



DOE/EIS-0486

Draft

PLAINS & EASTERN CLEAN LINE TRANSMISSION PROJECT
ENVIRONMENTAL IMPACT STATEMENT

Volume III of V

U.S. DEPARTMENT OF ENERGY
Office of Electricity Delivery and Energy Reliability
Washington, DC

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Appendix A Introduction and Table of Contents

This appendix contains the 11-inch by 17-inch formatted figures referenced in the text of the EIS.

Some of the descriptors of the symbology provided on these figures are provided as acronyms or abbreviations; please reference the List of Acronyms in the Table of Contents.

In some cases multiple project components (e.g., AC collection system routes, HVDC alternative routes, and the Applicant Proposed Route) overlap and may not always be visible on the maps.

Chapter 1

Figures in this chapter provide a detailed look at the location of Project features relative to topography and aerial imagery. The Aerial Imagery maps offer the most detailed look at the location of the proposed Project features by providing a large-scale depiction (i.e., show a small area on the ground at a high level of detail) and include locational information such as roads, waterways, county and municipal boundaries, and township/range/section overlaid on recent aerial imagery.

Figure 1.0-1: Topographic Maps

Figure 1.0-2: Aerial Maps

Chapter 2

Figures in this chapter include maps that provide an overview of the location of proposed Project features, depict the typical arrangement of converter station equipment and illustrate transmission structure types.

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Figure 2.1-9: 345kV Lattice Single Circuit Guyed Pole Deadend and Deadend

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Figure 2.1-11: 500kV Lattice Deadend and V-string

Figure 2.1-12: 500kV 3-Pole Guyed Deadend and Deadend

Figure 2.1-13: 500kV 3-Pole Guyed Running Angle and Running Angle

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Figure 2.1-18: HVDC ROW Limits

Figure 2.1-19: 600kV Lattice Deadend and Running Angle

Figure 2.1-20: 600kV Monopole Deadend and Running Angle

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Figure 2.1-22: 600kV Guyed Mast Tubular Tangent and Guyed V-tube Tangent

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Chapter 3

Chapter 3 figures include maps depicting the spatial data that DOE used to describe the affected environment and identify potential impacts associated with the Project features such as the HVDC Applicant Proposed Route and HVDC alternative routes, converter station siting areas, AC interconnection areas, wind development zones, and the AC collection system.

Data are mapped at varying scales and extents in the Chapter 3, based on the spatial distribution of the data and the appropriate scale to represent the level of accuracy of the data. The extents to which the data is mapped are dependent upon data availability and requirements to adequately depict the affected environment and potential impacts. Data are generally mapped beyond the Region of Influence (ROI) to provide a larger regional context; data mapped beyond the ROI may not be described in Chapter 3.

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Figure 3.5-1a through Figure 3.5-1f: Low-income Populations

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Figure 3.6-3: Landslide Incidence & Susceptibility

Figure 3.6-4: Karst Areas

Figure 3.6-5: Liquefaction Susceptibility

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Figure 3.17-1a through Figure 3.17-1f: Level III Ecoregions

Figure 3.18-1: Overall Visual Assessment Process

Figure 3.18-2: Visual Resources Inventory Process

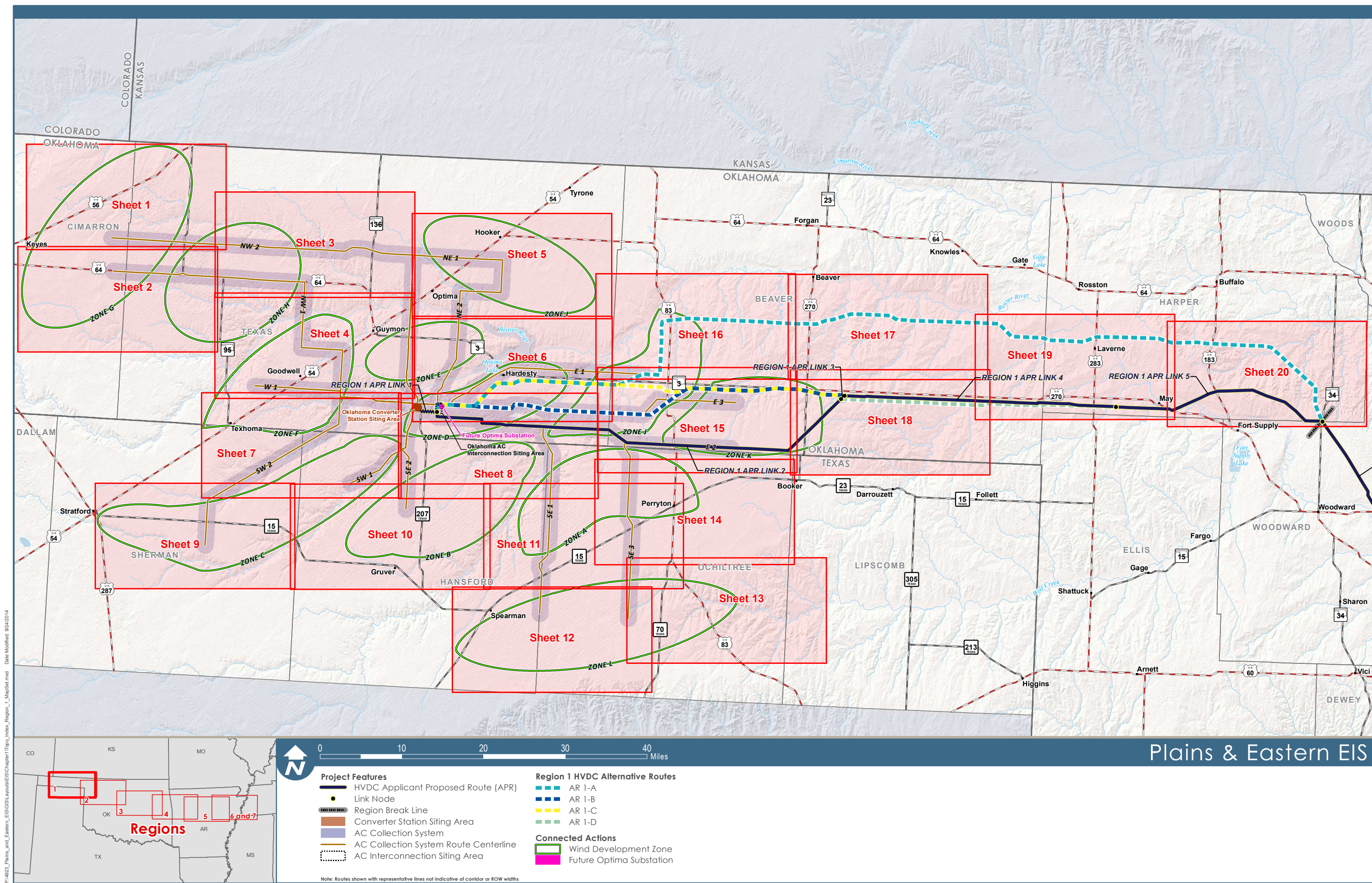
Figure 3.18-3a through Figure 3.18-3f: Landscape Category/Key Observation Points

Figure 3.18-4: Visual Resources Impact Assessment Process

Chapter 4

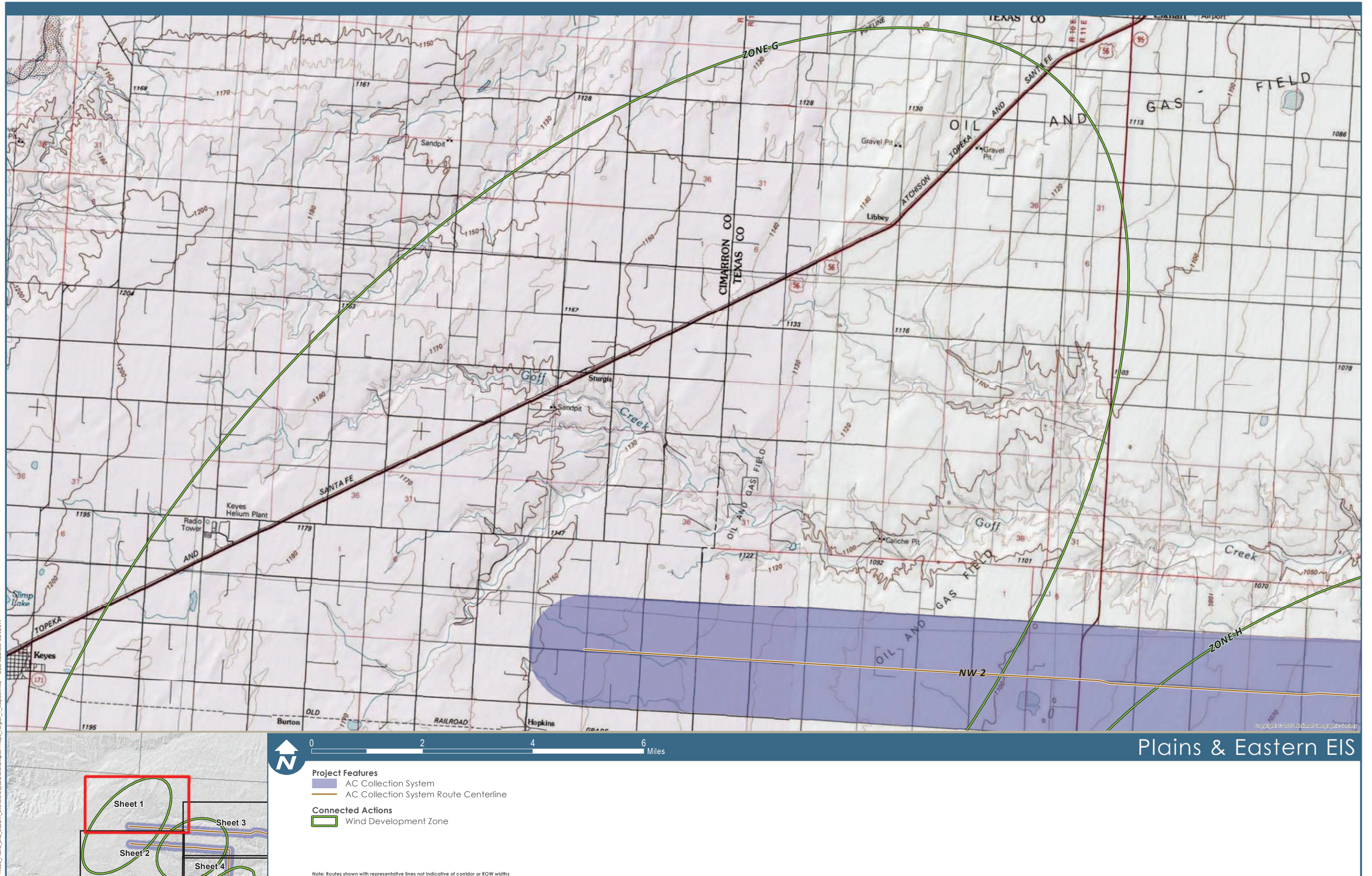
Chapter 4 figures depict the projects that DOE analyzed for cumulative effects at a scale similar to the Chapter 3 figures.

