PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Corridor - Jug Street 345kV, 15237
2.	**Points of Origin and Termination:**	Corridor - Jug Street
3.	**Right-Of-Way:**	6.4 miles / 150 ft / Corridor-Jug Street 345 & 138kV (Double Circuit)
4.	**Voltage:**	345,345 kV Design / 345,138 kV Operation
5.	**Application For Certificate:**	LON, 2017-2018
6.	**Construction:**	To be completed approx. 2019
7.	**Capital Investment:**	Approx. $28.4 million (total project)
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead, Steel
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased area capacity.
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	Line rebuild & upgrade

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Corridor-Jug Street 138kV Ckt
2.	**Points of Origin and Termination:**	Corridor Station / Jug Street Station
3.	**Right-Of-Way:**	6.4 miles / 150 ft / Corridor-Jug Street 345 & 138kV (Double Circuit)
4.	**Voltage:**	345,345 kV Design / 345,138 kV Operation
5.	**Application For Certificate:**	LON, 2017-2018
6.	**Construction:**	To be completed approx. 2019
7.	**Capital Investment:**	Approx. $28.4 million (total project)
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead, Steel
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased area capacity.
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	Line rebuild & upgrade

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Delano-Ross #1
2.	**Points of Origin and Termination:**	Delano / Ross
3.	**Right-Of-Way:**	4.7 miles / 100 ft / Delano-Ross
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	To be filed in 2014-2015
6.	**Construction:**	To be completed approx. 2015
7.	**Capital Investment:**	Approx. $5 million (both circuits)
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased area capacity.
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Delano-Ross #2
2.	**Points of Origin and Termination:**	Delano / Ross
3.	**Right-Of-Way:**	4.7 miles / 100 ft / Delano-Ross
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	To be filed in 2014-2015
6.	**Construction:**	To be completed approx. 2015
7.	**Capital Investment:**	Approx. $5 million (both circuits)
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased area capacity.
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Dennison-Yager 69kV (138kV design)
2.	**Points of Origin and Termination:**	Dennison / Yager (proposed)
3.	**Right-Of-Way:**	7.3 miles / 100 ft / 1 circuit 6-wired
4.	**Voltage:**	138 kV / 69 kV
5.	**Application For Certificate:**	Application filed July 2016
6.	**Construction:**	To be completed approx. Dec. 2017
7.	**Capital Investment:**	Approx. $15 million
8.	**Planned Substations:**	Name-Irish Run Switch (existing); Voltage-69kV; Acreage-0; Location-Ulrichsville, Ohio (Tuscarawas County)
9.	**Supporting Structures:**	Single steel poles with single circuit 6-wired
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased customer loads
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability, load curtailed at industrial customers
13.	**Miscellaneous**	69kV line rebuild (but to 138kV specs)

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Devola - Highland Ridge Switch 138 kV
2.	**Points of Origin and Termination:**	Devola / Highland Ridge Switch
3.	**Right-Of-Way:**	4 miles / 100 ft / 1 circuit
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	To be sumbitted 2017 or 2018
6.	**Construction:**	To be completed approx. December 2019.
7.	**Capital Investment:**	Approx $ 8.5 M
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Single steel poles with single circuit
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Increased area reliability
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Devola - Mill Creek 138 kV
2.	**Points of Origin and Termination:**	Devola / Mill Creek
3.	**Right-Of-Way:**	0.25 miles / 100 ft / 1 circuit
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	To be sumbitted in 2017 or 2018
6.	**Construction:**	To be completed approx. June 2020
7.	**Capital Investment:**	Approx $ 0.6 M
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Single steel poles with single circuit
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Connect new Devola station to existing Mill Creek; serve AEP Ohio loads
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability; part of overall plan to improve Marietta area system
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Dexter Sw. - Elliott - Lemaster 138 kV (Existing circuit Dexter Sw. - Elliott - Poston 138 kV circuit renamed due to Poston station being replaced by Lemaster station.)
2.	**Points of Origin and Termination:**	Lemaster/ Dexter Sw. Elliott
3.	**Right-Of-Way:**	20.88 miles/100ft, 1 circuit
4.	**Voltage:**	138 kV/ 138 kV
5.	**Application For Certificate:**	LON to be filed in Spring 2017.
6.	**Construction:**	Station construction to start in 2017. Line construction to start in 2018.
7.	**Capital Investment:**	Approx: $1.10 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	TBD
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	To terminate in the new Lemaster station.
12.	**Consequences of Line Construction Deferment or Termination:**	Will not connect to new Lemaster station.
13.	**Miscellaneous**	Line relocation to connect to the new Lemaster station that will replace Posotn station.

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Dilles Bottom-George Washington 138kV
2.	**Points of Origin and Termination:**	Dilles Bottom & George Washington
3.	**Right-Of-Way:**	1.5 miles / 100 ft / 2 circuits
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	Filing in late 2017 or early 2018
6.	**Construction:**	Completion est. 2019
7.	**Capital Investment:**	Approx. $2.5M
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Single Pole double circuit construction
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Service to IPP customer and potential cracker plant.
12.	**Consequences of Line Construction Deferment or Termination:**	Customer generation curtailment (Moundsville Power); PJM reliability issues
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Dilles Bottom-Holloway 138kV
2.	**Points of Origin and Termination:**	Dilles Bottom & Holloway
3.	**Right-Of-Way:**	1.3 miles / 100 ft / 2 circuits
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	Filing in late 2017 or early 2018
6.	**Construction:**	Completion est. 2019
7.	**Capital Investment:**	Approx. $3.5M
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Single Pole double circuit construction
10.	**Participation with Other Utilities:**	Partially feed through existing First Energy owned 138kV lines (Burger-Holloway)
11.	**Purpose of the Planned Transmission Line**	Service to IPP customer and potential cracker plant.
12.	**Consequences of Line Construction Deferment or Termination:**	Customer generation curtailment (Moundsville Power); PJM reliability issues
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Dublin-Amlin
2.	**Points of Origin and Termination:**	Dublin-Amlin
3.	**Right-Of-Way:**	3.6 mi / 100 / double ckt
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	Application, 2017-2018
6.	**Construction:**	To be completed approx. 6/1/2019
7.	**Capital Investment:**	Est. Approx. $12M (for both circuits)
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	TBD
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased area capacity.
12.	**Consequences of Line Construction Deferment or Termination:**	Facilities overload driven by customer
13.	**Miscellaneous**	May be overhead or underground. Pending negotiations with local authorities.

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Dublin-Sumac
2.	**Points of Origin and Termination:**	Dublin-Sumac
3.	**Right-Of-Way:**	3.6 mi / 100 / double ckt
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	Application, 2017-2018
6.	**Construction:**	To be completed approx. 6/1/2019
7.	**Capital Investment:**	Est. Approx. $12M (for both circuits)
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	TBD
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased area capacity.
12.	**Consequences of Line Construction Deferment or Termination:**	Facilities overload driven by customer
13.	**Miscellaneous**	May be overhead or underground. Pending negotiations with local authorities.

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	East Lima - Haviland, 2062
2.	**Points of Origin and Termination:**	East Lima-Haviland
3.	**Right-Of-Way:**	29.4 mi / 100 / double ckt
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	LON, 2017
6.	**Construction:**	To be completed approx. 12/18/20
7.	**Capital Investment:**	$51.5M for both circuits
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead, Steel, Pole
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Rebuild of existing line for rehabilitation.
12.	**Consequences of Line Construction Deferment or Termination:**	Continued deterioration and reduced reliability.
13.	**Miscellaneous**	Haviland-North Delphos line rebuild

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	East Lima - South Kenton 138kV, 700
2.	**Points of Origin and Termination:**	East Lima & South Kenton
3.	**Right-Of-Way:**	30.8 miles / 100ft / 1 circuit
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	LON or Construction Notice in 2022
6.	**Construction:**	est completion in 2024
7.	**Capital Investment:**	approx. $46.2 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Steel Poles
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Rebuild of existing line for rehabilitation.
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced reliability as line continues to deteriorate
13.	**Miscellaneous**	Line Rebuild largely in existing ROW

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	East Lima-Maddox Creek 345kV, 16757
2.	**Points of Origin and Termination:**	East Lima-Maddox Creek
3.	**Right-Of-Way:**	30.34 mi / 150 / single ckt
4.	**Voltage:**	345 kV / 345 kV
5.	**Application For Certificate:**	LON, 2018
6.	**Construction:**	To be completed approx. 6/1/2021
7.	**Capital Investment:**	Approx $18.2M
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Existing Steel Lattice
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Connect and serve new generation customer
12.	**Consequences of Line Construction Deferment or Termination:**	Generation deliverability limitation
13.	**Miscellaneous**	Line reconductor on existing structures

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Elk - Lemaster 138 kV (Existing circuit Elk - Poston 138 kV circuit renamed due to Poston station being replaced by Lemaster station.)
2.	**Points of Origin and Termination:**	Lemaster /Elk
3.	**Right-Of-Way:**	20.88 miles/100ft, 1 circuit
4.	**Voltage:**	138 kV/ 138 kV
5.	**Application For Certificate:**	LON to be filed in Spring 2017.
6.	**Construction:**	Station construction to start in 2017. Line construction to start in 2018.
7.	**Capital Investment:**	Approx: $1 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	TBD
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	To terminate in the new Lemaster station.
12.	**Consequences of Line Construction Deferment or Termination:**	Will not connect to new Lemaster station.
13.	**Miscellaneous**	Line relocation to connect to the new Lemaster station that will replace Posotn station.

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Freebyrd - South Cadiz 138 kV
2.	**Points of Origin and Termination:**	South Cadiz / Freebyrd Station
3.	**Right-Of-Way:**	2 miles / 100 ft.
4.	**Voltage:**	138 / 138 kV
5.	**Application For Certificate:**	LON Submitted
6.	**Construction:**	Started in 2016; in progress
7.	**Capital Investment:**	Approx $7M
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Steel Poles, double circuit construction
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Serve customer load increase that otherwise would overload existing 69 kV facilities.
12.	**Consequences of Line Construction Deferment or Termination:**	Customer served from South Cadiz-Freebyrd could not increase to full desired load.
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Gable-Carrollton 138kV
2.	**Points of Origin and Termination:**	Gable / Carrollton
3.	**Right-Of-Way:**	29 miles / 100 ft/ 1 circuit
4.	**Voltage:**	138 / 138 kV
5.	**Application For Certificate:**	LON filing in 2017-18
6.	**Construction:**	Est. completion in 2020-21
7.	**Capital Investment:**	Approx. $40 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Steel poles, 6-wired single circuit
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Rebuild of 100-year old line which has deteriorated
12.	**Consequences of Line Construction Deferment or Termination:**	Potential reliability issues with nearly 100-yr old T-Line (Tidd-Carrollton)
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Glencoe - Speidel 138 kV
2.	**Points of Origin and Termination:**	Glencoe Switch / Speidel Switch
3.	**Right-Of-Way:**	13.5 miles / 100 ft.
4.	**Voltage:**	138 / 69 kV
5.	**Application For Certificate:**	To be Submitted in 2017-18
6.	**Construction:**	To start in 2018 or 2019
7.	**Capital Investment:**	Approx. $20 Million
8.	**Planned Substations:**	Name-South Belmont Switch; Watertower Switch; Lamira Switch; Voltage-138; Acreage-; Location-
9.	**Supporting Structures:**	Steel Poles, single circuit on double circuit construction
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Support area shale load growth and other system upgrades. Replace deteriorated 69 kV facilities.
12.	**Consequences of Line Construction Deferment or Termination:**	Continuing to serve area shale growth and obtaining outages for other required upgrades both become increasingly difficult.
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Harrison-Circleville #1
2.	**Points of Origin and Termination:**	Harrison / Circleville
3.	**Right-Of-Way:**	15.2 miles / 100 ft / Harrison-Circleville
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	If required, to be filed in 2014-2015
6.	**Construction:**	To be completed approx. 2017
7.	**Capital Investment:**	Approx. $16 million (both circuits)
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased area capacity.
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Harrison-Circleville #2
2.	**Points of Origin and Termination:**	Harrison / Circleville
3.	**Right-Of-Way:**	15.2 miles / 100 ft / Harrison-Circleville
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	If required, to be filed in 2014-2015
6.	**Construction:**	To be completed approx. 2017
7.	**Capital Investment:**	Approx. $16 million (both circuits)
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased area capacity.
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Harrison (Csp) - Lemaster (Existing circuitHarrison (Csp) - Poston 138 kV circuit renamed due to Poston station being replaced by Lemaster station.)
2.	**Points of Origin and Termination:**	Lemaster /Harrison
3.	**Right-Of-Way:**	54.36/100ft, 1 circuit
4.	**Voltage:**	138 kV/ 138 kV
5.	**Application For Certificate:**	LON to be filed in Spring 2017.
6.	**Construction:**	Station construction to start in 2017. Line construction to start in 2018.
7.	**Capital Investment:**	Approx: $0.803 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	TBD
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	To terminate in the new Lemaster station.
12.	**Consequences of Line Construction Deferment or Termination:**	Will not connect to new Lemaster station.
13.	**Miscellaneous**	Line relocation to connect to the new Lemaster station that will replace Posotn station.

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Herlan-Blue Racer 138kV
2.	**Points of Origin and Termination:**	Herlan Switch & Blue Racer
3.	**Right-Of-Way:**	3.2 miles / 100 ft / 1 circuit
4.	**Voltage:**	138kV / 138kV
5.	**Application For Certificate:**	Application filed Jan. 2017
6.	**Construction:**	Estimated completion 2019
7.	**Capital Investment:**	Approx. $7M
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Single Pole, single circuit
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased customer loads; resolves PJM baseline reliability concerns
12.	**Consequences of Line Construction Deferment or Termination:**	PJM RTEP planning critera violations, reduced reliability to major industrial customers
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Hocking - Lemaster (Existing circuit Hocking - Poston 138 kV circuit renamed due to Poston station being replaced by Lemaster station.)
2.	**Points of Origin and Termination:**	Lemaster /Hocking
3.	**Right-Of-Way:**	15.65/100ft, 1 circuit
4.	**Voltage:**	138 kV/ 138 kV
5.	**Application For Certificate:**	LON to be filed in Spring 2017.
6.	**Construction:**	Station construction to start in 2017. Line construction to start in 2018.
7.	**Capital Investment:**	Approx: $0.957 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	TBD
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	To terminate in the new Lemaster station.
12.	**Consequences of Line Construction Deferment or Termination:**	Will not connect to new Lemaster station.
13.	**Miscellaneous**	Line relocation to connect to the new Lemaster station that will replace Posotn station.

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Hopetown-Delano
2.	**Points of Origin and Termination:**	Proposed Hopetown Station / Delano
3.	**Right-Of-Way:**	5.5 miles / 100 ft / Hopetown-Delano
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	Submitted
6.	**Construction:**	To be completed approx. 2018
7.	**Capital Investment:**	Approx. $5.5 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased area capacity.
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	June Road Extension (connect to Tidd-Wagenhals 138kV)
2.	**Points of Origin and Termination:**	June Road Station, in-and-out loop (Malvern)
3.	**Right-Of-Way:**	600-700 feet / 100 ft / 2 circuits
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	LON or Construction Notice in 2017
6.	**Construction:**	Est. to start in 2nd half of 2017
7.	**Capital Investment:**	$400,000
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Steel Poles
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Connect to future upgraded 138/69/12kV T & D station
12.	**Consequences of Line Construction Deferment or Termination:**	Inability to connect to new greenfield transmission & distribution station
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Lamping-Devola 138kV
2.	**Points of Origin and Termination:**	Lamping (proposed) / Devola (proposed)
3.	**Right-Of-Way:**	24 miles / 100 ft. / 1 circuit
4.	**Voltage:**	138kV / 138kV
5.	**Application For Certificate:**	Initial leg (Lamping-Rouse) submitted Dec 2016; other segments will be submitted in 2017-18
6.	**Construction:**	To be completed approx. June 2021
7.	**Capital Investment:**	Approx. $25 million
8.	**Planned Substations:**	Name-Rouse Switch, Bell Ridge Switch: Voltage-138kV; Acreage-0.0 (switch pole); Location-Washington County
9.	**Supporting Structures:**	Steel H-frames with single circuit
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Improved area reliability, replacing failing 23kV system; serve Washington Electric Co-op substations
12.	**Consequences of Line Construction Deferment or Termination:**	Continued poor reliability in the Marietta area
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Logtown-North Delphos 138kV, 24385
2.	**Points of Origin and Termination:**	Logtown-North Delphos
3.	**Right-Of-Way:**	17.0 mi / 130 / double ckt
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	LON, 2017
6.	**Construction:**	To be completed approx. 2/28/20
7.	**Capital Investment:**	$28.2M for both circuits
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead, Steel, Pole
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Rebuild of existing line for rehabilitation.
12.	**Consequences of Line Construction Deferment or Termination:**	Continued deterioration and reduced reliability.
13.	**Miscellaneous**	Haviland-North Delphos line rebuild

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Lowell 138 kV extension
2.	**Points of Origin and Termination:**	Lowell / Macksburg - Highland Ridge Switch 138 kV
3.	**Right-Of-Way:**	3.5 miles / 100 ft / 1 circuit
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	To be sumbitted 2017 or 2018
6.	**Construction:**	To be completed approx. Fall 2020
7.	**Capital Investment:**	Approx $ 4 M
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Single steel poles with single circuit
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Increased area reliability
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Macksburg - Highland Ridge Switch 138 kV
2.	**Points of Origin and Termination:**	Macksburg / Highland Ridge Switch
3.	**Right-Of-Way:**	11.3 miles / 100 ft / 1 circuit
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	Approx February 2016
6.	**Construction:**	To be completed approx. 2019-20
7.	**Capital Investment:**	Approx $30 M
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Single steel poles with single circuit
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Increased area reliability
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Miles Avenue Extension (connect to S. Canton-W. Canton #2 138kV)
2.	**Points of Origin and Termination:**	Miles Avenue Station, in-and-out loop (Canton)
3.	**Right-Of-Way:**	325 feet / 100 / 2 circuits
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	Construction Notice filed Nov. 2016
6.	**Construction:**	Estimated construction to be Fall 2017 - Spring 2018
7.	**Capital Investment:**	$420,000
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Steel Poles
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Serve AEP distribution station with improved reliability; retire switch in residential backyard
12.	**Consequences of Line Construction Deferment or Termination:**	Continued inaccessibility of AEP transmission facilities; risk of reliability problems
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	North Delphos - Sterling, 24386
2.	**Points of Origin and Termination:**	North Delphos-Sterling
3.	**Right-Of-Way:**	15.4 mi / 100 / double ckt
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	LON, 2017
6.	**Construction:**	To be completed approx. 12/18/20
7.	**Capital Investment:**	$28.9M for both circuits
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead, Steel, Pole
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Rebuild of existing line for rehabilitation.
12.	**Consequences of Line Construction Deferment or Termination:**	Continued deterioration and reduced reliability.
13.	**Miscellaneous**	Haviland-North Delphos & North Delphos-Rockhill line rebuilds

