PHASE I /II CULTURAL RESOURCES SURVEY

HANCOCK COUNTY FLOOD RISK REDUCTION PROGRAM
NORFOLK SOUTHERN RAILROAD IMPROVEMENTS
CITY OF FINDLAY, HANCOCK COUNTY, OHIO

JUNE 2021

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Results of a Phase I/II Cultural Resources Survey for the Hancock County Flood Risk Reduction Program, Norfolk Southern Railroad Improvements in the City of Findlay, Hancock County, Ohio

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June 2021

Lead Federal Agency:
U.S. Army Corps of Engineers – Buffalo District

EXECUTIVE SUMMARY

In April 2017, Stantec contracted The Mannik & Smith Group, Inc. (MSG) to conduct Section 106 consultation activities for proposed hydraulic improvements along the Blanchard River in the City of Findlay, Hancock County, Ohio. The hydraulic improvements represent the current stage of the Hancock County Flood Risk Reduction Project (HCFRRP), which began in the fall of 2016. Currently, the HCFRRP is being spearheaded by Hancock County and the Maumee Watershed Conservancy District (MWCD), which contracted Stantec to provide engineering and environmental permitting assistance for the project. For the purposes of this document, Hancock County, the MWCD, Stantec, and MSG will collectively be referred to as the Project Team.

Implementation of the proposed hydraulic improvements will require an individual Section 404 permit from the U.S. Army Corps of Engineers (USACE) and is therefore considered a federal undertaking subject to review and consultation under Section 106 of the National Historic Preservation Act. This consultation will proceed according to a series of steps detailed in a Section 106 Consultation Plan for the HCFRRP that was negotiated by the Ohio State Historic Preservation Office (SHPO), the USACE, and the Project Team and finalized in July 2017.

In September 2017, MSG initiated consultation with the SHPO regarding the potential impacts of the proposed hydraulic improvements on cultural resources. In October 2017, MSG submitted a Work Plan for Phases I and II of the proposed hydraulic improvements. Phase I includes the removal of four low-head dam/riffle structures and floodplain bench widening along the Blanchard River. Phase II involves modification to the Norfolk-Southern Railroad trestle, which crosses the river downstream of the Cory Street Dam. This phase of the project is now referred to as the Norfolk Southern Railroad Improvements. The results of a Phase I survey of the area of potential effects (APE) for the Phase I hydraulic improvements was submitted separately. This report contains the results of a Phase I/II survey of the APE for the Norfolk Southern Railroad Improvements project.

The Norfolk Southern Railroad Improvements project along the Blanchard River consists of removing and replacing the existing Norfolk Southern railroad bridge that spans the river just west of Cory Street. An additional span of approximately 47m (140ft) will be constructed on the northerly end of the bridge, where a floodplain bench will be excavated along the riverbank. The APE includes all areas of direct construction activity, along with the six parcels along Meeks Avenue and Meeks Court that will be used for access to the construction area, several of which will be excavated for the floodplain bench widening. The APE encompasses an area of approximately 7.93 ac (3.21 ha).

Background research included archival research on the environmental, prehistoric, and historic contexts of the city of Findlay and Hancock County, as well as a literature review of previous cultural resource survey and documentation efforts in the downtown Findlay area. The literature review revealed that two previously recorded archaeological resources are located within the project area – 33HK0777 and 33HK0810, both of which are historic-period sites representing light industrial and domestic activity during the 20th century. The literature review also identified no previously recorded historic/architectural resources in the current project area.

Field investigations identified one previously undocumented historic/architectural resource over 50 years of age in the APE, the Norfolk Southern Railroad bridge. MSG photographed and documented the bridge (HAN0067808) using the SHPO's online IForm system. Originally built by the Lake Erie & Western Railroad Company in 1903, it is a through two (or twin) riveted built-up girder structure, a common historic bridge type that was favored for railroad watercourse crossings. While the structural integrity is good, the abutments and center support do not appear to be original, and the bridge is not recommended eligible for NRHP listing. Because no eligible aboveground properties were identified in the APE, the current proposed project will have no effect on historic/architectural resources.

The archaeological survey consisted of shovel testing and limited test unit excavation within the 0.75 ac (0.3 ha) area of direct ground disturbance. No intact archaeological resources apart from 33HK0777 and 33HK0810 were identified within the archaeological survey area. However, intact, stratified deposits were identified at both sites, representing both their early 20th-century industrial occupations and mid-20th-century residential occupations. Further

excavation of these sites is likely to yield additional information about the development of light industries in Findlay as the local economy became more diversified in the early 20th century. 33HK0777 and 33HK0810 present an unusual opportunity to study technological change, labor processes, and social dynamics in such light industrial settings. Therefore, it is the Principal Investigator's opinion that both sites are eligible for the NRHP under Criterion D. MSG recommends that efforts be made to protect these sites from damage during construction efforts. If the sites cannot be protected, then the USACE, Hancock County and the MWCD should consult with the SHPO to negotiate a plan to mitigate the anticipated adverse effects through data recovery efforts.

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1.0 INTRODUCTION AND PROJECT DESCRIPTION

In April 2017, Stantec contracted The Mannik & Smith Group, Inc. (MSG) to conduct Section 106 consultation activities for proposed hydraulic improvements along the Blanchard River in the City of Findlay, Hancock County, Ohio. The hydraulic improvements represent the current stage of the Hancock County Flood Risk Reduction Program (HCFRRP), which began in the fall of 2016. The HCFRRP is the most recent iteration of a long-term effort by various local, regional and federal entities to reduce chronic flooding in the city of Findlay, Ohio due to frequent severe flood events along the Blanchard River and its tributaries in Hancock County. Currently, the HCFRRP is being spearheaded by Hancock County and the Maumee Watershed Conservancy District (MWCD), which contracted Stantec to provide engineering and environmental permitting assistance for the project. For the purposes of this document, Hancock County, the MWCD, Stantec, and MSG will collectively be referred to as the Project Team.

Implementation of the proposed hydraulic improvements will require an individual Section 404 permit from the U.S. Army Corps of Engineers (USACE) and is therefore considered a federal undertaking subject to review and consultation under Section 106 of the National Historic Preservation Act of 1966 (NHPA). This consultation will proceed according to a series of steps detailed in a Section 106 Consultation Plan for the HCFRRP that was negotiated by the Ohio State Historic Preservation Office (SHPO), the USACE, and the Project Team and finalized in July 2017. All tribal consultation will be conducted through the USACE's Regulatory Division.

In September 2017, MSG initiated consultation with the SHPO regarding the potential impacts of the proposed hydraulic improvements on cultural resources by submitting a Section 106 Project Summary Form (PSF) and a Public Involvement Plan (PIP). The PSF provided technical information on the design and implementation of the proposed improvements, and established an Area of Potential Effects (APE), while the PIP described the Project Team's approach to public and stakeholder involvement and provided a preliminary list of project stakeholders/consulting parties. The PSF and PIP were completed under Steps 1-3 of the Consultation Plan.

In October 2017, MSG submitted a Work Plan for Phases I and II of the proposed hydraulic improvements. Phase I includes the removal of four low-head dam/riffle structures and floodplain bench widening along the Blanchard River. Phase II, now referred to as the Norfolk Southern Railroad Improvements, involves modification to the Norfolk Southern railroad trestle, which crosses the river downstream of the Cory Street dam. The Work Plan presented a methodology for conducting reconnaissance-level cultural resource investigations for each work Phase, under Step 4 of the Consultation Plan. These submittals – the PSF, PIP and Work Plan – were approved by the SHPO on November 16, 2017.

The following report presents the findings of a cultural resources survey for the Norfolk Southern Railroad Improvements project, following the methods presented in the approved Work Plan. A separate report describing the results of cultural resources investigations within the APE for Phase I hydraulic improvements was previously submitted to the SHPO in February 2018.

1.1 Project Description, Area of Potential Effects and Survey Boundaries

The proposed Norfolk Southern Railroad Improvements project consist of modifications to the existing Norfolk Southern railroad bridge and the excavation of a floodplain bench. The bridge spans the Blanchard River just west of Cory Street in downtown Findlay. The bridge will be removed and replaced, with an additional span of approximately 47m (140ft) constructed on the northerly end of the bridge. The new span provides opportunity to excavate a floodplain bench on the northerly bank of the Blanchard River. The bridge foundations will remain, but the abutments will be removed and backfilled, and the elevation of the bridge deck will be raised to allow for additional capacity during flooding events.

The proposed work site will be accessed from parcels adjacent to the existing railroad right-of-way (ROW) on Meeks Court and Cory Street north of the Blanchard River. South of the Blanchard River, the work site will be accessed from a parcel adjacent to the railroad tracks owned by Norfolk Southern on Washington Street. Direct impacts from the bridge work will be limited to the in-river work area, associated floodplain bench widening on the north side of the river, and access and laydown areas on the adjacent parcels on Meeks Court, Cory Street, and Washington Street. Given the scale of new construction and the character of the surrounding environment (a wooded riparian setting), the visual impacts from the proposed bridge modifications will be limited to the nine parcels that immediately adjoin the railroad ROW. These parcels constitute the Area of Potential Effects (APE) for the project. The APE encompasses an area of approximately 7.93 ac (3.21 ha). The project location and APE for the proposed bridge modifications are depicted on Figures 1.1-1.2.

Direct, ground-disturbing impacts will be limited to a smaller area. Based on information presented in the Work Plan regarding previously recorded archaeological resources and previous cultural resource survey efforts in downtown Findlay, MSG recommended systematic archaeological investigation of six parcels along Meeks Avenue and Meeks Court that will be used for access to the Norfolk-Southern bridge, several of which will be excavated for the floodplain bench widening (Figure 1.3). These parcels total approximately 0.75 ac (0.3 ha).

