


▲ Substation	City/Township	Evergreen Forest	Cropland
● Existing Structure	County	Deciduous Forest	Industrial
■ Proposed Structure	Map Index	Grassland	Transportation
🏠 House	1,000 ft Corridor	Mixed Forest	Residential
— Existing 138 kV	Agriculture District	Pasture	Water
— Proposed 138 kV	Parcel Boundary	Commercial	


Scale: 1" = 300' (1:3,600)



0 150 300 450 600 Feet


Projected Coordinate System: Ohio State Plane  
Datum: North American Datum of 1983  
Projection: Lambert Conformal Conic  
Zone: South  
Linear Unit: Feet

Figure 03  
Land Use Map  
Seaman Voltage Drop Transmission Line Improvement Project  
Map Sheet 12



Source: Commonwealth Associates Inc., AEP, ESRI  
Comments:

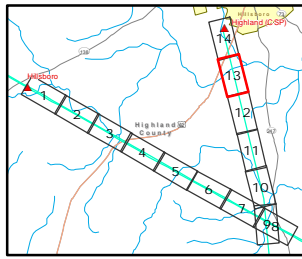
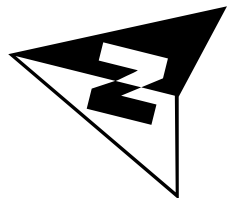
Drawn By: JEK  
Date: 5/8/2014



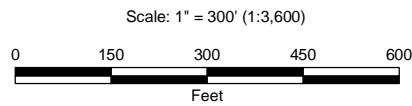
700 Morrisson Rd.  
Gahanna, OH 43230-6642  
PH: (614) 716-1000  
Fax: (614) 552-1818

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- |                      |                      |                  |                |
|----------------------|----------------------|------------------|----------------|
| ▲ Substation         | City/Township        | Evergreen Forest | Cropland       |
| ● Existing Structure | County               | Deciduous Forest | Industrial     |
| ■ Proposed Structure | Map Index            | Grassland        | Transportation |
| 🏠 House              | 1,000 ft Corridor    | Mixed Forest     | Residential    |
| — Existing 138 kV    | Agriculture District | Pasture          | Water          |
| — Proposed 138 kV    | Parcel Boundary      | Commercial       |                |



Projected Coordinate System: Ohio State Plane  
Datum: North American Datum of 1983  
Projection: Lambert Conformal Conic  
Zone: South  
Linear Unit: Feet

Figure 03  
Land Use Map  
Seaman Voltage Drop Transmission Line Improvement Project  
Map Sheet 13

Commonwealth  
associates, inc.

Source: Commonwealth Associates Inc., AEP, ESRI  
Comments:

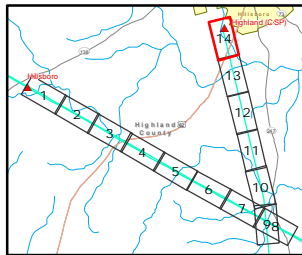
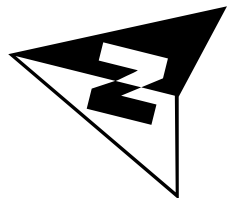
Drawn By: JEK  
Date: 5/8/2014



700 Morrison Rd.  
Gahanna, OH 43230-6642  
PH: (614) 716-1000  
Fax: (614) 552-1818

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- |                      |                      |                  |                |
|----------------------|----------------------|------------------|----------------|
| ▲ Substation         | City/Township        | Evergreen Forest | Cropland       |
| ● Existing Structure | County               | Deciduous Forest | Industrial     |
| ■ Proposed Structure | Map Index            | Grassland        | Transportation |
| 🏠 House              | 1,000 ft Corridor    | Mixed Forest     | Residential    |
| — Existing 138 kV    | Agriculture District | Pasture          | Water          |
| — Proposed 138 kV    | Parcel Boundary      | Commercial       |                |

Scale: 1" = 300' (1:3,600)

0 150 300 450 600  
Feet

Projected Coordinate System: Ohio State Plane  
Datum: North American Datum of 1983  
Projection: Lambert Conformal Conic  
Zone: South  
Linear Unit: Feet

Figure 03  
Land Use Map  
Seaman Voltage Drop Transmission Line Improvement Projects  
Map Sheet 14

Commonwealth  
associates, inc.

Source: Commonwealth Associates Inc., AEP, ESRI  
Comments:

Drawn By: JEK  
Date: 5/8/2014



700 Morrison Rd.  
Gahanna, OH 43230-6642  
PH: (614) 716-1000  
Fax: (614) 552-1818

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American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

New Market Township Fiscal Officer  
Mr. Dickk Barrera  
4695 U.S. 62  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mr. Barrera:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brett E. Schmied", is written over a light blue circular stamp.

Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager



American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Washington Township Trustee  
Mr. Mike Countryman  
5340 Mount Washington Road  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mr. Countryman:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Brett E. Schmied', is written over a horizontal line.

Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager



American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Washington Township Fiscal Officer  
Mr. Vic Gall  
4244 State Route 73  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mr. Gall:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Brett E. Schmied', with a large, stylized loop at the end.

Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager



American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Liberty Township Trustee  
Mr. James M. Grove  
133 East South Street  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mr. Grove:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

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Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager



American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

New Market Township Trustee  
Mr. Kenny Harless  
6095 New Market Road  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mr. Harless:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

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Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager





American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Washington Township Trustee  
Mr. Arthur Harless  
7449 Oakridge Road  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mr. Harless:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

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Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager





American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Mayor Drew Hastings  
City of Hillsboro  
130 North High Street  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mayor Hastings:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

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Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager





American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Highland County Board of Commissioners  
Mr. Shane Wilkin, President  
Mr. Jeremy Shaffer  
Mr. Thomas Horst  
119 Governor Foraker Place, Suite 211  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Commissioners:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

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Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager





American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

New Market Township Trustee  
Mr. Thomas Juillerat  
6261 New Market Road  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mr. Juillerat:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

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Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager





American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Liberty Township Trustee  
Mr. John McLaughlin  
9959 U.S. Route 50  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mr. McLaughlin:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

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Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager





American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Washington Township Trustee  
Mr. Travis Mootz  
7661 Oakridge Road  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mr. Mootz:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

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Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager





American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Highland County Planning Department  
Ms. Nicole Oberrecht  
119 Governor Foraker Place, Suite 211  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Ms. Oberrecht:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

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Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager



American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Highland County Engineer  
Mr. P. Dean Otworth  
138 Bowers Avenue  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mr. Otworth:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Brett E. Schmied', enclosed within a blue oval.

Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager





American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

New Market Township Trustee  
Mr. Lowell Sullivan  
4930 U.S. Route 62  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mr. Sullivan:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brett E. Schmied", enclosed within a large, loopy blue oval.

Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager



American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Liberty Township Fiscal Officer  
Ms. Jolene Walker  
7430 Roads Lane  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Ms. Walker:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Brett E. Schmied', is written over a horizontal line.

Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager





American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Highland County District Library  
Ms. Jennifer West, Director  
10 Willettsville Pike  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Ms. West:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

We ask that you make this Letter of Notification available to the public.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

Please feel free to contact me at 614-552-1929 and I would be happy to answer any questions concerning this project.

Sincerely,

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Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager



American Electric Power  
700 Morrison Road  
Gahanna, OH 43230

May 20, 2014

Liberty Township Trustee  
Mr. Jerry Williams  
8775 U.S. Route 50  
Hillsboro, Ohio 45133

RE: Letter of Notification  
Seaman Voltage Drop Transmission Line Improvement Project  
Case Number: 14-0904-EL-BLN

Dear Mr. Williams:

In accordance with Rules 4906 of the Ohio Administrative Code (OAC), AEP Ohio Transmission Company (AEP Ohio Transco) is required to submit a Letter of Notification to the State of Ohio Power Siting Board (OPSB) whenever certain changes are made to our transmission facilities.

The proposed Seaman Voltage Drop Transmission Line Improvement Project, Public Utilities Commission of Ohio (PUCO) Case Number 14-0904-EL-BLN, consists of the rewiring the Portsmouth-Trenton 138-kV line, rewiring the Seaman-Highland 138-kV line and adding additional wires and construction a connection between the two lines. The Portsmouth-Trenton 138-kV line will be approximately five miles long and built on steel H-Frame 138-kV structures. The Seaman-Highland 138-kV line will be approximately three miles long and built on double circuit steel monopole 138-kV structures. The project will be located in Liberty, New Market and Washington townships in Highland County.

In compliance with Rule 4906-11-02 of the OPSB Rules and Regulations, we have prepared and filed the attached Letter of Notification. This Notice contains details on the line location, project description and construction schedule, and is submitted for your information.

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Brett E. Schmied, J.D.  
Project Outreach Specialist  
American Electric Power

cc: Lorraine Engle, Project Manager



## **APPENDIX C**

### **THREATENED AND ENDANGERED SPECIES SURVEY REPORT**

# **SEAMAN VOLTAGE DROP TRANSMISSION LINE IMPROVEMENT PROJECT (New Highland-Hillsboro 138kV Circuit on the Portsmouth-Trenton #1 and Seaman-Highland Transmission Lines)**

## **THREATENED AND ENDANGERED SPECIES SURVEY REPORT**

*Prepared for:*

American Electric Power Ohio Transco  
700 Morrison Road  
Gahanna, Ohio 45230



*Prepared by:*



2700 West Argyle Street  
Jackson, Michigan 49202

May 2014



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## APPENDIX (follows figures)

APPENDIX A	AGENCY RESPONSES
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## 1.0 PROJECT DESCRIPTION

This document presents the results of the threatened and endangered species assessment conducted by Commonwealth Associates, Inc. (Commonwealth) for American Electric Power Ohio Transco's (AEP Ohio Transco) proposed Seaman-Highland Voltage Drop Transmission Line Improvement Project (Project) to create a new Highland-Hillsboro 138Kv circuit. The Project is located in Highland County, Ohio, south of the City of Hillsboro.

Creating the new circuit will require rebuilding the Portsmouth-Trenton #1 138kV electrical transmission line between the Hillsboro station off of Mad River Road to Structure #300 off of Stanforth Lane; relocating Structure #309 and removing Structure #310 on the Portsmouth-Trenton #2 138kV line; and rebuilding the Seaman-Highland 138kV (69kV) line between the Highland station off of South High Street to south of Structure #92, where the line crosses the Portsmouth-Trenton lines. The project is approximately 7.9 miles in length and consists of 4.8 miles along the Portsmouth-Trenton #1 & #2 lines and approximately 3.1 miles along the Seaman-Highland line. The Project Overview, Figure 1, following the report depicts the Project within the county and in relation to nearby roads, railroads, towns, rivers and streams, and other transmission lines.

As part of the Ohio Power Siting Board (OPSB) Letter of Notification (LON) requirements, AEP Ohio Transco is required to investigate and report the presence or absence of federal and state designated species and assess potential impacts by the Project, as stated in Ohio Administrative Code (OAC) Rule 4906-11-01(E)(1). These rules state:

- (E) *Environmental data. Describe the environmental impacts of the project. This description shall contain the following information:*
  - (1) *A description of the applicant's investigation concerning the presence or absence of federal and state designated species (including endangered species, threatened species, rare species, species proposed for listing, species under review for listing and species of special interest) that may be located within the area likely to be disturbed by the project, a statement of the findings of the investigation, and a copy of any documents produced as a result of the investigation.*

AEP Ohio Transco retained Commonwealth to conduct a threatened and endangered species review and field survey within areas crossed by the proposed Project and within 1,000 feet of the Project centerline. This report will be used to assist AEP Ohio Transco's effort to avoid impacts to threatened and endangered species potentially present in the study area during construction activities.

## 2.0 METHODS

Commonwealth began this survey by reviewing online data from the State of Ohio Department of Natural Resources (ODNR) and the U.S. Fish and Wildlife Service (USFWS). In addition, Commonwealth submitted a request to the ODNR Biodiversity Database for GIS records of species of

concern in proximity to the Project. The GIS shapefiles were added to the Project GIS maps as an overlay where they were in proximity to the Project area to identify designated species and other sensitive areas as reported by the ODNR. Coordination letters soliciting comments on the Project were submitted to the ODNR and USFWS. Copies of response letters provided by the ODNR and USFWS are included in Appendix A following the Project Overview Map. Agency-identified species and available species-specific information was reviewed to determine the various habitat types the listed species are known to frequent. This information was used during the field survey to assess the potential for these species of concern in or near the Project study area.