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Northeast Canton Extension (connect to Wagenhals-W. Canton 138kV)
2.	**Points of Origin and Termination:**	NE Canton Station, in-and-out loop (Canton)
3.	**Right-Of-Way:**	200-300 feet / 100 ft / 2 circuits
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	LON or Construction Notice in late 2017 or 2018
6.	**Construction:**	Est. to start in 2018
7.	**Capital Investment:**	$200,000
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Steel Poles
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Serve AEP distribution station with improved reliability
12.	**Consequences of Line Construction Deferment or Termination:**	Continued deterioration of substation and reduced reliability for area customers.
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Philo Sw - Crooksville
2.	**Points of Origin and Termination:**	Philo Sw / Crooksville
3.	**Right-Of-Way:**	0.5 miles / 100 ft / Philo Sw. - Crooksville
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	To be filed in 2015-2016
6.	**Construction:**	To be filed in 2015-2016
7.	**Capital Investment:**	Approx. $1.05 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	PJM identified voltage deviations in 2017 for the Muskingum Area.
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Philo Sw - North Muskingum
2.	**Points of Origin and Termination:**	Philo Sw / North Muskingum
3.	**Right-Of-Way:**	0.5 miles / 100 ft / Philo Sw. - North Muskingum
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	To be filed in 2015-2016
6.	**Construction:**	To be filed in 2015-2016
7.	**Capital Investment:**	Approx. $1.05 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	PJM identified voltage deviations in 2017 for the Muskingam Area.
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Rockhill - West Lima, 743
2.	**Points of Origin and Termination:**	Rockhill-West Lima
3.	**Right-Of-Way:**	3.0 mi / 100 / double ckt
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	LON, 2017
6.	**Construction:**	To be completed approx. 12/18/20
7.	**Capital Investment:**	$5.6M for both circuits
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Overhead, Steel, Pole
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Rebuild of existing line for rehabilitation.
12.	**Consequences of Line Construction Deferment or Termination:**	Continued deterioration and reduced reliability.
13.	**Miscellaneous**	North Delphos-Rockhill line rebuild

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	South Caldwell - Macksburg 138kV
2.	**Points of Origin and Termination:**	South Caldwell / Macksburg
3.	**Right-Of-Way:**	11.3 miles / 100 ft / 1 circuit
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	Approx. February 2016
6.	**Construction:**	To be completed approx. June 2018
7.	**Capital Investment:**	Approx. $16 million
8.	**Planned Substations:**	Name-South Olive Switch (proposed); Voltage-138 kV; Acreage-0.1; Location-Dexter City, Ohio (Noble County)
9.	**Supporting Structures:**	Single steel poles with single circuit
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Increase area reliability
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	South Kenton - West Mount Vernon, 748
2.	**Points of Origin and Termination:**	South Kenton - West Mount Vernon
3.	**Right-Of-Way:**	59.1 mi / 100 / single ckt
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	LON, 2017
6.	**Construction:**	Target completion 12/1/2020
7.	**Capital Investment:**	$70,319,000
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Steel Poles
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Rebuild of existing line for rehabilitation.
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced reliability as line continues to deteriorate
13.	**Miscellaneous**	Line Rebuild largely in existing ROW

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Speidel - Summerfield 138 kV
2.	**Points of Origin and Termination:**	Speidel / Summerfield
3.	**Right-Of-Way:**	19.5 miles / 100 ft.
4.	**Voltage:**	138 / 69 kV
5.	**Application For Certificate:**	Application submitted in 2016; approved by OPSB Feb 2017
6.	**Construction:**	To start in 2017
7.	**Capital Investment:**	Approx. $30 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Steel Poles, single circuit on double circuit construction
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Support area shale load growth and other system upgrades. Replace deteriorated 69 kV facilities.
12.	**Consequences of Line Construction Deferment or Termination:**	Continuing to serve area shale growth and obtaining outages for other required upgrades both become increasingly difficult.
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Summerfield-Blue Racer 138kV
2.	**Points of Origin and Termination:**	Summerfield & Blue Racer
3.	**Right-Of-Way:**	3.5 miles / 100 ft / 1 circuit
4.	**Voltage:**	138kV / 138kV
5.	**Application For Certificate:**	Estimated filing in 2017-18
6.	**Construction:**	Estimated completion 2020
7.	**Capital Investment:**	Approx. $7M
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Single Pole, single circuit
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased customer loads; replace deteriorated wood pole line
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced reliability due to limited thermal ratings and line deterioration.
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Tidd-Gable 138kV
2.	**Points of Origin and Termination:**	Tidd / Gable
3.	**Right-Of-Way:**	5.8 mles / 100 ft / 1 circuit
4.	**Voltage:**	138 kV/138 kV
5.	**Application For Certificate:**	LON filed Sept 2016 & approved
6.	**Construction:**	Est. completion in 2018
7.	**Capital Investment:**	Approx. $10 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Steel poles, 6-wired single circuit
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Provide 138kV transmission outlet from Tidd station (Cardinal power plant); rebuild of existing line
12.	**Consequences of Line Construction Deferment or Termination:**	Potential reliability issues with nearly 100-yr old T-Line (Tidd-Carrollton)
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Ware Road-Waverly 138kV, 18299
2.	**Points of Origin and Termination:**	Ware Road-Waverly
3.	**Right-Of-Way:**	7.65 miles, 100 feet, single
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	TBD
6.	**Construction:**	To be completed approx. 2019
7.	**Capital Investment:**	Approx. $8 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	overhead, wood
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased area capacity.
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability
13.	**Miscellaneous**	Line Rebuild

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	West Bellaire - Glencoe 138 kV
2.	**Points of Origin and Termination:**	West Bellaire / Glencoe Switch
3.	**Right-Of-Way:**	5.8 miles / 100 ft. / 2 circuits (1 @ 69kV, 1 @ 138kV)
4.	**Voltage:**	#1: 138 / 138 kV; #2: 138 / 69 kV
5.	**Application For Certificate:**	Application submitted Jan 2017
6.	**Construction:**	To start in 2018
7.	**Capital Investment:**	Approx. $13M
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Steel Poles, double circuit construction
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Solve PJM identified thermal and voltage violations.
12.	**Consequences of Line Construction Deferment or Termination:**	Identified violations would persist.
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Yager-Desert Road 69kV (138kV design)
2.	**Points of Origin and Termination:**	Yager (proposed) / Desert Road
3.	**Right-Of-Way:**	6.8 miles / 100 ft / 1 circuit 6-wired
4.	**Voltage:**	138 kV / 69 kV
5.	**Application For Certificate:**	Application filed July 2016
6.	**Construction:**	To be completed approx. May 2018
7.	**Capital Investment:**	Approx. $14 million
8.	**Planned Substations:**	Name-West Bowerston Switch; Voltage-138kV (operated at 69kV; Acreage-0.0 (switch pole); Location-Bowerston, Ohio (Harrison County)
9.	**Supporting Structures:**	Single steel poles with single circuit 6-wired
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased customer loads; PJM baseline RTEP upgrade
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability, load curtailed at industrial customers
13.	**Miscellaneous**	N/A

PUCO FORM FE-T9
AEP OHIO TRANSMISSION COMPANY
SPECIFICATION OF PLANNED ELECTRIC TRANSMISSION LINES

1.	**Line Name and Number:**	Yager-Leesville 138kV
2.	**Points of Origin and Termination:**	Yager - Leesville
3.	**Right-Of-Way:**	4.0 miles / 100 ft / 1 circuit
4.	**Voltage:**	138 kV / 138 kV
5.	**Application For Certificate:**	LON filed August 2016
6.	**Construction:**	To be completed approx. August 2017
7.	**Capital Investment:**	Approx. $11 million
8.	**Planned Substations:**	Name-N/A; Voltage-N/A; Acreage-N/A; Location-N/A
9.	**Supporting Structures:**	Steel H-frames with single circuit
10.	**Participation with Other Utilities:**	N/A
11.	**Purpose of the Planned Transmission Line**	Area reliability/serve increased customer loads
12.	**Consequences of Line Construction Deferment or Termination:**	Reduced area reliability, load curtailed at industrial customers
13.	**Miscellaneous**	N/A

PUCO FORM FE-T10
AEP OHIO TRANSMISSION COMPANY
SUMMARY OF PROPOSED SUBSTATIONS

Substation Name	Voltage(s) (kV)	Type Distribution (D) Transmission (T)	Timing	Line Association(s)	Line Existing or Proposed	Minimum Substation Site Acreage
Berrywood Station	138 kV/69 kV	T	est - 12/2018	Trent - Delaware 138 kV	Existing	Approx 3 acres
Clouse	138/69 kV	T	Estimated 12/1/2018	West Lancaster - Zanesville 138 kV ckt; New Lexington - South Fultonham 69 kV ckt	Existing	Approx. 6 acres
Cole Station	345/138 kV	T	Estimated Fall 2017	Beatty - Hayden 345 kV & Amlin - Cole 138 kV	Existing & Proposed	Approx 10 acres
Devola	138 kV	T	Estimated Oct. 2019	Devola - Highland Ridge Switch 138 kV; Devola - Mill Creek 138 kV; Lamping-Devola 138kV	Proposed & Existing	Approx 6 acres
Dilles Bottom	138/12 kV	T and D	Est. 2018-2019	George Washington-Dilles Bottom 138kV & Dilles Bottom-Holloway 138kV	Proposed	Approx. 4 acres
Gable Switch	138kV	T and D	Estimated August 2017	Carrollton-Tidd 138kV; Gable-South Cadiz 138kV	Proposed	Approx. 2-3 acres
Glencoe Switch (rebuild of existing Ohio Power station)	138/69kV	T	Est. Mar. 2019	Proposed: West Bellaire-Glencoe 138kV, Glencoe-Speidel 138kV (operated at 69kV); Existing: Glencoe-Robyville 69kV; Glencoe-Dillonvale 69kV; Glencoe-Somerton 69kV	Existing & Proposed	Approx. 4 acres
Heppner	138/69kV	T	Est. Fall 2017	Berlin-Lick-Ross 138kV	Proposed	Approx. 3 acres
Herlan Switch	138kV	T	Est. June 2019	Herlan-Blue Racer 138 kV (proposed); S. Caldwell-Herlan; Summerfield-Herlan; Herlan-Natrium #1; Herlan-Natrium #2	Proposed & Existing	Approx. 5.0 acres
Highland Ridge Switch	138 kV	T	Estimated Fall 2020	Macksburg - Highland Ridge Switch 138 kV	Proposed	Approx 0.2 acres
Ironman	138/69kV	T	Est. Fall 2017	Berlin-Lick-Ross 138kV	Proposed	Approx. 3 acres
June Road (previously listed as Malhorn)	138/69/12kV	T and D	Est. Dec. 2017	Tidd-Wagenhals 138kV; East Sparta-Malvern 69kV; Malvern-Pekin 69kV	Existing	Approx. 4 acres
Lamping	345/138kV	T	Est. June 2018	Muskingum-Kammer 345kV (existing); Lamping-Devola 138kV (proposed)	Existing & Proposed	Approx. 8 acres
Lemaster	138/12kV	T and D	Estimated 6/1/2018	Poston - Ross 138 kV; Poston - Harrison 138 kV; Poston - Hocking 138 kV; Crooksville - Poston - Strouds Run 138 kV; Corwin - Elk - Poston 138 kV; Dexter - Elliot - Poston 138 kV	Existing	Approx 10 acres
Lowell	138 kV	T	Estimated Fall 2020	Macksburg - Highland Ridge Switch 138 kV; Lowell 138 kV extension	Proposed	Approx 0.2 acres
Macksburg	138 kV	T	Estimated Fall 2018	Macksburg - Highland Ridge Switch 138 kV	Proposed	Approx 0.2 acres
Malaga Switch	138kV	T	Est 2021-2023	Muskingum-Somerton-Natrium 138 kV & Summerfield-Somerton-Natrium 138 kV	Existing	Approx. 2-4 acres
Neville Sw	138 kV	T	Estimated Fall 2016	Delano - Scioto Trail 138 kV	Existing	N/A (PH/PH)
Northeast Canton (full or partial rebuild of existing Ohio Power station)	138/69/12kV	T and D	Est. completion in 2018-19	Wagenhals-West Canton 138kV; various 69kV circuits	Existing	Existing: approx. 4 cres
Parlett Switch	69kV (built to 138kV standards)	T	Estimated June 2018	South Cadiz-Parlett 69kV; Dillonvale-Parlett 69kV; Blackhawk-Parlett 69kV	Existing	Approx. 2 acres

PUCO FORM FE-T10
AEP OHIO TRANSMISSION COMPANY
SUMMARY OF PROPOSED SUBSTATIONS

Substation Name	Voltage(s) (kV)	Type Distribution (D) Transmission (T)	Timing	Line Association(s)	Line Existing or Proposed	Minimum Substation Site Acreage
Rhodes	138 kV/69 kV	T	Estimated 2018-2019	Corwin-Lick 138kV	Existing	Approx. 5 acres
Saxony	138 kV	T	Estimated Spring 2018	East Leipsic - Yellow Creek 138 kV	Existing	Approx. 2.5 acres
South Olive Switch	138 kV	T	Estimated Fall 2018	South Caldwell - Macksburg 138 kV	Proposed	Approx 0.2 acres
Sumac Station	138 kV	T	Estimated Spring 2017	Amlin-Sumac #1	Existing, Not Energized	Approx 3 acres
Sumac Station	138 kV	T	Estimated Spring 2017	Amlin-Sumac #2	Existing, Not Energized	Approx 3 acres
Tuscany	138 kV	T	Estimated Fall 2017	Delano - Scioto Trail 138 kV	Existing	Approx. 2.5 acres

APPENDIX

List of Libraries

ADAMS COUNTY PUBLIC LIBRARY
212 E SPARKS ST
WEST UNION OH 45693-1257

ATHENS CO PUBLIC LIBRARY
95 W WASHINGTON
NELSONVILLE OH 45764-1134

BROWN COUNTY PUBLIC LIBRARY
613 S HIGH ST
P O BOX 527
MT ORAB OH 45154

COSHOCTON PUBLIC LIBRARY
655 MAIN ST
COSHOCTON OH 43812-1697

DEFIANCE PUBLIC LIBRARY
320 FORT ST
DEFIANCE OH 43512-2186

CARNEGIE PUBLIC LIBRARY
127 S NORTH ST
WASHINGTON CH OH 43160-2283

GUERNSEY CO PUBLIC LIBRARY
800 STEUBENVILLE AVE
CAMBRIDGE OH 43725-8590

PUSKARICH PUBLIC LIBRARY
200 E MARKET ST
CADIZ OH 43907-1185

LOGAN-HOCKING CO LIBRARY
230 E MAIN ST
LOGAN OH 43138-1356

LIMA PUBLIC LIBRARY
650 W MARKET ST
LIMA OH 45801-4678

AUGLAIZE CO PUBLIC LIBRARY
203 S PERRY ST
WAPAKONETA OH 45895-1999

CARROLL CO DISTRICT LIBRARY
70 SECOND ST NE
CARROLLTON OH 44615-1326

BUCYRUS PUBLIC LIBRARY
200 E MAINSFIELD ST
BUCYRUS OH 44820-2381

DELAWARE COUNTY LIBRARY
84 E WINTER ST
DELAWARE OH 43015-1941

COLUMBUS METRO LIBRARY
96 S GRANT AVE
COLUMBUS OH 43215-4702

FINDLAY HANCOCK COUNTY PUBLIC DISTRICT LIBRARY
206 BROADWAY ST
FINDLAY OH 45840-3382

PATRICK HENRY SCHOOL DISTRICT PUBLIC LIBRARY
208 N EAST AVE
DESHLER OH 43516-1280

HOLMES CO PUBLIC LIBRARY
3102 GLEN DR
MILLERSBURG OH 44654-1397

ASHLAND CO PUBLIC LIBRARY
224 CLAREMONT AVE
ASHLAND OH 44805-3093

ST CLAIRSVILLE PUBLIC LIBRARY
108 W MAIN ST
ST CLAIRSVILLE OH 43950-1225

CARNEGIE PUBLIC LIBRARY
219 E FOURTH ST
EAST LIVERPOOL OH 43920-3143

GREENVILLE PUBLIC LIBRARY
520 SYCAMORE ST
GREENVILLE OH 45331-1438

FAIRFIELD CO DISTRICT LIBRARY
219 N BROAD ST
LANCASTER OH 43130-3098

DR SAMUEL L BOSSARD MEMORIAL LIBRARY
7 SPRUCE ST
GALLIPOLIS OH 45631-1220

MARY LOU JOHNSON-HARDIN CO DISTRICT PUBLIC LIBRARY
325 E COLUMBUS ST
KENTON OH 44326-1546

HIGHLAND CO DISTRICT LIBRARY
10 WILLETTSVILLE PIKE
HILLSBORO OH 45133-8524

HURON CO COMMUNITY LIBRARY
6 W EMERALD ST
WILLARD OH 44890-1610

JACKSON CITY LIBRARY
21 BROADWAY ST
JACKSON OH 45640-1610

BRIGGS LAWRENCE COUNTY PUBLIC LIBRARY
321 S 4th ST
IRONTON OH 45638-1613

HURT/BATTELLE MEM LIBRARY
270 LILLY CHAPEL RD
WEST JEFFERSON OH 43162-1202

MONROE CO DISTRICT LIBRARY
96 HOME AVE
WOODSVILLE OH 43793-1232

MUSKINGUM CO LIBRARY SYSTEM
220 N FIFTH ST
ZANESVILLE OH 43701-2508

PERRY CO DISTRICT LIBRARY
117 S JACKSON ST
NEW LEXINGTON OH 43764-1368

PUTNAM CO DISTRICT LIBRARY
136 PUTNAM PARKWAY
OTTAWA OH 45875

BIRCHARD PUBLIC LIBRARY OF SANDUSKY COUNTY
423 CROGHAN ST
FREMONT OH 43420-2499

STARK COUNTY DISTRICT LIBRARY
715 MARKET AVE N
CANTON OH 44702-1018

MARYSVILLE PUBLIC LIBRARY
231 S PLUM ST
MARYSVILLE OH 43040-1596

PUBLIC LIBRARY OF STEUBENVILLE & JEFFERSON CO
407 S 4TH ST
STEUBENVILLE OH 43952-2942

LICKING COUNTY LIBRARY
101 W MAIN ST
NEWARK OH 43055-5054

MARION PUBLIC LIBRARY
445 E CHURCH ST
MARION OH 43302-4290

KATE LOVE-SIMPSON MORGAN COUNTY LIBRARY
358 E MAIN ST
MCCONNELSVILLE OH 43756-1130

CALDWELL PUBLIC LIBRARY
517 SPRUCE ST
CALDWELL OH 43724-1289

PICKAWAY CO PUBLIC LIBRARY
1160 N COURT ST
CIRCLEVILLE OH 43113-1304

MANSFIELD-RICHLAND CO LIBRARY
43 W THIRD ST
MANSFIELD OH 44902-1218

PORTSMOUTH PUBLIC LIBRARY
1220 GALLIA ST
PORTSMOUTH OH 45662-4185

AKRON-SUMMIT PUBLIC LIBRARY
60 S HIGH ST
AKRON OH 44326

BRUMBACK LIBRARY
215 W MAIN ST
VAN WERT OH 45891-1695

PUBLIC LIBRARY OF MT VERNON & KNOX CO
201 N MULBERRY ST
MT VERNON OH 43050-2413

LOGAN COUNTY LIBRARIES
220 N MAIN ST
BELLEFONTAINE OH 43311-2228

MEIGS CO DISTRICT LIBRARY
216 W MAIN ST
POMEROY OH 45769-1032

MT GILEAD FREE PUBLIC LIBRARY
41 E HIGH ST
MT GILEAD OH 43338-1429

PAULDING CO CARNEGIE LIBRARY
205 S MAIN ST
PAULDING OH 45879-1492

GARNET A WILSON PUBLIC LIBRARY OF PIKE COUNTY
207 N MARKET ST
WAVERLY OH 45690-1138

CHILLICOTHE AND ROSS COUNTY PUBLIC LIBRARY
140-146 S PAINT ST
P O BOX 185
CHILLICOTHE OH 45601

TIFFIN-SENECA PUBLIC LIBRARY
77 JEFFERSON ST
TIFFIN OH 44883-2399

TUSCARAWAS CO PUBLIC LIBRARY
121 FAIR AVE NW
NEW PHILADELPHIA OH 44663

HERBERT WESCOAT MEM LIBRARY
120 N MARKET ST
MCARTHUR OH 45651-1297

WASHINGTON CO PUBLIC LIBRARY
615 FIFTH ST
MARIETTA OH 45750-1973

WAYNE CO PUBLIC LIBRARY
220 W LIBERTY ST
WOOSTER OH 44691-3514

WOOD COUNTY PUBLIC LIBRARY
251 N MAIN ST
BOWLING GREEN OH 43402-2477

UPPER SANDUSKY COMM LIBRARY
301 N SANDUSKY AVE
UPPER SANDUSKY OH 43351-1139

Summary: Report -2017 Long-Term Forecast Report on behalf of AEP Ohio Transmission Company, Inc. electronically filed by Mr. Steven T Nourse on behalf of AEP Ohio Transmission Company

