Environmental Survey

for

Generation Pipeline, LLC

Ironville Lateral Project

May 2018

Survey Conducted and Report Prepared by

UTILITY TECHNOLOGIES INTERNATIONAL CORPORATION

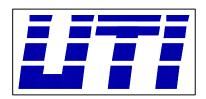


Table of Contents

1	MEI	HODS
	1.1	Desktop Review
	1.2	Wetland and Stream Delineation
2	RES	JLTS2
	2.1	Desktop Review2
	2.1.	1 Topographic Mapping2
	2.1.	
	2.1.	3 National Wetlands Inventory
	2.1.	4 Floodplain Mapping3
	2.2	Field Survey
	2.2.	1 Uplands3
	2.2.	2 Wetlands 3
	2.2.	3 Streams
	2.2.4	
	2.3	Threatened and Endangered Species Habitat Survey4
3	Con	clusions and Recommendations5
4		
4	Litei	rature Cited5

Appendices

Appendix A - Figures

Appendix B – Photograph Log

Appendix C – Wetland Data Forms

Appendix D – Ohio Rapid Assessment Method Data Forms

Utility Technologies International (UTI) was retained by Generation Pipeline, LLC (Generation) to complete an environmental survey for the proposed Ironville Lateral Project (Project) located in Lucas County, Ohio (Figure 1). The Project will consist of the construction of a 16" pipeline, a pig launcher and tap station, and a meter and regulator station. The Project corridor is approximately 1.54 miles in length and begins at an existing 24" Generation pipeline to the east and extends west to Corduroy Road, Otter Creek Road, York Street and multiple railroad tracks. The purpose of the Project is to provide natural gas to a single-end user. The single-end user will be a newly constructed hot-briquetted iron production plant.

The Project area, as well as adjacent land, consists of mowed lawn, open field, disturbed industrial properties, public roads and railroad easements. The Project corridor parallels existing railroad tracks for the majority of the length. Twelve (12) wetlands, one (1) perennial stream, and one (1) settling pond were identified during the survey.

This report outlines the findings of a wetland and stream delineation and threatened and endangered species habitat survey. The results of this survey will be used to support federal and state environmental permitting as well as review by the Ohio Power Siting Board for approval of a construction Letter of Notification.

1 METHODS

1.1 Desktop Review

Prior to visiting the site, available topographic, aerial, soils, flood, National Wetlands Inventory (NWI), and other resource mapping, if available, was reviewed to determine potential areas of concern. State stream designations, as well as navigability and other criteria that would determine agency jurisdiction, were also reviewed.

1.2 Wetland and Stream Delineation

Wetland delineation procedures follow the 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region, Version 2.0 (USACE 2010) and the 1987 Corps of Engineers Wetland Delineation Manual (USACE 1987). Each of the identified wetlands is evaluated consistent with the Ohio Rapid Assessment Method (ORAM, Version 5.0), developed by the Ohio Environmental Protection Agency (OEPA).

The federally regulated Ordinary High Water Mark (OHWM) of streams is delineated using the USACE Regulatory Guidance Letter 05-05 – Guidance on Ordinary High Water Mark Identification. Each stream is categorized in regard to its flow regime as perennial, intermittent, or ephemeral, as defined by the USACE. Streams with drainage areas less than one square mile are evaluated using the Field evaluation manual for Ohio's primary headwater habitat streams (OEPA 2012).

Delineated aquatic resources are classified according to the Classification of Wetland and Deepwater Habitats of the United States (Cowardin et al. 1979). Aquatic resource boundaries, sample point, and photograph locations were surveyed using a GPS unit with sub-meter accuracy.

1.3 Threatened and Endangered Species Habitat Survey

The project area was examined for suitable habitat for federally listed species whose known range includes Lucas County, Ohio. These species are the federally endangered Indiana bat (Myotis sodalis), the federally threatened northern long-eared bat (Myotis septentrionalis), the federally endangered Karner blue butterfly (Lycaeides Melissa samuelis), the federally endangered Kirtlandis warbler (Setophaga kirtlandii), the federally endangered piping plover (Charadrius melodus), the federally endangered rayed beanmussel (Villosa fabalis), the federally threatened eastern prairie fringed orchid (Platanthera leucophaea), the federally threatened rufa red knot (Calidris canutus rufa), the federally threatened eastern massasauga (Sistrurus catenatus), and the federal species of concern, the bald eagle (Haliaeetus leucocephalus). Any identified habitat suitable for listed species was recorded during the survey.

