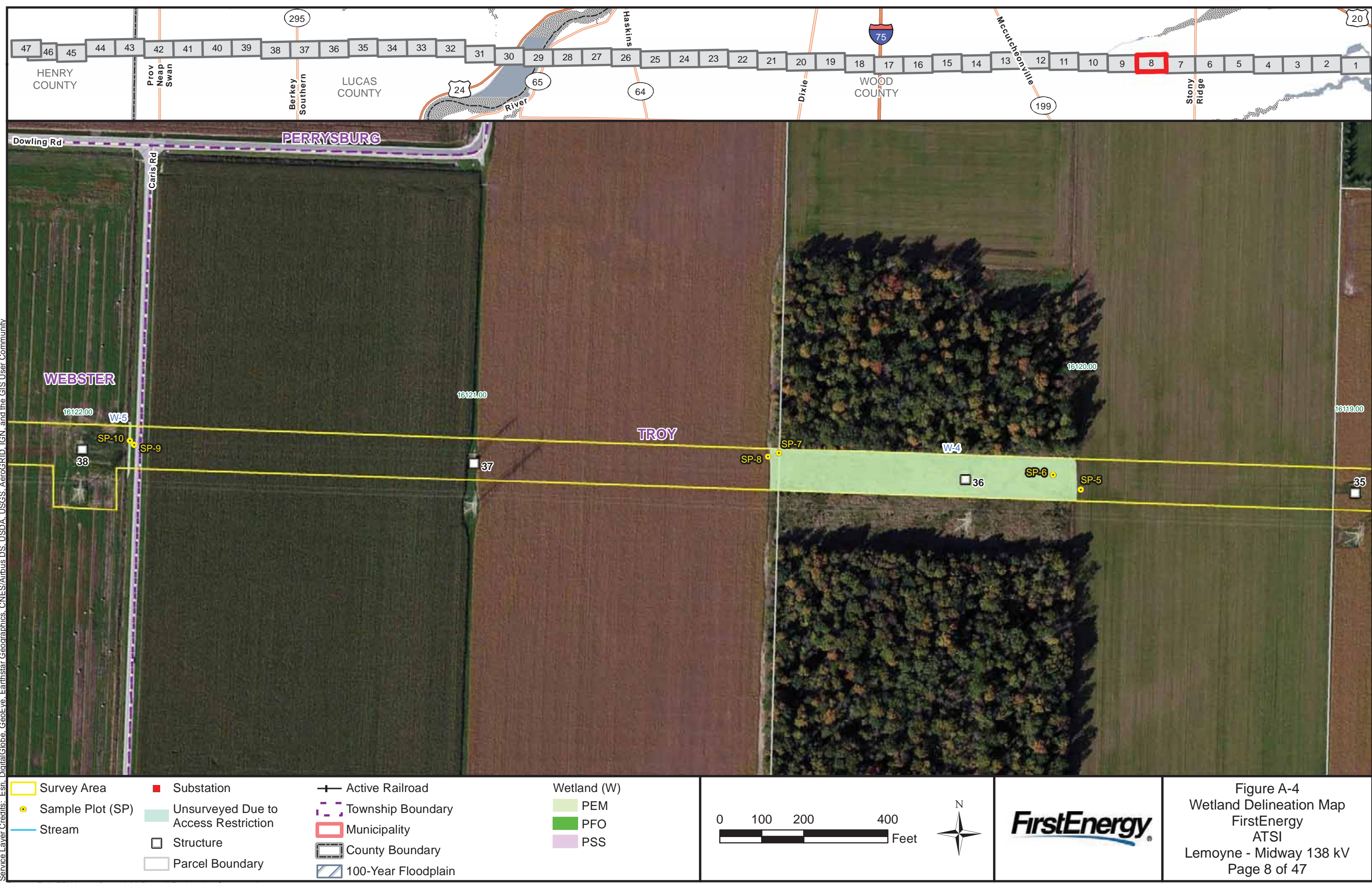
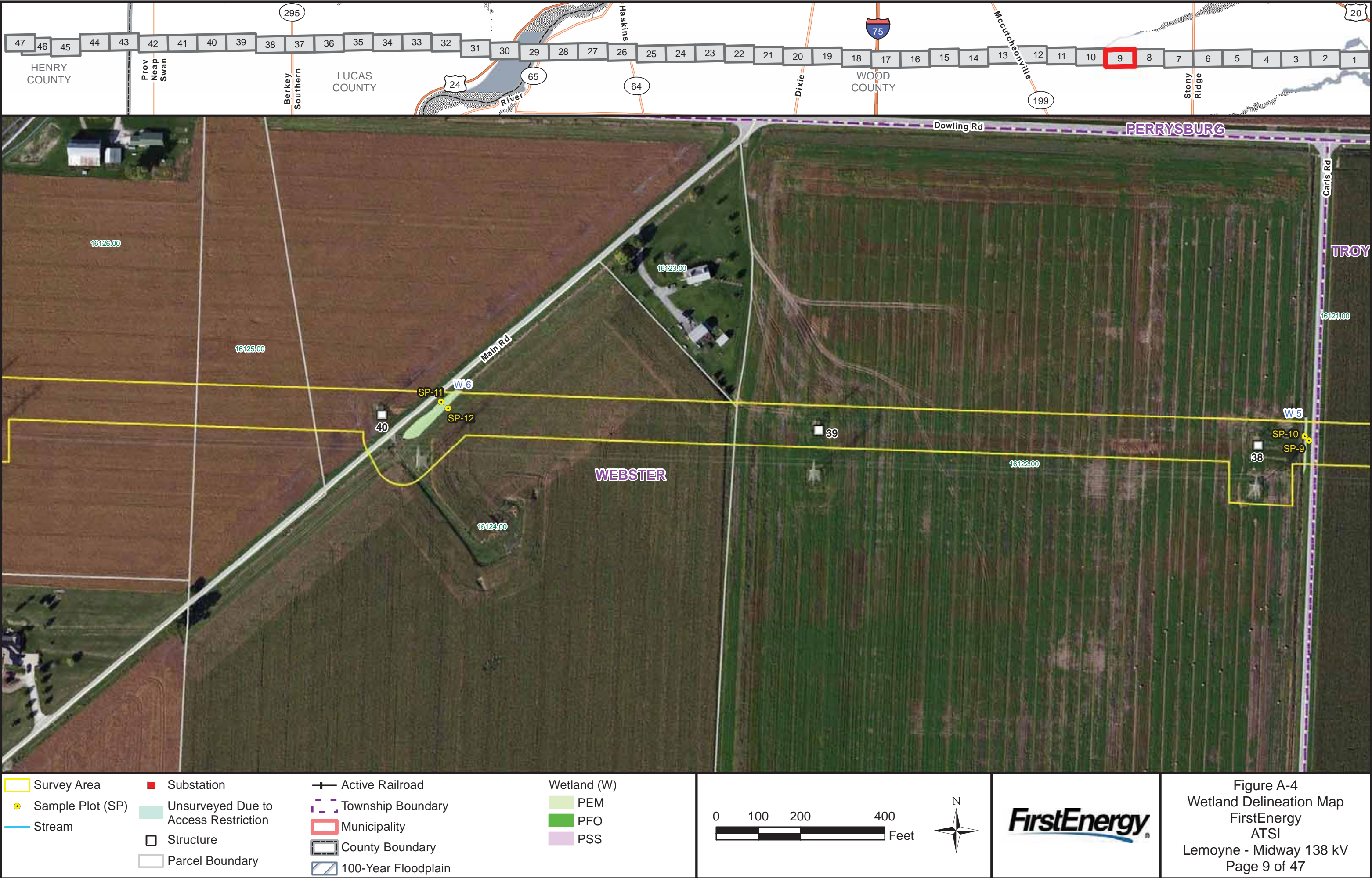


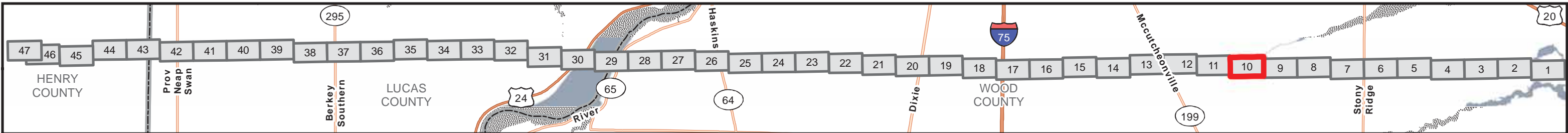
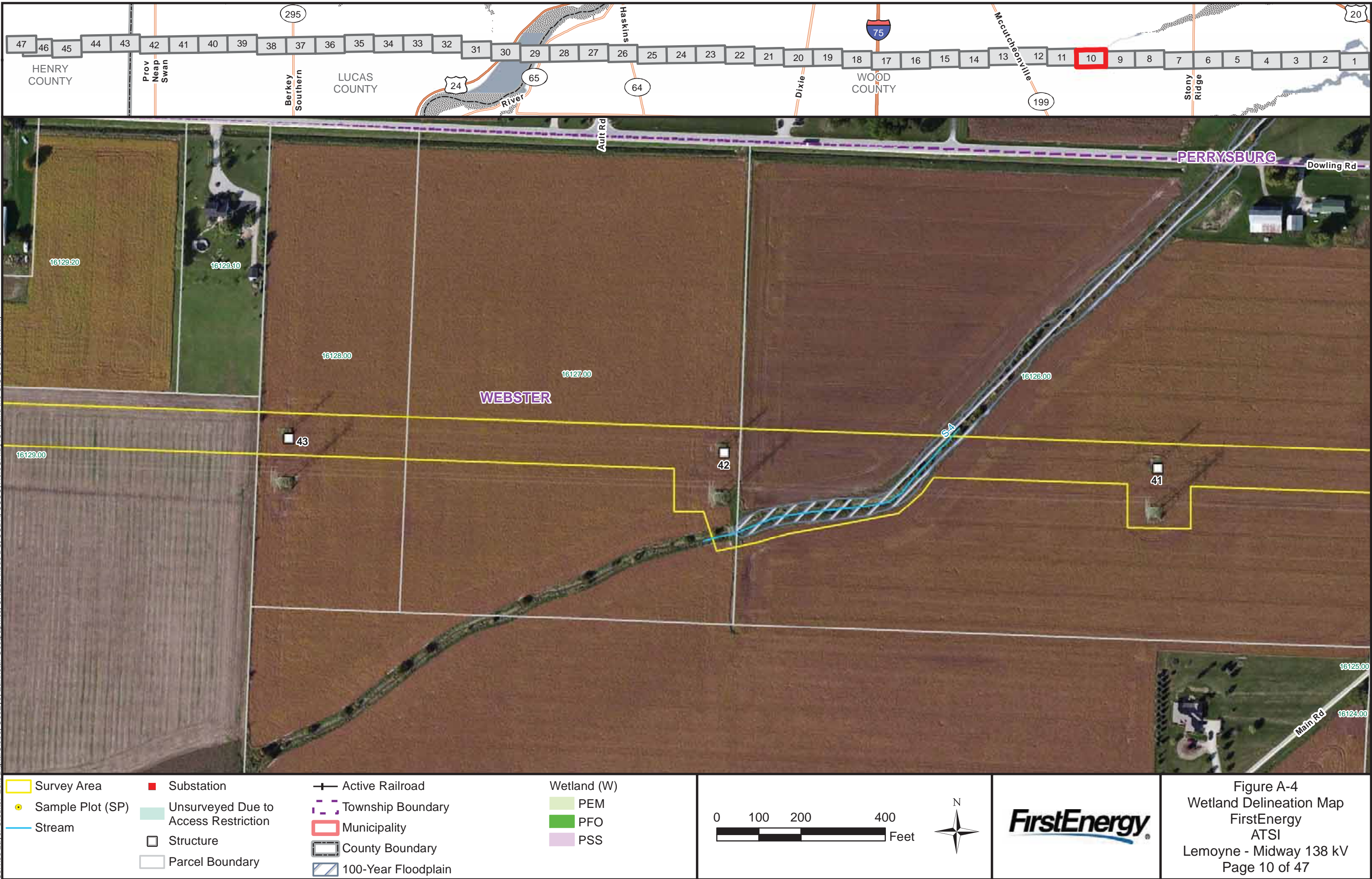
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\esrpsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



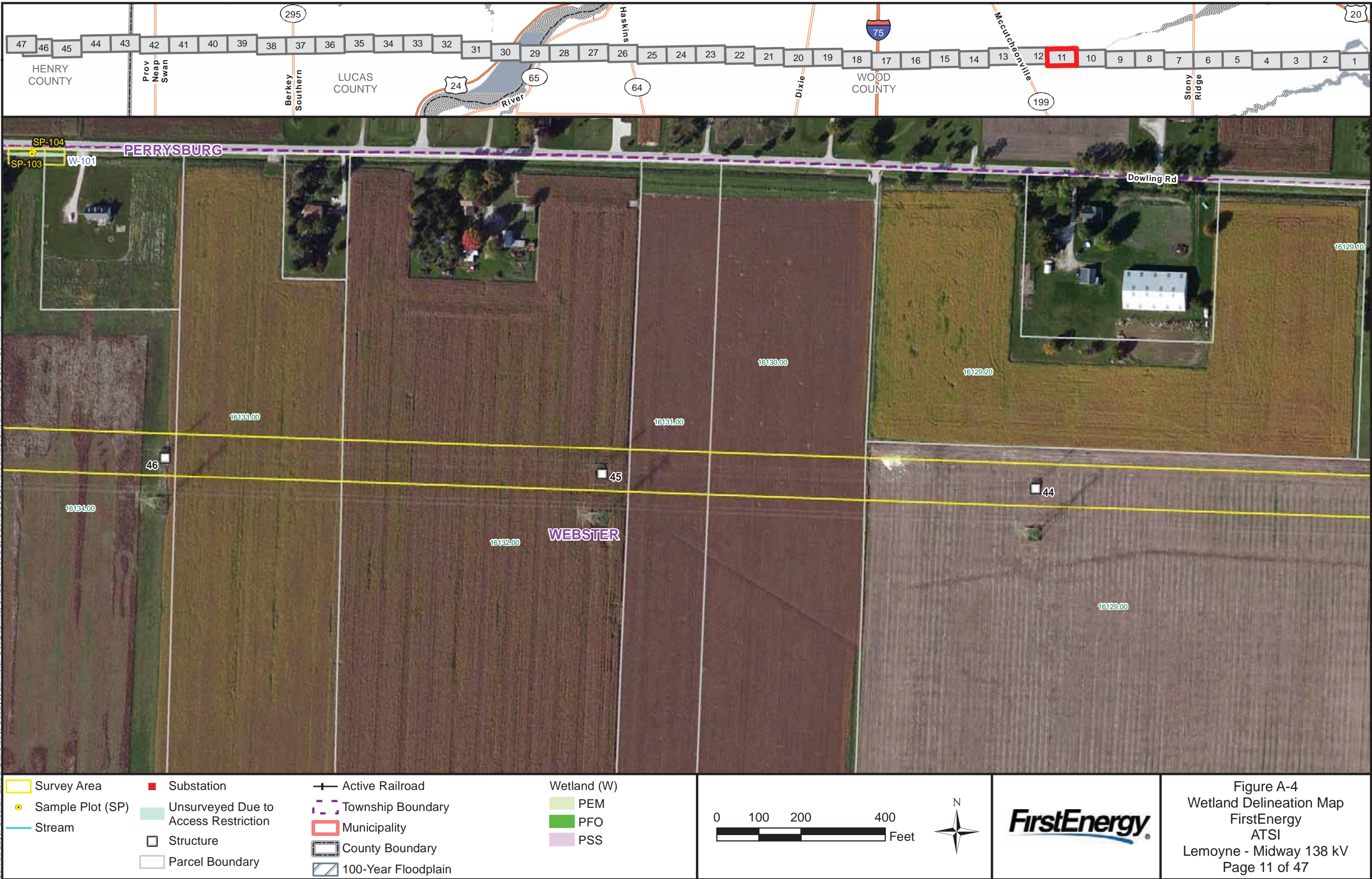
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\vespsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



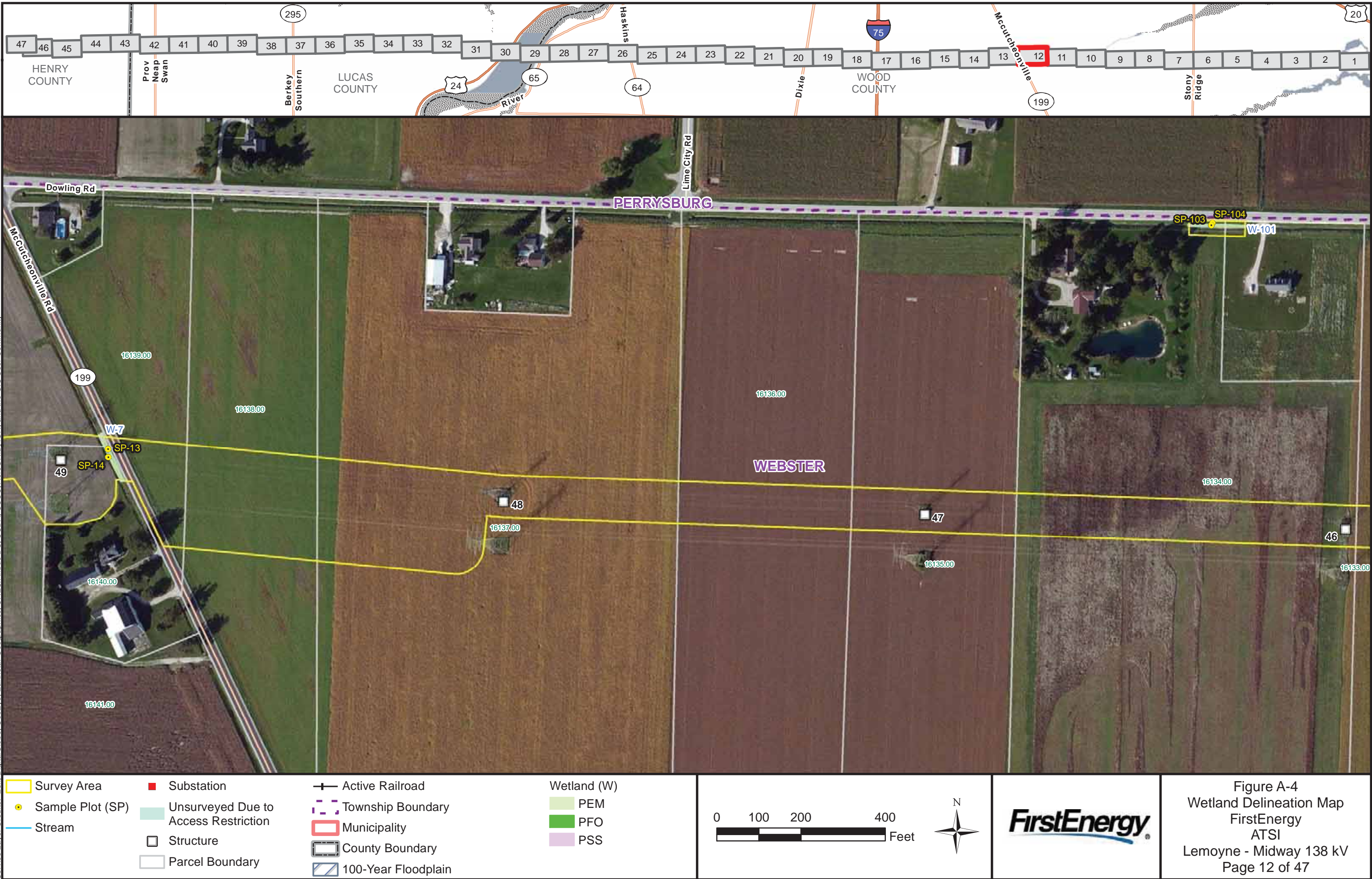
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\vespsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