1.2 Project Personnel

Project Manager for this survey was Maura Johnson, M.A., who conducted the history/architecture field survey, background research, and resource evaluation. Dr. Robert Chidester served as the Principal Investigator and Field Director for the archaeological survey, overseeing all field and laboratory efforts and completing the analysis of historic-period artifacts. Project Archaeologists Philip Bauschard, M.S. and Kate Hayfield, B.S., assisted in the archaeological fieldwork; Mr. Bauschard also conducted laboratory processing of artifacts and analyzed the prehistoric artifact assemblage. Also assisting in the archaeological fieldwork were technicians Katrina Newburn and Bill Yates. Mr. Daniel Hershberger, B.A., produced the artifact photographs in Appendix C. This report was prepared by Dr. Chidester, Ms. Johnson, Ms. Hayfield, Mr. Hershberger, and Mr. Bauschard. Mr. Bryan Agosti, M.S., created a GIS database for the project and prepared several of the figures in this report. Ms. Karen Braxton was responsible for report formatting and production.

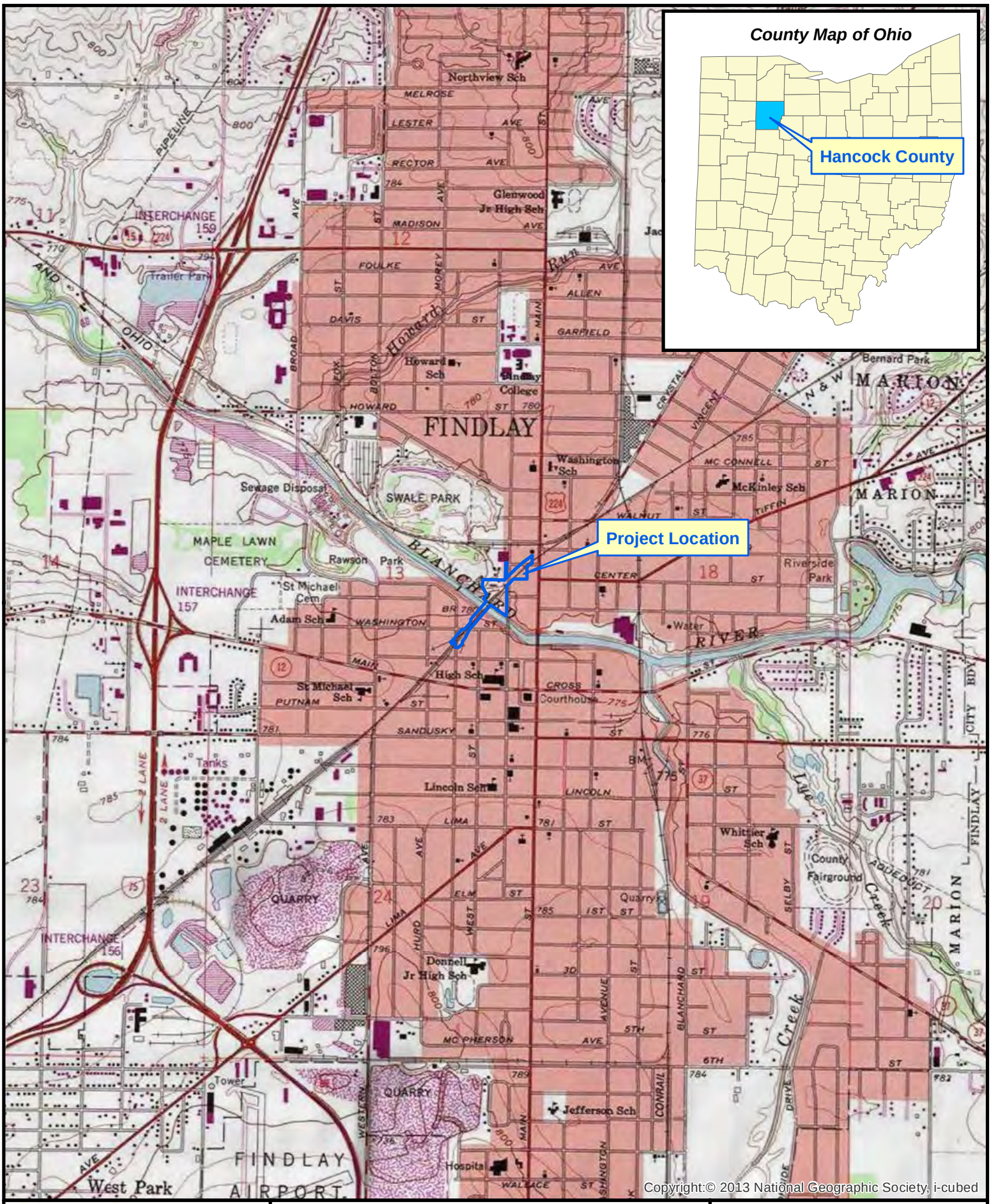

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Figure 1.1: Project Location
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio

Notes
USGS Quadrangle, 7.5' Series Topographic
Findlay, Hancock Co., Oh 1959 Revised 1977

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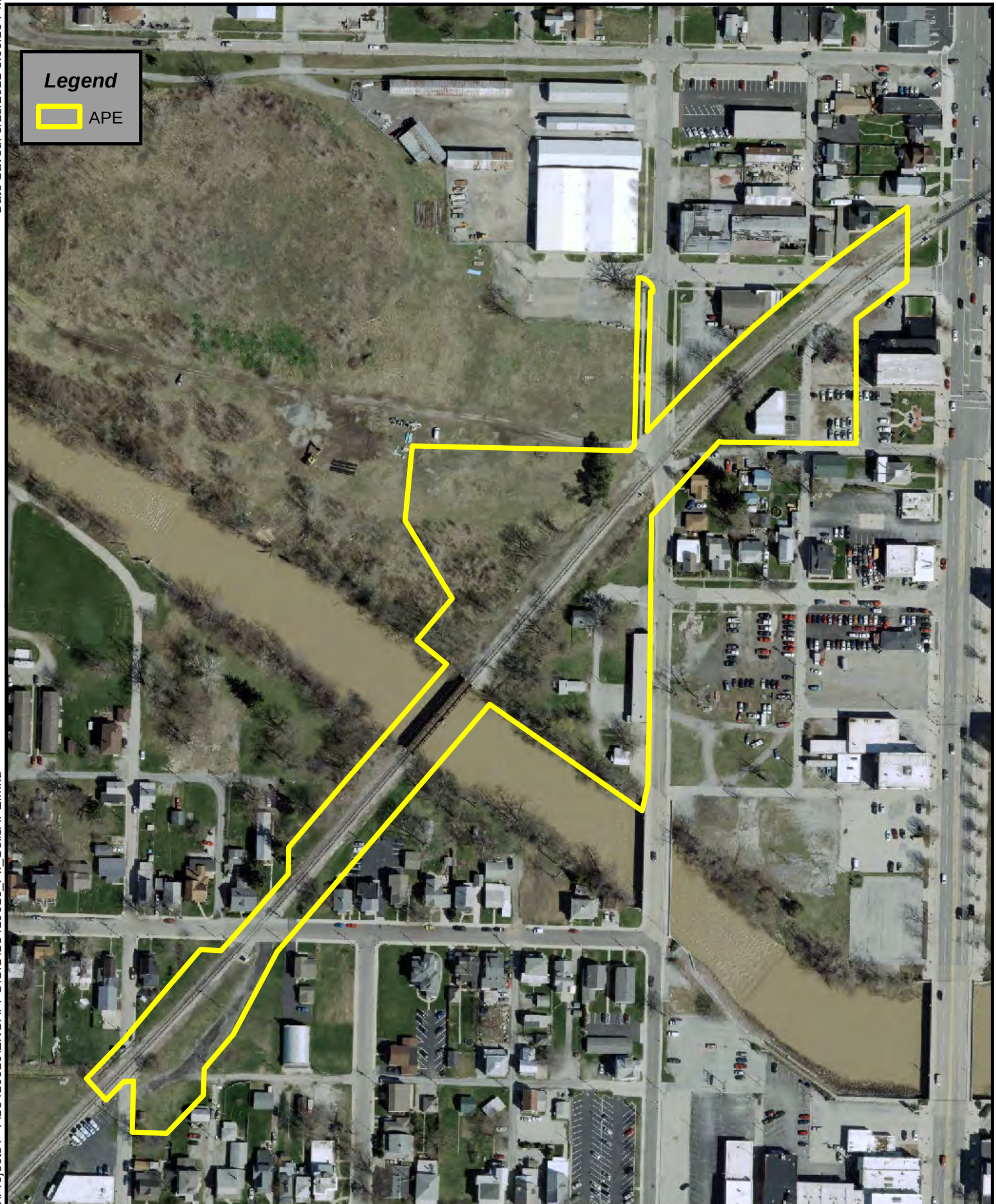

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Figure 1.2: Project APE
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio

Notes
The Hancock County photography, dated April 2017, is provided by OGRIP as part of the Ohio Statewide Imagery Program.

