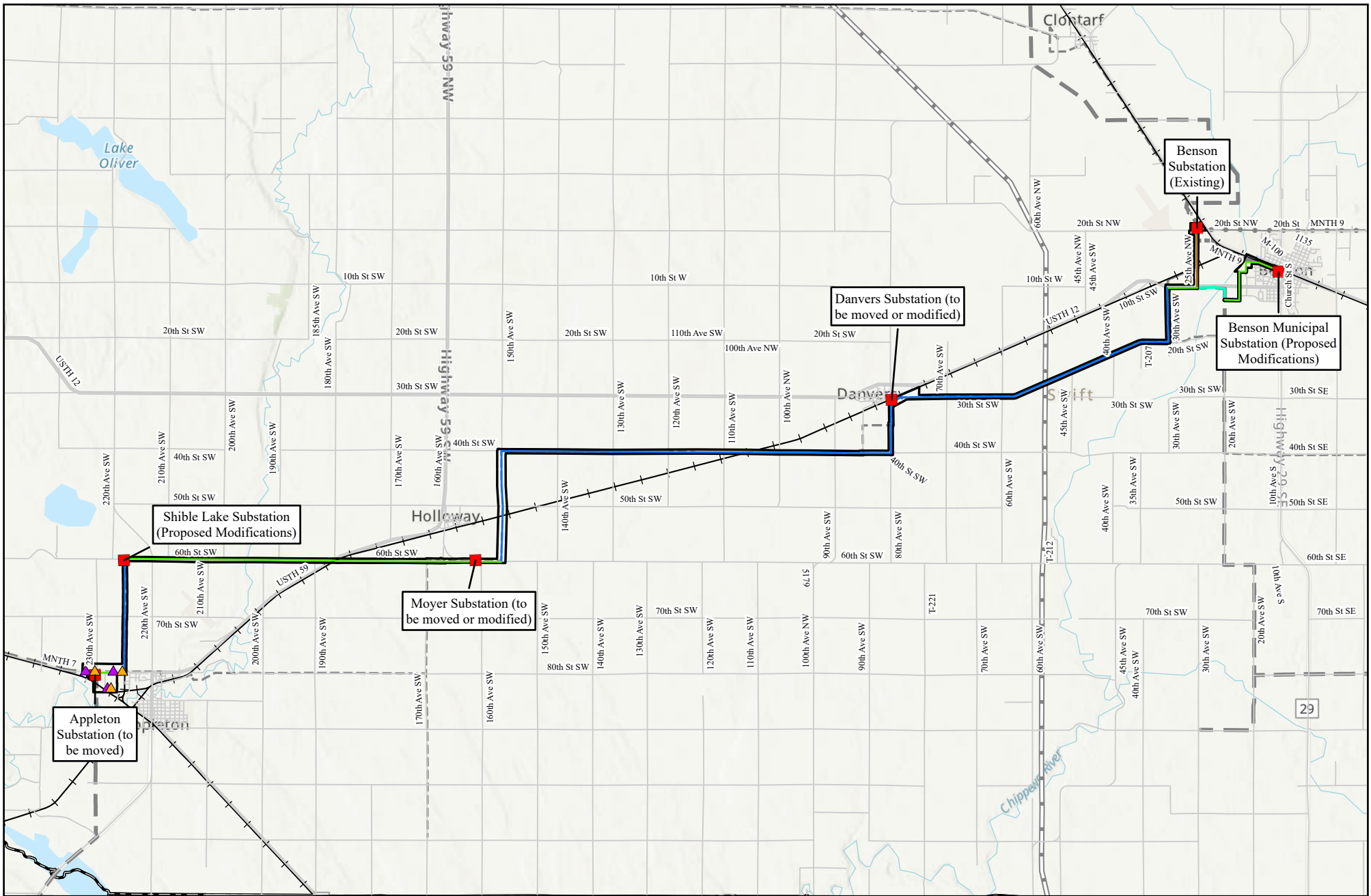


FIGURES

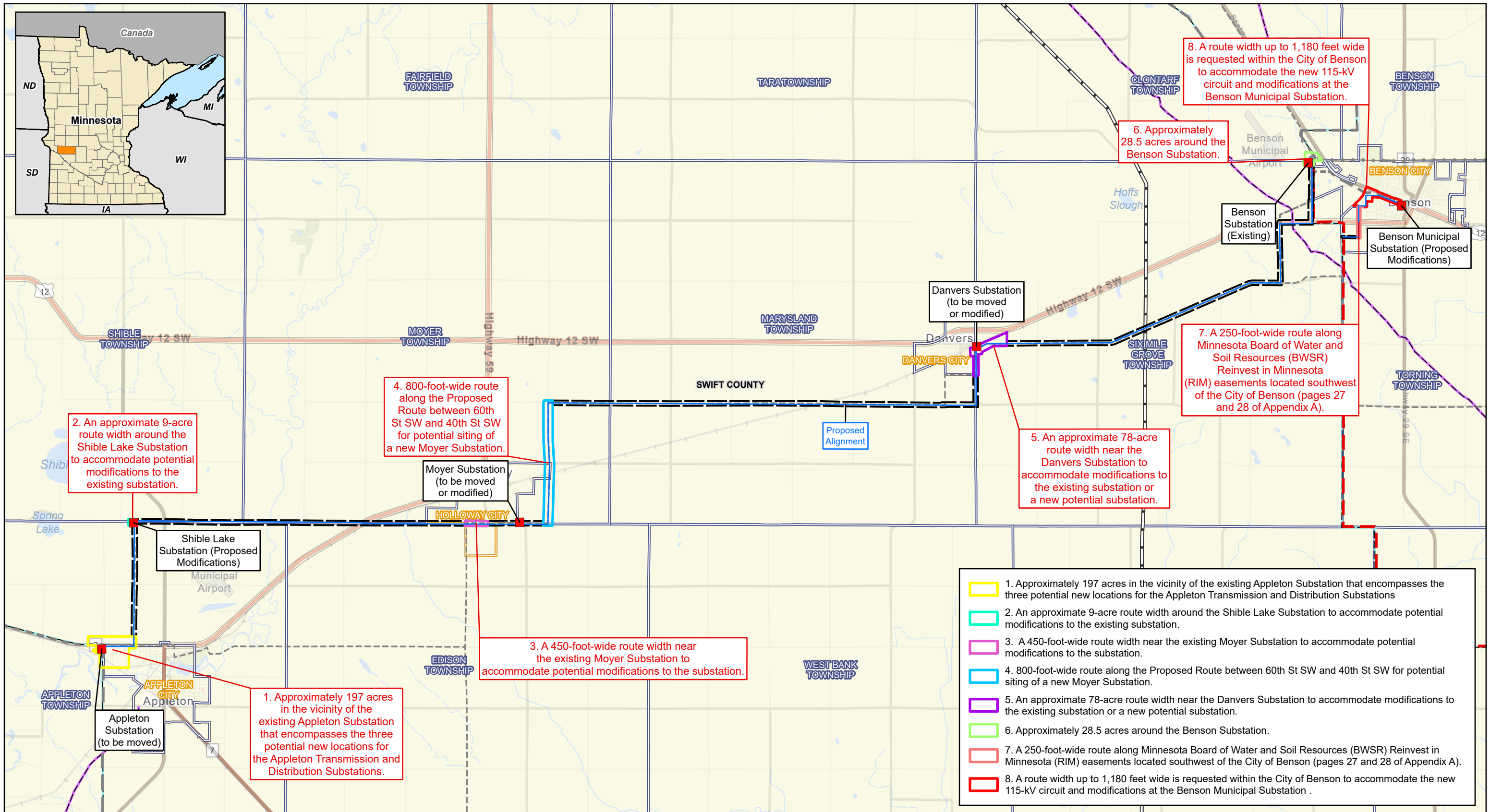


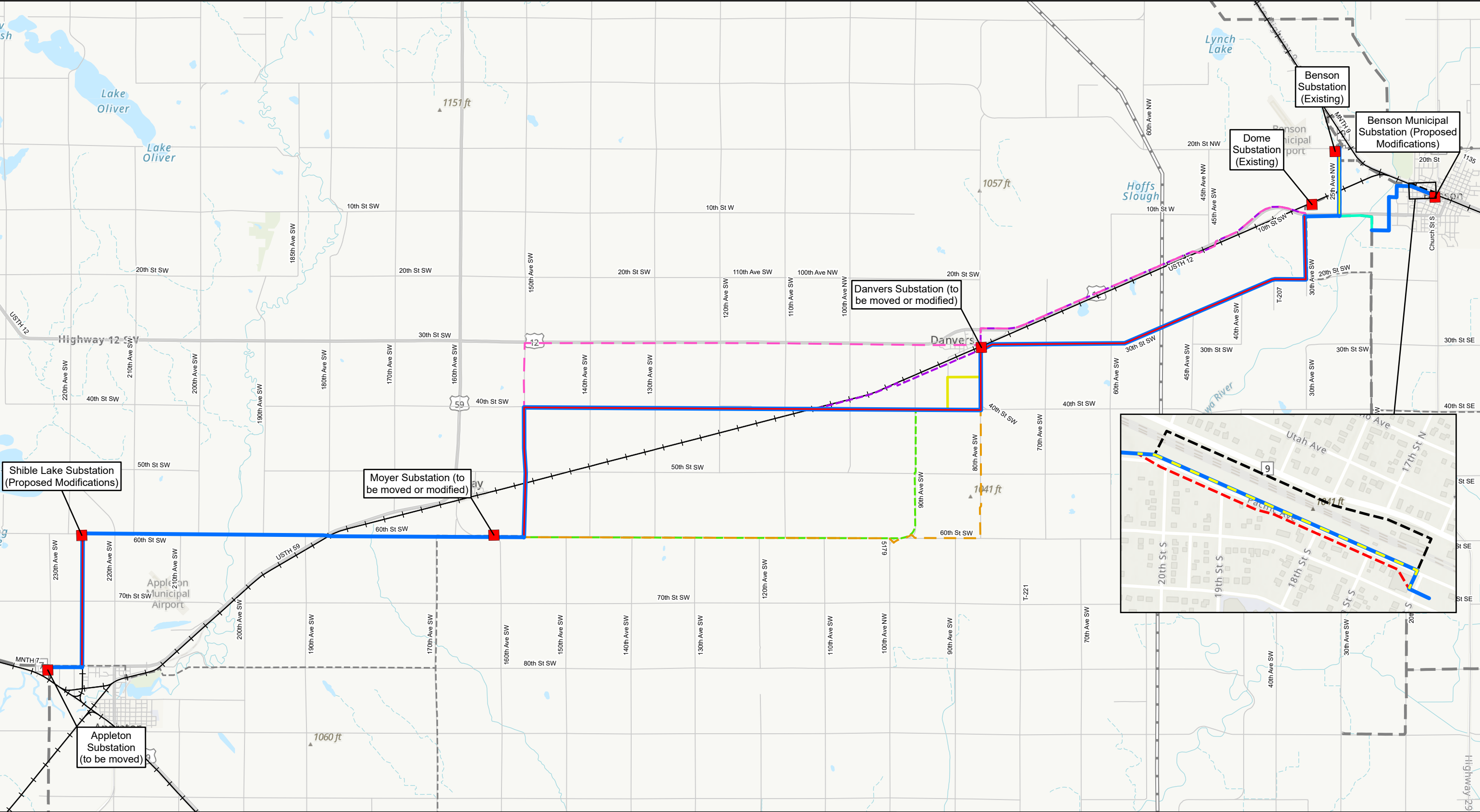
0 1 2 Miles
1:150,000



Figure 1-1
Appleton to Benson 115-kV Transmission Line Project
Swift County, Minnesota

- Substation
- ▲ Appleton Distribution Substation Location Option
- ▲ Appleton Transmission Substation Location Option
- Proposed New 115 kV Transmission Line
- Proposed Rebuild of Existing 115-kV
- Proposed Upgrade 41.6-kV to 115-kV
- Proposed Removal of 115-kV Transmission Line
- Route Width
- 41.6-kV Transmission Line
- 69-kV Transmission Line
- 115-kV Transmission Line
- 230-kV Transmission Line
- + BNSF Railway
- County Boundary







012 Miles

1:90,000

N

↑

Figure 5-1

Appleton to Benson 115-kV Transmission Line Project

Route Alternatives

Swift County, Minnesota

Substation

Proposed New 115 kV Transmission Line

Proposed Rebuild of Existing 115-kV

Proposed Upgrade 41.6-kV to 115-kV

Proposed Removal of 41.6-kV Transmission Line

Proposed Removal of 115-kV Transmission Line

Alternative 1

Alternative 2

Alternative 3

Alternative 4

City of Benson Alignment Alternative 1

City of Benson Alignment Alternative 2 (Proposed Line)