Figure 4.2-1a through Figure 4.2-1f: Present and Reasonably Foreseeable Future Actions



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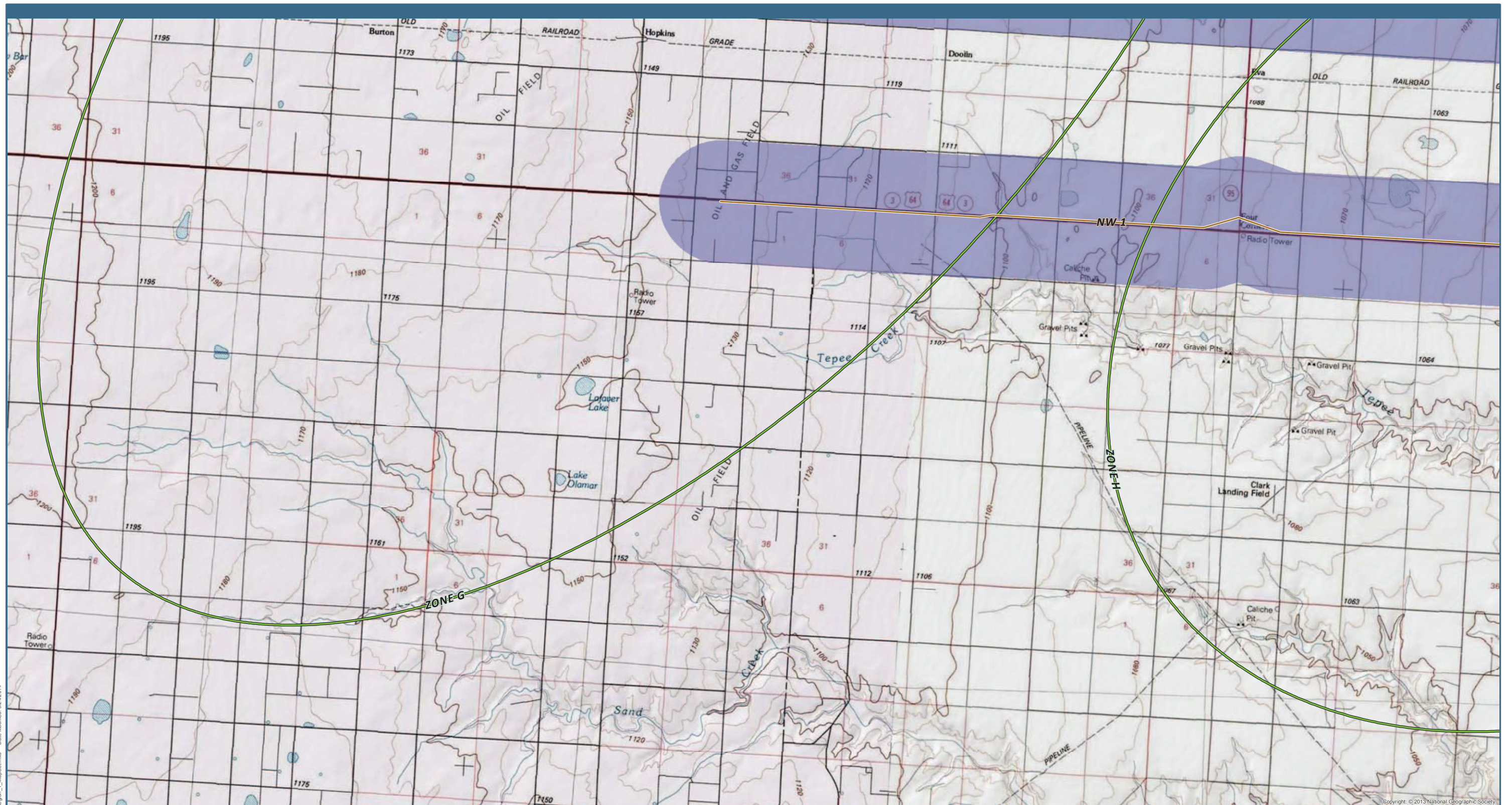
Figure 1.0-1: Topographic Map Index Region 1



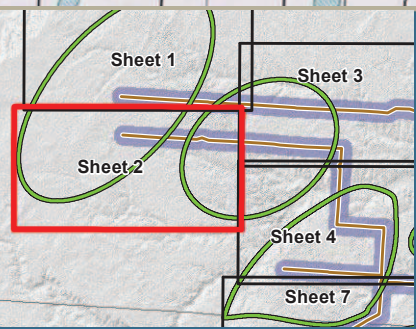
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Data Sources: US Topo Maps (USGS 2014b)

Figure 1.0-1: Topographic Map Region 1, Sheet 1



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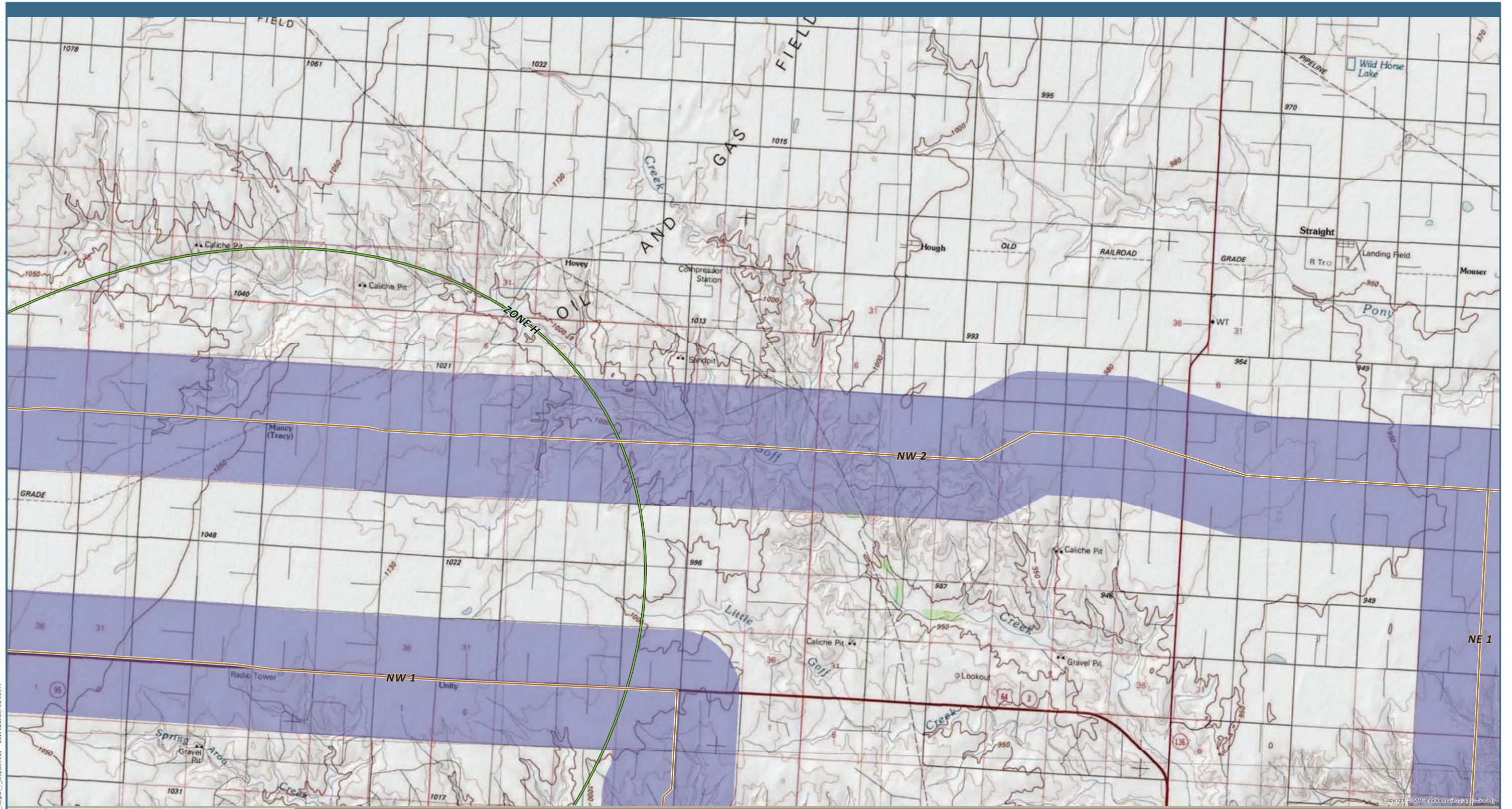


- Project Features**
- AC Collection System
 - AC Collection System Route Centerline
- Connected Actions**
- Wind Development Zone

Note: Routes shown with representative lines not indicative of corridor or ROW widths

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Figure 1.0-1: Topographic Map Region 1, Sheet 2



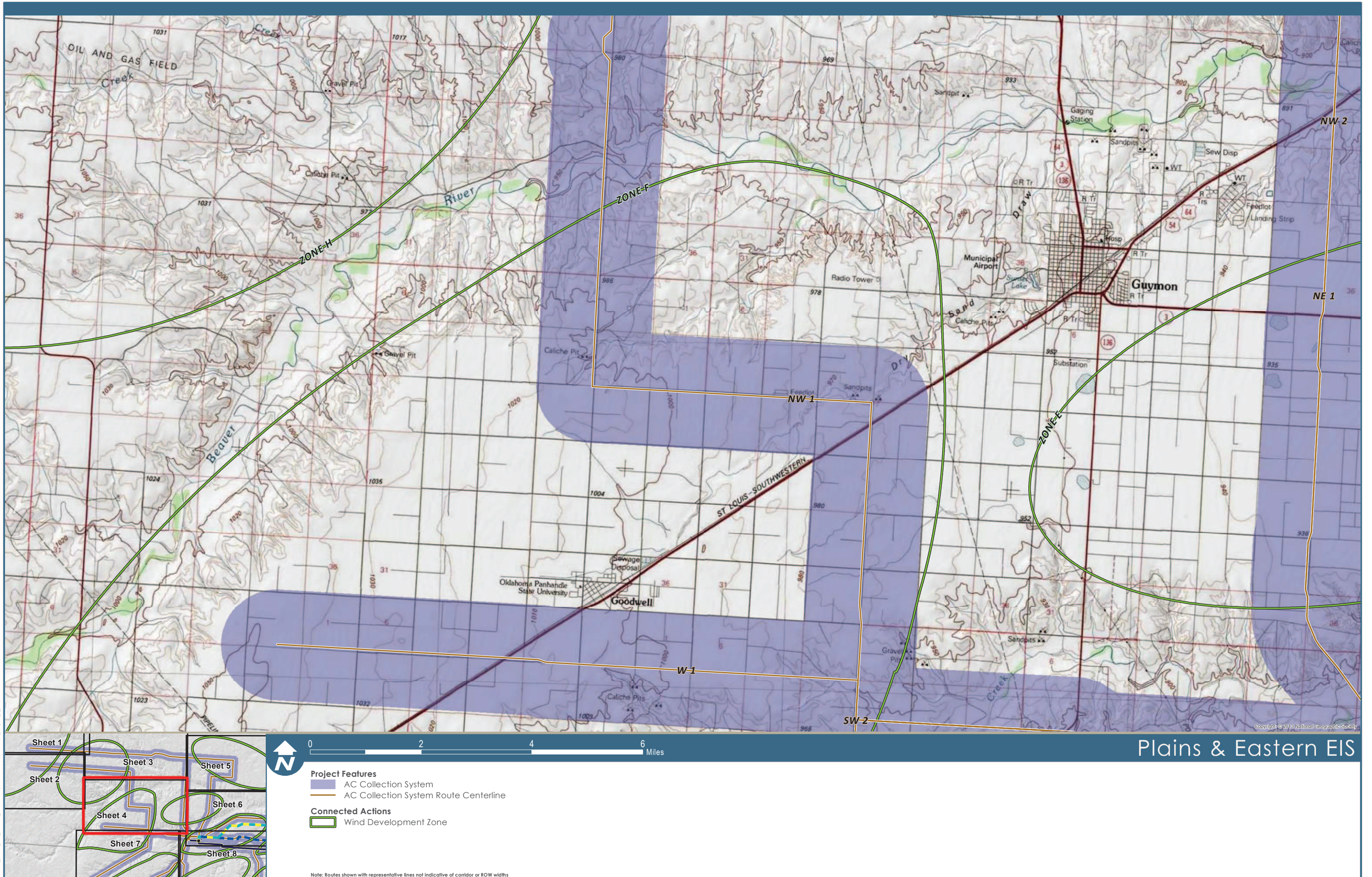
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Note: Routes shown with representative lines not indicative of corridor or ROW widths