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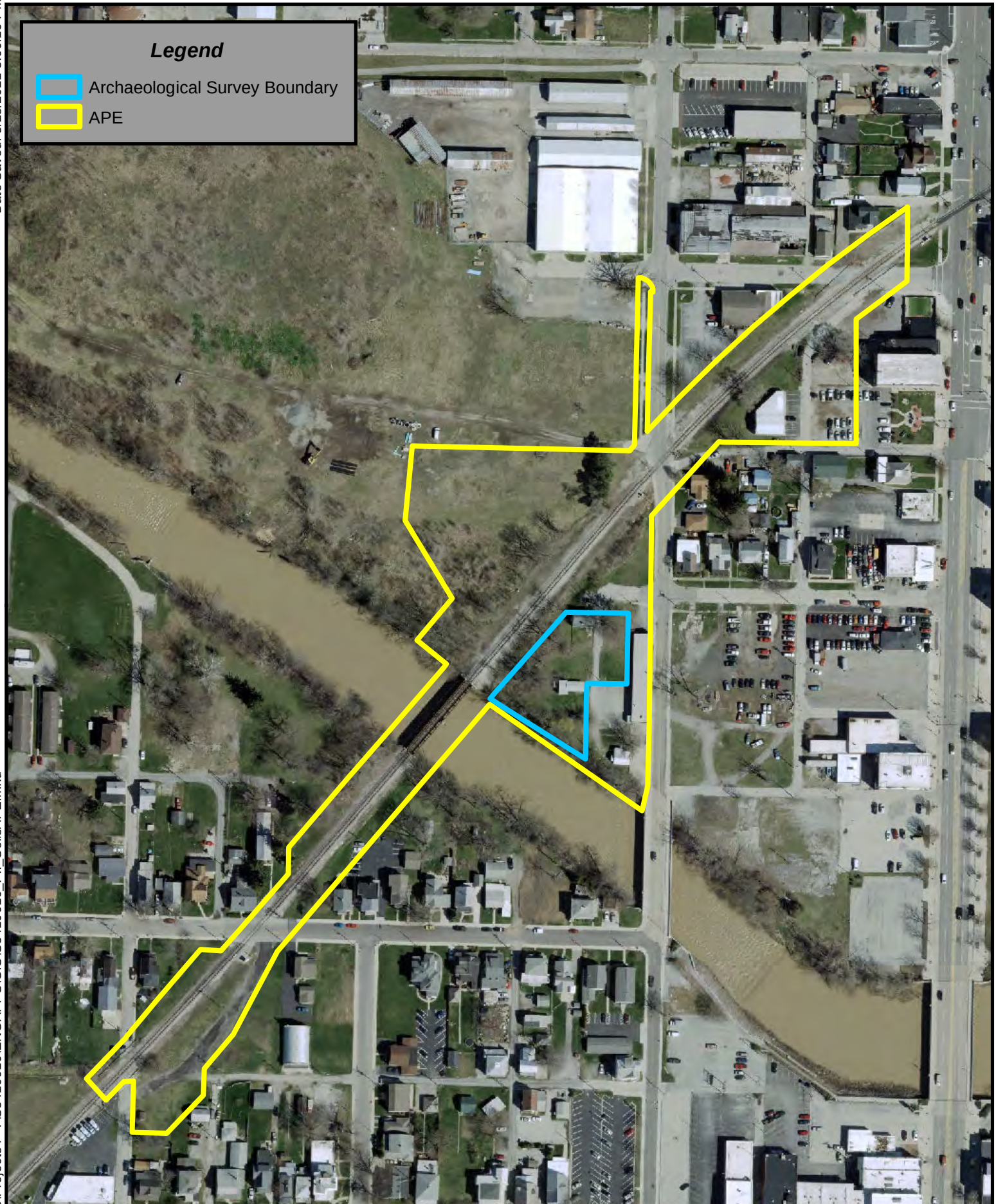

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Figure 1.3: Archaeological Survey Boundary
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio

Notes
The Hancock County photography, dated April 2017, is provided by OGRIP as part of the Ohio Statewide Imagery Program.

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2.0 BACKGROUND RESEARCH

The specific methods utilized during any cultural resources survey should ideally be based on a sound research design that takes into account environmental variables, documentation of known and suspected cultural resources in the general vicinity of the project area, and a thorough understanding of the relevant prehistoric and historic contexts for a given area. This background information is presented here.

2.1 Environmental Context

Before proceeding to the statement of prehistoric and historic contexts and the literature review of previously recorded cultural resources in the vicinity of the project area, this section will discuss the environmental context of northwest Ohio, focusing on Hancock County. Included are sub-sections on the physiography and glacial geology of northwest Ohio, the paleoclimate and paleoecology of the region, and the modern environment of Hancock County.

2.1.1 Physiography and Glacial Geology of Northwest Ohio

The study area, which lies within the Central Lowland Physiographic Province, is situated in an area of low relief, the Glacial Lake Plain (Feldman et al. 1977). Fluctuating glacial lake levels defined the character of northwest Ohio during Holocene times. According to Kelley and Farrand (1967), the region's glacial lake history reveals that Glacial Lake Maumee varied between elevations of 232 m (760 ft) and 243 m (800 ft) above sea level between 16,000 and 14,000 years Before Present (B.P.). During a glacial retreat, the Erie and Huron basins joined to form Lake Arkona, with beach stand lines at 216 m (710 ft), 213 m (700 ft), and 211 m (695 ft).

Port Huron moraines are associated with Lake Whittlesey at around 12,500 B.P., followed by successively retreating lake levels (representing glacial lakes Wayne, Warren, Grassmere, and Lundy) until ca. 11,500 B.P., when lake levels came near today's modern Lake Erie elevation. Minor fluctuations occurred thereafter, most notably between 9500 B.P. and 4500 B.P., when lake levels fell as low as 24-30 m (80-100 ft) below modern lake levels; modern levels that have continued to the present time were essentially achieved by 3500 B.P. (Kelley and Farrand 1967; Holcombe et al. 2003; Camp 2006:306-307).

The glacial lake waters that covered northern Ohio deposited fine lake silts and clays (Forsyth 1968:14). Hancock County is composed of a combination of gently rolling terrain and nearly level lake plains. The relatively low terrain that characterizes this region is a reflection of its location near the vicinity of the former Great Black Swamp, a poorly drained morass that cut off northwest Ohio from the rest of the state until it was drained in the late 19th century (Mayfield 1969; Camp 2006:50-52). In terms of prehistoric settlement patterns and archaeological site potential, ridges running through the area would have been attractive transportation corridors and habitation zones.

Around 10,900 B.P. there was a marked decline in spruce and other coniferous pollens in the area. Ogden (1969, 1977) suggests that this is a reflection of climatic shifts, which had caused major changes in the extent of glaciation some 1,000 years earlier. This decline in spruce and other coniferous pollens correlated with an increase in hardwood pollens (predominantly oak), suggesting general warming and/or drying trends for the region. The apparent climatic amelioration continued to be reflected by increases in oak pollen in all continental sequences, as well as increases in hickory pollen in the Lake Erie region occurring by about 7900 B.P. (Ogden 1977).

The Xerothermic Interval, which began about 5900 B.P., represented a warm/dry maximum in the region and is considered to be the origin of the "Prairie Peninsula" (Transeau 1935), which existed

in the western Lake Erie region until about 4900 B.P. (Ogden 1977). Cooler and increasingly moist conditions in the Lake Erie basin (Ogden 1977) and northern Indiana (Williams 1974) after 4000 B.P. are suggested by the rise of a rich mesophytic forest including oak, hickory, beech, and walnut. By this time Lake Erie had risen to within about 2.5 m (8 ft) of its modern level, leaving only the Maumee Bay area and the upper portions of Sandusky Bay above water (Graves 1977). By about 1500 B.P., the lower portions of Maumee Bay had been inundated. Increases in beech and maple in contiguous regions indicated the continuation of the cooling and moistening trends. These trends were temporarily reversed between about 700 to 550 B.P., but then continued after 550 B.P. with the onset of the "little ice age," a cold snap that extended into the 19th century A.D., when Lake Erie reached its modern levels (Graves 1977).

Glacial deposits dominate surface features throughout Hancock County. The Fort Wayne Moraine runs across the southern edge of the county just north of U.S. Route 30. The Defiance Moraine crosses northern Hancock County and extends into Putnam County to the west, roughly along the path of U.S. Route 224 and passing through both the Findlay area. Several sandy beach ridges left from the glacial lakes are the exception to the generally flat topography of the region (Camp 2006:15, 62-63, 120-123).

2.1.2 Modern Environment of Hancock County

In Hancock County, winters are typically cold and summers are hot. Winter precipitation, usually in the form of snow, provides adequate soil moisture by the spring to minimize the risk of drought during the summer. Average annual precipitation is just over 36 inches, peaking during the summer months at the height of the growing season. The average temperature extremes tend to occur in different months throughout the year, but summer high temperatures reach the low 80°s F, and the low winter temperatures fall to about 18° F or below (Robbins et al. 2006:2).

Several soil types are present within the APE (Table 2.1; Figure 2.1). Soil properties can generally be correlated with the likely presence of archaeological resources. Poorly drained soils, for instance, generally retain a low probability for archaeological resources since they are frequently inundated with water and are otherwise uninhabitable. Well-drained soils generally retain a higher probability for archaeological resources since they would have proffered a relatively dry habitation space.

Table 2.1 Soil Types within the APE

Map Symbol	Soil Name	Slope (%)	Drainage	Landforms	Acres	% of Project Area
FcA	Flatrock silt loam, occasionally flooded	0-2	Moderately well drained	Floodplains	0.32	3.65%
LcA	Lamberjack-Urban land complex	0-2	Somewhat poorly drained	Outwash Plains	8.20	93.40%
W	Water	N/A	N/A	Stream Channels	0.25	2.85%

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Figure 2.1: Soils Classification
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio

The soils data is provided by the U.S. Department of Agriculture, Natural Resources Conservation Service. The Hancock County photography, dated April 2017, is provided by OGRIP as part of the Ohio Statewide Imagery Program.

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2.2 Prehistoric Cultural Contexts

This section will outline the prehistoric cultural setting of northwest Ohio. Due to the urban nature of the project setting and the unlikelihood of encountering substantial prehistoric archaeological resources within the project area, this discussion will be condensed from that typically provided in a Phase I cultural resources survey report.

The prehistoric occupation of Ohio is generally divided into four broad periods: Paleoindian, Archaic, Woodland, and Mississippian (or Late Prehistoric-Protohistoric). The Paleoindian Period encompasses the cultural remains of the earliest recorded occupations of the region, beginning about 12,000 B.P., during early postglacial times. During this period, human populations followed migrating megafauna, which were gradually radiating northward with the spread of the post-glacial tundra and developing tundra-forest environments. These populations, called Paleoindians, were nomadic groups comprised of small kin-based bands that primarily practiced a foraging subsistence strategy. Current research suggests that these Paleoindian bands repetitively moved within a circumscribed geographic range to intercept large herd animals during their migratory cycles (Gramly 1988; Stothers 1996; Stothers and Abel 1991).

