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May 19, 2021

Ms. Tanowa M. Troupe  
Ohio Power Siting Board  
PUCO Docketing Division  
180 East Broad Street, 11<sup>th</sup> Floor  
Columbus, OH 43215-3716

Re: Case No. 16-253-GA-BTX  
Staff Report Condition No. 11 – Reading Cemetery Monitoring Report

Dear Ms. Troupe:

Please find attached the Archaeological Monitoring Reading Cemetery report for the Central Corridor Pipeline project.

Duke Energy Ohio sets forth this communication to certify our adherence with Condition No. 11 of the OPSB's Opinion, Order and Certificate pertaining to Case No. 16-253-GA-BTX.

Please contact me if you have any questions.

Sincerely,

Emily A. Olive, CP  
Paralegal



**Archaeological Monitoring, Reading Cemetery, Duke Energy Central  
Corridor Pipeline Project, Hamilton County, Ohio**

May 6, 2021

Duke Energy Ohio, Inc.

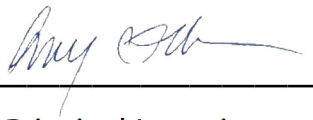
**Archaeological Monitoring, Reading Cemetery, Duke Energy Central Corridor Pipeline  
Project, Hamilton County, Ohio**

Prepared for:

Duke Energy Ohio, Inc.

Prepared by:

Amy C. Favret, M.A., RPA,

A handwritten signature in blue ink, appearing to read "Amy C. Favret", is positioned above a horizontal line.

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and

Kyle Mayer

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Archaeological Monitoring, Reading Cemetery, Duke Energy Central Corridor Pipeline Project,  
Hamilton County, Ohio

Project No: 672247CH  
Document Title: Archaeological Monitoring, Reading Cemetery, Duke Energy Central Corridor Pipeline  
Project, Hamilton County, Ohio  
Date: May 6, 2021  
Client Name: Duke Energy Ohio, Inc.  
Jacobs Project Mgr: Mike Frank  
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## Executive Summary

On behalf of Duke Energy Ohio, Inc. (Duke), Jacobs Engineering Group Inc (Jacobs) conducted archaeological monitoring for construction work related to the Central Corridor Pipeline Project (Project) in Hamilton County, Ohio. The Project consists of a 20.9-kilometer (13-mile) long, 20-inch diameter pipeline, planned to begin at a point near Duke Energy's existing WW Station (at the same location as the planned Highpoint Park Regulation Station) and extends generally southwest until it terminates at the planned Norwood Regulation Station, at the tie-in to the existing 20-inch diameter Line V.

In 2020, Jacobs completed a Phase I archaeological reconnaissance for the Project. The Area of Potential Effects was developed to consider potential Project impacts (both direct and indirect) to cultural resources. The direct APE was defined as the area proposed for ground disturbance, which included the 20.9-kilometer (13-mile) long, 15-meter (50-foot) wide maximum width pipeline corridor. The trench width for pipe installation is typically 0.9 to 1.5 meters (3 to 5 feet) across and 1.8 meters (6 feet) deep. Workspace widths in areas of valve installations, requiring welds and bends, and at HDD entry and exit locations, may be wider. In these areas, the direct APE width was expanded (estimated not to exceed 84 meters [275 feet]) to accommodate valve installation, welding work, and HDD entry and exit pits, as well as potential future shifts or expansions of temporary workspaces within the currently planned workspace corridor width (e.g., to accommodate equipment access or to avoid existing utility infrastructure). Work within existing public road right-of-way (ROW) will be confined to the roadway and the land under the footprint of the pipe alignment.

The Phase I Archaeological Reconnaissance report was submitted to the Ohio Historic Preservation Office (OHPO) on August 3, 2020. The Phase I archaeological reconnaissance resulted in the identification of one archaeological site. Site 33HA885 consists of a historic artifact scatter, likely associated with the former Nevison-Weiskopf Glass Manufacturer. No intact subsurface cultural features or remnants of the former glass manufacturer were located during the Phase I and no further work was recommended.

On September 14, 2020, the OHPO concurred with the results and recommendations of the report, with the condition that a cemetery monitoring plan and unanticipated discoveries plan (UDP) be developed for work near the Lockland-Reading/Reading Protestant Cemetery. The Lockland-Reading/Reading Protestant Cemetery is within the Project's Indirect APE and adjacent to the Direct APE, on its western side, along West Street and West Pleasant Street in Reading.

To fulfill OHPO's request, archaeological monitoring was conducted for all ground-disturbing activities within 30.5 meters (100 feet) of the cemetery. The objective of the archaeological monitoring was to identify and document any graves, burials, human remains, associated artifacts, or burial cases, or any other archaeological deposits that may be present in the project area.

Archaeological monitoring was conducted between March 15 and April 8, 2021. Soils within the trench exhibited extensive disturbance from the installation of existing utilities as well as previous road construction activities. No cultural materials and no evidence of burials, burial shafts, or human remains were observed. No additional archaeological work is recommended for the Project.

## 1. Introduction

On behalf of Duke Energy Ohio Inc. (Duke Energy), Jacobs Engineering Group, Inc. (Jacobs) conducted a Phase I archaeological reconnaissance for the proposed Central Corridor Pipeline Project in Hamilton County, Ohio. The project consists of a 20.9-kilometer (13-mile) long, 20-inch diameter pipeline, beginning near Duke Energy's existing WW Station (at the same location as the planned Highpoint Park Regulation Station) and extends generally southwest until it terminates at the planned Norwood Regulation Station, at the tie-in to Duke's existing 20-inch diameter Line V.

For the Phase I cultural resources survey, the Area of Potential Effects (APE) was developed to consider potential Project impacts (both direct and indirect) to cultural resources. The direct APE was defined as the area proposed for ground disturbance, which included the 20.9-kilometer (13-mile) long, 15-meter (50-foot) wide maximum width pipeline corridor. The trench width for pipe installation is typically 0.9 to 1.5 meters (3 to 5 feet) across and 1.8 meters (6 feet) deep. Workspace widths in areas of valve installations, requiring welds and bends, and at horizontal directional drill (HDD) entry and exit locations, may be wider. In these areas, the direct APE width was expanded (estimated not to exceed 84 meters [275 feet]) to accommodate the additional work space, as well as potential future shifts or expansions of temporary workspaces (e.g., to accommodate equipment access or to avoid existing utility infrastructure). Work within the existing public road right-of-way (ROW) will be confined to the roadway and the land under the footprint of the pipe alignment.

A records search was performed in order to evaluate the impacts of the Project on previously identified cultural resources and to gauge the potential for previously unidentified resources that could be eligible for listing on the National Register of Historic Places (NRHP). Within 1.6 kilometers (one mile) of the Project, the literature review identified 16 Ohio Archaeological Inventory (OAI) sites, 441 Ohio Historic Inventory (OHI) resources, 10 Ohio Genealogical Society (OGS)-recorded cemeteries, four individual National Register of Historic Places (NRHP)-listed resources, and two NRHP-listed historic districts. In addition, six Phase I cultural resources surveys and two architectural and historical investigations have been completed by others within the Study Area radius. None of the previously inventoried cultural resources surveys were located within the limits of the APE.