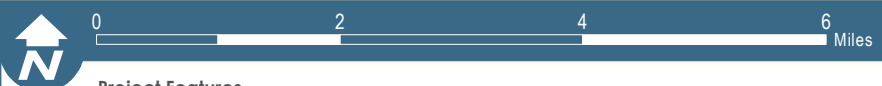
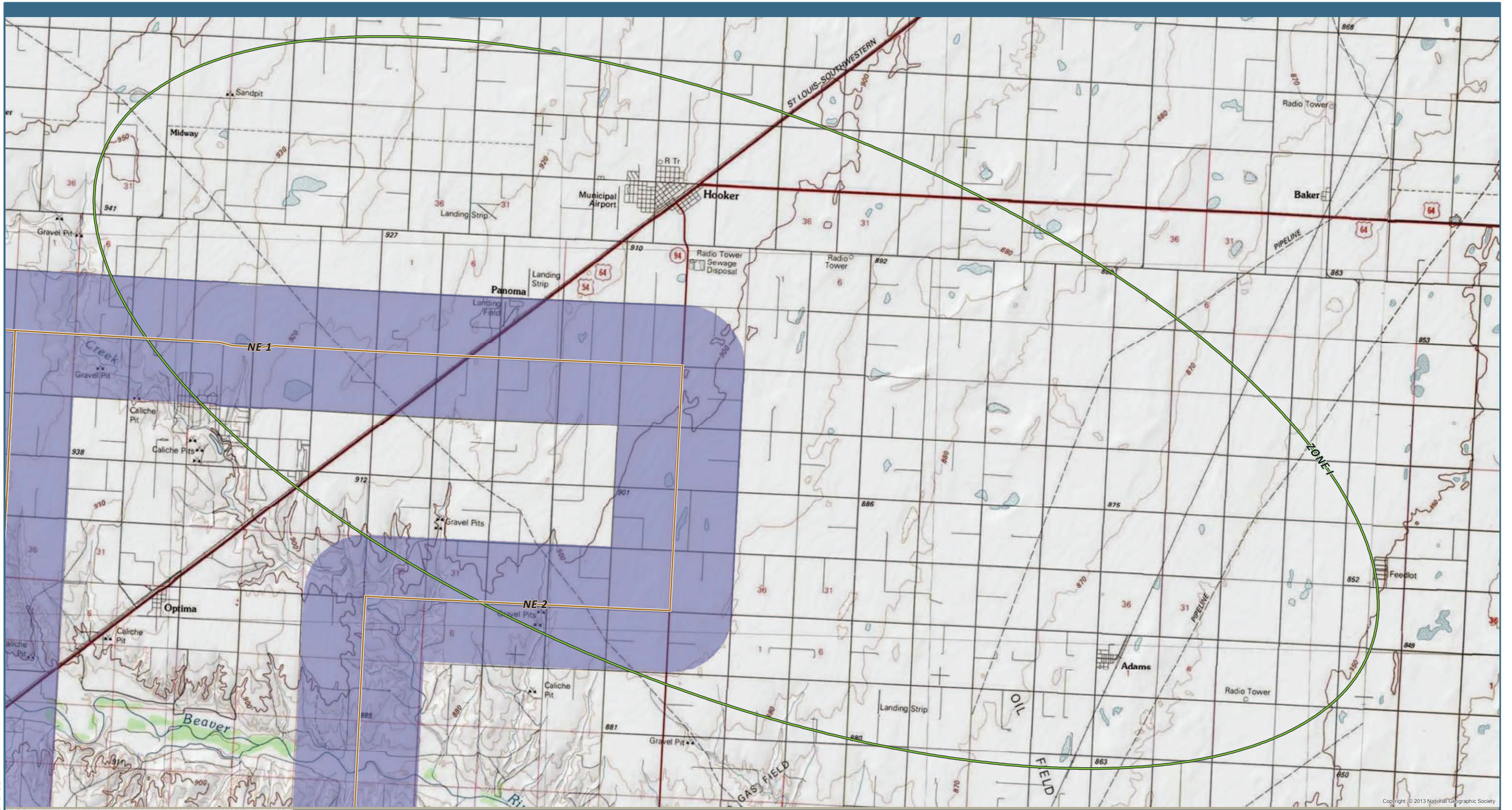
Figure 1.0-1: Topographic Map Region 1, Sheet 3



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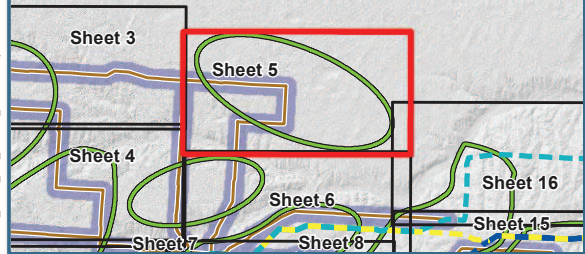
Figure 1.0-1: Topographic Map Region 1, Sheet 4



- Project Features**
- AC Collection System
 - AC Collection System Route Centerline
- Connected Actions**
- Wind Development Zone

Note: Routes shown with representative lines not indicative of corridor or ROW widths

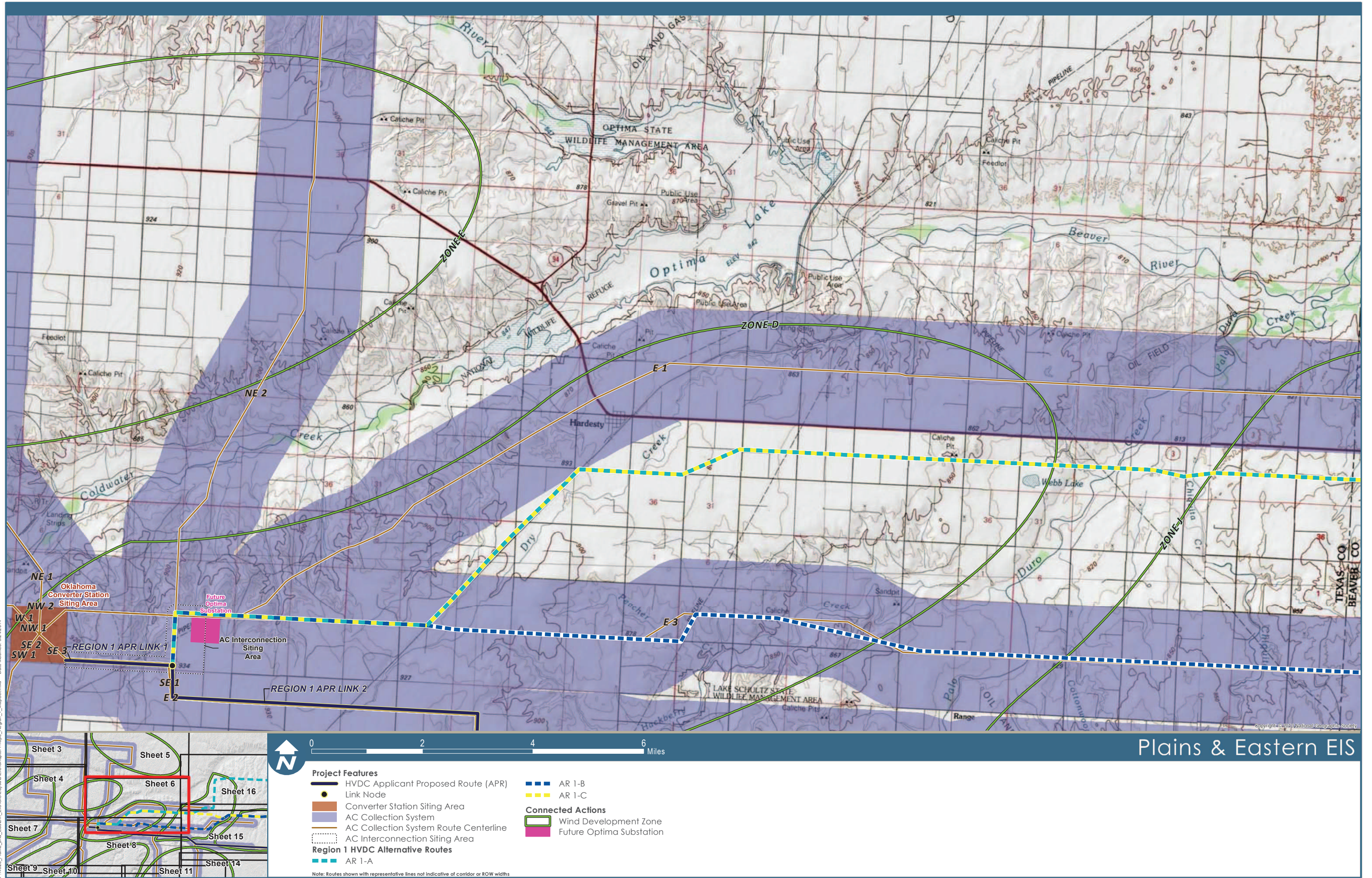
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Data Sources: US Topo Maps (USGS 2014b)

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Figure 1.0-1: Topographic Map Region 1, Sheet 5