The Archaic is identified by archaeologists as the period when more localized seasonal settlement and subsistence patterns replaced the broad seasonal migration patterns of the Paleoindian Period. The Archaic Period within the lower Great Lakes and much of the Midwest is understood in terms of Early (ca. 9600-8000 B.P.), Middle (ca. 8000-5000 B.P.), and Late (ca. 5000-2500 B.P.) temporal divisions. Over this time span, there were marked shifts in patterns of settlement, subsistence, and tool technology. A gradual shift from a highly mobile hunting and gathering subsistence strategy toward a more sedentary foraging subsistence strategy is evident. Trade and exchange relationships seem to have evolved from an informal buffering mechanism to formalized contractual agreements between groups in competition for the same resources. It is thought that as the population of individual groups increased, band territories would have become more finite. Population increases would also have increased the pressure on environmental resources that were not evenly distributed across the landscape. Therefore, trade and exchange would have been essential in redistributing these resources. As populations grew and competition over resources increased over time, these networks would necessarily have become more structured. During the Archaic Period, the unpredictability of the environment would have made extensive trade relationships necessary (Stothers et al. 2001). Another noteworthy development during the Late Archaic Period in Ohio was the invention of fired-clay pottery (Purtill 2009).

Broad exchange patterns, the emergence of cultigens, and an increasing shift toward sedentism generally identify the transition to the Woodland time period, which is also subdivided into Early (ca. 2500-2000 B.P.), Middle (ca. 2000-1500 B.P.), and Late (ca. 1500-800 B.P.) Woodland periods. As people gradually shifted from a reliance on hunting and gathering to a reliance on food production over the course of the Woodland Period, the trade and exchange networks first developed during the Late Archaic would have become more intensive and defined (Jackson 1991:227). Mortuary practices became more complex during the Early Woodland period, as the differential occurrence of exotic trade goods within graves suggests the emergence of cultural complexity (i.e., social inequality) in the western Lake Erie region at this time (Stothers and Abel 1997; Stothers and Schneider 1997; OHC n.d.a).

Archaeologists generally describe the Middle Woodland period in Ohio as the period associated with the development of the Hopewell culture. Hallmarks of this period include an increasing reliance on horticulture, continued increases in population and social complexity, and the construction of monumental earthworks in central and southern Ohio (Pacheco 1996). However, the archaeological record of northwest Ohio during this time period does not appear to reflect similar developments. Instead, the local Western Basin Middle Woodland Tradition appears to have evolved out of “a uniform and homogenous Late Archaic cultural base” (Stothers et al. 1979:49) and does not appear to have been part of the so-called Hopewell Interaction

Sphere. Maize horticulture only appears late in the Middle Woodland sequence in northwest Ohio (Stothers et al. 1981:12), indicating that year-round sedentism may have been a relatively late development in this region.

A significant reduction in the extensive, extra-regional trade of exotic goods and materials following the demise of the Hopewell culture marked the beginning of the Late Woodland Period (OHC n.d.c). There is some debate over the culture history of northwest Ohio during this time period. Some scholars recognize two different cultural traditions (the Algonquian-speaking Sandusky and the Iroquoian-speaking Western Basin traditions) overlapping and coming into conflict over competition for land and access to resources (Stothers 1999; Stothers and Abel 1995; Stothers et al. 1994), while others posit population continuity and *in situ* cultural development as a result of adaptation to climatic shifts associated with the onset of the "Little Ice Age" ca. 700 B.P. (Pratt 1993; Brose 2000).

The Mississippian Period (ca. 1100-350 B.P.) in northwest Ohio is marked by continued population growth, large villages, and subsurface storage pits resulting from an increased reliance on maize agriculture. Cultural influences from populations in the mid-South began to appear in what is now Ohio at this time. Permanent, fortified villages were often situated to command views of valleys and floodplains (Stothers et al. 1994). As recently as A.D. 1650 European explorers had only the vaguest knowledge of the lands lying south of what is now called Lake Erie (Brose 1997), although European trade goods had made their way into this region as early as a century before that (Stothers 2000). By A.D. 1650, however, the Ohio region was temporarily vacant after a period of sustained conflict between Algonqian and Iroquoian cultural groups. Only toward the end of the 17th century did modern Native American groups such as the Shawnee, Delaware, Wyandot and Miami move into Ohio from the south and east. These groups were among those present when the first European explorers arrived in Ohio in the later 17th century (OHC n.d.b).

2.3 Historic Contexts – Hancock County and the City of Findlay

2.3.1 Historic Overview

The first documented settlement in Hancock County occurred in 1815, and the Village of Findlay was laid out in 1821. In 1828 Hancock County was formally detached from Wood County, and Findlay was incorporated for the first time in 1838. By this time, white settlers were gradually clearing the forest, draining the Great Black Swamp, building roads, and establishing small settlements. The Lake Erie and Western Railroad was the first to reach Findlay in 1860, and by the 1880s the city was fully tied into the regional transportation grid.

In 1884, Charles Oesterlen, a German immigrant, tapped the first productive gas well in Findlay. This discovery sparked a 15-year economic boom in Findlay and Hancock County as first natural gas and then oil brought investment (and people) to the region. Between 1880 and 1890 the population of Findlay quadrupled, and much of the city's physical growth occurred between 1886 and 1895. By 1905, however, the area's natural gas and oil reserves had largely been tapped out and Findlay was forced to turn to small manufacturing to sustain economic growth.

During the first half of the 20th century the local transportation grid changed dramatically as railroads were replaced by automotive highways. A regional system of interurban lines flourished between 1903 and 1928, but this too became a victim of the American craze for the automobile. The population of Findlay continued to grow slowly until the late 1940s, when Findlay benefited from the post-World War II economic boom. Many areas of the city that had been platted but not developed in the 1880s and 1890s were finally occupied by new housing. Despite the location of production facilities for several nationally prominent companies in Findlay, however, agriculture remained the primary economic activity throughout the county. Following World War II, the

acreage of farmland in the county remained relatively stable while the number of individual farms dropped—a result of the consolidation of the industry by large agribusiness firms.

In the 1960s the Interstate highway system reached Findlay in the form of I-75, the primary north-south transportation corridor in western Ohio. Findlay continued to rely on a diversified economy throughout the 1980s and 1990s, attracting both international investment and small technology firms. By 2000 the city had grown to a population of nearly 40,000 residents, while Hancock County as a whole was home to over 70,000 people.

2.3.2 Exploration and Settlement

Hancock County was sparsely occupied until after the War of 1812, with the first documented settlement not occurring until 1815 (Beardsley 1881:10). By the terms of the 1817 Maumee Rapids Treaty, the Wyandot, Ottawa, Shawnee, and other tribes ceded all remaining lands in Ohio, except for specified reservations, to the government (Warner, Beers & Co. [WBC] 1886:196). During the 1820s and 1830s settlers trickled into the area, and small settlements were established along waterways and better-drained glacial ridges.

Hancock County was surveyed into townships and sections as early as 1820, but was attached to Wood County until 1828, and achieved its present form in 1845 when Wyandot County was detached from it (Beardsley 1881:27; WBC 1886:222-228). Findlay Township was organized in 1823 and designated in 1824 as the seat of justice for Hancock County. The township (and later, city) was named for Colonel James Findlay, who built Fort Findlay during the War of 1812 on what is now South Main Street while en route northward to join General William Hull's forces at Detroit. The Village of Findlay was laid out as early as 1821, although it was not officially recorded until 1829. The village was incorporated in 1838 and reincorporated in 1845 (WBC 1886:532, 537).

2.3.3 Transportation

The population of Hancock County grew slowly as the forest was gradually cleared, the swamp lands drained, transportation into the region improved, and Findlay was connected to external markets through the hub of Toledo. In the earliest years of white settlement, the Blanchard River was the main transportation route. This was somewhat by default, since the roads that were built were often swampy until well into the second half of the century, when the Great Black Swamp was drained (Weiser and Kern 1999:83). The first improved route to the Findlay vicinity was Hull's Trace, built during the War of 1812 as a military road to the Maumee Rapids, which carried most of the area's traffic into the 1820s (WBC 1886:300). The first road petition to the county commissioners dates to 1829 for the Findlay-Vanlue Road, a route from the east county line to Findlay, running through Vanlue (Kimmell 1910:87). Other roads built during the 1830s generally connected to the population center at Findlay, such as the Ft. Meigs-Fort Findlay Road, the Findlay-Marion Road, and the Findlay-Port Clinton Road (WBC 1886:301; Weiser and Kern 1999:83). Some of the crossroads hamlets that developed along these early transportation routes include Mt. Blanchard (established in 1830), Van Buren (1833), Williamstown (1834), Benton Ridge (1835), and McComb (1847) (Davis 1938:9).

The first railroad to connect Hancock County to the regional commerce grid was the Mad River and Lake Erie Railroad that ran from Findlay through Vanlue and on to Carey in Wyandot County, built in 1849 (Weiser and Kern 1999:83). However, the local economy was not really catalyzed until the Lake Erie and Western Railroad (later called the Nickel Plate Railroad, and now known as the Norfolk Southern Railroad) reached Findlay in 1860 (WBC 1886:568). The Baltimore and Ohio (B&O) Railroad was built through the northeastern corner of the county and began operating in

1874. In the early 1880s the number of railroads passing through the county proliferated rapidly. A small line that was later bought by the B&O was laid through the county in 1880, and the McComb, Deshler and Toledo Railroad was built through McComb in the same year (later to be extended to Findlay as a branch of the Cincinnati, Hamilton & Dayton Railway). The New York, Chicago and St. Louis Railroad laid tracks from Fostoria southwest to Arcadia, and then west from Arcadia, in 1881. The Cleveland, Delphos & St. Louis Railroad (later called the Northern Ohio Railroad) was extended east from Bluffton (in neighboring Allen County) in 1882-1883 and passed through Arlington and Mt. Blanchard on its way to Carey. In 1883 the Toledo, Columbus and Southern Railroad (later the Toledo & Ohio Central) was built through Findlay, and a spur of the New York Central Railroad was completed in the same year (Spaythe 1903:58-59; Weiser and Kern 1999:83). Villages and hamlets that originated after the advent of the railroads in Hancock County include Arcadia (established in 1854), Rawson (1855), Mt. Cory (1872), Mortimer (originally named Silverwood, 1883), and Jenera (1883) (Davis 1938:9-10).

