

July 10, 2020

Ms. Tanowa Troupe  
Docketing Division  
The Public Utilities Commission of Ohio  
180 East Broad Street  
Columbus, OH 43215-3793

**Letter of Notification**  
**Highland-GM 138 kV Transmission Line Loop**  
**to Magellan Substation Project**  
**Case No. 20-1176-EL-BLN**

Dear Ms. Troupe:

In accordance with Ohio Administrative Code (“OAC”) Rule 4906-2-04(A)(3) and OAC Chapter 4906-6, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, transmits one (1) original and eleven (11) copies of the enclosed Letter of Notification (“LON”) application. The LON application, which is attached, was completed in accordance with the requirements of OAC Chapter 4906-6.

In this Project, ATSI is proposing to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The Project also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. The Magellan Substation will serve a new ATSI customer, Ultium Cells LLC, and improve reliability in the area of the Project.

The Project will be located in the Village of Lordstown, Trumbull County, Ohio.

ATSI is requesting a 50 day expedited review of this Project.

Pursuant to OAC Rule 4906-2-04(A)(3), please be advised of the following:

a) Name and address of the applicants:

American Transmission Systems, Incorporated  
76 South Main Street  
Akron, Ohio 44308

b) Name and location of proposed facilities:

Highland-GM 138 kV Transmission Line Loop to Magellan Substation Project.

The Project area is located in the Village of Lordstown, Trumbull County, Ohio.

c) Applicant's representative:

Scott M. Humphrys  
Transmission Siting Supervisor  
Energy Delivery Transmission and Substation Design  
FirstEnergy Service Company  
76 South Main Street  
Akron, OH 44308-1890

d) No information that was provided in the pre-application letter required by OAC Rule 4906-6-03 has been amended or changed in the attached LON application.

e) A notarized statement that the information contained in the application is complete and accurate is attached as Attachment 1.

We have provided a copy of the LON by email, to each official of the political subdivisions immediately affected by the proposed Project listed in Exhibit 1. Copies of the transmittal letters addressed to the local government representatives of the Village of Lordstown and Trumbull County, Ohio are enclosed for your file. Copies of the transmittal letters to the local libraries are also enclosed. These materials are being provided as proof of compliance with OAC Rule 4906-6-07. A list of the property owners affected by the proposed Project and who will receive a letter describing this Project is attached as Exhibit 2. This is being provided as proof of compliance with OAC Rule 4906-6-08(B).

After docketing this filing, please return one time-stamped copy of the LON for our records in the enclosed envelope. Should staff of the Ohio Power Siting Board desire further information or discussion of this submittal, please contact me at 330-384-2526.

Sincerely,

A handwritten signature in black ink, appearing to read 'SMH', with a long horizontal line extending to the right.

Scott M. Humphrys  
Transmission Siting Supervisor  
Energy Delivery Transmission and Substation Design  
FirstEnergy Service Company

Attachments

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**Highland-GM 138 kV Transmission Line Loop  
to Magellan Substation Project  
Case Number 20-1176-EL-BLN**

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**Date: July 10, 2020**

**Attachment 1  
Acknowledgement of Scott M. Humphrys**

25B200B4-C658-45BC-A44C-3CB6840D07B5 --- 2020/07/09 07:14:21 -8:00 --- Remote Notary



BEFORE THE  
OHIO POWER SITING BOARD

In The Matter Of: )  
The Application of American )  
Transmission Systems, Incorporated for a )  
Certificate of Environmental )  
Compatibility and Public Need for the )  
Highland-GM 138 kV Transmission Line )  
Loop to Magellan Substation Project. )

Case No. 20-1176-EL-BLN

**ACKNOWLEDGMENT OF SCOTT M. HUMPHRYS**

I, Scott M. Humphrys, state the following:

Pursuant to Ohio Administrative Code Rule 4906-2-04(A)(3)(e), I am the authorized representative of the Applicant in this case and I affirm that the Letter of Notification application filed in this matter is true and accurate to the best of my information and belief.

Scott Humphrys

Signed on 2020/07/09 08:08:04 -8:00

Scott M. Humphrys  
FirstEnergy Service Company

State of Ohio )  
County of Summit ) ss:

The foregoing instrument was acknowledged before me this Ninth day of July, 2020.

Matthew J Albright

Signed on 2020/07/09 08:08:04 -8:00

Notary Public



12758505v1







## 05 Magellan LON Affidavit.docx

DocVerify ID: 25B200B4-C658-45BC-A44C-3CB6840D07B5  
Created: July 09, 2020 07:14:21 -8:00  
Pages: 2  
Remote Notary: Yes / State: OH

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### E-Signature Summary

**E-Signature 1: Scott Humphrys (smh)**

July 09, 2020 08:08:04 -8:00 [FDB5F68AEC08] [24.165.191.239]  
shumphrys@firstenergycorp.com (Principal) (Personally Known)

**E-Signature Notary: Matthew J. Albright (MJA)**

July 09, 2020 08:08:04 -8:00 [FC62AC50B1A8] [173.89.93.221]  
malbright@firstenergycorp.com  
I, Matthew J. Albright, did witness the participants named above electronically sign this document.



**Attachment 1**  
**Officials to be Served a Copy of the Letter of Notification**  
**Highland-GM 138 kV Transmission Line**  
**Loop to Magellan Substation Project**  
**Case No. 20-1176-EL-BLN**

**Trumbull County**

Mr. Frank S. Fuda  
Trumbull County Commissioner  
Trumbull County Administration  
Building  
160 High Street NW, 5th Floor  
Warren, OH 44481

Ms. Julie Green  
Trumbull County Planning  
Commission  
185 E Market Street NE  
Suite A, 2nd Floor  
Warren, OH 44481

Mr. Randy L. Smith, P.E., P.S.  
Trumbull County Engineer  
650 North River Road NW  
Warren, OH 44483

Mr. Daniel E. Polivka  
Trumbull County Commissioner  
Trumbull County Administration Building  
160 High Street NW, 5th Floor  
Warren, OH 44481

Mr. Mauro Cantalamessa  
Trumbull County Commissioner  
Trumbull County Administration  
Building  
160 High Street NW, 5th Floor  
Warren, OH 44481

Ms. Amy Reeher, District Administrator  
Trumbull Soil & Water Conservation  
District  
520 W. Main Street Suite 3  
Warren, OH 44481

**Village of Lordstown**

Mr. Arno Hill  
Village of Lordstown Mayor  
1455 Salt Springs Rd  
Lordstown, OH 44481

Mr. George Ebling, Jr.  
Treasurer/Tax Administrator  
1455 Salt Springs Rd  
Lordstown, OH 44481

Mr. Don Reider, Council Member  
Lordstown Planning Commission  
1455 Salt Springs Rd  
Lordstown, OH 44481

Mr. Dale Grimm  
Street Commissioner/  
Parks, Buildings & Grounds  
Superintendent  
1455 Salt Springs Rd  
Lordstown, OH 44481

**Libraries**

Mr. James A Wilkins, Director  
Warren-Trumbull County Public Library  
444 Mahoning Ave. NW  
Warren, OH 44483

July 10, 2020

*Via email – cefuda@co.trumbull.oh.us*  
Mr. Frank S. Fuda  
Trumbull County Commissioner  
Trumbull County Administration Building  
160 High Street NW, 5th Floor  
Warren, OH 44481

Dear Mr. Frank S. Fuda,

Recently, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, filed an application with the Ohio Power Siting Board (“OPSB”) seeking approval to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The application also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. This Project is needed to serve a new ATSI customer, Ultium Cells LLC, and will also improve reliability in the area of the Project.

The Project will be located in the Village of Lordstown, Trumbull County, Ohio.

In accordance with Ohio Administrative Code (“OAC”) Rule 4906-1-01, this Project falls within the Ohio Power Siting Board’s requirements for a Letter of Notification application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached Letter of Notification application with the OPSB for their review and approval. The Letter of Notification application contains a description of the Project and is provided for your information.

I will be happy to answer any questions you may have concerning this matter. You can contact me at 330-384-2526.

Sincerely,



Scott M. Humphrys  
Transmission Siting Supervisor  
Energy Delivery Transmission and Substation Design  
FirstEnergy Service Company

Attachments

July 10, 2020

*Via email – hwshaffe@co.trumbull.oh.us*  
Mr. Randy L. Smith, P.E., P.S.  
Trumbull County Engineer  
650 North River Road NW  
Warren, OH 44483

Dear Mr. Randy L. Smith,

Recently, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, filed an application with the Ohio Power Siting Board (“OPSB”) seeking approval to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The application also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. This Project is needed to serve a new ATSI customer, Ultium Cells LLC, and will also improve reliability in the area of the Project.

The Project will be located in the Village of Lordstown, Trumbull County, Ohio.

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I will be happy to answer any questions you may have concerning this matter. You can contact me at 330-384-2526.

Sincerely,



Scott M. Humphrys  
Transmission Siting Supervisor  
Energy Delivery Transmission and Substation Design  
FirstEnergy Service Company

Attachments

July 10, 2020

*Via email – cecantal@co.trumbull.oh.us*

Mr. Mauro Cantalamessa  
Trumbull County Commissioner  
Trumbull County Administration Building  
160 High Street NW, 5th Floor  
Warren, OH 44481

Dear Mr. Mauro Cantalamessa,

Recently, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, filed an application with the Ohio Power Siting Board (“OPSB”) seeking approval to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The application also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. This Project is needed to serve a new ATSI customer, Ultium Cells LLC, and will also improve reliability in the area of the Project.

The Project will be located in the Village of Lordstown, Trumbull County, Ohio.

In accordance with Ohio Administrative Code (“OAC”) Rule 4906-1-01, this Project falls within the Ohio Power Siting Board’s requirements for a Letter of Notification application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached Letter of Notification application with the OPSB for their review and approval. The Letter of Notification application contains a description of the Project and is provided for your information.

I will be happy to answer any questions you may have concerning this matter. You can contact me at 330-384-2526.

Sincerely,



Scott M. Humphrys  
Transmission Siting Supervisor  
Energy Delivery Transmission and Substation Design  
FirstEnergy Service Company

Attachments

July 10, 2020

*Via email – pcgreen@co.trumbull.oh.us*  
Ms. Julie Green  
Trumbull County Planning Commission  
185 E Market Street NE  
Suite A, 2nd Floor  
Warren, OH 44481

Dear Ms. Julie Green,

Recently, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, filed an application with the Ohio Power Siting Board (“OPSB”) seeking approval to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The application also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. This Project is needed to serve a new ATSI customer, Ultium Cells LLC, and will also improve reliability in the area of the Project.

The Project will be located in the Village of Lordstown, Trumbull County, Ohio.

In accordance with Ohio Administrative Code (“OAC”) Rule 4906-1-01, this Project falls within the Ohio Power Siting Board’s requirements for a Letter of Notification application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached Letter of Notification application with the OPSB for their review and approval. The Letter of Notification application contains a description of the Project and is provided for your information.

I will be happy to answer any questions you may have concerning this matter. You can contact me at 330-384-2526.

Sincerely,



Scott M. Humphrys  
Transmission Siting Supervisor  
Energy Delivery Transmission and Substation Design  
FirstEnergy Service Company

Attachments

July 10, 2020

*Via email – cegodfre@co.trumbull.oh.us*

Mr. Daniel E. Polivka  
Trumbull County Commissioner  
Trumbull County Administration Building  
160 High Street NW, 5th Floor  
Warren, OH 44481

Dear Mr. Daniel E. Polivka,

Recently, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, filed an application with the Ohio Power Siting Board (“OPSB”) seeking approval to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The application also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. This Project is needed to serve a new ATSI customer, Ultium Cells LLC, and will also improve reliability in the area of the Project.

The Project will be located in the Village of Lordstown, Trumbull County, Ohio.

In accordance with Ohio Administrative Code (“OAC”) Rule 4906-1-01, this Project falls within the Ohio Power Siting Board’s requirements for a Letter of Notification application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached Letter of Notification application with the OPSB for their review and approval. The Letter of Notification application contains a description of the Project and is provided for your information.

I will be happy to answer any questions you may have concerning this matter. You can contact me at 330-384-2526.

Sincerely,



Scott M. Humphrys  
Transmission Siting Supervisor  
Energy Delivery Transmission and Substation Design  
FirstEnergy Service Company

Attachments

July 10, 2020

*Via email – amy@trumbullohswcd.org*  
Ms. Amy Reeher, District Administrator  
Trumbull Soil & Water Conservation District  
520 W. Main Street Suite 3  
Warren, OH 44481

Dear Ms. Amy Reeher,

Recently, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, filed an application with the Ohio Power Siting Board (“OPSB”) seeking approval to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The application also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. This Project is needed to serve a new ATSI customer, Ultium Cells LLC, and will also improve reliability in the area of the Project.

The Project will be located in the Village of Lordstown, Trumbull County, Ohio.

In accordance with Ohio Administrative Code (“OAC”) Rule 4906-1-01, this Project falls within the Ohio Power Siting Board’s requirements for a Letter of Notification application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached Letter of Notification application with the OPSB for their review and approval. The Letter of Notification application contains a description of the Project and is provided for your information.

I will be happy to answer any questions you may have concerning this matter. You can contact me at 330-384-2526.

Sincerely,



Scott M. Humphrys  
Transmission Siting Supervisor  
Energy Delivery Transmission and Substation Design  
FirstEnergy Service Company

Attachments



July 10, 2020

*Via email – arnoahill@aol.com*  
Mr. Arno Hill  
Village of Lordstown Mayor  
1455 Salt Springs Rd  
Lordstown, OH 44481

Dear Mr. Arno Hill,

Recently, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, filed an application with the Ohio Power Siting Board (“OPSB”) seeking approval to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The application also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. This Project is needed to serve a new ATSI customer, Ultium Cells LLC, and will also improve reliability in the area of the Project.

The Project will be located in the Village of Lordstown, Trumbull County, Ohio.

In accordance with Ohio Administrative Code (“OAC”) Rule 4906-1-01, this Project falls within the Ohio Power Siting Board’s requirements for a Letter of Notification application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached Letter of Notification application with the OPSB for their review and approval. The Letter of Notification application contains a description of the Project and is provided for your information.

I will be happy to answer any questions you may have concerning this matter. You can contact me at 330-384-2526.

Sincerely,



Scott M. Humphrys  
Transmission Siting Supervisor  
Energy Delivery Transmission and Substation Design  
FirstEnergy Service Company

Attachments

July 10, 2020

*Via email – donald.reider@aol.com*  
Mr. Don Reider, Council Member  
Lordstown Planning Commission  
1455 Salt Springs Rd  
Lordstown, OH 44481

Dear Mr. Don Reider,

Recently, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, filed an application with the Ohio Power Siting Board (“OPSB”) seeking approval to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The application also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. This Project is needed to serve a new ATSI customer, Ultium Cells LLC, and will also improve reliability in the area of the Project.

The Project will be located in the Village of Lordstown, Trumbull County, Ohio.

In accordance with Ohio Administrative Code (“OAC”) Rule 4906-1-01, this Project falls within the Ohio Power Siting Board’s requirements for a Letter of Notification application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached Letter of Notification application with the OPSB for their review and approval. The Letter of Notification application contains a description of the Project and is provided for your information.

I will be happy to answer any questions you may have concerning this matter. You can contact me at 330-384-2526.

Sincerely,



Scott M. Humphrys  
Transmission Siting Supervisor  
Energy Delivery Transmission and Substation Design  
FirstEnergy Service Company

Attachments

July 10, 2020

*Via email – clerk@lordstownvillage.com*

Mr. George Ebling, Jr.  
Treasurer/Tax Administrator  
1455 Salt Springs Rd  
Lordstown, OH 44481

Dear Mr. George Ebling, Jr.,

Recently, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, filed an application with the Ohio Power Siting Board (“OPSB”) seeking approval to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The application also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. This Project is needed to serve a new ATSI customer, Ultium Cells LLC, and will also improve reliability in the area of the Project.

The Project will be located in the Village of Lordstown, Trumbull County, Ohio.

In accordance with Ohio Administrative Code (“OAC”) Rule 4906-1-01, this Project falls within the Ohio Power Siting Board’s requirements for a Letter of Notification application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached Letter of Notification application with the OPSB for their review and approval. The Letter of Notification application contains a description of the Project and is provided for your information.

I will be happy to answer any questions you may have concerning this matter. You can contact me at 330-384-2526.

Sincerely,



Scott M. Humphrys  
Transmission Siting Supervisor  
Energy Delivery Transmission and Substation Design  
FirstEnergy Service Company

Attachments

July 10, 2020

*Via email – lordstownroads@lordstownvillage.com*

Mr. Dale Grimm

Street Commissioner / Parks, Buildings &amp; Grounds Superintendent

1455 Salt Springs Rd

Lordstown, OH 44481

Dear Mr. Dale Grimm,

Recently, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, filed an application with the Ohio Power Siting Board (“OPSB”) seeking approval to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The application also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. This Project is needed to serve a new ATSI customer, Ultium Cells LLC, and will also improve reliability in the area of the Project.

The Project will be located in the Village of Lordstown, Trumbull County, Ohio.

In accordance with Ohio Administrative Code (“OAC”) Rule 4906-1-01, this Project falls within the Ohio Power Siting Board’s requirements for a Letter of Notification application. Therefore, in compliance with OAC Chapter 4906-6, we have prepared and filed the attached Letter of Notification application with the OPSB for their review and approval. The Letter of Notification application contains a description of the Project and is provided for your information.

I will be happy to answer any questions you may have concerning this matter. You can contact me at 330-384-2526.

Sincerely,



Scott M. Humphrys

Transmission Siting Supervisor

Energy Delivery Transmission and Substation Design

FirstEnergy Service Company

Attachments

July 10, 2020

*Via email – wilkinsj@wtcpl.org*  
Mr. James A Wilkins, Director  
Warren-Trumbull County Public Library  
444 Mahoning Ave. NW  
Warren, OH 44483

Dear Mr. James A Wilkins,

Enclosed please find one copy of the Letter of Notification application (“LON”) of American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, for the Highland-GM 138 kV Transmission Line Loop to Magellan Substation Project (“Project”) that has been filed with the Ohio Power Siting Board (“OPSB”). Please make the LON available for public reference in the Warren-Trumbull County Public Library. We are providing a copy of the LON for placement in your library in response to the requirements of the Ohio Administrative Code (“OAC”) Rule 4906-6-07(A)(2), which requires us to place a copy of the LON in the main public libraries of the political subdivisions in which any portion of the Project is located.

As described in the LON, ATSI proposes in the Project to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The Project also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. The Magellan Substation will serve a new ATSI customer, Ultium Cells LLC, and improve reliability in the area of the Project.

The Project will be in the Village of Lordstown, Trumbull County, Ohio.

Please feel free to call me with any question you have on making the LON available to your patrons. My phone number is 330-384-2526.

Sincerely,



Scott M. Humphrys  
Transmission Siting Supervisor  
Energy Delivery Transmission and Substation Design  
FirstEnergy Service Company

**Exhibit 2**  
**Property Owners Affected by the**  
**Highland-GM 138 kV Transmission Line**  
**Loop to Magellan Substation Project**  
**Case No. 20-1176-EL-BLN**

**Property Owners**

<b>Parcel Number</b>	<b>Property Owner</b>	<b>Property Address</b>	<b>Easement Status</b>
45-192905	Lordstown Motors Corp	2300 Hallock Young	Need New Rights
45-904682	Gigapower, LLC	State Route 45	Need New Rights

**AMERICAN TRANSMISSION SYSTEMS,  
INCORPORATED  
A FIRSTENERGY COMPANY**

**LETTER OF NOTIFICATION**

**HIGHLAND-GM 138 kV TRANSMISSION LINE LOOP TO  
MAGELLAN SUBSTATION PROJECT**

**OPSB CASE NO.: 20-1176-EL-BLN**

**July 10, 2020**

**American Transmission Systems, Incorporated  
76 South Main Street  
Akron, Ohio 44308**

**LETTER OF NOTIFICATION  
HIGHLAND-GM 138 kV TRANSMISSION LINE LOOP  
TO MAGELLAN SUBSTATION PROJECT**

The following information is being provided in accordance with the procedures in the Ohio Administrative Code (“OAC”) Chapter 4906-6 for the application and review of Accelerated Certificate Applications. Based upon the requirements found in Appendix A to OAC Rule 4906-1-01, this Project qualifies for submittal to the Ohio Power Siting Board (“OPSB”) as a Letter of Notification application.

**4906-6-05: ACCELERATED APPLICATION REQUIREMENTS**

**4906-6-05: Project Name**

Name of Project: Highland-GM 138 kV Transmission Line Loop  
to Magellan Substation Project (“Project”).

**4906-6-05 (B)(1): Brief Description of the Project**

In this Project, American Transmission Systems, Incorporated (“ATSI”), a FirstEnergy company, proposes to construct the new 138 kV 11-breaker breaker-and-a-half (future 12 breaker) Magellan Substation, which will be approximately 106,250 square feet in size. The Project also proposes an approximately 0.5-mile long 138 kV transmission line loop connecting the new Magellan Substation to the Highland-GM 138 kV Transmission Line. The new transmission line loop will utilize 795 kcmil 26/7 ‘Drake’ ACSS conductor. The Magellan Substation will serve a new ATSI customer, Ultium Cells LLC.

To meet ATSI construction, operation and safety standards, two single circuit wood structures just outside of the existing GM Substation (Structures #3097 & #1) will require replacement due to the changes proposed in this Project. They will be replaced with two single circuit guyed wood pole structures, one with guying and one without guying. The steel tower at the tap location (Structure #3015) requires bolt replacements on a crossarm member to meet current FirstEnergy loading requirements. The tangent steel tower adjacent to the tap location (Structure #3016) requires crossarm member replacements. The



tap point will consist of two single circuit steel monopoles, one carrying GM-Magellan (Structure #2A), and the other Highland-Magellan #1 (Structure #2B).

The general layout is shown in Exhibit 3.

The general location of the Project is shown in Exhibit 1, a partial copy of the United States Geologic Survey Quad Map. Exhibit 2 is a copy of ESRI aerial imagery of the Project area. The new Magellan Substation is located on Tod Ave SW in Warren, Ohio 44481. The Project is located in Lordstown, Trumbull County Ohio.

**4906-6-05 (B)(1): Letter of Notification Requirement**

The Project meets the requirements for a Letter of Notification because the Project is within the types of projects defined by Item (1)(d)(ii) of the Application Requirement Matrix for Electric Power Transmission Lines, Appendix A of OAC Rule 4906-1-01. The Project is also within the type of projects defined by Item (3). These items state:

*(1) New construction, extension, or relocation of single or multiple circuit electric power transmission line(s), or upgrading existing transmission or distribution line(s) for operation at a higher transmission voltage, as follows:*

*(d) Line(s) primarily needed to attract or meet the requirements of a specific customer or customers, as follows:*

*(ii) Any portion of the line is on property owned by someone other than the specific customer or applicant.*

*(3) Construction of a new electric power transmission substation.*

The proposed Project is within the requirements of Item (1)(d)(ii) as it involves the construction of a new transmission line primarily to serve a customer on property not owned by that customer. The Project is also within the requirements of Item (3) as it involves construction of a new electric power transmission substation.

#### **4906-6-05 (B)(2): Need For the Project**

The proposed Project is to construct the new Magellan 138 kV Substation and associated transmission line loop in Lordstown Ohio to serve Ultium Cells, LLC, a new battery production facility. The proposed substation will consist of an 11-breaker breaker-and-a-half (future 12-breaker) configuration. The substation will be connected by a new approximately 0.5-mile 138 kV transmission line loop to the existing Highland-GM 138 kV Transmission Line. Once the loop is energized, the new transmission line names will be the GM-Magellan 138 kV Transmission Line and the Highland-Magellan No. 1 138 kV Transmission Line.

This Project is needed to provide Ultium Cells LLC with dedicated 138 kV service. The new battery plant will not initially operate at full electrical capacity and initially will be completely served from this new transmission line loop. Later this year and under separate filing, ATSI will propose a third 138 kV transmission line from the Highland 138 kV Substation to support the full load demand of this customer.

In addition to providing service to the customer, the new Magellan 138 kV Substation will become a new node of interconnection for ATSI, providing added operational flexibility in the Trumbull County area. The new substation and transmission line loop will provide an additional 138 kV source to customers in the Trumbull County area, increasing system reliability and further sectionalizing the existing Highland-GM 138 kV Line thus decreasing line exposure for customers served from the Tod 138 kV Substation.

This Project was presented to PJM during the western sub-regional TEAC meeting on May 22, 2020 and will be assigned a Supplemental RTEP number shortly. The scheduled in-service date is April 9, 2021. The PJM slide is shown in Exhibit 4.

#### **4906-6-05 (B)(3): Location of the Project Relative to Existing or Proposed Lines**

The location of the Project relative to existing or proposed lines is shown in the ATSI Transmission Network Map, included as part of the confidential portion of the FirstEnergy Corp. 2020 Long-Term Forecast Report (LTFR). This map was submitted to the PUCO in

Case No. 20-0657-EL-FOR under Rule 4901:5-5:04 (C)(2)(b) of the Ohio Administrative Code. The map is incorporated by reference only. This map shows ATSI's 345 kV and 138 kV transmission lines and transmission substations including the Highland-GM 138 kV Transmission Line. The Project area is located approximately 3¼ inches (11" x 17" printed version) from the right edge of the map and 3½ inches (11" x 17" printed version) from the top of the map. The general location and layout of the Project area is shown in Exhibits 1 through 3. This Project was not included in the 2020 LTFR.