Appendix 6-1. Public Officials Contacted and Officials to be Served a Copy of the Certified Application

OFFICE	ATTENTION	ADDRESS	CITY	STATE	ZIP
Chillicothe & Ross County Public Library - Main Library	Mr. James Hill, Director	140 S. Paint Street	Chillicothe	Ohio	45601
Chillicothe & Ross County Public Library - Richmond Dale Branch	Mr. James Hill, Director	770 Main Street	Richmond Dale	Ohio	45673
Ross County Board of Commissioners	Mr. Doug Corcoran, Mr. Steve Neal, Mr. Dwight Garrett	2 North Paint Street, Suite H	Chillicothe	Ohio	45601
Ross County Engineer	Mr. Charles R. Ortman	755 Fairgrounds Road, PO Box 458	Chillicothe	Ohio	45601
Ross County Soil & Water Conservation District	Mr. Mark Ault	475 Western Avenue, Suite H	Chillicothe	Ohio	45601
Mayor Luke Feeney	City of Chillicothe	35 South Paint Street	Chillicothe	Ohio	45601
Councilman Bruce A. Arnold	City of Chillicothe	35 South Paint Street	Chillicothe	Ohio	45601
Scioto Township Trustee	Mr. Paul E. Corcoran	472 Willow Lane	Chillicothe	Ohio	45601
Scioto Township Trustee	Ms. Melissa Jo Butt	9 Timberlane Drive, PO BOX 6351	Chillicothe	Ohio	45601
Scioto Township Trustee	Mr. John K Wetzel	6821 US RT 23	Chillicothe	Ohio	45601
Scioto Township Fiscal Officer	Mr. Willard J Billy Taylor III	9 Shawnee Dr.	Chillicothe	Ohio	45601
Springfield Township Trustee	Mr. Dennis M. Miller	148 Schrake Road	Chillicothe	Ohio	45601
Springfield Township Trustee	Mr. Carmi V Jones IV	2286 Charleston Pl	Chillicothe	Ohio	45601
Springfield Township Trustee	Mr. Chuck Schrader III	2749 Rocky Road	Chillicothe	Ohio	45601
Springfield Township Fiscal Officer	Ms. Carol L Schrader	2749 Rocky Road	Chillicothe	Ohio	45601

Springfield

138 kV Transmission Line Rebuild Project

AEP OHIO
An AEP Company
BOUNDLESS ENERGY™

The proposed Springfield 138 kV Transmission Line Rebuild Project is part of the overall Ross-Jackson Area Improvements Project where AEP Ohio plans to improve the reliability of the electric transmission grid in Ross County and Jackson County by updating aging infrastructure to improve its condition and address performance issues. The project includes upgrading about 5 miles of transmission line. The projected costs of the upgrades are approximately $8 million.

WHAT

Major project components include:

- Upgrading about 5 miles of new transmission line

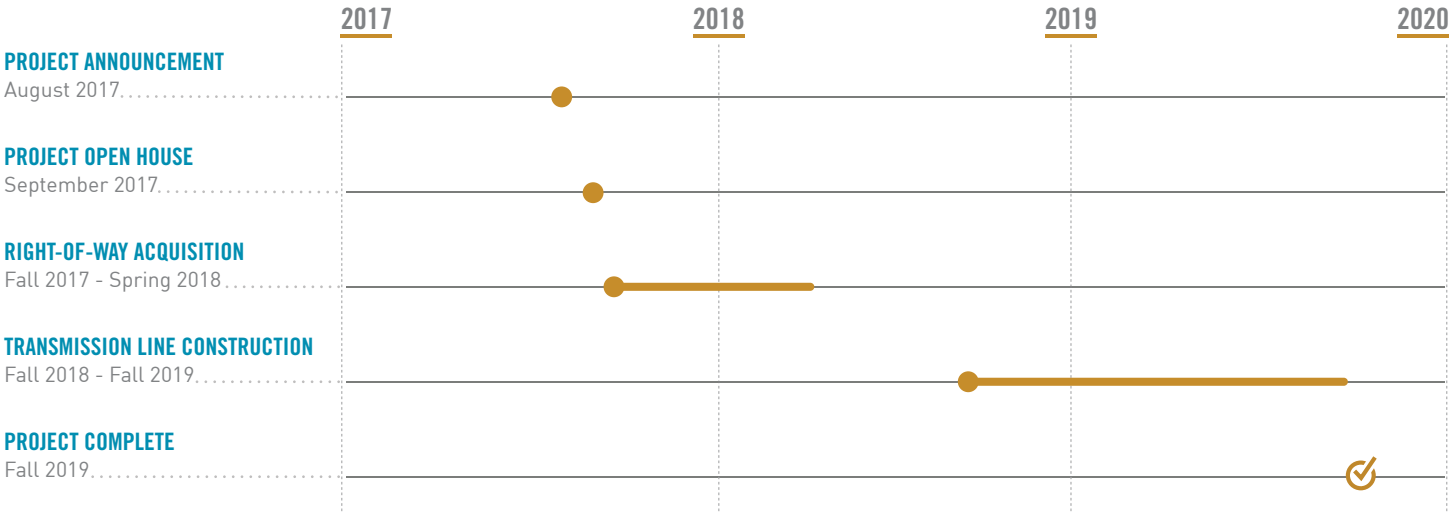
WHY

The existing transmission line has reached an age where it needs to be replaced. Replacing aging equipment with modern structures and wires provides the region with a more reliable power source capable of reducing outages.

WHERE

The Springfield transmission line is about 5 miles long. The line runs through Springfield Township in Ross County.

Project Schedule*



*Timeline is subject to change.

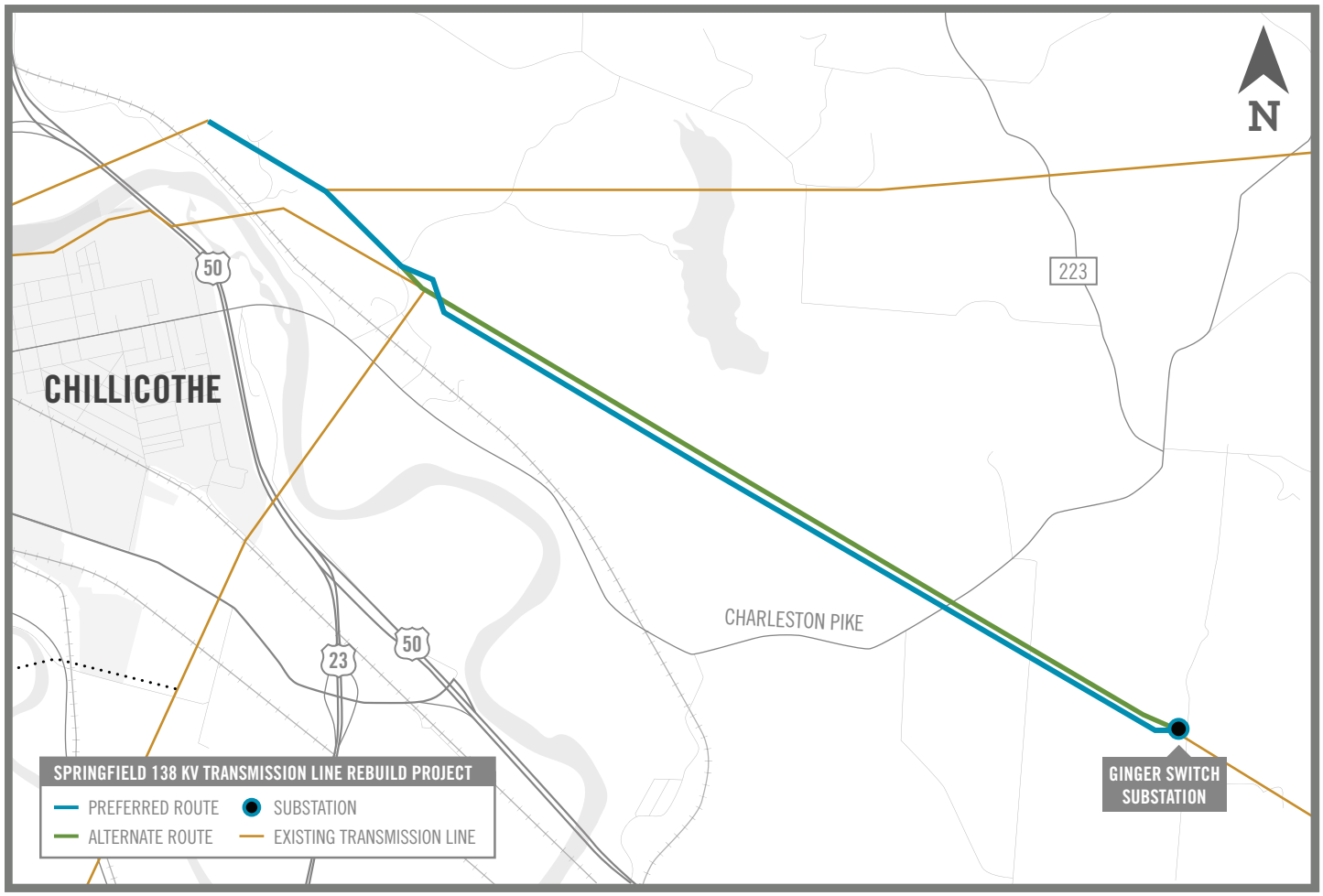
Typical Structures*

Proposed structures will vary depending on location. The project will use several structure types, including steel H-frame and monopoles that will be about 100-feet tall. The structures will be placed in the center of an approximate 100-foot wide right-of-way corridor.

AEP Ohio is committed to meeting the energy needs of customers while protecting the environment and natural beauty of the region.

*Exact structure, height, and right-of-way width may vary

Project Map



AEP Ohio welcomes your feedback regarding this project. Please send comments and questions to:

Contact:

AEP Ohio
c/o Erin Miller
700 Morrison Road
Gahanna, OH 43230

ecmiller1@aep.com

(614) 552-1929 or (877) 215-9261

AEPOhio.com/Springfield

AEP OHIO

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gai consultants

Ecological Survey Report

AEP Ohio Transmission Company
Ross – Ginger 138kV Line Rebuild Project
Ross County, Ohio

GAI Project Number: C170352.10, Task 001

October 2017

AMERICAN ELECTRIC POWER℠

BOUNDLESS ENERGY℠

Prepared by: GAI Consultants, Inc.
Canton Office
3720 Dressler Road Northwest
Canton, Ohio 15120-2700

Prepared for: American Electric Power Service Corporation
1 Riverside Place
22nd Floor
Columbus, Ohio 43215-2373

Ecological Survey Report

AEP Ohio Transmission Company
Ross – Ginger 138kV Line Rebuild Project
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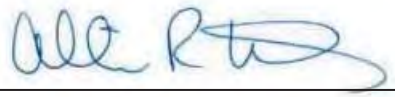
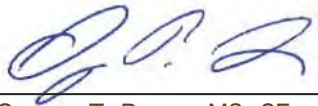
Report Authors:



Allison R. Wheaton, WPIT
Senior Project Environmental Specialist



George T. Reese, MS, CE
Environmental Director

Table of Contents

1.0 Introduction

GAI Consultants, Inc. (GAI), on behalf of American Electric Power Ohio Transmission Company (AEP), completed an ecological survey for the Ross – Ginger 138kV Line Rebuild Project (Project) located in Ross County, Ohio (OH). The Project involves rebuilding approximately 4.8 miles of existing 69 kilovolt (kV) transmission line to a 138 kV transmission line between the Ross Substation and Ginger Switch Station.

Ecological surveys were completed on May 18 and 23, 2017, July 31, 2017, and August 1-3, 2017. The study area consisted of a 400-foot-wide corridor centered along the existing transmission line, as shown on Figure 1.

The Project study area is located within the Lick Run-Scioto River (United States Geological Survey [USGS] Hydrologic Unit Code [HUC] #050600020503), Dry Run (HUC #050600021002), and Lick Run-Walnut Creek (HUC #050600021004) watersheds.

This report details the results of the ecological surveys regarding the existence of aquatic resources within the Project study area (Figure 2). The United States Army Corps of Engineers (USACE) Wetland Determination Data Forms are provided in Appendix B. Ohio Environmental Protection Agency (OEPA) Primary Headwater Habitat Evaluation (HHEI) Data Forms are provided in Appendix C and Ohio Rapid Assessment Method for Wetlands (ORAM) Data Forms are provided in Appendix D.

2.0 Methods

2.1 Wetlands

The 1987 USACE *Corps of Engineers Wetlands Delineation Manual* (Wetlands Delineation Manual) (USACE, 1987), the 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, Version 2.0*, and the 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region, Version 2.0* (Regional Supplements) (USACE, 2010, 2012) describe the methods used to identify and delineate wetlands that fall under the jurisdiction of the USACE. This approach recognizes the three parameters of wetland hydrology, hydrophytic vegetation, and hydric soils to identify and delineate wetland boundaries. In accordance with the Wetlands Delineations Manual and Regional Supplements, GAI completed preliminary data gathering and on-site inspections.

2.1.1 Preliminary Data Gathering

The preliminary data gathering was used to compile and review information that may be helpful in identifying wetlands and/or areas that warrant further inspection during the investigation. The preliminary data gathering included a review of the following:

- USGS 7.5-minute topographic mapping for Londonderry (USGS, 1963) and Chillicothe East (USGS, 1985), OH (Figure 1);
- United States Fish and Wildlife Service (USFWS), National Wetlands Inventory (NWI) mapping (USFWS, 2017) (Figure 2);
- Federal Emergency Management Agency (FEMA), National Flood Hazard Layer (FEMA, 2015) (Figure 2); and
- United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS, 2015) soil mapping (Figure 2).

Topographic mapping was used to identify mapped streams and the overall shape of the landscape in the Project area to determine potential locations for wetlands, such as floodplains

and depressions. NWI mapping was used to determine locations where probable wetlands are located based on infrared photography. Soil mapping was reviewed to determine the location and extent of mapped hydric soils that have a high probability of containing wetlands.

2.1.2 Onsite Inspection

The methodology described in the Regional Supplements identifies areas meeting the definition of a wetland by evaluating three parameters: hydrology, vegetation, and soil. During the on-site inspection, GAI staff traversed the Project study area on foot to determine if any indicators of wetlands were present. When indicators of wetlands were observed, an observation point was established and a Wetland Determination Data Form (Data Form) was completed to determine if all three wetland indicators were present.

The presence of wetland hydrology was determined by examining the observation point for primary and secondary indicators of wetland hydrology. The presence of any primary indicator signified the presence of wetland hydrology or the presence of two or more secondary indicators signified the presence of wetland hydrology.

Vegetation was characterized by four different strata. This included trees (woody plants, excluding vines, three inches or more in diameter at breast height [DBH]), saplings/shrubs (woody plants, excluding vines, less than three inches DBH and greater than or equal to 3.28 feet tall), herbs (non-woody plants, regardless of size, and all other plants less than 3.28 feet tall), and woody vines (greater than 3.28 feet tall). In general, trees and woody vines were sampled within a thirty-foot (30') radius, saplings and shrubs were sampled within a fifteen-foot (15') radius, and herbs were sampled within a five-foot (5') radius.

When evaluating an area for the presence of hydrophytes, classification of the indicator status of vegetation was based on *The National Wetland Plant List: 2016 Update of Wetland Ratings* (Lichvar et al., 2016). The list of possible indicator statuses for plants is as follows:

- Obligate Wetland (OBL) - Obligate Wetland plants occur in standing water or in saturated soils;
- Facultative Wetland (FACW) - Facultative Wetland plants nearly always occur in areas of prolonged flooding or require standing water or saturated soils, but may on rare occasions occur in non-wetlands;
- Facultative (FAC) - Facultative plants occur in a variety of habitats, including wetland and mesic to xeric non-wetland habitats, but often occur in standing water or saturated soils;
- Facultative Upland (FACU) - Facultative Upland plants typically occur in xeric or mesic non-wetland habitats, but may frequently occur in standing water or saturated soils; and
- Obligate Upland (UPL) - Obligate Upland plants almost never occur in water or saturated soils.

Presence of hydrophytic vegetation was determined by using a Rapid Test, Dominance Test or Prevalence Index (USACE, 2012). The Rapid Test finds a vegetation community to be hydrophytic if all dominant species are OBL or FACW. Hydrophytic vegetation was considered present based on the Dominance Test if more than 50 percent of dominant species are OBL, FACW, or FAC. The Prevalence Index weighs the total percent of vegetation cover based on the indicator status of each plant. Hydrophytic vegetation was considered present when the Prevalence Index is less than or equal to 3.0.

To determine the presence of hydric soils, soil data was collected by digging a minimum 16-inch soil pit. The soil profile was studied and described, while possible hydric indicators were examined. Soil indicators described in the Wetlands Delineation Manual and Regional Supplements were used to determine the presence of hydric soils. The presence of any of these indicators signified a hydric soil.

If all three parameters including wetland hydrology, a dominance of hydrophytic vegetation, and hydric soils were identified at a single observation point, the area was determined to be a wetland. Once a wetland was identified, the boundary was delineated.

