ABSTRACT

This report presents the results of a Phase I cultural resources survey for the proposed Brunstetter Connector project. The proposed 12-in. (30.5-cm) natural gas pipeline will connect the 16-in. (41-cm) Line 264 pipeline with the existing Brunstetter Station at the southeast corner of the intersection of Highland Avenue and Brunstetter Road in Lordstown Township, Trumbull County, Ohio. The proposed pipeline corridor is approximately 762 m (2,500 ft.) long with a 15.2-m (50-ft.) right-of-way. Total acreage for this project is about 2.9 acres. The project corridor, which crosses the same creek three times, is along relatively level land. Land usage includes agricultural, wooded, and a farmstead.

The review of the Ohio Archaeological Inventory and the Ohio Historic Inventory files, as well as the National Register of Historic Places, indicates that there are no previously recorded archaeological or historic sites along the project corridor. Additionally, no structures are illustrated within the project corridor on historic maps, nor is the property associated with any significant historic events or individuals. Field investigations consisted of a visual inspection of the corridor and shovel testing. No evidence of cultural resources was encountered within the project corridor. It is recommended that no additional cultural resource investigations should be required prior to construction activities for the proposed pipeline.

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1.0 INTRODUCTION

This report presents the results of a Phase I cultural resources survey for the proposed Brunstetter Connector project. The proposed 12-in. (30.5-cm) natural gas pipeline will connect the 16-in. (41-cm) Line 264 pipeline with the existing Brunstetter Station at the southeast corner of the intersection of Highland Avenue and Brunstetter Road in Lordstown Township, Trumbull County, Ohio (Figure 1). The proposed pipeline corridor is approximately 762 m (2,500 ft.) long with a 15.2-m (50-ft.) right-of-way. Total acreage for this project is about 2.9 acres.

The project corridor, which crosses the same creek three times, is along relatively level land. The western portion of the corridor, which is where the proposed pipeline will tie-in with an existing line, is about 60 m (197 ft.) in length. This section begins within a designated wetland and continues along a farm road between an agricultural field and a wooded area (Plates 1 and 2). After the first creek crossing, the line will go through a partially cleared wooded area which has a stand of pine trees to the north and native trees to the south (Plate 3). This section extends about 310 m (1,017 ft.) to the second creek crossing (Plate 4). The line will then continue along a farm road with an agricultural field to the north and a wooded area to the south for a distance of about 180 m (590 ft.) (Plate 5). At that point the line will cross the creek for a third time (Plate 6) to continue through a farmstead to the Brunstetter Station on the east side of Highland Avenue (Plates 7 and 8). This final section is about 190 m (623 ft.) in length. The farmstead will not be impacted, other than the pipeline going through part of the existing gravel drive. The approximate 22 m (72 ft.) not accounted for in these calculations is associated with the creek crossings.

The survey was conducted by EnviroScience, Inc. of Stow, Ohio, for the East Ohio Gas Company (EOG). The aim of this Phase I survey was to locate and identify all cultural resources within the proposed project corridor, if possible to assess their significance of meeting the criteria for listing in the National Register of Historic Places, and to make recommendations for avoidance or mitigation procedures for any culturally significant properties identified during this investigation. Background research involved the examination of the cultural and environmental history of the project corridor and surrounding areas, as well as a review of the archaeological and architectural resource files and National Register of Historic Places (NRHP) at the Ohio Historic Preservation Office (OHPO). Field investigations consisted of a visual inspection of the ground surface and the excavation of shovel tests to examine the soil stratigraphy.

The background research, field investigations, and report preparation were completed by Norman Haywood, M.A., R.P.A. Field investigations were conducted on November 19 and 20, 2012. Figures in this report were prepared by Danielle Papineau and Laura Sayre. Copies of the report are filed with the OHPO, U.S. Army Corps of Engineers, EOG, and EnviroScience, Inc.

2.0 ENVIRONMENTAL SETTING

In order to better understand human settlement patterns of the past, it is important to recognize the present-day and paleoenvironmental setting of the area that is being

examined. A variety of methods have been utilized to describe different ecosystems. The method used here is based on the ecoregion as developed by the U.S. Forest Service in which ecological boundaries are determined by geology, soil, vegetation, and other environmental characteristics. The project corridor is in the Grand River Pymatuning Subsection of the Western Glaciated Allegheny Plateau Section, which in turn is part of the Eastern Broadleaf Forest (Continental) Province (Keys and Carpenter 1995; McNab and Avers 1994). This corresponds with the Glaciated Plateau as depicted on the Ohio Department of Natural Resources "Physiographic Sections of Ohio" map (ODNR 1986).

The bedrock of this area consists of shales, sandstones, and limestones of the Waverly Formation which dates to the Mississippian (Bownocker 1992). Glacial deposits in the project corridor consist of Late Wisconsinan hummocky moraine material deposited between 14,000 and 18,000 years ago (Pavey et al. 1999).

Soils along the project corridor consist of the following (US Department of Agriculture 2012):

Fitchville silt loam, 0 – 2% slopes;
Glenford silt loam, 6 – 12% slopes;
Rittman silt loam, 0 – 2% slopes; and
Sebring silt loam.

The parent materials for Fitchville silt loam, Glenford silt loam, and Sebring silt loam is lacustrine deposits. Although none of these soils is subject to flooding, the Fitchville silt loam is somewhat poorly drained, the Glenford silt loam moderately well drained, and Sebring silt loam poorly drained. The parent material for Rittman silt loam is till. This moderately well drained soil is not subject to flooding.

The Fitchville silt loam occurs at the east end of the woods and into the agricultural field to the east of the woods. Glenford soils are found in the eastern portion of the agricultural field and into the residential area. The Rittman soil, the most commonly occurring soil along the project corridor, is found in the wooded area, along much of the agricultural field in the east half of the corridor, and at the east end of the corridor. The Sebring soil occurs at the west end of the project corridor in the small segment of agricultural field and extends into the western portion of the woods.

The potential natural vegetation for this ecoregion is beech-maple forest, Appalachian oak forest, northern hardwood forest, mixed mesophytic forest, and a small extent of oak-hickory forest (McNab and Avers 1994: Chapter 16, p. 7). Historically, game animals that could be found in this Section were bison, elk, black bear, mountain lion, and timber wolf. Animals that can still be found here are white-tailed deer, red fox, woodchuck, cottontail rabbit, raccoon, weasel, and skunk. Birds include heron, mallard, American kestrel, American woodcock, mourning dove, and the bald eagle.

3.0 CULTURAL OVERVIEW

3.1 Paleoindian Occupation (14,000 B.C. to 8000 B.C.)

The earliest known people to inhabit the New World were the Paleoindians who probably arrived about 14,000 years ago, although some archaeologists believe they could have arrived as much as 40,000 years ago. Most of the evidence of their presence consists of surface finds of diagnostic artifacts, especially fluted points (Dorwin 1966; Prufer and Baby 1963; Smail 1951; Winters 1963). Tools were typically made from high quality cherts obtained from distant sources (Tankersley 1989). This indicates they traveled extensively and/or had a large trade network. Additionally, the aesthetic appearance of the tools was important as suggested by the craftsmanship displayed in the projectile points and other tools.

As the Wisconsin glacier retreated, new areas became open for habitation by plants, animals, and the Paleoindians. The open grazing lands and boreal forests provided sustenance for such animals as the mammoth, mastodon, musk ox, bison, and other large mammals which could be hunted (Cleland 1966). In addition to these large mammals, the Paleoindian diet was supplemented by vegetal materials gathered throughout the landscape. It is believed these people were nomadic and lived in small groups. Many of the Paleoindian sites discovered in the Midwest are situated on hilltops and bluffs that overlook major river valleys and other larger rivers.

