

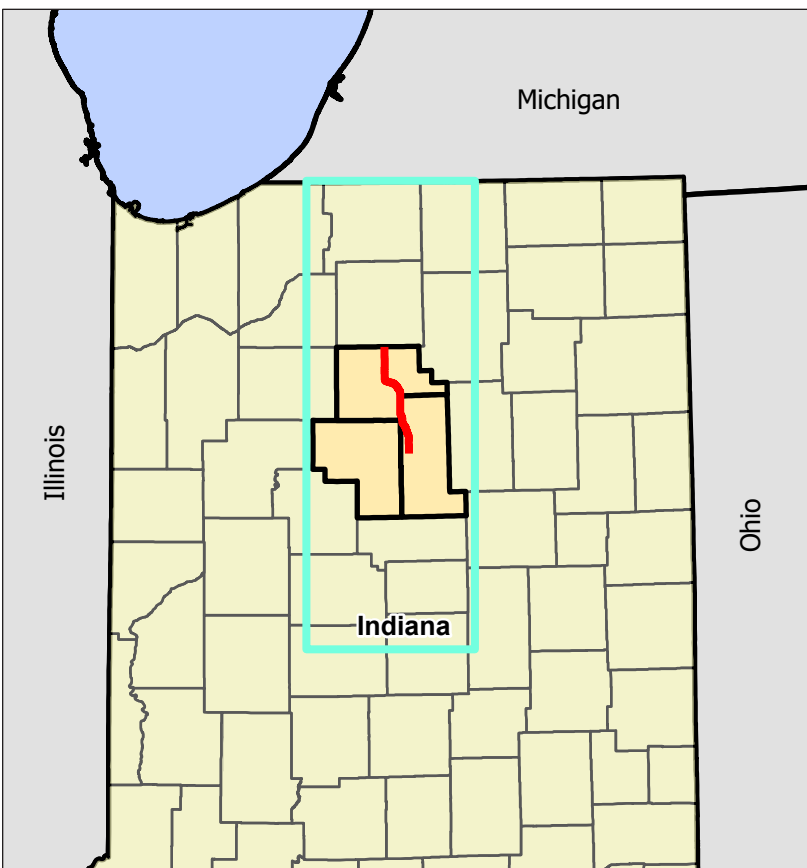
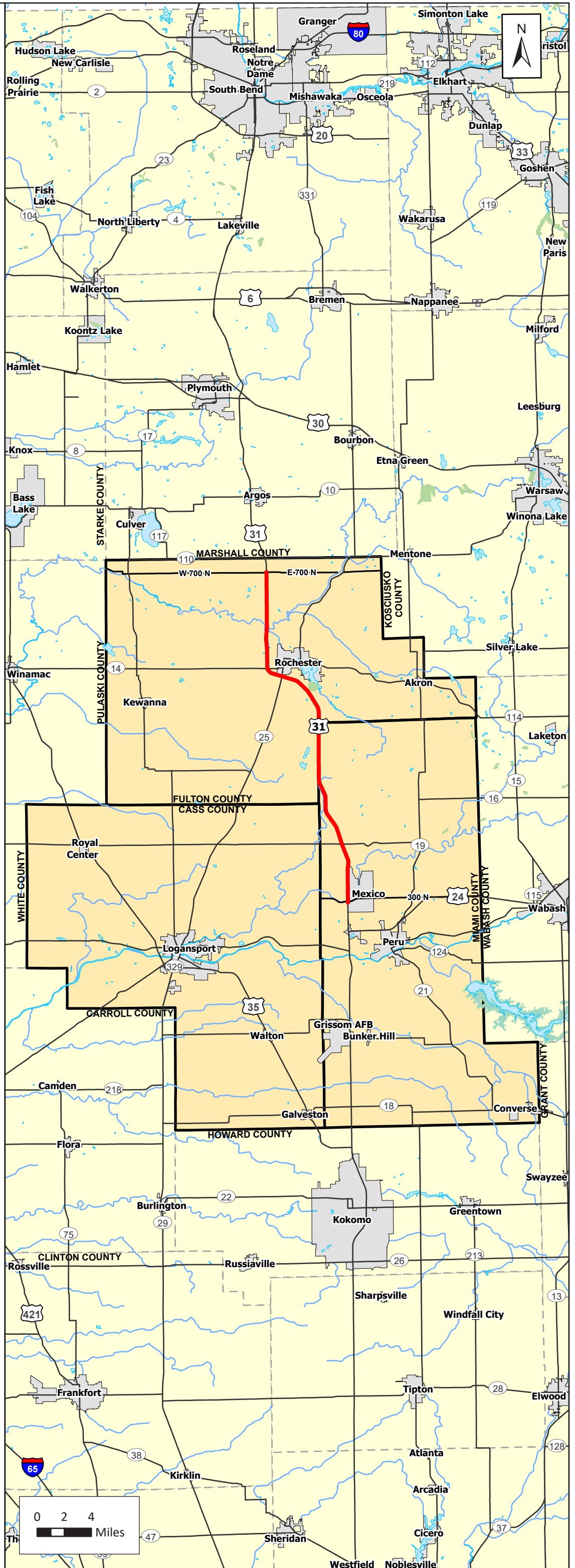
US 31 North

ATTACHMENT A. STUDY LOCATION MAP



US 31 North Study Location

— ProPEL US 31 North



US 31 North

ATTACHMENT B. CONSTRAINTS SUMMARY TABLE

ATTACHMENT B. CONSTRAINTS SUMMARY TABLE

Resource	Presence within ProPEL US 31 North Study Area
Socioeconomic Considerations	
Demographics / Underserved Communities	
Minorities	8-21% of County Population; 8 Affected Communities
Persons in Poverty	12-16% of County Population; 14 Affected Communities
Limited English Proficiency (LEP)	1-7% of County Population; 16 Census Tract Block Groups (CTBGs) in Study Area
Disability Status	15-19% Persons with a Disability; All (49) CTBGs in Study Area
No Vehicle Available	5-6% of Households; 32 CTBGs in Study Area
No Internet Available	17-24% of Households; All (49) CTBGs in Study Area
HUD Resources	4
Manufactured Housing Communities	2
Disadvantaged Communities (by Census Tract)	4 Census Tracts in Study Area
Infrastructure	
Major Utilities: Pipelines (Number and Total length)	3 (18,038.8 feet)
Major Utilities: Transmission Lines (Number and Total length)	1 (7,886 feet)
Active Railroads	0
Airports	2
Community Facilities	
Schools	1
Places of Worship	7
Cemeteries	5
Public Services	1
Recreational Facilities	8
Natural Resources	
Wetlands (Acres and Number of areas)	878.98 (288)
Soils: Hydric/Predominantly Hydric (Acres and % of Study Area)	3,993 (22%)

Resource	Presence within ProPEL US 31 North Study Area
Soils: Suitability, Very and Somewhat Limited (Acres and % of Study Area)	16,296 (92%)
Prime and Unique Farmland (Acres and % of Study Area)	13,660 (77%)
Streams (Number of Segments and Total Length)	81 (175,978 feet)
Special Status Streams (Number)	2
Impaired Streams (Number of Segments and Total Length)	28 (78,088 feet)
Floodplains (Floodplain Zone and Floodway, Acres)	520
Protected Species: State Listed Species	13
Protected Species: Federally Listed Species	10
Cultural Resources	
Above-Ground Sites	
National Register Eligible Sites	1
Potential National Register Eligible Sites	12
Cemeteries	5
Archaeological Sites	
Potential National Register Eligible Sites	2
Potential Section 4(f) Resources	
Recreational Facilities	4
Wildlife Refuges/Natural Preserves	0
Historic Properties	13
Section 6(f) Resources	
Sites with LWCF Funding (Current & Planned)	0
Mineral Resources	
Geological Hazards	8 (2 abandoned industrial pits; 6 petroleum wells)
Air Quality	
NAAQS Criteria Pollutants	In Attainment
Noise	
Areas for Further Noise Abatement Investigation	6
Hazardous Materials	
Parcels with Potential for HAZMAT	8

US 31 North

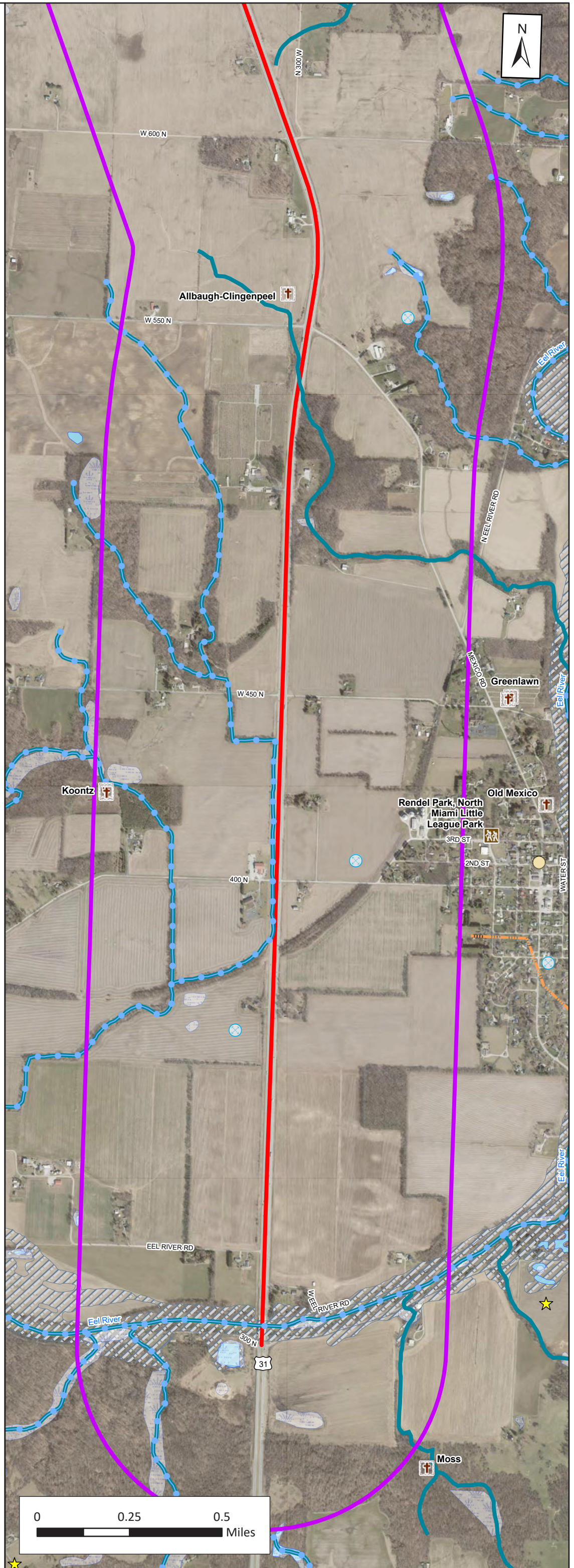
ATTACHMENT C. CONSTRAINTS MAP SERIES



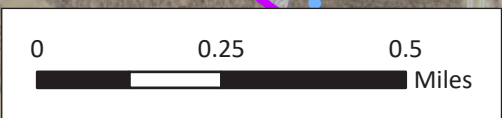
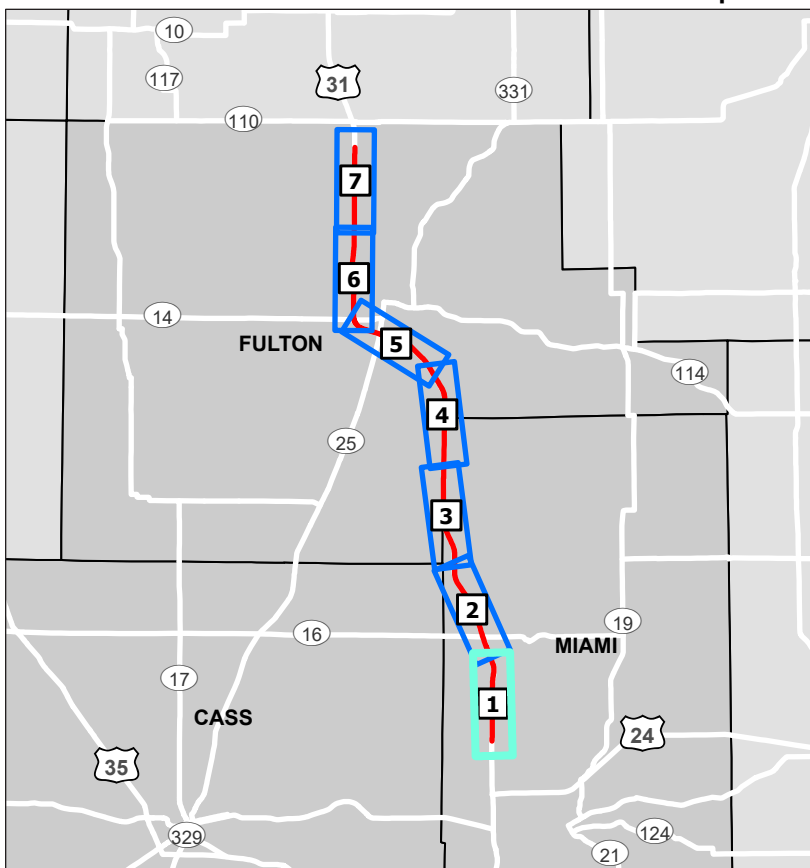
US 31 North

Environmental Constraints

- US 31 North PEL Corridor
- Study Area (0.5 Mile Corridor Buffer)
- Brownfield Site
- Cemeteries
- Confined Feeding Operation
- Industrial Minerals Sand Gravel Pits - Abandoned
- Leaking Underground Storage Tank
- Petroleum Wells
- Recreation Facility
- Religious Facility
- School
- Underground Storage Tank
- Electric Transmission Line
- Impaired Stream/Lake
- NPS NRI Listed
- Pipeline
- Railroad - Abandoned
- River/Stream
- Trails
- Floodplain
- Institutional Control Site
- Lake
- Landfill Boundaries
- Managed Lands
- Wetland



Map 1 of 7

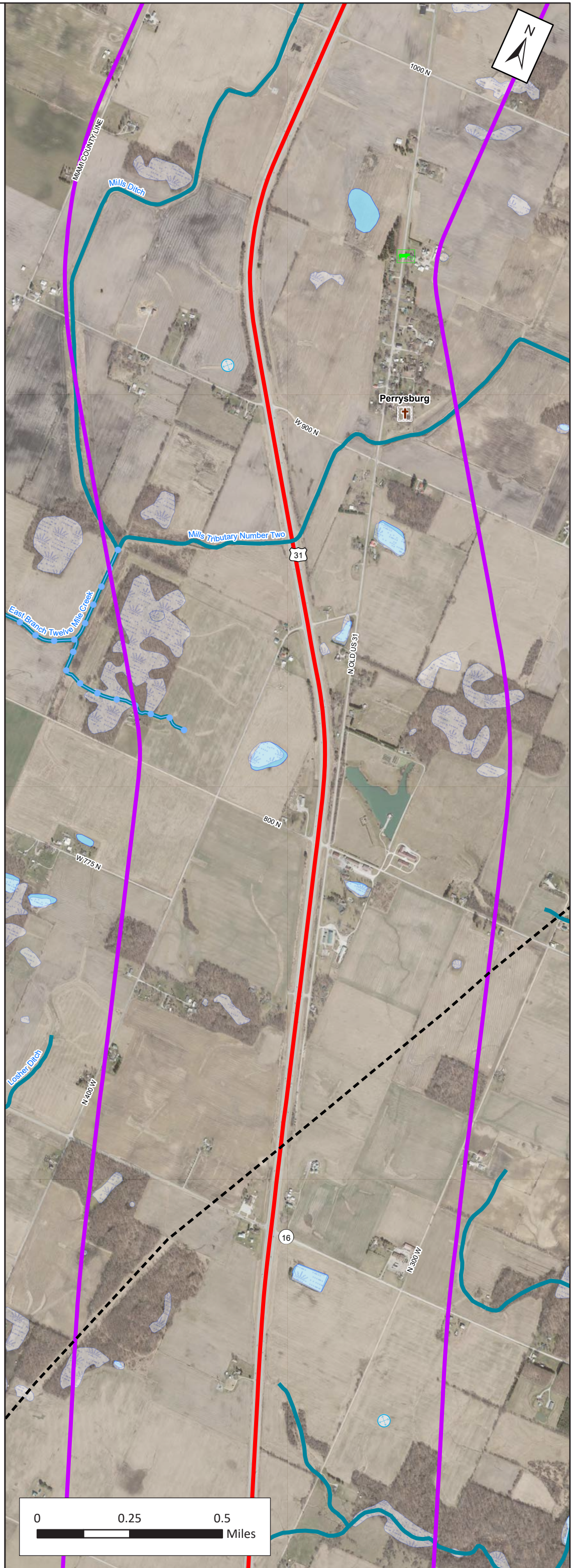




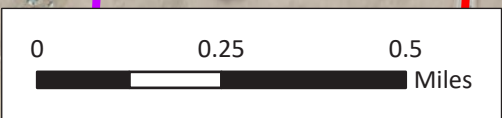
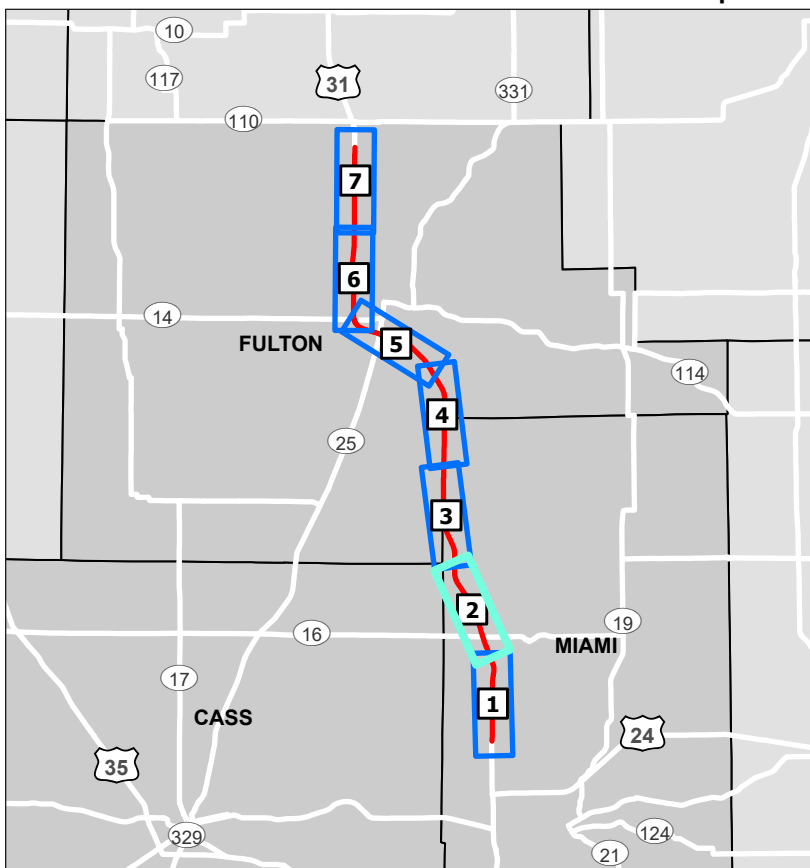
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Map 2 of 7

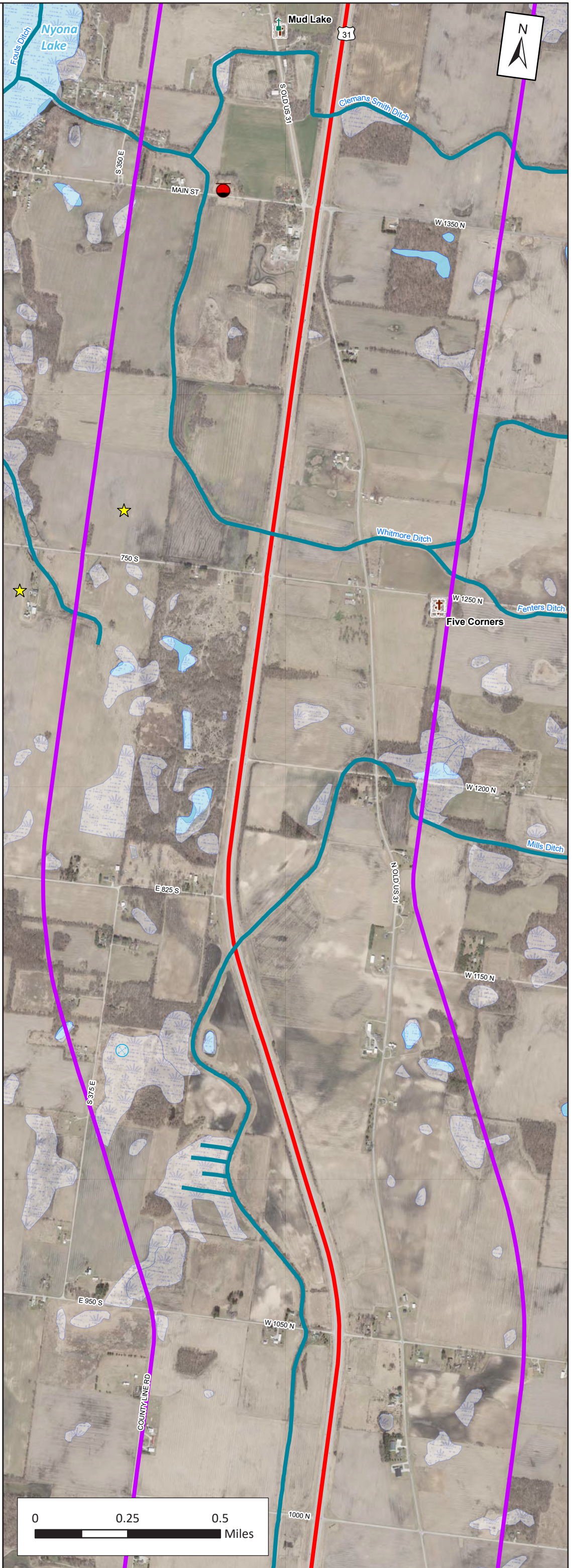




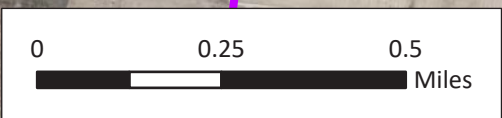
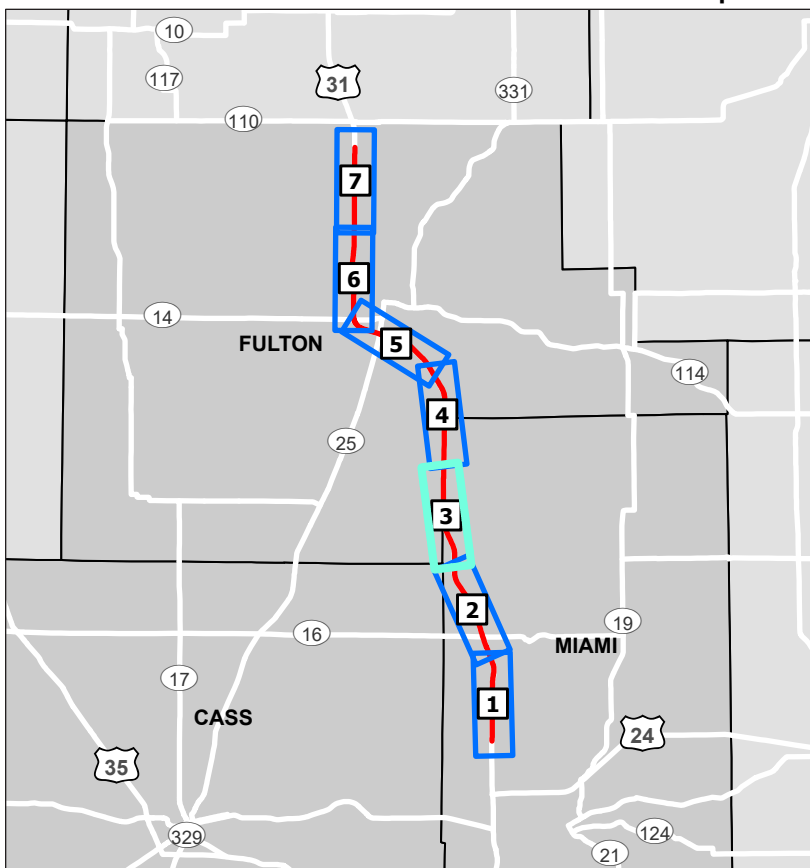
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Map 3 of 7

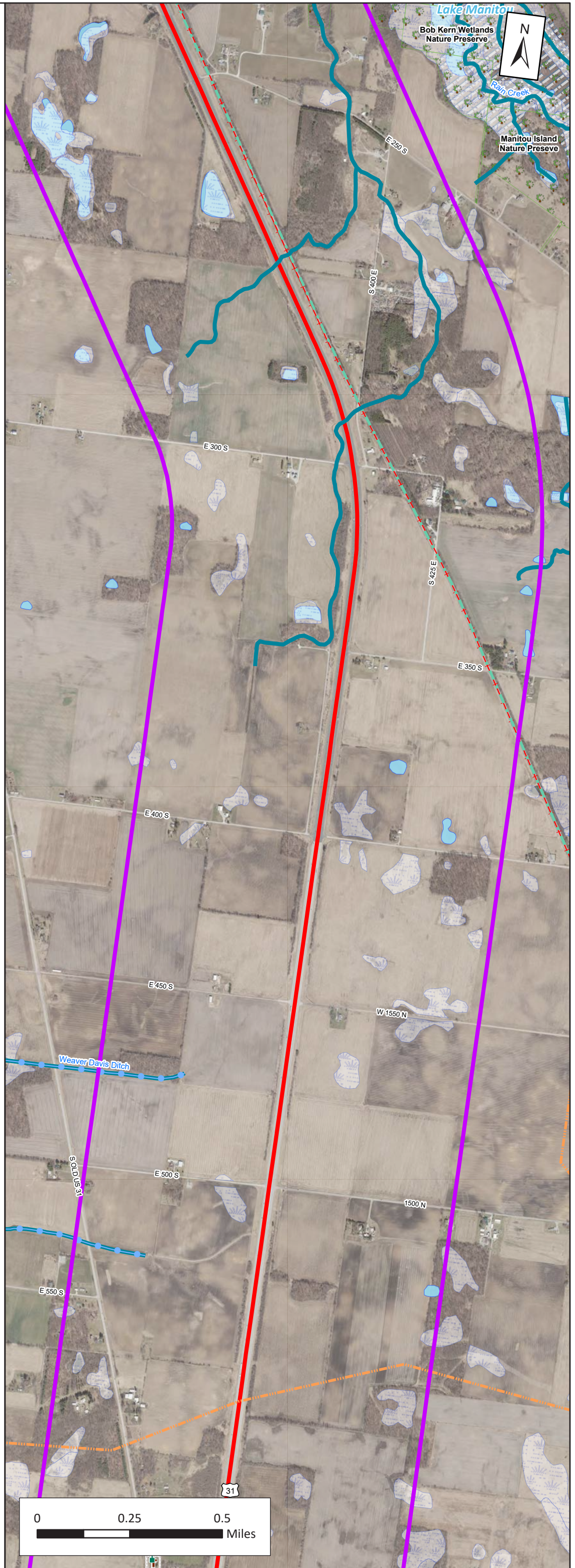




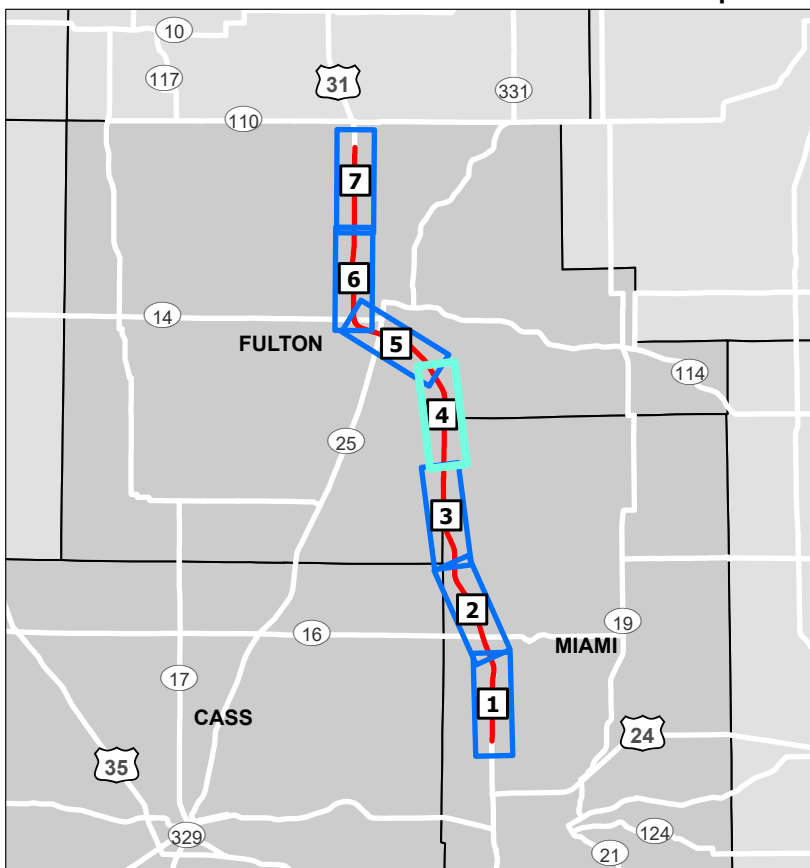
US 31 North

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Map 4 of 7

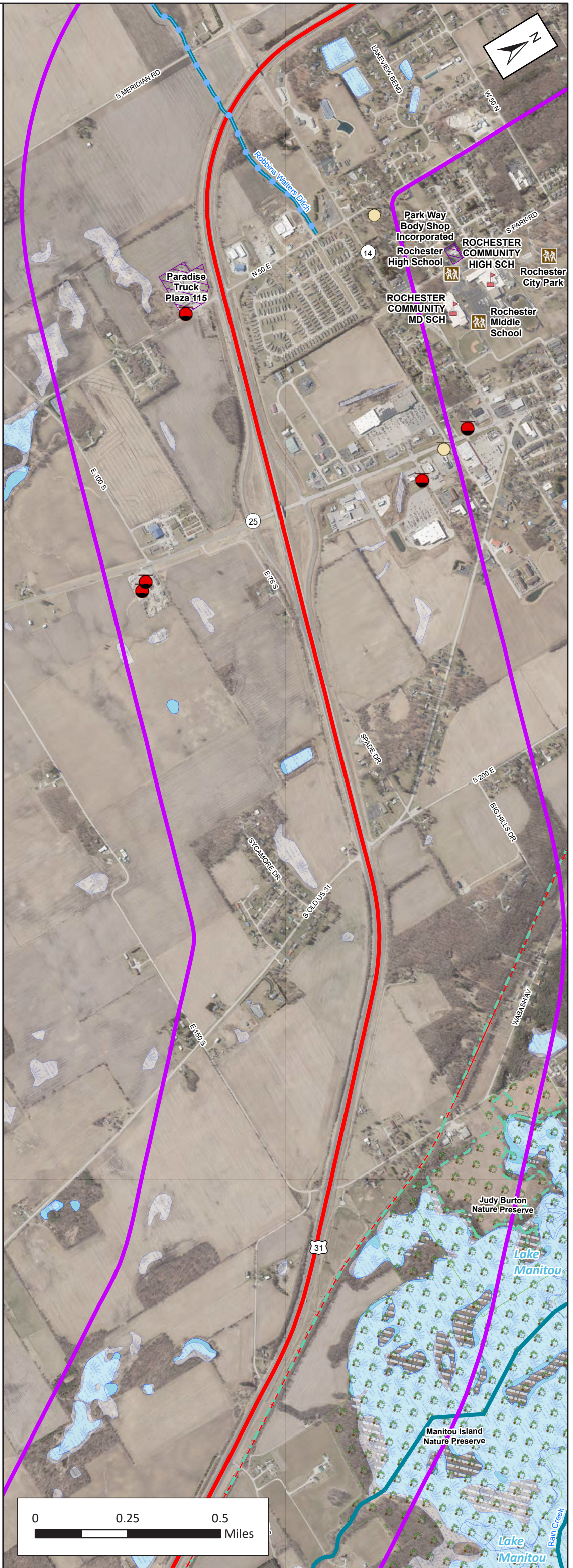




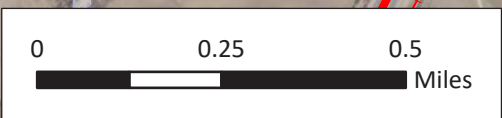
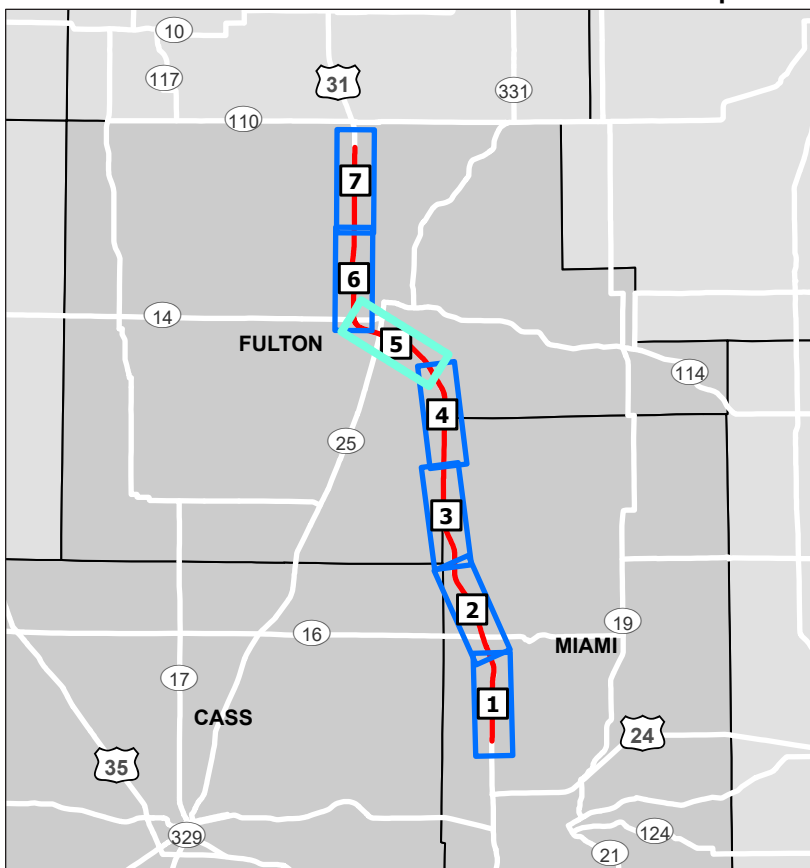
US 31 North

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Map 5 of 7

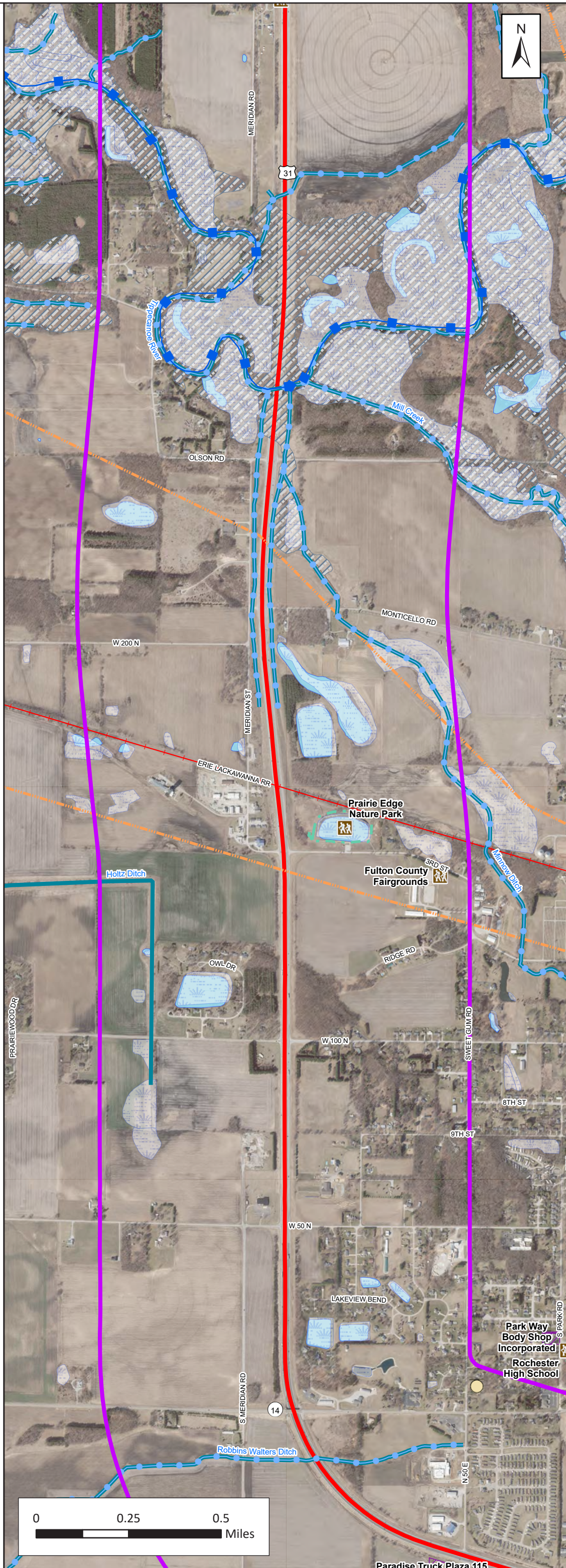




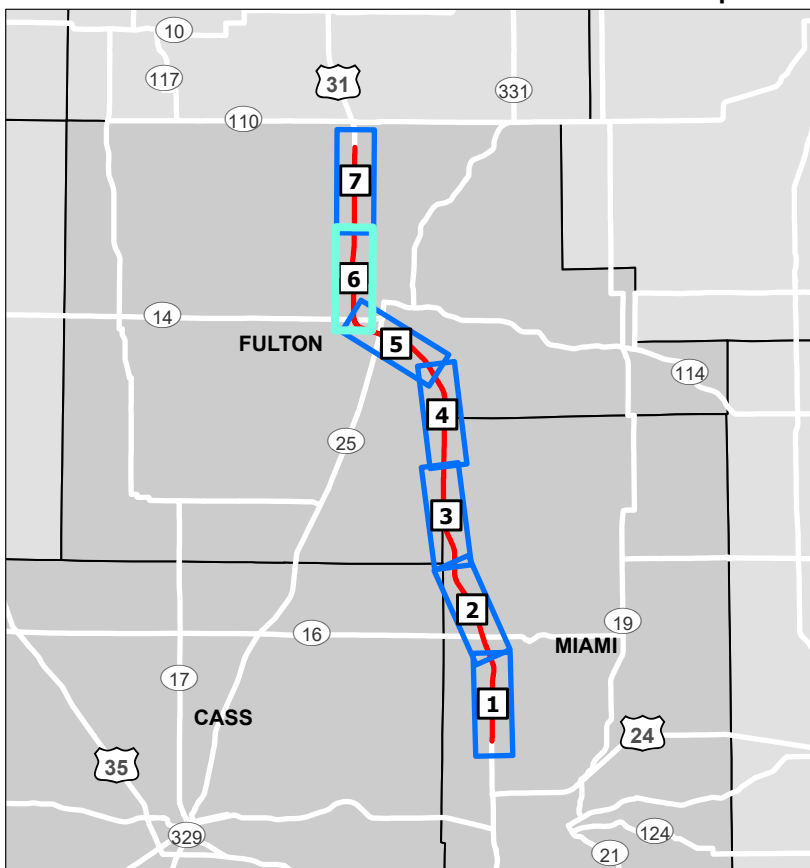
US 31 North

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Map 6 of 7

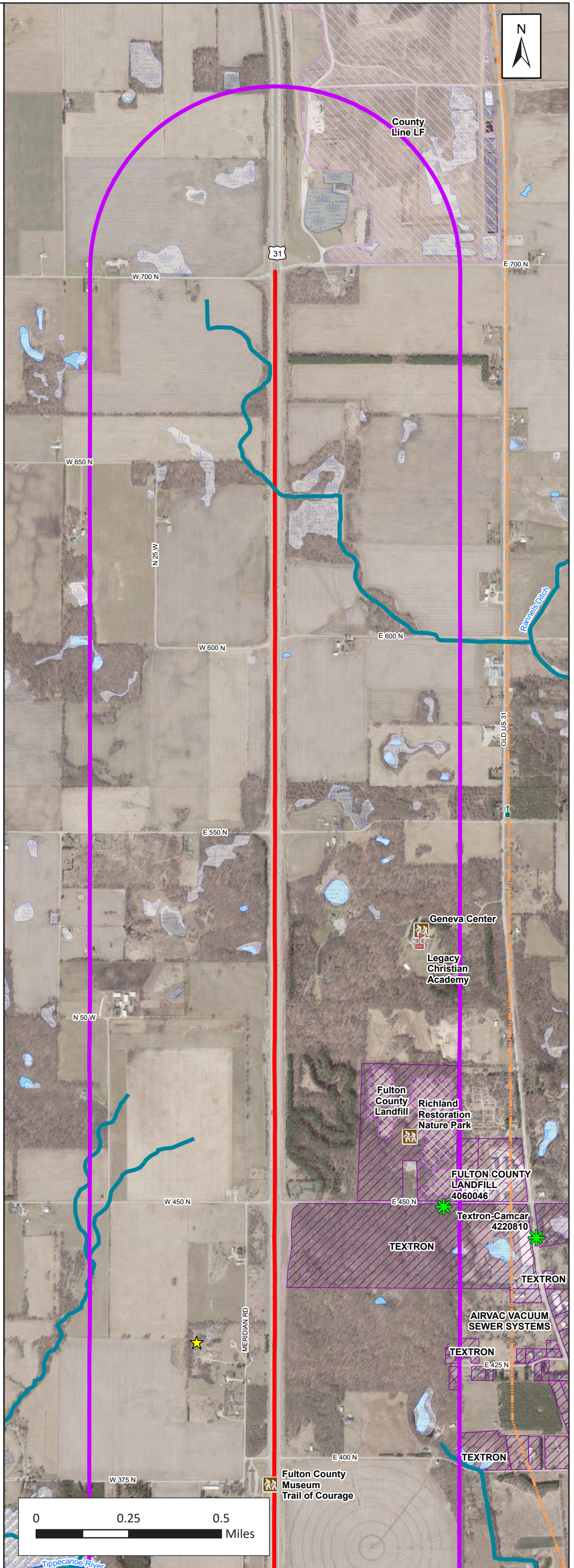




US 31 North

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US 31 North

ATTACHMENT D. UNDERSERVED COMMUNITIES RESOURCES

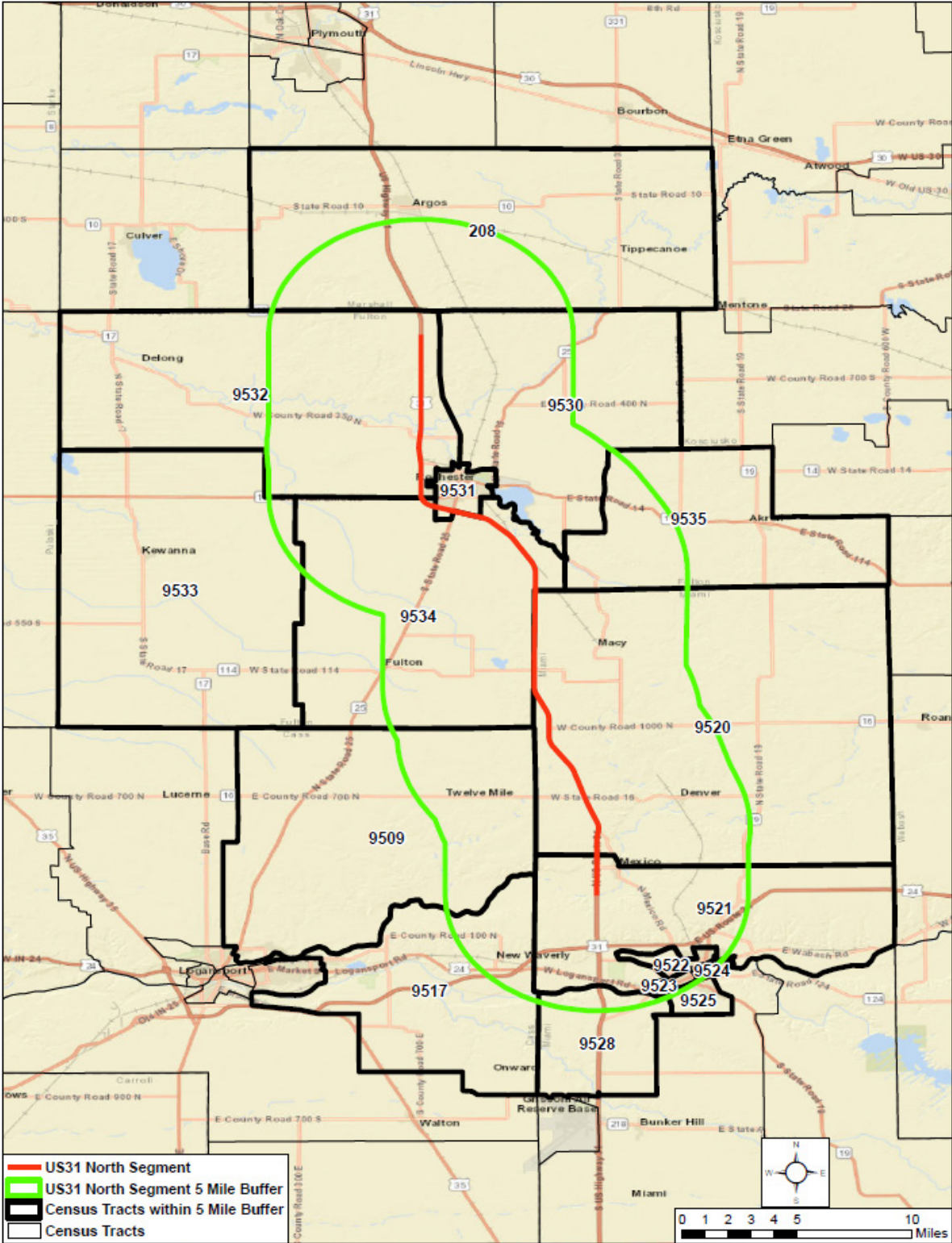
ATTACHMENT D. UNDERSERVED COMMUNITIES RESOURCES

The following is provided in this attachment:

- Map indicating the 16 Census Tracts within the 5-mile study area (Figure D-1).
- Data for minorities and persons in poverty within the study area (Table D-1).
- Data for persons with limited English proficiency (LEP) and disability status within the study Area (Table D-2).
- Data for occupied households with no vehicle available or no internet access in the study area (Table D-3).
- Data from the Council on Environmental Quality (CEQ) Climate and Economic Justice Screening Tool for the study area.
- Data from the US Department of Transportation (USDOT) Transportation Disadvantaged Census Tract tool for the study area.
- Data from the United States Housing and Urban Development Resource Locator mapping tool for the study area.

MAP SHOWING THE 16 CENSUS TRACTS WITHIN THE STUDY AREA

Figure D-1. Census Tracts within the Study Area



DATA FOR MINORITIES AND PERSONS IN POVERTY WITHIN THE STUDY AREA

Table D-1. Minorities and Persons in Poverty within the Study Area (Census Data)

Geography	Total Population	Minorities (%)	Persons in Poverty (%)
Cass County	37,727	7,918 (20.99%)	4,781 (13.07%)
Block Group 1, Census Tract 9509	734		68 (9.51%)
Block Group 2, Census Tract 9509	732	54 (7.38%)	--
Block Group 1, Census Tract 9517	876	--	94 (11.59%)
Block Group 3, Census Tract 9517	882	57 (6.46%)	68 (7.82%)
Fulton County	20,069	1,694 (8.44%)	2,863 (14.54%)
Block Group 1, Census Tract 9530	1,772	275 (15.52%)	481 (27.44%)
Block Group 2, Census Tract 9530	625	--	--
Block Group 3, Census Tract 9530	1,008	--	52 (5.16%)
Block Group 1, Census Tract 9531	483	--	159 (38.04%)
Block Group 2, Census Tract 9531	1,618	--	183 (11.56%)
Block Group 3, Census Tract 9531	1,533	130 (8.48%)	265 (18.19%)
Block Group 4, Census Tract 9531	420	52 (12.38%)	134 (34.18%)
Block Group 5, Census Tract 9531	747	--	--
Block Group 6, Census Tract 9531	1,243	--	185 (14.88%)
Block Group 1, Census Tract 9532	975	--	--
Block Group 2, Census Tract 9532	946	--	153 (16.17%)
Block Group 3, Census Tract 9532	812	79 (9.73%)	178 (21.92%)
Block Group 1, Census Tract 9533	496	--	--
Block Group 3, Census Tract 9533	625	68 (10.88%)	--
Block Group 1, Census Tract 9534	1,144	--	--
Block Group 2, Census Tract 9534	533	81 (15.20%)	--
Block Group 3, Census Tract 9534	756	72 (9.52%)	236 (31.22%)
Block Group 1, Census Tract 9535	538	--	--
Marshall County	46,336	5,978 (12.90%)	5,689 (12.49%)
Block Group 1, Census Tract 208	690	--	--
Block Group 2, Census Tract 208	1,754	--	331 (19.13%)
Block Group 3, Census Tract 208	1,027	--	--
Block Group 4, Census Tract 208	1,572	82 (5.22%)	108 (7.04%)
Miami County	35,684	4,150 (11.63%)	5,205 (15.60%)
Block Group 1, Census Tract 9520	1,014	--	154 (15.43%)
Block Group 2, Census Tract 9520	822	--	--

Geography	Total Population	Minorities (%)	Persons in Poverty (%)
Block Group 3, Census Tract 9520	1,001	--	156 (15.58%)
Block Group 4, Census Tract 9520	947	--	74 (7.82%)
Block Group 5, Census Tract 9520	675	--	--
Block Group 1, Census Tract 9521	730	--	--
Block Group 2, Census Tract 9521	792	70 (8.84%)	--
Block Group 3, Census Tract 9521	1,535	120 (7.82%)	--
Block Group 4, Census Tract 9521	1,332	181 (13.59%)	86 (6.46%)
Block Group 1, Census Tract 9522	1,124	166 (14.77%)	139 (12.37%)
Block Group 2, Census Tract 9522	872	86 (9.86%)	265 (30.39%)
Block Group 3, Census Tract 9522	409	--	--
Block Group 4, Census Tract 9522	447	--	--
Block Group 1, Census Tract 9523	715	--	241 (34.28%)
Block Group 2, Census Tract 9523	1,116	--	548 (49.10%)
Block Group 3, Census Tract 9523	1,047	359 (34.29%)	358 (34.19%)
Block Group 1, Census Tract 9524	556	--	--
Block Group 2, Census Tract 9524	820	--	191 (23.29%)
Block Group 3, Census Tract 9524	597	128 (21.44%)	182 (34.40%)
Block Group 4, Census Tract 9524	798	75 (9.40%)	86 (10.78%)
Block Group 1, Census Tract 9525	507	227 (44.77%)	258 (51.39%)
Block Group 2, Census Tract 9525	643	56 (8.71%)	124 (19.28%)
Block Group 1, Census Tract 9528	872	68 (7.80%)	107 (12.27%)

Source: ACS 2016-2020, Tables B03002 and B17021

Note: -- Less than 50 persons. Yellow highlight = Affected Communities (i.e., those 25% higher than each county's population), which are mapped in *Attachment E Underserved Communities Maps*.