Wetland boundaries were determined by looking for locations in which one of the three wetland indicators would transition into an upland characteristic. When the transition was identified, a Data Form was completed in the Upland Area. Wetland boundaries were then marked in the field using pink flagging labeled "WETLAND DELINEATION." The locations of the flags were recorded using a Global Positioning System (GPS) unit. Each wetland was codified with a unique identifier indicating the feature type and number (e.g., W001).

Wetlands were then classified using the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979) as modified for NWI Mapping Convention. This system classifies wetlands based on topographic position and vegetation type. Palustrine system wetlands found within the study area are classified as Palustrine Emergent (PEM), Palustrine Scrub-Shrub (PSS), Palustrine Forested (PFO), or Palustrine Unconsolidated Bottom (PUB) based on aerial coverage of the vegetative community across the extent of the wetland boundary (Cowardin et al., 1979).

2.2 Waterbodies

As with wetlands, Section 404 of the Clean Water Act (CWA) and state regulations protect waterbodies in OH. Generally, waterbodies are defined as environmental features that have defined beds and banks, an ordinary high water mark (OHWM), and contain flowing or standing water for at least a portion of the year.

2.2.1 Preliminary Data Gathering

During the preliminary data gathering, the USGS 7.5-minute topographic mapping was examined for the presence of mapped waterbodies including perennial and intermittent streams. In addition, the topographic mapping was used to identify areas likely to contain unmapped waterbodies including ephemeral streams (USGS, 1963 and 1985) (Figure 1).

The OEPA Stream Eligibility Web Map was used to determine eligibility coverage under the 401 Water Quality Certification (WQC) for the 2017 Nationwide Permits (NWPs). Furthermore, the map was used to identify any ineligible areas that may require a CWA Section 401 individual permit from the OEPA should stream impacts occur within the Project area (OEPA, 2017) (Figure 3).

2.2.2 Onsite Inspection

During the onsite inspection, GAI staff traversed the study area, concurrently with the wetland inspection, and waterbodies were identified. Waterbodies were identified based on the morphological and hydrologic characteristics of the channel and the presence of aquatic macroinvertebrates.

When a waterbody was identified, field measurements were collected. The measurements included top-of-bank width, top-of-bank depth, pool depth, water depth, OHWM width, and OHWM depth. A detailed description of substrate composition was also recorded. Waterbodies were then delineated using white flagging marked with the GAI stream code (e.g., S001). The

tops-of-bank for streams wider than 10 feet were delineated and the centerline of smaller streams were delineated. The locations of the flags were recorded using a sub-meter capable hand-held GPS unit.

2.3 Rare, Threatened, and Endangered Species

GAI conducted a literature review of potential Rare, Threatened, and Endangered (RTE) species in the vicinity of the Project study area. Potential habitat for RTE species as a result of the literature review was noted during the ecological survey.

2.3.1 Preliminary Data Gathering

A request for review of the Ohio Natural Heritage Database (ONHD) was submitted to the Ohio Department of Natural Resources (ODNR) to determine if any state-listed Threatened or Endangered species occur within a one-mile radius of the Project area. A request was also submitted to the USFWS Ohio Ecological Services Field Office to determine if any federally-listed Threatened or Endangered species occur within the vicinity of the Project area.

2.3.2 Onsite Inspection

During the onsite inspection, GAI staff traversed the study area in conjunction with the wetland and waterbody inspections to determine if suitable habitat for state and/or federally listed RTE species are present within the study area.

3.0 Results

3.1 Wetlands

3.1.1 Preliminary Data Gathering

Desktop review of available USFWS NWI digital data for the Project revealed four NWI mapped wetlands located within the Project study area. One NWI wetland is classified as Palustrine Scrub-Shrub Broad-leaved Deciduous, Temporary Flooded (PSS1A) and corresponds with W007-PFO-CAT2; one is classified as Palustrine Unconsolidated Bottom, Intermittently Exposed, Diked/Impounded (PUBGh) and corresponds with W006-PUB-CAT1; and two are classified as Palustrine Forested, Broad-leaved Deciduous, Temporary Flooded (PFO1A), one of which corresponds with W005-PUB-CATMOD2 and the other corresponds with S001 (USFWS, 2017).

According to the USDA-NRCS soil mapping, a total of 23 soil map units are located within the Project study area (Figure 2). None of the soil map units are classified as hydric and none are known to contain hydric inclusions.

3.1.2 Onsite Inspection

Eight wetlands were identified and delineated within the Project study area, including five PEM wetlands, two PUB wetlands, and one PFO wetland. In order to document site conditions, USACE Data Forms were completed for each wetland and upland reference. Information on the delineated wetlands can be found in Table 1 and photographs of the wetlands are included in Appendix A.

3.1.3 Regulatory Discussion

The USACE guidance divides waterbodies into three groups: Traditionally Navigable Waters (TNWs), non-navigable Relatively Permanent Waters (RPWs), and non-navigable Non-RPWs. TNWs are waterbodies which have been, are, or may be susceptible to use in interstate commerce, including recreational use of the waterbody. RPWs are waterbodies that flow year

round, or at a minimum seasonally, by exhibiting continuous flow for at least three consecutive months, but are not TNWs (USACE, 2007). Non-RPWs are waterbodies that do not flow continuously for at least three consecutive months, are not TNWs or RPWs, but typically exhibit characteristic beds, banks, and OHWM (USACE, 2007).

The status of wetlands is determined partly based on the classification of the waterbody that the wetland is associated with and the degree of that association. Wetlands that abut or are adjacent to TNWs are jurisdictional. Wetlands that abut RPWs are jurisdictional. Wetlands that are adjacent to RPWs and wetlands that abut or are adjacent to Non-RPWs must be subjected to the Significant Nexus Test (SNT) to determine their jurisdictional status. Generally, the USACE considers wetlands that are isolated, meaning that they are not associated with any other surface water feature, as non-jurisdictional; and wetlands that abut or are adjacent to Non-RPWs as needing further examination by the USACE to determine and verify whether they exhibit a significant nexus to waters of the United States. If these wetlands exhibit a significant nexus, they are jurisdictional; if not, they are not subject to USACE jurisdiction.

Wetlands that do not exhibit an association with any surface water are categorized as "isolated" under present USACE guidance and policy. These wetlands are regulated by the OEPA Division of Surface Water and may require an Isolated Wetland Permit.

As regulated by Ohio Administrative Code (OAC) rules 3745-1-50 through 3745-1-54, wetlands were also evaluated using the ORAM to determine the appropriate wetland category. Any wetland score that fell within a gray zone between categories was scored one of two ways. Either the wetland was assigned to the higher of the two categories or it was assessed using a non-rapid method to determine its quality (Mack, 2001). The category assigned to a particular wetland determines the requirement, if any, for additional levels of protection administered by the OEPA.

All wetlands within the study area were identified as jurisdictional. Jurisdictional status is the opinion of GAI and must be confirmed by USACE and state agencies through the Jurisdictional Determination (JD) process.

3.2 Waterbodies

3.2.1 Preliminary Data Gathering

Desktop review of the available USGS topographic mapping revealed six previously mapped stream segments located within the Project study area (Figure 1). Desktop review of OEPA's Stream Eligibility Web Map revealed the majority of the Project is located within an eligible area for automatic 401 WQC coverage. However, the southernmost portion of the Project area near the Ginger Switch Station is located within an ineligible area for automatic 401 coverage (Figure 3).

3.2.2 Onsite Inspection

Thirty-seven stream segments were identified and delineated within the Project study area. Four stream segments were classified as having a perennial flow regime, 16 were classified as intermittent, and 17 were classified as ephemeral. Information on the delineated waterbodies and their classifications can be found in Table 2, and photographs of the identified streams are included in Appendix A.

3.2.3 Regulatory Discussion

As with wetlands, present USACE guidance and policy determines the jurisdictional status of waterbodies identified during the Project. TNWs and RPWs are jurisdictional. Non-RPWs must be subjected to the SNT by USACE to determine their jurisdictional status. If Non-RPWs exhibit a Significant Nexus, as defined in USACE guidance documents, they are jurisdictional. If not, they do not fall under the jurisdiction of the USACE.

Streams are generally defined as environmental features that have defined beds and banks, an OHWM as defined in Regulatory Guidance Letter No. 05-05 (USACE, 2005), and contain flowing or standing waters for at least a portion of the year. Streams were classified as perennial, intermittent, or ephemeral based upon presence of flow, estimated duration of flow, stream bed characteristics, and presence of aquatic biota. The USACE *Jurisdictional Determination Form Instructional Guidebook* (USACE, 2007) was used to determine stream classification and flow status.

As regulated by OAC Chapter 3745-1 and Section 401 WQC, streams were also assessed according to OEPA guidance using either the HHEI for watersheds less than one square mile in size, or the Qualitative Habitat Evaluation Index (QHEI) for watersheds between one and 20 square miles in size.

One stream segment (S001) delineated within the Project study area was identified as Dry Run and another stream segment (S003) was identified as Lick Run. Both of these streams are designated as Warmwater Habitat (WWH) streams by OAC Chapter 3745-1-09. All other stream segments delineated within the Project study area were identified as Unnamed Tributaries (UNTs) to Lick Run and UNTs to the Scioto River.

All stream segments are located within an eligible area for coverage under the 401 WQC for NWPs.

3.3 Rare, Threatened, and Endangered Species

3.3.1 Preliminary Data Gathering

Desktop review of ODNR, Division of Wildlife's Ohio's Listed Species revealed 336 Endangered, Threatened, Species of Concern, and Species of Interest located in OH (ODNR, 2017). Seventeen of the state-listed species are considered federally Endangered, and four are federally Threatened.

A review of the USFWS *County Distribution of Federally Listed Threatened, Endangered, Proposed, and Candidate Species for Ohio*, as well as the USFWS Information for Planning and Consultation (IPaC) website, revealed seven federally Endangered or Threatened species that may occur within the Project study area (USFWS, 2017). The list of species includes the following:

- Clubshell (*Pleurobema clava*) - Endangered;
- Indiana bat (*Myotis sodalis*) - Endangered;
- Northern long-eared bat (*Myotis septentrionalis*) - Threatened;
- Northern riffleshell – (Epioblasma torulosa rangiana;
- Rayed bean (*Villosa fabalis*) - Endangered;
- Running buffalo clover(*Trifolium stoloniferum*) - Endangered; and,
- Snuffbox (*Epioblasma triquetra*) - Endangered.

In addition to the species listed above, there are 21 species of migratory birds that may occur within the Project study area.

3.3.2 Onsite Inspection

Potential habitat for RTE species was evaluated within the Project study area. In general, the habitat encountered within the study area consisted of open agricultural fields (fallow fields, livestock pastures), maintained residential properties, PEM, PFO, and PUB wetlands, and successional mixed deciduous forest. Four perennial, sixteen intermittent, and seventeen ephemeral streams were also identified within the Project study area. Representative photographs of the identified habitat types are included in Appendix A.

3.3.3 Regulatory Discussion

State-listed RTE species fall under the jurisdiction of the ODNR, Division of Wildlife, while federally-listed species are covered under Section 7 of the Endangered Species Act. The Bald and Golden Eagle Protection Act and Migratory Bird Act aim to extend protection to certain bird species that fall under the jurisdiction of the USFWS. Based on the desktop review and on-site inspection, informal consultation with the ODNR and USFWS has been initiated to determine if any activities associated with the proposed Project may affect state- and/or federally-listed RTE species. The ODNR and USFWS consultation letters were submitted on May 16, 2017, and are provided in Appendix E. A response from the USFWS was received on June 05, 2017, and the ODNR response was received on August 25, 2017. Both response letters are also provided in Appendix E.

4.0 Conclusions

Ecological surveys were conducted within the Project study area on May 18 and 23, 2017, July 31, 2017, and August 1-3, 2017. Five PEM wetlands, two PUB wetlands, and one PFO wetland were identified within the Project study area. Thirty-seven stream segments (four perennial, 16 intermittent, and 17 ephemeral) were also identified within the Project study area. Summaries of the delineated aquatic features are provided in Tables 1 and 2, and a map of their locations is depicted on Figure 2. Photographs of the wetland and stream features, as well as current site conditions, are included in Appendix A. Wetland Determination Data Forms documenting the investigation are provided in Appendix B, with HHEI and ORAM Data Forms provided in Appendix C and D, respectively.

The jurisdictional status of these features are considered preliminary and should be confirmed with the USACE and state agencies through the JD process.

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TABLES

Table 1
Wetlands Identified Within the Project Study Area

Wetland I.D.[1]	Latitude[2]	Longitude[2]	Proximal Waterbody	USACE Classification[3]	Cowardin Classification[4]	Size[5] (acres)	ORAM v. 5.0 Score[6]	ORAM Category[7]	Figure 2 (sheet)
W001-PEM-CAT1	39.312845	-82.874361	UNT to Walnut Creek	Jurisdictional; Adjacent	PEM	0.161	21	1	1
W002-PEM-CAT1	39.313466	-82.875732	UNT to Walnut Creek	Jurisdictional; Adjacent	PEM	0.013	29	1	1
W003-PEM-CAT1	39.324304	-82.900328	UNT to Lick Run	Jurisdictional; Abutting	PEM	0.608	29.5	1	3,4
W004-PEM-CAT1	39.326426	-82.904624	UNT to Lick Run	Jurisdictional; Abutting	PEM	0.021	28	1	4
W005-PUB-CATMOD2	39.332371	-82.917678	UNT to Scioto River	Jurisdictional; Adjacent	PUB	0.207	35.5	Modified 2	6
W006-PUB-CAT1	39.346168	-82.941558	UNT to Scioto River	Jurisdictional; Adjacent	PUB	0.073	28	1	9
W006-PEM-CAT1	39.346122	-82.941330	UNT to Scioto River	Jurisdictional; Adjacent	PEM	0.026			
W007-PFO-CAT2	39.348446	-82.948598	UNT to Scioto River	Jurisdictional; Abutting	PFO	0.115	45	2	10

Notes:

1 GAI map designation.

2 North American Datum, 1983.

3 Jurisdictional status is the opinion of GAI and must be confirmed by USACE and state agencies through the JD process.

4 PEM - Palustrine Emergent; PUB - Palustrine Unconsolidated Bottom; PFO – Palustrine Forested.

5 Total acreage of wetland located within the Project study area.

6 Interim scoring breakpoints for wetland regulatory categories for ORAM v 5.0 Score: Category 1 score 0 - 29.9; Category 1 or 2 gray zone ORAM score 30 - 34.9; Category modified 2 ORAM score 35 - 44.9; Category 2 ORAM score 45 - 59.9; Category 2 or 3 ORAM score 60 - 64.9; Category 3 ORAM score 65 - 100. OEPA Ecology Unit Division of Surface Water. *ORAM v. 5.0 Qualitative Score Calibration.* Dated August 15, 2000. http://www.epa.ohio.gov/portals/35/401/oram50sc_s.pdf.

[7] OAC Rule 3745-1-54(C)(2) defines Category 1 wetlands as wetlands which "...support minimal wildlife habitat, and minimal hydrological and recreation functions," and as wetlands which have "..hydrologic isolation, low species diversity, a predominance of non-native species, no significant habitat or wildlife use, and limited potential to achieve beneficial wetland functions." Category 2 wetlands are defined as wetlands which "...support moderate wildlife habitat, or hydrological or recreational functions," and as wetlands which are "...dominated by native species but generally without the presence of, or habitat for, rare, threatened or endangered species; and wetlands which are degraded but have a reasonable potential for reestablishing lost wetland functions." Degraded but Restorable Category 2 Wetlands are according to OAC Rule 3745-1-54(C) states that wetlands that are assigned to Category 2 constitute the broad middle category that "...support moderate wildlife habitat, or hydrological or recreational functions," but also include "...wetlands which are degraded but have a reasonable potential for reestablishing lost wetland functions." OAC Rule 3745-1-54(C)(2) defines Category 3 wetlands as wetlands which "...support superior habitat, or hydrological or recreational functions," and as wetlands which have "...high levels of diversity, a high proportion of native species, or high functional values."

Table 2
Waterbodies Identified Within the Project Study Area

Stream I.D.[1]	Waterbody Name	OEPA WQ Designation[2]	OEPA Stream Eligibility[3]	Stream Type	USACE Classification[4]	HHEI Score[5]	PHWH Class[5]	QHEI Score[6]	Bank Width[7] (feet)	OHWM Width (feet)	OHWM Depth (inches)	Stream Length[8] (feet)	Latitude[9]	Longitude[9]	Figure 2 (sheet)
S001	Dry Run	WWH	Eligible	Perennial	RPW	-	-	-	30	15	24	518	39.316021	-82.881698	1,2
S002	UNT to Lick Run	-	Eligible	Intermittent	RPW	40	Class II	-	7	5	12	745	39.321078	-82.892782	3
S003	Lick Run	WWH	Eligible	Perennial	RPW	-	-	-	20	12	18	613	39.324013	-82.899437	3,4
S004	UNT to Lick Run	-	Eligible	Intermittent	RPW	32	Class II	-	2	1	4	151	39.324098	-82.899775	3,4
S005	UNT to Lick Run	-	Eligible	Ephemeral	NRPW	17	Class I	-	3	1.5	10	64	39.324848	-82.902479	4
S006	UNT to Lick Run	-	Eligible	Ephemeral	NRPW	16	Class I	-	4	2	6	401	39.325692	-82.903170	4
S007	UNT to Lick Run	-	Eligible	Intermittent	RPW	33	Class II	-	4	1.5	6	492	39.325808	-82.904394	4
S008	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	24	Class I	-	2	1	4	112	39.327122	-82.905625	4
S009	UNT to Scioto River	-	Eligible	Intermittent	RPW	40	Class II	-	4	3	10	667	39.327285	-82.906218	4
S010	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	23	Class I	-	2	1.5	4	207	39.327558	-82.906236	4,5
S011	UNT to Scioto River	-	Eligible	Intermittent	RPW	24	Class I	-	2	1.5	4	340	39.327756	-82.906666	4,5
S012	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	24	Class II	-	3	1.5	6	202	39.326783	-82.906795	4
S013	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	18	Class II	-	2	1	4	172	39.327184	-82.907129	4,5
S014	UNT to Scioto River	-	Eligible	Intermittent	RPW	39	Class II	-	5	4	6	654	39.328833	-82.909747	5
S015	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	33	Class II	-	4	1.5	3	291	39.329187	-82.909926	5
S016	UNT to Scioto River	-	Eligible	Intermittent	RPW	39	Class II	-	6	6	6	2557	39.331415	-82.913937	5,6
S017	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	39	Class II	-	6	4	6	106	39.330677	-82.912775	5
S018	UNT to Scioto River	-	Eligible	Intermittent	RPW	39	Class II	-	5	3	6	580	39.331054	-82.914633	5
S019	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	34	Class II	-	4	2	6	235	39.330768	-82.915222	5
S020	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	20	Class I	-	3	1.5	6	78	39.331972	-82.915573	5,6
S021	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	24	Class I	-	3	1.5	4	81	39.332096	-82.918040	6
S022	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	24	Class I	-	3	1.5	6	166	39.333497	-82.920938	6
S023	UNT to Scioto River	-	Eligible	Intermittent	RPW	39	Class II	-	8	6	8	1087	39.334863	-82.923433	6

Stream I.D.[1]	Waterbody Name	OEPA WQ Designation[2]	OEPA Stream Eligibility[3]	Stream Type	USACE Classification[4]	HHEI Score[5]	PHWH Class[5]	QHEI Score[6]	Bank Width[7] (feet)	OHWM Width (feet)	OHWM Depth (inches)	Stream Length[8] (feet)	Latitude[9]	Longitude[9]	Figure 2 (sheet)
S024	UNT to Scioto River	-	Eligible	Intermittent	RPW	54	Class II	-	5	3	4	489	39.335595	-82.924121	6,7
S025	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	39	Class II	-	4	2	4	294	39.336484	-82.925716	7
S026	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	24	Class I	-	3	1	3	80	39.336619	-82.925691	7
S027	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	23	Class I	-	2	1	3	465	39.337403	-82.928715	7
S028	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	24	Class I	-	2	1	3	82	39.337853	-82.928652	7
S029	UNT to Scioto River	-	Eligible	Perennial	RPW	54	Class II	-	7	5	8	2256	39.342420	-82.936957	8,9
S030	UNT to Scioto River	-	Eligible	Intermittent	RPW	45	Class II	-	5	4	8	576	39.341337	-82.935386	8
S031	UNT to Scioto River	-	Eligible	Intermittent	RPW	55	Class II	-	5	4	8	347	39.341812	-82.935670	8
S032	UNT to Scioto River	-	Eligible	Intermittent	RPW	33	Class II	-	2	2	3	427	39.342225	-82.936162	8
S033	UNT to Scioto River	-	Eligible	Intermittent	RPW	30	Class II	-	3	2	6	152	39.344418	-82.938587	8,9
S034	UNT to Scioto River	-	Eligible	Perennial	RPW	64	Class II	-	6	5	12	634	39.346262	-82.942870	9
S035	UNT to Scioto River	-	Eligible	Intermittent	RPW	44	Class II	-	6	5	10	509	39.348660	-82.948030	10
S036	UNT to Scioto River	-	Eligible	Intermittent	RPW	55	Class II	-	6	5	8	66	39.348771	-82.947362	10
S037	UNT to Scioto River	-	Eligible	Ephemeral	NRPW	31	Class II	-	4	3	6	510	39.349189	-82.949196	10

Notes:

1 GAI map designation.

2 As defined by OAC Chapter 3745-1 Water Quality Standards, Water use designations and statewide criteria (OAC 3745-1-09). http://www.epa.ohio.gov/dsw/rules/3745_1.aspx.