### 3.0 RESULTS

Commonwealth ecologists conducted a species habitat survey in conjunction with the stream and wetland field surveys. These surveys were conducted on April 2, 3, 4 and 11, 2014. On-the-ground surveys were limited to within the 150 foot wide right of way and along the proposed access routes where off of the right of way.

#### 3.1 State Species of Concern

ODNR provided two letter responses (one for each line) dated April 15, 2014 and April 16, 2014, indicating the ranges of several species that potentially occur within the vicinity of the proposed Project area. Table 1 lists the four species identified by the ODNR. The ODNR database indicated no known occurrences of species of concern within the Project area. One additional species, narrow-leaved toothwort, was observed during the on-site review.

**TABLE 1  
STATE SPECIES THAT COULD INHABIT  
PROJECT AREA**

Common Name	Scientific Name	State Status
<b>Mammals</b>		
Black Bear	<i>Ursus americanus</i>	Endangered
Bobcat	<i>Lynx rufus</i>	Threatened
Indiana Bat	<i>Myotis sodalis</i>	Endangered
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Endangered
<b>Plant</b>		
Narrow-leaved Toothwort	<i>Cardamine dissecta</i>	Potentially End.

**Black Bear:** This is a highly mobile species, and we concur with the ODNR that the Project is not likely to impact this species.

**Bobcat:** Similar to the black bear, impact to this species is not likely, due to its mobility.

**Indiana Bat:** The Indiana bat, a known inhabitant of Ohio, has a presumed presence in Highland County. The bat utilizes dead or dying trees with exfoliating bark for cover, roosts, and breeding/nursery activities during the warmer months of the year. Males generally spend the summer alone or in small groups. The



females may form nursery colonies of 100 or more. During the colder winter months, the bat migrates to southern Indiana and northern Kentucky to hibernate and is not present in the Project area during that time. Dead or dying trees will be utilized by the Indiana bat for only several breeding seasons at most, as the dying process will eventually take these trees down. They will be replaced in the future by other currently healthy trees. The Project area is maintained to control woody vegetation through routine tree clearing and control of woody vegetative growth. No additional clearing of trees within the right of way is proposed. To the extent possible, access routes to the structures will follow existing roads, driveways, and two-track lanes. If any existing bat habitat trees need to be removed for access, the tree removal will be undertaken between October 1 and March 31. Minimal clearing is anticipated. Therefore, we concluded that the Project as proposed “is not likely to adversely affect” any Indiana bats that may be in the area.

**Loggerhead Shrike:** The ODNR has identified that the Project is within the range of the loggerhead shrike, a state endangered bird. The loggerhead shrike lives in open and semi-open habitats. Within Ohio, breeding loggerhead shrikes are known to prefer osage–orange hedgerows bordering open agricultural fields and hunt in a variety of farm fields and edge habitats. Where osage–orange hedgerows are not available, breeding pairs may occupy pastures and fencerows dotted with dense thorny thickets composed of hawthorns, roses, and other species. The shrike looks for prey from perches, so its foraging habitat must be open for it to locate potential prey. Shrikes typically nest in large shrubs that can be found scattered throughout open areas or that line roadways. In non-osage-orange thickets, they typically place their nests less than 6 feet high. A lack of suitable hunting perches can make the habitat unsuitable for the shrike. (<http://www.ohiobirds.org/obba2/pdfs/species/LoggerheadShrike.pdf>).

The ODNR recommends that no work occur between April 1 and August 1 in grassland or prairie habitat to prevent potential impact to the species during their nesting period. Most of the right of way is open habitat and likely marginally suitable for the loggerhead shrike. There are good perching areas and open fields for hunting but not an abundance of live large shrubs and hedgerows for nesting within the corridor. Commonwealth has followed up with the ODNR on the habitat concerns and is contracting with a botanist familiar with the loggerhead shrike and its habitat to identify suitable areas so they can be demarked on the SWPPP maps. AEP Ohio Transco proposes to start construction (including access roads) after August 1 in these areas. Once started, construction will be limited to areas already cleared. In the event that the Project is delayed and construction must occur in suitable habitat between April 1 and August 1, Commonwealth has proposed an alternative to the ODNR to allow construction in this time frame:

1. Prior to installing any construction access or work pads between those dates, a qualified individual will conduct an on-the-ground review to confirm the absence of nests.
2. Between these dates, to ensure all construction activities are confined to cleared areas, barrier fencing will be installed around the work areas.

AEP Ohio Transco is agreeable to following these recommendations but still intends to maintain the construction schedule currently proposed. Correspondence with the ODNR is included at the end of this report in Appendix A.

**Freshwater Mussels:** Although no specific species of mussels was identified, the ODNR notes that any in-water work must ensure no impact to freshwater native mussels in the area. The Project crosses two perennial streams, the Rocky Fork and the South Fork of the Rocky Fork, which may support freshwater mussels. No in-water work is proposed.

Four small streams will be temporarily impacted by construction access crossing. Although these are not perennial streams and unlikely to support freshwater mussels, timber mat bridging will be used to ensure crossing is above the flow line and stream bed. Where construction is near the Rocky Fork or South Fork of the Rocky Fork, barrier fencing will be installed to provide buffering of the streams. With the proposed timber matting, buffering, and SWPPP measures, the Project is not likely to have an impact on listed and non-listed mussels.

**Narrow Leaved Toothwort:** Narrow-leaved toothwort was observed within the Project corridor during the on-site review. The species was observed on the edge of the right of way and not in an area of on-the-ground construction or access. The location of this species will be forwarded to the ODNR. A sensitive area buffer will be demarcated on the SWPPP maps. With the proposed SWPPP measures and buffering, the Project is not likely to have an impact on this species.

### 3.2 Federal Species of Concern

To address the Project's potential to impact federally protected species, Commonwealth conducted web based literature review of USFWS Federally Listed Threatened, Endangered, Proposed, and Candidate Species' County Distribution, Revised 2014, to identify what species potentially occur in Highland County. In addition Commonwealth contacted the USFWS to request an informal consultation on the project. A copy of the USFWS response is included at the end of this report in Appendix A.

**TABLE 2  
FEDERAL SPECIES THAT COULD INHABIT  
PROJECT AREA**

Common Name	Scientific Name	State Status
<b>Mammals</b>		
Indiana Bat	<i>Myotis sodalis</i>	Endangered
Little Brown Bat	<i>Myotis lucifugus</i>	Under Consideration
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Proposed Endangered
<b>Birds</b>		
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Recovery

**Bats:** In addition to the Indiana bat, the northern long-eared bat was identified as a species of concern. The USFWS lists the northern long-eared bat as proposed endangered in Ohio. Both species utilize forested habitat and may occur within the Project area. Also, the Project is within the range of the little brown bat, which is being considered for listing due to population decline from white nose syndrome.

Little brown bats are known to hibernate in Ohio usually in caves, old coal mines and man-made structures. Males roost solitarily in the summer season, and roosts may include buildings, tree cavities, caves, mines, and other man-made structures. Females form maternity colonies, mostly in man-made structures, but sometimes will roost in tree cavities and exfoliating bark of dead trees. In the summer, these bats typically roost singly or in colonies under bark, in cavities, and in crevices in live and dead trees. The bats may also summer roost in cooler locations, such as caves and mines. They have also been found roosting under eaves on houses, behind window shutters, in bat houses, and in open and enclosed buildings. They are documented to enter hibernation in October/November and leave in March/April. Bats have been known to hibernate in caves, mines and tunnels within 60 miles of their summer roosts.

As outlined under discussions on the Indiana bat, 3.1 State Species of Concern, the Project area is maintained for woody vegetative growth. No additional clearing of the right of way is proposed. To the extent possible, access routes to the structures to be replaced or reinforced will follow existing roads, driveways, and two track-lanes. If any existing bat habitat trees need to be removed for access, the tree removal will be undertaken between October 1 and March 31. Therefore, we concur with the USFWS that the Project as proposed is not likely to affect any of these bat species adversely.

**Bald Eagle:** Bald eagles are typically found near sizeable bodies of water, where water with ample food (fish) is located within two miles of the nest (<http://wildlife.ohiodnr.gov/species-and-habitats/species-guide-index/birds/bald-eagle>). The Project crosses several streams, the largest being the Rocky Fork near US 62. This stream is likely not suitable to support sufficient numbers or size of fish for eagles in this location. Bald eagles have been observed in Highland County at the Rocky Fork Lake. This approximately 2,000-acre impoundment of the Rocky Fork is over 4.5 miles from the Project area. No eagle nests were observed within 1,000 feet of the right of way. It is unlikely that bald eagles would nest in the Project area due to the lack of abundant sizable fish within the Project streams and the distance from Rocky Fork Lake.

## 4.0 SUMMARY

AEP Ohio Transco retained Commonwealth to conduct a threatened and endangered species review for areas located within 1,000 feet of the proposed Project centerline. This report will be used to assist AEP Ohio Transco's efforts to avoid impacts to threatened and endangered species potentially present in the study area during construction activities. Commonwealth ecologists conducted a species habitat survey in conjunction with the stream and wetland field surveys. These surveys were conducted over a period of time in April 2014.

The ODNR and USFWS recommend that trees exhibiting characteristics suitable for habitat for the Indiana and northern long-eared bats, and any surrounding wooded areas should be saved. If these areas cannot be avoided, they should be cut only from October 1 to March 31. If seasonal restriction is not possible, net surveys should be conducted. No trees will be cut in the electric transmission line right of way. To the extent possible, access routes will follow existing roads, driveways, and two-track lanes.



If any existing bat habitat trees need to be removed for access, AEP Ohio Transco proposes to adhere to seasonal tree clearing restrictions and undertake tree removal between October 1 and March 31. Minimal clearing is anticipated.

The ODNR has identified the Project area as being within the range of the loggerhead shrike, a state endangered bird. Marginal habitat exists within the Project area. Suitable areas will be identified and demarcated on the SWPPP maps. No construction is to occur within these areas between April 1 and August 1. In the event the construction schedule changes, a plan for working in these areas has been proposed.

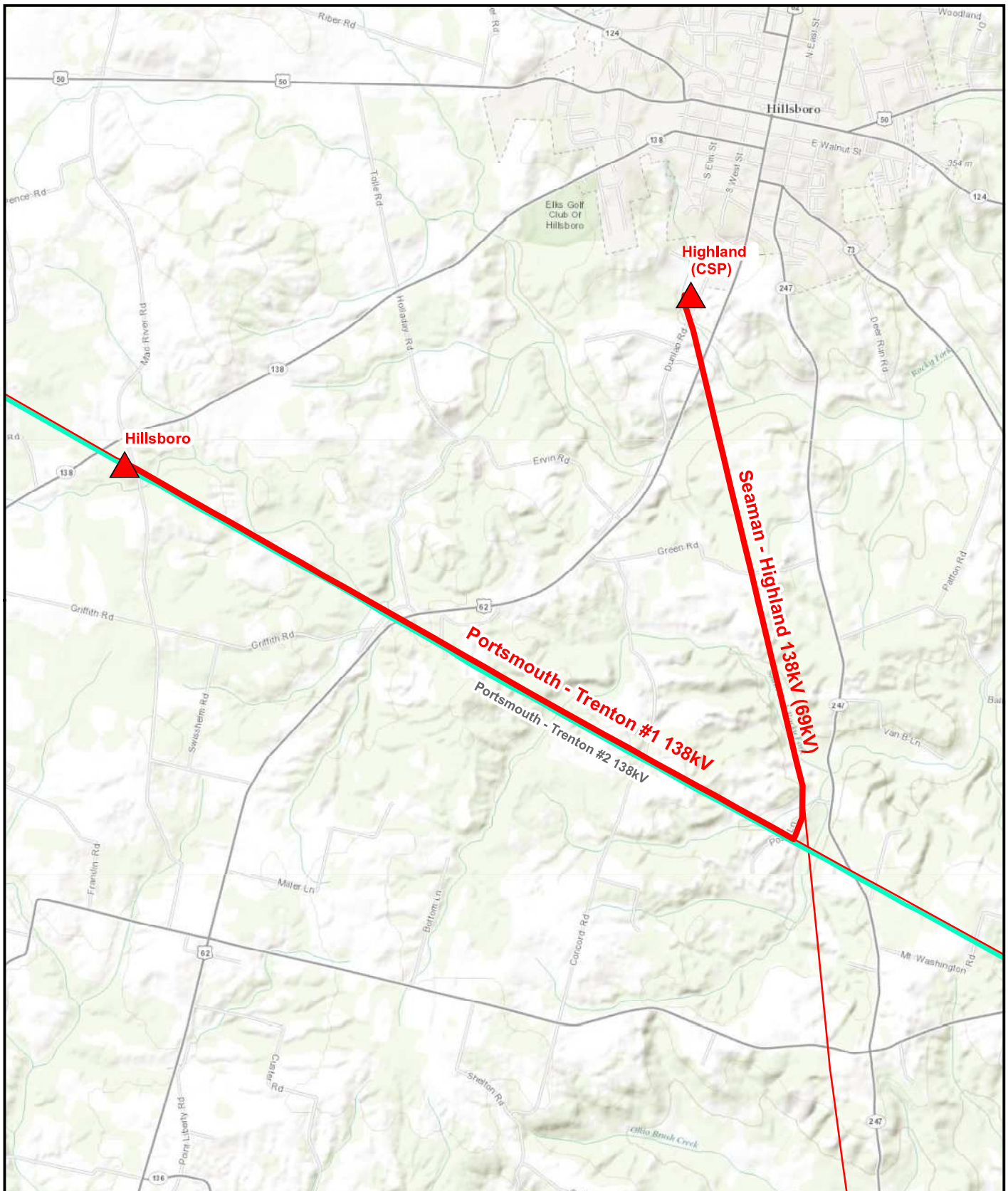
To prevent impact to freshwater mussels, the ODNR requires no in-water work in perennial streams and maintaining riparian buffers. No forested habitat is proposed to be cleared within 100 feet of the edge of either river. SWPPP maps with soil erosion control measures for construction and restoration will be prepared. Sensitive areas will be demarcated on the SWPPP maps, and barrier fencing is to be utilized to maintain the buffer where construction is near the rivers. No in-water work is proposed.

