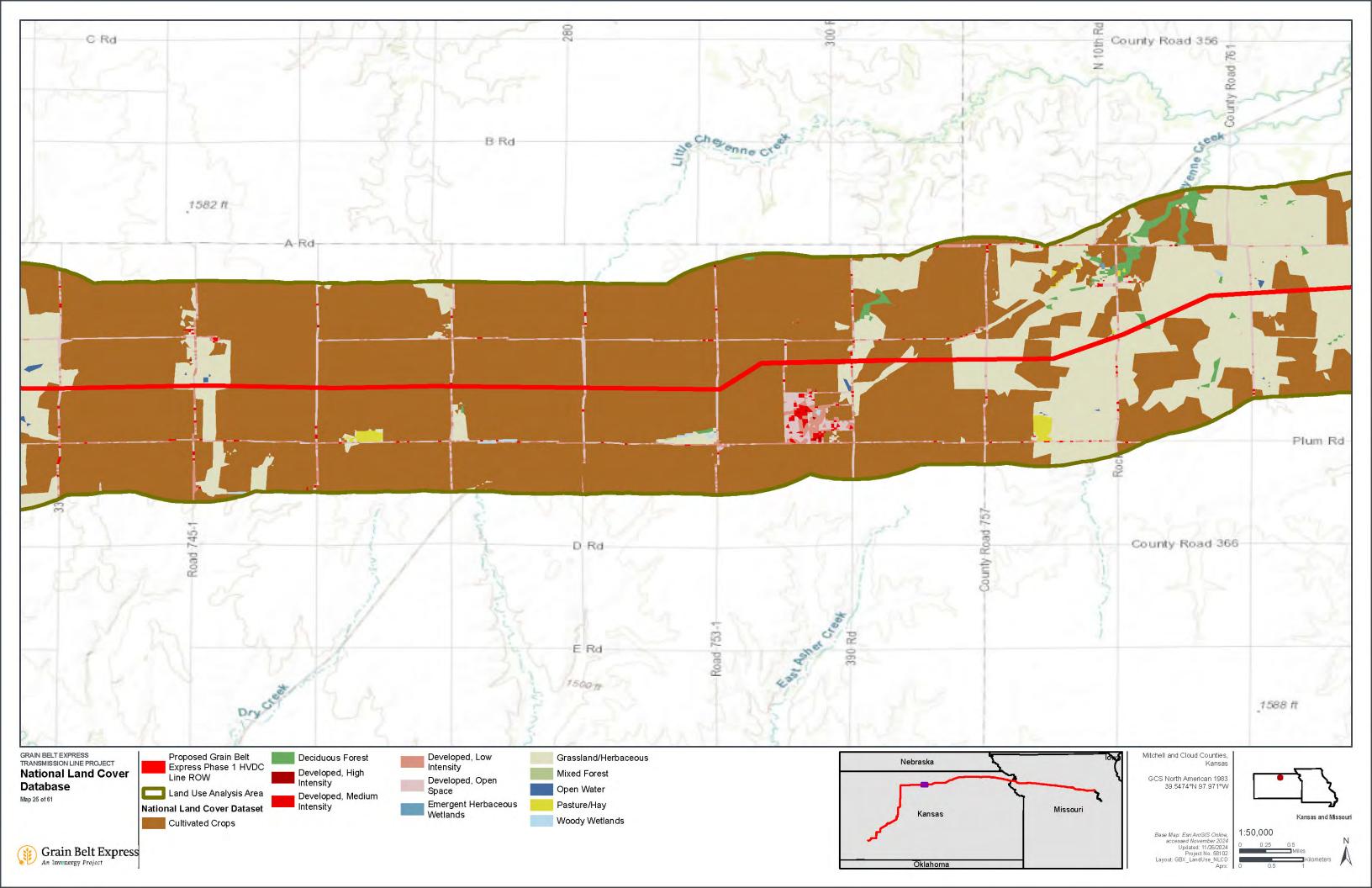
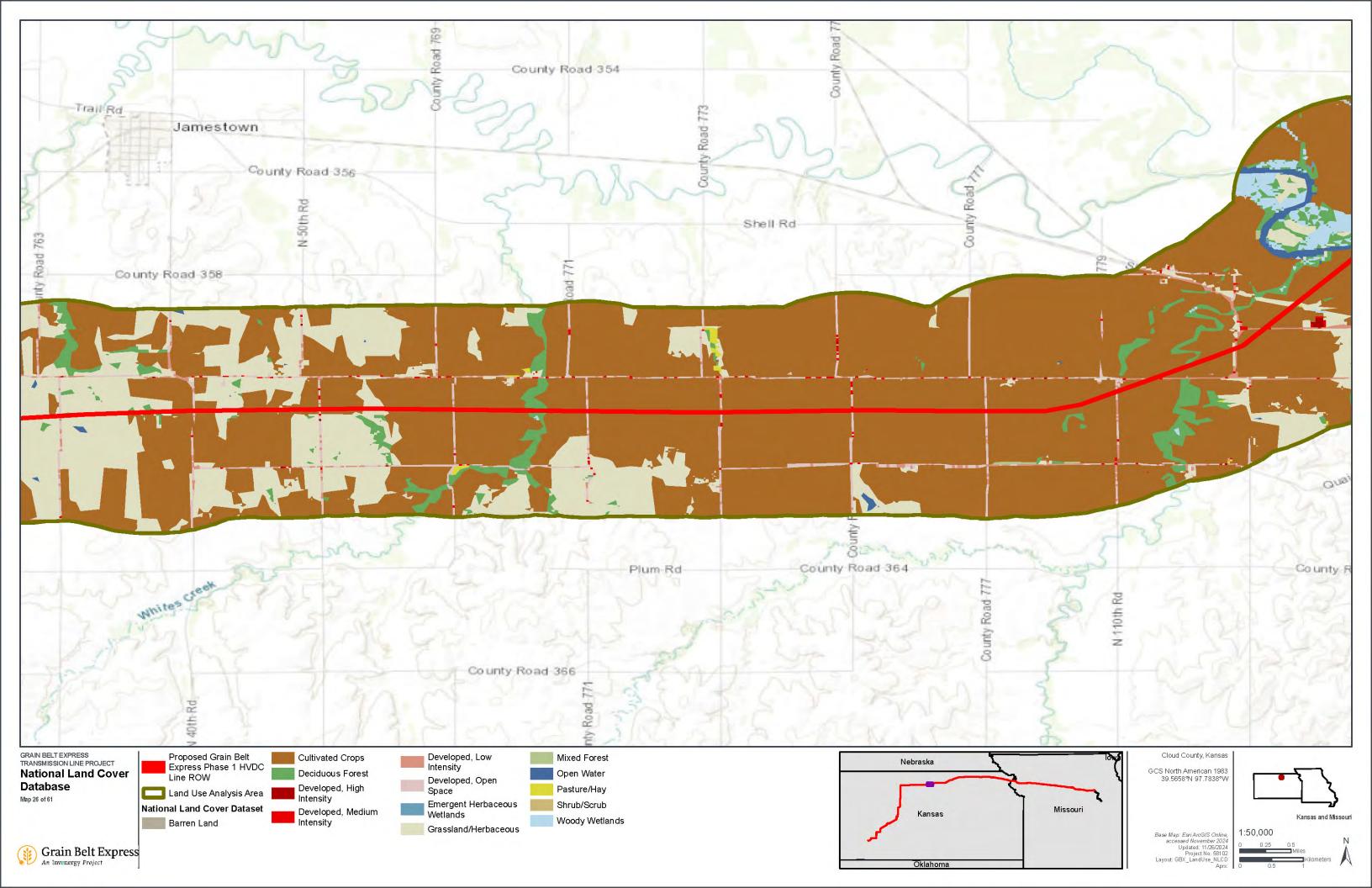
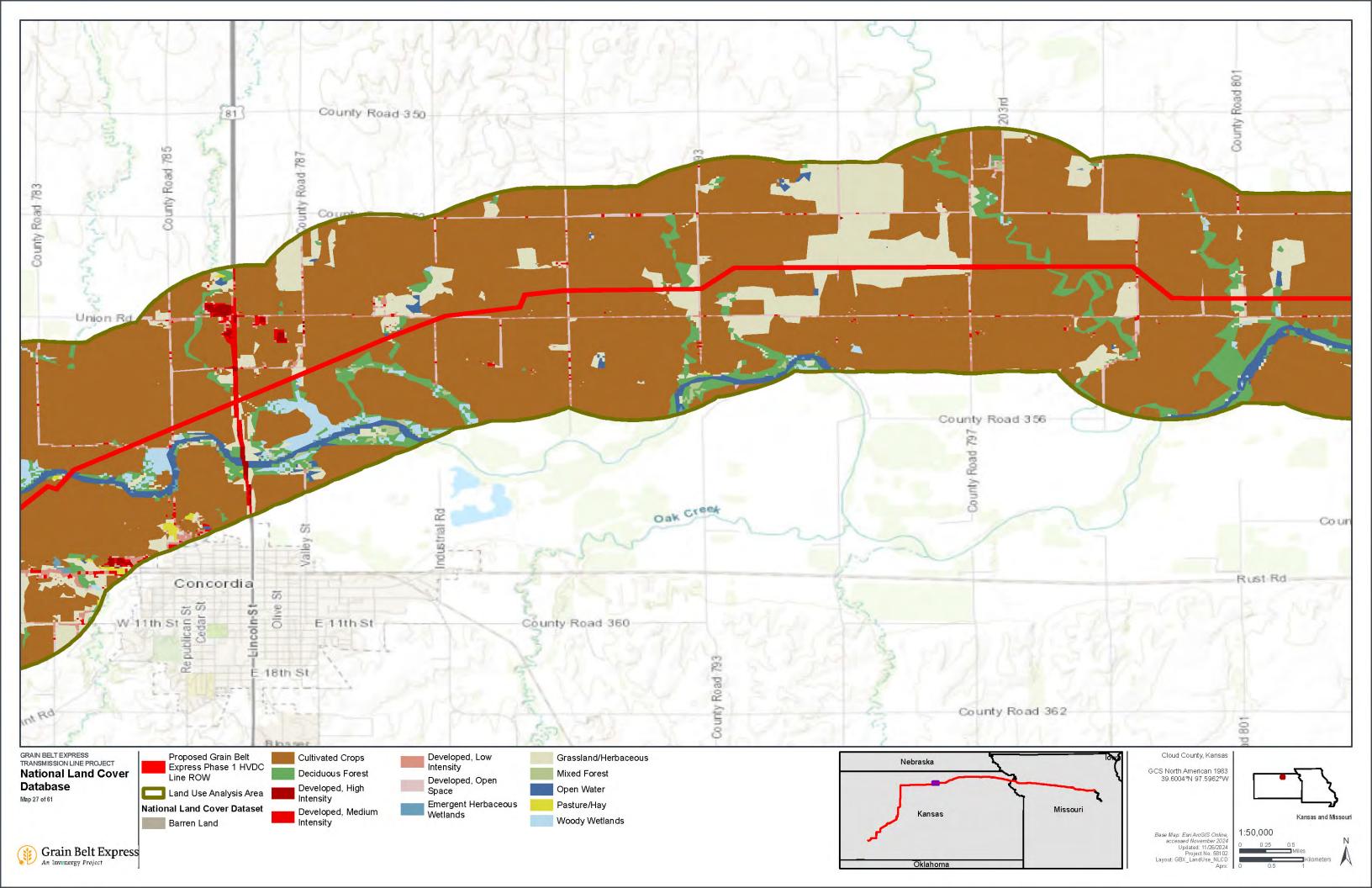
Grain Belt Express Transmission Line Environmental Impact Statement

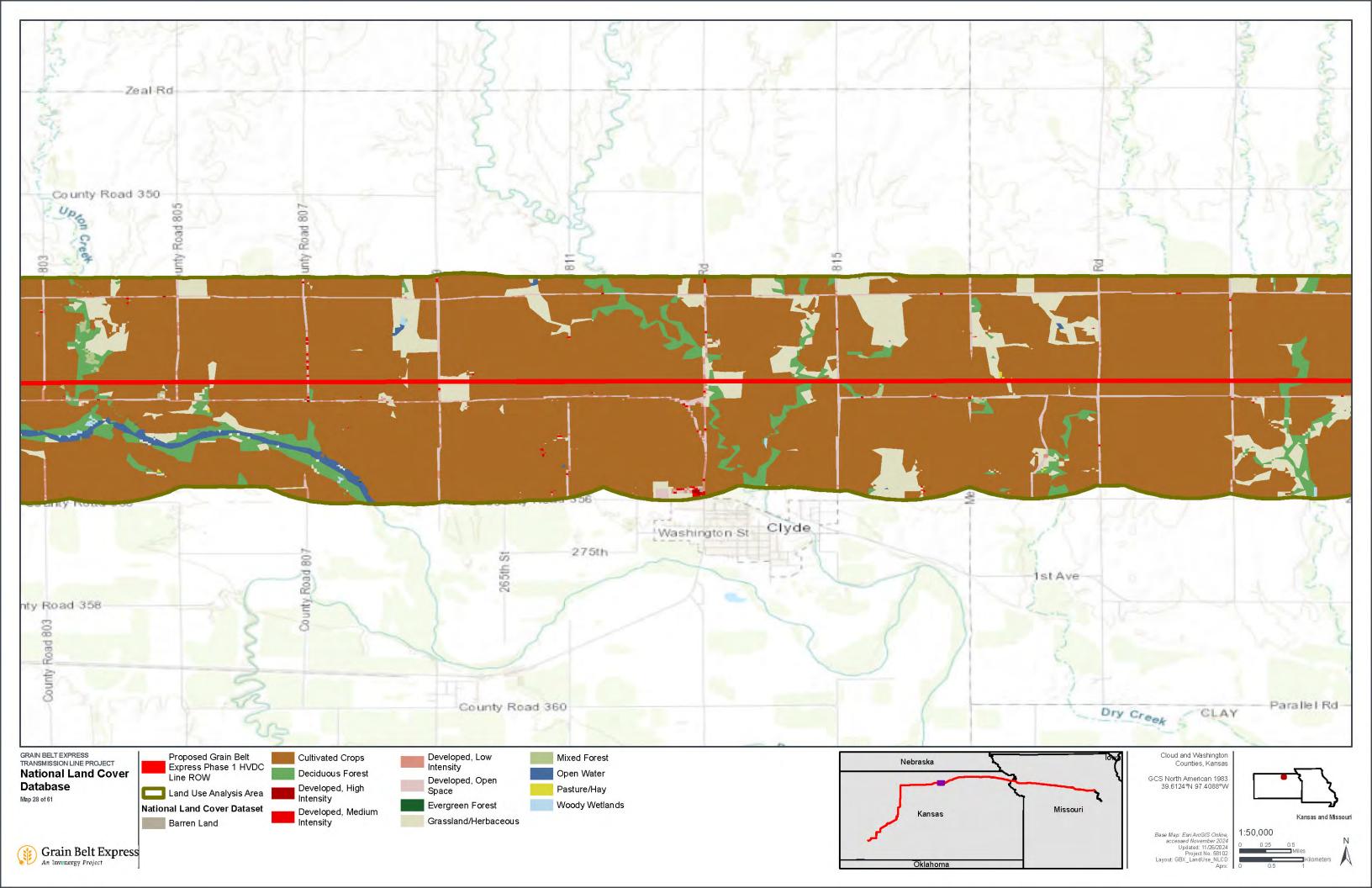
Appendix 3.10: National Land Cover Database Maps