3.2 Archaic Occupation (8000 B.C. to 900 B.C.)

As the climate began to moderate around 9000 B.C., the glacial-boreal ecosystem of the Midwest changed. Warmer and drier conditions brought about a deciduous forest by 5000 B.C. (Cleland 1966). By this time, the large game animals had become extinct and were replaced by smaller mammals such as deer and bear.

During the Early Archaic period, which lasted from about 8000 to 6000 B.C., the presence of smaller game led to a shift from the Paleoindian lanceolate points to smaller and more diversified projectile points, such as the bifurcates. Other tools that became important were woodworking and milling tools such as axes, gouges, drills, and grinding stones (Chapman 1975; Jennings 1968). Although still nomadic, their geographic ranges became smaller as the territories became more well exploited (Potter 1970). Sites associated with the Early Archaic are typically small and located in uplands near secondary stream valleys (Benchley 1975).

From about 6000 to 3000 B.C., the climate was further moderated. During this period, known as the Middle Archaic, diversification became even greater as seasonal resources were further exploited. Although deer hunting was still the primary resource, a wider variety of plant sources were consumed and utilized (Cleland 1966). Additionally, a more complex social structure became evident (Griffin 1978).

Changes in sustenance are reflected in the tool kit as the Early Archaic bifurcate point types were replaced by large side-notched points (Fitzhugh 1972; Justice 1987). Ground and polished stone tools, such as full grooved axes, pendants, and bannerstones, also

became increasingly important. Bone tools also were added to the tool kit during this period (Chapman 1975; Griffin 1968).

The Late Archaic period lasted from about 3000 to 900 B.C. About 2000 B.C. the deciduous forest reached its most northern limit (Cleland 1966:93). During this period, the people became more sedentary as seen in such regional cultures as the Glacial Kame, Red Ochre, and Old Copper cultures (Cleland 1966). Specialized artifacts such as steatite and sandstone bowls, stone tubes and beads, polished plummets, net sinkers, whistles and rattles, birdstones, boatstones, and bone awls, needles, and perforators entered into the tool assemblage (Chapman 1975:6). Also ceremonialism became increasingly important as suggested by more elaborate, formalized mortuary practices and exotic burial goods obtained through emerging trade networks (Chapman and Otto 1976:20).

Unlike the smaller and lightly utilized sites from earlier time periods, Late Archaic sites are large and suggest long periods of settlement. However, there was still seasonal exploitation of various areas, such as aquatic resources during the spring and summer and upland game animals during the winter.

3.3 Woodland Occupation (900 B.C. to A.D. 1000)

Essentially, the Early Woodland period, which lasted from about 900 to 100 B.C., represents a cultural expansion of the Late Archaic (Brose et al. 1978:67). At this time, there was a greater tendency toward territorial permanence, increasing elaboration of the ceremonial exchange and mortuary rituals, and the appearance of pottery. The Early Woodland diet was supplemented by domestication of various native and non-native cultigens, such as sunflower and chenopodium (Struever and Vickery 1973:11-19), although these food resources were also utilized to a lesser extent during the Archaic (Yarnell 1973). The cultivation of squash, pumpkin, sunflower, and gourd further augmented the hunting-gathering-fishing based economy (Potter 1970).

The Adena culture was the regional adaptation of the Early Woodland in Ohio. It was noted for the use of pottery and conical mounds for interment of the dead (Chapman and Otto 1976). Similar to their predecessors in the Late Archaic, the Adena culture were semi-sedentary with semi-permanent village sites. Included in their pottery types were Fayette thick, Adena plain, and Montgomery incised. The tool kit included leaf-shaped blades and a variety of stemmed points such as Cresap, Robbins, and Adena. Copper, which was obtained as a trade good from the Great Lakes, was used for the production of decorative items such as beads, bracelets, rings, gorgets, and reels (Potter 1970:7). Other artifacts included tubular pipes, quadraconcave gorgets, pendants of banded slate materials, full grooved axes, hematite celts, and incised stone tablets (Chapman and Otto 1976:210).

From about 100 B.C. to A.D. 500, the Middle Woodland period flourished as trade networks became more extensive and complex. Throughout much of the eastern U.S., this period is referred to as the Hopewell Interaction Sphere. It extended from western New York to Kansas City and from the Gulf of Mexico to Lake Huron (Caldwell 1964; Struever 1964). This culture is especially noted for the elaborate geometric earthworks, enclosures, and mounds that are frequently associated with a variety of exotic ceremonial

items (Brose et al. 1978:68). Included in the trade network were copper and silver from the Upper Great Lakes, quartz crystals and mica from the Lower Allegheny region, obsidian and grizzly bear teeth from the west, and shark and alligator teeth, marine shell, and pearls from the Gulf Coast region (Prufer 1964:75). Lithic artifacts associated with the Hopewell are Snyder points, small side-notched points, and prismatic blades. Hopewell village and mortuary sites are found in the valleys of major rivers (Asch et al. 1979:83). Smaller sites were generally located in bottomlands, which were situated to maximize quantities of selected resources, and uplands, utilized primarily as hunting camps.

The Late Woodland, which lasted from about A.D. 500 to 1000, witnessed a cultural decline, the exact cause of which is unknown. Some theorize it was associated with a climatic change (Baerreis et al. 1976; Griffin 1960) whereas others see problems inherent with a single subsistence activity (Cleland 1966; Farnsworth 1973). By A.D. 700 ceremonial centers were abandoned, trade networks were dissolving, and burial ceremonialism was less elaborate. It also marked an increased reliance on cultivated plants supplemented by hunting and gathering. Two distinct types of sites are prevalent during this period. A base camp or village with cultivated fields was established during the summer and hunting camps during winter months.

3.4 Late Prehistoric Occupation (A.D. 1000 - 1650)

During this period of time, much of eastern North America was dominated by the Mississippian cultural sequence. Agriculture, based on raising beans, maize, and squash, became increasingly more important to the subsistence base. Although the greatest concentration of Mississippian settlements was in the central Mississippi valley, the influence extended for hundreds of miles in all directions. Many of these communities had large ceremonial centers. The complex economic and sociopolitical system was supported by specialized camps and farmsteads (Dragoo 1976:20). In northeastern and north-central Ohio, the Mississippian evolved as the Whittlesey focus. This was typified by large agricultural villages on uplands near major rivers that were occupied year-round (Brose 1976:43-44). Small campsites were utilized for brief periods of specialized activities.

3.5 Euro-American Occupation

The following discussion is derived from several historical accounts of Trumbull County (Anonymous 1882; Upton 1909). Prior to the late 1700s, it was impractical for Euro-Americans to settle west of the Appalachians. Those who did enter these areas were French explorers and fur traders, Jesuit and Moravian missionaries, and Indian captives.

Trumbull County, which was organized on July 10, 1800, was named after the Governor of Connecticut, Jonathan Trumbull. It was reduced in size when Mahoning County was formed on February 16, 1846. The first settlers to the area were Ephraim Quinby and Richard Storer who came to Warren in 1798 from Washington County, Pennsylvania. Quinby purchased 441 acres of land, much of which included the city of Warren. They returned to Pennsylvania for the winter, but returned to Trumbull County to settle in April 1799. They were soon followed by numerous other settlers, many of whom

built their homes in the vicinity of Warren. By 1801, Warren was the largest settlement in the Western Reserve. Construction of the first mill in the county began in June 1800 when Henry Lane and Charles Dally began building their mill and dam in Warren.

Lordstown Township was named for Samuel P. Lord who held much of the township land in speculation. As a result, it was one of the last townships to be settled and also saw the slowest growth for many years. Although a date is not provided in the references examined, Henry Thorne from Virginia built the first cabin in the township. He was followed in 1818 by Andrew Longmore. The first school districts in the township were laid out in 1828. In the early 1830s James Scott, Cyrus Bosworth, and Asael Adams purchased 6,500 acres of land, or about one quarter of the township, from heirs of Lord for speculation following which the township was further divided. The village of Lordstown was not incorporated until 1975 (Village of Lordstown n.d.).