The physical growth of Findlay and its rising prominence as an industrial and commercial center during the late 19th century necessitated the improvement of transportation options through Hancock County. The Findlay, Ft. Wayne and Western Railroad became the newest major railway to pass through the county in 1888. At the height of rail travel, an estimated 30 to 40 passenger trains passed through Findlay every day. A mule-drawn streetcar service had been started in the city in 1887, but in 1891 was replaced by the first electric streetcar service in the county, the Findlay Street Railway (Weiser and Kern 1999:83-84).

The first four decades of the 20th century witnessed further important developments in the local transportation system. In 1906 a new electric interurban railway connected a number of the county's small villages to Findlay, and Findlay to Bowling Green, Lima, Fostoria, and Toledo. Many roads were improved and several major hard-surfaced roads were constructed, including the brick-paved Dixie Highway (which ran north-south through the county, built in 1917) and the Lincoln Highway (built east-west through the southern part of the county in 1919; later to become U.S. Route 30) (Weiser and Kern 1999:84). By the end of the 1920s, most state and federal roads in Hancock County had been paved (Heminger 1965:66). These improvements, along with a growing automobile culture in the United States and the increasing importance of trucks in the shipping industry, gradually overtook the interurban railway system; the last electric car in Hancock County ran in 1932 (Weiser and Kern 1999:84). Air travel also became an option when the county airport was built on a farm south of the city in 1928 (Humphrey 1940:139).

As in every previous period, Hancock County experienced further dramatic changes to the local transportation system following World War II. After Congress authorized the construction of an interstate highway system in the late 1950s, Interstate 75 was built through Hancock County along the route of the old Dixie Highway and opened in 1964. The portion of Ohio State Route 15 running east from Findlay to Carey was transformed into a four-lane expressway in 1966 and became a major travel artery, although no further industrial development resulted in this area on the south side of Findlay (Heminger 1965:68; Weiser and Kern 1999:84).

2.3.4 Industry, Commerce, Finance and Government

During the mid-19th century Findlay functioned primarily as the agricultural trading center of the county, and as such it was home to a number of agriculture-related industries, including grist, saw, and flax/linseed oil mills, a woolen mill, a planning mill, wagon works and carriage works, foundries, barrel hoop, stave and handle manufacturers, tanneries, breweries, a pottery, a rake factory, a furniture factory, a saddlery, and limestone quarries and kilns (Davis 1938:14; Weiser and Kern 1999:63). Although urban amenities were slow in developing, infrastructure improvements such as

a public gas works for the town were initiated as early as 1858. However, production and distribution did not commence until the Findlay Gas Light Company constructed a gas-works plant and began public distribution on Christmas eve, 1874 (WBC 1886:575).

Natural resources, technology and market forces joined during the last two decades of the 19th century to fuel a gas and oil boom that resulted in a florescence of residential, commercial and governmental building construction in Findlay (Humphrey 1940:52; Spaythe 1903:189; WBC 1886:344). Local residents had been aware of the presence of local gas in the area since the 1830s and some had even figured out ways to use it for home heating and cooking purposes, but it wasn't until the late 1870s that industrialists in Pennsylvania demonstrated the utility of natural gas as a fuel for industrial enterprises. This development redoubled the determination of Findlay resident Dr. Charles Oesterlen[1] to exploit the natural gas resources of the Findlay area (Downes et al. 1954:40; Wickstrom and Gray 1994:4).

Oesterlen, a German immigrant who had come to Findlay in the 1830s, had long attempted to convince others of the potential value of gas deposits in the area. Oesterlen knew that the Trenton limestone formation that runs from Toledo to Indianapolis and underlies most of Hancock County potentially contained vast amounts of natural gas. With the development of natural gas as an industrial fuel in Pennsylvania, he was finally able to gather a small group of investors to form the Findlay Natural Gas Company (FNGC) in April 1884. Oesterlen immediately started drilling for gas. On December 5, a 1,648-foot-deep shaft on his own farm (located east of the village) tapped a gas well that produced about 250,000 cubic feet of natural gas per day. The FNGC immediately began laying pipelines (Downes et al. 1954:40; Heminger 1965:21; Wickstrom and Gray 1994:4-5).

Despite the fact that there was as yet no market for natural gas in the Findlay area, the FNGC (and other companies organized soon after the initial discovery on Oesterlen's farm) drilled eight wells throughout the Findlay area during 1885, each one more productive than the last (Wickstrom and Gray 1994:5). On January 20, 1886, however, Findlay's gas boom literally exploded with the discovery of the great Karg Well, located on the south bank of the Blanchard River at the foot of Liberty Street near downtown. The pressure was so intense that it was visible and audible over a five-mile radius, releasing between 20,000,000 to 50,000,000 cubic feet of gas per day for five days, when it was finally brought under control (Humphrey 1940:52; Wickstrom and Gray 1994:5). When it was ignited, the flame reached 70 feet in the air; it was easily visible in Bowling Green (25 miles distant) and the light it produced could be seen as far away as Toledo. Even then it could not be capped for over four months after its discovery, allowing an estimated 1.5 billion cubic feet of gas to escape (Downes et al. 1954:45; Humphrey 1940:52; Wickstrom and Gray 1994:5).

The discovery of the Karg Well touched off a speculative frenzy of industrial and real estate development in northwestern Ohio and east-central Indiana (Glass 2000; Wickstrom and Gray 1994). Although many other communities in these areas profited from the gas boom, none was quite as successful (nor so thoroughly transformed) as was Findlay. Community leaders hired publicist C.C. Howells to promote the town, which he did with gusto. Between 1886 and 1889 outside capital poured into the town as 50 new industries located there (Wickstrom and Gray 1994:5-6). The most significant addition to the local economy was the glass industry. Previously Pittsburgh had been the center of glass production in the U.S., but Findlay and other towns in the Ohio gas belt (including Tiffin, Fostoria, Bowling Green, and Maumee) offered free gas to any company that would relocate. Between 1884 and 1890, 35 new glass firms either moved to Ohio or were started by local entrepreneurs. Over a dozen glass firms located in the Findlay area alone, with the most important specialty being the production of glass tableware (Measell and Smith

[1] Oesterlen's name is variously spelled Oesterlen, Oesterlin, or Osterlin in historical sources.

1986:1). Other new industries included the Findlay White Lime Company, the Findlay Iron, Steel and Brass Works, Remington Arms, the Ohio Oil Company (which would eventually become today's Marathon Oil Corporation), a chainworks, a cooper, oil refineries, and manufacturers of church furniture, typewriters, signs, and clay pots, just to name a few (Weiser and Kern 1999:63).

One result of the exploding urban population caused by the gas boom was the need for municipal utilities. Electricity was first made available to Findlay residents in the late 1880s, and water mains were constructed throughout the city in 1888-1889. However, the municipal water supply was not treated for drinkability until 1904; prior to that year, many residents used water from wells drilled on their own property for drinking and cooking (Heminger 1965:35-37).

Many of the municipal improvements and physical growth of the city were made possible by the fact that the city itself got into the natural gas business almost immediately upon the discovery of the Karg Well. Findlay residents approved the issuing of bonds for the purpose in April, 1886, and the city soon began producing gas from several wells. Naturally, private gas suppliers in and around Findlay were not too pleased with this new competition, deeming it to be so unfair that they challenged it in court. Both the Hancock County Common Pleas Court and the Circuit Court sided with the city, and when the municipal government purchased the Findlay Gas Light Company in October 1887, it gained a monopoly on the production and distribution of gas within the city (Measell and Smith 1986:11-12).

For all of the excited speculation concerning Findlay's and Hancock County's seemingly boundless future, however, the gas boom ended just as quickly as it had begun. Many local boosters believed that natural gas was a renewable resource, and therefore engaged in extremely wasteful practices such as the continuous burning of flambeaux as an advertising technique. Making the situation worse was the fact that city gas lines were allowed to flow continuously, whether the gas was needed or not. The result of such practices was the complete wasting of millions of cubic feet of gas. By early 1889, declining pressures and volumes of natural gas coming out of many wells had led to freeze-ups of the pipelines and higher prices, which naturally bred dissatisfaction throughout the community. In the spring of 1890 the Karg Well ran dry, and the large Stuartsville gas field near Findlay was tapped out the same year. By 1891 area glass factories had begun shutting down and moving elsewhere (Downes et al. 1954:55, 65; Measell and Smith 1986:13; Wickstrom and Gray 1994:6-8). Indeed, the city of Findlay's decision in late 1890 to try to raise the ridiculously low rates that glass factories had been paying for their large consumption of natural gas ended up with the city in court again when the glass companies filed for temporary injunctions against the city. Once again, the courts sided with the city at every level; the glass manufacturers finally gave up when the Ohio Supreme Court handed down its ruling in early 1892. A year later the glass industry in Hancock County had vanished (Measell and Smith 1986:13-15).

Fortunately for residents of Hancock County, even larger quantities of petroleum existed underneath the gas deposits in the Trenton Limestone formation. The first productive oil well in northwest Ohio was drilled on the grounds of a strawboard mill near Lima in 1886; the owner had originally been looking for natural gas. This discovery came at just the right time, as oil-producing regions in the eastern U.S. were beginning to become depleted; oil men and speculators from these areas quickly flocked to Ohio (Downes et al. 1954:70-71). Throughout late 1886 and 1887 new oil gushers were frequently discovered between Lima and Toledo. So much oil was coming out of the ground, with no pipelines to transport it, that many wells were allowed to flow freely until storage vats could be built. Some fields were literally knee-deep in oil that then ran off into rivers and ditches.

John Rockefeller's Standard Oil Company, then based in Cleveland, quickly bought up as much of the Ohio crude oil as it could in an attempt to maintain its monopoly on oil refining in the U.S., despite the fact that the quality of Ohio crude oil was too poor to be refined for industrial use. The result was a conflict between Standard Oil and local producers. Fourteen of these local oil men joined together in 1887 to form the Ohio Oil Company in order to protect themselves from Standard Oil's encroachment and manipulation of the market. This tactic worked for a while, but in 1889 Standard Oil bought out Ohio Oil, giving it ownership of 75% of the Lima-Indiana oil field. Over the course of the next decade and a half, fierce competition reigned between Standard Oil and a myriad of small independent producers (Wickstrom and Gray 1994:8-13), many of whom were in Wood, Hancock and Allen counties.