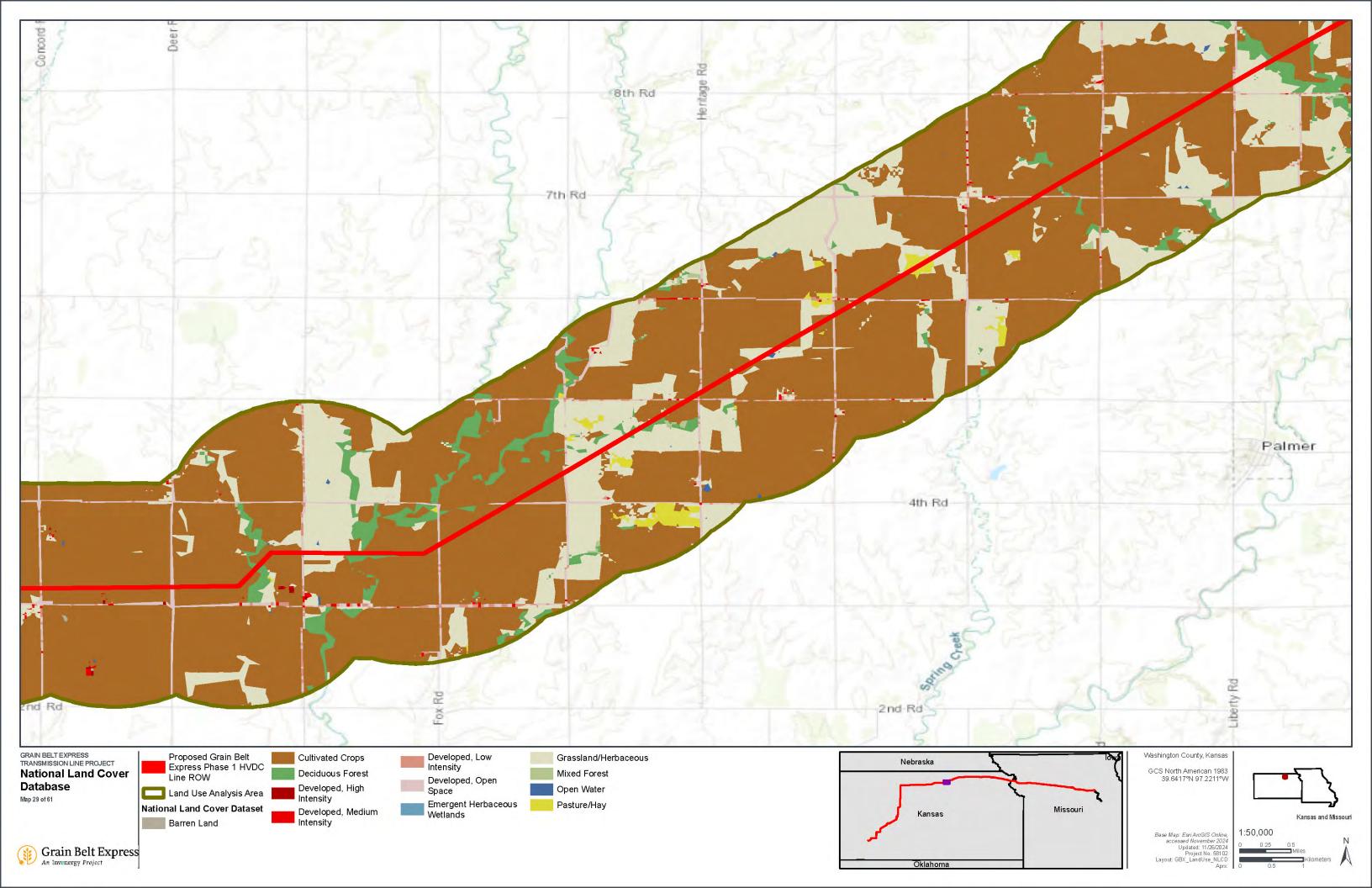
Continued

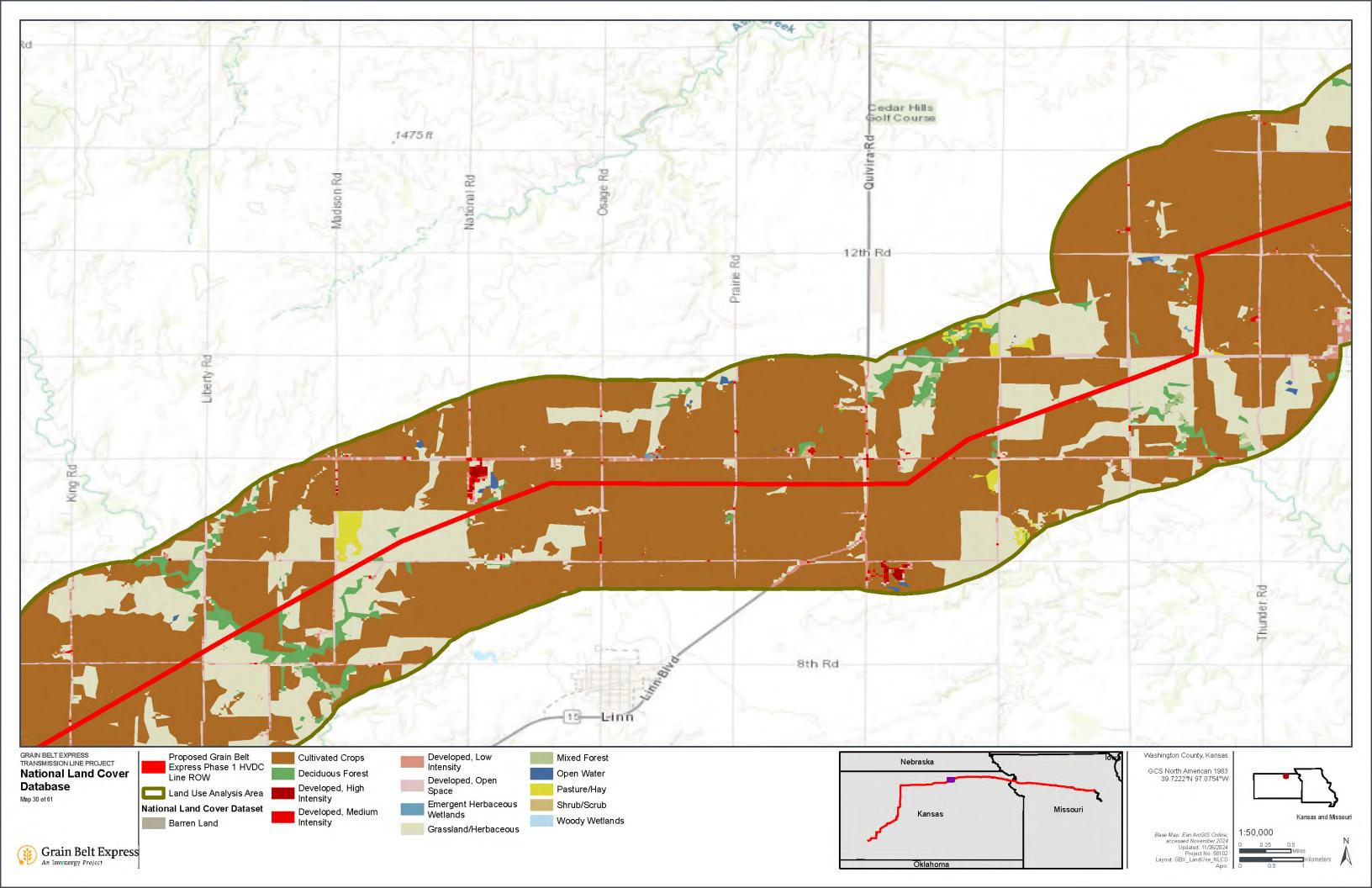


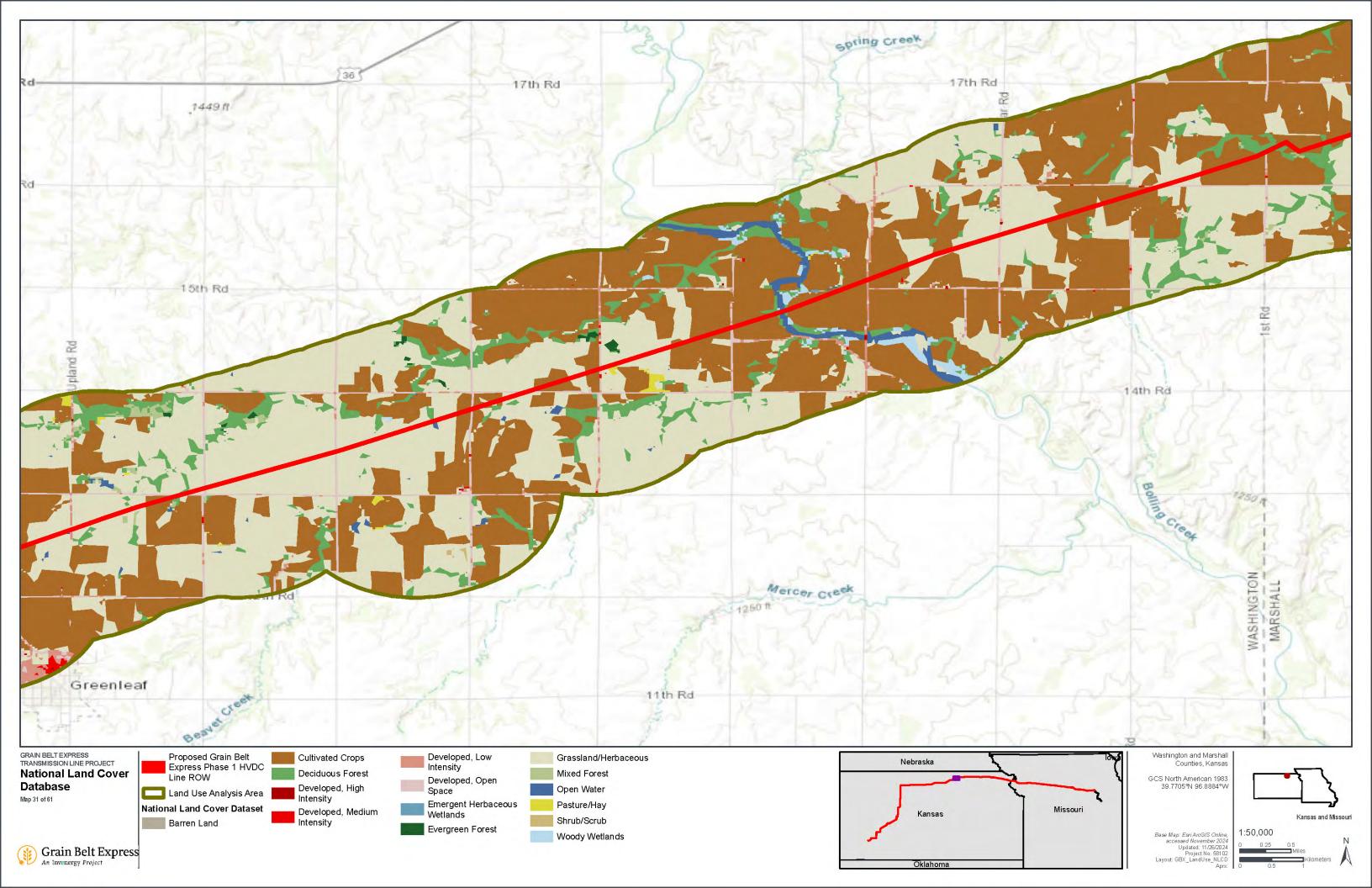


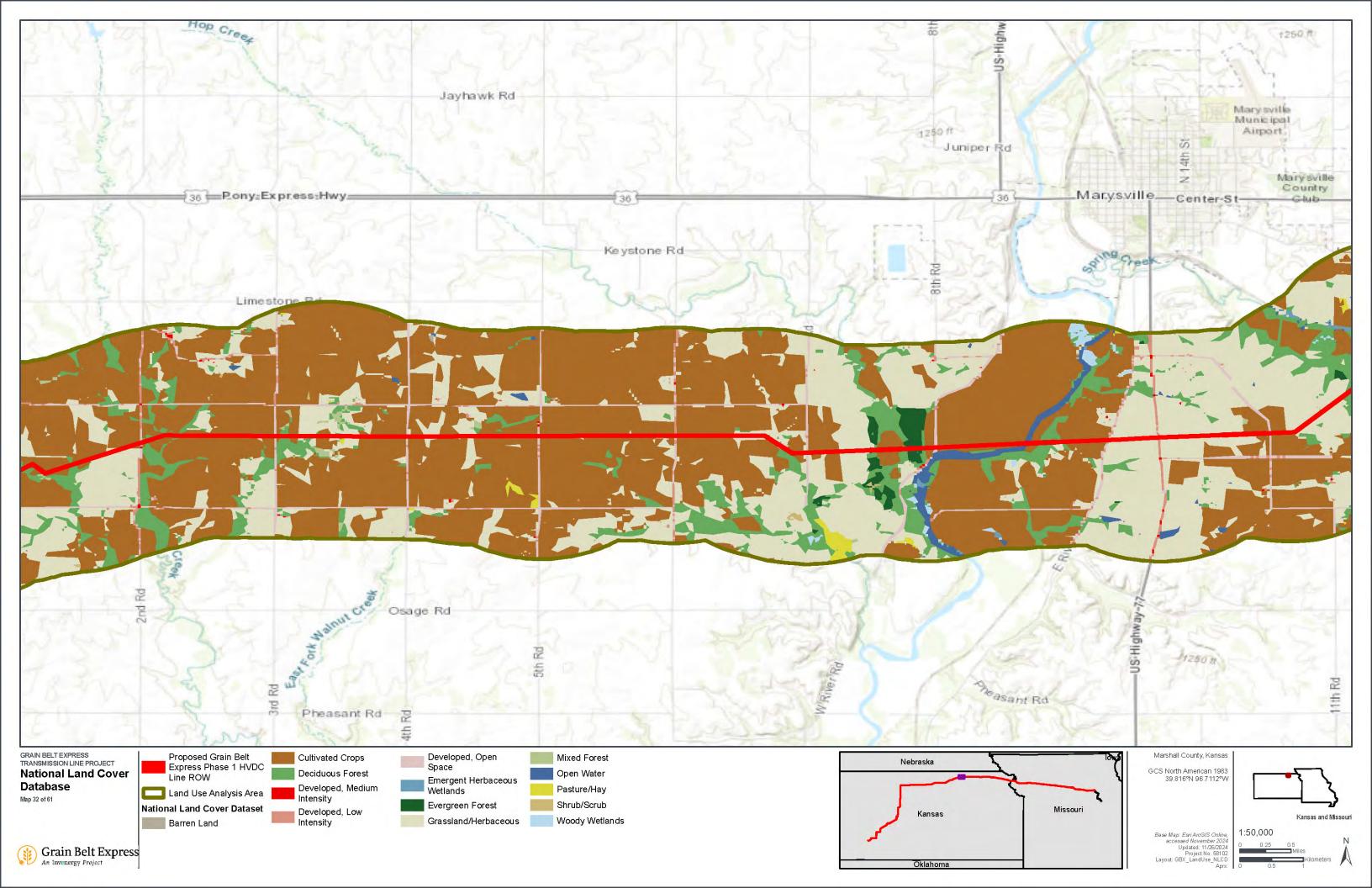


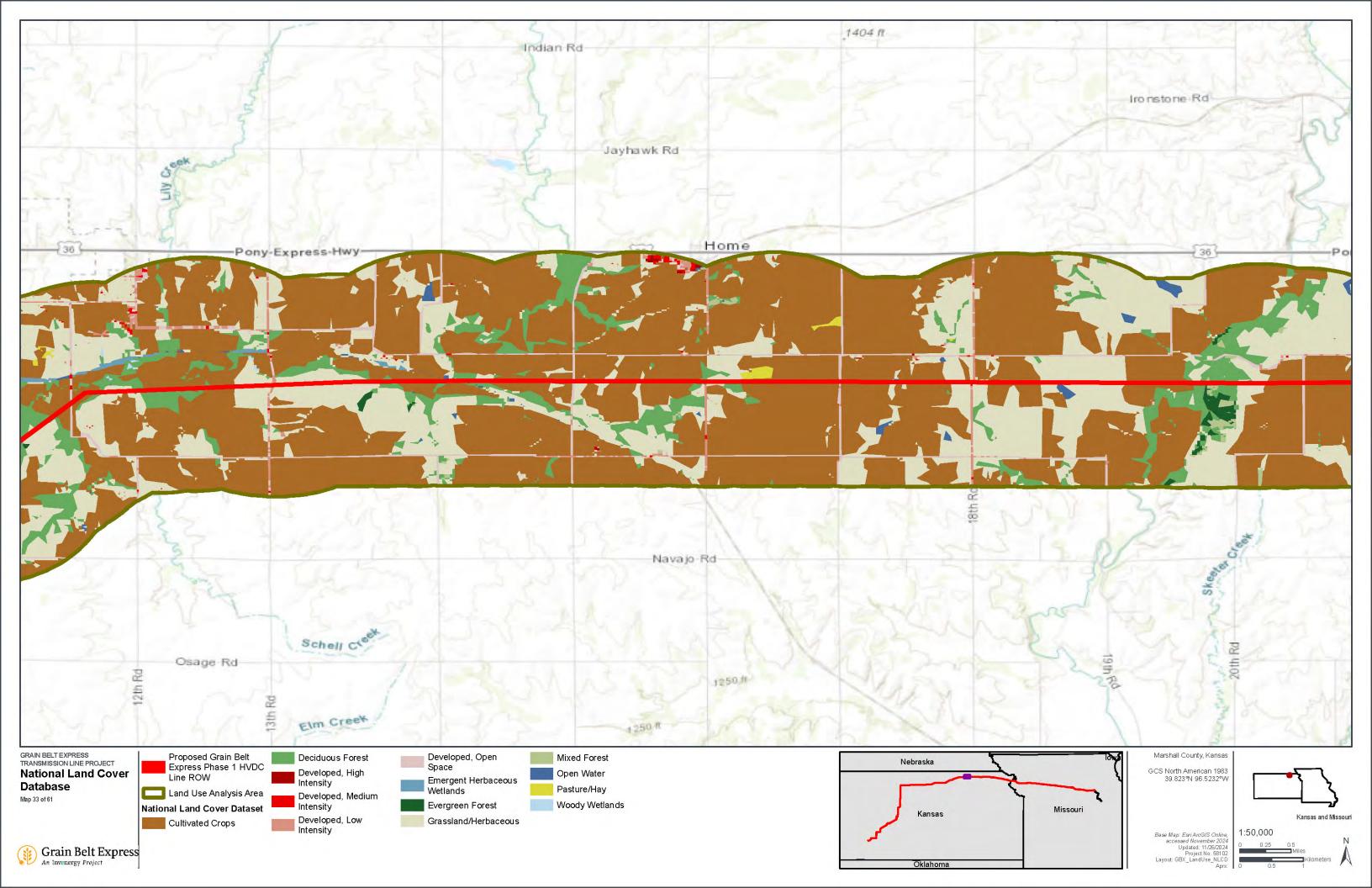


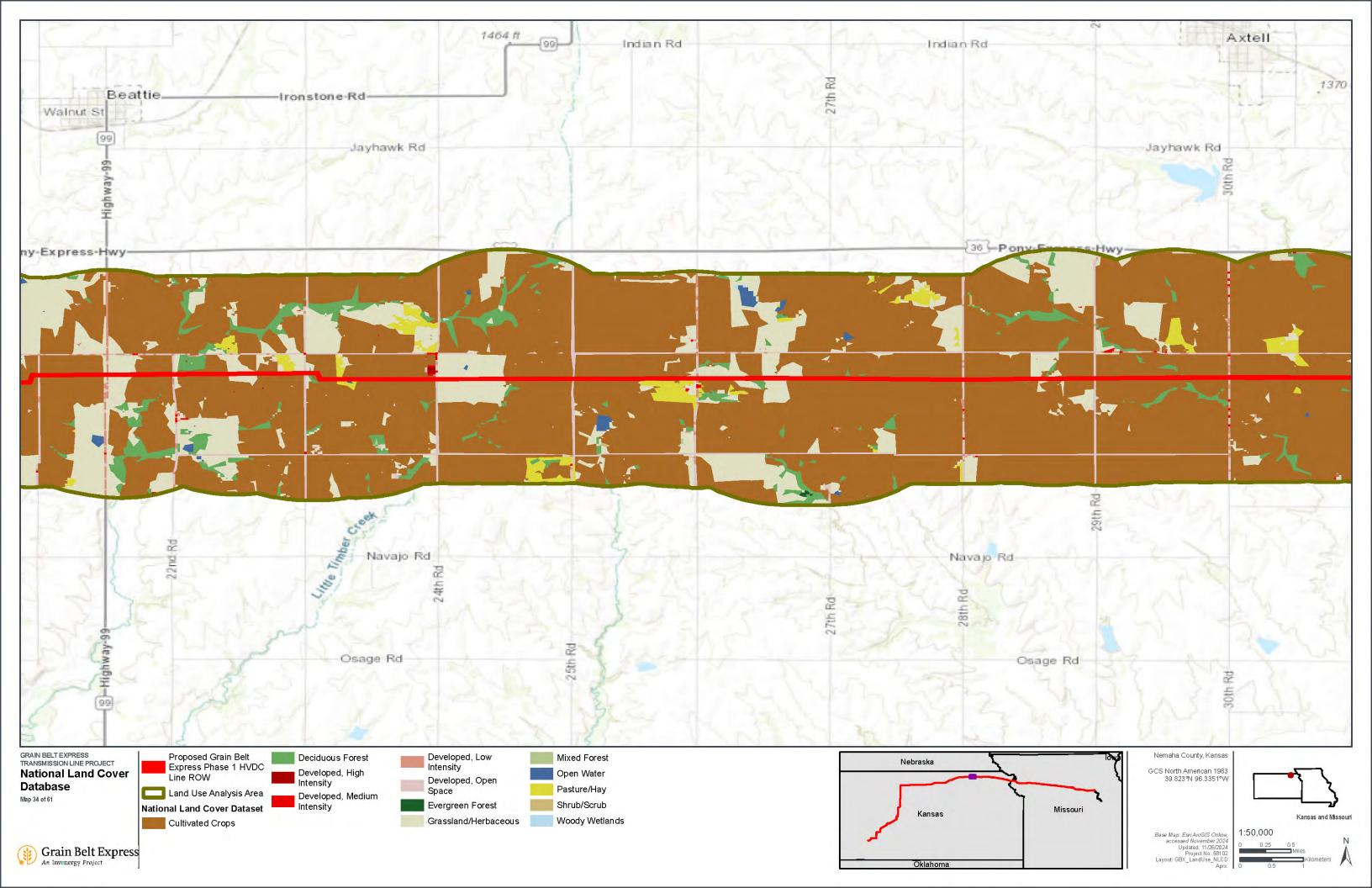


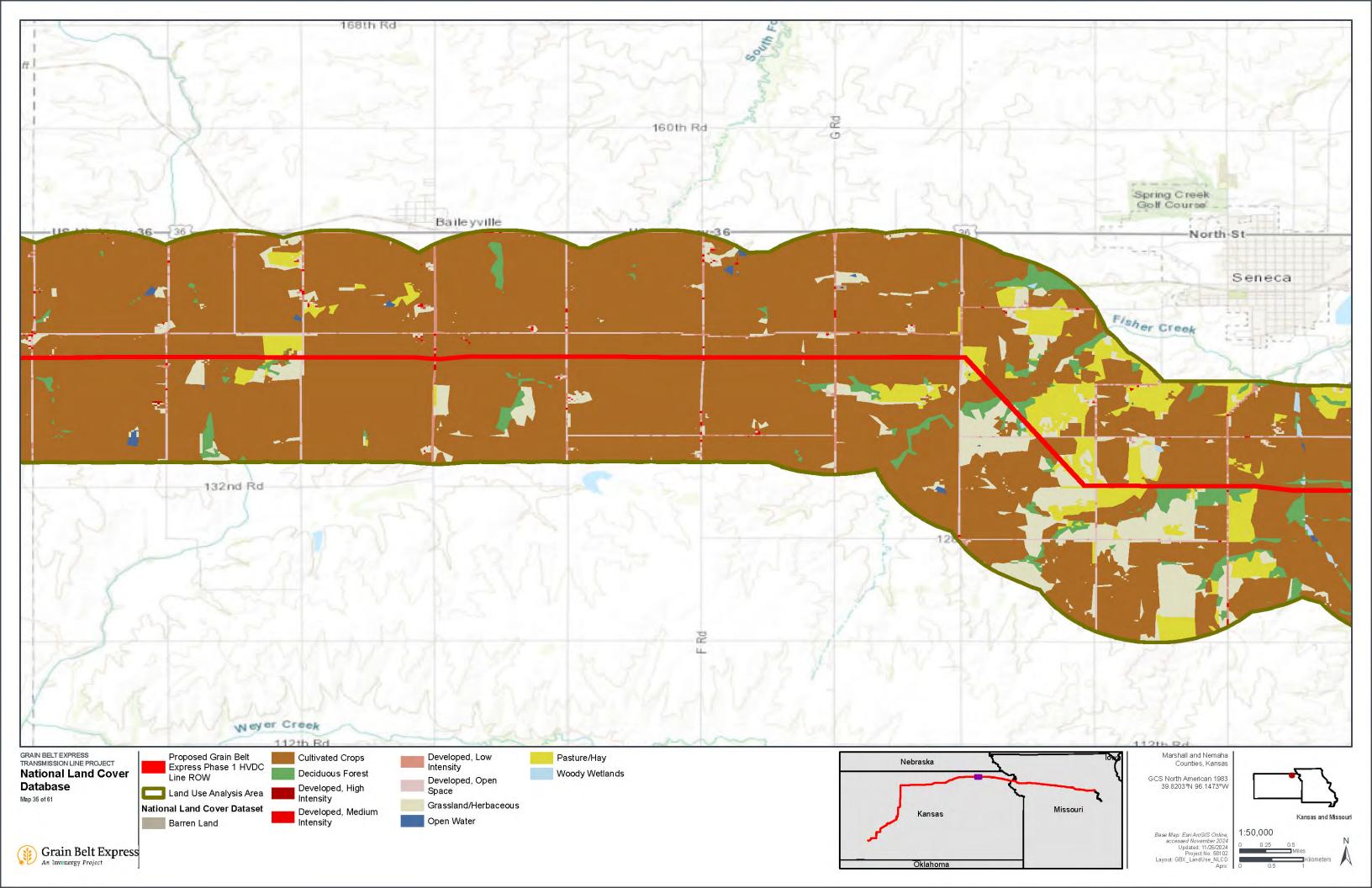


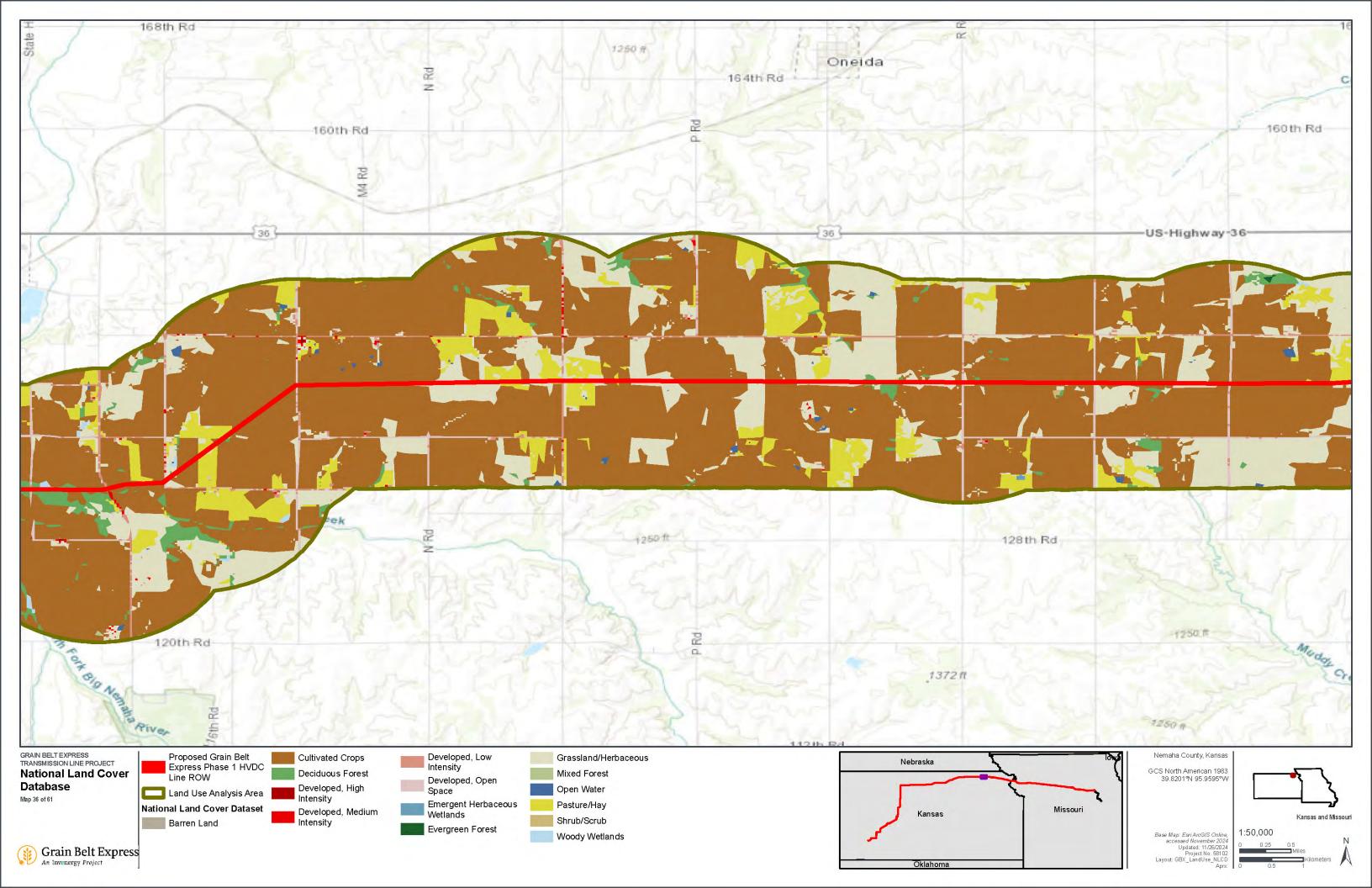


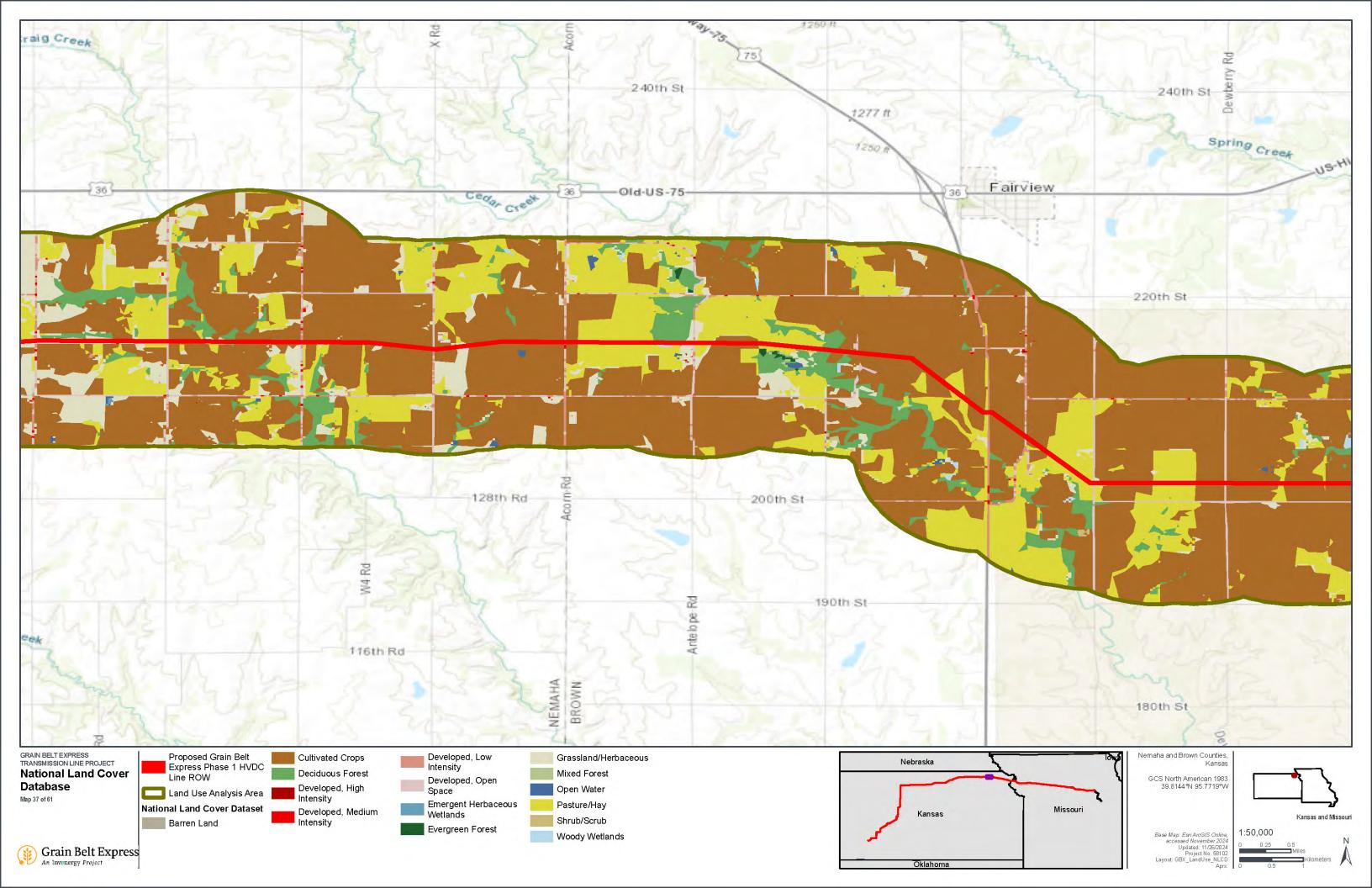


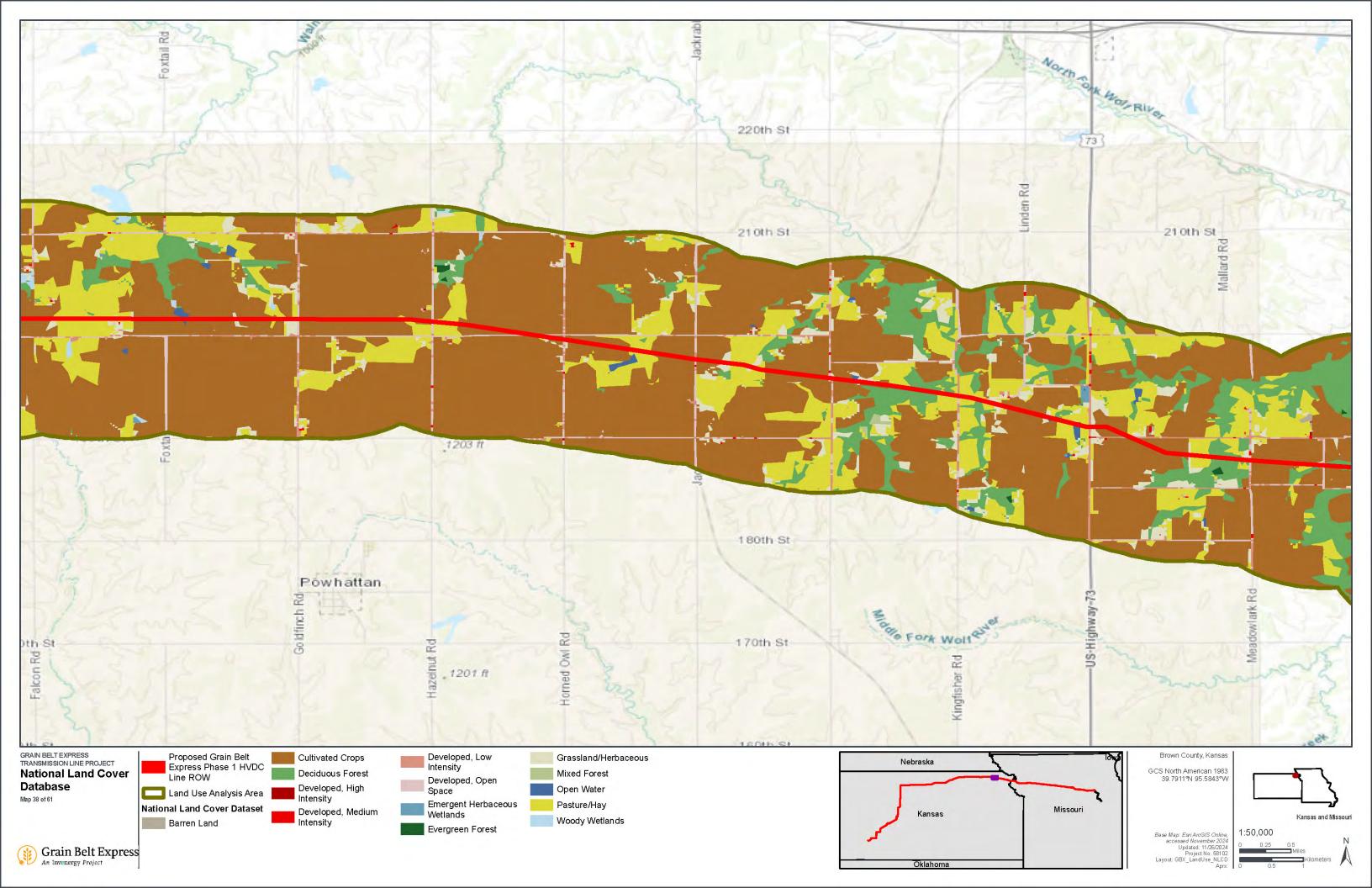


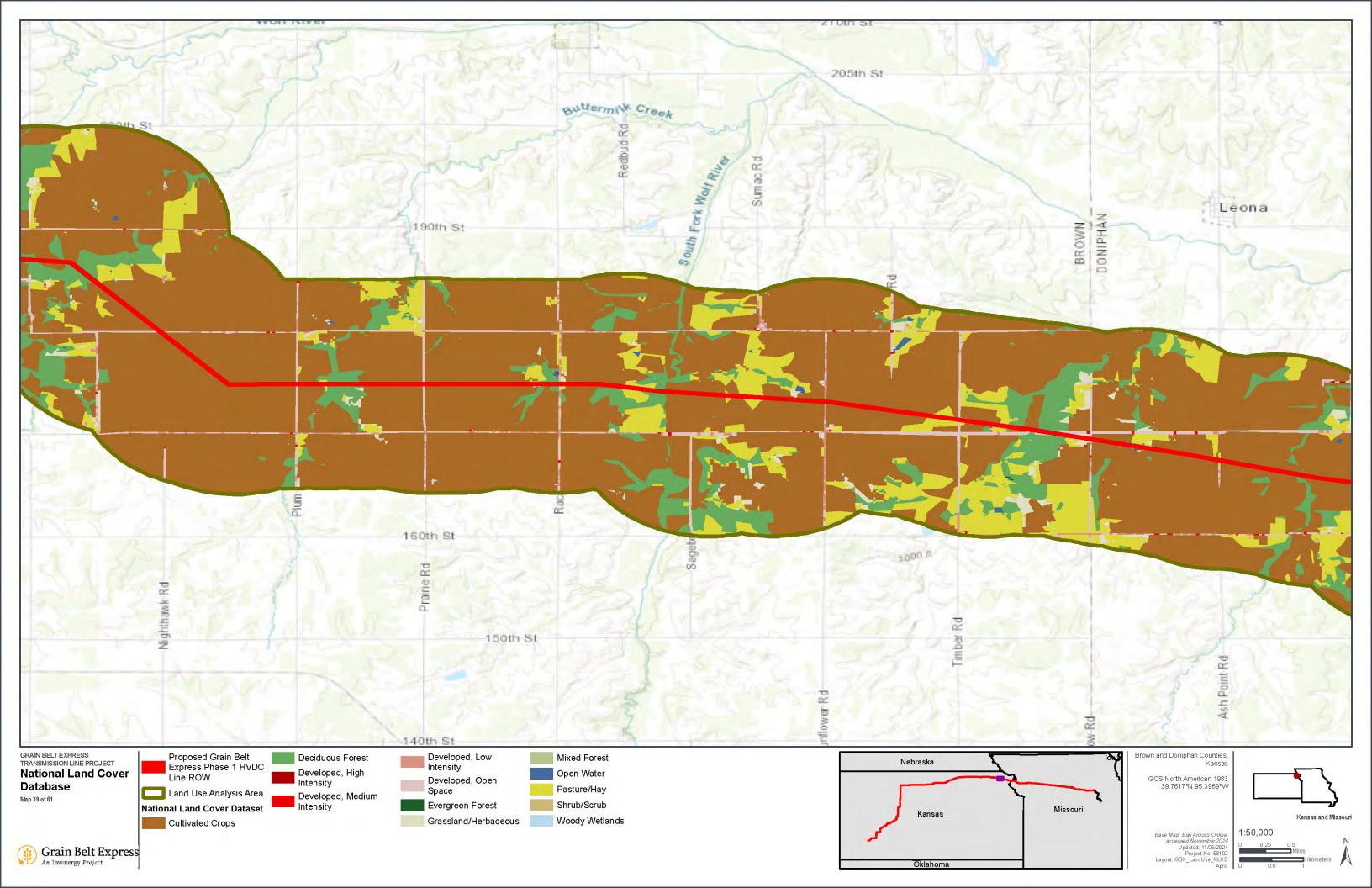


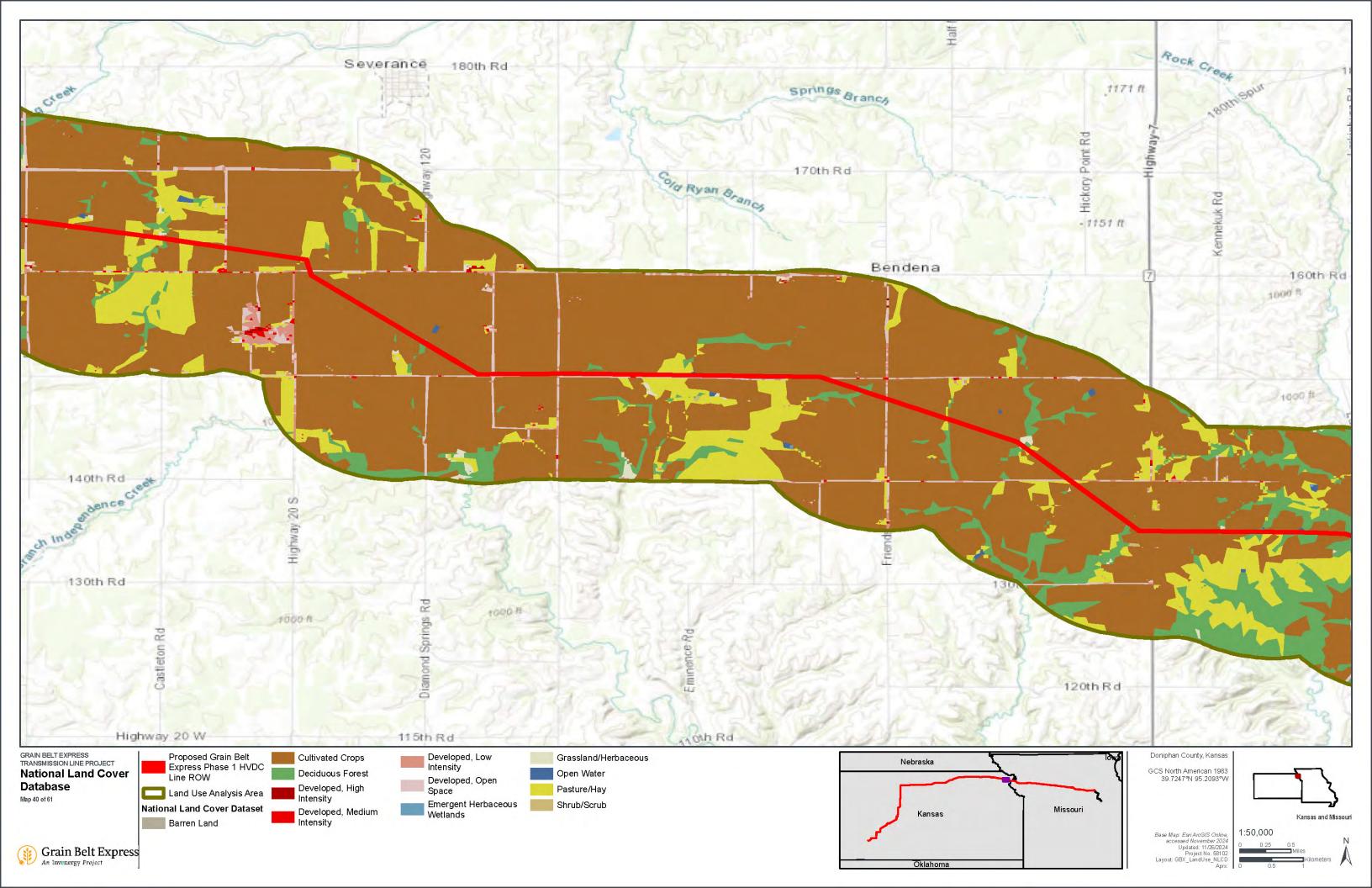


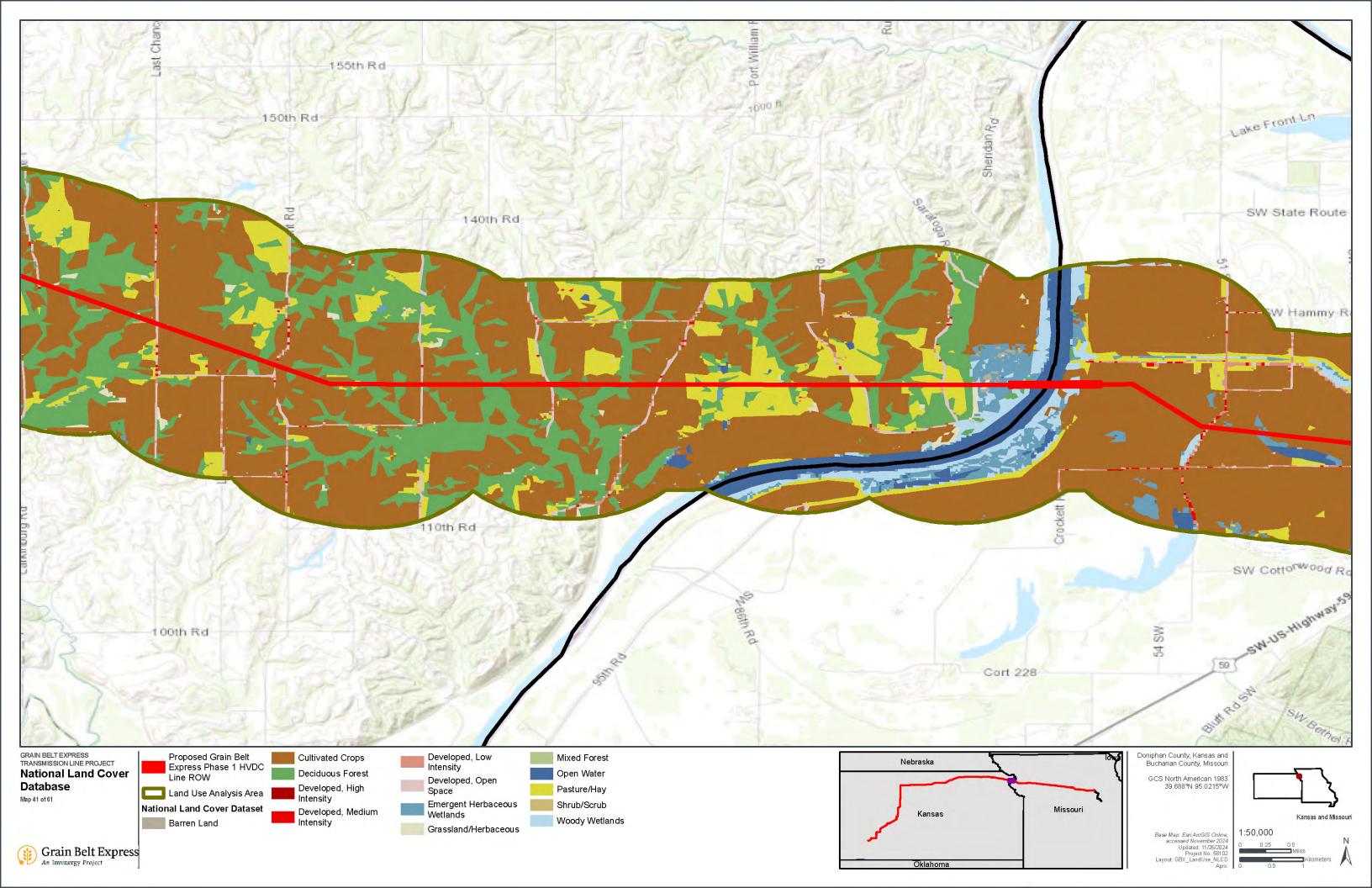


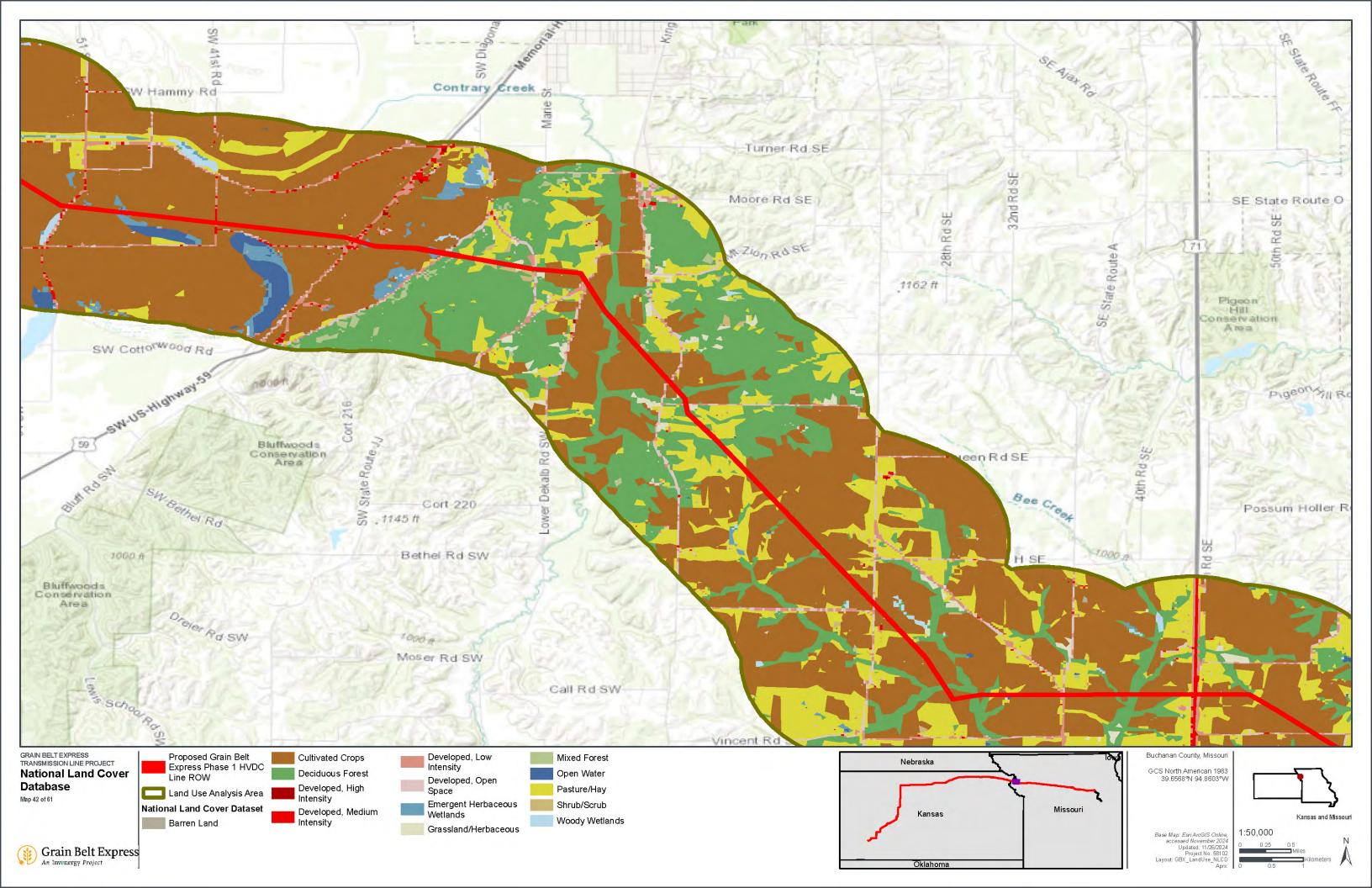


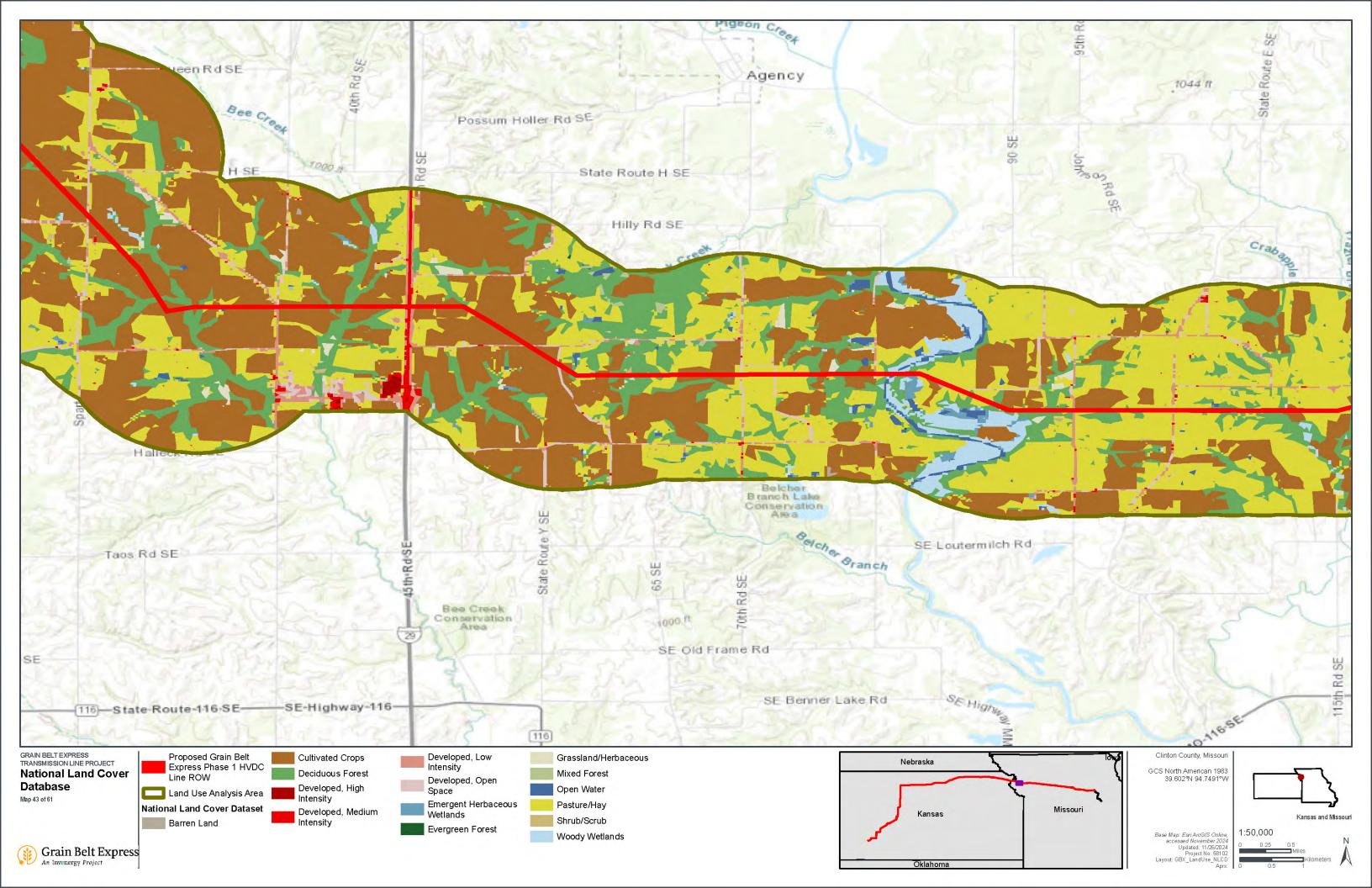


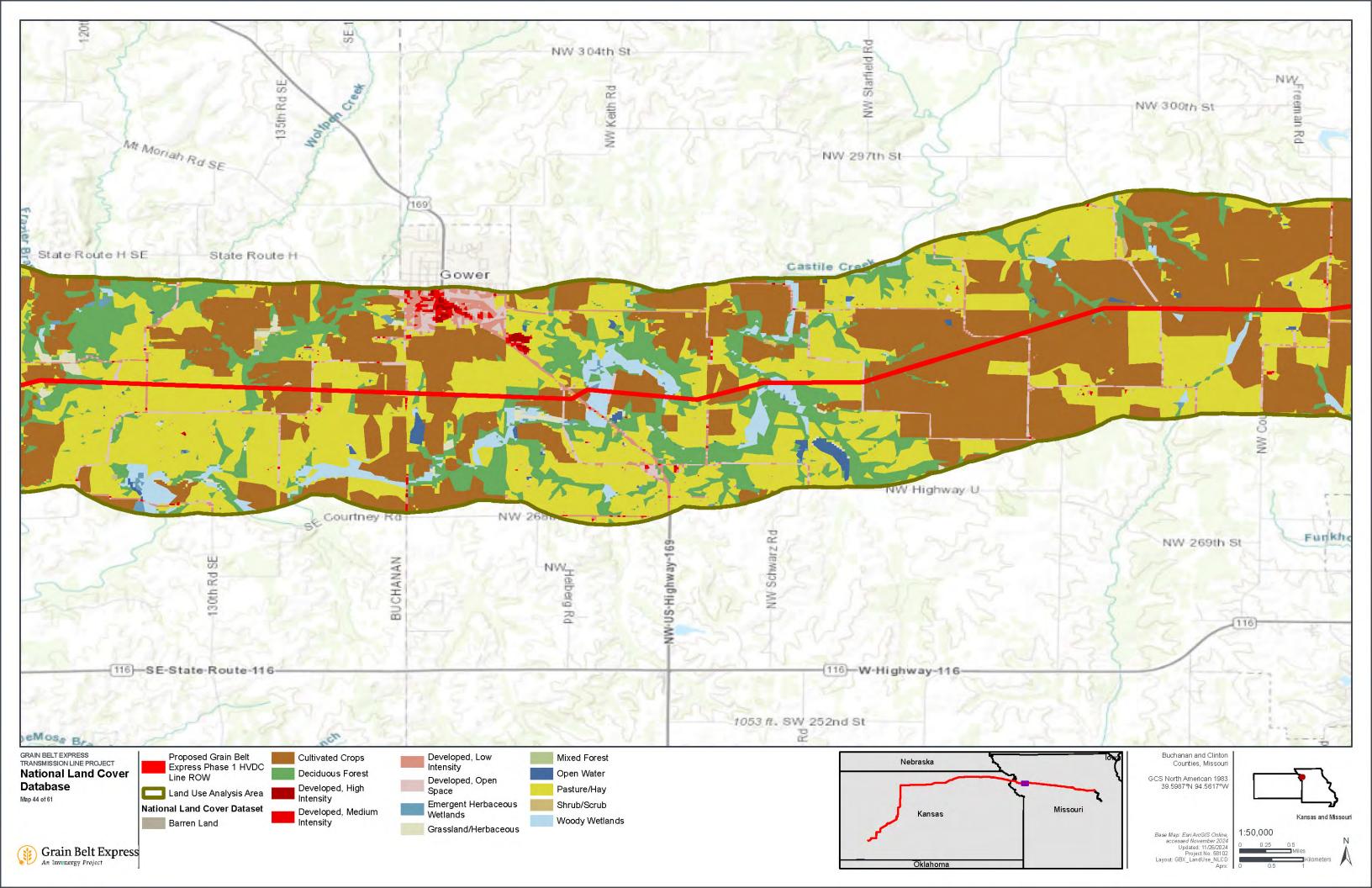


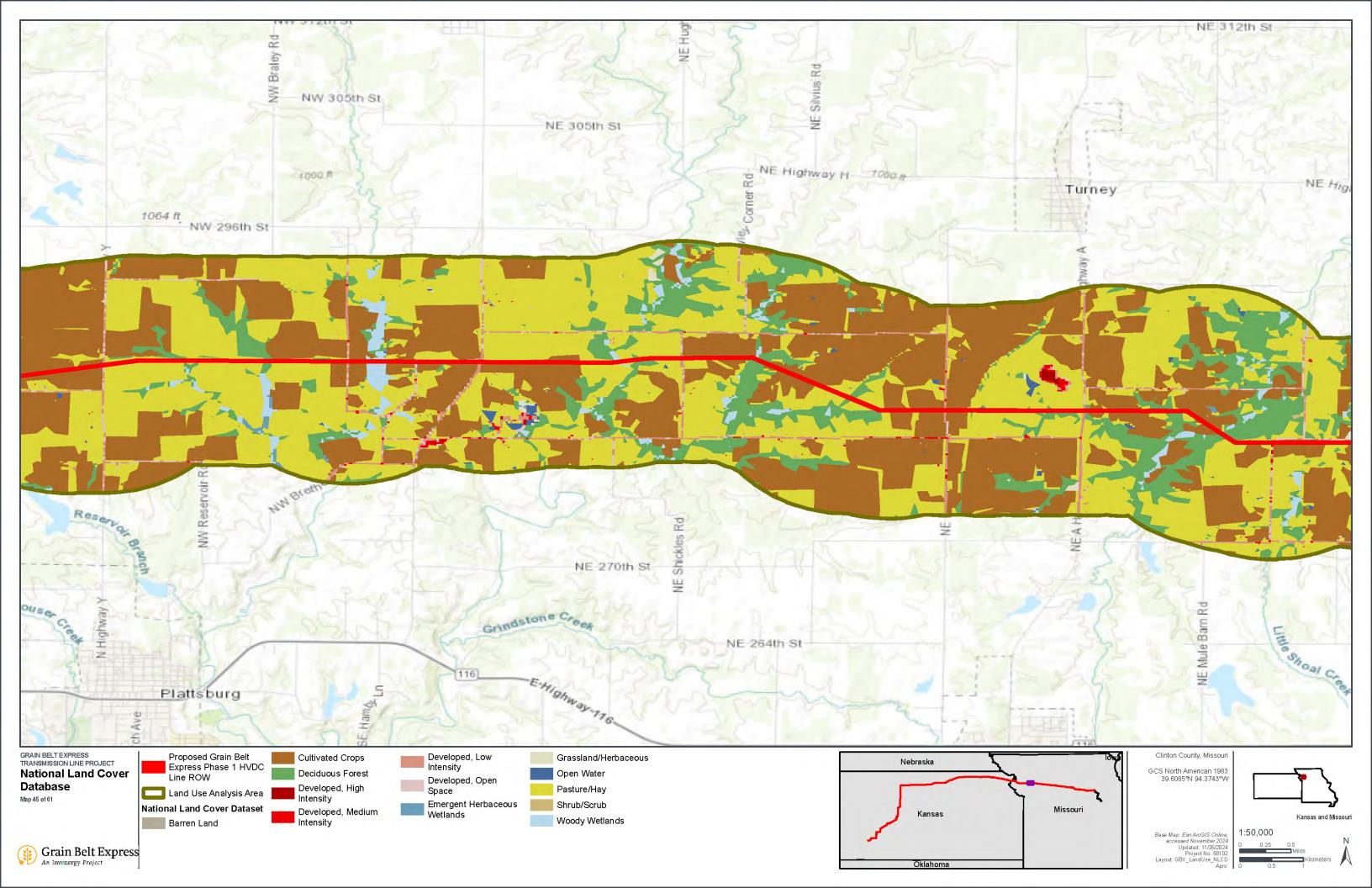


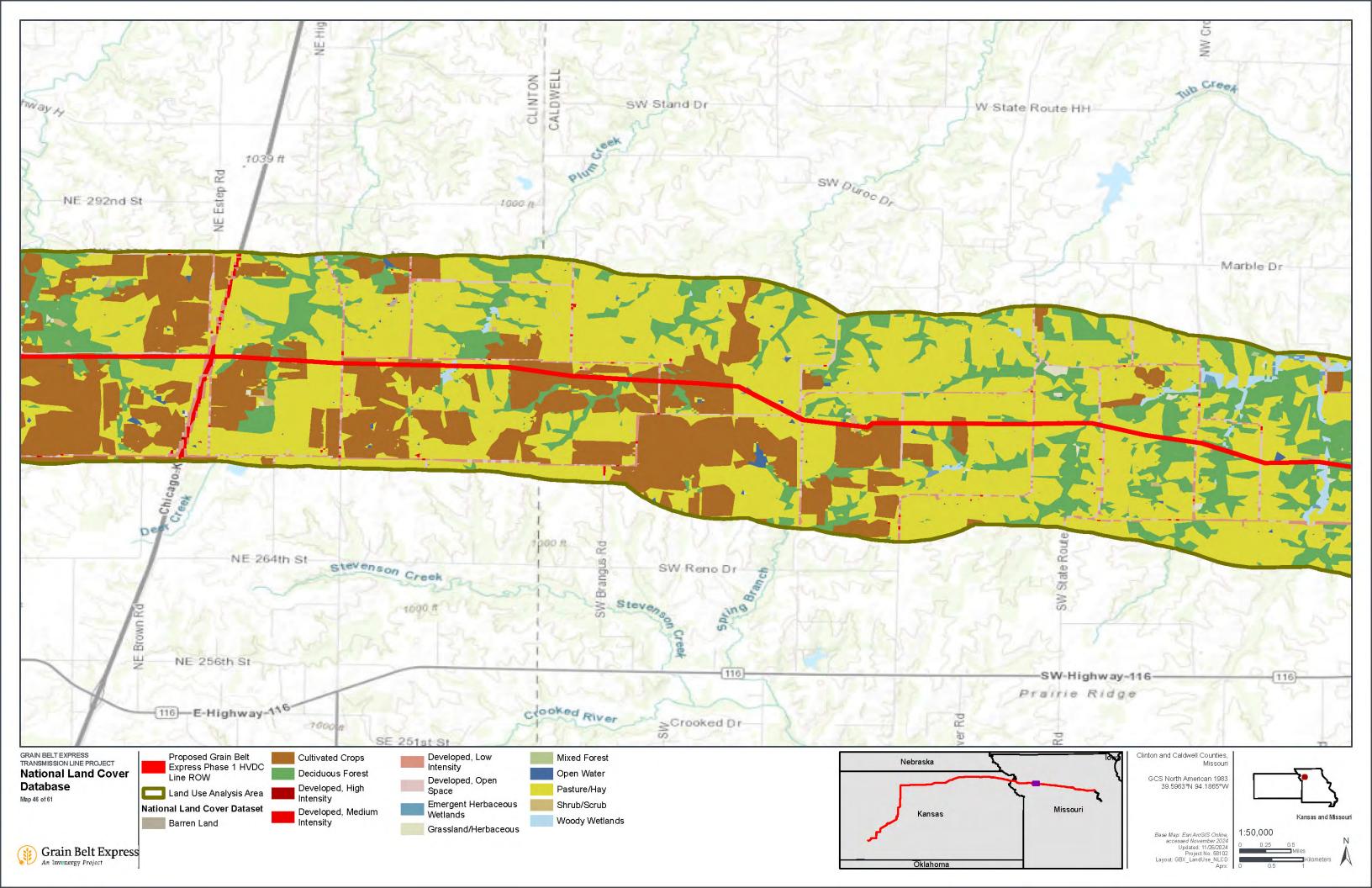


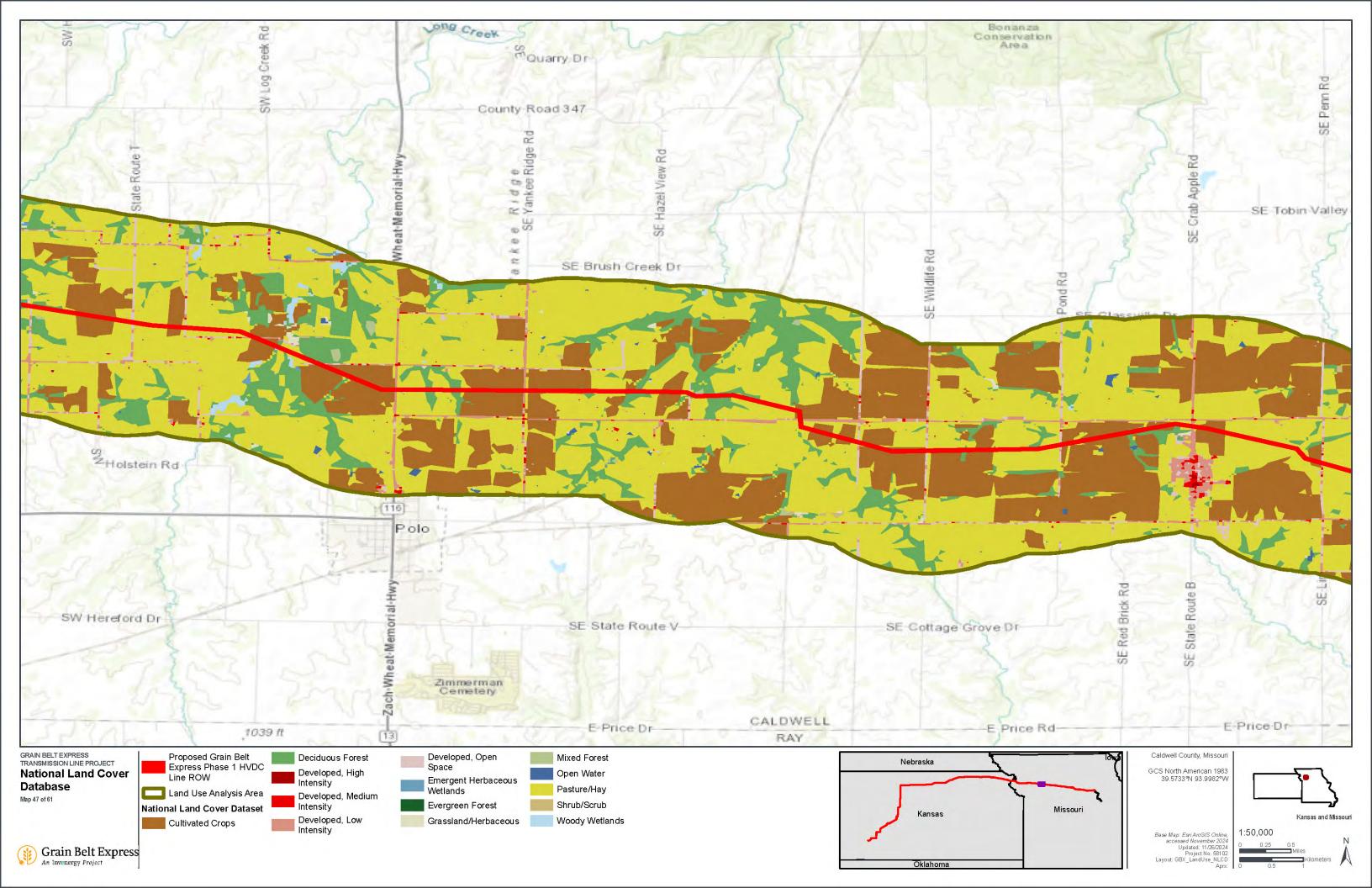


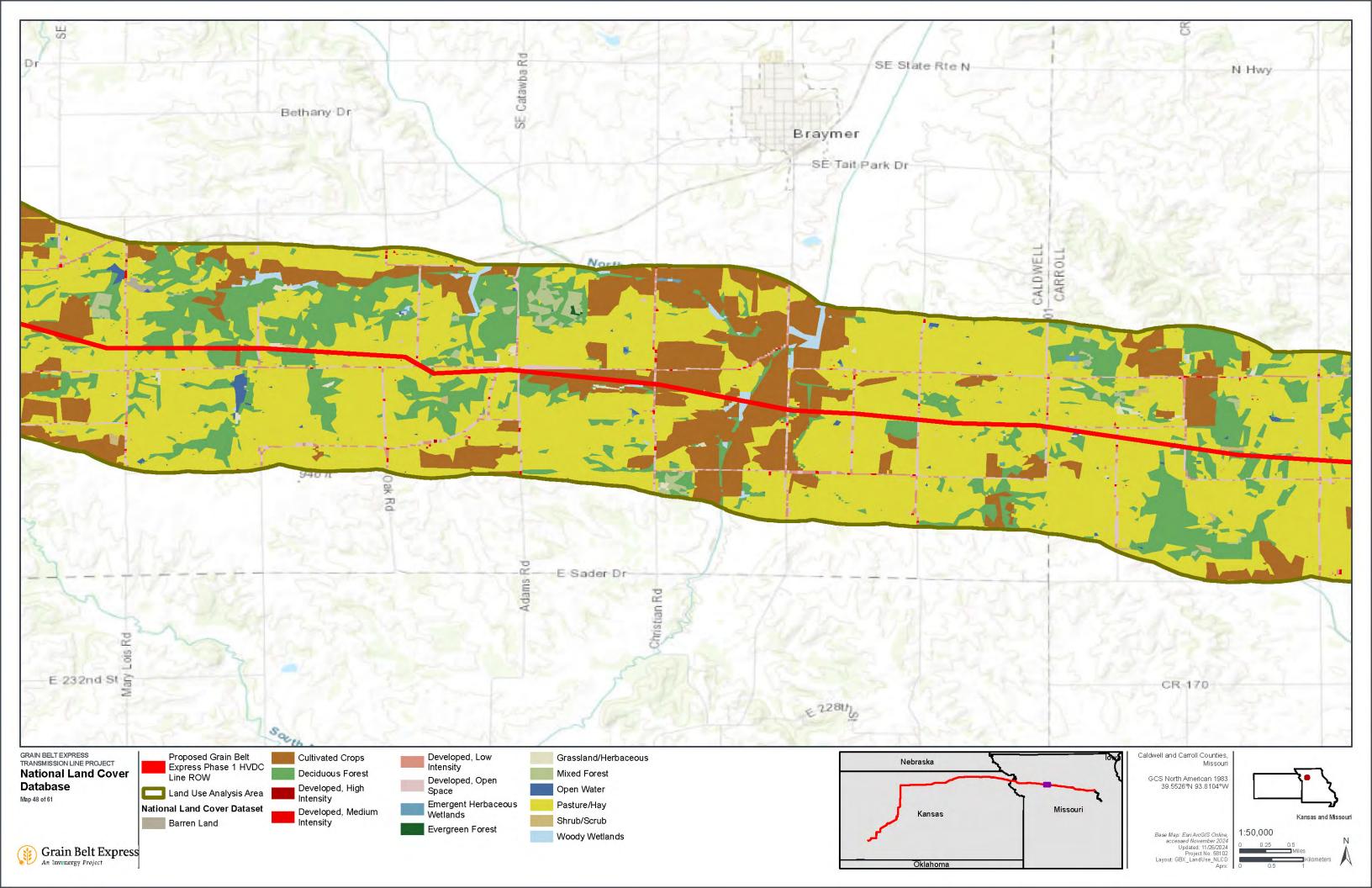


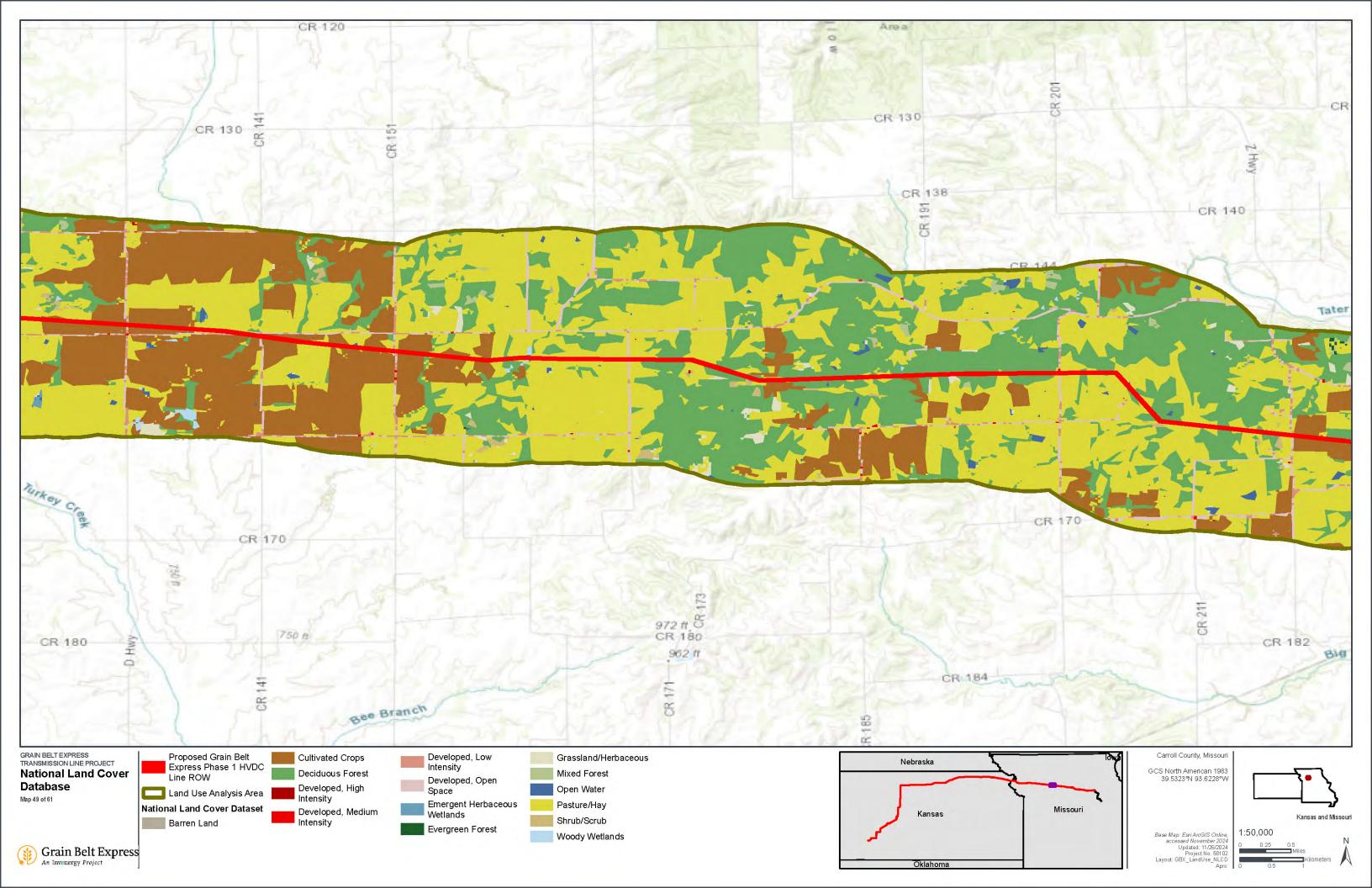


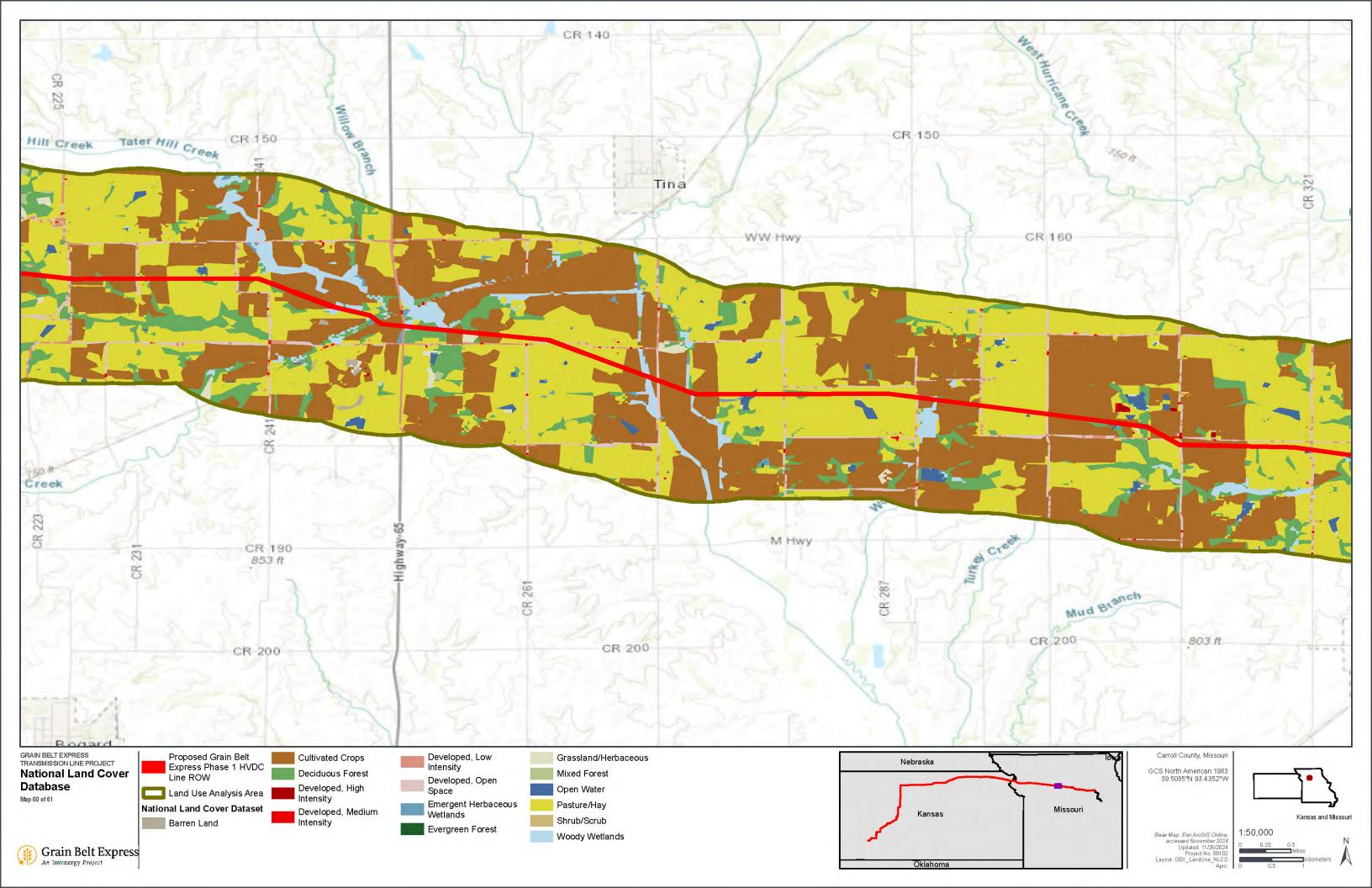


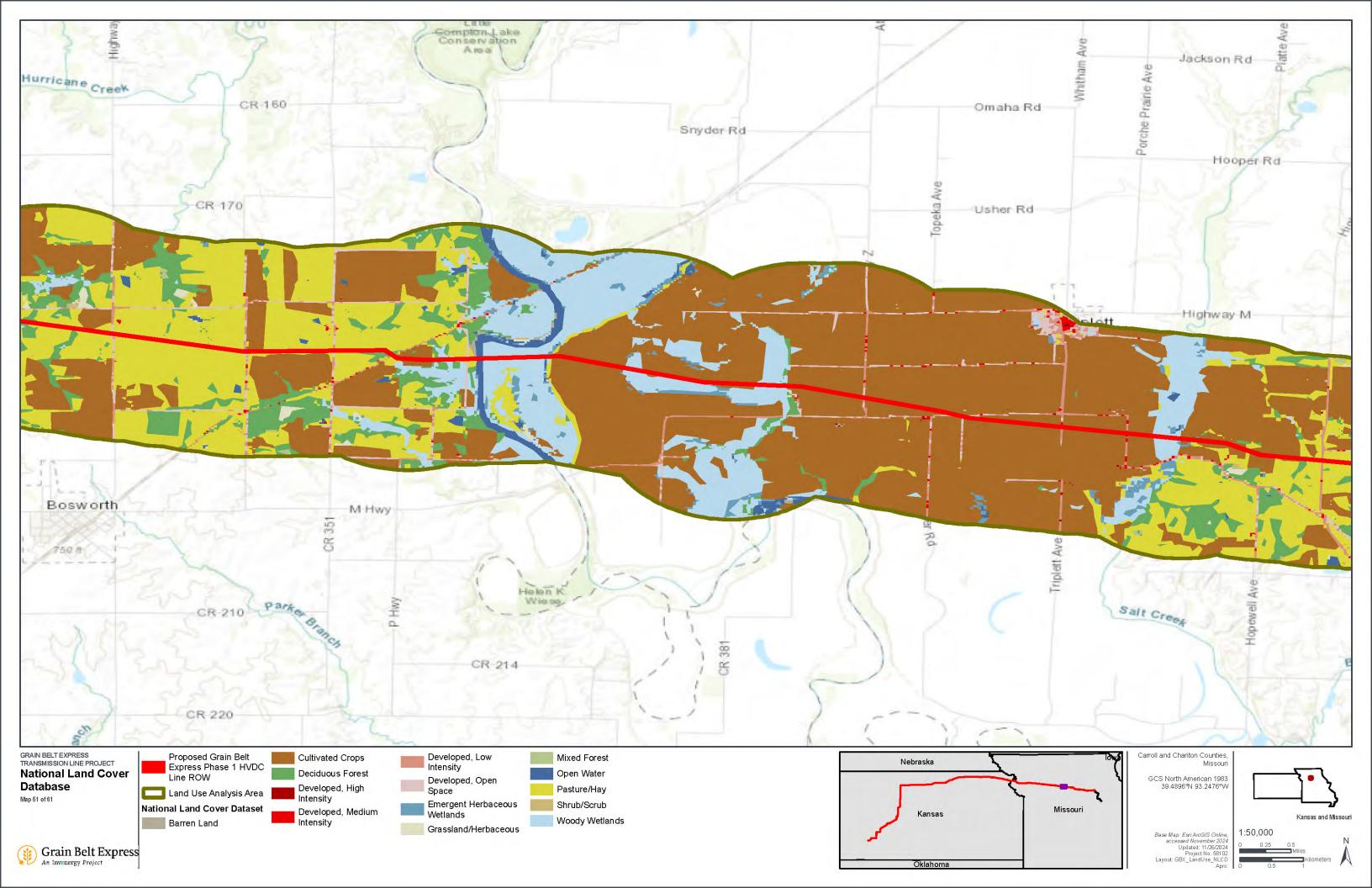


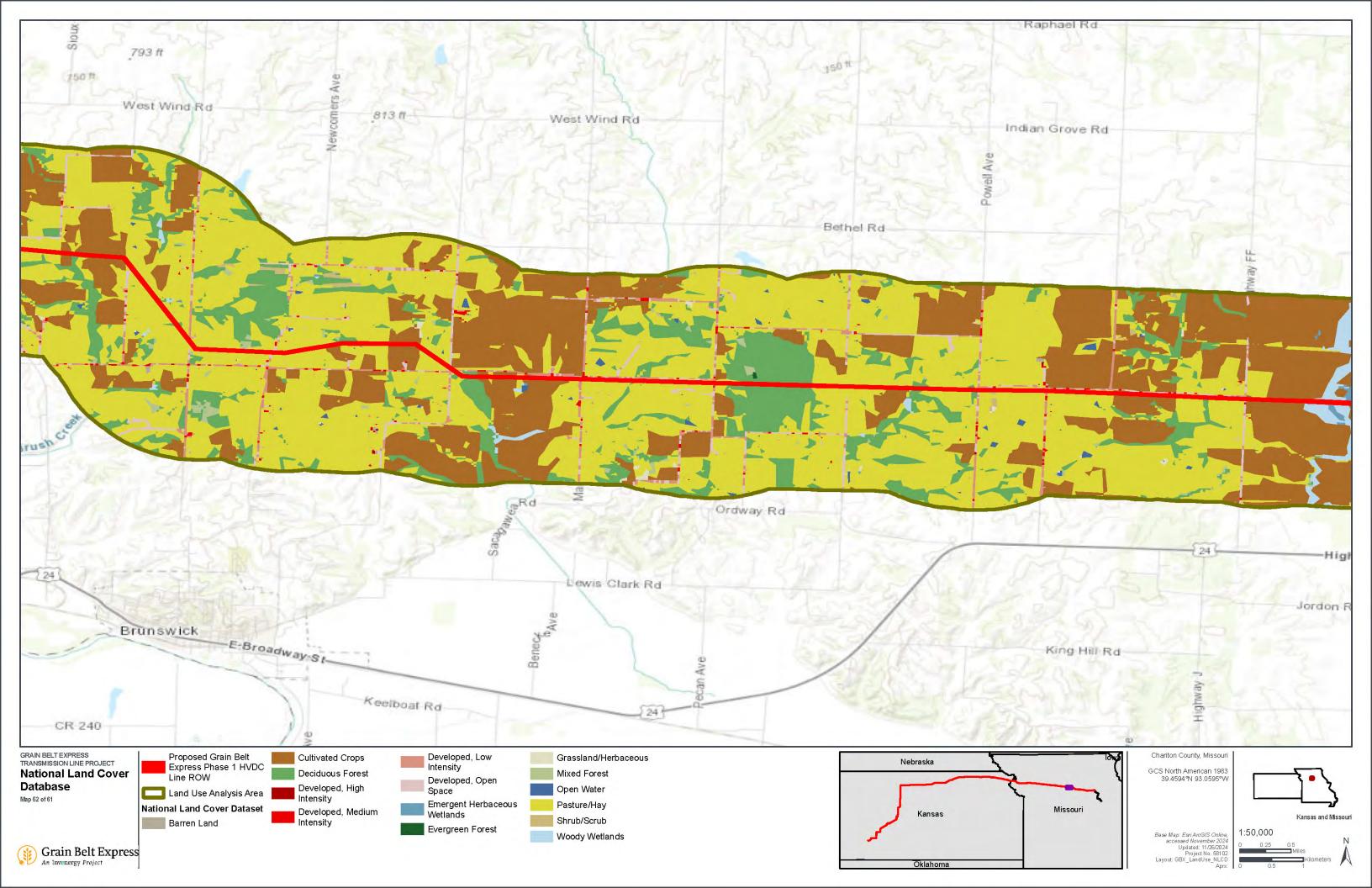


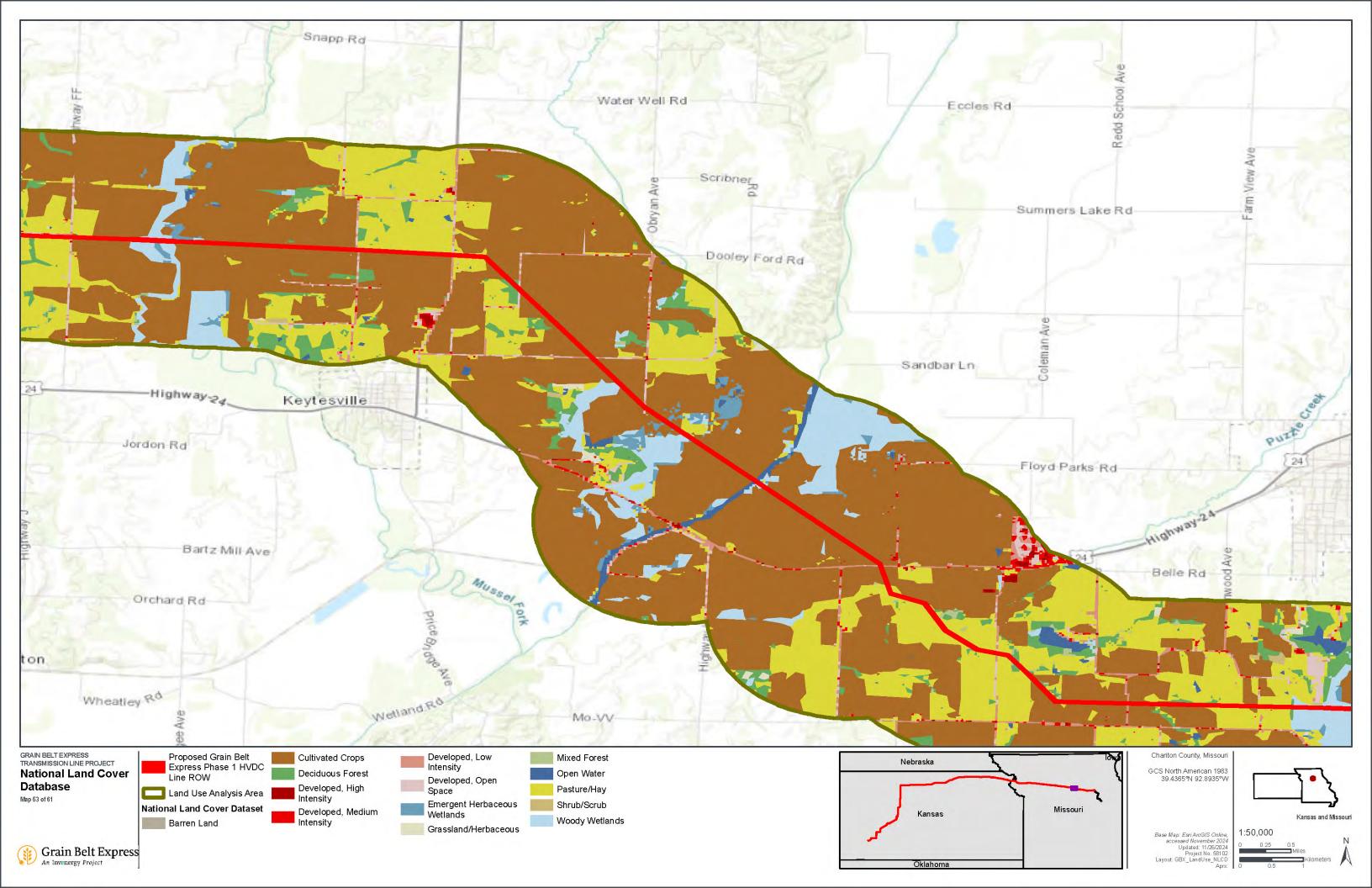


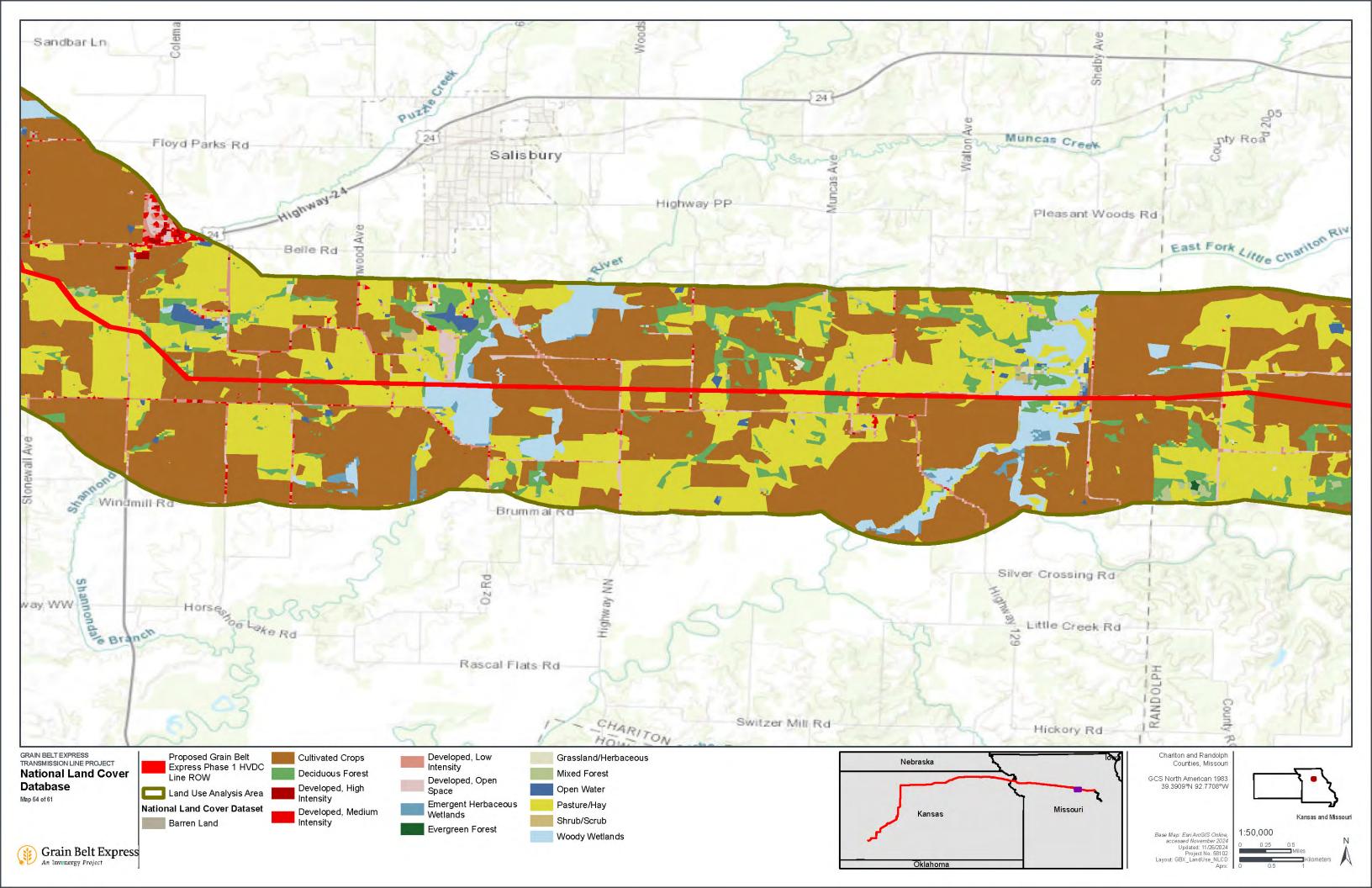


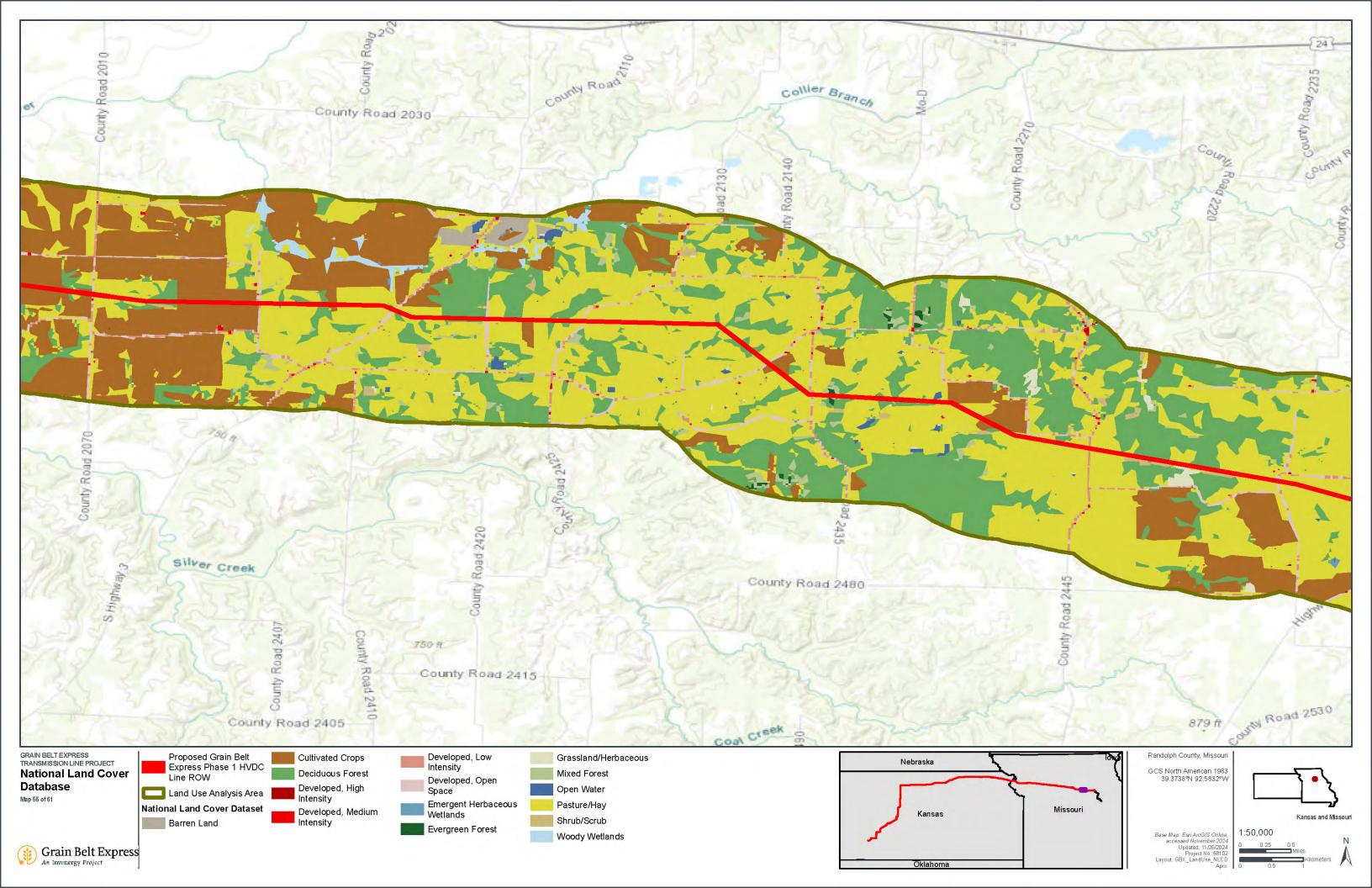


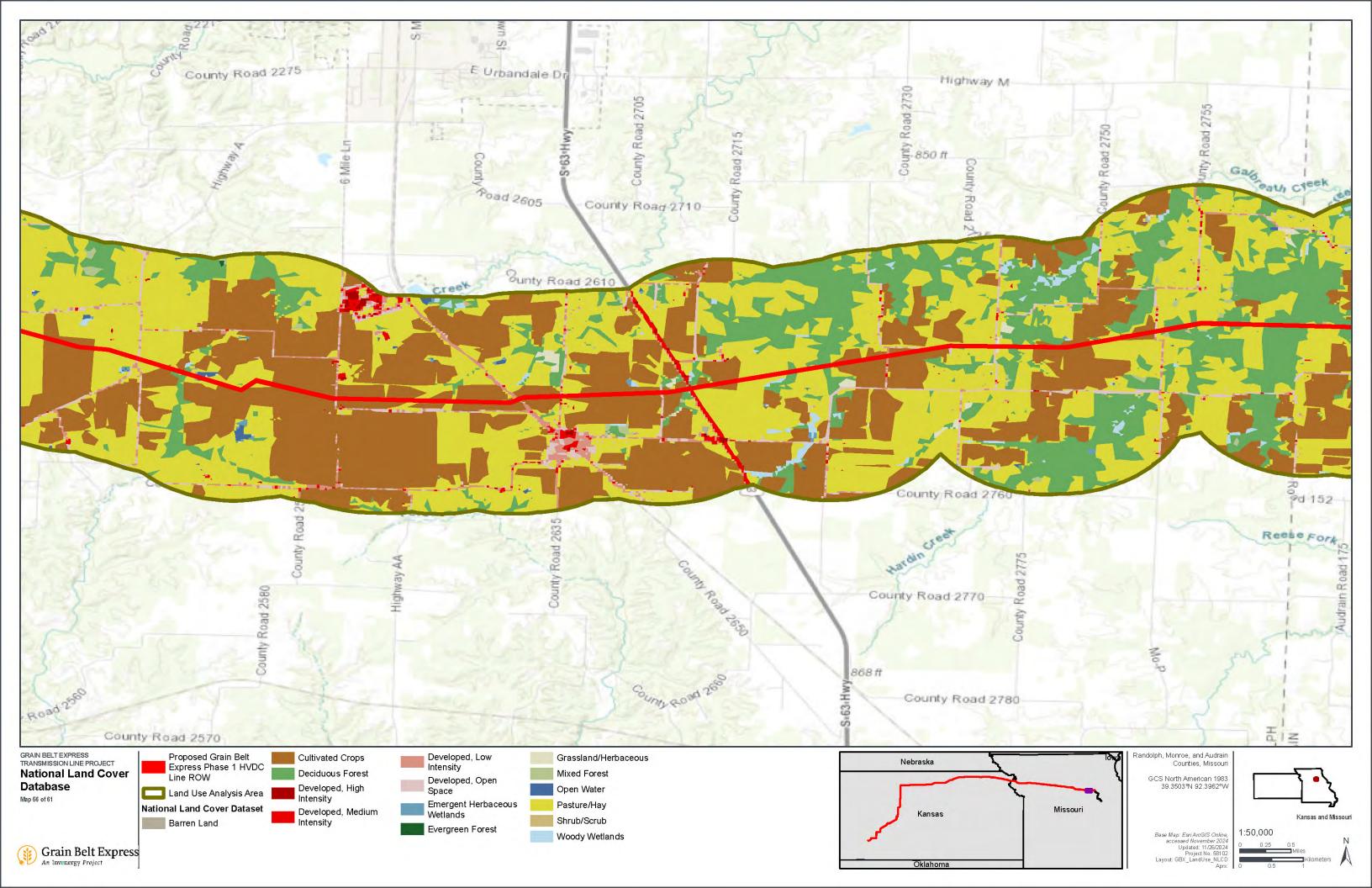


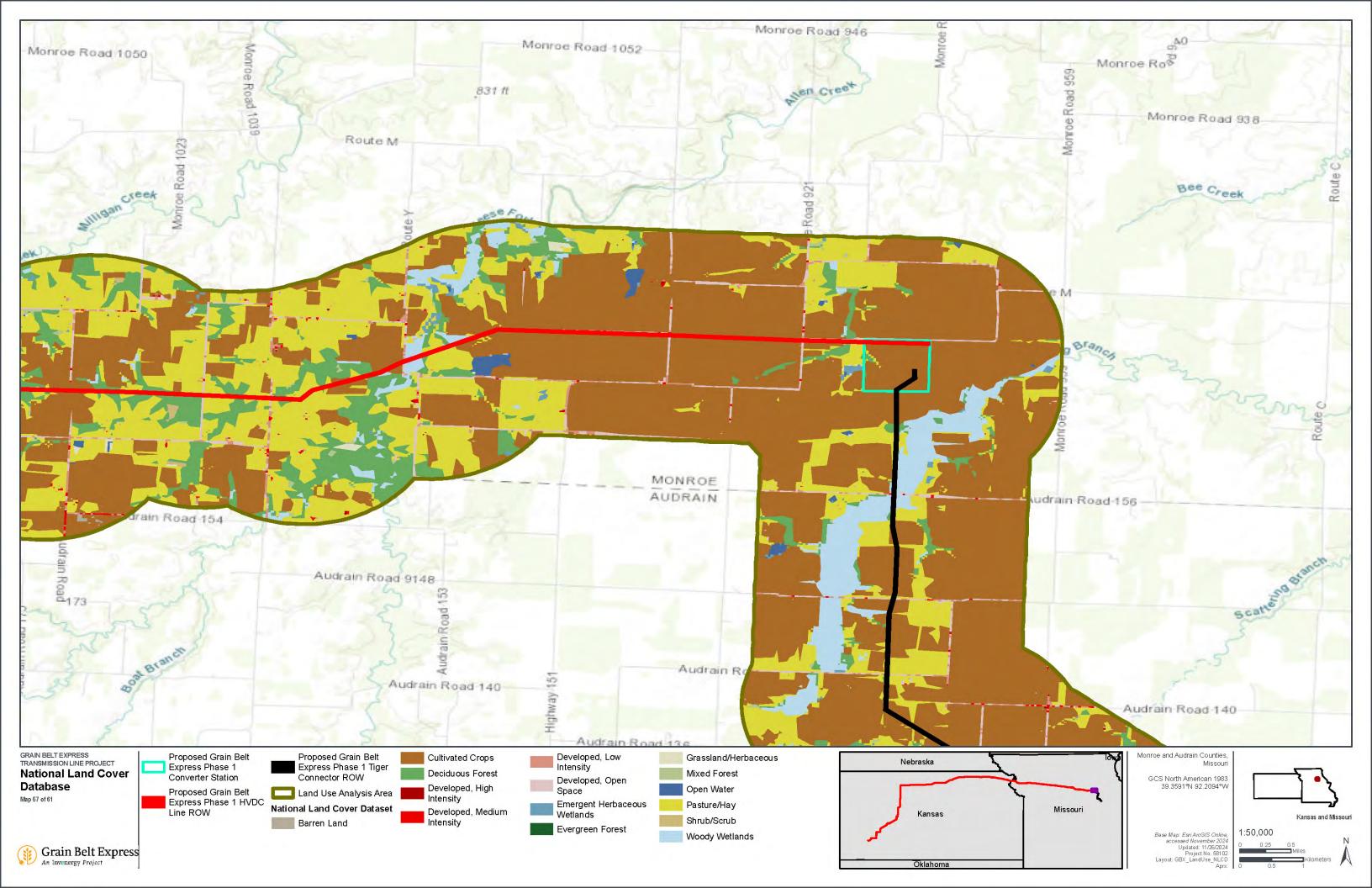


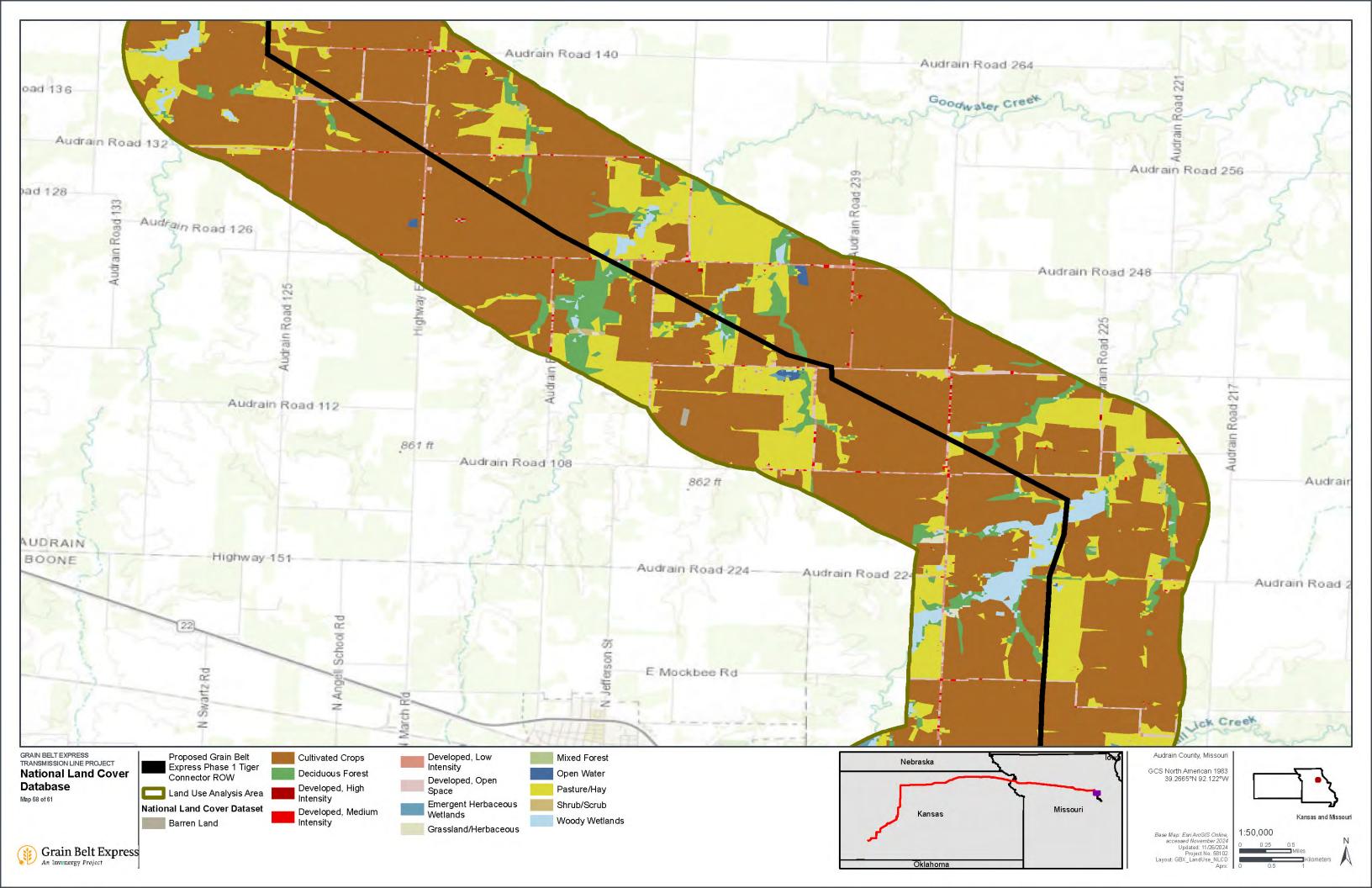


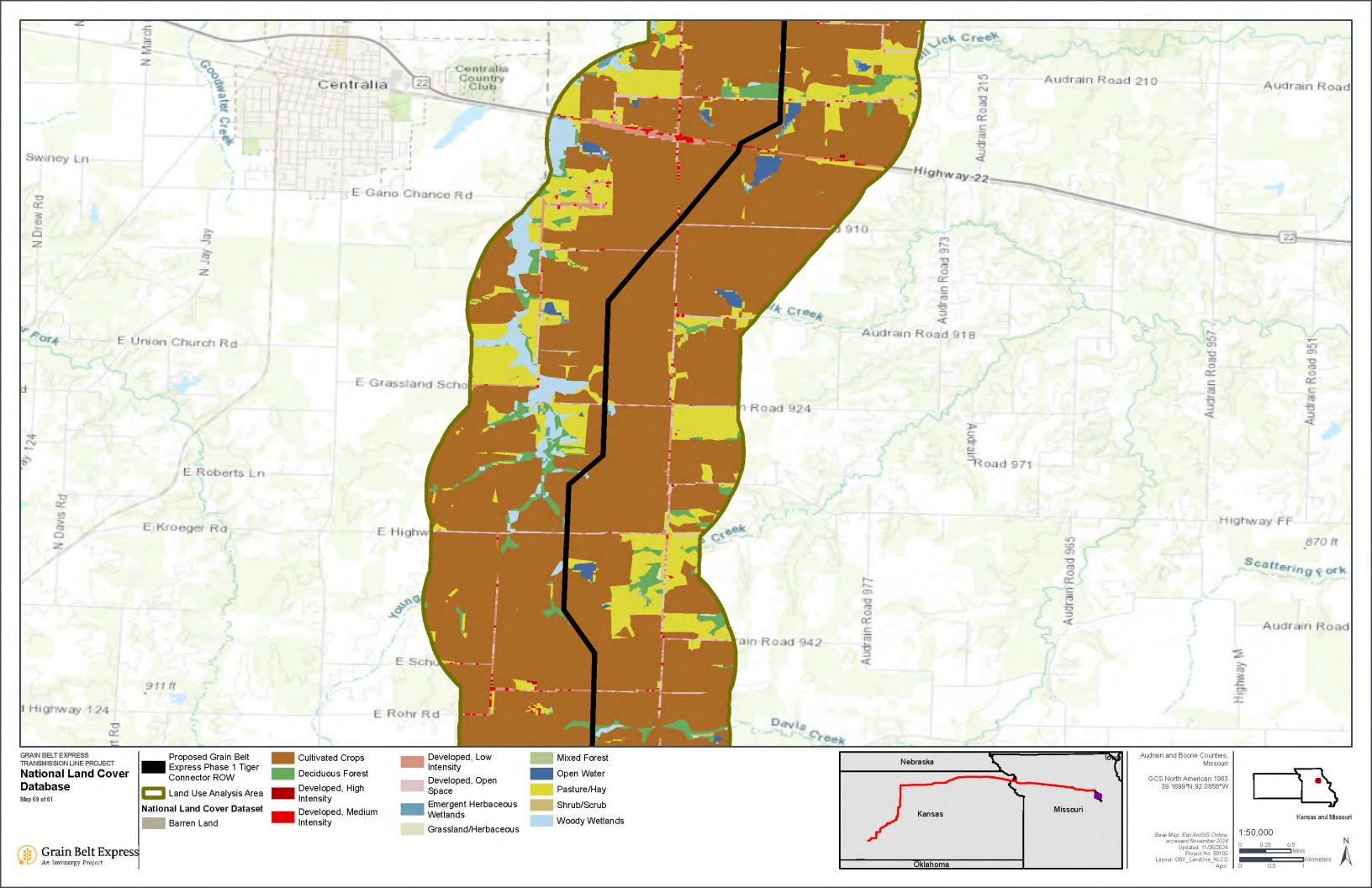