4.0 BACKGROUND RESEARCH AND FIELD METHODS

4.1 Introduction

A Phase I cultural resources survey for the proposed Brunstetter Connector project was conducted by EnviroScience, Inc. In order to satisfactorily complete this project, a documentary research of the history of the area as well as all known historic and prehistoric cultural resources either within or near the project corridor were assessed for their significance in relation to this project. Following this, an archaeological field investigation was conducted along the project corridor.

4.2 Literature Review

A literature review was conducted to establish the history of the project corridor and vicinity, to locate any previously recorded cultural resources within or near the project corridor, and to identify any archaeological investigations that had taken place in the vicinity. This included reviews of the NRHP, the Ohio Historic Inventory (OHI) files, and the Ohio Archaeological Inventory (OAI) files of the OHPO. In addition to other contract archaeology publications, county and local histories were consulted to incorporate pertinent data on historical events. References were also reviewed at the State Library in Columbus.

4.21 Literature Relating to the Prehistory of Ohio

Probably the most obvious indications of prehistoric activity within Ohio are the numerous earthworks associated with the Adena and Hopewell cultures. An examination of the map indicating the known earthworks in Ohio as of 1914 indicates that they were present in every county with the exception of Henry County in the northwest portion of the state (McGraw 1995). A mound is depicted to the north of the project corridor on Mills' archaeological atlas (Mills 1914), but no mention is made of it in any of the other references that were examined, including the files at the OHPO (Figure 2). Otherwise there are no other earthworks along or in the immediate vicinity of the project corridor.

Other literature examined that identifies prehistoric earthwork locations include Squier and Davis (1848), Webb and Baby (1975), and Webb and Snow (1945). None of these sources discuss the presence of mounds or enclosures within or near the project corridor.

4.22 Historic Maps

Historic maps, particularly the atlases that were produced for the various counties in the mid to late 1800s, provide a wealth of information, including property landowners, as well as locations of structures, cemeteries, and orchards. On the 1874 map of Lordstown Township (Everts 1874) the landowner is identified as Mary S. Lane (Figure 3). Ms. Lane is also shown as the landowner in 1899 (The American Atlas Company 1899) (Figure 4). There is no information concerning Ms. Lane in the contemporaneous literature. Also no buildings are depicted within or near the project corridor on those maps. No buildings are shown in the vicinity of the project corridor on the 1908 Warren, Ohio, 15-minute topographic quadrangle (Figure 5).

4.23 Previous Cultural Resource Investigations

There are three reports on file at the OHPO for Lordstown Township, but only one of these is near the project corridor and considered relevant. That report concerns a survey for a proposed pipeline replacement about 15 km (9 mi.) long (Thomann and Locking 2008). A portion of the corridor that was examined for that report ran parallel to Highland Road on the east side of the road beside the Brunstetter Station. Although no cultural resources were encountered in the immediate vicinity of the station, three isolated finds were encountered. Two of these are north of the Brunstetter Connector corridor and are discussed below.

4.24 Previously Recorded Historic Properties and Archaeological Sites

No previously recorded historic properties or archaeological sites are identified along the project corridor in the files at the OHPO. However, within a radius of 3.2 km (2 mi.) there are four known archaeological sites (Table 1). There are no historic properties listed in the OHI files or in the NRHP in the vicinity of the project corridor.

Table 1

Archaeological Sites in the Vicinity of the Project Corridor

Site	Culture	Setting	Distance to Water
33-TR-24	Archaic, Late Woodland	stream valley	76 m
33-TR-96	Woodland	stream valley	72 m
33-TR-229	unassigned prehistoric	nr	nr
33-TR-230	unassigned prehistoric	nr	nr

nr – not recorded

Site 33-TR-24 was a relatively large site from which, in addition to ceramics and lithic artifacts, numerous features were encountered. However, in an updated site form from 1981 it notes that the site was extensively dozed and possibly since then was destroyed. Site 33-TR-96 consists of a projectile point and debitage. Sites 33-TR-229 and 33-TR-230 are both isolated finds that were recorded during the survey for the pipeline discussed in the "Previous Cultural Resource Investigations" section. A chert flake was recovered from 33-TR-229 and a projectile point from 33-TR-230. With such a small sample size of archaeological sites, it is not reasonable to attempt to produce any type of predictive model.

4.3 Field Methods

A series of shovel tests were dug at 15-m (50-ft.) intervals along a single transect within the pipeline right-of-way (Figure 6). Each shovel test measured about 50 cm across. Soil matrix was screened through ¼-inch mesh in an attempt to locate any cultural resources. Soils were described in terms of color, texture, and thickness of the A horizon. All shovel test pits were backfilled following their examination. The corridor also extends partially into agricultural fields at the west end and near the central portion of the corridor. In addition to excavating shovel tests along the grass-covered farm road, a pedestrian survey was also conducted in the agricultural field. Surface visibility was rarely above 50% since corn was recently harvested from the field, which is why shovel testing was also done. The pedestrian survey consisted of walking a single transect near the north boundary of the right-of-way.

4.4 Laboratory Methods

Normally, artifacts are washed, labeled, and catalogued at the EnviroScience, Inc. office. Lithic assemblages are then assigned to technologically significant classes and historic artifacts are analyzed for date range, socio-economic status, ethnicity, region-specific attributes, settlement type, and intra-site distribution. However, since no artifacts were recovered, this was not necessary.

5.0 SURVEY RESULTS AND RECOMMENDATIONS

This report presents the results of a Phase I cultural resources survey of approximately 762 m (2,500 ft.) for the proposed pipeline project in Lordstown Township, Trumbull County, Ohio. The location at which the proposed line will connect with the existing line is within a designated wetland. The soils along the farm road and within the western agricultural field up to the first creek crossing consists of 20 cm (6.1 in.) of very dark grayish brown (10YR 3/2) silty clay loam underlain by light gray (10YR 7/1) silty clay loam (Figure 7). This soil was also observed in the first two shovel tests within the wooded area to the east of the first creek crossing. From about 40 m (131.2 ft.) east of the creek to about the middle of the wooded area, the soil profile consists of about 19 cm (5.8 in.) of brown (10YR 4/3) silty clay loam underlain by light brownish gray (10YR 6/2) silty clay loam with occasional brownish yellow (10YR 6/8) mottles (Figure 7). From the middle of the wooded area to about 40 m (131.2 ft.) west of the second creek crossing where the

woods ends, the soil profile is about 20 cm (6.1 in.) of brown (10YR 4/3) silty clay loam underlain by yellowish brown (10YR 5/4) silty clay loam (Figure 7). The soils in the remainder of the wooded area to the west of the creek and the agricultural field between the middle and east creek crossing consists of about 24 cm (7.3 in.) of very dark grayish brown (10YR 3/2) underlain by yellowish brown (10YR 5/4) silty clay loam (Figure 7). Shovel tests were attempted along most of the grass-covered portions of the farmstead, but there was impenetrable gravel immediately below the sod. The only area where shovel tests could be conducted in the farmstead was immediately west of Highland Avenue where two shovel tests were excavated on the lawn. The soil profile at this location was essentially the same as what was observed along the eastern agricultural field.

As noted previously, there are no structures depicted along the project corridor on any of the historic maps that were examined. The farmstead at the east end of the project corridor consists of a house, barn, two pole barns, and a garage (Plates 9 through 15). Between the garage and one of the pole barns is a large concrete slab (Plate 16). All of the structures have additions with the exception of the garage. The farm house and barn appear to date to the early 1900s while the pole barns and garage are more recent. The house has undergone numerous renovations, including additions on the front, rear, and north sides as well as probable replacement of the original roofing material which now consists of asphalt shingles. The original windows were also replaced. The barn has had two additions put on it – one on the south side and one on the rear to the west. None of the structures associated with the farmstead is considered significant and will not be impacted by the proposed pipeline.