By 1889 the Lima-Indiana trend was producing over 12,000,000 barrels of oil per year. It reached its peak production in 1896, when a total of 20,575,138 barrels were produced. Between 1886 and 1906 the field accounted for well over half of the total oil production in the state (Alkire 1951:41-43), and from 1895 to 1903 Ohio was the nation's leading oil producer. When the enormously productive Spindletop Well was discovered in Texas in 1901, however, the oil industry's focus quickly shifted to the mid-continent. By 1910 northwestern Ohio oil fields were largely depleted (Wickstrom and Gray 1994:15).

Despite the depletion of gas and oil reserves in such a short period of time, Findlay had been irrevocably transformed into a small industrial city. While some industries, such as glass tableware, quickly abandoned the area, others remained and new industries were started. Furthermore, Findlay had developed a substantial working-class population that was not afraid to organize itself in search of better treatment on the job, whatever that job may have been. According to one early 20th-century history of Hancock County, in 1903 there were no fewer 30 active unions (many of them craft unions, rather than typically more inclusive industrial unions) in the city (Spaythe 1903:130).

Standard Oil continued to work the Lima-Indiana trend until 1911, when President Theodore Roosevelt's trust-busting campaign broke the corporation up into 32 separate companies. One of these was the old Ohio Oil Company, which continued to operate wells in the region until 1937 (Wickstrom and Gray 1994:15). By this time, however, not much oil was left to find: The Lima-Indiana trend continued to account for about half of the state's total oil production between 1907 and 1916, but from 1917 to 1936 it was responsible for only one-quarter to one-third of the state's output. Between 1937 and 1950 the field's production dropped even further, producing just one-sixth of the state's oil or less during these years (Alkire 1951:41-43). After 1950 oil production in Hancock County nearly ceased altogether (see Alkire 1951:2-4, 1952:2-3, 1953:4-6, 1954:5-6, 1955:6).

While many of the industries that had come to Findlay during the height of the gas boom during the late 1880s either left town or died out after the oil boom subsided, they were soon replaced by several important new companies that were founded during the early 20th century. These included the Buckeye Traction Ditcher Company (manufacturers of machinery for laying drainage tiles in agricultural fields), the Northern Ohio Sugar Company, the Cooper Tire and Rubber Company, and the Differential Steel Car Company (Weiser and Kern 1999:63).

City and county public utilities also got a boost in the late 1920s and 1930s. By the end of the First World War Findlay had developed a sewage problem. The inability to handle the high volume of sewage produced by residents of the growing city caused the State Board of Health to order the city to build a new sewage plant, but it was not until 1927 that city taxpayers finally approved the necessary funding. The new sewage plant opened near Maple Grove Cemetery on the west side of

town in the early 1930s. Just a few years later Findlay received federal assistance to build a modern waterworks plant as well (Humphrey 1961:205). Federal funding was also used to finally extend electrical service into rural areas of the county at this time (Heminger 1965:36).

During the Great Depression Findlay, like many other cities and towns across the nation, suffered from high unemployment. Fortunately for the city and the county, several of the federal government's assistance programs (including the Works Progress Administration [WPA] and the Civilian Conservation Corps [CCC]) provided work for local residents. A CCC camp was built in the present-day vicinity of Swale Park (on the north side of the river across from Rawson Park) in 1935 and continued to operate through 1939. In 1935 federal and state funds were secured, and the CCC workers undertook to straighten the Blanchard River in two spots (including the horseshoe bend where it crossed Main Street in the downtown area) and to replace the old iron bridge across the river at Main Street with a new, reinforced concrete bridge (Humphrey 1961:210; Weiser and Kern 1999:83). Despite the ravages of the Depression, the local economy did manage to retain the diversity it had achieved following the end of the gas boom. Some of the items that were manufactured in Findlay during the 1930s included cigars, washing machines, clay pigeons (at the Remington Arms factory), medicinal products, and cosmetics (Humphrey 1940:137).

Due to judicious planning by the Findlay Chamber of Commerce and other civic leaders as well as cooperation between business interests and organized labor, Findlay was able to avoid the economic trouble that could have resulted if returning servicemen came home to a lack of jobs following World War II. Instead, Findlay was able to attract several prominent national corporations, including RCA, Eastman Kodak and Dow Chemical. In addition, the Ohio Oil Company, which renamed itself the Marathon Oil Company in 1962, continued to maintain corporate offices in Findlay. The result was a second economic boom that lasted from 1946 to 1956. During this decade some additions that had originally been platted during the gas boom of 1887-1890 were finally developed, and further additions were added to all sides of the city. The northern portion of Findlay, above the river, saw the most pronounced development (Humphrey 1961:214-215, 219; Weiser and Kern 1999:63; Marathon Oil Company 2008).

Findlay and Hancock County experienced a third economic boom during the final two decades of the 20th century. In the late 1980s the Tall Timbers industrial park was established on the northern side of town; its status as a Trade Free Zone attracted many businesses, including ten Japanese companies. A second industrial/business park, Westfield Park, was built on the western edge of Findlay, and several high-tech firms opened offices in the city and the county. All told, between 1986 and 1998 a total of 27 new companies located plants or offices in Findlay and 60% of existing businesses expanded their operations (Weiser and Kern 1999:64).

2.3.5 Migration, Ethnic Groups, and Demographic Change

The vast majority of Hancock County's earliest Euroamerican residents were native-born whites of Anglo-American stock, while a small percentage were immigrants from France and Germany, a demographic profile that remained intact until well into the 20th century (Howe 1977:867; Humphrey 1940:137). Along with the sudden and dramatic economic growth resulting from the gas boom came an equally dramatic population explosion, revealed in the following figures: 1870—3,315 residents; 1880—4,633; 1887—10,221; and 1890—18,553 (Heminger 1965:23; Spaythe 1903:189; WBC 1886:344). Although over 60 additions to the city had been surveyed between 1834 and 1885 (WBC 1886:537), many of them were small and the city as a whole was still contained within an area of four square miles at the beginning of 1887. Before the year was over the city had engulfed the entirety of Findlay Township in the course of growing to a size of 24 square miles; numerous additions were carved out of adjacent farmland.

In a report written in mid-1887, Ohio State Geologist Edward Orton stated that 700 dwellings had already been built since January and that an equal number were projected to be constructed before the end of the year. Between spring and late summer alone, Findlay's population skyrocketed from just over 10,000 people to an estimated 13,000 to 18,000 people (Orton quoted in Measell and Smith 1986:3-4). New additions continued to be laid out through 1890, although the population appears to have stabilized after 1887.

Immediately following the end of the oil boom, Findlay experienced a large but temporary drop in population as manufacturing industries left town. The city's population had peaked at 18,553 in the 1890 census, and was still 17,613 in the 1900 census (Spaythe 1903:189); in 1910, it had dropped to 14,858, a decline of over 15%. The city's population rebounded to just over 17,000 in 1920, however, and continued to increase modestly each decade thereafter (Humphrey 1961:203). In the 2000 census the population of Findlay was recorded as 38,967; Hancock County's population was 71,295 (U.S. Census Bureau n.d.).

2.4 Literature Review

2.4.1 Previous Cultural Resource Investigations

Several previous cultural resource investigations have been conducted in the downtown Findlay area, primarily associated with previous iterations of the long-term effort to control flooding along the Blanchard River. These were described in the Work Plan, and will be summarized here.

2.4.1.1 Cultural Resource Reconnaissance Surveys, 2010

In May 2010, the Northwest Ohio Flood Mitigation Partnership, Inc. (NWOFMP) contracted MSG to conduct a Phase I cultural resources survey of three proposed flood mitigation corridors centered along the Blanchard River in Ottawa and Hancock counties, Ohio. This survey was undertaken as part of a larger suite of environmental studies that resulted in the completion of a draft environmental impact statement (EIS) for the proposed flood mitigation measures. Two of the proposed flood mitigation corridors were located in and around the City of Findlay (Hancock County), and the third was located in and around the Village of Ottawa (Putnam County). This summary addresses only the Hancock County corridors.

The two Hancock County corridors included agricultural tracts outside of the city, and residential, commercial, industrial, civic and parkland areas within the city limits. Overall, the two corridors encompassed 1,011 acres (409 ha). The Phase I archaeological survey identified and recorded 51 archaeological sites and 12 isolated finds within the APE. In addition, land-use histories of selected lots within 10 urban neighborhoods resulted in the identification of four archaeologically sensitive neighborhoods and two potentially sensitive neighborhoods. Based on the results of the survey, MSG recommended 15 individual sites or site components as potentially eligible for listing in the National Register of Historic Places (NRHP) under Criterion D. MSG recommended additional Phase II study of the NRHP-eligible sites and the archaeologically sensitive neighborhoods, as well as exploratory archaeological testing to determine whether Phase II evaluative testing was warranted in two additional potentially archaeologically sensitive neighborhoods (Chidester et al. 2011).

MSG had previously established the APE for history/architecture resources for the two Hancock County corridors in January 2010. The APE included areas where a right-of-way take was possible or where visual or traffic impacts were anticipated. In total, the history / architecture APE

for the Hancock County corridors encompassed 2,228 acres (902 ha). Through on-site reconnaissance, MSG identified and recorded 324 properties (representing 379 individual buildings or structures) in the Hancock County corridors that were over 50 years of age and retained some elements of physical integrity. Depending on the integrity and occurrence of the resource, survey data was recorded either on I-Forms (94 properties) or in Documentation Tables (230 properties). Their eligibility for listing in the NRHP was based on the National Register Criteria for Evaluation (36 CFR 50.4). (Of the 324 properties identified and recorded during the survey, 62 properties previously recorded on Ohio Historic Inventory (OHI) forms were also included; 55 of those properties were located in the Findlay Downtown Historic District, which is listed on the NRHP under Criteria A and C.) Additional Phase II studies were recommended for 39 properties that maintained their physical integrity, were architecturally notable, were best examples of a property type, or that suggested a potential for historic significance that was not revealed at the reconnaissance level of research. For these properties, further research was needed to establish clear associations with the historic contexts developed in the study plan. No further research was recommended for the 55 properties in the historic district (Johnson et al. 2011).

