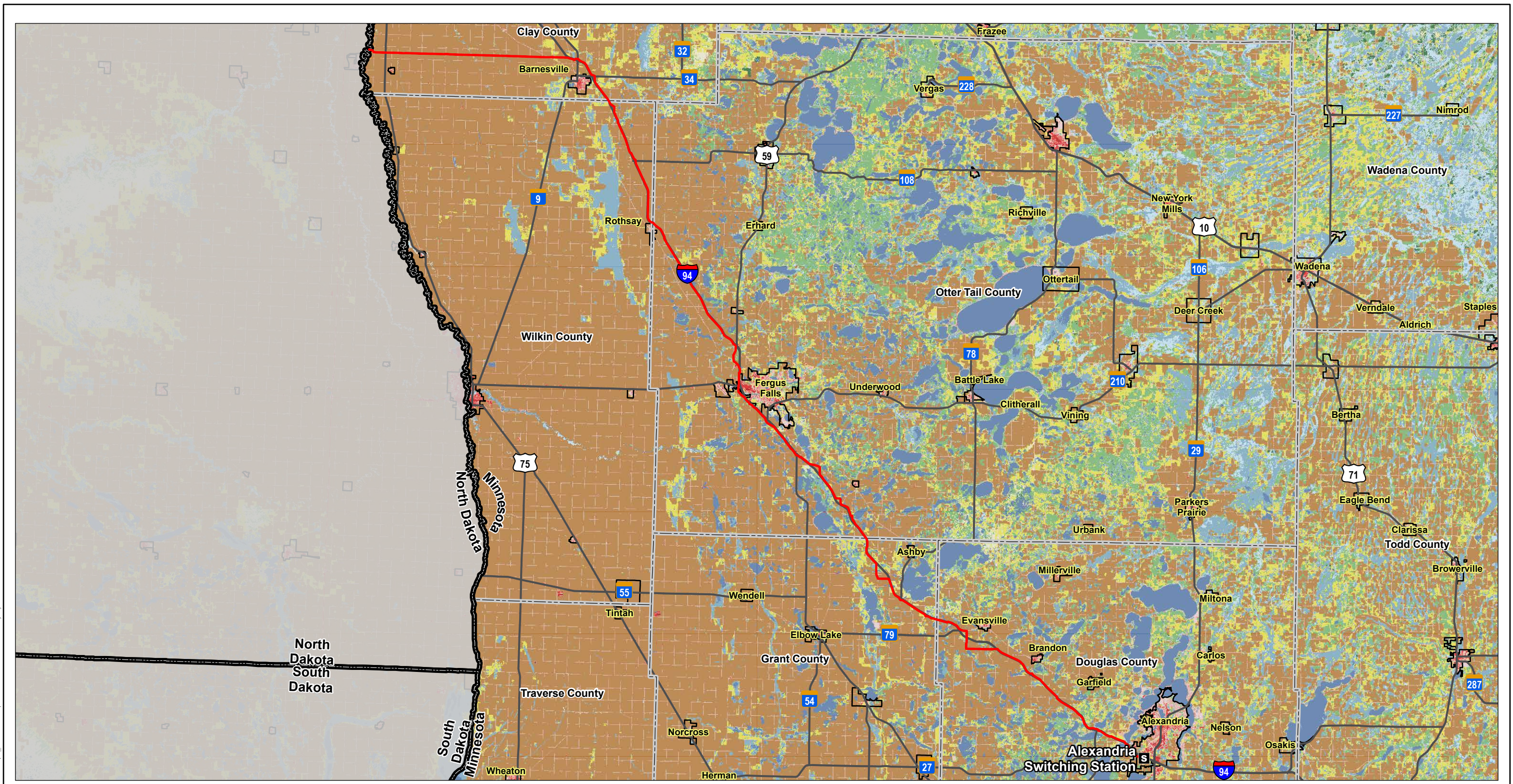
**Map 6**  
**Recreation and Land Use Map**  
Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit  
Transmission Project Route Permit  
Amendment

**Notes**  
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
2. Data Sources: Xcel, Stantec, BWSR, MNDOT, MNDNR, USCB, USGS  
3. Background: ESRI World Hillshade