No evidence of cultural resources was encountered during field investigations. Also, archival research indicates that the property within the project corridor is not associated with any significant historic events or individuals, nor are the remnants of any significant architectural design to be found here. The area of potential effects is limited to the trench which will be excavated for the pipeline. As a result, no significant cultural resources will directly or indirectly be impacted. It is recommended that no additional cultural resource investigations should be required prior to construction activities for the proposed pipeline.

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APPENDIX A

Figures

Figure 1. Portion of Warren, Ohio, 7.5-minute Topographic Quadrangle Map Showing Location of Project Corridor.

Project Corridor

2,000 1,000 0 2,000 Feet

600 300 0 600 Meters

N

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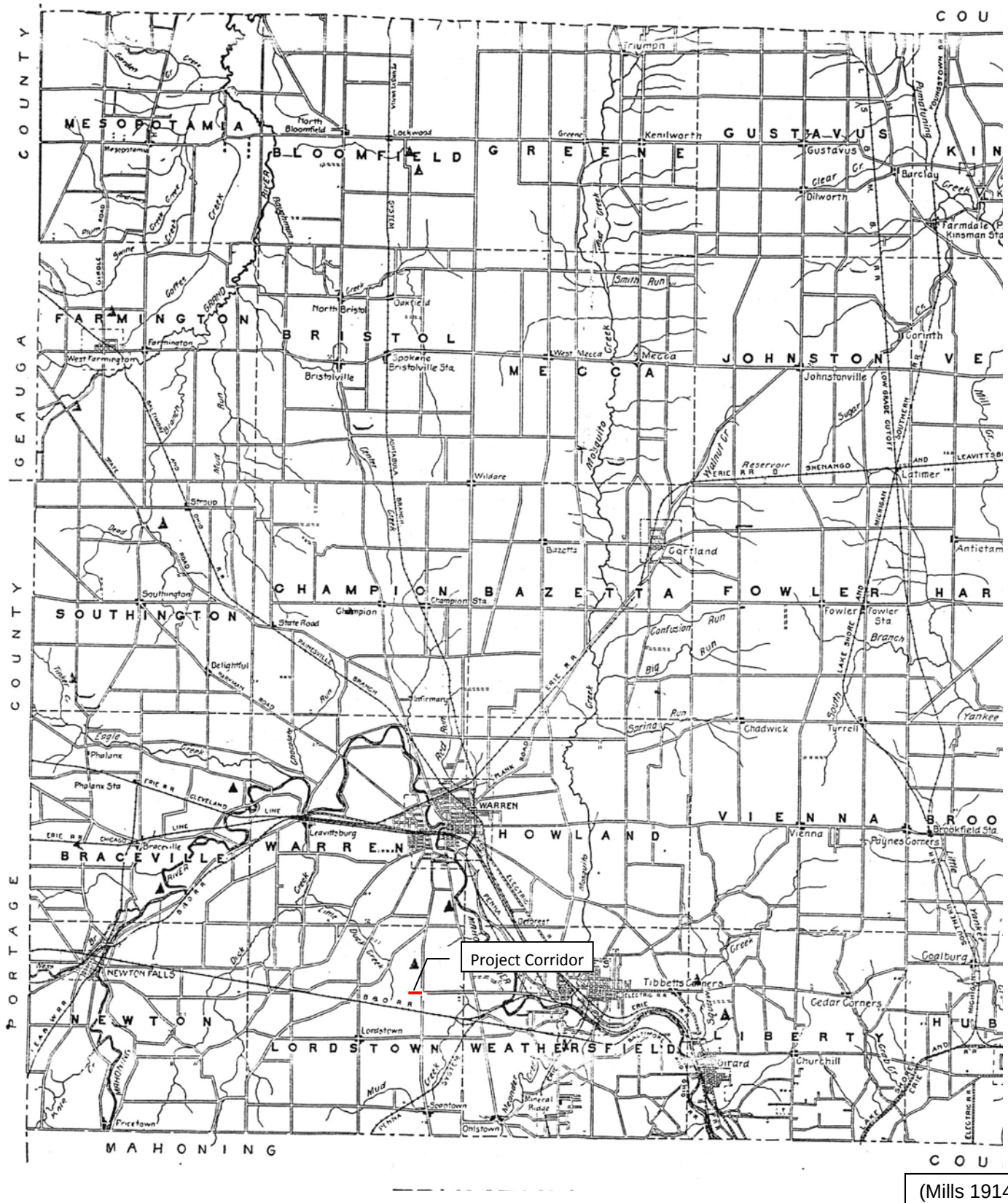

Figure 2. Portion of Trumbull County, Ohio, Map from Mills' archaeological atlas showing location of project corridor.

0 3 6 9 miles

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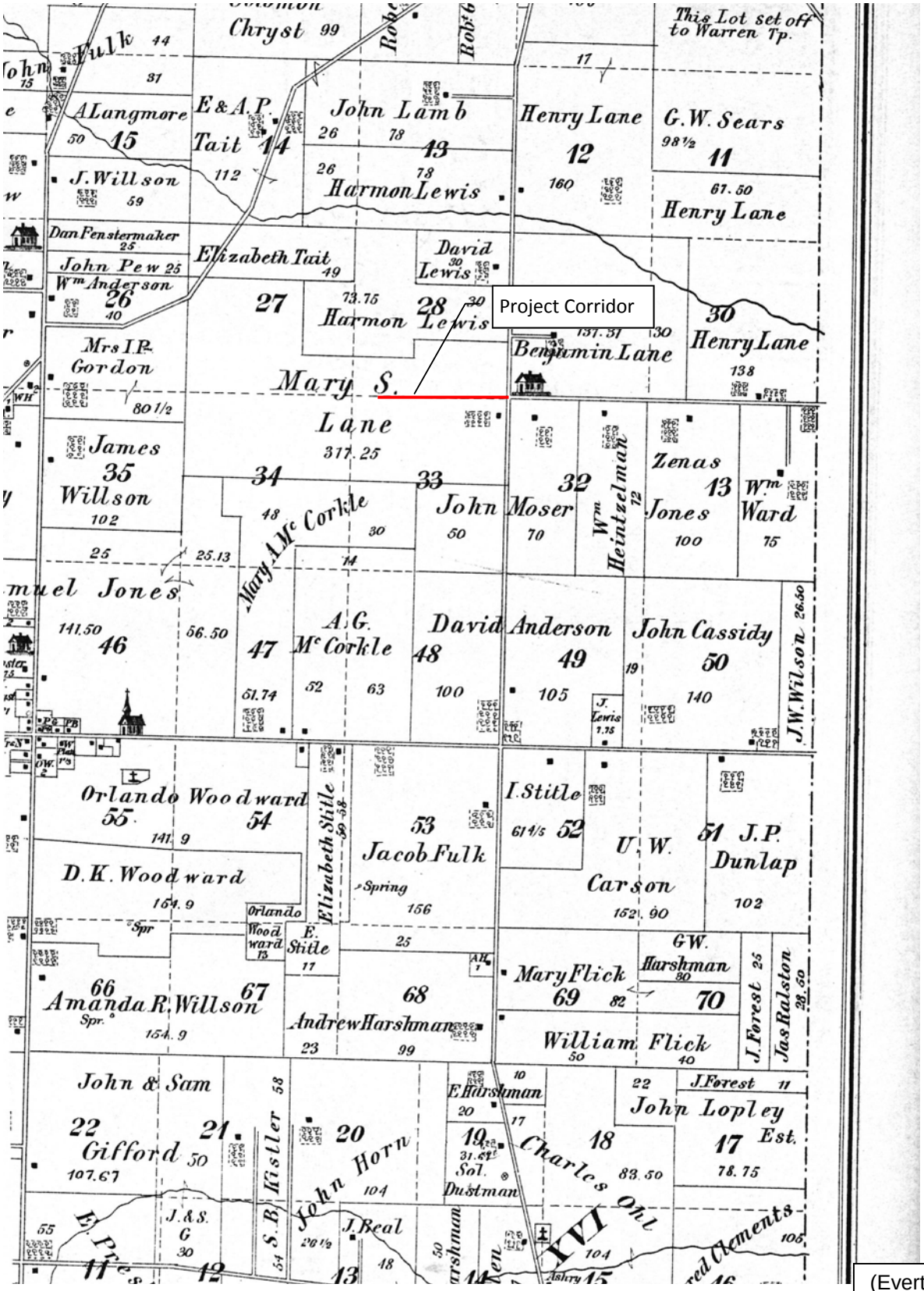

(Everts 1874)

Figure 3. Portion of 1874 map of Lordstown Township, Trumbull County, Ohio, showing location of project corridor.