**4906-6-05 (B)(4): Alternatives Considered**

ATSI considered providing the customer service by looping in the Glenwillow-Mansfield 345 kV Line into a new 345/138 kV substation. This alternative would require at least a 4-breaker 345 kV ring bus, two 345/138 kV transformers, and a 6-breaker 138 kV ring bus. Based on the anticipated load levels, the 345 kV option was deemed unnecessary as the selected option provides service to the customer with a less impactful and more cost effective project.

**4906-6-05 (B)(5): Public Information Program**

ATSI will issue a public notice in a newspaper of general circulation in the Project area within 7 days of filing this Letter of Notification application. The notice will comply with OAC Rules 4906-6-08(A) (1) through (6). In addition to the public notice, ATSI will mail letters explaining the Project to affected landowners and tenants within and contiguous to the planned Project area, including those property owners along and adjacent to the transmission line route and proposed substation location.

ATSI's manager of External Affairs will advise local officials of features and the status of the proposed Project, as necessary.

ATSI has also established a project website:

[https://www.firstenergycorp.com/about/transmission\\_projects/ohio.html](https://www.firstenergycorp.com/about/transmission_projects/ohio.html). ATSI will maintain the Project website and will continue to work with property owners concerning the proposed Project.

Finally, during all phases of this Project, ATSI will maintain the transmission projects hotline at 1-800-589-2837 and can be reached via email at: [transmissionprojects@firstenergycorp.com](mailto:transmissionprojects@firstenergycorp.com) where the public may ask questions or leave comments on the Project for ATSI.

#### **4906-6-05 (B)(6): Construction Schedule**

The construction schedule for this Project is expected to begin as early as September 2, 2020 and completed by April 9, 2021.

#### **4906-6-05 (B)(7): Area Map**

Exhibit 1 depicts the general location of the Project. This Exhibit provides a partial copy of the United States Geologic Survey, Trumbull County OH, Quad Map. Exhibit 2 is a copy of ESRI aerial imagery of the Project area.

#### **4906-6-05 (B)(8): Property Owner List**

The Project will be located on new easements. Table 1 contains a list of property owners affected by the Project.

**Table 1. List of Affected Property Owners**

Parcel Number	Property Owner	Property Address	Easement Status
45-192905	Lordstown Motors Corp	2300 Hallock Young	Need New Rights
45-904682	Gigapower, LLC	State Route 45	Need New Rights

#### **4906-6-05 (B)(9): TECHNICAL FEATURES OF THE PROJECT**

##### **4906-6-05 (B)(9)(a): Operating Characteristics**

The transmission line construction will have the following characteristics:

Voltage: 138kV

Conductors: 795 kcmil 26/7 'Drake' ACSS

Static Wire: 7#8 Alumoweld – Highland-Magellan No. 1 138 kV (from Structure #2B to Magellan)

SFPOC\_SFSJ-J-12375 48 Fiber OPGW – GM-Magellan 138 kV

Insulators:	Porcelain Bells
ROW Width:	175 feet
Structure Types:	Exhibit 5: Single Circuit Steel Monopole Deadend, (2) structures required.  Exhibit 6: Double Circuit Steel Monopole Tangent Deadend, (1) structure required. Exhibit 7: Double Circuit Steel Monopole Angled Deadend, (2) structures required.  Exhibit 8: Single Circuit Wood Monopole (2) structures required  Exhibit 9: Steel Deadend Monopole (Shield Wire Only) (1) structure required

The equipment and facilities described below will be located within the fenced area of the new proposed Magellan Substation once construction is complete.

Voltage:	138 kV Max System Voltage
Bus Conductor:	4" Aluminum Pipe
Insulators:	Porcelain
Breakers:	Eleven (11) 138 kV 3000 A 40 kA Siemens SPS2S Breakers
Switches:	Twenty-Three (23) 138 kV 2000 A Manual V-Type Switches Eight (8) 138 kV 2000 A Motor Operated Switches
CVT's:	Fourteen (14) 138 kV Single Phase Capacitor Voltage Transformers
Arresters:	Eighteen (18) 108 kV (84 kV MCOV) Arresters
Structures:	Ten (10) 138 kV Bus Support Structures Two (2) 138 kV Dual Bay A-Frame Take-off Structures Seventeen (17) 138 kV Switch Support Structure
Cap Bank:	Two (2) Fuseless Capacitor Banks, 43.2 MVAR at 144.1 kV (39.6 MVAR at 138 kV)  Six (6) 1.88 mH, 300A Reactors  Three (3) Neutral Instrumentation for Voltage Differential (1 VT, 1 resistor, and 3 capacitor units per set)

Six (6) Arresters – Sized per the cap bank manufacturer  
Two (2) 138 kV Cap Switchers  
Fence: Approximately 1,190 feet of new fence

**4906-6-05 (B)(9)(b): Electric and Magnetic Fields**

There are no occupied residences within 100 feet of the proposed transmission line centerline or the proposed substation therefore no Electric and Magnetic Field (“EMF”) calculations are required by this code provision.

**4906-6-05 (B)(9)(c): Estimated Cost**

The estimated capital cost for the proposed Project is approximately \$19,613,170 paid by ATSI.

**4906-6-05 (B)(10): SOCIAL AND ECOLOGICAL IMPACTS**

**4906-6-05 (B)(10)(a): Land Uses**

The Project is in the Village of Lordstown, Trumbull County Ohio. The main land use around the Project area is zoned as heavy manufacturing.

**4906-6-05 (B)(10)(b): Agricultural Land**

Agricultural land does not exist within the Project’s disturbance area.

**4906-6-05 (B)(10)(c): Archaeological or Cultural Resources**

As part of the investigation, a search of Ohio Historic Preservation Office (“OHPO”) online database was conducted to identify the existence of any significant archeological or cultural resource sites within 0.5 mile of the Project Area. A map of the results of the search is shown in Exhibit 10.

The OHPO database includes all Ohio listings on the National Register of Historic Places (“NRHP”), including districts, sites, building, structures, and objects that are significant in

American history, architecture, archeology, engineering, and culture. The results of the search identified no listed NRHP sites and no NRHP eligible sites within 0.5 mile of the Project potential disturbance area.

The OHPO database also includes listing of the Ohio Archaeological Inventory (“OAI”), the Ohio Historic Inventory (“OHI”), previous cultural resource surveys, and the Ohio Genealogical Society (“OGS”) cemetery inventory. There are no OAI listed archeological resources within 0.5 mile of the Project area. There are no listed Historic Structures located within 0.5 mile of the Project area. One (1) previous cultural resource Phase 1 survey was conducted within 0.5 mile of the Project area and is identified in Table 2. No OSG cemeteries are located within 0.5 mile of the Project area.

**Table 2. List of Previous Cultural & Historic Resource Survey**

Year	Name	County
2016	A Phase I Archaeological Survey of Proposed Water and Sanitary Sewer Lines Serving the Lordstown Energy Center, Village of Lordstown, Lordstown Township (T3N R4W), Trumbull County, Ohio	Trumbull

The above listed resource is located near the edge of the 0.5-mile search radius and is unlikely to be impacted by the proposed project. No other archeological or cultural impacts are anticipated.

**4906-6-05 (B)(10)(d): Local, State, and Federal Requirements**

Table 3 shows the list of government agency requirements and their status at the time of filing.

**Table 3. List of Government Agency Requirements to be Secured Prior to Construction**

Agency	Permit Requirement	Permit Requirement
Trumbull County Soil and Water Conservation District	Stormwater Pollution Prevention Plan Approval	Will be Filed
Ohio Environmental Protection Agency	General NPDES Construction Storm Water Permit Application	Will be Filed
Village of Lordstown	Site Plan Approval	Will be Filed

**4906-6-05 (B)(10)(e): Endangered, Threatened, and Rare Species Investigation**

As part of the investigation, ATSI utilized a prior environmental assessment completed by Arcadis on behalf of General Motors LLC. Arcadis submitted a request to the Ohio Department of Natural Resources (“ODNR”) Office of Real Estate to conduct an Environmental Review on October 15, 2019. As part of the Environmental Review, the ODNR Office of Real Estate conducted a search of the ODNR Division of Wildlife’s Nature Heritage Database to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project Area. The ODNR’s Office of Real Estate’s response on November 27, 2019 indicated that nine (9) state-listed endangered species are located within a one-mile radius of the Project Area. A copy of ODNR’s Office of Real Estate’s response is included as Exhibit 11

As part of the investigation, Arcadis also submitted a request to the US Fish and Wildlife Service (“USFWS”) for an Ecological Review to research the presence of any endangered, threatened, or rare species within one (1) mile of the Project Area. A copy of USFWS’s Ecological Review response is included as Exhibit 12. The USFWS’s response on September 25, 2019 indicated that there are no federal wilderness areas, wildlife refuges, or critical habitats located within the vicinity of the Project Area. The response also indicated that the Project is within the range of the federally listed endangered Indiana bat (*Myotis sodalis*), the threatened Northern long-eared bat (*Myotis septentrionalis*), the threatened Eastern massasauga (*Sistrurus catenatus*), and the endangered Clubshell (*Pleurobema clava*). A list of all endangered, threatened, and rare species, as identified by ODNR and USFWS, within the range of the Project are listed in Table 4.

Additionally, on behalf of General Motors LLC, a presence/probable absence survey for the federally and state endangered Indiana Bat was conducted by Copperhead Environmental Consulting in 2018. The survey resulted in no captures of any listed bat species. A copy of the presence/absence report is also included within Exhibit 12.



**Table 4. List of Endangered, Threatened, and Rare Species.**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Federal Listed Status</b>	<b>State Listed Status</b>	<b>Affected Habitat</b>
Indiana bat	<i>Myotis sodalis</i>	Endangered	Endangered	Trees & Forest
Northern long-eared bat	<i>Myotis septentrionalis</i>	Threatened	N/A	Trees & Forest
Clubshell	<i>Pleurobema clava</i>	Endangered	Endangered	Streams/Rivers
Black sandshell	<i>Ligumia recta</i>	N/A	Threatened	Streams/Rivers
Northern brook lamprey	<i>Ichthyomyzon fossor</i>	N/A	Endangered	Streams/Rivers
Mountain brook lamprey	<i>Ichthyomyzon greeleyi</i>	N/A	Endangered	Streams/Rivers
Eastern hellbender	<i>Cryptobranchus alleganiensis alleganiensis</i>	Species of concern	Endangered	Streams/Rivers
Eastern massasauga	<i>Sistrurus catenatus</i>	Threatened	Endangered	Prairies/Wetlands
Spotted turtle	<i>Clemmys guttata</i>	N/A	Threatened	Wetlands
Northern harrier	<i>Circus cyaneus</i>	N/A	Endangered	Grasslands
Upland sandpiper	<i>Bartamia longicauda</i>	N/A	Endangered	Grasslands
Least bittern	<i>Ixobrychus exilis</i>	N/A	Threatened	Semiaquatic vegetation

The response from ODNR and USFWS indicated that the Project is within the range of the federal and state endangered Indiana bat and the federal and state threatened Northern long-eared bat. With no records of known hibernacula or maternity roosts for the Northern long-eared bat or the Indiana bat in the Project Area and based on the results of the presence/absence survey conducted in 2018, the USFWS indicated that tree clearing on the Project Area could occur at any time of the year, until March 31, 2024 without adversely

affecting listed bat species. Additionally, the USFWS did not anticipate impacts to any other federally listed species. A copy of the USFWS concurrence is included as Exhibit 12.

In addition to the Indiana bat, the ODNR response indicated that Clubshell, Black sandshell, Northern brook lamprey, Mountain brook lamprey, Eastern hellbender, Eastern massasauga, Spotted turtle, Northern harrier, Upland sandpiper, and Least bittern are within the range of the Project Area. No impacts to these mussel and aquatic species are expected due to the Project's location and that no work is proposed in streams or wetlands. No impacts to the bird species are expected due to the lack of suitable foraging and nesting habitat within the Project Area.

#### **4906-6-05 (B)(10)(f): Areas of Ecological Concern**

The ODNR Office of Real Estate researched the presence of any unique ecological sites, geological features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forest, national wildlife refuges, or other protected natural areas within one mile of the Project Area. The ODNR Office of Real Estate's response on November 27, 2019 indicated it has one record of a great blue heron rookery located within one mile of the Project Area. Although the exact location of the great blue heron rookery was not provided by ODNR, no rookeries were observed within the Project Area. Therefore, it is not anticipated that the Project will impact the rookery.

A wetland delineation was conducted within the Project area as part of the larger study conducted on behalf of GM by Terra Technologies in 2014, by EMH&T in 2017, and by GHD in 2019. A site visit was conducted on December 13, 2019 with the USACE, the U.S. Environmental Protection Agency, and the Ohio EPA to verify the resource boundaries and to validate the Ohio Rapid Assessment Method (ORAM) scoring. Per these events, no wetland or streams were determined to be within the Project area associated with the Magellan Substation and associated loop line. On June 11, 2020, AECOM, on behalf of ATSI conducted a wetland delineation within the areas associated with access to the Magellan substation and associated loop line. All delineated wetlands and streams will be avoided as per the access plan. The wetland reports are shown in Exhibits 14 and 15.

The Project work limits do not encroach on any regulated flood plains based on a review of online FEMA Flood Insurance Rate Mapping. Exhibit 13 depicts the location of the regulated flood plains floodplains in relation to the Project Area.

A review of the National Conservation Easement Database ([www.conservationeasement.us](http://www.conservationeasement.us)) revealed no conservation easements in the Project Area.

**4906-6-05(B)(10)(g): Other Information**

Construction and operation of the proposed Project will be in accordance with the requirements specified in the latest revision of the National Electrical Safety Code as adopted by the PUCO and will meet all applicable safety standards established by the Occupational Safety and Health Administration.

No other or unusual conditions are expected that will result in significant environmental, social, health or safety impacts.

**4906-6-07: Documentation of Letter of Notification Transmittal and Availability for Public Review**

This Letter of Notification application is being provided concurrently with its docketing with the OPSB to the following officials in the Village of Lordstown, Trumbull County, Ohio.

**Trumbull County**

Mr. Frank S. Fuda  
Trumbull County Commissioner  
Trumbull County Administration  
Building  
160 High Street NW, 5th Floor  
Warren, OH 44481

Ms. Julie Green  
Trumbull County Planning  
Commission  
185 E Market Street NE  
Suite A, 2nd Floor  
Warren, OH 44481

Mr. Randy L. Smith, P.E., P.S.  
Trumbull County Engineer  
650 North River Road NW  
Warren, OH 44483

Mr. Daniel E. Polivka  
Trumbull County Commissioner  
Trumbull County Administration  
Building  
160 High Street NW, 5th Floor  
Warren, OH 44481

Mr. Mauro Cantalamessa  
Trumbull County Commissioner  
Trumbull County Administration  
Building  
160 High Street NW, 5th Floor  
Warren, OH 44481

Amy Reeher, District Administrator  
Trumbull Soil & Water Conservation  
District  
520 W. Main Street Suite 3  
Cortland, OH 44410

**Village of Lordstown**

Mr. Arno Hill  
Village of Lordstown Mayor  
1455 Salt Springs Rd  
Lordstown, OH 44481

Mr. George Ebling, Jr.  
Treasurer/Tax Administrator  
1455 Salt Springs Rd  
Lordstown, OH 44481

Mr. Don Reider, Council Member  
Lordstown Planning Commission  
1455 Salt Springs Rd  
Lordstown, OH 44481

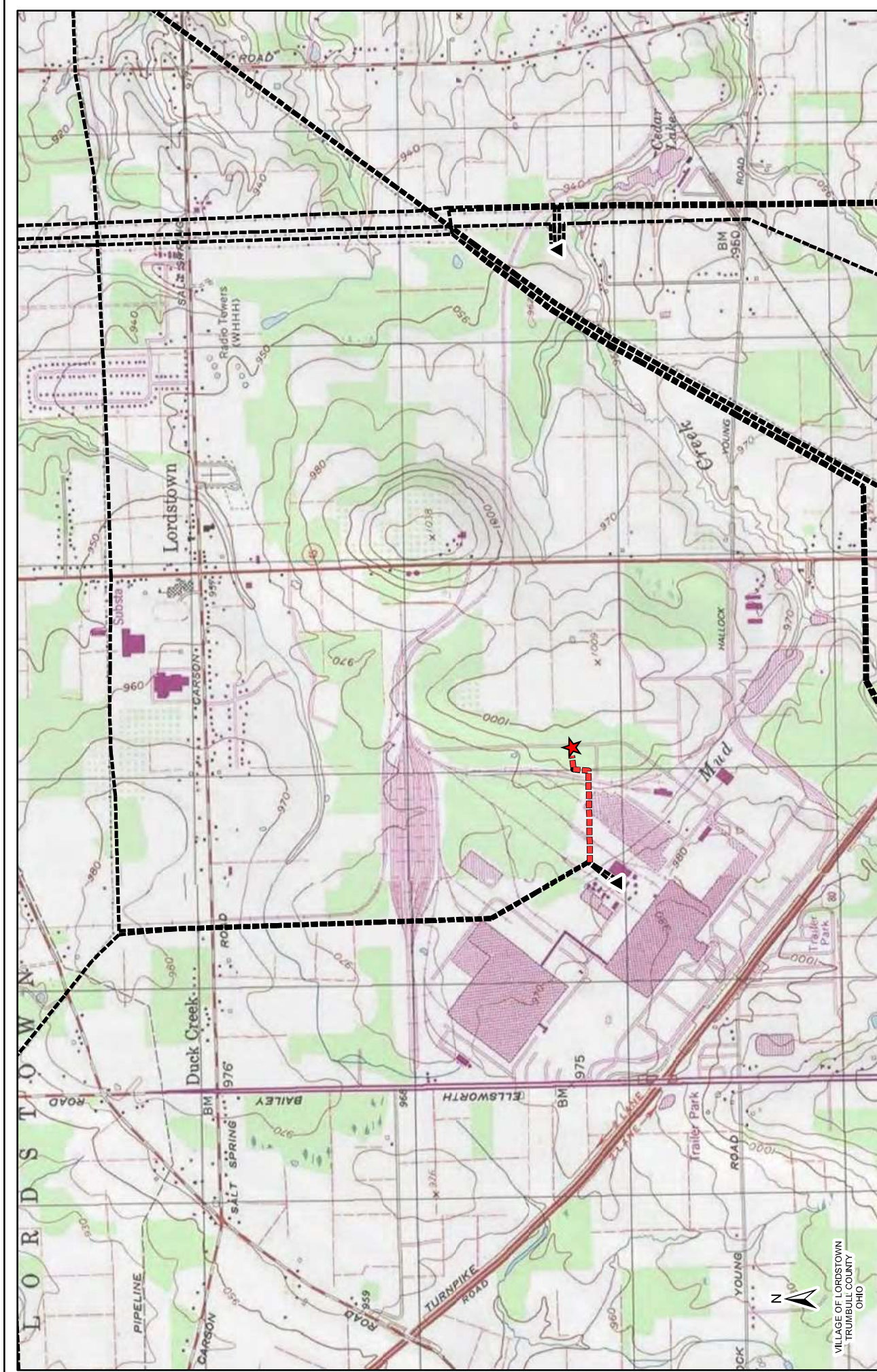
Mr. Dale Grimm  
Street Commissioner/  
Parks, Buildings & Grounds  
Superintendent  
1455 Salt Springs Rd  
Lordstown, OH 44481

**Libraries**

Mr. James A Wilkins, Director  
Warren-Trumbull County Public Library  
444 Mahoning Ave. NW  
Warren, OH 44483

Copies of the transmittal letters to these officials have been included with the transmittal letter submitting this Letter of Notification application to the OPSB and are being provided to meet the requirement of OAC Rule 4906-6-07 (B) to provide the OPSB with proof of compliance with the notice requirement to local officials in OAC Rule 4906-6-07 (A)(1) and to libraries in OAC Rule 4906-6-07 (A)(2).

Information is posted on [www.firstenergycorp.com/about/transmission\\_project/ohio.html](http://www.firstenergycorp.com/about/transmission_project/ohio.html) on how to request an electronic or paper copy of this Letter of Notification application. The link to website is being provided to meet the requirement of OAC Rule 4906-6-07 (B) and to provide the OPSB with proof of compliance with the notice requirements in OAC Rule 4906-6-07 (A)(3).



**LEGEND:**

- ★ Magellan Substation
- GM Lordstown-Magellan 138kV and Highland-GM No1 138kV Transmission Lines
- Other Substations
- 138 kV and 345 kV Transmission Lines

**Reference:**  
USGS Topographical Overlay

**Coordinate System:**  
NAD 1983 StatePlane Ohio North FIPS 3401 Feet  
Projection: Lambert Conformal Conic; Units: Foot US

**Scale:**  
0 1,000 2,000 4,000 Feet

**EXHIBIT 1**

**FirstEnergy**

**Highland-GM 138 kV Transmission Line Tap to Magellan Substation Project**

**TRUMBULL**

**MAHONING**

**PORTAGE**

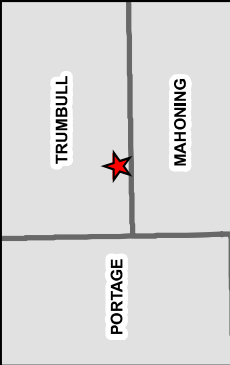




**EXHIBIT 2**

**FirstEnergy**

Highland-GM 138 kV Transmission Line  
Tap to Magellan Substation Project



0 1,000 2,000 4,000  
Feet

Reference:  
ESRI Aerial Imagery, ODOT

Coordinate System:  
NAD 1983 StatePlane Ohio North FIPS 3401 Feet  
Projection: Lambert Conformal Conic; Units: Foot US

**LEGEND:**

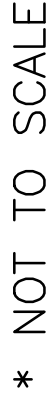
Magellan Substation

GM Lordstown-Magellan 138kV and Highland-Magellan No1 138kV Transmission Lines

Other Substations

Other 138 kV and 345 kV Transmission Lines

Roads



**ATSI®**  
American Transmission Systems, Inc.  
a subsidiary of FirstEnergy Corp.

## EXHIBIT 3

- CITY OF LORDSTOWN
- 
- TRUMBULL COUNTY, OH

## LEGEND





Exhibit 4

ATSI Transmission Zone M-3 Process  
Magellan New Customer Solution

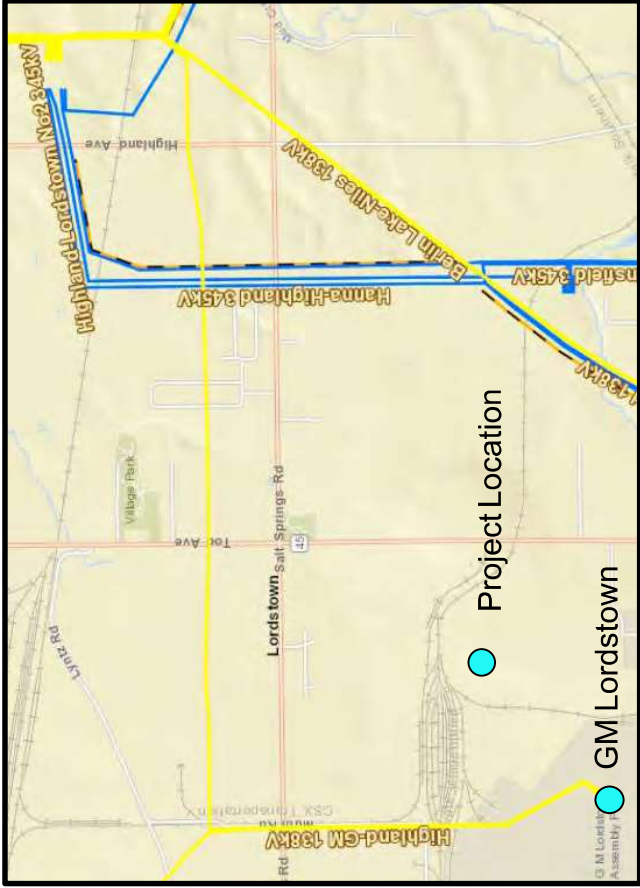
**Need Number:** ATSI-2020-003  
**Process Stage:** Solution Meeting – 05/22/2020  
**Previously Presented:** Need Meeting – 04/20/2020

**Supplemental Project Driver(s):**  
*Customer Service*

**Specific Assumption Reference(s):**  
Modification of existing customer connection request evaluated per FirstEnergy’s “Requirements for Transmission Connected Facilities” document and “Transmission Planning Criteria” document.

**Problem Statement:**  
New Customer Connection – A customer requested 138 kV transmission service for approximately 95 MVA of total load near the Highland-GM Lordstown 138 kV Line.