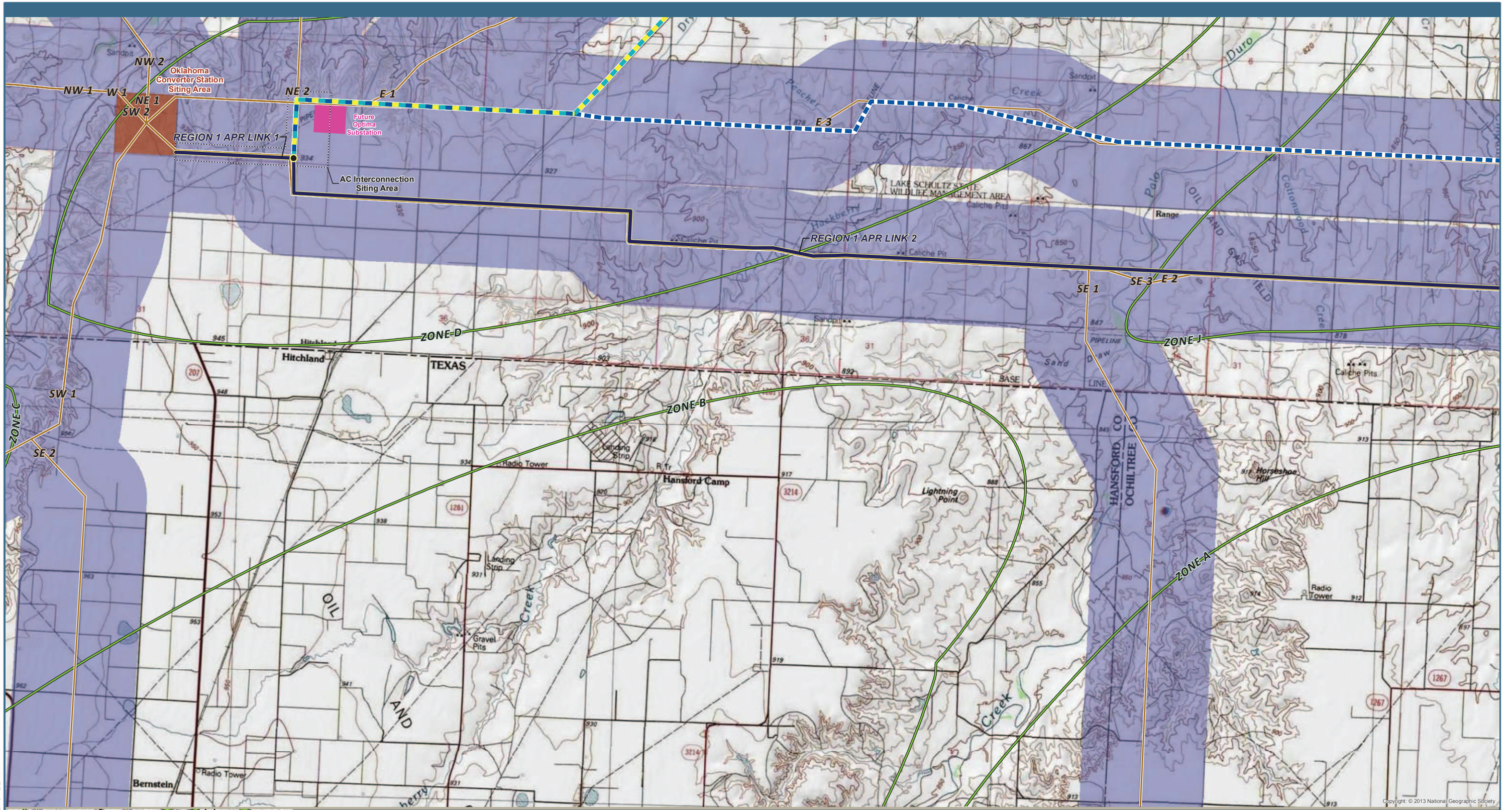


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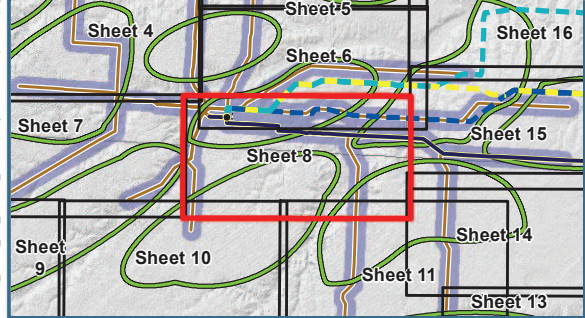
Figure 1.0-1: Topographic Map Region 1, Sheet 6

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Data Sources: US Topo Maps (USGS 2014b)



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0 2 4 6 Miles

Project Features

- HVDC Applicant Proposed Route (APR)
- Link Node
- Converter Station Siting Area
- AC Collection System
- AC Collection System Route Centerline
- AC Interconnection Siting Area

Region 1 HVDC Alternative Routes

- AR 1-A
- - - AR 1-B
- - - AR 1-C

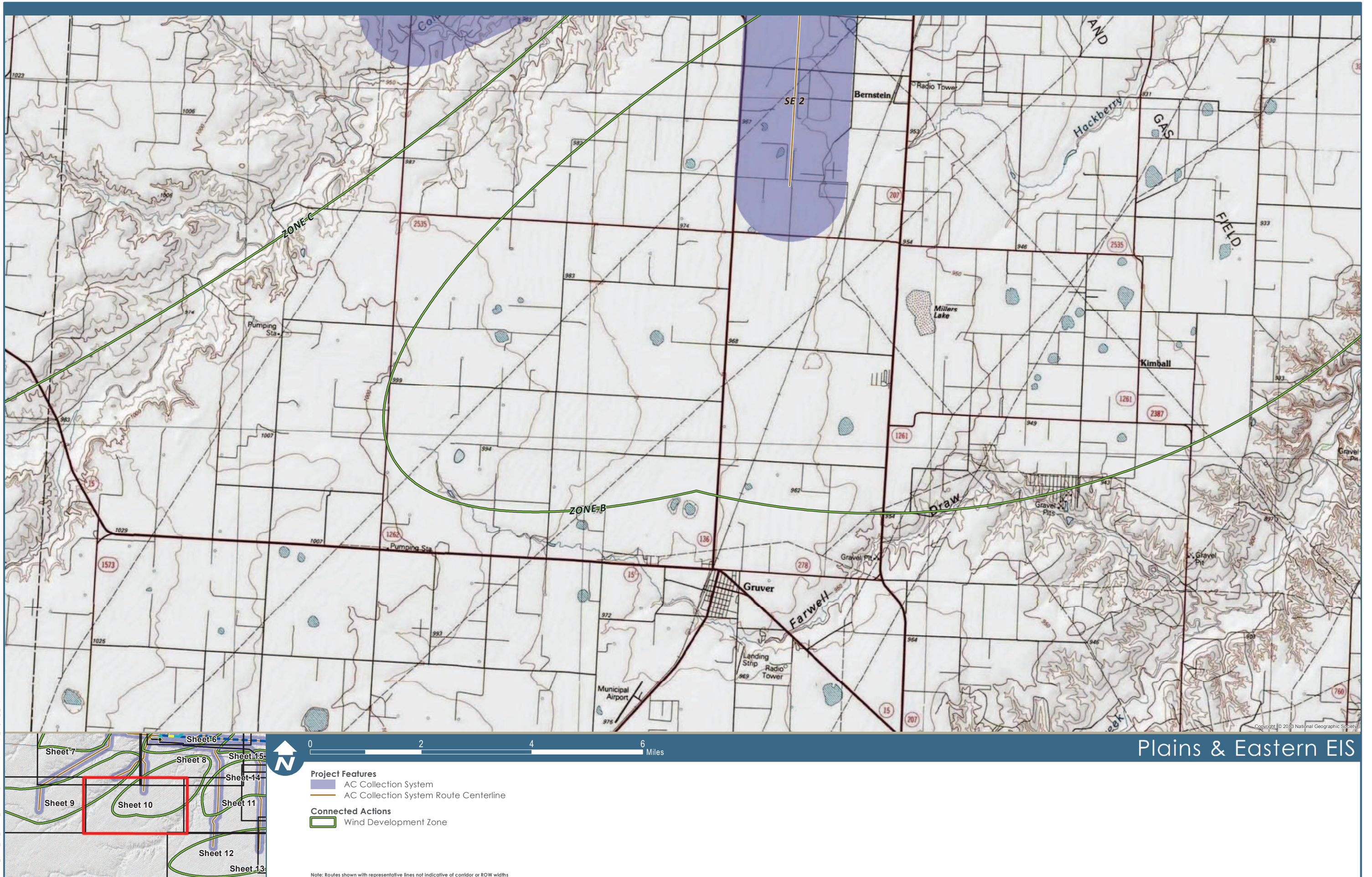
Connected Actions

- Wind Development Zone
- Future Optima Substation

Note: Routes shown with representative lines not indicative of corridor or ROW widths

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Figure 1.0-1: Topographic Map Region 1, Sheet 8

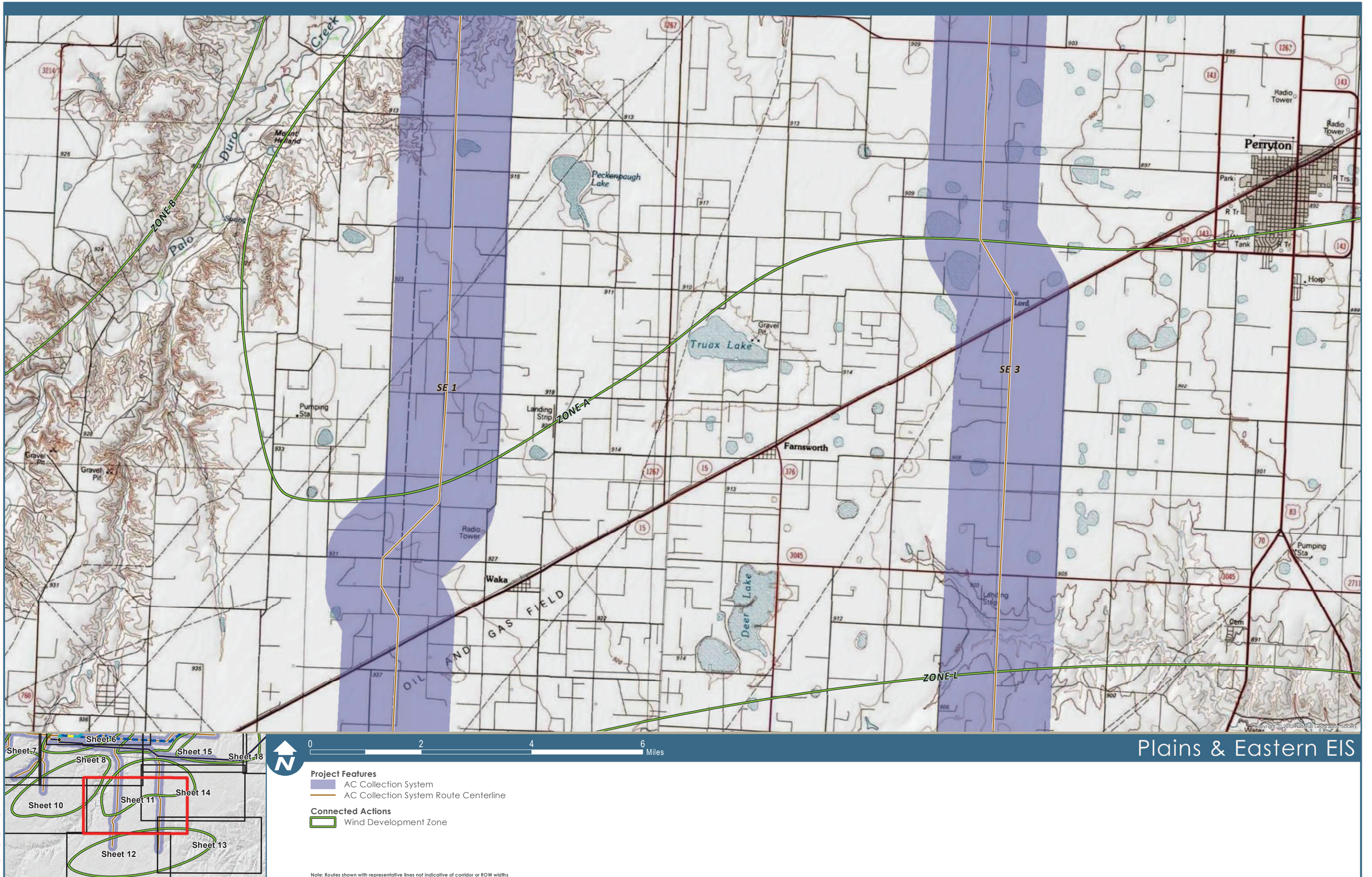


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Data Sources: US Topo Maps (USGS 2014b)

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Figure 1.0-1: Topographic Map Region 1, Sheet 10