City of Benson Alignment Alternative 3

41.6-kV Transmission Line

69-kV Transmission Line

115-kV Transmission Line

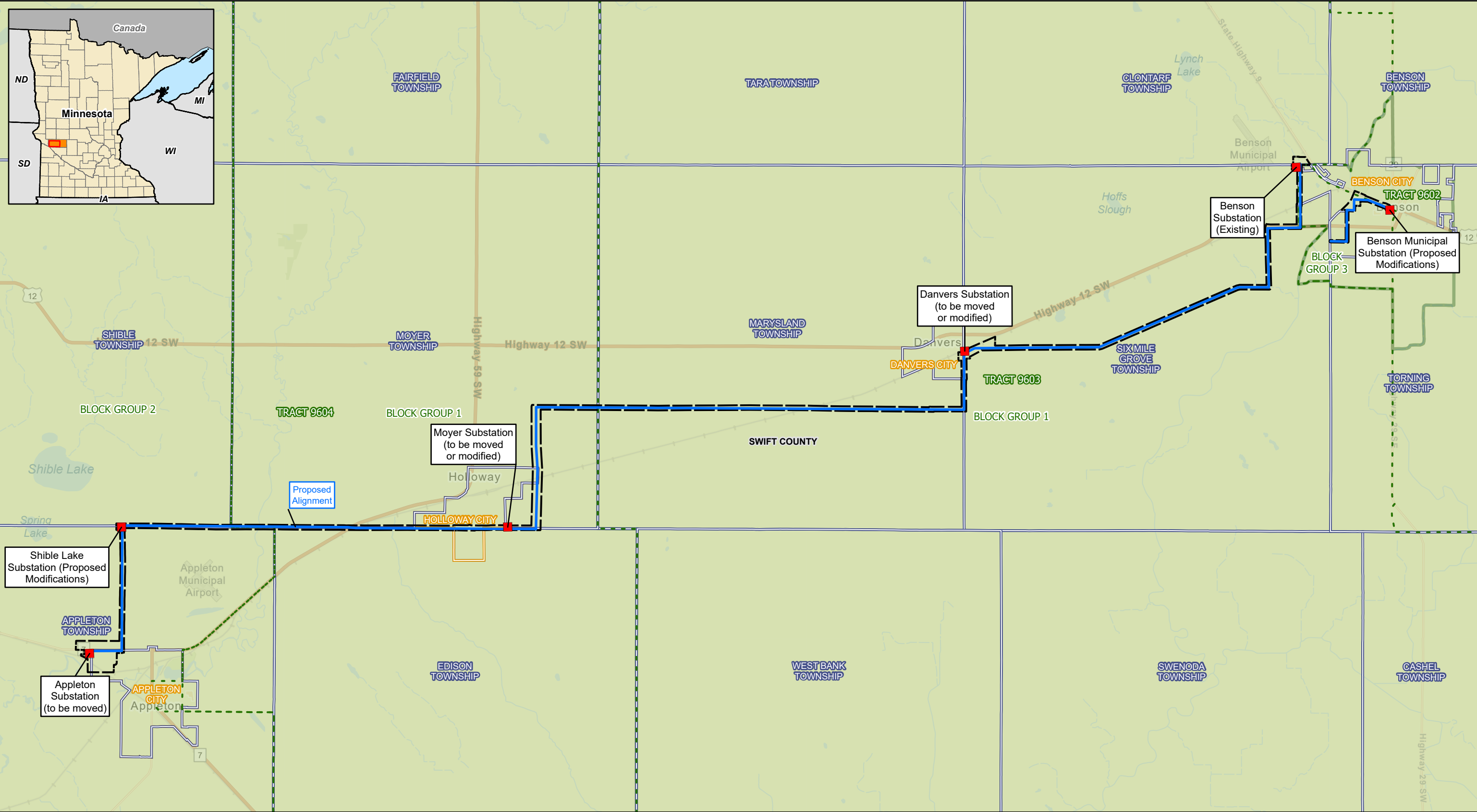
230-kV Transmission Line

BNSF Railway

County Boundary

Date: (10/23/2024)

Source:



0

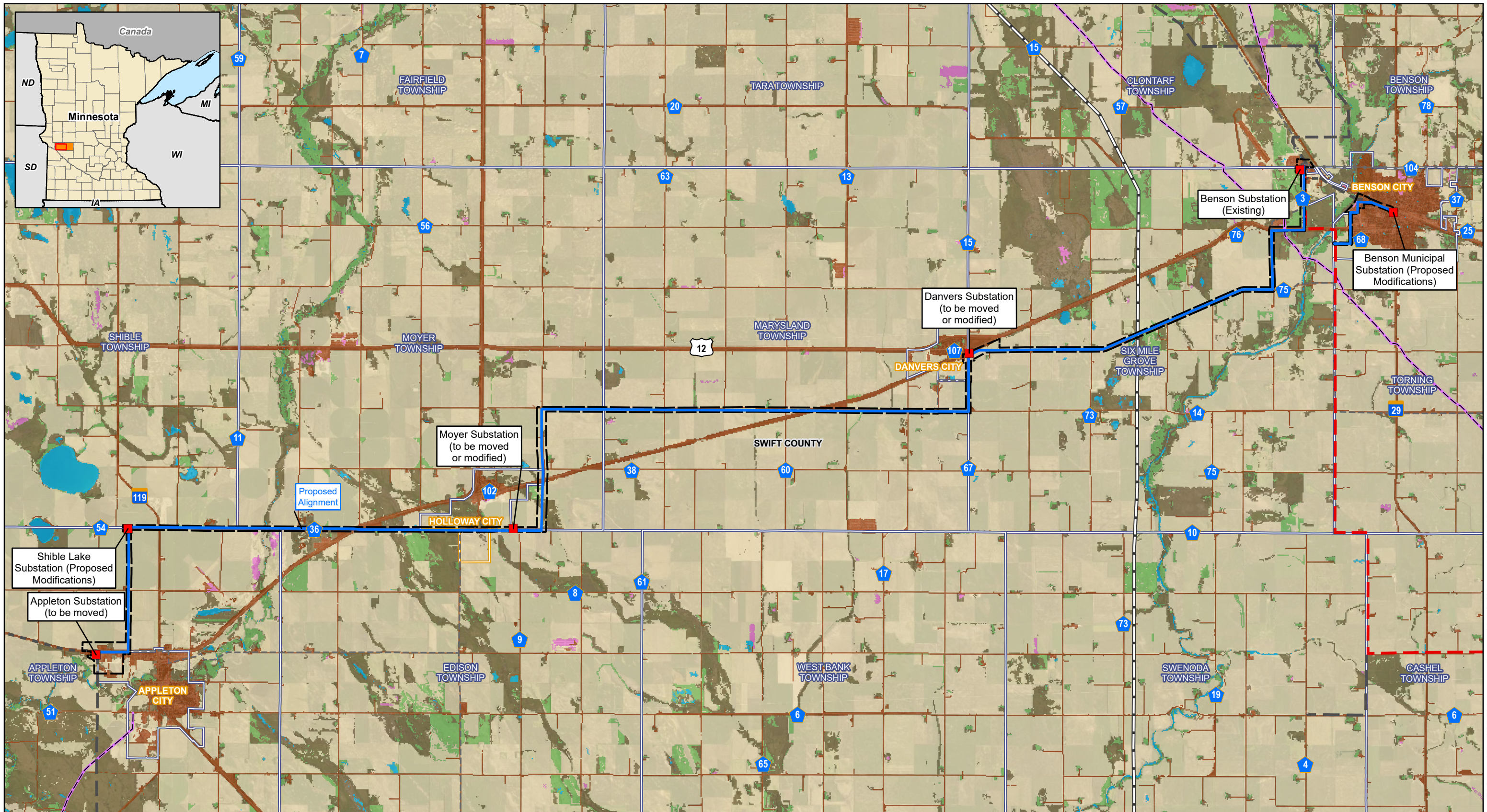
2

Miles

1 inch = 2 miles

Figure 7-1
Appleton to Benson 115-kV Transmission Line Project
Census Tracts
Swift County, Minnesota

Great River Energy	Census Tract
Substation	Census Block Group
Proposed Alignment	City Boundary
Proposed Route	Township Boundary
	County Boundary