**Requested In-Service Date:** 07/01/2021



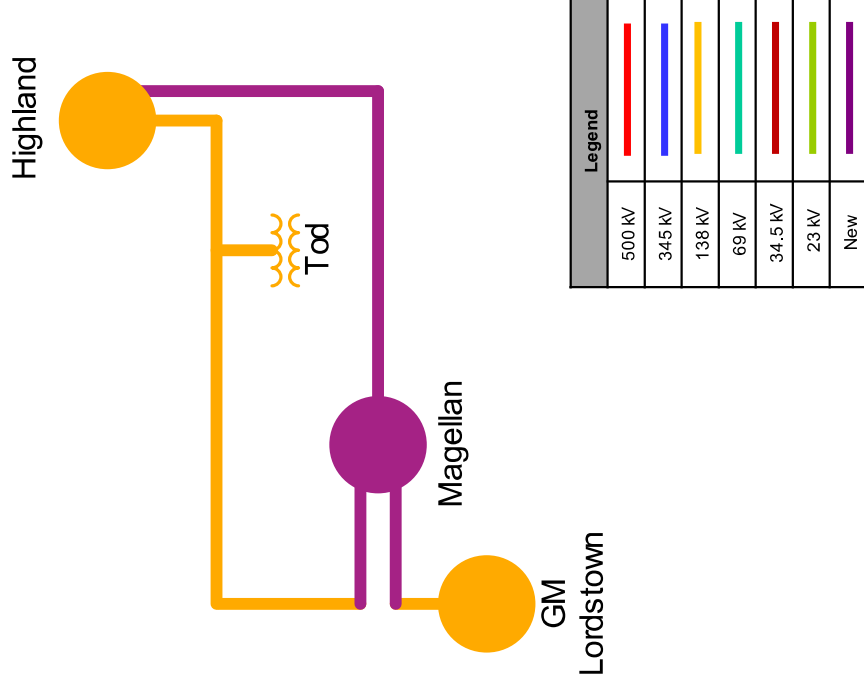
Legend	
345 kV	<span style="color: blue;">—</span>
138 kV	<span style="color: yellow;">—</span>
69 kV	<span style="color: red;">—</span>

- Need Number:** ATSI-2020-003
- Process Stage:** Solution Meeting – 05/22/2020
- Previously Presented:** Need Meeting – 04/20/2020
- Proposed Solution**
- Magellan 138 kV Breaker and a Half***
- Construct a 138 kV 11-breaker breaker-and-a-half (future 12-breaker) substation
  - Loop the Highland-GM Lordstown 138 kV Line by building approximately 0.5 miles of 138 line using 795 ACSR near structure 3069
  - Provide three 138 kV metering package
  - Install two capacitors totaling 86.4 MVAR @ 144.1 kV (multiple step)
  - Build roughly 3.5 miles of 138 kV line from Highland to Magellan using 795 ACSR utilizing an open arm position on the Highland-Lordstown #1 345 kV Line

**Transmission Line Ratings:**

- **Highland-Magellan #1 138 kV Line**
  - After Proposed Solution: 329 MVA SN / 413 MVA SE
- **Highland-Magellan #2 138 kV Line**
  - After Proposed Solution: 275 MVA SN / 333 MVA SE
- **GM Lordstown-Magellan 138 kV Line**
  - After Proposed Solution: 267 MVA SN / 352 MVA SE

Continued on next slide...





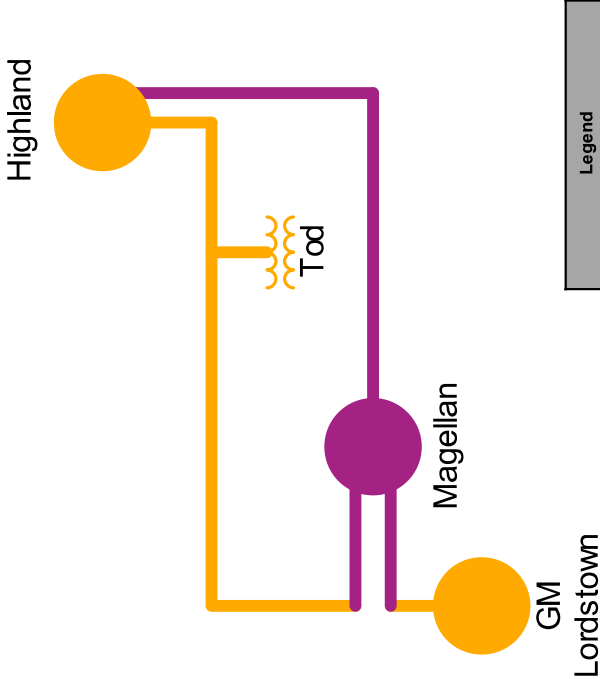
# ATSI Transmission Zone M-3 Process Magellan New Customer Solution

**Need Number:** ATSI-2020-003  
**Process Stage:** Solution Meeting – 05/22/2020  
**Previously Presented:** Need Meeting – 04/20/2020

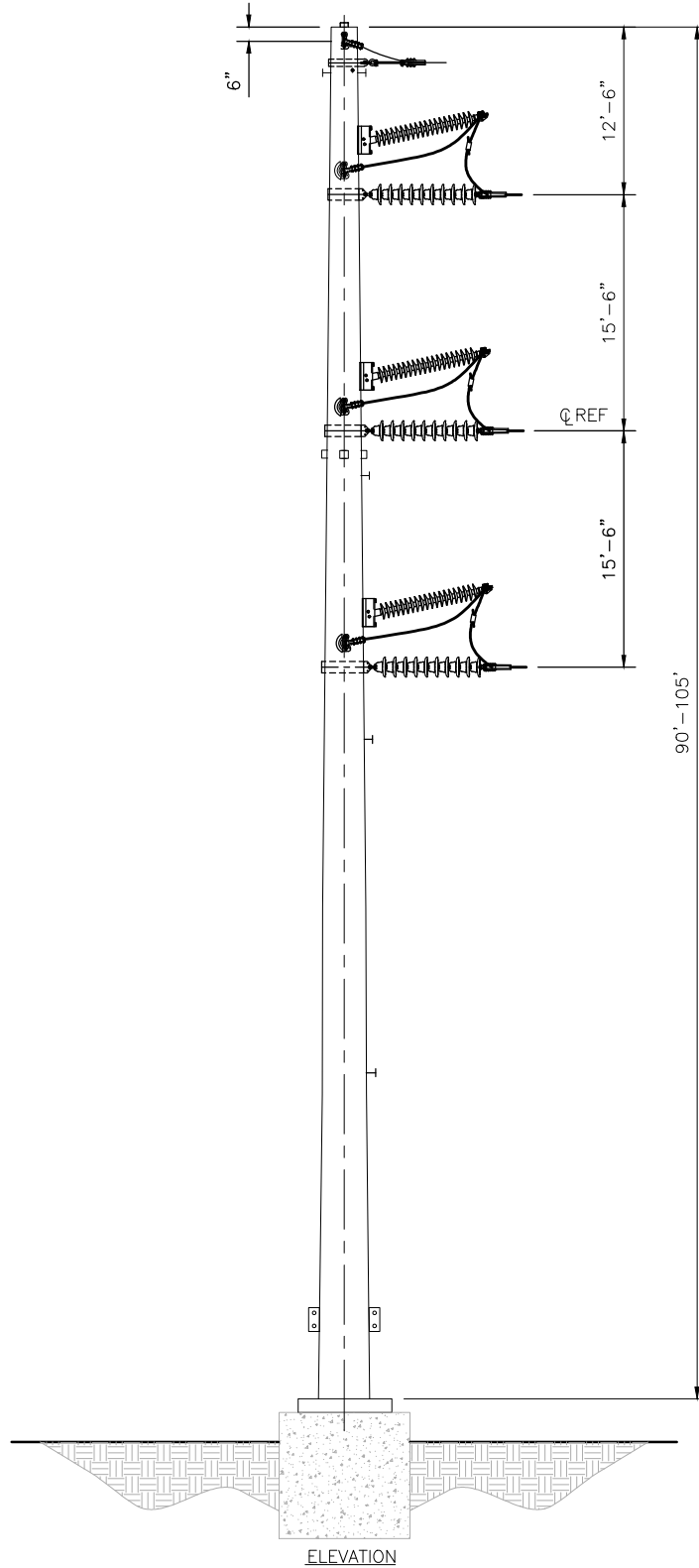
- Alternatives Considered:**
- Provide service via 5-breaker ring bus (criteria violations identified)
  - Provide service via a 345/138 kV substation (not needed for studied load level)

**Estimated Project Cost:** \$31.8 M

**Projected In-Service:** 07/01/2021  
**Status:** Engineering  
**Model:** 2019 Series 2024 Summer RTEP 50/50



Legend	
500 kV	Red
345 kV	Blue
138 kV	Yellow
69 kV	Teal
34.5 kV	Red
23 kV	Green
New	Purple



DATE: 5/20

DESIGNED: SAL/BMcD

GM-MAGELLAN 138KV  
& HIGHLAND-MAGELLAN NO. 1 138KV  
SINGLE CIRCUIT TUBULAR STEEL POLE  
DEADEND 40-70 DEGREES

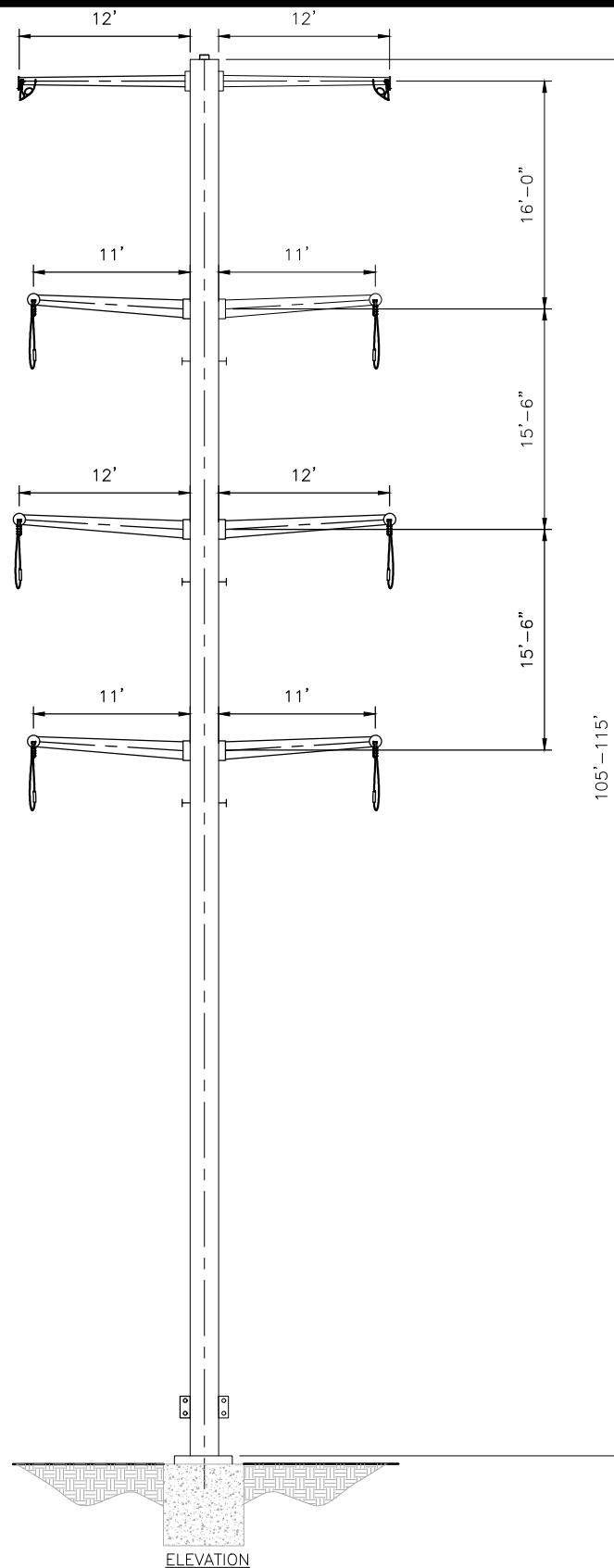
PROJECT:

122251

CONTRACT:

-

EXHIBIT 5



DATE: 5/20

DESIGNED: SAL/BMcD

GM-MAGELLAN 138KV  
 & HIGHLAND-MAGELLAN NO. 1 138KV  
 DOUBLE CIRCUIT TUBULAR STEEL POLE  
 DEADEND 0-5 DEGREES

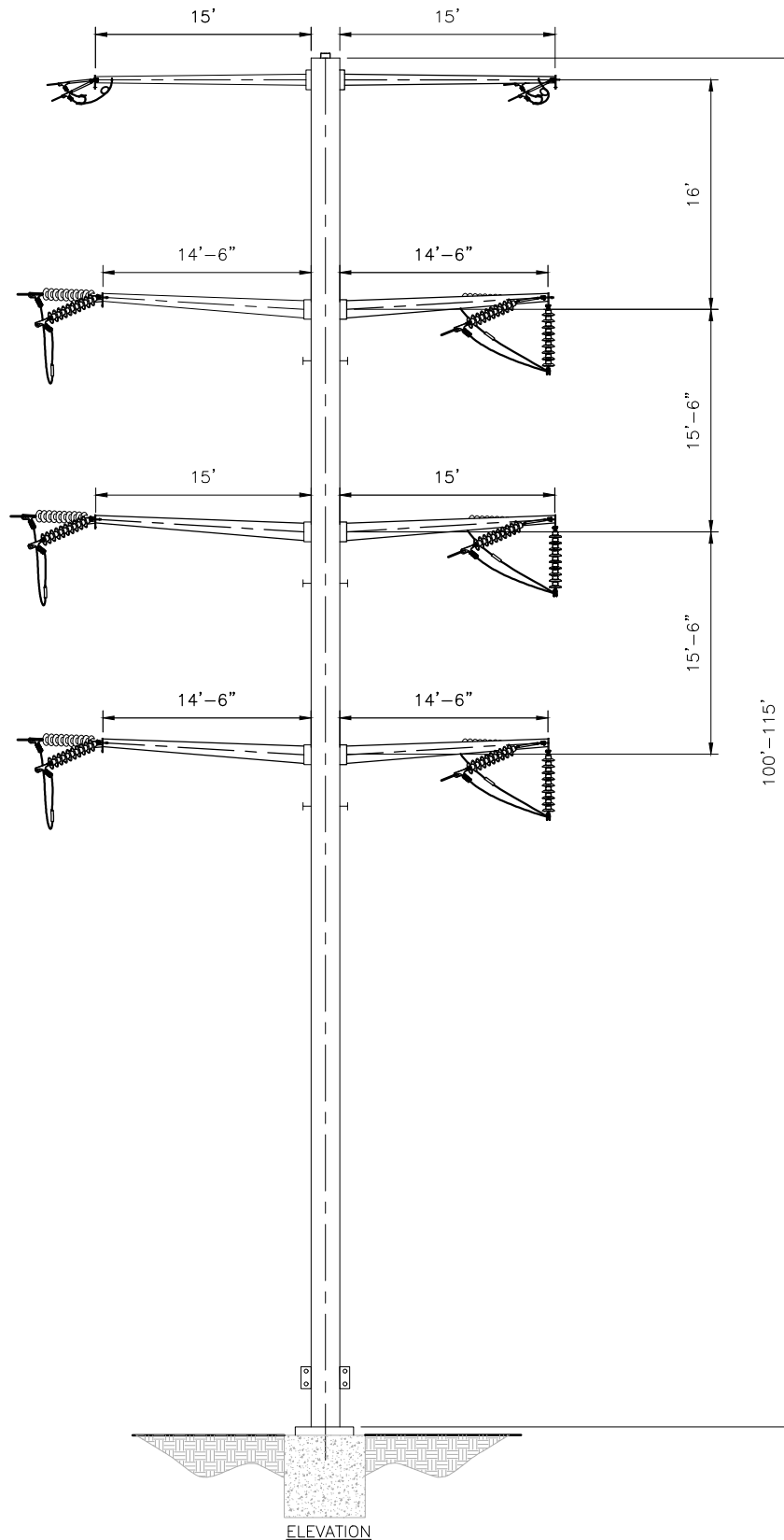
PROJECT:

122251

CONTRACT:

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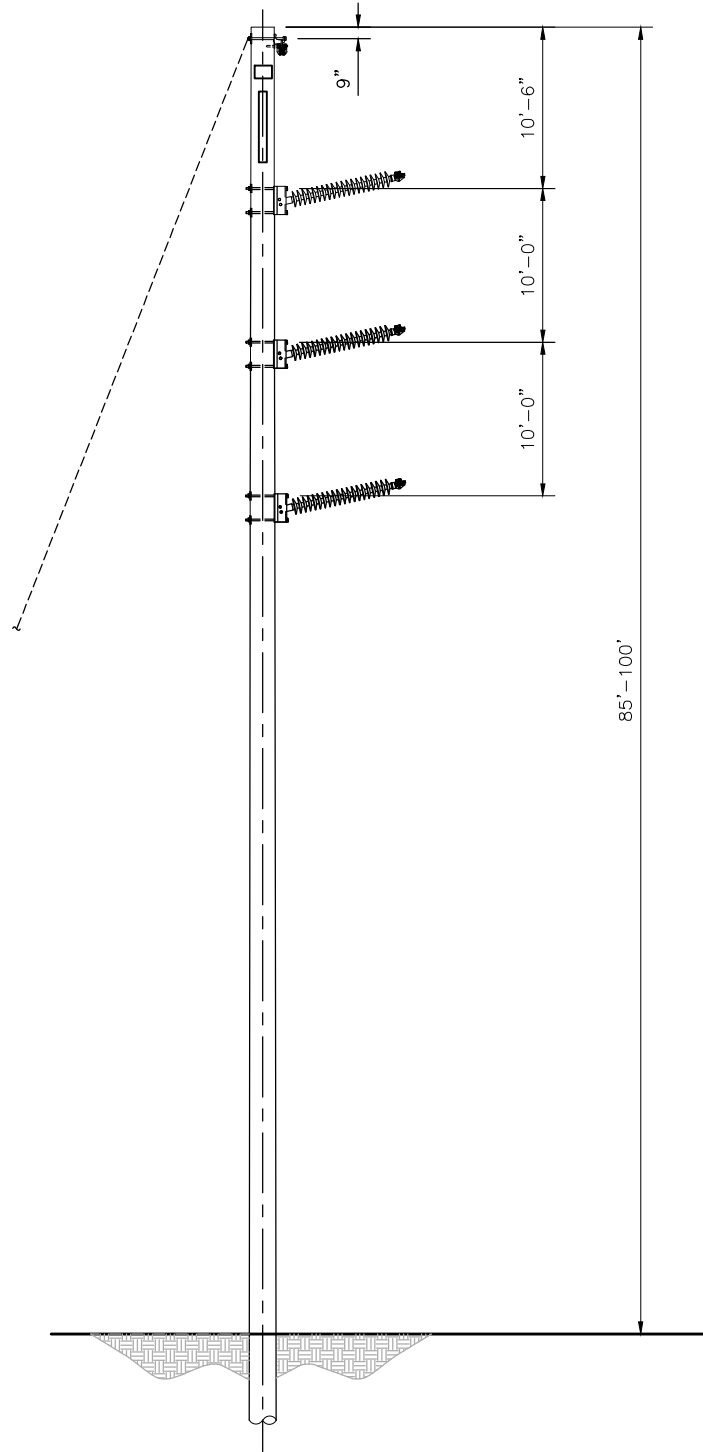
EXHIBIT 6



DATE: 5/20  
DESIGNED: SAL/BMcD

GM-MAGELLAN 138KV  
& HIGHLAND-MAGELLAN NO. 1 138KV  
DOUBLE CIRCUIT TUBULAR STEEL POLE  
DEADEND 75-100 DEGREES

PROJECT: 122251  
CONTRACT: -  
EXHIBIT 7



ELEVATION



DATE: 5/20

DESIGNED: SAL/BMcD

# GM-MAGELLAN 138KV SINGLE CIRCUIT WOOD POLE TANGENT 0-15 DEGREES

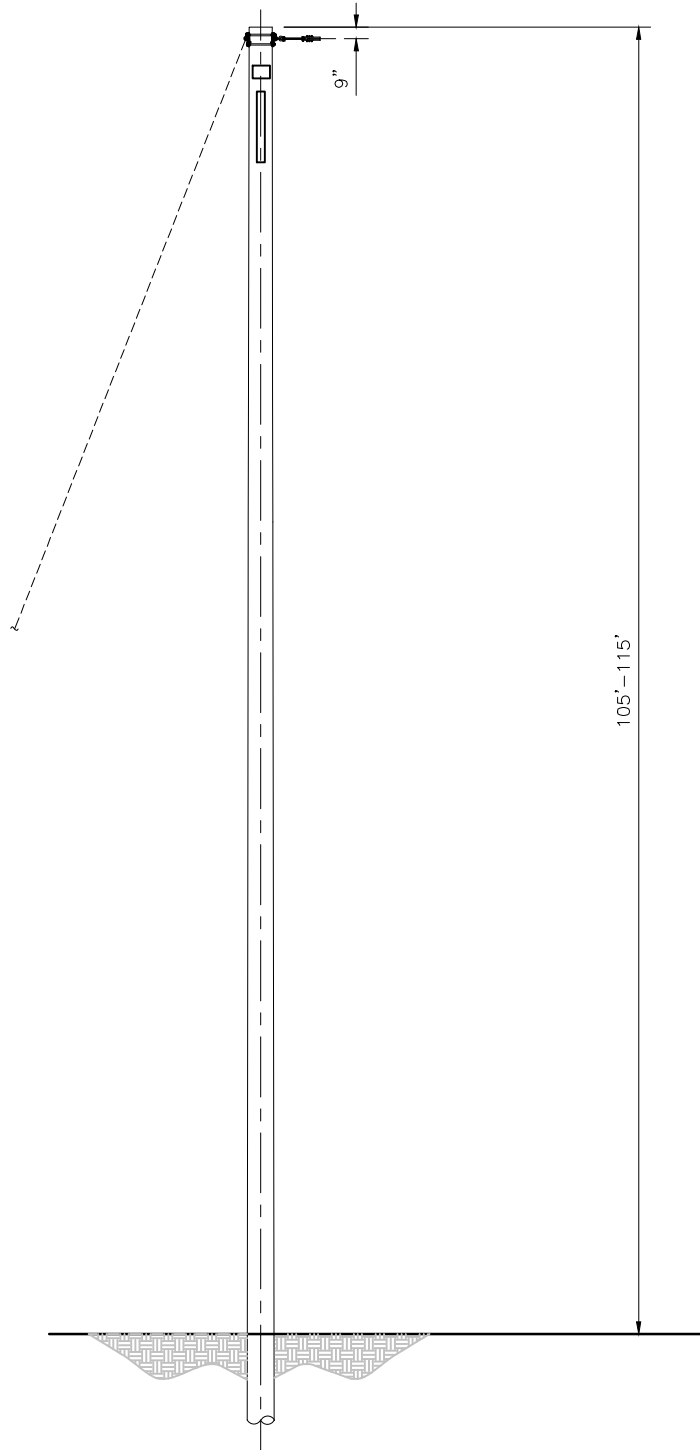
PROJECT:

122251

CONTRACT:

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EXHIBIT 8



ELEVATION



DATE: 6/20

DESIGNED: SAL/BMcD

# HIGHLAND-MAGELLAN NO.1 138KV SHIELD WIRE ONLY STEEL POLE ONE SIDED DEADEND

PROJECT:

122251

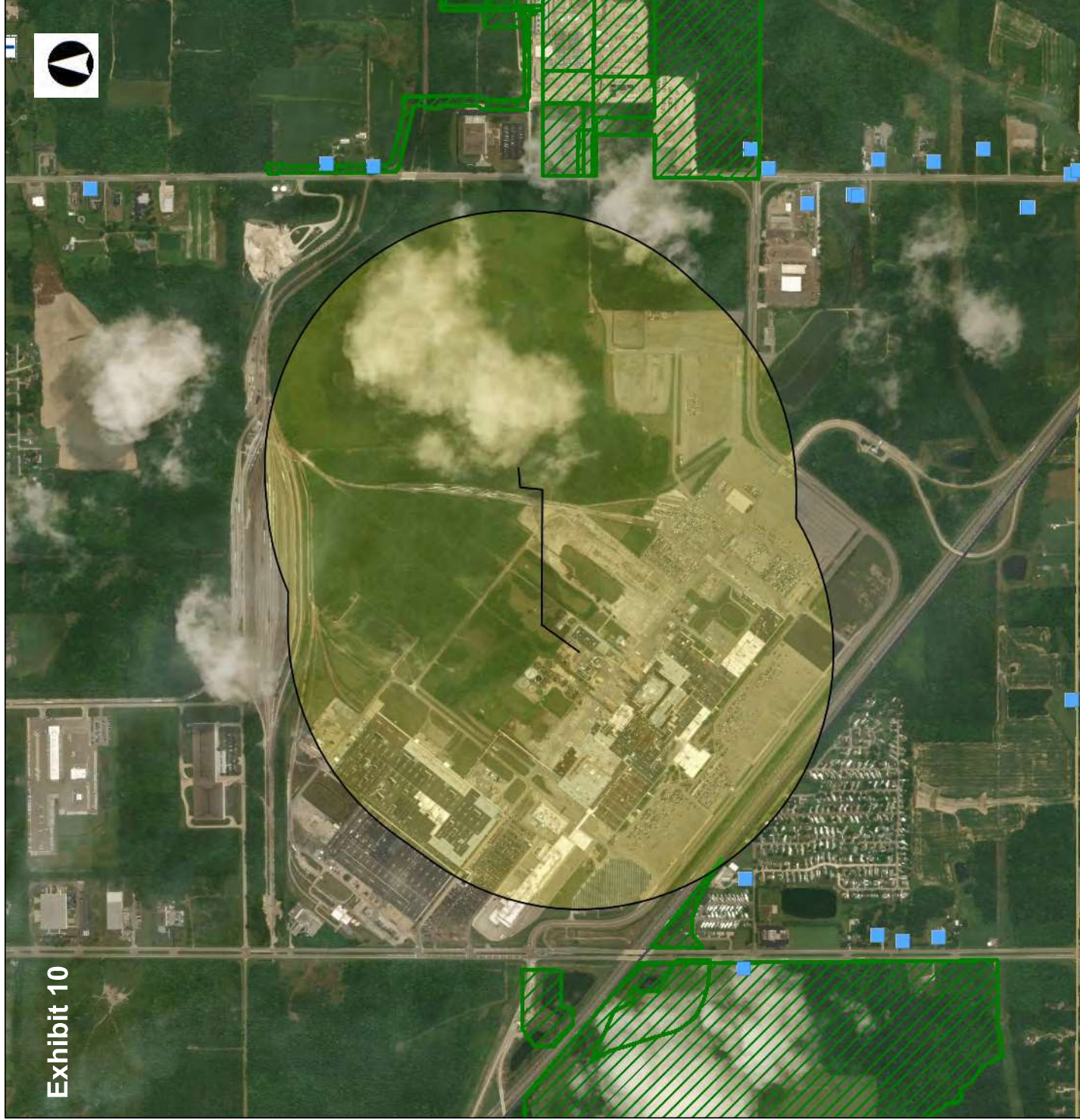
CONTRACT:

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EXHIBIT 9



# Exhibit 10



## Legend

- NR Listings
  - Listed
  - National Historic Landmark
  - Delisted
- NR Determinations of Eligibility
- Historic Structures
- Historic Bridges
- Historic Tax Credit Projects
- OGS Cemeteries
- Confident
- Not Confident
- Historic Markers
- UTM Zone Split
- NR Boundaries
- Phase1
- Phase2
- Phase3
- Historic Previously Surveyed

0 0.30 0.61 Miles

1: 24,000

## Copyright/Disclaimer

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Datum: [Datum]

Projection: WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere





# Ohio Department of Natural Resources

MIKE DeWINE, GOVERNOR

MARY MERTZ, DIRECTOR

**Exhibit 11**

**Office of Real Estate**  
*Paul R. Baldrige, Chief*  
2045 Morse Road – Bldg. E-2  
Columbus, OH 43229  
Phone: (614) 265-6649  
Fax: (614) 267-4764

November 27, 2019

Scott Bush  
GHD Services, Inc.  
1801 Old Highway 8 NW, Suite 114  
St. Paul, Minnesota 55112

**Re:** 19-916; Project Magellan - Parcel B

**Project:** The proposed project involves the construction of an industrial development.

**Location:** The proposed project is located in the Village of Lordstown, Trumbull 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.