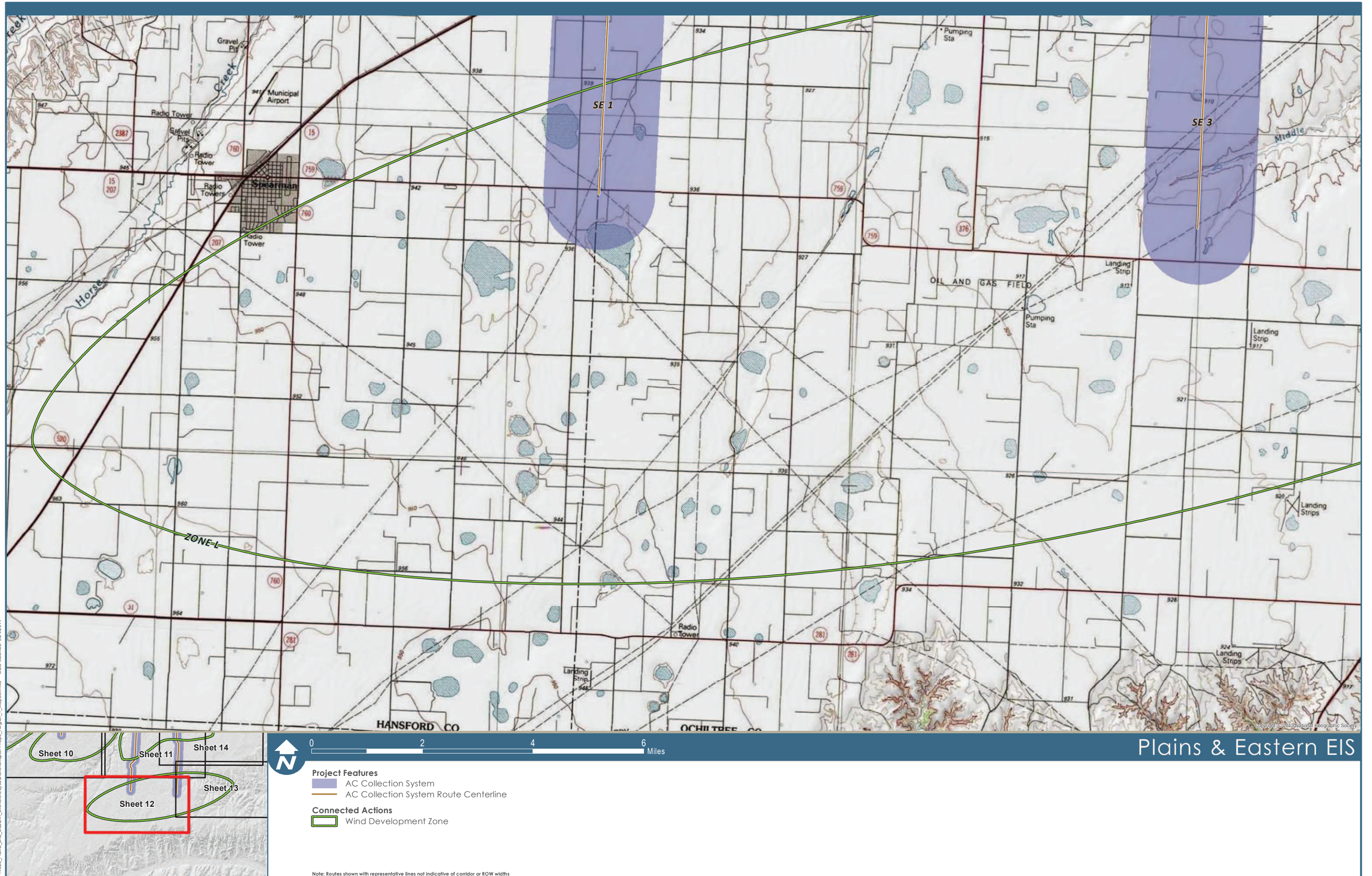


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Data Sources: US Topo Maps (USGS 2014b)

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Figure 1.0-1: Topographic Map Region 1, Sheet 11



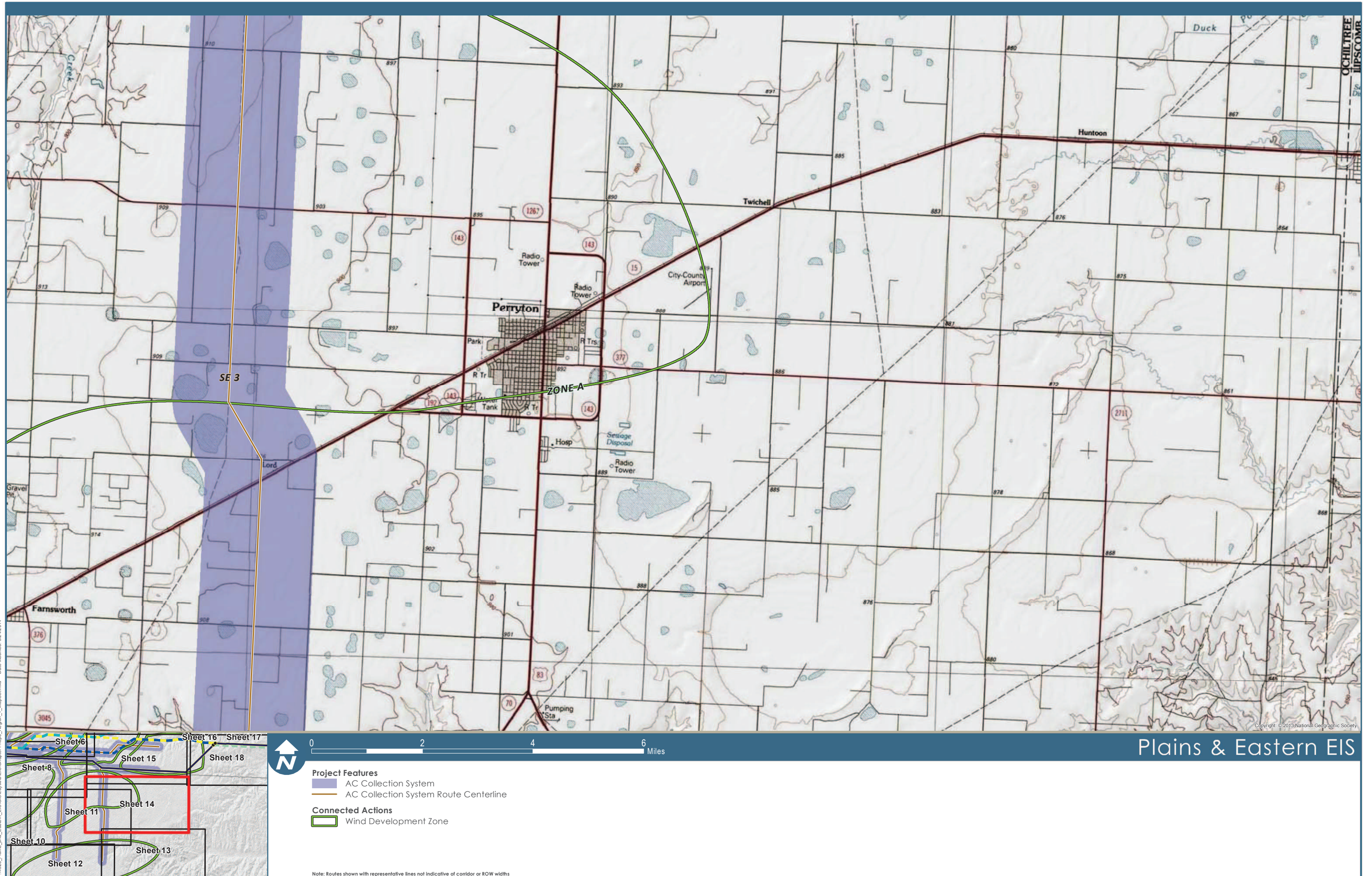
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Data Sources: US Topo Maps (USGS 2014b)

Note: Routes shown with representative lines not indicative of corridor or ROW widths

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Figure 1.0-1: Topographic Map Region 1, Sheet 12

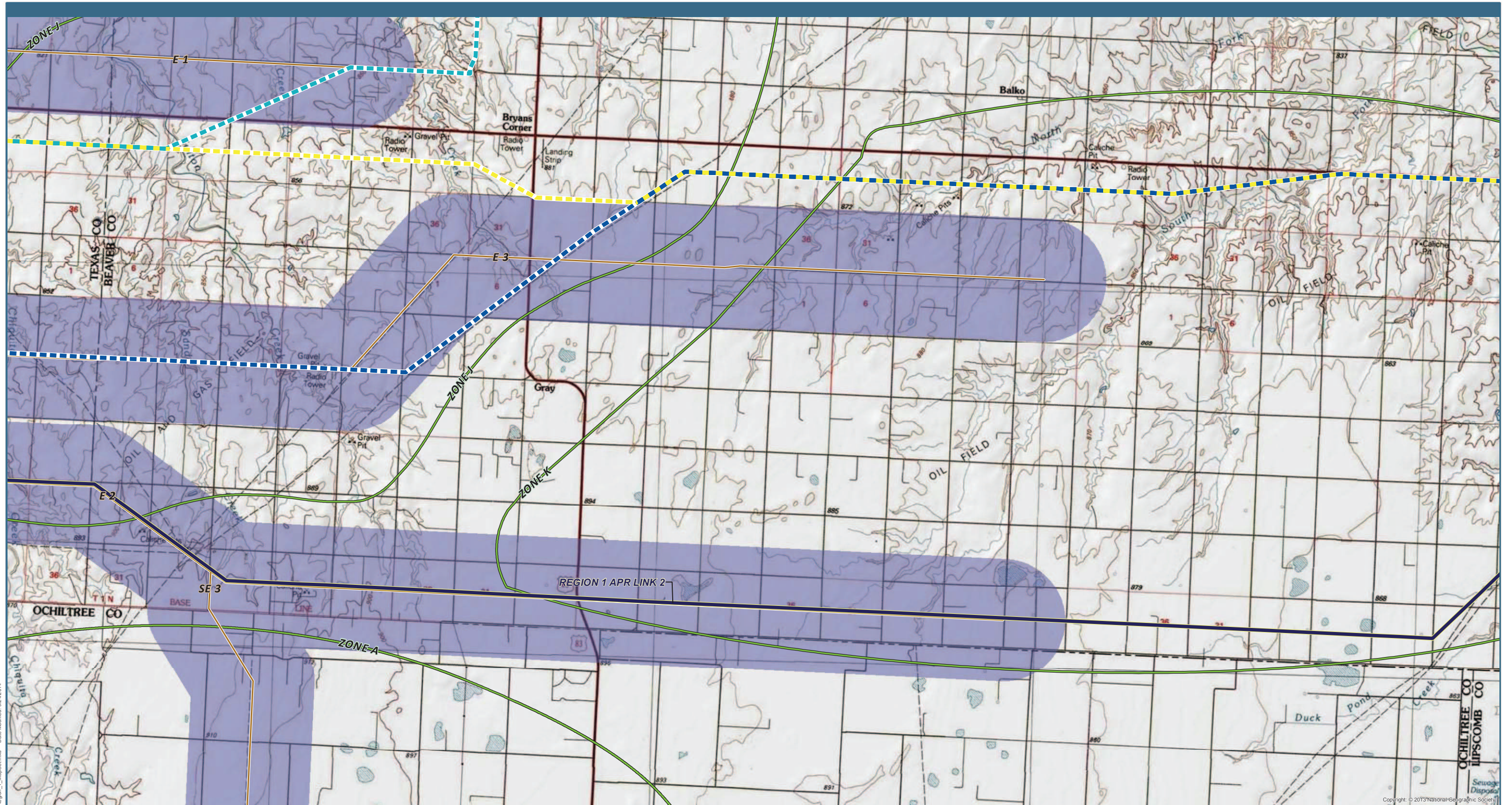


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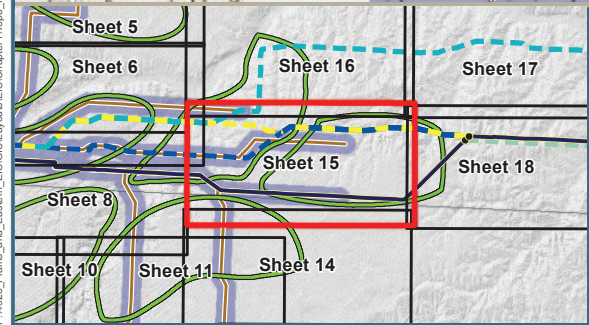
Data Sources: US Topo Maps (USGS 2014b)