Phase I archaeological reconnaissance and architectural and historical resources investigations were completed for the project in June and July 2020. The Phase I Archaeological Reconnaissance report was submitted to the Ohio Historic Preservation Office (OHPO) on August 3, 2020. The Phase I archaeological reconnaissance resulted in the identification of one archaeological site. Site 33HA885 consists of a historic artifact scatter, likely associated with the former Nevison-Weiskopf Glass Manufacturer. No intact subsurface cultural features or remnants of the former glass manufacturer were located during the Phase I work and no further work was recommended.

On September 14, 2020, the OHPO concurred with the results and recommendations of the report, with the condition that a cemetery monitoring plan and unanticipated discoveries plan (UDP) be developed for work near the Lockland-Reading/Reading Protestant Cemetery. The Lockland-Reading/Reading Protestant Cemetery is within the Project's Indirect APE and adjacent to the Direct APE, on its western side, along West Street and West Pleasant Street in Reading.

The Cemetery Monitoring Plan and UDP included visual inspection of the APE, mapping, GPS recordation, and photo documentation during ground-disturbing activities, archaeological monitoring, and records including a daily log of observations made during the field work and construction activity. In addition, protocols for the handling of unanticipated discovery of human burials were presented. Per the OHPO, the cemetery avoidance/monitoring plan was to include:

- 1) A commitment by Duke Energy to conduct archaeological monitoring and take all precautions to avoid disturbing human remains;

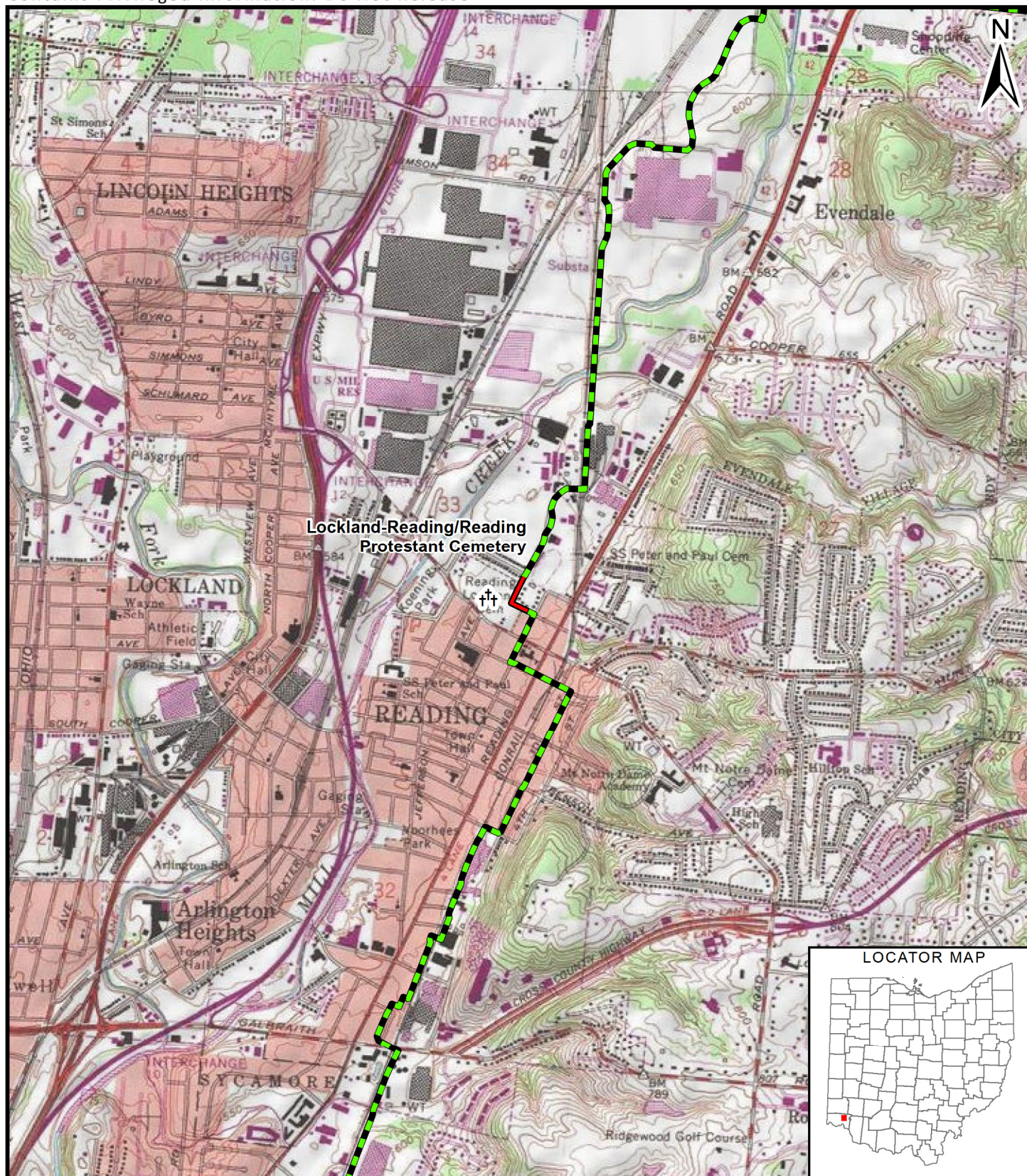
- 2) Delineation of the cemetery boundaries and burial locations established and/or potentially unknown as related to project plans;
- 3) A detailed discussion on disinterment, identification and notification of next of kin for unmarked burials;
- 4) A description of an appropriate location for reinternment of unmarked burials; and
- 5) Evidence that the entity in charge of the cemetery has been consulted and approved the plan (Grooms 2020).

The cemetery monitoring plan and UDP were prepared in accordance with guidance presented in the OHPO's September 14, 2020 letter and presented the field methodology for the archaeological monitoring as well as procedures in the event of an inadvertent discovery of human remains or graves within the Project's Area of Potential Effects (APE). In addition, this plan was reviewed and approved by Ms. Gail Walker of the Reading Cemetery Association on October 1, 2020 (see Appendix A).

Fieldwork was conducted in March and April of 2021. Key personnel committed to the project include Principal Investigator Amy C. Favret, M.A., and field archaeologists Derrick Cole and Kyle Mayer. Ms. Favret, Mr. Cole, and Mr. Mayer served as report co-authors and performed archaeological monitoring. April Greenberg and Mr. Mayer conducted the records search. Ms. Greenberg also contributed to report graphics.

This report presents brief environmental and cultural contexts for the Project area in Section 2.0. Section 3.0 outlines the field and laboratory methods used during the archaeological monitoring. Section 4.0 discusses the results of the monitoring fieldwork, followed by the summary and recommendations in Section 5.0. The references cited appear in Section 6.0.