3 As defined by the 401 WQC conditions for stream eligibility coverage under the 2017 NWP program. Streams located in Possibly Eligible areas are eligible for coverage if the pH is <6.5 or stream flow is ephemeral. Streams located in Possibly Eligible areas are also eligible for coverage if the HHEI score is <50, or if the HHEI score is between 50-69 and substrate composition is ≤10% coarse types (includes cumulative percentage of bedrock, boulders, boulder slabs, and cobble).

4 Jurisdictional status is the opinion of GAI and must be confirmed by USACE and state agencies through the JD process. RPW - Relatively Permanent Waters.

5 Scoring for OEPA Headwater Habitat Evaluation Index (HHEI) Primary Headwater Habitats (PHWH). Class I = 0 - 29.9 and include "normally dry channels with little or no aquatic life present"; Class II = 30 - 69.9 and are equivalent to "warm water habitat"; Class III = 70 – 100 and typically have perennial flow with cool-cold water adapted native fauna.

6 Narrative rating for headwater streams using the OEPA Qualitative Habitat Evaluation Index (QHEI). Excellent = ≥70; Good = 55 - 60; Fair = 43 - 54; Poor = 30 - 42; Very Poor = <30.

7 Width in feet from tops of stream bank.

8 Total stream length (in feet) located within the Project study area.

9 North American Datum, 1983.

Table 3
ODNR and USFWS RTE Species and Critical Habitat Review Results

Common Name	Scientific Name	Habitat Type	Listing Status[1]	Habitat Type Present Within the Project Area?	Impacts to Habitat/Species Anticipated?	Restricted Construction Dates
Amphibians						
Eastern hellbender[2]	*Cryptobranchus alleganiensis*	Medium to large, rocky streams that are not excessively silty	E, FSC	No	No; Known habitat types are not present within the Project area	-
Midland mud salamander	*Pseudotriton montanus diastictus*	Springs, seeps and creeks under large, flat stones	T	No	No; Known habitat types are not present within the Project area	-
Bats						
Indiana bat[2,4]	*Myotis sodalist*	Trees >3" dbh	E, FE	Yes	No; Avoided with winter tree clearing	April 1 to September 30
Northern long-eared bat[4]	*Myotis septentrionalis*	Roost in cavities or in crevices of both live trees and snags; Hibernate in caves and mines with constant temperatures, high humidity, and no air currents	FT	Yes	No; Avoided with winter tree clearing	April 1 to September 30
Birds						
Barn owl	*Tyto alba*	Old buildings, barns, silos, chimneys, or sometimes hollow trees; Hunt over open grasslands	T	No	No; Known habitat types are not present within the Project area	-
Bald eagle[2,3,4]	*Haliaeetus leucocephalus*	Forested areas with expanses of shallow fresh or salt water for foraging	FSC	No	No; No nests were observed within the Project area	-
Fish						
Spotted darter	*Etheostoma maculatum*	Medium sized rivers and streams with swift current at the top or bottom end of a riffle, large boulders or flat slabs of rock	E	No	No; Known habitat types are not present within the Project area	April 15 to June 30

Common Name	Scientific Name	Habitat Type	Listing Status[1]	Habitat Type Present Within the Project Area?	Impacts to Habitat/Species Anticipated?	Restricted Construction Dates
Fish (Cont.)						
Goldeye	*Hiodon alosoides*	Turbid slower-moving waters of lakes and rivers	E	No	No; Known habitat types are not present within the Project area	-
Ohio lamprey[2]	*Ichthyomyzon bdellium*	The Ohio River and the lower portion of its tributaries	E	No	No; Known habitat types are not present within the Project area	April 15 to June 30
Shortnose gar[2]	*Lepisosteus platostomus*	Lower Scioto and Ohio River	E	No	No; Known habitat types are not present within the Project area	April 15 to June 30
Northern madtom[2]	*Noturus stigmosus*	Swift currents along sand, silt, or rocky substrates	E	No	No; Known habitat types are not present within the Project area	April 15 to June 30
Shovelnose sturgeon[2]	*Scaphirhynchus platorynchus*	Open or main channel areas of large rivers, often in areas with swift current and sand or gravel bottom	E	No	No; Known habitat types are not present within the Project area	April 15 to June 30
American eel[2]	*Anguilla rostrate*	Moderate or large rivers with continuous flow and moderately clear water	T	No	No; Known habitat types are not present within the Project area	April 15 to June 30
Blue sucker[2]	*Cycleptus elongatus*	Deep swiftly flowing chutes or channels of large rivers; In fast gravel bottomed chutes of the lower Scioto River from around Piketon downstream to the Ohio River	T, FSC	No	No; Known habitat types are not present within the Project area	April 15 to June 30
Lake chubsucker[2]	*Erimyzon sucetta*	Natural lakes and very sluggish streams or marshes with dense aquatic vegetation and clear waters	T	No	No; Known habitat types are not present within the Project area	April 15 to June 30
Tippecanoe darter[2,3]	*Etheostoma tippecanoe*	Medium to large streams and rivers in the Ohio River Drainage; Found in riffles of moderate current with a substrate of gravel and small cobble sized rocks	T	Yes	No; In-stream work is not proposed	April 15 to June 30

Common Name	Scientific Name	Habitat Type	Listing Status[1]	Habitat Type Present Within the Project Area?	Impacts to Habitat/Species Anticipated?	Restricted Construction Dates
Fish (Cont.)						
Channel darter[2]	*Percina copelandi*	Large course sand or fine gravel bars in large rivers	T	No	No; Known habitat types are not present within the Project area	April 15 to June 30
River darter[2]	*Percina shumardi*	Very large rivers with swift current with gravel or rocky bottom in depths of three feet or more	T	No	No; Known habitat types are not present within the Project area	April 15 to June 30
Insects						
Plains clubtail[3]	*Gomphus externus*	Moderately flowing rivers and large streams with muddy bottoms, and occasionally lakes	E	No	No; Known habitat types are not present within the Project area	-
Regal fritillary	*Speyeria idalia*	Tall-grass and mixed grass prairies	E	No	No; Known habitat types are not present within the Project area	-
Buckskin cave pseudoscorpion	*Apochthonius hobbsi*	Caves	E	No	No; Known habitat types are not present within the Project area	-
Cobblestone tiger beetle[3]	*Cicindela marginipennis*	Pebble and cobblestone, sometimes mixed with sand on sparsely vegetated islands and edges of small to medium streams to larger rivers	T	No	No; Known habitat types are not present within the Project area	-
Mammals						
Black bear[2]	*Ursus americana*	Thick understory vegetation and large quantities of edible material	E	Yes	No; Impacts are not anticipated due to the migratory nature of this species	-
Mussels						
Fanshell[2]	*Cyprogenia stegaria*	Substrates including sand, gravel, cobble and mixed materials on the bottoms of streams and rivers; Free flowing, clean and well oxygenated water	E, FE	No	No; Known habitat types are not present within the Project area	-

Common Name	Scientific Name	Habitat Type	Listing Status[1]	Habitat Type Present Within the Project Area?	Impacts to Habitat/Species Anticipated?	Restricted Construction Dates
Mussels (Cont.)						
Elephant-ear	*Elliptio crassidens crassidens*	Streams with flowing water; Muddy sands, sand, and rocky substrates in moderate currents	E	Yes	No; In-stream work is not proposed	-
Northern riffleshell[2,3]	*Epioblasma torulosa rangiana*	Large to small streams, with sand and gravel substrates	E, FE	Yes	No; In-stream work is not proposed	-
Snuffbox[2]	*Epioblasma triquetra*	Sand, gravel, or cobble substrates in swift small and medium-sized rivers; Individuals are often buried deep in the sediment	E, FE	No	No; Known habitat types are not present within the Project area	-
Ebonyshell	*Fusconaia ebena*	Large rivers in sand and gravel	E	No	No; Known habitat types are not present within the Project area	-
Long-solid[2]	*Fusconaia maculata maculata*	Small to large rivers in gravel with strong current	E	No	No; Known habitat types are not present within the Project area	-
Sharp-ridged pocketbook[2]	*Lampsilis ovata*	Large rivers in coarse sand or gravel	E	No	No; Known habitat types are not present within the Project area	-
Yellow sandshell	*Lampsilis teres*	Streams with flowing water, along the banks of muddy or silty rivers	E	Yes	No; In-stream work is not proposed	-
Washboard	*Megalonaias nervosa*	Small or larger rivers and in a variety of substrate including mud, sand, or gravel	E	No	No; Known habitat types are not present within the Project area	-
Sheepnose[2]	*Plethobasus cyphyus*	Large rivers and streams; Found in shallow areas with moderate to swift currents flowing over coarse sand and gravel	E, FE	No	No; Known habitat types are not present within the Project area	-

Common Name	Scientific Name	Habitat Type	Listing Status[1]	Habitat Type Present Within the Project Area?	Impacts to Habitat/Species Anticipated?	Restricted Construction Dates
Mussels (Cont.)						
Clubshell[2,3]	*Pleurobema clava*	Clean, loose sand and gravel in medium to small rivers and streams	E, FE	No	No; Known habitat types are not present within the Project area	-
Rabbitsfoot[2]	*Quadrula cylindrical cylindrical*	Small to medium sized rivers of moderate current with clear, relatively shallow water and a mixture of sand and gravel substrates	E, FC	No	No; Known habitat types are not present within the Project area	-
Monkeyface	*Quadrula metanevra*	Large clean rivers in gravel or mixed sand and gravel	E	No	No; Known habitat types are not present within the Project area	-
Rayed bean[2,3]	*Villosa fabalis*	Smaller, headwater creeks, found in large rivers and wave washed areas; Gravel or sand substrates and in roots of aquatic vegetation	E, FE	No	No; Known habitat types are not present within the Project area	-
Little spectaclecase[2]	*Villosa lienosa*	Small to medium streams in sand or gravel	E	Yes	No; In-stream work is not proposed	-
Black sandshell[2]	*Ligumia recta*	Rivers with strong currents and lakes with a firm substrate of gravel or sand	T	No	No; Known habitat types are not present within the Project area	-
Threehorn wartyback[2]	*Obliquaria reflexa*	Medium to large rivers, substrates include gravel, gravel-sand, or gravel-mud with a moderate current	T	No	No; Known habitat types are not present within the Project area	-
Fawnsfoot[2]	*Truncilla donaciformis*	Large rivers or the lower reaches of medium-sized streams in sand or gravel	T	Yes	No; In-stream work is not proposed	-

Common Name	Scientific Name	Habitat Type	Listing Status[1]	Habitat Type Present Within the Project Area?	Impacts to Habitat/Species Anticipated?	Restricted Construction Dates
Plants						
Elliott's bent grass[3]	*Agrostis elliottiana*	Dry, open waste areas, sterile soil, and fields	E	No	No; Known habitat types are not present within the Project area	
Chaffweed	*Centunculus minimus*	Open, moist habitats such as mudflats in stream and river bottoms	E	No	No; Known habitat types are not present within the Project area	-
Many-flowered umbrella sedge	*Cyperus lancastriensis*	Dry slopes, open woods, and fields	E	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Round-leaved spurge	*Euphorbia serpens*	Full sun in moist, alluvial or rich soil, frequently in disturbed situations	E	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Flame azalea	*Rhododendron calendulaceum*	Open woods and cleared areas on well drained, acidic soils	E	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Running buffalo clover	*Trifolium stoloniferum*	Mesic habitats with partial sunlight including woodlands and mowed lawns	E, FE	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Canada Milk-vetch	*Astragalus canadensis*	Moist to slightly dry black soil prairies, sand prairies, sandy savannas, thickets and woodland borders, moist meadows near rivers, and abandoned fields	T	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Limestone savory	*Calamintha arkansana*	Calcarerous shores	T	No	No; Known habitat types are not present within the Project area	-
Bush's sedge	*Carex bushii*	Dry to moist open woods, thickets, and fields	T	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Tansy mustard	*Descurainia pinnata*	Dry, open or sparsely wooded places, fields, railroad embankments, and in very disturbed situations; Often in sandy soil	T	Yes	No; Impacts to this species are not anticipated, per the agency responses	-

Common Name	Scientific Name	Habitat Type	Listing Status[1]	Habitat Type Present Within the Project Area?	Impacts to Habitat/Species Anticipated?	Restricted Construction Dates
Plants (Cont.)						
Few-flowered spike-rush	*Eleocharis quinqueflora*	Moist, open situations in calcareous substrates, fens, wet prairies, sedge meadows	T	No	No; Known habitat types are not present within the Project area	-
Godfrey's thoroughwort	*Eupatorium godfreyanum*	Stream banks, wooded roadsides, and shaly slopes	T	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Leafy blue flag	*Iris brevicaulis*	Shade, semi-shade, swamps, swampy stream terraces, floodplains, borders of rich woods and shores	T	No	No; Known habitat types are not present within the Project area	-
Leggett's pinweed	*Lechea pulchella*	Dry to moist sandy plains, shores, and open woods	T	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Lurking leskea	*Plagiothecium latebricola*	Northern hardwood lowlands	T	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Walter's violet	*Viola walteri*	Open woods and rocky ledges, in calcareous substrates; Dolomite outcrops and promontories	T	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Reptiles						
Timber rattlesnake[2]	*Crotalus horridus*	Wooded areas	E, FSC	Yes	No; Impacts to this species are not anticipated, per the agency responses	-
Spotted turtle	*Clemmys guttata*	Permanent wetlands, flooded forests, marshes, wet meadows, bogs and woodland streams	T	Yes	No; Impacts to this species are not anticipated as the preferred habitat type(s) will be avoided and any aquatic resource impacts will be temporary	-

Notes:

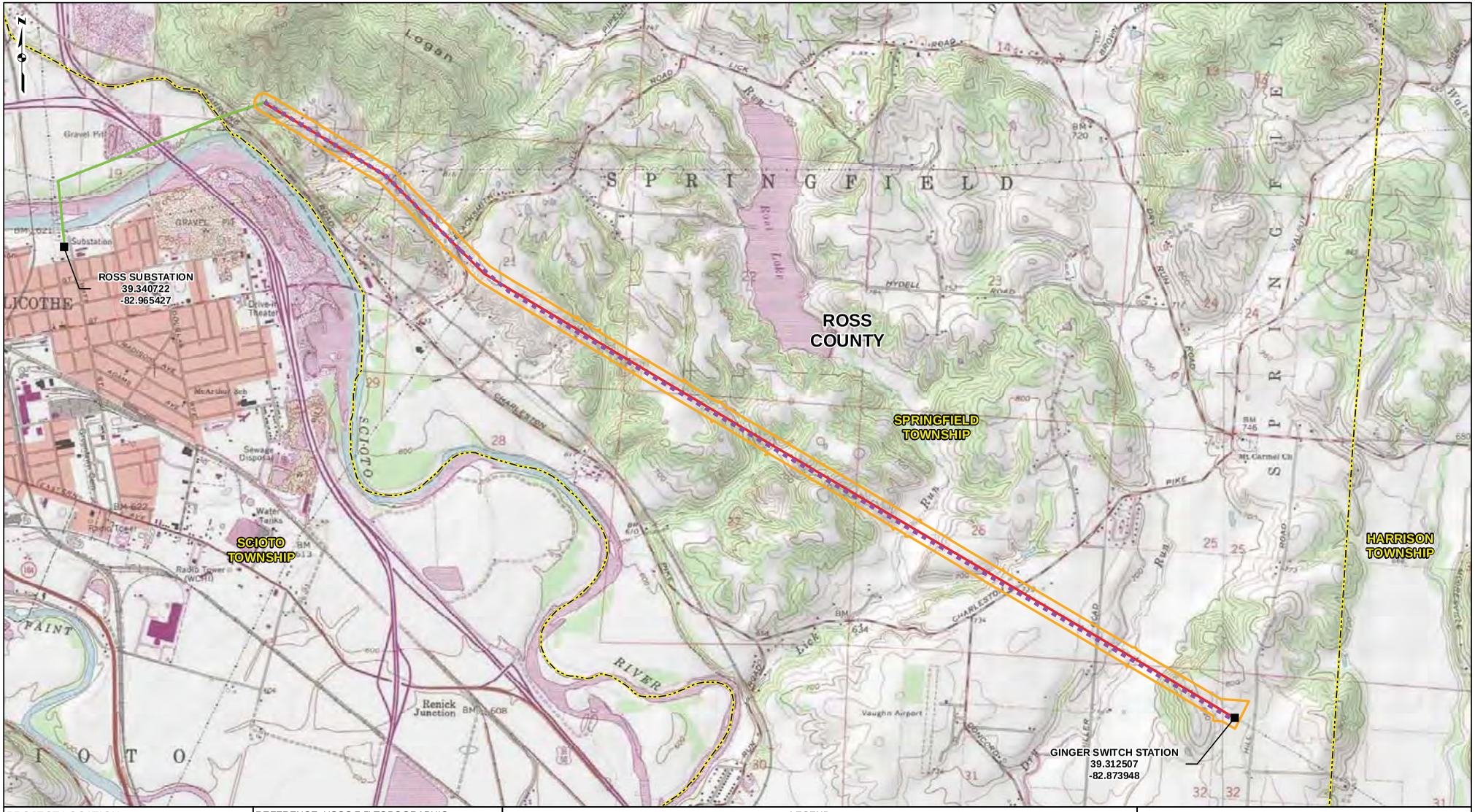
1 E = state endangered; T = state threatened; P = state potentially threatened; SC = state species of concern; FE = federal endangered; FT = federal threatened; FSC = federal species of concern; FC = federal candidate.