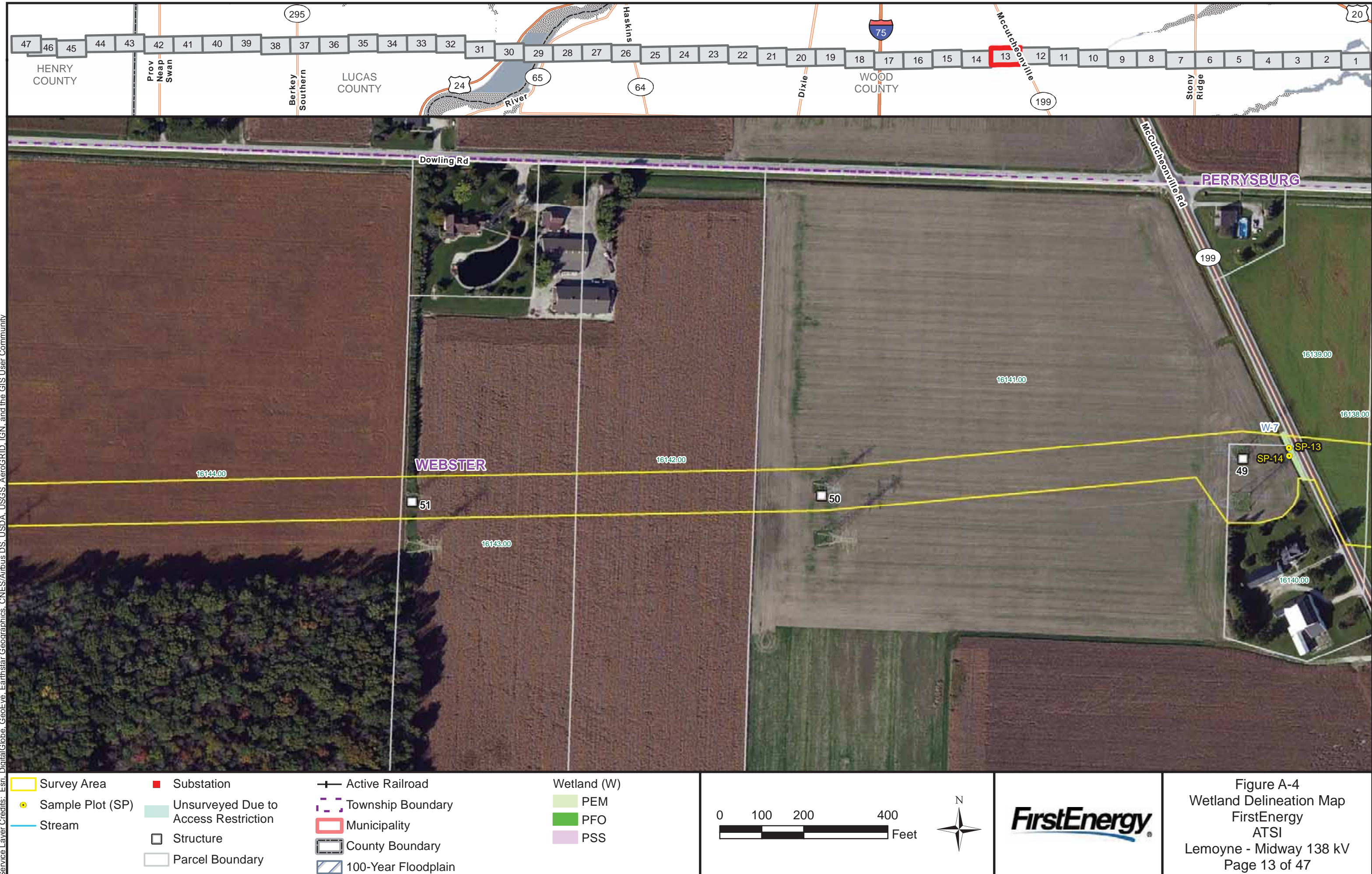
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\vespsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



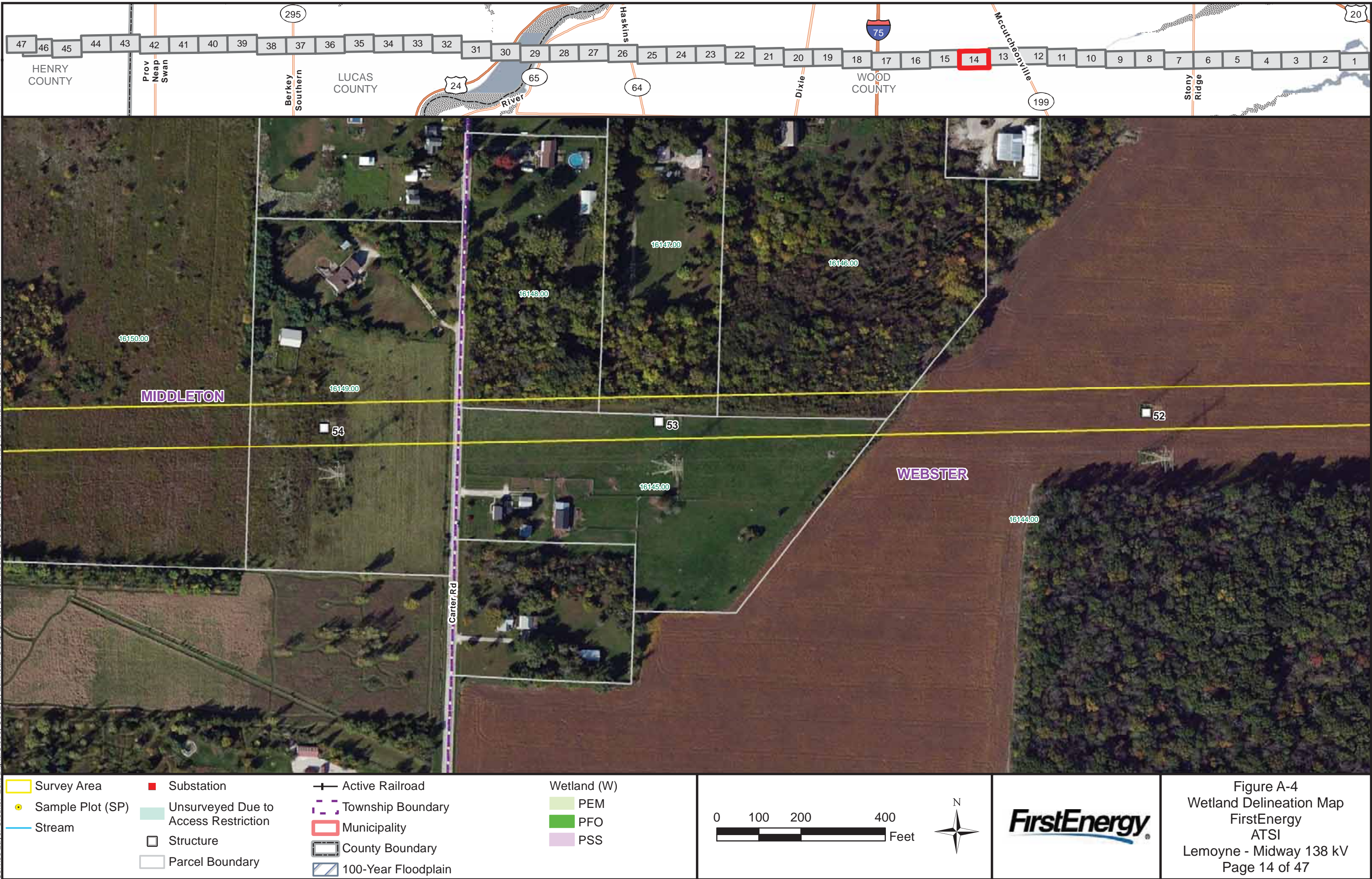
COPYRIGHT © 2014 Burns & McDonnell Engineering Company, Inc.
Burns & McDonnell Path: \\burns\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\vespsrv\data\Projects\First Energy\76055_TREPP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\vespsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\espsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

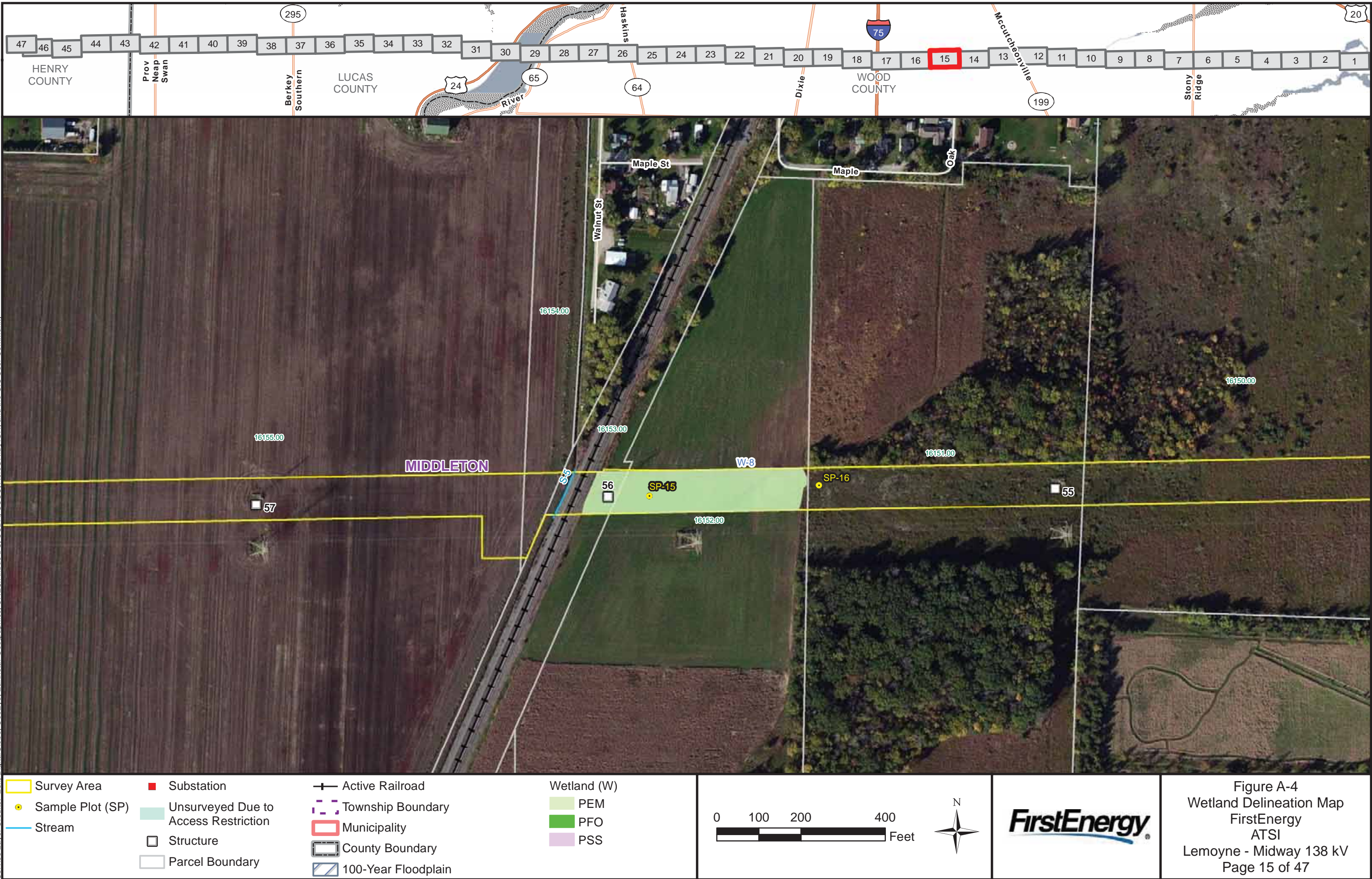
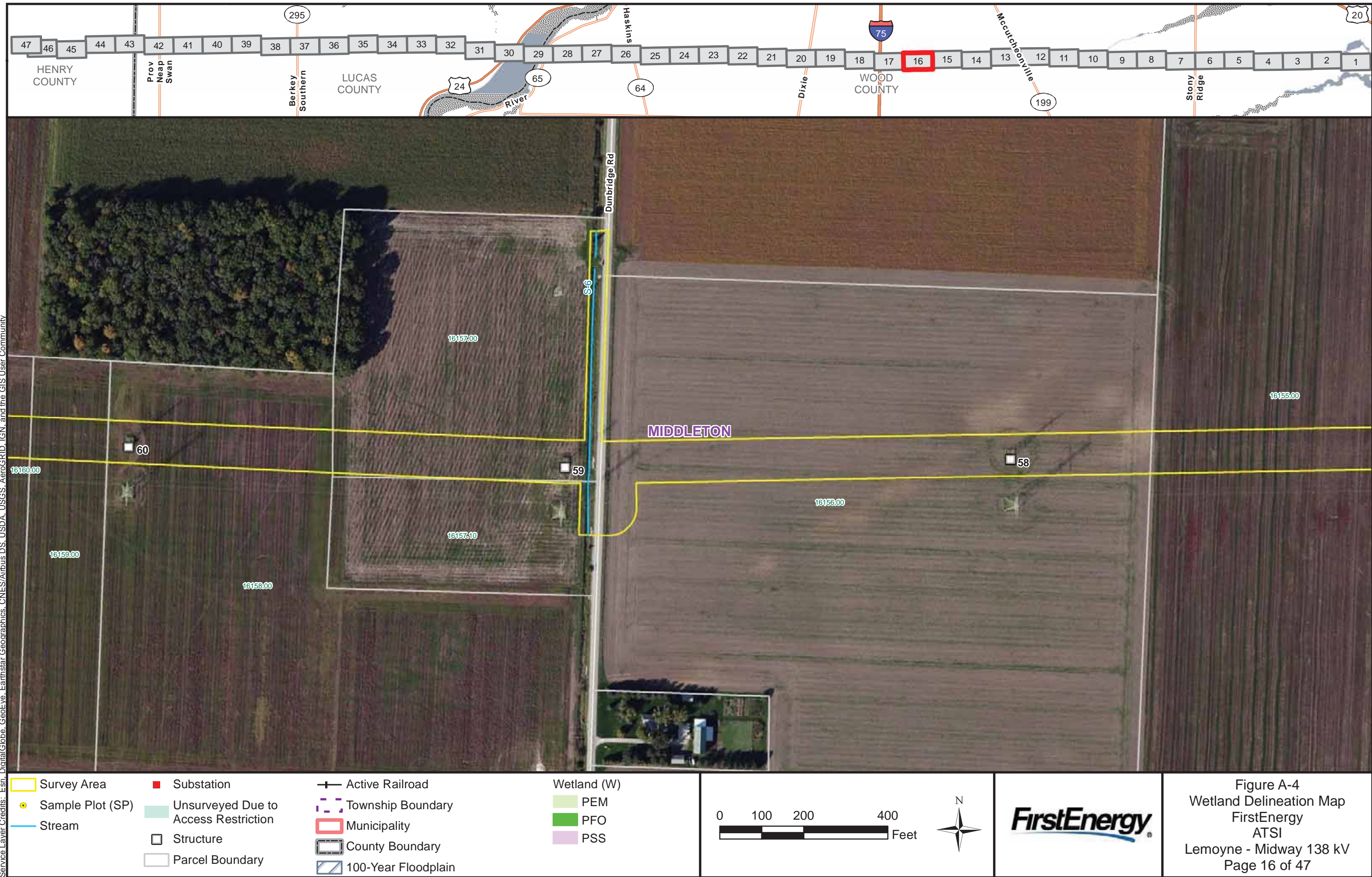
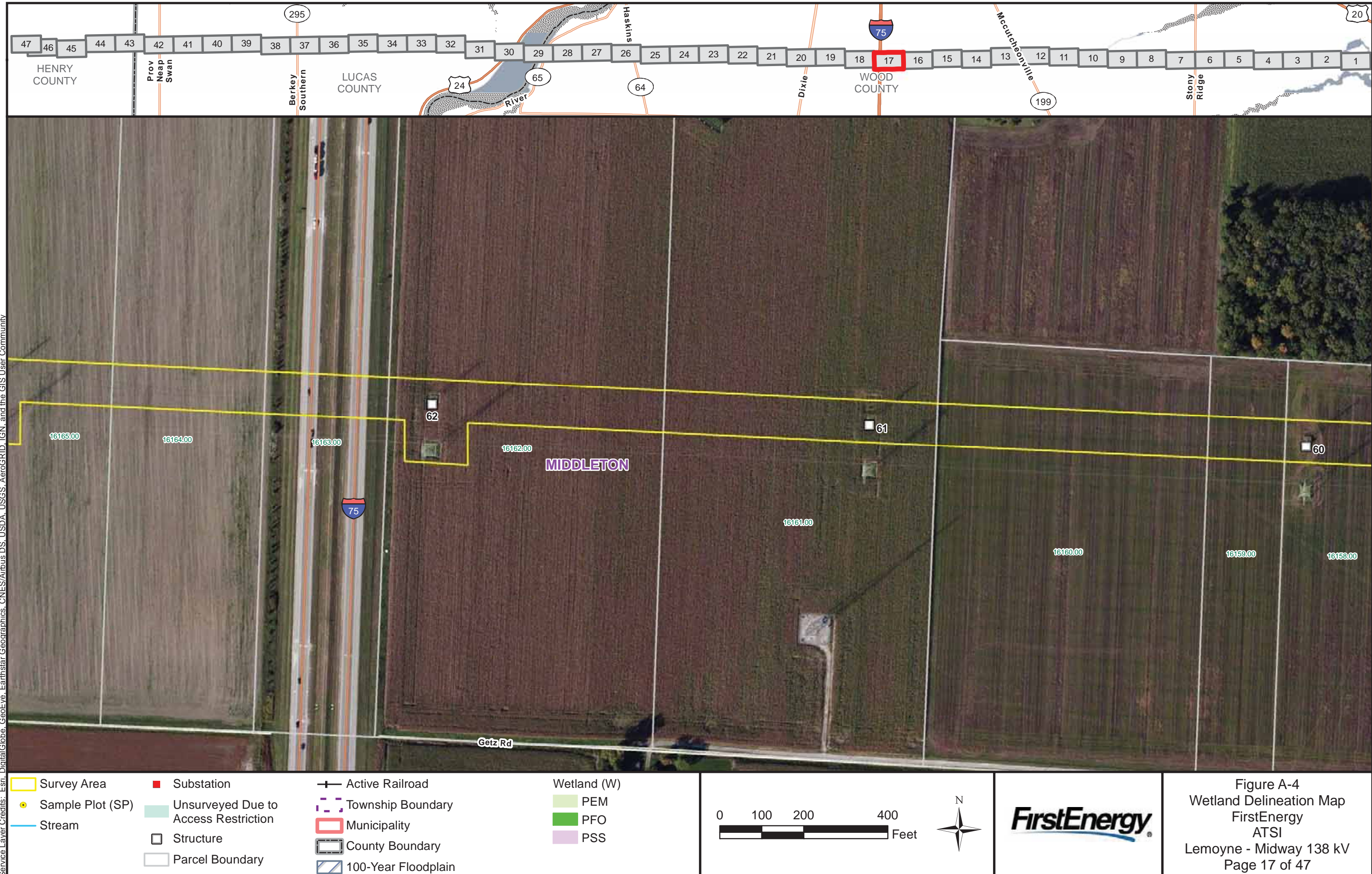


Figure A-4
Wetland Delineation Map
FirstEnergy
ATSI
Lemoyne - Midway 138 kV
Page 15 of 47