DATA FOR PERSONS WITH LEP AND WITH A DISABILITY WITHIN THE STUDY AREA

Table D-2. Persons with LEP and with a Disability within the Study Area (Census Data)

Geography	Total Population	LEP (%)*	Disability (%)**
Cass County	37,727	2,619 (7.38%)	5,138 (18.2%)
Block Group 1, Census Tract 9509	734	0%	15.3%
Block Group 2, Census Tract 9509	732	0%	16.8%
Block Group 1, Census Tract 9517	876	0%	10.4%
Block Group 3, Census Tract 9517	882	0%	13.3%
Fulton County	20,069	460 (2.45%)	2,938 (19.4%)
Block Group 1, Census Tract 9530	1,772	8.81%	17.0%
Block Group 2, Census Tract 9530	625	0%	9.2%
Block Group 3, Census Tract 9530	1,008	0%	14.0%
Block Group 1, Census Tract 9531	483	0%	57.4%
Block Group 2, Census Tract 9531	1,618	<1%	16.7%
Block Group 3, Census Tract 9531	1,533	1.58%	7.2%
Block Group 4, Census Tract 9531	420	0%	27.2%
Block Group 5, Census Tract 9531	747	0%	17.6%
Block Group 6, Census Tract 9531	1,243	2.49%	15.5%
Block Group 1, Census Tract 9532	975	4.57%	15.9%
Block Group 2, Census Tract 9532	946	0%	37.0%
Block Group 3, Census Tract 9532	812	0%	30.8%
Block Group 1, Census Tract 9533	496	0%	28.8%
Block Group 3, Census Tract 9533	625	<1%	26.1%
Block Group 1, Census Tract 9534	1,144	0%	11.0%
Block Group 2, Census Tract 9534	533	0%	16.0%
Block Group 3, Census Tract 9534	756	0%	28.9%
Block Group 1, Census Tract 9535	538	0%	10.3%
Marshall County	46,336	2006 (4.63%)	5,265 (15.4%)
Block Group 1, Census Tract 208	690	0%	9.6%
Block Group 2, Census Tract 208	1,754	<1%	19.0%
Block Group 3, Census Tract 208	1,027	0%	10.1%
Block Group 4, Census Tract 208	1,572	1.59%	9.3%
Miami County	35,684	435 (1.29%)	4,891 (18.9%)
Block Group 1, Census Tract 9520	1,014	54 (5.37%)	25.2%
Block Group 2, Census Tract 9520	822	<1%	14.8%
Block Group 3, Census Tract 9520	1,001	1.76%	11.1%

Geography	Total Population	LEP (%)*	Disability (%)**
Block Group 4, Census Tract 9520	947	0%	14.6%
Block Group 5, Census Tract 9520	675	0%	17.1%
Block Group 1, Census Tract 9521	730	0%	15.4%
Block Group 2, Census Tract 9521	792	<1%	23.7%
Block Group 3, Census Tract 9521	1,535	1.31%	16.3%
Block Group 4, Census Tract 9521	1,332	<1%	21.6%
Block Group 1, Census Tract 9522	1,124	0%	12.8%
Block Group 2, Census Tract 9522	872	0%	23.4%
Block Group 3, Census Tract 9522	409	0%	14.8%
Block Group 4, Census Tract 9522	447	0%	38.9%
Block Group 1, Census Tract 9523	715	<1%	15.4%
Block Group 2, Census Tract 9523	1,116	0%	31.6%
Block Group 3, Census Tract 9523	1,047	0%	26.6%
Block Group 1, Census Tract 9524	556	0%	26.4%
Block Group 2, Census Tract 9524	820	0%	26.7%
Block Group 3, Census Tract 9524	597	3.35%	26.4%
Block Group 4, Census Tract 9524	798	0%	25.4%
Block Group 1, Census Tract 9525	507	0%	18.2%
Block Group 2, Census Tract 9525	643	0%	19.8%
Block Group 1, Census Tract 9528	872	0%	14.1%

Source: ACS 2016-2020, Tables B16004 and C21007

Note: *Based on the population 5 years and older. ** Based on the population 18 years and over.

See *Attachment E Underserved Communities Maps* for associated mapping.

DATA FOR OCCUPIED HOUSEHOLDS WITH NO VEHICLE AVAILABLE OR INTERNET ACCESS IN THE STUDY AREA

Table D-3. Housing with No Vehicles or No Internet Available within the Study Area (Household Data)

Geography	Total Housing Units	% with No Vehicle Available	% with No Internet Available
Cass County	14,950	5.66%	18.96%
Block Group 1, Census Tract 9509	734	0.00%	26.51%
Block Group 2, Census Tract 9509	732	0.29%	18.13%
Block Group 1, Census Tract 9517	876	0.00%	16.51%
Block Group 3, Census Tract 9517	882	12.86%	15.49%
Fulton County	7,840	5.00%	17.13%
Block Group 1, Census Tract 9530	579	6.22%	21.76%
Block Group 2, Census Tract 9530	242	0.00%	14.05%
Block Group 3, Census Tract 9530	409	2.69%	4.65%
Block Group 1, Census Tract 9531	294	13.95%	50.34%
Block Group 2, Census Tract 9531	556	2.52%	17.09%
Block Group 3, Census Tract 9531	546	2.56%	2.01%
Block Group 4, Census Tract 9531	164	24.39%	33.54%
Block Group 5, Census Tract 9531	339	10.03%	22.71%
Block Group 6, Census Tract 9531	456	18.64%	17.76%
Block Group 1, Census Tract 9532	361	7.48%	30.47%
Block Group 2, Census Tract 9532	415	0.00%	2.17%
Block Group 3, Census Tract 9532	330	0.00%	13.64%
Block Group 1, Census Tract 9533	216	0.00%	32.41%
Block Group 3, Census Tract 9533	294	0.00%	16.33%
Block Group 1, Census Tract 9534	469	0.00%	2.99%
Block Group 2, Census Tract 9534	239	0.42%	24.69%
Block Group 3, Census Tract 9534	316	3.48%	15.82%
Block Group 1, Census Tract 9535	264	2.27%	9.85%
Marshall County	17,430	5.88%	23.99%
Block Group 1, Census Tract 208	251	0.00%	22.31%
Block Group 2, Census Tract 208	606	2.48%	17.16%
Block Group 3, Census Tract 208	405	5.19%	9.63%
Block Group 4, Census Tract 208	514	0.00%	17.90%
Miami County	13,531	5.76%	17.40%
Block Group 1, Census Tract 9520	349	8.02%	22.35%
Block Group 2, Census Tract 9520	283	5.30%	3.53%

Geography	Total Housing Units	% with No Vehicle Available	% with No Internet Available
Block Group 3, Census Tract 9520	407	0.00%	19.90%
Block Group 4, Census Tract 9520	351	0.85%	17.95%
Block Group 5, Census Tract 9520	313	0.00%	21.73%
Block Group 1, Census Tract 9521	366	2.46%	23.77%
Block Group 2, Census Tract 9521	398	10.30%	25.63%
Block Group 3, Census Tract 9521	630	0.00%	13.65%
Block Group 4, Census Tract 9521	473	5.07%	16.28%
Block Group 1, Census Tract 9522	467	7.07%	17.56%
Block Group 2, Census Tract 9522	377	10.88%	20.16%
Block Group 3, Census Tract 9522	158	0.00%	40.51%
Block Group 4, Census Tract 9522	195	0.00%	26.15%
Block Group 1, Census Tract 9523	288	8.33%	10.07%
Block Group 2, Census Tract 9523	412	38.83%	20.39%
Block Group 3, Census Tract 9523	436	8.03%	14.68%
Block Group 1, Census Tract 9524	184	3.80%	14.67%
Block Group 2, Census Tract 9524	467	15.20%	28.05%
Block Group 3, Census Tract 9524	245	19.18%	4.08%
Block Group 4, Census Tract 9524	356	12.08%	10.67%
Block Group 1, Census Tract 9525	153	0.00%	22.88%
Block Group 2, Census Tract 9525	276	3.62%	33.33%
Block Group 1, Census Tract 9528	386	0.00%	11.40%

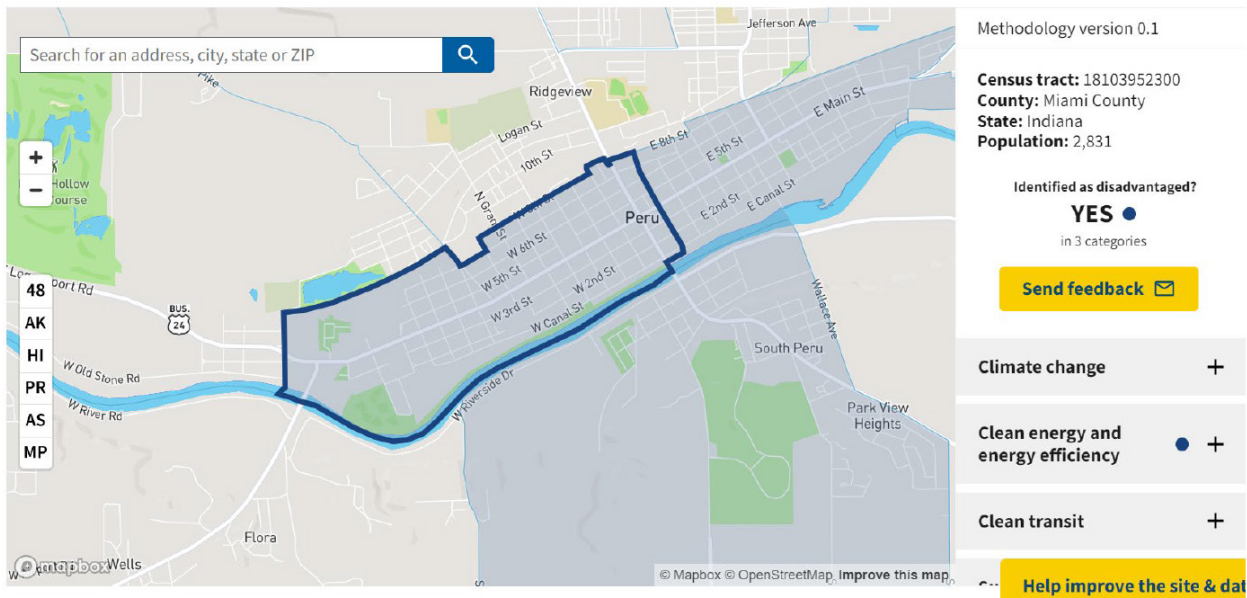
Source: ACS 2016-2020, Tables B25044, B28002

Note: These are mapped in *Attachment E Underserved Communities Maps*.

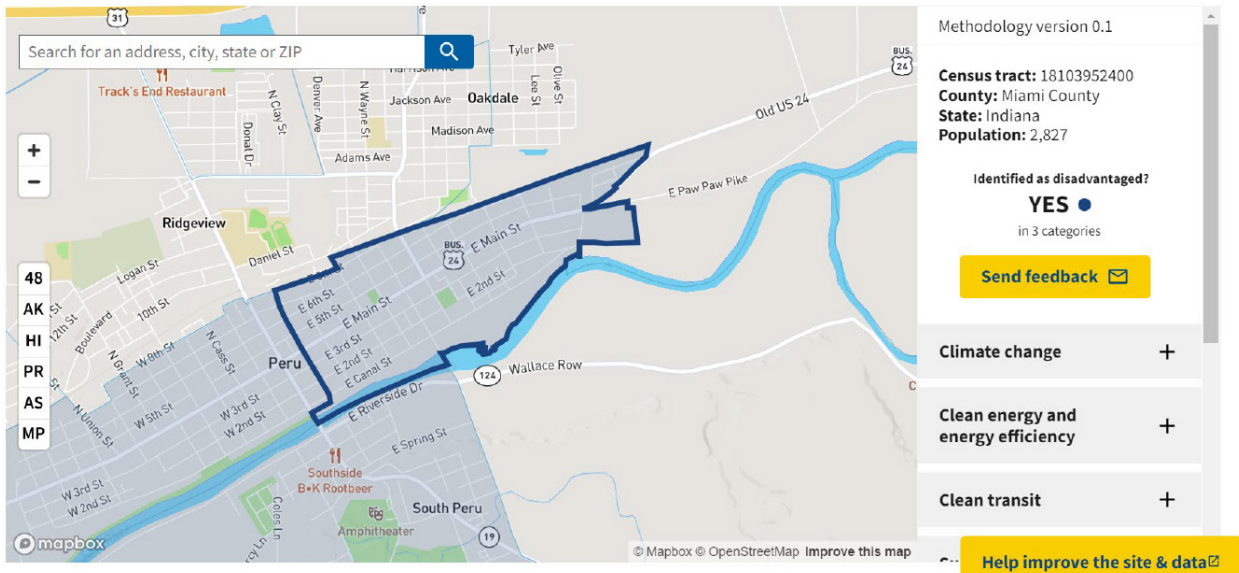
DATA FROM THE CEQ CLIMATE AND ECONOMIC JUSTICE SCREENING TOOL FOR THE STUDY AREA

Three of the census tracts in the study area are identified as Disadvantaged Communities as identified in the CEQ's Climate and Economic Justice Screening Tool, all within Peru:

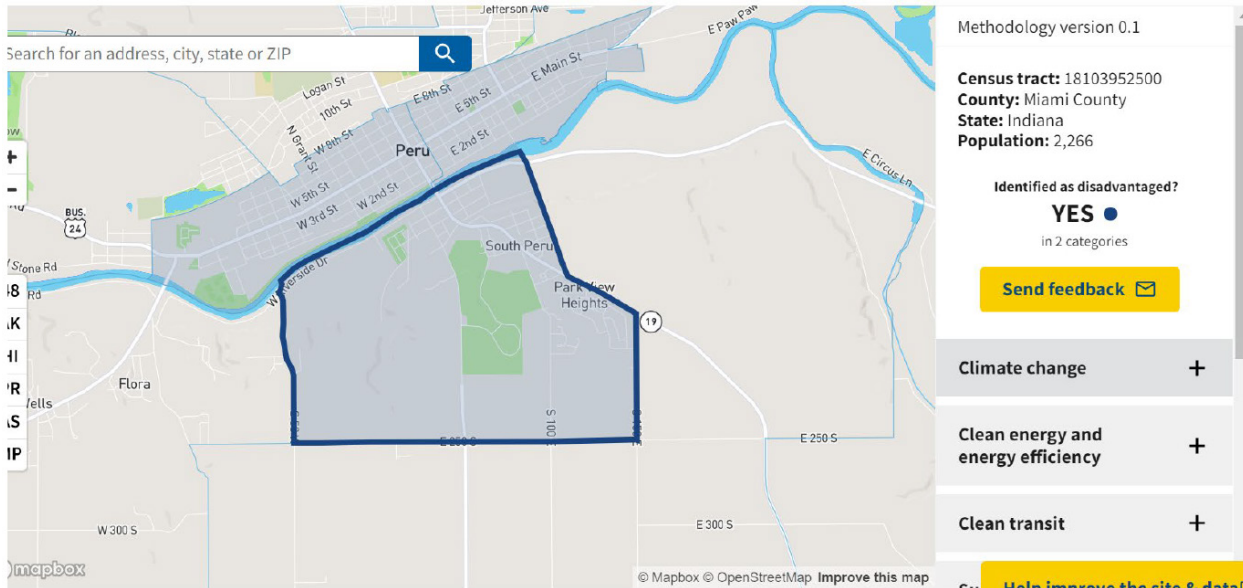
Census Tract 9523 in 3 categories (Clean energy and energy efficiency; Sustainable housing; and Health burdens):



Census Tract 9524 in 3 categories (Sustainable housing; Health burdens; and Workforce Development):



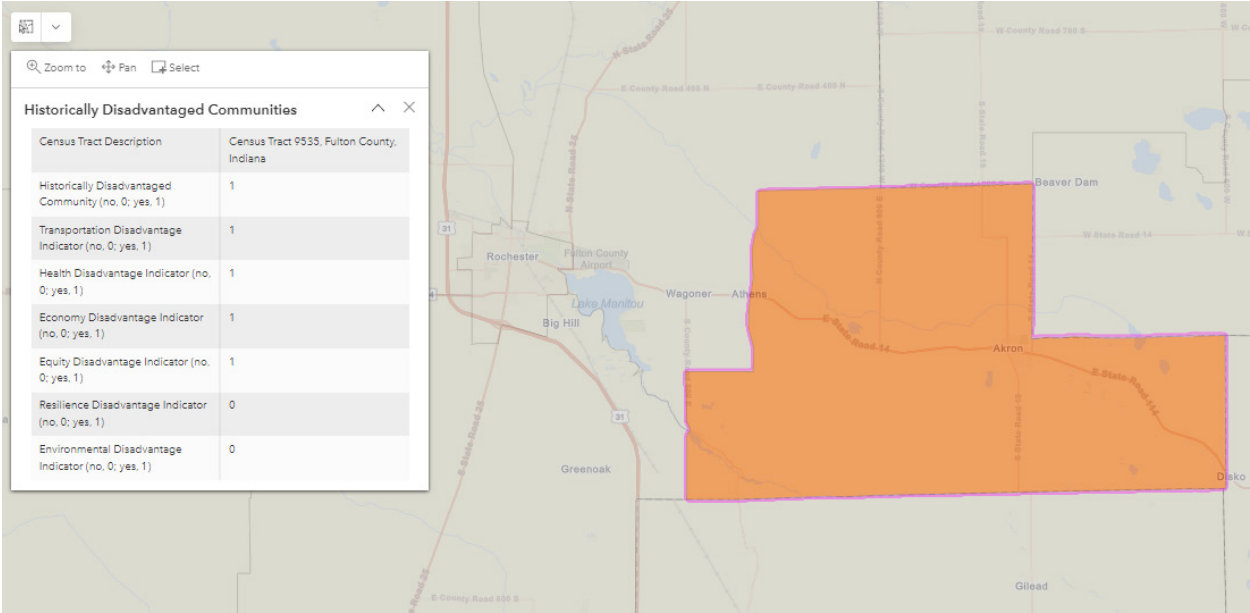
Census Tract 9525 in 2 categories (Health burdens; and Workforce development):



DATA FROM THE USDOT TRANSPORTATION DISADVANTAGED CENSUS TRACT TOOL FOR THE STUDY AREA

One of the census tracts in the study area was identified as Disadvantaged Communities as identified by the USDOT Transportation Disadvantaged Census Tract Tool, east of Rochester: census tract 9535.

Census Tract 9525 in 4 categories (transportation access disadvantage, health disadvantage, economic disadvantage, and equity disadvantage).



DATA FROM THE UNITED STATES HOUSING AND URBAN DEVELOPMENT RESOURCE LOCATOR MAPPING TOOL FOR THE STUDY AREA

The USHUD Resource Locator mapper tool identified four properties in the study area, including one low-income housing tax credit property and three USDA rural housing properties.



HUD Properties

Low Income Housing Tax Credit Properties

42

Property Info

ARBOR WOODS APTS
500 MITCHELL DR
ROCHESTER, IN 46975








Management/Contact Info

Total Affordable Units
Numbers below do not indicate vacancies

1 Bedroom Units	8
2 Bedroom Units	26
3 Bedroom Units	20
4 Bedroom Units	0

Close

The screenshot shows a map application interface with a popup window titled "HUD Properties". The popup contains the following information:

- HUD Properties** (header)
- 
- USDA Rural Housing**
- 
- Property Info**
- FA - Family
- 433 E 18th St
- Rochester, IN 46975
- 
- Management/Contact Info**
- JUSTUS PROPERTY MANAGEMENT
- 104 SOUTH MAIN ST
- NAPPANEE, IN 46550
- 5747732910 0
- JUSTUSPROPERTYMANAGEMENT@gmail.com
- 
- 
- If the resource information above is incorrect, please notify USDA directly.
-  As part of U.S. Department of Agriculture (USDA), there are affordable housing facilities that are available to individuals in need of safe and affordable housing. If you have any questions or are interested in applying for a particular USDA Rural Housing building, please contact the management company directly.
- [More info...](#)
- 

The screenshot displays a map interface with a pop-up window titled "HUD Properties". The map shows a street grid in Rochester, Indiana, with a green pin icon indicating the location of the property. The pop-up window contains the following information:

- HUD Properties** (header)
- USDA Rural Housing** (title)
- USDA** (logo)
- Property Info**
 - FA - Family
 - 1729 Bancroft Ave
 - Rochester, IN 46975
- Management/Contact Info**
 - JUSTUS PROPERTY MANAGEMENT
 - 104 SOUTH MAIN ST
 - NAPPANEE, IN 46550
 - 5747732910 0
 - JUSTUSPROPERTYMANAGEMENT@
- Disclaimer: "If the resource information above is incorrect, please notify USDA directly."
- USDA** (logo) and text: "As part of U.S. Department of Agriculture (USDA), there are affordable housing facilities that are available to individuals in need of safe and affordable housing. If you have any questions or are interested in applying for a particular USDA Rural Housing building, please contact the management company directly."
- [More Info...](#)
- Close** (button)

HUD Properties

USDA Rural Housing

Property Info

EL - Elderly
300 E 4th St
Rochester, IN 46975

Management/Contact Info

JUSTUS PROPERTY MANAGEMENT
104 SOUTH MAIN ST
NAPPANEE, IN 46550
5747732910
JUSTUSPROPERTYMANGEMENT@

If the resource information above is incorrect, please notify USDA directly.

As part of U.S. Department of Agriculture (USDA), there are affordable housing facilities that are available to individuals in need of safe and affordable housing. If you have any questions or are interested in applying for a particular USDA Rural Housing building, please contact the management company directly.

[More Info...](#)

Close

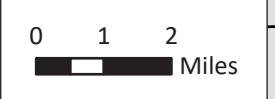
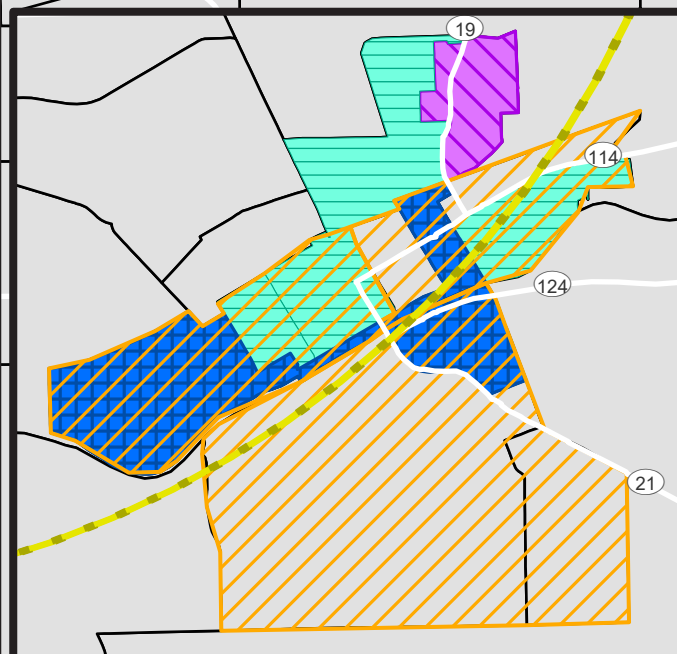
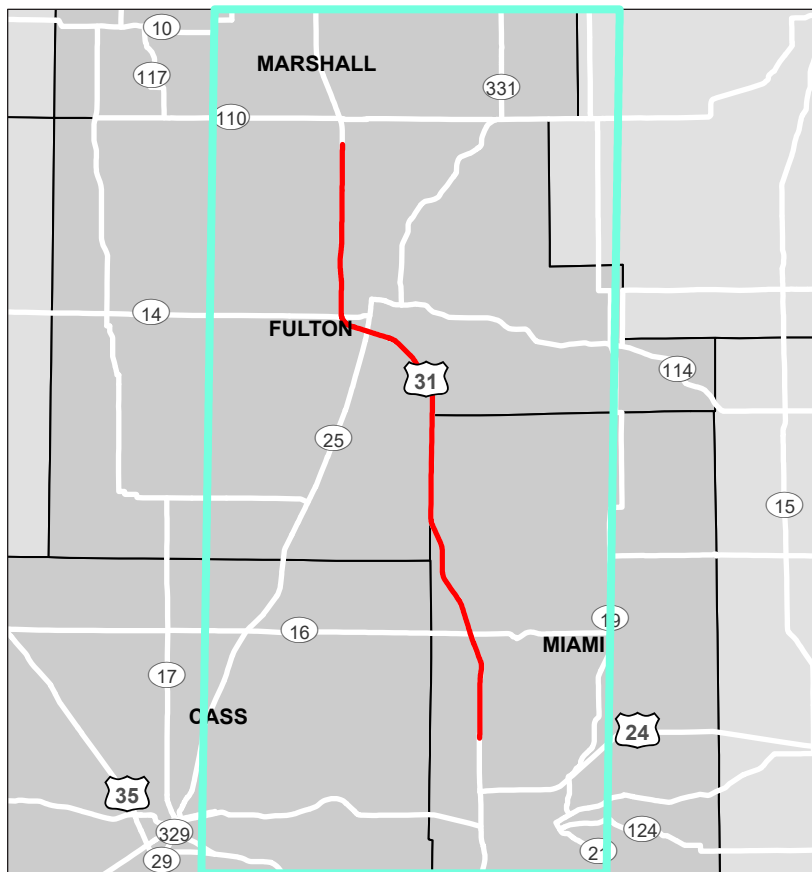
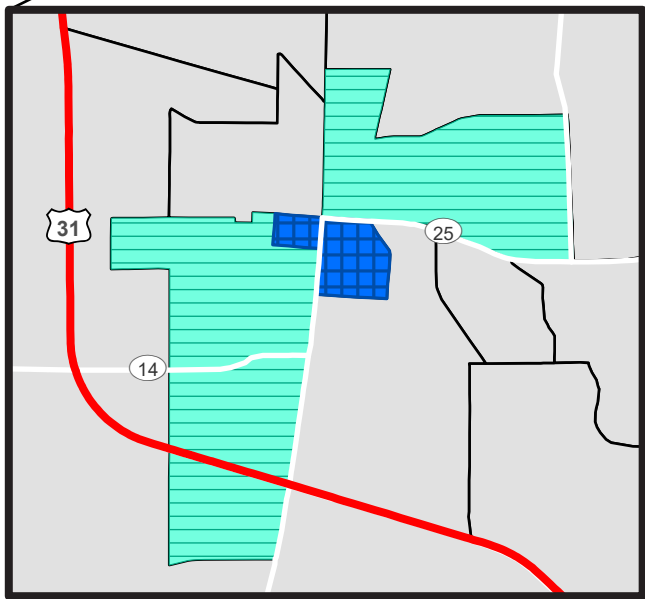
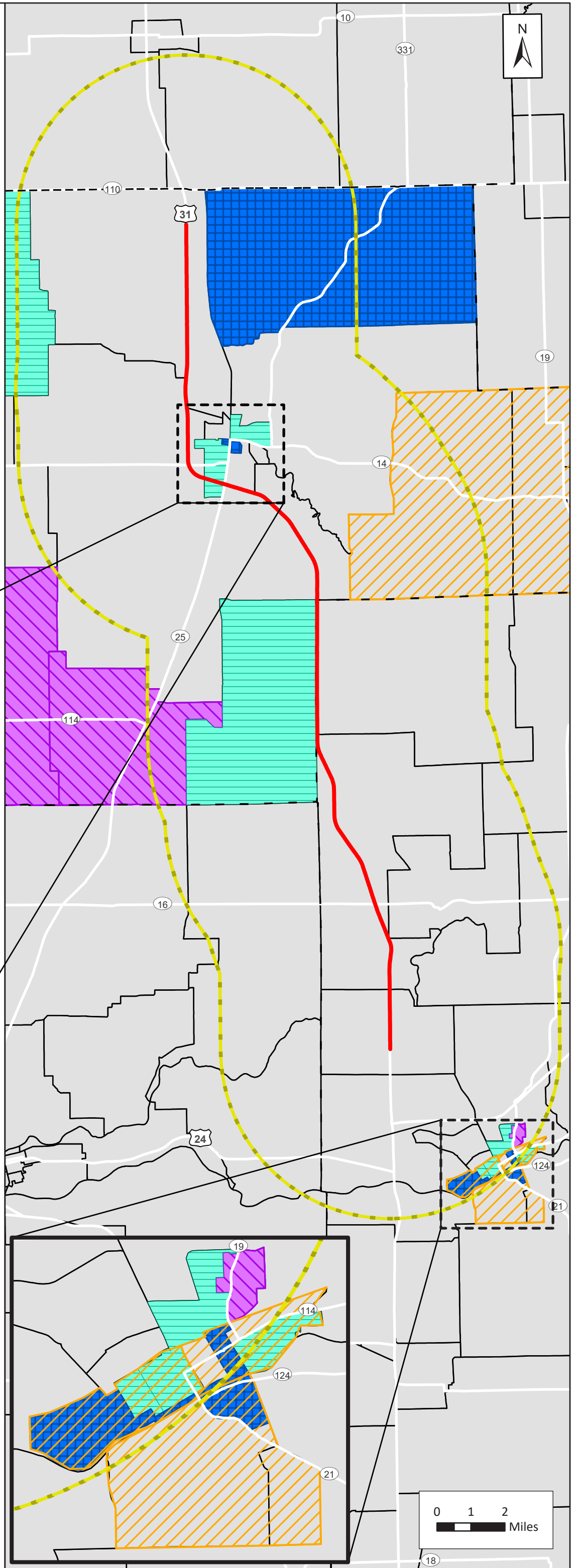
US 31 North

ATTACHMENT E. UNDERSERVED COMMUNITIES MAPS



US 31 North Underserved Communities EJ and Disadvantaged Communities

- Census Tract Block Group (CTBG) Boundary
- US 31 North PEL Corridor
- 5 Mile Radius
- County
- Communities with Environmental Justice (EJ) Concerns
 - Minority
 - Poverty
 - Minority & Poverty
 - Disadvantaged Communities

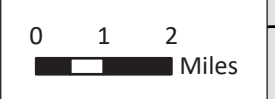
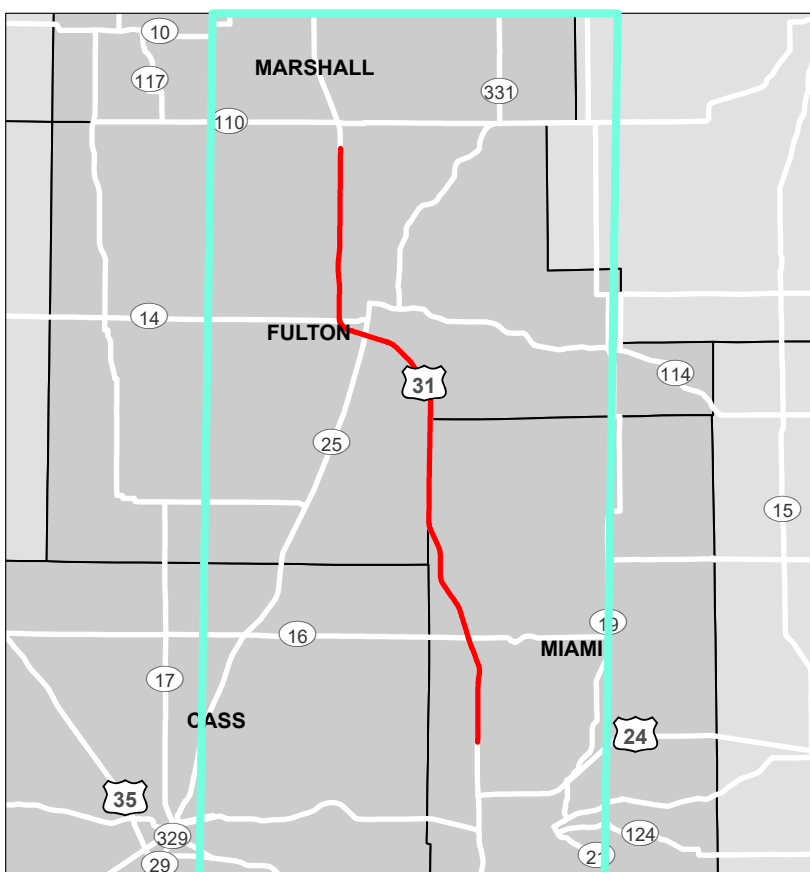
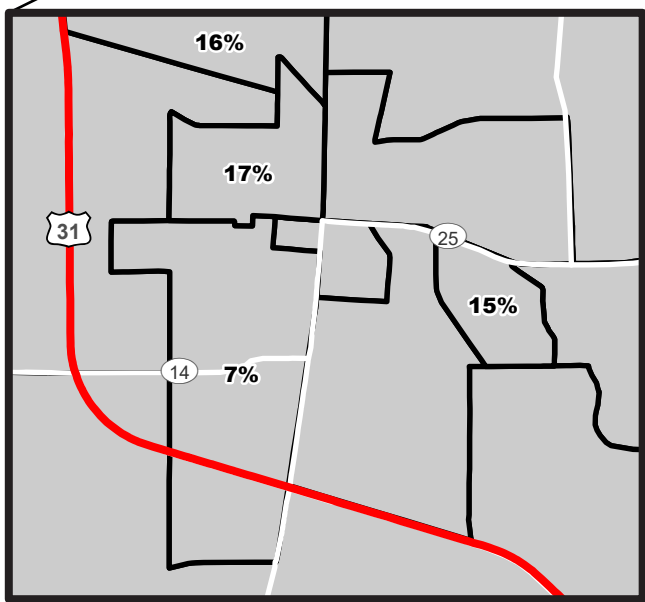
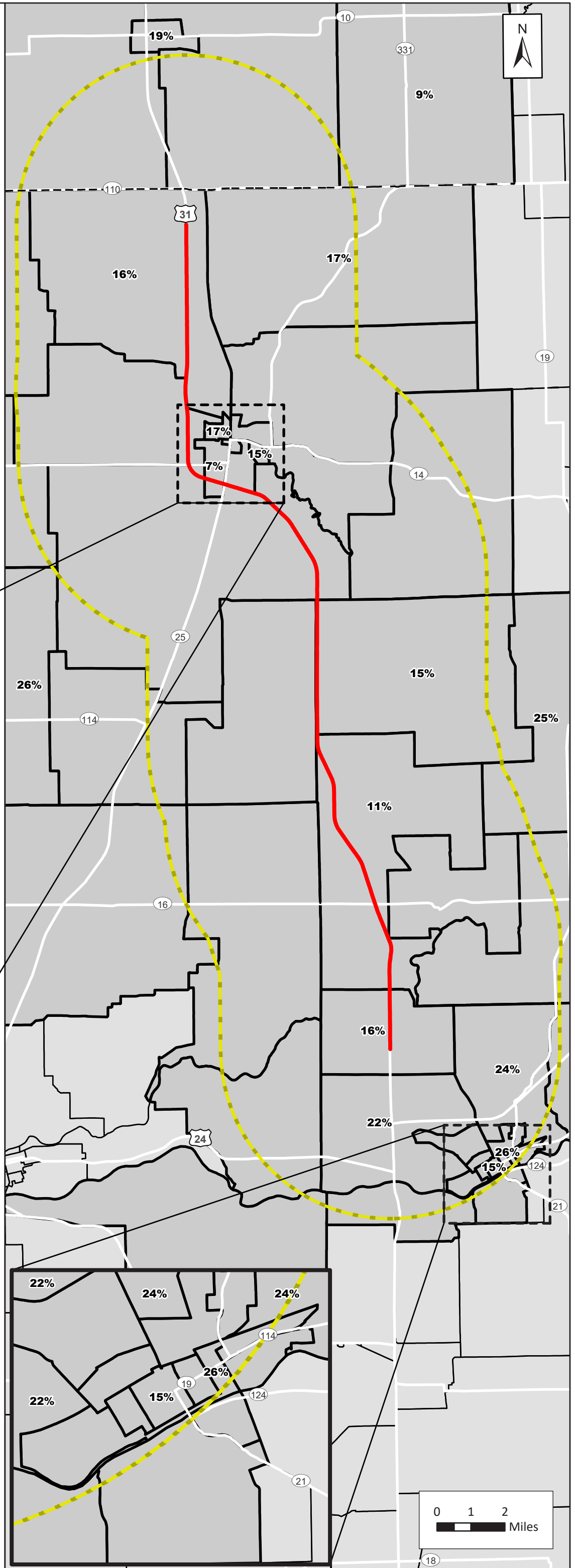




US 31 North

Underserved Communities Limited English Proficiency (LEP)

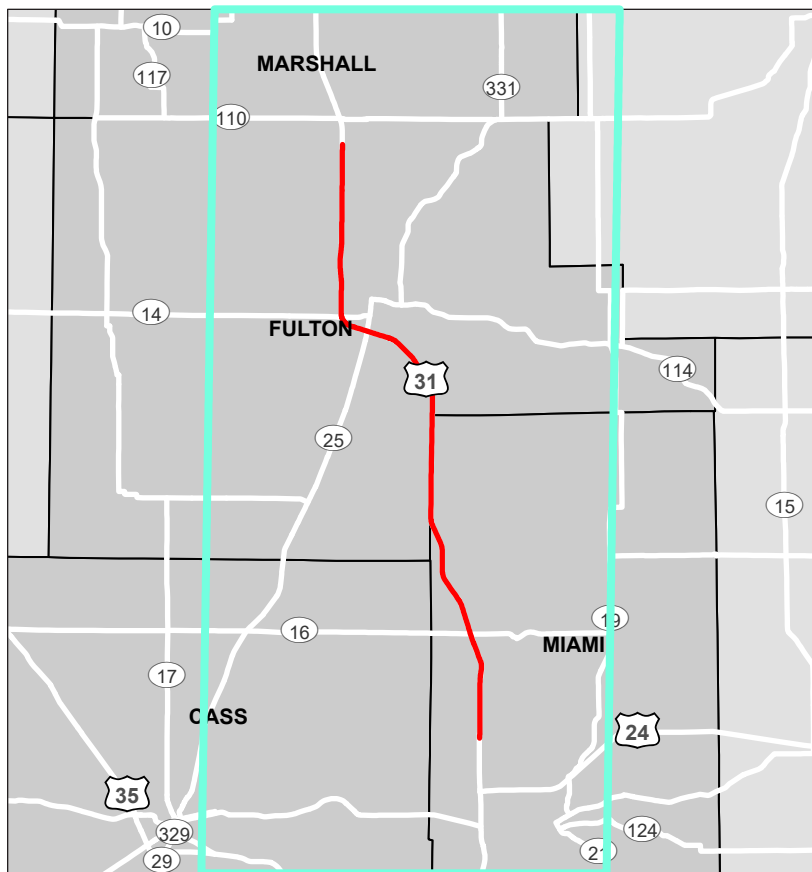
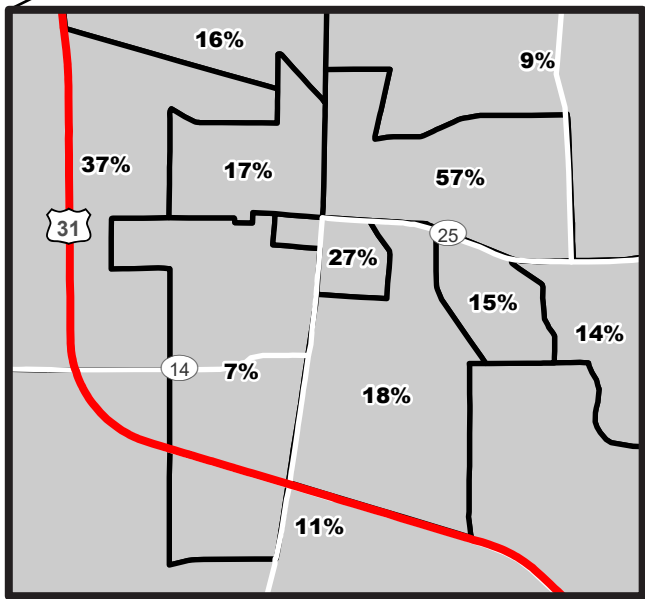
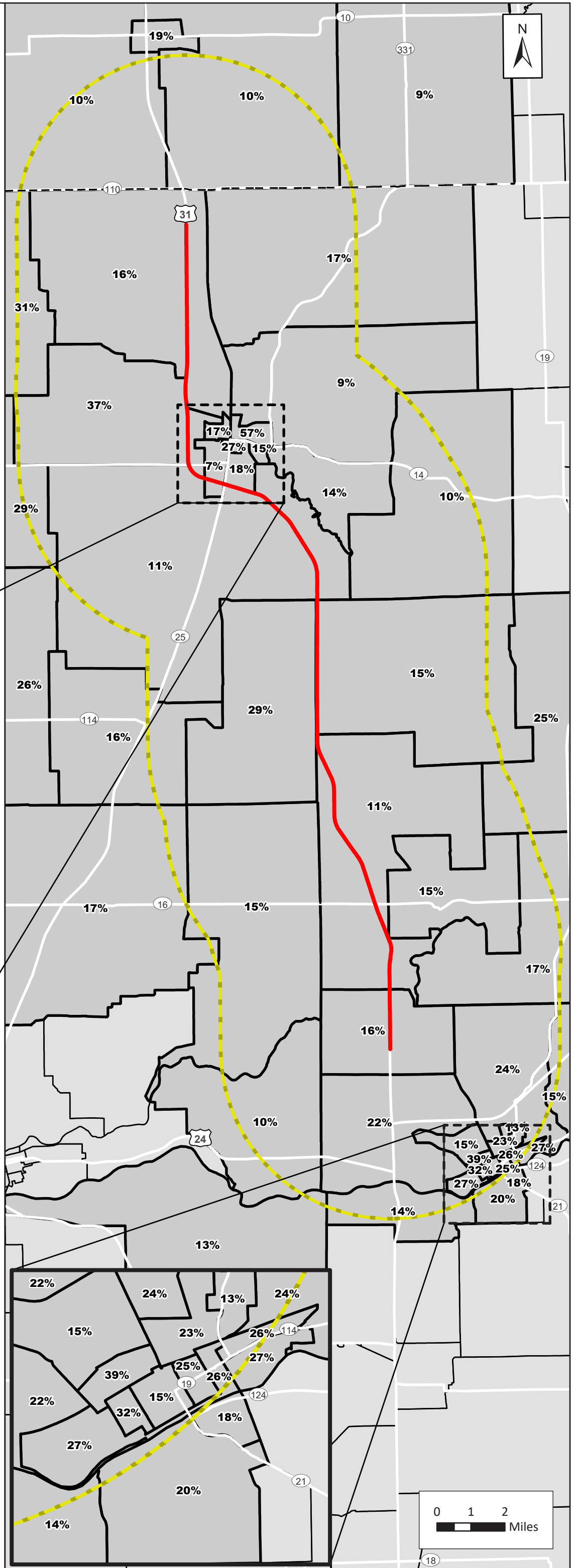
- Census Tract Block Group (CTBG) Boundary
- CTBG in Study Area, Persons with LEP (%)
0% if not noted
- US 31 North PEL Corridor
- 5 Mile Radius
- County





US 31 North Underserved Communities Disability Status

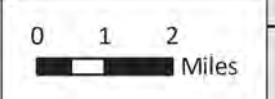
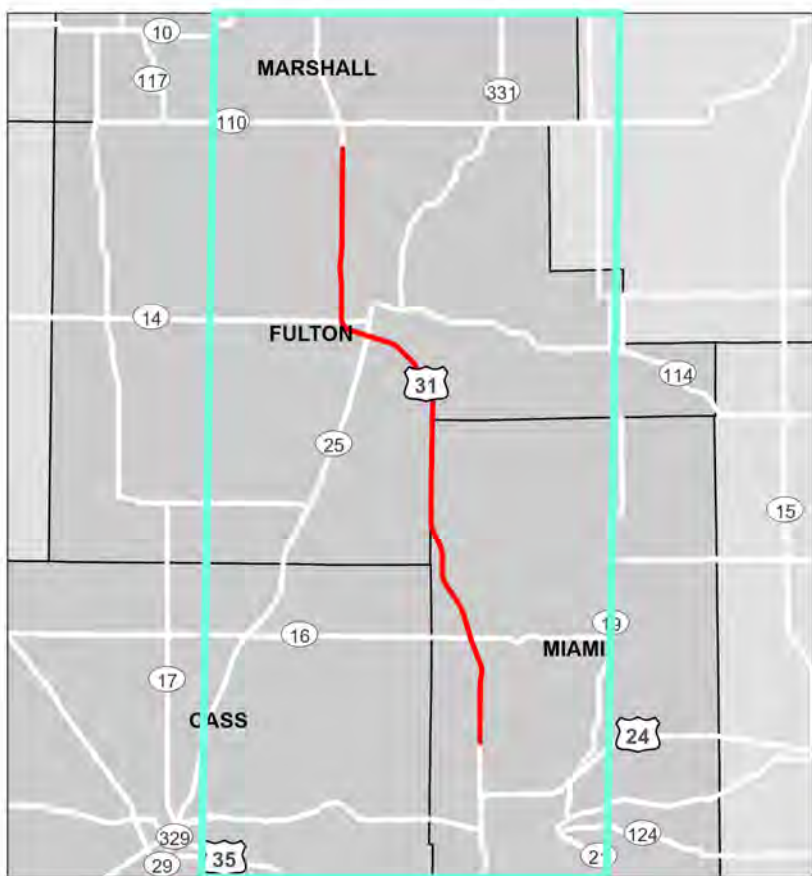
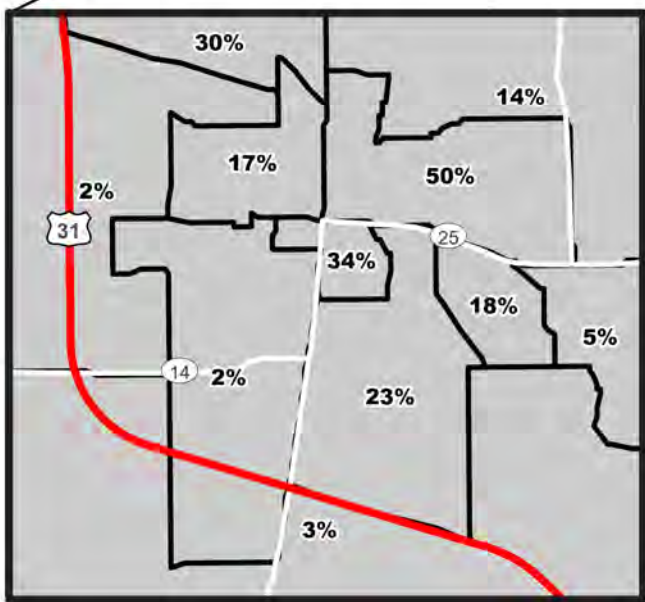
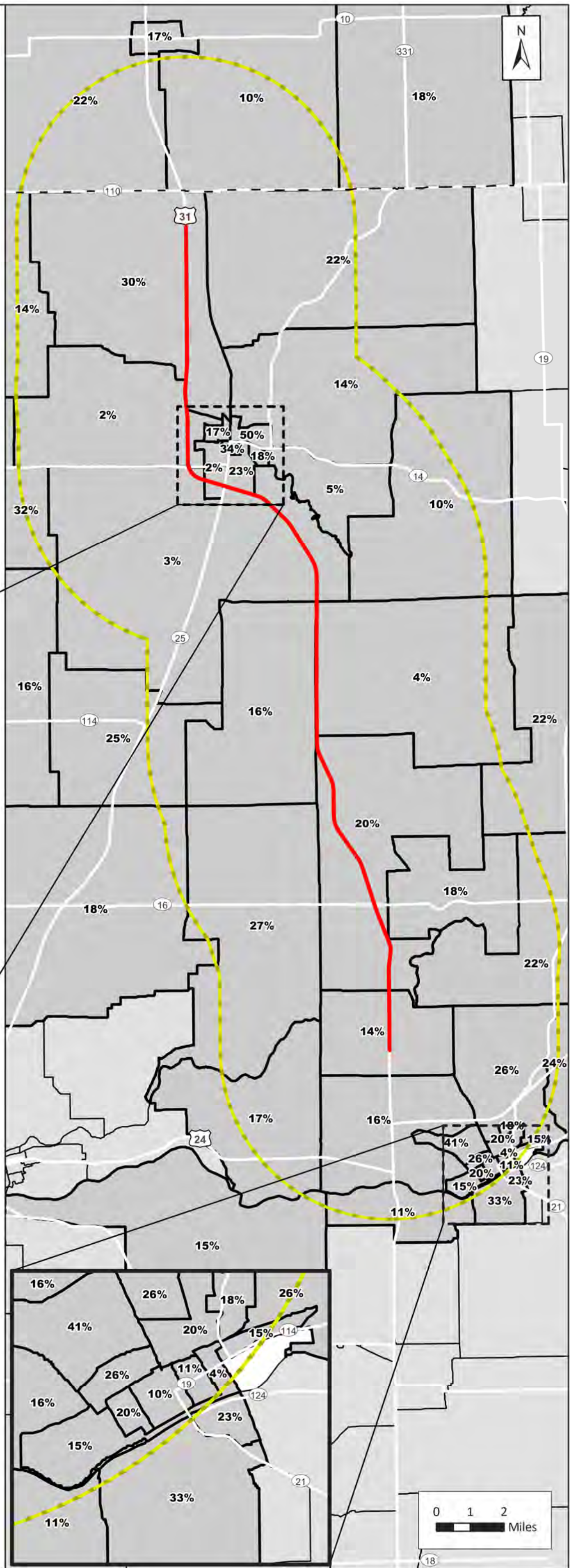
- Census Tract Block Group (CTBG) Boundary
- CTBG in Study Area, Persons with Disabilities (%)
- US 31 North PEL Corridor
- 5 Mile Radius
- County