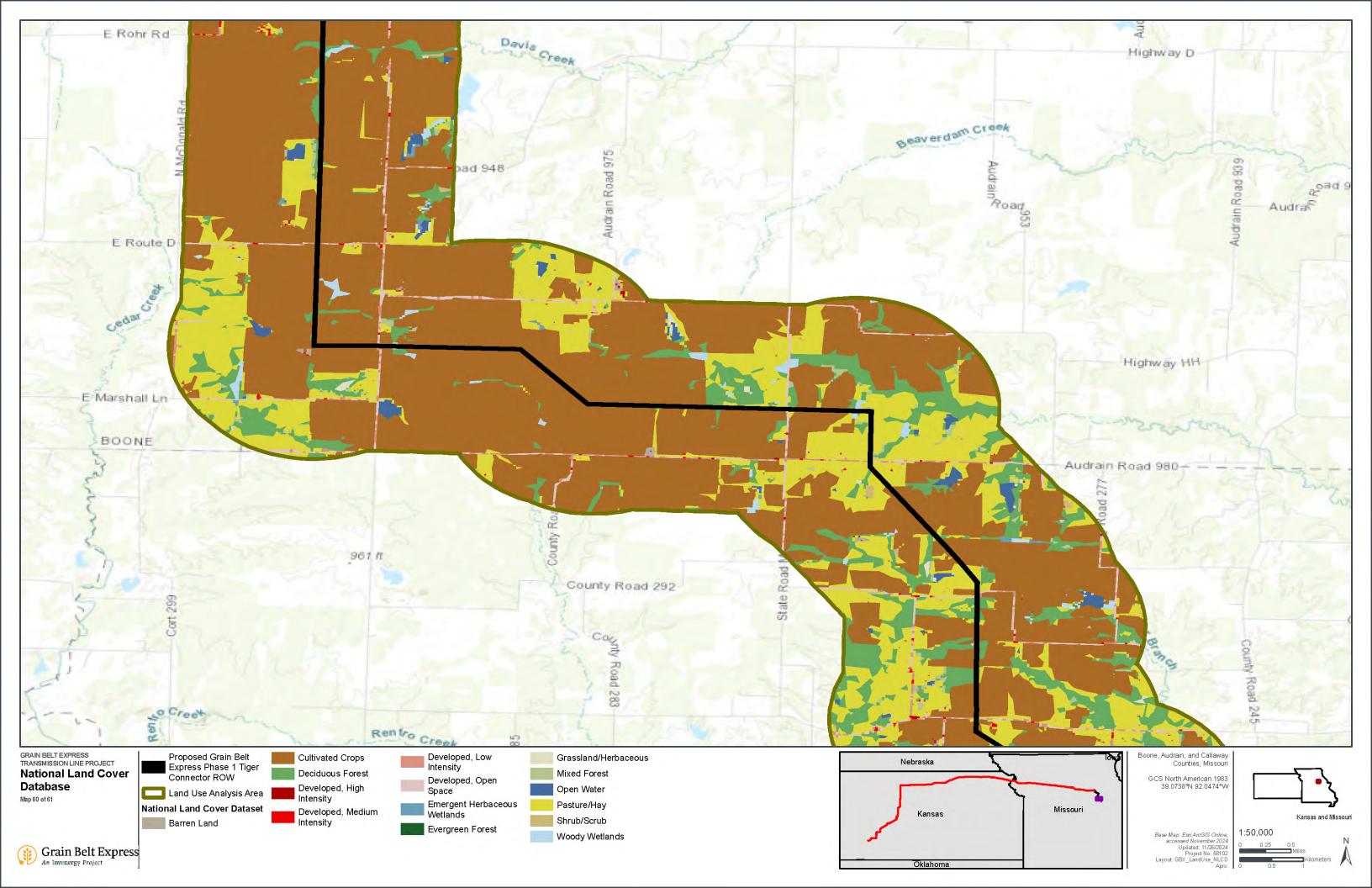


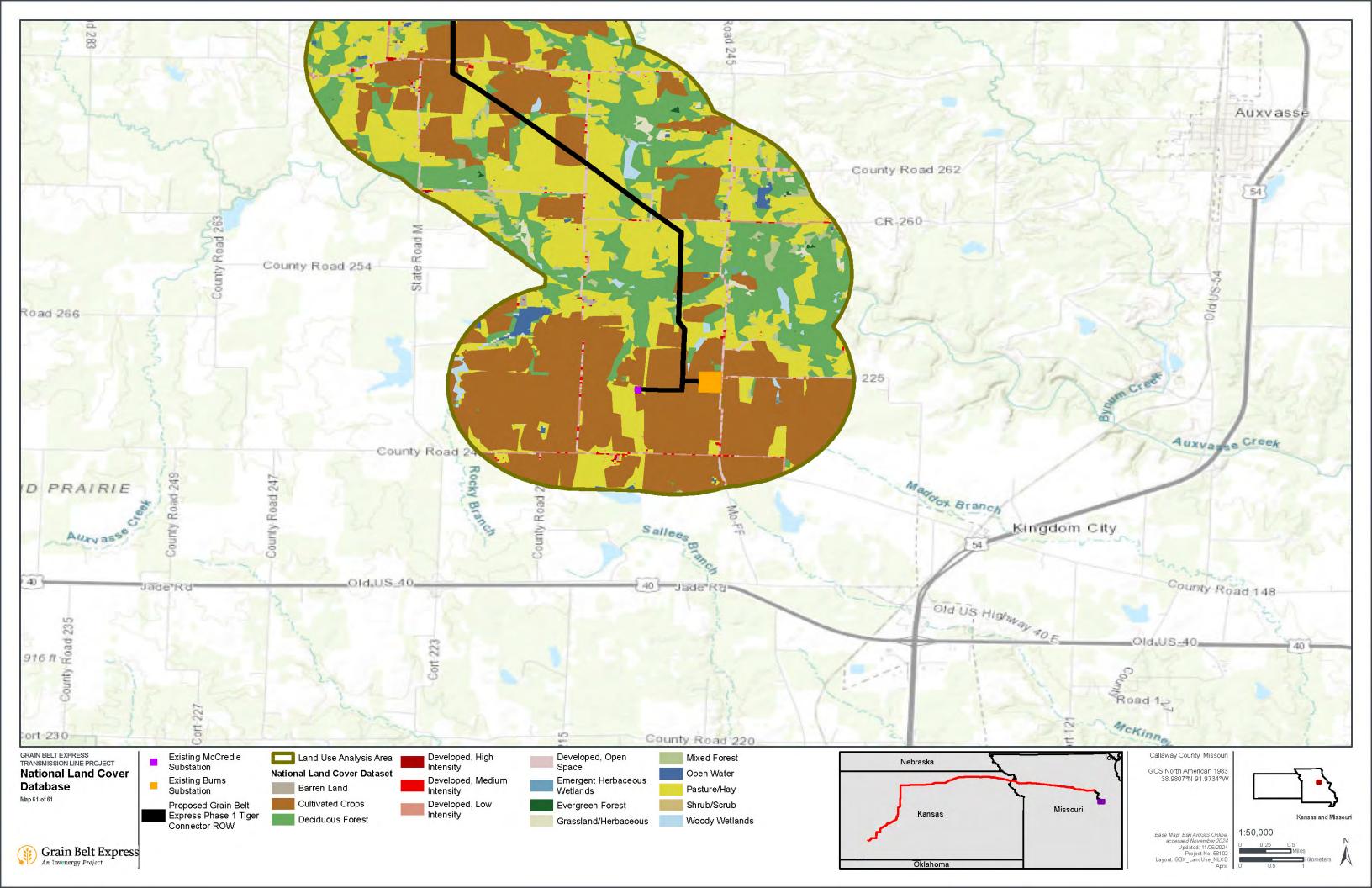






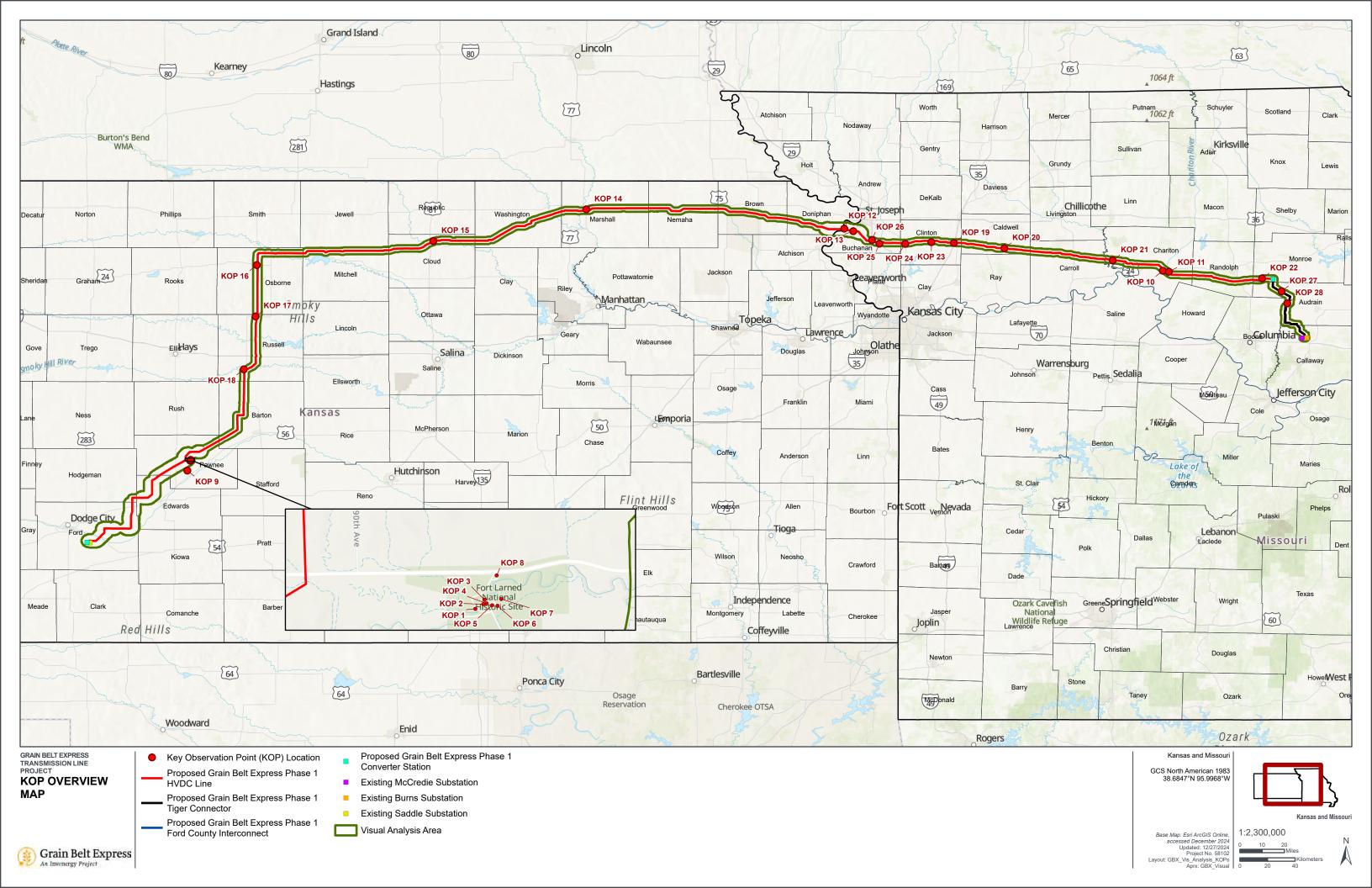






Grain Belt Express Transmission Line Environmental Impact Statement

Appendix 3.12: Visual Simulations





Mostly-Cloudy Date: **12-14-22** Photo Time:

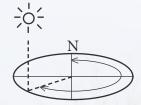
12:07 PM

Visibility:

Good Poor

Air Quality: Good

Sun Azimuth:



172.93°

Sun Angle:

28.72°

Lighting Angle on Project:

Side Lit

Wind:

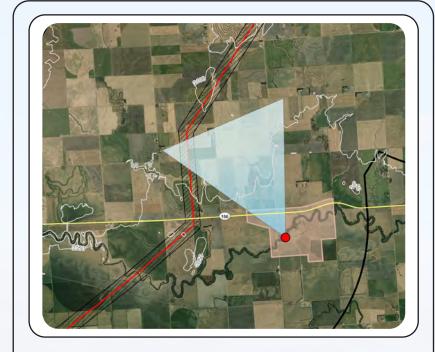
8 mph

Temperature (°F):

58°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

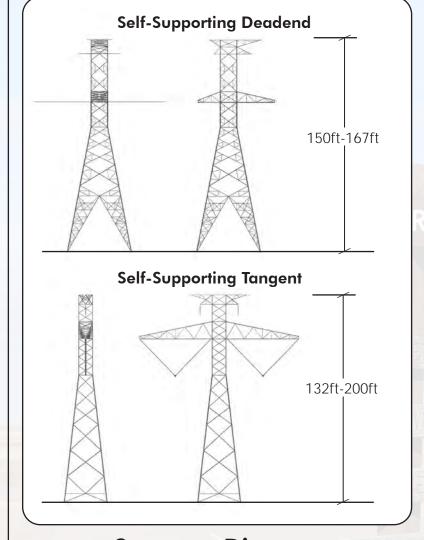


Contour Line (50-feet)
 Grain Belt Express
 Transmission Line
 State Highway
 Contour Line (50-feet)
 Photography Angle
 Project Area
 Miles
 Analysis Area
 Fort Larned National
 Historic Site
 Miles

Approximate Distance to Nearest Structure:

2.09 miles

Project Location



Structure Diagram



KOP 1 - Fort Larned NHS - Visitor Parking Lot

Base Photographic Documentation

County: **Pawnee, Kansas**

Latitude (o): 38.182

Longitude (o): -99.221

Viewpoint Elevation (feet): 2041

Camera Height (meters): 1.5

Camera Heading (degrees):

330

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

1

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.







KOP 1: View from Fort Larned NHS - Visitor Parking Lot looking northwest - Simulated Condition