0 1 2 mi

0 1 2 3 km

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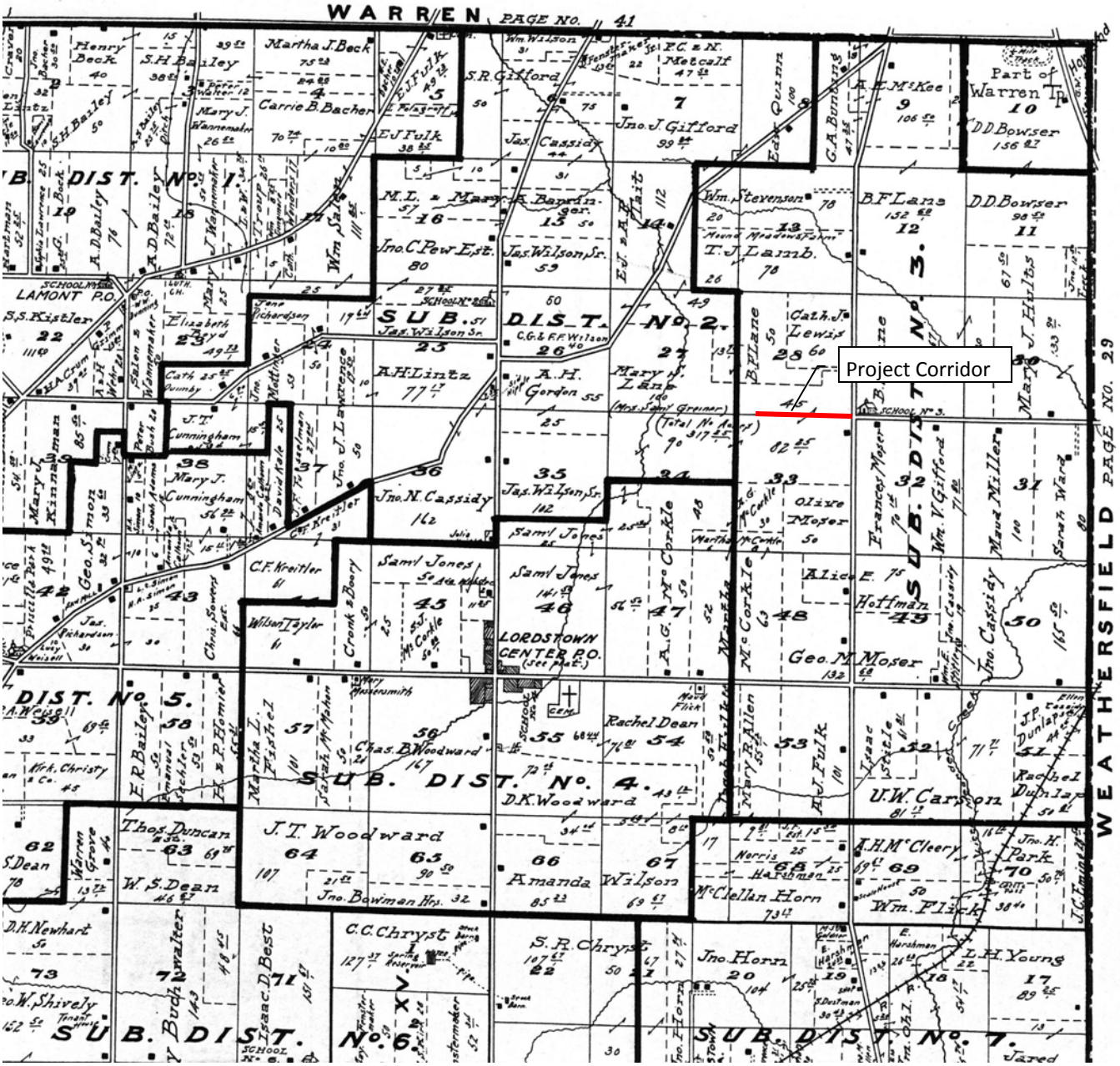

(American Atlas Company 1899)

Figure 4. Portion of 1899 map of Lordstown Township, Trumbull County, Ohio, showing location of project corridor.

0 1 2 mi

0 1 2 3 km

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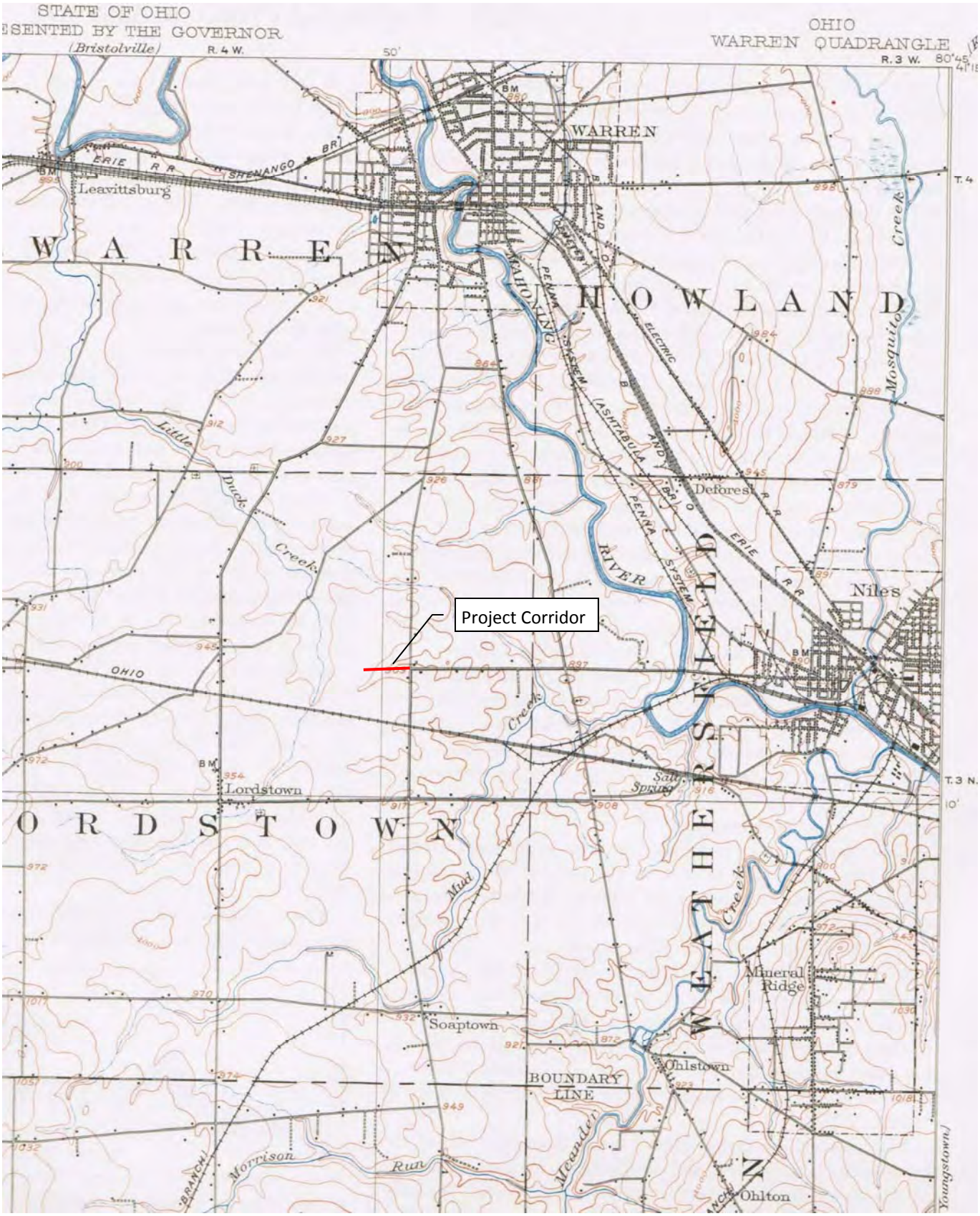

Figure 5. Portions of Warren, Ohio, 1908 15-minute topographic quadrangle map showing location of project corridor.