Scale: 0 4 8 Miles  
(At original document size of 11x17)  
1:506,880

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**Map 7      Land Cover**



**Legend**

Project Substation	Perennial Ice/Snow	Mixed Forest
Project Area (Right-of-Way)	Developed, Open Space	Shrub/Scrub
Municipality	Developed, Low Intensity	Grassland/Herbaceous
County Boundary	Developed, Medium Intensity	Pasture/Hay
State Boundary	Developed, High Intensity	Cultivated Crops
Major Highway	Barren Land (Rock/Sand/Clay)	Woody Wetlands
<b>Land Cover (NLCD, 2023)</b>	Deciduous Forest	Emergent Herbaceous Wetlands
Open Water	Evergreen Forest	

**Project Location**  
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-26  
TR by AR on 2026-01-16  
IR by NP on 2026-01-16

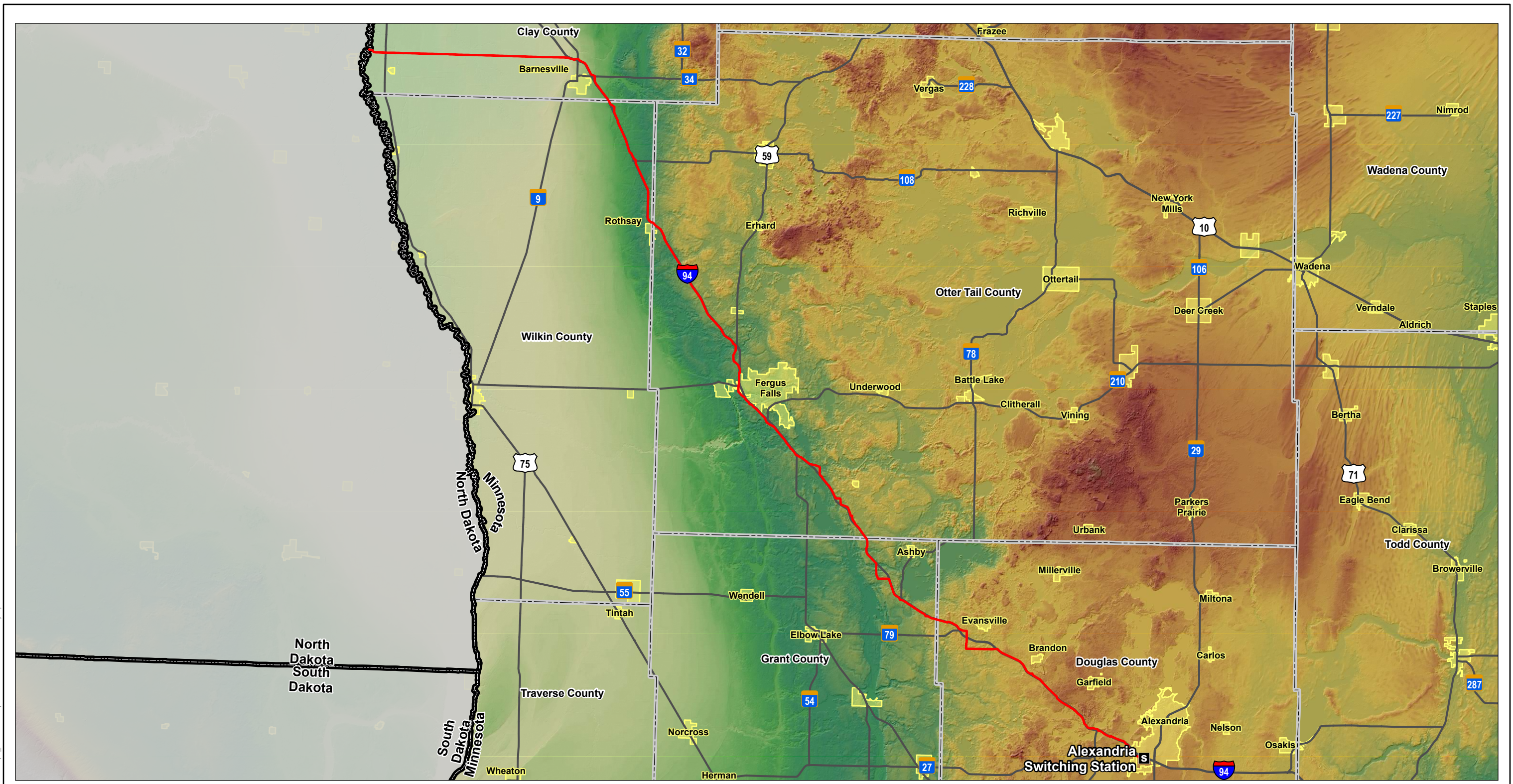
**Map 7**  
**Land Cover Map**  
Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit  
Transmission Project Route Permit  
Amendment