Partly Cloudy

Date: 12-14-22

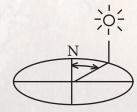
Photo Time:

8:27 AM

Visibility:

Air Quality: Good

Sun Azimuth:



125.35°

Sun Angle:

5.76°

Lighting Angle on Project:

Side Lit

Wind:

3 mph

Temperature (°F):

35°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

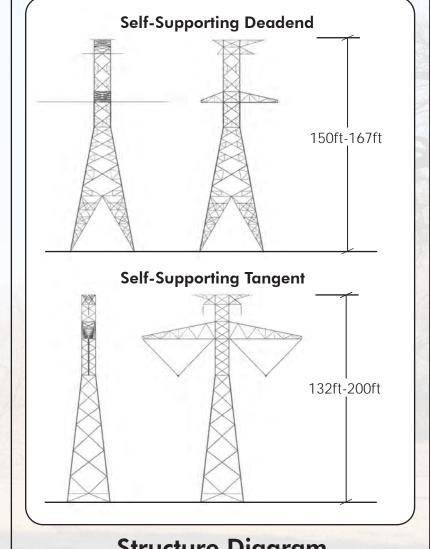


State Highway Analysis Area Proposed Phase I Contour Line (50-feet) Fort Larned National Grain Belt Express Photography Angle Transmission Line Project Area

Approximate Distance to Nearest Structure:

4 miles

Project Location



Structure Diagram



KOP 2 - Fort Larned NHS -Officers Row North End

Base Photographic Documentation

Pawnee, Kansas County:

Latitude (o): 38.183

Longitude (o): -99.219

Viewpoint Elevation (feet): 2041

Camera Height (meters): 1.5

Camera Heading (degrees):

10

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.



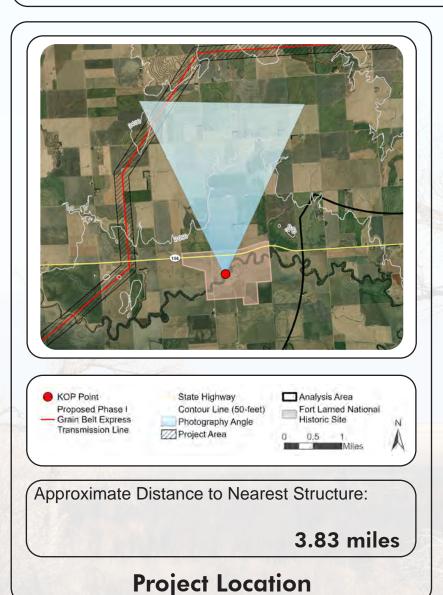


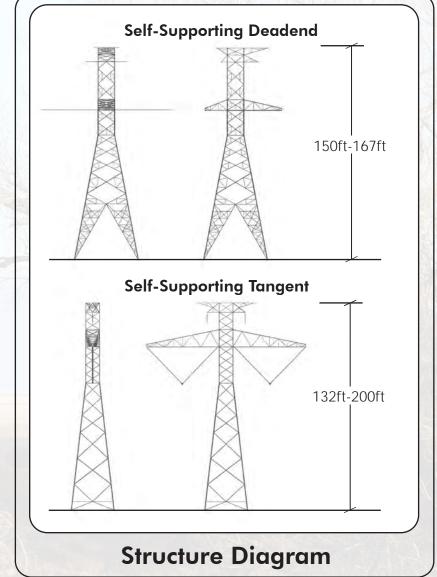




Sun and Weather Date: 12-14-22 Photo Time: **Partly** 8:30 AM Cloudy Visibility: Poor Air Quality: Good Sun Azimuth: 126.01° 6.4° Sun Angle: Lighting Angle on Project: Side Lit Wind: 3 mph Temperature (°F): 35°F

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT







KOP 3 - Fort Larned NHS - Recreational Nature Trail