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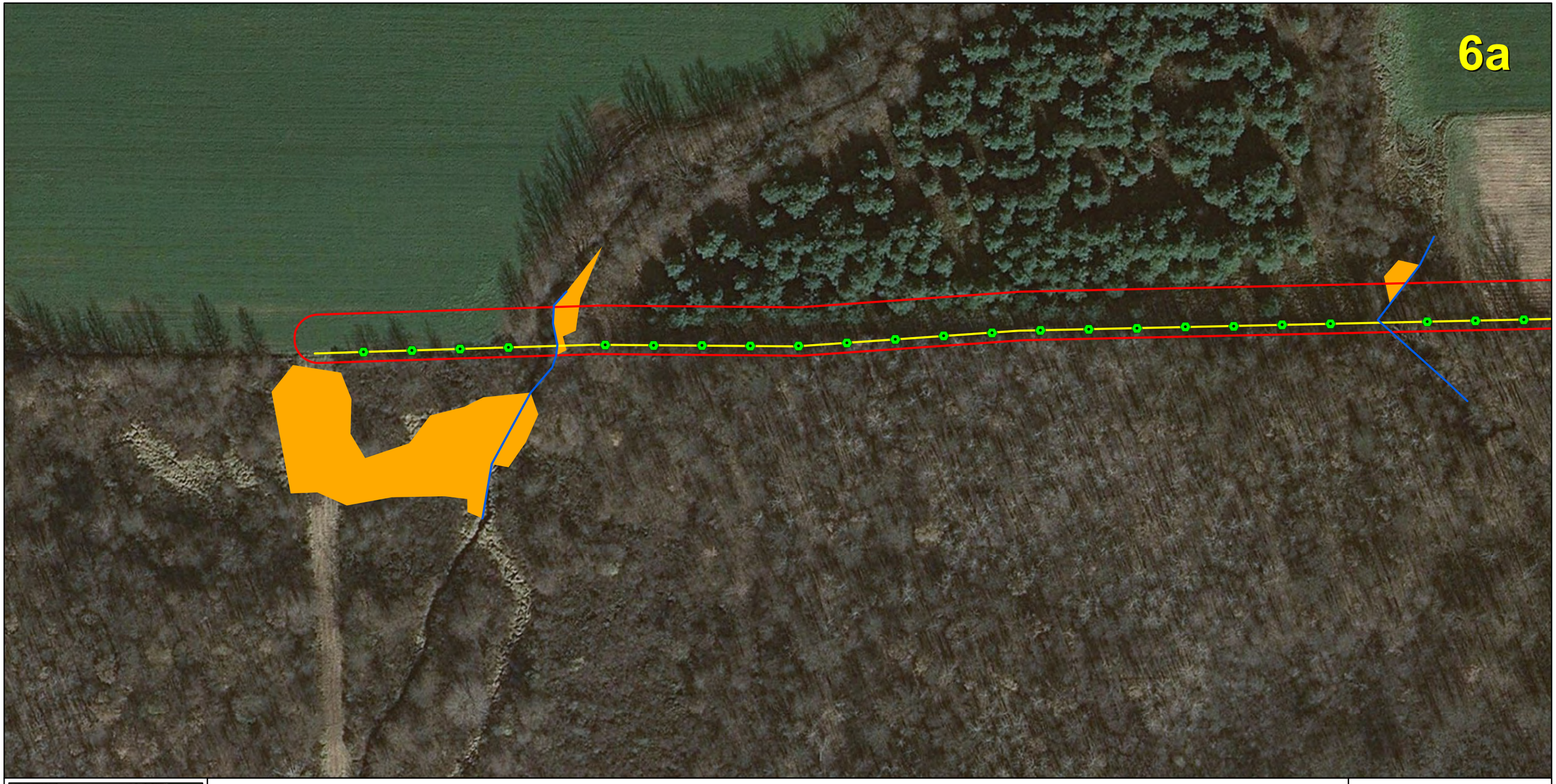

Figure 6a. Survey Coverage.

Shovel Test
Proposed Pipeline
Wetland
Stream
Project Boundary

200 100 0 200 Feet

60 30 0 60 Meters

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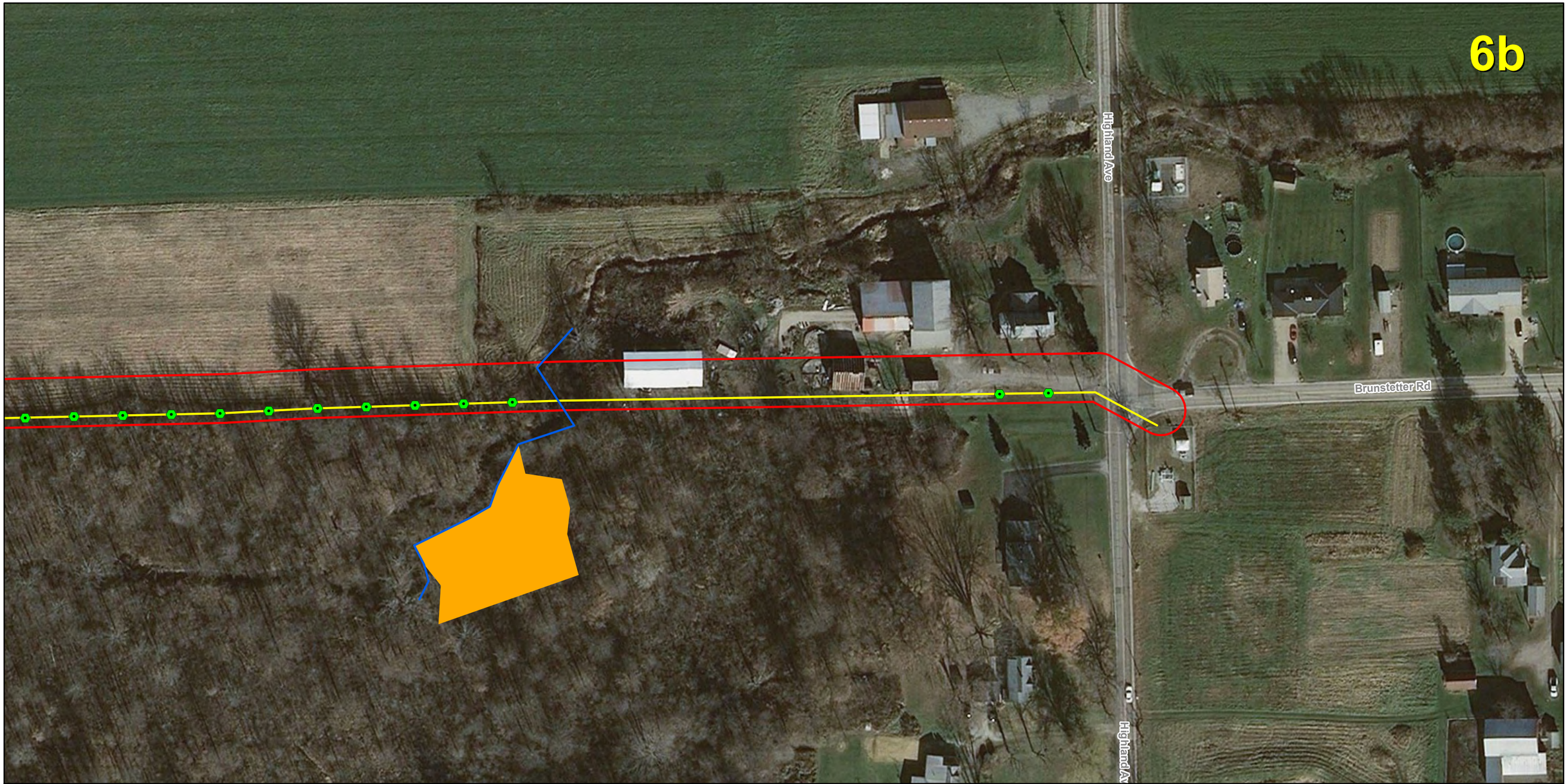