**Notes**  
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, NLCD, USCB  
3. Background: ESRI World Imagery

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Page 1 of 1

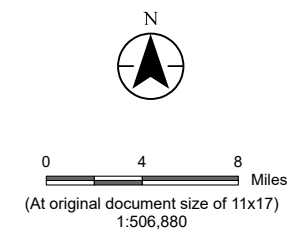
**Map 8      Topography**



- Legend**
- S Project Substation
  - Project Area (Right-of-Way)
  - Municipality
  - County Boundary
  - State Boundary
  - Major Highway
- Elevation Range**
- 2131.23 ft
  - 781.76 ft

*Project Location*  
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

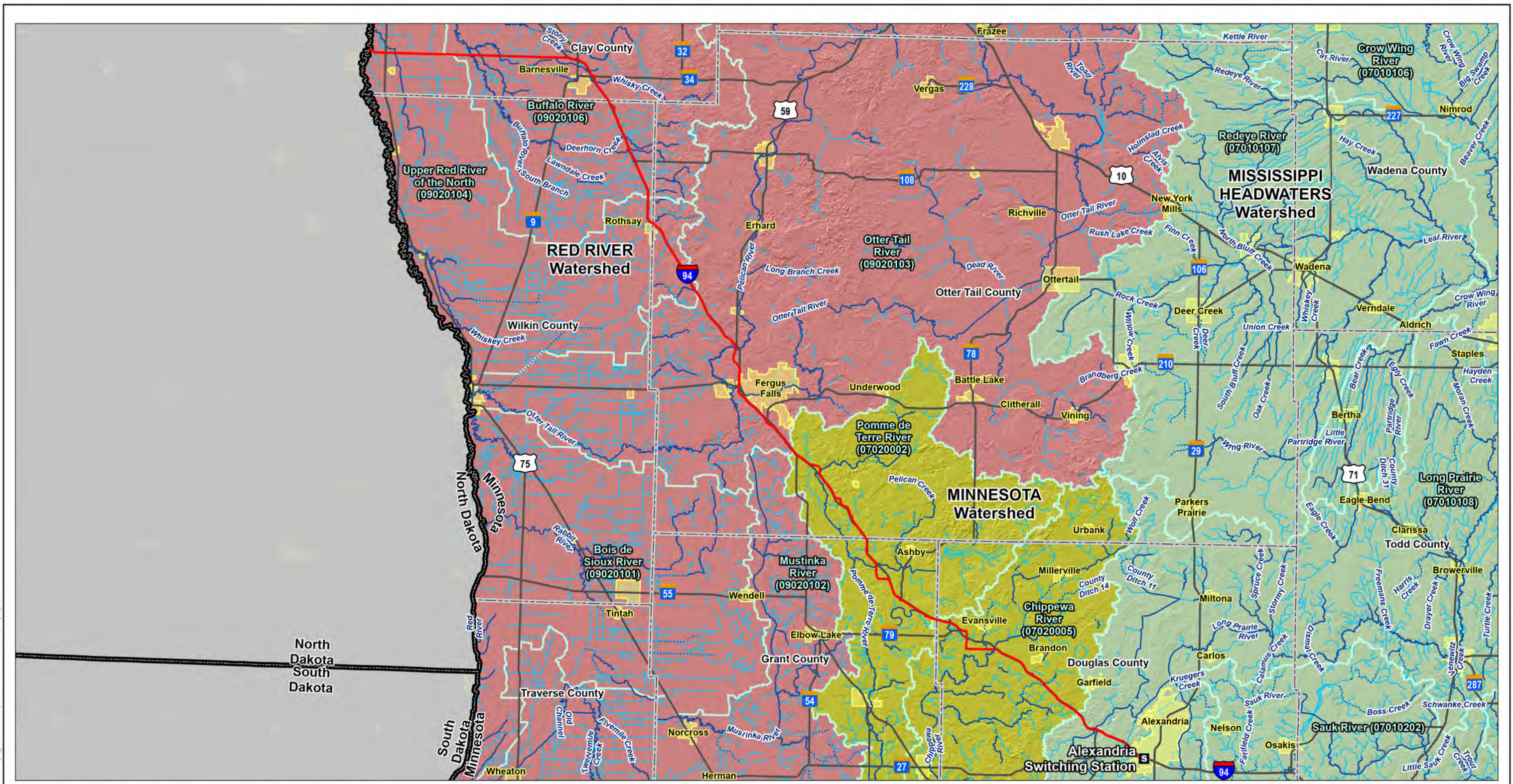
*Prepared by KJM on 2026-03-26*  
TR by AR on 2026-01-16  
IR by NP on 2026-01-16