Base Photographic Documentation

County: Pawnee, Kansas

Latitude (o): 38.184

Longitude (o): -99.219

Viewpoint Elevation (feet): 2040

Camera Height (meters): 1.5

Camera Heading (degrees):

0

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

1

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.



Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.







KOP 3: View from Fort Larned NHS - Recreational Nature Trail looking north - Color Overlay

Date: 12-14-22

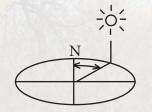
Partly Cloudy Photo Time: 8:35 AM

Visibility:

Good Poor

Air Quality: Good

Sun Azimuth:



126.67°

Sun Angle:

7.04°

Lighting Angle on Project:

Side Lit

Wind:

3 mph

Temperature (°F):

35°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

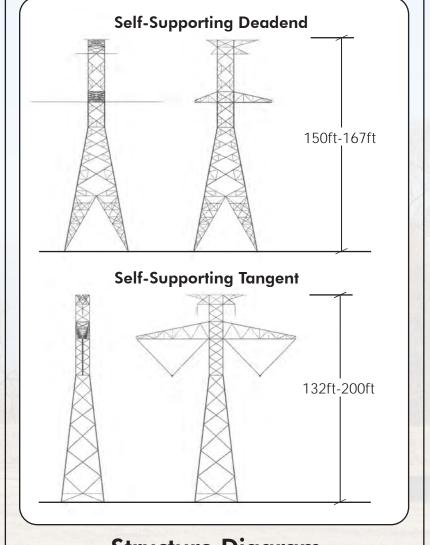


KOP Point
 Proposed Phase I
 Grain Belt Express
 Transmission Line
 State Highway
 Contour Line (50-feet)
 Photography Angle
 Project Area
 0 0,5 1
 Miles

Approximate Distance to Nearest Structure:

3.11 miles

Project Location



Structure Diagram



KOP 4 - Fort Larned NHS - Interior Walkway

Base Photographic Documentation

County: Pawnee, Kansas

Latitude (o): 38.183

Longitude (o): -99.218

Viewpoint Elevation (feet): 2039

Camera Height (meters): 1.5

Camera Heading (degrees):

345

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