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Figure 1.0-1: Topographic Map Region 1, Sheet 14



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0 2 4 6 Miles

Project Features

- HVDC Applicant Proposed Route (APR)
- AC Collection System
- AC Collection System Route Centerline

Region 1 HVDC Alternative Routes

- AR 1-A
- AR 1-B
- AR 1-C

Connected Actions

- Wind Development Zone

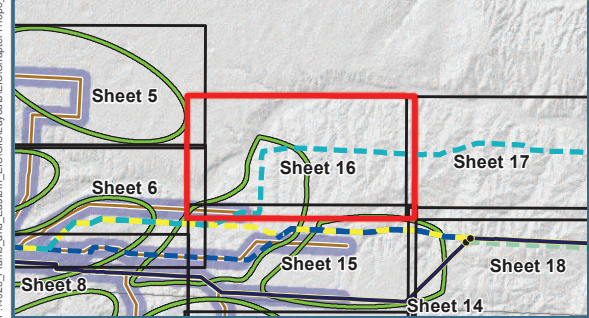
Note: Routes shown with representative lines not indicative of corridor or ROW widths

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Figure 1.0-1: Topographic Map Region 1, Sheet 15



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- Project Features**
- AC Collection System
 - AC Collection System Route Centerline
- Region 1 HVDC Alternative Routes**
- AR 1-A
- Connected Actions**
- Wind Development Zone

Note: Routes shown with representative lines not indicative of corridor or ROW widths

Data Sources: US Topo Maps (USGS 2014b)

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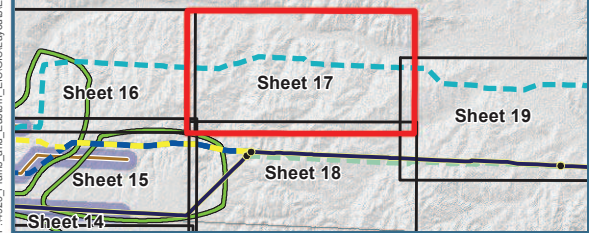
Figure 1.0-1: Topographic Map Region 1, Sheet 16



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- Project Features**
- Region 1 HVDC Alternative Routes
 - AR 1-A
- Connected Actions**
- Wind Development Zone



Note: Routes shown with representative lines not indicative of corridor or ROW widths

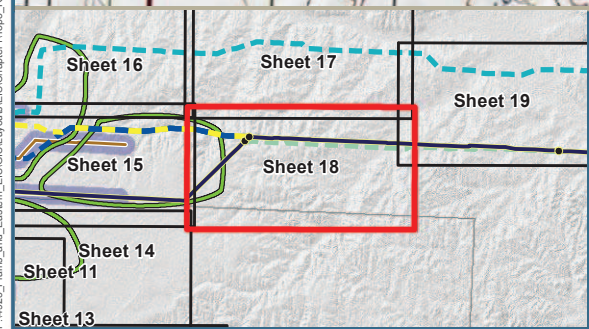
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Data Sources: US Topo Maps (USGS 2014b)

Figure 1.0-1: Topographic Map Region 1, Sheet 17



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0 2 4 6 Miles

Project Features

- HVDC Applicant Proposed Route (APR)
- Link Node

Region 1 HVDC Alternative Routes

- AR 1-B
- AR 1-C
- AR 1-D

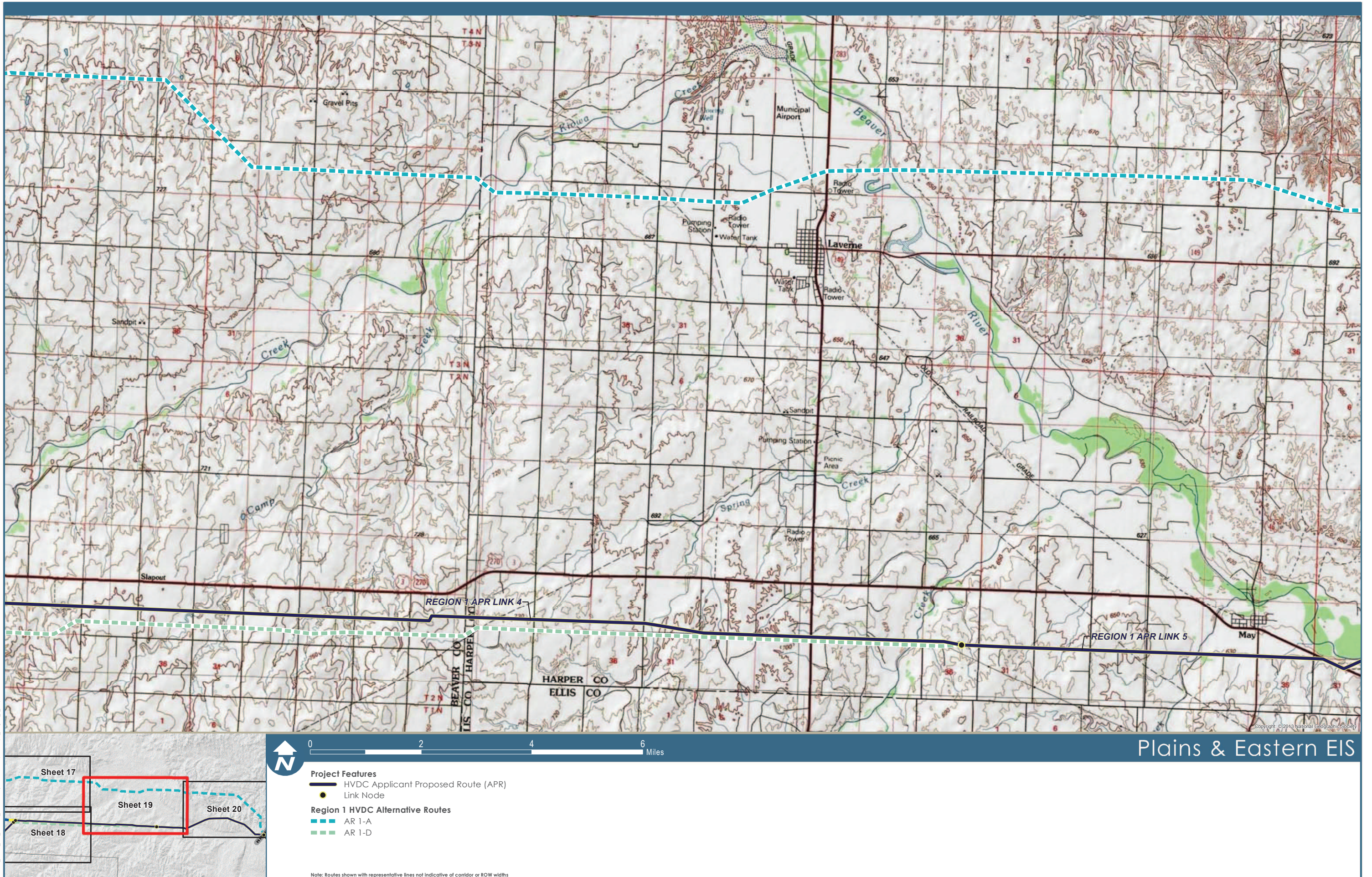
Connected Actions

- Wind Development Zone

Note: Routes shown with representative lines not indicative of corridor or ROW widths

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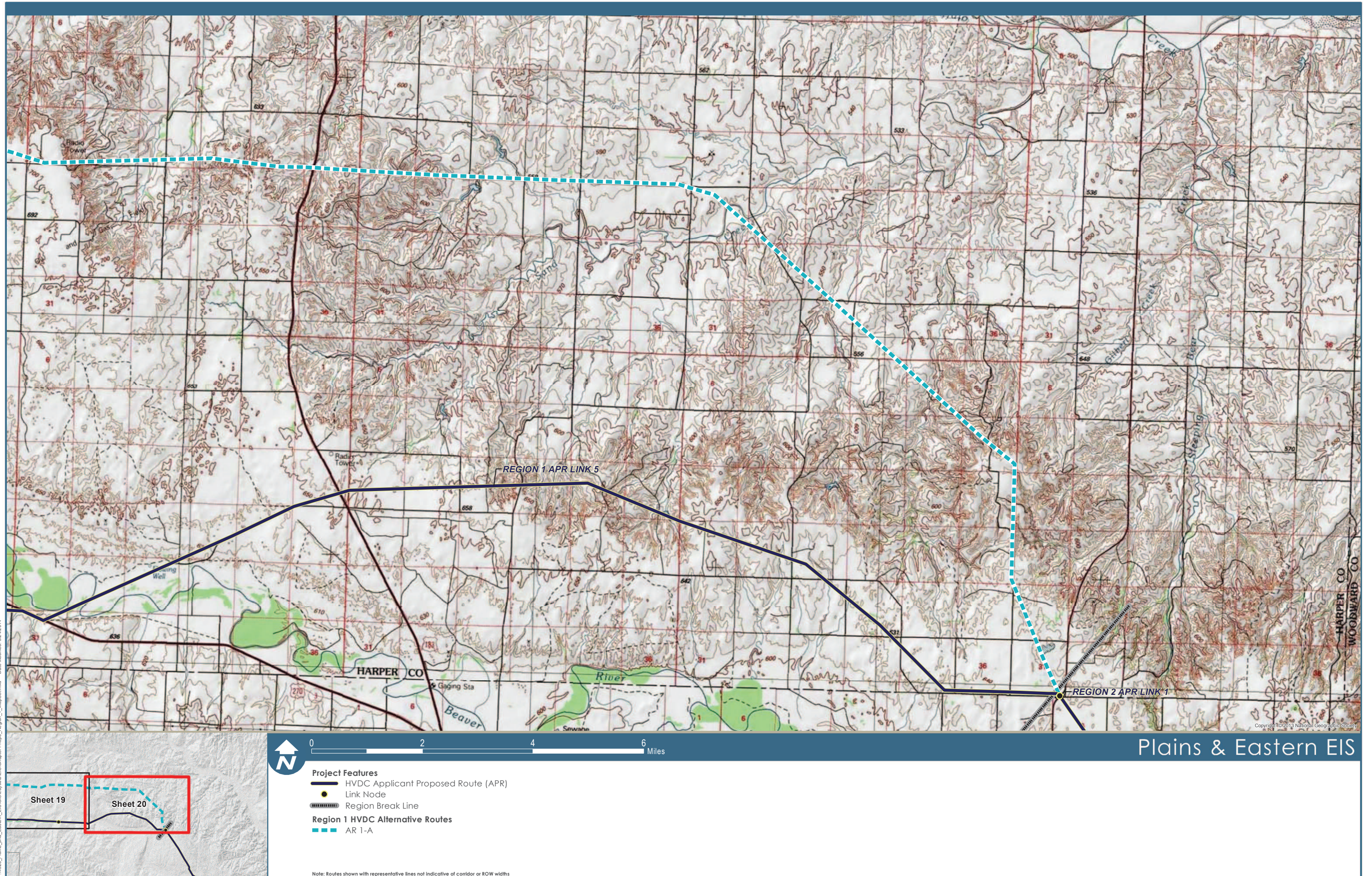
Figure 1.0-1: Topographic Map Region 1, Sheet 18