US 31 North Underserved Communities No Internet Available

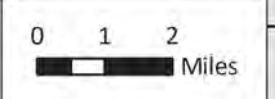
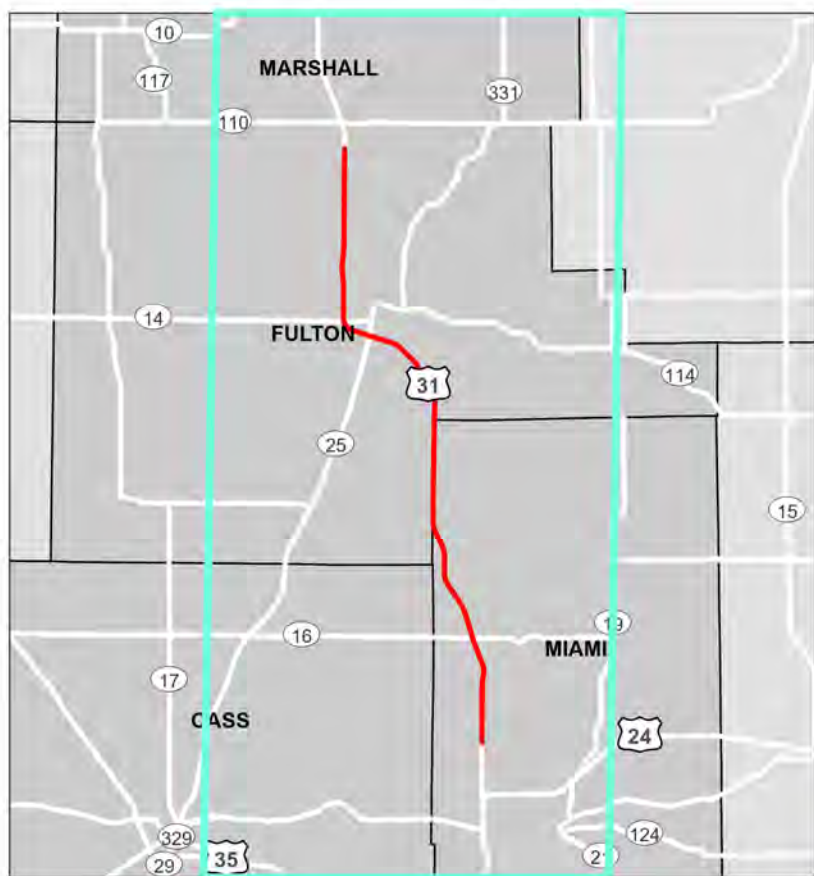
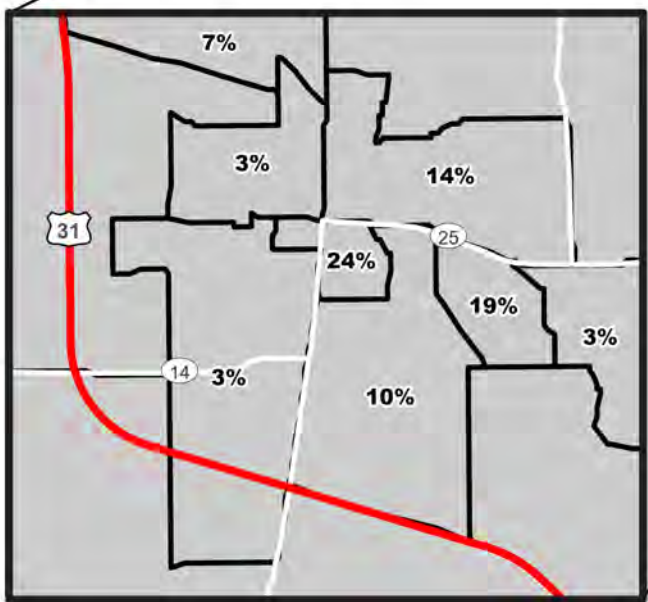
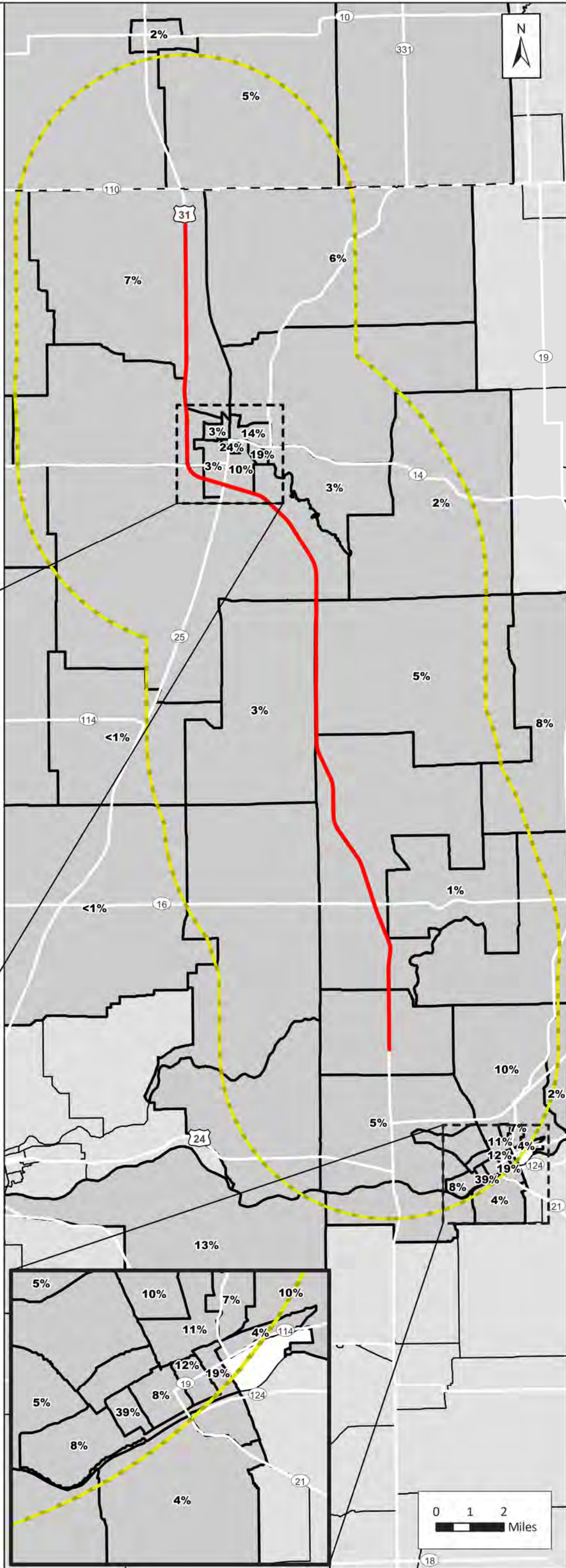
- Census Tract Block Group (CTBG) Boundary
- CTBG in Study Area, Households with No Internet Available (%)
- US 31 North PEL Corridor
- 5 Mile Radius
- County





US 31 North Underserved Communities No Vehicle Available

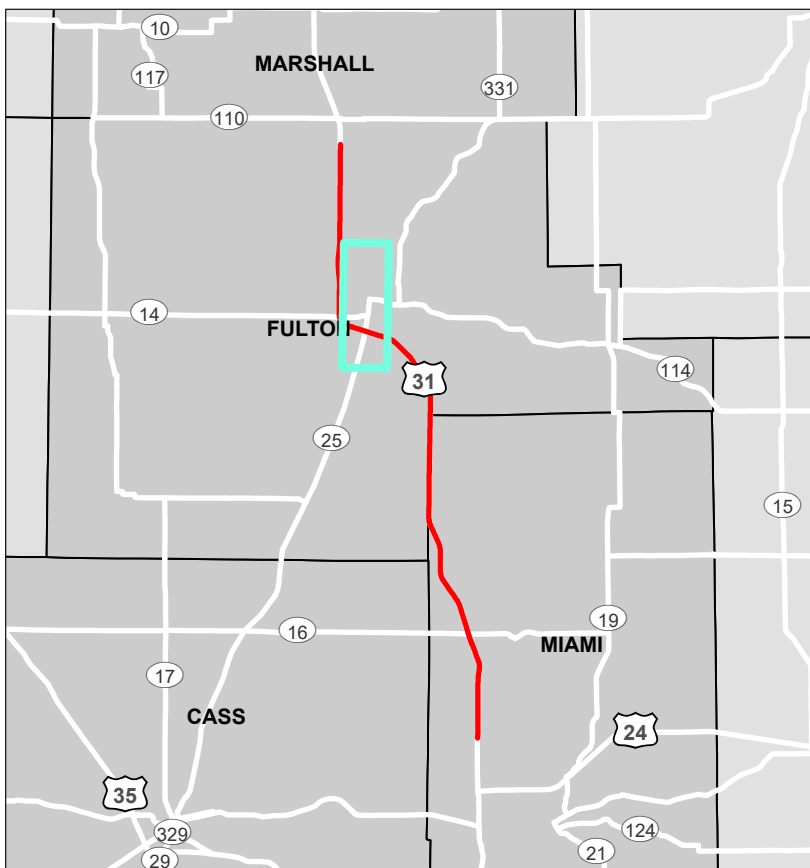
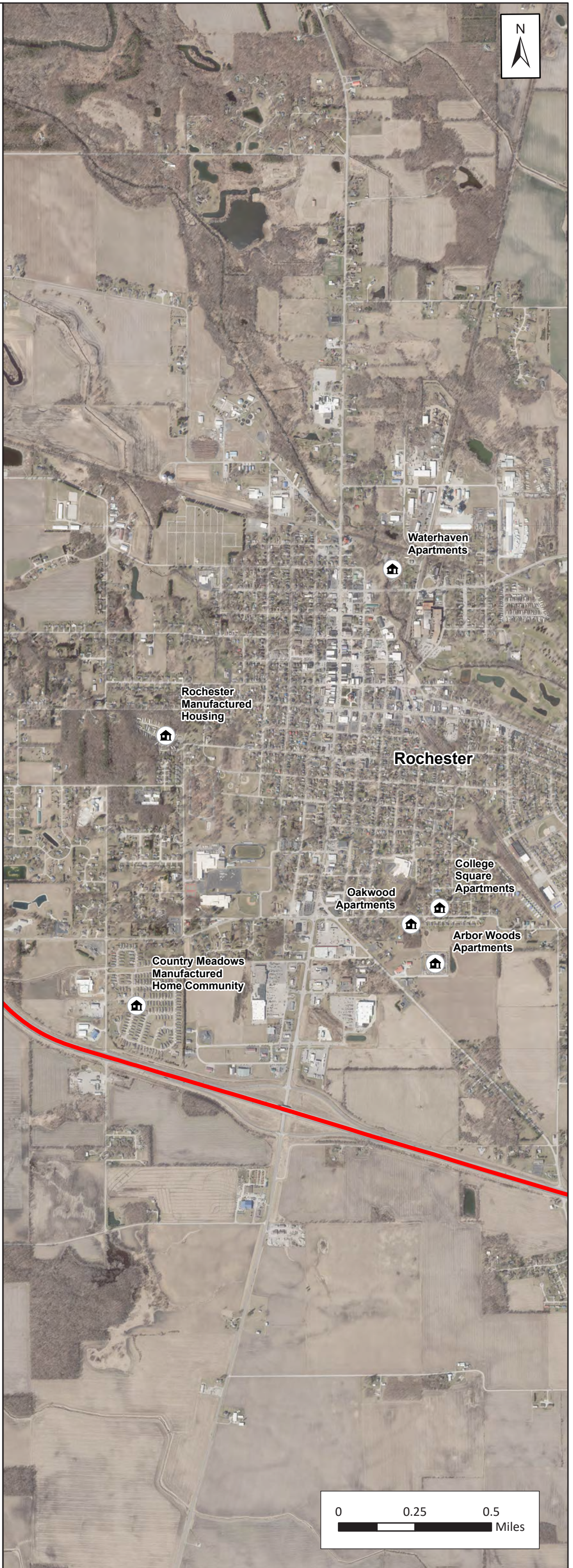
- Census Tract Block Group (CTBG) Boundary
- CTBG in Study Area, Households with No Vehicle Available (%)
0% if not needed
- US 31 North PEL Corridor
- 5 Mile Radius
- County





US 31 North Other Underserved Communities

- Identified Community
- US 31 North PEL Corridor





US 31 North

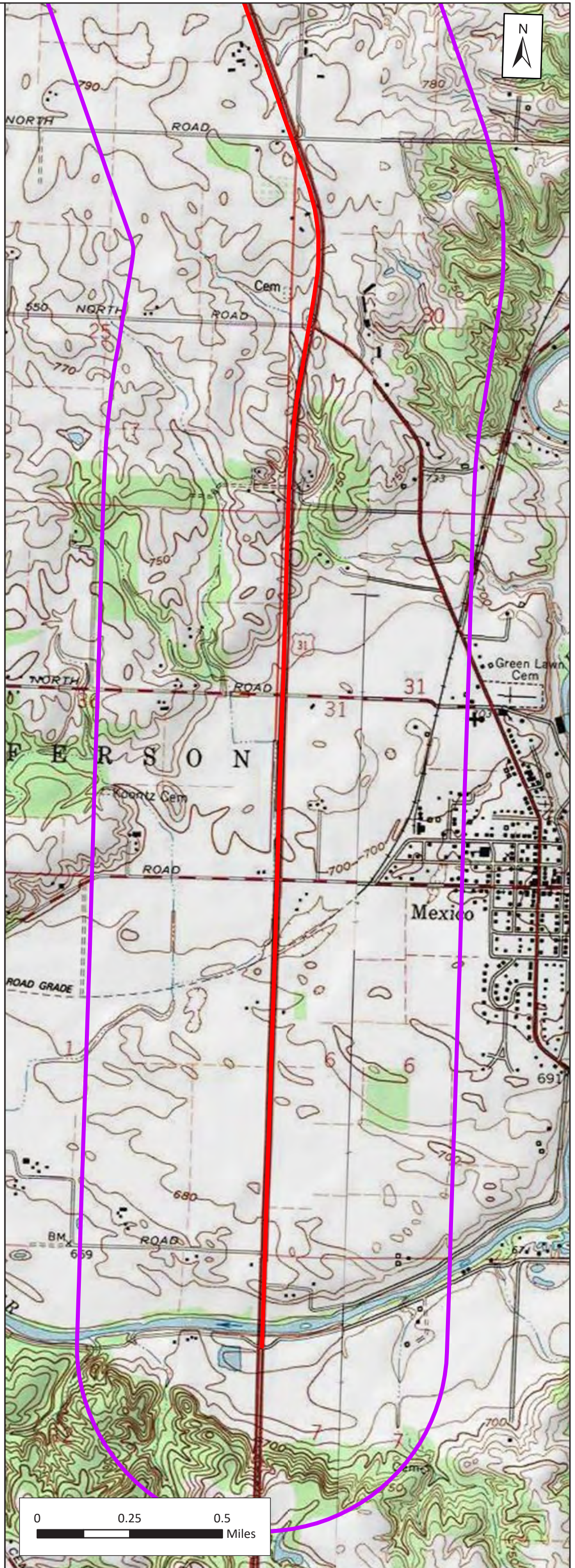
ATTACHMENT F. USGS TOPOGRAPHIC MAP SERIES



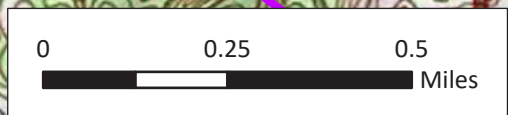
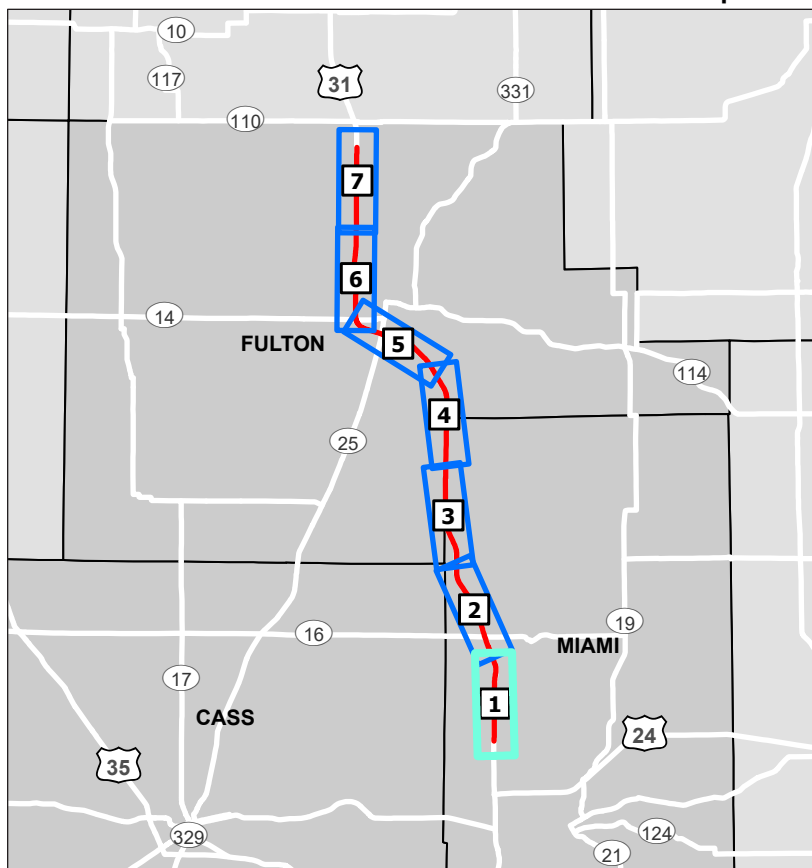
US 31 North

USGS Topographic Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer





Map 1 of 7

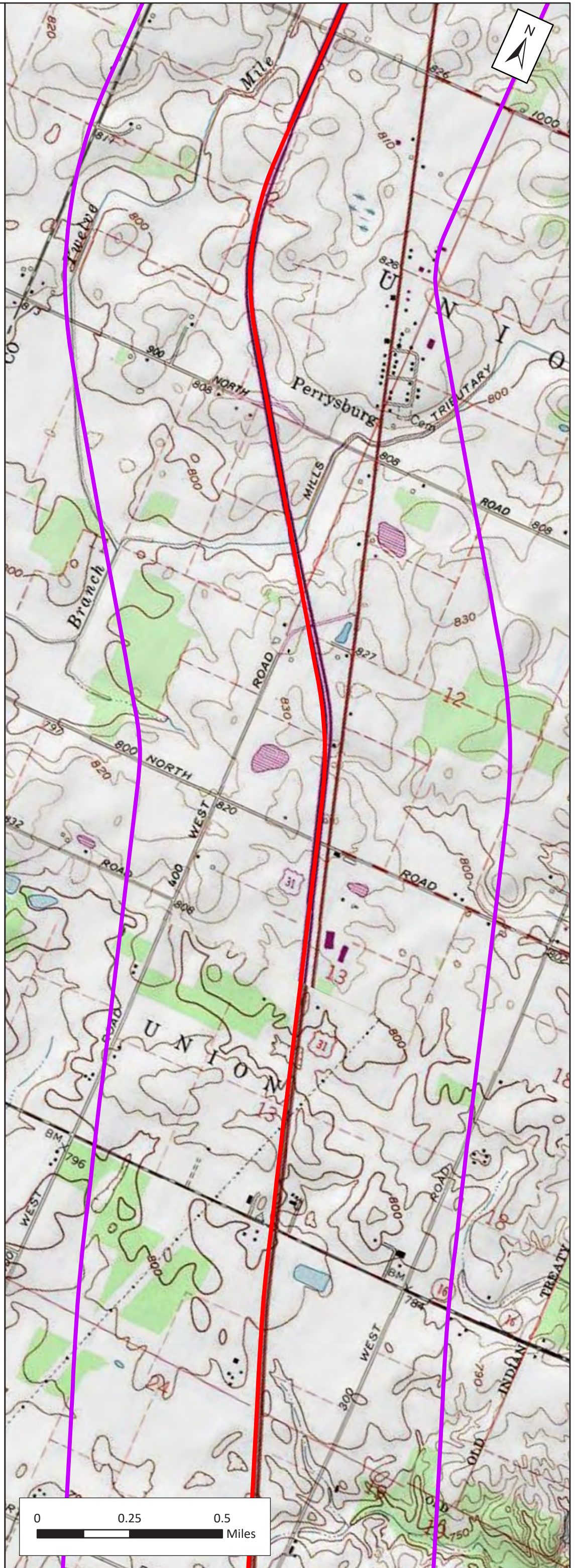




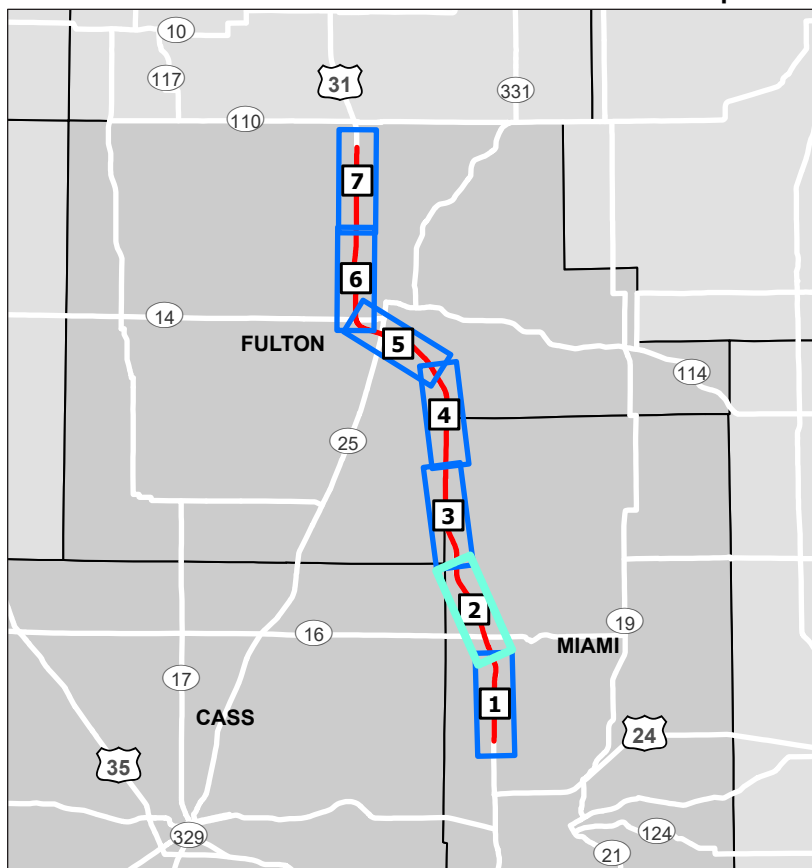
US 31 North

USGS Topographic Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer





Map 2 of 7

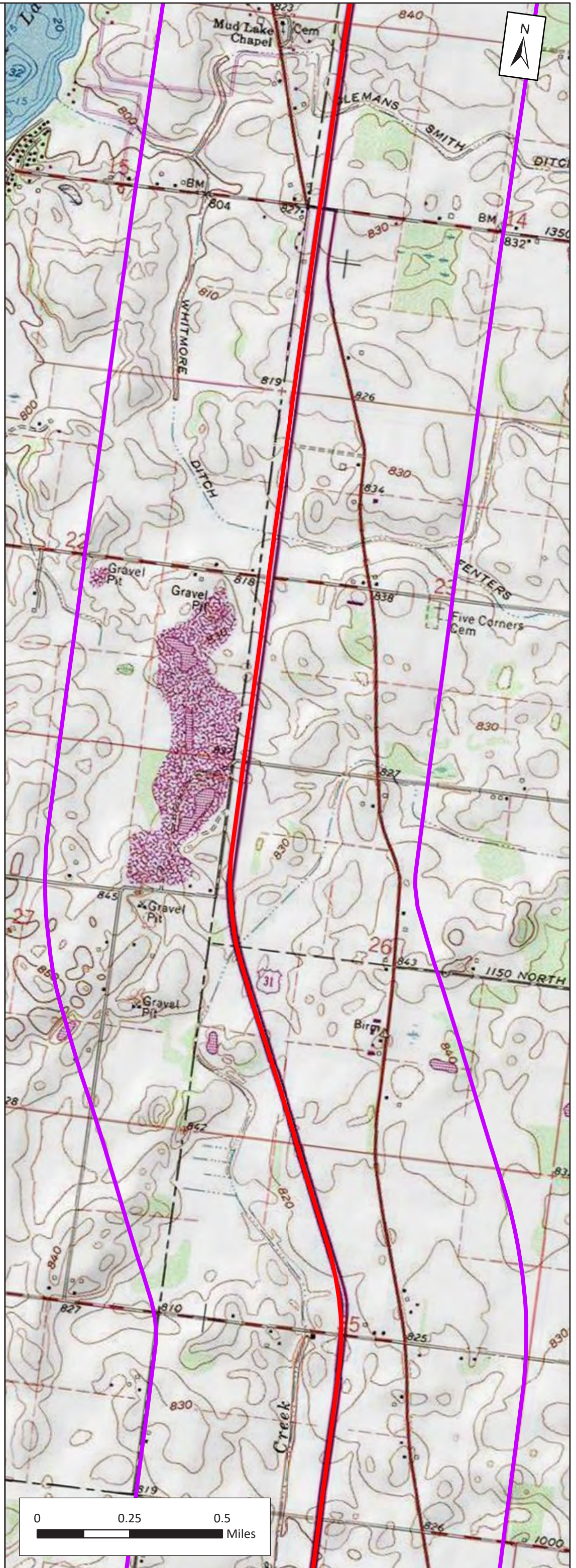




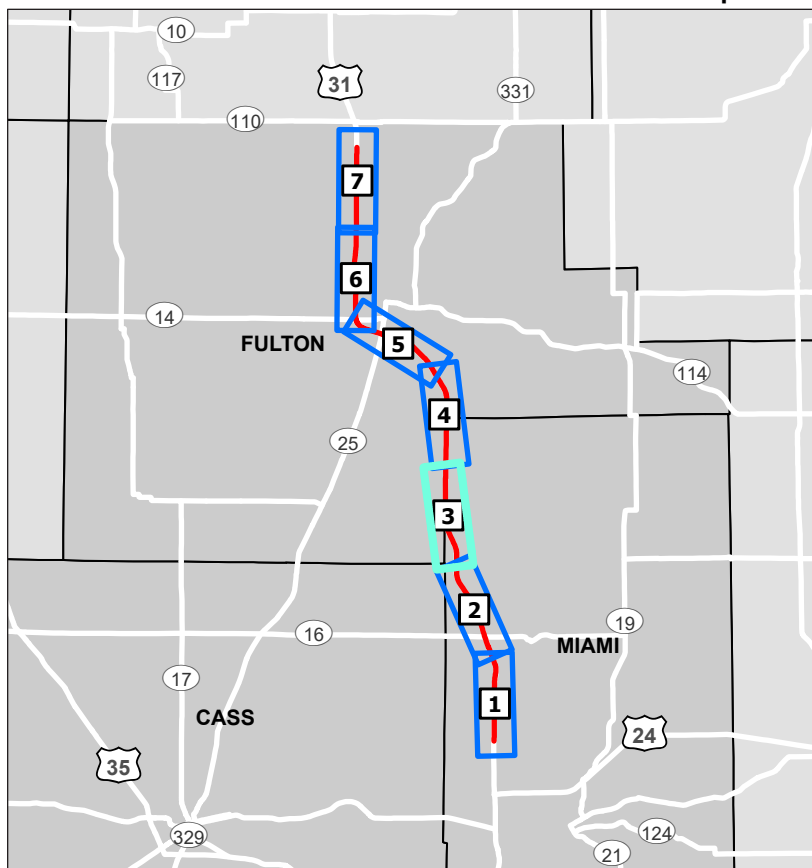
US 31 North

USGS Topographic Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer





Map 3 of 7

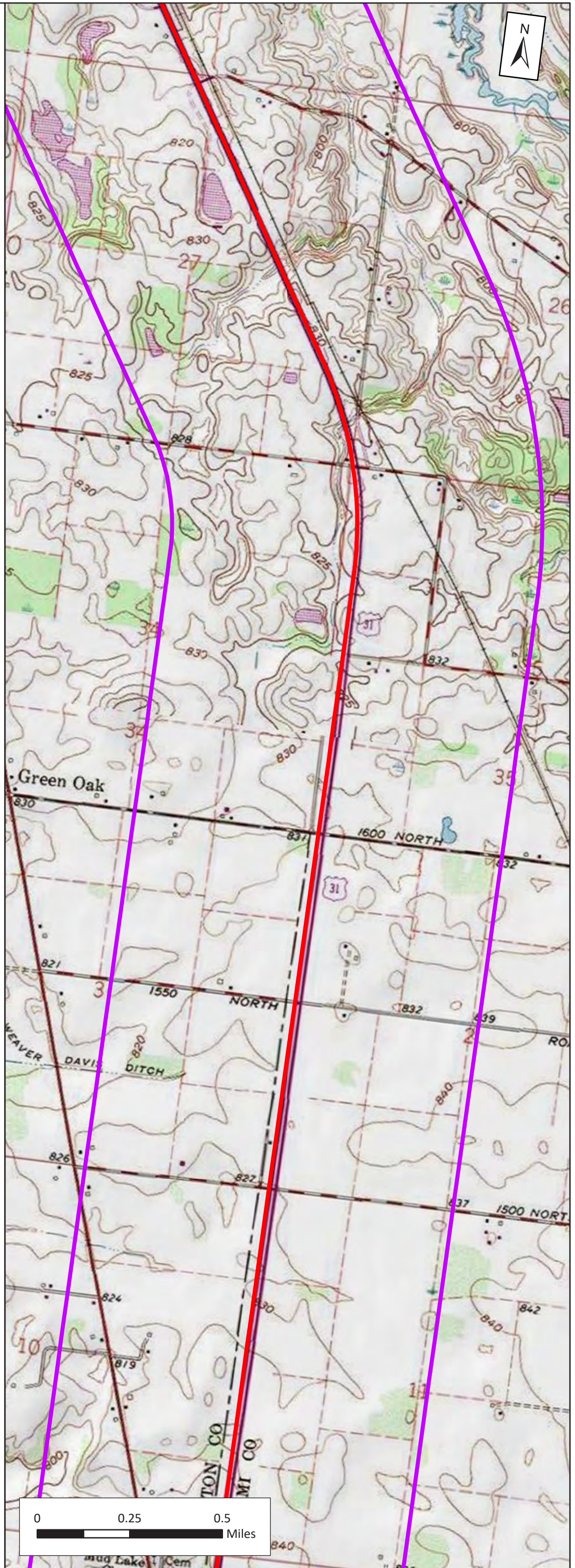




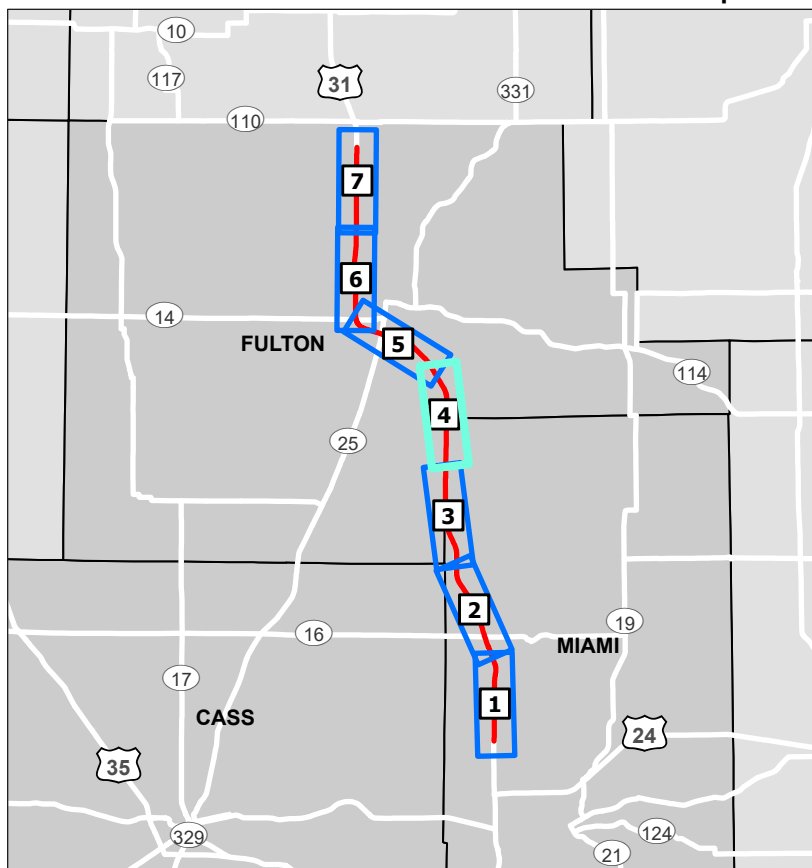
US 31 North

USGS Topographic Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer





Map 4 of 7

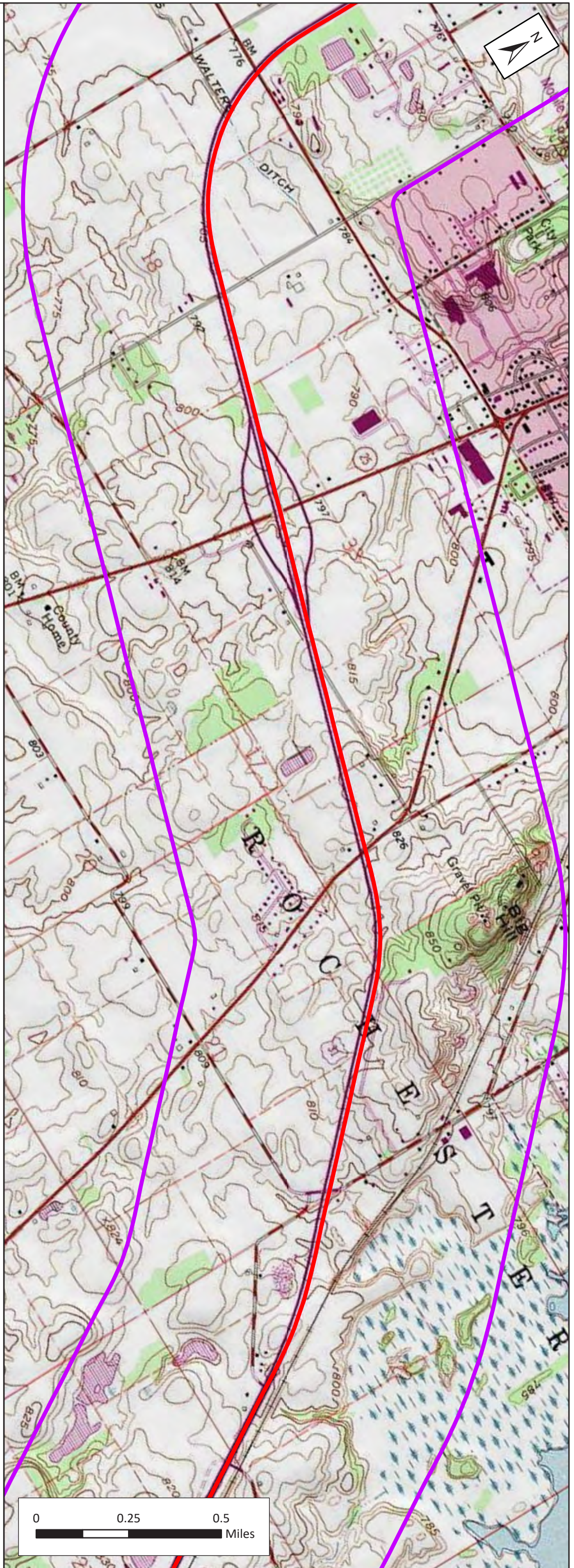




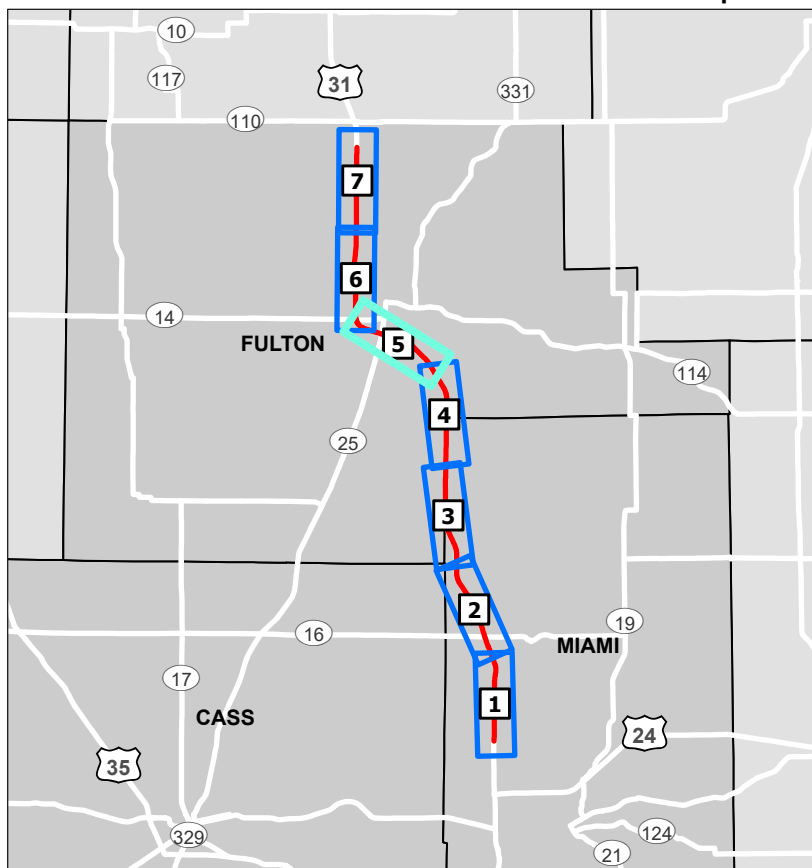
US 31 North

USGS Topographic Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer





Map 5 of 7

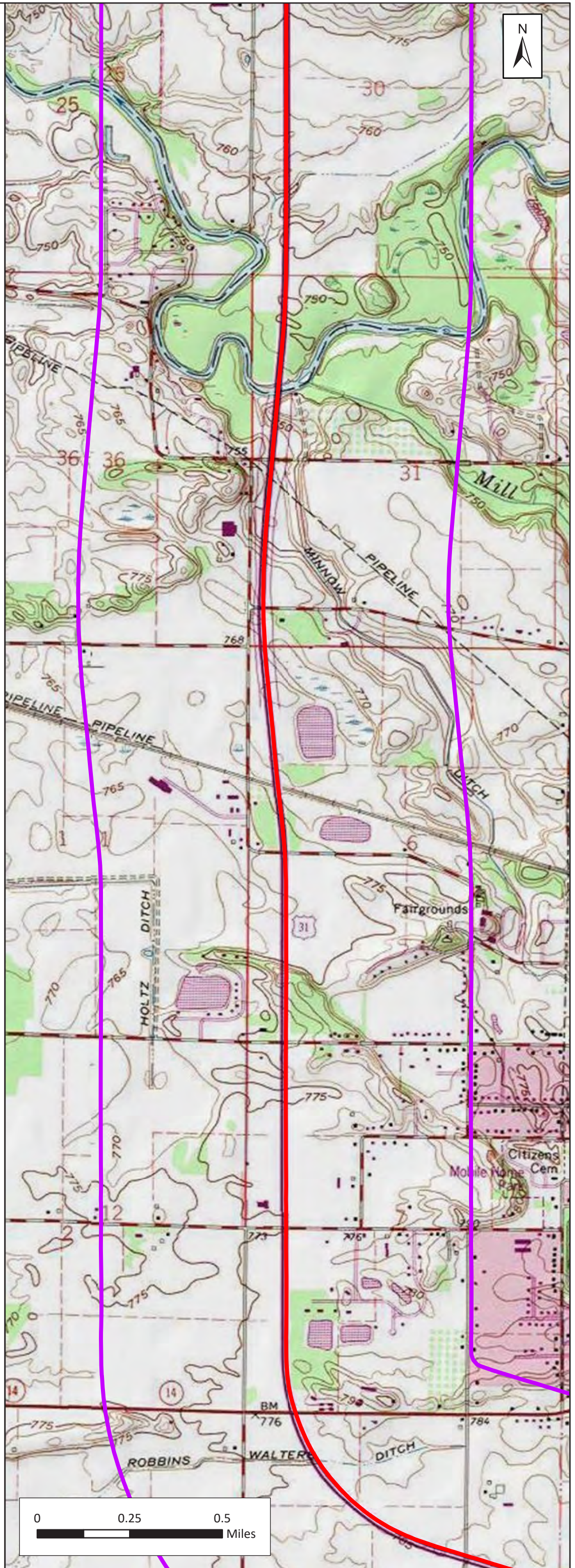




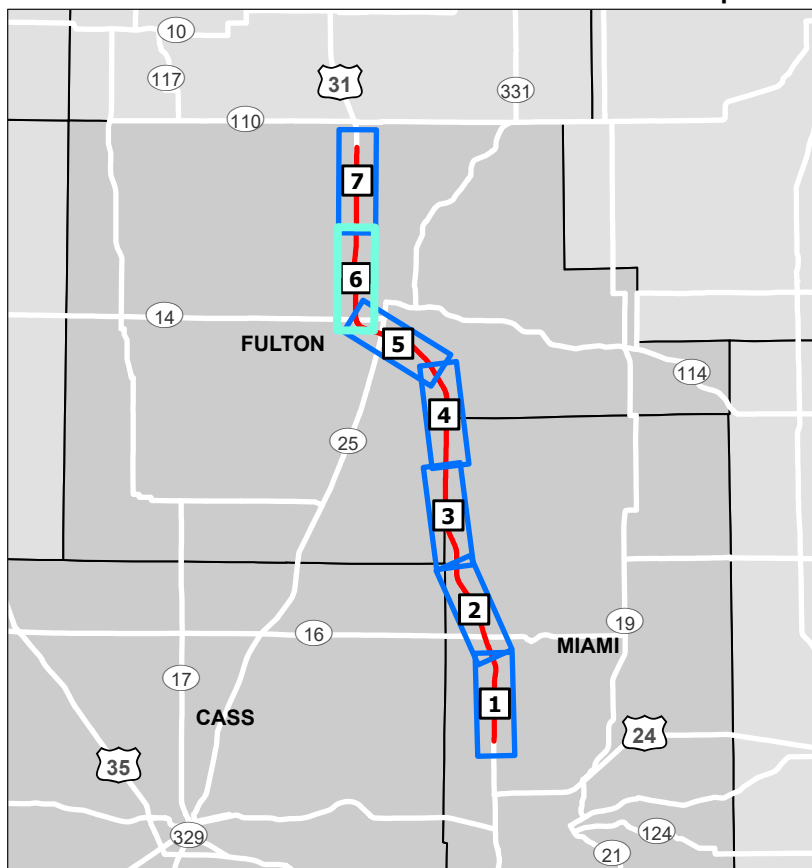
US 31 North

USGS Topographic Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer





Map 6 of 7

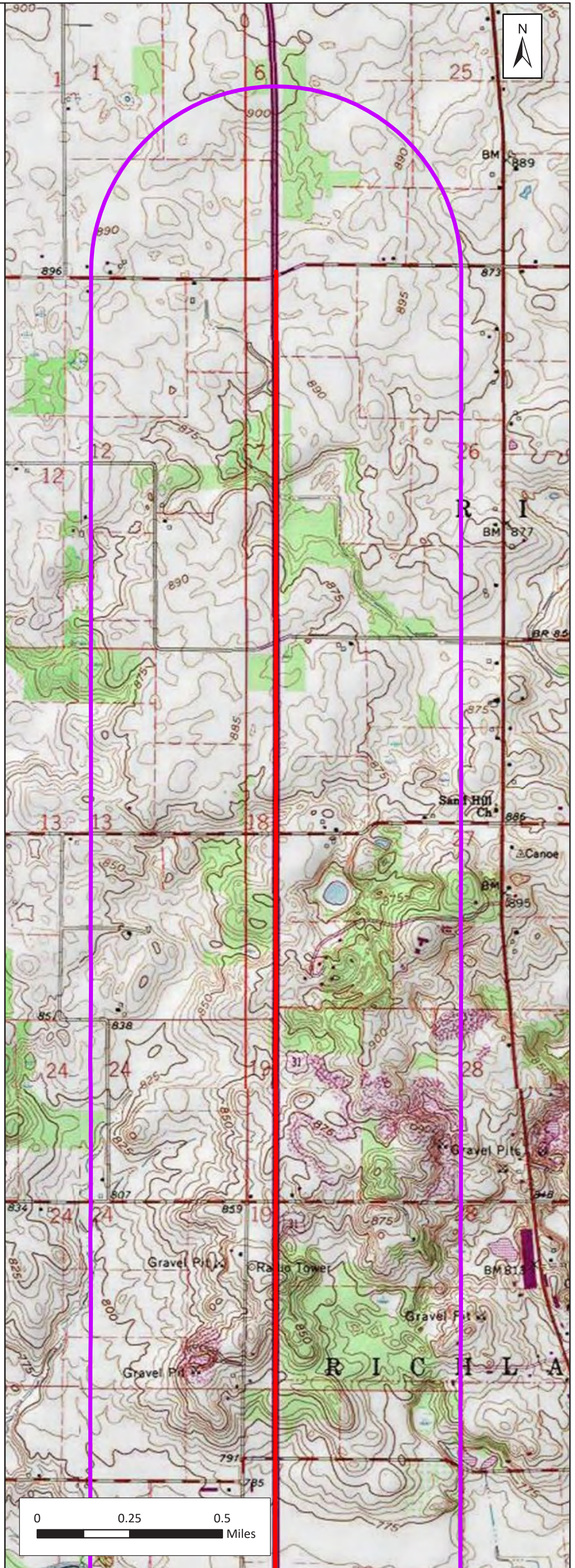




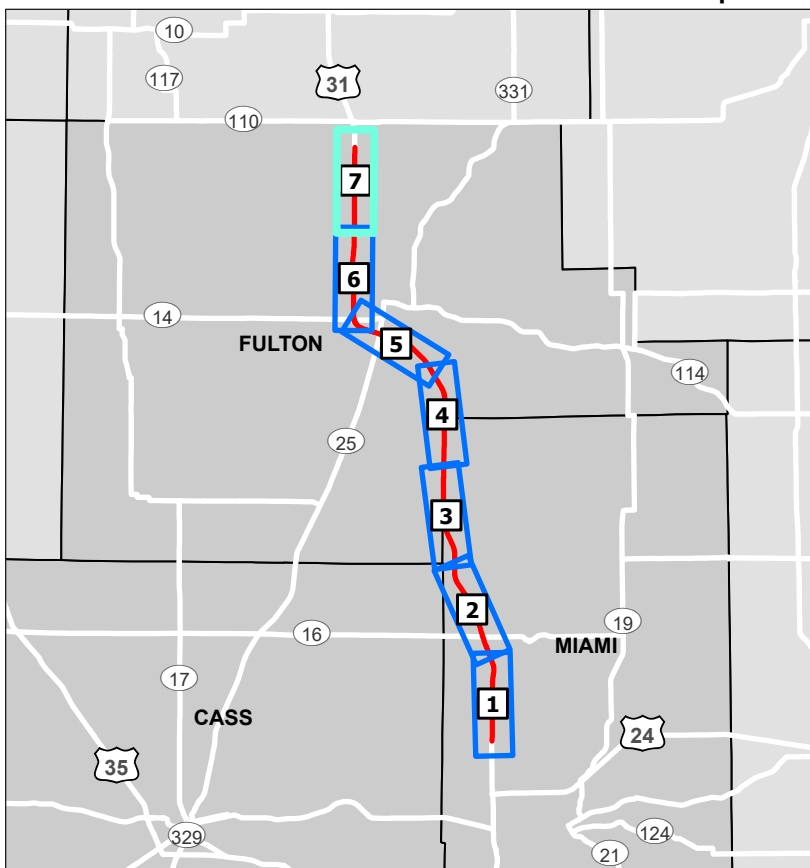
US 31 North

USGS Topographic Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer



Map 7 of 7








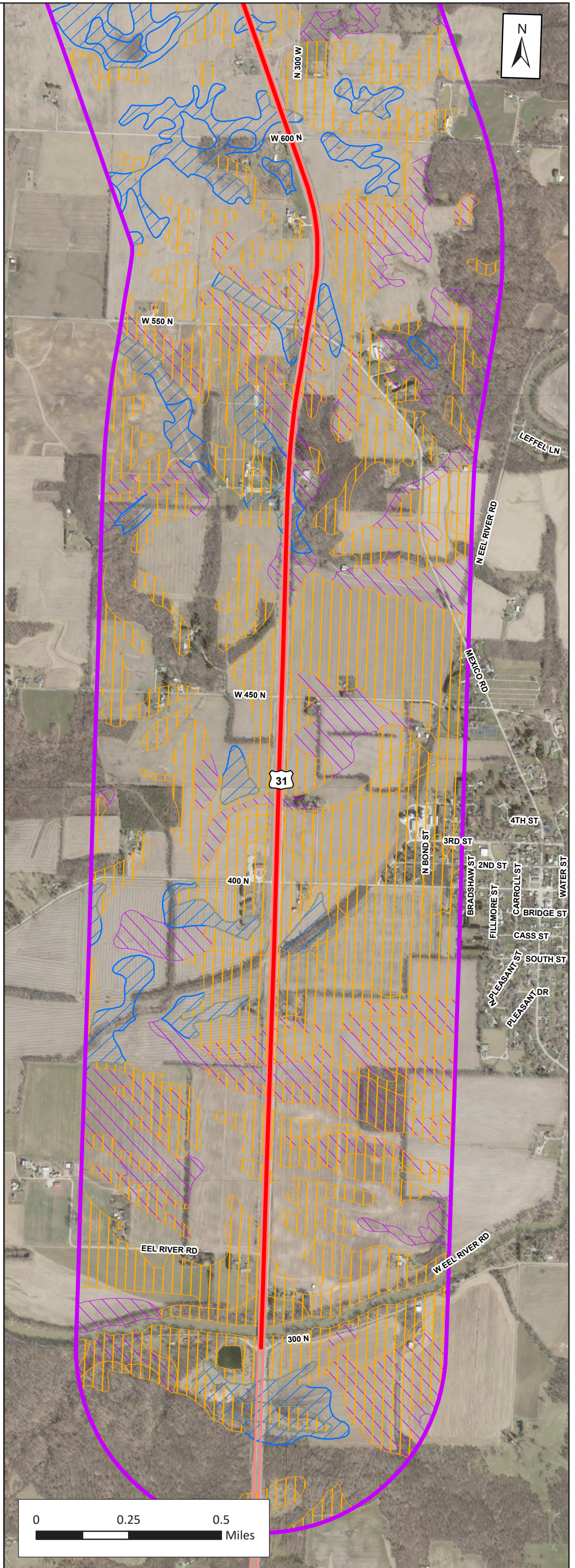
US 31 North

ATTACHMENT G. SOILS MAP SERIES

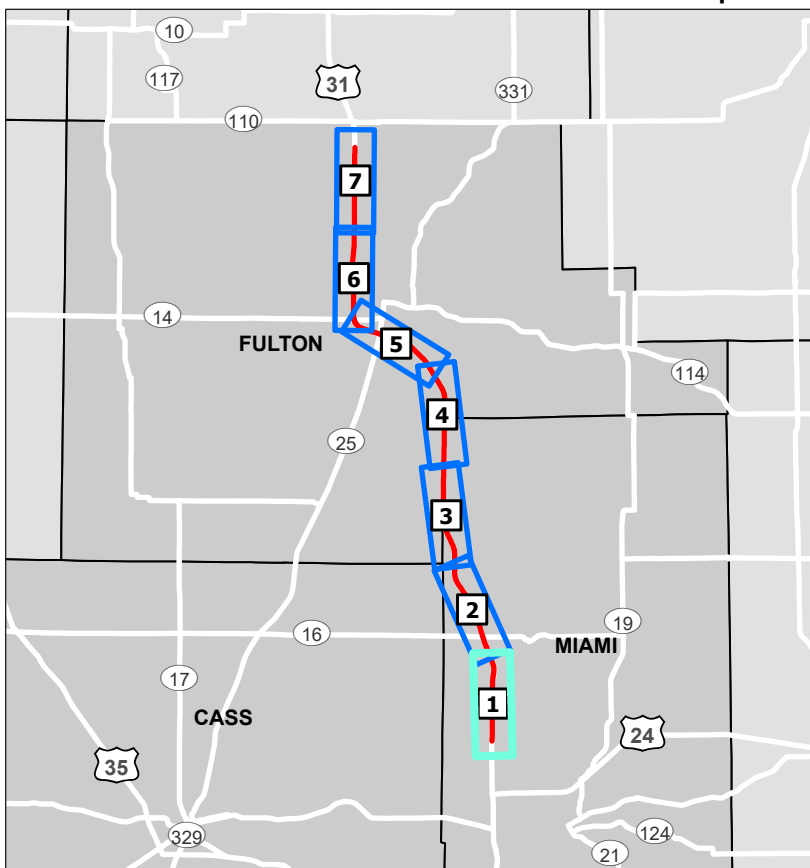


US 31 North Soils Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer
-  Hydric Soils
-  Not Suitable Soils
-  Prime and Unique Farmland