1

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.











Partly Cloudy

Date: 12-14-22

Photo Time:

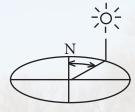
8:38 AM

Visibility:

Poor

Air Quality: Good

Sun Azimuth:



127.18°

Sun Angle:

7.51°

Lighting Angle on Project:

Front Lit

Wind:

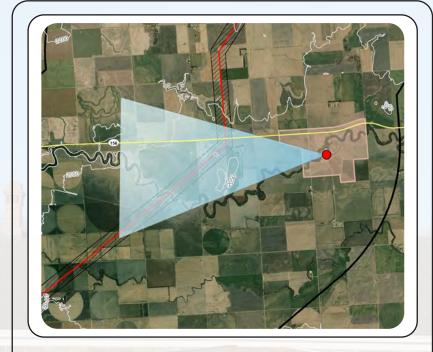
3 mph

Temperature (°F):

35°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

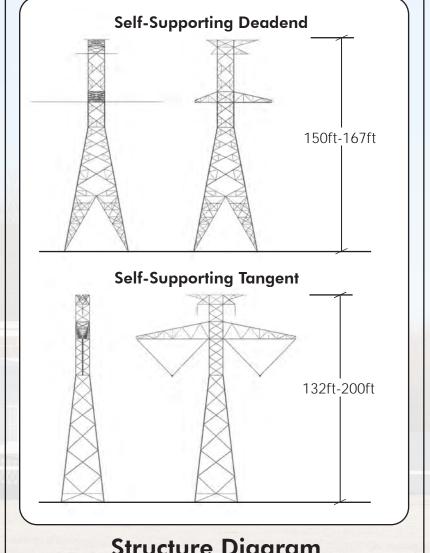


KOP Point State Highway Analysis Area Proposed Phase I Contour Line (50-feet) Fort Larned National - Grain Belt Express Photography Angle Transmission Line Project Area

Approximate Distance to Nearest Structure:

1.74 miles

Project Location



Structure Diagram



KOP 5 - Fort Larned NHS -Central Parade Ground

Base Photographic Documentation

Pawnee, Kansas County:

Latitude (o): 38.183

Longitude (°): -99.218

Viewpoint Elevation (feet): 2037

Camera Height (meters): 1.5

Camera Heading (degrees):

280

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.









Partly Cloudy

Date: 12-14-22

Photo Time:

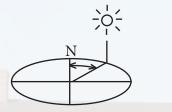
8:42 AM

Visibility:

Poor

Air Quality: Good

Sun Azimuth:



127.86°

Sun Angle:

8.14°

Lighting Angle on Project:

Side Lit

Wind:

3 mph

Temperature (°F):

35°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