**Map 8**  
**Topography Map**  
Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit  
Transmission Project Route Permit  
Amendment

**Notes**  
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB, USGS  
3. Background: USGS 1/3 arc-second DEM

## Map 9 Watercourses



**Legend**

- S Project Substation
- Project Area (Right-of-Way)
- Municipality
- County Boundary
- State Boundary
- Major Highway
- ~ USGS Watercourse

**MNDNR Public Watercourse Inventory**

- ~ Public Water Watercourse
- ~ Public Ditch/Altered Natural Watercourse
- Watershed Boundary - HUC 08
- Watershed Basin - HUC 04
- Minnesota River
- Mississippi Headwaters
- Red River

**Project Location**  
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

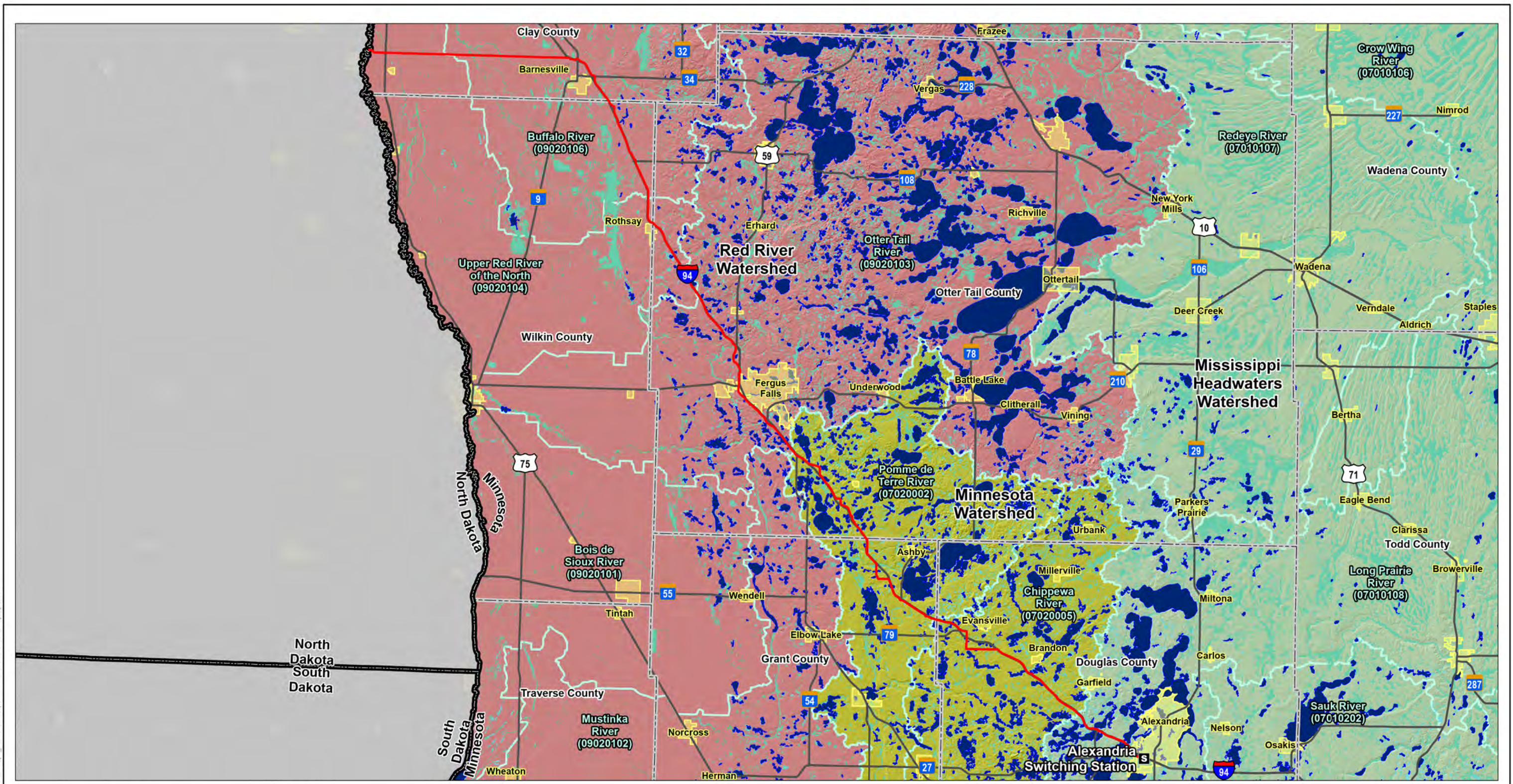
Prepared by KJM on 2026-03-24  
TR by AR on 2026-01-16  
IR by NP on 2026-01-16