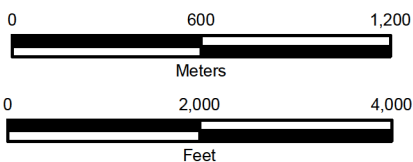
**LEGEND:**

++ Lockland-Reading/Reading Protestant Cemetery Location

Proposed Amended Route

Monitored Portion of Centerline

BASE MAP SOURCE:  
USGS 7.5-minute Topographic Quadrangle:  
Cincinnati East, OH (published 1982)



C314V Central Corridor  
Pipeline Extension Project  
Hamilton County, OH

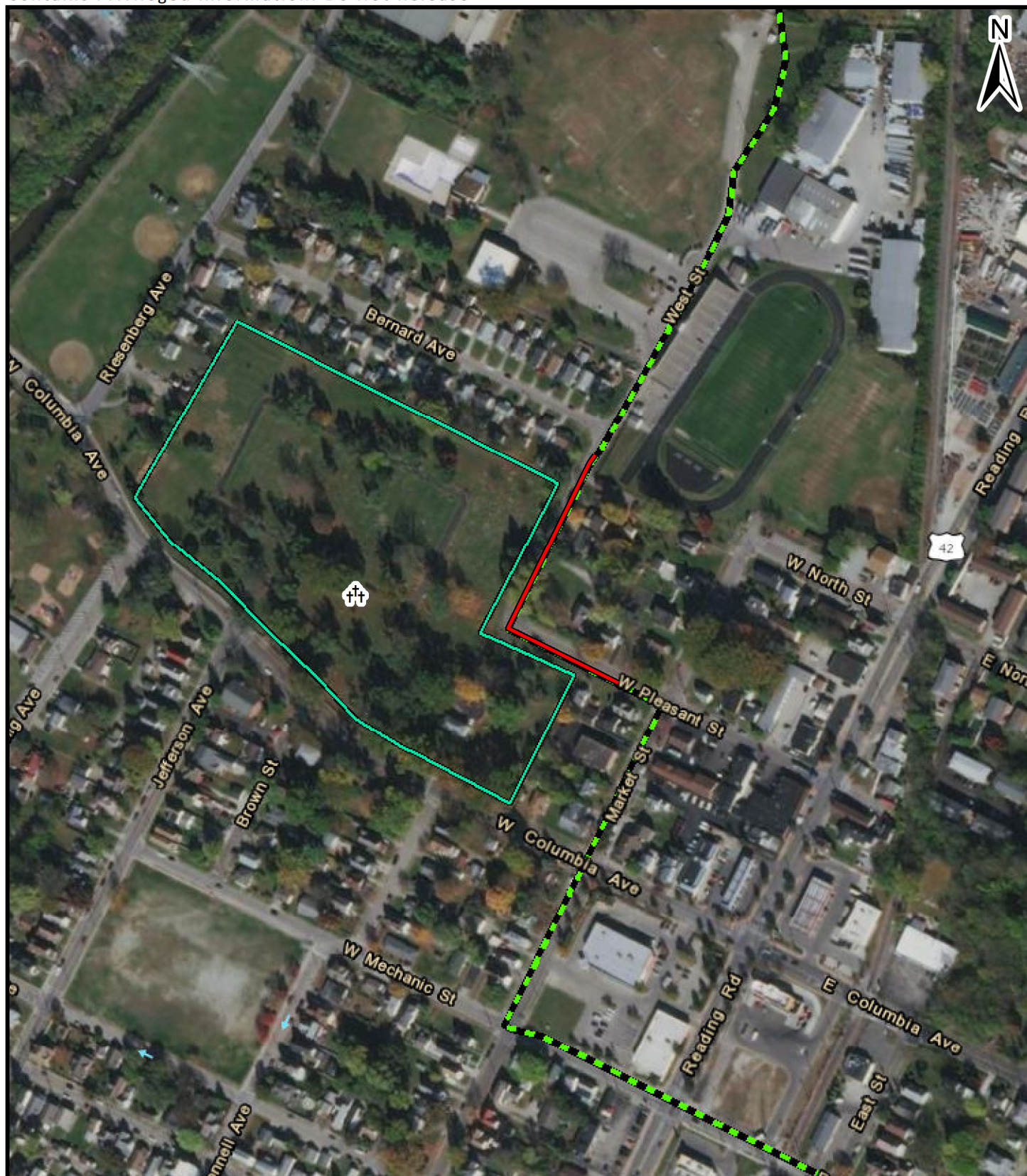
**FIGURE 1.1**  
**PROJECT LOCATION**

PN: 672247CH

DATE: 4/27/2021

**Jacobs**





**LEGEND:**

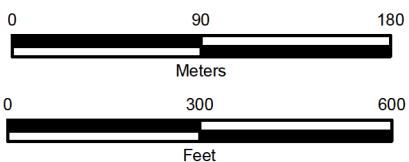
⛪ Lockland-Reading/Reading Protestant Presbyterian Cemetery Location (OGS ID 4746)

--- Proposed Amended

— Monitored Portion of APE

□ Cemetery Boundary

BASE MAP SOURCE:  
Esri World Imagery Layer, 2019



C314V Central Corridor  
Pipeline Extension Project  
Hamilton County, OH

**FIGURE 1.2**  
**LOCKLAND-READING/READING**  
**PROTESTANT CEMETERY**  
**OVERVIEW**

PN: 672247CH

DATE: 4/27/2021

**Jacobs**



## 2. Research Design

### 2.1 Background Research

#### 2.1.1 Literature Review

Jacobs conducted a preliminary cultural resources desktop study in 2016 for the Project. The results of this study were submitted in a letter report to the Ohio Historic Preservation Office (OHPO) on September 28, 2016. In a response dated October 19, 2016, the OHPO recommended that a Phase I cultural resources survey be conducted within the Area of Potential Effects (APE).

Following the 2016 submittal, Duke Energy made adjustments to the preferred route and, in the same timeframe, the OHPO online mapping system was updated with new records. Therefore, an additional records review was conducted, and an updated literature review and preliminary work plan document was submitted to the OHPO and Ohio Power Siting Board (OPSB) on March 10, 2017.

On November 21, 2019, in OPSB Case No. 16-0253-GA-BTX, the OPSB issued its Opinion, Order and Certificate (Certificate), formally approving the Project based on a specific route. This approved route was referred to as the alternate route in Duke Energy's certificate application. Subsequently, Jacobs conducted an additional review of the OHPO's online GIS mapping system in January 2020, to capture resources that may have been added subsequent to the previous desktop studies.

The records reviewed included the Ohio Archaeological Inventory (OAI), the Ohio Historic Inventory (OHI), Determination of Eligibility (DOE) files, the National Register of Historic Places (NRHP), Ohio Genealogical Society (OGS)-recorded cemetery files, National Historic Landmarks (NHLs), historic bridges, and previous cultural resources investigation reports.

Following the review and concurrence of the Phase I archaeological report, and the preparation of the Monitoring Plan and Unanticipated Discovery Plan, Jacobs conducted supplementary records research using the OHPO online mapping database in April 2021. The re-examination did not identify any newly inventoried cultural resources within the study area.

The detailed results of the archaeological records reviews can be found in the Phase I archaeological reconnaissance report (see Favret et al. 2020).