2 RESULTS

2.1 Desktop Review

2.1.1 Topographic Mapping

The U.S. Geological Survey (USGS) 7.5-minute topographic series (Oregon, Ohio Quadrangle) is shown on Figure 2. The project area is depicted as agricultural and industrial and is generally flat. Otter Creek and its associated wetlands are depicted flowing through the central portion of the project corridor. Elevations range from approximately 900 feet above mean sea level (AMSL) on the eastern end of the property to approximately 595 feet AMSL at the eastern end of the project and approximately 575 feet AMSL at the western end of the project.

2.1.2 Soil Survey

The Project area is found on the Soil Survey of Lucas County, Ohio and was accessed on the Soil Survey Geographic (SSURGO) Database (USDA Web Soil Survey, 2018) (Figure 3). Six (6) soil types were identified across the project area: Fulton silty clay loam, 0-2% slopes (FuA); Fulton silty clay loam, 2-6% slopes (FuB); Latty silty clay, till substratum (Lc); St. Clair silty clay loam (SuC2); Toledo silty clay (To); Udorthents, loamy (Uo). Four of these soils – FuA, FuB, Lc and To and are listed as either hydric or saturated.

2.1.3 National Wetlands Inventory

The National Wetlands Inventory (NWI) map of the Project area is shown on Figure 4. No wetlands or other surface water features are shown along the project corridor. Man-made ponds are shown outside the project corridor along the east and west sides of Otter Creek Road.

2.1.4 Floodplain Mapping

The Federal Emergency Management Agency (FEMA) produces Flood Insurance Rate Maps (FIRM), which shows the locations of predictable floodplain during precipitation flood events. The majority of the Project is located in Zone X, which are areas not subject to flooding. A portion of the Project corridor along the east and west sides of Otter Creek Road is located within Zone AE, which are areas located in a special flood hazard area within the 100-Year Floodplain of Otter Creek (Figure 4).

2.2 Field Survey

2.2.1 Uplands

Two upland communities including open field and scrub shrub field exist within the project area. The open field is common throughout the project. Typical vegetation within this community includes tall false rye grass (*Schedonorus arundinaceus*, FACU), flat-stem bluegrass (*Poa compressa*, FACU), common reed (*Phragmites australis*, FACW), white clover (*Trifolium repens*, FACU), common timothy (*Phleum pretense*, GACU), Kentucky bluegrass (*Poa pratensis*, FACU), Canada goldenrod (*Solidago anadensis*, FACU), white oldfield American-aster (*Symphyotrichum pilosum*, FACU), and Canadian thistle (*Cirsium arvense*, FACU).

The scrub-shrub community is located in sparse areas across the project corridor. The herbaceous layer is dominated by garlic mustard (*Alliaria petiolata*, FACU), Canada goldenrod, lesser burdock (*Arctium minus*, FACU), fragrant bedstraw (*Galium triflorum*, FACU), Fuller's teasel (*Dipsaucus fullonum*, FACU), and a grass (*Poa* sp., NL). Dominant shrubs in this community include gray dogwood (*Cornus racemosa*, FAC), rough-leaf dogwood (*Cornus rummondii*, FAC), Morrow's honeysuckle (*Lonicera morrowii*, FACU), and Amur honeysuckle (*Lonicera maackii*, UPL).

2.2.2 Wetlands

Fourteen (12) wetlands were identified and delineated within the project area. These wetlands consist of palustrine emergent (PEM) and palustrine scrub shrub (PSS) vegetation. Wetland Determination Data Forms were completed for each identified wetland. The delineated wetlands have also been categorized using the Ohio Rapid Assessment Method for Wetlands v.5.0 (ORAM). Wetland data forms are included in Appendix C. ORAM scoring forms are included in Appendix D. Wetland results are given in Table 1 and are briefly described in the following section. Wetland size has been determined for areas within the survey area. Wetlands are shown on Figure 5.