**Map 9**  
**Watercourses Map**  
Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit  
Transmission Project Route Permit Amendment

**Notes**  
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB  
3. Background: USGS Hillshade

Page 1 of 1

**Map 10 Waterbodies and Wetlands**



**Legend**

- Project Substation
- Project Area (Right-of-Way)
- Municipality
- County Boundary
- State Boundary
- Major Highway
- Minnesota Public Waters Basins Inventory
- National Wetland Inventory
- USGS Waterbody
- Watershed Boundary - HUC 08
- Watershed Basin - HUC 04
- Minnesota River
- Mississippi Headwaters
- Red River

**Project Location**  
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

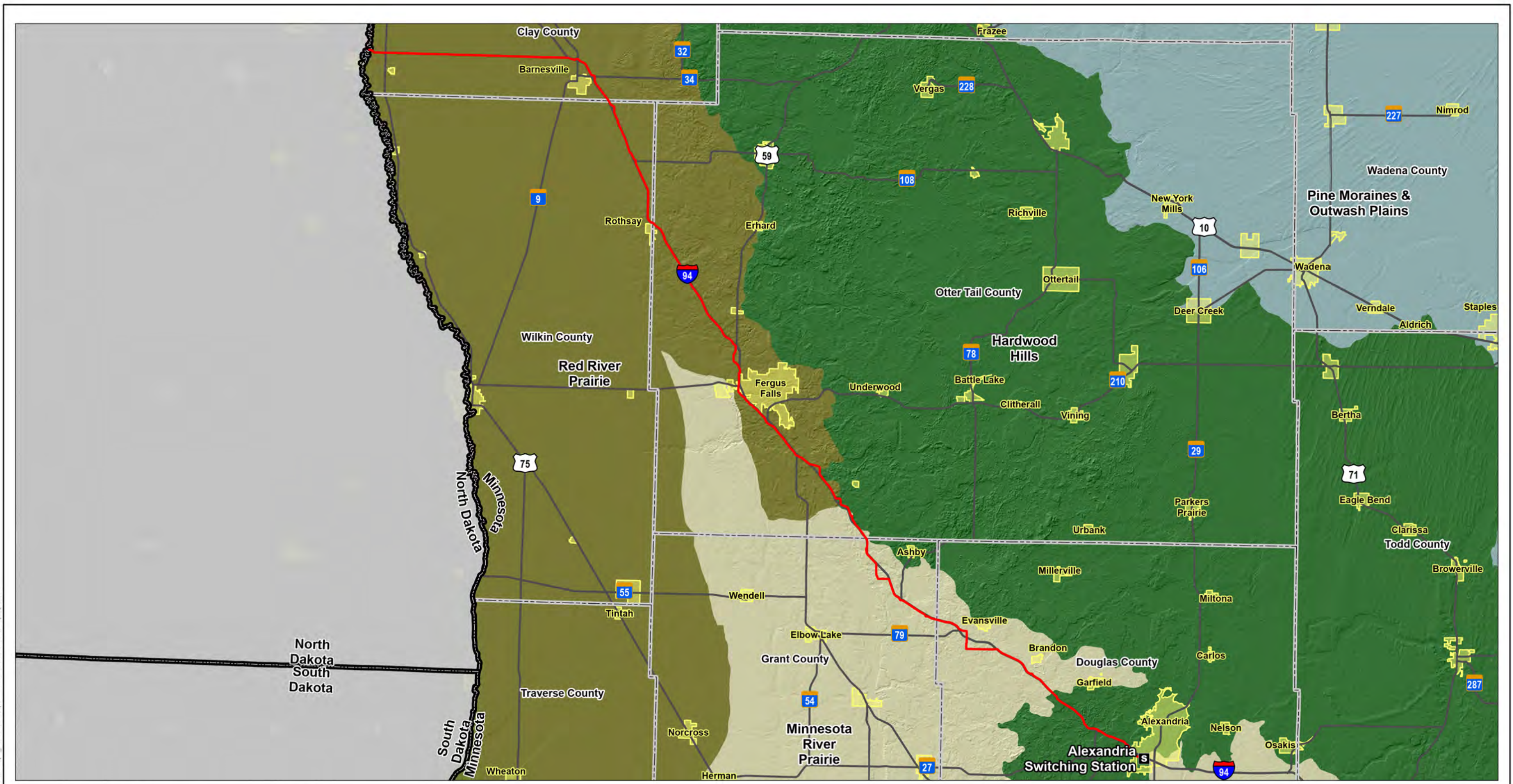
Prepared by KJM on 2026-03-24  
TR by AR on 2026-01-16  
IR by NP on 2026-01-16