#### 2.1.2 Lockland-Reading/Reading Protestant-Presbyterian Cemetery

The Lockland-Reading/Reading Protestant-Presbyterian Cemetery (OGS ID #4746; OHI #HAM0521350) (Reading Cemetery) is within the indirect APE and adjacent to the direct APE (Figure 1.2). According to the OGS record, the Reading Cemetery dates from 1827. The OHI form for the cemetery indicates that it is the oldest of four cemeteries in Reading. A portion of the cemetery in the current northeast section served as the churchyard for the Reading Presbyterian Church, which was founded in 1823 as the city's first religious group. The oldest portion of the cemetery is south of Pleasant Street, near West Street, adjacent to the Project APE. According to the OHI form, the burial markers in this portion of the cemetery date from the 1820s and 1830s.

Prior to the construction of the first church building, the congregation of the Reading Presbyterian Church met in a nearby schoolhouse prior to the church's founding. On March 23, 1823 the congregation purchased one acre of land for thirty dollars from Bridget and Abraham Voorhees, founder of "Voorheestown," now Reading. The first church building was constructed from 1826 to 1827, in the northeast section of the cemetery, along West Pleasant in the area adjacent to the APE, now known as the Old Presbyterian section (Photograph 2.1). The original church was constructed of brick. The then 17-member congregation elected Reverend Benjamin Graves



as pastor on May 17, 1827 (Hutchison 1876). Reverend Graves wrote of the initial site of the church, "Pretty hard soil at that, as the road on which the church was built was the racetrack on the Sabbath, and other things in like manner" (Reading Historical Society, 2001).



Photograph 2.1. The Old Presbyterian Section of Lockland-Reading/Reading Presbyterian Cemetery, facing north.

In 1837-1838 the National Presbyterian Church experienced a schism between what were known as the Old school and New school camps. The Reading church congregation ostensibly remained in support of the Old School camp. Members of the Reading Presbyterian Church who subscribed to the New School met separately, though in the same building for a time (Reading Historical Society, 2001). The New School members went on to hold services in a nearby log cabin and in 1850, a church was constructed in Lockland to accommodate the New School members. As a result of this split, the Reading Presbyterian congregation lost half its members, though both congregations continued to grow over time (Reading Historical Society, 2001). In 1842, a more permanent church building was constructed at the northeast corner of the intersection of Columbia Avenue and Market Street, and services were held here until 1870. This building still stands today at 2826 West Columbia Avenue (Reading Historical Society, 2001; Hamilton County Board of Commissioners, 1991; Photograph 2.2). After 1850, the original church building within the cemetery grounds was dismantled. Bricks from the original church and the original bells were incorporated into the cemetery's receiving vault (Reading Historical Society, 2001).



Photograph 2.2. Reading Presbyterian Church Building, from 1842 to 1870, facing north.

Harriet Wilson wrote of her memories of the church and cemetery in 1890, "Back of the church was the graveyard, which was truly 'God's Acre,' given by the founders of the village....One long row of graves told of the blotting out of a large family in a few days by the terrible cholera (of 1833). The cemetery was enlarged and is now dotted with the monuments of many who in life were gathered together in the old church" (Reading Historical Society 2001).

Around 1870, the cemetery was sold to the Reading-Lockland Cemetery Association (Hamilton County Board of Commissioners 1991). In that same year on October 14, the Lockland and Reading branches of the Presbyterian churches reunited along with the Old and New schools of the Presbyterian church nationwide. But by 1877, attendance was low in Reading, and all services moved to the nearby Lockland church location. Historic aerial photographs show that West and W. Pleasant Streets were constructed sometime between 1932 and 1956.

## 2.2 Environmental Context

The Project area is located within the broad floodplain of Mill Creek. The APE is approximately 413 meters (1,355 feet) east of Mill Creek. Soils within the current Project area are typical of built up environments with high population density. This portion of the APE is in a heavily urbanized area on two residential city streets and thus is considered urban land. A full environmental context section presenting information on the prehistoric and historic environmental setting of the general Project area is contained in the Phase I report (see Favret et al. 2020).



### **3. Methodology**

This section describes the research design and field methods employed during the archaeological monitoring. The objective of the archaeological monitoring was to identify, recover, protect, and document any human remains, associated artifacts, or burial cases that may be present in the project area. The APE for the project is currently located under paved, residential roads, thus traditional archaeological survey was not feasible.

#### **3.1 Field Methods**

Jacobs conducted the archaeological monitoring using methods consistent with the OHPO's *Archaeological Guidelines* (1994) and the *Secretary of the Interior's Standards and Guidelines for Archaeological and Historic Preservation* (National Park Service 1983). A Secretary of the Interior (SOI)-qualified archaeologist supervised monitoring of all ground-disturbing activities within 30.5 meters (100 feet) of the Lockland-Reading/Reading Protestant Cemetery. Ground-disturbing activities included removal of asphalt, removal of fill, and any other activity that resulted in physical ground disturbance within 30.5 meters (100 feet) of the cemetery boundaries.

Monitoring activities included the following methodology:

- Visual inspection of the APE within 30.5 meters (100 feet) of the cemetery.
- Mapping, GPS recordation, and photo documentation of the APE within 30.5 meters (100 feet) of the cemetery, and during ground-disturbing activities.
- Archaeological monitoring of all manual and mechanical excavations during ground disturbance. In the event potential cultural deposits or artifacts would have been encountered, archaeologists would have halted excavations and recorded the cultural deposits through photographs, profile and plan view mapping, and recordation of the deposits with a GPS unit capable of sub-meter accuracy.
- Archaeological staff also maintained systematic records including a daily monitoring log. The daily logs captured observations made during monitoring activities.
- Archaeologists photographed the general setting of the project area and recorded the cemetery property boundaries and gas pipe location with a GPS unit.

#### **3.2 Laboratory Methods**

No cultural materials were observed during the archaeological monitoring; therefore, no discussion of laboratory methodology is included.

## 4. Results

Archaeological monitoring began March 15, 2021 when ground-disturbing activities within 30.5 meters (100 feet) of the Reading Cemetery started and was completed on April 8, 2021. Mechanical excavation occurred along the centerline of the project corridor as well as two additional trenches excavated at the intersection of West Street and Bernard Avenue for a temporary residential water line.

The centerline trench began approximately 7.5 meters (24.6 feet) south of the intersection of West Street and Bernard Avenue and continued south on West Street to the intersection with West Pleasant Street. The trench turned east and continued in the eastbound lane of West Pleasant Street and ended approximately 25 meters (82 feet) from the intersection of West Pleasant and Market Streets. The section of centerline trench along West Street was approximately three meters (9.8 feet) wide and varied in depth between approximately 2.5 and 3.5 meters (8.2 and 11.5 feet). Along West Pleasant Street, there were fewer existing utilities which allowed for a smaller trench, measuring approximately one meter (3.3 feet) wide and 2.5 to 3.5 meters (8.2 to 11.5 feet) deep. In areas with higher likelihood of cave-ins or in cases of road asphalt breaking and causing unsafe conditions, the trench was widened for shoring. The total length of the main trench was approximately 250 meters (820 feet) (Photographs 4.1 through 4.14).