Table 1. Wetlands Identified within the Project Survey Area

Wetland	Cowardin Classification	ORAM Score	ORAM Category	Total Wetland Acreage	Acreage within Survey Corridor	Potential Jurisdictional Status
Wet A	PEM	37	Mod 2	13.16	13.16	Jurisdictional
Wet B	PEM	9	1	0.02	0.02	Jurisdictional
Wet C	PEM	23	1	1.11	1.11	Jurisdictional
Wet D	PEM	13	1	0.08	0.08	Jurisdictional
Wet E	PEM	10	1	0.13	0.13	Drainage Ditch -
						Jurisdictional
Wet F*	PEM			1.48	1.48	Jurisdictional

Wet G	PEM	12	1	0.04	0.04	Jurisdictional
Wet H	PEM	12	1	0.02	0.02	Jurisdictional
Wet J	PEM	12	1	0.04	0.04	Jurisdictional
Wet K	PEM	12	1	0.02	0.02	Jurisdictional
Wet L	PEM	13	1	0.22	0.22	Jurisdictional
Wet M	PEM	29	1	2.31	2.31	Jurisdictional
Tota	al Wetland Acre	age withir	18.63			

^{*} Wetland was not evaluated as it is contained within the City of Toledo water treatment facility. The pipeline will be installed via HDD under the wetland and City facility.

Wetland A is a palustrine emergent wetland located between an active agricultural field and the railroad tracks. dominated by common reed, purple loosestrife (*Lythrum slaicaria*), reed canary grass (*Phalaris arundinacea*), and eastern cottonwood (*Populus deltoids*). There were a few gray dogwoods and roughleaf dogwood.

Wetlands B, C, D, E, F, G, H, J, K, L and M are all disturbed palustrine emergent wetlands associated with man-made activities. The dominant vegetation consisted of common reed and reed canary grass. Wetlands G, H, J, K and L are depressions left behind after bulk fuel above-ground storage tanks were removed from the former Chevron USA facility.

2.2.3 Streams

One perennial stream, Otter Creek, was identified within the project corridor. This stream is a modified drainage channel that flows across the survey corridor from south to north.

2.2.4 Other Surface Waters

One pond was identified along the survey corridor. The pond is a man-made sludge pond used by the City of Toledo as part of their water treatment process.

2.3 Threatened and Endangered Species Habitat Survey

Living or dead trees with shedding or peeling bark or cavities may serve as roosting trees for the Indiana bat and/or the northern long-eared bat. In addition, sheds and barns may serve as roosting habitat for the northern long-eared bat. No contiguous forest habitat exists along the survey area. A few potential roosting habitat trees are located within the survey area. Clearing of potential roosting habitat trees should occur during October 1 and March 31. Any clearing outside that time frame should be coordinated with USFWS.

The proposed project lies within the range of the Kirtland's warbler. During migration, individual birds usually forage in shrub/scrub or forested habitat and may stay in one area for a few days. The project corridor does contain potential habitat for the Kirtland's warbler. If clearing of potential habitat cannot be avoided, to preclude adverse effects to migrating Kirtland's warblers, clearing within 3 miles of the shoreline of Lake Erie should not occur from April 22nd – June 1st, or from August 15th – October 15th.

Piping plovers use wide, flat, open, sandy beaches with very little grass or other vegetation. Nesting territories often include small creeks or wetlands. The project corridor does not contain potential habitat for the piping plover.

The rayed bean mussel generally lives in smaller, headwater creeks, but it is sometimes found in large rivers and wave-washed areas of glacial lakes. It prefers gravel or sand substrates, and is often found in and around roots of aquatic vegetation. No rivers or streams were present in the project corridor.

The eastern prairie fringed orchid occurs in a wide variety of habitats, from mesic prairie to wetlands such as sedge meadows, marsh edges, even bogs. It requires full sun for optimum growth and flowering and a grassy habitat with little or no woody encroachment. A symbiotic relationship between the seed and soil fungi, called mycorrhizae, is necessary for seedlings to become established. The eastern prairie fringed orchid is not likely to be present due to the historical disturbances.