**Natural Heritage Database:** The Natural Heritage Database has the following record at or within a one-mile radius of the project area:

Great blue heron rookery

The review was performed on the project area you specified in your request as well as an additional one-mile radius. Records searched date from 1980. This information is provided to inform you of features present within your project area and vicinity.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. 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 all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

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

The DOW recommends that impacts to streams, 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 project is within the range of the Indiana bat (*Myotis sodalis*), a state endangered and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees to include: 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 roost trees consists of 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. However, Indiana bats are also dependent on the forest structure surrounding roost trees. If suitable habitat occurs within the project area, the DOW recommends trees be conserved. If suitable habitat occurs within the project area and trees must be cut, the DOW recommends cutting occur between October 1 and March 31. If suitable trees must be cut during the summer months, the DOW recommends a net survey be conducted between June 1 and August 15, prior to any cutting. Net surveys should incorporate either nine net nights per square 0.5 kilometer of project area, or four net nights per kilometer for linear projects. If no tree removal is proposed, this project is not likely to impact this species.

The project is within the range of the clubshell (*Pleurobema clava*), a state endangered and federally endangered mussel, and the black sandshell (*Ligumia recta*), a state threatened mussel. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the northern brook lamprey (*Ichthyomyzon fossor*), a state endangered fish, and the mountain brook lamprey (*Ichthyomyzon greeleyi*), a state endangered fish. Due to the location, and that there is no in-water work proposed in a perennial stream, this project is not likely to impact these species.

The project is within the range of the eastern hellbender (*Cryptobranchus alleganiensis alleganiensis*), a state endangered species and a federal species of concern. Due to the location, and that there is no in-water work proposed in a perennial stream of sufficient size to provide suitable habitat, this project is not likely to impact this species.

The project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and a federally threatened snake species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. Due to the location, and the type of habitat present at the project site and within the vicinity of the project area, this project is not likely to impact this species.

The project is within the range of the spotted turtle (*Clemmys guttata*), a state threatened species. This species prefers fens, bogs and marshes, but also is known to inhabit wet prairies, meadows, pond edges, wet woods, and the shallow sluggish waters of small streams and ditches. Due to the location, and the type of habitat present at the project site and within the vicinity of the project area, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus cyaneus*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this



type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 15 to August 1. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the least bittern (*Ixobrychus exilis*), a state threatened bird. This secretive marsh species prefers dense emergent wetlands with thick stands of cattails, sedges, sawgrass or other semiaquatic vegetation interspersed with woody vegetation and open water. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

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 U.S. Fish & Wildlife Service.

**Water Resources:** The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

[http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List\\_8\\_16.pdf](http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List_8_16.pdf)

ODNR appreciates the opportunity to provide these comments. Please contact Sarah Tebbe, Environmental Specialist, at (614) 265-6397 or [Sarah.Tebbe@dnr.state.oh.us](mailto:Sarah.Tebbe@dnr.state.oh.us) if you have questions about these comments or need additional information.

Mike Pettegrew  
Environmental Services Administrator (Acting)

# **APPENDIX E1**

**USFWS Consultation Letter**





# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ohio Ecological Services Field Office

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

Phone: (614) 416-8993 Fax: (614) 416-8994



In Reply Refer To:

September 25, 2019

Consultation Code: 03E15000-2019-SLI-1987

Event Code: 03E15000-2019-E-02231

Project Name: Project Magellen

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <http://www.fws.gov/migratorybirds/RegulationsandPolicies.html>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/BirdHazards.html>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <http://www.fws.gov/migratorybirds/AboutUS.html>.

---

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List



# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Ohio Ecological Services Field Office**

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

(614) 416-8993

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## Project Summary

Consultation Code: 03E15000-2019-SLI-1987

Event Code: 03E15000-2019-E-02231

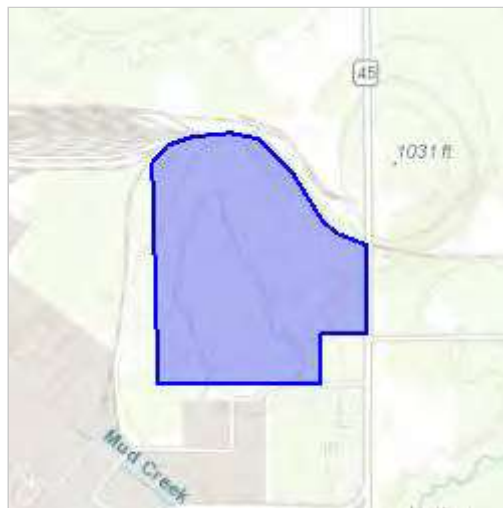
Project Name: Project Magellen

Project Type: DEVELOPMENT

Project Description: New industrial development on 173 Acre parcel. Project planning is being undertaken

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/41.15288572681847N80.86228738786092W>



Counties: Trumbull, OH

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## Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>▪ Incidental take of the northern long-eared bat is not prohibited at this location. Federal action agencies may conclude consultation using the streamlined process described at <a href="https://www.fws.gov/midwest/endangered/mammals/nleb/s7.html">https://www.fws.gov/midwest/endangered/mammals/nleb/s7.html</a></li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Reptiles

NAME	STATUS
Eastern Massasauga (=rattlesnake) <i>Sistrurus catenatus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2202">https://ecos.fws.gov/ecp/species/2202</a>	Threatened

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## Clams

NAME	STATUS
Clubshell <i>Pleurobema clava</i> Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3789">https://ecos.fws.gov/ecp/species/3789</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

# APPENDIX E2

Bat Presence/Probable Absence Survey Report





**Summer 2018 Indiana Bat Presence/Probable Absence Survey  
for the Proposed NorthPoint Development, Lordstown  
Industrial Park, Trumbull County, OH**

**(Survey Reference #18-012)**

**TAILS# 03E15000-2018-TA-1201**

Eric Nagy  
Senior Environmental Scientist  
EMH&T  
5500 New Albany Road  
Columbus, OH, 43054

21 June 2018

**COPPERHEAD ENVIRONMENTAL CONSULTING, INC.**  
P.O. BOX 73 ■ 471 MAIN STREET ■ PAINT LICK, KENTUCKY 40461  
(859) 925-9012 OFFICE (859) 925-9816 FAX

[www.copperheadconsulting.com](http://www.copperheadconsulting.com)

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## Appendices

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Appendix A: Mist-Net Photographs

Appendix B: Bat Capture and Habitat Datasheets

## INTRODUCTION

Copperhead Environmental Consulting, Inc. (Copperhead) has been contracted by EMH&T to conduct a presence/probable absence (P/A) survey for the federally listed Indiana bat (*Myotis sodalis*) at a 173-acre site containing 30 forested acres south of Salt Springs Rd, west of Highway 45, and northwest of Interstate 80 in the Lordstown Industrial Park, Trumbull Co., OH (Figure 1).

Because the project area is within the Indiana bat's summer range, removal of forested habitat may potentially impact summer populations of the species. To determine the presence or probable absence of this species, Copperhead completed a mist-net survey within the project area.

## METHODS

### Site Selection/Mist-Netting

Nine net nights were surveyed within the project area (Table 1; Figure 1) based on estimated forested impacts (30 acres). A study plan was submitted to the U.S. Fish & Wildlife Service (USFWS) Ohio Field Office and Ohio Department of Natural Resources (ODNR) on 15 May 2018 and concurrence was received from USFWS on 16 May 2018. Prior to the survey, Copperhead biologists conducted field reconnaissance of the project area to select mist-net locations (mist-net photographs are provided in Appendix A).

Mist-net surveys were implemented in accordance with guidelines outlined in the *2018 Range-Wide Indiana Bat Survey Guidelines* (USFWS 2018) and the most recent *Ohio Division of Wildlife and USFWS (OH Field Office) Guidance for Bat Permitted Biologist* (ODNR-DOW 2018). Mist-net surveys were conducted under our USFWS Federal Fish and Wildlife Permit #TE94849B-0 and our ODNR Scientific Collecting Permit #20-076.

**Table 1. Mist-net locations for the proposed NorthPoint Development of the Lordstown Industrial Park, Trumbull County, Ohio. Summer 2018.**

Mist-Net	Dates Surveyed (2018)*	No. of Net Nights	Latitude	Longitude
A	6 June	1	41.15054	-80.86351
B	6-7 June	2	41.15047	-80.86329
C	6-7 June	2	41.15018	-80.86378
D	6-7 June	2	41.15018	-80.86411
E	6-7 June	2	41.15000	-80.86421

\* Netting effort was conducted on June 5, but cancelled due to temperatures dropping below 50°C

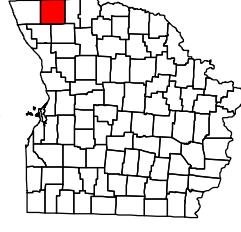




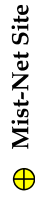
**COPPERHEAD**  
ENVIRONMENTAL CONSULTING

## Lordstown Industrial Park

Study Area



Trumbull County,  
Ohio



Coordinate System:  
NAD 1983 StatePlane  
Ohio South FIPS 3402  
Feet  
Projection: Lambert  
Conformal Conic  
Datum: North American  
1983  
Sources: USDA, ESRI,  
USGS  
Date: 6/21/2018

1:7,000  
or  
1 cm = 70 m

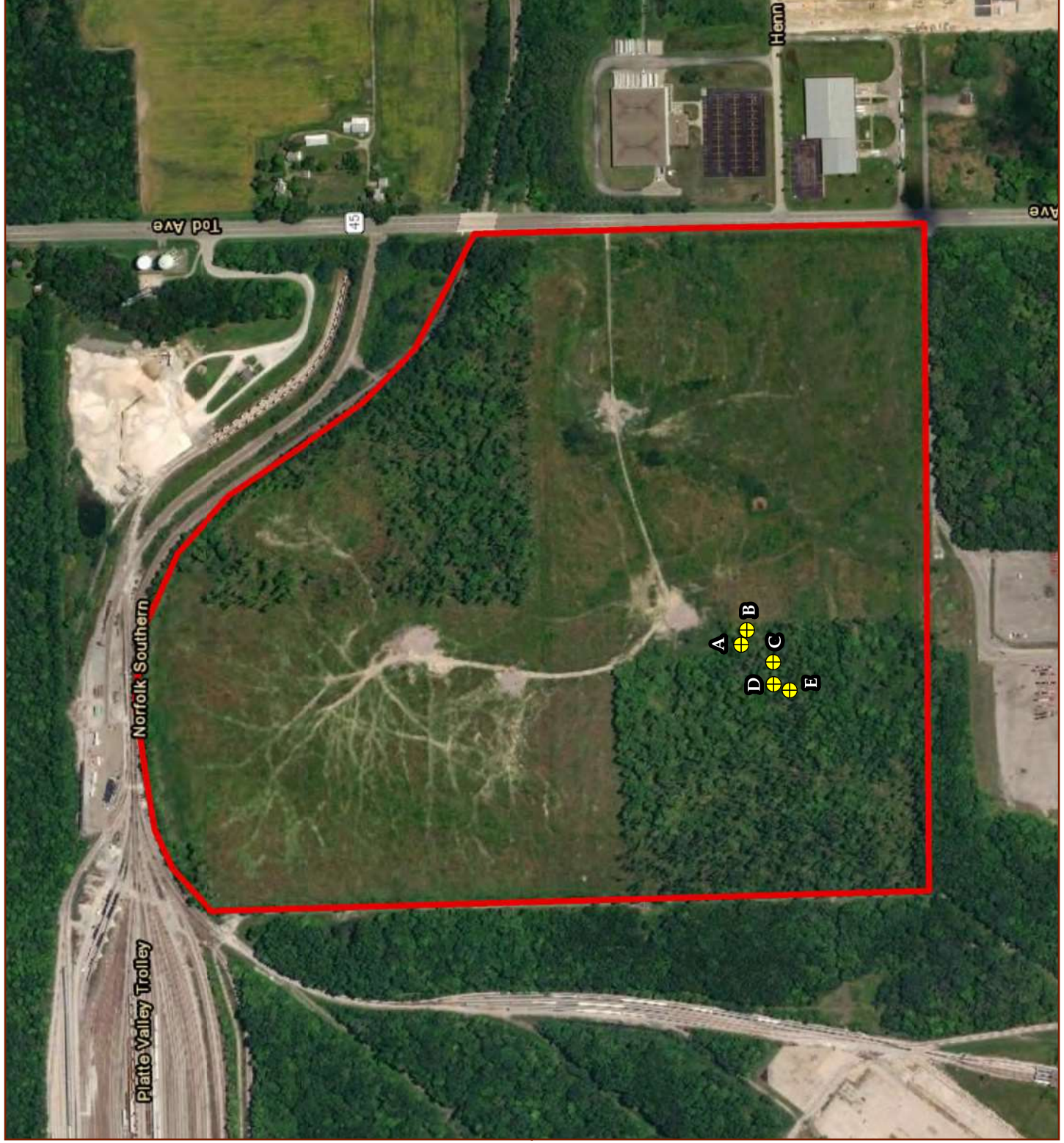
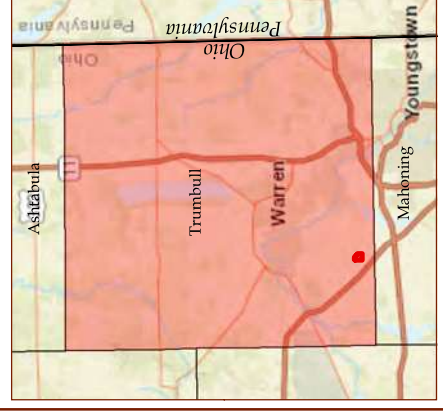
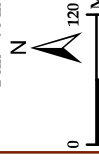


Figure 1. Mist-net locations for the proposed NorthPoint Development of the Lordstown Industrial Park, Trumbull County, Ohio. Summer 2018.

Mist-net locations were recorded using a handheld Global Positioning System (GPS) unit. Mist-nets were set prior to sunset and deployed at dusk. Nets were left open for at least 5 hours after sunset each night and checked every 10 minutes. Disturbance near the nets was kept to a minimum. Weather data, including temperature, relative wind speed, and cloud cover, was recorded on an hourly basis to ensure compliance with mist-netting guidelines (e.g., temperature during survey > 50°F, no rain, etc.).

Low visibility, high-quality nylon nets, 9 to 12 m (~20 – 30 ft) in length (depending upon the width of the corridor) were used for each net set. A two-tier set, at least 6 meters (~20 feet) high, constituted a net set. Netting consisted of 4 mist-net sets erected at one site on the first night and 5 mist-net sets erected at 4 locations on the second night.

Bats were live-caught in mist-nets and released unharmed near the point of capture. Data recorded for each captured individual included time of capture, capture net, capture height, species, sex, age class, reproductive condition, mass, and forearm length. Processing of bats was completed within 30 min from the time the bat was removed from the net.

### **White-Nose Syndrome Protocol**

To minimize the transmission of White-Nose Syndrome (WNS) between captured bats, all netting and field activities followed the most up-to-date USFWS guidelines. All hard, non-porous netting equipment was sanitized with Isopropyl alcohol wipes (70%) prior to arrival at the project site and after each survey night; all other equipment was submersed in hot water (55°C) for a minimum of 20 minutes. Disposable latex gloves were worn over sanitized handling gloves and changed following the handling of each bat. All non-disposable equipment (e.g., PESOLA® scales, rulers, calipers) that came into contact with a bat was sanitized immediately following the handling of each bat. Bats were evaluated for potential WNS infection through wing scoring following the *Wing-Damage Index* (Reichard and Kunz 2009).

## **RESULTS**

### **Mist-Netting Results**

Mist-netting was conducted from 5-7 June, 2018 (Bat Capture and Habitat Datasheets are provided in Appendix B). Survey efforts on 5 June were not counted because the temperature dropped below 50°C during the last hour of the survey. Surveys conducted on 6 and 7 June were completed with no variance from weather guidelines.

In total, 10 bats of 2 species were captured (Table 2). No Indiana bats were captured.



**Table 2. Bats captured during the summer 2018 survey for the proposed NorthPoint Development of the Lordstown Industrial Park, Trumbull County, Ohio.**

Species	Adult, Male, Non-Reproductive	Adult, Male, Testes Descended	Adult, Female, Pregnant	Unknown*	Total
<i>Eptesicus fuscus</i>	1	2	4	-	7
<i>Lasiurus borealis</i>	1	-	1	1	3
<b>Total</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>10</b>

\*Bat escaped before age/sex determination

## Habitat

The 30 ac proposed clearing portion of the 173-acre property consists of a small field interspersed with young early successional trees. Dominate tree species include sugar maple (*Acer saccharum*), silver maple (*Acer saccharinum*), red maple (*Acer rubrum*), slippery elm (*Ulmus rubra*), Ohio buckeye (*Aesculus glabra*), and northern red oak (*Quercus rubra*). Trees are present in small clusters or as individuals throughout most of the property. The northern portion of the property includes slightly older trees in larger clusters with interspersed tree falls and forest gaps. No potential roosting habitat was observed. All trees were alive with tight bark. Foraging habitat on the property was of moderate quality. There was an abundance of open space for bats to travel through and forage in but given the surrounding habitat and the quality of the habitat on site it is unlikely that many bats utilize the property for roosting. No water resources were observed on the property.

## CONCLUSIONS

Mist-netting efforts provided no evidence that Indiana bats use the project area during summer months. Indiana bat habitat within the project area is of moderate quality. In general, the forest composition and age structure provide unsuitable roosting opportunities for bats. All trees are alive with tight bark; most trees are young. The larger diameter trees of species considered optimal roosting habitat for Indiana bats are absent or few in number and do not exhibit characteristics preferred by Indiana bats based on their lack of exfoliating bark. These findings and the failure to capture listed bats suggest that the target species are not present in the project area during the maternity season or are present in such low densities that current survey techniques failed to detect them.

## LITERATURE CITED

Ohio Division of Natural Resources – Division of Wildlife (ODNR-DOW). 2018. Ohio Division of Wildlife and USFWS (OH Field Office) Guidance for Bat Permitted Biologist.

Reichard, J. D. and T. H. Kunz. 2009. White-nose syndrome inflicts lasting injuries to the wings of little brown myotis (*Myotis lucifugus*). *Acta Chiropterologica*, 11(2) 457-464.

United States Fish and Wildlife Service (USFWS). 2018. Range-wide Indiana Bat Survey Guidelines.

# **APPENDIX A**

## **Mist-Net Photographs**



**Net A**



**Net B**





**Net C**



**Net D**



**Net E**



## **APPENDIX B**

### **Bat Capture and Habitat Datasheets**



Site No. \_\_\_\_\_ Project Phase# 711 Project Name Lordstown Industrial Park Dates 6/5, 10/6

Net Site Diagram

**Net height x net length (m) Dates**

A = 5.2 x 9	6/5
B = 5.2 x 9	6/5 + 6/6
C = 5.2 x 12	6/5 + 6/6
D = 5.2 x 12	6/5 + 6/6
E = 5.2 x 9	6/5 + 6/6
F = x	

**Net Set GPS Location (UTM of Lat/Long)**

A = 41.15054	-80.86351
B = 41.15047	-80.86329
C = 41.15018	-80.86378
D = 41.15018	-80.86411
E = 41.15000	-80.86421
F =	

**Net Set by Habitat**

Habitat	A	B	C	D	E	F
Corridor	X	X	X	X	X	
Road Rut						
Creek						
River						
Pond						
Forest Gap						
Cave						
Mine						
Tree						
Other: list						

**Time nets up Time nets down**

Date	6/5	2051	0153
Date	6/6	2053	0152

**Dominant Vegetation**

1. <u>Acer saccharum</u>	4. <u>Ulmus rubra</u>
2. <u>Acer rubrum</u>	5. <u>Asclepias tuberosa</u>
3. <u>Acer saccharinum</u>	6. <u>Quercus rubra</u>

**Potential listed bat habitat at site:**

**Roost habitat:** 1. **Poor:** No or few snags > ~5" DBH with sloughing bark or other usable roost features (cracks, crevices, etc) 2. **Moderate:** Snags with sloughing bark or other roost features present ~5-15 inch DBH within 1000 feet of forested areas. 3. **Optimal:** Snags with sloughing bark or other roost features present > ~15 inch DBH within 1000 feet of forested areas.


**Water Resources:** 1. **Poor:** bat drinking resources not present at the site. 2. **Moderate:** Ephemeral or intermittent streams or ponded areas present but too cluttered to allow many bats to drink easily or simultaneously. No corridors, openings or canopy gaps allow bats easy access to the resource. 3. **Optimal:** Streams or ponds (including road ruts) present that appear to offer drinking resource throughout the majority of the summer. Flyways to resources are available.

**Forest Structure:** (if hardwoods are absent or nearly absent or if stand is monoculture, area automatically qualifies as a 1: poor).

1. **Poor:** Habitat even aged and young. Trees smaller than 5 inch DBH. Understory growth cluttered and restricts flying/foraging 2. **Moderate:** some diversity in age of trees in the stand. Trees 5 to 15 inches present. Understory clutter dominant but not ubiquitous. Trees greater than 15" DBH may be present but rare. 3. **Optimal:** Mature forest. Diverse age classes of trees present. Trees > 15 inch DBH frequent. Varying tree height and treefalls allow for frequent small openings and gaps that facilitate bat foraging.

2. **Land Cover:** 1. **Poor:** Area surrounding site predominantly un-forested. Few mature trees present not connected to other areas of trees. 2. **Moderate:** Trees present in the form of small woodlots and wooded fence rows. Little connection to adjacent forested areas. 3. **Optimal:** Area is largely forested. Wooded stands are connected to other wooded stands via wooded stream, fence row, or other wooded corridor.