Soils within the trench along West Street consist of road gravel underlain with fill of light brown sand mixed with yellowish brown clay (Photographs 4.3 and 4.4). A higher concentration of sand was found at the northern end of West Street and around existing utilities crossing under the road perpendicular to the centerline trench. No intact soils were observed during the trenching along West Street. As the excavation moved south toward the intersection of West and West Pleasant Streets, sand was less prevalent, and soils were a mix of mottled clays. A thin layer of degraded brick and brick fragments were observed directly under the asphalt at the intersection of West and West Pleasant Streets; however, no whole bricks were observed (Photograph 4.6 and 4.7). The brick was coarse, and no markings were evident. Based on the vertical position of the brick layer, it appears this may be a degraded remnants of brick pavers within the road; however, no intact bricks were observed, and the layer only extended for approximately one meter. No other cultural materials were found.

At the intersection of West and West Pleasant Streets, the trench was widened to allow for greater room to place the pipe elbow into the trench (Photograph 4.8). The trench section continued east, under West Pleasant Street, and contained a higher concentration of mottled clay and gravel (Photographs 4.10 through 4.13). Sand was encountered in areas near existing utilities, including a sewer line that crossed through the intersection and just north of the trench on West Pleasant Street. During excavation along West Pleasant Street the southern wall of the trench was within approximately 7.5 meters (24.6 feet) of the Reading Cemetery fence line. No cultural material was encountered and there was no evidence of grave shafts or burials within the trench.

Two temporary water line trenches (T0318-01 and T0318-02) were excavated under the sidewalk in front of 1552 West Street and in the southwest corner of the intersection of West Street and Bernard Avenue, respectively (see Figure 4.1; Photographs 4.15 and 4.16). These trenches were excavated in order to reach residential water lines so a temporary water line could be put in place to return water service to houses following a water main break. Both trenches were approximately two meters by two meters (6.6 feet by 6.6 feet) and were excavated to a depth of approximately 1.5 meters (4.9 feet). Soils in the trenches were predominately light brown sand mixed with yellowish brown clay. No cultural material was found in the water line trenches.

The archaeological monitoring did not identify any cultural materials, evidence of grave shafts, or burials within the APE.

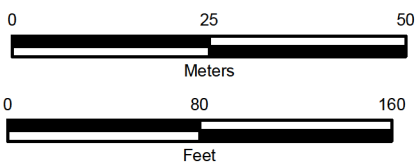




**LEGEND:**

- Temporary Waterline Trench
- Proposed Amended Route
- Monitored Portion of Centerline
- Cemetery Boundary

BASE MAP SOURCE:  
Esri World Imagery Layer, 2019



C314V Central Corridor  
Pipeline Extension Project  
Hamilton County, OH

**FIGURE 4.1**  
**LOCKLAND-READING/READING**  
**PROTESTANT CEMETERY**  
**RESULTS**

PN: 672247CH

DATE: 4/27/2021

**Jacobs**





Photograph 4.1. Overview of Project APE, intersection of West Street and Bernard Avenue, facing south.



Photograph 4.2. Centerline trench, asphalt removal, West Street, facing south.





Photograph 4.3. Centerline trench soil profile, West Street, facing west.



Photograph 4.4. Centerline trench soils and existing utilities, West Street, facing west.





Photograph 4.5. Overview of Project APE, intersection of West and West Pleasant Streets, facing north.



Photograph 4.6. Centerline trench profile, brick fragments, intersection of West Street and West Pleasant Street, facing west.





Photograph 4.7. Centerline trench, brick layer and small brick fragments, intersection of West Street and West Pleasant Street.



Photograph 4.8. Centerline trench, intersection of West Street and West Pleasant Street, facing northeast.



Photograph 4.9. Overview, centerline trench, asphalt removal along Pleasant Street, facing west.



Photograph 4.10. Centerline trench, along Pleasant Street, facing north.





Photograph 4.11. Centerline trench, soil profile, West Pleasant Street, facing south.



Photograph 4.12. Overview of centerline trench, along West Pleasant Street, facing south.





Photograph 4.13. Overview of APE, centerline trench at West Pleasant Street terminus.



Photograph 4.14. Overview of Project APE, from terminus on West Pleasant Street, facing west.





Photograph 4.15. Water line trench T0318-01, 1552 West Street, west wall profile, facing west.



Photograph 4.16. Water line trench T0318-02, intersection of West Street and Bernard Avenue, north wall profile, looking north.

## 5. Summary and Recommendation

This report presents the background research, field strategy, and results of the archaeological monitoring within 30.5 meters (100 feet) of the Lockland-Reading/Reading Presbyterian Cemetery. The Project includes the construction, operation, and maintenance of a 20.9-kilometer (13-mile) long, 20-inch diameter pipeline in northeastern Hamilton County. The pipeline begins at a point near Duke Energy's existing WW Station (at the same location as the planned Highpoint Park Regulation Station), and extends in a general southwesterly direction until it terminates near the existing Norwood Station, at the tie-in to the existing 20-inch diameter Line V. A 250-meter (820 feet) section of the Project passes the Reading Cemetery. To fulfill OHPO's request, archaeological monitoring was conducted for all ground-disturbing activities within 30.5 meters (100 feet) of the cemetery. The objective of the archaeological monitoring was to identify and document any graves, burials, human remains, associated artifacts, or burial cases, or any other archaeological deposits that may be present in the project area.

Mechanical excavation and archaeological monitoring occurred within the APE, beginning approximately 7.5 meters (24.6 feet) south of the intersection of West Street and Bernard Avenue and terminating approximately 25 meters (82 feet) west of the intersection of West Pleasant and Market Streets. The centerline trench was between one and three meters (3.3 and 9.8 feet) wide and was excavated to depths between 2.5 and 3.5 meters (8.2 and 11.5 feet). Two additional two-by-two-meter (6.6-by-6.6-feet) trenches were excavated at 1552 West Street and in the southwest corner of the intersection of West Street and Bernard Avenue for a temporary residential water line.

The archaeological monitoring took place between March 15 and April 18, 2021. Soils within the centerline trench and the two water line trenches exhibited extensive disturbance from existing utilities and road construction. Soils along West Street included light brown sand mixed with yellowish brown clay. Sand was prevalent on the northern end of the trench, while the southern end exhibited more clay content. At the intersection of West Street and West Pleasant Street, a small section of the trench included degraded brick and brick fragments immediately below the asphalt. The brick fragments were heavily degraded and there was no evidence of intact brick roadway or subsurface structural deposits. Soils along West Pleasant Street included yellowish brown clays.

No evidence of intact subsurface cultural materials was observed during the monitoring. There is no evidence of grave shafts, burials, or human remains within the APE. No additional archaeological work is recommended for this portion of the APE.

## 6. References

Favret, Amy C.

2020 *Duke Energy, C314V Central Corridor Pipeline Project, Cemetery Monitoring Plan and Unanticipated Discovery Plan, Hamilton County, Ohio (OHPO #2016HAM36589)*. Jacobs Engineering Group, Inc. Prepared for Duke Energy Ohio, Inc.