A potentially endangered plant, the narrow-leaved toothwort, was observed during the field work. Barrier fencing is to be utilized to maintain a construction buffer.

With the proposed construction considerations of timing, buffering, and timber mat bridging, no species of concern are expected to be impacted by the proposed Project.

## **5.0 CONCLUSION**

Based upon the nature of the Project, review of available current literature, review of federal and state records of species of concern, and field survey conducted in April 2014, it is not expected that species of concern will be impacted by the Project with adherence to restrictions. Commonwealth understands that AEP Transco intends to comply with the buffering and seasonal construction restrictions outlined by the ODNR and USFWS.



**Legend:**

▲ Substation

— Seaman Voltage Drop Transmission Line Improvement Project 138kV Transmission Line

1 inch = 4,000 feet

0 4,000 8,000 Feet



Hillsboro, OH



Seaman Voltage Drop  
Transmission Line Improvement  
Project

Figure 1  
Project Overview



# Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

## Ohio Division of Wildlife

*Scott Zody, Chief*  
2045 Morse Rd., Bldg. G  
Columbus, OH 43229-6693

February 24, 2014

Ann Stevens  
Commonwealth Associates, Inc.  
2700 West Argyle Street  
Jackson, MI 49202

Dear Ms. Stevens

After reviewing the Natural Heritage Database, I find the Division of Wildlife has no records of rare or endangered species in the Portsmouth – Trenton #1 Electrical Transmission line project area in Liberty and New Market Townships, Highland County, Ohio. We are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests, national wildlife refuges, parks or forests or other protected natural areas within a one mile radius of the project area.

Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although we inventory all types of plant communities, we only maintain records on the highest quality areas.

This letter only represents a review of rare species and natural features data within the Ohio Natural Heritage Database. It does not fulfill coordination under the National Environmental Policy Act (NEPA) or the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S. C. 661 et seq.) and does not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Please contact me at 614-265-6452 if I can be of further assistance.

Sincerely,

A handwritten signature in blue ink that reads "Greg Schneider".

Greg Schneider, Administrator  
Ohio Natural Heritage Database Program





# Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

## Ohio Division of Wildlife

*Scott Zody, Chief*  
2045 Morse Rd., Bldg. G  
Columbus, OH 43229-6693

February 24, 2014

Ann Stevens  
Commonwealth Associates, Inc.  
2700 West Argyle Street  
Jackson, MI 49202

Dear Ms. Stevens

After reviewing the Natural Heritage Database, I find the Division of Wildlife has no records of rare or endangered species in the Seaman-Highland Electrical Transmission Line project area in Liberty Township, Highland County, Ohio. We are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests, national wildlife refuges, parks or forests or other protected natural areas within a one mile radius of the project area.

Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although we inventory all types of plant communities, we only maintain records on the highest quality areas.

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Please contact me at 614-265-6452 if I can be of further assistance.

Sincerely,

A handwritten signature in blue ink that reads "Greg Schneider".

Greg Schneider, Administrator  
Ohio Natural Heritage Database Program



# Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

## Office of Real Estate

Paul R. Baldridge, Chief  
2045 Morse Road – Bldg. E-2  
Columbus, OH 43229  
Phone: (614) 265-6649  
Fax: (614) 267-4764

April 15, 2014

Ann M. Stevens  
Commonwealth Associates, Inc.  
2700 West Argyle Street  
Jackson, Michigan 49204

**Re:** 14-141; Portsmouth- Trenton #1 Transmission Line – AEP

**Project:** The project involves the rehabilitation and rebuilding of an above ground electric transmission line within an existing utility easement.

**Location:** The project is located New Market and Liberty Townships, Highland County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

**Fish and Wildlife:** The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to wetlands and other water resources be avoided and minimized to the fullest extent possible, and that best management practices be utilized to minimize erosion and sedimentation.

The DOW recommends no in-water work in perennial streams from at least April 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat.

The project is within the range of the Indiana bat (*Myotis sodalis*), a state and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees: Shagbark hickory (*Carya ovata*), Shellbark hickory (*Carya laciniosa*), Bitternut hickory (*Carya cordiformis*), Black ash (*Fraxinus nigra*), Green ash (*Fraxinus pennsylvanica*), White ash (*Fraxinus americana*), Shingle oak (*Quercus imbricaria*), Northern red oak (*Quercus rubra*), Slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), Eastern cottonwood (*Populus deltoides*), Silver maple (*Acer saccharinum*), Sassafras (*Sassafras albidum*), Post oak (*Quercus stellata*), and White oak (*Quercus alba*). Indiana bat habitat consists of suitable trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or

riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. If suitable trees occur within the project area, these trees should be conserved. If suitable habitat occurs on the project area and trees must be cut, cutting must occur between October 1 and March 31. If suitable trees must be cut during the summer months, a net survey must be conducted between June 15 and July 31, prior to cutting. Net surveys shall incorporate either two net sites per square kilometer of project area with each net site containing a minimum of two nets used for two consecutive nights, or one net site per kilometer of stream within the project limits with each net site containing a minimum of two nets used for two consecutive nights. If no tree removal is proposed, the project is not likely to impact this species.

The project is within the range of the black bear (*Ursus americanus*), a state endangered species, and the bobcat (*Lynx rufus*), a state threatened species. Due to the mobility of these species, this project is not likely to impact these species.

The project is within the range of the loggerhead shrike (*Lanius ludovicianus*), a state endangered bird. A statewide survey has not been completed for this species. A lack of records does not indicate the species is absent from the area. Therefore, if grassland or prairie habitat will be impacted, construction must not occur in this habitat during the species' nesting period of April 1 to August 1. If this habitat will not be impacted, the project is not likely to impact this species.

The ODNR Natural Heritage Database has no records for rare or endangered species at this project site. We are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests, national wildlife refuges or other protected natural areas within the project area. Our inventory program does not provide a complete survey of Ohio wildlife, and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

ODNR appreciates the opportunity to provide these comments. Please contact John Kessler at (614) 265-6621 if you have questions about these comments or need additional information.

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ODNR Office of Real Estate  
2045 Morse Road, Building E-2  
Columbus, Ohio 43229-6693  
John.Kessler@dnr.state.oh.us





# Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

## Office of Real Estate

Paul R. Baldridge, Chief  
2045 Morse Road – Bldg. E-2  
Columbus, OH 43229  
Phone: (614) 265-6649  
Fax: (614) 267-4764

April 16, 2014

Ann M. Stevens  
Commonwealth Associates, Inc.  
2700 West Argyle Street  
Jackson, Michigan 49204

**Re:** 14-143; Seaman-Highland 138 kV Electric Transmission Line - AEP

**Project:** The project involves the rebuilding of an above ground electrical transmission line within an existing utility easement.

**Location:** The project is located New Market and Liberty Townships, Highland County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

**Fish and Wildlife:** The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to wetlands and other water resources be avoided and minimized to the fullest extent possible, and that best management practices be utilized to minimize erosion and sedimentation.

The DOW recommends no in-water work in perennial streams from at least April 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat.

The project is within the range of the Indiana bat (*Myotis sodalis*), a state and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees: Shagbark hickory (*Carya ovata*), Shellbark hickory (*Carya laciniosa*), Bitternut hickory (*Carya cordiformis*), Black ash (*Fraxinus nigra*), Green ash (*Fraxinus pennsylvanica*), White ash (*Fraxinus americana*), Shingle oak (*Quercus imbricaria*), Northern red oak (*Quercus rubra*), Slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), Eastern cottonwood (*Populus deltoides*), Silver maple (*Acer saccharinum*), Sassafras (*Sassafras albidum*), Post oak (*Quercus stellata*), and White oak (*Quercus alba*). Indiana bat habitat consists of suitable trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or

riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. If suitable trees occur within the project area, these trees should be conserved. If suitable habitat occurs on the project area and trees must be cut, cutting must occur between October 1 and March 31. If suitable trees must be cut during the summer months, a net survey must be conducted between June 15 and July 31, prior to cutting. Net surveys shall incorporate either two net sites per square kilometer of project area with each net site containing a minimum of two nets used for two consecutive nights, or one net site per kilometer of stream within the project limits with each net site containing a minimum of two nets used for two consecutive nights. If no tree removal is proposed, the project is not likely to impact this species.

This project must not have an impact on freshwater native mussels in the area. This applies to both listed and non-listed species. The Ohio Mussel Survey Protocol requires a mussel survey for streams, and water bodies listed in Appendix A of the protocol. Streams with a watershed of 10<sup>2</sup> miles or larger above the impact point that are not listed in Appendix A of the protocol should also be assessed for mussels and/or mussel habitat. Mussel surveys may be recommended for these streams as well. Therefore, if in-water work is planned in any stream that meets any of the above criteria, the DOW recommends the applicant provide information to indicate no mussel impacts will occur. If this is not possible, the DOW recommends a professional malacologist conduct a mussel survey in the project area. If mussels that cannot be avoided are found in the project area, as a last resort, the DOW recommends a professional malacologist collect and relocates the mussels to suitable and similar habitat. Mussel surveys and any subsequent mussel relocation should be done in accordance with the Ohio Mussel Survey Protocol.

The project is within the range of the black bear (*Ursus americanus*), a state endangered species, and the bobcat (*Lynx rufus*), a state threatened species. Due to the mobility of these species, this project is not likely to impact these species.

The project is within the range of the loggerhead shrike (*Lanius ludovicianus*), a state endangered bird. A statewide survey has not been completed for this species. A lack of records does not indicate the species is absent from the area. Therefore, if grassland or prairie habitat will be impacted, construction must not occur in this habitat during the species' nesting period of April 1 to August 1. If this habitat will not be impacted, the project is not likely to impact this species.

The ODNR Natural Heritage Database has no records for rare or endangered species at this project site. We are unaware of any unique ecological sites, geologic features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests, national wildlife refuges or other protected natural areas within the project area. Our inventory program does not provide a complete survey of Ohio wildlife, and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the US Fish & Wildlife Service.

ODNR appreciates the opportunity to provide these comments. Please contact John Kessler at (614) 265-6621 if you have questions about these comments or need additional information.

John Kessler  
ODNR Office of Real Estate  
2045 Morse Road, Building E-2  
Columbus, Ohio 43229-6693  
John.Kessler@dnr.state.oh.us

## Ann M. Stevens

---

**From:** Ann M. Stevens  
**Sent:** Friday, May 02, 2014 3:28 PM  
**To:** 'Reardon, Nathan'  
**Cc:** Kessler, John; Tebbe, Sarah  
**Subject:** 14-143 CAI Energy- Seaman-Highland 138 kV Electric Transmission Line - AEP Comments

Nathan:

I apologize, I noticed that I have three projects which were identified as potential Loggerhead Shrike, and it's one of the two for AEP in Highland County that has the potential habitat. So the reference file I've been using is wrong. The area of potential habitat is on the Seaman-Highland line, 14-143.