None of the archaeological or architectural/historic sites identified by these surveys are located within or adjacent to the APE for the Norfolk Southern Railroad Improvements project. The locations of these sites in proximity to the current APE are shown in Figures 2.2 and 2.3.

2.4.1.2 Section 106 Review of 16 Properties

In 2008 the NWOFMP received $3 million from the Ohio Capital Improvements budget for the acquisition and demolition of "at-risk" properties within the Blanchard River floodplain. With those funds, the NWOFMP acquired 16 properties that had suffered repeated flood damage, were no longer habitable, and posed serious health, safety and liability issues. MSG was contracted by the NWOFMP in December 2009 to document and evaluate the 16 previously unrecorded properties proposed for demolition.

Using a geographic context focused on the study area, which was supplemented by site-specific research and photographic documentation, MSG has determined that none of the above-ground structures on these 16 properties met the eligibility criteria for listing in the NRHP, either individually or as part of a historic district, and no further investigations were recommended. Further, MSG recommended that the demolition of these properties would have no impact on other properties currently listed in the NRHP, including the Findlay Downtown Historic District (Johnson and Chidester 2010).

However, research determined that 11 of the 16 properties appeared to have high or moderate potential for intact archaeological resources that may meet NRHP eligibility criterion D. Due to the potential for disturbance of these archaeological resources during demolition of the above-ground structures, MSG recommended that a professional archaeologist be present during demolition activities on these 11 properties in order to record any potentially significant features or artifact deposits that may be revealed (Johnson and Chidester 2010).

Figure 2.2
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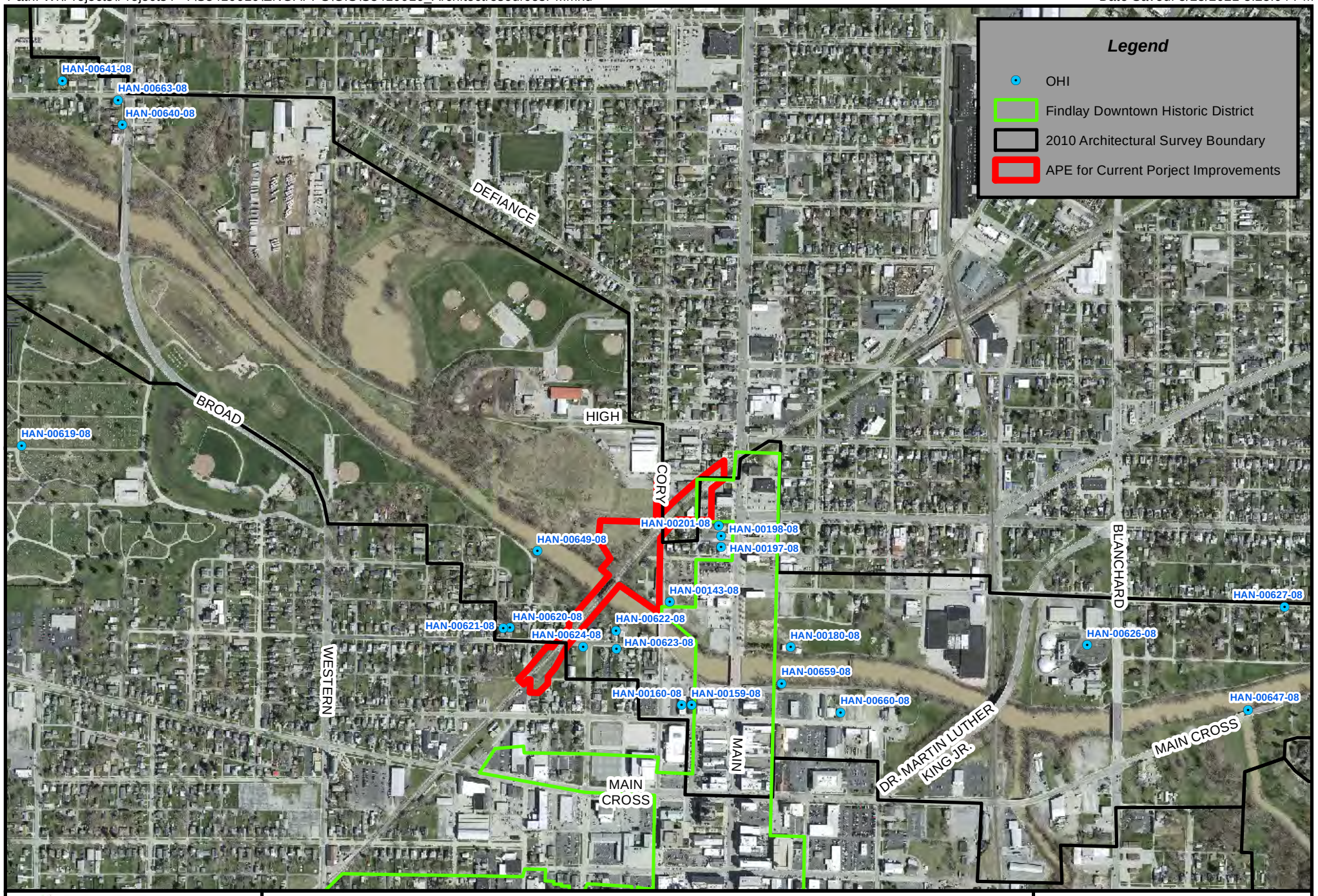

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Figure 2.3: Literature Review - Architectural Resources
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio

Notes

The Hancock County photography, dated April 2017, is provided by OGRIP as part of the Ohio Statewide Imagery Program.

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With two exceptions, the demolition of the archaeologically properties was monitored by an archaeologist from MSG in October-November 2010. All nine monitored sites yielded archaeological remains, although some were more intact than others. One property yielded over 1,400 artifacts, including over 1,000 artifacts from two test excavation units; two properties yielded between 700-900 artifacts; four properties yielded between 100-500 artifacts; and two properties yielded fewer than 100 artifacts. Following the completion of monitoring, all nine sites were assigned OAI numbers. MSG recommended that two of the sites are eligible for the NRHP; that four of the sites are potentially eligible for the NRHP; and that two of the sites are not eligible for the NRHP. A recommendation was not made for the ninth site. Additional, systematic archaeological investigation was recommended for the potentially eligible sites and the site for which no recommendation regarding eligibility was made (Chidester and Johnson 2017).

Two of the monitored archaeological sites (33HK0777 and 33HK0810), both of which were recommended potentially eligible for the NRHP, are located within the APE for the current project (see Figure 2.2).

2.4.2 Cartographic Sources

Historic Sanborn fire insurance maps and high-altitude aerial photographs were examined during the literature review. Such cartographic sources disclose early patterns of land use for a given area, helping to shed light on previous geographical distributions of industries, residential neighborhoods, and other structural elements of human occupation in urban locales. These documents are key to understanding the historical landscape of the project area and how it has evolved over time.

For this project, Sanborn maps from 1895, 1901, 1908, 1915, 1924, 1930 and 1949 were examined (see Appendix A, Figures A1-A7). (Sanborn maps of Findlay from 1884, 1887 and 1890 do not depict this part of town.) The 1895 Sanborn map shows that Cory Street had yet to be built. Meeks Court is depicted, though it is labeled as "Not Graded." Only one structure was present within the archaeological survey area, a small building in the location of present-day 141 Meeks Ave. By 1901 Cory Street had been constructed, and additional buildings appear within the archaeological survey area. These, as well as other buildings on adjacent parcels, represented the development of light industries on the fringes of the downtown area during the early 20th century. The archaeological survey area continued to be primarily industrial through the 1920s, but by 1930 at least one former industrial building (located at 137 Meeks Ave.) had been converted to a residence. Also by 1930, previously vacant parcels in this general neighborhood had been largely developed with single-family homes. By 1949 the area was almost entirely residential, with only a small cigar factory still being located within the archaeological survey area and a "poultry dressing" facility adjacent to it.

High-altitude aerial photographs dating from 1939, 1949, 1957, 1969, 1979, 1988, 1994, 2004, and 2015 (HIG 2018) were also examined (see Appendix A, Figures A8-A15). Unfortunately, tree cover on the north bank of the Blanchard River largely obscures the view of any structures within the archaeological survey area on these photographs. No major changes are visible to downtown Findlay during this time span, with the exception of the addition of baseball fields to Swale Park between 1988 and 1994 and the rather intensive use of the area now known as the Bradman tire dump (between the Norfolk-Southern Railroad and Swale Park, to the northwest of the current APE) between 1957 and 2004.

3.0 HISTORY/ARCHITECTURE SURVEY

This section of the report includes a description of the research design and field methods that were used to identify historic/architectural resources within the project APE and the results of those investigations. The fieldwork was completed on April 15, 2020 by Maura Johnson and Daniel Hershberger.

3.1 Research Design

The background research and historic context provided a framework for understanding what types of historic/architectural resources might be present in the study area. At various stages during this ongoing project, MSG has produced several reports for flood mitigation studies in Hancock County that have established a detailed building typology and description of prevailing architectural styles. For that information, the reader is specifically directed to the survey plan (Johnson et al., 2010) that was prepared for Phase I architectural investigations associated with initial flood mitigation studies in Hancock County.

3.2 Field Survey Methods

Field reconnaissance included survey of all buildings and structures over 50 years of age within the APE. All properties meeting the 50-year threshold were photographed and located on field maps. Other relevant attributes were recorded as field notes. Historic maps were cross-referenced with more current maps for use in the field, to guide the field investigators to areas of potential interest as well as to bracket possible construction dates for those buildings identified in the field.