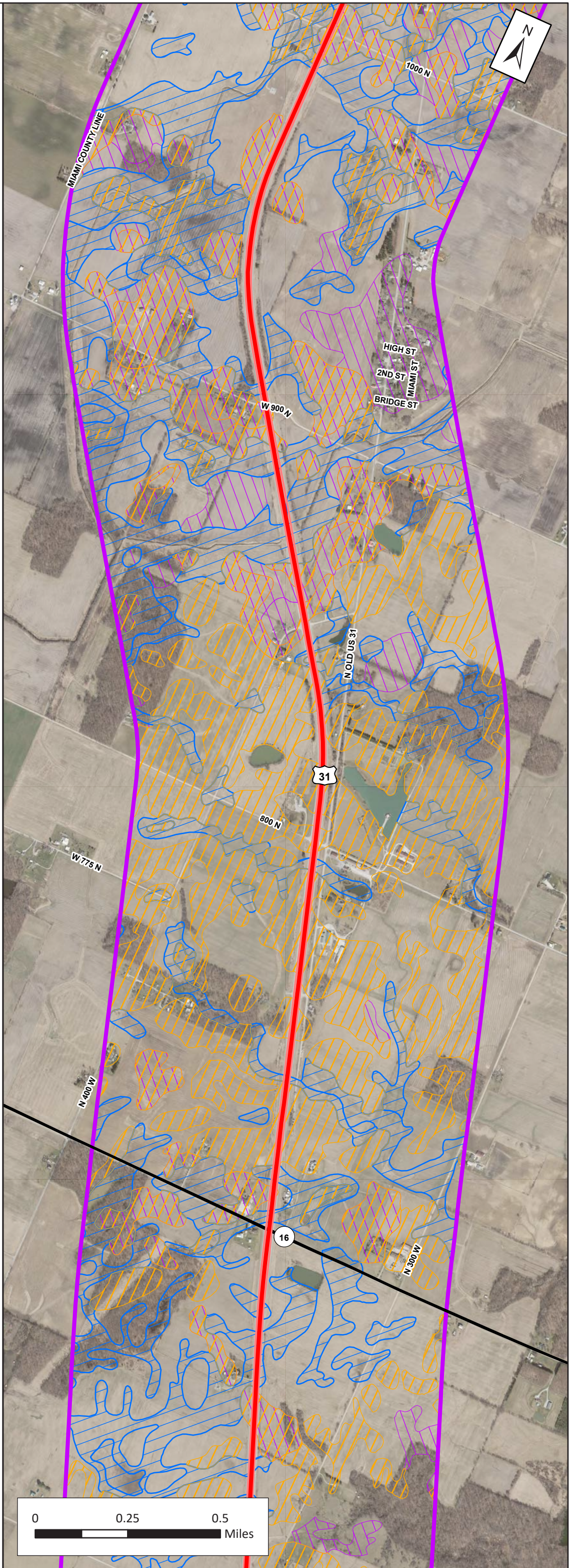
Map 1 of 7





US 31 North Soils Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer
-  Hydric Soils
-  Not Suitable Soils
-  Prime and Unique Farmland








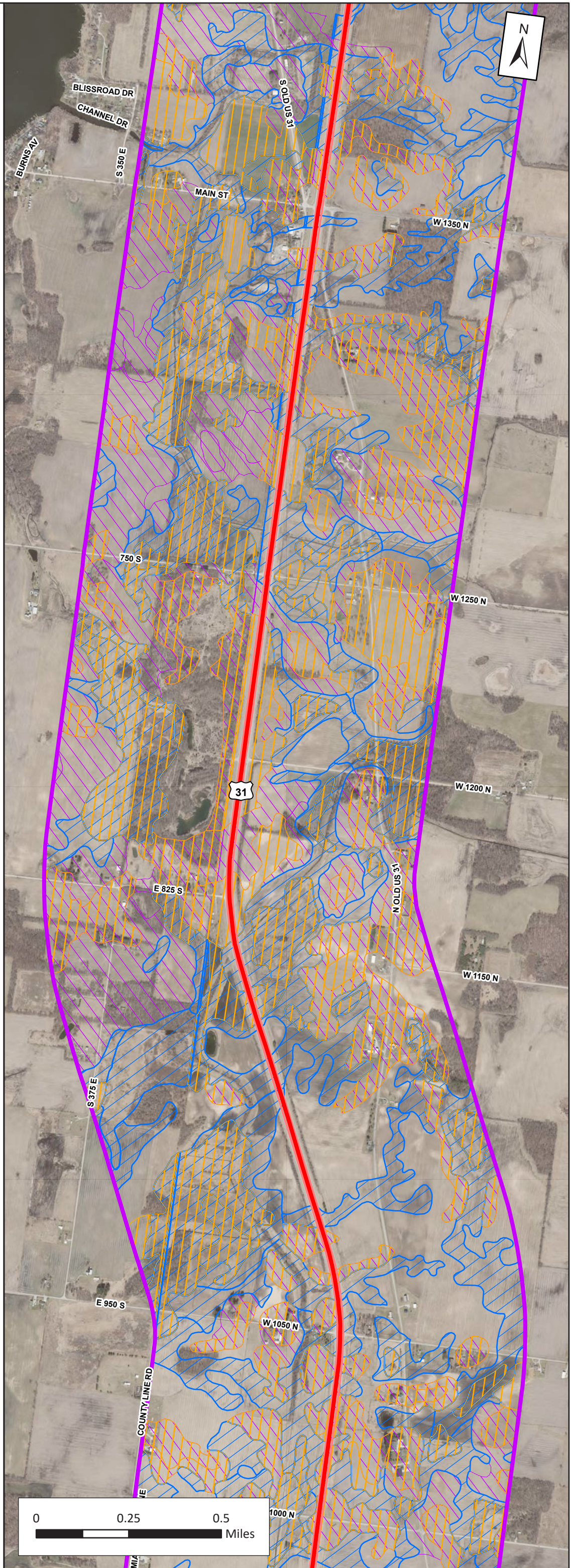
Map 2 of 7



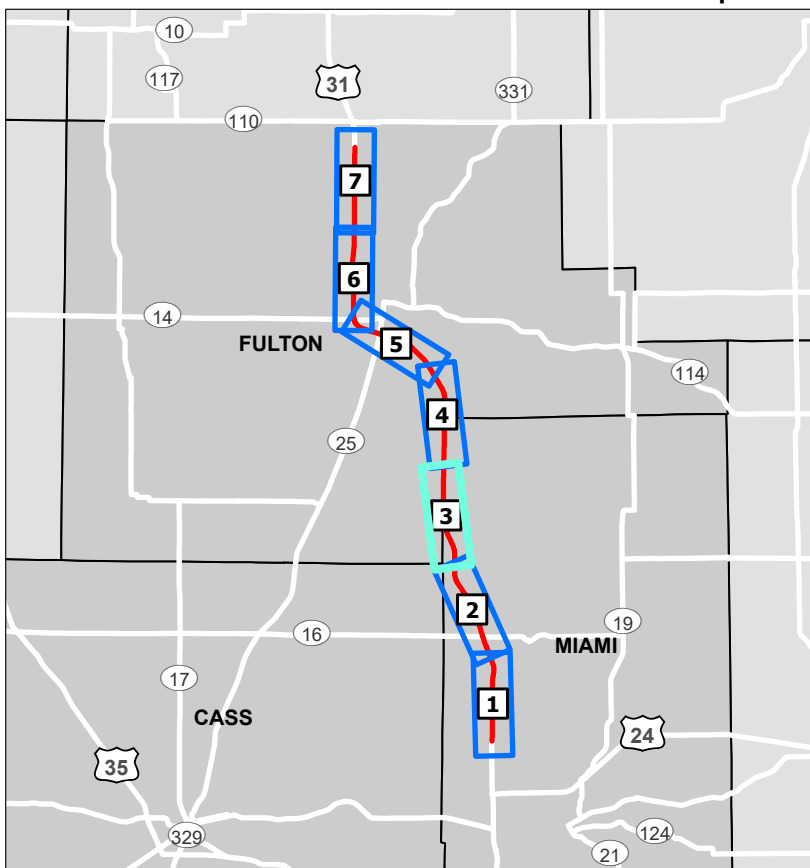


US 31 North Soils Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer
-  Hydric Soils
-  Not Suitable Soils
-  Prime and Unique Farmland








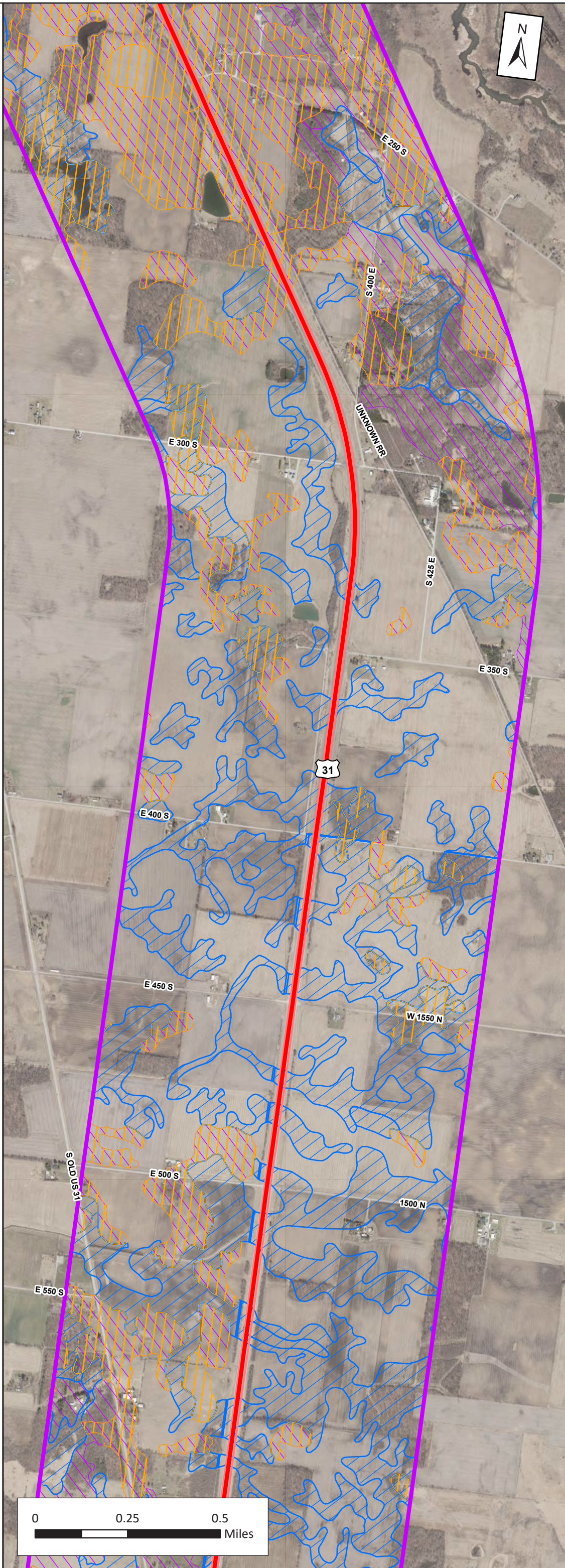
Map 3 of 7



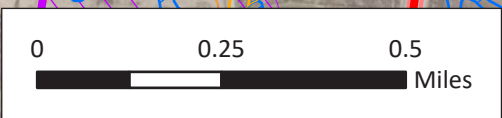
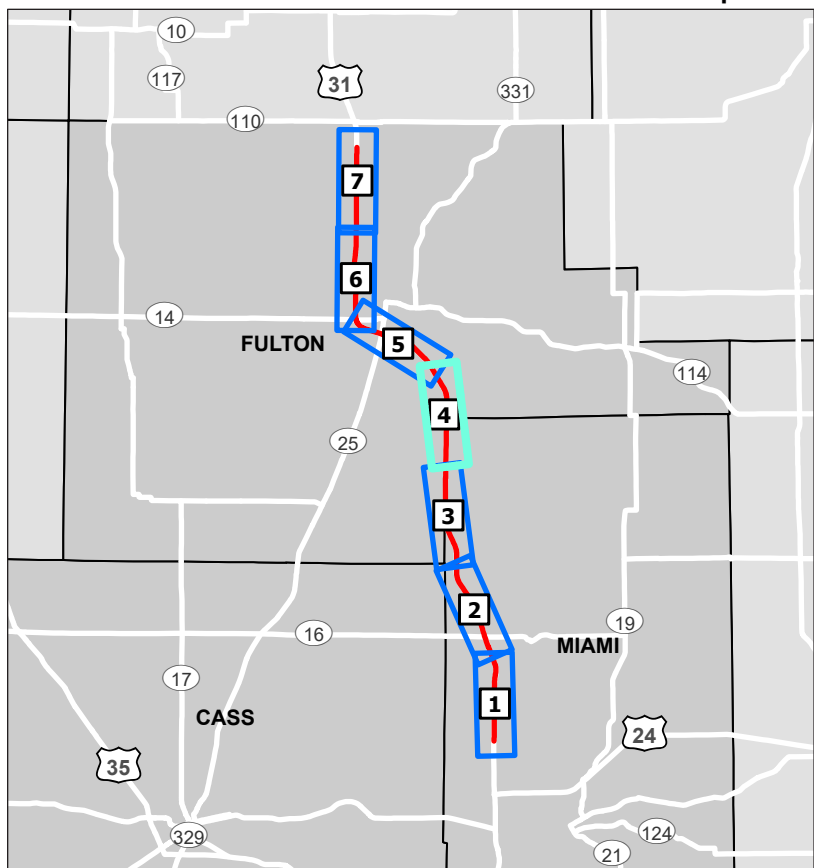


US 31 North Soils Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer
-  Hydric Soils
-  Not Suitable Soils
-  Prime and Unique Farmland



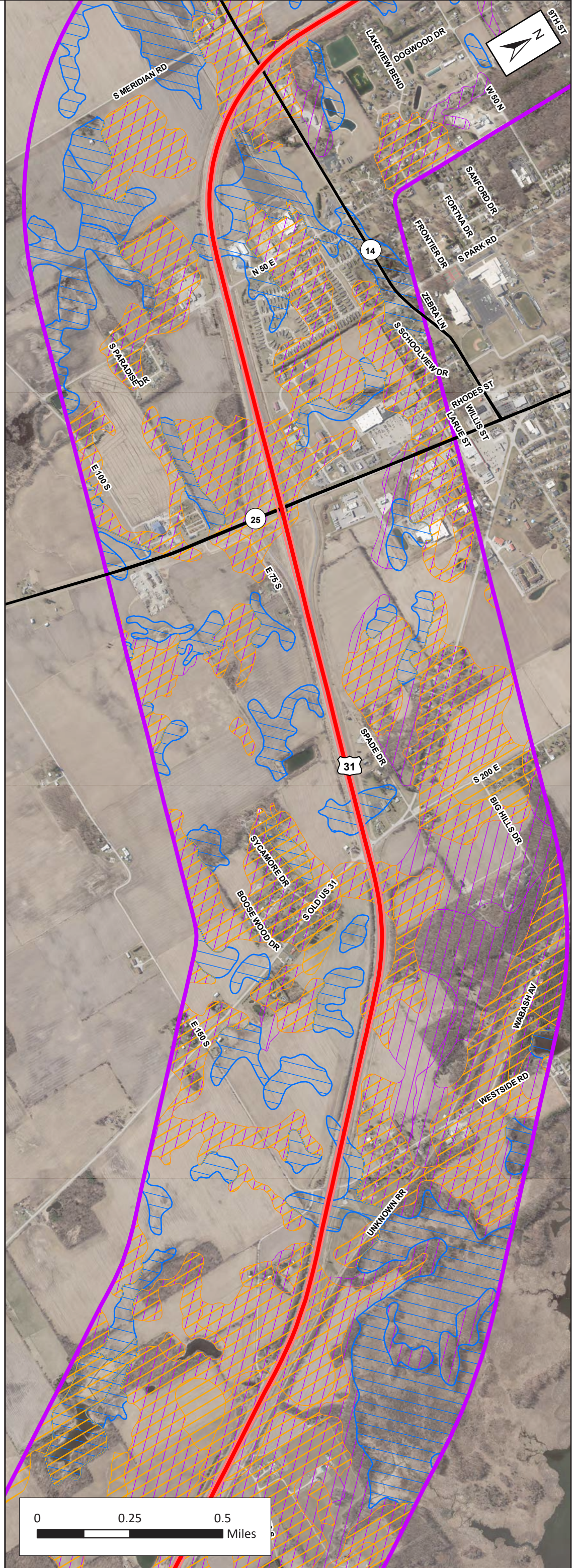
Map 4 of 7



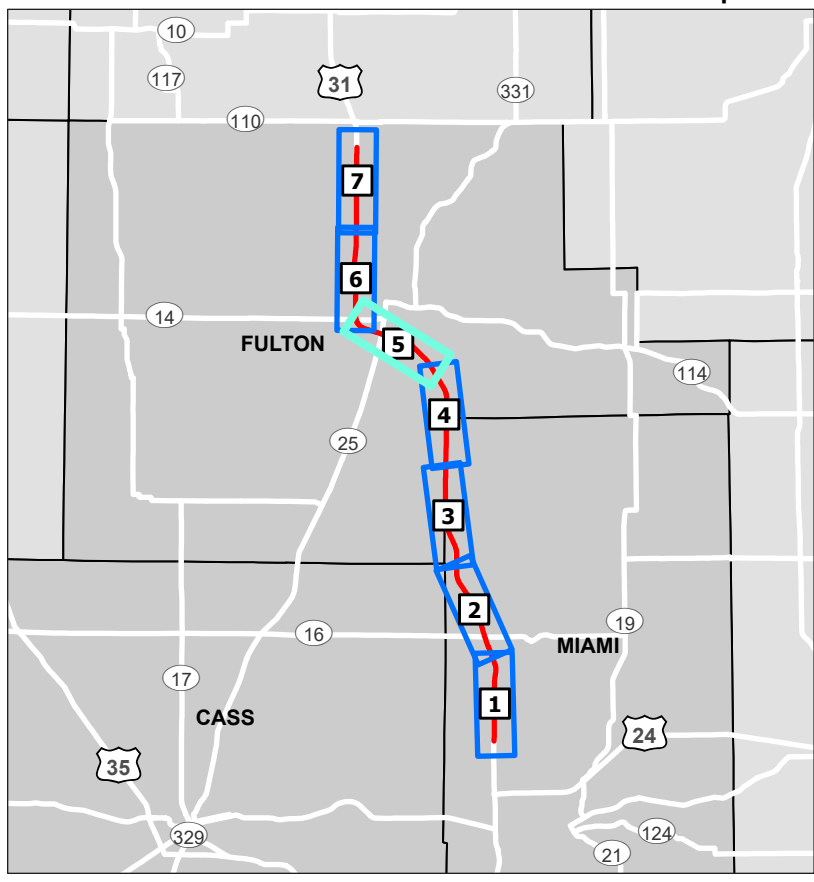


US 31 North Soils Map

- US 31 North PEL Corridor
- 0.5 Mile Corridor Buffer
- Hydric Soils
- Not Suitable Soils
- Prime and Unique Farmland








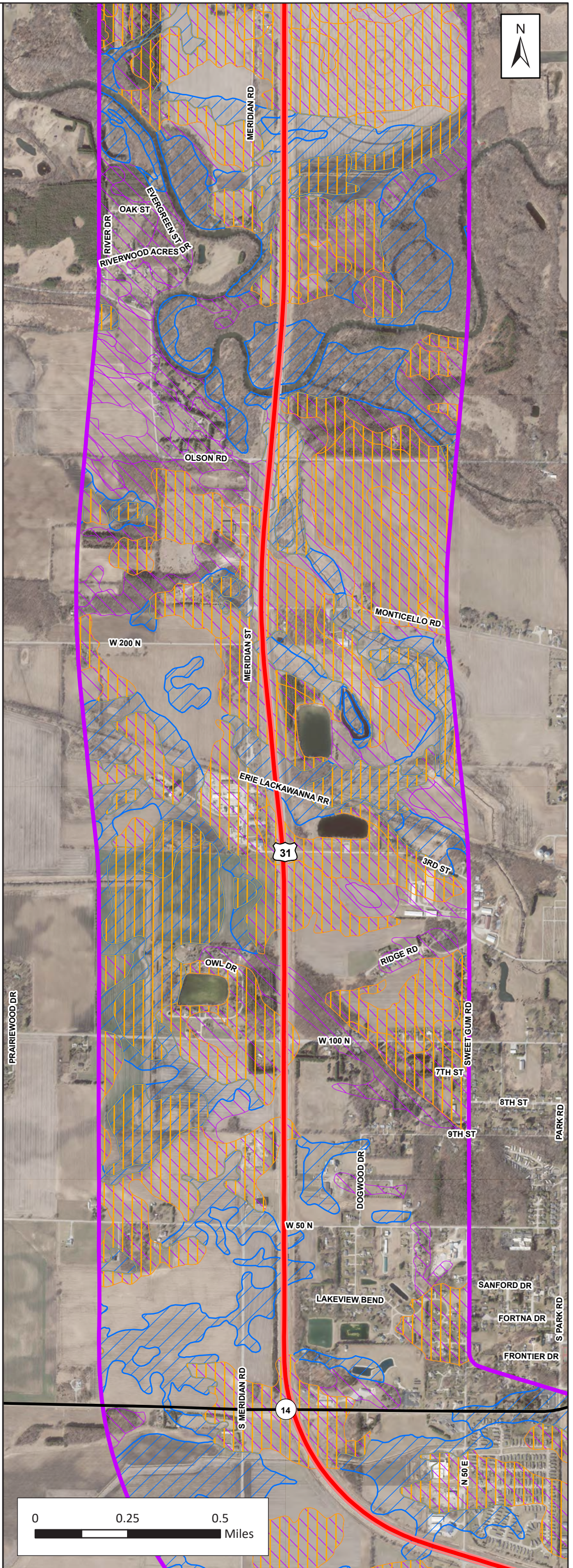
Map 5 of 7



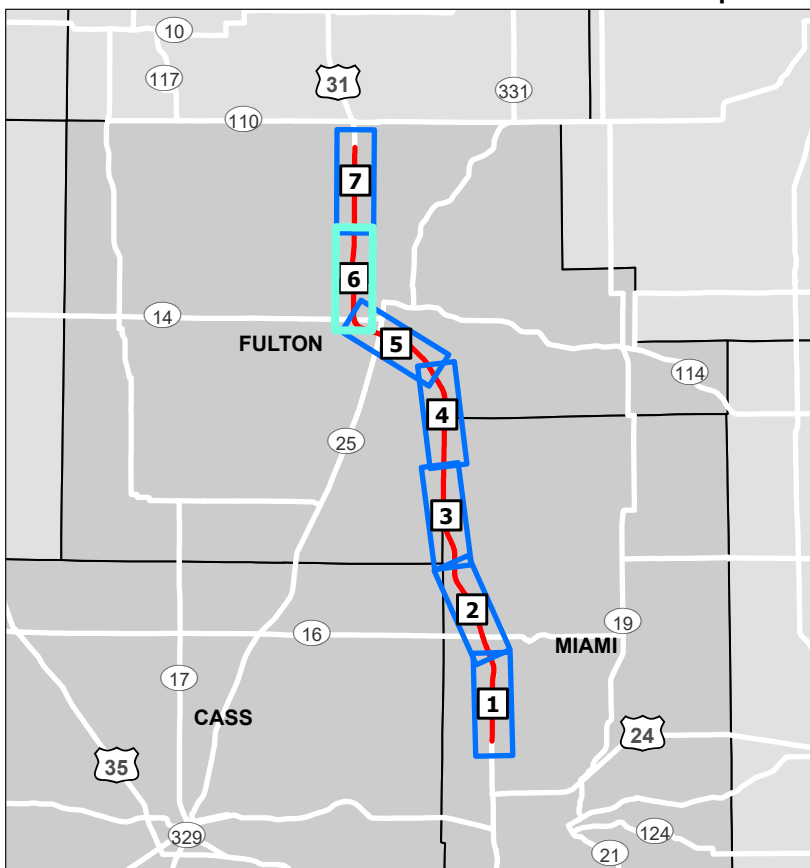


US 31 North Soils Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer
-  Hydric Soils
-  Not Suitable Soils
-  Prime and Unique Farmland








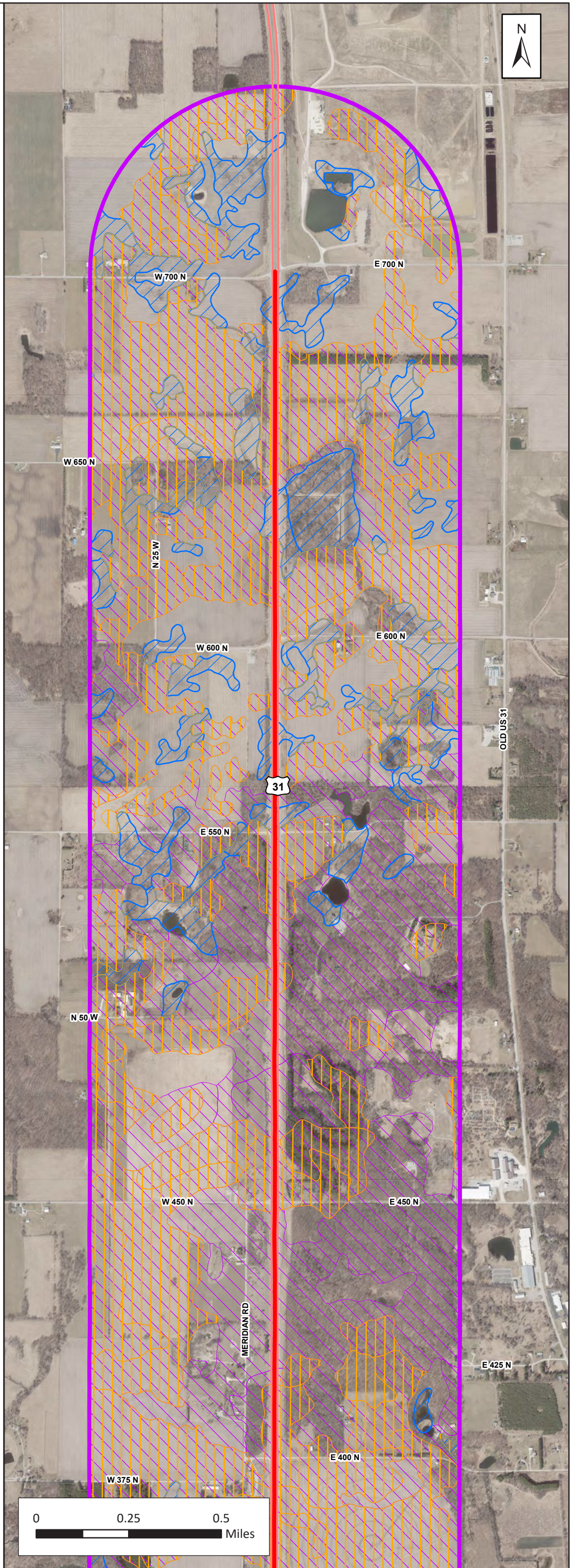
Map 6 of 7



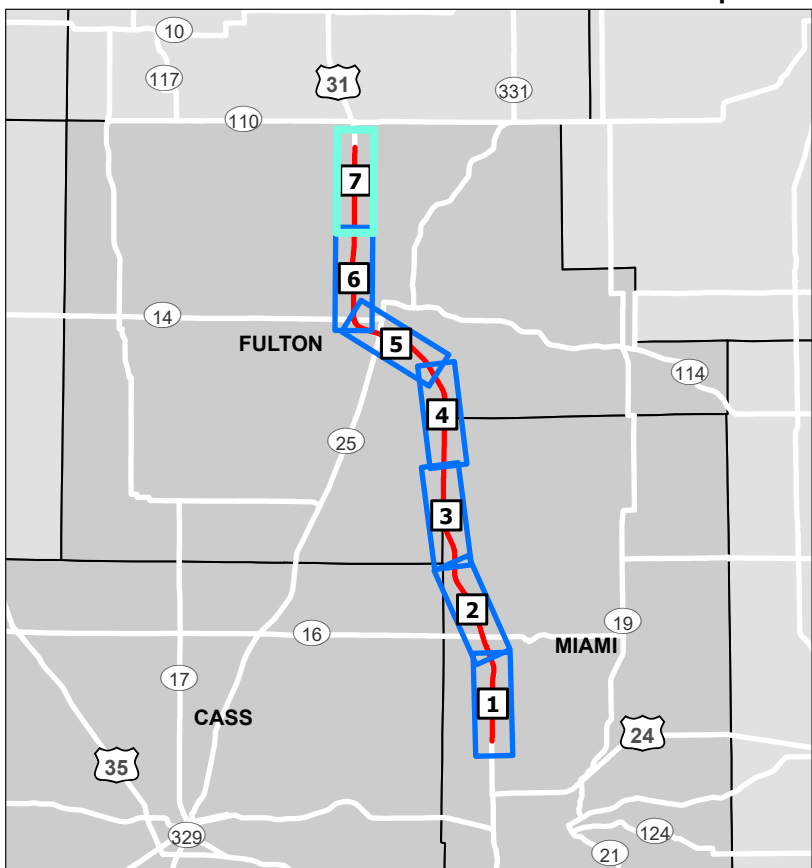


US 31 North Soils Map

-  US 31 North PEL Corridor
-  0.5 Mile Corridor Buffer
-  Hydric Soils
-  Not Suitable Soils
-  Prime and Unique Farmland



Map 7 of 7



US 31 North

ATTACHMENT H. PROTECTED SPECIES RESOURCES

The following is provided in this attachment:

- USFWS IPaC Information (updated September 14, 2023)
- USFWS Letter on the Draft Environmental Constraints Report (dated August 22, 2023)
- Indiana DNR Early Coordination Environmental Assessment (dated August 24, 2023)
- INDOT TES Email - 1/2 Mile Bat Survey (dated October 24, 2022)

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Fulton and Miami counties, Indiana



Local office

Indiana Ecological Services Field Office

☎ (812) 334-4261

📠 (812) 334-4273

620 South Walker Street
Bloomington, IN 47403-2121

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5949	Endangered

Northern Long-eared Bat *Myotis septentrionalis*
Wherever found
No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/9045>

Endangered

Tricolored Bat *Perimyotis subflavus*
Wherever found
No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/10515>

Proposed Endangered

Birds

NAME	STATUS
------	--------

Whooping Crane *Grus americana*
No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/758>

[EXPN](#)

Clams

NAME	STATUS
------	--------

Clubshell *Pleurobema clava*
No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/3789>

Endangered

Rabbitsfoot *Quadrula cylindrica cylindrica*
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
<https://ecos.fws.gov/ecp/species/5165>

Threatened

Rayed Bean *Villosa fabalis*
Wherever found
No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/5862>

Endangered

Round Hickorynut *Obovaria subrotunda*
Wherever found
There is **final** critical habitat for this species.
<https://ecos.fws.gov/ecp/species/9879>

Threatened

Salamander Mussel *Simpsonaias ambigua*
Wherever found
No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/6208>

Proposed Endangered

Sheepnose Mussel *Plethobasus cyphus*
Wherever found
No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/6903>

Endangered

Insects

NAME STATUS

Monarch Butterfly *Danaus plexippus*

Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the [Bald and Golden Eagle Protection Act](#) and the [Migratory Bird Treaty Act](#).

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME BREEDING SEASON

Bald Eagle *Haliaeetus leucocephalus*

Breeds Oct 15 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

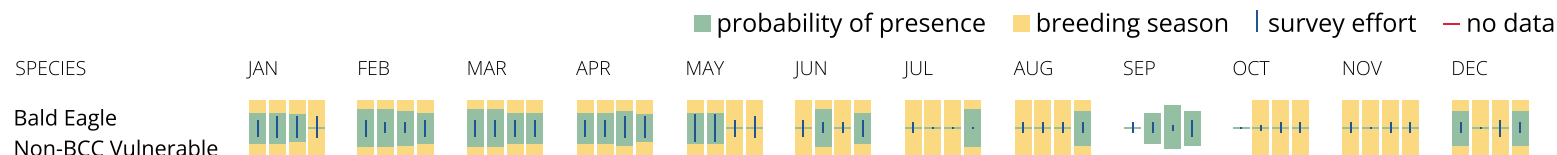
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<p>Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p>	Breeds Oct 15 to Aug 31
<p>Black Tern <i>Chlidonias niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3093</p>	Breeds May 15 to Aug 20
<p>Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 20 to Jul 31
<p>Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 20 to Aug 10
<p>Cerulean Warbler <i>Dendroica cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974</p>	Breeds Apr 21 to Jul 20
<p>Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 15 to Aug 25
<p>Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679</p>	Breeds elsewhere
<p>Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Apr 1 to Jul 31
<p>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Sep 10
<p>Upland Sandpiper <i>Bartramia longicauda</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9294</p>	Breeds May 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

■ probability of presence ■ breeding season | survey effort — no data

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

[PEM1Fh](#)

[PEM1A](#)

[PEM1Cd](#)

[PEM1C](#)

[PEM1B](#)

[PEM1Af](#)

FRESHWATER FORESTED/SHRUB WETLAND

[PFO1C](#)

[PFO1A](#)

[PFO1Cd](#)

[PSS1C](#)

[PSS1/EM1A](#)

[PSS1A](#)

FRESHWATER POND

[PUBGx](#)

[PUBG](#)

[PUBFx](#)

[PUBGh](#)

[PUBF](#)

RIVERINE

[R2UBH](#)

[R4SBC](#)

[R2UBHx](#)

[R5UBH](#)

[R5UBFx](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



United States Department of the Interior Fish and Wildlife Service



Indiana Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

August 22, 2023

Mr. Berry Craig
PARSONS
101 West Ohio Street, Suite 2121
Indianapolis, Indiana 46204

Project No.: Des. 2100113
Project: ProPel US 31 North
Location: Cass, Fulton, and Miami Counties, Indiana

Dear Mr. Craig:

The U.S. Fish and Wildlife Service (FWS) has reviewed the ProPel US 31 North Draft Environmental Constraints Report (ECR), dated June 9, 2023, and the Draft Purpose and Need Report (PNR), dated June 5, 2023, and has the following comments.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, as amended, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The Draft ECR provides information about currently known environmental, cultural, and socioeconomic resources within the ProPel US 31 North study area, which is a mile wide corridor (buffer) centered on the highway from County Road 300 North, just south of Eel River in Miami County, to CR 700 North in Fulton County, 1 mile south of the Marshall County line. The highway itself is in Miami and Fulton Counties, but 8.5 acres of the study area are within Cass County as a narrow strip along the Cass/Miami county line. Approximately 17,700 acres are located within the study area.

Of major interest to the FWS are the Eel River and Tippecanoe River, which are crossed by US 31 in Miami and Fulton Counties, respectively, and the Manitou Wetlands Complex, southeast of Rochester in Fulton County, portions of which are within the 0.5-mile buffer along the east side of US 31. Lake Manitou and its wetlands are not directly impacted by US 31, but drainage enters the system from the highway.

Information about natural resources within the study is essentially correct except for the species protected by the Endangered Species Act – the species list and critical habitat designations have changed since the Information for Planning and Consultation (IPaC) report was provided on November 8, 2022. The round hickorynut mussel (*Obovaria subrotunda*) was listed as threatened by Federal Register Notice of March 9, 2023, with an effective date of April 10, 2023; at the same time, critical habitat was designated for the species, which includes the entire Tippecanoe River within Fulton County, in addition to sections in adjacent counties. The Federal Register Notice of the listing and critical habitat designation can be found at <https://www.govinfo.gov/content/pkg/FR-2023-03-09/pdf/2023-03998.pdf#page=1>. A map of the Tippecanoe River Management Unit critical habitat is attached to this letter.

Also, the tricolored bat (*Perimyotis subflavus*) has been proposed for listing as endangered, with the entire state of Indiana being within the range; we do not know when this proposed listing will be finalized, but it could occur at any time. The listing was proposed by Federal Register Notice of September 14, 2022, but apparently the species was not yet included in IPaC at the time of your query. The Federal Register Notice can be found at <https://www.govinfo.gov/content/pkg/FR-2022-09-14/pdf/2022-18852.pdf#page=1>. No critical habitat has been proposed for the species at this time.

In addition to the round hickorynut, 4 other Federal listed species of mussel are found within the Tippecanoe River within Fulton County, as indicated in the ECR. Round hickorynut, sheepsnose (*Plethobasus cyphus*), and rabbitsfoot (*Quadrula cylindrica cylindrica* [*Theliderma cylincrica*]) are known within the project study area, meaning they are close to the US 31 bridge.

The same 5 Federal listed mussel species are known at various locations in Eel River from North Manchester downstream to the confluence with the Wabash River at Logansport but not in the abundance found in the Tippecanoe River. Rabbitsfoot is known in the vicinity of the US 31 bridge. In 2017, a detailed mussel survey took place at the bridge due to a proposed rehabilitation project that would impact the river (Des. 1500756 and 1500757). Although no Federal listed species were found, it was determined that a quality mussel population existed at the site, so mussels were salvaged in 2019 prior to the initiation of construction and moved upstream away from the impact area. A rabbitsfoot was found at the relocation site and left in place. INDOT has copies of the various reports from 2017 and 2019.

At this time, the USFWS does not have comments on the Draft Purpose and Need Report.

We appreciate the opportunity to review these documents. For further discussion, please contact Elizabeth McCloskey at elizabeth_mccloskey@fws.gov.

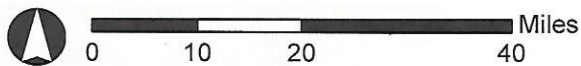
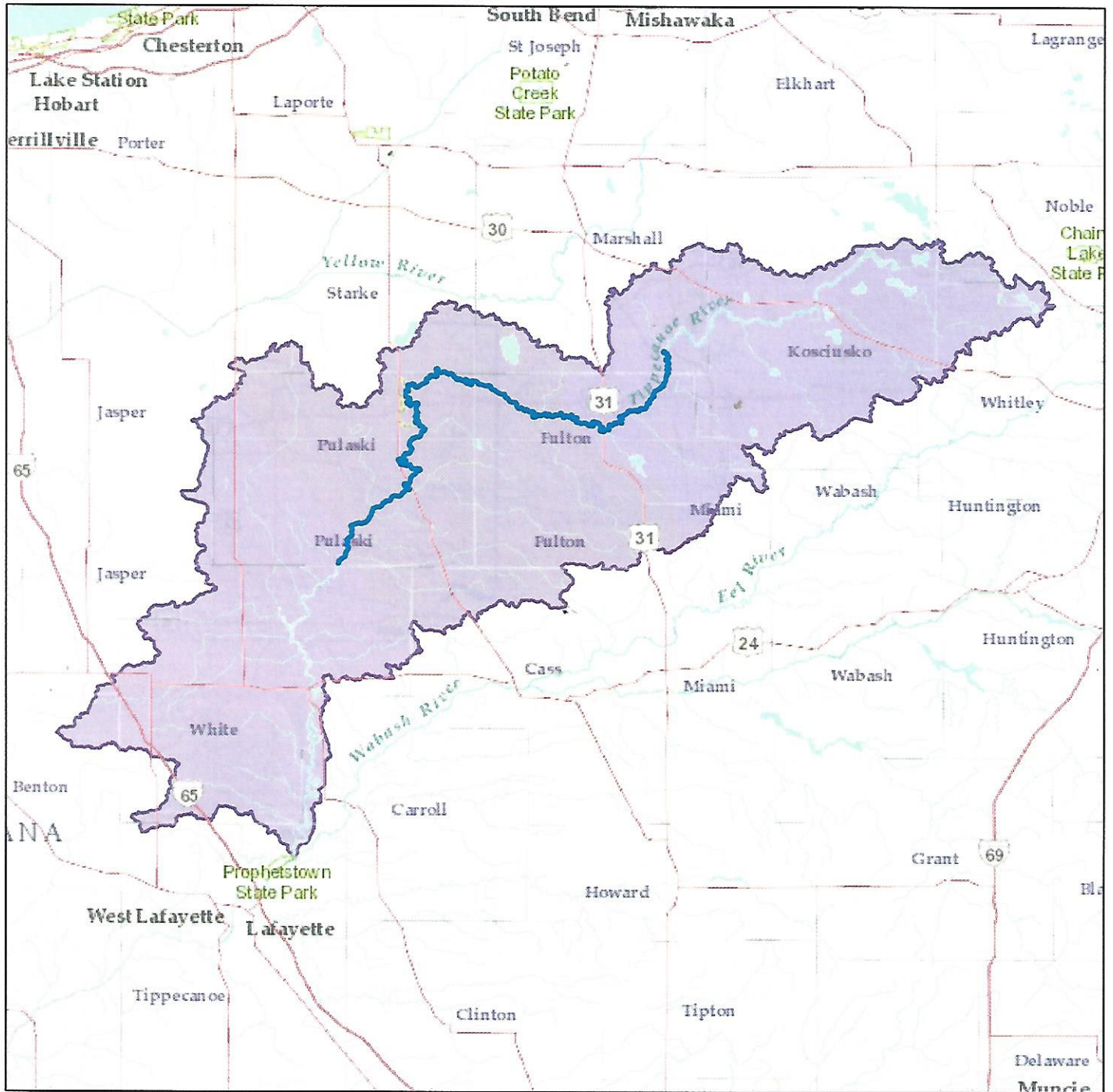
Sincerely yours,

/s/ *Elizabeth S. McCloskey*

for Susan E. Cooper
Supervisor

Sent via email August 22, 2023; no hard copy to follow.

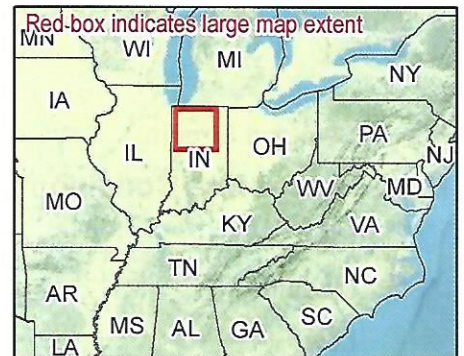
Tippecanoe Management Unit



Selected Stream

Management Unit Condition

- High
- Medium
- Low



THIS IS NOT A PERMIT

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

DNR#: ER-25741

Request Received: July 6, 2023

Requestor:

Berry Craig
Parsons
101 West Ohio Street, Suite 2121
Indianapolis, IN 46204

Project:

ProPEL US 31 North: Planning and Environment Linkages (PEL) study on the US 31 corridor for about 27 miles, extending from CR 300 North south of the Eel River to CR 700 North south of the Fulton/Marshall County line.

meeting request August 10th

County/Site Info: Fulton County

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Regulatory Assessment:

This proposal may require the formal approval of our agency pursuant to the Flood Control Act (IC 14-28-1) for any proposal to construct, excavate, or fill in or on the floodway of a stream or other flowing waterbody which has a drainage area greater than one square mile. Please submit more detailed plans to the Division of Water's Technical Services Section if you are unsure whether or not a permit will be required.

Natural Heritage Database:

The Natural Heritage Program's data have been checked. Manitou Islands Wetland Conservation Area, S/DNR FW, Judy Burton Nature Preserve, S/DNR, and multiple Migratory Bird Concentration Sites are located within .5 mile of the project site. Care should be taken to note the listed Nature Preserves and impacts should be avoided. The following species have been identified within .5 mile of the project site:

Mussels

Clubshell (*Pleurobema clava*), State Endangered
Northern Riffleshell (*Epioblasma rangiana*), State Endangered
Rabbitsfoot (*Theliderma cylindrica*), State Endangered
Rayed Bean (*Villosa fabalis*), State Endangered
Rough Pigtoe (*Pleurobema plenum*), State Endangered
Round Hickorynut (*Obovaria subrotunda*), State Endangered
Sheepnose (*Plethobasus cyphus*), State Endangered
Kidneyshell (*Ptychobranchnus fasciolaris*), Species of Special Concern
Purple Lilliput (*Toxolasma lividus*), Species of Special Concern
Wavyrayed Lampmussel (*Lampsilis fasciola*), Species of Special Concern

Birds

American Bittern (*Botaurus lentiginosus*), State Endangered
Common Gallinule (*Gallinula galeata*), State Endangered
Least Bittern (*Ixobrychus exilis*), State Endangered
Marsh Wren (*Cistothorus palustris*), State Endangered
Sedge Wren (*Cistothorus stellaris*), State Endangered
Virginia Rail (*Rallus limicola*), State Endangered
Broad-winged Hawk (*Buteo platypterus*), Species of Special Concern

Reptiles/Amphibians

Blanding's Turtle (*Emydoidea blandingii*), State Endangered

Fish

Gilt Darter (*Percina evides*), State Endangered
Greater Redhorse (*Moxostoma valenciennesi*), State Endangered

Mammals

American Badger (*Taxidea taxus*), Species of Special Concern

Insects

Turquoise Bluet (*Enallagma divagans*), State Rare

Communities

Dry Sand Savanna
Dry-mesic Sand Savanna
Marsh, Wetland

Flora

Bicknell's Northern Cranesbill (*Geranium bicknellii*), State Endangered

Fish and Wildlife Comments:

Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project area:

A) Heritage Species

If the project incorporates work on the bridge going over the Eel River or Tippecanoe River in this corridor, further consultation with the Division of Fish and Wildlife will be required. Given the known mussel resources in these areas, including State and Federally listed species, it is critical that further coordination with DNR occur early in the project planning stages to ensure these mussel resources are not impacted.

The proposed study will occur within the existing rights-of-way along US 31, which is unsuitable for the listed avian species. No significant impacts are expected as a result of this project.

Manitou Lake and its associated wetlands and preserves contain rare and sensitive amphibian and reptile species. Further consultation with the State Herpetologist will be needed before work is conducted near these features.

Badgers are a wide-ranging species that prefer an open, prairie-type habitat, with Indiana being at the eastern edge of their natural range. The range of the badger continues to expand as a result of land-use changes from forest to farmland and open pastureland. Impacts to the American badger or its preferred habitat are unlikely as a result of this project.

B) Wildlife Passage

Maintaining or improving fish and wildlife passage at existing and proposed crossings is a priority for the Division of Fish and Wildlife (DFW) to reduce wildlife mortality along roadways. The DFW has outlined different requirements for different types of crossing structure impacts. For brand new crossings in areas that currently do not have a crossing, the new structure must accommodate white-tailed deer passage where appropriate. Minimum structure dimensions for white-tailed deer passage are 20 feet of width clearance (overall size of the structure span) and 8 feet of height clearance measured from the OHWM to the low chord elevation and where deer passage is provided. For crossing replacements, the new structure must include wildlife passage appropriate for the type of replacement structure being proposed. If the existing structure is sized to accommodate white-tailed deer passage, then it should be included in the design of the new structure. If white-tailed deer passage is not possible with the existing structure, deer passage still needs to be considered in the design and at minimum the bank lines must be restored within structures to allow for smaller wildlife passage above the ordinary high-water mark. There are several techniques and materials for incorporating wildlife passage into the design of a crossing structure. Wildlife passage designs should include a smooth level pathway preferably 3 feet wide but a minimum of 1-2 feet in width composed of natural substrate (soil, sand, gravel, etc.) or compacted aggregate fill over riprap (#2, #53, #73, etc.) tied into existing elevations both upstream and downstream. The stream crossing repairs or modifications, and any bank stabilization under or around the structure, must not create conditions that are less favorable for wildlife passage when compared to existing conditions. Upgrading wildlife passage for rehabilitated/modified structures is encouraged whenever possible to improve wildlife/vehicle safety.

Coordination with a Regional Environmental Biologist to address wildlife passage issues before submitting a permit application (if required) is encouraged to avoid delays in the permitting process. The following links are good resources to consider in the design of stream crossing structures to maintain fish and wildlife passage:

<https://www.fs.usda.gov/ccrc/tool/fishxing-fish-passage-learning-systems>

<https://www.fs.usda.gov/wildlifecrossings/library/index.php>

https://www.fhwa.dot.gov/clas/ctip/wildlife_crossing_structures/

<https://www.fhwa.dot.gov/engineering/hydraulics/pubs/11008/hif11008.pdf>.

C) Bioengineering

Where planting is not sufficient to stop erosion, a bioengineering approach may be more appropriate. Bioengineering incorporates plants in combination with natural materials such as logs, live stakes (e.g., cuttings from species like willow), and brush bundles (i.e., branches from live woody plants), creating a natural appearance and habitat for fish and wildlife. Bioengineering designs can lead to long-term stabilization of a shoreline, reducing the need for future work.