As noted, the plan is to wait until after August 1 to do the work but appreciate the DOW considering an alternative if the work must be done during the nesting period. Thank you, Ann

**Ann M. Stevens, RLA, PMP**  
*Project Manager*  
*Environmental Services & Licensing*

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---

**From:** Reardon, Nathan [mailto:Nathan.Reardon@dnr.state.oh.us]  
**Sent:** Friday, May 02, 2014 3:03 PM  
**To:** Ann M. Stevens  
**Cc:** Kessler, John; Tebbe, Sarah  
**Subject:** RE: Comments

Hi Ann,

The DOW appreciates the effort and commitment of CAI Energy to ensure that the loggerhead shrike will not be impacted by this project. The DOW recommends that construction be avoided within the identified habitat during the breeding season of April 1 through August 1. However, if construction cannot be avoided within this area during the breeding season, the DOW recommends a survey of the area for nesting loggerhead shrikes similar to what you have proposed below.

Thank you,  
Nathan

**Nathan Reardon**  
Compliance Coordinator  
ODNR - Division of Wildlife  
2045 Morse Road, Bldg. G  
Columbus, OH 43229-6693  
Phone: 614-265-6741  
Email: [nathan.reardon@dnr.state.oh.us](mailto:nathan.reardon@dnr.state.oh.us)

---

**From:** Ann M. Stevens [<mailto:Ann.Stevens@cai-engr.com>]  
**Sent:** Monday, April 28, 2014 2:54 PM  
**To:** Reardon, Nathan  
**Cc:** Kessler, John; Tebbe, Sarah  
**Subject:** RE:  
Comments

Nathan:

Thank you for the information. We have had a botanist who is familiar with the Loggerhead Shrike look at our project and there is one area which has potential habitat. The plan is to delay construction of access roads and work pads in that area until after August 1. Work is scheduled for the fall and winter. However, there is always a possibility of the project being delayed due to outage windows. That's the time that the transmission line can be taken off line for the work.

Could we propose an alternative if construction is to be done between April 1 and August 1?

1. Prior to installing any construction access or work pads between those dates, a qualified individual will conduct an on-the-ground review to confirm the absence of nests.
2. Between those dates, to ensure all construction activities are confined to cleared areas, barrier fencing will be installed around the work areas.

Thank you for your time and attention, Ann

**Ann M. Stevens, RLA, PMP**  
*Project Manager*  
*Environmental Services & Licensing*

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---

**From:** Reardon, Nathan [<mailto:Nathan.Reardon@dnr.state.oh.us>]  
**Sent:** Thursday, April 17, 2014 7:41 AM  
**To:** Ann M. Stevens  
**Cc:** Kessler, John; Tebbe, Sarah  
**Subject:** RE:  
Comments

Hi Ann,



We don't have any restrictions on who can perform surveys/reviews of loggerhead shrike habitat. All that we recommend is that it is someone familiar with the loggerhead shrike and it's habitat. If you have any further questions, please feel free to contact me.

Thank you,  
Nathan

**Nathan Reardon**  
Compliance Coordinator  
ODNR - Division of Wildlife  
2045 Morse Road, Bldg. G  
Columbus, OH 43229-6693  
Phone: 614-265-6741  
Email: [nathan.reardon@dnr.state.oh.us](mailto:nathan.reardon@dnr.state.oh.us)

---

**From:** Tebbe, Sarah  
**Sent:** Wednesday, April 16, 2014 8:18 AM  
**To:** Reardon, Nathan  
**Cc:** Kessler, John; Ann M. Stevens ([Ann.Stevens@cai-engr.com](mailto:Ann.Stevens@cai-engr.com))  
**Subject:** FW:  
Comments

Hi Nathan,

Please see Ann's question below. Attached are the referenced comments.

Thanks,

*Sarah Tebbe*  
ODNR office of REALM  
Phone: 614 265 6397

---

**From:** Ann M. Stevens [<mailto:Ann.Stevens@cai-engr.com>]  
**Sent:** Wednesday, April 16, 2014 8:00 AM  
**To:** Tebbe, Sarah  
**Cc:** Kessler, John  
**Subject:** RE:  
Comments

Sarah:

Do you have a name of someone at the Division of Wildlife we can talk to on the Loggerhead shrike (*Lanius ludovicianus*)? We might want to have an ornithologist check on suitable habitat and I want to make sure there are not any restrictions as to who can do it or get a recommendation from them for a consultant. Thank you, Ann

**Ann M. Stevens, RLA, PMP**  
*Project Manager*

## Ann M. Stevens

---

**From:** susan\_zimmermann@fws.gov on behalf of Ohio, FW3 <ohio@fws.gov>  
**Sent:** Wednesday, February 26, 2014 10:17 AM  
**To:** Ann M. Stevens  
**Subject:** OPSB Application - Highland County Transmission Lines

TAILS# 03E15000-2014-TA-0783 - Seaman-Highland 138kV Line AEP  
TAILS# 03E15000-2014-TA-0784 - Portsmouth-Highland 138kV Line AEP

Dear Ms. Stevens,

We have received your recent correspondence requesting information about the subject proposal. There are no Federal wilderness areas, wildlife refuges or designated critical habitat within the vicinity of the project area.

ENDANGERED SPECIES COMMENTS: Due to the project, type, size, and location, we do not anticipate adverse effects to federally endangered, threatened, proposed, or candidate species. Should the project design change, or during the term of this action, additional information on listed or proposed species or their critical habitat become available, or if new information reveals effects of the action that were not previously considered, consultation with the Service should be initiated to assess any potential impacts.

If you have additional questions or require further assistance with your project proposal, please contact me at the following number (614) 416-8993, x12. In addition, you can find more information on natural resources in Ohio, and a county list of federally threatened and endangered species in Ohio, by visiting our homepage at:  
<http://www.fws.gov/midwest/ohio>.

Sincerely,



Mary Knapp, PhD.  
Field Supervisor

## **APPENDIX D**

### **AREAS OF ECOLOGICAL CONCERN, WETLAND DELINEATION, AND STREAM ASSESSMENT REPORT**

# **SEAMAN VOLTAGE DROP TRANSMISSION LINE IMPROVEMENT PROJECT (New Highland-Hillsboro 138kV Circuit on the Portsmouth-Trenton #1 and Seaman-Highland Transmission Lines)**

## **AREAS OF ECOLOGICAL CONCERN, WETLAND DELINEATION, AND STREAM ASSESSMENT REPORT**

*Prepared for:*

American Electric Power Service Corporation  
700 Morrison Road  
Gahanna, Ohio 45230



*Prepared by:*

  
2700 W. Argyle St.  
Jackson, MI 49202

May 2014



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## 1.0 PROJECT DESCRIPTION

This document presents the results of the wetland and stream assessment conducted by Commonwealth Associates, Inc. (Commonwealth) on behalf of American Electric Power Ohio Transmission Company (AEP Ohio Transco) for the Seaman Voltage Drop Transmission Line Improvement Project (Project) to create a new 138kV Highland-Hillsboro circuit. The Project is located in Highland County, Ohio, south of the City of Hillsboro, as illustrated on Figure 1, Project Overview. The new circuit is needed to address voltage drop violations and ensure electrical reliability in Highland County and the greater Dayton/Cincinnati area.

Creating the new circuit will require rebuilding the Portsmouth-Trenton #1 138kV electrical transmission line between the Hillsboro station off of Mad River Road to Structure #300 off of Stanforth Lane; relocating Structure #309 and removing Structure #310 on the Portsmouth-Trenton #2 138kV line; and rebuilding the Seaman-Highland 138kV (69kV) line between the Highland station off of South High Street to south of Structure #92, where the line crosses the Portsmouth-Trenton lines. The Project is approximately 7.9 miles in length and consists of 4.8 miles along the Portsmouth-Trenton #1 & #2 lines and approximately 3.1 miles along the Seaman-Highland line. The Project Overview map, included at the end of this report, depicts the Project within the county and in relation to nearby roads, railroads, towns, rivers and streams, and other transmission lines.

As part of the Ohio Power Siting Board (OPSB) Letter of Notification (LON) requirements, AEP Ohio Transco is required to describe the investigation concerning the presence or absence of areas of ecological concern as stated in Ohio Administrative Code (OAC) Rule 4906-15-11-01(E)(2). This rule states:

- (E) *Environmental data. Describe the environmental impacts of the proposed project. This description shall include the following information:*
  - (2) *A description of the applicant's investigation concerning the presence or absence of areas of ecological concern (including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries) that may be located within the areas likely to be disturbed by the project, a statement of the findings of the investigation, and a copy of any document produced as a result of the investigation.*

AEP Ohio Transco retained Commonwealth to review areas of ecological concern, as defined above, within the proposed Project and conduct a field assessment of wetlands and streams within the 150-foot-wide Project corridor. This report will be used to assist AEP Ohio Transco's efforts to avoid impacts to these areas during project design and site development.

## 2.0 METHODS

### 2.1 Preliminary Resource Review

Prior to conducting the field portion of the study, Commonwealth reviewed maps, GIS data, and other readily available information to identify national and state forests and parks, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries in the Project vicinity. The review also provided valuable

site information, including relief, cover, soils, landownership, and land use, that was then used to make preliminary determinations of wetlands and streams that might be present within the Project corridor. The review included, but was not limited to, the following resources:

- Google Earth, digital aerial photographs
- U.S. Geological Survey (USGS), topographic quadrangle maps
- Natural Resources Conservation Service (NRCS), Web Soil Survey (WSS)
- Natural Resources Conservation Service (NRCS), WETS data
- U.S. Fish and Wildlife Service (USFWS), National Wetlands Inventory (NWI) Wetlands Mapper
- Federal Emergency Management Agency (FEMA), Flood Map Viewer

## 2.2 Field Review

After completing the office review, Commonwealth conducted site visits to evaluate any preliminary wetland or stream determinations that had been made in the office and, where possible, to make new determinations by identifying vegetation communities, characterizing soils, assessing hydrology, and noting any disturbances. Two methodologies were relied upon during the field review; one for identifying and delineating wetlands and the other for assessing rivers and streams. The methods are described further in the following sections.

### 2.2.1 Wetland Identification and Delineation

Identification and delineation of wetlands followed those methods outlined in the U.S. Army Corps of Engineers (USACE) *Corps of Engineers Wetlands Delineation Manual* (1987 Manual) and the USACE *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)*. In the 1987 Manual a definition is provided that indicates “wetlands” are essentially areas that have positive evidence of three parameters: hydric soils, wetland hydrology, and hydrophytic vegetation. During the office review, Commonwealth collected available information regarding the three parameters and used the data to make preliminary determinations of wetland presence. A site visit was then conducted to identify vegetation communities, characterize soils, assess hydrology, and note disturbances. Preliminary wetland boundaries were noted where one or more of these criteria gave way to upland characteristics. Sample plots were established, wetland data was collected and recorded, wetland boundaries were delineated, and sample plots and boundary points were GPS surveyed.

Preliminary data gathered prior to the site visit is summarized in Section 3.1 of this report. Data collected during the delineation of any wetland is summarized in Section 3.2 of this report. The methodology used to examine each parameter is described in the following sections.

**Soils:** Soil profiles were examined by digging soil pits and recording hydric soil characteristics. A *Munsell Soil Color Chart* was used to identify the hue, value, and chroma of the matrix and mottles of the soil. Generally, mottled soils with a matrix chroma of two or less, and unmottled soils with a matrix chroma of one or less are considered to exhibit hydric soil characteristics. In sandy soils, mottled soils with a matrix chroma of three or less, and unmottled soils with a matrix chroma of two or less are considered to be hydric soils.

**Hydrology:** The 1987 Manual requires that an area be inundated or saturated to the surface for a minimum of 5 percent of the growing season (areas saturated between 5 percent and 12.5 percent of

the growing season may or may not be wetlands, while areas saturated over 12.5 percent of the growing season fulfill the hydrology requirements for wetlands). The Regional Supplements state that the growing season dates are determined through onsite observations of the following indicators of biological activity in a given year: (1) above-ground growth and development of vascular plants, and/or (2) soil temperature at the 12-inch depth is 41°F or higher. Therefore, the beginning of the growing season in a given year is indicated by whichever condition occurs earlier, and the end of the growing season by whichever persists later. The Regional Supplements also state that if onsite data gathering is not practical, the growing season can be approximated by the median dates (i.e., 5 years in 10, or 50 percent probability) of 28°F.