2 ODNR, Division of Wildlife (DOW) comments included in the ODNR response, dated August 25, 2017.

3 ODNR, Natural Heritage Database (NHD) review results indicate a record of this species has been identified within a one-mile radius of the Project area.

4 Federally listed species, migratory bird, or species of concern comments included in the USFWS response, dated June 5, 2017.

FIGURES



PROJECT LOCATION

ROSS COUNTY, OHIO

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: LONDONDERRY (1963) AND CHILICOTHE EAST (1985), OHIO, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND USGS, ACCESSED 11/2017.

LEGEND

- EXISTING STATION
- EXISTING 138kV TRANSMISSION LINE
- EXISTING 69kV TRANSMISSION LINE
- PROPOSED 138 kV TRANSMISSION LINE
- STUDY AREA
- COUNTY BOUNDARY
- TOWNSHIP BOUNDARY

0 1,000 2,000 4,000 Feet

FIGURE 1
PROJECT LOCATION MAP

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

DRAWN BY: AKW DATE: 11/17/2017
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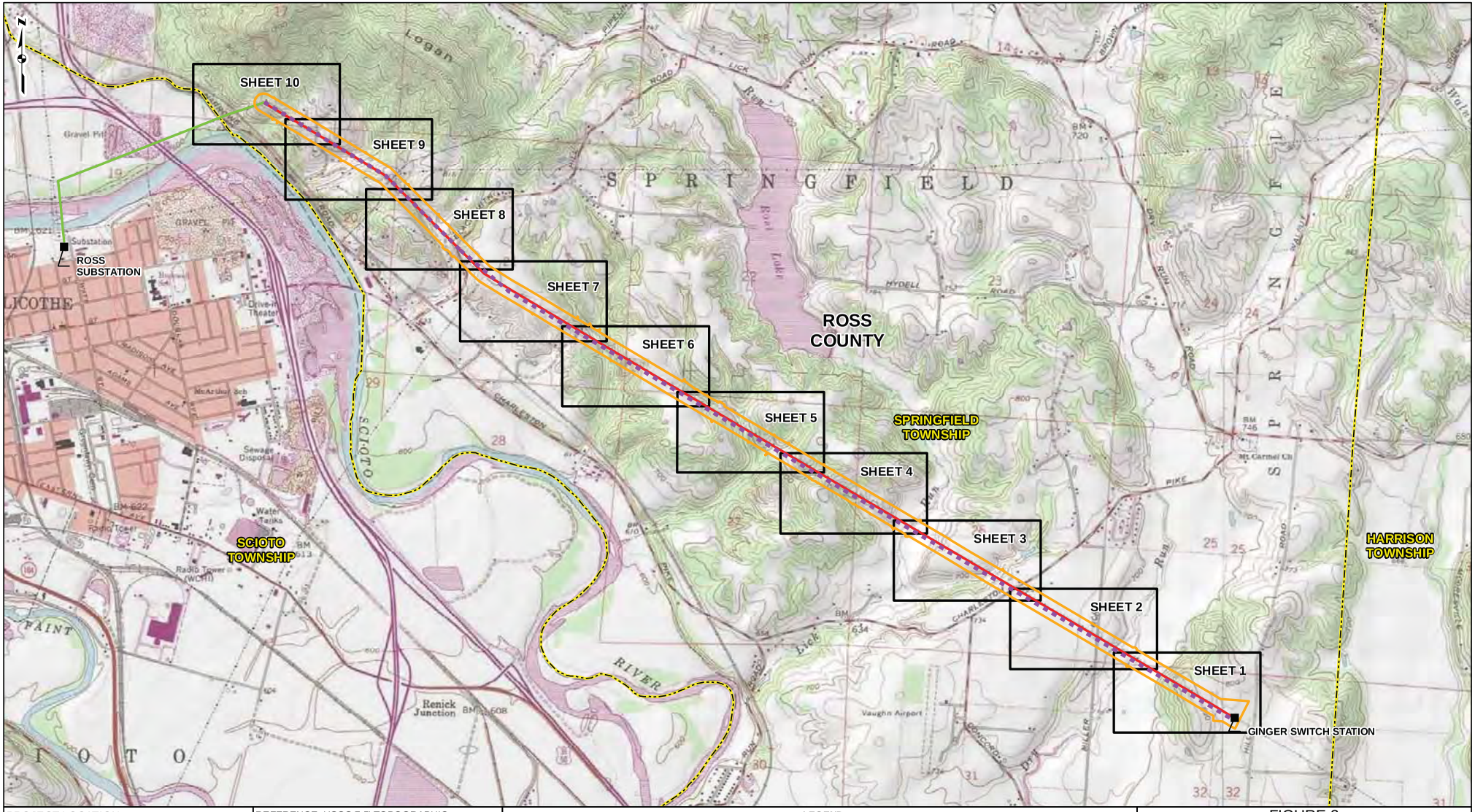

PROJECT LOCATION

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LEGEND

- EXISTING STATION
- EXISTING 138kV TRANSMISSION LINE
- EXISTING 69kV TRANSMISSION LINE
- PROPOSED 138 kV TRANSMISSION LINE
- STUDY AREA
- COUNTY BOUNDARY
- TOWNSHIP BOUNDARY
- SHEET INDEX

0 1,000 2,000 4,000 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET INDEX

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

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APPROVED: ARW

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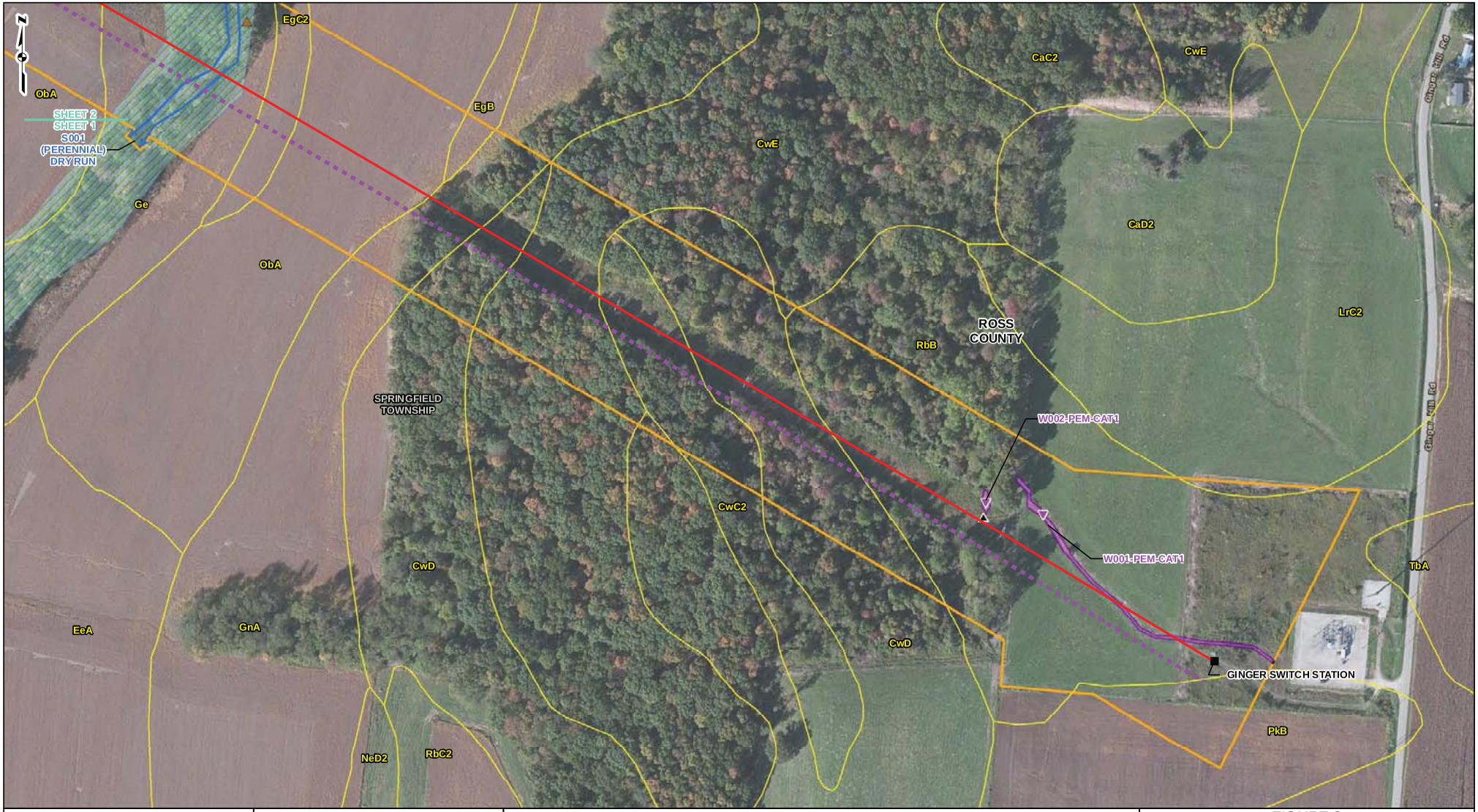

PROJECT LOCATION

ROSS COUNTY, OHIO

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LEGEND

- EXISTING STATION
- UPLAND DATA POINT
- WETLAND DATA POINT
- CULVERT
- SOIL TEST PIT
- STREAM
- EXISTING 138kV TRANSMISSION LINE
- EXISTING 69kV TRANSMISSION LINE
- PROPOSED 138 kV TRANSMISSION LINE
- OPEN-ENDED BOUNDARY
- STUDY AREA
- SOIL TYPE BOUNDARY
- ODNR LAND
- NWI WETLAND
- 100-YEAR FLOODPLAIN
- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY

WETLAND TYPE:

- PEM
- PFO
- PUB

0 100 200 400 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET 1 OF 10

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

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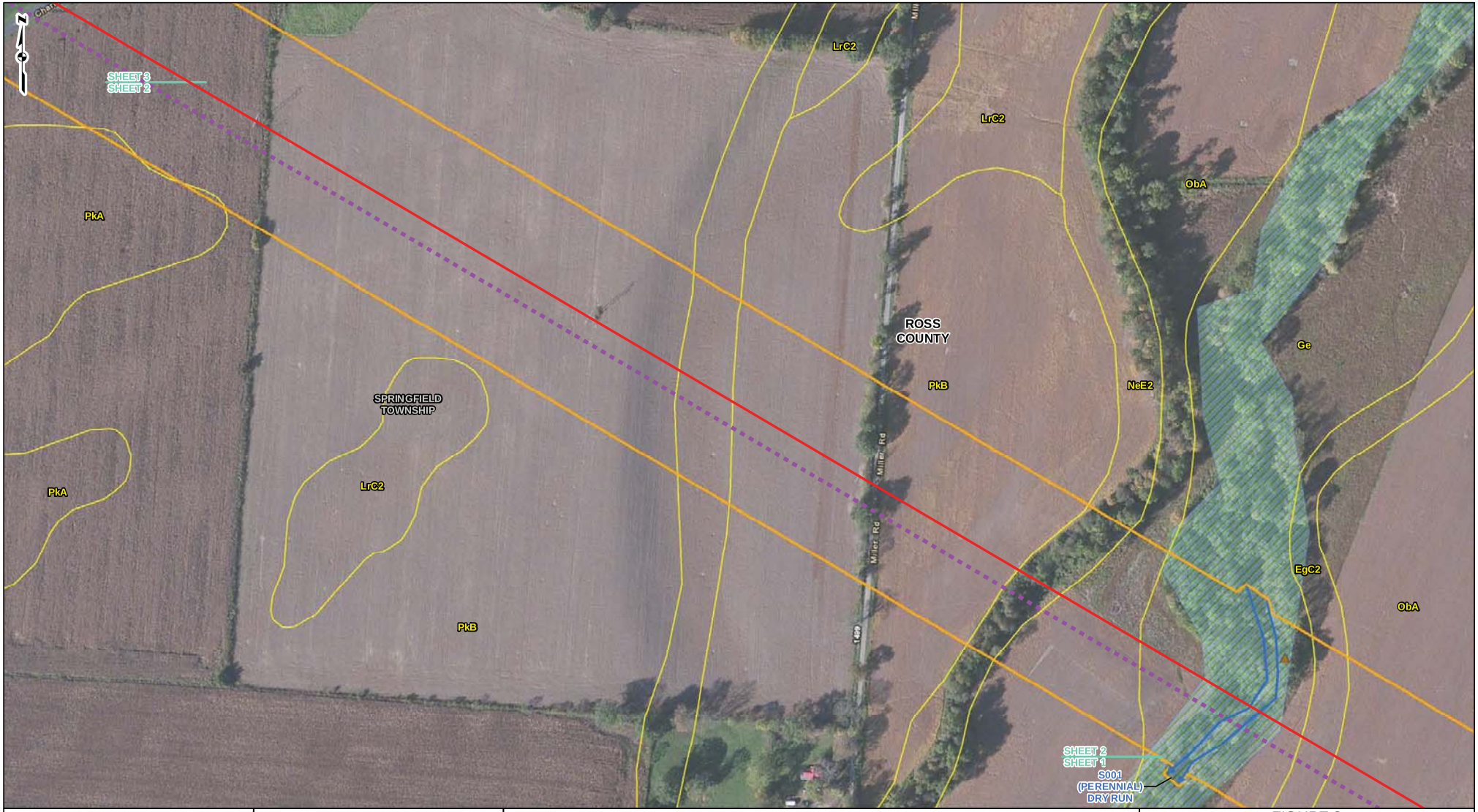

PROJECT LOCATION

ROSS COUNTY, OHIO

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LEGEND

- EXISTING STATION
- UPLAND DATA POINT
- WETLAND DATA POINT
- CULVERT
- SOIL TEST PIT
- STREAM
- EXISTING 138kV TRANSMISSION LINE
- EXISTING 69kV TRANSMISSION LINE
- PROPOSED 138 kV TRANSMISSION LINE
- OPEN-ENDED BOUNDARY
- STUDY AREA
- SOIL TYPE BOUNDARY
- ODNR LAND
- NWI WETLAND
- 100-YEAR FLOODPLAIN
- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY

WETLAND TYPE:

- PEM
- PFO
- PUB

0 100 200 400 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET 2 OF 10

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

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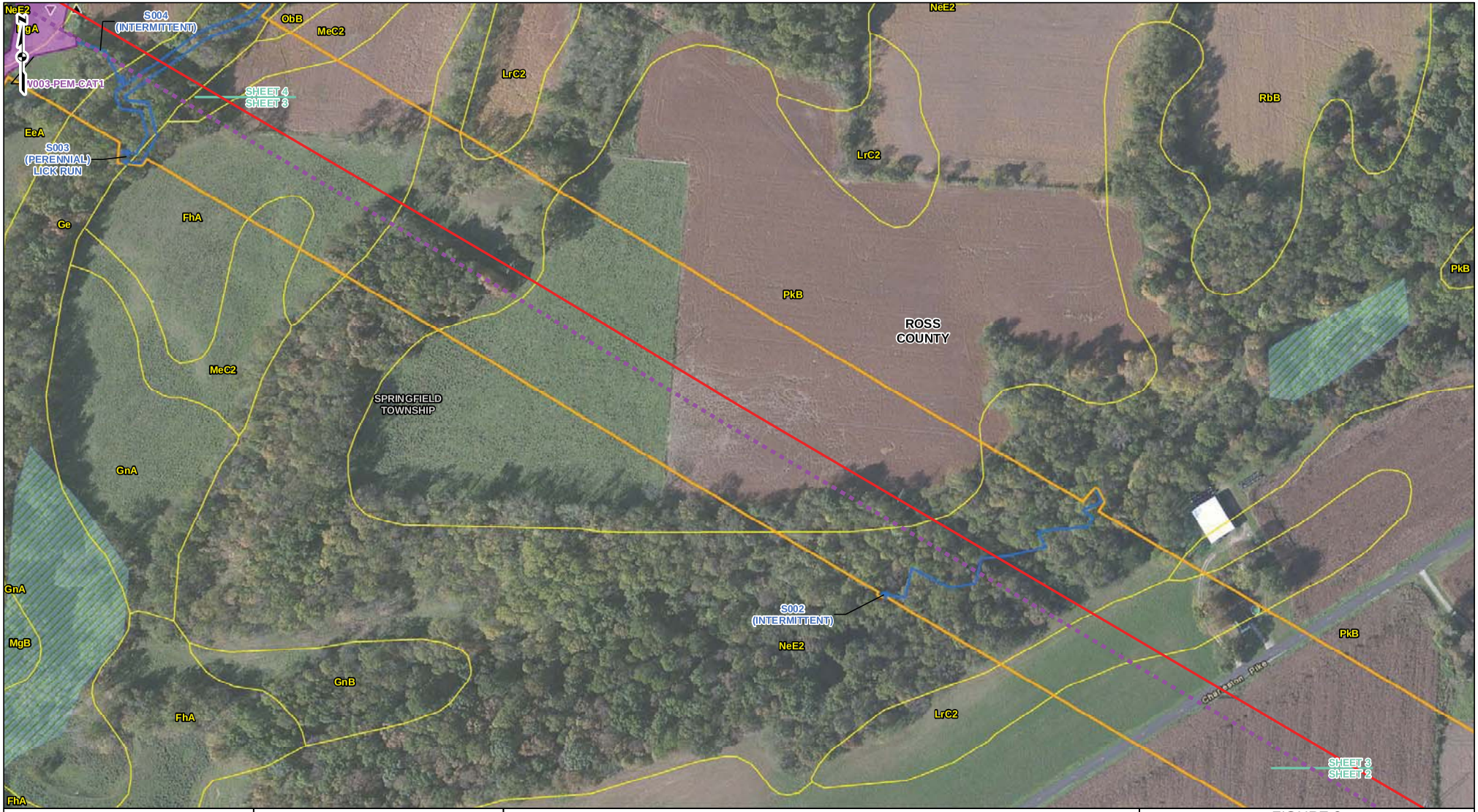