D) Wetlands

Due to the presence or potential presence of wetlands on site you should contact and coordinate with the Indiana Department of Environmental Management (IDEM) 401 program and also the United States Army Corps of Engineers (USACOE) 404 program.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

1. Revegetate all bare and disturbed areas within the project area using a mixture of grasses (excluding all varieties of tall fescue), sedges and wildflowers native to Northern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion. A native herbaceous seed mixture must include a least 5 species of grasses and sedges and 5 species of wildflowers.
2. Minimize and contain within the project limits in-channel disturbance and the clearing of trees and brush.
3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
4. Do not cut any trees suitable for Indiana Bat or Northern Long-eared Bat roosting (3 inches or greater diameter-at-breast height, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.

5. Use minimum average 6-inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
6. Do not use broken concrete as riprap.
7. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
8. Minimize the movement of resuspended bottom sediment from the immediate project area.
9. Do not deposit or allow construction/demolition materials or debris to fall or otherwise enter the waterway. Any incidental fallen material or debris in the waterway must be removed within 24 hours using best management practices, particularly lifting material out of the waterway and not dragging it across the streambed whenever possible.
10. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
11. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.
12. Do not excavate or place fill in any riparian wetland.

Contact Staff:

Our agency appreciates this opportunity to be of service. Please contact me at RVanVoorhis@dnr.IN.gov or (317) 232-8163 if we can be of further assistance.

Rachel Van Voorhis
Rachel Van Voorhis
Environmental Coordinator
Division of Fish and Wildlife

Date: August 24, 2023

Jagger, Eric [US-US]

From: Gill, Arianna <AGill@indot.IN.gov>
Sent: Monday, October 24, 2022 8:30 AM
To: Jagger, Eric [US-US]
Subject: [EXTERNAL] RE: ProPEL US 31 North - Bat Coordination Scoping Inquiry

Hello,

For my records, what's the des. No.?

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area(s). The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat shall be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

Thanks,

Arianna Gill

Sr Environmental Mngr Supervisor

Fort Wayne District

5333 Hatfield Road

Fort Wayne, IN 46808

Phone: (260) 969-8262

Email: AGill@indot.in.gov



[\[in.gov\]](http://in.gov)

US 31 North

ATTACHMENT I. ABOVE-GROUND CULTURAL RESOURCES IDENTIFICATION MEMORANDUM & SHPO LETTER



US 31 North

ABOVE-GROUND CULTURAL RESOURCES IDENTIFICATION MEMORANDUM

February 17, 2023

Prepared By

Gray & Pape Heritage Management



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Appendix A: Cultural Resources-Maps

Appendix B: Cultural Resources-Tables

1. INTRODUCTION

1.1. PURPOSE OF THIS MEMORANDUM

The Indiana Department of Transportation (INDOT) is conducting Planning and Environment Linkages (PEL) studies on the US 30 and US 31 corridors. This Above-Ground Cultural Resources Identification Memorandum was prepared for the ProPEL US 31 North Study.

As part of the data-gathering phase of these studies, the Memorandum's purpose is to collect information on previously identified above-ground cultural resources that are listed in or eligible for listing in the National Register of Historic Places (National Register) or may be potentially eligible for listing in the National Register. For the purposes of this identification, an above-ground cultural resource may be any structure, building, object, bridge or cemetery that is, in simple terms, above the ground as opposed to archaeological resources that are generally below the ground.

This identification is a planning tool to help inform INDOT, the public, and stakeholders of cultural resources along the US 31 North corridor. Specifically, any improvement projects that develop with federal involvement as a result of these PEL studies must comply with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations under 36 CFR Part 800. Under Section 106, federal agencies must identify and assess their actions on those cultural resources that are listed in or eligible for listing in the National Register and seek ways to avoid, minimize and/or mitigate adverse effects. The data collected for the ProPEL studies will help identify any properties currently listed in the National Register and those that have the potential to be eligible for listing in the National Register based on previous surveys. Formal determinations of National Register eligibility will occur in the future in the Section 106 process for any federally funded or approved project programmed from the ProPEL studies.

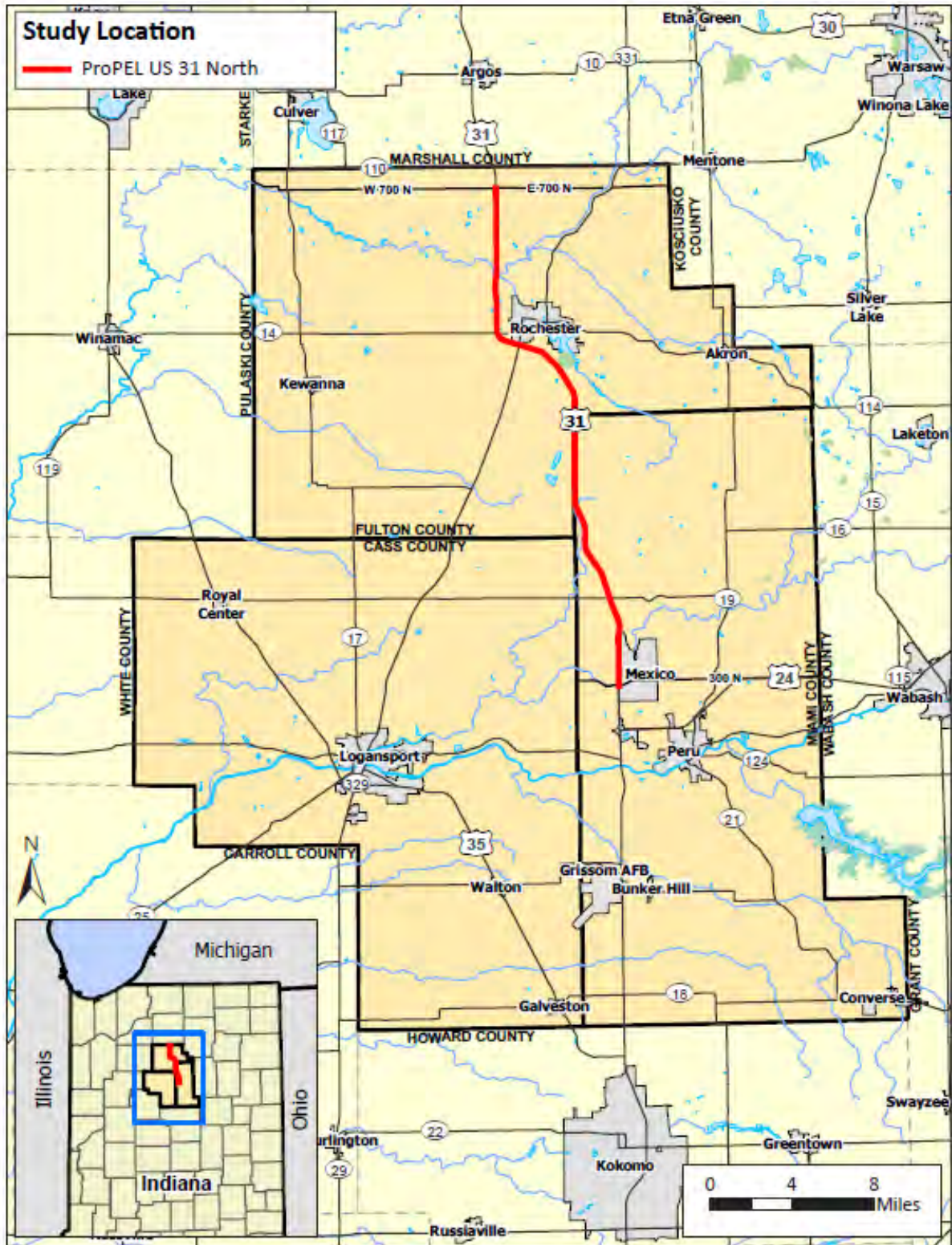
1.2. STUDY DESCRIPTION

The ProPEL US 31 North study area extends from just south of the Eel River in Miami County at CR 300 North to just south of the Fulton/Marshall county line at CR 700 North.

1.3. US 31 NORTH STUDY CORRIDOR OVERVIEW

The US 31 North corridor is a four-lane Principal Arterial roadway located in a primarily agricultural setting. US 31 in the study area is primarily direct access with at-grade intersections. The built environment along the US 31 corridor is primarily agricultural with scattered residential with commercial properties throughout the corridor.

Figure 1: Study Location Map



2. CULTURAL RESOURCES IDENTIFICATION

2.1. METHODOLOGY

For the purposes of this PEL study, a boundary of 0.50 mile from each side of the US 31 centerline was delineated. Within this boundary, a desktop survey and literature review of previously identified cultural resources were conducted.

The primary resource referenced for this study was the State Historic Architectural and Archaeological Research Database (SHAARD) and the associated Indiana Historic Buildings, Bridges and Cemeteries Map (IHBBM). SHAARD is a collection of surveyed resources in the state maintained by the Indiana Department of Natural Resources–Division of Historic Preservation and Archaeology (DNR-DHPA).

For the purposes of the PEL study, the resources mapped and recorded via SHAARD include the following:

- Individual properties or districts listed in the National Register.
Properties or districts listed in the National Register are presumed to maintain that designation unless there has been a known significant alteration of the property.
- Properties assigned a rating of “Notable” or “Outstanding” in the Indiana Historic Sites and Structures Inventory (IHSSI).

Properties rated “Notable” or “Outstanding” are not automatically considered eligible for the National Register. These properties were deemed to exhibit characteristics or have known historic associations that indicate they may have significance. They are usually considered to have greater potential to be eligible for listing in the National Register. Properties rated “Contributing” were not included as they are generally not considered National Register eligible, although exceptions do occur as explained below.

Other sources referenced for this study included:

- Indiana Historic Bridge Inventory
Although the IHSSI did survey bridges and assign ratings similar to other structures, the definitive source for bridge eligibility in Indiana is the Historic Bridge Inventory (HBI) maintained by INDOT.
- Previous Section 106 reports and documentation via the INDOT Cultural Resources Office Public Map and IN SCOPE, INDOT’s online portal for Section 106 documents.

- Street-level imagery and aerial photography

A desktop survey of the identified resources was undertaken to verify whether the National Register-listed properties or those rated “Notable” or “Outstanding” were extant or had undergone major alterations-if visible. Updates were noted as appropriate.

- Property Parcel Records

The 2021 GIS Data Harvest Program was accessed to include parcel information and approximate property ages in part to help aid in the identification of post-World War II properties and subdivisions that may not have been previously surveyed. In some instances, parcel data was absent where

structures were present. Maps depicting the parcel age ranges (where available) in the study area are included in Appendix A.

2.2. CAVEATS

Several factors should be considered in interpreting the data presented as part of the US 31 North PEL study:

- No fieldwork or windshield reconnaissance was conducted. The resources identified were done through a desktop survey and data obtained from the sources cited above.
- The IHSSI ratings are indicators of *potential* National Register eligibility. However, formal National Register evaluations that would occur with Section 106 projects include research, analysis, and contextual comparison not provided in this study. Properties rated “Contributing” or not previously surveyed could later be found to be National Register eligible and conversely those rated “Notable” or “Outstanding” may be determined not eligible.
- Properties built after World War II, were likely not identified in IHSSI surveys. Therefore, there are likely post-WWII resources that have not been surveyed in a meaningful way along the corridor.

3. CONCLUSION

For the ProPEL US 31 North study, above-ground resources that are currently listed in the National Register and those that have potential to be eligible for listing based on previous surveys were identified. This identification is intended as a planning tool and is not a final determination of National Register eligibility. Any project federally funded or approved, that is programmed as a result of the PEL study will follow the Section 106 process where cultural resources will be formally evaluated for National Register eligibility.

In summary, a total of thirteen (13) above-ground properties were identified as either “Outstanding” or “Notable” in the US 31 North study area. Of these, a total of four (4) properties; three (3) “Outstanding” and one (1) “Notable” are located in Fulton County. A total of nine (9) properties; two (2) “Outstanding” and seven (7) “Notable” are located in Miami County. One of the identified properties in Miami County is also National Register-listed (Leedy Barn-NR-1072). Five (5) cemeteries were identified in the study area, four (4) in Miami County and one (1) in Fulton County.

The results of the ProPEL US 31 North study above-ground resources identification are shown in the included maps (Appendix A) and property tables (Appendix B).

4. REFERENCES

Indiana Department of Natural Resources-Division of Historic Preservation and Archaeology.

Indiana Historic Buildings, Bridges, and Cemeteries Map. Electronic document,

<https://indnr.maps.arcgis.com/home/item.html?id=1593429c17c34942a0d1d3fac03c4a80>, accessed October 14, 2022.

Indiana Department of Natural Resources-Division of Historic Preservation and Archaeology.

State Historic Architectural and Archaeological Research Database (SHAARD),

<https://www.in.gov/dnr/historic/4505.htm>, accessed October 14, 2022.

Indiana Department of Transportation-Cultural Resources Office.

CRO-Public Web Map App, [CRO-Public Web Map App \(arcgis.com\)](#), accessed November 28, 2022.

Indiana Geographic Information Office.

GIS Data Harvest Program, [Indiana Data Harvest \(2021\) \(arcgis.com\)](#), accessed October 14, 2022

APPENDIX A: CULTURAL RESOURCES- MAPS



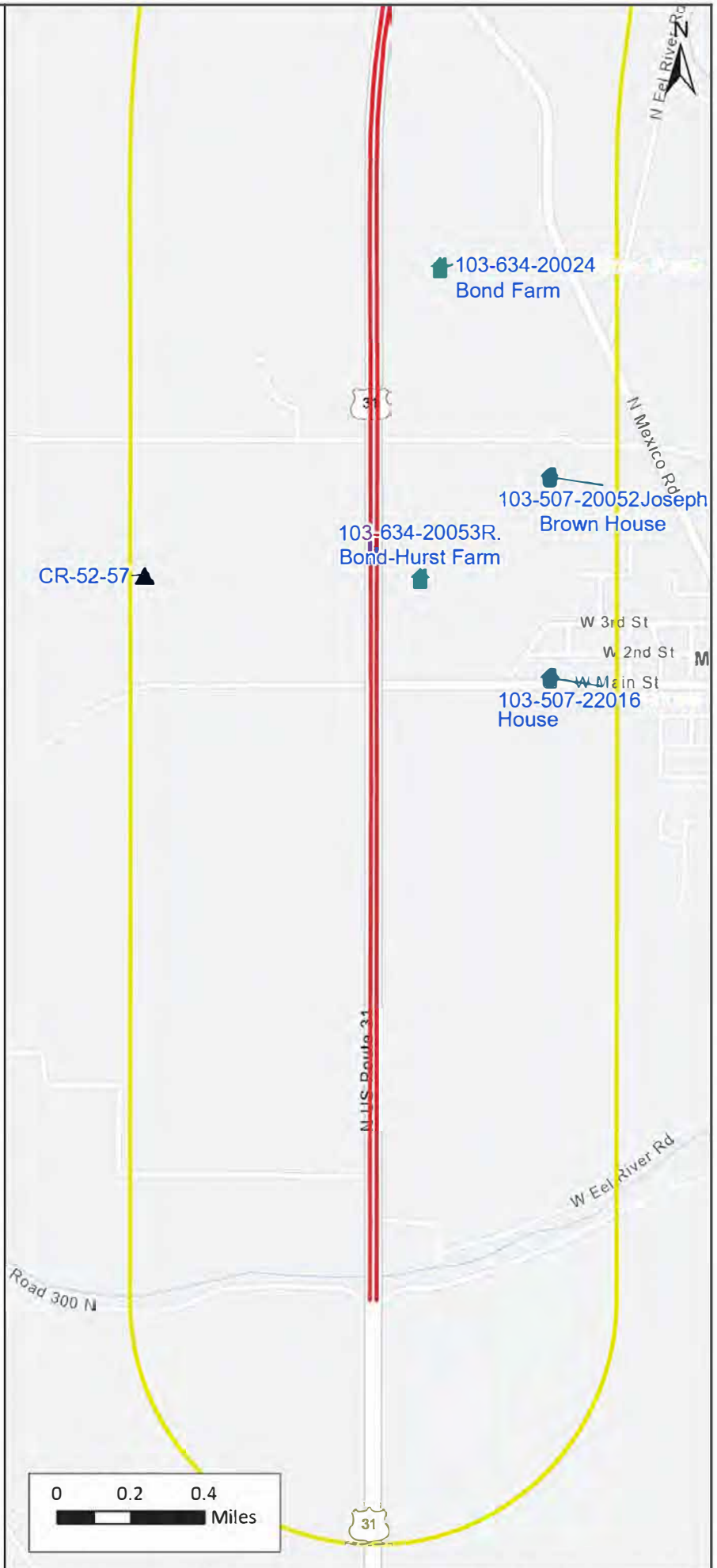
US 31 North

Aboveground Potentially Eligible, Eligible, and NRHP-listed Resources, Miami County

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- ▲ Cemeteries
- National Register Listed Properties
- Notable
- Outstanding

Page 1 of 10





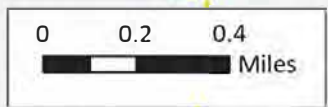
US 31 North

Aboveground Potentially Eligible, Eligible, and NRHP-listed Resources, Miami County

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- ▲ Cemeteries
- ▤ National Register Listed Properties
- ▤ Notable
- ▤ Outstanding

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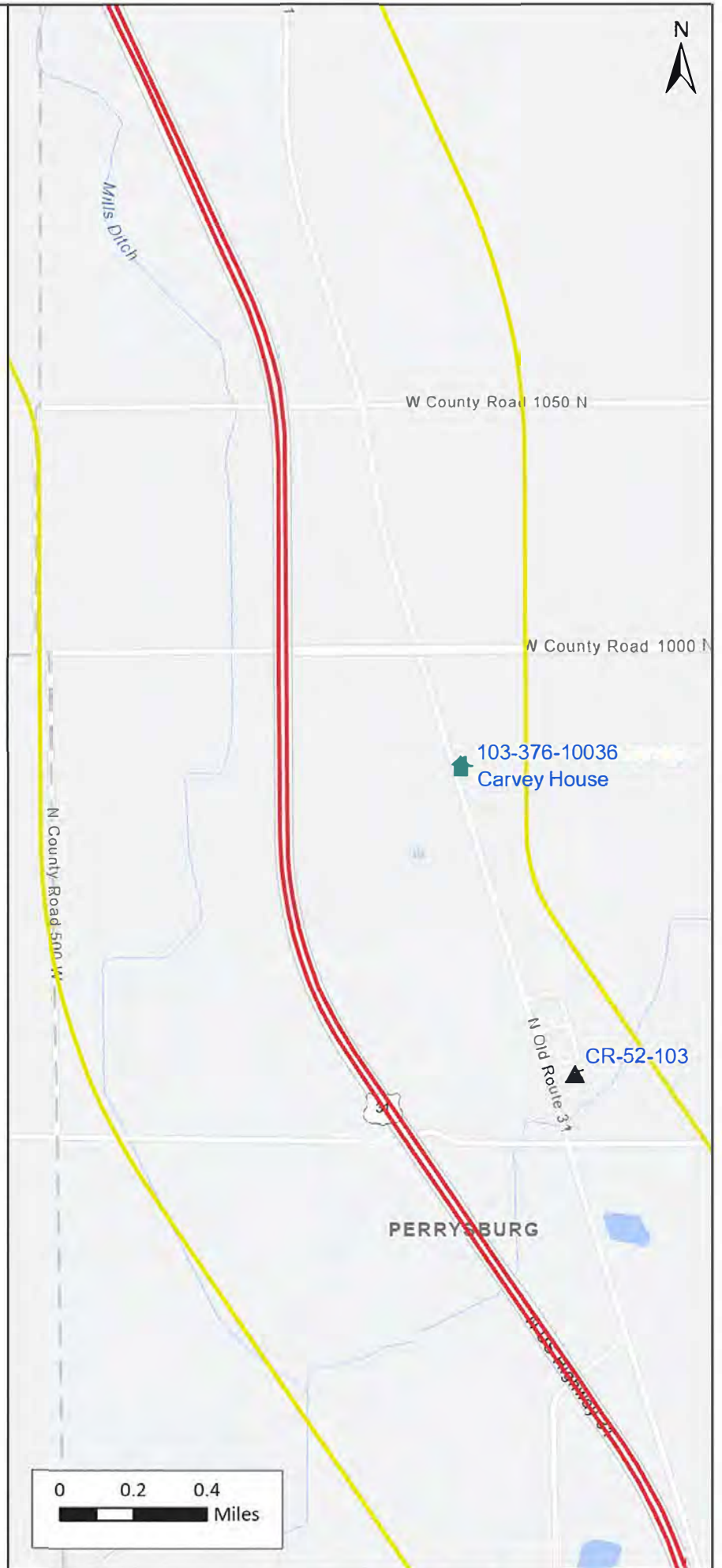
US 31 North

Aboveground Potentially Eligible, Eligible, and NRHP-listed Resources, Miami & Fulton Counties

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- ▲ Cemeteries
- National Register Listed Properties
- Notable
- Outstanding

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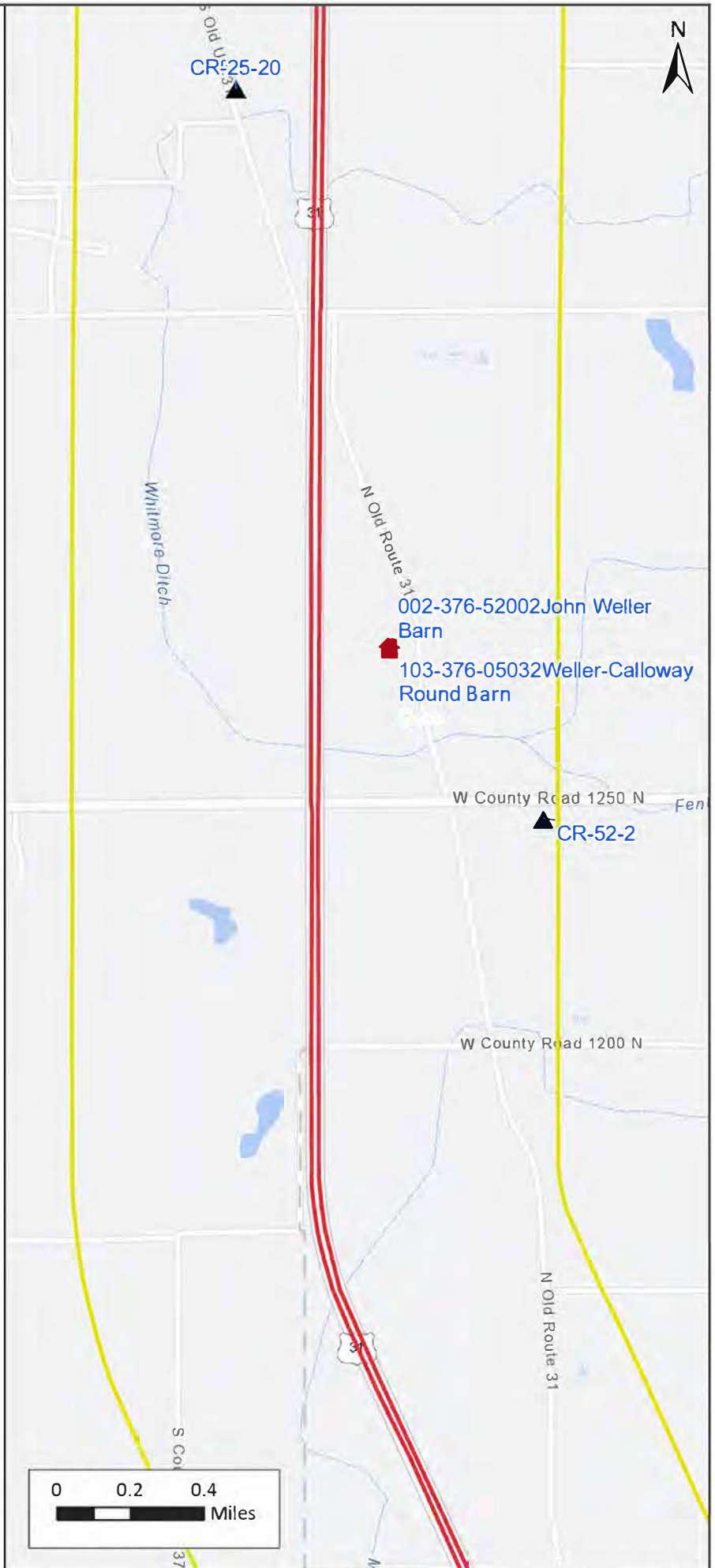
US 31 North

Aboveground Potentially Eligible, Eligible, and NRHP-listed Resources, Miami & Fulton Counties

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- ▲ Cemeteries
- National Register Listed Properties
- Notable
- Outstanding

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US 31 North

Aboveground Potentially Eligible, Eligible, and NRHP-listed Resources, Miami & Fulton Counties

Legend

-  ProPEL US 31 North
-  0.5-Mile Study Buffer
-  Cemeteries
-  National Register Listed Properties
-  Notable
-  Outstanding

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US 31 North

Aboveground Potentially Eligible, Eligible, and NRHP-listed Resources, Fulton County

Legend

-  ProPEL US 31 North
-  0.5-Mile Study Buffer
-  Cemeteries
-  National Register Listed Properties
-  Notable
-  Outstanding

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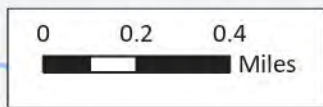
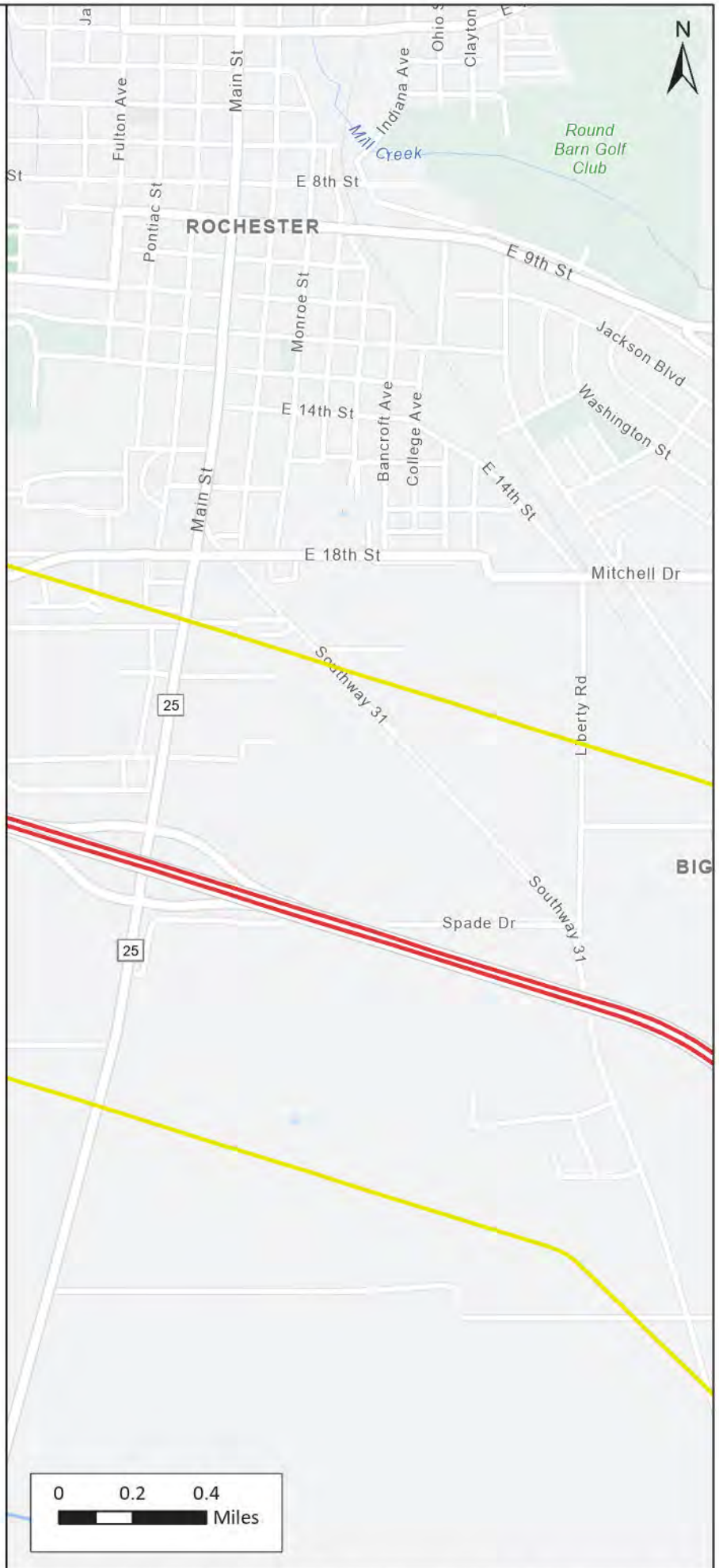
US 31 North

Aboveground Potentially Eligible, Eligible, and NRHP-listed Resources, Fulton County

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- ▲ Cemeteries
- National Register Listed Properties
- Notable
- Outstanding

Page 7 of 10





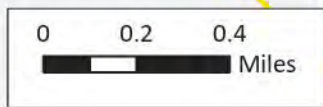
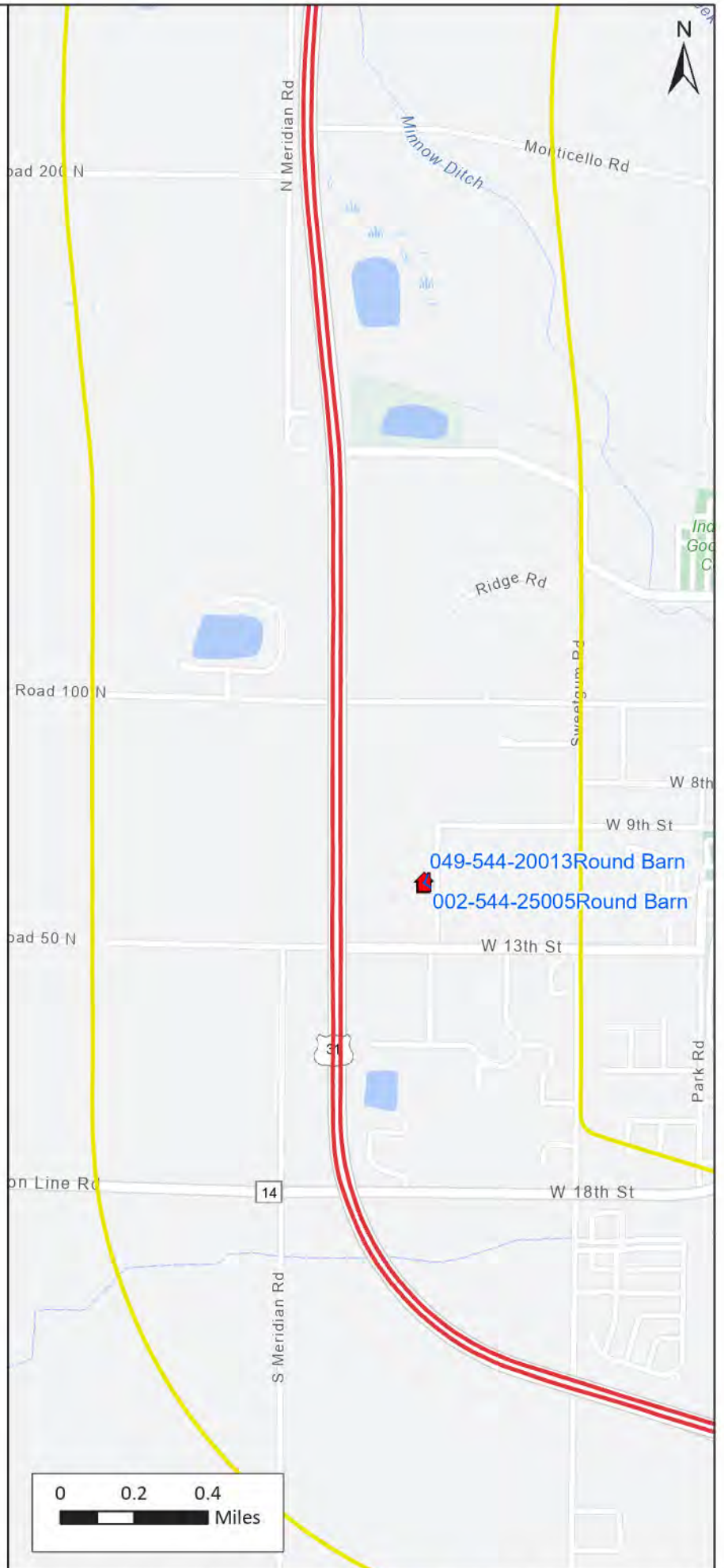
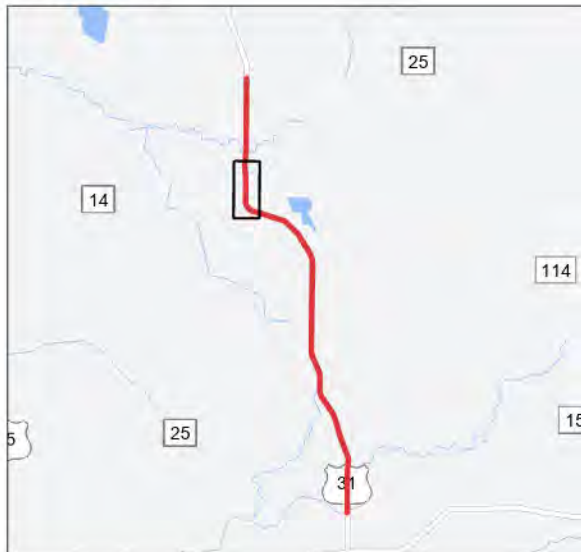
US 31 North

Aboveground Potentially Eligible, Eligible, and NRHP-listed Resources, Fulton County

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- ▲ Cemeteries
- National Register Listed Properties
- Notable
- Outstanding

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US 31 North

Aboveground Potentially Eligible, Eligible, and NRHP-listed Resources, Fulton County

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- ▲ Cemeteries
- National Register Listed Properties
- Notable
- Outstanding

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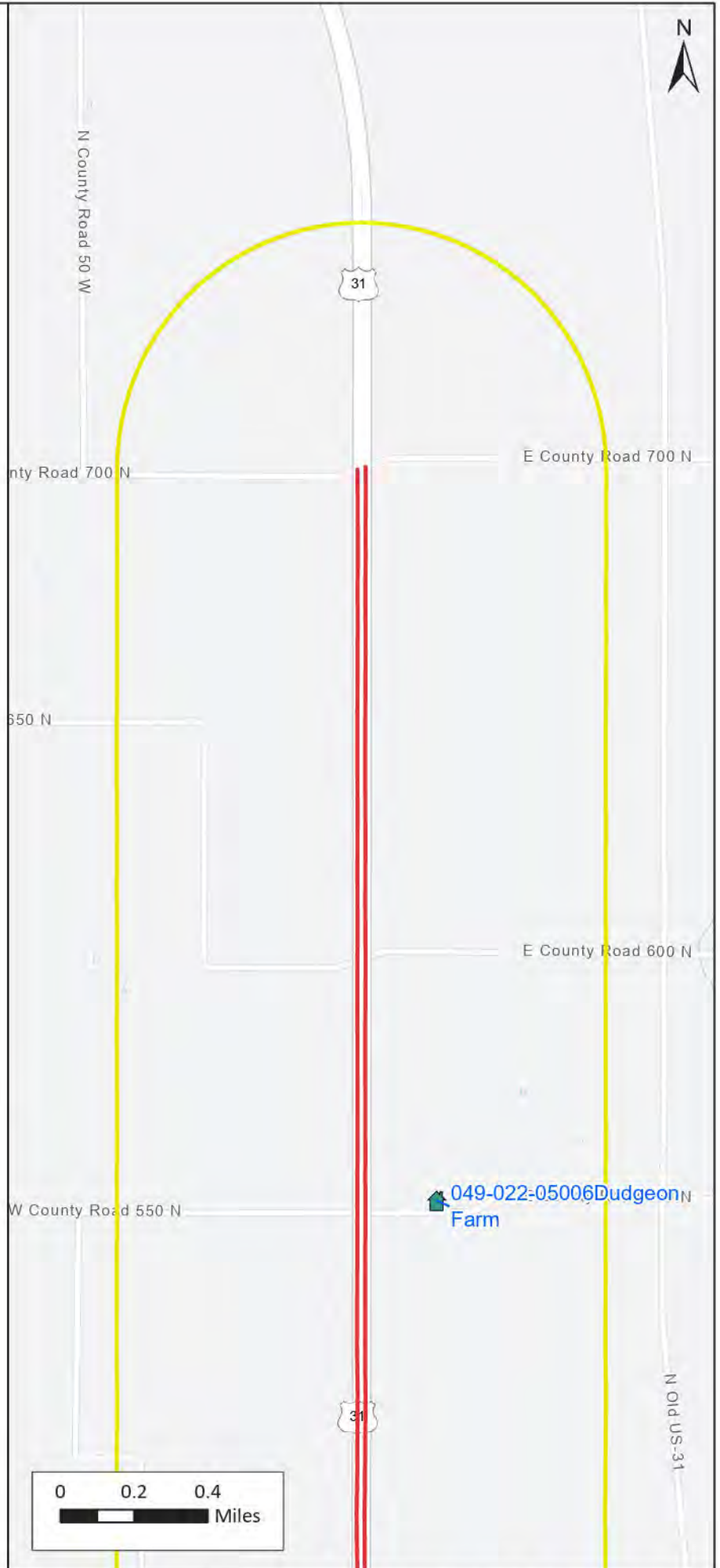
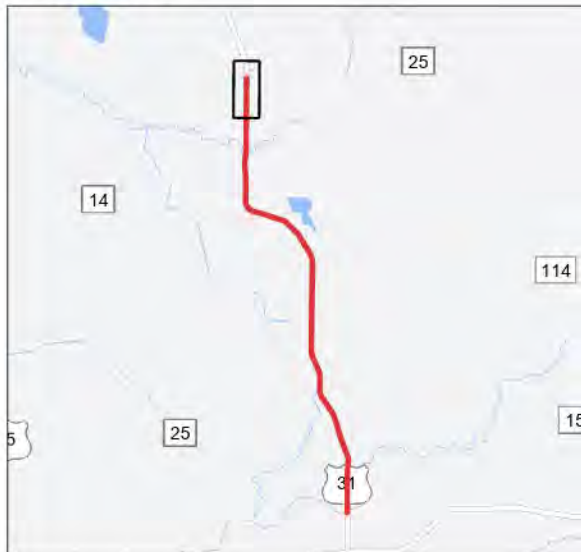
US 31 North

Aboveground Potentially Eligible, Eligible, and NRHP-listed Resources, Fulton County

Legend

- ProPEL US 31 North
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- ▲ Cemeteries
- 🏠 National Register Listed Properties
- 🏠 Notable
- 🏠 Outstanding

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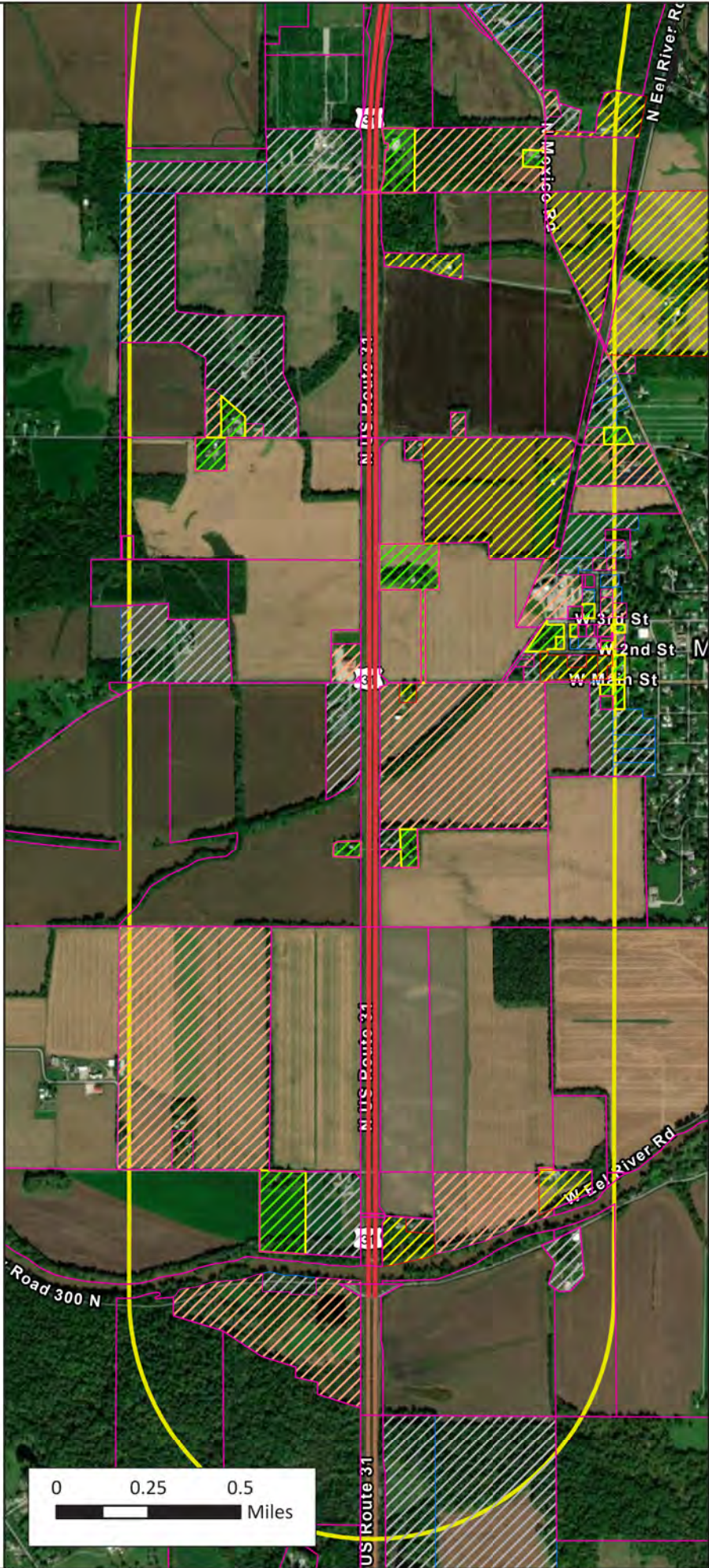


US 31 North
Parcel Age Ranges
Miami County

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- 01 - Pre-1880
- 02 - 1880-1939
- 03 - 1940-1976
- 04 - Post-1976
- Parcel Data Unavailable

Page 1 of 10



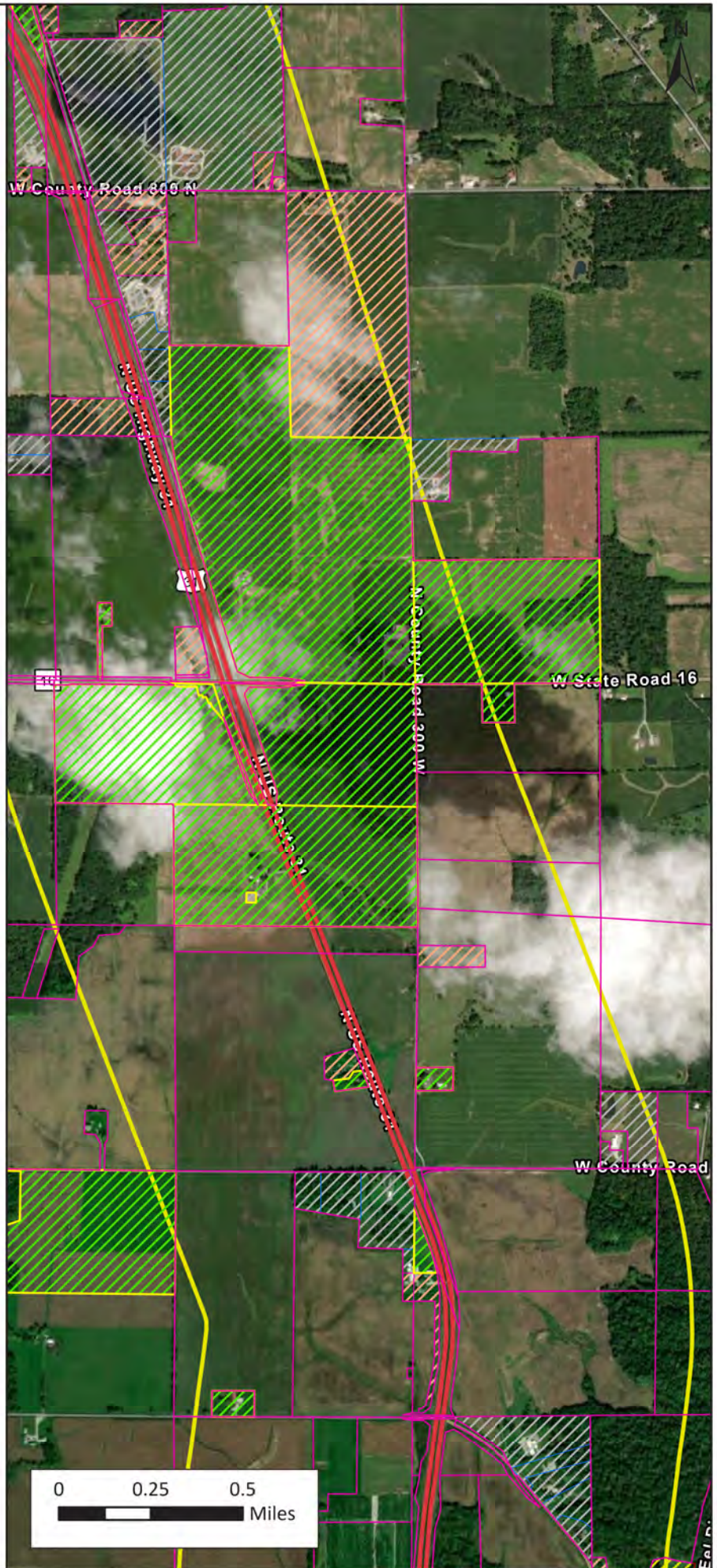


US 31 North
Parcel Age Ranges
Miami County

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- 01 - Pre-1880
- 02 - 1880-1939
- 03 - 1940-1976
- 04 - Post-1976
- Parcel Data Unavailable

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US 31 North

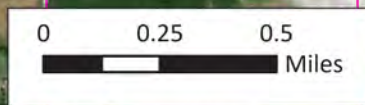
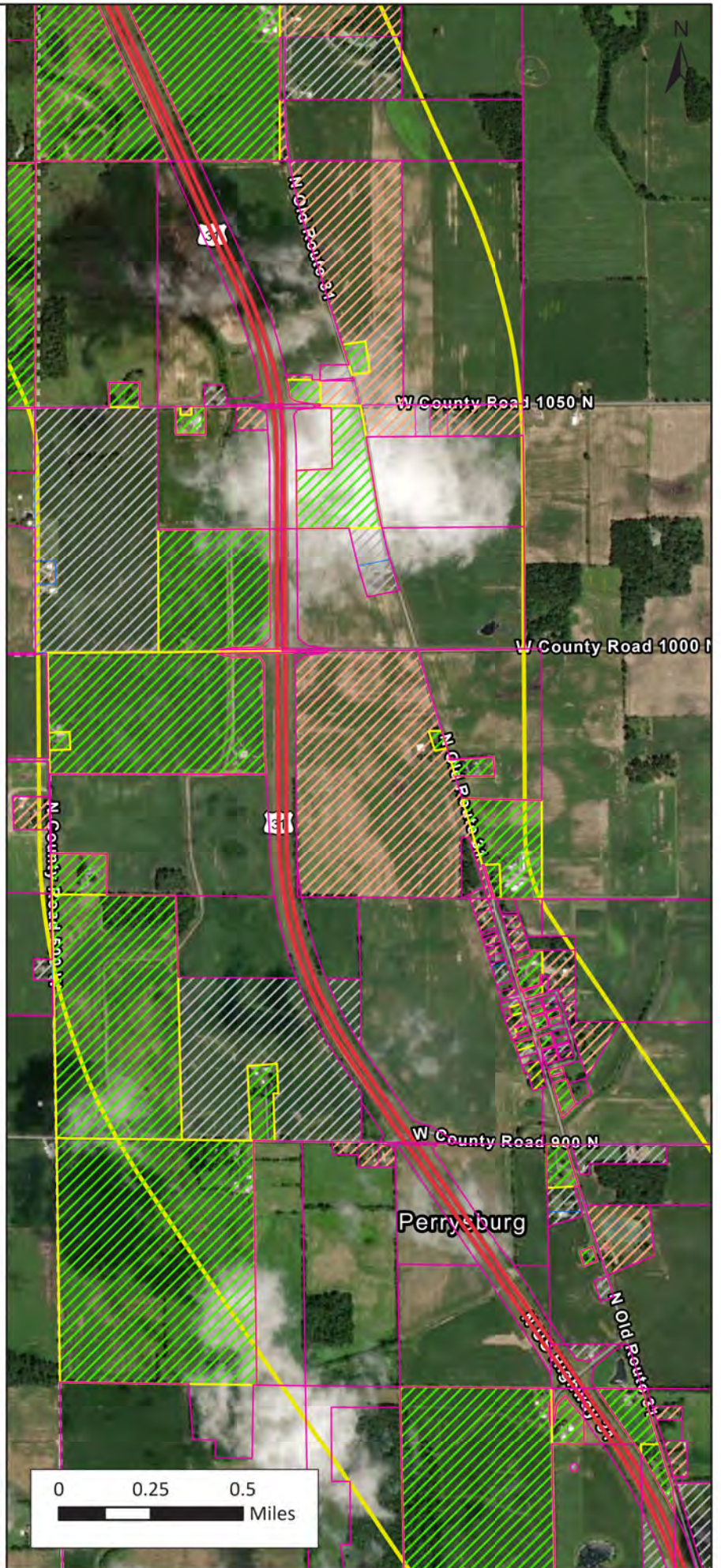
Parcel Age Ranges

Miami & Fulton Counties

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- 01 - Pre-1880
- 02 - 1880-1939
- 03 - 1940-1976
- 04 - Post-1976
- Parcel Data Unavailable