**Map 10**  
**Waterbodies and Wetlands Map**  
Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit Transmission  
Project Route Permit Amendment

**Notes**  
1. Coordinate System: IAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB  
3. Background: USGS Hillshade

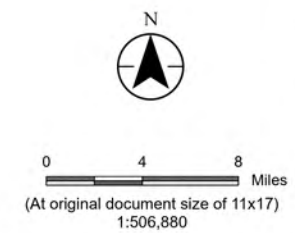
Page 1 of 1

**Map 11 Ecological Classification Subsections**



- Legend**
- S Project Substation
  - Project Area (Right-of-Way)
  - Municipality
  - County Boundary
  - State Boundary
  - Major Highway

- Ecological Subsections of Minnesota**
- A - Red River Prairie
  - I - Pine Moraines & Outwash Plains
  - M - Hardwood Hills
  - Q - Minnesota River Prairie



*Project Location*  
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

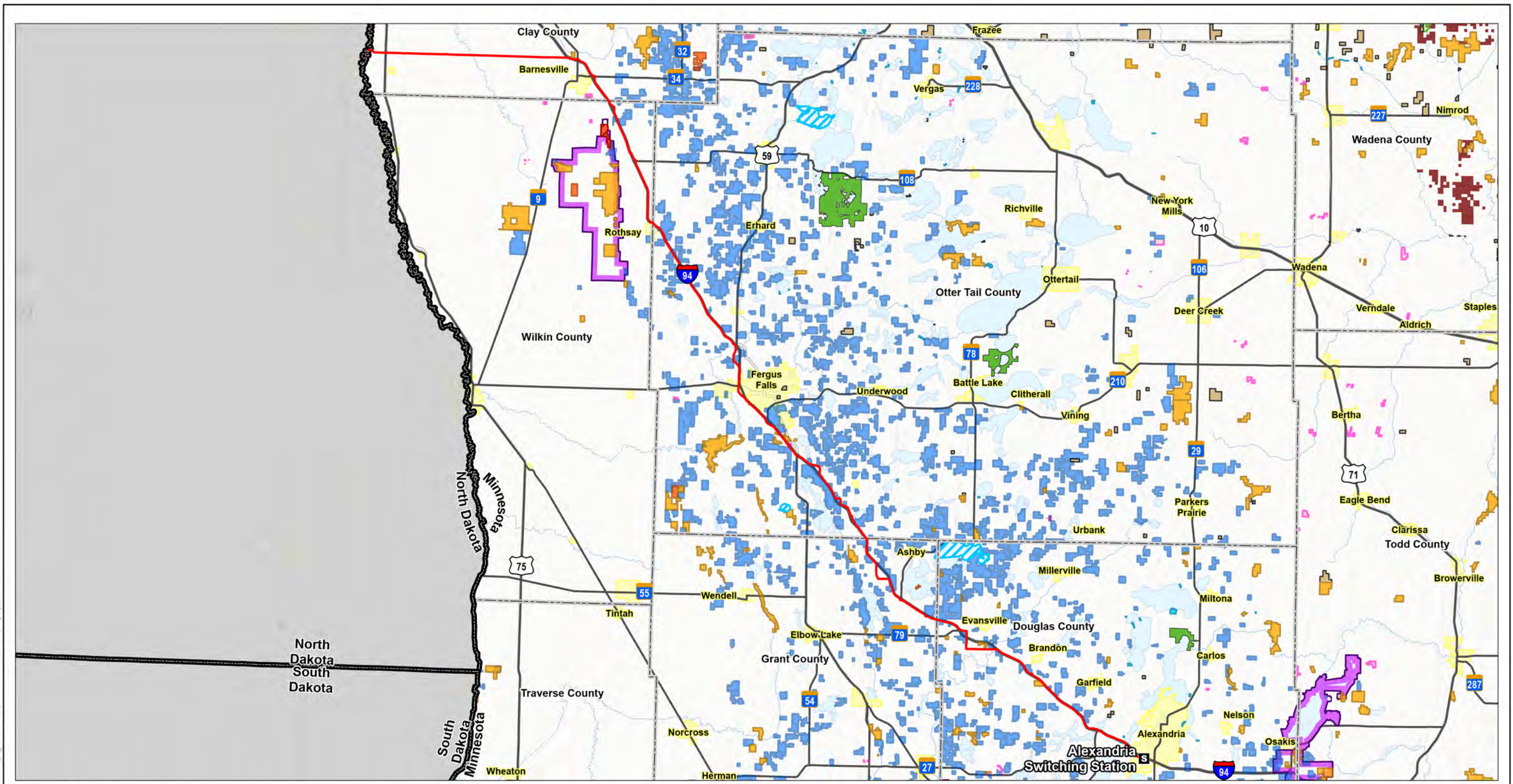
*Prepared by KJM on 2026-03-24*  
TR by AR on 2026-01-16  
IR by NP on 2026-01-16