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Hamilton County Board of County Commissioners

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1994 *Archaeological Guidelines*. Ohio Historical Society, Columbus.

Reading Historical Society

2001 *Reading Ohio Sesquicentennial, History of Reading, Ohio*. Reading Historical Society

## **Appendix A. Monitoring Plan and Unanticipated Discovery Plan**





**C314V Central Corridor Pipeline Project**  
**Cemetery Monitoring Plan and Unanticipated Discovery Plan**

**Hamilton County, Ohio (OHPO #2016HAM36589)**

October 2, 2020

**Duke Energy Ohio, Inc.**



**Duke Energy, C314V Central Corridor Pipeline Project, Cemetery Monitoring Plan and  
Unanticipated Discovery Plan, Hamilton County, Ohio (OHPO #2016HAM36589)**

Project No: 672247CH  
Document Title: Duke Energy, C314V Central Corridor Pipeline Project, Cemetery Monitoring Plan and  
Unanticipated Discovery Plan (OHPO #2016HAM36589)  
Date: October 2, 2020  
Client Name: Duke Energy Ohio, Inc.  
Project Manager: Mike Frank  
Author: Amy C. Favret, M.A., RPA

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## 1. Introduction

On behalf of Duke Energy Ohio Inc. (Duke Energy), Jacobs Engineering Group, Inc. (Jacobs) conducted a Phase I archaeological reconnaissance for the proposed Central Corridor Pipeline Project in Hamilton County, Ohio. The proposed project consists of a 20.9-kilometer (13-mile) long, 20-inch diameter pipeline, planned to begin at a point near Duke Energy's existing WW Station (at the same location as the planned Highpoint Park Regulation Station) and extends generally southwest until it terminates at the planned Norwood Regulation Station, at the tie-in to the existing 20-inch diameter Line V.

For the Phase I cultural resources survey, the Area of Potential Effects (APE) was developed to consider potential Project impacts (both direct and indirect) to cultural resources. The direct APE is defined as the area proposed for ground disturbance, which includes the 20.9-kilometer (13-mile) long, 15-meter (50-foot) wide maximum width pipeline corridor. The trench width for pipe installation is typically 0.9 to 1.5 meters (3 to 5 feet) across and 1.8 meters (6 feet) deep. Workspace widths in areas of valve installations, requiring welds and bends, and at HDD entry and exit locations, may be wider. In these areas, the direct APE width was expanded (estimated not to exceed 84 meters [275 feet]) to accommodate valve installation, welding work, and HDD entry and exit pits, as well as potential future shifts or expansions of temporary workspaces within the currently planned workspace corridor width (e.g., to accommodate equipment access or to avoid existing utility infrastructure). Work within existing public road right-of-way (ROW) will be confined to the roadway and the land under the footprint of the pipe alignment.

A records search was performed in order to evaluate the impacts of the Project on previously identified cultural resources and to gauge the potential for previously unidentified resources that could be eligible for listing on the National Register of Historic Places (NRHP). Within 1.6 kilometers (one mile) of the Project, the literature review identified 16 Ohio Archaeological Inventory (OAI) sites, 441 Ohio Historic Inventory (OHI) resources, 10 Ohio Genealogical Society (OGS)-recorded cemeteries, four individual National Register of Historic Places (NRHP)-listed resources, and two NRHP-listed historic districts. In addition, six Phase I cultural resources surveys and two architectural and historical investigations have occurred within the Study Area radius. None of the previously inventoried cultural resources surveys was located within the limits of the APE.

Phase I archaeological reconnaissance and architectural and historical resources investigations were completed for the project in June and July 2020. The Phase I Archaeological Reconnaissance report was submitted to the Ohio Historic Preservation Office (OHPO) on August 3, 2020. The Phase I archaeological reconnaissance resulted in the identification of one archaeological site. Site 33HA885 consists of a historic artifact scatter, likely associated with the former Nevison-Weiskopf Glass Manufacturer. No intact subsurface cultural features or remnants of the former glass manufacturer were located during the Phase I and no further work was recommended.

On September 14, 2020, the OHPO concurred with the results and recommendations of the report, with the condition that a cemetery monitoring plan and unanticipated discoveries plan (UDP) be developed for work near the Lockland-Reading/Reading Protestant Cemetery. The Lockland-Reading/Reading Protestant Cemetery is within the Project's Indirect APE and adjacent to the Direct APE, on its western side, along West Street and West Pleasant Street in Reading.

The Cemetery Monitoring Plan and UDP includes visual inspection of the APE, mapping, GPS recordation, and photo documentation during ground-disturbing activities, archaeological monitoring, and records including a daily log of observations made during the field work and construction activity. In addition, protocols for the handling of unanticipated discovery of human burials are presented. Per the OHPO, the cemetery avoidance/monitoring plan should include:

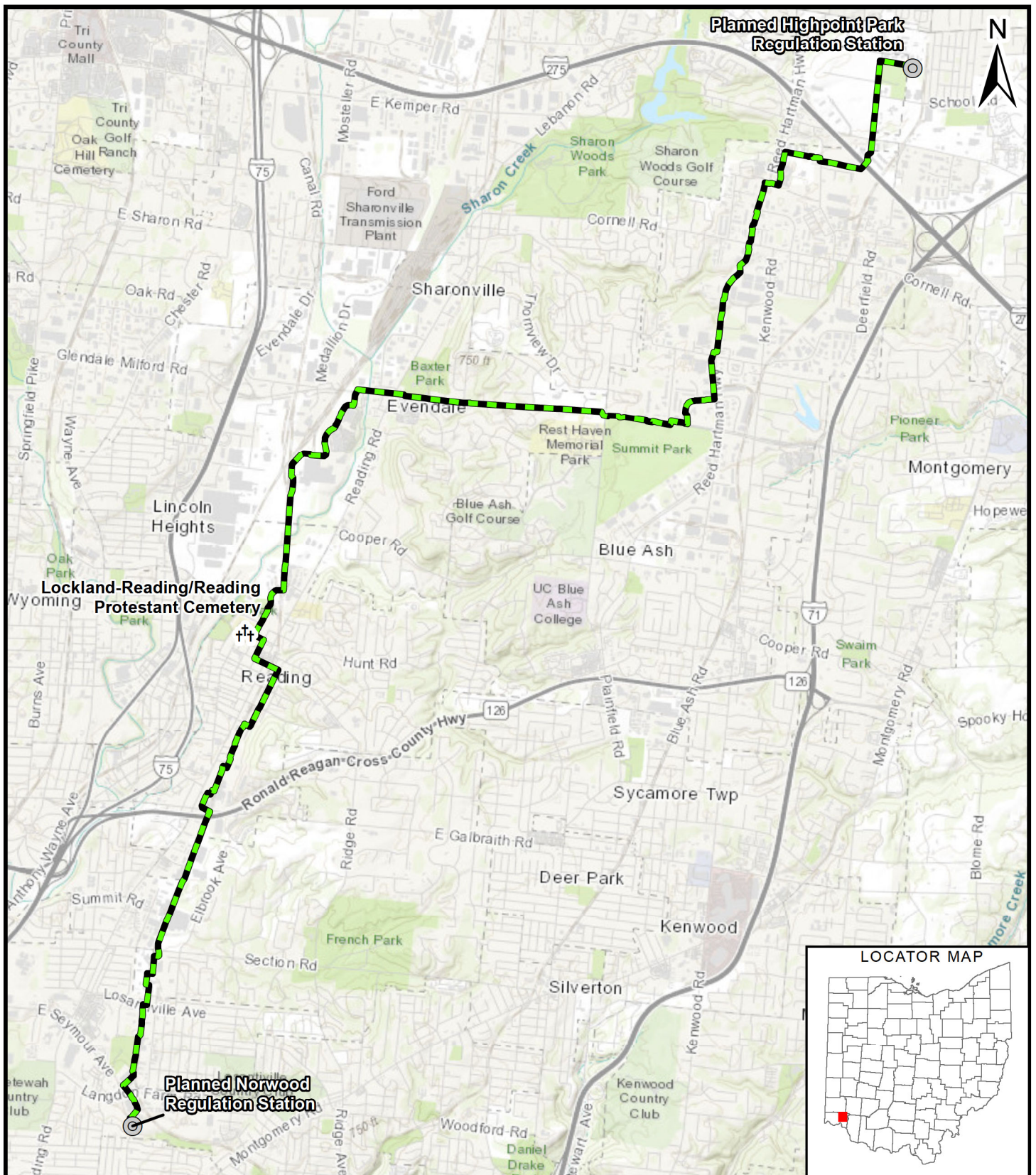
- 1) A commitment by Duke Energy to conduct archaeological monitoring and take all precautions to avoid disturbing human remains;
- 2) Delineation of the cemetery boundaries and burial locations established and/or potentially unknown as related to project plans;
- 3) A detailed discussion on disinterment, identification and notification of next of kin for unmarked burials;
- 4) A description of an appropriate location for reinternment of unmarked burials; and
- 5) Evidence that the entity in charge of the cemetery has been consulted and approves the plan (Grooms 2020).