The soils and ground surface were examined for evidence of wetland hydrology in lieu of seeking detailed hydrological data. This is an acceptable approach according to the 1987 Manual and the Regional Supplements. Evidence indicating wetland hydrology typically includes primary indicators such as surface water (A2), saturation (A3), water marks (B1), sediment deposits (B2), drift deposits (B3), water-stained leaves (B9), and oxidized rhizospheres along living roots (C3), as well as secondary indicators such as drainage patterns (B10), geomorphic position (D2), saturation visible on aerial imagery (C9), and FAC-neutral test (D5).

**Vegetation:** Dominant vegetation was visually assessed for each stratum (tree, sapling/shrub, herb and woody vine) and an indicator status of obligate (OBL), facultative wet (FACW), facultative (FAC), facultative upland (FACU), and/or upland (UPL) were assigned to each plant species based on the *2012 National Wetland Plant List*. The wetland indicator status reflects the likelihood of a species occurring in a wetland versus non-wetland habitat. The various indicator status designations are explained further in Table 1 below. An area was determined to have hydrophytic vegetation when, under normal circumstances, 50 percent or more of the composition of the dominant species are OBL, FACW and/or FAC species. Vegetation of an area was determined to be non-hydrophytic when more than 50 percent of the composition of the dominant species was FACU and/or UPL species. In addition to the dominance test, the FAC-Neutral test and prevalence tests were used to determine if a wetland has a predominance of hydrophytic vegetation.

**TABLE 1**  
**WETLAND INDICATOR STATUS DESIGNATIONS**

Indicator Category	Indicator Symbol <sup>1</sup>	Definition
Obligate	OBL	Almost always is a hydrophyte, rarely in uplands
Facultative Wet	FACW	Usually is a hydrophyte but occasionally found in uplands
Facultative	FAC	Commonly occurs as either a hydrophyte or non-hydrophyte
Facultative Upland	FACU	Occasionally is a hydrophyte but usually occurs in uplands
Upland	UPL	Rarely is a hydrophyte, almost always occurs in uplands

<sup>1</sup> Indicator status modifiers (+ and -) are no longer used

## 2.2.2 Rivers and Streams Assessment

Regulatory activities under the Clean Water Act provide authority for states to issue water quality standards and “designated uses” to all “Waters of the U.S.” upstream to the highest reaches of the tributary streams. In addition, the Federal Water Pollution Control Act (FWPCA) and its amendments require knowledge of the potential fish or biological communities that can be supported in a stream or



river, including upstream headwaters. Streams were identified by the presence of a defined bed and bank, and evidence of an ordinary high water mark (OHWM). Results obtained are discussed in Section 3.3 of this report.

### 3.0 RESULTS

The results presented herein apply to the existing and reasonably foreseeable site conditions at the time of our assessment. They cannot apply to site changes of which Commonwealth is unaware and has not had the opportunity to review. Changes in the condition of a property may occur with time due to natural processes or human impacts at the Project site or on adjacent properties. Changes in applicable standards may also occur as a result of legislation or the expansion of knowledge over time. Accordingly, the findings of this report may become invalidated, wholly or in part, by changes beyond the control of Commonwealth. The transmission structures referenced in this report are based on the existing structure numbers and physical locations.

#### 3.1 Preliminary Resource Review

**Areas of Ecological Concern:** Based on published resources, no state forests and national or state parks, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, or wildlife sanctuaries are crossed by the Project.

**Floodplains:** A review of FEMA Flood Risk Maps identified one Special Flood Hazard Area (SFHA) within the Project corridor: a 100-year flood zone along the Rocky Fork between structures 104 and 105 of the Seaman-Highland line. No regulatory floodway is identified in this area. No structures are located within the 100-year flood zone. No impacts to the 100-year flood zone are anticipated. The SFHA and its boundary has been included on the Map Sheets at the end of this report.

**Topography:** The Project is located on the Hillsboro and New Market USGS topographic quadrangle maps and is depicted as a mix of open fields and second growth and plantation forests and dissected by drainageways of the the Rocky Fork and the South Fork of the Rocky Fork. The landscape is gently rolling to steeply sloped in the stream valleys with elevations Above Mean Sea Level (AMSL) ranging from approximately 980 feet along the Rocky Fork to approximately 1080 feet near the Hillsboro station. USGS contours and elevations have been included on the Map Sheets at the end of this report.

**Geology:** The Project site is located entirely within the physiographic region known as the Central Lowland Dissected Illinoian Till Plain. Till plains are characterized as hilly former till plain in which glacial deposits have been eroded from many valley sides with relatively high stream density and moderate relief. Hilltops are of high-lime Illinoian-age till with loess cap. Slopes consist of bedrock and till-derived soil that accumulates at the base of slopes and Ordovician and Silurian age carbonate rocks and calcareous shales.

**Growing Season:** The National Weather Service WETS data, obtained from the NRCS National Water and Climate Center, reveals that, in an average year, the growing season in Highland County begins on April 17 and lasts until October 20, or 186 days. Five percent of the growing season equates to approximately nine days.

**Hydrologic Units:** A review of United States Geological Survey (USGS) watershed data indicates the Project is located in the Middle Ohio-Little Miami watershed. The Hydrologic Unit Code's (HUC's) and their boundaries, as well as rivers, streams, wetlands, any significant ponds or ditches crossed by the Project, have been included on the Map Sheets at the end of this report. Sub-basins and sub-watersheds crossed by the Project, as well as the structures located in each watershed, are provided in Table 2.

**TABLE 2  
WATERSHEDS CROSSED BY THE PROJECT**

Sub-basin Name	Sub-watershed Name	Hydrologic Unit Code (HUC-12)	Structure #
Rocky Fork	Headwaters Rocky Fork	050600030503	Portsmouth-Trenton #1 Hillsboro Station to Structure #319, Seaman-Highland Structure #99 to Highland Station
	South Fork Rocky Fork	050600030501	Portsmouth-Trenton #1 west of Structure #319, Seaman-Highland south of Structure #99

**Soils:** According to the USDA-NRCS Web Soil Survey (WSS), 44 different mapping units within 18 soil series are crossed by the Project. Nine of the mapping units are listed on the National List of Hydric Soils (USDA, 2014) as “hydric” because they contain components that are hydric or suggest a regime that results in a hydric soil. None of the mapping units are expected to be directly impacted by the Project. A list of the soils that are present, along with their basic attributes, is provided in Table 3. A copy of the soil maps for the Project is provided in Appendix A.

**TABLE 3**  
**USDA MAPPED SOILS CROSSED BY THE PROJECT**

Soil Series	Mapping Unit Symbol <sup>1</sup>	Mapping Unit Description	Slopes (%)	Hydric Soil	Hydric Component	Hydric Criteria <sup>2</sup>
Algiers	Ag	Algiers silt loam	0 to 2	yes	Blanchester	2
Boston	BmC2	Boston-Bratton complex	6 to 12	no	n/a	n/a
	BmD2	Boston-Bratton complex	12 to 18	no	n/a	n/a
Cincinnati	ChC2	Cincinnati silt loam	6 to 12	no	n/a	n/a
Dubois	DuA	Dubois silt loam	0 to 2	yes	Poorly to very poorly drained dark colored soils	2
	Dub	Dubois silt loam	2 to 6	yes	Poorly to very poorly drained dark colored soils	2
Eel	Ee	Eel silt loam	0 to 2	yes	Sloan	2
Fitchville	FcB	Fitchville silt loam	2 to 6	no	n/a	n/a
Genesee	Gn	Genesee silt loam	0 to 2	no	n/a	n/a
Haubstadt	HbB	Haubstadt silt loam	2 to 6	no	n/a	n/a
	HbC2	Haubstadt silt loam, moderately eroded	6 to 12	no	n/a	n/a
	HbC3	Haubstadt silt loam, severely eroded	6 to 12	no	n/a	n/a
	HbD2	Haubstadt silt loam, moderately eroded	12 to 18	no	n/a	n/a

Soil Series	Mapping Unit Symbol <sup>1</sup>	Mapping Unit Description	Slopes (%)	Hydric Soil	Hydric Component	Hydric Criteria <sup>2</sup>
Hickory	HkC2	Hickory silt loam, moderately eroded	6 to 12	no	n/a	n/a
	HkD2	Hickory silt loam, moderately eroded	12 to 18	no	n/a	n/a
	HkE2	Hickory silt loam, moderately eroded	18 to 25	no	n/a	n/a
	HkF2	Hickory silt loam, moderately eroded	25 to 35	no	n/a	n/a
	HyD3	Hickory clay loam, severely eroded	12 to 18	no	n/a	n/a
	HyE3	Hickory clay loam, severely eroded	18 to 25	no	n/a	n/a
Jonesboro	JoR1A1	Jonesboro-Rossmoyne silt loams	0 to 2	yes	Clermont	2, 3
	JoR1B1	Jonesboro-Rossmoyne silt loams	2 to 6	no	n/a	n/a
	JoR1B2	Jonesboro-Rossmoyne silt loams, eroded	2 to 6	no	n/a	n/a
	JoR1B2	Jonesboro-Rossmoyne silt loams	6 to 12	no	n/a	n/a



Soil Series	Mapping Unit Symbol <sup>1</sup>	Mapping Unit Description	Slopes (%)	Hydric Soil	Hydric Component	Hydric Criteria <sup>2</sup>
Negley	NdC	Negley loam	6 to 12	no	n/a	n/a
	NdD	Negley loam	12 to 18	no	n/a	n/a
	NdE	Negley loam	18 to 25	no	n/a	n/a
	NdF	Negley loam	12 to 35	no	n/a	n/a
	NeB	Negley silt loam	2 to 6	no	n/a	n/a
	NfD3	Negley clay loam, severely eroded	12 to 18	no	n/a	n/a
Otwell	OwB	Otwell silt loam	2 to 6	no	n/a	n/a
	OwC2	Otwell silt loam, moderately eroded	6 to 12	no	n/a	n/a
	OwD2	Otwell silt loam, moderately eroded	12 to 18	no	n/a	n/a
	OwE2	Otwell silt loam, moderately eroded	18 to 25	no	n/a	n/a
	OwF	Otwell silt loam	5 to 35	no	n/a	n/a
Rossmoyne	RpC2	Rossmoyne silt loam, moderately eroded	6 to 12	no	n/a	n/a
	RpC3	Rossmoyne silt loam, severely eroded	6 to 12	no	n/a	n/a
	RpD2	Rossmoyne silt loam, moderately eroded	12 to 18	no	n/a	n/a
	RsC3	Rossmoyne silty clay, severely eroded	6 to 12	no	n/a	n/a

Soil Series	Mapping Unit Symbol <sup>1</sup>	Mapping Unit Description	Slopes (%)	Hydric Soil	Hydric Component	Hydric Criteria <sup>2</sup>
Sardinia	SaB	Sardinia silt loam	2 to 6	yes	wetland	2
	SaC2	Sardinia silt loam, moderately eroded	6 to 12	yes	wetland	2
Shoals	Sh	Shoals silt loam	0 to 2	yes	Sloan	2
Sloan	Sn	Sloan silt loam	0 to 2	no	n/a	n/a
Stonelick	St	Stonelick loam	0 to 2	no	n/a	n/a
Westboro	WsS1B1	Westboro-Schaffer silt loam	2 to 4	yes	Clermont	2, 3

<sup>1</sup> Soil Survey of Highland County, USDA

<sup>2</sup> USDA-NRCS. Soil Survey Staff. Soil Taxonomy, A Basic System of Soil Classification for Making and Interpreting Soil Surveys, Agriculture Handbook, Second Edition, Service Number 436. 1999

**National Wetland Inventory:** National Wetland Inventory (NWI) wetlands are areas of potential wetland that have been identified from U.S. Fish and Wildlife Service (USFWS) aerial photograph interpretation and have typically not been field verified. Forested and heavy scrub-shrub wetlands are often not shown on NWI maps, as foliage effectively hides the visual signature that indicates the presence of standing water and moist soils from an aerial view. As a result, NWI maps do not show all the wetlands found in a particular area nor do they necessarily provide accurate wetland boundaries. NWI maps are useful for providing indications of potential wetland areas, which are often supported by soil mapping and hydrologic predictions, based upon topographical analysis using USGS topographic maps.