**Map 11**  
**Ecological Classification Subsections Map**  
Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit  
Transmission Project Route Permit  
Amendment

**Notes**  
1. Coordinate System: NAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
2. Data Sources: Xcel, Stantec, MnDOT, MNDNR, USCB  
3. Background: USGS Hillshade

Page 1 of 1

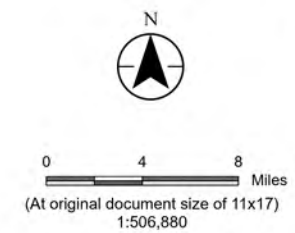
**Map 12 Wildlife Resources**



- Legend**
- Project Substation
  - Project Area (Right-of-Way)
  - Municipality
  - County Boundary
  - State Boundary
  - Major Highway
  - Important Bird Area
  - Migratory Waterfowl Feeding and Resting Areas

- MNDNR Management Units**
- State Forest
  - State Park
  - State Wayside
  - Aquatic Management Area
  - Fish Management Area
  - Forest Recreation Area
  - Other Forest Land
  - Scientific and Natural Area

- USFWS Interest**
- Wildlife Management Area
  - USFWS Critical Habitat
  - USFWS Interest
  - Farm Service Agency Transfer Parcel
  - National Wildlife Refuge
  - Waterfowl Production Area