This cemetery monitoring plan and UDP was prepared in accordance with guidance presented in the OHPO's September 14, 2020 letter and presents the field methodology for the archaeological monitoring as well as procedures in the event of an inadvertent discovery of human remains or graves within the Project's Area of Potential Effects (APE). In addition, this plan was reviewed and approved by Ms. Gail Walker of the Reading Cemetery Association on October 1, 2020 (see Appendix A).

### **1.1 Lockland-Reading/Reading Protestant Cemetery**

The Lockland-Reading/Reading Protestant Cemetery (OGS ID #4746; OHI #HAM0521350) (Reading Cemetery) is within the indirect APE and adjacent to the direct APE (Figure 1.2). According to the OGS record, the Reading Cemetery dates from 1827. The OHI form for the cemetery indicates that it is the oldest of four cemeteries in Reading. A portion of the cemetery in the current northeast section served as the churchyard for the Reading Presbyterian Church, which was founded in 1823 as the city's first religious group. The oldest portion of the cemetery is south of Pleasant Street, near West Street, adjacent to the Project APE. According to the OHI form, the burial markers in this portion of the cemetery date from the 1820s and 1830s. A full history of the cemetery will be included in the final monitoring report at the conclusion of field work.

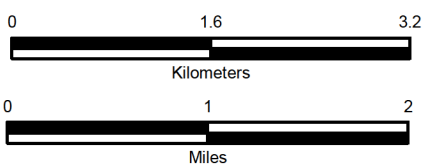




#### LEGEND:

- †† Lockland-Reading/Reading Protestant Cemetery Location
- ⊙ Planned Regulation Stations
- Proposed Amended Route