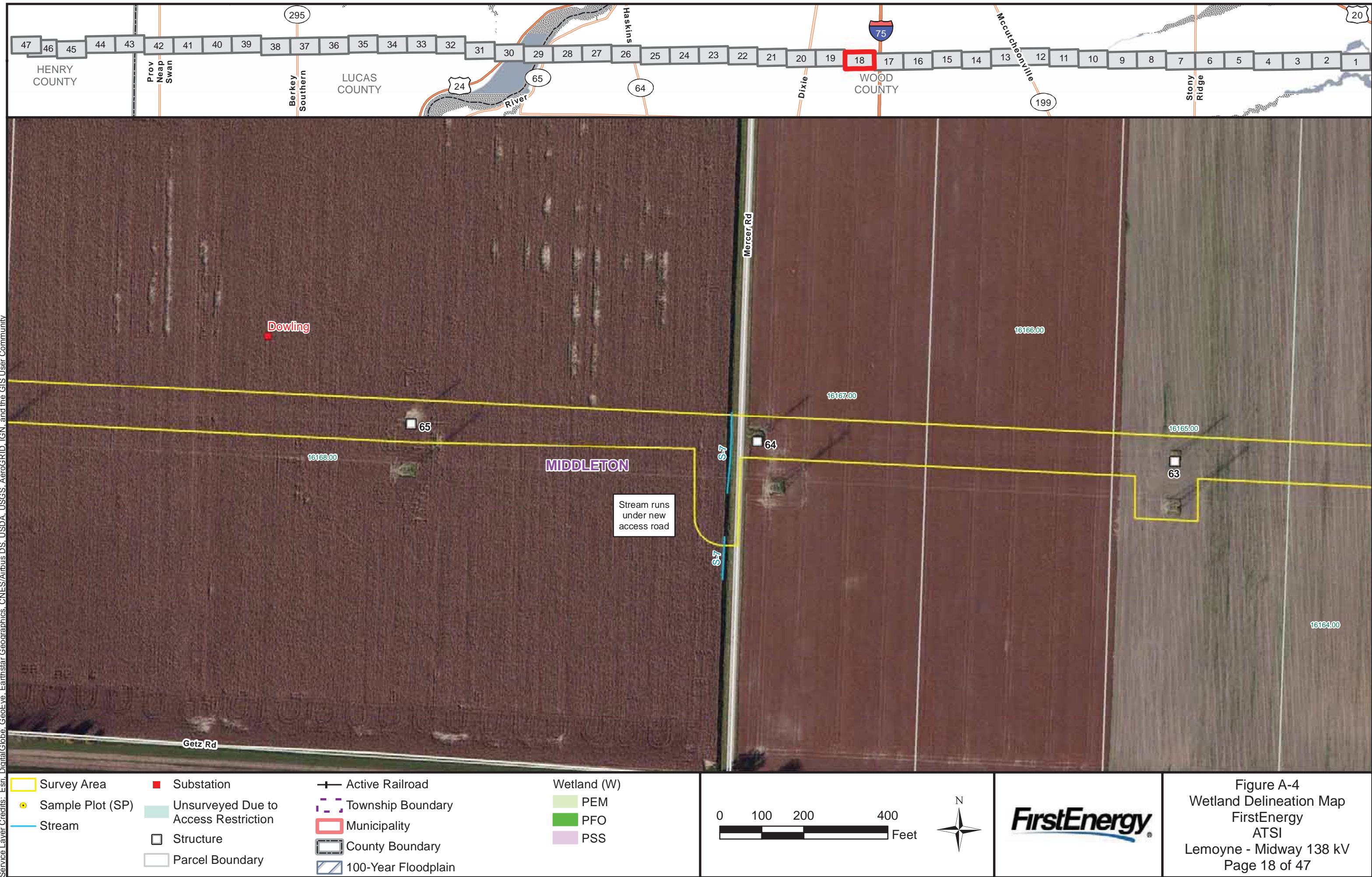
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\vespsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MM\LMMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\naspsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\vespsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\vespsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

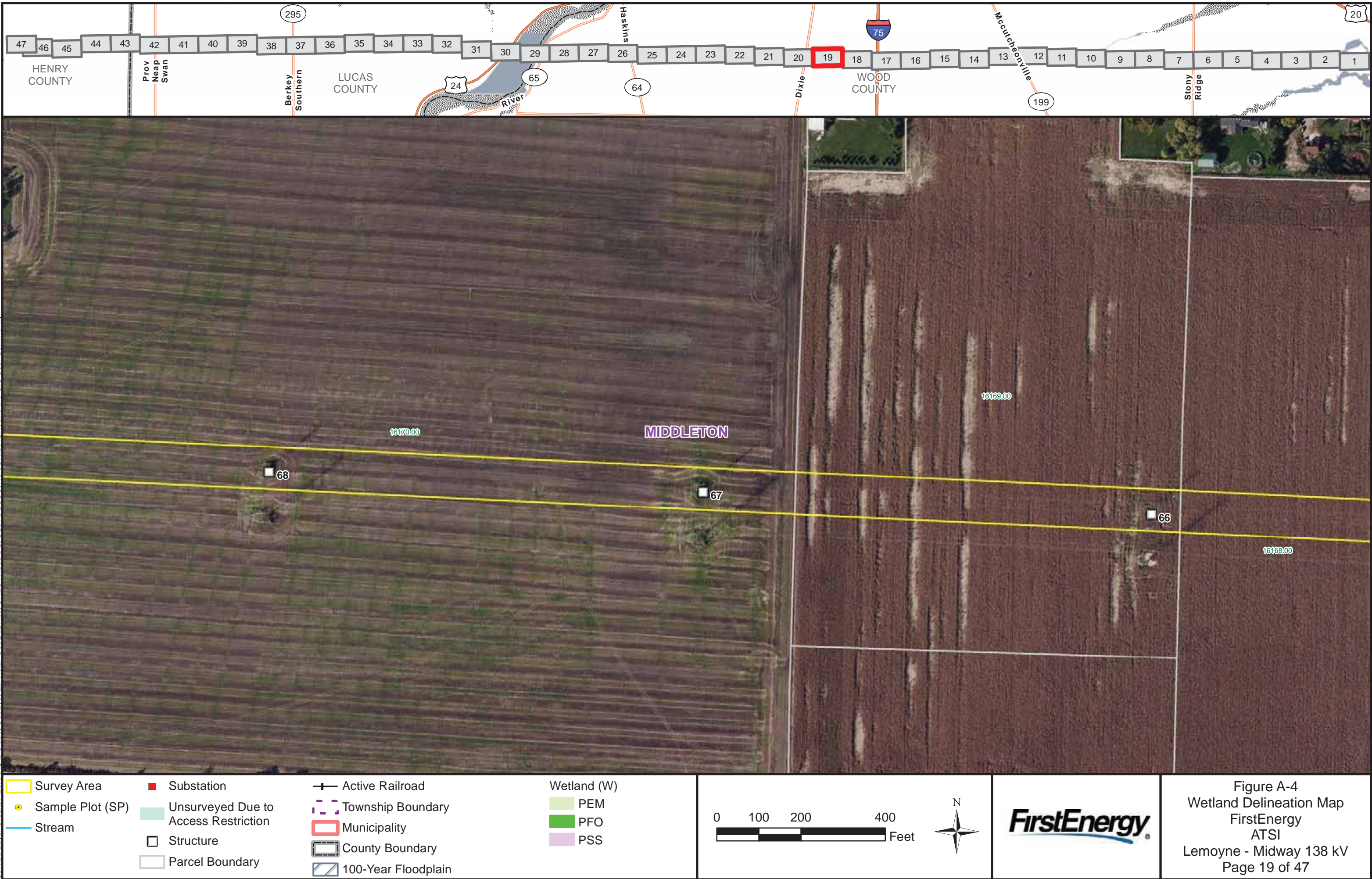


Figure A-4
Wetland Delineation Map
FirstEnergy
ATSI
Lemoyne - Midway 138 kV
Page 19 of 47

COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\espsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_Construction\Mapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

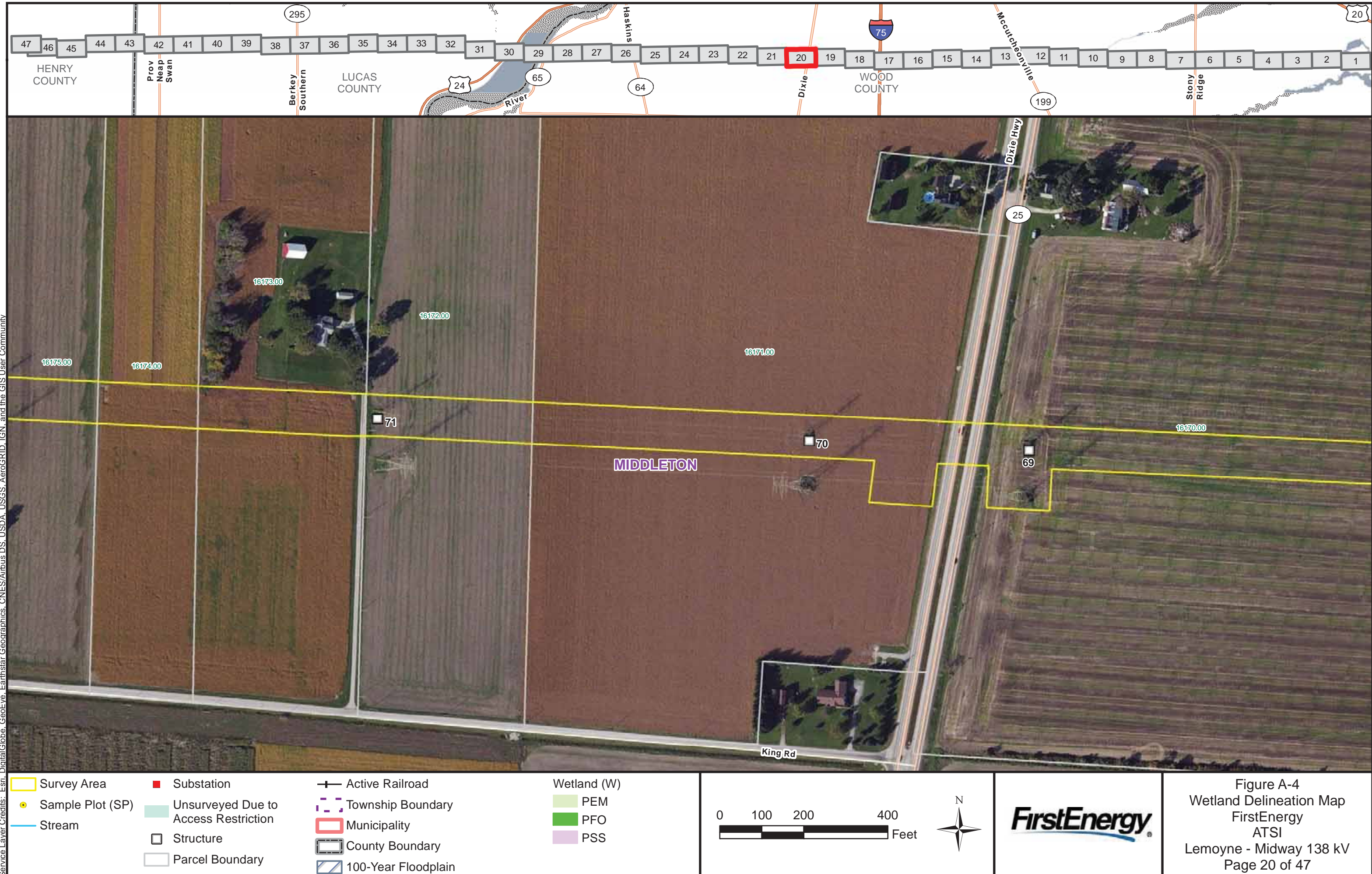
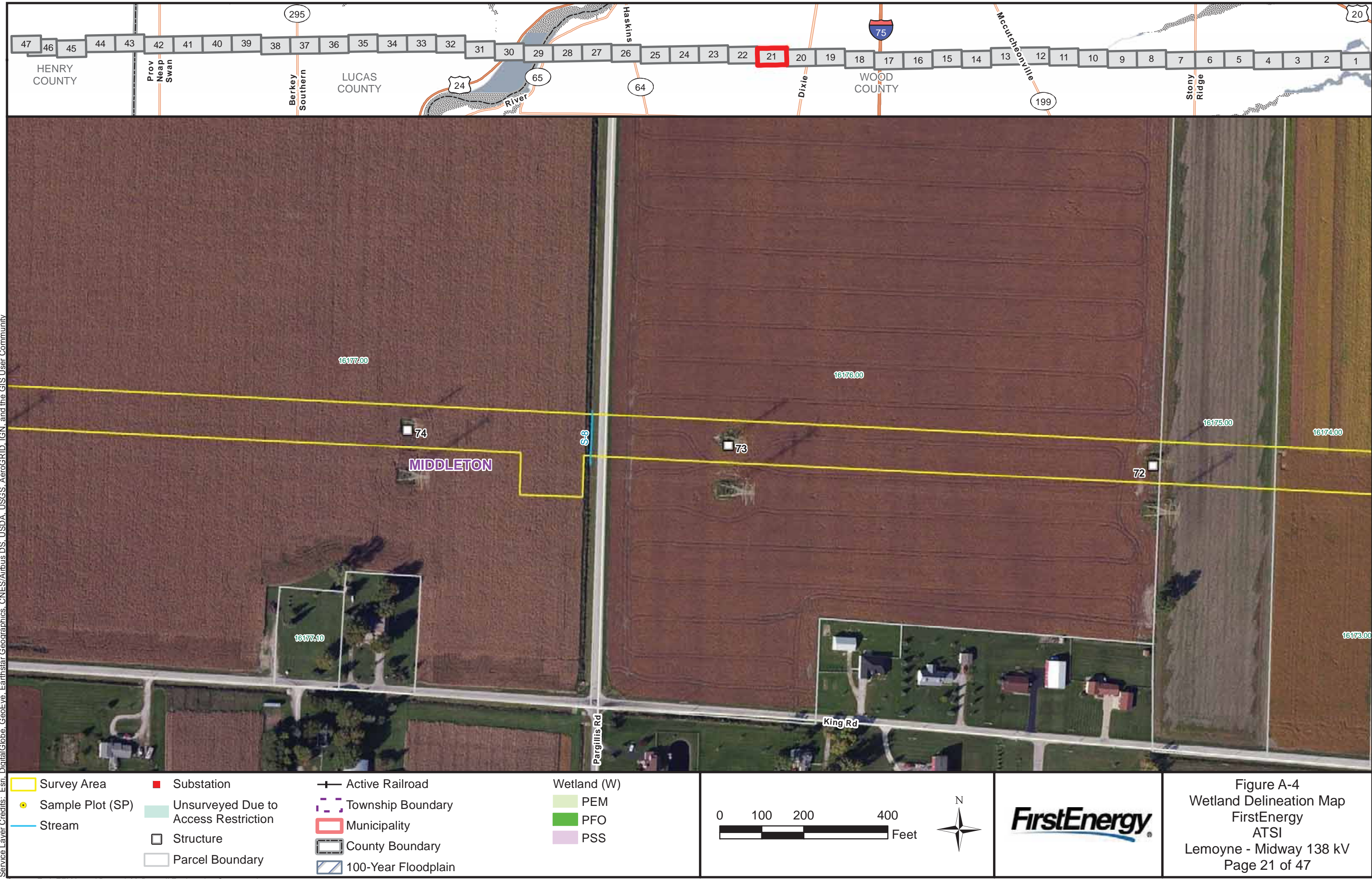


Figure A-4
Wetland Delineation Map
FirstEnergy
ATSI
Lemoyne - Midway 138 kV
Page 20 of 47

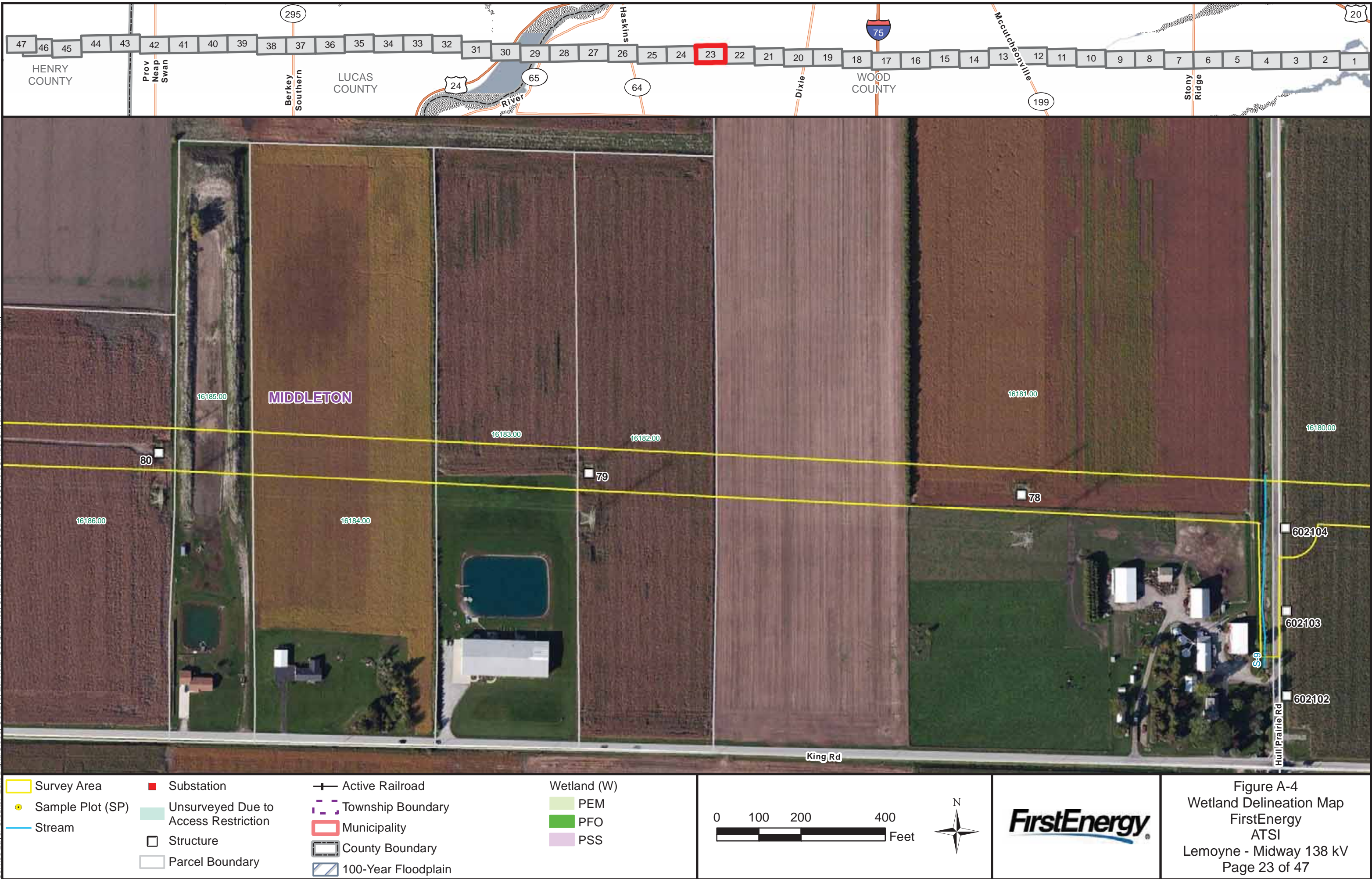


COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\espsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

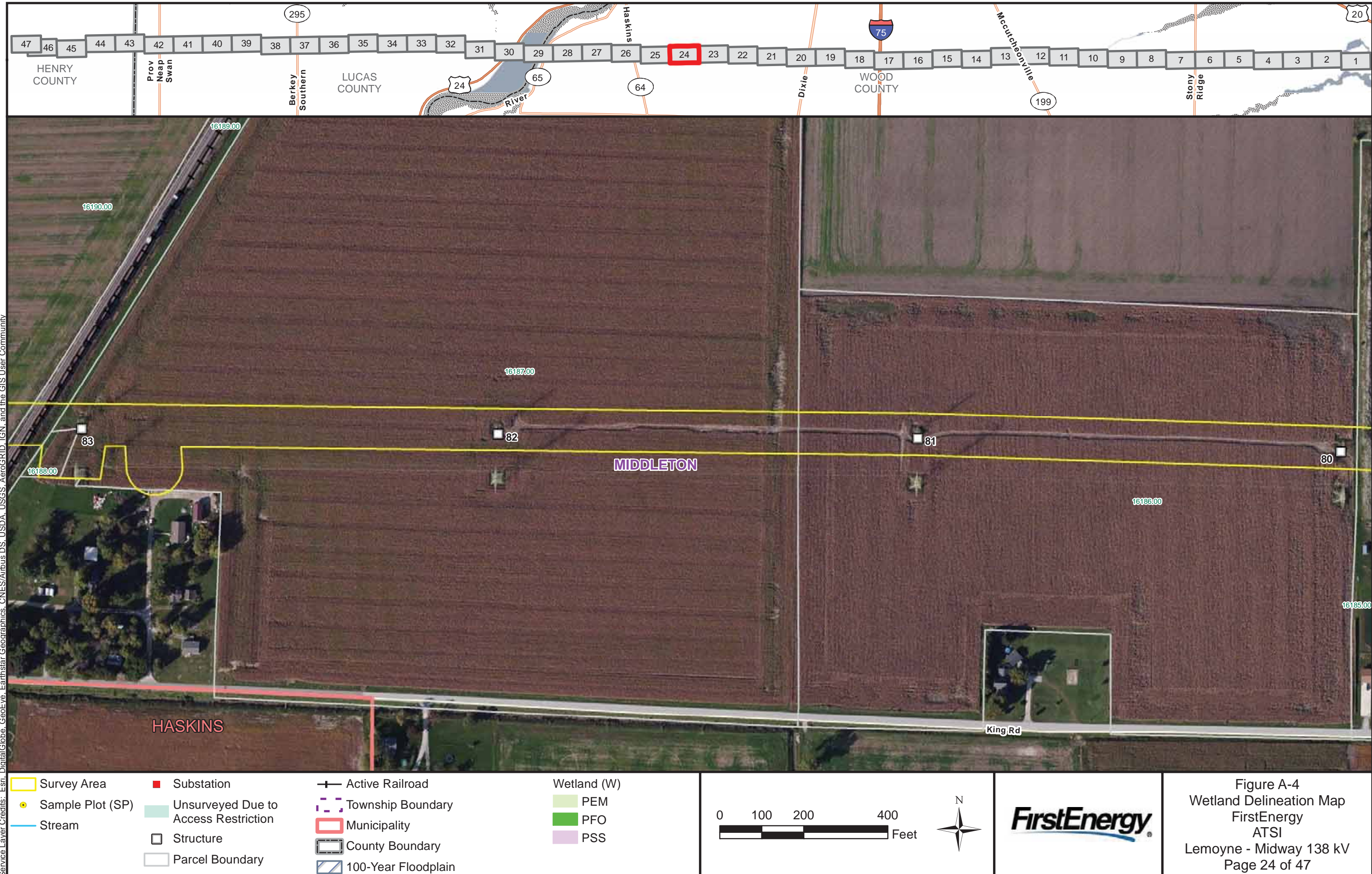


Survey Area	Substation	Active Railroad	Wetland (W) PEM
Sample Plot (SP)	Unserved Due to Access Restriction	Township Boundary	PFO
Stream	Structure	Municipality	PSS
	Parcel Boundary	County Boundary	
		100-Year Floodplain	