**Project Location**  
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

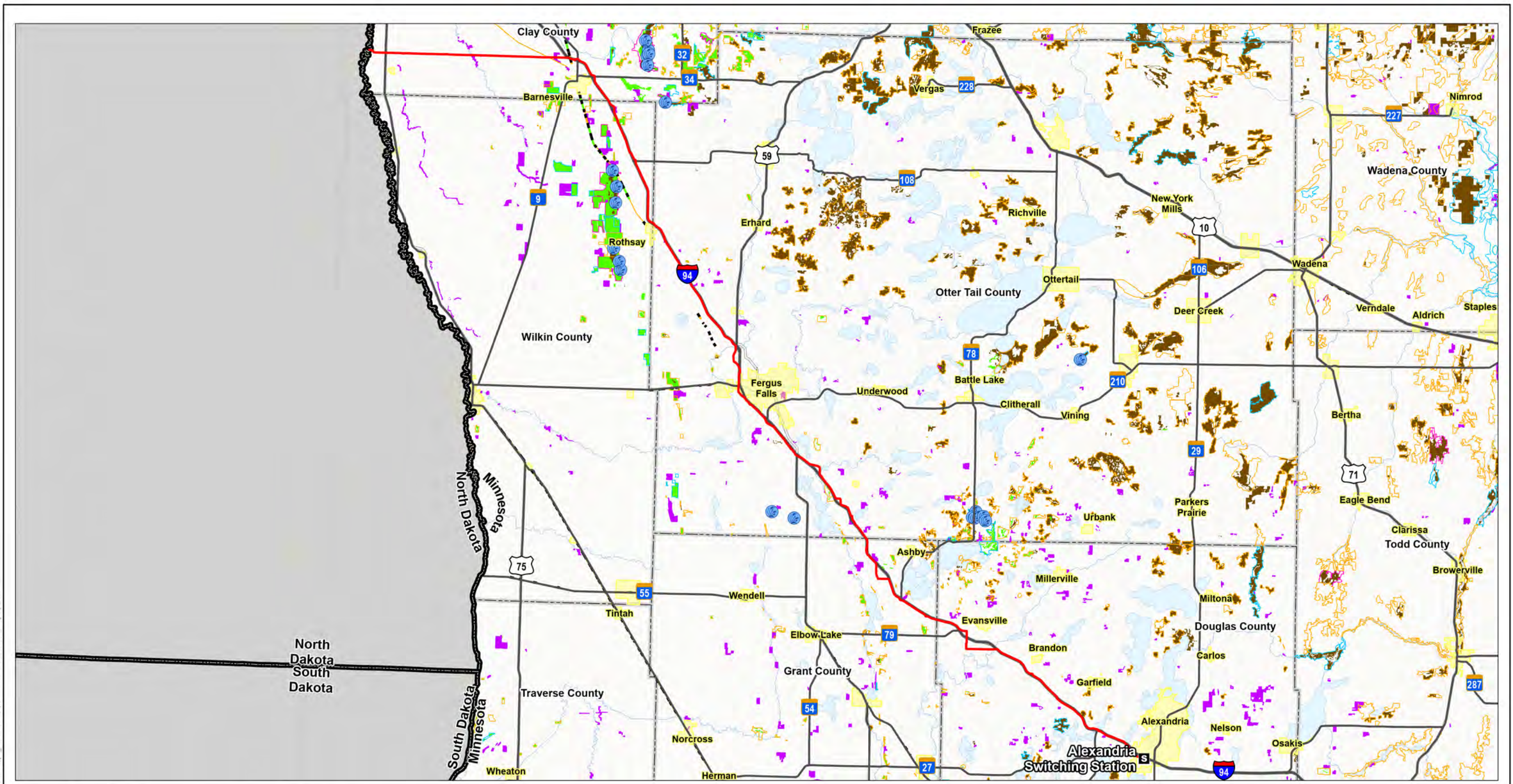
Prepared by KJM on 2026-03-24  
TR by AR on 2026-01-16  
IR by NP on 2026-01-16

**Map 12**  
**Wildlife Resources Map**  
Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit  
Transmission Project Route Permit Amendment

Notes  
1. Coordinate System: IAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
2. Data Sources: Xcel, Stantec, Audubon, MnDOT, MNDNR, USCB, USGS, USFWS  
3. Background: ESRI World Hillshade

Page 1 of 1

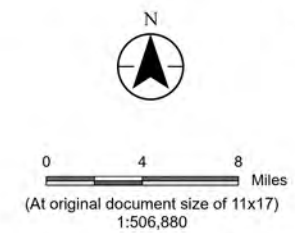
## Map 13 Unique and Natural Features



- Legend**
- Project Substation
  - Project Area (Right-of-Way)
  - Municipality
  - County Boundary
  - State Boundary
  - Major Highway
  - Calcareous Fen

- BWSR Conservation Easements (RIM Reserve)
- DNR Native Prairie
- DNR Native Plant Community
- MBS Railroad Rights-of-Way Prairies
- Very Good
- Good

- Sites of Biodiversity Significance**
- Fair
  - Outstanding
  - High
  - Moderate



**Project Location**  
Clay, Wilkin, Otter Tail, Grant and Douglas Counties, Minnesota

Prepared by KJM on 2026-03-24  
TR by AR on 2026-01-16  
IR by NP on 2026-01-16

**Map 13**  
**Rare and Unique Resources Map**  
Bison-Alexandria 345 kV 2<sup>nd</sup> Circuit  
Transmission Project Route Permit  
Amendment

**Notes**  
1. Coordinate System: IAD 1983 StatePlane Minnesota Central FIPS 2202 Feet  
2. Data Sources: Xcel, Stantec, Audubon, MnDOT, MNDNR, USCB  
3. Background: ESRI World Hillshade