BASE MAP SOURCE:  
Esri World Topographic Layer



C314V Central Corridor  
Pipeline Extension Project  
Hamilton County, OH

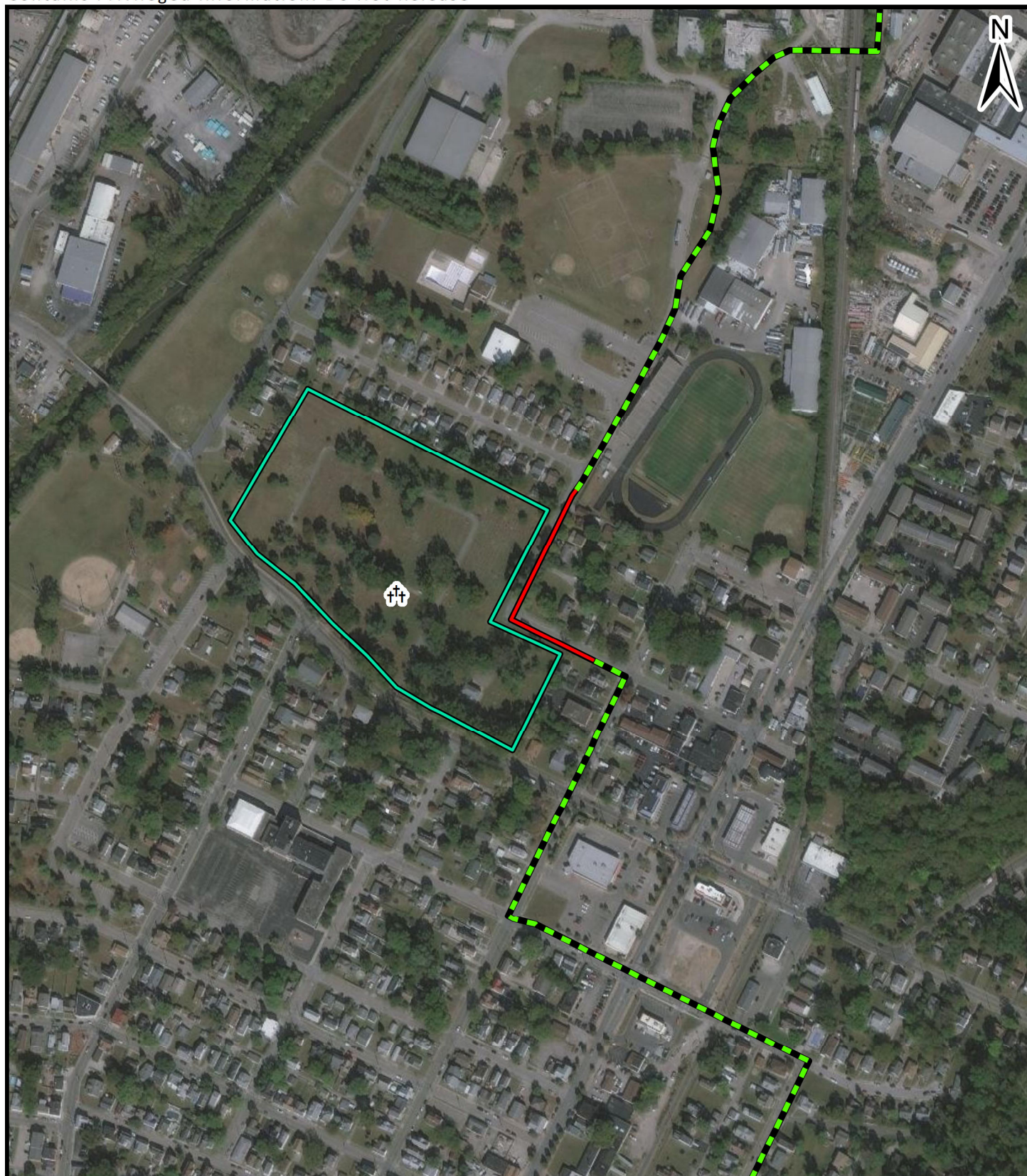
FIGURE 1  
PROJECT LOCATION  
MAP

PN: 672247CH

DATE: 9/23/2020

**Jacobs**





# LEGEND:

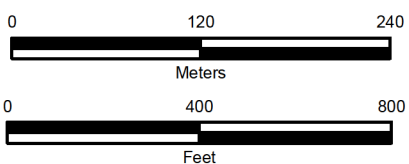
⛔ Lockland-Reading/Reading  
Protestant Cemetery Location  
(OGS ID 4746)

--- Proposed Amended Route

— Extent of Route to be  
Monitored during Construction

□ Cemetery Boundary

BASE MAP SOURCE:  
Esri World Imagery Layer, 2019



C314V Central Corridor  
Pipeline Extension Project  
Hamilton County, OH

## FIGURE 2 LOCKLAND-READING/READING PROTESTANT CEMETERY LOCATION MAP

PN: 672247CH

DATE: 9/24/2020

**Jacobs**



## **2. Archaeological Monitoring**

A Secretary of the Interior (SOI)-qualified archaeologist will supervise and monitor all ground-disturbing activities within 30.5 meters (100 feet) of the Lockland-Reading/Reading Protestant Cemetery. Archaeological monitoring is required whenever ground disturbance is planned, including during any excavation activities involving removal of asphalt, removal of fill, or any other activity that results in physical ground disturbance.

Monitoring activities include the following methodology:

- Visual inspection of the APE within 30.5 meters (100 feet) of the cemetery.
- Mapping, GPS recordation, and photo documentation of the APE within 30.5 meters (100 feet) of the cemetery, and during ground-disturbing activities.
- Archaeological monitoring of all manual and mechanical excavations will be conducted during ground disturbance. When artifacts are encountered, archaeologists will halt excavations and record the cultural deposits through photographs, profile mapping, and plan view mapping, and will record the locations of artifacts with a GPS unit capable of sub-meter accuracy.
- Archaeological staff will maintain systematic records including a daily monitoring log. The daily log will record the observations made during monitoring activities.

### **2.1 Unanticipated Discovery Plan**

In the event of a discovery of human remains, associated artifacts, grave shafts, etc., Duke will follow all relevant Ohio state laws and recommendations regarding treatment of human remains.

The following measures will be implemented should an unanticipated discovery of human remains or associated artifacts be made during archaeological monitoring and/or construction:

1. Construction within the (50 feet) of the unanticipated discovery will be immediately halted and the location will be secured and protected from damage and disturbance. The area will be marked with flagging, tape, or construction fencing.
2. The Reading Cemetery Association, the City of Reading Police, and the Hamilton County Coroner will be notified by Duke Energy or an appropriate representative. In addition, the OHPO will be notified.
3. Once all notifications under #2 have been completed (by phone or in-person conversation), any human remains, or burial cases will be photographed and carefully removed from the excavation area. Burial cases will be reinterred at a suitable location within the cemetery, in coordination with any known next of kin and/or the Reading Cemetery Association. Human remains not within a burial case will be removed, containerized and transported to the Hamilton County Coroner's Office for identification and analysis.
4. Following identification and analysis of human remains, next of kin will be notified and the disposition of the remains will be determined. Remains whose origins are not identified will be reinterred at a suitable location determined in coordination with the Reading Cemetery Association.

### **2.2 Contact List**

#### **Reading Cemetery (Lockland-Reading; Reading Protestant Cemetery)**

Gail Walker (Site Manager)

Reading Cemetery Association



200 W Columbia Avenue  
Cincinnati, OH 45215  
Phone: 513-554-1027  
Mobile Phone: 513-227-5378

**City of Reading Police**

Bryan Edens, Chief  
1000 Market Street  
Cincinnati, Ohio 45215  
Phone: 513-733-4122

**Hamilton County Coroner**

Dr. Lakshmi Kode Sammarco  
3159 Eden Avenue  
Cincinnati, Ohio 45219  
Phone: 513-946-8700

**OHPO**

Thomas Grooms  
Archaeology Transportation Reviews Manager  
800 E. 17<sup>th</sup> Avenue  
Columbus, Ohio 43211  
Phone: 614-298-2017

**Duke Energy Ohio, Inc.**

James Olderberg  
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2 Crown Pointe Court  
Cincinnati, Ohio 45241  
Mobile Phone: 513-900-7738

### **3. Report**

Following the conclusion of ground disturbing activities near the Reading Cemetery, Jacobs will produce an Archaeological Monitoring report for review by the USACE and OHPO. The report will include an introduction, background data, field methodology, and results of the archaeological monitoring. If human remains are discovered during the construction activities, a description of the discovery, methodology for removal, skeletal analysis, and reburial, including full description of artifacts, skeletal remains, attempts at identification, and plan-view mapping of each burial will be included in the Monitoring Report.



## **4. References**

Favret, Amy C. and Jared N. Tuk

2020 *Cultural Resources Work Plan, C314-V Central Corridor Pipeline Project*. Jacobs Engineering Group, Inc.  
Prepared for Duke Energy Ohio, Inc.

Favret, Amy C., Derrick Cole, and Kyle Mayer

2020 *Phase I Archaeological Reconnaissance, Duke Energy Central Corridor Pipeline Project, Hamilton County, Ohio*. Jacobs Engineering Group, Inc. Prepared for Duke Energy Ohio, Inc.

Ohio Historic Preservation Office

1994 *Archaeological Guidelines*. Ohio Historical Society, Columbus.

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## **Appendix A. Reading Cemetery Association Agreement**



Date: 10/11/2020

Amy C. Favret, M.A. RPA  
Jacobs Engineering Group, Inc.  
2 Crowne Point, Suite 100  
Cincinnati Ohio 45202

**Re: Concurrence with the Cemetery Monitoring Plan and Unanticipated Discoveries Plan -  
Duke Energy Central Corridor Gas Pipeline Project**

Dear Ms. Favret:

I understand that Duke Energy Ohio, Inc., (Duke Energy) is planning to construct a natural gas pipeline including a portion within the pavement of West Street and W. Pleasant Street which adjoins the Lockland-Reading/Reading Protestant Cemetery property as described in your letter of September 29, 2020.

As the Site Manager of the cemetery, I hereby grant approval of the Cemetery Monitoring Plan and unanticipated discoveries plan.

  
\_\_\_\_\_  
Signature

Gail Walker Gayle Walker  
Name (Printed)

Site Manager, Lockland-Reading/Reading Protestant Cemetery  
Title