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US 31 North

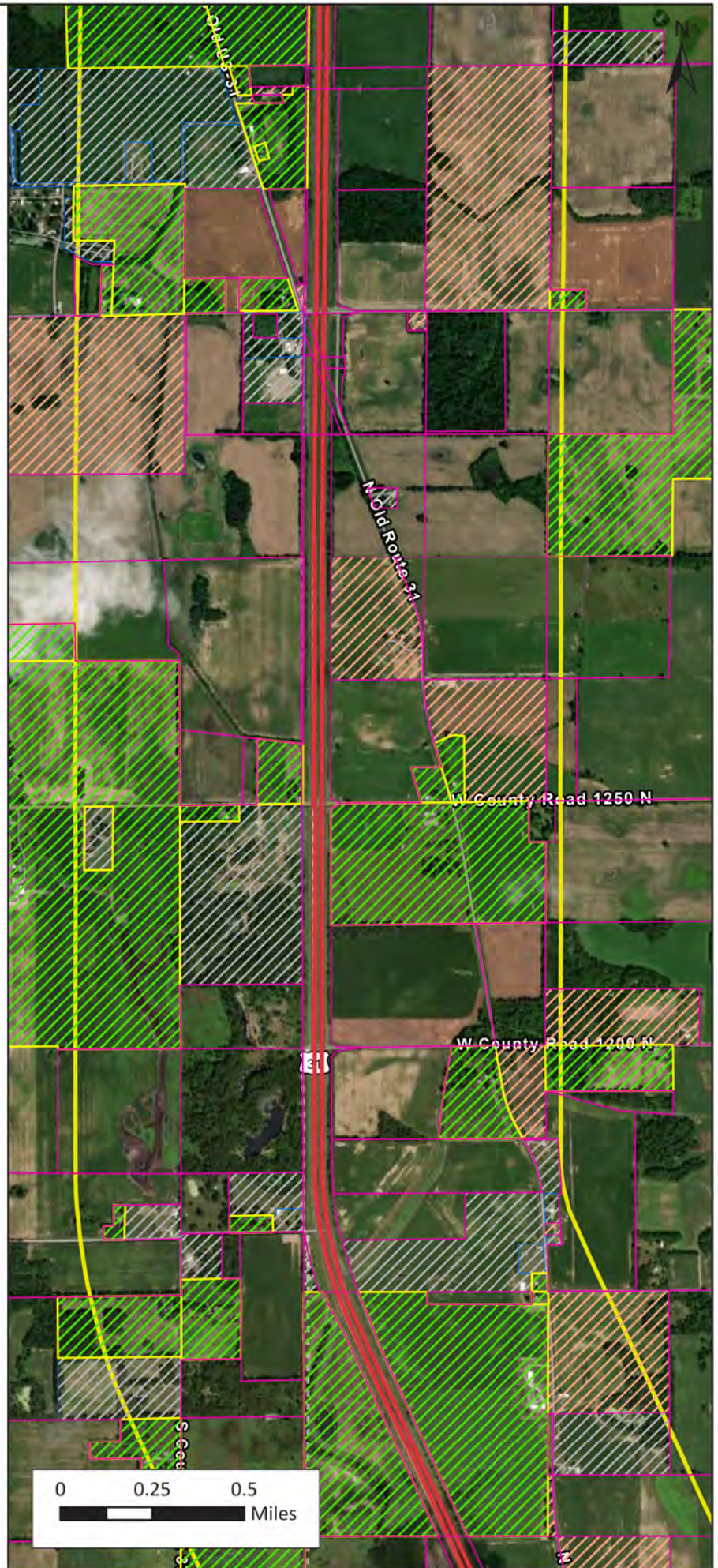
Parcel Age Ranges

Miami & Fulton Counties

Legend

-  ProPEL US 31 North
-  0.5-Mile Study Buffer
-  01 - Pre-1880
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-  03 - 1940-1976
-  04 - Post-1976
-  Parcel Data Unavailable

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US 31 North

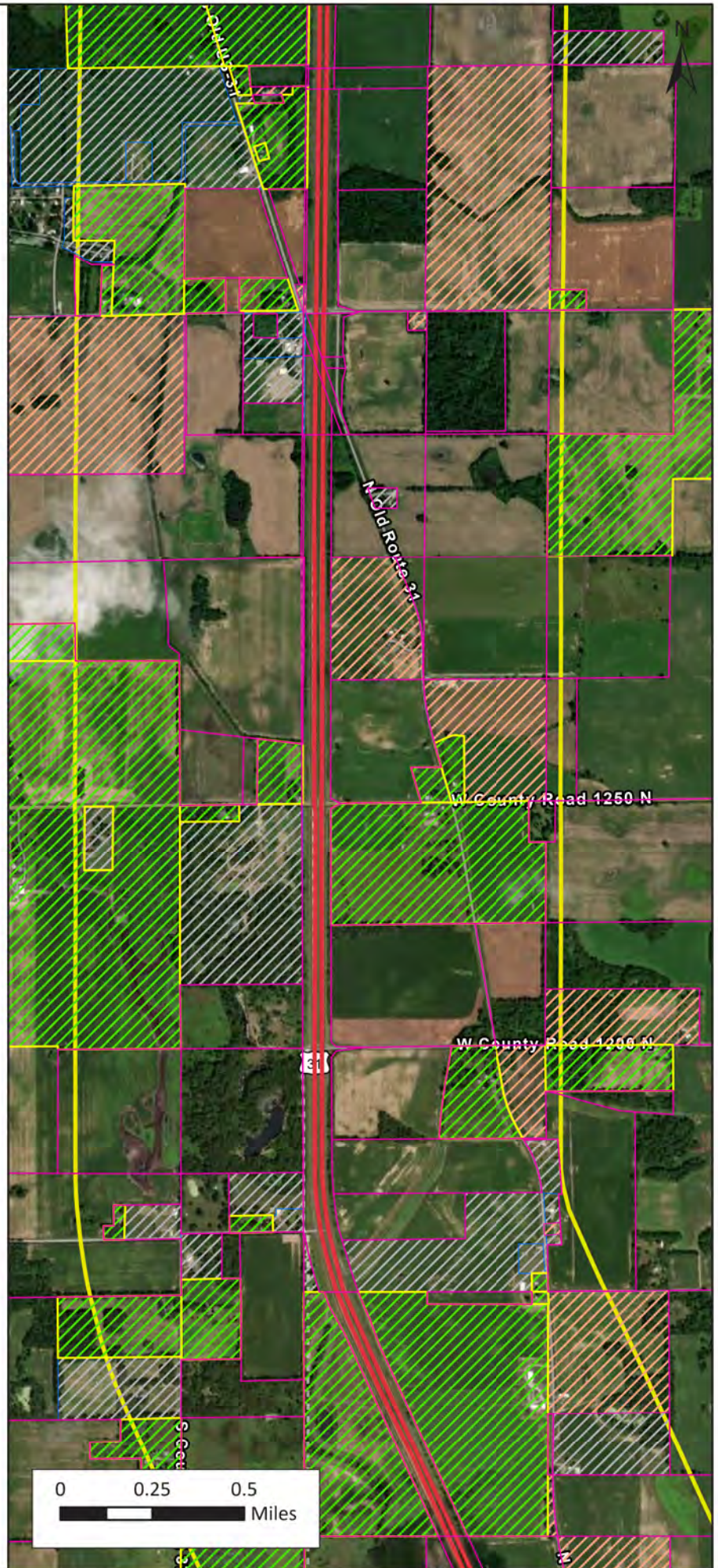
Parcel Age Ranges

Miami & Fulton Counties

Legend

- ProPEL US 31 North
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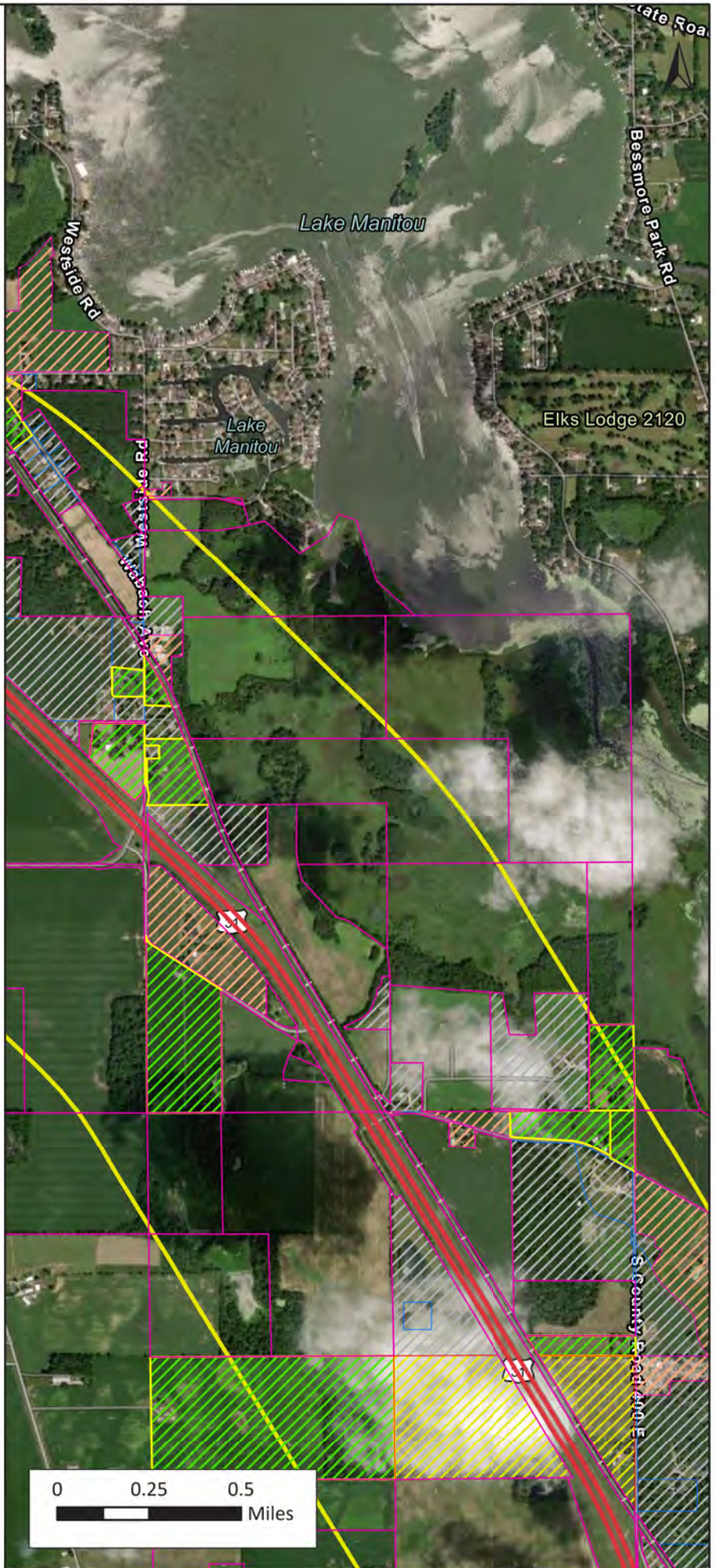


US 31 North
Parcel Age Ranges
Fulton County

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
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- 02 - 1880-1939
- 03 - 1940-1976
- 04 - Post-1976
- Parcel Data Unavailable








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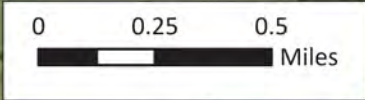
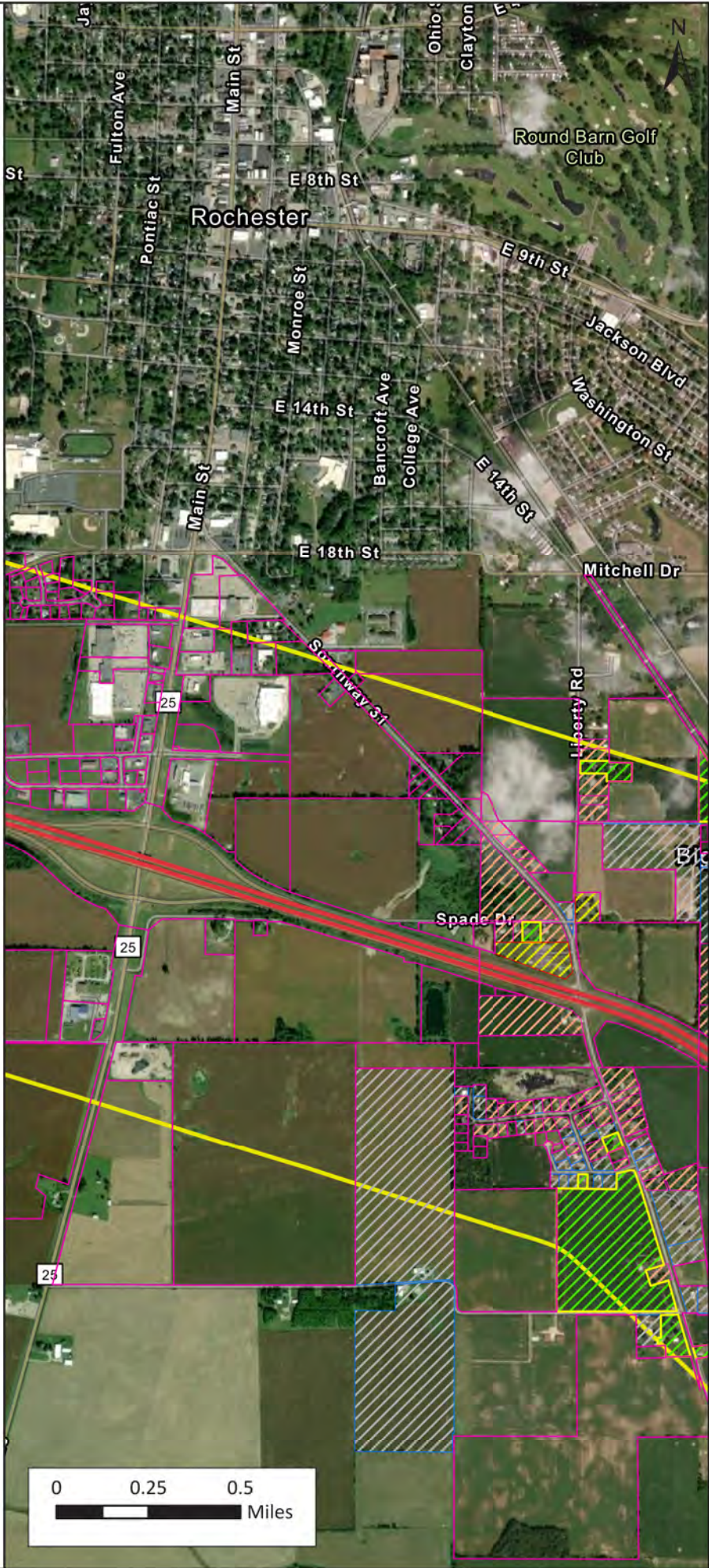


US 31 North
Parcel Age Ranges
Fulton County

Legend

-  ProPEL US 31 North
-  0.5-Mile Study Buffer
-  01 - Pre-1880
-  02 - 1880-1939
-  03 - 1940-1976
-  04 - Post-1976
-  Parcel Data Unavailable

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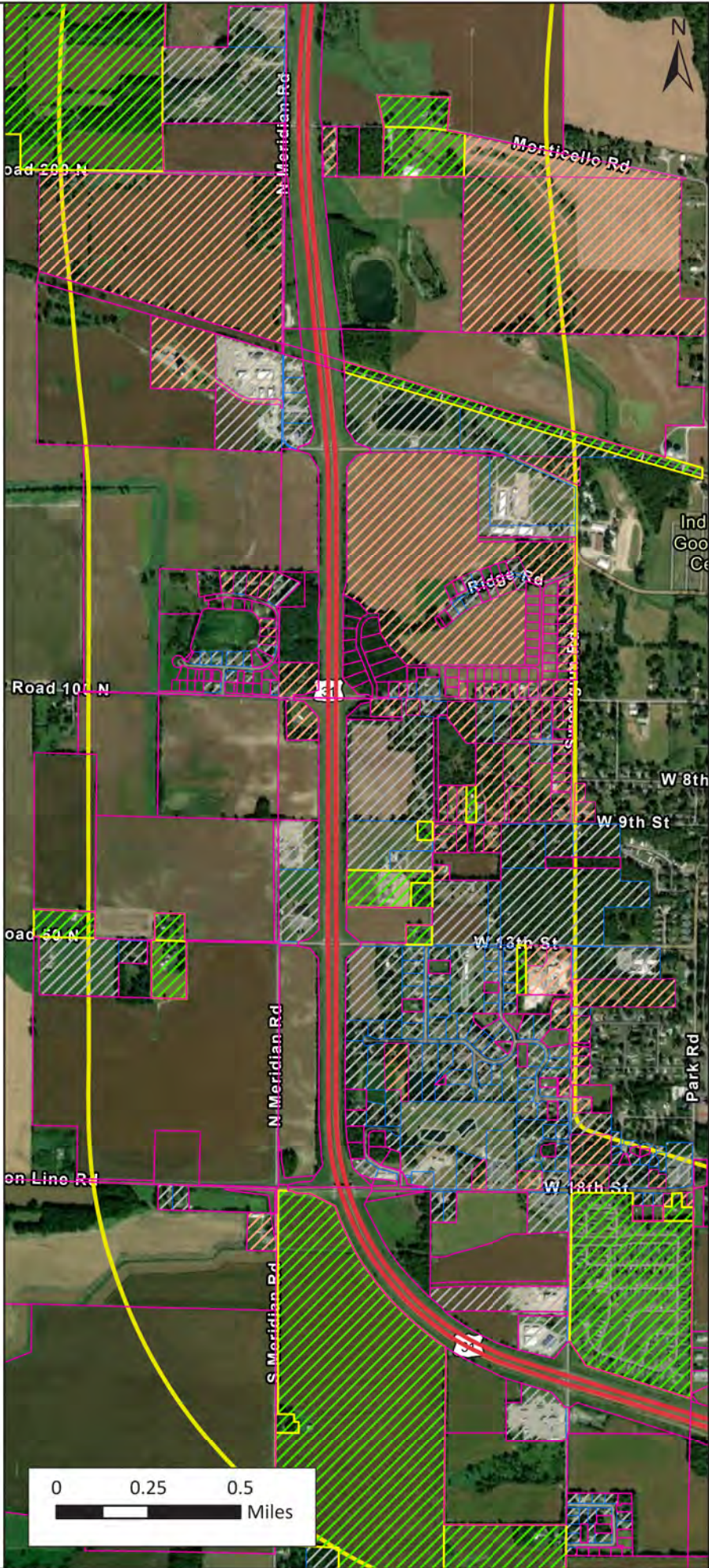


US 31 North
Parcel Age Ranges
Fulton County

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- 01 - Pre-1880
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- 03 - 1940-1976
- 04 - Post-1976
- Parcel Data Unavailable

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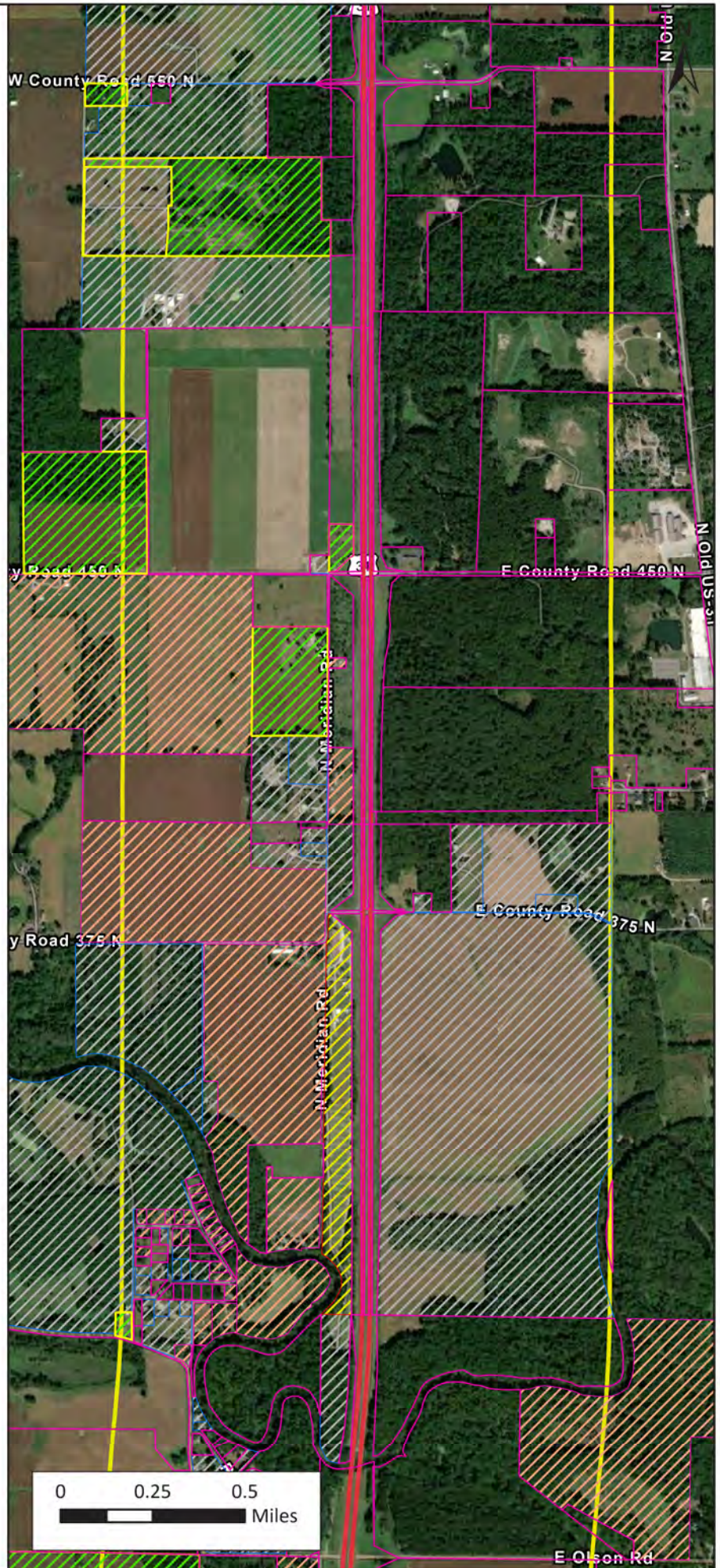


US 31 North
Parcel Age Ranges
Fulton County

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- 01 - Pre-1880
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- 03 - 1940-1976
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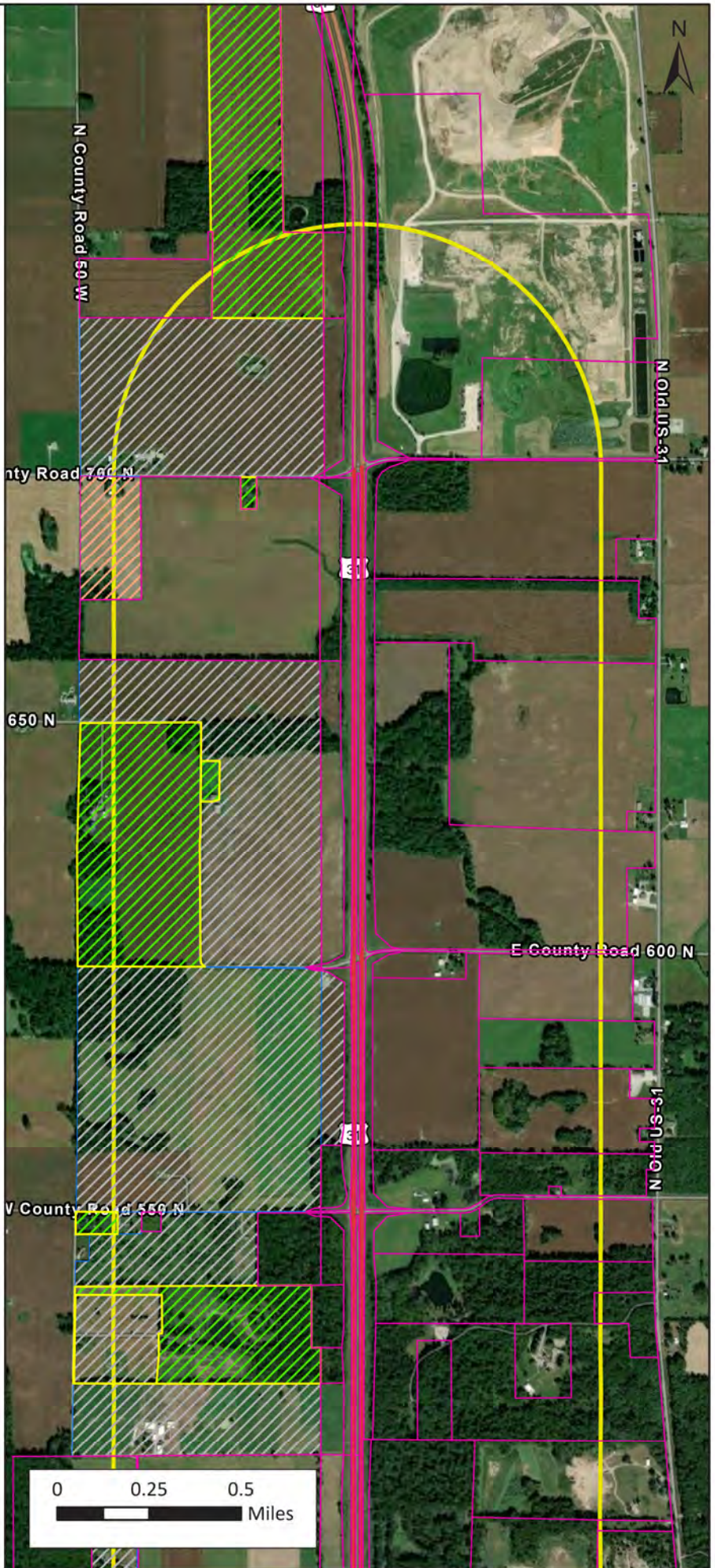


US 31 North
Parcel Age Ranges
Fulton County

Legend

- ProPEL US 31 North
- 0.5-Mile Study Buffer
- 01 - Pre-1880
- 02 - 1880-1939
- 03 - 1940-1976
- 04 - Post-1976
- Parcel Data Unavailable

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APPENDIX B: CULTURAL RESOURCES-TABLES

Notable and Outstanding Above-Ground Resource Descriptions

County	IHSSI Number	Name	Rating
Fulton	002-544-25003	Leedy Barn	Outstanding
Fulton	002-544-25005	Round Barn	Outstanding
Miami	002-376-52002	John Weller Barn	Outstanding
Fulton	049-022-05006	Dudgeon Farm	Notable
Miami	103-376-05032	Weller-Calloway Round Barn	Outstanding
Miami	103-634-20021	Richardson Farm	Notable
Miami	103-634-20024	Bond Farm	Notable
Miami	103-634-20053	R. Bond-Hurst Farm	Notable
Miami	103-376-10036	Carvey House	Notable
Miami	103-634-20014	Maus Farm	Notable
Fulton	049-544-20013	Round Barn	Outstanding
Miami	103-507-22016	House	Notable
Miami	103-507-20052	Joseph Brown House	Notable

Listed National Register of Historic Places Properties

County	SHAARD Number	Name	Status
Fulton	NR-1072	Leedy Barn (Round Barn)	Listed

Identified Cemeteries

County	SHAARD Number	Name
Miami	CR-52-103	Perrysburg
Miami	CR-52-2	Five Corners
Miami	CR-52-51	Allbaugh-Clingenpeel
Fulton	CR-25-20	Mud Lake
Miami	CR-52-57	Koontz

Division of Historic Preservation & Archaeology 402 W. Washington Street, W274 Indianapolis, IN 46204-2739
Phone 317-232-1646 Fax 317-232-0693 dhpa@dnr.IN.gov



August 3, 2023

Jeff Laswell
Indianapolis Branch Manager
Gray & Pape Heritage Management
5807 N. Post Road
Indianapolis, Indiana 46216

Federal Agency: Indiana Department of Transportation (“INDOT”),
on behalf of Federal Highway Administration, Indiana Division (“FHWA”)

Re: Additional project information for ProPel US 31 North (DHPA No. 31077)

Dear Mr. Laswell:

The staff of the Indiana State Historic Preservation Officer (“Indiana SHPO”) has received your July 10, 2023, submission which enclosed INDOT’s ProPel US 31 North archaeological and above-ground memoranda, received by our office July 10, 2023, for this project in Fulton County and Miami County, Indiana.


From the information provided, it is the staff of the Indiana SHPO’s understanding that the Indiana Department of Transportation (“INDOT”) is conducting Planning and Environment Linkages (PEL) studies on the US 30 and US 31 corridors. The documentation of Above-Ground and Archaeological Cultural Resources Identification Memorandums were prepared specifically for the ProPEL US 31 North Study portion of the study. Additionally, it is our understanding that as part of the data-gathering phase of these studies, the Memorandums’ purpose is to collect information on previously identified cultural resources that are listed in or eligible for listing in the National Register of Historic Places (“NRHP”) or may be potentially eligible for listing in the NRHP.

The memorandums specifically state, any improvement projects that develop with federal involvement as a result of these PEL studies must comply with Section 106 of the National Historic Preservation Act (“NHPA”) and its implementing regulations under 36 CFR Part 800. Under Section 106, federal agencies must identify and assess their actions on those cultural resources that are listed in or eligible for listing in the NRHP and seek ways to avoid, minimize and/or mitigate adverse effects. The Memorandums state that formal determinations of NRHP eligibility will occur in the future to comply with the Section 106 process for any federally funded or approved project programmed from the ProPEL studies. Our office will assist the federal agency responsible for administering the project by evaluating the historical significance of the properties within the area of potential effect that will be part of future submissions to our office.

The Indiana SHPO staff’s archaeological reviewer for this project is Wade T. Tharp, and the structures reviewer is Toni Lynn Giffin. however, if you have a question about the Section 106 process, please contact initially the INDOT Cultural Resources staff members who are assigned to this project.

In all future correspondence about the ProPel US 31 North project in Fulton County and Miami County, Indiana, please refer to DHPA No. 30177.

Very truly yours,


Beth K. McCord
Deputy State Historic Preservation Officer

BKM:TLG:WTT:tlg

emc: Matt Coon, Ph.D., Indiana Department of Transportation
Susan Branigin, Indiana Department of Transportation
Clint Kelly, Indiana Department of Transportation
Jeffrey Laswell, Gray & Pape, Inc.
Toni Lynn Giffin, Indiana DNR-DHPA
Wade T. Tharp, Indiana DNR-DHPA

US 31 North

ATTACHMENT J. LWCF TABLE

An excerpt from the Land and Water Conservation Fund (LWCF) County Property List for Cass, Fulton, and Miami Counties in Indiana, last Updated March 2022, is provided on the next page. None of the listed resources are present within the ProPEL US 31 North study area.

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)

County	Property
Cass	France Park & Olde Town Park
Cass	Huston Park and Nature Preserve
Cass	Huston Sports Center and Park
Cass	Riverside Park
Fulton	Lakeview Park
Fulton	Akron City Park/ Pike Memorial Park
Miami	Miami State Recreation Area
Miami	Mississinewa Reservoir
Miami	Mississinewa Reservoir
Miami	Miami State Recreation Area, Mississinewa Reservoir
Miami	Miami State Recreation Area, Mississinewa Reservoir
Miami	Mississinewa Reservoir - Miami SRA
Miami	Miami SRA

US 31 North

ATTACHMENT K. NOISE-SENSITIVE AREAS IDENTIFICATION MEMORANDUM



US 31 North
Noise-Sensitive Areas Identification
Memorandum

April 18, 2023

Prepared By



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1. INTRODUCTION

1.1. PURPOSE OF THIS MEMORANDUM

ProPEL is an Indiana Department of Transportation (INDOT) initiative for transportation planning that uses Planning and Environment Linkages (PEL) studies to consider environmental, community, and economic goals. INDOT is using PEL studies on the US 30 and US 31 corridors in central and northern Indiana. This Noise-Sensitive Areas Identification Memorandum has been prepared for the ProPEL US 31 North study.

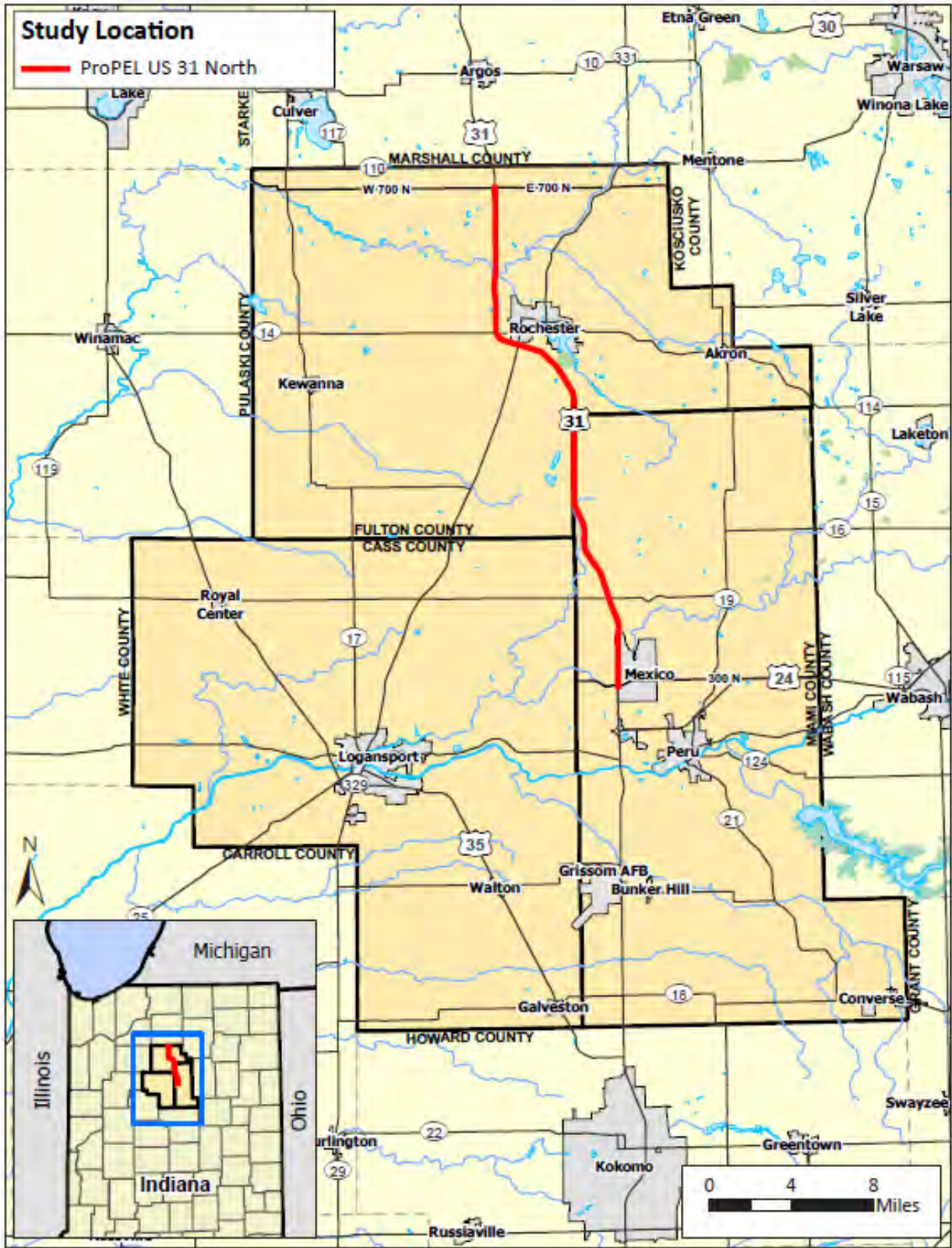
As part of the data-gathering phase of these studies, this memorandum's purpose is to identify the noise-sensitive areas along the ProPEL US 31 North corridor, including those with sufficient density such that noise abatement could potentially be determined reasonable and feasible per INDOT's 2022 Traffic Noise Analysis Procedure (Noise Policy). See Section 2.1 for more information. These potentially noise-sensitive areas are identified in order to evaluate how they may influence future projects for this corridor to assist with alternatives development and screening during the PEL study.

Formal noise analysis, inclusive of field measurements and modeling, will not be completed during the ProPEL US 31 North study, but will occur, if required, during subsequent National Environmental Policy Act (NEPA) analysis.

1.2. STUDY AREA DESCRIPTION

The ProPEL US 31 North corridor is 27 miles in length and extends from just south of the Eel River in Miami County (County Road [CR] 300 North) to just south of the Fulton/Marshall County line (CR 700 North in Fulton County), as shown in Figure 1. Within the study limits, US 31 is a four-lane Principal Arterial roadway and is primarily direct access with at-grade intersections in a predominantly agricultural setting. The built environment along US 31 within the study limits is primarily agricultural with scattered residential with commercial properties throughout the corridor.

Figure 1. Study Location Map



2. LEGISLATION AND NOISE FUNDAMENTALS

2.1. REGULATORY REQUIREMENTS

Federal Highway Administration (FHWA) regulations for highway traffic noise for federal-aid highway projects are contained in the Code of Federal Regulations (CFR), Title 23 Part 772 (23 CFR 772). INDOT's procedures for project development, including the Noise Policy, comply with the requirements of 23 CFR 772.

Compliance with 23 CFR 772 is typically achieved during project development during the NEPA process. PEL studies, however, are planning (i.e., pre-NEPA) studies and as such, the analysis completed during the ProPEL US 31 North study is not intended to fully meet the requirements of 23 CFR 772. The ProPEL US 31 North study will evaluate potential traffic noise impacts to help inform the alternatives development and will utilize FHWA and INDOT noise policies, such as noise abatement criteria thresholds and distances for noise limits. Detail is provided in *Section 3 Noise Study Methodology*.

This approach provides an appropriate framework and process that could seamlessly transition into a future NEPA phase, should NEPA clearance be required. For any transportation improvements recommended as part of the ProPEL US 31 North study that would be Type I¹ project(s) 3, a traffic noise analysis would be completed in the future during project development and the NEPA process in accordance with 23 CFR 772 and the most current version of the INDOT Noise Policy at that time, as applicable.

2.2. TRAFFIC NOISE

Noise is generally defined as unwanted sound. Airborne sound is what we hear when there are rapid fluctuations (or variations) in air pressure above and below atmospheric pressure. The ear is sensitive to these pressure variations and perceives them as sound. The intensity of these pressure variations causes the ear to discern different levels of loudness.

Sound pressure levels are measured and expressed in decibels (dB). The dB scale is logarithmic and expresses the ratio of the sound pressure level being measured to a standard reference level.

Most sounds occurring in the environment do not consist of a single frequency, but rather a broadband of differing frequencies. Because the human ear does not respond to all frequencies equally, weighting scales are used to define the relative loudness of different frequencies. The "A" weighting scale is widely used in environmental work because it closely resembles the non-linearity of human hearing. The A-weighted sound level in decibels is identified as dB(A).

A noise receptor is a discrete or representative location placed at a noise-sensitive area for any of the land uses listed in the Noise Abatement Criteria (NAC) found in 23 CFR 772, which generally include areas of active human use, to determine traffic-generated noise levels. Traffic noise at a receptor is influenced by the following major factors:

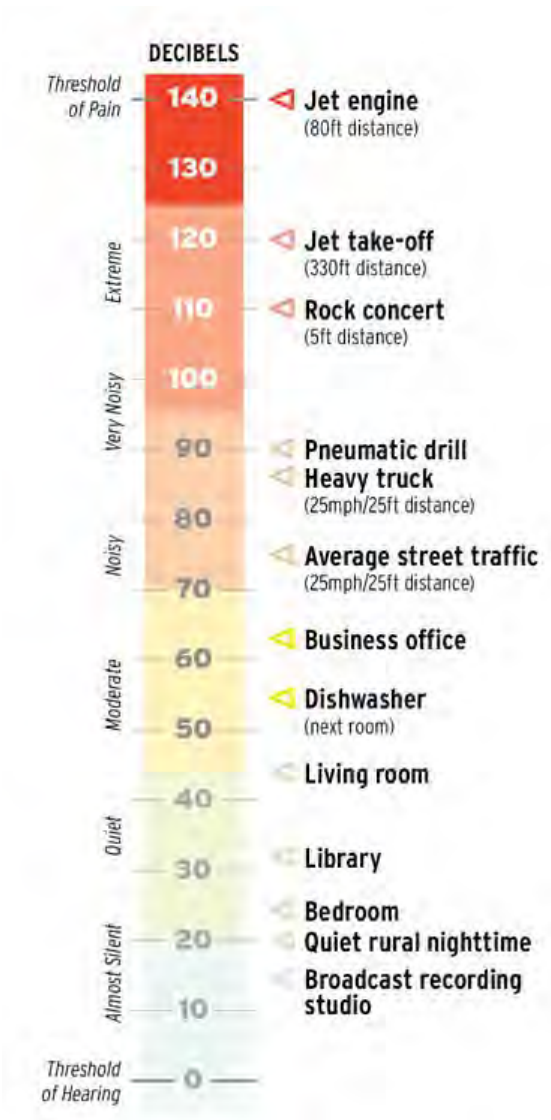
- Distance from the traffic to the receptor

¹ Type I projects include constructing a highway on a new location; the physical alteration of existing highway where there is either substantial horizontal or vertical alignment alteration; the addition of through-traffic lanes either through new construction or restriping; the addition or relocation of interchange lanes or ramps; or the addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot, or toll plaza. If a project is determined to be a Type I project under these definitions, then the entire project area as defined in the environmental document is a Type I project.

- Volume of traffic
- Speed of traffic
- Vehicle mix
- Acoustical shielding

Tire sound levels increase with vehicle speed but also depend upon road surface, vehicle weight, tread design, and wear. Change in any of these factors can vary noise levels. At lower speeds, especially in trucks and buses, the dominant noise source is the engine and related accessories. Figure 2 provides sound levels of typical noise sources.

Figure 2. Sound Levels of Typical Noise Sources



3. NOISE STUDY METHODOLOGY

Overall, for the purposes of the ProPEL US 31 North study, noise-sensitive land uses and potential noise receptors have been identified along the US 31 corridor. Where sufficient density exists such that noise abatement could potentially be determined reasonable and feasible in future studies, those areas have been identified as Areas for Further Noise Abatement Investigation on the maps in Attachment A. Noise-sensitive areas for further investigation have been identified based on the presence of noise-sensitive land uses, as well as the density of receptors (determined by professional judgement). Details are provided in the sections that follow.

3.1. NOISE STUDY PROCESS

A two-step process to consider traffic noise in the ProPEL US 31 North study was used:

1. Identification of noise-sensitive areas using Common Noise Environments (CNEs)
2. Identification of areas with level of activity potentially sufficient to warrant mitigation.

The analysis conducted at this stage will not be used to determine noise impact or noise abatement locations. Subsequent project development and NEPA evaluation for any transportation improvements recommended as part of the ProPEL US 31 North study would include detailed noise modeling and analysis.

3.2. NOISE ABATEMENT CRITERIA

Land uses along the ProPEL US 31 North study corridor have been categorized using the typologies contained in the noise abatement criteria (NAC) found in 23 CFR 772 (shown in Table 1).

Table 1. FHWA Noise Abatement Criteria (NAC)

Hourly A-Weighted Sound Level			
Activity Category	Criteria ¹ Leq(h) in Decibels (dB(A))	Evaluation Location	Activity Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B ²	67	Exterior	Residential.
C ²	67	Exterior	Active sports areas, amphitheatres, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E ²	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	-	-	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G	-	-	Undeveloped lands that are not permitted. ³

Source: Federal Highway Administration (23 CFR Part 772, Table 1).

¹ Leq(h) Activity Criteria are only for impact determination and are not design standards for noise abatement measures.

² Includes undeveloped lands permitted for this activity category.

³ Includes lands that do not currently have any active permits which would result in a change in activity category.

3.3. STUDY AREA & IDENTIFICATION OF LAND USES

The noise study area for the ProPEL US 31 North study is shown on the maps in Attachment A and includes the area within approximately 500 feet of US 31 (from the edge of outside travel lane and project termini) within the study limits. The study area for this analysis is 500 feet, which is the distance within which noise impacts are typically observed and noise barriers could provide effective mitigation.

Available aerial imagery was used to identify noise-sensitive land uses and confirmed via windshield survey on November 9, 2022. The noise study area consists primarily of single-family and multi-family residences (NAC Activity Category B), institutional or recreational outdoor use at New Life United Methodist Church, Chapel Ministries Outreach Church, Allbaugh-Clingenpeel Cemetery, McClain Funeral Home, New Life Church, Rochester Church of God, Prairie Edge Nature Park, Nickel Plate Trail, Fulton County Conservation Club, and Fulton County Historical Society (NAC Activity Category C), and three locations with outdoor use at restaurants or business properties (NAC Activity Category E). The noise study area also includes non-sensitive

industrial and commercial land uses (NAC Activity Category F) and vacant, undeveloped land (NAC Activity Category G), which are not documented in this memorandum or mapping.

Per 23 CFR 772, for NAC Activity Category C land uses that do not have an exterior area of frequent human use or have exterior use that is far from or physically shielded from the roadway, noise studies shall use NAC Activity Category D as the basis for determining noise impact. There are no NAC Activity Category D interior use receptors identified within the study area.

Receptors may represent multiple receptors or units. Under most situations, a single structure is considered a single receptor. Structures that contain multiple residential units (e.g., apartments) are considered to have one receptor per residential unit. For certain land uses (e.g., parks, trails), a separate algorithm is used to translate usage data into an appropriate number of receptor units, based on converting total usage to equivalent residential units. For the purposes of the ProPEL US 31 North study, equivalent residential units have not yet been assigned to non-residential receptors. Instead, either one receptor or an estimate of several receptors, based on number of uses or area of the property, have been assigned based on professional judgement.

Per INDOT Noise Policy, coordination with local governments is necessary to determine if there are any new permitted land uses within the study area for inclusion as existing conditions in the noise analysis. On October 26, 2022, the Fulton and Miami County Plan Commissions provided information regarding proposed or permitted development plans within the study area. Planned developments without imminent permits were not included. Upon review of documents, there are three planned or permitted noise-sensitive properties within the study limits, all on residential properties (NAC Activity Category B), as noted in Section 3.4 below. The ProPEL US 31 North study will continue to evaluate potential noise-sensitive areas as projects are identified and analyzed through the alternatives screening process, as needed.

3.4. COMMON NOISE ENVIRONMENTS

Based on a combination of land use, location of cross streets, and residential density, land uses in the study area have been grouped into a series of numbered Common Noise Environments (CNE) that are identified on the maps in Attachment A. Twenty-three (23) CNEs were identified. The CNE boundaries and land use within each are described below.

CNE 1 is located on the west side of US 31 from the Eel River to CR 400 North. This area consists of three single-family residences (NAC Activity Category B) and outdoor use at New Life United Methodist Church (NAC Activity Category C).

CNE 2 is located on the east side of US 31 from the Eel River to CR 400 North. This area consists of 4 single-family residences (NAC Activity Category B).

CNE 3 is located on the west side of US 31 from W CR 400 North to CR 550 North. This area consists of a single-family residence (NAC Activity Category B), and potential outdoor use at Chapel Ministries Outreach Church (NAC Activity Category C) and McClure's Orchard/Winery (NAC Activity Category E).

CNE 4 is located on the east side of US 31 from CR 400 North to Mexico Road. This area consists of three single-family residences (NAC Activity Category B). This CNE contains an approved building permit near CR 450 North.

CNE 5 is located on the west side of US 31 from CR 550 North to State Road (SR) 16. This area consists of six single-family residences (NAC Activity Category B) and Allbaugh-Clingenpeel Cemetery (NAC Activity Category C).

CNE 6 is located on the east side of US 31 from Mexico Road to SR 16. This area consists of one single-family residence (NAC Activity Category B).

CNE 7 is located on the west side of US 31 from SR 16 to CR 400 West. This area consists of three single-family residences (NAC Activity Category B) and McClain Funeral Home (NAC Activity Category C).

CNE 8 is located on the east side of US 31 from SR 16 to CR 400 West. This area consists of six single-family residences (NAC Activity Category B) and outdoor use at Vohne Liche Kennels (NAC Activity Category E). *Note: this CNE contains an Area for Further Noise Abatement Investigation; see Section 4.*

CNE 9 is located on the west side of US 31 from CR 400 West to CR 750 South. This area consists of six single-family residences (NAC Activity Category B).

CNE 10 is located on the east side of US 31 from CR 400 West to CR 400 South. This area consists of three single-family residences (NAC Activity Category B).

CNE 11 is located on the west side of US 31 from CR 750 South to CR 400 South. This area consists of four single-family residences (NAC Activity Category B).

CNE 12 is located on the west side of US 31 from CR 400 South to Old US 31. This area consists of four single-family residences (NAC Activity Category B).

CNE 13 is located on the east side of US 31 from CR 400 South to Wabash Avenue. This area consists of three single-family residences (NAC Activity Category B) and the Nickel Plate Trail (NAC Activity Category C).

CNE 14 is located on the east side of US 31 from Wabash Avenue to Old US 31. This area consists of three single-family residences (NAC Activity Category B).

CNE 15 is located on the west side of US 31 from Old US 31 to SR 25. This area consists of three single-family residences. (NAC Activity Category B).

CNE 16 is located on the east side of US 31 from Old US 31 to SR 25. This area consists of six single-family residences (NAC Activity Category B) and potential outdoor use at Rochester Church of God (NAC Activity Category C). *Note: this CNE contains an Area for Further Noise Abatement Investigation; see Section 4.*

CNE 17 is located on the west side of US 31 from SR 25 to 3rd Street. This area consists of three single-family residences (NAC Activity Category B) and New Life Church (NAC Activity Category C). *Note: this CNE contains an approved building permit near CR 100 North.*

CNE 18 is located on the east side of US 31 from SR 25 to SR 14. This area consists of single-family residences including Country Meadows Mobile Home Community (NAC Activity Category B) and outdoor use at a day-care center (NAC Activity Category C). This CNE contains and approved building permits near Sweetgum Road. *Note: this CNE contains an Area for Further Noise Abatement Investigation; see Section 4.*

CNE 19 is located on the east side of US 31 from SR 14 to 3rd Street. This area consists of seven single-family residences (NAC Activity Category B) and Kindred Hospice (NAC Activity Category C).

CNE 20 is located on the west side of US 31 from 3rd Street to the Tippecanoe River. This area consists of single-family and duplex residences (NAC Activity Category B). This CNE contains an approved building permit near Monticello Road. *Note: this CNE contains an Area for Further Noise Abatement Investigation; see Section 4.*

CNE 21 is located on the east side of US 31 from 3rd Street to the Tippecanoe River. This area consists of one single-family residence (NAC Activity Category B) and Prairie Edge Nature Park (NAC Activity Category C). *Note: this CNE contains an Area for Further Noise Abatement Investigation; see Section 4.*

CNE 22 is located on the west side of US 31 from the Tippecanoe River to CR 700 North. This area consists of four single-family residences (NAC Activity Category B) and outdoor use at the Fulton County Conservation

Club and Fulton County Historical Society (NAC Activity Category C). This CNE contains an approved building permit near CR 550 North. *Note: this CNE contains an Area for Further Noise Abatement Investigation; see Section 4.*

CNE 23 is located on the east side of US 31 from the Tippecanoe River to CR 700 North. This area consists of two single-family residences (NAC Activity Category B).