PROJECT LOCATION

ROSS COUNTY, OHIO

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LEGEND

- EXISTING STATION
- UPLAND DATA POINT
- WETLAND DATA POINT
- CULVERT
- SOIL TEST PIT
- STREAM
- EXISTING 138kV TRANSMISSION LINE
- EXISTING 69kV TRANSMISSION LINE
- PROPOSED 138 kV TRANSMISSION LINE
- OPEN-ENDED BOUNDARY
- STUDY AREA
- SOIL TYPE BOUNDARY
- ODNR LAND
- NWI WETLAND
- 100-YEAR FLOODPLAIN
- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY

WETLAND TYPE:

- PEM
- PFO
- PUB

0 100 200 400 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET 3 OF 10

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

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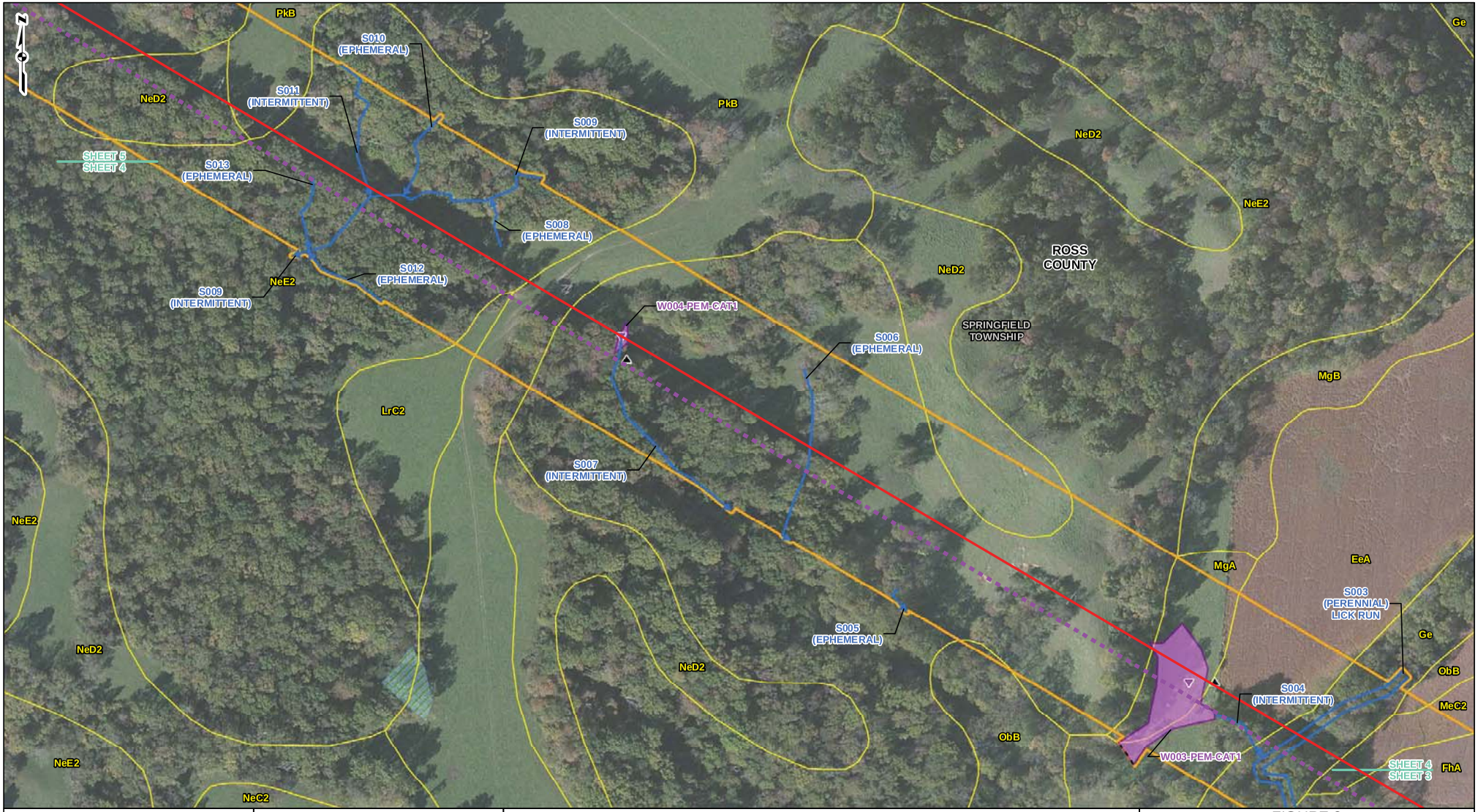

PROJECT LOCATION

ROSS COUNTY, OHIO

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LEGEND

- EXISTING STATION
- UPLAND DATA POINT
- WETLAND DATA POINT
- CULVERT
- SOIL TEST PIT
- STREAM
- EXISTING 138kV TRANSMISSION LINE
- EXISTING 69kV TRANSMISSION LINE
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- STUDY AREA
- SOIL TYPE BOUNDARY
- ODNR LAND
- NWI WETLAND
- 100-YEAR FLOODPLAIN
- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY
- WETLAND TYPE:
- PEM
- PFO
- PUB

0 100 200 400 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET 4 OF 10

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

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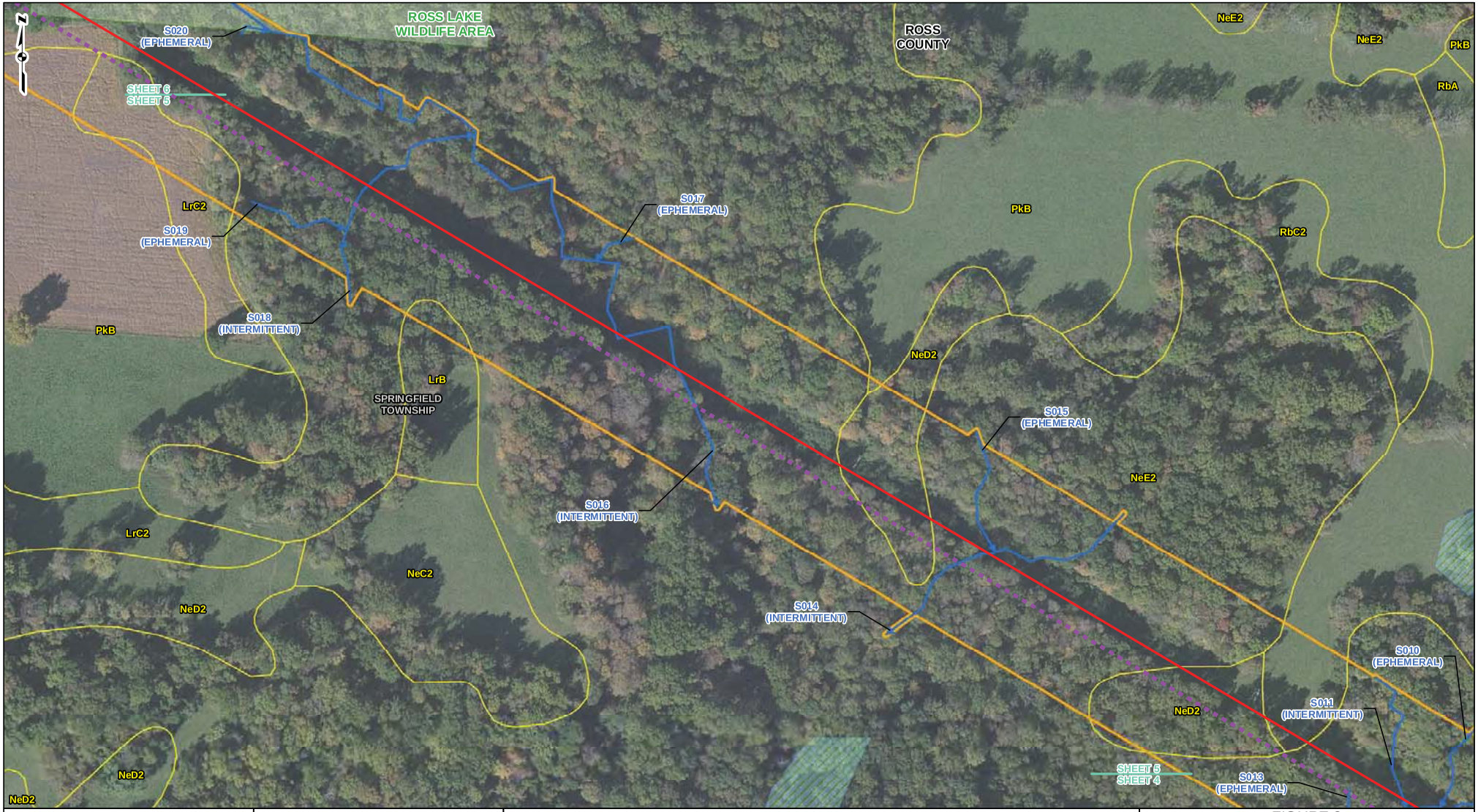

PROJECT LOCATION

ROSS COUNTY, OHIO

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LEGEND

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- STREAM
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- 100-YEAR FLOODPLAIN
- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY

WETLAND TYPE:

- PEM
- PFO
- PUB

0 100 200 400 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET 5 OF 10

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

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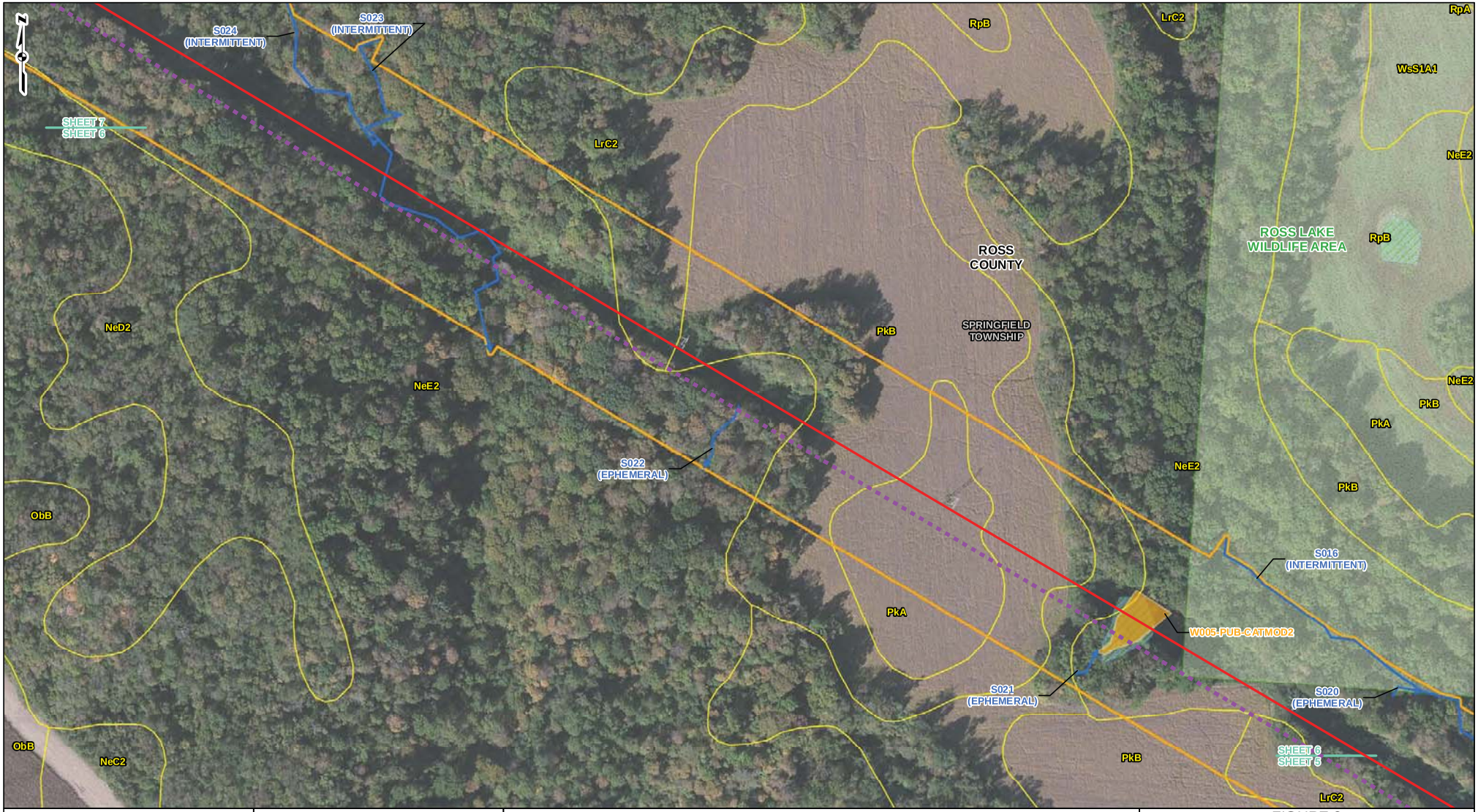

PROJECT LOCATION

ROSS COUNTY, OHIO

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- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY
- WETLAND TYPE:
- PEM
- PFO
- PUB

0 100 200 400 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET 6 OF 10

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

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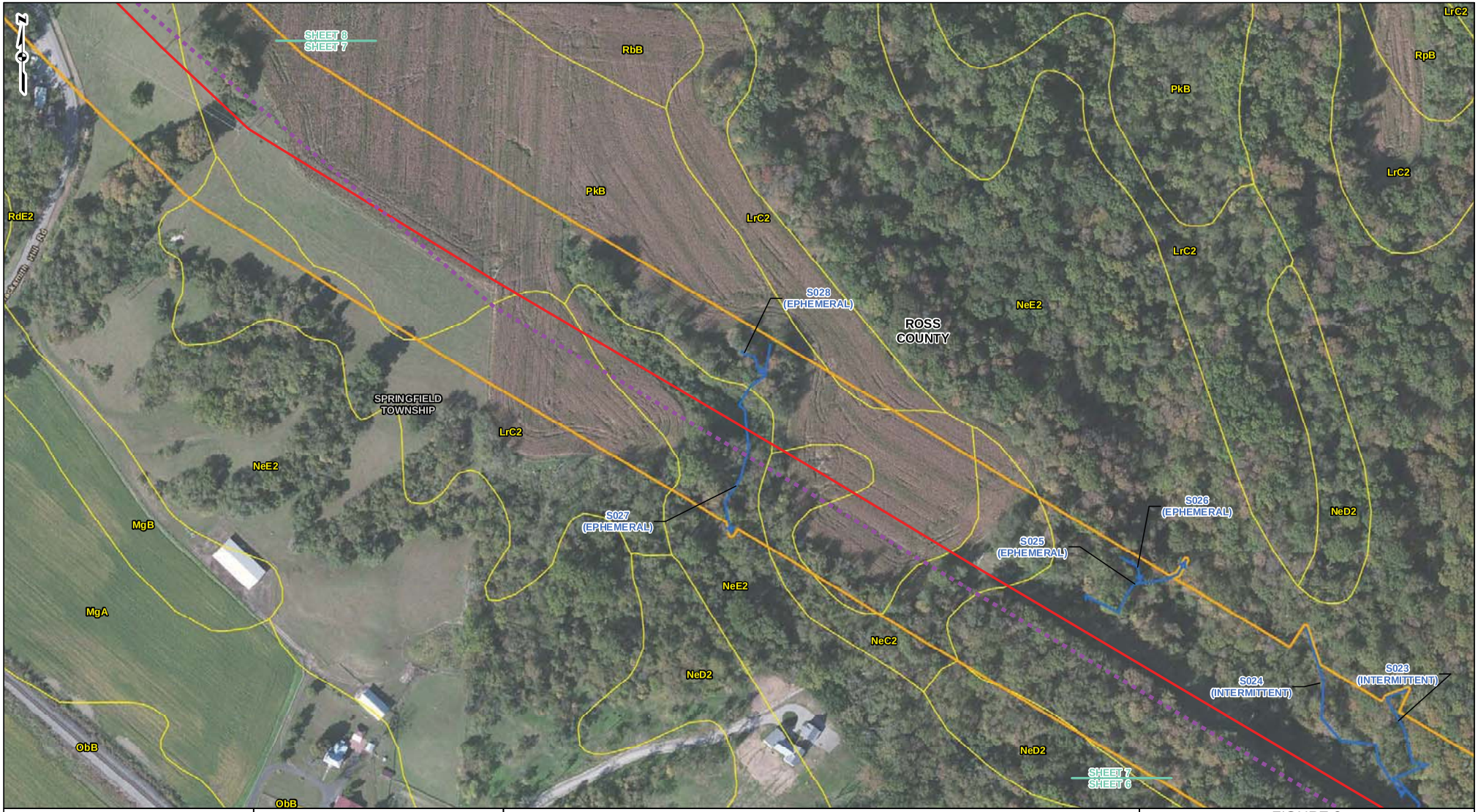

PROJECT LOCATION

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LEGEND

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- WETLAND DATA POINT
- CULVERT
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- STREAM
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- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY

WETLAND TYPE:

- PEM
- PFO
- PUB

0 100 200 400 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET 7 OF 10

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

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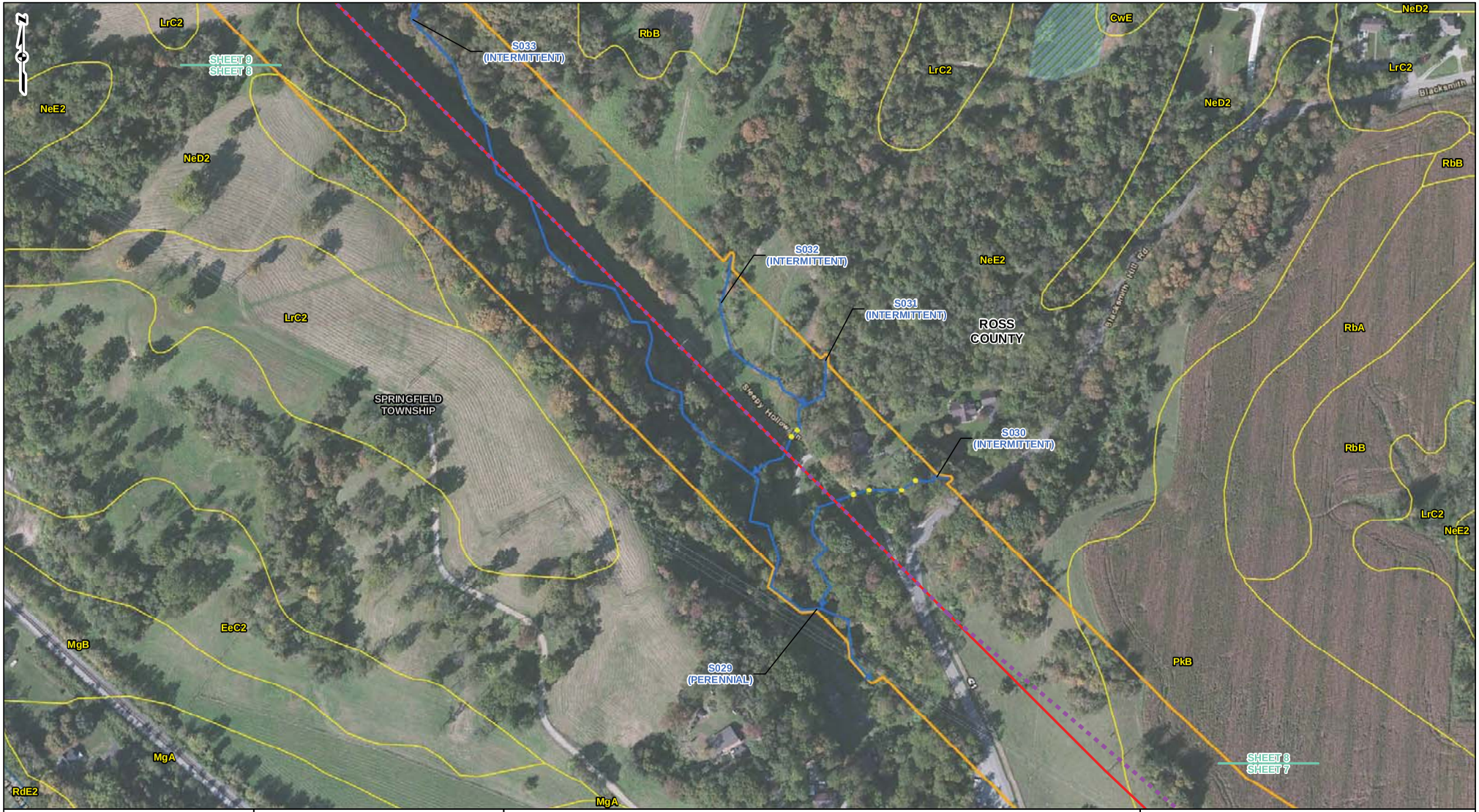