02 Miles

1 inch = 2 miles

GREAT RIVER ENERGY

Figure 7-2

Appleton to Benson 115-kV Transmission Line Project

Land Use

Swift County, Minnesota

Great River Energy

Substation

Proposed Alignment

Proposed Route

GRE AG-BK 115-kV Line

41.6-kV Transmission Line

69-kV Transmission Line

115-kV Transmission Line

230-kV Transmission Line

Existing Natural Gas Pipeline

Agricultural & Developed Vegetation

Developed & Other Human Use

Forest & Woodland

Open Water

Recently Disturbed or Modified

Shrub & Herb Vegetation

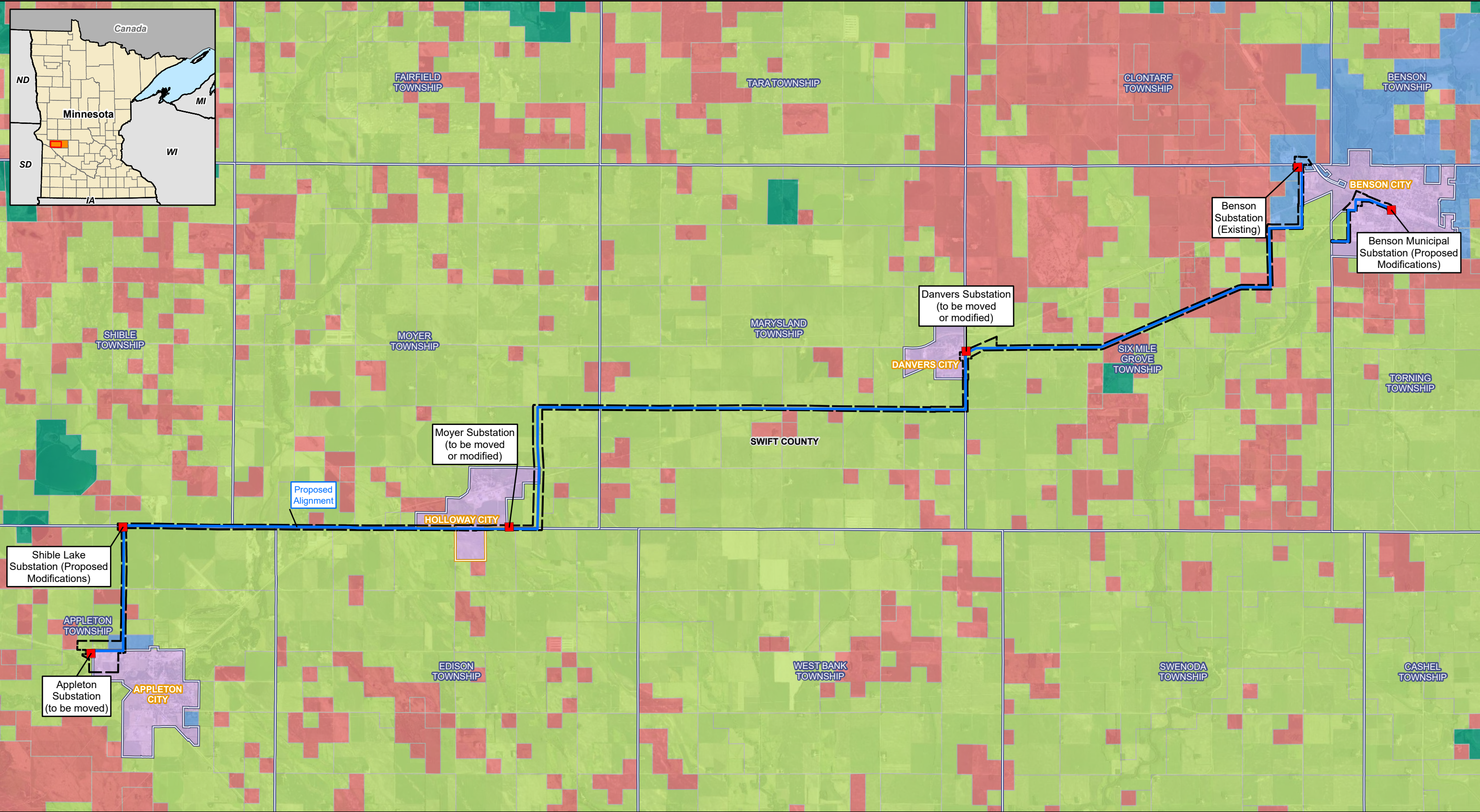
City Boundary

Township Boundary

County Boundary

Source: Z:\Clients\E_HIGRE\Appleton_Benson\ArcGIS\Permitting\State\PUC\Route_Permits\202408\Figures\Maple\Maple_RP_Figures.aprx

Date: (10/24/2024)