According to the National Wetland Inventory (NWI) *Wetlands Mapper*, the Project corridor contains six freshwater wetlands, including one Palustrine scrub-shrub wetland and five impounded ponds. A summary of each wetland is presented in Table 4. Field review of the PSS1A wetland showed that the wetland does not extend above the banks of the two streams in the area. Of the five ponds, two were determined to have additional wetland characteristics, as identified in Table 5 (Wetland 2 and Wetland 5). None of the areas are expected to be disturbed by any Project activity. NWI mapped wetlands have been included on the Map Sheets at the end of this report.

**TABLE 4  
NWI MAPPED WETLANDS CROSSED BY THE PROJECT**

Classification Code	Classification Code Description <sup>1,2</sup>	Location (pole #)	Anticipated Impact
PSS1A	Palustrine, Scrub-shrub, Broad-leaved deciduous, temporarily flooded	Portsmouth-Trenton #1 Str. 323 – Str. 324	No
PUBGh	Palustrine, Unconsolidated Bottom, Intermittently Exposed (surface water present throughout the year), Impounded	Portsmouth-Trenton #1 Str. 318 – Str. 319	No
PUBGh	Palustrine, Unconsolidated Bottom, Intermittently Exposed (surface water present throughout the year), Impounded	Portsmouth-Trenton #1 Str. 316 – Str. 314	No
PUBGh	Palustrine, Unconsolidated Bottom, Intermittently Exposed (surface water present throughout the year), Impounded	Portsmouth-Trenton #1 Str. 306 – Str. 307	No
PUBGh	Palustrine, Unconsolidated Bottom, Intermittently Exposed (surface water present throughout the year), Impounded	Seaman-Highland Str. 105	No
PUBGh	Palustrine, Unconsolidated Bottom, Intermittently Exposed (surface water present throughout the year), Impounded	Seaman-Highland Str. 106 – Str. 307	No
Total: 6			

<sup>1</sup> USFWS National Wetlands Inventory Wetland Code Interpreter:  
<http://137.227.242.85/Data/interpreters/wetlands.aspx>

<sup>2</sup> *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979)

### 3.2 Wetland Assessment

Twelve wetlands totaling 1.81 acres were identified within the Project corridor. Commonwealth considers all 12 wetlands to be jurisdictional (i.e., “Waters of the U.S.”). The wetlands are of three habitat types: palustrine emergent (EM), palustrine emergent/scrub-shrub (EM/SS), and palustrine unconsolidated bottom/emergent (PUB/EM). Only one wetland is anticipated to be impacted by the Project. The wetland (Wetland 7) is approximately 0.21 acre in size and located between Seaman-Highland Structures #95 and #96. The wetland extends from one side of the Project corridor to the other and will need to be crossed in order to access structures #96 through #98. The crossing is expected to be temporary, to occur where farming activities already cross the wetland, and to be accomplished with the use of 100 linear feet of 14-foot-wide timber mats (1,400 square feet of impact). Once construction activities have been completed, the timber mat is to be removed and the wetland restored to conditions similar to it was before the timber mat was installed. This type of temporary crossing is typically allowable under state and federal statutes without a permit. None of the remaining wetlands are expected to be impacted by the Project. Wetlands identified within the Project corridor, as well as any anticipated impacts, are summarized in Table 5. One additional impounded pond was also noted along the Seaman-Highland line between wetlands #9 and #10. The location and approximate extent of each wetland has been included on the Assessed Features Maps, Sheets 1 – 7, at the end of this report. Photographs taken during the field portion of the assessment are provided in Appendix B.

**TABLE 5**  
**WETLANDS IDENTIFIED WITHIN THE PROJECT CORRIDOR**

ID	Habitat Type <sup>1</sup>	Description	Size <sup>2</sup>	Anticipated Impact	Change <sup>3</sup> (sf)
Wetland 1	EM	Emergent (atypical: no hydric soil indicators), near Stream 5	0.06	None	NC
Wetland 2	EM	Emergent wetland fringe adjacent to impounded pond	0.01	None	NC
Wetland 3	EM	Emergent, wetland extending from Stream 17	0.12	None	NC
Wetland 4	EM	Emergent, downstream of stream 20, upstream of Stream 21	0.04	None	NC
Wetland 5	PUB/EM	Impounded pond THAT has sedimented in with rooted vegetation	0.37	None	NC
Wetland 6	EM	Emergent, downstream of Streams 22, 23 & 24, upstream of Stream 25	0.08	None	NC
Wetland 7	EM	Emergent, extending from Stream 35	0.21	Temporary	NC
Wetland 8	EM	Emergent, received drainage from agricultural header line	0.01	None	NC
Wetland 9	EM	Emergent, hillside seep, dominated by invasives w/ limited buffer	0.04	None	NC
Wetland 10	EM	Emergent, receives drainage from adjacent pond through seepage from embankment	0.39	None	NC
Wetland 11	EM/SS	Emergent/scrub-shrub, downstream of Stream S-41, not contiguous to Stream 40 (Rocky Fork)	0.34	None	NC
Wetland 12	EM/SS	Emergent/scrub-shrub in headwater of stream, receives ephemeral drainage from adjacent pond through upland swale	0.14	None	NC
Total			1.81		NC

<sup>1</sup> P = Palustrine, EM = Emergent, SS = Scrub-shrub, FO = Forested. From Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al., 1979)

<sup>2</sup> Acres of wetland within right of way. Several surveyed wetland boundaries were extended to the edge of the right of way during map development.

<sup>3</sup> Change is the expected amount of wetland to be lost (-) or gained (+) after poles have been removed and installed. NC means "no change."

### 3.3 Stream Assessment

Within the 150-foot-wide Project corridor, 45 streams, totaling 8,061 linear feet and consisting of 50 stream segments, were identified. Stream flow regimes consisted of 21 ephemeral, 14 intermittent, and 10 perennial, with 5 streams falling between flow regimes because of changes in topography, recent storms or questionable flow. Commonwealth has preliminarily determined that all of the streams appear to be jurisdictional (i.e., "Waters of the U.S."). None of the streams are navigable or Section 10 Rivers. Five of the identified streams are expected to be temporarily impacted by Project-related activities. Streams 2, 3, 4, 35 and 36 are anticipated to be temporarily impacted by the Project. None of these streams are perennial. These streams extend from one side of the Project corridor to the



other and will need to be crossed in order to access structures. The crossing is to be temporary, to occur where farming activities already cross the streams, and to be accomplished with the use of a timber mat bridge to prevent impact to the streambed and flow. Once construction activities have been completed, the timber mat is to be removed and the stream banks and buffers restored to conditions similar to what they were before the timber mat was installed. This type of temporary crossing is typically allowable under state and federal statutes without a permit. None of the remaining streams are expected to be impacted by the Project. Streams identified within the Project corridor are summarized in table 6. The location and approximate extent of each stream has been included on the Map Sheets at the end of this report. Photographs taken during the field portion of the assessment are provided in Appendix B.

**TABLE 6  
STREAMS IDENTIFIED WITHIN THE PROJECT CORRIDOR**

<b>Stream Name</b>	<b>Flow Regime<sup>1</sup></b>	<b>Waterbody Description</b>	<b>Length Within ROW Corridor (feet)<sup>2</sup></b>	<b>Approximate Bankful Width (feet)<sup>3</sup></b>
Stream 01	PER	Rocky Fork	167	10.0
Stream 02	EPH	Isolated, drainage channel extending from an agriculture header tile	267	1.5
Stream 03	EPH	Tributary to Stream 04	154	1.0
Stream 04	INT	Tributary to the Rocky Fork	163	4.0
Stream 05	EPH	Isolated	458	1.0
Stream 06	INT	Tributary to the Rocky Fork	239	2.5
Stream 07	INT/PER	Tributary to the Rocky Fork	38	4.0
Stream 08	PER	Rocky Fork	828	17.0
Stream 08A	PER	Tributary to the Rocky Fork	270	6.0
Stream 09	INT	Tributary to the Rocky Fork	120	3.0
Stream 09	INT	Tributary to the Rocky Fork	320	3.0
Stream 10	EPH	Tributary to Stream 09	43	2.5
Stream 11	EPH/INT	Isolated	155	3.0
Stream 12	PER	South Fork of the Rocky Fork	170	9.5
Stream 13	EPH	Tributary to the South Fork of Rocky Fork	191	3.5
Stream 14	EPH	Isolated, drainage channel extending from an agriculture header tile	159	2.0
Stream 15	EPH	Tributary to Stream 16	161	3.0
Stream 16	EPH	Isolated	138	1.5
Stream 17	INT	Isolated	345	2.0
Stream 18	EPH	Roadside ditch	64	2.0
Stream 19	EPH	Interstitial, tributary to South Fork of Rocky Fork	156	2.0
Stream 20	EPH/INT	Tributary to Wetland 4	60	2.0
Stream 21	EPH/INT	Downstream of Wetland 4	50	2.0
Stream 22	EPH	Seepage from impoundment above	115	2.0
Stream 23	INT	Isolated tributary to Wetland 6	75	2.0
Stream 24	EPH	Seepage from impoundment above	44	2.0
Stream 25	INT	Continuation of Stream 23 through Wetland 6	56	3.0
Stream 26	PER	Tributary to Stream 29	280	6.0
Stream 26	PER	Tributary to Stream 29 (crossed by access route)	20	6.5
Stream 26	PER	Tributary to Stream 29	210	7.0

Stream Name	Flow Regime <sup>1</sup>	Waterbody Description	Length Within ROW Corridor (feet) <sup>2</sup>	Approximate Bankful Width (feet) <sup>3</sup>
Stream 27	EPH	Tributary to Stream 26	30	2.0
Stream 28	INT	Tributary to Stream 26	169	4.0
Stream 29	PER	Tributary to South Fork of Rocky Fork	162	10.0
Stream 30	EPH	Tributary to Stream 31	166	2.0
Stream 31	INT	Tributary to Stream 29	210	2.0
Stream 32	INT	Tributary to the South Fork of Rocky Fork	140	3.0
Stream 32	INT	Tributary to the South Fork of Rocky Fork (crossed by access route)	20	3.0
Stream 33	EPH/INT	Tributary to Stream 32	179	2.0
Stream 34	PER	South Fork of Rocky Fork	302	8.0
Stream 35	INT	Tributary to the South Fork of Rocky Fork	132	2.0
Stream 36	INT	Tributary to the South Fork of Rocky Fork (crossed by access route)	20	
Stream 36	INT	Tributary to the South Fork of Rocky Fork	172	1.5
Stream 37	EPH	Tributary to the South Fork of Rocky Fork	101	2.0
Stream 38	EPH	Tributary to Stream 39, not within right of way	0	2.5
Stream 39	EPH	Isolated, defined streambed begins off of the right of way	0	3.0
Stream 40	EPH	Downstream of Wetland 10, tributary to Rocky Fork	240	2.5
Stream 41	PER	Rocky Fork	110	28.0
Stream 42	EPH	Tributary to Stream 43	114	3.0
Stream 43	EPH	Tributary to Rocky Fork	130	8.0
Stream 44	EPH	Road sideditch, captured stream, tributary to Stream 43	148	2.5
<b>Total</b>			<b>8,061</b>	

<sup>1</sup> EPH=Ephemeral, INT=Intermittent, PER=Perennial

<sup>2</sup> Within the right of way or access route if not within the right of way.

<sup>3</sup> Crossed by the centerline of the right of way. Several surveyed stream boundaries were extended to the edge of the right of way during map development.

#### 4.0 SUMMARY

No national or state forests or parks, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, or wildlife sanctuaries are crossed by the Project.

One Special Flood Hazard Area (SFHA) is crossed by the Project: a 100-year flood zone along Rocky Fork and no regulatory floodway. No impact to the 100-year flood zones is anticipated.