PROJECT LOCATION

ROSS COUNTY, OHIO

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LEGEND

- EXISTING STATION
- UPLAND DATA POINT
- WETLAND DATA POINT
- CULVERT
- SOIL TEST PIT
- STREAM
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- SOIL TYPE BOUNDARY
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- NWI WETLAND
- 100-YEAR FLOODPLAIN
- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY

WETLAND TYPE:

- PEM
- PFO
- PUB

0 100 200 400 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET 8 OF 10

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

DRAWN BY: AKW
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PROJECT LOCATION

ROSS COUNTY, OHIO

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LEGEND

- EXISTING STATION
- UPLAND DATA POINT
- WETLAND DATA POINT
- CULVERT
- SOIL TEST PIT
- STREAM
- EXISTING 138kV TRANSMISSION LINE
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- 100-YEAR FLOODPLAIN
- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY
- WETLAND TYPE:
- PEM
- PFO
- PUB

0 100 200 400 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET 9 OF 10

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

DRAWN BY: AKW
DATE: 11/20/2017
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PROJECT LOCATION

ROSS COUNTY, OHIO

REFERENCES: ESRI WORLD IMAGERY, MICROSOFT, UC - G, 2011, ACCESSED 11/2017. WORLD TRANSPORTATION, ESRI, DELORME, HERE, MAPMYINDIA, TOMTOM, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY. OBTAINED THROUGH ESRI ARCGIS ONLINE, ACCESSED 11/2017. NATIONAL WETLAND INVENTORY (NWI) WETLANDS, USFWS, 2017. NATIONAL FLOOD HAZARD LAYER, FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), OHIO, 2015. SOIL SURVEY GEOGRAPHIC (SSURGO) DATABASE FOR ROSS COUNTY, OHIO, USDA/NRCS, 2015. ODNR (OHIO DEPARTMENT OF NATURAL RESOURCES) LAND, 2014.

LEGEND

- EXISTING STATION
- UPLAND DATA POINT
- WETLAND DATA POINT
- CULVERT
- SOIL TEST PIT
- STREAM
- EXISTING 138kV TRANSMISSION LINE
- EXISTING 69kV TRANSMISSION LINE
- PROPOSED 138 kV TRANSMISSION LINE
- OPEN-ENDED BOUNDARY
- STUDY AREA
- SOIL TYPE BOUNDARY
- ODNR LAND
- NWI WETLAND
- 100-YEAR FLOODPLAIN
- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY

WETLAND TYPE:

- PEM
- PFO
- PUB

0 100 200 400 Feet

FIGURE 2
RESOURCE LOCATION MAP
SHEET 10 OF 10

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

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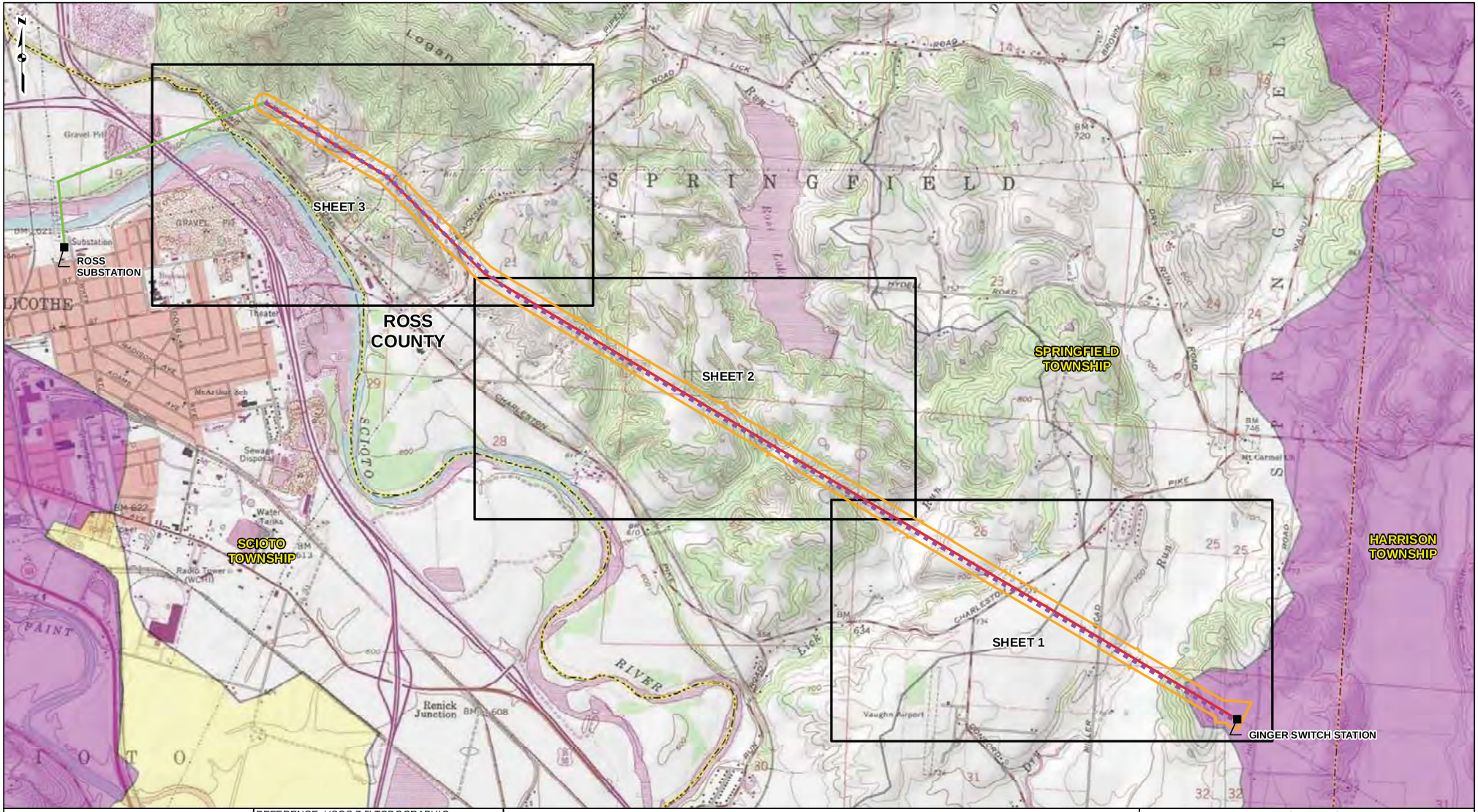

PROJECT LOCATION

ROSS COUNTY, OHIO

REFERENCE: USGS 7.5' TOPOGRAPHIC QUADRANGLES: LONDONDERRY (1963) AND CHILICOTHE EAST (1985), OHIO, OBTAINED THROUGH ESRI USA TOPO MAPS, NATIONAL GEOGRAPHIC TOPO AND USGS, ACCESSED 11/2017. STREAM ELIGIBILITY, OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA), 2017.

LEGEND

- EXISTING STATION
- EXISTING 138kV TRANSMISSION LINE
- EXISTING 69kV TRANSMISSION LINE
- PROPOSED 138 kV TRANSMISSION LINE
- STUDY AREA
- COUNTY BOUNDARY
- TOWNSHIP BOUNDARY

OHIO EPA STREAM ELIGIBILITY

- INELIGIBLE
- POSSIBLY ELIGIBLE
- ELIGIBLE

0 1,000 2,000 4,000 Feet

FIGURE 3
STREAM ELIGIBILITY MAP
SHEET INDEX

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

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PROJECT LOCATION

ROSS COUNTY, OHIO

REFERENCES: ESRI WORLD IMAGERY, NAIP, 2015, ACCESSED 11/2017. WORLD TRANSPORTATION, ESRI, DELORME, HERE, MAPMYINDIA, TOMTOM, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY, OBTAINED THROUGH ESRI ARCGIS ONLINE, ACCESSED 11/2017. STREAM ELIGIBILITY, OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA), 2017. NHD STREAMS, NATIONAL HYDROGRAPHY DATASET (NHD), USGS, 2015. WQS STREAMS, OHIO WATER QUALITY STANDARDS (OH WQS), 2010.

LEGEND

- EXISTING STATION
- STREAM
- EXISTING 138kV TRANSMISSION LINE
- EXISTING 69kV TRANSMISSION LINE
- PROPOSED 138 kV TRANSMISSION LINE
- NHD STREAM
- OH WQS STREAM
- STUDY AREA

OHIO EPA STREAM ELIGIBILITY

- INELIGIBLE
- POSSIBLY ELIGIBLE
- ELIGIBLE

0 300 600 1,200 Feet

FIGURE 3
STREAM ELIGIBILITY MAP
SHEET 1 OF 3

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

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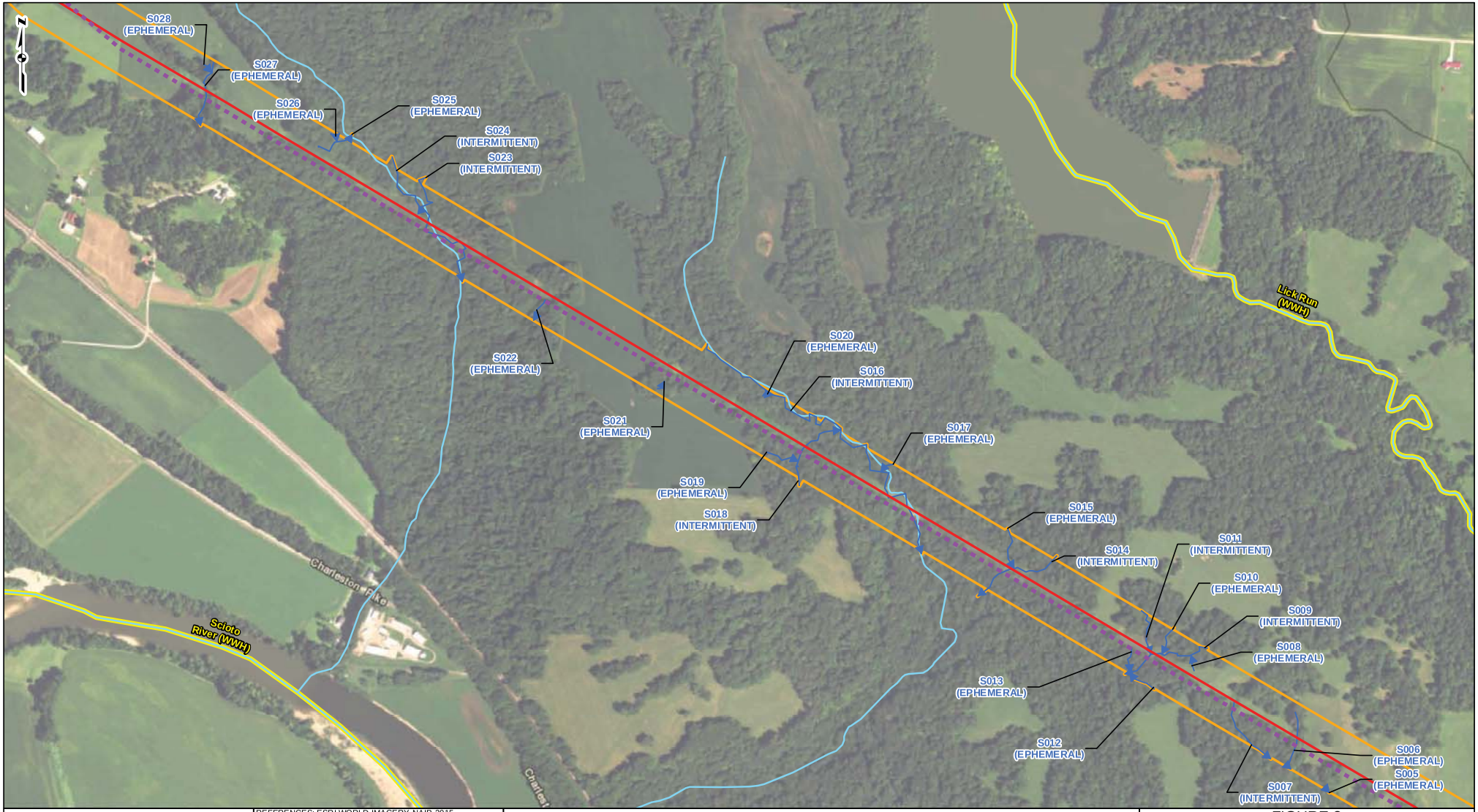

PROJECT LOCATION

ROSS COUNTY, OHIO

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LEGEND

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- EXISTING 138kV TRANSMISSION LINE
- EXISTING 69kV TRANSMISSION LINE
- PROPOSED 138 kV TRANSMISSION LINE
- NHD STREAM
- OH WQS STREAM
- STUDY AREA

OHIO EPA STREAM ELIGIBILITY

- INELIGIBLE
- POSSIBLY ELIGIBLE
- ELIGIBLE

0 300 600 1,200 Feet

FIGURE 3
STREAM ELIGIBILITY MAP
SHEET 2 OF 3

ROSS - GINGER
138kV LINE REBUILD PROJECT
AMERICAN ELECTRIC POWER

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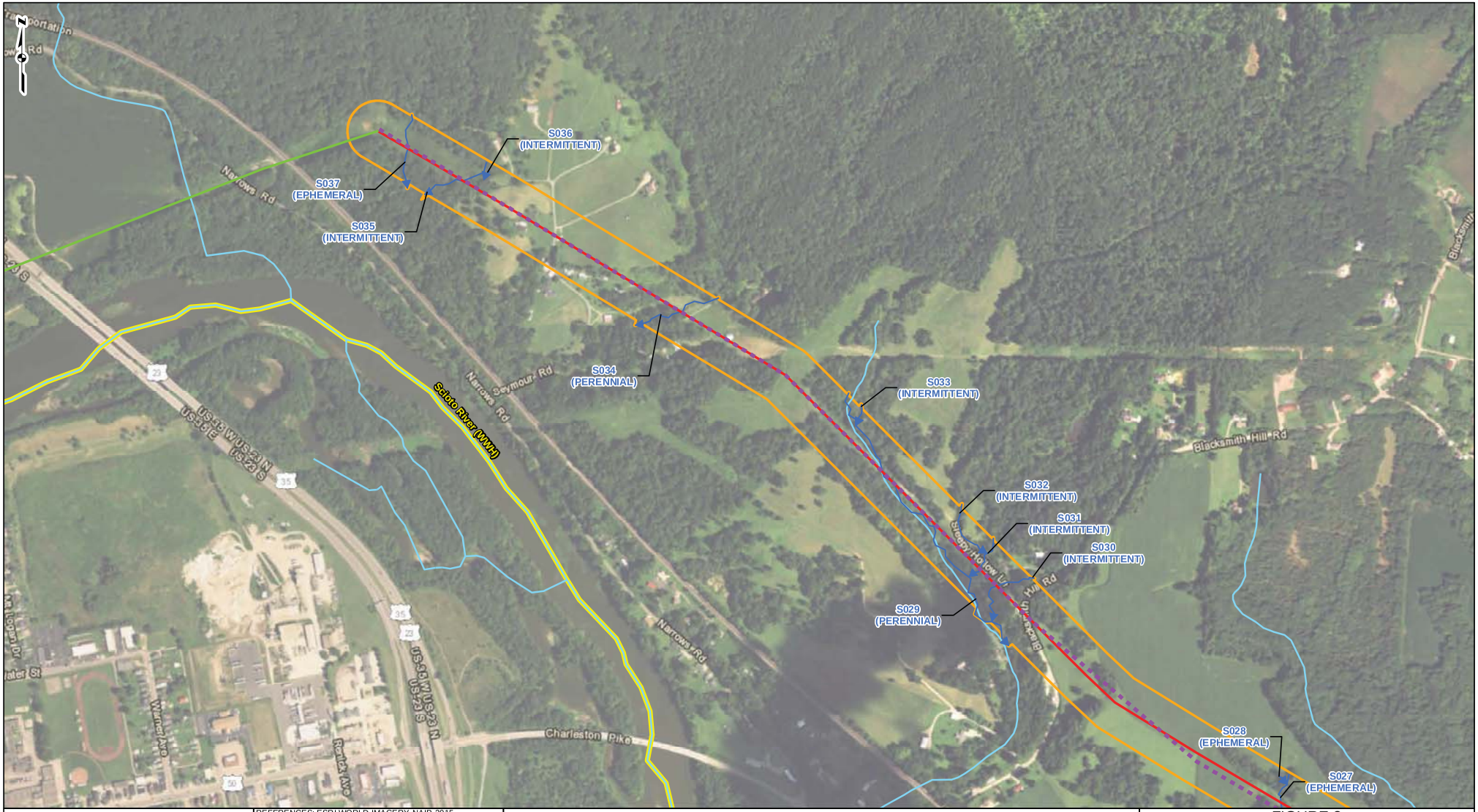

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ROSS COUNTY, OHIO

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- NHD STREAM
- OH WQS STREAM
- STUDY AREA

OHIO EPA STREAM ELIGIBILITY

- INELIGIBLE
- POSSIBLY ELIGIBLE
- ELIGIBLE

0 300 600 1,200 Feet

FIGURE 3
STREAM ELIGIBILITY MAP
SHEET 3 OF 3

ROSS - GINGER
138kV LINE REBUILD PROJECT
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APPENDIX A
Photographs

Photograph 1. Wetland W001-PEM-CAT1, Facing Northwest

Photograph 2. Wetland W001-PEM-CAT1, Facing Southeast

Photograph 3. Wetland W002-PEM-CAT1, Facing South

Photograph 4. Wetland W002-PEM-CAT1, Facing Northwest

Summary: Application (2 of 5 Parts) electronically filed by Ms. Christen M. Blend on behalf of AEP Ohio Transmission Power Company, Inc.