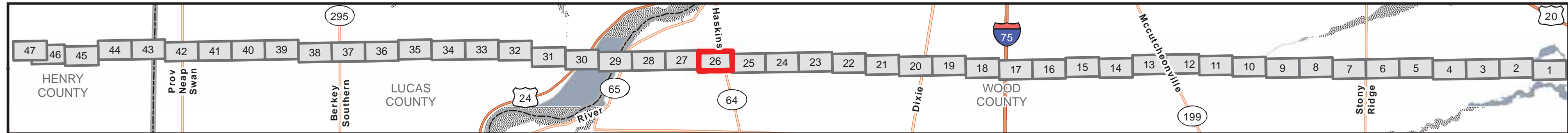
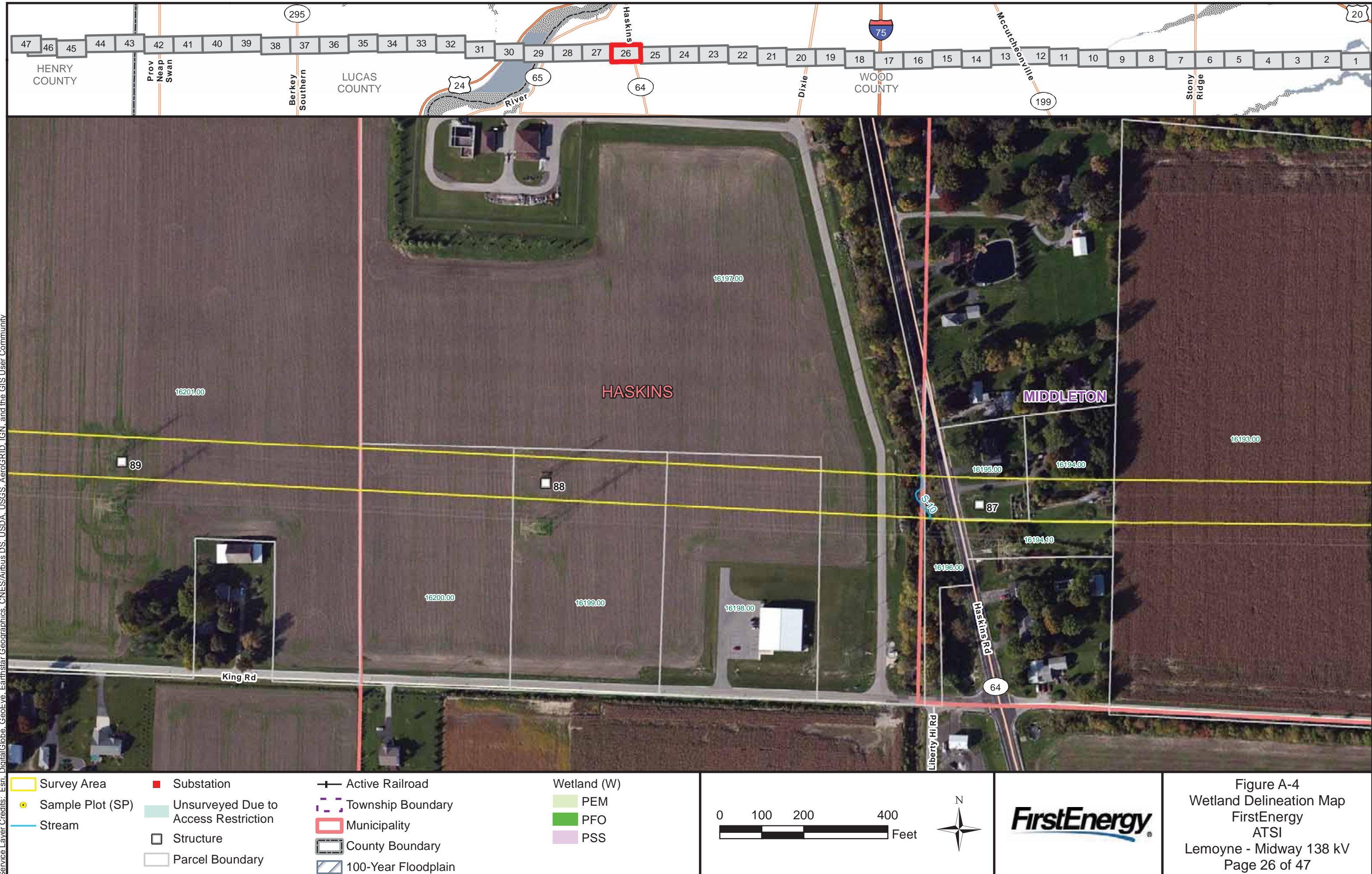
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\spsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



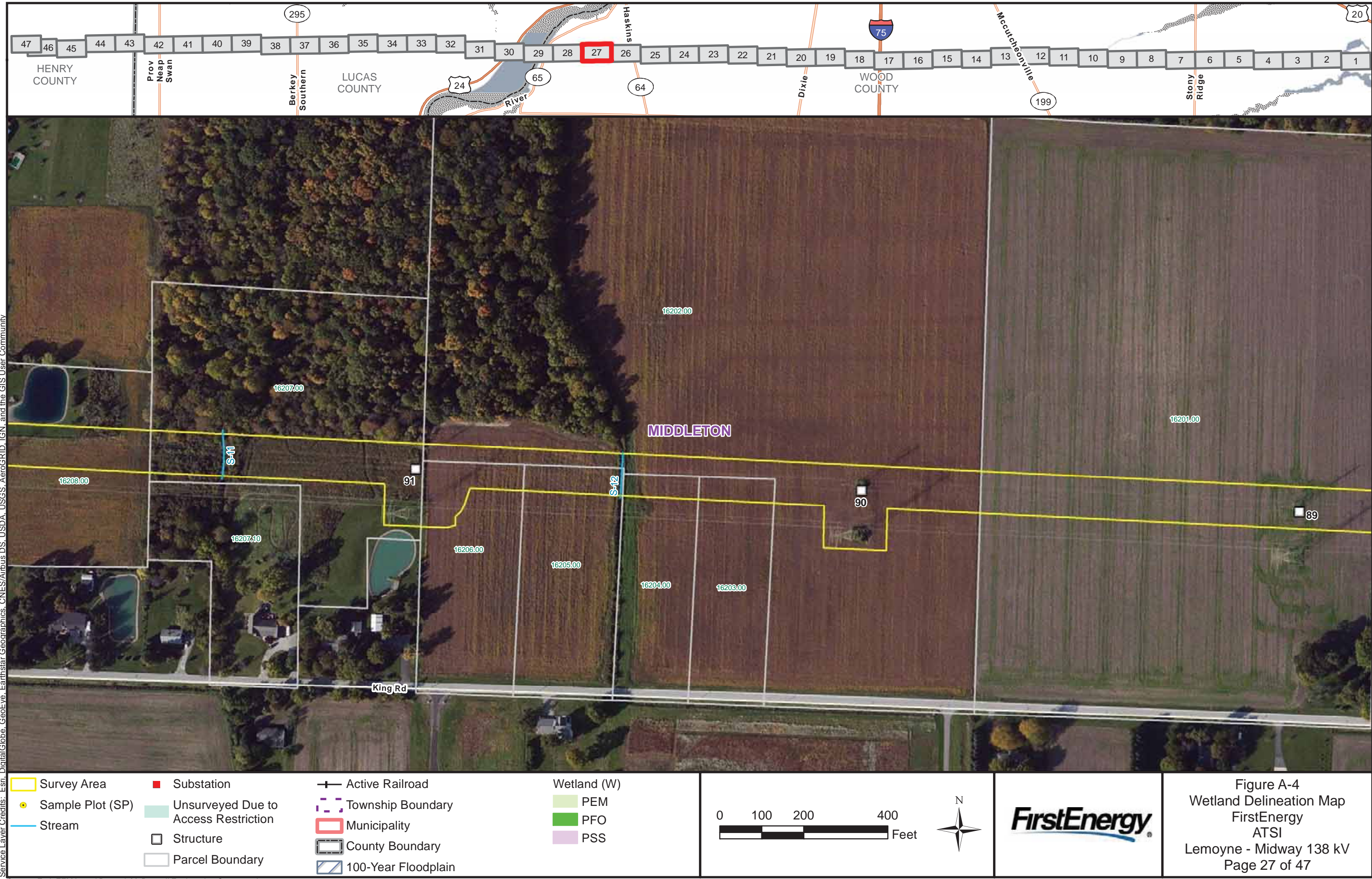
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\espsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\esrps\data\Projects\First Energy\76055_TREPP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



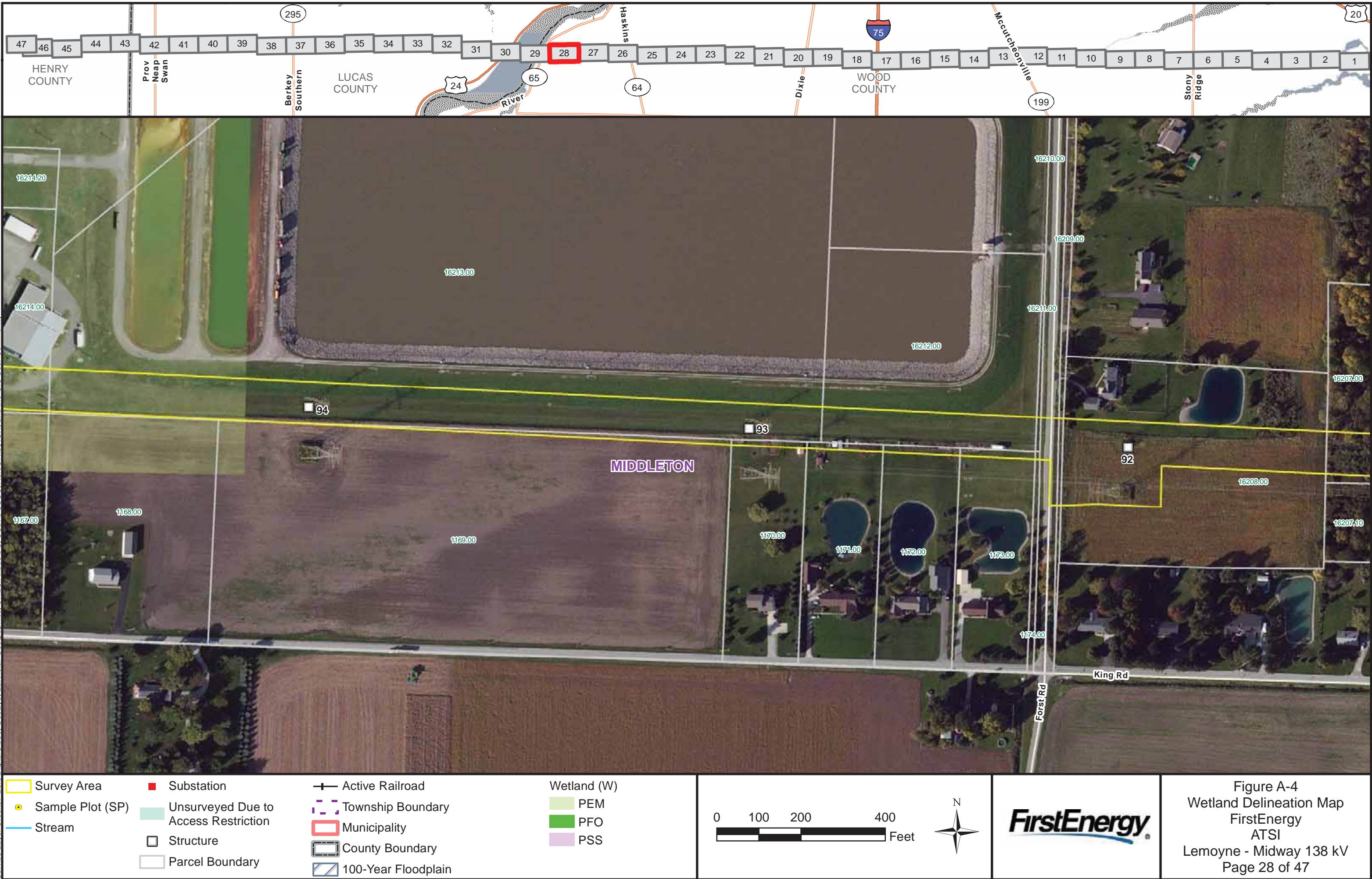
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\vespsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_Construction\Mapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



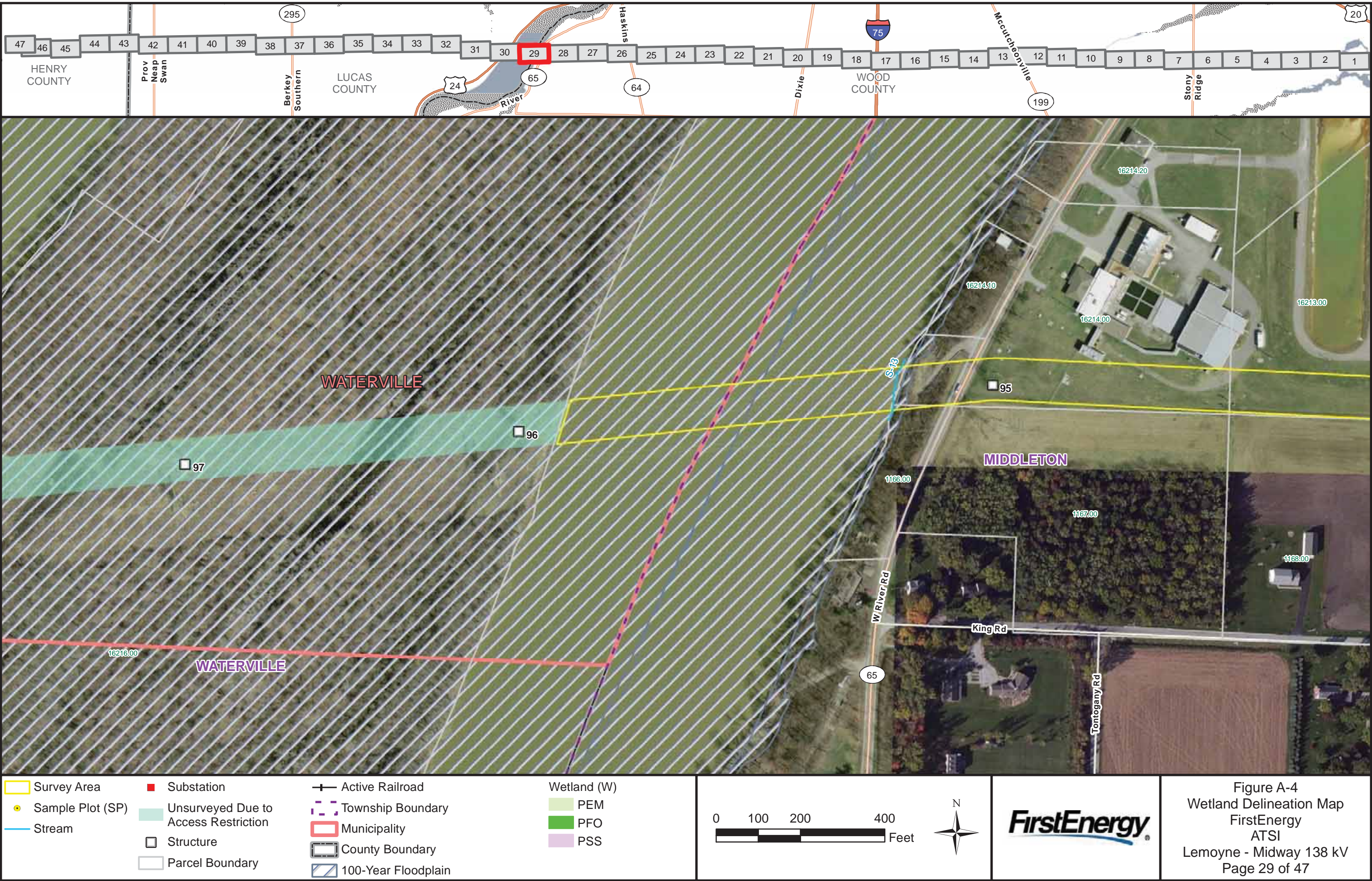
Survey Area	Substation	Active Railroad	Wetland (W) PEM
Sample Plot (SP)	Unserved Due to Access Restriction	Township Boundary	PFO
Stream	Structure	Municipality	PSS
	Parcel Boundary	County Boundary	
		100-Year Floodplain	

Figure A-4
Wetland Delineation Map
FirstEnergy
ATSI
Lemoyne - Midway 138 kV
Page 27 of 47