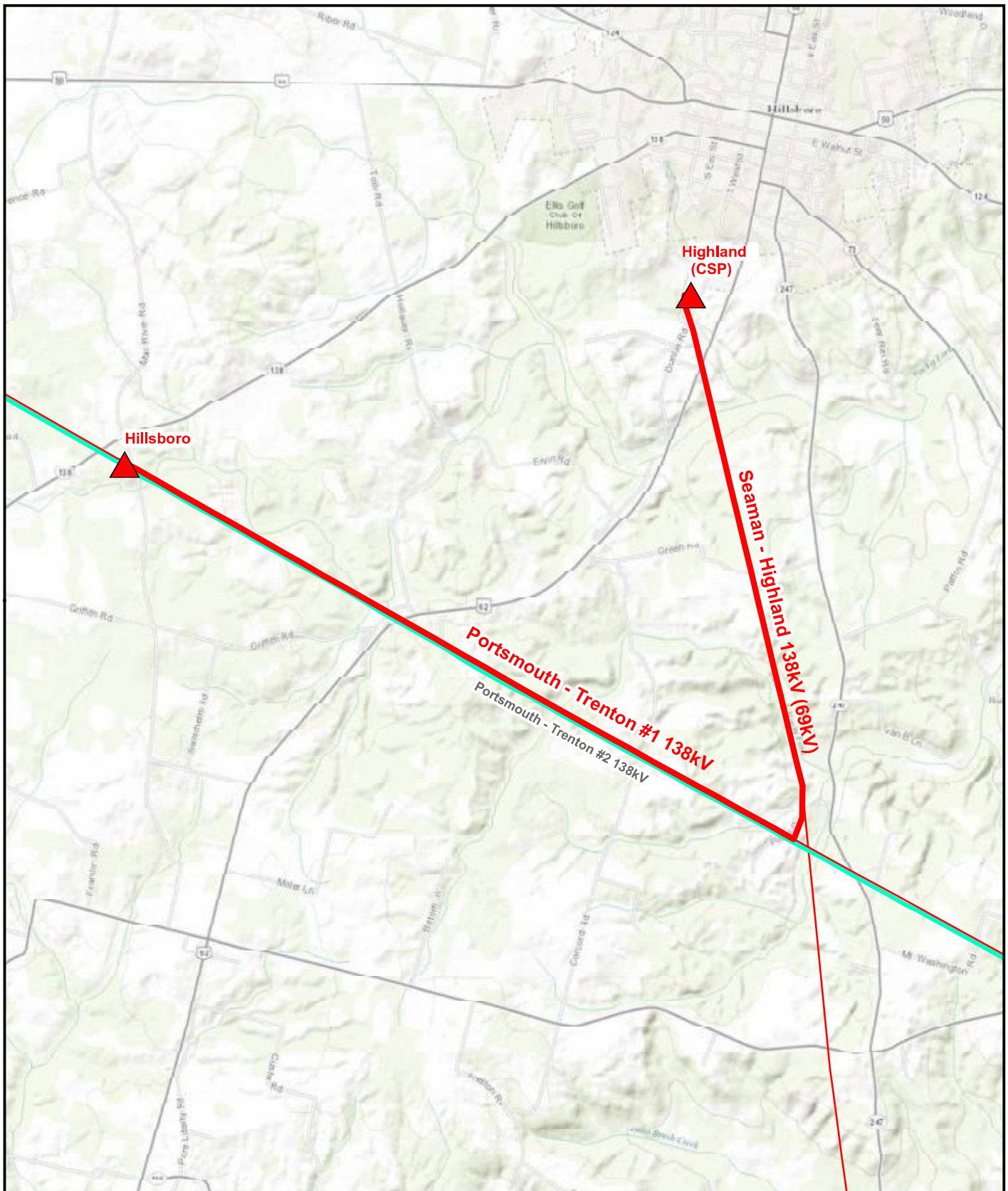
Twelve wetlands totaling 1.81 acres were identified within the Project corridor. Commonwealth has preliminarily determined that all of the wetlands appear to be jurisdictional (i.e., "Waters of the U.S."). Four impounded ponds were noted in addition to the 12 wetlands. One wetland (Wetland 7) is approximately 0.21 acre in size and is to be temporarily impacted by timber mat placement to access structures #96 through #98 on the Seaman-Highland line. The total wetland impact would be approximately 1,400 square feet. None of the remaining wetlands identified within the Project corridor are expected to be permanently or temporarily impacted by Project-related activities.

Forty-five streams, totaling 8,061 linear feet and consisting of 50 stream segments, were identified. Commonwealth has preliminarily determined that all of the streams appear to be jurisdictional (i.e., "Waters of the U.S."). Five of the identified streams (Streams 2, 3, 4, 35 and 36) are expected to be temporarily impacted by Project-related activities. These streams will be crossed by using timber mat bridging to access structures. None of the remaining streams are expected to be impacted by the Project.

Erosion, runoff, and sedimentation control measures will be installed for access and installation of structures. These measures may include temporary and permanent seed, mulch, silt fence, erosion control blankets, temporary construction entrances, concrete washouts, and temporary timber mat roads. Installing the measures will help minimize impacts to nearby streams and wetlands by protecting the soil surface from raindrop impact, controlling overland flow of storm water runoff, and capturing sediment before it can be discharged with storm water runoff to off-site areas. The specific location and type of each control measure to be installed will be addressed in detail in the overall Construction and Storm Water Pollution Prevention Plan (SWP3) for the Project.

## **5.0 CONCLUSION**

This report will be used to assist AEP Ohio Transco's efforts to avoid areas of ecological concern, wetlands, and streams to the extent feasible during Project design and development. While one wetland and 4 streams are anticipated to be impacted, the impact is expected to be temporary and insignificant. None of the impacted streams are perennial. As a result, a notification or permit application under Sections 401 and/or 404 of the Clean Water Act for the temporary impact is not expected to be required by either the Ohio EPA or the USACE.



**Legend:**

▲ Substation

— Seaman Voltage Drop Transmission Line Improvement Project 138kV Transmission Line

1 inch = 4,000 feet

0 4,000 8,000 Feet



Highland County, OH

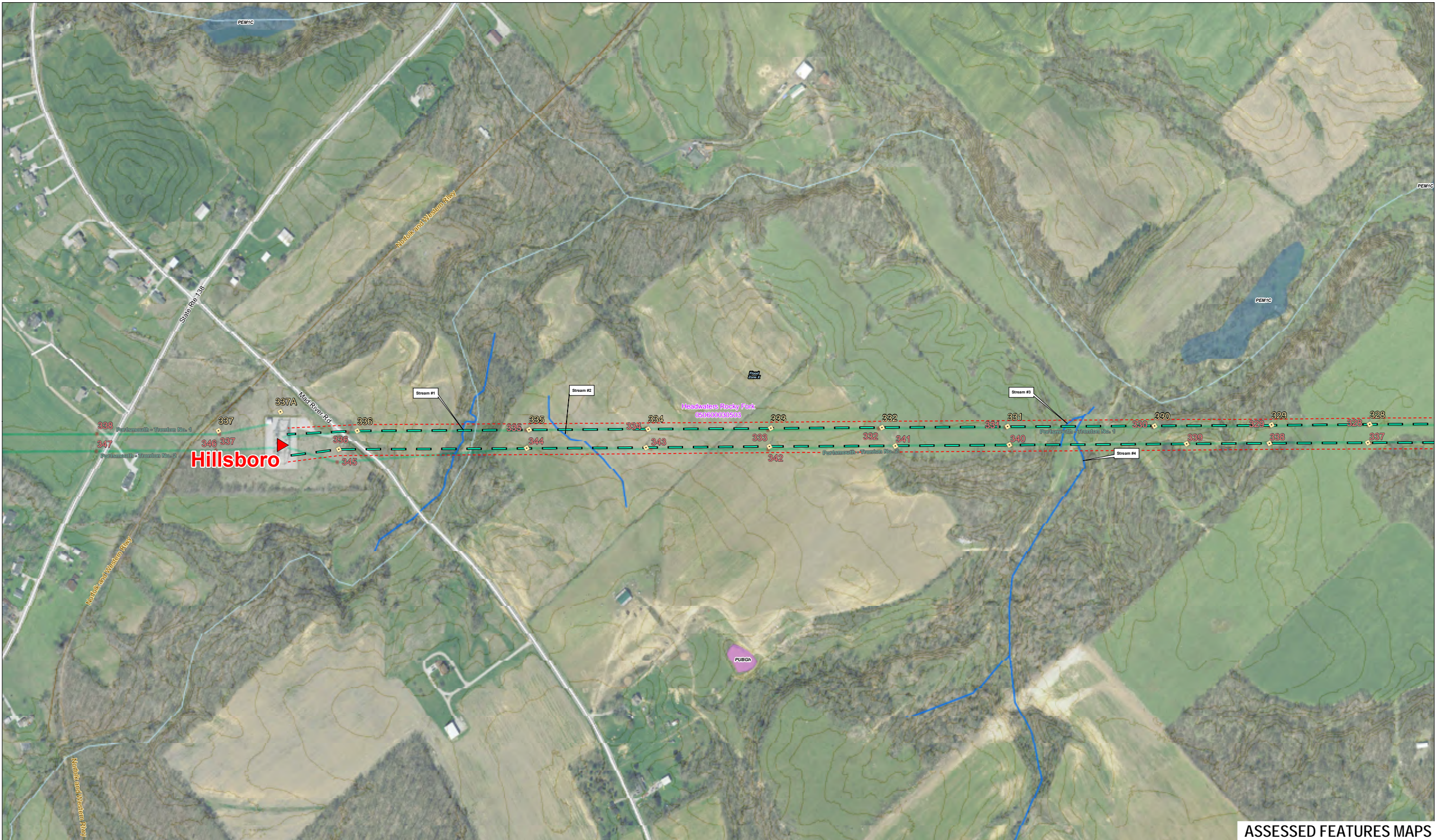


Seaman Voltage Drop  
Transmission Line Improvement  
Project

Figure 1  
Project Overview







ASSESSED FEATURES MAPS

<b>SYM Existing Substation &amp; Transmission Line</b> ▲ Substation ● Existing Structure □ Angle Structure — Existing 69 kV — Existing 88 kV — Existing 115 kV — Existing 138 kV — Existing 161 kV		<b>SYM Proposed Features</b> — Proposed Structure — Proposed 138 kV — Construction Entrance — Access Route (Alternative) — Access Route (Paved) — Access Route (Gravel or Dirt) — Temporary Mat Road — Silt Fence — Culvert		<b>SYM Transportation &amp; Hydrology</b> — Interstate — Highway — Railroad — Major/Local Road — River/Stream/Lake — Lake (Location Map) — Lake (Map Sheet)		<b>SYM Wetlands</b> — Palustrine Emergent — Palustrine Forested — Palustrine Unconsolidated Bottom — Palustrine Scrub/Shrub — CAI Identified Wetland — CAI Identified Stream		<b>SYM Boundary &amp; Feature</b> — Municipal — County — Hydrologic Unit Code — Parcel — Map Index — Contour — Fence				<p>AEP Ohio Transmission Company <b>Seaman Voltage Drop Transmission Line Improvement Project 138kV Transmission Line</b> Highland County, Ohio</p>		<p>Projected Coordinate System: Ohio State Plane Datum: North American Datum of 1983 Projection: Lambert Conformal Conic Zone: South Linear Unit: feet</p>				<p>DSNR: <b>DAL</b> DRAWN: <b>ABB</b> CHECKED: <b>AMS</b></p>		<p>Scale: 1" = 200' (1:2,400) Date: 5/8/2014</p>		<p>Map Sheet 01 of 07</p>			
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ASSESSED FEATURES MAPS

SYM	Existing Substation & Transmission Line	SYM	Proposed Features	SYM	Transportation & Hydrology	SYM	Wetlands	SYM	Boundary & Feature
▲	Substation	—	Existing 230 kV	—	Interstate	—	Palustrine Emergent	—	Municipal
●	Existing Structure	—	Existing 345 kV	—	Highway	—	Palustrine Forested	—	County
□	Angle Structure	—	Existing 500 kV	—	Railroad	—	Palustrine Unconsolidated Bottom	—	Hydrologic Unit Code
—	Existing 69 kV	—	Existing 765 kV	—	Major/Local Road	—	Palustrine Scrub-Shrub	—	Parcel
—	Existing 88 kV	—		—	River/Stream/Lake	—	CAI Identified Wetland	—	Map Index
—	Existing 115 kV	—		—	Lake (Location Map)	—	CAI Identified Stream	—	Contour
—	Existing 138 kV	—		—	Lake (Map Sheet)	—		—	Fence
—	Existing 161 kV	—		—		—		—	



AEP Ohio  
Transmission Company  
Seaman Voltage Drop  
Improvement Project  
138kV Transmission Line  
Highland County, Ohio