The rufa red knot (Calidris canutus rufa) is a shorebird that migrates through this area and has been seen in Lucas County. The wetlands within the project corridor are so heavily degraded they do not provide a great food source for shorebirds. No shorebirds were seen during the survey. These birds would be much more likely to use the mudflats along nearby Lake Erie.

The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. This general habitat was not present within the project corridor.

The bald eagle nests in large trees near water. No bald eagle habitat was observed within the project area. No eagles or eagle nests were observed at the site.

3 Conclusions and Recommendations

The wetlands described in this document are under the jurisdiction either of the USACE or the Ohio EPA. Prior to commencing grading activities along the project corridor the USACE should be consulted as to the jurisdictional status of the wetlands identified. In addition, any impact to wetlands should be permitting through the USACE and the Ohio EPA. No filling may occur in these areas without these agencies written permission.

4 Literature Cited

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classifications of Wetlands and Deepwater Habitats of the United States. FWS/OBS-79/31. U.S. Department of Interior, Fish and Wildlife Service, Office of Biological Services, Washington, D.C.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. US Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

Lichvar, R.W., M. Butterwick, N.C. Melvin, and W.N. Kirchner. 2016. The National Wetland Plant List. 2016. Update of Wetland Ratings. Phytoneuron 2014-41: 1-42.

Mack, J.J. 2000. ORAM v. 5.0 Quantitative Score Calibration. Ohio Environmental Protection Agency, Division of Surface Water, Wetland Ecology Unit, Columbus, Ohio.

Mack, J.J. 2001. Ohio Rapid Assessment Method for Wetlands v. 5.0, User's Manual and Scoring Forms. Ohio EPA Technical Report WET/2001-1. Ohio Environmental Protection Agency, Division of Surface Water, 401/Wetland Ecology Unit, Columbus, Ohio.

Munsell Color. 2009. Munsell Soil Color Charts (Rev. ed.). Grand Rapids, Michigan.

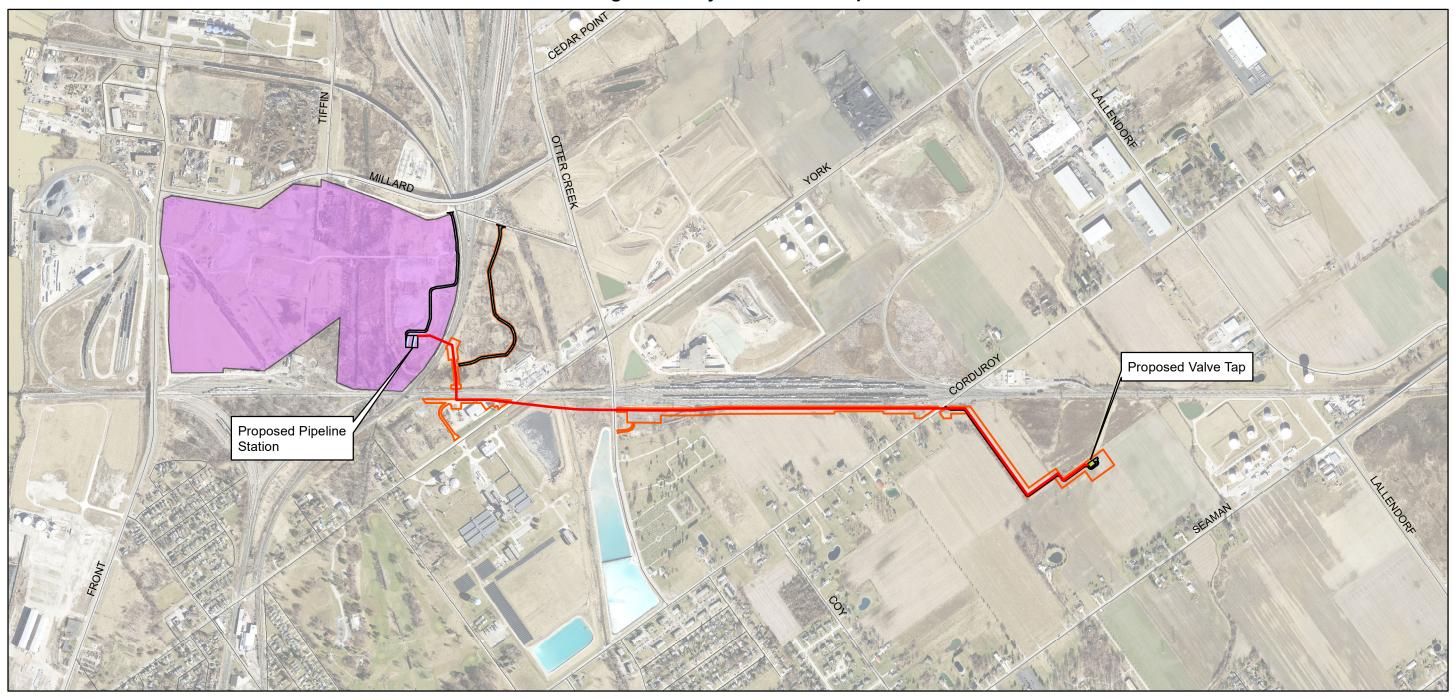
Ohio Environmental Protection Agency, 2012. Field Evaluation Manual for Ohio's Primary Headwater Habitat Streams. Final Version 3.0. Ohio EPA Division of Surface Water, Columbus, Ohio. 117 pp.