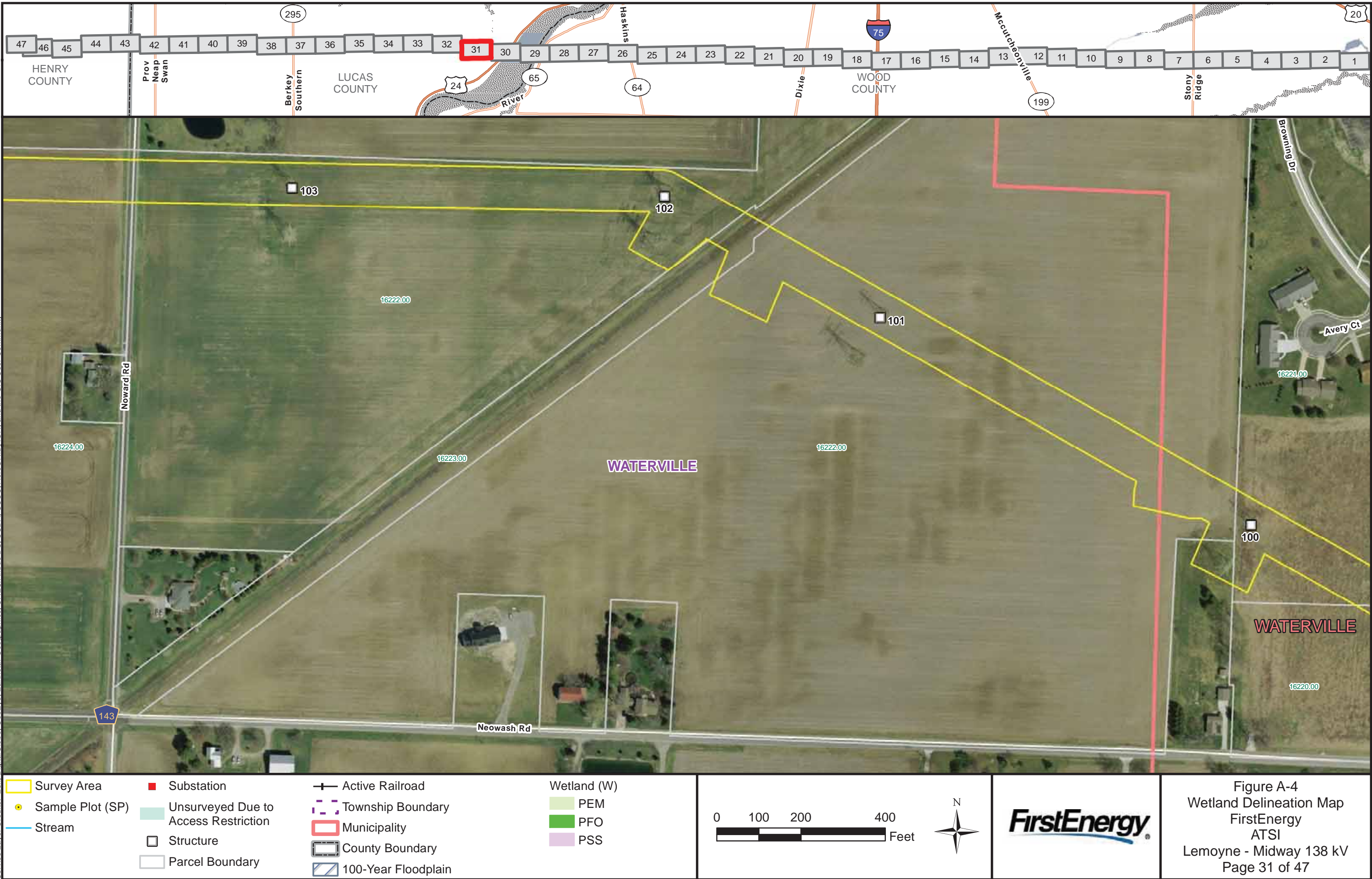
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\esrpsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\vespsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\spsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MM\MMW_Construction\Mapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\nespsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

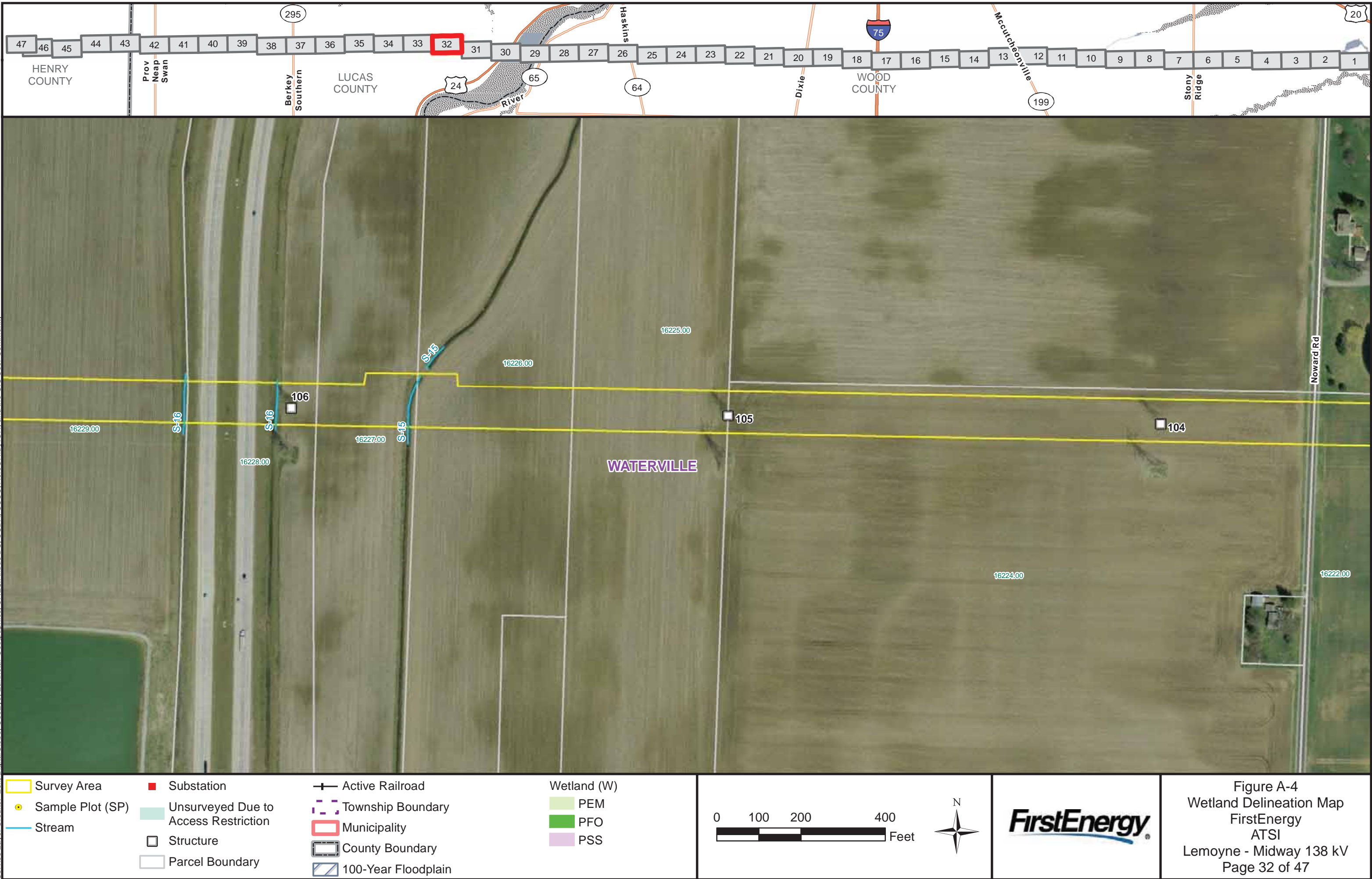
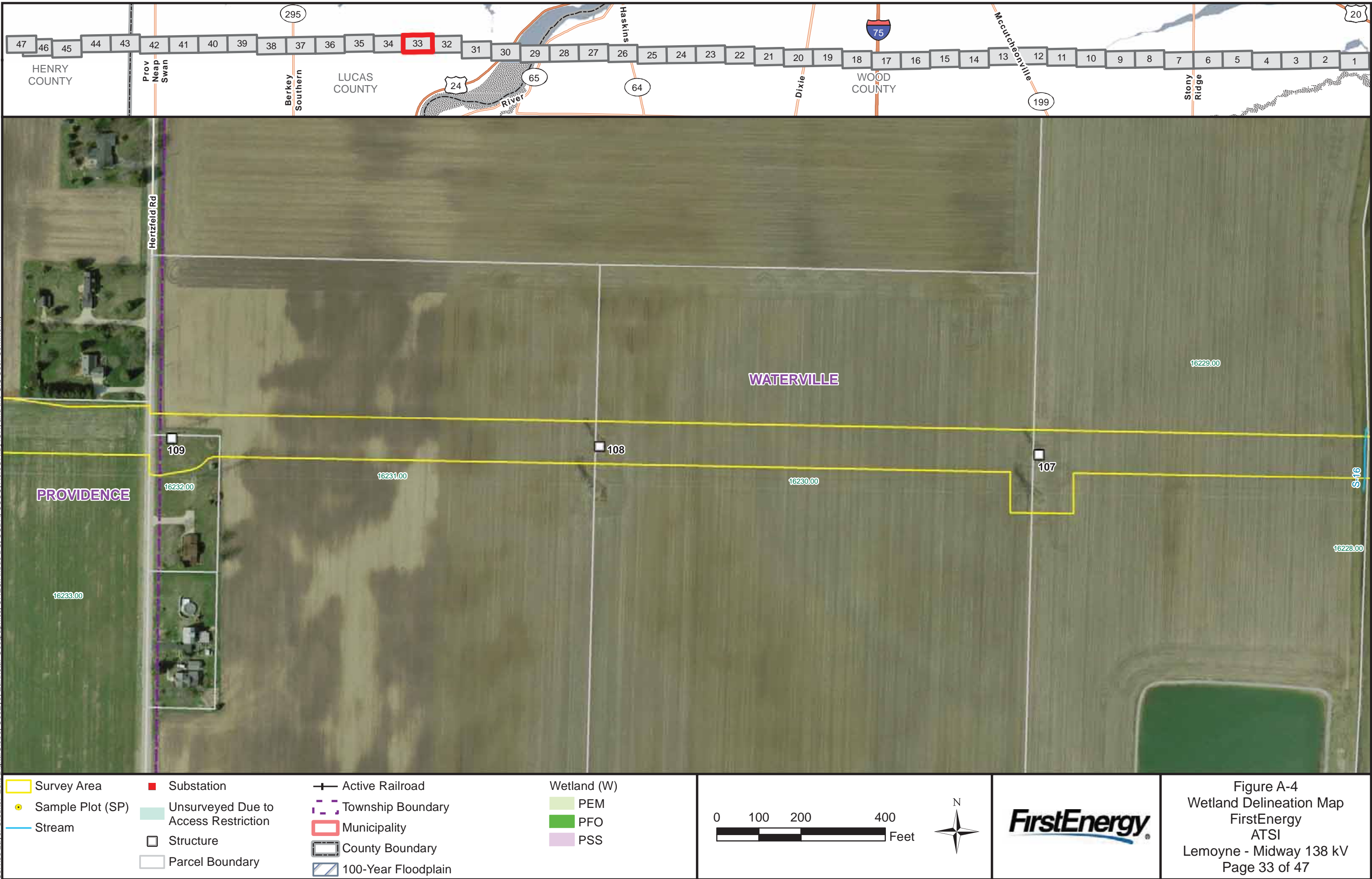
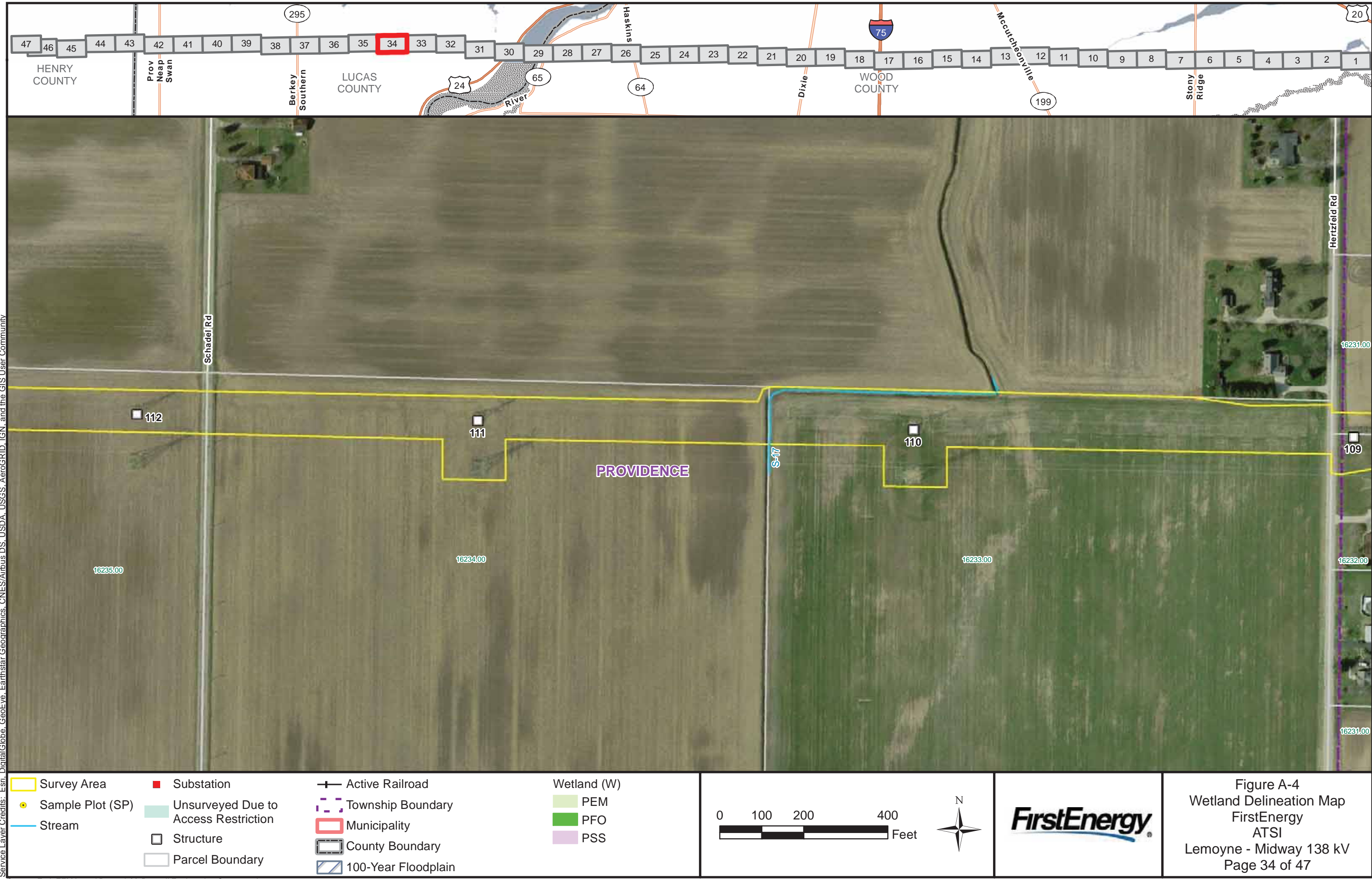


Figure A-4
Wetland Delineation Map
FirstEnergy
ATSI
Lemoyne - Midway 138 kV
Page 32 of 47

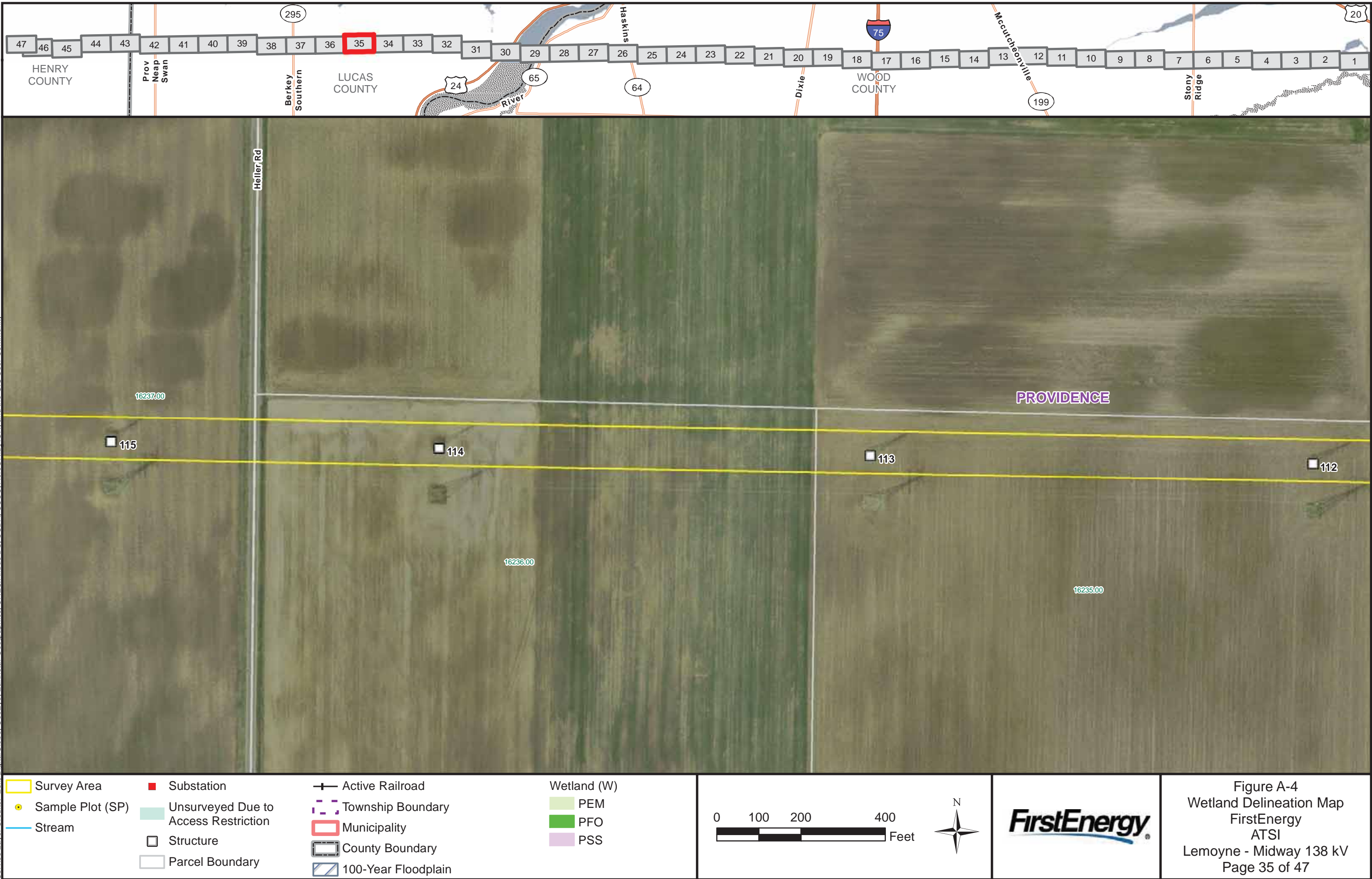
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\esrpsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\nespsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMWLMMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\esrpsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\espsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

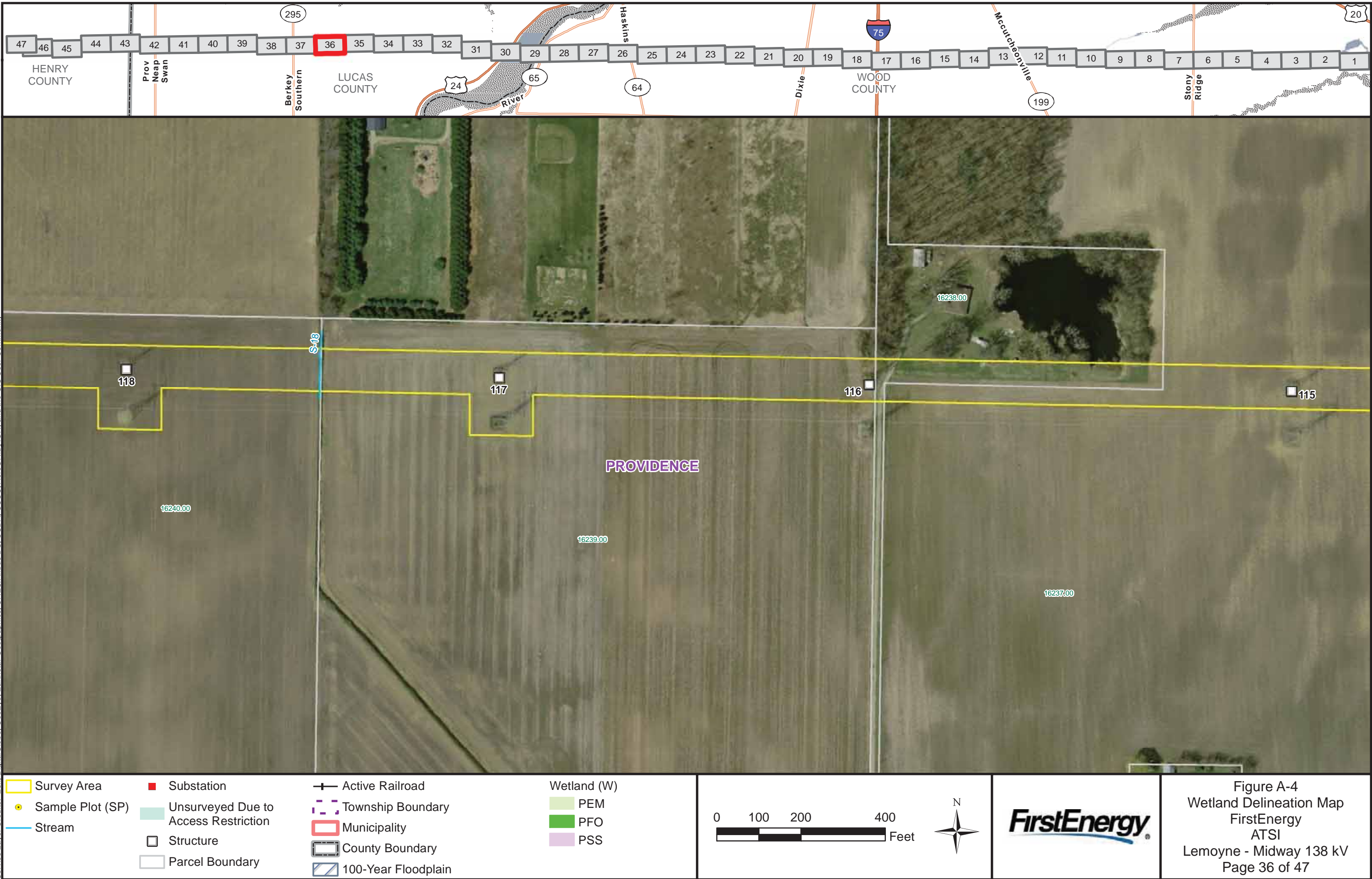


Figure A-4
Wetland Delineation Map
FirstEnergy
ATSI
Lemoyne - Midway 138 kV
Page 36 of 47

COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\naspsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_Construction\Mapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

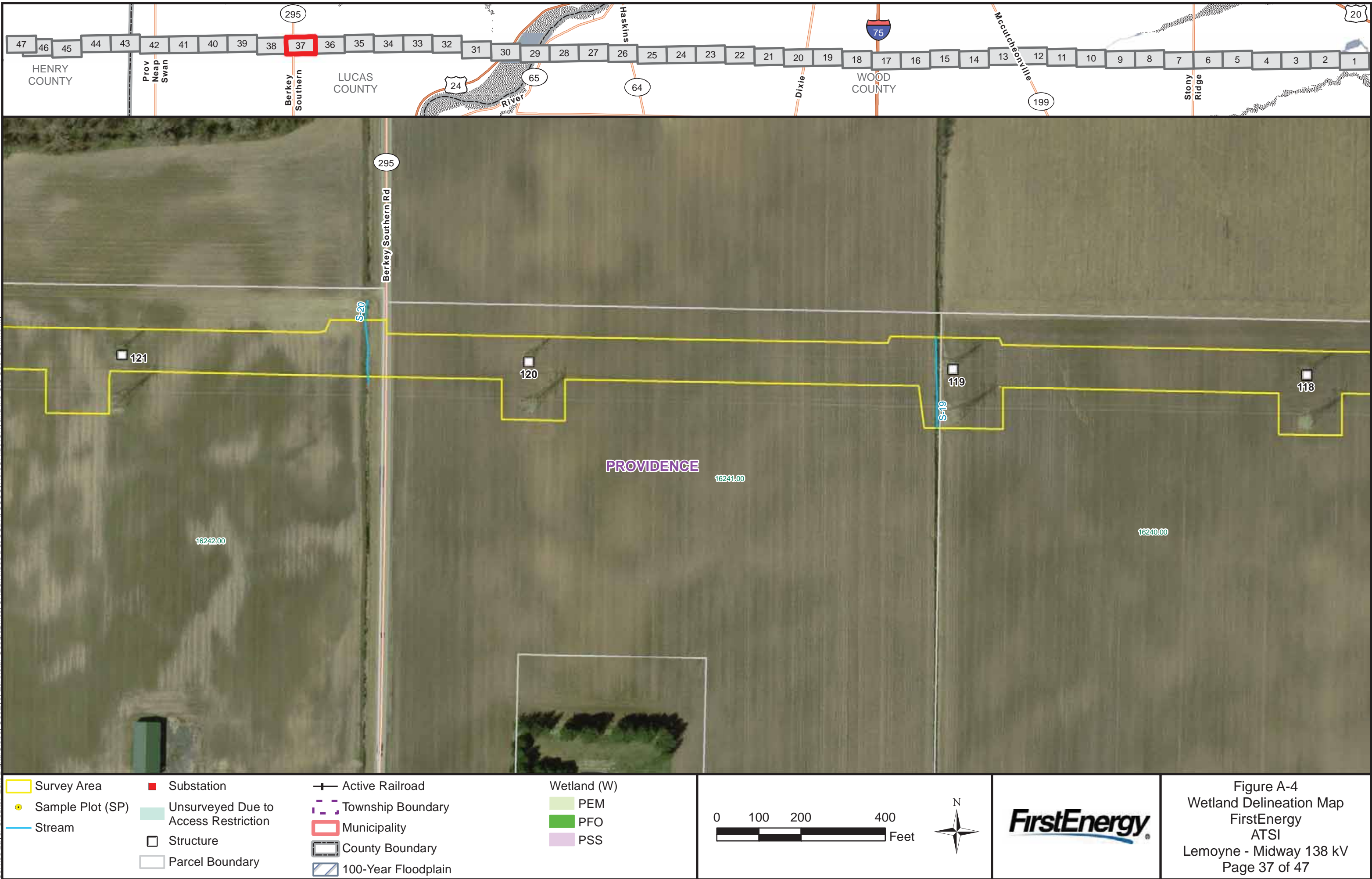


Figure A-4
Wetland Delineation Map
FirstEnergy
ATSI
Lemoyne - Midway 138 kV
Page 37 of 47

COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\esrpsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

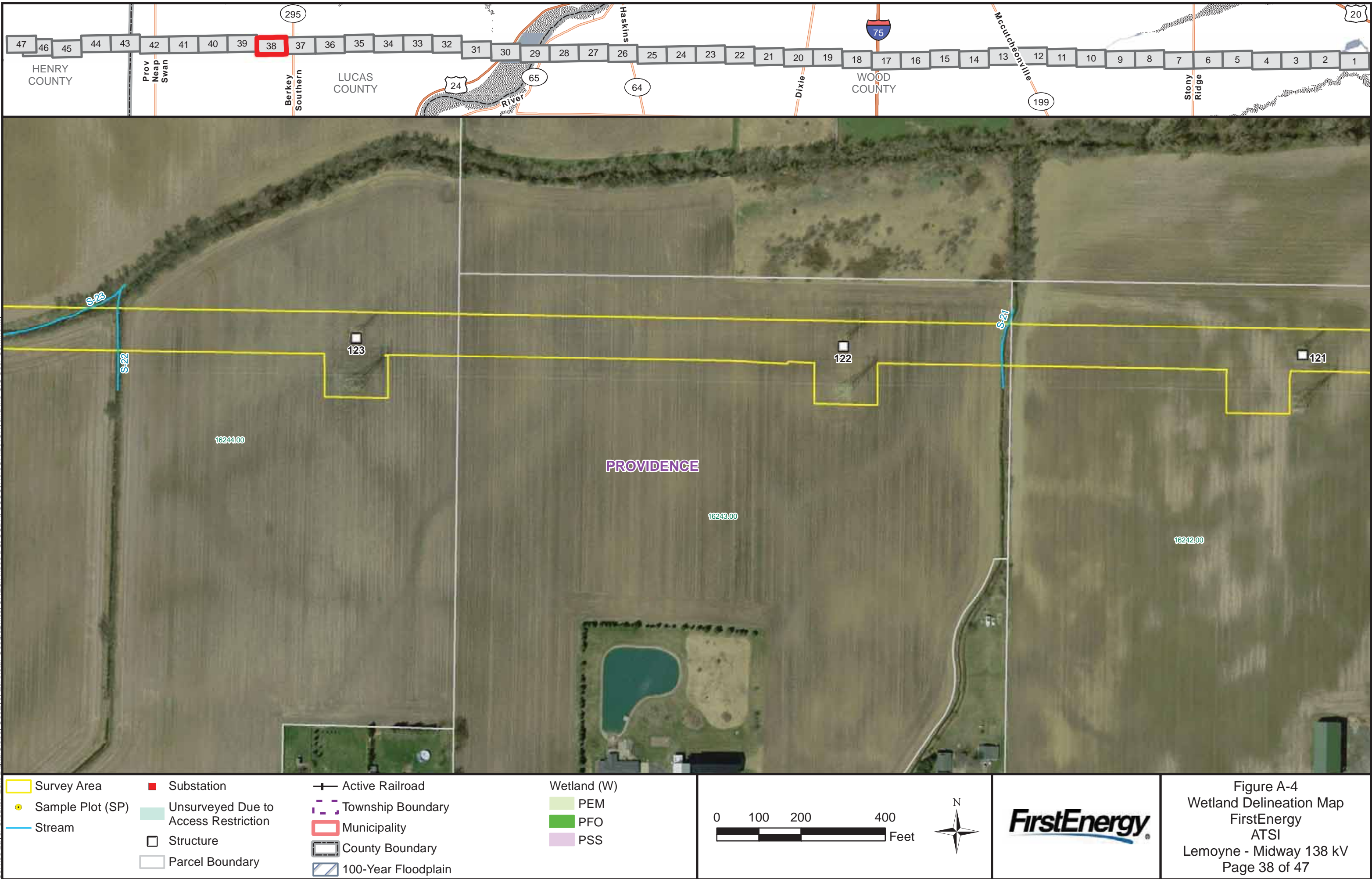
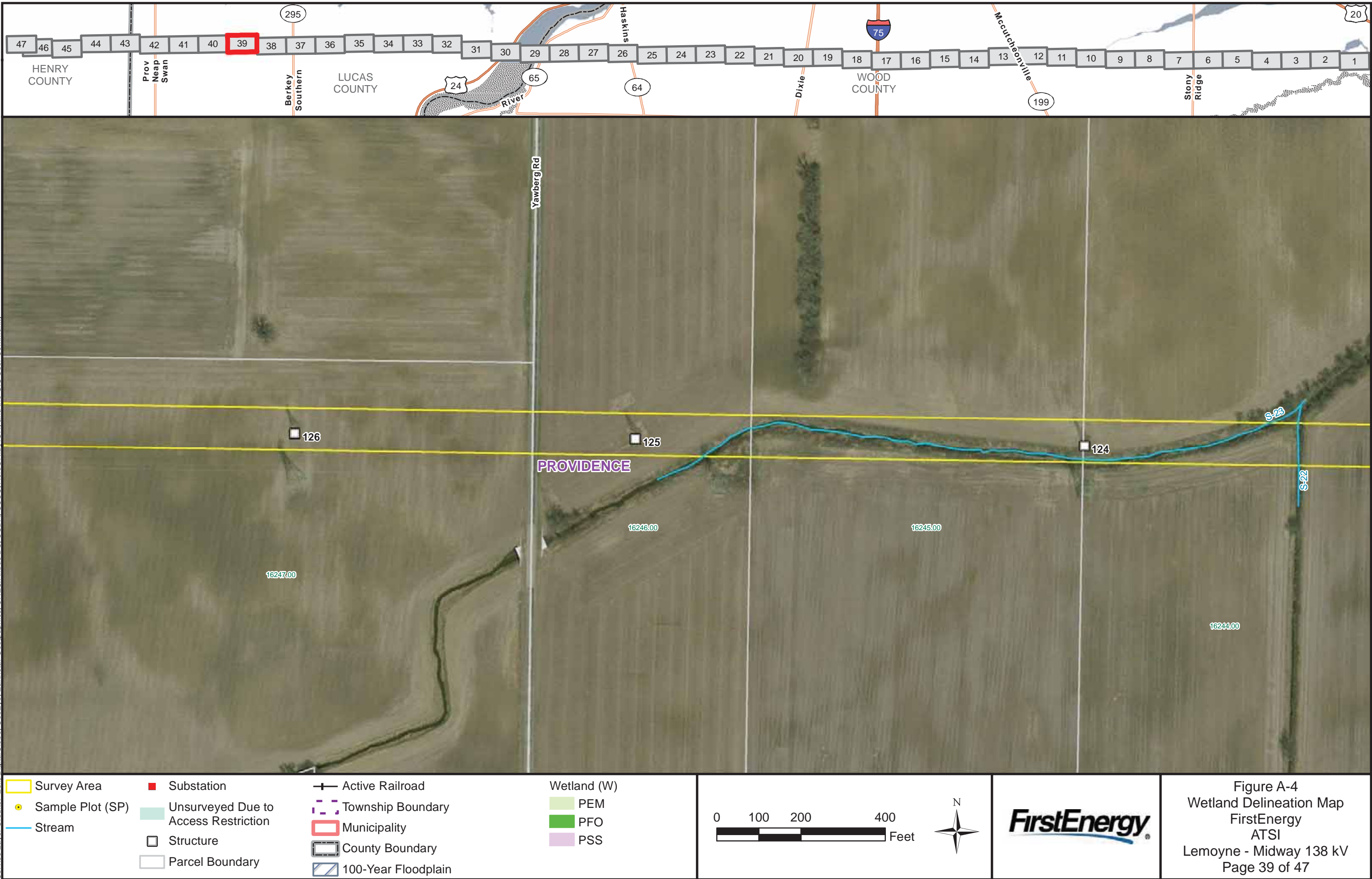


Figure A-4
Wetland Delineation Map
FirstEnergy
ATSI
Lemoyne - Midway 138 kV
Page 38 of 47

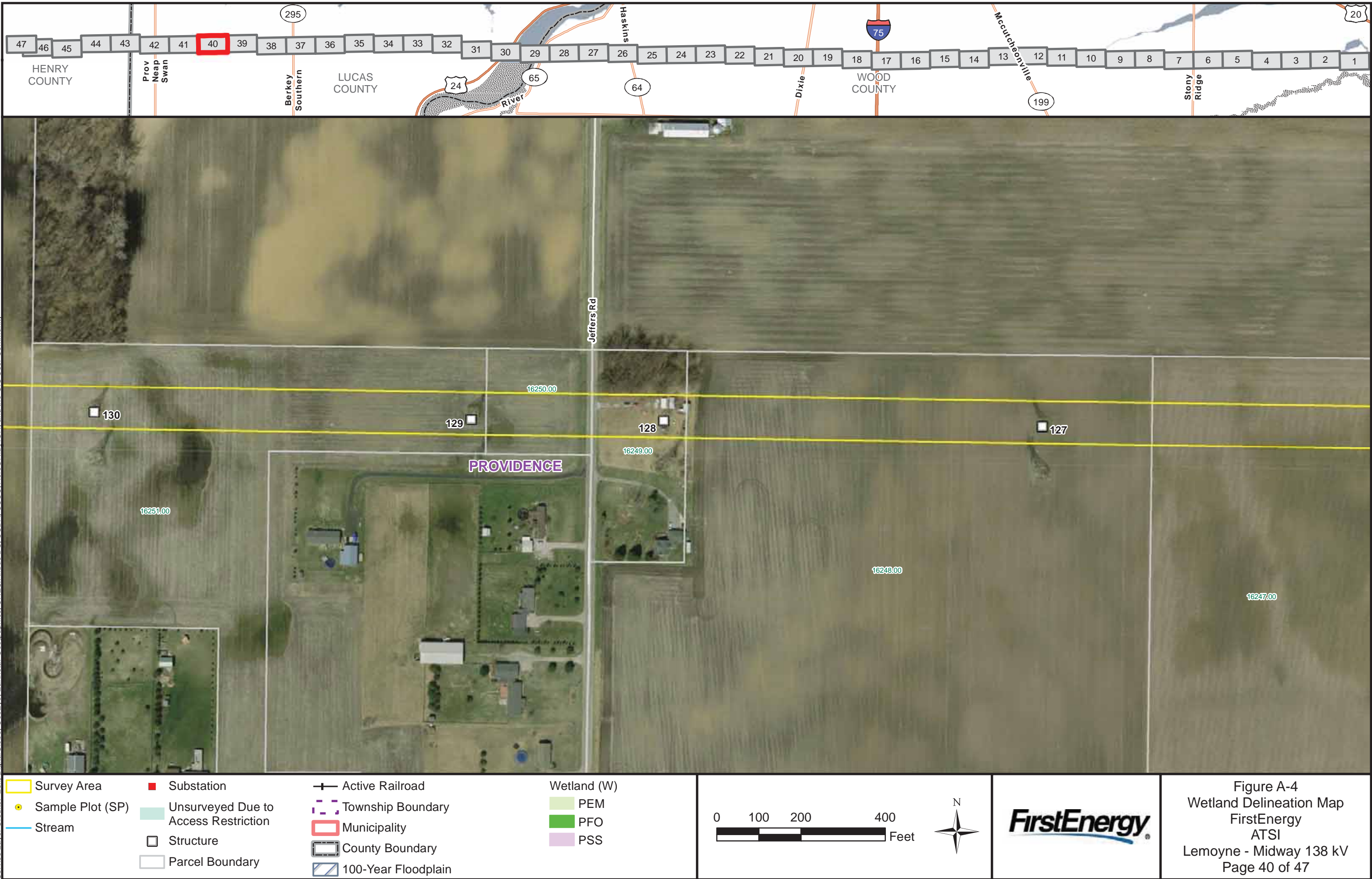
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\nespsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



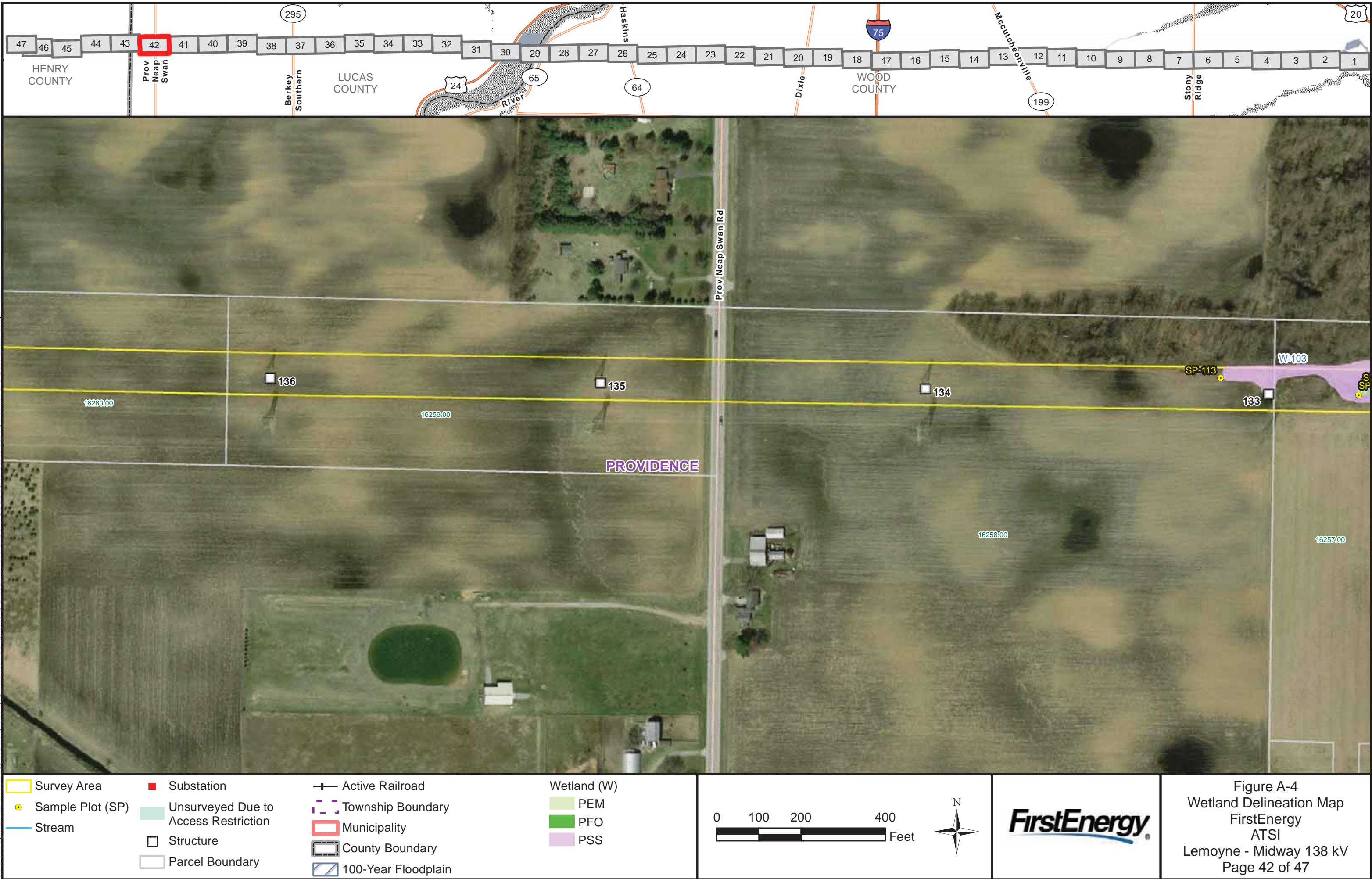
Source: Esri, FEMA, and Burns & McDonnell Engineering Company, Inc.