Projected Coordinate System: Ohio State Plane  
Datum: North American Datum of 1983  
Projection: Lambert Conformal Conic  
Zone: South  
Linear Unit: feet



DSNR: DAL  
DRAWN: ABB  
CHECKED: AMS

Scale: 1" = 200' (1:2,400)

Date: 5/8/2014

Map Sheet 03 of 07

0 200 400 Feet

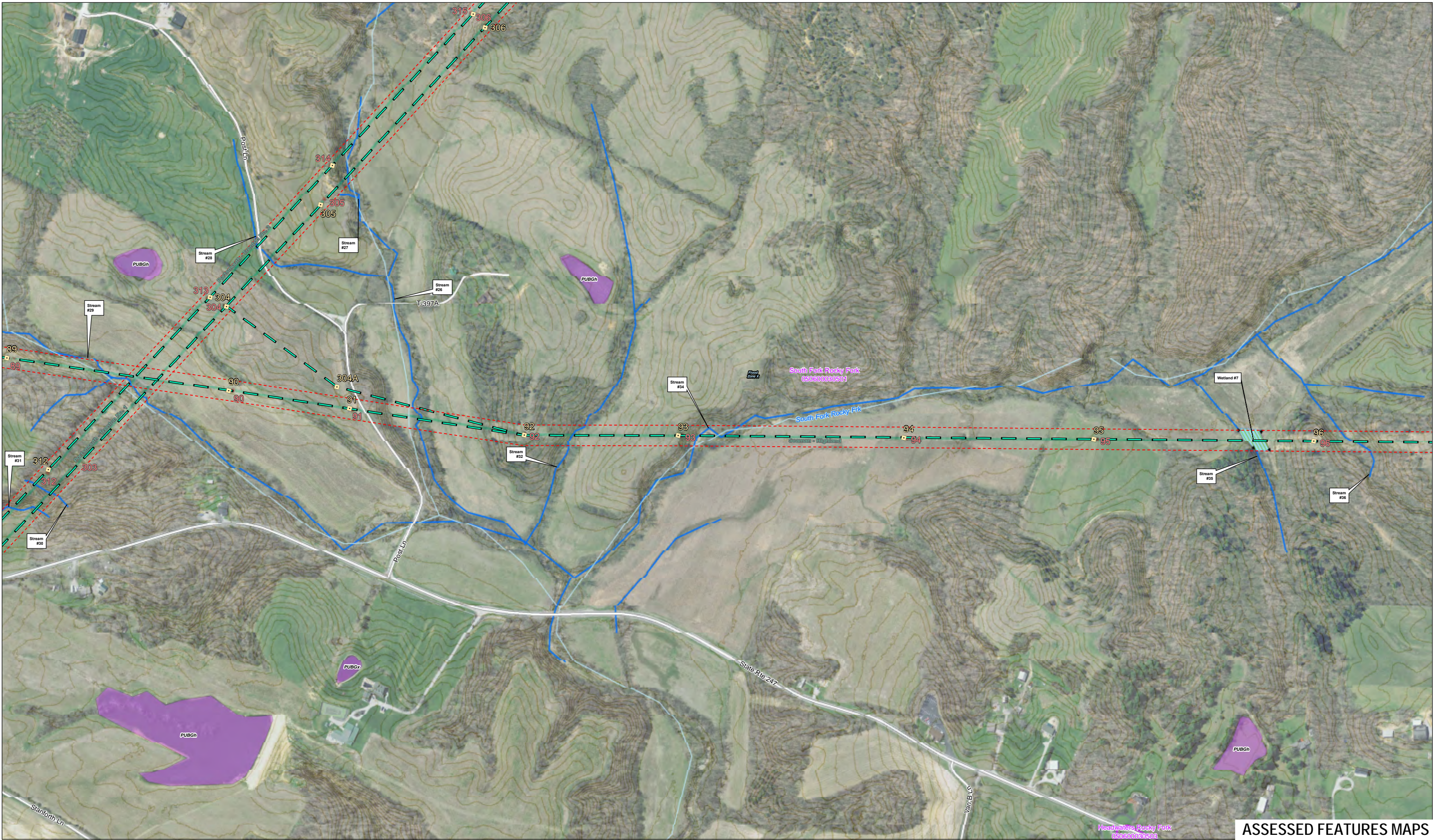
Commonwealth

AEP AMERICAN ELECTRIC POWER









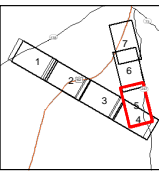
ASSESSED FEATURES MAPS

SYM	Existing Substation & Transmission Line	SYM	Proposed Features	SYM	Transportation & Hydrology	SYM	Wetlands	SYM	Boundary & Feature
▲	Substation	—	Proposed Structure	—	Interstate	—	Palustrine Emergent	—	Municipal
●	Existing Structure	—	Proposed 138 kV	—	Highway	—	Palustrine Forested	—	County
◻	Angle Structure	—	Construction Entrance	—	Railroad	—	Palustrine Unconsolidated Bottom	—	Hydrologic Unit Code
—	Existing 69 kV	—	Access Route	—	Major/Local Road	—	Palustrine Scrub-Shrub	—	Parcel
—	Existing 88 kV	—	Access Route (Alternative)	—	River/Stream/Lake	—	CAI Identified Wetland	—	Map Index
—	Existing 115 kV	—	Access Route (Paved)	—	Lake (Location Map)	—	CAI Identified Stream	—	Contour
—	Existing 138 kV	—	Access Route (Gravel or Dirt)	—	Lake (Map Sheet)	—		—	Fence
—	Existing 161 kV	—	Temporary Mat Road						
		—	Silt Fence						
		—	Culvert						



AEP Ohio  
Transmission Company  
Seaman Voltage Drop  
Transmission Line  
Improvement Project  
138kV Transmission Line  
Highland County, Ohio

Projected Coordinate System: Ohio State Plane  
Datum: North American Datum of 1983  
Projection: Lambert Conformal Conic  
Zone: South  
Linear Unit: feet



DSNR:	DAL
DRAWN:	ABB
CHECKED:	AMS

Scale: 1" = 200' (1:2,400)

Map Sheet 05 of 07

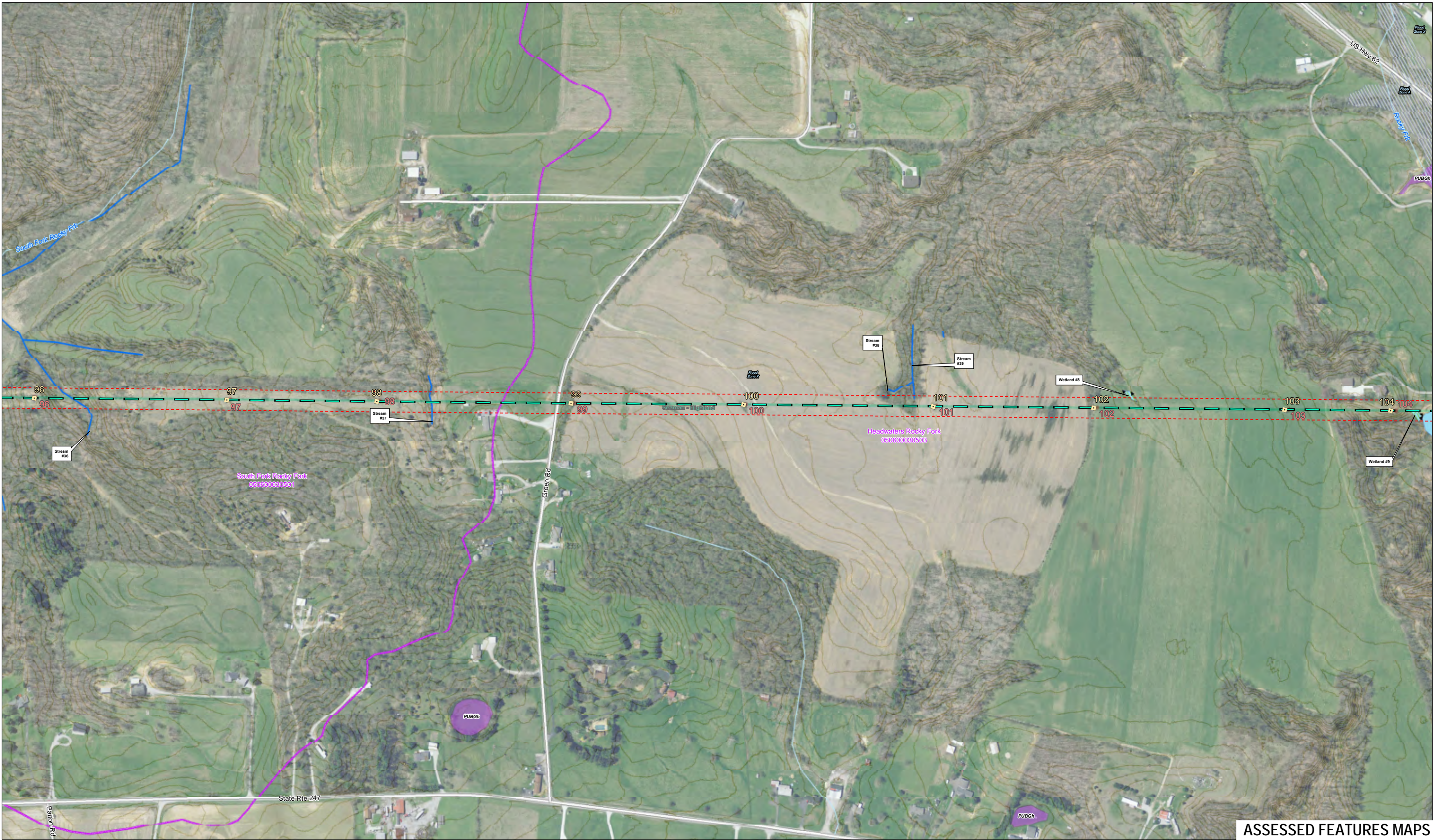
Commonwealth  
associates, inc.

Date: 5/8/2014

0 200 400 Feet

AEP AMERICAN  
ELECTRIC  
POWER





ASSESSED FEATURES MAPS

<b>SYM Existing Substation &amp; Transmission Line</b> ▲ Substation ● Existing Structure □ Angle Structure — Existing 69 kV — Existing 88 kV — Existing 115 kV — Existing 138 kV — Existing 161 kV		<b>SYM Proposed Features</b> ■ Proposed Structure --- Proposed 138 kV --- Construction Entrance --- Access Route --- Access Route (Alternative) --- Access Route (Paved) --- Access Route (Gravel or Dirt) --- Temporary Mat Road --- Silt Fence --- Culvert		<b>SYM Transportation &amp; Hydrology</b> — Interstate — Highway — Railroad — Major/Local Road — River/Stream/Lake — Lake (Location Map) — Lake (Map Sheet)		<b>SYM Wetlands</b> ■ Palustrine Emergent ■ Palustrine Forested ■ Palustrine Unconsolidated Bottom ■ Palustrine Scrub-Shrub ■ CAI Identified Wetland ■ CAI Identified Stream		<b>SYM Boundary &amp; Feature</b> ■ Municipal ■ County ■ Hydrologic Unit Code ■ Parcel ■ Map Index — Contour — Fence				AEP Ohio Transmission Company <b>Seaman Voltage Drop Transmission Line Improvement Project 138kV Transmission Line</b> Highland County, Ohio		Projected Coordinate System: Ohio State Plane Datum: North American Datum of 1983 Projection: Lambert Conformal Conic Zone: South Linear Unit: feet				DSNR: <b>DAL</b> DRAWN: <b>ABB</b> CHECKED: <b>AMS</b>		Scale: 1" = 200' (1:2,400) Date: 5/8/2014		Map Sheet 06 of 07 		 	
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## **APPENDICIES**

Appendix A – USDA Web Soil Survey (WSS) Map

Appendix B – Photographs



## **APPENDIX A**

USDA Web Soil Survey (WSS) Map

**This foregoing document was electronically filed with the Public Utilities**

**Commission of Ohio Docketing Information System on**

**5/28/2014 2:58:14 PM**

**in**

**Case No(s). 14-0904-EL-BLN**

Summary: Application Letter of Notification for the Seaman Voltage Drop Transmission Line Improvement Project Part 2 electronically filed by Mr. Yazen Alami on behalf of AEP Ohio Transmission Company