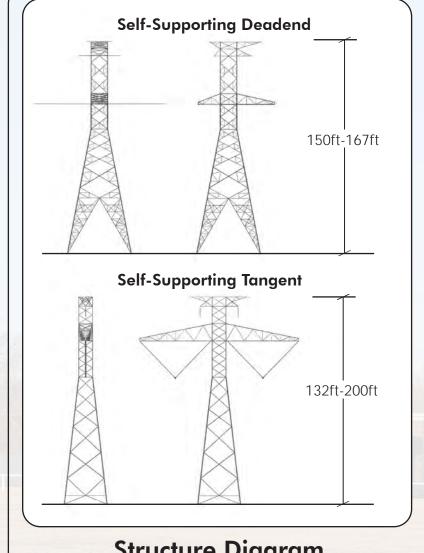




Approximate Distance to Nearest Structure:

2.88 miles

Project Location



Structure Diagram



KOP 6 - Fort Larned NHS -East Parade Ground

Base Photographic Documentation

Pawnee, Kansas County:

Latitude (o): 38.182

Longitude (°): -99.217

Viewpoint Elevation (feet): 2036

Camera Height (meters): 1.5

Camera Heading (degrees):

260

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.









Mostly-Cloudy

Date: 12-14-22

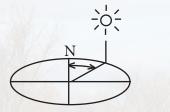
Photo Time: 8:47 AM

Visibility:

Poor

Air Quality: Good

Sun Azimuth:



128.89°

Sun Angle:

9.07°

Lighting Angle on Project:

Side Lit

Wind:

3 mph

Temperature (°F):

35°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

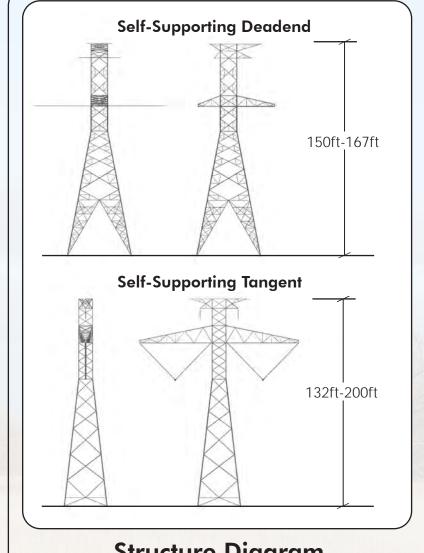


KOP Point State Highway Analysis Area Proposed Phase I Contour Line (50-feet) Fort Larned National - Grain Belt Express Photography Angle Transmission Line Project Area

Approximate Distance to Nearest Structure:

3.86 miles

Project Location



Structure Diagram



KOP 7 - Fort Larned NHS -Cemetery

Base Photographic Documentation

Pawnee, Kansas County:

Latitude (o): 38.184

Longitude (°): -99.216

Viewpoint Elevation (feet): 2037

Camera Height (meters): 1.5

Camera Heading (degrees):

330

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.