Figure 6b. Survey Coverage.

Shovel Test
Proposed Pipeline
Stream
Wetland
Project Boundary

200 100 0 200 Feet

60 30 0 60 Meters

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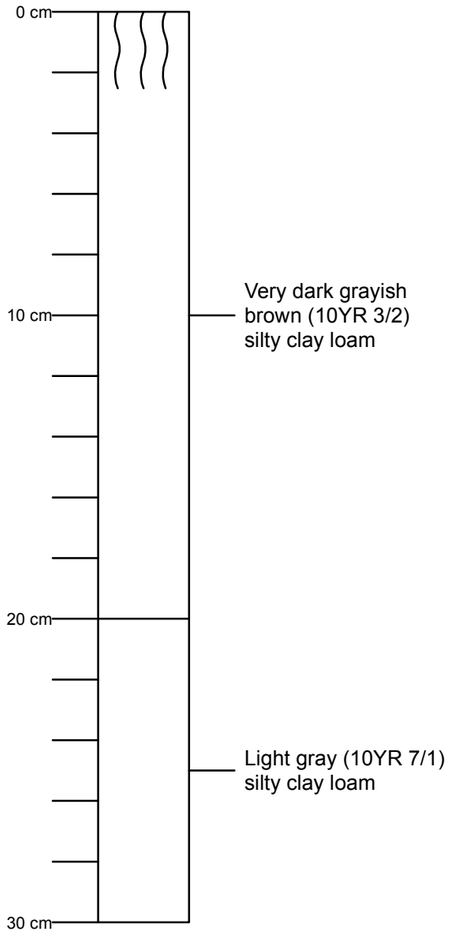
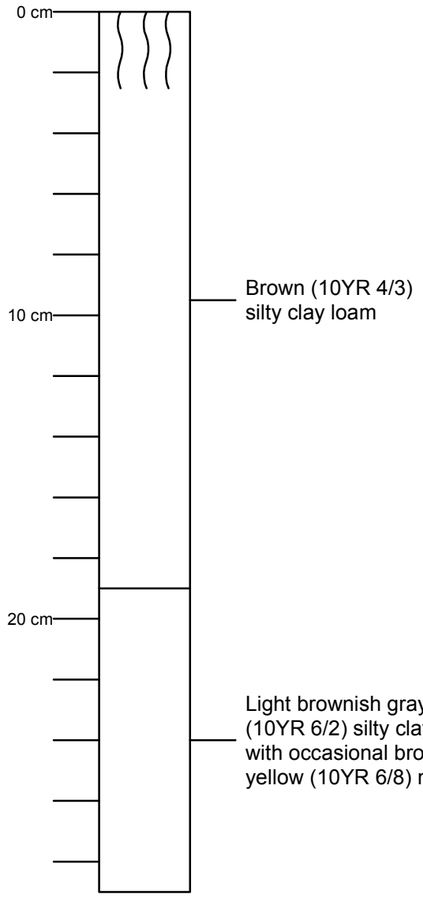
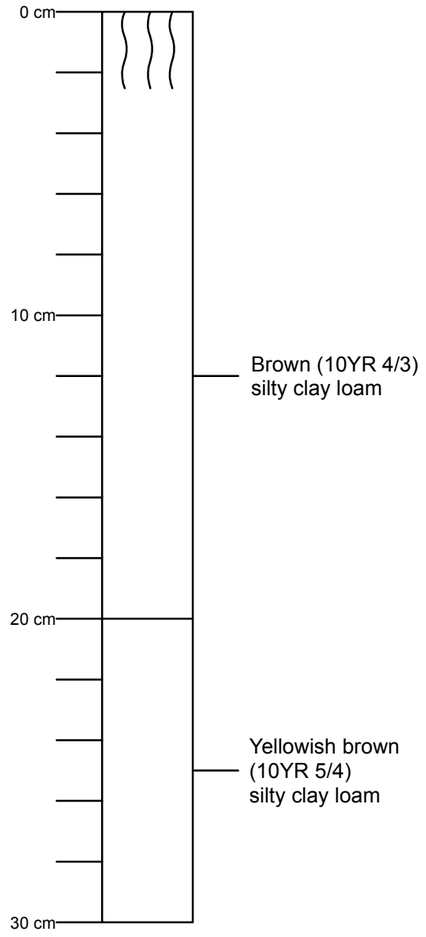
West End of Project Corridor



Western Portion of Wooded Area



Eastern Portion of Wooded Area



East Agricultural Field

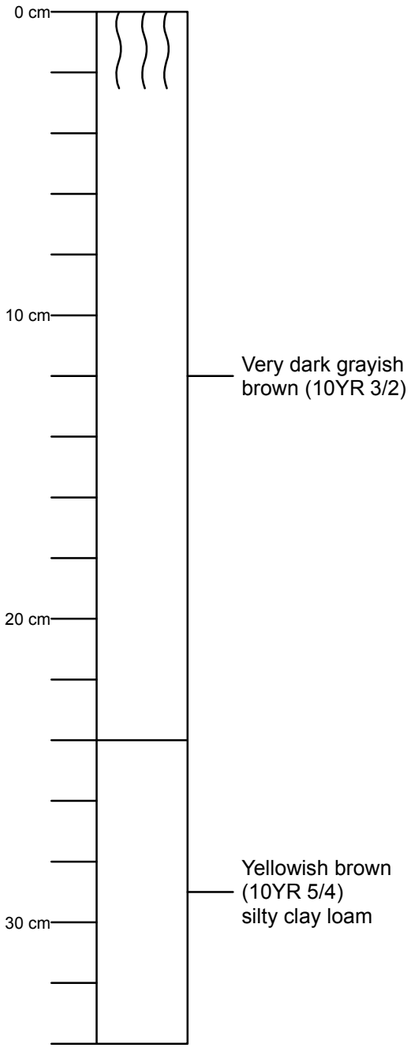


Figure 7. Soil Profiles within Project Corridor.