**Comments:**

Site No. SKE PG 1 Project Phase# \_\_\_\_\_ Dates 6/7  
 Site Location \_\_\_\_\_ Habitat Type\* \_\_\_\_\_  
 County \_\_\_\_\_ State \_\_\_\_\_ Technician(s) \_\_\_\_\_  
 Lat/Lon or UTM (circle one): N/Easting \_\_\_\_\_ W/Northing \_\_\_\_\_ UTM Zone \_\_\_\_\_  
 COPPERHEAD  
COPPERHEAD CONSULTING, INC.



**COPPERHEAD**  
SPECIALTY COATINGS FOR CONCRETE

[illegible]

**Species Abbreviations:** *Corynorhinus rafinesquii* (CORA); *Eptesicus fuscus* (EPFU); *Lastarvus cinereus* (LABCI); *Lastarvus seminolas* (LASEJ); *Lasiotyleris noctivagus* (LANO); *Miomotis australopartus* (MYAU); *Miomotis leiboi* (MYLE); *Miomotis lucifugus* (MYLU); *Miomotis septentrionalis* (MYSF); *Miomotis sodalis* (MYSO); *Nycticeius humeralis* (NYHU); *Pernomyscus subtilans* (PESU); *Tadarida brasiliensis* (TABR).

**\*Habitat Type:** Creek/riparian; Bottomland forest; Upland forest; Pond; Cave entrance; Mine portal; Bridge; Structure; Field edge; Open field; Other

Dates

Project Name

Project Phase#

Site No.

Net Site Diagram

Net height x net length (m)

Net Set by Habitat

F

E

D

C

B

A

Habitat

Corridor

Road Rut

Creek

River

Pond

Forest Gap

Cave

Mine

Tree

Other list

Date

Time nets up

Time nets down

Dominant Vegetation

1.

2.

3.

4.

5.

6.

Net Set GPS Location (UTM or Lat/Long)

A = 6/7

B = 6/7

C = 6/7

D = 6/7

E = 6/7

F = 6/7

Transmitters

Band#         

Freq.         

Brand         

Weight         

#days         

Potential listed bat habitat at site:

**Roost habitat:** 1. **Poor:** No or few snags >= ~5" DBH with sloughing bark or other usable roost features (cracks, crevices, etc) 2. **Moderate:** Snags with sloughing bark or other roost features present > ~15 inch DBH within 1000 feet of forested areas. 3. **Optimal:** Streams or ponds (including road cuts) present that appear to offer drinking resource throughout the majority of the summer. Flyways to resources are available.

**Water Resources:** 1. **Poor:** bat drinking resources not present at the site. 2. **Moderate:** Ephemeral or intermittent streams or ponded areas present but too cluttered to allow many bats to drink easily or simultaneously. No corridors, openings or canopy gaps allow bats easy access to the resource. 3. **Optimal:** Streams or ponds (including road cuts) present that appear to offer drinking resource throughout the majority of the summer. Flyways to resources are available.

**Forest Structure:** (if hardwoods are absent or nearly absent or if stand is monoculture, area automatically qualifies as a 1: poor).

1. **Poor:** Habitat even aged and young. Trees smaller than 5 inch DBH. Understory growth cluttered and restricts flying/foraging 2. **Moderate:** some diversity in age of trees in the stand. Trees 5 to 15 inches present. Understory clutter dominant but not ubiquitous. Trees greater than 15" DBH may be present but rare. 3. **Optimal:** Mature forest. Diverse age classes of trees present. Trees > 15 inch DBH frequent. Varying tree height and treefalls allow for frequent small openings and gaps that facilitate bat foraging.

**Land Cover:** 1. **Poor:** Area surrounding site predominantly un-forested. Few mature trees present not connected to other areas of trees. 2. **Moderate:** Trees present in the form of small woodlots and wooded fence rows. Little connection to adjacent forested areas. 3. **Optimal:** Area is largely forested. Wooded stands are connected to other wooded stands via wooded stream, fence row, or other wooded corridor.

Comments:

Please return to: P.O. Box 73, Pant Lick, KY 40461

Copperhead Consulting Ph:859-925-9012



# APPENDIX E3

Request for Species Consultation Review Letter





January 2, 2020

Reference No. 11203468

Mr. Jeromy Applegate  
Fish and Wildlife Biologist  
U S Fish and Wildlife Service  
Ohio Ecological Services Field Office  
4625 Morse Rd., Suite 104  
Columbus, OH 43230

Subject: Request for Species Consultation Review Letter  
Consultation Code: 03E15000-2019-SLI-1987  
Event Code: 03E15000-2020-E-00712  
Project Name: Project Magellan East  
Village of Lordstown, Trumbull County, Ohio

---

Dear Mr. Applegate:

On June 26, 2018, the USFWS completed a review of an Indiana Bat Presence / Probable Absence Survey Report prepared by Copperhead Environmental Consulting on June 21, 2018 for the proposed North Point Industrial Development site in Lordstown, Trumbull County, Ohio. In an email from Suzann Zimmermann on June 26, 2018, the USFWS transmitted the results of their review, concurring with the negative findings of the report and that tree clearing could occur on the Site at any time of the year until March 31, 2024. The correspondence also indicated that due to the size and scope of the project, Service did not anticipate adverse effects to any other federally endangered, threatened, proposed, or candidate species. Copies of the Copperhead report and USFWS correspondence is provided in Attachment 1.

The proposed North Point Industrial Development project did not move forward. However, the Site is currently proposed for Project Magellan, an industrial development to manufacture automotive electric battery cells. We are requesting an updated project review letter from the Service verifying that the Service's previous project clearance remains valid as discussed with the you during our pre-application meeting. The following sections provide Site information on Project Magellan.

## **1. Site Location**

The Site encompasses approximately 158.215 acres and is located west of the intersection of Tod Avenue SW (State Route 45) and Henn Parkway, approximately 1 mile north of Ohio Turnpike US Route 80 in the Village of Lordstown, Trumbull County, Ohio. The approximate Center of the Site is located at 41.152200°, -80.862922° WGS 84. A map showing the Site location and boundaries on the Warren, Ohio USGS 7.5-

minute quadrant is provided as Figure 1. The Site lies within the Mud Creek drainage basin, a tributary to the Mahoning River. The Site was historically used for agricultural purposes. Farming ceased in the 1970s and 1980s and the land underwent succession from farmland to woodland. The Site was developed for natural gas in the 1990s and three wells were installed on the Site. Two of the gas wells have since been closed and properly abandoned. The remaining well remains active. The Site was logged in 2015, with about 75 percent of the Site being clear-cut and the remainder of the Site being selectively logged. The Site has remained in this condition since 2015. In 2019, a 15 acre parcel located to the southeast of the Site, and which had historically been included as part of the Site, was sold as a separate parcel and has been recently cleared in preparation for site development.

## **2. Action Area and Proposed Work**

Project Magellan proposes a new industrial manufacturing facility at this location. Detailed construction plans, including the construction footprint, have not yet been finalized. However, due to the size and scope of this project, we anticipate the entire Site will be required to construct the project.

## **3. Onsite Habitats**

Onsite habitats have not changes since the 2018 survey completed by Copperhead and the Service's review. About 75 percent of the Site consists of recently logged areas now dominated by early successional meadow habitats. The remaining 25 percent of the Site consists of selectively logged areas. Both upland and wetland habitats are present on the Site. Other minor cover types include gas well sites and an access lane from Tod Ave. Sw. Two ephemeral watercourses are located on the Site. Both watercourses lacked flow at the time of our site visit in September 2019 but had a small flow in December following a wet period.

Representative site photographs are provided in Attachment 2.

## **4. Official Species List and Evaluation**

The Official Species List provided pursuant to Section 7 of the Endangered Species Act by the USFWS, Ohio Ecological Services Field Office is shown in Attachment 3 and includes the following species, critical habitat and status:

- Indiana Bat (*Myotis sodalist*) There is final critical habitat for this species. Your location is outside the critical habitat. Status: Endangered
- Northern Long-eared Bat (*Myotis septentrionalis*) No critical habitat has been designated for this species. Status: Threatened
- Eastern Massasauga (*Sistrurus catenatus*) No critical habitat has been designated for this specie:. Threatened



- Clubshell (*Pleurobema clava*) No critical habitat has been designated for this species.  
Status: Endangered

Caves or other structures that could potentially serve as bat hibernacula were not observed on the Site. About 25 percent of the Site is selectively logged woods (40 acres). Tree species greater than 3 inches in diameter are present in these areas. A bat survey was completed in 2018 by Copperhead. Indiana bat and northern long-eared bat were not identified onsite by the survey.

Massasaugas live in wet areas including wet prairies, marshes and low areas along rivers and lakes. In many areas massasaugas also use adjacent uplands during part of the year. They often hibernate in crayfish burrows but may also be found under logs and tree roots or in small mammal burrows. The snake's habitat needs vegetation control such as prescribed fire and mowing to prevent invasion of shrubs, trees and non-native plants. Woody plant invasion is reducing the amount of available habitat in some areas. While wetlands are present on the Site, they are either forested wetlands, recently logged wetlands, or wetlands that have formed in uplands as a result of the logging of the Site in 2015. These wetlands are not associated with wet prairie, marshes, or along a river or lake and are not suitable habitat for the eastern massasauga.

Aquatic habitat on the Site is limited to two ephemeral watercourses and two man-made ditches. These aquatic habitats are not suitable to support the clubshell clam.

We look forward to your review and consultation. If you have any questions, please feel free to contact me at (610) 646-7486 or [scott.bush@GHD.com](mailto:scott.bush@GHD.com).

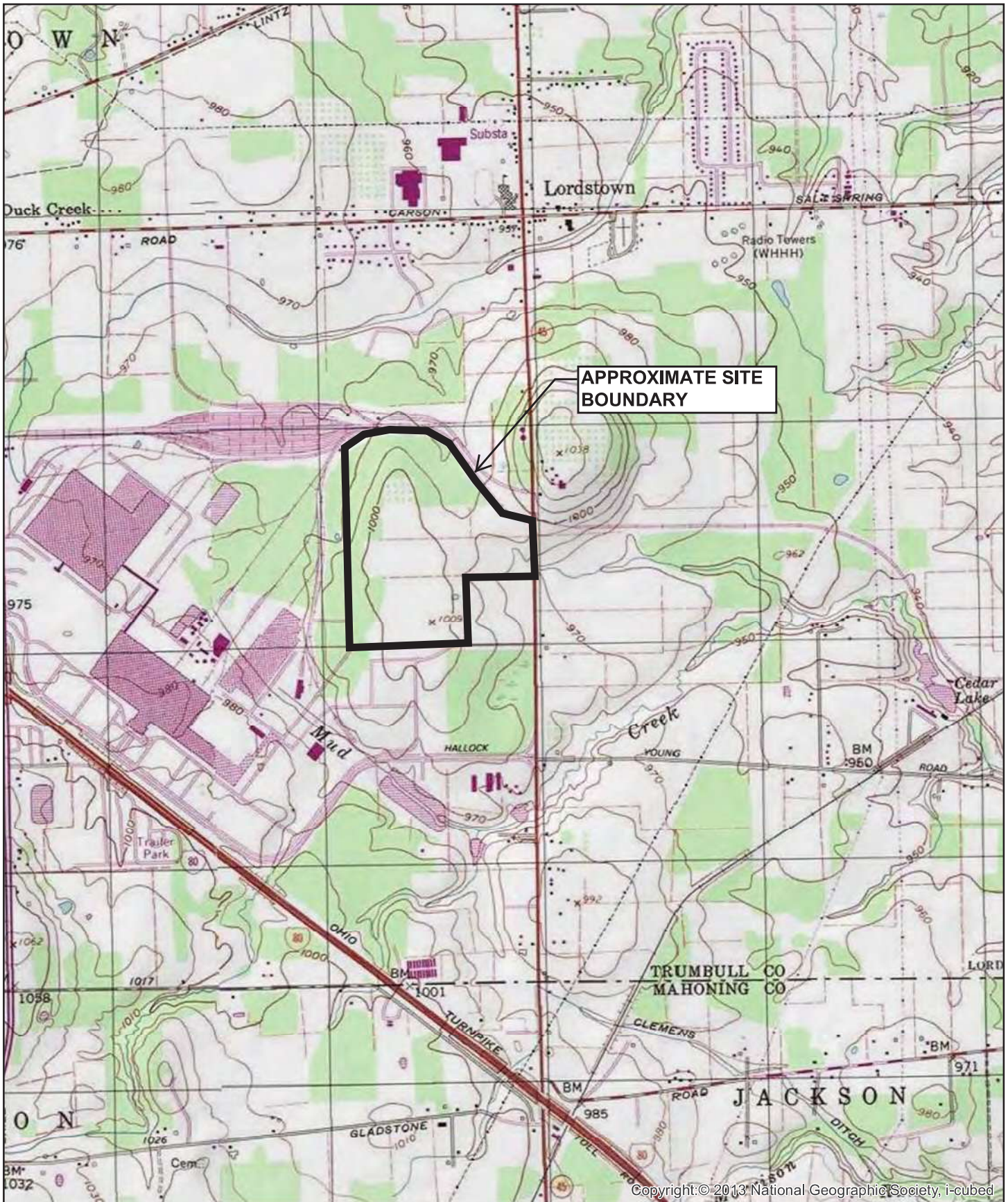
Yours truly,

A handwritten signature in black ink, appearing to read "Scott E. Bush". The signature is fluid and cursive, with the first name "Scott" and last name "Bush" clearly distinguishable.

Scott E. Bush, PWS

## FIGURES

FIGURE 1



Paper Size 8.5 x 11  
0 2,000  
Feet  
Map Projection: Lambert Conformal Conic  
Horizontal Datum: North American 1983  
Grid: NAD 1983 StatePlane Ohio North FIPS 3401 Feet



MEGELLAN EAST - PARCEL 4  
USGS TOPOGRAPHIC LOCATION MAP

CITY OF LORDSTOWN, TRUMBULL COUNTY, OH  
USGS QUAD: WARREN

Job Number 11204429  
Revision A  
Date Dec 12, 2019

M:\0\_Kunka\GHD-PermitMap\_Template\_OH.mxd

© 2019. While every care has been taken to prepare this map, GHD (and DATA CUSTODIAN) make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.

1240 North Mountain Road Harrisburg, PA 17112 T 717 541 0622 F 717 541 8004 W www.ghd.com

ATTACHMENT 1

USFWS CORRESPONDENCE AND INDIANA BAT SURVEY REPORT



**From:** [susan\\_zimmermann@fws.gov](mailto:susan_zimmermann@fws.gov) <[susan\\_zimmermann@fws.gov](mailto:susan_zimmermann@fws.gov)> **On Behalf Of** Ohio, FW3  
**Sent:** Tuesday, June 26, 2018 2:10 PM  
**To:** [cleftwich@copperheadconsulting.com](mailto:cleftwich@copperheadconsulting.com); Milligan, Rob <[RMilligan@emht.com](mailto:RMilligan@emht.com)>;  
[twetzel@copperheadconsulting.com](mailto:twetzel@copperheadconsulting.com)  
**Cc:** [nathan.reardon@dnr.state.oh.us](mailto:nathan.reardon@dnr.state.oh.us); [kate.parsons@dnr.state.oh.us](mailto:kate.parsons@dnr.state.oh.us)  
**Subject:** Bat Survey Response for Lordstown Industrial Park Project, Trumbull County

TAILS #03E15000-2018-TA-1201

Dear Mr. Leftwich,

We have received your summer bat survey report for the subject project. The survey was conducted following current U.S. Fish and Wildlife Service (Service) guidelines. No Indiana bats (*Myotis sodalis*) were detected, demonstrating probable absence of Indiana bats in the project area. Currently, the Service has no known hibernacula or maternity roost records for northern long-eared bat (*Myotis septentrionalis*) in the vicinity of the project. Therefore, the 4(d) rule for the northern long-eared bat could be applied (see: <http://www.fws.gov/midwest/endangered/mammals/nleb/index.html>). Tree clearing on the project site at any time of the year is unlikely to result in adverse impacts to Indiana bats and will not result in any unauthorized incidental take of northern long-eared bats. Negative Indiana bat summer surveys are valid for five years. Therefore, **no tree clearing should occur on the site after March 31, 2024** without further coordination with this office.

If there is a federal nexus for the project (e.g., federal funding provided, federal permits required to construct), no tree clearing should occur on any portion of the project area until consultation under section 7 of the Endangered Species Act, between the Service and the federal action agency, is completed. We recommend that the federal action agency submit a determination of effects to this office, relative to the Indiana bat and northern long-eared bat, for our review and concurrence.

Due to the project type, size, and location, we do not anticipate adverse effects to any other 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.

This letter provides technical assistance only and does not serve as a completed section 7 consultation document. If project plans change, if portions of the proposed project were not evaluated, or if additional information on listed or proposed species or their critical habitat becomes available, it is our recommendation that you reinstate coordination with this office. We recommend that the project be coordinated with the Ohio Department of Natural Resources due to the potential for the project to affect state listed species and/or state lands. Contact John Kessler, Environmental Services Administrator, at (614) 265-6621 or at [john.kessler@dnr.state.oh.us](mailto:john.kessler@dnr.state.oh.us).

If you have questions, or if we can be of further assistance in this matter, please contact our office at (614) 416-8993 or [ohio@fws.gov](mailto:ohio@fws.gov).

Sincerely,

Scott Pruitt

Acting Field Office Supervisor

cc: Nathan Reardon, ODNR-DOW

Kate Parsons, ODNR-DOW



**Summer 2018 Indiana Bat Presence/Probable Absence Survey  
for the Proposed NorthPoint Development, Lordstown  
Industrial Park, Trumbull County, OH**

**(Survey Reference #18-012)**

**TAILS# 03E15000-2018-TA-1201**

Eric Nagy  
Senior Environmental Scientist  
EMH&T  
5500 New Albany Road  
Columbus, OH, 43054

21 June 2018

**COPPERHEAD ENVIRONMENTAL CONSULTING, INC.**  
P.O. BOX 73 ■ 471 MAIN STREET ■ PAINT LICK, KENTUCKY 40461  
(859) 925-9012 OFFICE (859) 925-9816 FAX

[www.copperheadconsulting.com](http://www.copperheadconsulting.com)

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## Appendices

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Appendix A: Mist-Net Photographs

Appendix B: Bat Capture and Habitat Datasheets



## INTRODUCTION

Copperhead Environmental Consulting, Inc. (Copperhead) has been contracted by EMH&T to conduct a presence/probable absence (P/A) survey for the federally listed Indiana bat (*Myotis sodalis*) at a 173-acre site containing 30 forested acres south of Salt Springs Rd, west of Highway 45, and northwest of Interstate 80 in the Lordstown Industrial Park, Trumbull Co., OH (Figure 1).

Because the project area is within the Indiana bat's summer range, removal of forested habitat may potentially impact summer populations of the species. To determine the presence or probable absence of this species, Copperhead completed a mist-net survey within the project area.

## METHODS

### Site Selection/Mist-Netting

Nine net nights were surveyed within the project area (Table 1; Figure 1) based on estimated forested impacts (30 acres). A study plan was submitted to the U.S. Fish & Wildlife Service (USFWS) Ohio Field Office and Ohio Department of Natural Resources (ODNR) on 15 May 2018 and concurrence was received from USFWS on 16 May 2018. Prior to the survey, Copperhead biologists conducted field reconnaissance of the project area to select mist-net locations (mist-net photographs are provided in Appendix A).

Mist-net surveys were implemented in accordance with guidelines outlined in the *2018 Range-Wide Indiana Bat Survey Guidelines* (USFWS 2018) and the most recent *Ohio Division of Wildlife and USFWS (OH Field Office) Guidance for Bat Permitted Biologist* (ODNR-DOW 2018). Mist-net surveys were conducted under our USFWS Federal Fish and Wildlife Permit #TE94849B-0 and our ODNR Scientific Collecting Permit #20-076.

**Table 1. Mist-net locations for the proposed NorthPoint Development of the Lordstown Industrial Park, Trumbull County, Ohio. Summer 2018.**

Mist-Net	Dates Surveyed (2018)*	No. of Net Nights	Latitude	Longitude
A	6 June	1	41.15054	-80.86351
B	6-7 June	2	41.15047	-80.86329
C	6-7 June	2	41.15018	-80.86378
D	6-7 June	2	41.15018	-80.86411
E	6-7 June	2	41.15000	-80.86421

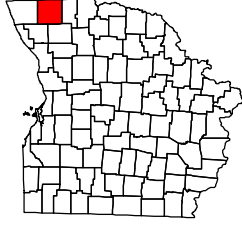
\* Netting effort was conducted on June 5, but cancelled due to temperatures dropping below 50°C



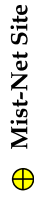
**COPPERHEAD**  
ENVIRONMENTAL CONSULTING

## Lordstown Industrial Park

Study Area



Trumbull County,  
Ohio



Coordinate System:  
NAD 1983 StatePlane  
Ohio South FIPS 3402  
Feet  
Projection: Lambert  
Conformal Conic  
Datum: North American  
1983  
Sources: USDA, ESRI,  
USGS  
Date: 6/21/2018

1:7,000  
or  
1 cm = 70 m

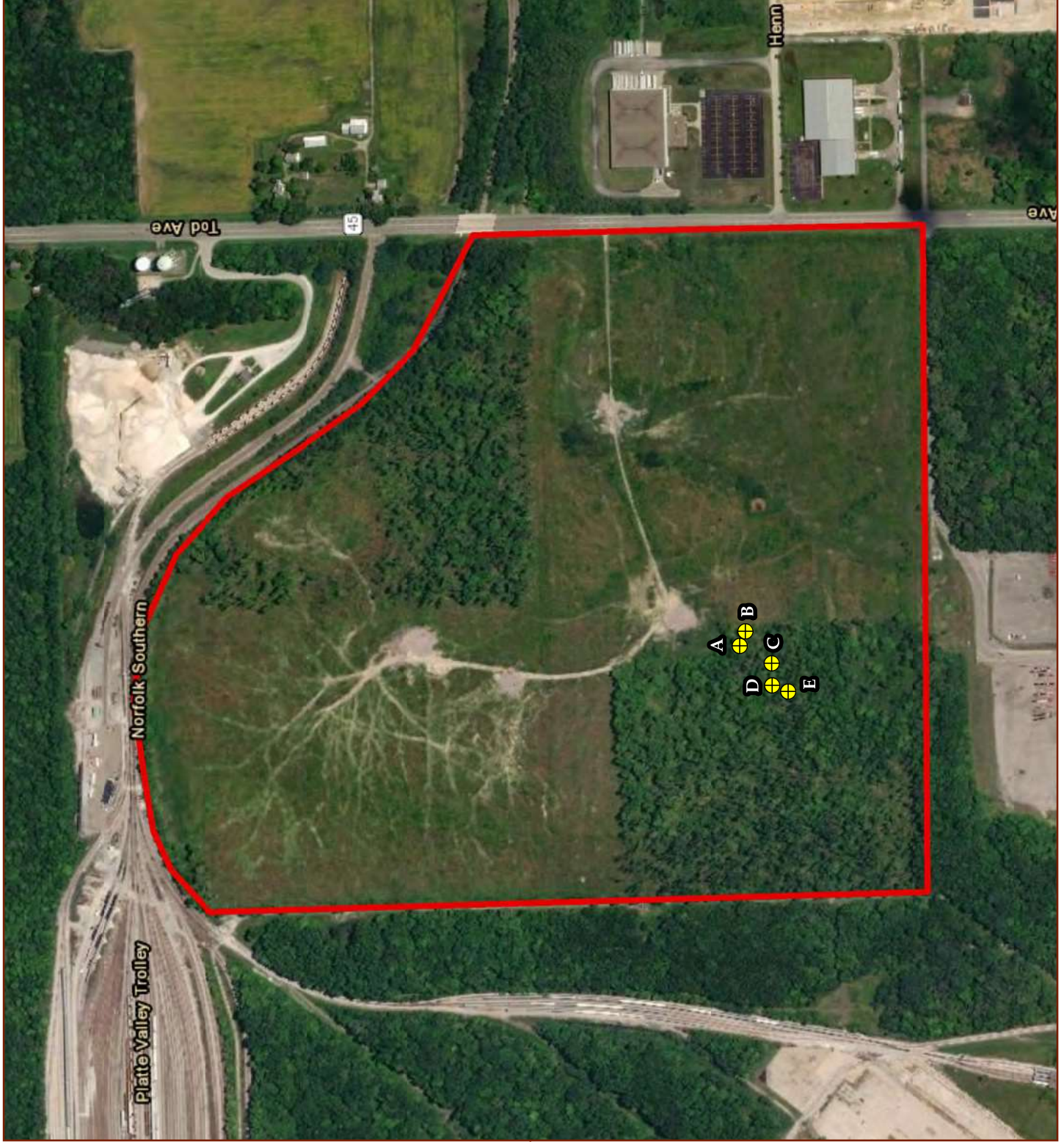
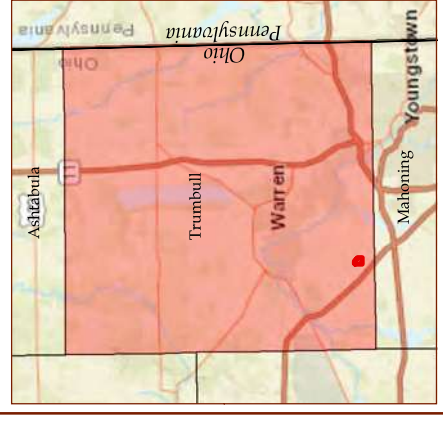
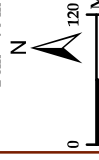


Figure 1. Mist-net locations for the proposed NorthPoint Development of the Lordstown Industrial Park, Trumbull County, Ohio. Summer 2018.