- U.S. Army Corps of Engineers. 2012. Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Northcentral and Northeast (version 2.0). Technical Report ERDC/EL TR-12-1. US Army Engineer Research and Development Center, Vicksburg, Mississippi.
- U.S. Army Corps of Engineers and U.S. Environmental Protection Agency. 2007. U.S.Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook. Washington, D.C.
- U.S. Department of Agriculture. 2012. Web Soil Survey. USDA. Natural Resource Conservation Service. http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm.

APPENDIX A

FIGURES

Figure 1- Project Location Map



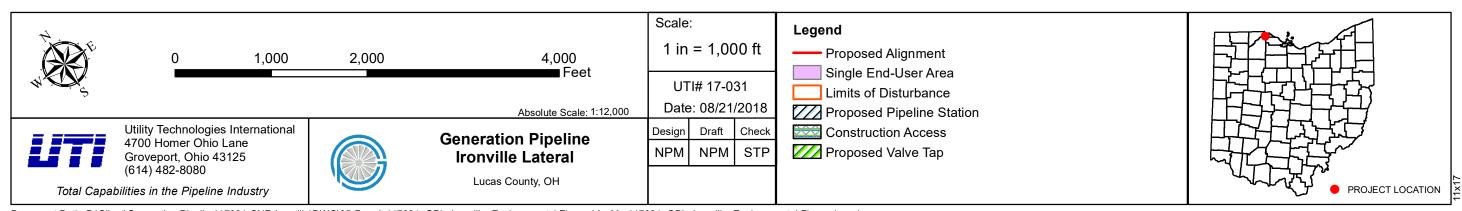
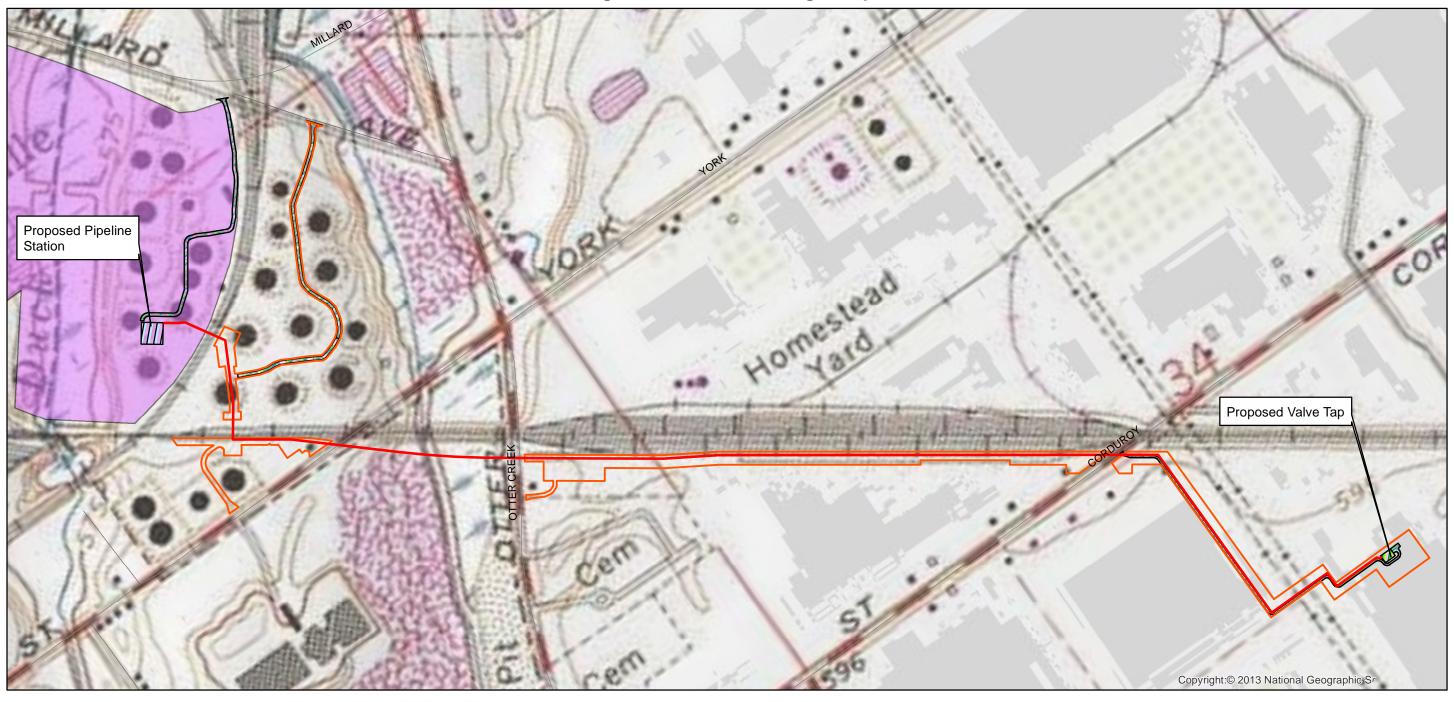