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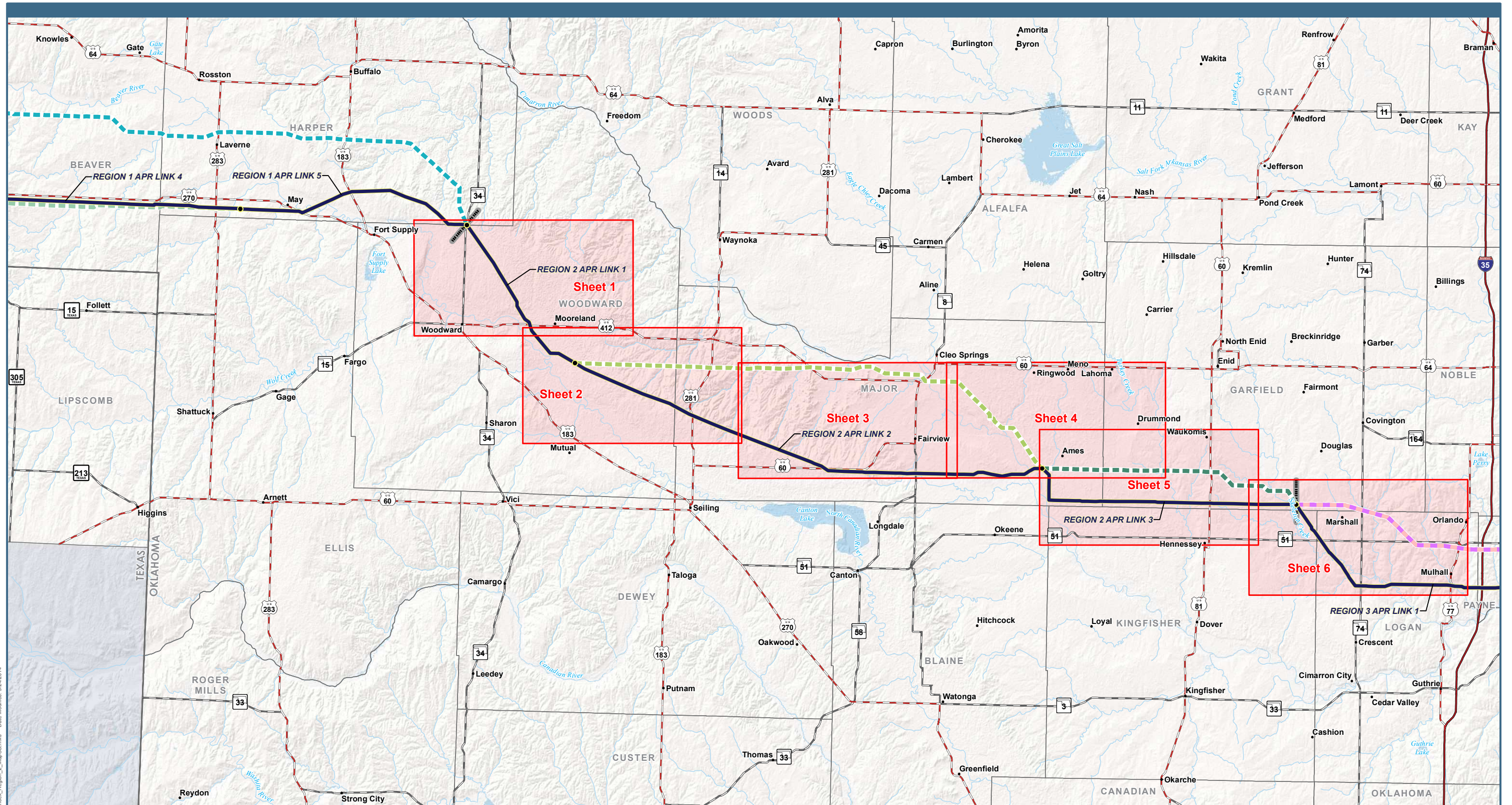
Figure 1.0-1: Topographic Map Region 1, Sheet 19



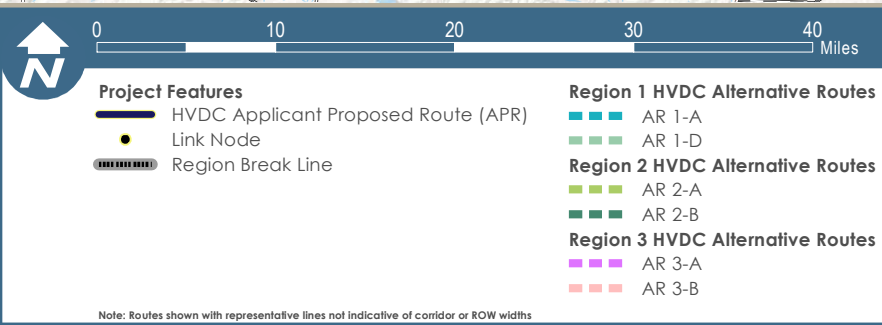
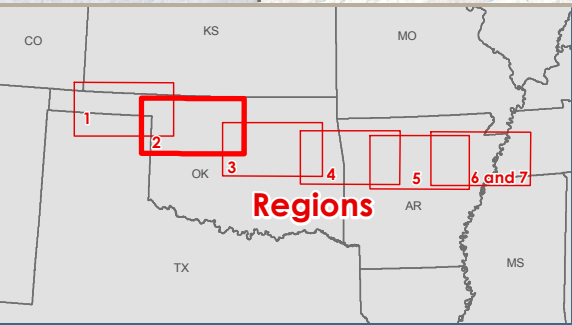
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Figure 1.0-1: Topographic Map Region 1, Sheet 20

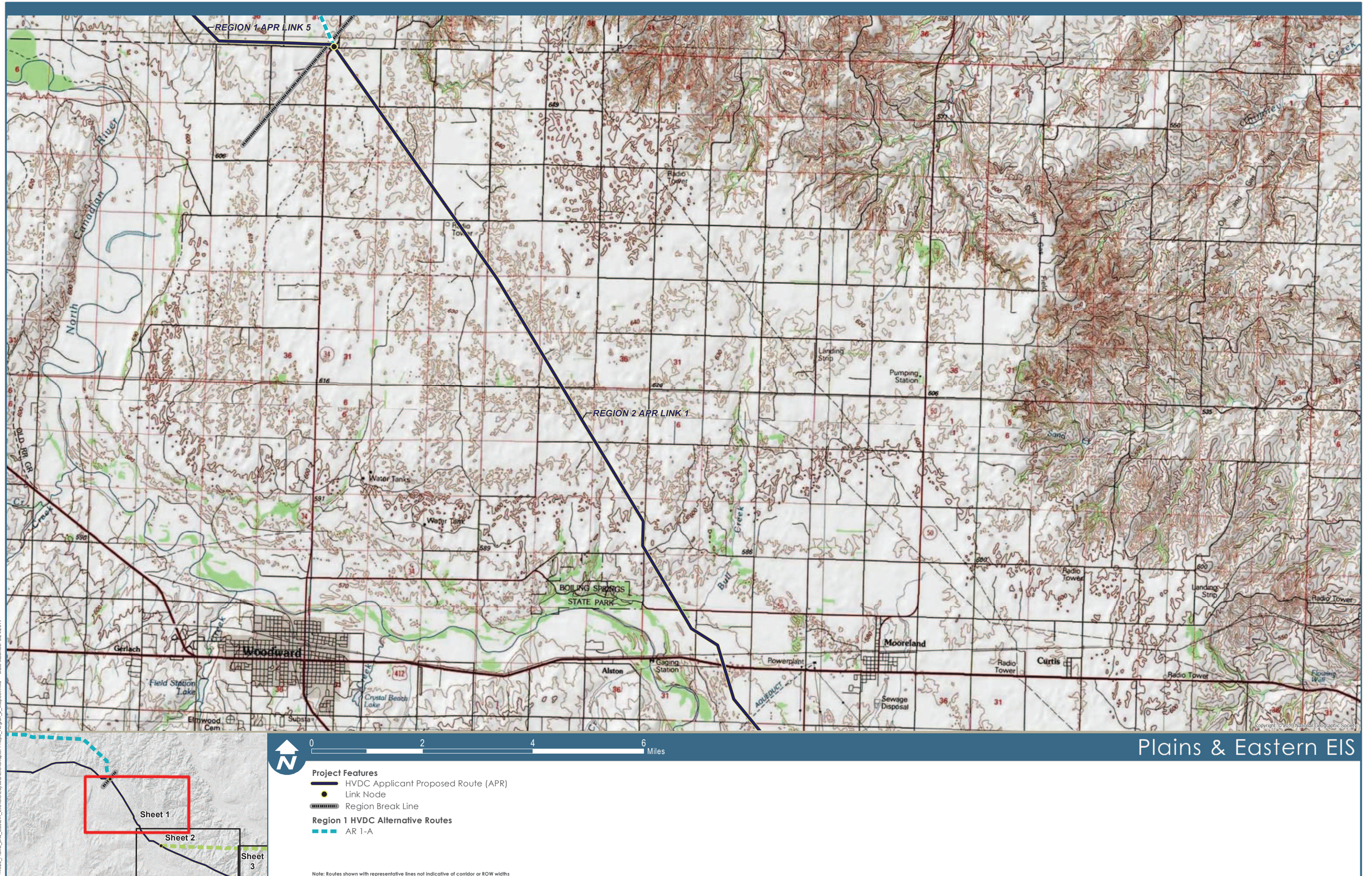


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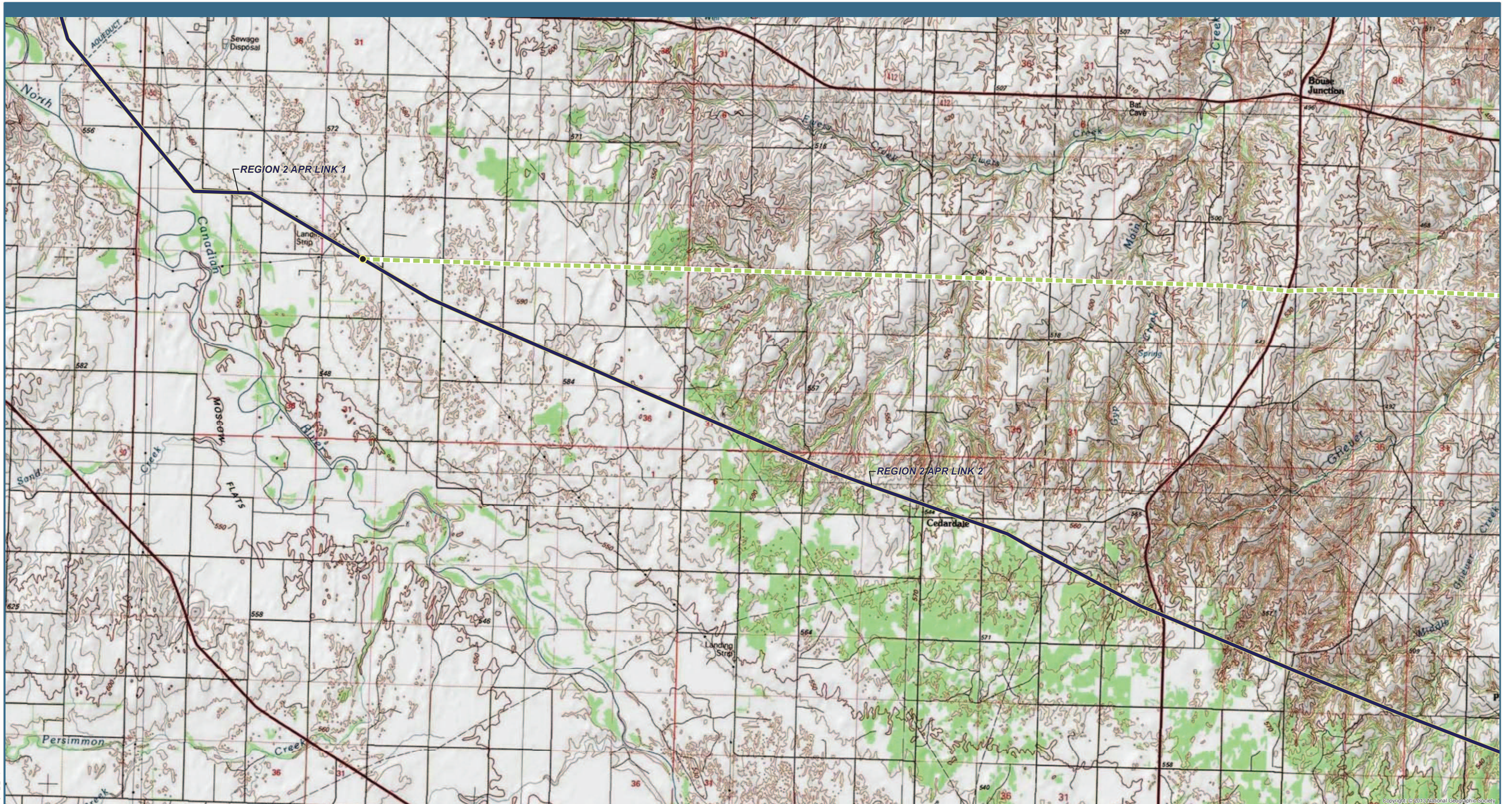
Figure 1.0-1: Topographic Map Index Region 2