Mist-net locations were recorded using a handheld Global Positioning System (GPS) unit. Mist-nets were set prior to sunset and deployed at dusk. Nets were left open for at least 5 hours after sunset each night and checked every 10 minutes. Disturbance near the nets was kept to a minimum. Weather data, including temperature, relative wind speed, and cloud cover, was recorded on an hourly basis to ensure compliance with mist-netting guidelines (e.g., temperature during survey > 50°F, no rain, etc.).

Low visibility, high-quality nylon nets, 9 to 12 m (~20 – 30 ft) in length (depending upon the width of the corridor) were used for each net set. A two-tier set, at least 6 meters (~20 feet) high, constituted a net set. Netting consisted of 4 mist-net sets erected at one site on the first night and 5 mist-net sets erected at 4 locations on the second night.

Bats were live-caught in mist-nets and released unharmed near the point of capture. Data recorded for each captured individual included time of capture, capture net, capture height, species, sex, age class, reproductive condition, mass, and forearm length. Processing of bats was completed within 30 min from the time the bat was removed from the net.

### **White-Nose Syndrome Protocol**

To minimize the transmission of White-Nose Syndrome (WNS) between captured bats, all netting and field activities followed the most up-to-date USFWS guidelines. All hard, non-porous netting equipment was sanitized with Isopropyl alcohol wipes (70%) prior to arrival at the project site and after each survey night; all other equipment was submersed in hot water (55°C) for a minimum of 20 minutes. Disposable latex gloves were worn over sanitized handling gloves and changed following the handling of each bat. All non-disposable equipment (e.g., PESOLA® scales, rulers, calipers) that came into contact with a bat was sanitized immediately following the handling of each bat. Bats were evaluated for potential WNS infection through wing scoring following the *Wing-Damage Index* (Reichard and Kunz 2009).

## **RESULTS**

### **Mist-Netting Results**

Mist-netting was conducted from 5-7 June, 2018 (Bat Capture and Habitat Datasheets are provided in Appendix B). Survey efforts on 5 June were not counted because the temperature dropped below 50°C during the last hour of the survey. Surveys conducted on 6 and 7 June were completed with no variance from weather guidelines.

In total, 10 bats of 2 species were captured (Table 2). No Indiana bats were captured.

**Table 2. Bats captured during the summer 2018 survey for the proposed NorthPoint Development of the Lordstown Industrial Park, Trumbull County, Ohio.**

Species	Adult, Male, Non-Reproductive	Adult, Male, Testes Descended	Adult, Female, Pregnant	Unknown*	Total
<i>Eptesicus fuscus</i>	1	2	4	-	7
<i>Lasiurus borealis</i>	1	-	1	1	3
<b>Total</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>10</b>

\*Bat escaped before age/sex determination

## Habitat

The 30 ac proposed clearing portion of the 173-acre property consists of a small field interspersed with young early successional trees. Dominate tree species include sugar maple (*Acer saccharum*), silver maple (*Acer saccharinum*), red maple (*Acer rubrum*), slippery elm (*Ulmus rubra*), Ohio buckeye (*Aesculus glabra*), and northern red oak (*Quercus rubra*). Trees are present in small clusters or as individuals throughout most of the property. The northern portion of the property includes slightly older trees in larger clusters with interspersed tree falls and forest gaps. No potential roosting habitat was observed. All trees were alive with tight bark. Foraging habitat on the property was of moderate quality. There was an abundance of open space for bats to travel through and forage in but given the surrounding habitat and the quality of the habitat on site it is unlikely that many bats utilize the property for roosting. No water resources were observed on the property.

## CONCLUSIONS

Mist-netting efforts provided no evidence that Indiana bats use the project area during summer months. Indiana bat habitat within the project area is of moderate quality. In general, the forest composition and age structure provide unsuitable roosting opportunities for bats. All trees are alive with tight bark; most trees are young. The larger diameter trees of species considered optimal roosting habitat for Indiana bats are absent or few in number and do not exhibit characteristics preferred by Indiana bats based on their lack of exfoliating bark. These findings and the failure to capture listed bats suggest that the target species are not present in the project area during the maternity season or are present in such low densities that current survey techniques failed to detect them.

## LITERATURE CITED

Ohio Division of Natural Resources – Division of Wildlife (ODNR-DOW). 2018. Ohio Division of Wildlife and USFWS (OH Field Office) Guidance for Bat Permitted Biologist.

Reichard, J. D. and T. H. Kunz. 2009. White-nose syndrome inflicts lasting injuries to the wings of little brown myotis (*Myotis lucifugus*). *Acta Chiropterologica*, 11(2) 457-464.

United States Fish and Wildlife Service (USFWS). 2018. Range-wide Indiana Bat Survey Guidelines.

# **APPENDIX A**

## **Mist-Net Photographs**





**Net A**



**Net B**





**Net C**



**Net D**





**Net E**

## **APPENDIX B**

### **Bat Capture and Habitat Datasheets**



Site No. \_\_\_\_\_ Project Phase# 711 Project Name Lordstown Industrial Park Dates 6/5, 10/6  
 Net Site Diagram

**Net height x net length (m) Dates**

A =  $5.2 \times 9$  6/5 ●  
 B =  $5.2 \times 9$  6/5 + 6/6  
 C =  $5.2 \times 12$  6/5 + 6/6  
 D =  $5.2 \times 12$  6/5 + 6/6  
 E =  $5.2 \times 9$  6/5 + 6/6  
 F =  $\times$

**Net Set GPS Location (UTM of Lat/Long)**

A = 41.15054 -80.86351  
 B = 41.15047 -80.86329  
 C = 41.15018 -80.86378  
 D = 41.15018 -80.86411  
 E = 41.15000 -80.86421  
 F = \_\_\_\_\_

**Transmitters**

Band# \_\_\_\_\_ Band# \_\_\_\_\_  
 Freq. \_\_\_\_\_ Freq. \_\_\_\_\_  
 Brand \_\_\_\_\_ Brand \_\_\_\_\_  
 Weight \_\_\_\_\_ Weight \_\_\_\_\_  
 #days \_\_\_\_\_ #days \_\_\_\_\_

**Habitat**

Corridor ☒ **A** ☒ **B** ☒ **C** ☒ **D** ☒ **E** ☒ **F**  
 Road Rut \_\_\_\_\_  
 Creek \_\_\_\_\_  
 River \_\_\_\_\_  
 Pond \_\_\_\_\_  
 Forest Gap \_\_\_\_\_  
 Cave \_\_\_\_\_  
 Mine \_\_\_\_\_  
 Tree \_\_\_\_\_  
 Other: list \_\_\_\_\_

**Date**

6/5 2051 **Time nets up** **Time nets down**  
6/6 2053 0153 0152

**Dominant Vegetation**

1. Acer saccharum 4. Ulmus rubra  
 2. Acer rubrum 5. Asclepias tuberosa  
 3. Acer saccharinum 6. Quercus rubra

**Potential listed bat habitat at site:**

**Roost habitat:** **1. Poor:** No or few snags  $\geq 5$ " DBH with sloughing bark or other usable roost features (cracks, crevices, etc) **2. Moderate:** Snags with sloughing bark or other roost features present  $\sim 5$ -15 inch DBH within 1000 feet of forested areas. **3. Optimal:** Snags with sloughing bark or other roost features present  $> 15$  inch DBH within 1000 feet of forested areas.

**Water Resources:** **1. Poor:** bat drinking resources not present at the site. **2. Moderate:** Ephemeral or intermittent streams or ponded areas present but too cluttered to allow many bats to drink easily or simultaneously. No corridors, openings or canopy gaps allow bats easy access to the resource. **3. Optimal:** Streams or ponds (including road cuts) present that appear to offer drinking resource throughout the majority of the summer. Flyways to resources are available.

**Forest Structure:** (if hardwoods are absent or nearly absent or if stand is monoculture, area automatically qualifies as a 1: poor).  
**1. Poor:** Habitat even aged and young. Trees smaller than 5 inch DBH. Understory growth cluttered and restricts flying/foraging **2. Moderate:** some diversity in age of trees in the stand. Trees 5 to 15 inches present. Understory clutter dominant but not ubiquitous. Trees greater than 15" DBH may be present but rare. **3. Optimal:** Mature forest. Diverse age classes of trees present. Trees  $> 15$  inch DBH frequent. Varying tree height and treefalls allow for frequent small openings and gaps that facilitate bat foraging.

**Land Cover:** **1. Poor:** Area surrounding site predominantly un-forested. Few mature trees present not connected to other areas of trees.  
**2. Moderate:** Trees present in the form of small woodlots and wooded fence rows. Little connection to adjacent forested areas.  
**3. Optimal:** Area is largely forested. Wooded stands are connected to other wooded stands via wooded stream, fence row, or other wooded corridor.

**Comments:**



Site No. SEE PG 1 Project Phase# \_\_\_\_\_ Dates 6/7  
 Site Location \_\_\_\_\_ Habitat Type\* \_\_\_\_\_  
 County \_\_\_\_\_ State \_\_\_\_\_ Technician(s) \_\_\_\_\_  
 Lat/Lon or UTM (circle one): N/Easting \_\_\_\_\_ W/Northing \_\_\_\_\_ UTM Zone \_\_\_\_\_

**COPPERHEAD**  
 CONSERVATION



**COPPERHEAD**  
SPECIALTY COATINGS FOR CONCRETE

[illegible]

**Species Abbreviations:** *Corynorhinus rafinesquii* (CORA); *Corynorhinus t. virginianus* (COVI); *Episcias fuscus* (EPFU); *Lastarius borealis* (LABO); *Lastarius cinereus* (LACI); *Lastarius seminolus* (LASE); *Lastionictus noctivagus* (LANO); *Myotis austroriparius* (MYAU); *Myotis grisescens* (MYGR); *Myotis leibii* (MYLE); *Myotis lucifugus* (MYLU); *Myotis septentrionalis* (MYSE); *Myotis sodalis* (MYSO); *Nycticeius humeralis* (NYHU); *Perimyotis subflavus* (PESU); *Tadarida brasiliensis* (TABR).

**\*Habitat Type:** Creek/riparian; Bottomland forest; Upland forest; Pond; Cave entrance; Mine portal; Bridge; Structure; Field edge; Open field; Other

Dates

Project Name

Project Phase#

Site No.

Net Site Diagram

Net height x net length (m)

Net Set by Habitat

Dates

see pg 1  
for other details

A = x 6/7  
B = x 6/7  
C = x 6/7  
D = x 6/7  
E = x 6/7  
F = x

Net Set GPS Location (UTM or Lat/Long)

A =  
B =  
C =  
D =  
E =  
F =

Transmitters

Band#  
Freq.  
Brand  
Weight  
#days

Habitat

Corridor

Road Rut

Creek

River

Pond

Forest Gap

Cave

Mine

Tree

Other list

Date

Time nets up

Time nets down

6/7 20:53 01:54

Dominant Vegetation

1.  
2.  
3.  
4.  
5.  
6.

Potential listed bat habitat at site:

**Roost habitat:** 1. **Poor:** No or few snags >= ~5" DBH with sloughing bark or other usable roost features (cracks, crevices, etc) 2. **Moderate:** Snags with sloughing bark or other roost features present > ~15 inch DBH within 1000 feet of forested areas. 3. **Optimal:** Streams or ponds (including road cuts) present that appear to offer drinking resource throughout the majority of the summer. Flyways to resources are available.

**Water Resources:** 1. **Poor:** bat drinking resources not present at the site. 2. **Moderate:** Ephemeral or intermittent streams or ponded areas present but too cluttered to allow many bats to drink easily or simultaneously. No corridors, openings or canopy gaps allow bats easy access to the resource. 3. **Optimal:** Streams or ponds (including road cuts) present that appear to offer drinking resource throughout the majority of the summer. Flyways to resources are available.

**Forest Structure:** (if hardwoods are absent or nearly absent or if stand is monoculture, area automatically qualifies as a 1: poor). 1. **Poor:** Habitat even aged and young. Trees smaller than 5 inch DBH. Understory growth cluttered and restricts flying/foraging 2. **Moderate:** some diversity in age of trees in the stand. Trees 5 to 15 inches present. Understory clutter dominant but not ubiquitous. Trees greater than 15" DBH may be present but rare. 3. **Optimal:** Mature forest. Diverse age classes of trees present. Trees > 15 inch DBH frequent. Varying tree height and treefalls allow for frequent small openings and gaps that facilitate bat foraging.

**Land Cover:** 1. **Poor:** Area surrounding site predominantly un-forested. Few mature trees present not connected to other areas of trees. 2. **Moderate:** Trees present in the form of small woodlots and wooded fence rows. Little connection to adjacent forested areas. 3. **Optimal:** Area is largely forested. Wooded stands are connected to other wooded stands via wooded stream, fence row, or other wooded corridor.

Comments:

ATTACHMENT 2  
SITE PHOTOGRAPHS





**Photo 1: Facing N from DP01 towards emergent wetland in Area Z. (Photo taken 10/15/2019)**



**Photo 2: Facing S from DP06 towards wool grass and pin oak in Area Z. (Photo taken 10/15/2019)**



**Photo 3: View of emergent wetland in northcentral portion of Area Z. (Photo taken 10/15/2019)**



**Photo 4: View of large depression in Area Z near flag WLA1026 (Photo taken 10/15/2019)**





**Photo 5: Facing N from DP14 towards arrow-leaved tearthumb. (Photo taken 10/16/2019)**



**Photo 6: View of Stream 1 as it leaves the Site. Train tracks in distance. (Photo taken 10/16/2019)**





**Photo 7: View of incised banks of Stream 1. (Photo taken 10/16/2019)**



**Photo 8: Facing N from DP17 towards emergent wetland vegetation. (Photo taken 10/17/2019)**





**Photo 9: Depleted matrix (F3) soil profile at DP17 which is typical for wetland areas throughout the Site. (Photo taken 10/17/2019)**



**Photo 10: View of Stream 2 in the northwest corner of the Site. (Photo taken 10/17/2019)**



**Photo 11: Facing S from DP19 towards wool grass on left and Site boundary on right (Photo taken 10/17/2019)**



**Photo 12: Facing N from border of Area B (on left) and existing gravel access road (on right) (Photo taken 10/17/2019)**





**Photo 13: View of typical vegetation in Area B. (Photo taken 10/17/2019)**



**Photo 14: View of Depleted matrix (F3) soil profile in Area B. (Photo taken 10/17/2019)**





**Photo 15: Facing W towards wool grass in Area X. (Photo taken 10/18/2019)**



**Photo 16: Facing W towards Area U (on right) and access road (on left). (Photo taken 10/18/2019)**



**Photo 17: Facing N from border of Area X (on left) and Tod Ave (on right). (Photo taken 10/21/2019)**



**Photo 18: Facing NE old access road near DP32 in Area R (Photo taken 10/21/2019)**





**Photo 19: Facing E from DP33 in Area L. (Photo taken 10/21/2019)**



**Photo 20: Facing W from DP35 towards Area A. (Photo taken 10/22/2019)**



**Photo 21: Facing S from DP37 towards Area S. (Photo taken 10/22/2019)**



**Photo 22: Facing E from flag WLG1708 in Area H (on right). (Photo taken 10/23/2019)**





**Photo 23: Facing E towards upland from edge of Area H and property boundary (on right) (Photo taken 10/23/2019)**



**Photo 24: Facing E from DP40 in Area H. (Photo taken 10/23/2019)**

ATTACHMENT 3

iPAC SPECIS LIST



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ohio Ecological Services Field Office

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

Phone: (614) 416-8993 Fax: (614) 416-8994



In Reply Refer To:

January 02, 2020

Consultation Code: 03E15000-2019-SLI-1987

Event Code: 03E15000-2020-E-00712

Project Name: Project Magellen East

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.



A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <http://www.fws.gov/migratorybirds/RegulationsandPolicies.html>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/BirdHazards.html>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <http://www.fws.gov/migratorybirds/AboutUS.html>.

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We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Ohio Ecological Services Field Office**

4625 Morse Road, Suite 104

Columbus, OH 43230-8355

(614) 416-8993

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## Project Summary

Consultation Code: 03E15000-2019-SLI-1987

Event Code: 03E15000-2020-E-00712

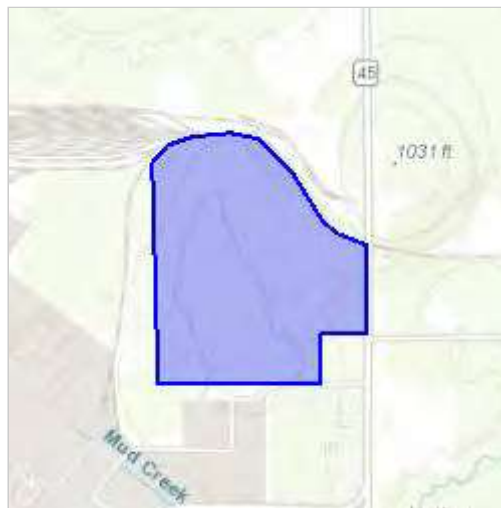
Project Name: Project Magellen East

Project Type: DEVELOPMENT

Project Description: New industrial development on 158.215 Acre parcel. Project planning is being undertaken

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/41.15288572681847N80.86228738786092W>



Counties: Trumbull, OH

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## Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> <li>Incidental take of the northern long-eared bat is not prohibited at this location. Federal action agencies may conclude consultation using the streamlined process described at <a href="https://www.fws.gov/midwest/endangered/mammals/nleb/s7.html">https://www.fws.gov/midwest/endangered/mammals/nleb/s7.html</a></li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Reptiles

NAME	STATUS
Eastern Massasauga (=rattlesnake) <i>Sistrurus catenatus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2202">https://ecos.fws.gov/ecp/species/2202</a>	Threatened

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## Clams

NAME	STATUS
Clubshell <i>Pleurobema clava</i> Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3789">https://ecos.fws.gov/ecp/species/3789</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

# APPENDIX E4

USFWS Email Correspondence



## **Tremante, Vinnie**

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**From:** Applegate, Jeromy <jeromy\_applegate@fws.gov>  
**Sent:** Friday, January 3, 2020 12:59 PM  
**To:** Scott.Bush@ghd.com  
**Cc:** Jim F. Hartnett; Tremante, Vinnie; Gilbert, Matthew C LRP  
**Subject:** Project Magellan East -- Threatened and Endangered Species Review

Scott,

This email is in response to your January 2, 2020 letter requesting a review of the subject project, relative to potential impacts to federally threatened and endangered species. The project Magellan East site is located east of the former GM Lordstown Assembly Plant, on a property known as the North Point site, in reference to the proposed North Point Industrial Development, which never moved forward.

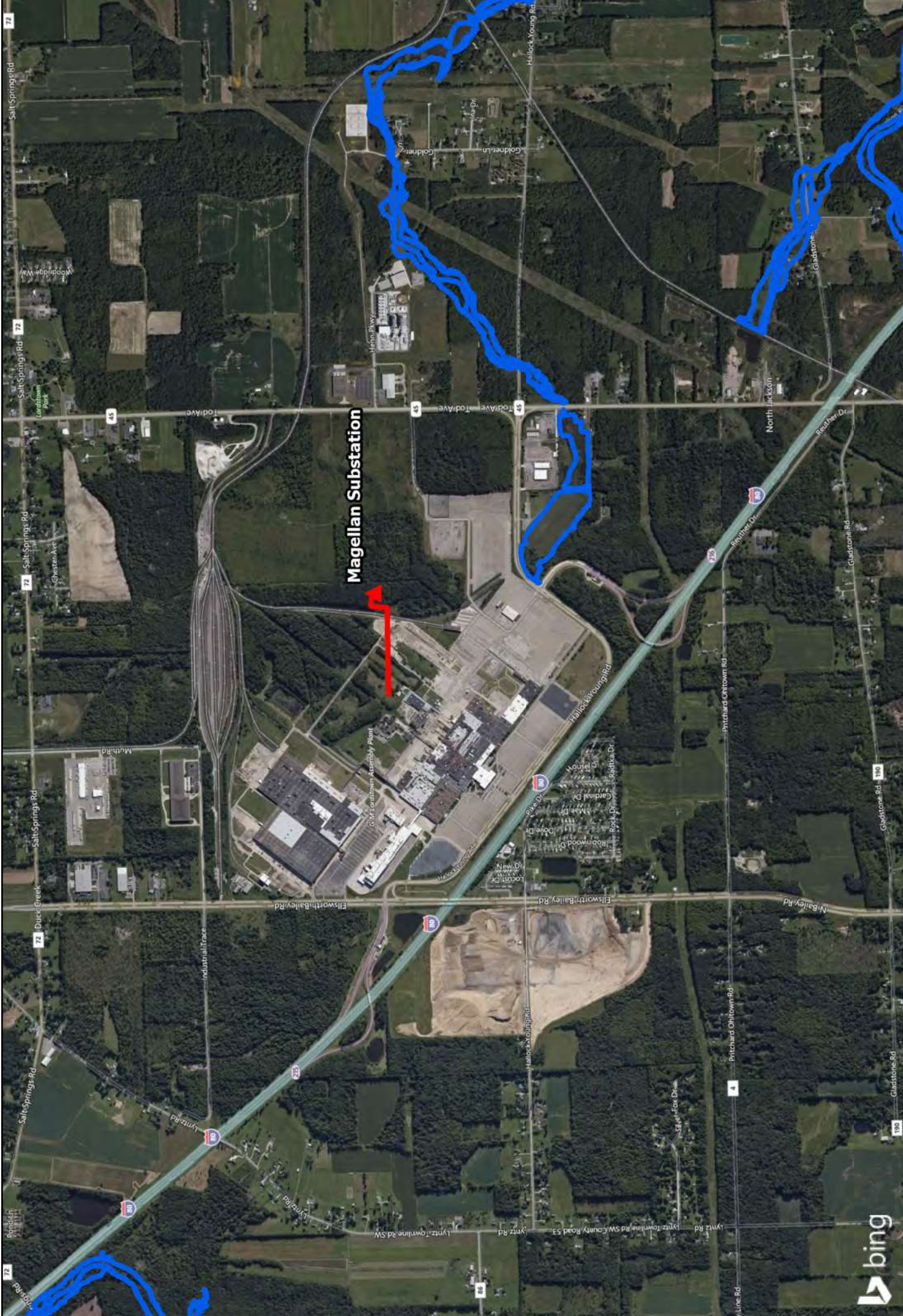
As you state in your letter, this office reviewed the North Point site in 2018, including a mist net survey report for federally listed bats that was completed in June 2018. Because no Indiana bats or northern long-eared bats were captured during the survey, we stated in 2018 that tree clearing at the North Point site could occur at any time of the year, until March 31, 2024, without impacting Indiana bats or northern long-eared bats. This statement is also applicable to the proposed Project Magellan East, because it occurs entirely within the North Point property. In addition, as stated in our 2018 review, we do not anticipate impacts to any other federally listed species.

Please contact me with any questions.

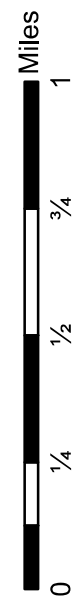
Jeromy

Jeromy Applegate  
Fish and Wildlife Biologist  
U S Fish and Wildlife Service  
Ohio Ecological Services Field Office  
4625 Morse Rd., Suite 104  
Columbus, OH 43230  
Phone: 614-416-8993 ext. 21  
FAX: 614-416-8994





# Highland-GM 138 kV Transmission Line Loop to Magellan Substation Project Exhibit 13



Map Created On: 6/24/2020

## Legend

 Project Area

 In Flood Zone





January 7, 2020

No. 11204429.20

Mr. Jim Harnett  
General Motors, LLC  
jim.f.hartnett@gm.com

Re: Wetland Delineation Report  
Project Magellan East  
City of Lordstown, Trumbull County, Ohio

Dear Mr. Hartnett:

GHD Services Inc. (GHD) was retained to conduct a wetland delineation at the Project Magellan East property (Site) for a potential new industrial development. GHD's wetland delineation was performed to delineate the current boundaries of wetlands and other waters on the Site. This report provides a discussion of the methodology and results for the wetland delineation.

## 1. Site Location and History

The Site encompasses approximately 158.215 acres and is located west of the intersection of Tod Avenue SW (State Route 45) and Henn Parkway, approximately 1 mile north of Ohio Turnpike US Route 80 in the Village of Lordstown, Trumbull County, Ohio. The approximate Center of the Site is located at 41.152200°, -80.862922° WGS 84. A map showing the Site location and boundaries on the Warren, Ohio USGS 7.5-minute quadrant is provided as Figure 1. The Site lies within the Mud Creek drainage basin, a tributary to the Mahoning River. The Site was historically used for agricultural purposes. Farming ceased in the 1970s and 1980s and the land underwent succession from farmland to woodland. The Site was developed for natural gas in the 1990s and three wells were installed on the Site. Two of the gas wells have since been closed and properly abandoned. The remaining well remains active. The Site was logged in 2015, with about 75 percent of the Site being clear-cut and the remainder of the Site being selectively logged. The Site has remained in this condition since 2015. In 2019, a 15 acre parcel located to the southeast of the Site, and which had historically been included as part of the Site, was sold as a separate parcel and has been recently cleared in preparation for site development.