02 Miles

1 inch = 2 miles

GREAT RIVER ENERGY

Figure 7-3

Appleton to Benson 115-kV Transmission Line Project

Zoning

Swift County, Minnesota

Great River Energy

■ Substation

▭ Proposed Route

— Proposed Alignment

Swift County Zoning

■ Ag Preservation District 1

■ Ag Preservation District 2

■ Municipality

■ Shoreland

■ Urban Development District

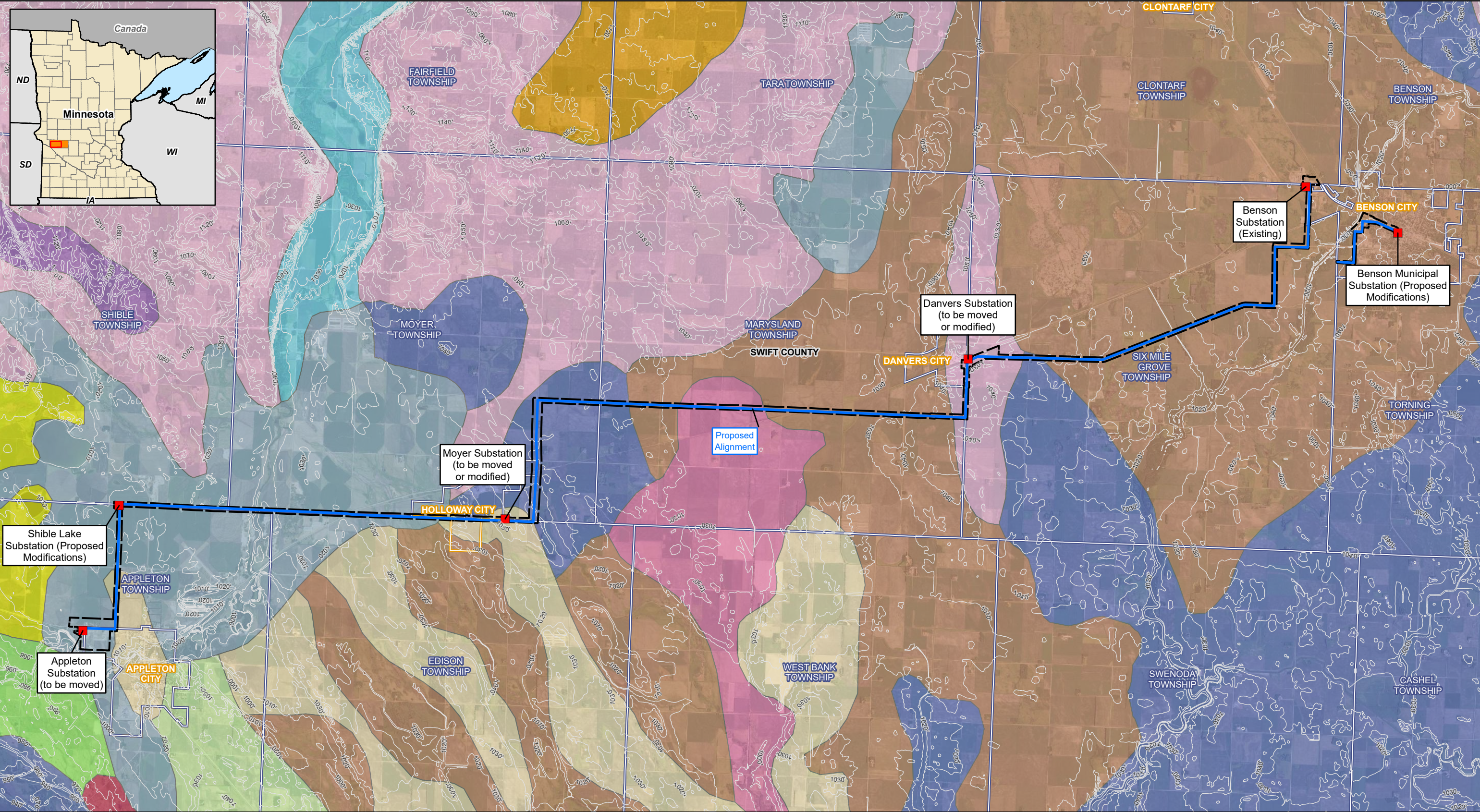
▭ City Boundary

▭ Township Boundary

▭ County Boundary

Source: Z:\Clients\E_HIGRE\Appleton_Benson\ArcGIS\Permitting\State\PU\Route_PUC\Map\Figures\Map_Figures.aprx

Date: (10/24/2024)



02Miles

1 inch = 2 miles

GREAT RIVER ENERGY

Figure 7-5

Appleton to Benson 115-kV Transmission Line Project

Soils and Topography

Swift County, Minnesota

Substation

Proposed Alignment

Proposed Route

10' Contour

Great River Energy

City Boundary

Township Boundary

County Boundary

Soils (STATSGO)

Langhei-Hamerly-Barnes (s3467)

Maddock-Egeland (s3520)

Marysland-Esteline-Egeland (s3534)

Marysland-Hecla-Arveson (s3523)

Parnell-Hamerly-Aazdahl (s3485)

Spottswood-Sioux-Renshaw (s3518)

Sverdrup-Rothsay-Egeland (s3525)

Sverdrup-Shakopee-McDonaldsville (s3528)

Sylene-Sioux-Lohnes-Arvilla (s3445)

Tara-Parnell-Hamerly (s3519)

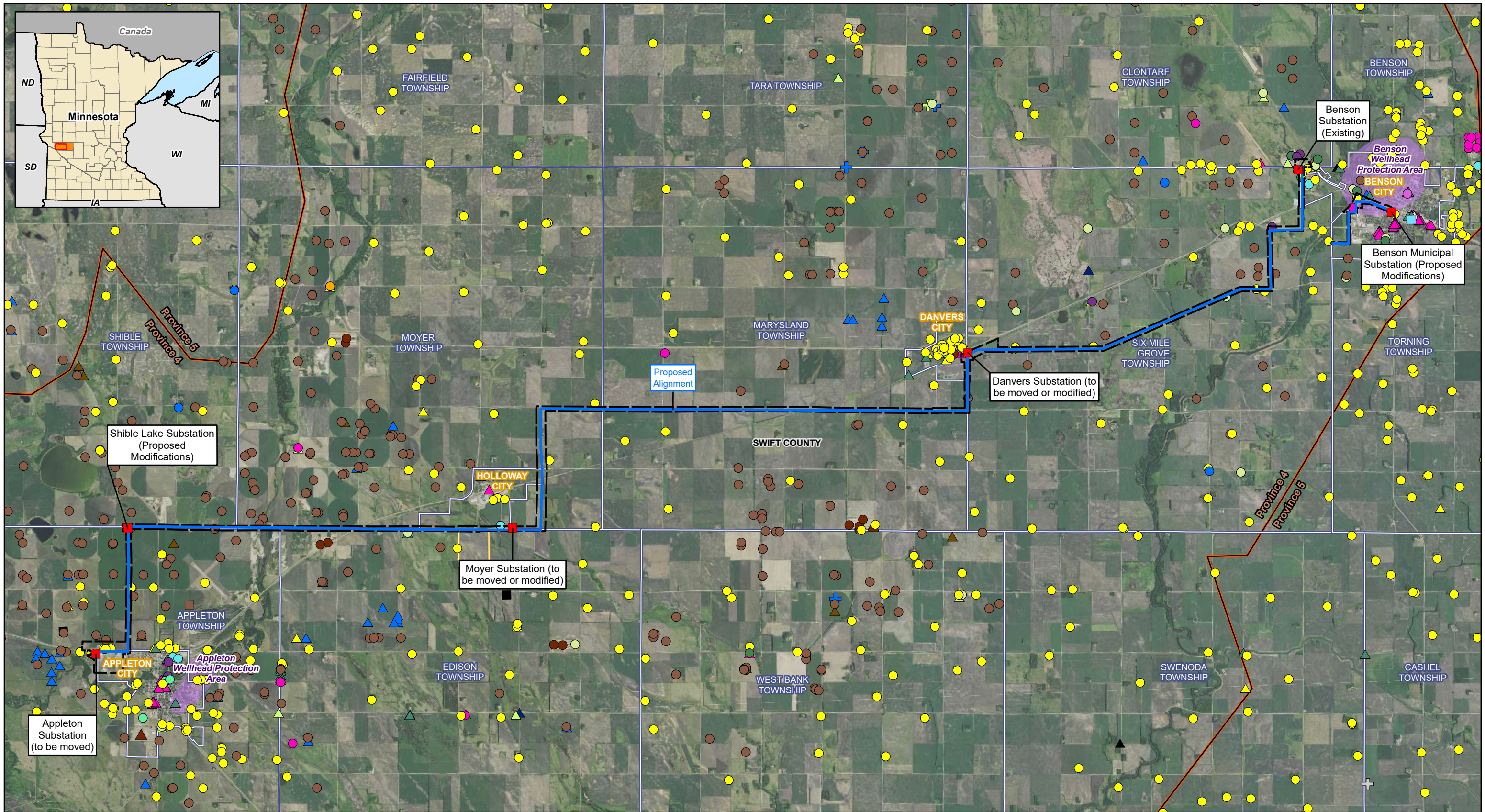
Tara-Spicer-Doland-Colvin (s3522)

Webster-Ves-Normanica-Canisteo (s3529)

Winger-Vallers-Hamerly (s3521)

Source: Z:\Clients\E_HIGRE\Appleton_Benson\ArcGIS\Permitting\State\PU\Route\Figures\Appleton_Benson_RP_Figures.aprx

Date: (10/24/2024)



02 Miles

1 inch = 2 miles

GREAT RIVER ENERGY

Figure 7-6
Appleton to Benson 115-kV Transmission Line Project
Groundwater Features
Swift County, Minnesota

Great River Energy
■ Substation
— Proposed Alignment
— Proposed Route
○ Calcareous Fen
— Groundwater Province
— Wellhead Protection Area
— City Boundary

County Well Index - Located Well
○ Active
□ Inactive
△ Sealed
+ Unknown
● Abandoned

Well Type
● Commercial
● Domestic
● Elevator
● Environmental Bore Hole
● Heat Pump
● Industrial
● Irrigation
● Monitor Well
● Observation Well
● Other (specify in remarks)
● Piezometer
● Recovery Well
● Scientific Investigation
● Test Well
● Unknown