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APPENDIX B

Plates

Plate 1 - West end of corridor at pipeline tie-in - facing east

Plate 2 - West agricultural field - facing west

Plate 3 - Wooded portion of corridor - facing east

Plate 4 - Middle creek crossing - facing east

Plate 5 - East agricultural field - facing east

Plate 6 - East stream crossing - facing west

Plate 7 - Farmstead portion of corridor - facing east

Plate 8 - East end of corridor - facing east

Plate 9 - Additions on front and north sides of house - facing southwest

Plate 10 - Addition on rear of house - facing northeast

Plate 11 - Barn with addition on side - facing northwest

Plate 12 - Addition on rear and side of barn – facing north

Plate 13 - West pole barn with addition - facing northwest

Plate 14 - East pole barn - facing northwest

Plate 15 - Garage with barn beside and pole barn behind - facing west-northwest

Plate 16 - Concrete slab between barn garage and pole barn - facing west

Tara E Miletti (Services - 6)

From: Kessler, John [John.Kessler@dnr.state.oh.us]
Sent: Wednesday, January 16, 2013 4:55 PM
To: Tara E Miletti (Services - 6)
Cc: Tebbe, Sarah
Subject: FW: 12-787 Comments The East Ohio Gas Company- Brunstetter Connector

ODNR COMMENTS TO: Dominion; Tara Miletti, tara.e.miletti@dom.com

Project: The East Ohio Gas Company- Brunstetter Connector

Location: City 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.

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

The project is within the range of the Indiana bat (*Myotis sodalis*), a state and federally endangered species. The following species of trees have relatively high value as potential Indiana bat roost trees: Shagbark hickory (*Carya ovata*), Shellbark hickory (*Carya laciniosa*), Bitternut hickory (*Carya cordiformis)*, Black ash (*Fraxinus nigra*), Green ash (*Fraxinus pennsylvanica*), White ash (*Fraxinus americana*), Shingle oak (*Quercus imbricaria*), Northern red oak (*Quercus rubra*), Slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*), Eastern cottonwood (Populus deltoides), Silver maple (*Acer saccharinum*), Sassafras (*Sassafras albidum*), Post oak (*Quercus stellata*), and White oak (*Quercus alba*). Indiana bat habitat consists of suitable trees that include dead and dying trees of the species listed above with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees of the species listed above with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. If suitable trees occur within the project area, these trees must be conserved. If suitable habitat occurs on the project area and trees must be cut, cutting must occur between September 30 and April 1. If suitable trees must be cut during the summer months, a net survey must be conducted in May or June prior to cutting. Net surveys shall incorporate either two net sites per square kilometer of project area with each net site containing a minimum of two nets used for two consecutive nights, or one net site per kilometer of stream within the project limits with each net site containing a minimum of two nets used for two consecutive nights. If no tree removal is proposed, the project is not likely to impact this species.

The project is within the range of the clubshell (*Pleurobema clava*), a state and federally endangered mussel, and the snuffbox (*Epioblasma triquetra*), a state endangered and federal endangered mussel.
Due to the type of streams being impacted, the project is not likely to impact these species.

The project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and a federal candidate snake species. Due to the lack of records in the project area for this species and the land use of the project area, the project is not likely to impact this species.

The project is within the range of the mountain brook lamprey *(Ichthyomyzon greeleyi*), a state endangered fish. The DOW recommends no in-water work in perennial streams at from least April 15 to June 30 to reduce impacts to indigenous aquatic species and their habitat.

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

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

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

John Kessler, P.E.
Environmental Services Administrator
Office of Real Estate
Ohio Department of Natural Resources
2045 Morse Rd., Columbus, OH 43229-6605
phone: 614-265-6621
email: john.kessler@dnr.state.oh.us

Ohio EPA
40 years and moving forward
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

12/27/2012

EAST OHIO GAS CO
TARA MILETTI
320 SPRINGSIDE DR-STE 320
AKRON OH 44333

RE: Approval for coverage under Ohio EPA General Permit OHC000003
STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY.

Dear Applicant:

The Ohio Environmental Protection Agency has received a Notice of Intent (NOI) □for coverage under the above referenced general permit for:

Facility Name: BRUNSTETTER CONNECTOR
Facility Street / Location: W OF BRUNSTETTER RD & HIGHLAND AVE
County: Trumbull
City(ies) and Township(s): LORDSTOWN ;
Ohio EPA Facility Permit Number: 3GC06290*AG

This site/facility is approved for coverage under the above referenced Ohio EPA construction general permit (CGP). Please use your Ohio EPA facility permit number in all future correspondences. Please familiarize yourself with your permit. The permit contains requirements and prohibitions with which you must comply. Coverage remains in effect until a renewal general permit is issued and Ohio EPA has contacted you in writing instructing you to request continuing permit coverage.

Be aware that if more than one operator, as defined in the permit, will be engaged at a site, each operator shall seek coverage under the general permit. One operator shall submit an NOI and the additional operator(s) shall submit a Co-permittee NOI. Co-Permittees are covered under the same facility permit number. There is no fee associated with the Co-permittee NOI form.

Please be aware that this letter only authorizes discharges in accordance with the above referenced Storm Water Construction General Permit. The placement of fill into regulated waters of the state may require a 401 Water Quality Certification and/or Isolated Wetlands Permit from Ohio EPA. For further information on the 401/Isolated Wetlands Program please contact Mr. Jeff Boyles at: (614)644-2012 or at: Jeffrey.Boyles@epa.state.oh.us . Also a Permit-To-Install (PTI) is required for the construction of sanitary or industrial wastewater collection, conveyance, storage, treatment, or disposal facility; unless a specific exemption by rule exists. For more information on the PTI Program please contact the appropriate Division of Surface Water district office (the district within which the project is to be constructed) staff. Failure to obtain the required permits in advance is a violation of Ohio Revise Code 6111 and potentially subjects you to enforcement and civil penalities.

You may obtain additional information, copies of general permits and current forms/instructions from our web site at: **http://www.epa.ohio.gov/dsw/storm/stormform.aspx**

If you have any further questions, you should contact one of the following:

OHC000003 (Statewide CGP)
Mike Joseph (614) 752-0782 michael.joseph@epa.state.oh.us

OHCD00001 (Big Darby CGP) and OHCO00001 (Olentangy Permit)
Jason Fyffe (614) 728-1793 jason.fyffe@epa.state.oh.us

Or by calling (614) 644-2001 and asking to speak with a member of the Storm Water Unit

Sincerely,

Scott J. Nally
Director

CC: D BOGOEVSKI

CT Consultants
engineers | architects | planners

Since 1922

Letter of Transmittal

TO: Village of Lordstown
1455 Salt Springs Road
Lordstown, Ohio 44481

Date: January 25, 2013 Job No. 13092
Attn: Dave Harrison, Planning & Zoning Administrator
Re: DEO Brunstetter Connector
SWP3 Review

WE ARE SENDING YOU ☒Attached ☐Under Separate Cover via _____ the following items:

☐Shop Drawings ☒ Prints ☒Plans ☐ Samples ☒ Specifications

☒ Copy of Letter ☐ Change Order ☒ OHC-3 Permit

Copies	Date	No.	Description
1	1/23/13	2	SWP3 Drawings
1	12/20/12	1	SWP3 Specifications
1	1/7/12	3	DEO Correspondence
1	12/27/12	2	OEPA General Permit OHC000003; Permit # 3GC06290*AG
1	1/23/13	1	DEO Correspondence

THESE ARE TRANSMITTED as checked below:

☐ For approval ☒ Approved as submitted ☐ Resubmit ☐ Copies for Approval

☐ For your use ☐ Approved as noted ☐ Submit ☐ Copies for Distribution

☐ As requested ☐ Returned for correction ☐ Return ☐ Corrected prints

☐ For review and comment ☐ For Bids Due _____ ☐ Prints returned after loan to us

Remarks: Hello, Dave, the SWP3 submittal for DEO installation of 2,500 feet of 12-inch steel natural gas pipeline is hereby approved. Please call if you have any questions or comments. Thank you.

Copy to: _____
File
_____

Signed: JF Topolski
John F. Topolski, PE
440-530-2261

If enclosures are not as noted, kindly notify us at once.

I:\2013\13092\CORRESP\TRANSMIT\1301JFT1.Doc

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

1/30/2013 3:17:11 PM

in

Case No(s). 13-0203-GA-BNR

Summary: Correspondence Transmitting for Filing Staff Requested Documents - Part 6 electronically filed by Teresa Orahood on behalf of Dominion East Ohio Gas