4. AREAS FOR FURTHER NOISE ABATEMENT INVESTIGATION

Table 2 summarizes identified CNEs, the potential number of receptors within each, and whether the CNE contains an Area for Further Noise Abatement Investigation. Note that as described above, some receptors on the figures in Attachment A may represent multiple receptors or units, such as those for mobile homes in CNE 18. As such, the potential number of receptors identified in Table 2 may be greater than the number of receptor locations shown on the figures.

Areas for further noise abatement investigation have been identified in CNE 8 in Miami County, and CNEs 16, 18, 20, 21, and 22 in Fulton County. These areas include:

- Vohne Liche Kennels (CNE 8);
- Single-family residences and McClain Funeral Home (CNE 16);
- A single-family residence, a daycare center, and Country Meadows Mobile Home Community (CNE 18);
- Multi-family residences (CNE 20);
- Prairie Edge Nature Park (CNE 21); and
- The Fulton County Conservation Club and Fulton County Historical Society (CNE 22).

Table 2. Identified CNEs, Receptors, and Areas for Further Noise Abatement Investigation

CNE	Potential # of Receptors	Area for Further Noise Abatement Investigation?	NAC Activity Category
1	4	NO	B, C
2	5	NO	B
3	3	NO	B,C, E
4	3	NO	B
5	7	NO	B, C
6	1	NO	B
7	4	NO	B, C
8	8	YES	B, E
9	6	NO	B
10	3	NO	B
11	4	NO	B
12	4	NO	B
13	12	NO	B, C
14	3	NO	B
15	3	NO	B
16	7	YES	B, C
17	4	NO	B, C
18	39	YES	B, C
19	8	NO	B, C
20	20	YES	B
21	6	YES	B, C
22	8	YES	B, C
23	2	NO	B

5. CONCLUSION

For the ProPEL US 31 North study, existing and planned noise-sensitive land uses along US 31 within the study limits were identified. Twenty-three CNEs were identified and evaluated, six of which were identified as Areas for Further Noise Abatement Investigation. To help inform activities such as alternatives development and screening for the PEL study, these areas have been identified as having levels of activity potentially sufficient that noise abatement could be determined reasonable and feasible in future studies.

The analysis conducted at this stage will not be used to determine noise impact or noise abatement locations. Subsequent project development and NEPA evaluation for any transportation improvements recommended as part of the ProPEL US 31 North study that are Type 1 projects would include detailed noise modeling and analysis at that time.

6. REFERENCES

FHWA, “Highway Traffic Noise: Analysis and Abatement Guidance”, FHWA-HEP-10-025, https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/revguidance.pdf, December 2011.

FHWA, Noise Policy FAQs – Frequently Asked Questions, https://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/faq_nois.cfm#D4e.

FHWA, “Procedures for Abatement of Highway Traffic Noise and Construction Noise”, Code of Federal Regulations, Title 23 Part 772 (23 CFR 722), July 13, 2010.

INDOT, “Traffic Noise Analysis Procedure”, <https://www.in.gov/indot/engineering/files/2022-INDOT-Noise-Policy-Signed-Final-101222.pdf>, October 12, 2022.

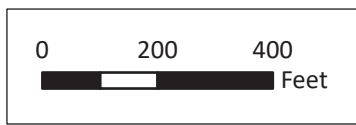
ProPEL US 31 North Noise-Sensitive Areas Identification Memorandum

ATTACHMENT A: NOISE-SENSITIVE AREA MAPS

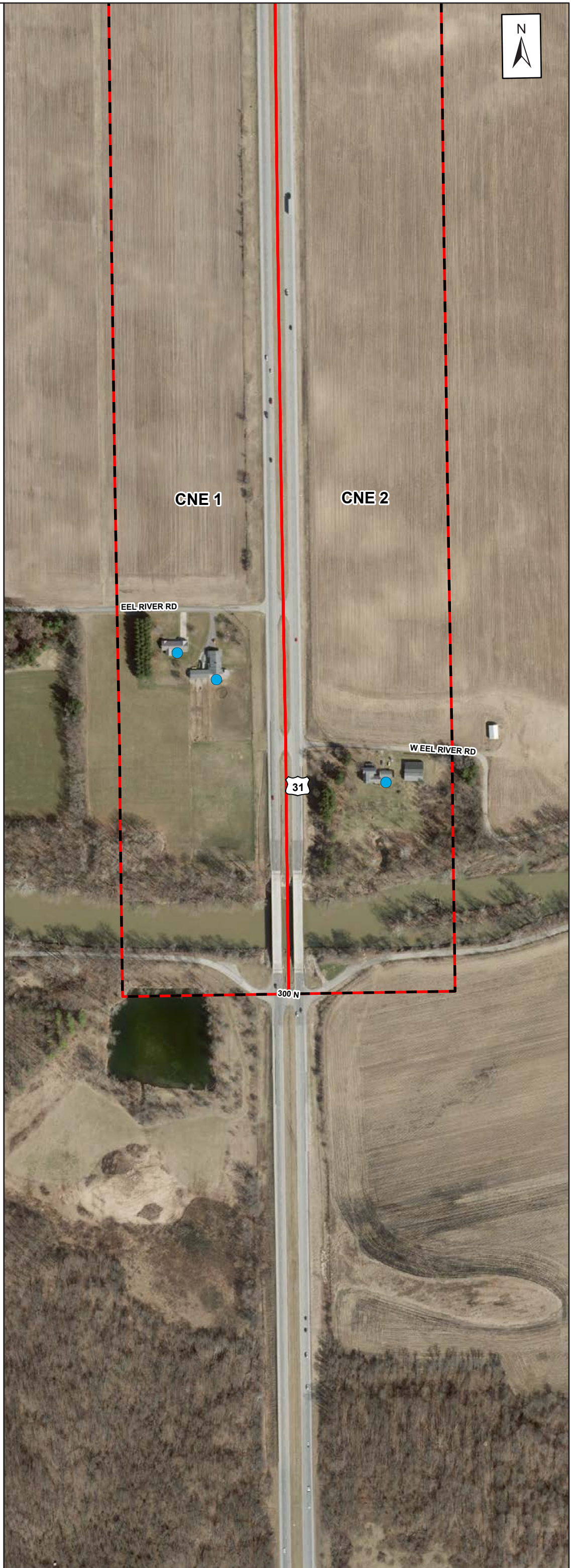


US 31 North Noise-Sensitive Areas

- 500-Foot Noise Study Area
 - Common Noise Environment (CNE)
 - Area for Further Noise Abatement Investigation
- FHWA Noise Abatement Criteria
- Activity Category B
 - Activity Category C
 - Activity Category E



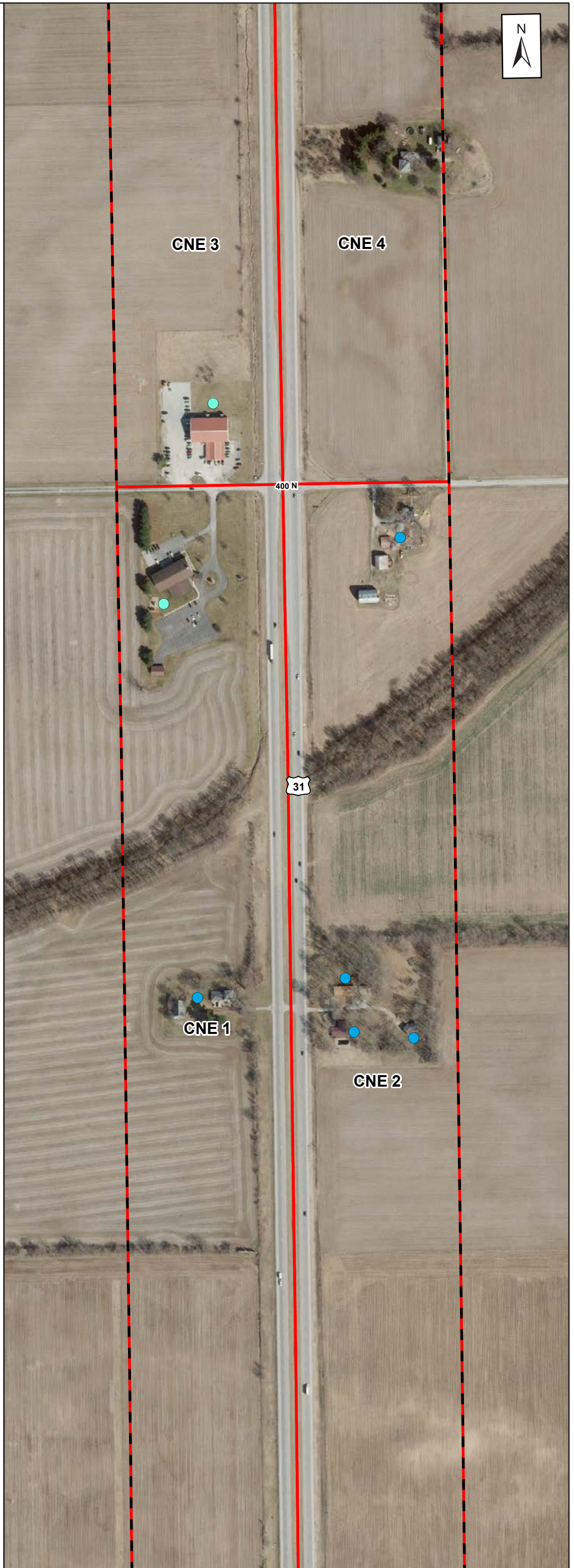
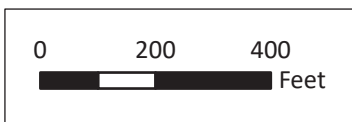
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US 31 North Noise-Sensitive Areas

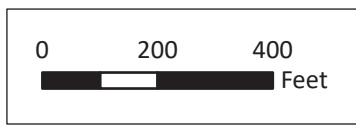
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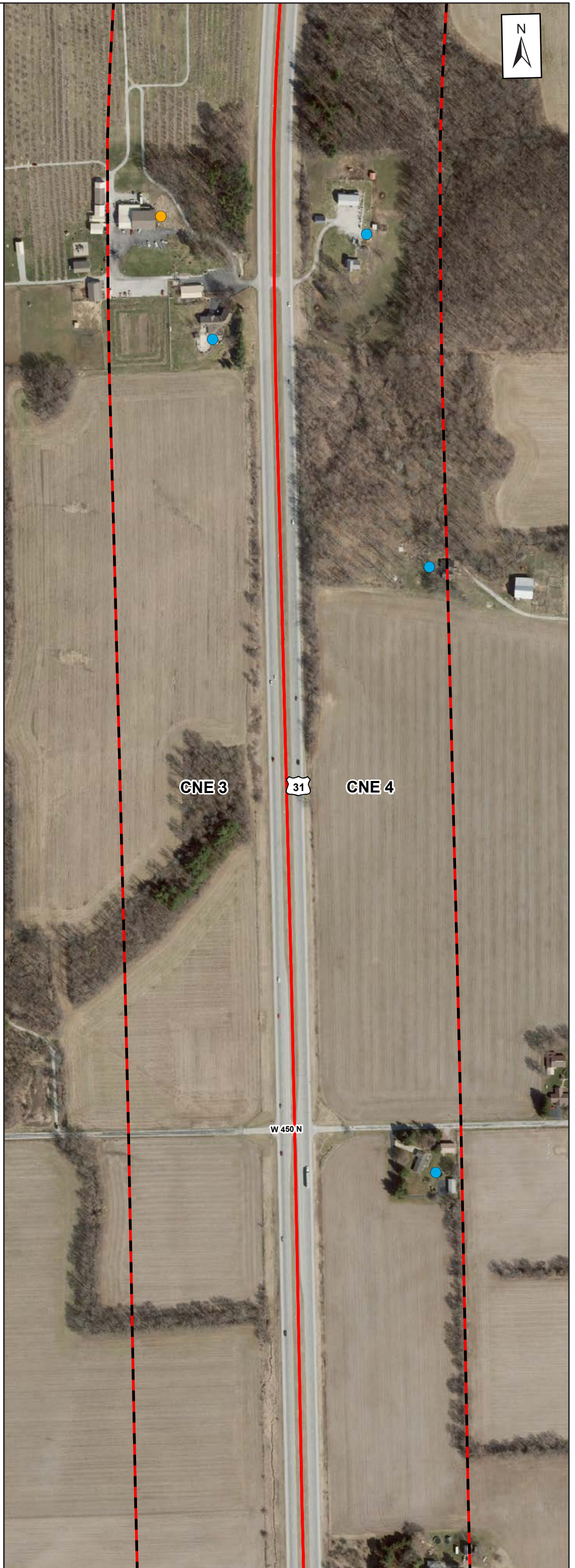


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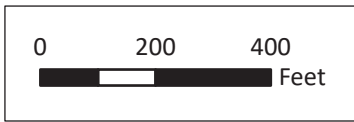
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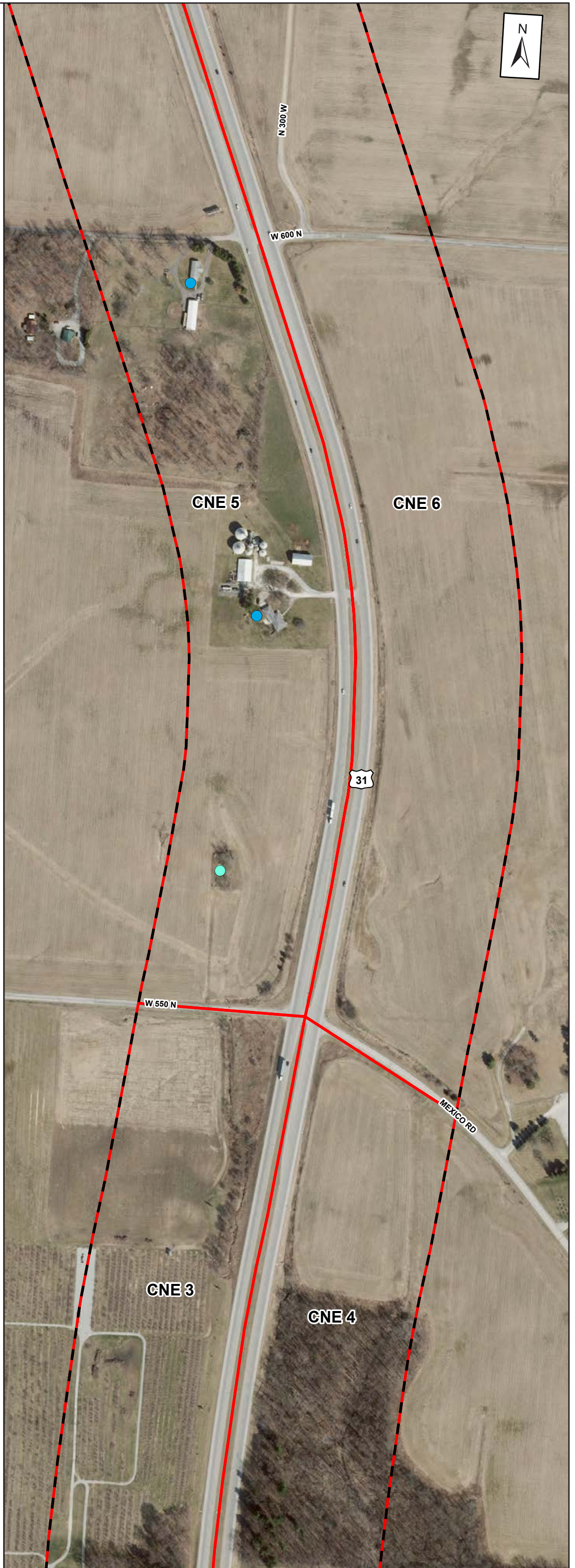


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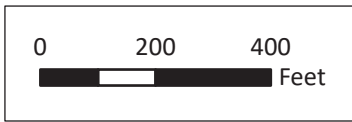
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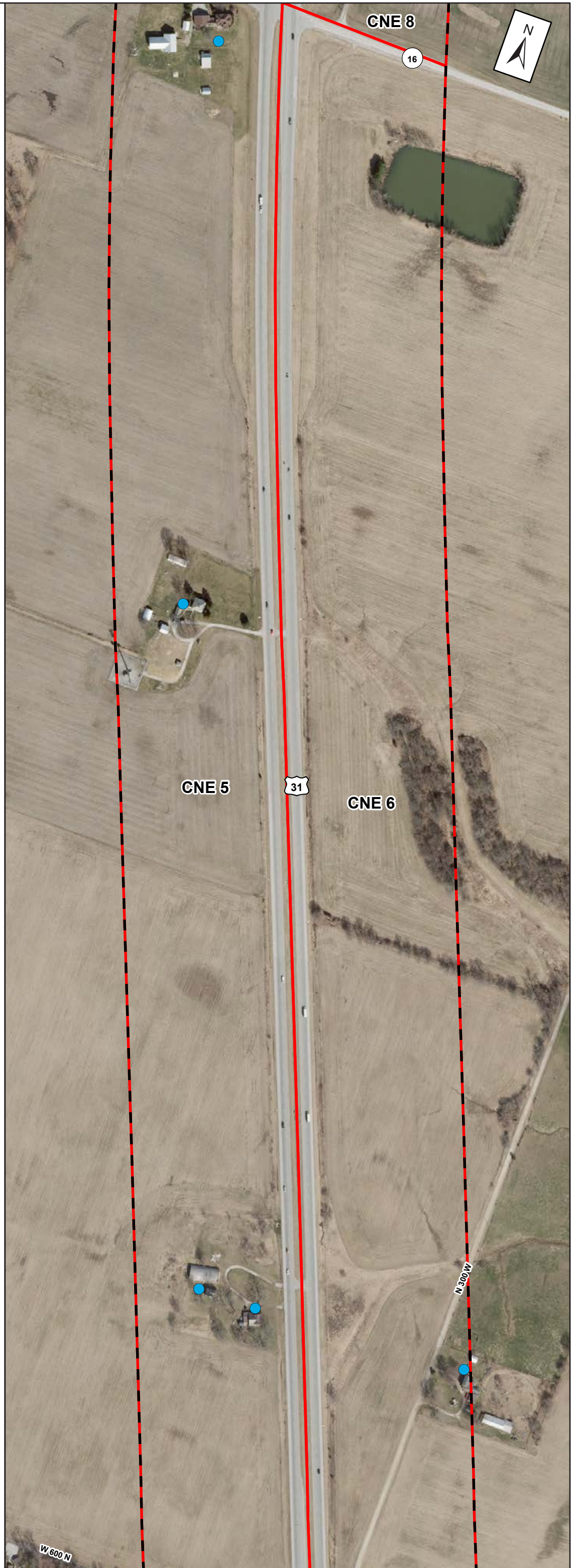


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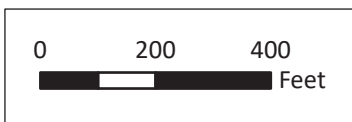
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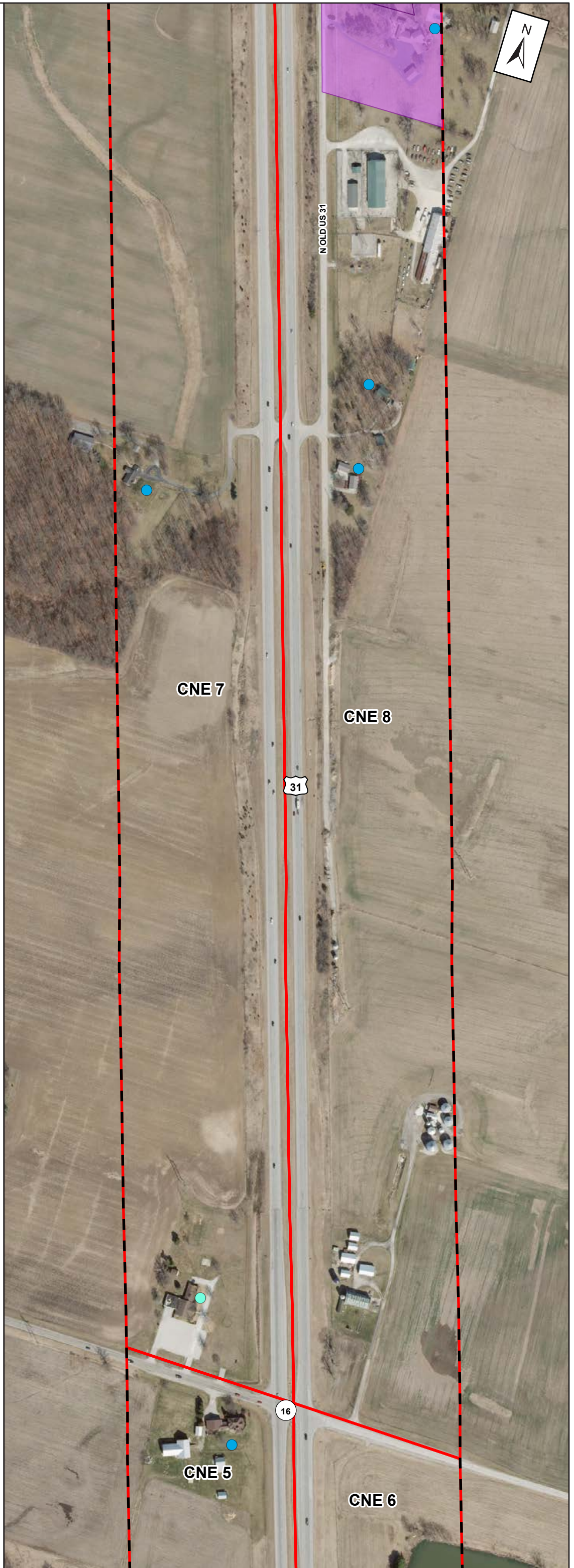
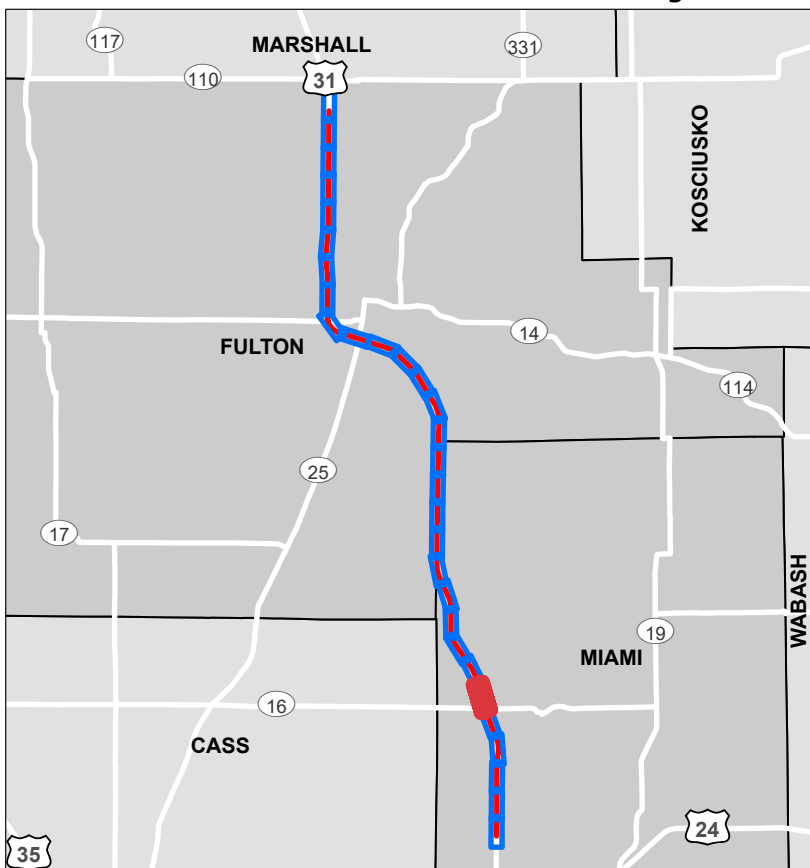


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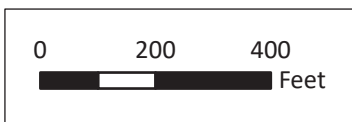
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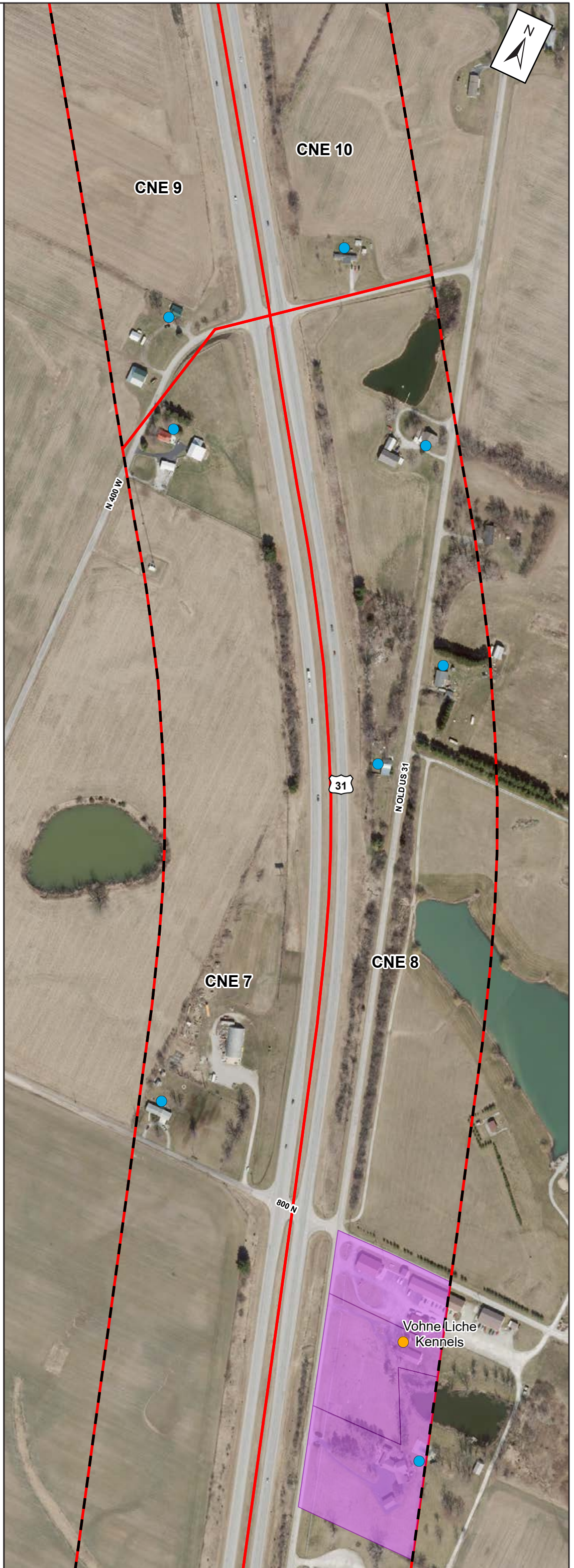


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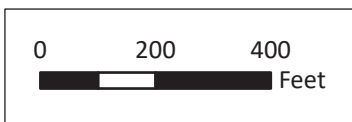
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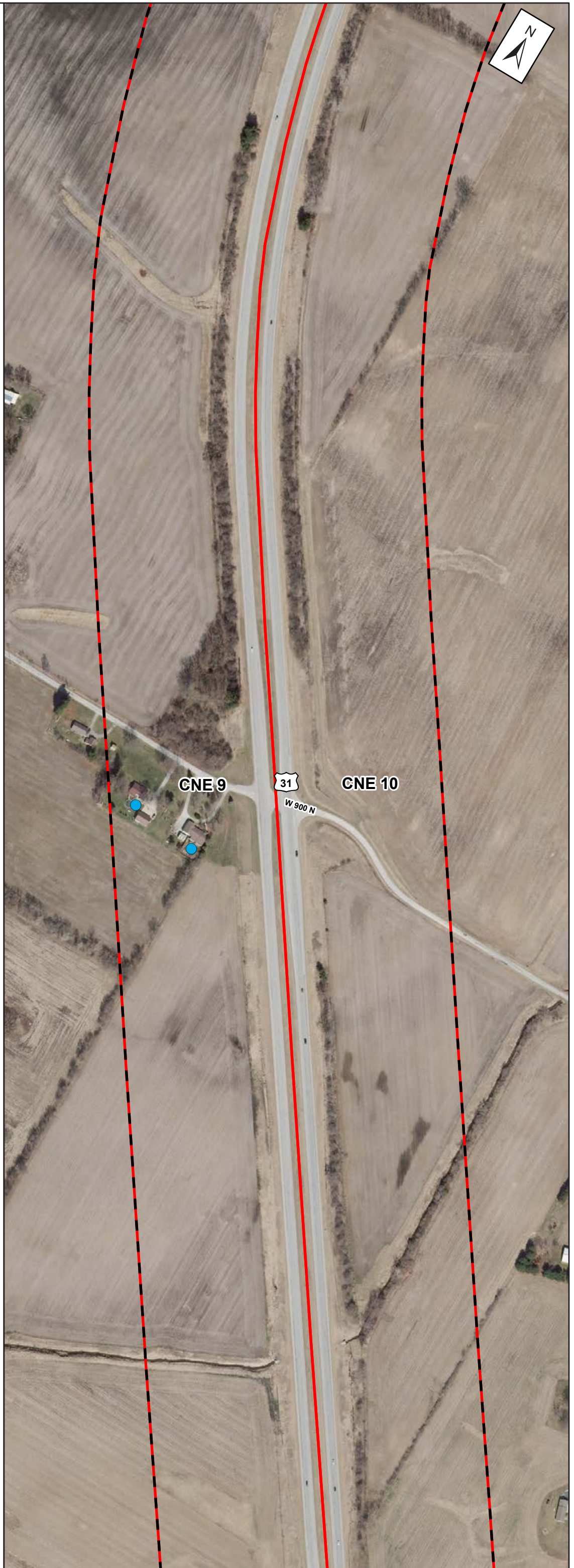


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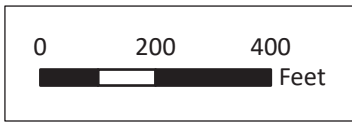
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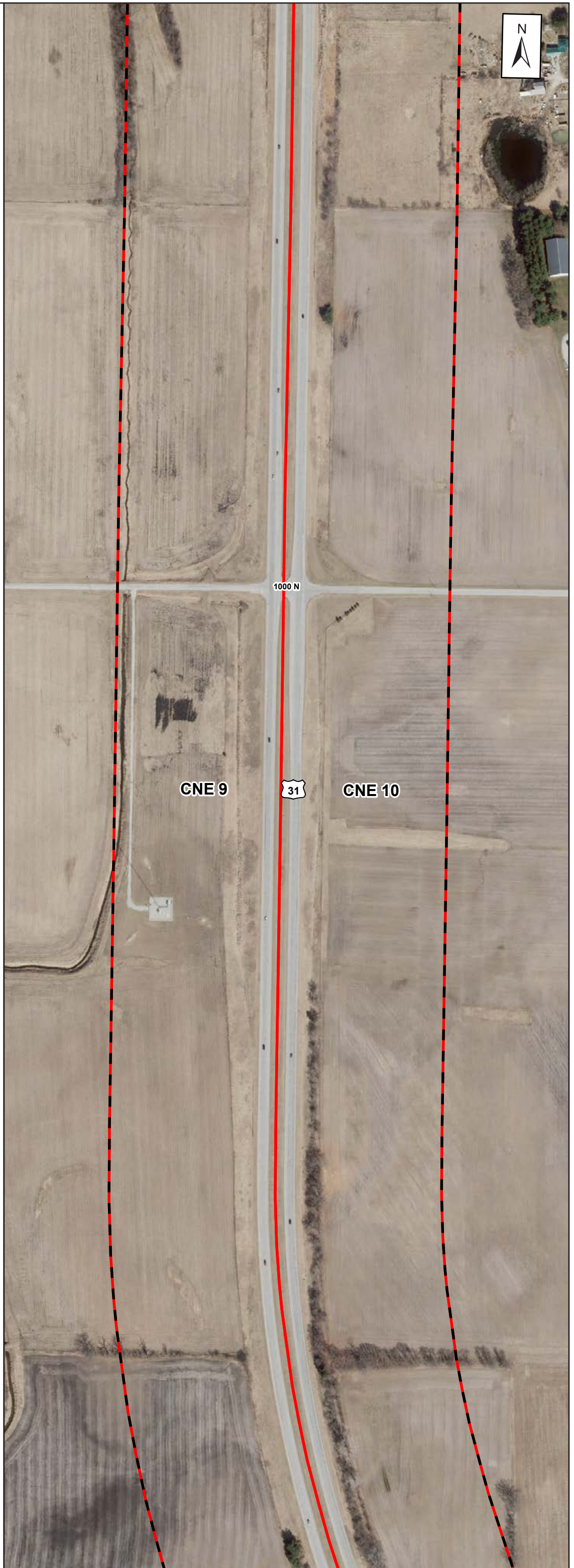


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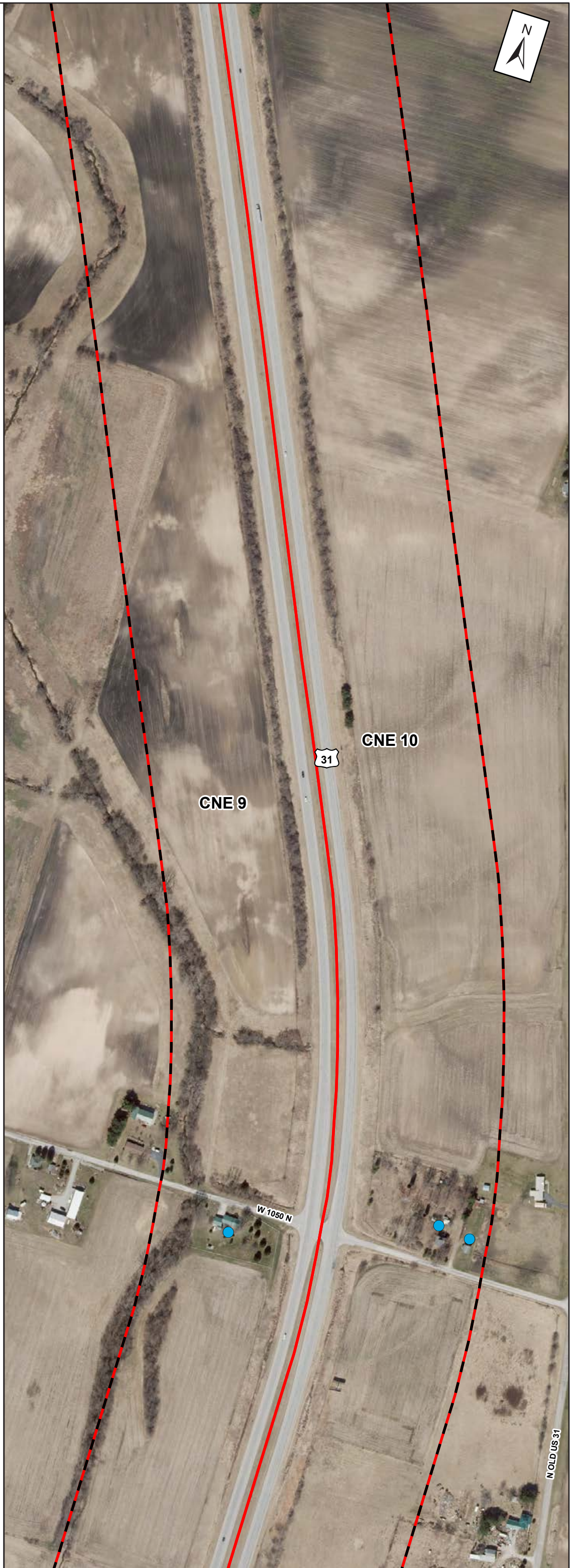
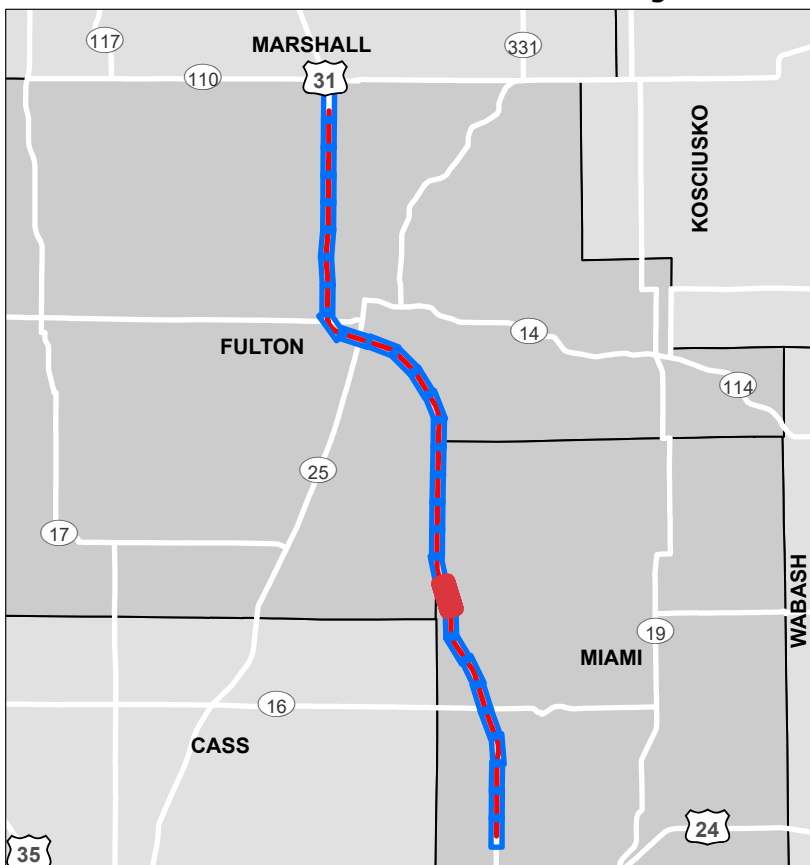
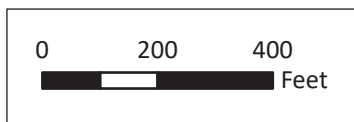
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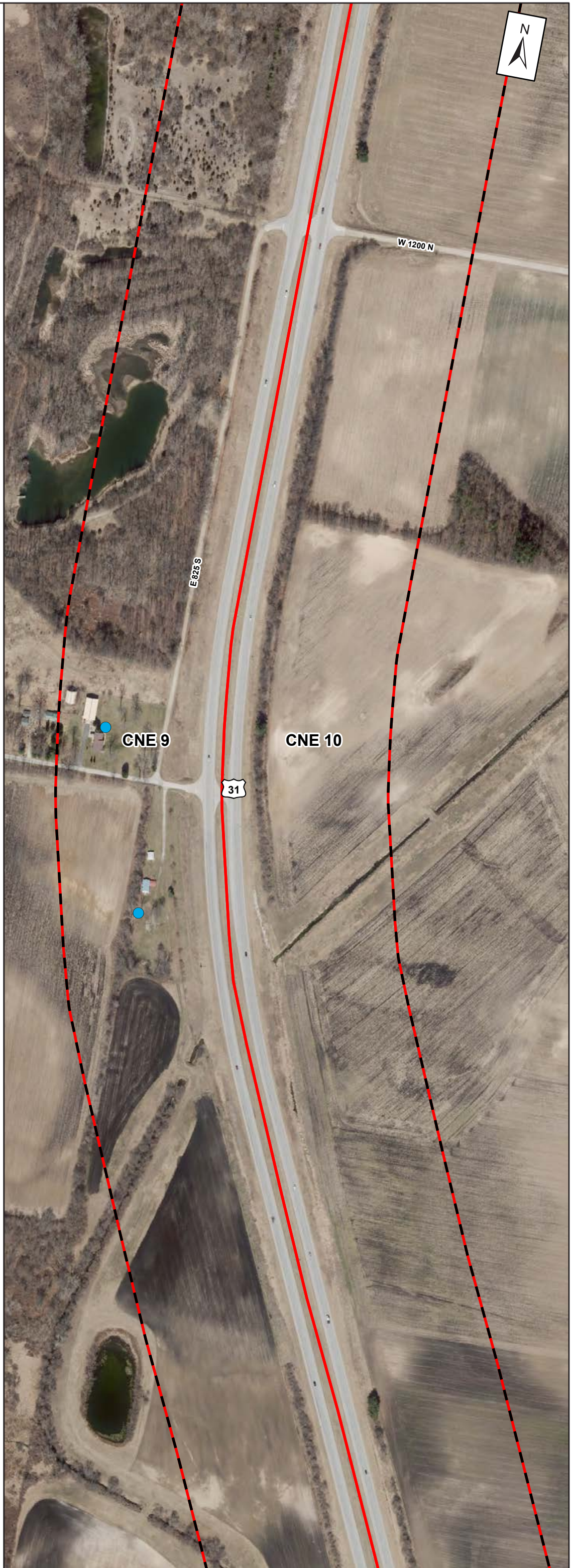
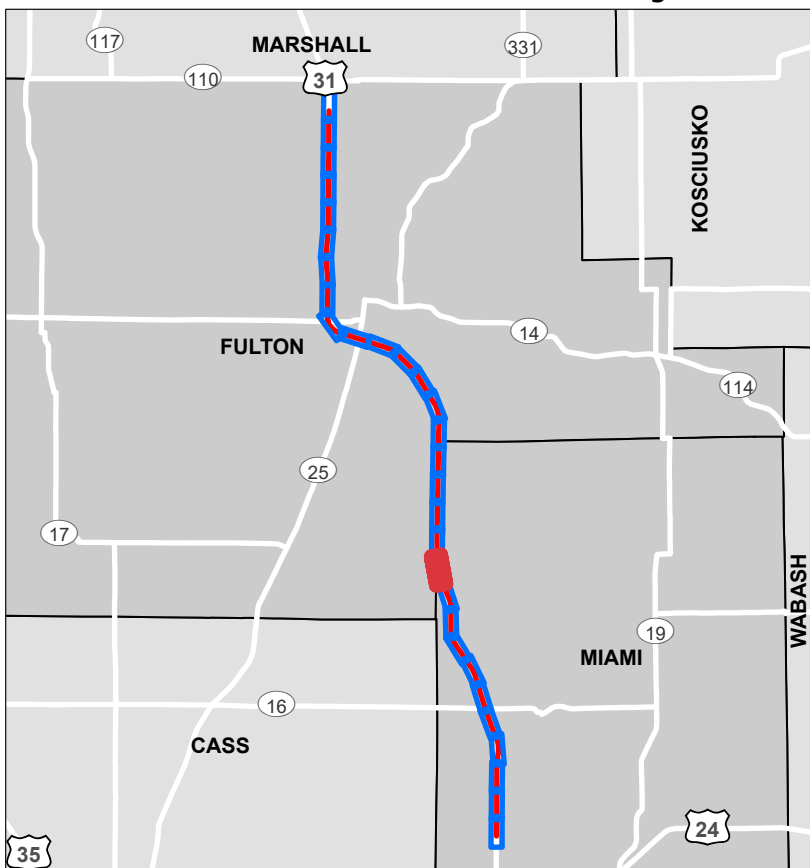
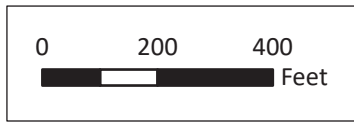




US 31 North

Noise-Sensitive Areas

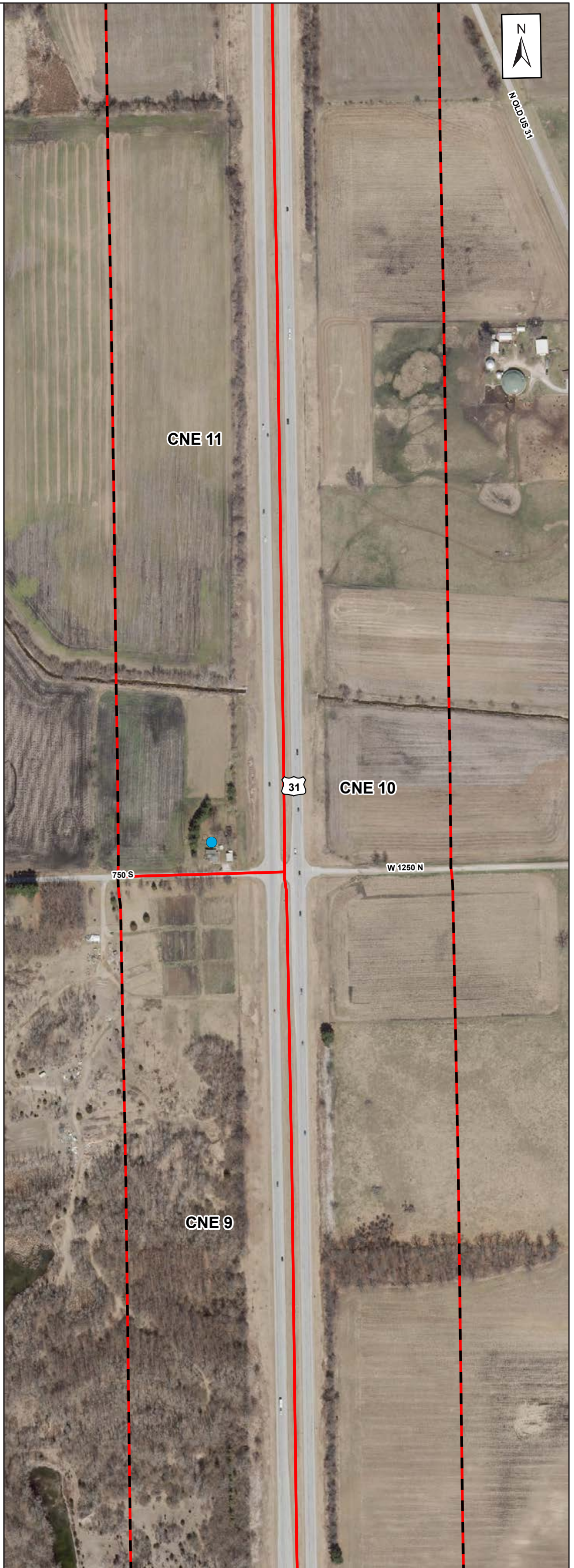
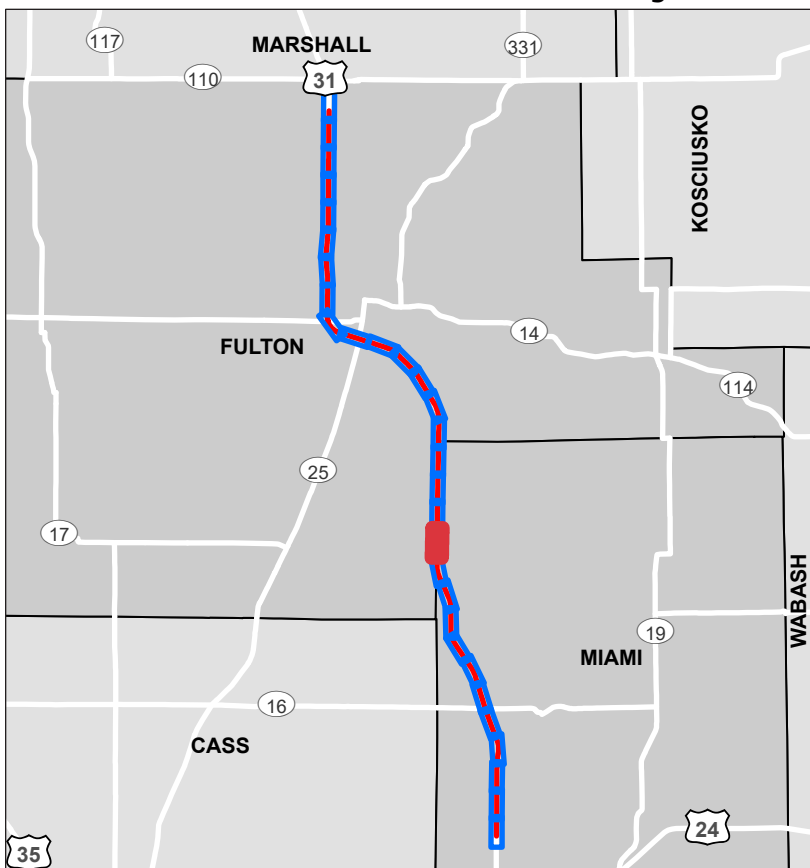
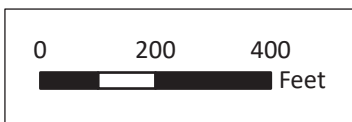
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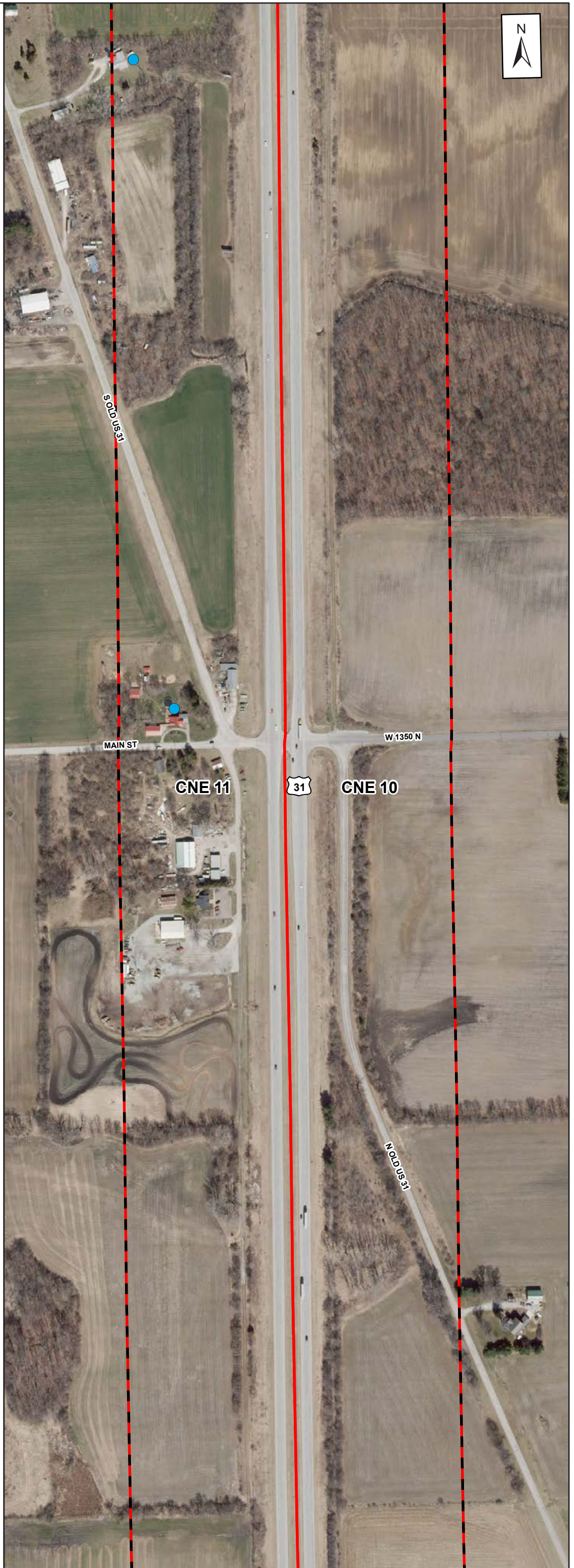
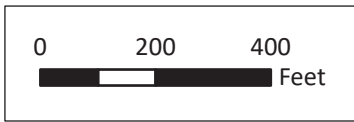
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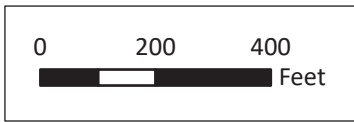
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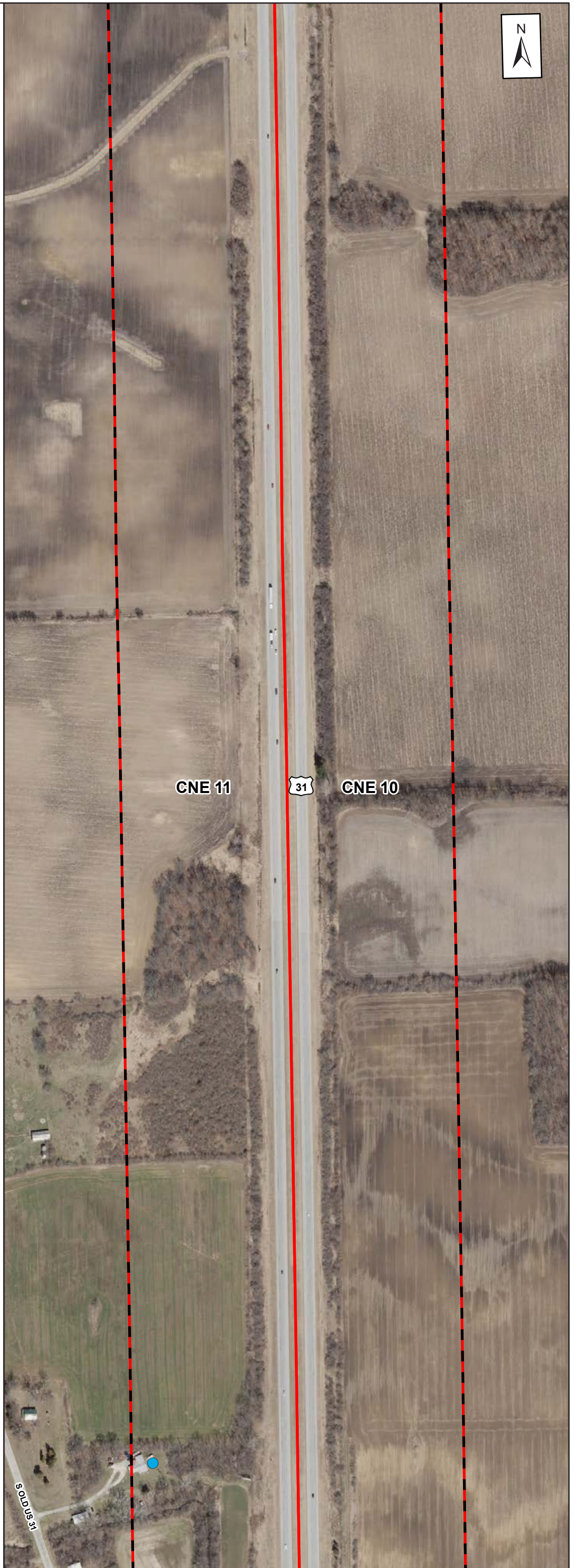