For Environmental Review Purposes Only

Source: Z:\Clients\E_HIGRE\Appleton_Benson\ArcGIS\Permitting\State\PUC\Route_Figures\Appleton_RP_Figures.aprx Date: (10/24/2024)

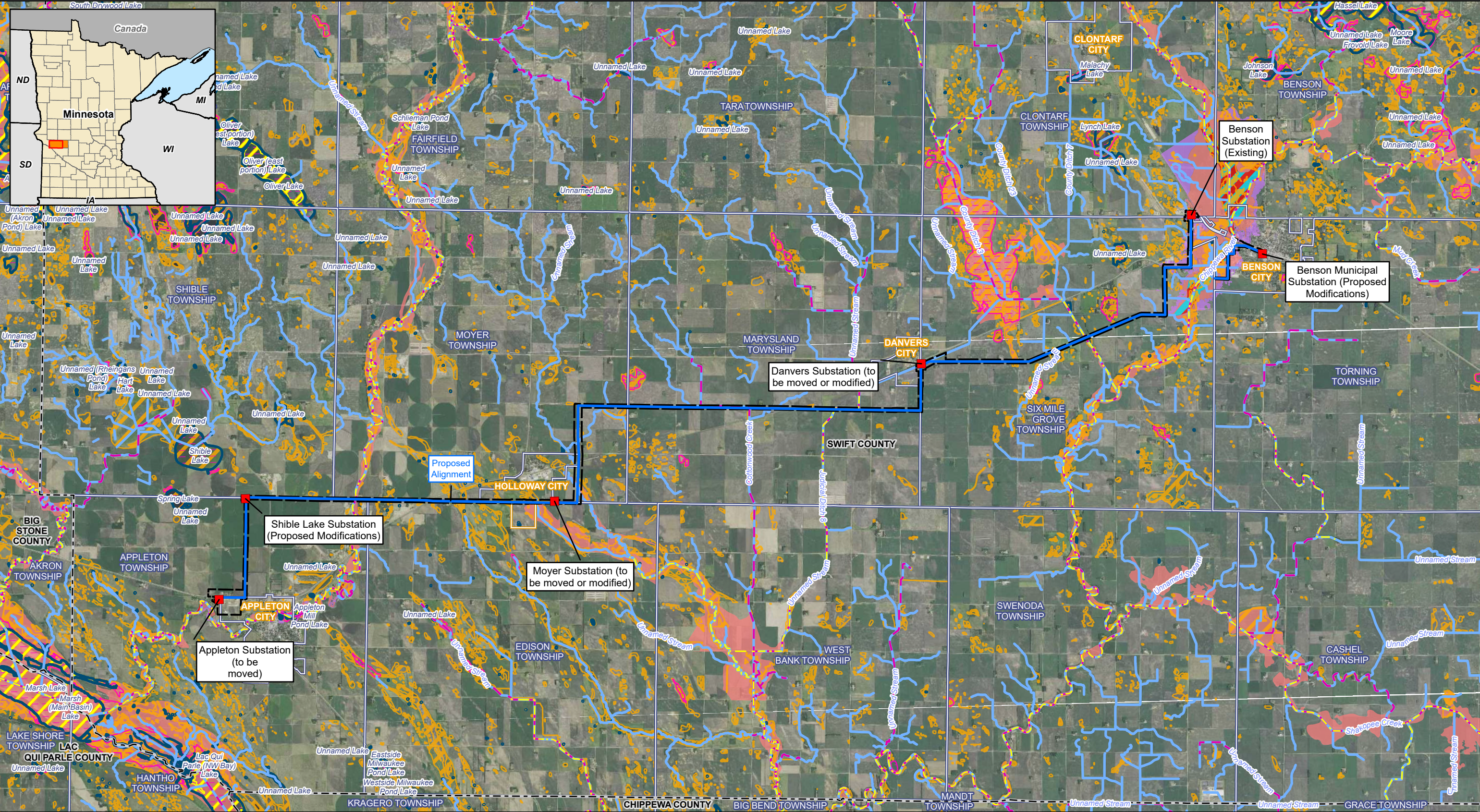


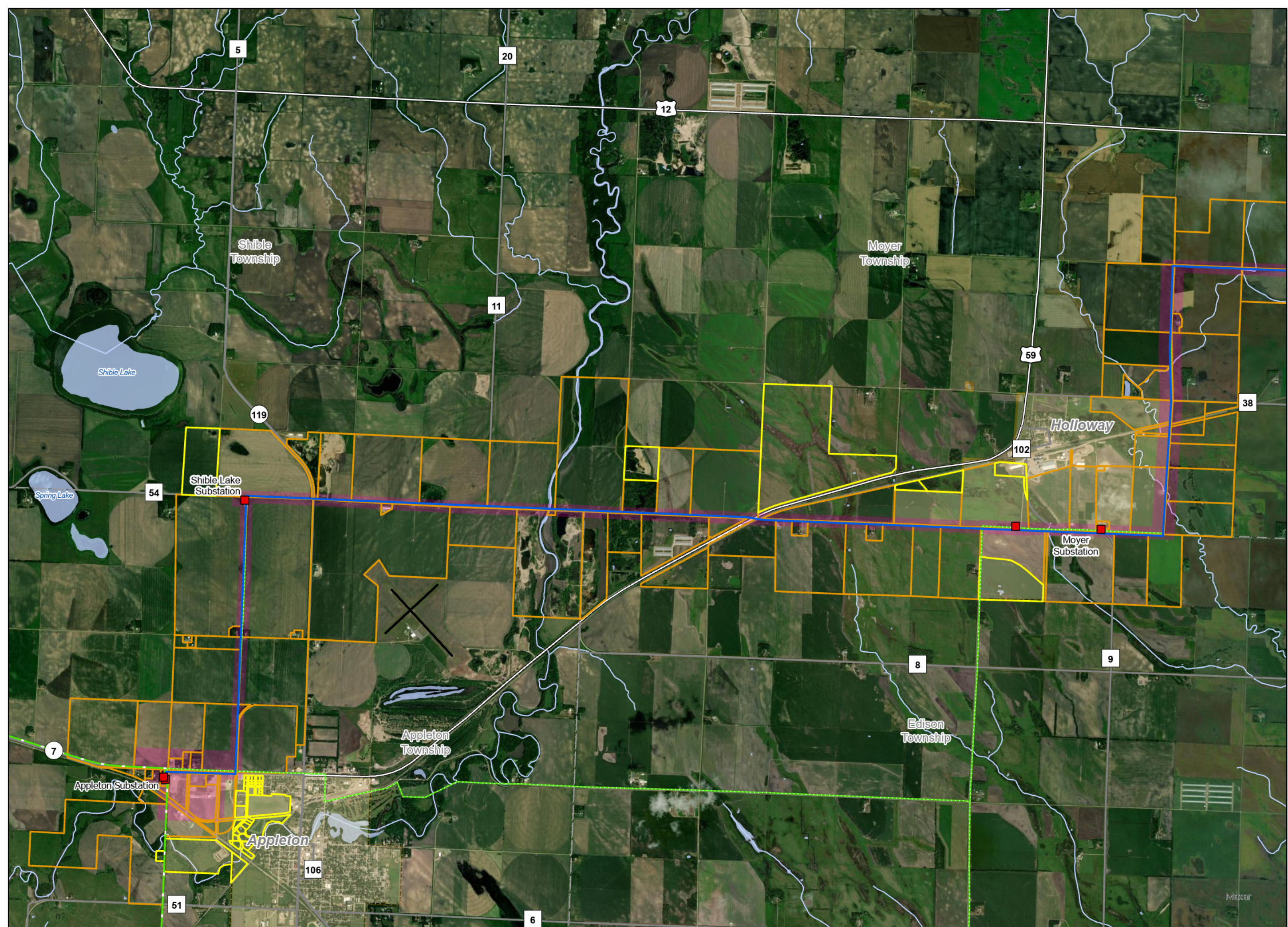
Figure 7-7

Appleton to Benson 115-kV Transmission Line Project

Surface Water Features

Swift County, Minnesota

Great River Energy Substation Proposed Alignment Proposed Route	Calcareous Fen MDNR Hydrography Dataset Watercourse MDNR Hydrography Dataset Lake/Pond PWI Watercourse PWI Basin Impaired