Issued: January 25, 2017

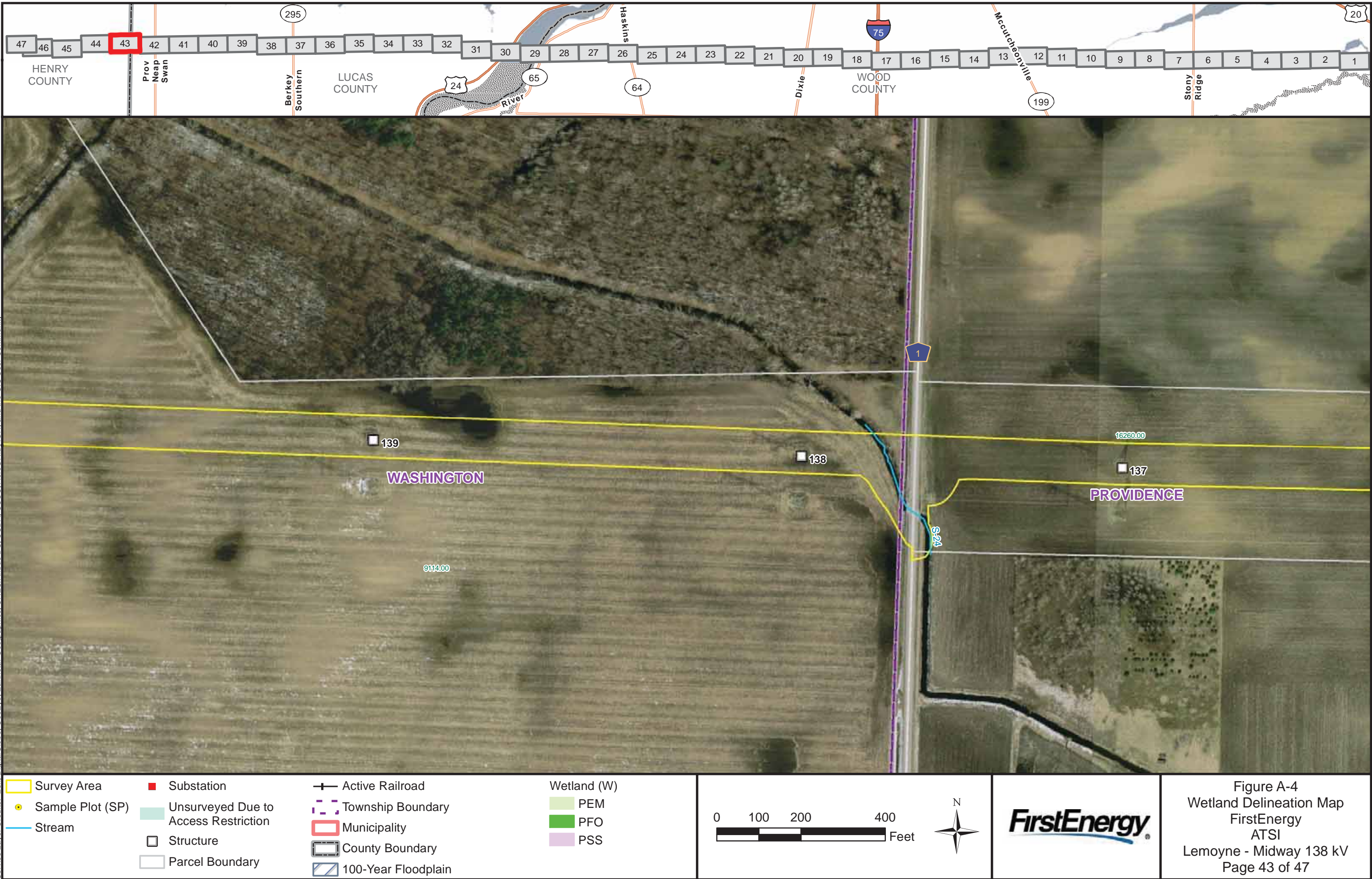
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\espsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



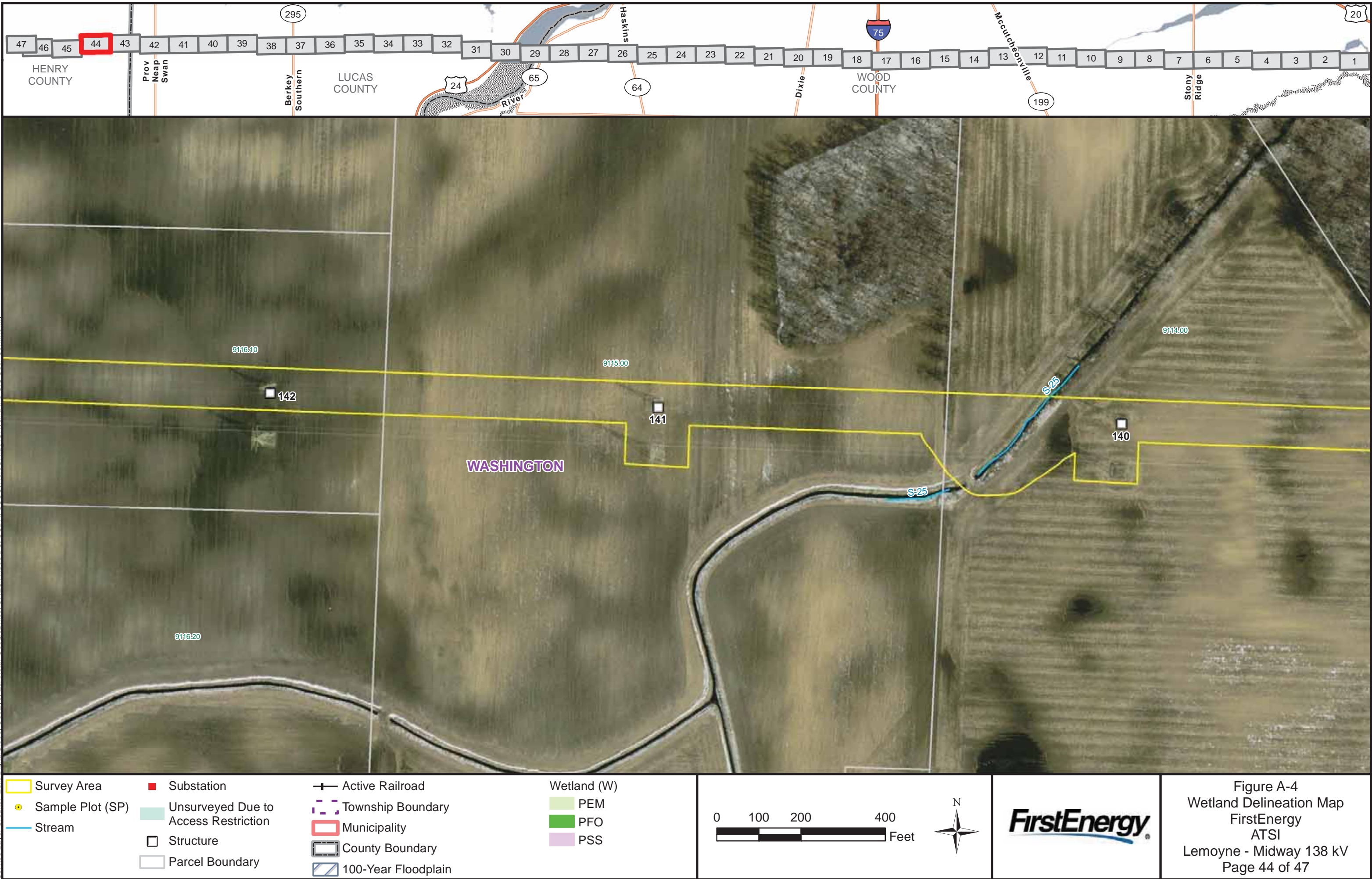
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\naspsrv\data\Projects\First Energy\76055_TREPP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



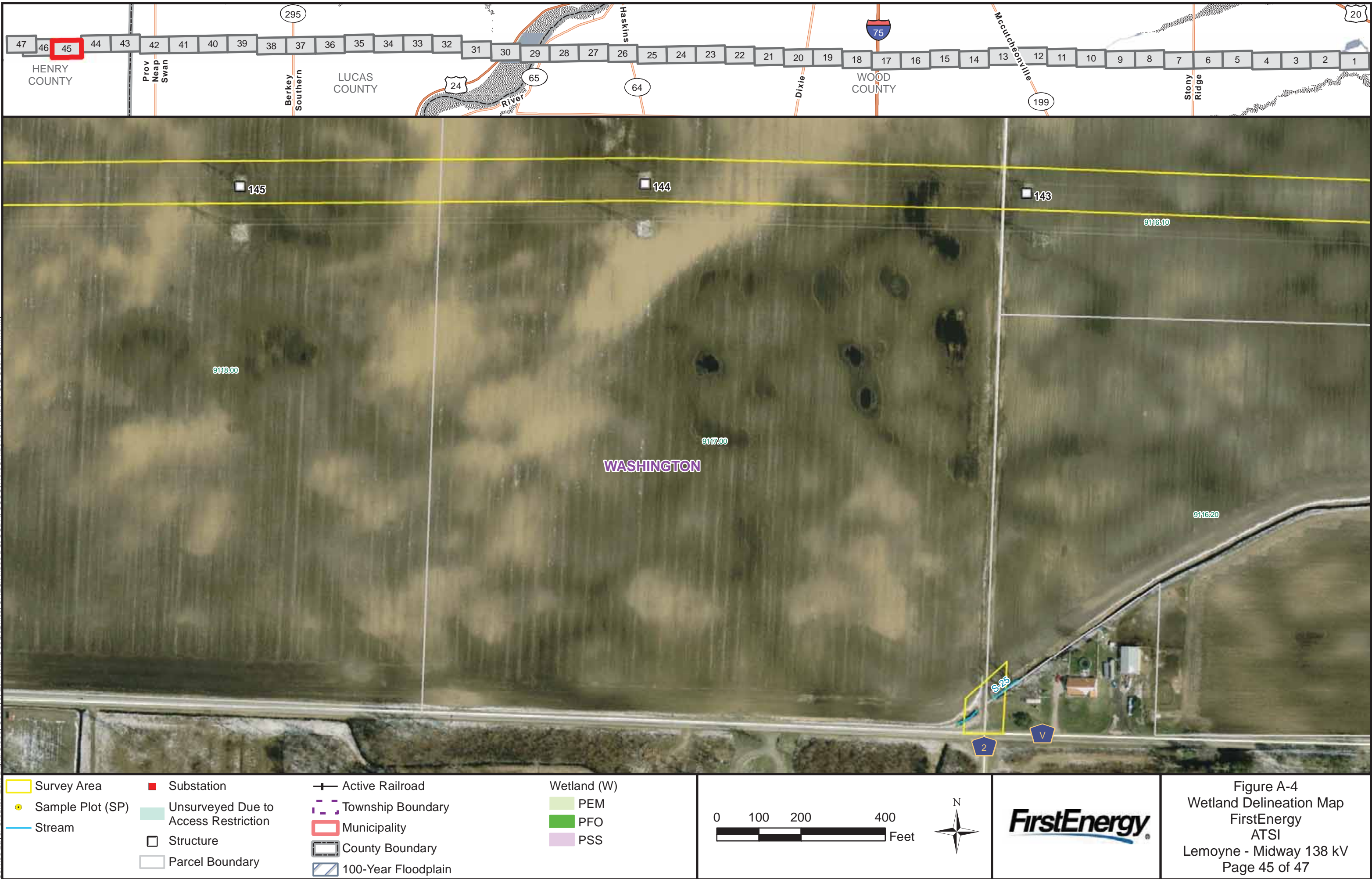
COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\nspsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMWLMMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\esrpsrv\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



COPYRIGHT © 2014 BURNS & MCDONNELL ENGINEERING COMPANY, INC.
Burns & McDonnell Path: \\npsps\data\Projects\First Energy\76055_TREP\GIS\DataFiles\ArcDocs\Wetlands\LM2MMW\MMW_ConstructionMapbook_Alt_Fig4_Delineation.mxd
Service Layer Credits: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Source: Esri, FEMA, and Burns & McDonnell Engineering Company, Inc.

Issued: January 25, 2017

APPENDIX B – WETLAND DETERMINATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lemoyne-Midway 138 kV Project City/County: Wood County Sampling Date: 8/5/2014

Applicant/Owner: ATSI State: Ohio Sampling Point: SP-1

Investigator(s): Richards, Gutman Section, Township, Range: T6N, R12E, S15

Landform (hillslope, terrace, etc.) ditch Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR or MLRA): L Lat: 41.475807 Long: -83.453918 Datum: NAD83

Soil Map Unit Name: Nappanee loam, 0 to 2 percent slopes NWI Classification: N/A

Are climate/hydrologic conditions on the site typical for this time of year? ☒ Yes ☐ No (If no, explain in Remarks)

	Vegetation	Soil	Hydrology	
Significantly Disturbed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are "Normal Circumstances" present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Naturally Problematic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

	Yes	No	Remarks
Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample plot located in PEM W-1.
Hydric Soil Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Wetland Hydrology Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the Sampled Area within a Wetland?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one required: check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>																			
<input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)																				
Field Observations:	<table border="0" style="width: 100%;"> <tr> <th style="width: 20%;"></th> <th style="width: 10%;">Yes</th> <th style="width: 10%;">No</th> <th style="width: 20%;">Depth (inches):</th> </tr> <tr> <td>Surface Water Present?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><u> </u></td> </tr> <tr> <td>Water Table Present?</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><u>4</u></td> </tr> <tr> <td>Saturation Present? (includes capillary fringe)</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><u>2</u></td> </tr> <tr> <td>Wetland Hydrology Present?</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td></td> </tr> </table>		Yes	No	Depth (inches):	Surface Water Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u> </u>	Water Table Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>4</u>	Saturation Present? (includes capillary fringe)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>2</u>	Wetland Hydrology Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, etc.), if available:
	Yes	No	Depth (inches):																			
Surface Water Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u> </u>																			
Water Table Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>4</u>																			
Saturation Present? (includes capillary fringe)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>2</u>																			
Wetland Hydrology Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>																				
Remarks: Hydrology indicators A2, A3, D2, and D5 are present.																						

VEGETATION – Use scientific names of plants

 Sampling Point: SP-1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	%	_____	_____
2. _____	%	_____	_____
3. _____	%	_____	_____
4. _____	%	_____	_____
5. _____	%	_____	_____
6. _____	%	_____	_____
7. _____	%	_____	_____
	<u>0 %</u>	= Total Cover	

Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	%	_____	_____
2. _____	%	_____	_____
3. _____	%	_____	_____
4. _____	%	_____	_____
5. _____	%	_____	_____
6. _____	%	_____	_____
7. _____	%	_____	_____
	<u>0 %</u>	= Total Cover	

Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Eleocharis tenuis</u>	60 %	Y	FACW
2. <u>Carex sp.</u>	20 %	Y	FAC*
3. <u>Leersia oryzoides</u>	5 %	N	OBL
4. _____	%	_____	_____
5. _____	%	_____	_____
6. _____	%	_____	_____
7. _____	%	_____	_____
8. _____	%	_____	_____
9. _____	%	_____	_____
10. _____	%	_____	_____
11. _____	%	_____	_____
12. _____	%	_____	_____
	<u>85 %</u>	= Total Cover	

Woody Vine Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	%	_____	_____
2. _____	%	_____	_____
3. _____	%	_____	_____
4. _____	%	_____	_____
	<u>0 %</u>	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>5 %</u>	x 1 = <u>5</u>
FACW species <u>60 %</u>	x 2 = <u>120</u>
FAC species <u>20 %</u>	x 3 = <u>60</u>
FACU species <u>0 %</u>	x 4 = <u>0</u>
UPL species <u>0 %</u>	x 5 = <u>0</u>
Column Totals: <u>85 %</u> (A)	<u>185</u> (B)
Prevalence Index = B/A = <u>2.18</u>	

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☒ 3 - Prevalence Index is ≤3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Remarks (include photo numbers here or on a separate sheet): Photo C-1. *Assumed FAC because most Carex sp. in the region are FAC, FACW, or OBL. Dominance and prevalence tests are met.

SOIL

Sampling Point: SP-1

Profile Description: *(Describe to the depth needed to document the indicator or confirm the absence of indicators.)*

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 4/2	95	10YR 5/6	5	C	M	clay loam	
12-24	10YR 5/2	95	10YR 5/3	5	C	M	clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

- ☐ Histosol (A1) ☐ Dark Surface (S7) (**LRR R, MLRA 149B**)
☐ Histic Epipedon (A2) ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Black Histic (A3) ☐ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
☐ Hydrogen Sulfide (A4) ☐ Loamy Mucky Mineral (F1) (**LRR K, L**)
☐ Stratified Layers (A5) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☒ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR, K, L**)
☐ Thin Dark Surface (S9) (**LRR, K, L**)
☐ Iron-Manganese Masses (F12) (**LRR, K, L**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic**Restrictive Layer (if observed):**

Type: _____ Depth (inches): _____

Hydric Soil Present?☒ Yes ☐ No**Remarks:** Hydric soil indicator F3 is present.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lemoyne-Midway 138 kV Project City/County: Wood County Sampling Date: 8/5/2014

Applicant/Owner: ATSI State: Ohio Sampling Point: SP-2

Investigator(s): Richards, Gutman Section, Township, Range: T6N, R12E, R15

Landform (hillslope, terrace, etc.) terrace Local relief (concave, convex, none): none Slope (%): 2

Subregion (LRR or MLRA): L Lat: 41.47583 Long: -83.454005 Datum: NAD83

Soil Map Unit Name: Nappanee loam, 0 to 2 percent slopes NWI Classification: N/A

Are climate/hydrologic conditions on the site typical for this time of year? ☒ Yes ☐ No (If no, explain in Remarks)

	Vegetation	Soil	Hydrology	
Significantly Disturbed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Are "Normal Circumstances" present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Naturally Problematic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

	Yes	No	
Hydrophytic Vegetation Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Remarks: This is an upland plot adjacent to W-1.
Hydric Soil Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Wetland Hydrology Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is the Sampled Area within a Wetland?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one required: check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>															
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)																
Field Observations:	<table border="0" style="width: 100%;"> <tr> <td style="width: 33%; text-align: center;">Yes</td> <td style="width: 33%; text-align: center;">No</td> <td style="width: 33%; text-align: center;">Depth (inches):</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> </tr> </table>	Yes	No	Depth (inches):	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, etc.), if available:	
Yes	No	Depth (inches):																
<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____																
<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____																
<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____																
<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____																
Wetland Hydrology Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																		
Remarks: Hydrology indicators are not present.																		

VEGETATION – Use scientific names of plants

 Sampling Point: SP-2

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	%		
2. _____	%		
3. _____	%		
4. _____	%		
5. _____	%		
6. _____	%		
7. _____	%		
	<u>0 %</u>	= Total Cover	

Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	%		
2. _____	%		
3. _____	%		
4. _____	%		
5. _____	%		
6. _____	%		
7. _____	%		
	<u>0 %</u>	= Total Cover	

Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Bromus inermis</u>	60 %	Y	UPL
2. <u>Elymus virginicus</u>	15 %	N	FACW
3. <u>Asclepias syriaca</u>	5 %	N	UPL
4. <u>Rumex crispus</u>	2 %	N	FAC
5. <u>Ambrosia artemisiifolia</u>	2 %	N	FACU
6. _____	%		
7. _____	%		
8. _____	%		
9. _____	%		
10. _____	%		
11. _____	%		
12. _____	%		
	<u>84 %</u>	= Total Cover	

Woody Vine Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	%		
2. _____	%		
3. _____	%		
4. _____	%		
	<u>0 %</u>	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0 %</u>	x 1 = <u>0</u>
FACW species <u>15 %</u>	x 2 = <u>30</u>
FAC species <u>2 %</u>	x 3 = <u>6</u>
FACU species <u>2 %</u>	x 4 = <u>8</u>
UPL species <u>65 %</u>	x 5 = <u>325</u>
Column Totals: <u>84 %</u> (A)	<u>369</u> (B)
Prevalence Index = B/A = <u>4.39</u>	

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is >50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Remarks (include photo numbers here or on a separate sheet): Photo C-2. Hydrophytic vegetation is not present.