Wetlands on the Site were delineated on September 30, 2014 and October 1, 2014 by Terra Technologies, Inc., a consulting firm based in Leawood, Kansas. Investigators from Terra Technologies identified ten (10) wetlands on the Site totaling 8.81 acres and three (3) stream segment totaling 2,597 linear feet on-site. The delineation was submitted to the U.S. Army Corps of Engineers, Pittsburg District (USACE) in October 2014.

In March 2015, a clearing company cut and harvested most of the trees on Site. The tree stumps were not removed in either uplands or wetlands. The USACE conducted a site visit in June 2015 and requested additional information for the site. The USACE did not verify the results of the Terra Technologies delineation.



In April 2017, EMH&T, Inc. and the USACE conducted a joint Site visit to observe the current Site conditions. During that Site visit, it appeared that wetlands on the Site either had expanded outside their original boundaries or were larger than originally delineated. Some other areas on the Site appeared to be holding water in uplands due to severe rutting caused by equipment used during the 2015 clearing activity. According to the EMH&T 2017 report, it was agreed that these upland areas holding water would not be considered wetlands at the time of the Corps April 2017 Site visit.

On May 22, 2017 through May 24, 2017, EMH&T conducted a wetland delineation of the site. All wetland boundaries were flagged and surveyed using a handheld GPS unit. EMH&T observed that the boundaries of most wetlands had expanded in size since the 2014 Terra Technologies delineation was completed and several additional wetlands were identified and delineated. EMH&T identified 24.56 acres of wetlands on the Site, 0.21 acre of wetland in the right-of-way of Tod Ave SW, and three (3) stream segments totaling 3,040 linear feet on the Site. The USACE issued a preliminary jurisdictional determination (LRP 2014-1077) on December 20, 2017 based on EMH&T's 2017 wetland delineation.

On behalf of General Motors, LLC, GHD conducted a wetland delineation on the Site during the period of October 15 through the 22, 2019. GHD reviewed the Terra Technologies and EMH&T reports prior to conducting our field investigations. GHD observed that most of the Site had been recently logged and severely rutted by logging activities, as noted by EMH&T in their 2017 report. In addition to the wetland areas identified during previous delineations, GHD observed that large parts of the site that were previously identified as uplands, and that were severely rutted in 2015, are now dominated by hydrophytic plants, exhibited indicators of wetland hydrology, and had soils with a depleted matrix and redox features in the upper 10 inches of the soil profile. Based on these observations, GHD delineated 25 wetland areas totaling 65.99 acres on the Site. GHD also identified two ephemeral stream segments (Streams 1 and 2) totaling 131 linear feet on the Site. Two ephemeral man-made ditches (Ditches 1 and 2) were identified on-site. Ditch 1 totals 307.5 linear feet on the Site. Ditch 2 totals 2,965 linear feet on the Site.

## **2. Wetland Delineation Methodology**

GHD's wetland delineation was conducted using the methods in the Corps of Engineers 1987 Wetlands Delineation Manual (Technical Report Y-87-1) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast (Version 2.0, January 2012). According to these methods, wetlands are typically identified by the presence of three parameters: the dominance of hydrophytic vegetation, the presence of hydric soils, and positive indicators of wetland hydrology. Typically, all three parameters must be present for an area to be considered wetlands. However, in areas where one or more of the wetland parameters are significantly disturbed (e.g., recently cleared or graded areas) the undisturbed parameters, examination of similarly situated undisturbed adjoining areas, and professional judgment were used to delineate the extent of wetlands. Other waters (e.g., streams, rivers, ponds, etc.) were delineated by identifying the Ordinary High Water Mark (OHWM) along these water features, where present. Two man-made ditches occur on the Site. While these linear drainage features periodically convey surface water, they were created by excavation and lack a defined streambed containing alluvial substrates and stream banks. Accordingly, these features were identified in this report as man-made ditches.

Prior to conducting our field investigation, GHD reviewed secondary sources of data for the project area including the Warren, Ohio 7.5-minute USGS topographic map (Figure 1), aerial photographs (Figures 2A through 2E), NRCS soil survey (Figure 3), and USFWS National Wetlands Inventory map (Figure 4). These secondary resources are often useful in identifying areas that may contain wetlands or other waters. Following review of secondary resources, GHD then conducted a field investigation to delineate the boundaries of wetlands and other waters on the Site. The vegetation, soil profiles, and hydrologic indicators were examined at locations across the Site and the boundaries between wetlands and uplands were determined based on the USACE methods. Documentation of the wetland parameters at data point locations was recorded on Wetland Determination Data Forms. The wetland boundaries were flagged in the field, surveyed using sub-meter accuracy GPS, and plotted on a topographic base map of the Site. Color photographs were also taken as documentation.

### 3. RESULTS

#### 3.1 REVIEW OF SECONDARY DATA

Review of the USGS map for the Site (Figure 1) indicates that the Site is gently sloping from a high point in the approximate center of the Site towards the Site boundaries. The highest point is in the south-central part of the Site and is shown with an elevation of 1009 feet above mean sea level. The western half of the Site drains to the west while the eastern half drains to the east. A small square pond is shown in the south center part of the Site. No streams are identified on the Site by the USGS map.

Review of historical and recent aerial photographs (Figure 2A-2E) indicates the Site was historically farmed. Farming ceased in the 1970s and 1980s. The Site underwent succession from farmlands to woodlands over several decades. In 2015, about 75 percent of the property was clear-cut and the remainder was selectively logged. Evidence of significant disturbance (clearing and rutting) across the Site related to the logging is evident in photographs after 2015. The Site is currently vacant. The site is bordered to the west by a wooded area connected to the former Lordstown Assembly Plant, to the east by Tod Avenue SW (State Route 45), to the north by rail lines, and to the south by industrial lands and a wooded area.

Review of the NRCS web soil survey (Figure 3) indicates the following soil series are located in the Site.

Map Unit Symbol	Map Unit Name	NRCS Hydric Status
LrC	Lordstown loam, 6 to 12 percent slopes	Non-Hydric
RsB	Rittman silt loam, 2 to 6 percent slopes	Non-Hydric
Ud	Udorthents, loamy	Non-Hydric
WbA	Wadsworth silt loam, 0 to 2 percent slopes	Predominantly Non-Hydric. May contain up to 10 percent Frenchtown soils (hydric) in depressions.
WbB	Wadsworth silt loam, 2 to 6 percent slopes	Predominantly Non-Hydric. May contain up to 8 percent Frenchtown soils (hydric) in depressions.

Five soil series are mapped on the Site. They are the Rittman silt loam, Udorthents, Lordstown loam, and Wadsworth silt loam (0 to 2 percent slopes and 2 to 6 percent slopes). The Wadsworth silt loam series covers the majority of the Site. The Rittman silt loam series runs northwest to southeast on the higher parts of the Site and connects two areas of Udorthents, which are mapped at the northern Site boundary and the southeast boundary of the Site. The Lordstown loam series occupies a small area at the east-northeast corner of the Site. The Wadsworth silt loam is generally found at lower elevations while the Rittman and Lordstown loam generally occupy higher elevations on the Site.

Review of the USFWS NWI map (Figure 4) maps a small freshwater emergent wetland in the north-central portion of the Site. The NWI map does not show any other wetlands or riverine systems on the Site.

### **3.2 Results of Wetland Delineation**

GHD delineated 25 areas of wetlands totaling 65.99 acres and two watercourses totaling 131 linear feet on the Site. The boundaries of wetlands and watercourses delineated by GHD are shown on the Wetland Location Map in Appendix A and are discussed below. A summary of the delineated wetlands and other waters is provided on the Wetland Location Plan in Appendix A.

#### **3.2.1 Area A**

Area A is a 9.37-acre palustrine emergent (PEM) wetland with a small component of forested wetland located at lower elevations along the northern and western Site boundaries. Much of Area A appears to have formed in depressions and poorly drained, rutted compacted soils as a result of logging in 2015. Dominant species in Area A included dark-green bulrush (*Scirpus atrovirens*), cottongrass bulrush (*Scirpus cyperinus*), fragile-stem american-aster (*Symphyotrichum racemosum*), northern spicebush (*Lindera benzoin*), reed canary grass (*Phalaris arundinacea*), parasol white-top (*Doellingeria umbellata*), american wild mint (*Mentha arvensis*), common fox sedge (*Carex vulpinoidea*), wrinkle-leaf goldenrod (*Solidago rugosa*), lamp rush (*Juncus effuses*), rice cut grass (*Leersia oryzoides*), rambler rose (*Rosa multiflora*), glossy false buckthorn (*Frangula alnus* syn. *Rhamnus frangula*), red maple (*Acer rubrum*) saplings, pin oak (*Quercus palustris*) saplings, and silky dogwood (*Cornus amomum*). Soils in Area A are variable due to disturbances associated with the logging in 2015. Soils generally exhibited a very dark brown (10YR 2/2) to dark grayish brown (10YR 4/2) A horizon underlain by dark grayish brown (10YR 4/2) and 10YR 5/1 (gray) soils containing between 5% and 40% prominent redox concentrations in the matrix and pore linings. These conditions meet the depleted matrix (F3) hydric soil criteria. At the time of the investigation, primary indicators of hydrology were only present at DP23. All data points sampled in Area A met at least two secondary indicators of wetland hydrology including geomorphic position (D2) and passing FAC-Neutral Test (D5). Area A is documented on Data Forms DP16, DP17, DP18, DP19, and DP23 in Appendix B and the color photographs in Appendix C.

#### **3.2.2 Area B**

Area B is a 8.82-acre PEM wetland located along the western Site boundary. Area B appears to have recently formed on depressions and poorly drained, compacted soils resulting from logging in 2015. Area B is dominated by glossy false buckthorn, cottongrass bulrush (*Scirpus cyperinus*), lamp rush, and rambler rose. Soils in Area B exhibited a dark gray (10YR 4/1) matrix with 7% to 20% dark yellowish brown (10YR 4/4 and 10YR 4/6) redox concentrations in the matrix and pore linings in the

upper 12 inches. This meets the F3 hydric soil indicator. Wetland hydrology present included areas of shallow surface water (Indicator A1), geomorphic position (D2), microtopographic relief (D4), and passing FAC-Neutral Test (D5). Area B is documented on Data Form DP20 and DP25 included in Appendix B and the color photographs in Appendix C.

### **3.2.3 Area H**

Area H is a 2.86-acre palustrine forested (PFO) and emergent / scrub-shrub (PEM/SS) wetland located in the southwestern corner of the Site. Area H was selectively logged in 2015 and thus contains some areas with an open canopy and some areas with a tree canopy where trees remained after the logging. Area H is bordered on the south and west by a chainlink perimeter fence. Dominant species in Area H included shag-bark hickory (*Carya ovata*), northern spicebush, red maple, lamp rush, dark-green bulrush, arrow-leaf tearthumb (*Persicaria sagittata*), and rambler rose. Soils in Area H generally exhibited a very dark gray (10YR 3/1) surface layer from 0" to 2" which was underlain from 2" to 9" by a dark grayish brown (10YR 4/2) matrix containing 5% dark yellowish brown (10YR 4/4) redox concentrations in the matrix. This meets the F3 hydric soil criteria. At the time of the investigation, primary indicators of hydrology included saturation (A3) at the surface. Secondary indicators of wetland hydrology present included geomorphic position (D2) and a passing FAC-Neutral Test (D5). Area H is documented on Data Form DP40 included in Appendix B and the color photographs in Appendix C.

### **3.2.4 Area S**

Area S is a 9.44-acre PEM and PFO wetland located in the southern portion of the Site. Area S occupies parts of the Site that were clear-cut and partially clear-cut in 2015. Much of Area S appears to have recently formed in areas severely disturbed during the 2015 logging. The eastern portions of Area S are primarily PEM wetlands (clear-cut areas). The western portions are PFO wetlands (selectively cut areas). Dominant species in Area S include red maple, northern spicebush, canada goldenrod (*Solidago canadensis*), lamp rush, gray dogwood (*Cornus racemosa*), wrinkle-leaf goldenrod, shag-bark hickory, dark-green bulrush, arrow-leaf tearthumb, and rambler rose. Soils in Area S generally exhibited a dark gray (10YR 4/1) to dark grayish brown (10YR 4/2) matrix (F3) from 0" to 9" with 6% to 9% dark yellowish brown (10YR 4/4) to yellowish brown (10YR 5/6) redox concentrations in the matrix, meeting the F3 hydric soil criteria. At the time of the investigation, saturation (A3), a primary indicator of wetland hydrology, was found at the surface. Secondary indicators of wetland hydrology present in Area S included geomorphic position (D2) and a passing FAC-Neutral Test (D5). Area S is documented on Data Forms DP35, DP37, and DP39 included in Appendix B. Color photographs are provided in Appendix C.

### **3.2.5 Area U**

Area U is a 2.0-acre PEM wetland located in the south-central portion of the Site. Area U occupies a part of the Site that was clear-cut in 2015. Dominant species in Area U include rambler rose, quaking aspen (*Populus tremuloides*), lamp rush, wrinkle-leaf goldenrod, and fragile-stem american aster. Soils in Area U generally exhibited a very dark grayish brown (10YR 3/2) surface layer to a depth of 5" which contained 4% dark yellowish brown (10YR 4/4) redox concentration in the matrix. From a depth of 5" to 15" soils exhibited a dark gray (10YR 4/1) matrix with 5% yellowish brown (10YR 4/6) redox concentrations in the matrix, meeting the F3 hydric soil criteria. At the time of the investigation, saturation (A3), a primary indicator of wetland hydrology, was found at the surface. Geomorphic

position (D2), a secondary indicator of wetland hydrology, was the only secondary indicator found in Area U. Area U is documented on Data Form DP28 included in Appendix B and the color photographs in Appendix C.

### **3.2.6 Area W**

Area W is a 0.01-acre PEM wetland located in a small depression abutting the existing access road in the east-central portion of the Site. Area W likely formed as a direct result of former logging activities in 2015. Area W is sparsely vegetated and dominated by narrow-leaf cattail (*Typha angustifolia*). Soil in Area W exhibited a dark grayish brown (10YR 4/2) matrix containing 2% dark yellowish brown (10YR 4/4) redox concentrations in the matrix, meeting the F3 hydric soil criteria. Auger refusal occurred at a depth of 8" due to a rock or gravel layer likely associated with the gas pad at this location. At the time of the investigation, primary indicators of hydrology were surface water (A1) and saturation (A3). Area W is documented in the color photographs in Appendix C.

### **3.2.7 Area X**

Area X is a 4.86-acre PEM and PEM/SS wetland located in the eastern part of the Site along Tod Ave SW. Dominant vegetation in Area X included silky dogwood, glossy false buckthorn, lamp rush, wrinkle-leaf goldenrod, and common reed (*Phragmites australis*). Soil in Area X generally exhibited a very dark grayish brown (10YR 3/2) surface layer to 3" underlain by an 8" layer of dark grayish brown (10YR 4/2) matrix with 4% dark yellowish brown (10YR 4/6) redox concentrations. At the time of the investigation, portions of Area X were saturated at the surface. Secondary indicators of wetland hydrology present included geomorphic position (D2) and a passing FAC-Neutral Test (D5). Area X is documented on Data Forms DP30 included in Appendix B and the color photographs in Appendix C.

### **3.2.8 Area Y**

Area Y is a 0.01-acre PEM wetland located in a small depression abutting the north side of the driveway to the Site off Tod Ave SW. Dominant vegetation in Area Y included narrow-leaf cattail, gray dogwood, and rambler rose. Soil in Area W exhibited a dark grayish brown (10YR 4/2) depleted matrix containing 2% dark yellowish brown (10YR 4/4) redox concentrations in the matrix, meeting the F3 hydric soil criteria. At the time of the investigation, primary indicators of hydrology were surface water (A1) and saturation (A3). Area Y is documented in the color photographs in Appendix C.

### **3.2.9 Area Z**

Area Z is a 26.79-acre PEM and PFO wetland located in the eastern and northeaster portions of the Site. Area Z occupies land that was both clear cut and selectively logged in 2015, with the PEM wetlands occurring on areas that were clear-cut and PFO wetlands occurring on areas that were selectively logged. Large parts of Area Z appear to have recently formed on rutting and in depressions and compacted soils resulting from the logging in 2015. Dominant vegetation in Area Z included pin oak, red maple, silky dogwood, quaking aspen, american hornbeam, american elm, glossy false buckthorn, northern spicebush, reed canary grass, fragile-stem american aster, lamp rush, tall goldenrod (*Solidago altissima*), wrinkle-leaf goldenrod, halberd-leaf tearthumb, rambler rose, dark-green bulrush, broad-leaf cattail, arrow-leaf tearthumb, and japanese stilt grass. Soils in Area Z generally exhibited a dark gray (10YR 4/1) to dark grayish brown surface layer underlain by a dark gray matrix with 2% to 20% dark yellowish brown (10YR 4/4 and 10YR 4/6) redox concentrations. This profile meets the F3 hydric soil indicator. Primary indicators of wetland hydrology were largely



absent at data points examined in Area Z at the time of our investigation. However, surface water (A1) 1" deep was observed at DP24 and secondary indicators of wetland hydrology present among all sampling locations in Area Z included drainage patterns (B10), geomorphic position (D2), passing the FAC-Neutral Test (D5). Area Z is documented on Data Forms DP01, DP03, DP04, DP06, DP08, DP09, DP11, DP13, DP14, DP15, and DP24 included in Appendix B and the color photographs in Appendix C.

#### **3.2.10 Areas C-F, I-R, T, and V**

Areas C-F, I-R, T, and V are a mosaic of small wetlands in the southwestern and south-central part of the Site that appear to be predominantly the result of rutting, soil compaction, and access roads from the logging in 2015. Areas C-F, I-R, T, and V includes PFO wetland Areas C, D, E, F, I, J, K, L, M, N, and P totaling 0.66 acre, PEM/SS wetland Areas O, Q, and R totaling 0.83 acre, and PEM wetland Areas T and V totaling 0.34 acre. Dominant vegetation in Areas C-F, I-R, T, and V included red maple, pin oak, shag-bark hickory, northern spicebush, gray dogwood, glossy false buckthorn, rambler rose, lamp rush, Japanese honeysuckle, dark-green bulrush, sensitive fern, jumpseed, narrow-leaf cattail, and reed canary grass. Soil observed in Area C-F, I-R, T, and V is variable but generally exhibited a dark grayish brown (10YR 4/2) surface with 2% to 3% dark yellowish brown (10YR 4/4) redox concentrations in the matrix meeting the F3 hydric soil criteria. The underlying soil to at least 12" generally exhibited a gray (10YR 5/1) to grayish brown (10YR 4/2) matrix with between 10% and 30% yellowish brown (10YR 5/6) redox concentrations in the matrix. At the time of the investigation, saturation (A3) was found at most locations within Areas C-F, I-R, T, and V. All sampling locations in Area C-F, I-R, T, and V exhibited the secondary indicators geomorphic position (D2) and passing FAC-Neutral Test (D5). Area C-F, I-R, T, and V is documented on Data Forms DP27, DP32, DP33, and DP34 included in Appendix B and the color photographs in Appendix C.

#### **3.2.11 Stream 1**

Stream 1 is an ephemeral first order unnamed tributary (UNT) to Mud Creek in the northeastern portion of the Site. Stream 1 receives surface runoff from Area Z and the surrounding uplands on the Site. The segment of Stream 1 on the Site begins in Wetland Z and extends approximately 81 linear feet LF to the northern property line. The channel is approximately 1.5 meters wide at maximum bank full width, has a low gradient and no sinuosity. Stream 1 appears to be highly influenced by stormwater runoff and was dry at the time of our investigation. The on-Site segment of Stream 1 does not support fish, long-lived aquatic macroinvertebrates, or other aquatic organisms that rely on perennial or seasonal flow. Stream 1 flows off-Site to the east in a railroad side ditch and then north in a culvert beneath the existing rail lines. Stream 1 is documented in the color photographs in Appendix C.

#### **3.2.12 Stream 2**

Stream 2 is an ephemeral first order UNT to Mud Creek in the northwest corner of the Site. Stream 2 originates in Area A and extends 50 feet to the northern property boundary. Stream 2 receives surface run-off from Area A, the surrounding uplands, and Ditch 2. Stream 2 appears to be highly influenced by stormwater runoff and is dry most of the year. The on-Site segment of Stream 2 does not support fish, long-lived aquatic macroinvertebrates, or other aquatic organisms that rely on perennial or seasonal flow. At the time of the investigation, Stream 2 lacked flowing water but areas of shallow standing water were present in isolated spots. Stream 2 has a maximum bankfull width of

approximately 1 meter, has a low gradient, and no sinuosity. Stream 2 flows off-Site and into a culvert that flows northwest under the existing rail lines. The watercourse is documented in the color photographs in Appendix C.

### **3.2.13 Ditches**

GHD identified two man-made ditches (Ditch 1 and 2) on the Site as identified on the map in Appendix A. Ditch 1 occurs in the southeastern portion of the Site and conveys surface water from Wetland Area U through a culvert to Wetland Area X. Ditch 2 occurs along the western property line. The southern portion of Ditch 2 flows south along the fence and onto the former GM Lordstown Facility. The northern portion of Ditch 2 flows north through Wetland B and A and discharges to Stream 2. Both ditches flow in response to rainfall and appeared to lack a baseflow.

### **3.2.14 Uplands**

Uplands on the Site total 92.225 acres and consist of open field, gravel access roads, and selectively logged woods. Evidence of the 2015 logging operations are evident throughout the uplands on the Site. Dominant upland vegetation included northern white oak (*Quercus alba*), black cherry (*Prunus serotina*), pin oak, black locust (*Robinia pseudoacacia*), northern spicebush, bristly dewberry (*Rubus hispidus*), rambler rose, autumn olive (*Elaeagnus umbellata*), glossy false buckthorn, parasol white-top, reed canary grass, lamp rush, silky dogwood, woodland strawberry, orchard grass (*Dactylis glomerata*), garlic-mustard (*Alliaria petiolata*), jumpseed, white avens (*Geum canadense*), fragile-stem american-aster, tall goldenrod, wrinkle-leaf goldenrod, and quaking aspen. Upland soils observed to a depth of 18" generally ranged from a brown (10YR 4/3 or 10YR 5/3) to very dark brown (10YR 3/2) silt loam matrix with mostly absent but at most 1% redox concentrations. All soils observed exhibited a silt loam texture. Primary indicators of wetland hydrology were generally absent in the uplands. However, one secondary indicator of wetland hydrology, a passing FAC-Neutral Test (D5), was observed at data point locations DP12, DP22, DP29, and DP41.

The uplands are documented on Data Forms DP02, DP05, DP07, DP10, DP12, DP21, DP22, DP26, DP29, DP31, DP36, and DP41 included in Appendix B and the color photographs in Appendix C.

## **4. ORAM Scoring**

Wetlands present on the Site were evaluated on December 2, 2019 using the Ohio Environmental Protection Agency's (OEPA) Ohio Rapid Assessment Method (ORAM) for Wetlands version 5.0. The following qualitative metrics were evaluated using the ORAM methodology.

- Metric 1. Wetland Area (size)
- Metric 2. Upland buffers and surrounding land use
- Metric 3. Hydrology
- Metric 4. Habitat Alteration and Development
- Metric 5. Special Wetlands
- Metric 6. Plant communities, interspersions, and microtopography

Ohio Environmental Protection Agency (OEPA) inspected the site and verified the ORAM scoring on the wetlands on the Site as shown in the following table.

Wetland ID	Metric						Grand Total (max 100)	Category
	1	2	3	4	5	6		
A	3	6	6.5	6.5	0	6	28	1
B	3	7	6.5	6.5	0	4	26.5	1
C-F, I-R, T, V	2	10	6.5	6.5	0	8	33	2
H	2	11	9.5	8	0	10	40.5	2
S	3	7	6.5	7.5	0	12	36	2
U	2	7	6.5	6.5	0	3	25	1
W	0	3	5	6	0	0	14	1
X	3	7	6.5	6.5	0	8	31	2
Y	0	4	8	5.5	0	1	18.5	1
Z	5	6	6.5	7.5	0	10	35	2

## 5. SUMMARY AND DISCUSSION

GHD conducted a wetland delineation at the 158.215-acre Site located in the City of Lordstown, Trumbull County, Ohio in September 2019. The wetland delineation was conducted in accordance with the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual and supplemental regional manual methods. GHD identified and delineated 25 wetland areas totaling 65.99 acres on the Site. The remaining 92.225 acres were identified as uplands. GHD also identified two ephemeral stream segments (Streams 1 and 2) totaling 131 linear feet on the Site. Two ephemeral man-made ditches (Ditches 1 and 2) were identified on-site. Ditch 1 totals 307.5 linear feet on the Site. Ditch 2 totals 2,965 linear feet on the Site. Wetlands and streams delineated within the Study Area are shown on the Wetland Location Map in Appendix A. All of the wetlands and streams identified by GHD are likely to be jurisdictional under Section 404.