Stream (2024) Impaired Lake (2024)	NWI Wetland 1% Annual Chance Flood Hazard Regulatory Floodway 0.2% Annual Chance Flood Hazard City Boundary Township Boundary County Boundary
---------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------

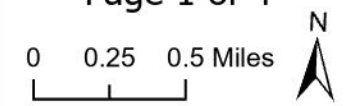


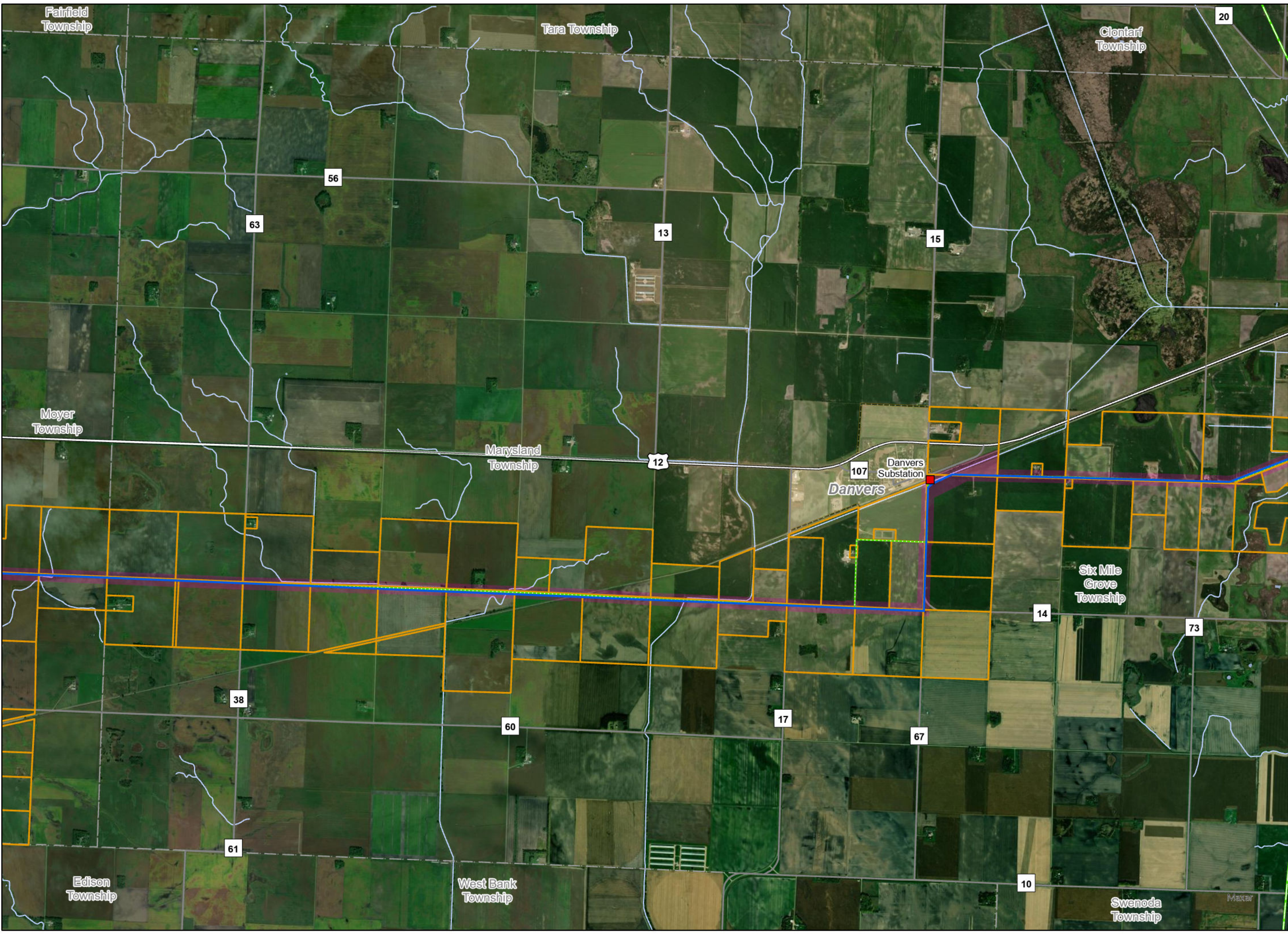
- Proposed 115-kV transmission line
- 41.6-kV transmission line
- 115-kV transmission line
- Project substation
- Notice parcels (Route width)
- Additional notice parcels (Certificate of Need Notice Plan)
- Proposed route width