SOIL

Sampling Point: SP-2

Profile Description: *(Describe to the depth needed to document the indicator or confirm the absence of indicators.)*

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ☐ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ☐ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ☐ Dark Surface (S7) (**LRR K, L**)
- ☐ Polyvalue Below Surface (S8) (**LRR, K, L**)
- ☐ Thin Dark Surface (S9) (**LRR, K, L**)
- ☐ Iron-Manganese Masses (F12) (**LRR, K, L**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: gravel Depth (inches): 12

Hydric Soil Present?

☐ Yes ☒ No

Remarks: Hydric soil indicators are not present.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lemoyne-Midway 138 kV Project City/County: Wood County Sampling Date: 8/5/2014

Applicant/Owner: ATSI State: Ohio Sampling Point: SP-3

Investigator(s): Richards, Gutman Section, Township, Range: T6N, R12E, S15

Landform (hillslope, terrace, etc.) depression Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR or MLRA): L Lat: 41.475739 Long: -83.469 Datum: NAD83

Soil Map Unit Name: Hoytville clay loam, 0 to 1 percent slopes NWI Classification: N/A

Are climate/hydrologic conditions on the site typical for this time of year? ☒ Yes ☐ No (If no, explain in Remarks)

	Vegetation	Soil	Hydrology	
Significantly Disturbed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are "Normal Circumstances" present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Naturally Problematic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

	Yes	No	
Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remarks: Sample plot located in PEM W-3.
Hydric Soil Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Wetland Hydrology Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the Sampled Area within a Wetland?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one required: check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>																			
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)																				
Field Observations:	<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;"></td> <td style="width: 10%; text-align: center;">Yes</td> <td style="width: 10%; text-align: center;">No</td> <td style="width: 47%; text-align: center;">Depth (inches):</td> </tr> <tr> <td>Surface Water Present?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Water Table Present?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Saturation Present? (includes capillary fringe)</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;">_____</td> </tr> <tr> <td>Wetland Hydrology Present?</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td></td> </tr> </table>		Yes	No	Depth (inches):	Surface Water Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	Water Table Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	Saturation Present? (includes capillary fringe)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	Wetland Hydrology Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, etc.), if available:
	Yes	No	Depth (inches):																			
Surface Water Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____																			
Water Table Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____																			
Saturation Present? (includes capillary fringe)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____																			
Wetland Hydrology Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>																				
Remarks: Hydrology indicators C3, D2, and D5 are present.																						

VEGETATION – Use scientific names of plants

 Sampling Point: SP-3

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____		%		
2. _____		%		
3. _____		%		
4. _____		%		
5. _____		%		
6. _____		%		
7. _____		%		
		<u>0 %</u>	= Total Cover	
Sapling/Shrub Stratum	(Plot size: <u>15'</u>)			
1. <u>Cornus alba</u>		5 %	Y	FACW
2. _____		%		
3. _____		%		
4. _____		%		
5. _____		%		
6. _____		%		
7. _____		%		
		<u>5 %</u>	= Total Cover	
Herb Stratum	(Plot size: <u>5'</u>)			
1. <u>Phragmites australis</u>		60 %	Y	FACW
2. <u>Persicaria amphibia</u>		20 %	Y	OBL
3. <u>Rubus allegheniensis</u>		10 %	N	FACU
4. <u>Solidago altissima</u>		5 %	N	FACU
5. <u>Platanus occidentalis</u>		5 %	N	FACW
6. _____		%		
7. _____		%		
8. _____		%		
9. _____		%		
10. _____		%		
11. _____		%		
12. _____		%		
		<u>100 %</u>	= Total Cover	
Woody Vine Stratum	(Plot size: <u>30'</u>)			
1. _____		%		
2. _____		%		
3. _____		%		
4. _____		%		
		<u>0 %</u>	= Total Cover	

Dominance Test worksheet:
 Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)
 Total Number of Dominant Species Across All Strata: 3 (B)
 Percent of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>20 %</u>	x 1 = <u>20</u>
FACW species <u>70 %</u>	x 2 = <u>140</u>
FAC species <u>0 %</u>	x 3 = <u>0</u>
FACU species <u>15 %</u>	x 4 = <u>60</u>
UPL species <u>0 %</u>	x 5 = <u>0</u>
Column Totals: <u>105 %</u> (A)	<u>220</u> (B)
Prevalence Index = B/A = <u>2.1</u>	

Hydrophytic Vegetation Indicators:
☒ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:
Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Remarks (include photo numbers here or on a separate sheet): Photo C-3. Rapid, dominance, and prevalence tests are met.

SOIL

Sampling Point: SP-3**Profile Description:** *(Describe to the depth needed to document the indicator or confirm the absence of indicators.)*

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 4/2	95	10YR 5/6	5	C	M	clay loam	
12-24	10YR 4/2	93	10YR 5/3	5	C	M	clay loam	
			10YR 5/6	2	C	M		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

- ☐ Histosol (A1) ☐ Dark Surface (S7) (**LRR R, MLRA 149B**)
☐ Histic Epipedon (A2) ☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Black Histic (A3) ☐ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
☐ Hydrogen Sulfide (A4) ☐ Loamy Mucky Mineral (F1) (**LRR K, L**)
☐ Stratified Layers (A5) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☒ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR, K, L**)
☐ Thin Dark Surface (S9) (**LRR, K, L**)
☐ Iron-Manganese Masses (F12) (**LRR, K, L**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic**Restrictive Layer (if observed):**

Type: _____ Depth (inches): _____

Hydric Soil Present?☒ Yes ☐ No**Remarks:** Hydric soil indicator F3 is present.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lemoyne-Midway 138 kV Project City/County: Wood County Sampling Date: 8/5/2014
 Applicant/Owner: ATSI State: Ohio Sampling Point: SP-4
 Investigator(s): Richards, Gutman Section, Township, Range: T6N, R12E, S15
 Landform (hillslope, terrace, etc.) terrace Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR or MLRA): L Lat: 41.475736 Long: -83.469101 Datum: NAD83
 Soil Map Unit Name: Hoytville clay loam, 0 to 1 percent slopes NWI Classification: N/A
 Are climate/hydrologic conditions on the site typical for this time of year? ☒ Yes ☐ No (If no, explain in Remarks)
 Significantly Disturbed? Vegetation ☐ Soil ☐ Hydrology ☐ Are "Normal Circumstances" present? ☒ Yes ☐ No
 Naturally Problematic? ☐ ☐ ☐ (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

	Yes	No	Remarks: This is an upland plot adjacent to PEM W-3.
Hydrophytic Vegetation Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Hydric Soil Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Wetland Hydrology Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is the Sampled Area within a Wetland?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one required: check all that apply)</u>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)		<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)		<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)		<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)		<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)		<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)		<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			<input type="checkbox"/> Microtopographic Relief (D4)
			<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:	Yes	No	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, etc.), if available:
Surface Water Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Water Table Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Saturation Present? (includes capillary fringe)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Wetland Hydrology Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Remarks: Hydrology indicators are not present.			

VEGETATION – Use scientific names of plants

 Sampling Point: SP-4

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____		%		
2. _____		%		
3. _____		%		
4. _____		%		
5. _____		%		
6. _____		%		
7. _____		%		
		<u>0 %</u> = Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15'</u>)			
1. <u>Rubus allegheniensis</u>		15 %	Y	FACU
2. _____		%		
3. _____		%		
4. _____		%		
5. _____		%		
6. _____		%		
7. _____		%		
		<u>15 %</u> = Total Cover		
Herb Stratum	(Plot size: <u>5'</u>)			
1. <u>Setaria verticillata</u>		60 %	Y	FACU
2. <u>Rubus allegheniensis</u>		10 %	N	FACU
3. _____		%		
4. _____		%		
5. _____		%		
6. _____		%		
7. _____		%		
8. _____		%		
9. _____		%		
10. _____		%		
11. _____		%		
12. _____		%		
		<u>70 %</u> = Total Cover		
Woody Vine Stratum	(Plot size: <u>30'</u>)			
1. _____		%		
2. _____		%		
3. _____		%		
4. _____		%		
		<u>0 %</u> = Total Cover		

Dominance Test worksheet:
 Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0 %</u>	x 1 = <u>0</u>
FACW species <u>0 %</u>	x 2 = <u>0</u>
FAC species <u>0 %</u>	x 3 = <u>0</u>
FACU species <u>85 %</u>	x 4 = <u>340</u>
UPL species <u>0 %</u>	x 5 = <u>0</u>
Column Totals: <u>85 %</u> (A)	<u>340</u> (B)
Prevalence Index = B/A = <u>4</u>	

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:
Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? ☐ Yes ☒ No

Remarks (include photo numbers here or on a separate sheet): Photo C-4. Hydrophytic vegetation is not present.

SOIL

Sampling Point: SP-4

Profile Description: *(Describe to the depth needed to document the indicator or confirm the absence of indicators.)*

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 3/2	95	10YR 5/6	5	C	M	clay loam	
12-24	10YR 5/2	93	10YR 5/3	5	C	M	clay loam	
			10YR 5/6	2	C	M		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7) (**LRR R, MLRA 149B**)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
☐ Loamy Mucky Mineral (F1) (**LRR K, L**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR, K, L**)
☐ Thin Dark Surface (S9) (**LRR, K, L**)
☐ Iron-Manganese Masses (F12) (**LRR, K, L**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic**Restrictive Layer (if observed):**

Type: _____ Depth (inches): _____

Hydric Soil Present?☒ Yes ☐ No**Remarks:** Hydric soil indicator F6 is present.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lemoyne-Midway 138 kV Project City/County: Wood County Sampling Date: 8/5/2014
 Applicant/Owner: ATSI State: Ohio Sampling Point: SP-5
 Investigator(s): Richards, Gutman Section, Township, Range: T6N, R12E, S15
 Landform (hillslope, terrace, etc.) terrace Local relief (concave, convex, none): none Slope (%): 2
 Subregion (LRR or MLRA): L Lat: 41.475667 Long: -83.523733 Datum: NAD83
 Soil Map Unit Name: Hoytville clay loam, 0 to 1 percent slopes NWI Classification: N/A
 Are climate/hydrologic conditions on the site typical for this time of year? ☒ Yes ☐ No (If no, explain in Remarks)
 Significantly Disturbed? Vegetation ☒ Soil ☐ Hydrology ☐ Are "Normal Circumstances" present? ☒ Yes ☐ No
 Naturally Problematic? ☐ ☐ ☐ (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

	Yes	No	Remarks:
Hydrophytic Vegetation Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This is an upland plot adjacent to W-4 located in an agricultural field.
Hydric Soil Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Wetland Hydrology Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is the Sampled Area within a Wetland?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one required: check all that apply)</u>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)		<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)		<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)		<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)		<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)		<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)		<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)			<input type="checkbox"/> Microtopographic Relief (D4)
			<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:	Yes	No	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, etc.), if available:
Surface Water Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Water Table Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Saturation Present? (includes capillary fringe)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Wetland Hydrology Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Remarks: Hydrology indicators are not present.			

VEGETATION – Use scientific names of plants

 Sampling Point: SP-5

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	%			Dominance Test worksheet: Number of Dominant Species that are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____	%			
3. _____	%			
4. _____	%			
5. _____	%			
6. _____	%			
7. _____	%			
<u>0 %</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0 %</u> x 1 = <u>0</u> FACW species <u>0 %</u> x 2 = <u>0</u> FAC species <u>0 %</u> x 3 = <u>0</u> FACU species <u>0 %</u> x 4 = <u>0</u> UPL species <u>2 %</u> x 5 = <u>10</u> Column Totals: <u>2 %</u> (A) <u>10</u> (B) Prevalence Index = B/A = <u>5</u>
1. _____	%			
2. _____	%			
3. _____	%			
4. _____	%			
5. _____	%			
6. _____	%			
7. _____	%			
<u>0 %</u> = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
1. <u>Bromus inermis</u>	2 %	Y	UPL	
2. _____	%			
3. _____	%			
4. _____	%			
5. _____	%			
6. _____	%			
7. _____	%			
8. _____	%			
9. _____	%			
10. _____	%			
11. _____	%			
12. _____	%			
<u>2 %</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>30'</u>)				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1. _____	%			
2. _____	%			
3. _____	%			
4. _____	%			
<u>0 %</u> = Total Cover				
Remarks (include photo numbers here or on a separate sheet): Photo C-5. Hydrophytic vegetation is not present.				

SOIL

Sampling Point: SP-5

Profile Description: *(Describe to the depth needed to document the indicator or confirm the absence of indicators.)*

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators:

- | | |
|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Polyvalue Below Surface (S8) (MLRA 147, 148) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ☐ Dark Surface (S7) (**LRR K, L**)
- ☐ Polyvalue Below Surface (S8) (**LRR, K, L**)
- ☐ Thin Dark Surface (S9) (**LRR, K, L**)
- ☐ Iron-Manganese Masses (F12) (**LRR, K, L**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: compact soil Depth (inches): 12

Hydric Soil Present?

☐ Yes ☒ No

Remarks: No hydric soil indicators are present. F6 is not met due to the lack of redox concentrations, F7 is not met because redox depletions need to have a value of 5 or more.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lemoyne-Midway 138 kV Project City/County: Wood County Sampling Date: 8/5/2014

Applicant/Owner: ATSI State: Ohio Sampling Point: SP-6

Investigator(s): Richards, Gutman Section, Township, Range: T6N, R12E, S18

Landform (hillslope, terrace, etc.) depression Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR or MLRA): L Lat: 41.475758 Long: -83.523977 Datum: NAD83

Soil Map Unit Name: Hoytville clay loam, 0 to 1 percent slopes NWI Classification: N/A

Are climate/hydrologic conditions on the site typical for this time of year? ☒ Yes ☐ No (If no, explain in Remarks)

	Vegetation	Soil	Hydrology	
Significantly Disturbed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are "Normal Circumstances" present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Naturally Problematic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

	Yes	No	Remarks: Sample plot located in PEM W-4.
Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hydric Soil Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Wetland Hydrology Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the Sampled Area within a Wetland?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one required: check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)			
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input checked="" type="checkbox"/> Drainage Patterns (B10)			
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)			
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)			
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)			
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)			
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)			
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input checked="" type="checkbox"/> Geomorphic Position (D2)			
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)			
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)			
		<input checked="" type="checkbox"/> FAC-Neutral Test (D5)			

Field Observations:	Yes No Depth (inches):	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, etc.), if available:
Surface Water Present?	<input type="checkbox"/> <input checked="" type="checkbox"/> _____	
Water Table Present?	<input type="checkbox"/> <input checked="" type="checkbox"/> _____	
Saturation Present? (includes capillary fringe)	<input type="checkbox"/> <input checked="" type="checkbox"/> _____	
Wetland Hydrology Present?	<input checked="" type="checkbox"/> <input type="checkbox"/> _____	

Remarks: Hydrology indicators B10, D2, and D5 are present.

VEGETATION – Use scientific names of plants

 Sampling Point: SP-6

Tree Stratum	(Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____		%		
2. _____		%		
3. _____		%		
4. _____		%		
5. _____		%		
6. _____		%		
7. _____		%		
		<u>0 %</u> = Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>15'</u>)			
1. _____		%		
2. _____		%		
3. _____		%		
4. _____		%		
5. _____		%		
6. _____		%		
7. _____		%		
		<u>0 %</u> = Total Cover		
Herb Stratum	(Plot size: <u>5'</u>)			
1. <u>Phalaris arundinacea</u>		100 %	Y	FACW
2. <u>Solidago altissima</u>		5 %	N	FACU
3. _____		%		
4. _____		%		
5. _____		%		
6. _____		%		
7. _____		%		
8. _____		%		
9. _____		%		
10. _____		%		
11. _____		%		
12. _____		%		
		<u>105 %</u> = Total Cover		
Woody Vine Stratum	(Plot size: <u>30'</u>)			
1. _____		%		
2. _____		%		
3. _____		%		
4. _____		%		
		<u>0 %</u> = Total Cover		

Dominance Test worksheet:
 Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant Species Across All Strata: 1 (B)
 Percent of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0 %</u>	x 1 = <u>0</u>
FACW species <u>100 %</u>	x 2 = <u>200</u>
FAC species <u>0 %</u>	x 3 = <u>0</u>
FACU species <u>5 %</u>	x 4 = <u>20</u>
UPL species <u>0 %</u>	x 5 = <u>0</u>
Column Totals: <u>105 %</u> (A)	<u>220</u> (B)
Prevalence Index = B/A = <u>2.1</u>	

Hydrophytic Vegetation Indicators:
☒ 1 - Rapid Test for Hydrophytic Vegetation
☒ 2 - Dominance Test is >50%
☒ 3 - Prevalence Index is ≤3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Vegetation Strata:
Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
Sapling/Shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Remarks (include photo numbers here or on a separate sheet): Photo C-6. Rapid, dominance, and prevalence tests are met.

SOIL

Sampling Point: SP-6

Profile Description: *(Describe to the depth needed to document the indicator or confirm the absence of indicators.)*

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 3/2	95	10YR 5/6	5	C	M	clay loam	
12-24	10YR 5/2	96	10YR 5/3	2	C	M	clay loam	
			10 YR 5/6	2	C	M		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains²Location: PL=Pore Lining, M=Matrix**Hydric Soil Indicators:**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)

- ☐ Dark Surface (S7) (**LRR R, MLRA 149B**)
☐ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
☐ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
☐ Loamy Mucky Mineral (F1) (**LRR K, L**)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☒ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR, K, L**)
☐ Thin Dark Surface (S9) (**LRR, K, L**)
☐ Iron-Manganese Masses (F12) (**LRR, K, L**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic**Restrictive Layer (if observed):**

Type: _____ Depth (inches): _____

Hydric Soil Present?☒ Yes ☐ No**Remarks:** Hydric soil indicator F6 is present.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lemoyne-Midway 138 kV Project City/County: Wood County Sampling Date: 8/5/2014

Applicant/Owner: ATSI State: Ohio Sampling Point: SP-7

Investigator(s): Richards, Gutman Section, Township, Range: T6N, R12E, S18

Landform (hillslope, terrace, etc.) depression Local relief (concave, convex, none): concave Slope (%): 1

Subregion (LRR or MLRA): L Lat: 41.475848 Long: -83.526363 Datum: NAD83

Soil Map Unit Name: Hoytville clay loam, 0 to 1 percent slopes NWI Classification: N/A

Are climate/hydrologic conditions on the site typical for this time of year? ☒ Yes ☐ No (If no, explain in Remarks)

	Vegetation	Soil	Hydrology	
Significantly Disturbed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are "Normal Circumstances" present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Naturally Problematic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

	Yes	No	
Hydrophytic Vegetation Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remarks: Sample plot located in PEM W-4.
Hydric Soil Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Wetland Hydrology Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is the Sampled Area within a Wetland?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one required: check all that apply)</u>			<u>Secondary Indicators (minimum of two required)</u>																					
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)																						
Field Observations: <table border="0" style="width: 100%;"> <tr> <td style="width: 33%;"></td> <td style="width: 10%; text-align: center;">Yes</td> <td style="width: 10%; text-align: center;">No</td> <td style="width: 10%; text-align: center;">Depth (inches):</td> </tr> <tr> <td>Surface Water Present?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>Water Table Present?</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>Saturation Present? (includes capillary fringe)</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>Wetland Hydrology Present?</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td></td> </tr> </table>				Yes	No	Depth (inches):	Surface Water Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Water Table Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Saturation Present? (includes capillary fringe)	<input type="checkbox"/>	<input checked="" type="checkbox"/>		Wetland Hydrology Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections, etc.), if available:	
	Yes	No	Depth (inches):																					
Surface Water Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>																						
Water Table Present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>																						
Saturation Present? (includes capillary fringe)	<input type="checkbox"/>	<input checked="" type="checkbox"/>																						
Wetland Hydrology Present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>																						
Remarks: Hydrology indicators B10, D2, and D5 are present.																								

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

7/21/2017 4:24:12 PM

in

Case No(s). 17-1566-EL-BLN

Summary: Application (Part 10) Exhibit 6-2 for the Dowling-Midway 138kV Transmission Line Reconductor Project filed by FirstEnergy, S. Humphrys electronically filed by Docketing Staff on behalf of Docketing