Figure 2- USGS Quadrangle Map



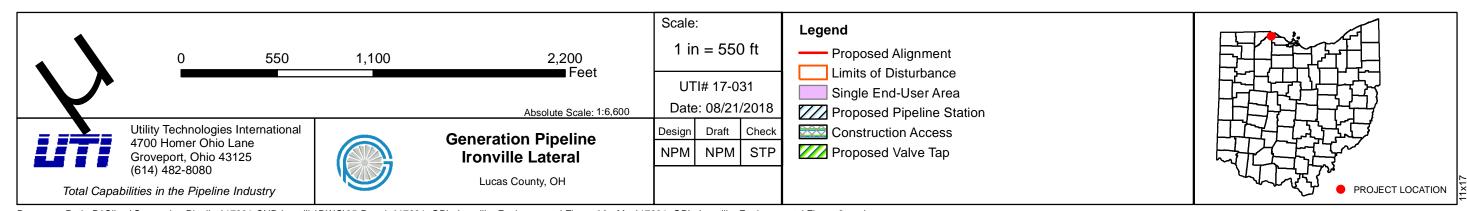
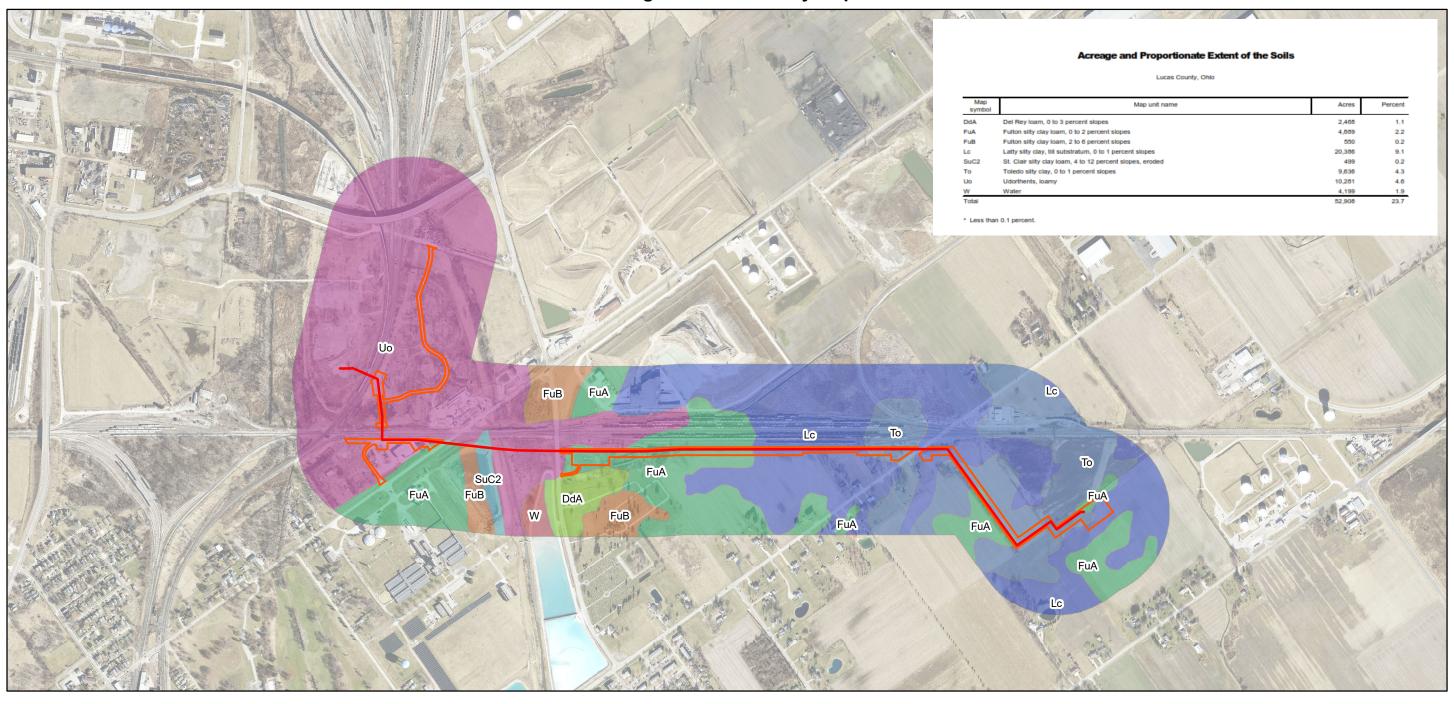
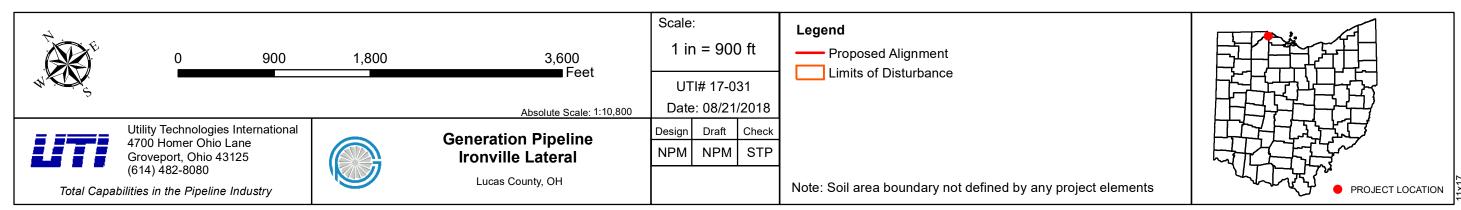


Figure 3- Soil Survey Map





This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

11/14/2018 5:11:54 PM

in

Case No(s). 18-1601-GA-BLN

Summary: Letter of Notification - Attachment J (Part 1 of 4) electronically filed by Mr. Michael J. Settineri on behalf of Generation Pipeline LLC