Notice Parcels

Figure 8-1

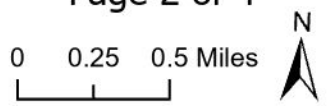
Page 1 of 4



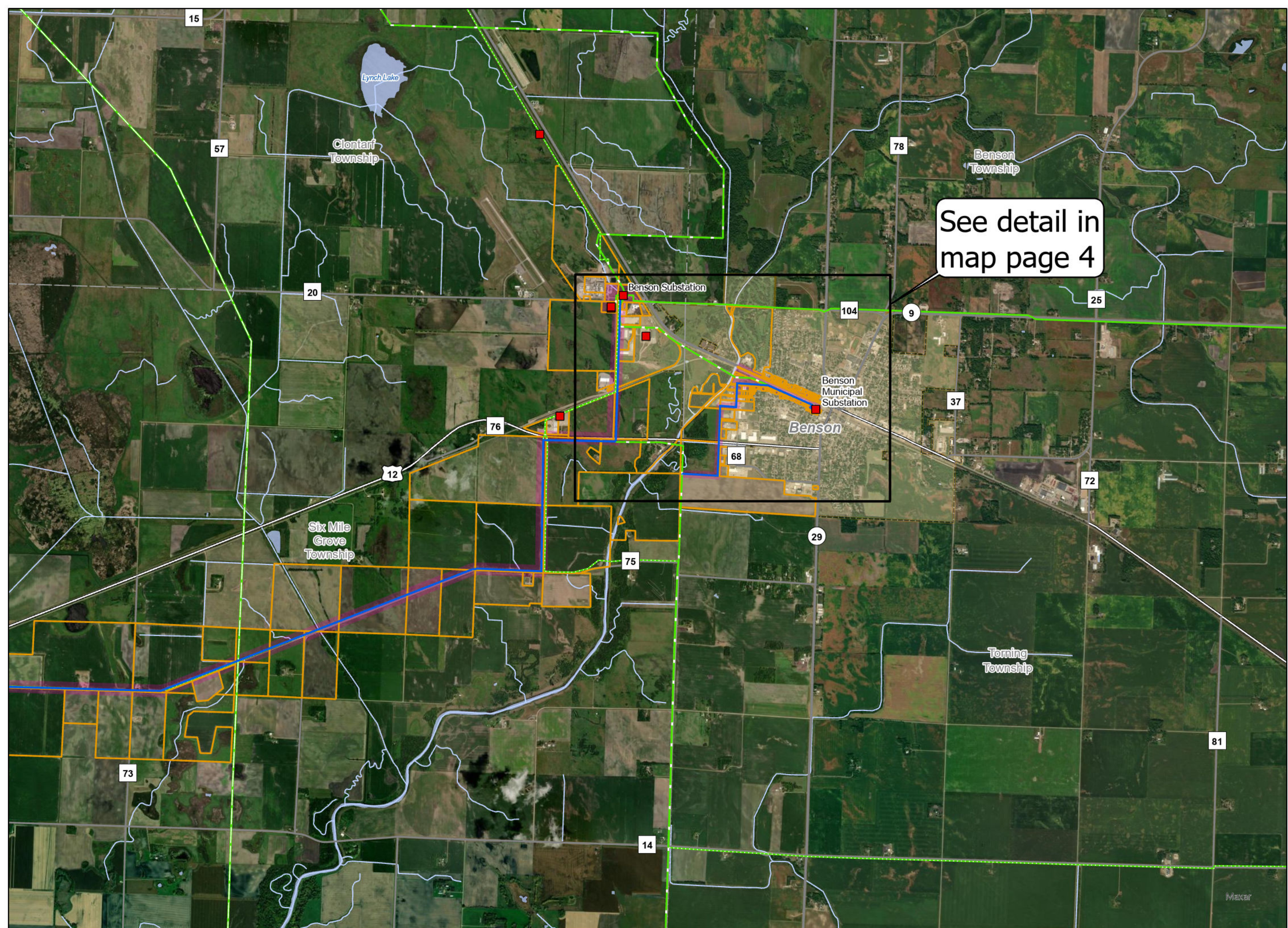


- Proposed 115-kV transmission line
- 41.6-kV transmission line
- 230-kV transmission line
- Project substation
- Notice parcels (Route width)
- Proposed route width

Notice Parcels
Figure 8-1
Page 2 of 4



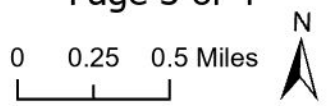
**GREAT
RIVER
ENERGY**



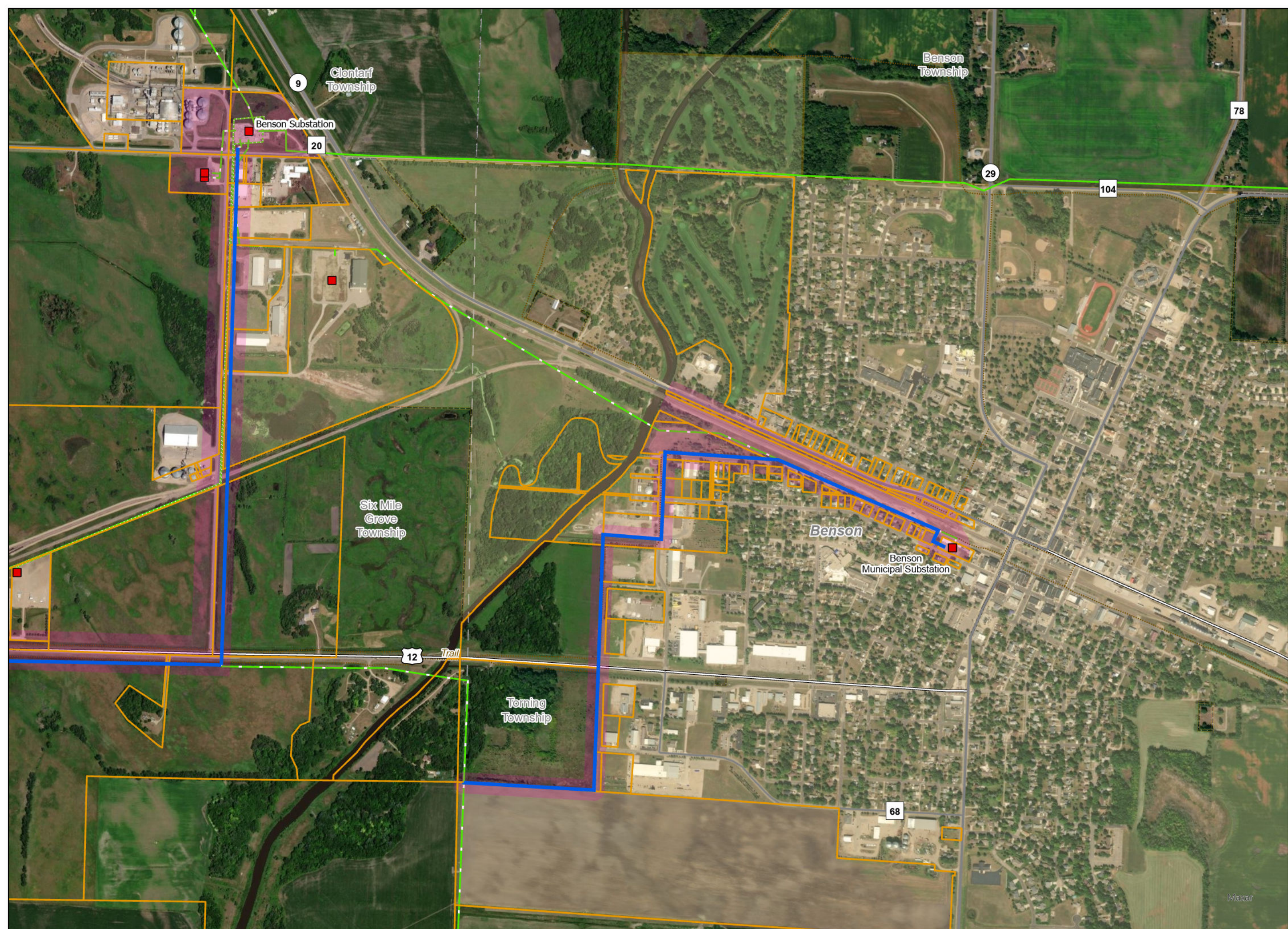
- Proposed 115-kV transmission line
- 41.6-kV transmission line
- 69-kV transmission line
- 115-kV transmission line
- 230-kV transmission line
- Project substation
- Notice parcels (Route width)
- Proposed route width

See detail in
map page 4

Notice Parcels
Figure 8-1
Page 3 of 4



**GREAT
RIVER
ENERGY®**



- Proposed 115-kV transmission line
- 41.6-kV transmission line
- 69-kV transmission line
- 115-kV transmission line
- Project substation
- Notice parcels (Route width)
- Proposed route width

Notice Parcels

Figure 8-1