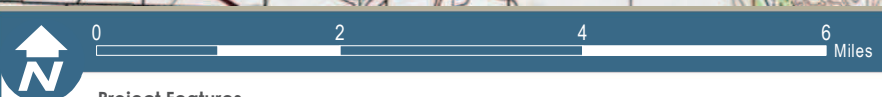
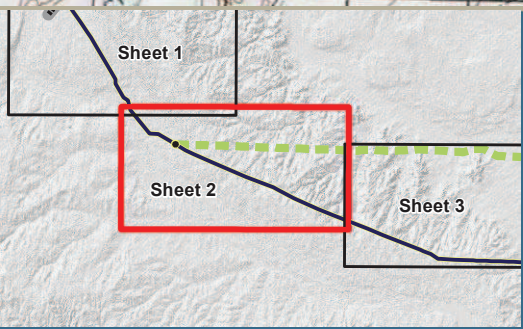
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Data Sources: US Topo Maps (USGS 2014b)

Figure 1.0-1: Topographic Map Region 2, Sheet 1



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- Project Features**
- HVDC Applicant Proposed Route (APR)
 - Link Node
- Region 2 HVDC Alternative Routes**
- - - AR 2-A

Note: Routes shown with representative lines not indicative of corridor or ROW widths

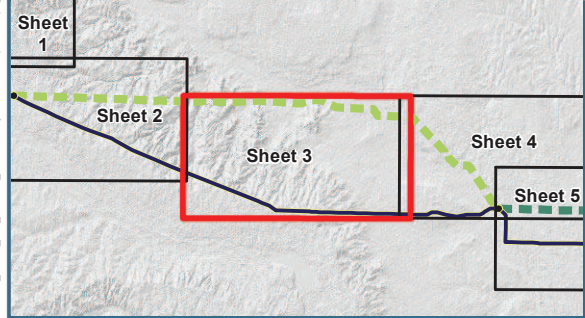
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Data Sources: US Topo Maps (USGS 2014b)

Figure 1.0-1: Topographic Map Region 2, Sheet 2



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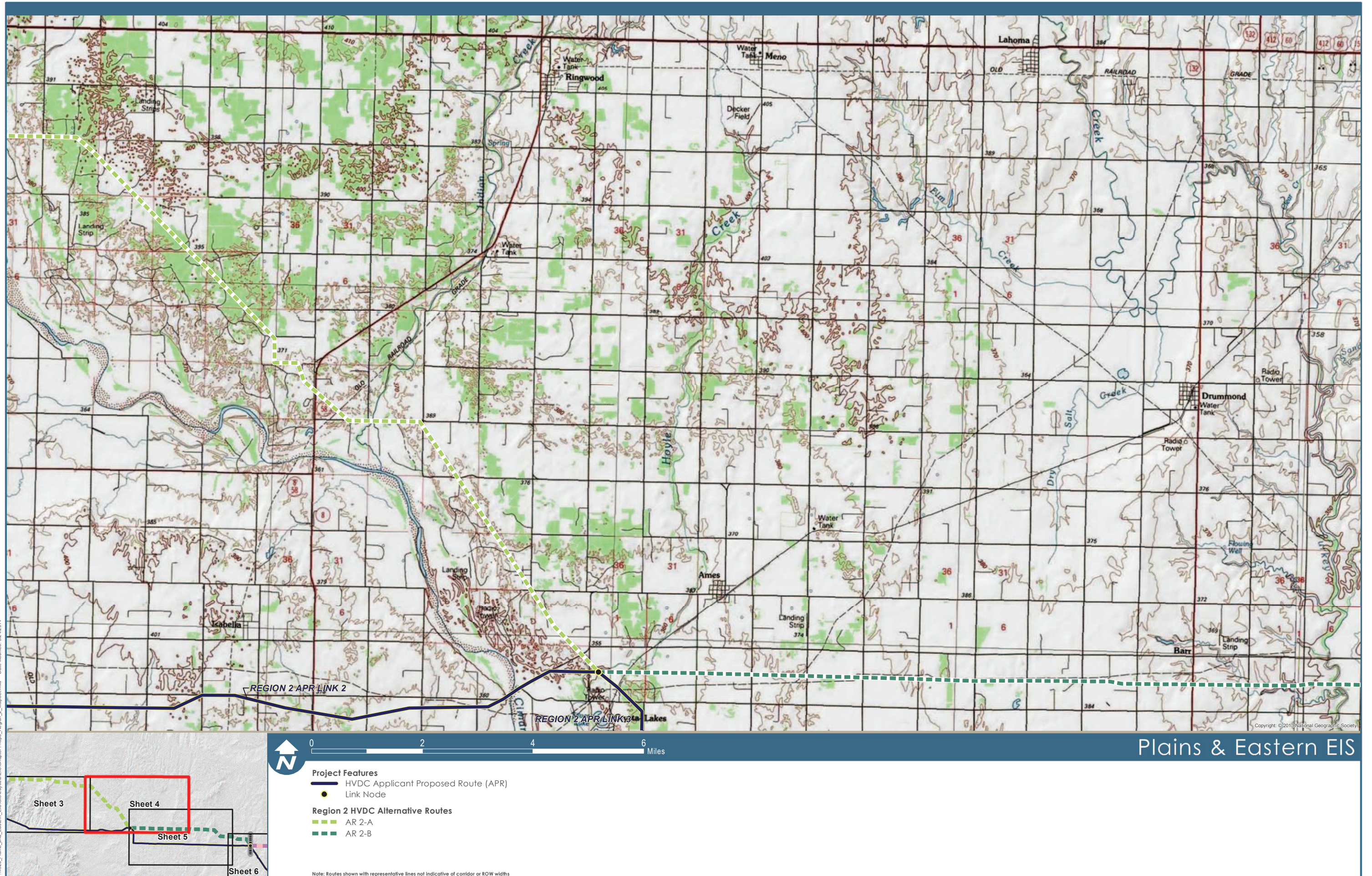
- Project Features**
- HVDC Applicant Proposed Route (APR)
 - - - Region 2 HVDC Alternative Routes
 - - - AR 2-A

Note: Routes shown with representative lines not indicative of corridor or ROW widths

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Data Sources: US Topo Maps (USGS 2014b)

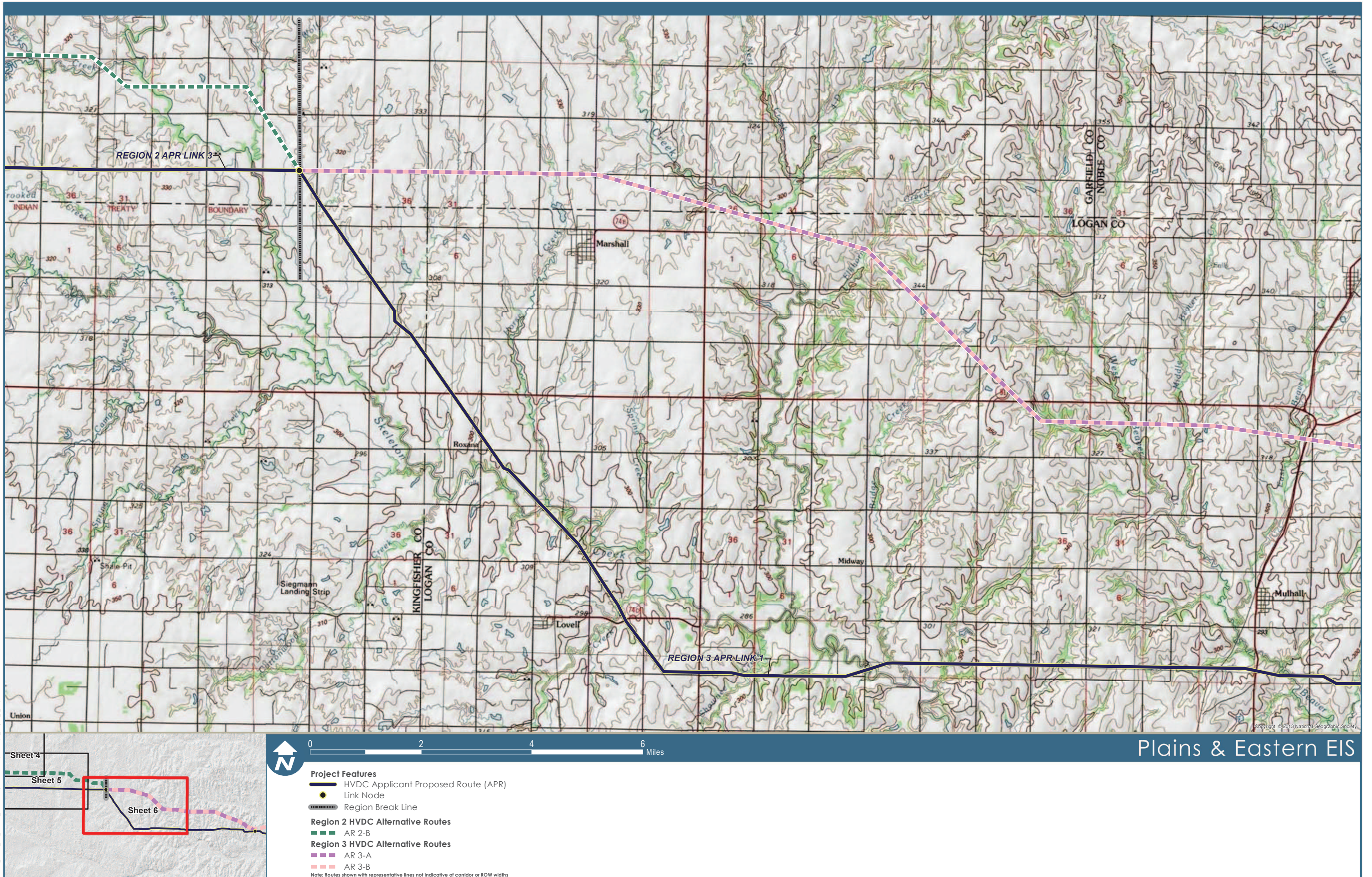
Figure 1.0-1: Topographic Map Region 2, Sheet 3



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Figure 1.0-1: Topographic Map Region 2, Sheet 4



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Data Sources: US Topo Maps (USGS 2014b)

Figure 1.0-1: Topographic Map Region 2, Sheet 6