Mostly-Cloudy

Date: 12-14-22

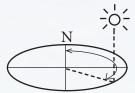
Photo Time: 12:45 PM

Visibility:

Poor

Air Quality: Good

Sun Azimuth:



182.89°

Sun Angle:

28.99°

Lighting Angle on Project:

Side Lit

Wind:

23 mph

Temperature (°F):

34°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

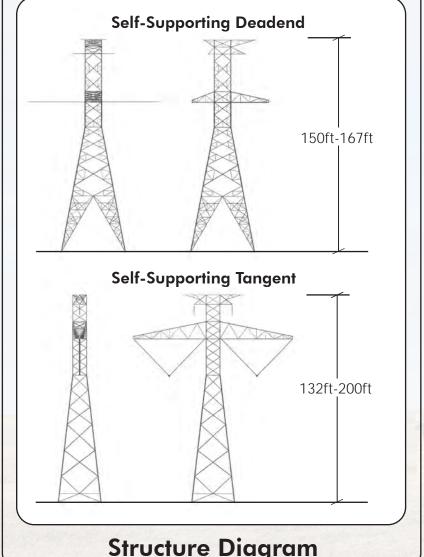


KOP Point Photography Angle Proposed Phase I Project Area Grain Belt Express Analysis Area Fort Larned National State Highway

Approximate Distance to Nearest Structure:

2 miles

Project Location



Structure Diagram



KOP 8 - Fort Larned NHS -Recreational Picnic Area

Base Photographic Documentation

Pawnee, Kansas County:

Latitude (o): 38.188

Longitude (°): -99.217

Viewpoint Elevation (feet): 2036

Camera Height (meters): 1.5

Camera Heading (degrees):

320

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.











Date:

12-14-21

Photo Time:

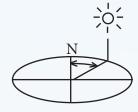
9:30 AM

Visibility:

Poor

Air Quality: Good

Sun Azimuth:



136.73°

Sun Angle:

15.3°

Lighting Angle on Project:

Side Lit

Wind:

5 mph

Temperature (°F):

41°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

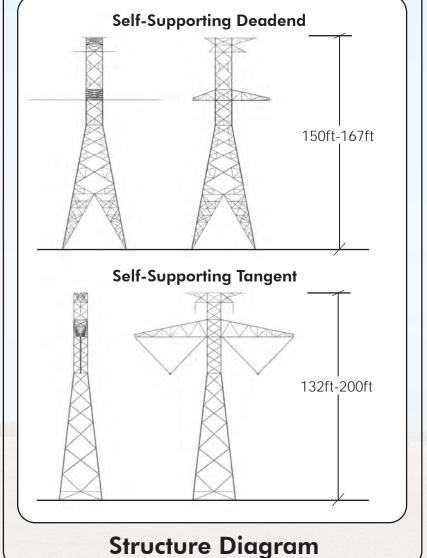




Approximate Distance to Nearest Structure:

4.24 miles

Project Location





KOP 9 - Santa Fe NHT -Santa Fe Ruts

Base Photographic Documentation

Pawnee, Kansas County:

Latitude (o): 38.118

Longitude (°): -99.239

Viewpoint Elevation (feet): 2094

Camera Height (meters): 1.5

Camera Heading (degrees):

315

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.



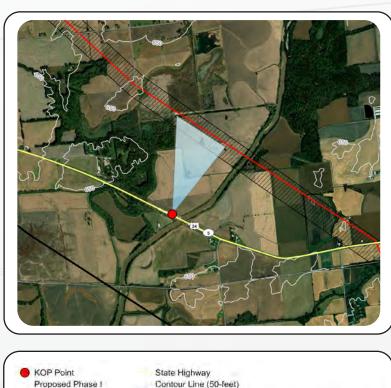


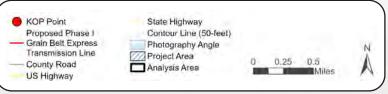




Sun and Weather Date: 12-13-22 Photo Time: Cloudy 8:56 AM Visibility: Poor Air Quality: Good Sun Azimuth: ÷; 124.14° 3.82° Sun Angle: Lighting Angle on Project: Side Lit Wind: 15 mph Temperature (°F): 45°F

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

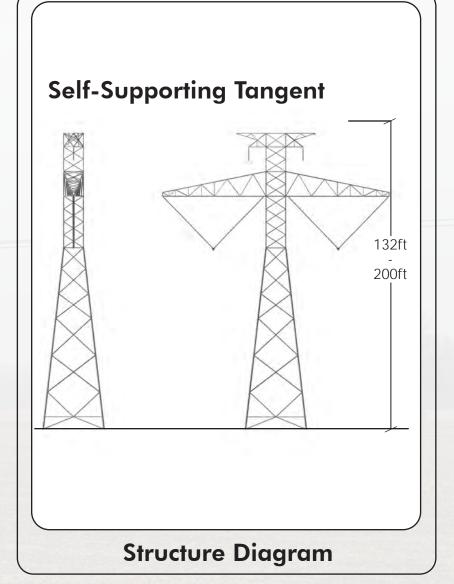




Approximate Distance to Nearest Structure:

0.82 miles

Project Location





KOP 10 - Lewis and Clark
NHT Auto Tour Route Chariton River Access Area

Base Photographic Documentation

County: Chariton, Missouri

Latitude (o): 39.417

Longitude (o): -92.896

Viewpoint Elevation (feet): 651

Camera Height (meters): 1.5

Camera Heading (degrees):

15

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

1

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.



Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.





Cloudy

12-13-22

Date:

Photo Time: **9:15 AM**

Visibility:

Good Poor

Air Quality: Good

Sun Azimuth:



Sun Angle:

6.81°

Lighting Angle on Project:

Side Lit

Wind:

20 mph

Temperature (°F):

47°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT



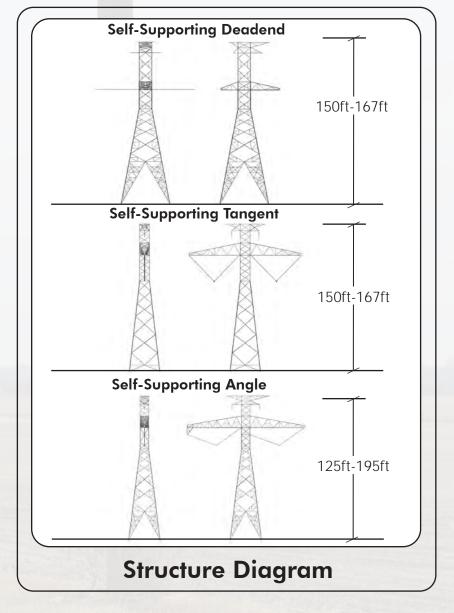
KOP Point
 Proposed Phase I
 Grain Belt Express
 Transmission Line
 County Road
 US Highway

 State Highway
 Contour Line (50-feet)
 Photography Angle
 Project Area
 O 0.25 0.5
 Milles

Approximate Distance to Nearest Structure:

0.5 miles

Project Location





KOP 11 - Lewis and Clark NHT Auto Tour Route - U.S. Highway 24

Base Photographic Documentation

County: Chariton, Missouri

Latitude (o): **39.41**

Longitude (o): -92.857

Viewpoint Elevation (feet): 665

Camera Height (meters): 1.5

Camera Heading (degrees):

280

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

1

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.







Sunny

Date: 10-25-22

Photo Time:

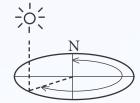
3:36 PM

Visibility:



Air Quality: Good

Sun Azimuth:



223.15°

Sun Angle:

27.35°

Lighting Angle on Project:

Side Lit

Wind:

13 mph

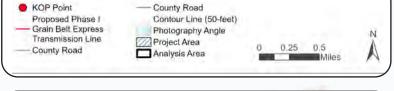
Temperature (°F):

55°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

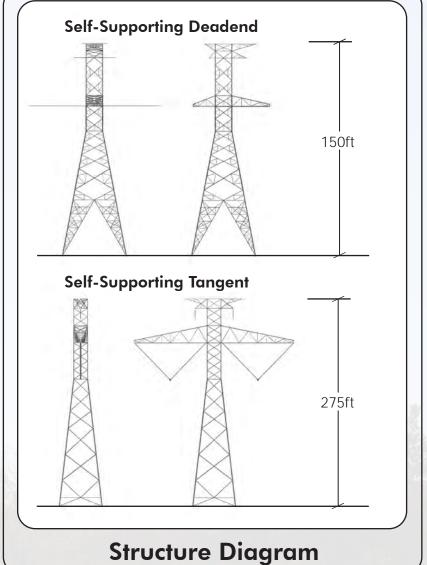




Approximate Distance to Nearest Structure:

0.5 miles

Project Location







KOP 12 - Jentell Brees Missouri River Access

Base Photographic Documentation

County: Buchanan, Missouri

Latitude (o): 39.691

Longitude (°): -94.967

Viewpoint Elevation (feet): 800

Camera Height (meters): 1.5

Camera Heading (degrees):

230

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

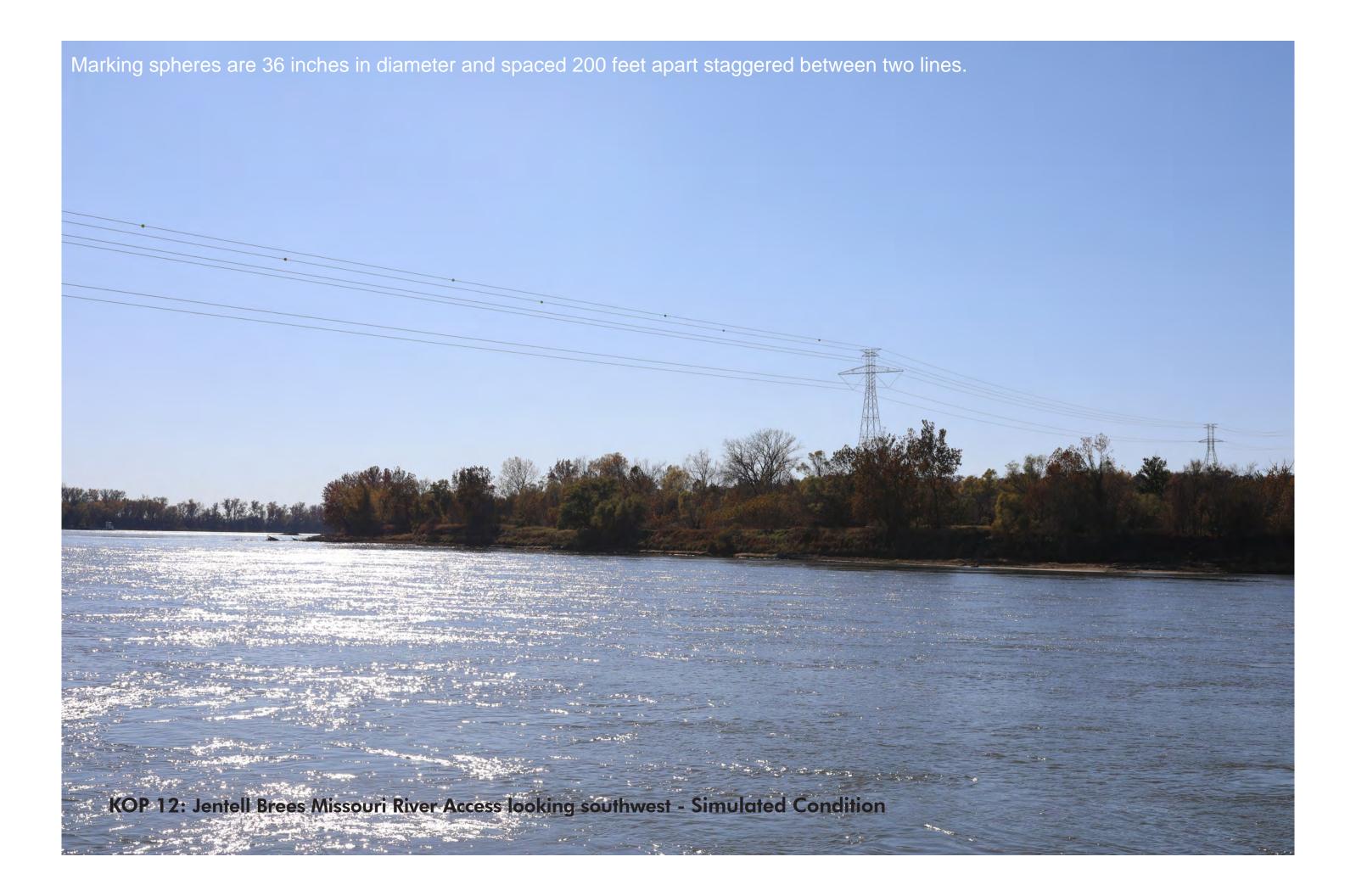
Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.







Sun and Weather Date: 10-27-22 Photo Time: 2:45 PM Visibility: Good Poor Air Quality: Good Sun Azimuth:

Sun Angle: **32.66**°

Lighting Angle on Project:

Side Lit

210.16°

Wind:

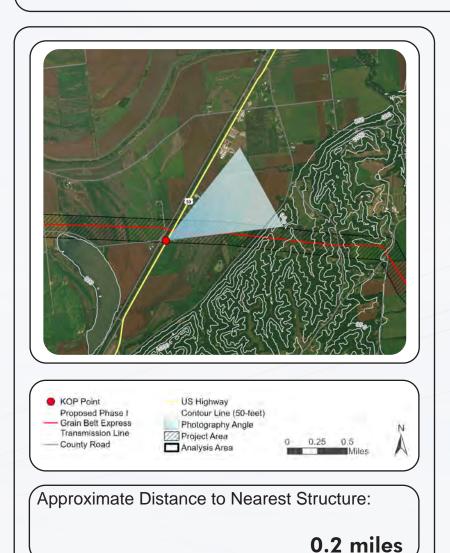
14 mph

Temperature (°F):

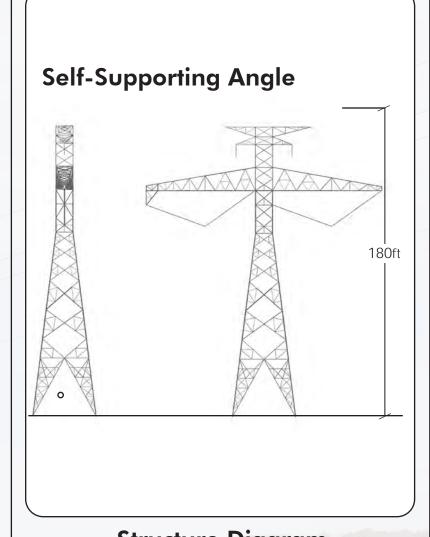
64°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT



Project Location



Structure Diagram



KOP 13 - Lewis and Clark NHT Auto Tour Route - U.S. Highway 59 (SW Bluff Woods Road)

Base Photographic Documentation

County: Buchanan, Missouri

Latitude (o): **39.675**

Longitude (o): -94.908

Viewpoint Elevation (feet): 812

Camera Height (meters): 1.5

Camera Heading (degrees):

70

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

1

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.







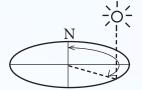


Sunny

Visibility:

Air Quality: Good

Sun Azimuth:



171.01°

Poor

Date: 10-24-22

Photo Time:

11:47 AM

Sun Angle:

38.83°

Lighting Angle on Project:

Side Lit

Wind:

7 mph

Temperature (°F):

50°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

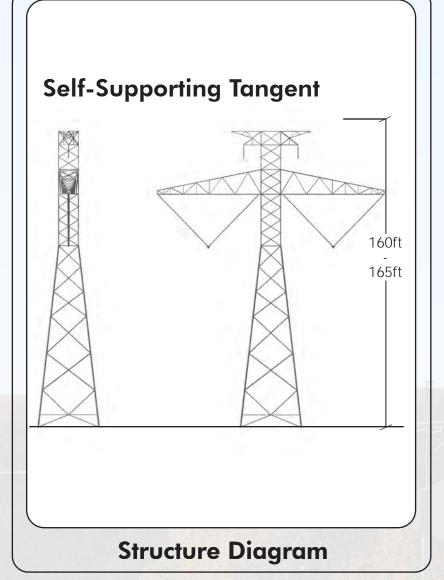




Approximate Distance to Nearest Structure:

0.48 miles

Project Location





KOP 14 - U.S. Highway 77

Base Photographic Documentation

Marshall, Kansas County:

Latitude (o): 39.816

Longitude (°): -96.645

Viewpoint Elevation (feet): 1240

Camera Height (meters): 1.5

Camera Heading (degrees):

180

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.









Sunny

Photo Time: 2:38 PM

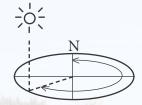
Date: **10-24-22**

Visibility:

Good Poor

Air Quality: Good

Sun Azimuth:



220.8°

Sun Angle:

29.35

Lighting Angle on Project:

Side Lit

Wind:

5 mph

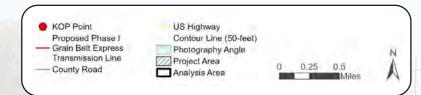
Temperature (°F):

55°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT

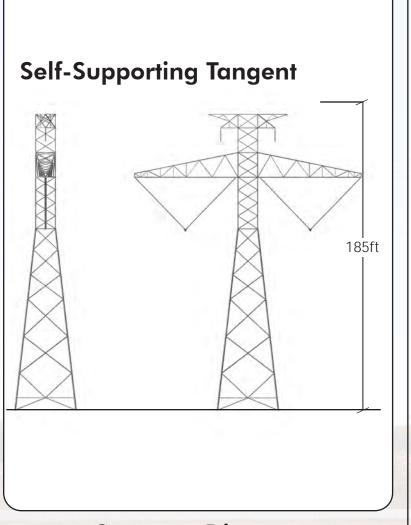




Approximate Distance to Nearest Structure:

0.31

Project Location



Structure Diagram



KOP 15 - Union Road

Base Photographic Documentation

County: Cloud, Kansas

Latitude (o): **39.61**

Longitude (o): -97.64

Viewpoint Elevation (feet): 1382

Camera Height (meters): 1.5

Camera Heading (degrees):

190

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

1

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.



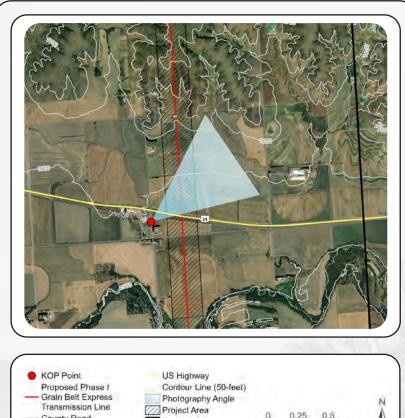


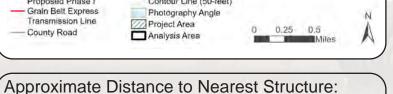


Sun and Weather Date: 10-25-22 Photo Time: Cloudy 9:53 AM Visibility: Poor Air Quality: Good Sun Azimuth: 139.35° 29.09° Sun Angle: Lighting Angle on Project: **Ambient Lit** Wind: 14 mph Temperature (°F): 50°F

Simulation was prepared using information provided by client. Locations, colors, and heights may vary based on final engineering and design.

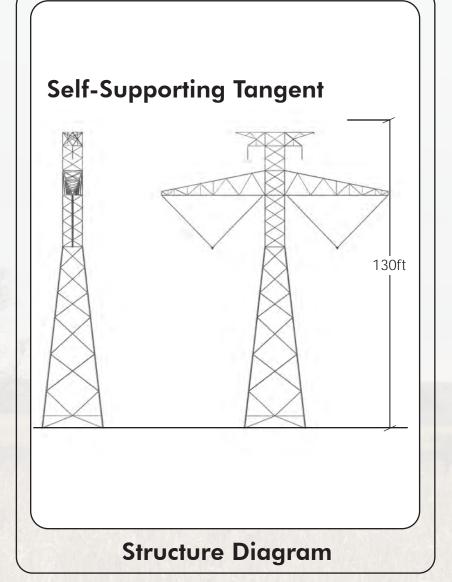
GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT





Project Location

0.28 miles





KOP 16 - County 671 Avenue

Base Photographic Documentation

County: Osborne, Kansas

Latitude (o): **39.454**

Longitude (o): -98.787

Viewpoint Elevation (feet): 1596

Camera Height (meters): 1.5

Camera Heading (degrees):

65

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

1

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.

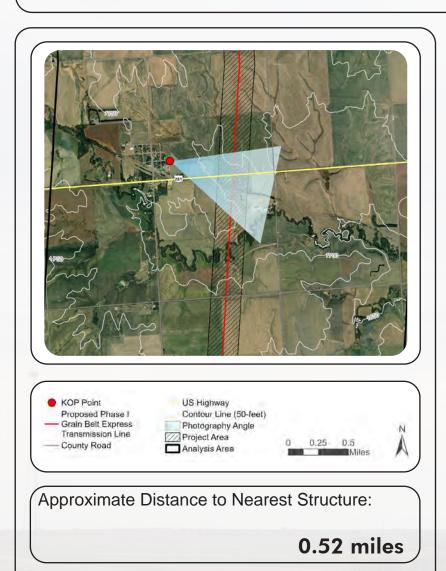




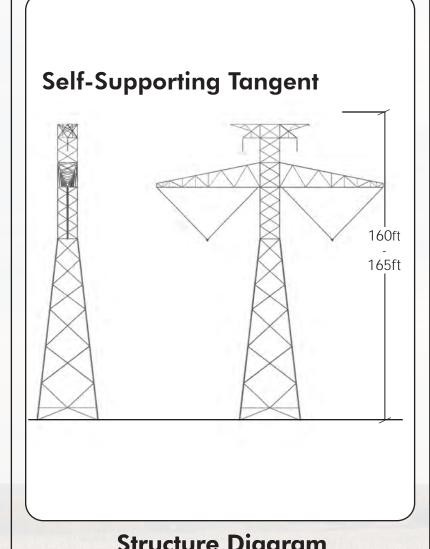


Sun and Weather Date: 10-25-22 Photo Time: Cloudy 11:07 AM Visibility: Poor Air Quality: Good Sun Azimuth: 159.32° 36.56° Sun Angle: Lighting Angle on Project: **Ambient Lit** Wind: 14 mph Temperature (°F): 50°F

GRAIN BELT EXPRESS TRANSMISSION LINE PROJECT



Project Location



Structure Diagram



KOP 17 - Corner of 2nd Street and Ola Avenue

Base Photographic Documentation

Russell, Kansas County:

Latitude (o): 39.12

Longitude (°): -98.796

Viewpoint Elevation (feet): 1728

Camera Height (meters): 1.5

Camera Heading (degrees):

95

Camera Make & Model:

Canon EOS 5D Mark IV Camera Sensor Size (mm):

36 x 24 Full Frame

Crop Factor:

Lens Make & Model:

AF-P Nikkor

Lens Focal Length (mm):

50

Image Size (pixels):

6720 x 4480

Single frame simulation approximates 50mm full frame equivalent.

Viewing Instructions: Printed at 100% the resulting simulation is 16 inches wide by 10 inches high. At this size and focal length, the simulation should be viewed at arms length (24 inches). If viewed on a computer monitor, scale should be 100%.



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