Logging activities on the Site in 2015 caused significant alterations to the Site topography, surface drainage, and soil compaction, which were apparent during GHD's field investigation. These disturbances created conditions conducive to the temporary ponding and perching of precipitation in areas that were previously identified as uplands. It is GHD's opinion that these logging disturbances, co-occurring with successive years of well above normal precipitation, resulted in the expansion of wetlands and the formation of new wetlands in former upland areas on the Site. Based on previous wetland delineations completed on the Site in 2014 and 2017 as compared to GHD's 2019 delineation, approximately 41.43 acres of wetlands have formed since the 2017 PJD was issued by the USACE in areas previously identified as uplands.

Wetlands that form on uplands as a result of recent disturbances, such as logging, usually exhibit lower wetland functions and societal values. They often exhibit lower species richness and diversity, higher susceptibility to invasion by non-native species, and limited habitat values. Based on the extent of disturbance that occurred in 2015 and our current observations of these areas, it is our opinion that the majority of the recently formed wetlands on the Site would be unlikely to provide a high level of wetland function and value over time.

Both the USACE and OEPA have completed an inspection of the Site. The results presented in this letter are consistent with the findings of their inspection. If you have any questions, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory Kunka".

Gregory Kunka  
**Environmental Scientist**

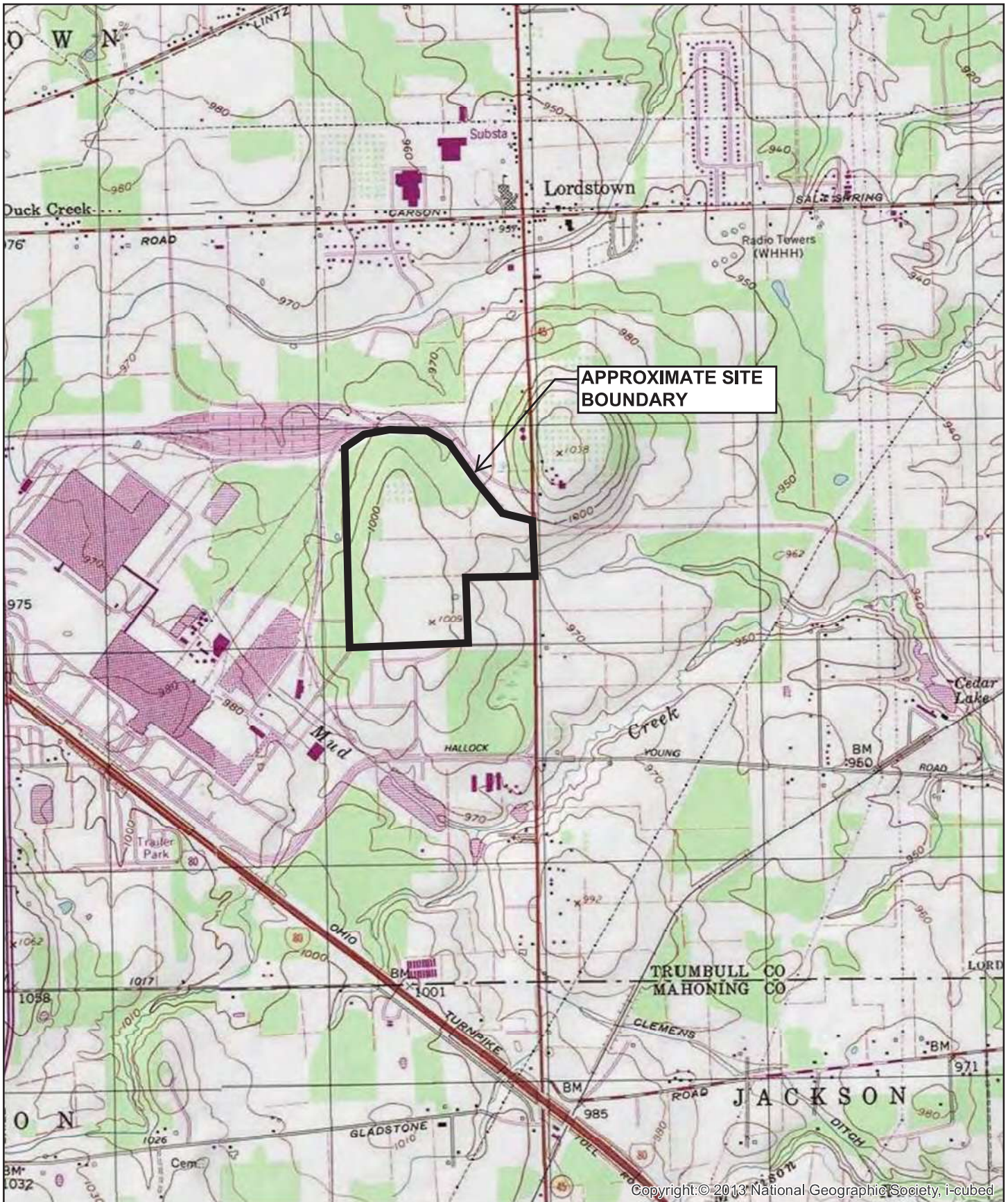
A handwritten signature in black ink, appearing to read "Scott E. Bush".

Scott E. Bush, P.W.S.  
**Senior Ecologist**

## FIGURES



FIGURE 1



Paper Size 8.5 x 11  
0 2,000  
Feet  
Map Projection: Lambert Conformal Conic  
Horizontal Datum: North American 1983  
Grid: NAD 1983 StatePlane Ohio North FIPS 3401 Feet



MEGELLAN EAST - PARCEL 4  
USGS TOPOGRAPHIC LOCATION MAP

CITY OF LORDSTOWN, TRUMBULL COUNTY, OH  
USGS QUAD: WARREN

Job Number 11204429  
Revision A  
Date Dec 12, 2019

M:\0\_Kunka\GHD-PermitMap\_Template\_OH.mxd

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1240 North Mountain Road Harrisburg, PA 17112 T 717 541 0622 F 717 541 8004 W www.ghd.com



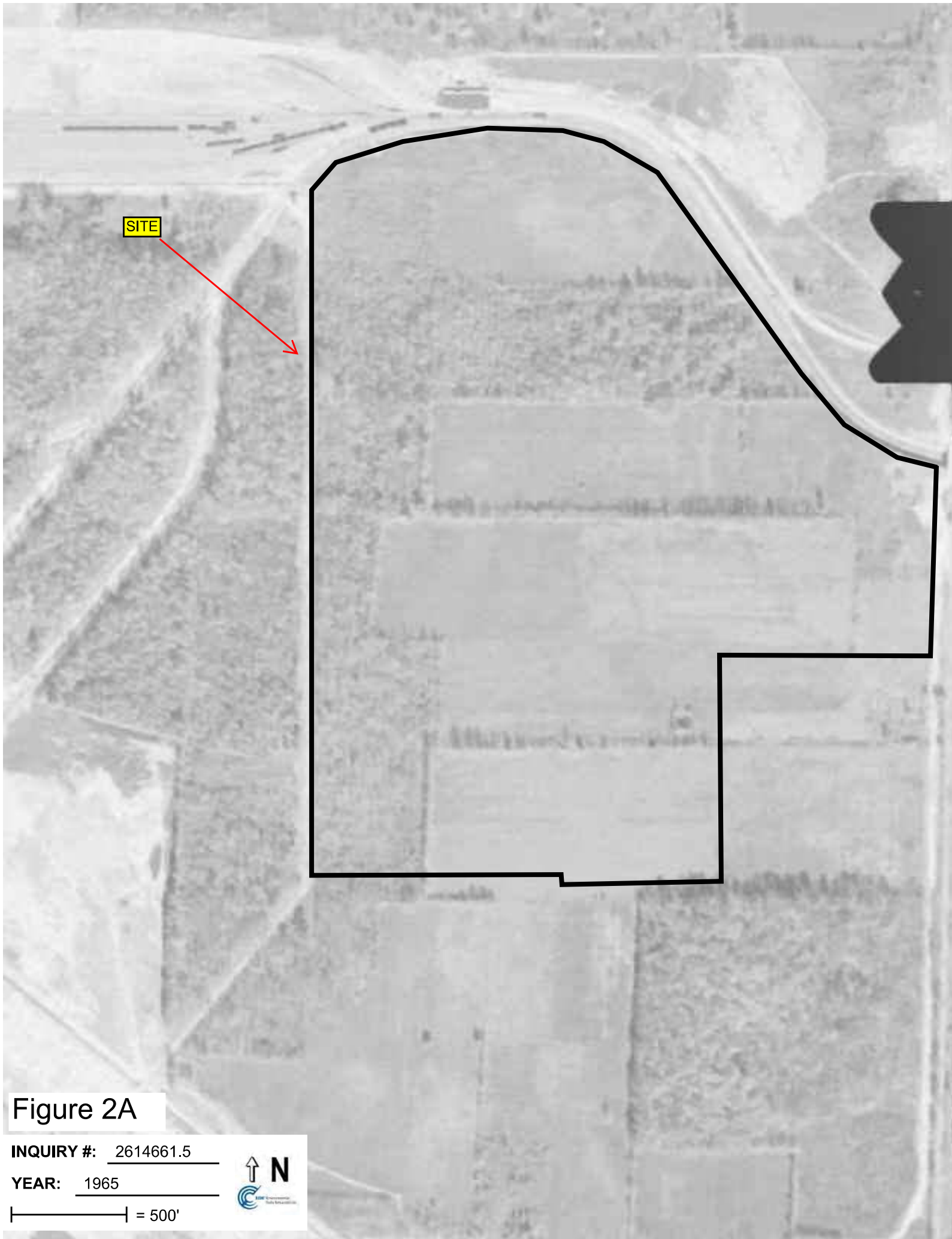


Figure 2A

INQUIRY #: 2614661.5

YEAR: 1965

| = 500'





Figure 2B

INQUIRY #: 2614661.5

YEAR: 1977

| = 1000'





# Project Magellan

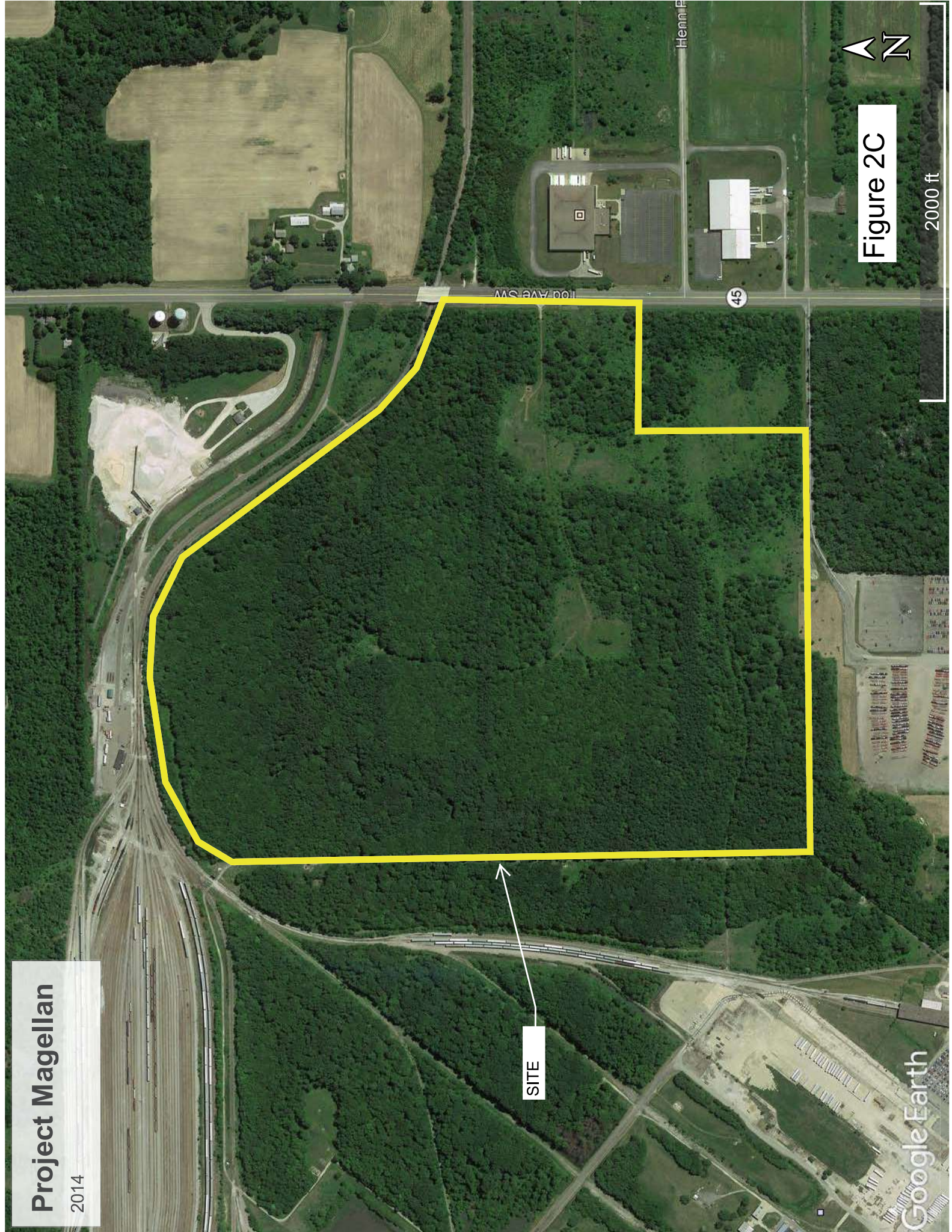
2014

SITE

Figure 2C

2000 ft

Google Earth





# Project Magellan

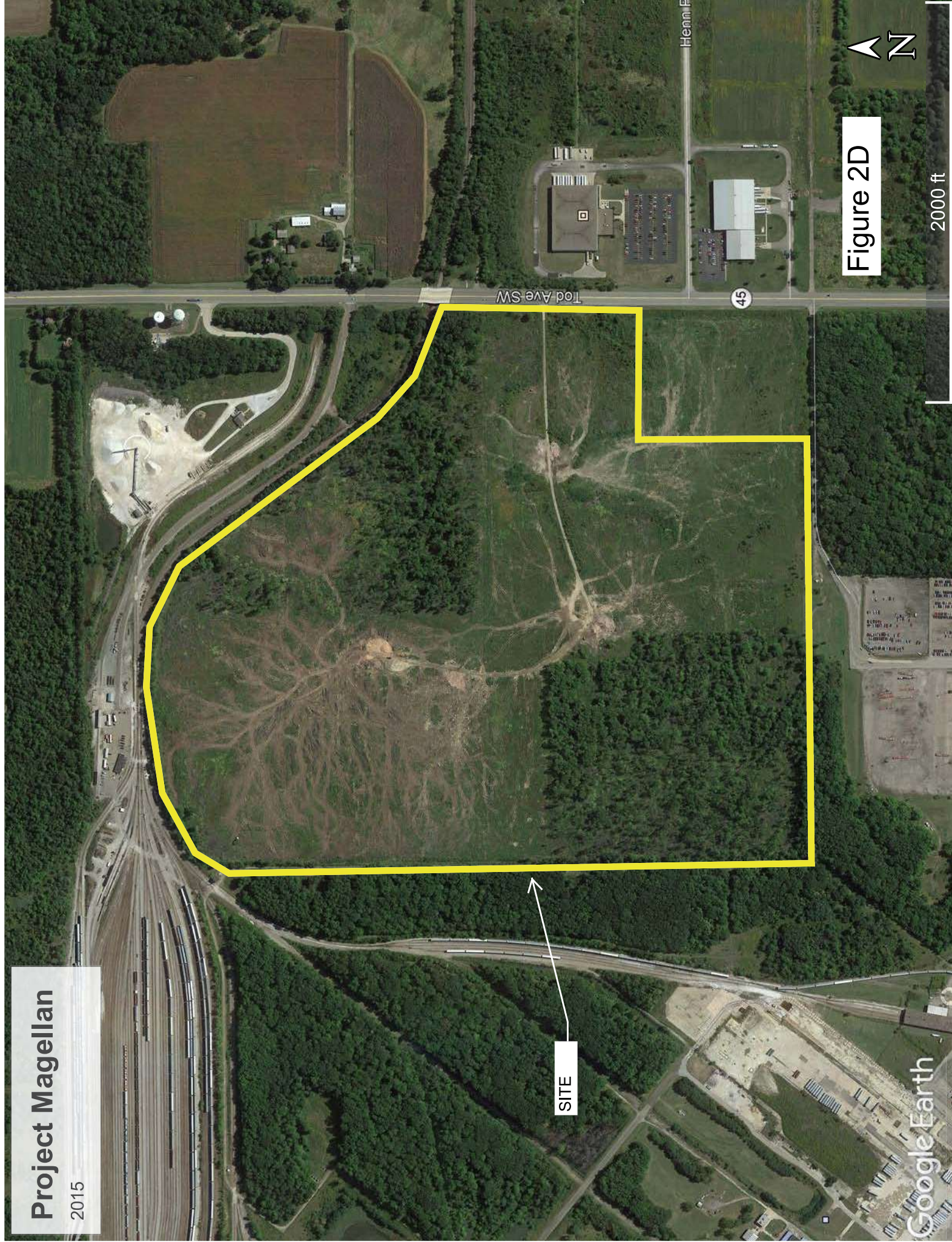
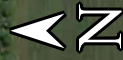
2015

SITE

Figure 2D

Google Earth

2000 ft





# Project Magellan

2016

SITE

Figure 2E

Google Earth

© 2013 Google

2000 ft



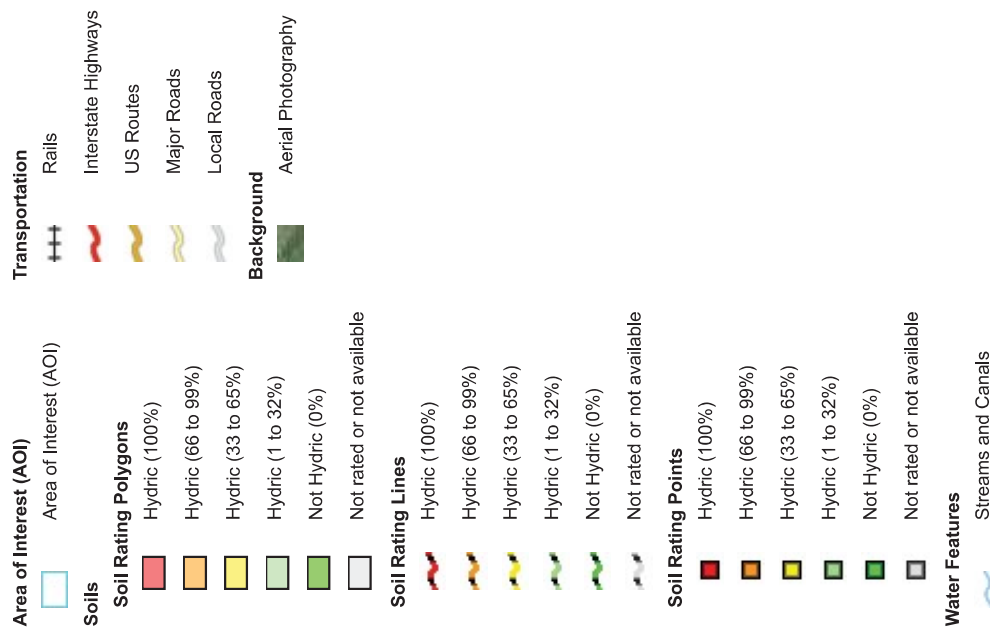


**FIGURE 3**

Hydric Rating by Map Unit—Trumbull County, Ohio



## MAP LEGEND



## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Trumbull County, Ohio  
Survey Area Data: Version 17, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 7, 2009—Mar 21, 2017

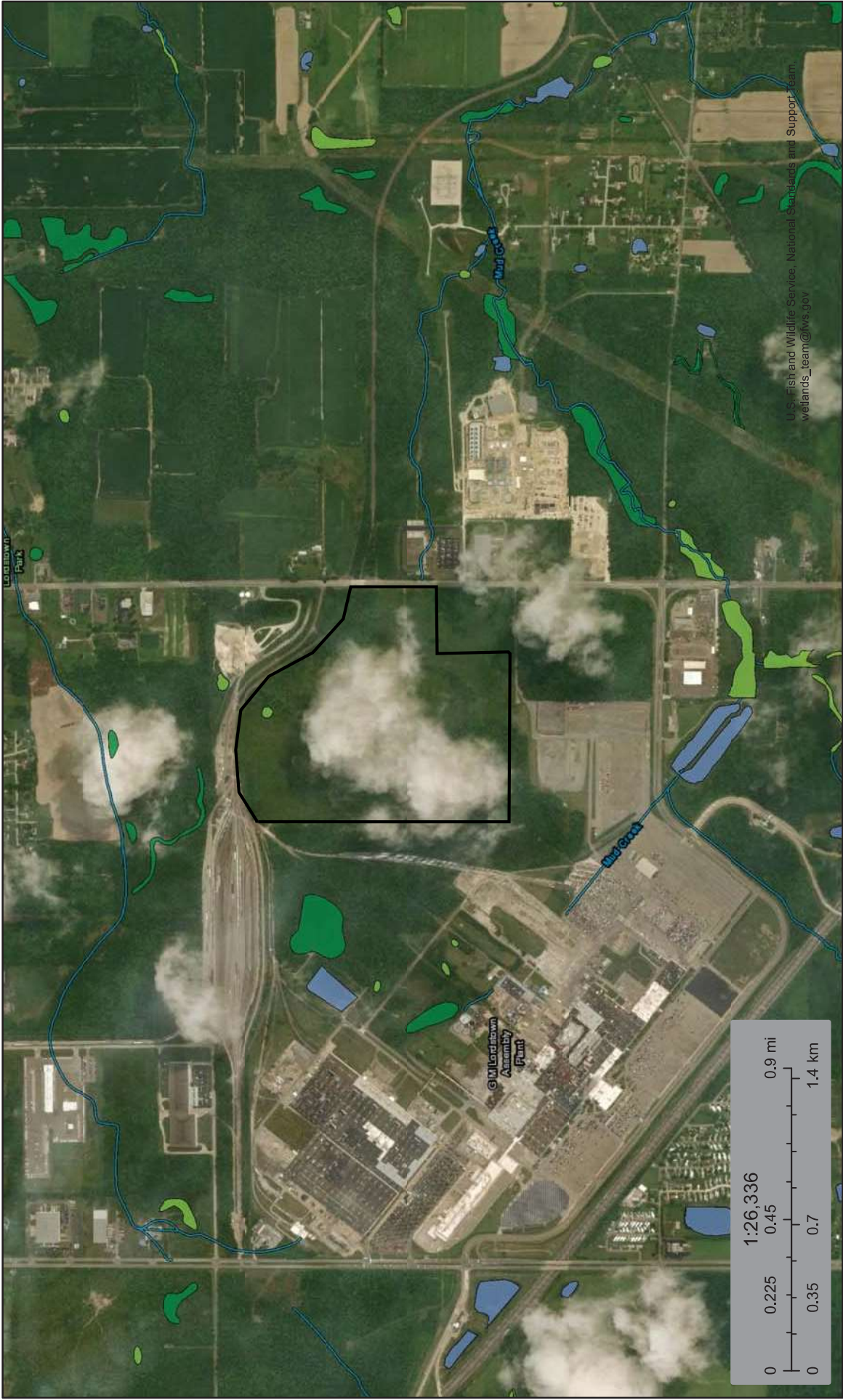
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
LrB	Lordstown loam, 2 to 6 percent slopes	0	10.4	3.3%
LrC	Lordstown loam, 6 to 12 percent slopes	0	16.3	5.2%
LyB	Loudonville silt loam, 2 to 6 percent slopes	0	2.7	0.9%
RsB	Rittman silt loam, 2 to 6 percent slopes	0	21.0	6.7%
Sc	Sebring silt loam, till substratum, 0 to 2 percent slopes	90	4.0	1.3%
Ud	Udorthents, loamy	0	53.0	16.9%
Ur	Urban land	0	0.8	0.2%
WbA	Wadsworth silt loam, 0 to 2 percent slopes	10	94.1	30.1%
WbB	Wadsworth silt loam, 2 to 6 percent slopes	8	110.7	35.4%
<b>Totals for Area of Interest</b>			<b>313.0</b>	<b>100.0%</b>



FIGURE 4



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

December 12, 2019

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

Riverine

National Wetlands Inventory (NWI)

This page was produced by the NWI mapper



**APPENDIX A**

**WETLAND**  
**LOCATION MAP**

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

**Commission of Ohio Docketing Information System on**

**7/10/2020 2:58:16 PM**

**in**

**Case No(s). 20-1176-EL-BLN**

Summary: Application for Certificate of Environmental Compatibility and Public Need (Part 1 of 4) electronically filed by Mr. Robert J Schmidt on behalf of American Transmission Systems Inc.