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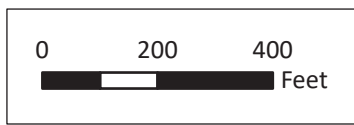
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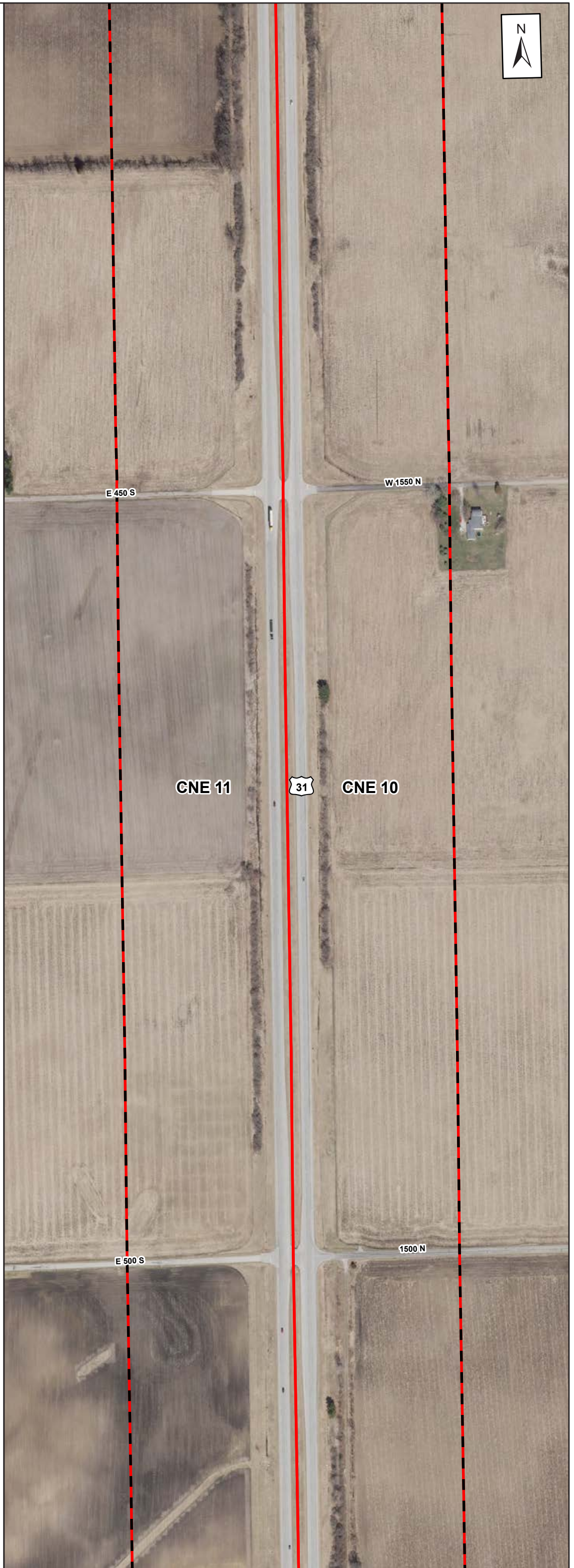


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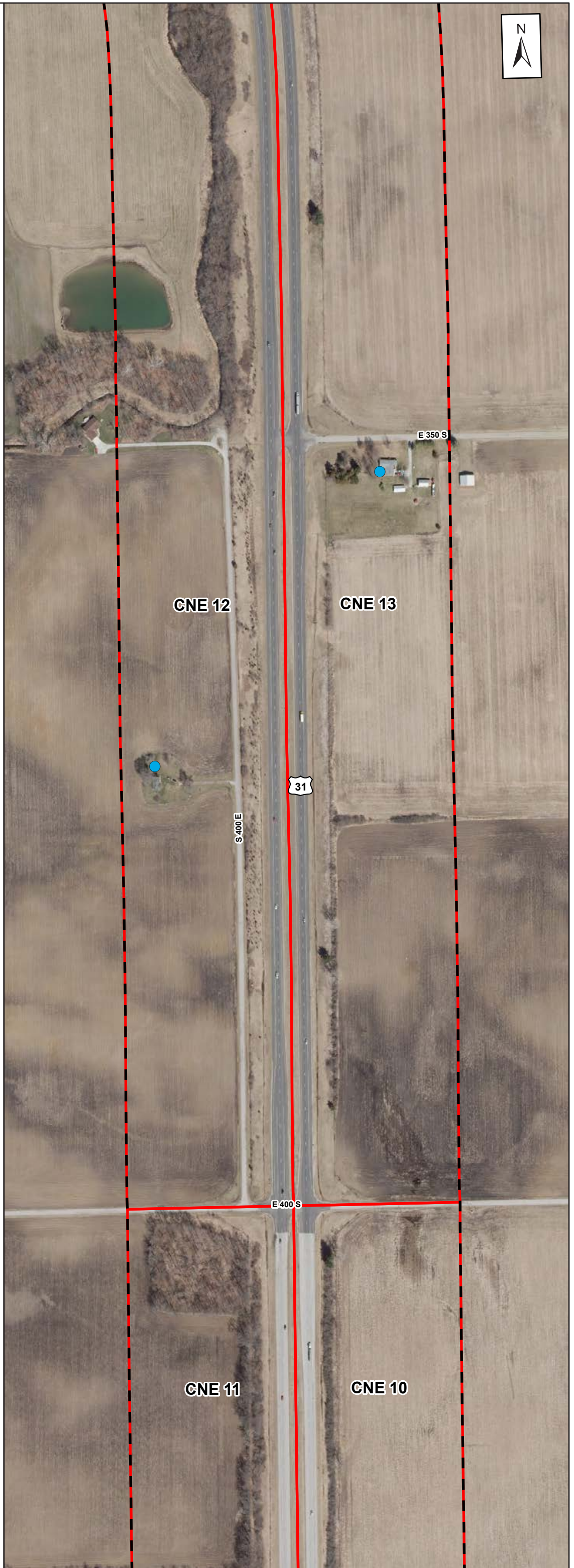


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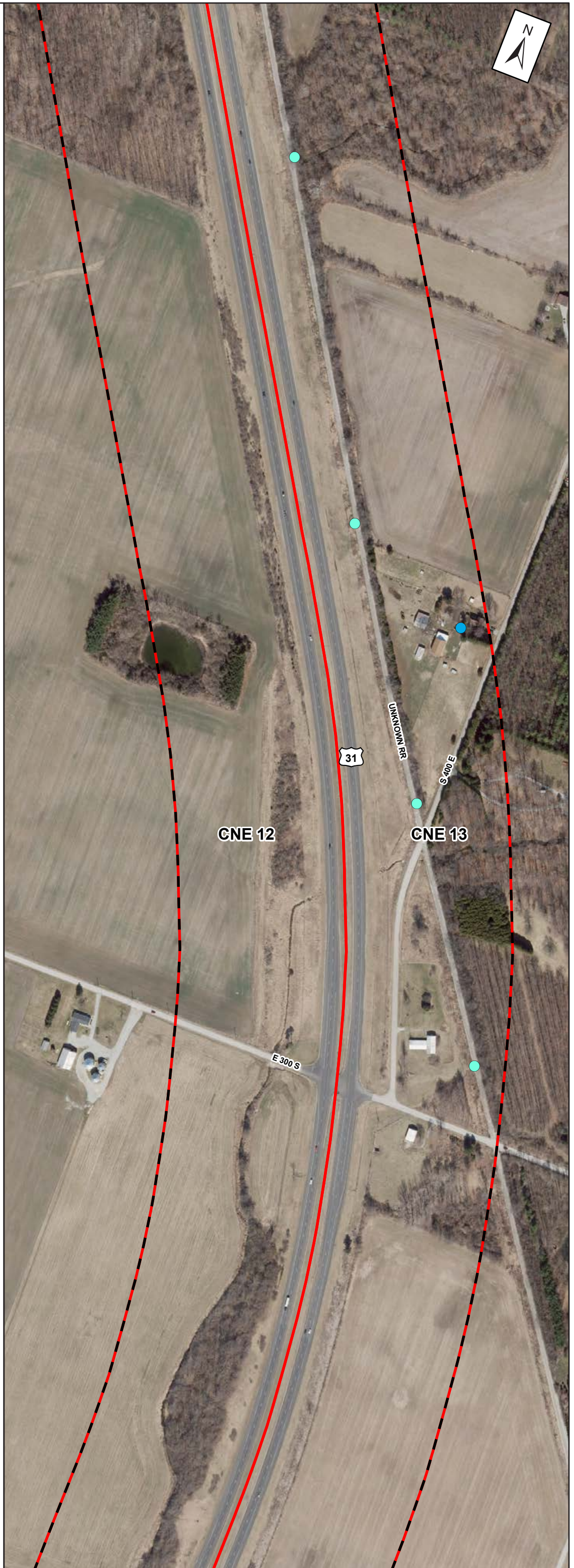
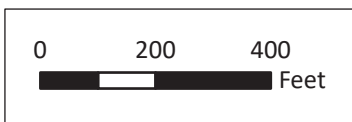
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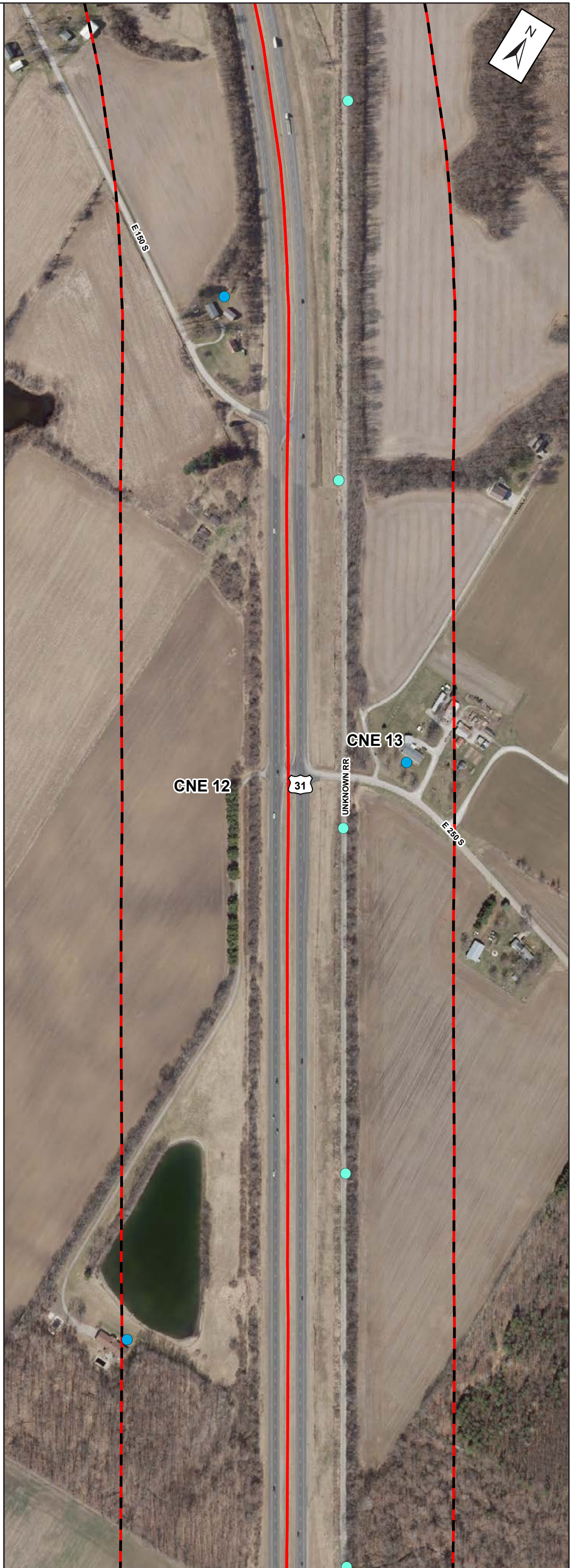
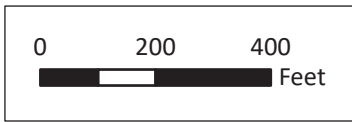
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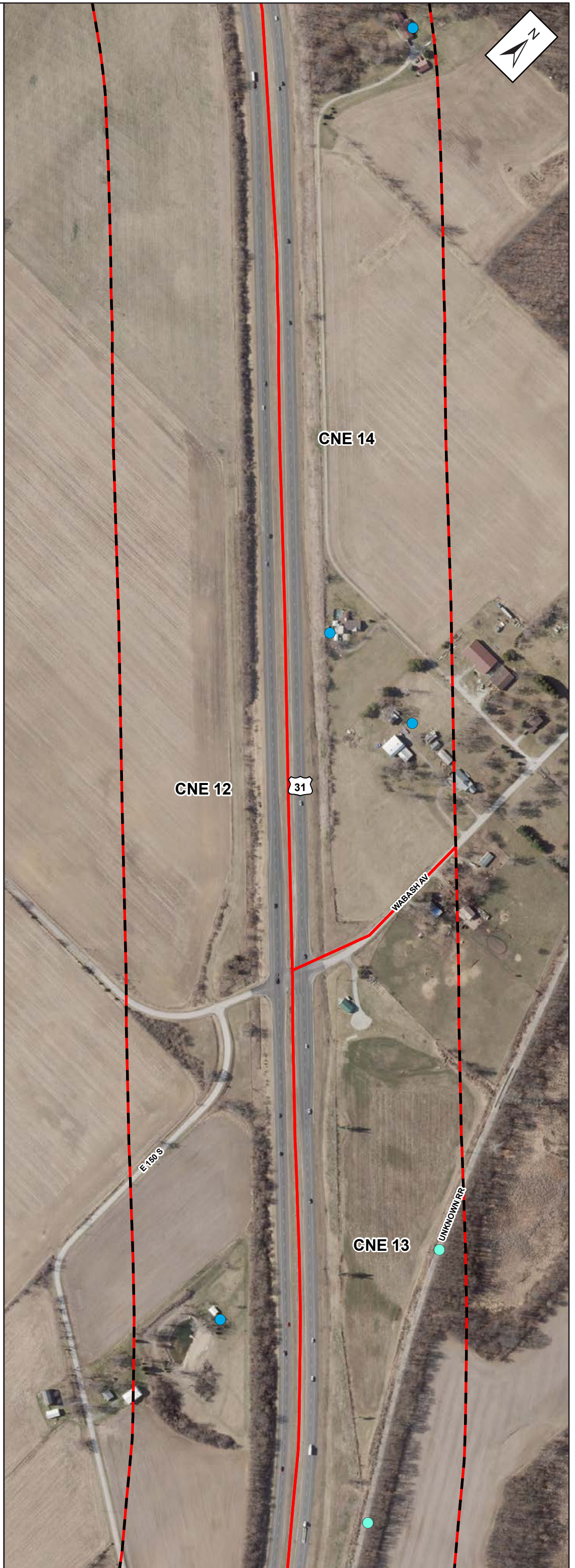
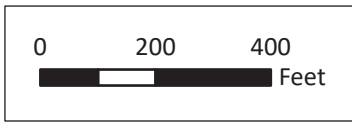
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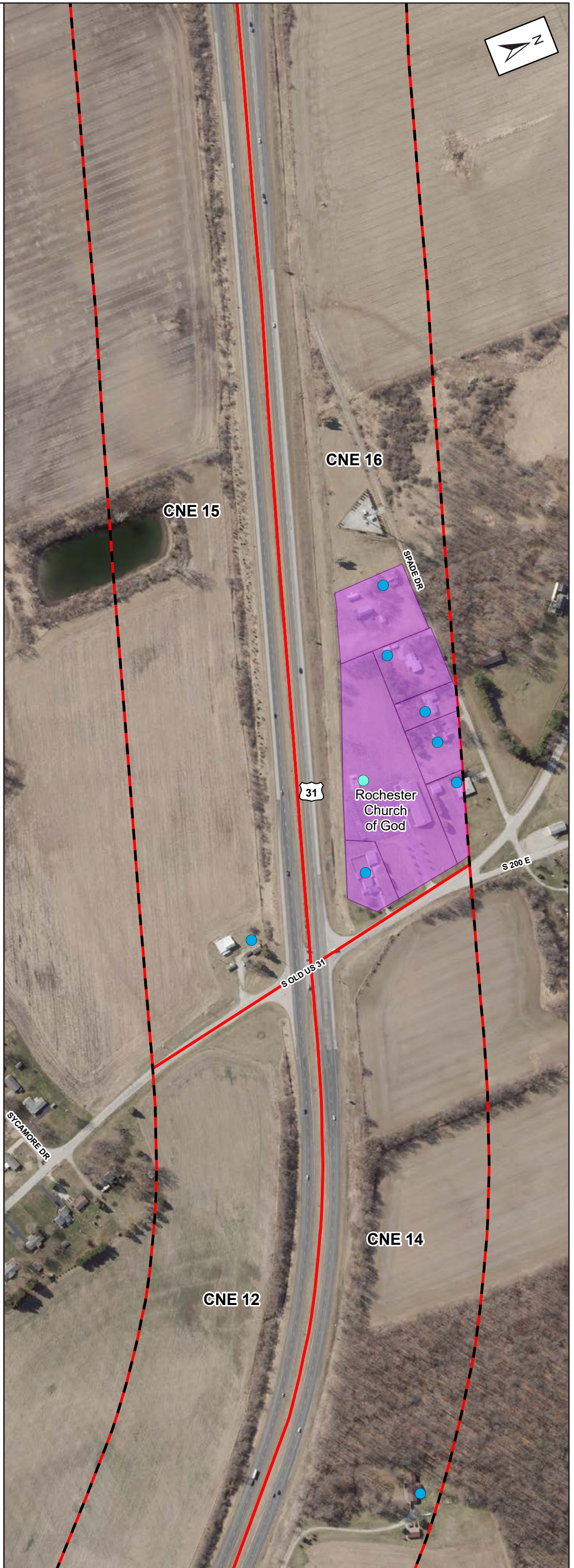
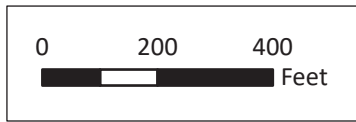
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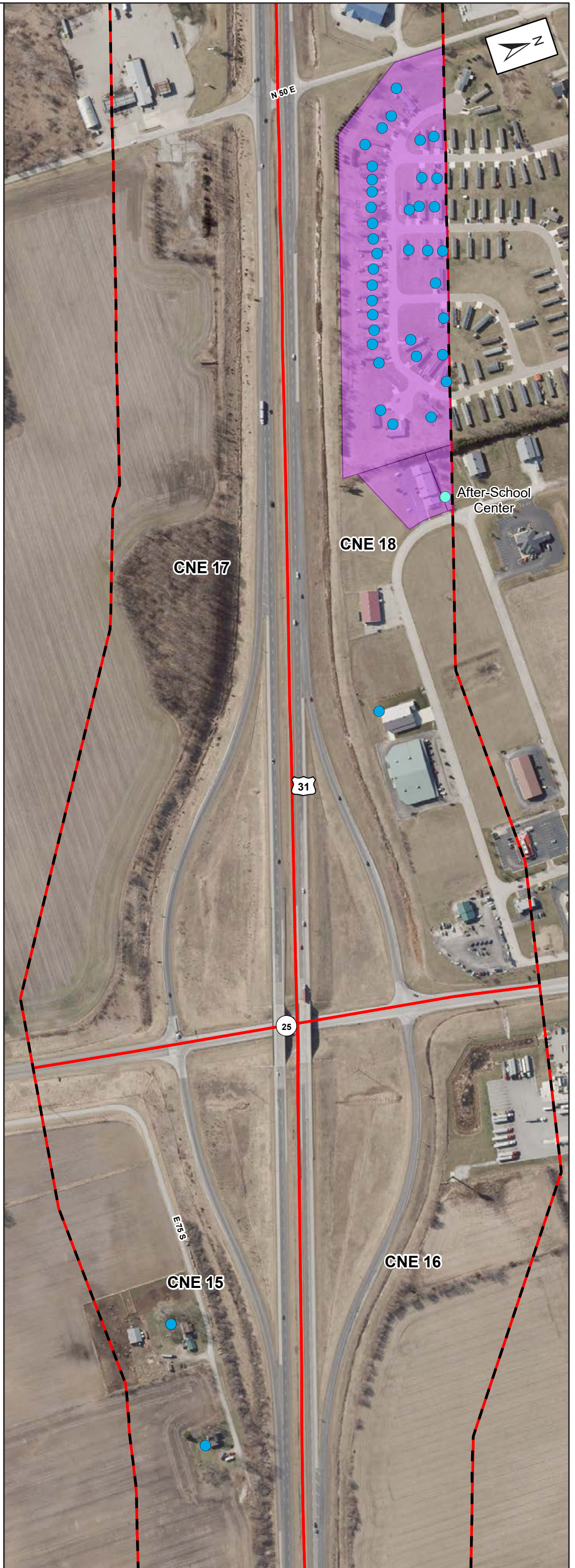
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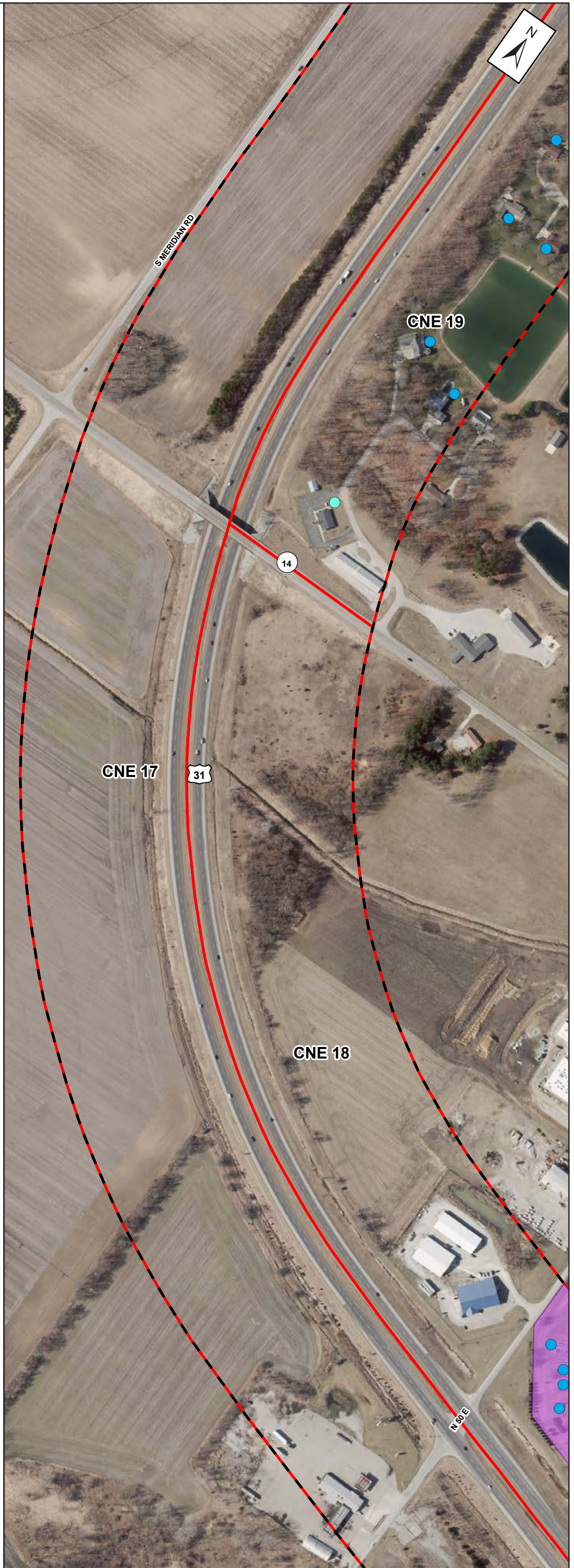
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US 31 North Noise-Sensitive Areas

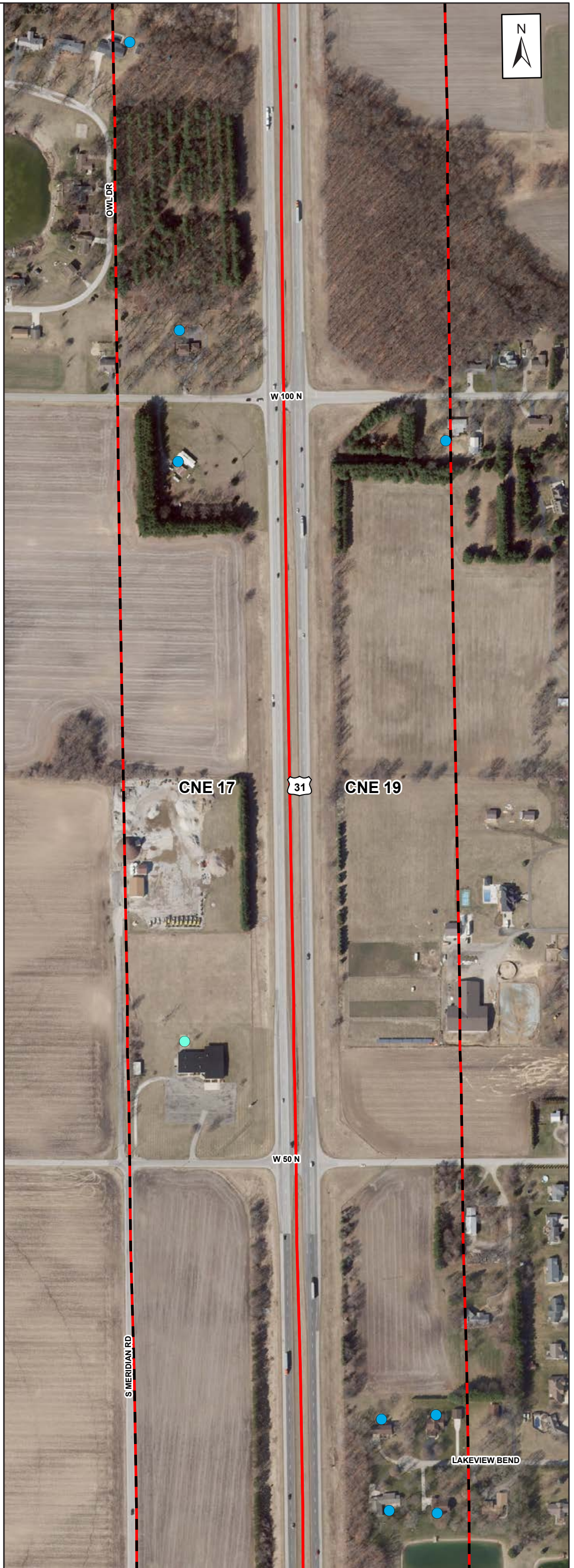
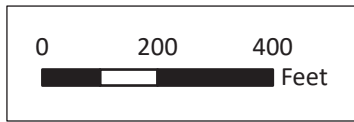
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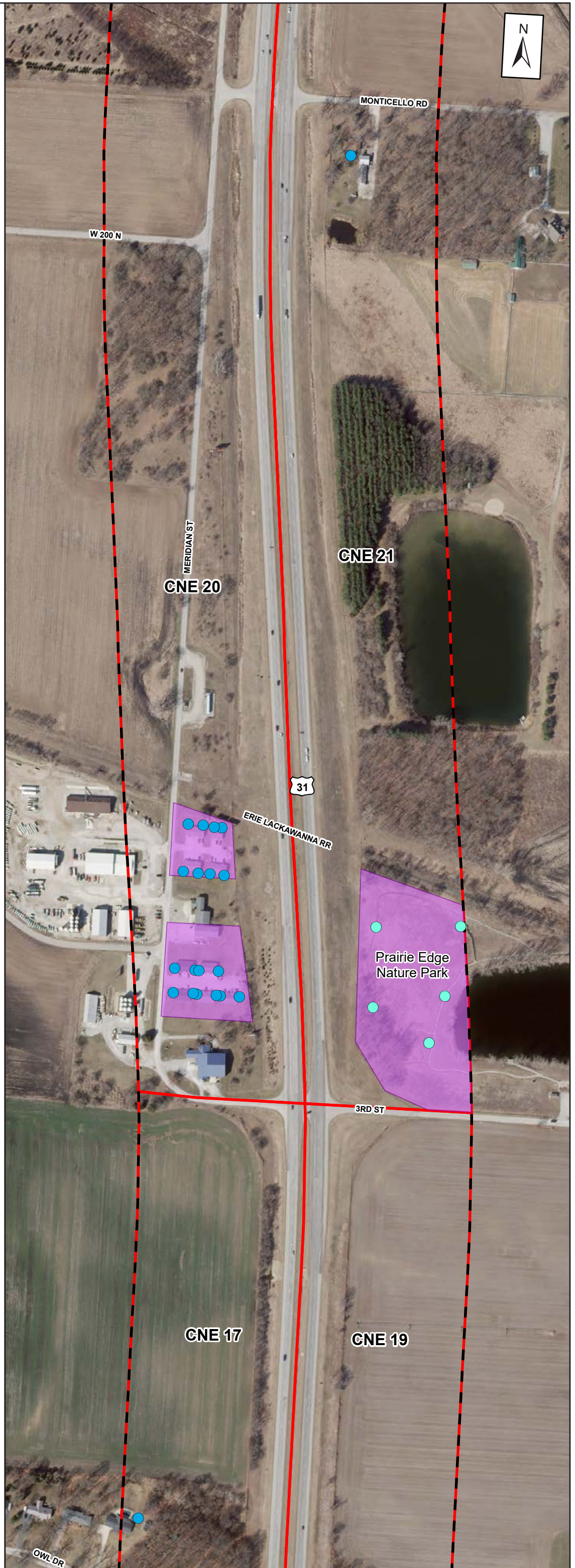


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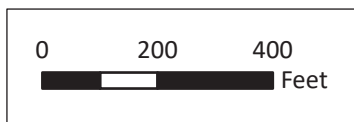
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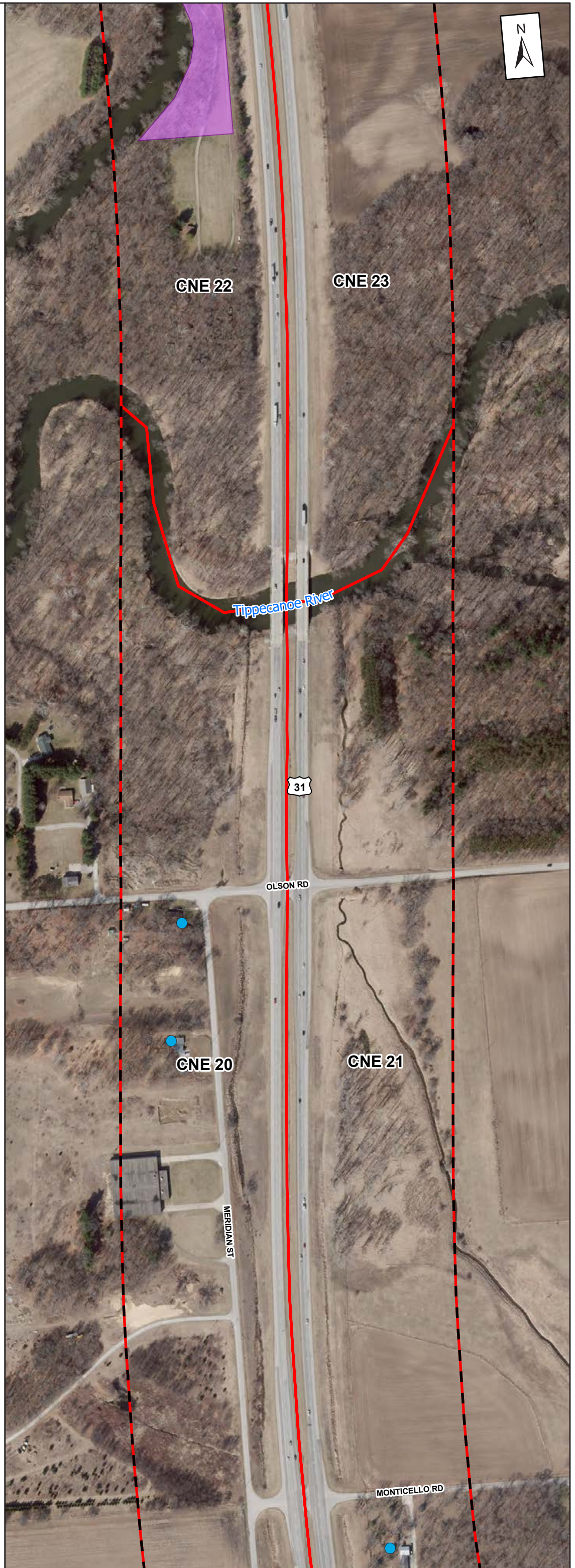


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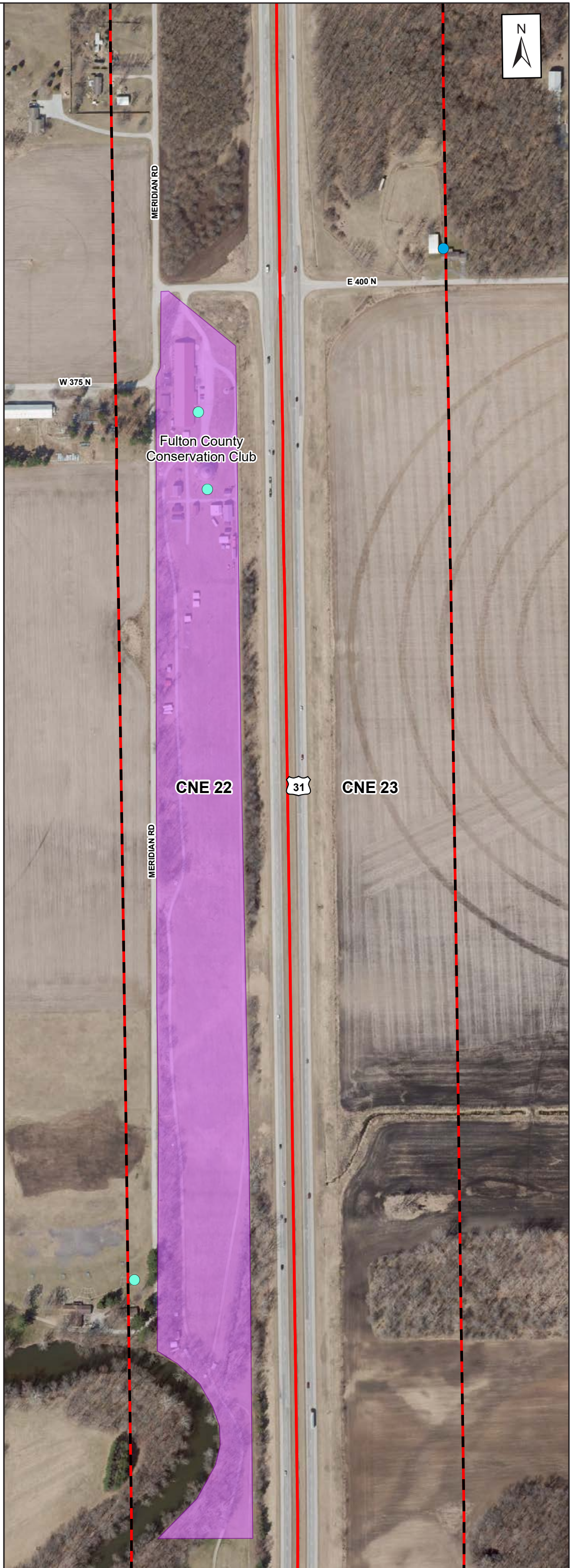
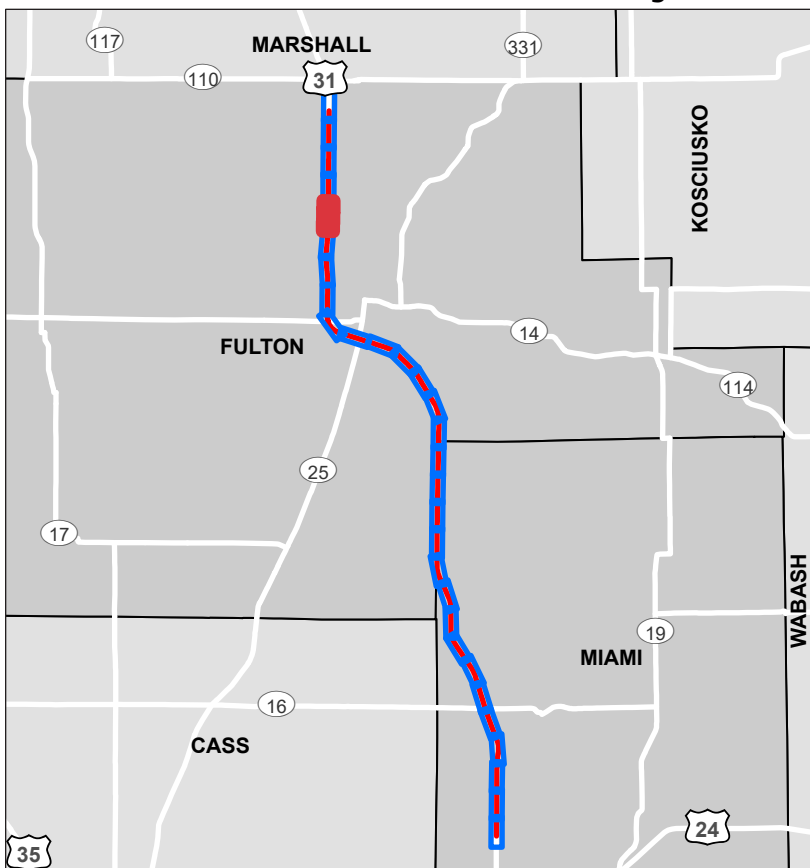
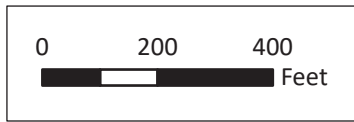
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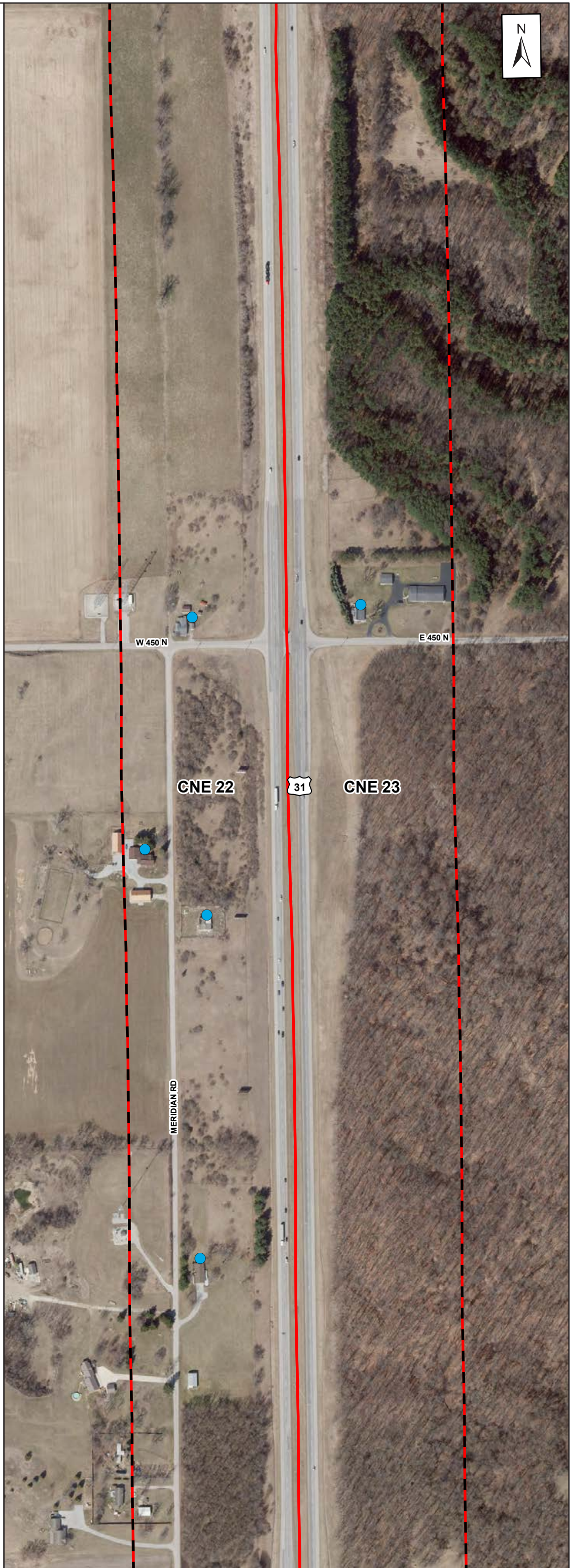
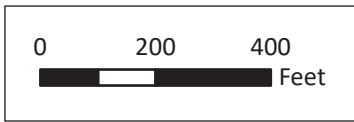
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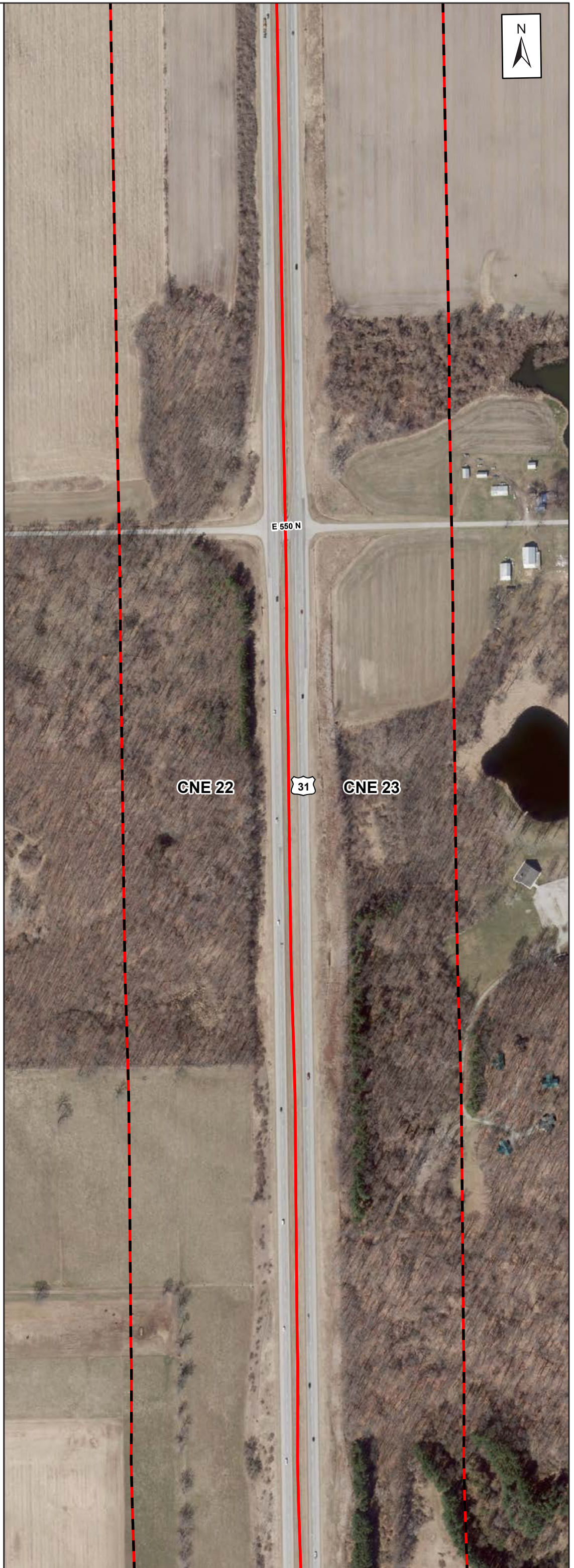
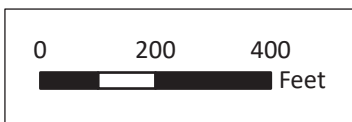
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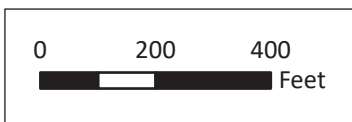
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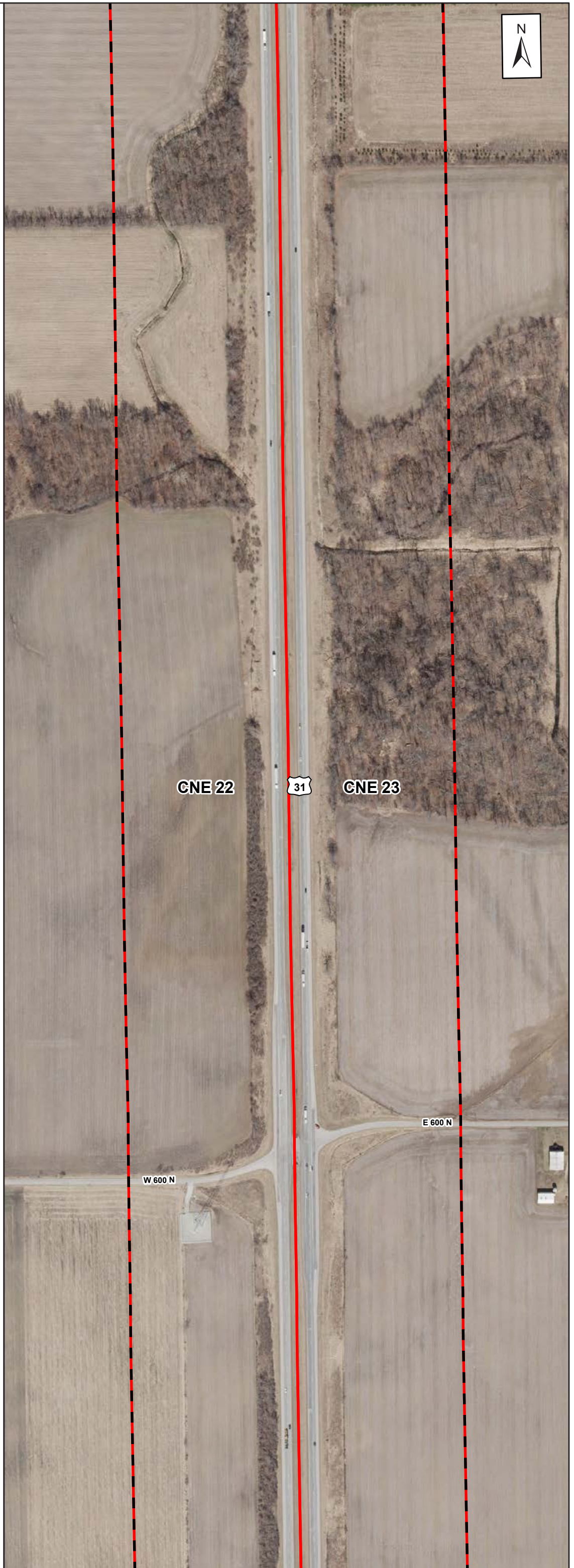


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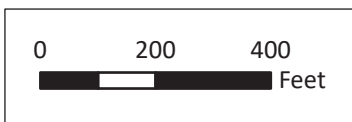
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