3.3 Survey Results

Through on-site reconnaissance MSG identified and recorded one property within the project APE that meets the 50-year threshold, the Norfolk Southern bridge over the Blanchard River. The location of the bridge is shown in Figure 3.1. Constructed in 1903 by the Lake Erie and Western Railroad Company, the bridge (HAN0067808) is a through two (or twin) riveted built-up girder. The photolog in Appendix B includes views of the bridge. The OHI form in Appendix F describe the features, integrity, and relevant attributes of the property.

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Figure 3.1: History/Architecture Survey Results
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio

Notes
The Hancock County photography, dated April 2017, is provided by OGRIP as part of the Ohio Statewide Imagery Program.

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4.0 ARCHAEOLOGICAL SURVEY

The archaeological survey was conducted from November 20 – 22, 2017. This section of the report includes a description of the archaeological research design developed as a result of the background research (detailed in Section 2), the resulting field methods employed to identify and evaluate archaeological resources within the survey area, and the laboratory methods used to analyze the material culture that was recovered.

4.1 Research Design and Methods

4.1.1 Research Design

The research design for the archaeological survey was based on the results of previous archaeological investigations within Findlay as well as the relevant prehistoric and historic contexts (see Sections 2.2-2.3). Given the history of urban development within the project area, intact evidence of extensive prehistoric occupation is unlikely to survive. Therefore, the research design focused on archaeological resources associated with the historic period.

As noted in Section 2.4, two previously recorded archaeological sites – 33HK0777 and 33HK0810 – are located within the archaeological survey area. Both of these sites were initially developed for light industrial use during the late 19th century, representing the economic growth that resulted from Hancock County's natural gas and oil boom of the 1880s-1890s. By the middle of the 20th century such industrial activity had largely moved to the outskirts of the city, however, and formerly industrial parcels in and around the downtown area were being converted to residential uses. This was the case for both 33HK0777 and 33HK0810. The former represents a cigar factory that was converted into a residence at [location redacted], while the latter represents a mattress factory picking room and furniture repair shop that was converted into a residence at [location redacted]. Archaeological monitoring of both sites during the demolition of structures on the properties in 2010 resulted in the documentation of archaeological deposits associated with the residential occupation of both sites, as well as the earlier industrial use of 33HK0810 (Chidester and Johnson 2017).

In addition to the parcels at [locations redacted], similar industrial-turned residential properties are present within the archaeological survey area. Therefore, the survey had two goals: first, to identify whether any additional intact archaeological resources are present within the archaeological survey area through close-interval shovel-testing; and second, to evaluate the stratigraphic integrity and information potential of 33HK0777 and 33HK0810, as well as other archaeological resources that may be identified during shovel testing, through the excavation of several 1 m x 1 m (3.3 ft x 3.3 ft) square test excavation units.

4.1.2 Field Survey Methods

The archaeological survey was conducted in accordance with the guidelines developed by the SHPO (Ohio Historic Preservation Office 1994). The shovel testing survey consisted of the excavation of 50 cm x 50 cm (19.7 in x 19.7 in) shovel test pits (STPs) at 10-m (32.8-ft) intervals throughout the archaeological survey area. These STPs were excavated until culturally sterile subsoil was encountered or to a depth of 50 cm (19.7 in), whichever came first. Excavated soil was screened through ¼-in wire mesh, and recovered artifacts were bagged and labeled with the provenience. Radial STPs were excavated at a distance of 5 m (16.4 ft) in cardinal directions from positive STPs in order to delineate the horizontal extent of archaeological deposits, and additional judgmental STPs were excavated in select locations in order to investigate stratigraphic integrity and potential archaeological features. Locations of positive STPs were recorded using a hand-held

Trimble GPS unit with sub-meter accuracy. The entire project area was visually inspected and photographically documented.

In addition, three 1 m x 1 m (3.3 ft x 3.3 ft) square test units were excavated – two within 33HK0777 and one within 33HK0810. The placement of these units was guided by the goal of determining whether subsurface features or artifact deposits associated with the industrial or residential occupations of the parcels were present on these two sites. The test units were excavated according to natural stratigraphic layers. As with the STPs, excavated soil was screened through ¼-in wire mesh, and recovered artifacts were bagged and labeled with the provenience. Stratigraphic levels and unit wall profiles were photographed, and scale drawings of the same were produced. Members of the field crew took detailed notes about soil colors, textures, inclusions, stratigraphy, and other relevant information.

4.1.3 Laboratory Methods

All cultural materials collected in the field were washed, sorted and catalogued in MSG's laboratory facility in Maumee. Artifacts were rinsed in water and loose dirt was removed with a soft-bristled toothbrush. Fragile artifacts or those not suited to wet cleaning (e.g., wood or charcoal fragments, heavily rusted metal items) were dry-brushed to remove dirt. After artifacts were cleaned, they were re-bagged in 4-mil plastic ziplock bags, and the bags were labeled according to provenience.

The following is a description of the methods used by MSG to analyze the cultural materials collected from each site encountered during the Phase I survey.

4.1.3.1 Prehistoric Artifact Analysis

Lithic Artifacts

In many ways, lithic assemblages are ideal for the study of prehistoric cultures. Chert was almost universally utilized by prehistoric cultures in North America. Because the tool manufacturing process creates large amounts of lithic detritus, chert has a nearly ubiquitous presence on prehistoric sites (Meyers 1970:5). In the study area, chert would have likely been gathered from either of two possible sources: primary bedded outcrops or glacial till and other secondary deposits.

Determination of chert types is based upon a macroscopic investigation of the overall properties of the chert and descriptions taken from relevant literature (e.g., DeRegnaucourt and Georgiady 1998; Justice 1987; Ritchie 1961). As much as possible, all lithic artifacts are identified by chert type. In cases where it is not possible to identify the type of chert, artifacts are generally assumed to have been manufactured from local pebble cherts from glacial deposits.

MSG's classification scheme for prehistoric artifacts seeks to order all lithic artifacts into primary groups based upon shared attributes (e.g., bifaces). These classes are broken down further into morphological classifications that seek to place artifacts into descriptive categories with a focus on the similarity of objects, if not their specific usage (e.g., projectile points). When possible, these descriptive categories are assigned to tertiary groups, which are types that have been shown to have chronological or cultural significance (e.g., Kirk Corner-Notched projectile points, which are diagnostic of the Early Archaic period). The primary artifact classes utilized by MSG are cores (which can be further divided into blade cores and flake cores), lithic debitage (which includes flakes, shatter and remnant core fragments) and tools (including projectile points, bifaces, gravers, scrapers, drills, grinding stones, etc.).

4.1.3.2 Historic Artifact Analysis

Following the completion of initial processing, historic materials are identified according to material, method of manufacture, and function. Historic artifacts can be separated into seven broad material categories: ceramics, glass, masonry, metal, plastic, faunal, and other. Next, artifacts are sorted into subcategories within each of the material categories. They are also grouped into functional categories, which can serve as analytical tools in examining patterns such as activity areas, consumption and intensity of site use. These functional categories have been adapted by MSG from previous studies (e.g., Mansberger 1988; Rogers et al. 1988; South 1977). Both material and functional categories are discussed in this section.

Ceramics

Ceramics are one of the most temporally diagnostic artifact classes on historic-period sites. Ceramic analysis can illustrate the socio-economic status of site occupants (Miller 1980, 1991), consumption preferences (Wall 1994), and the range of some site-specific activities (such as cooking, hosting visitors, or gardening), among other things. During laboratory analysis, ceramics are initially sorted into the following ware types: stoneware, unrefined earthenware, refined earthenware, and porcelain. Ware types are distinguished on the basis of paste color, paste texture, glaze, and decoration. The classifications and chronologies formulated by standard collectors' identification guides (e.g., Cushion 1980; Debolt 1994; Greer 2005; Ketchum 1983, 1987, and 2000; Lehner 1988; Raycraft and Raycraft 1990), as well as the academic literature (e.g., Claney 2004; Gibson 2011; Lofstrom et al. 1982; Miller 1980, 1991; Miller and Hunter 2001; Miller et al. 2000; Noël Hume 1969; Samford 1997; South 1977; Sussman 1977, 1997), are among the sources used to identify and date ceramic artifacts.

Glass

Prior to 1860, little technological change had occurred in the glass industry and almost every piece was handmade. Glassmaking underwent a "revolution" during the second half of the 19th century, resulting in numerous identifiable temporal markers. These manufacturing characteristics and their respective temporal ranges have been identified for vessel glass (bottles and jars), tableware, window, and miscellaneous glass. For example, mouth-blown bottles or jars (which pre-date the mid-1860s) will exhibit a pontil scar on the base, while mold-blown bottles (which in the U.S. may date anywhere from ca. 1830 to 1920, depending on the type of mold used) will have side mold seams that run from the base or heel of the vessel to its neck or the base of the lip. A bottle or jar with a side mold seam that continues to the top of the lip, indicating fully automated manufacture, post-dates 1905. Color and function are other major characteristics used to identify glass artifacts. While color is not always a reliable diagnostic tool, it often illustrates function and can sometimes provide date ranges. For instance, glass with magnesium added as a decoloring agent (a technique used from about 1870 to 1914) can often become solarized, and turns purple when exposed to the sun (Lockhart 2006). Applied color labeling, which is still commonly used on glass soda-pop bottles, was first introduced in the 1930s (Miller et al. 2000:8). MSG's procedures for glass identification and temporal affiliation follow studies by Bender (2016), Deiss (1981), Jones (2000), Jones and Sullivan (1989), Ketchum (1975), Lorrain (1968), Madden and Hardison (2004), Miller and McNichol (2012), Putnam (1965), Toulouse (1971), and Weiland (2009), as well as the Society for Historical Archaeology's *Historic Glass Bottle Identification & Information Website* (www.sha.org/bottle).

Metal

Metal artifacts are identified by material (aluminum, brass, copper, iron, lead, steel, etc.) and function (hardware, tools, roofing, buttons, etc.). The mode of manufacture may be used to identify and date the artifact (e.g., Busch 1981; Rock 2000; Wells 1998), and spatial analysis can provide

important clues as to the layout of a site; this has proven especially successful in the analysis of historic nails (e.g., Young 1994). Metal artifacts are commonly found in severely deteriorated states that prevent successful identification. When good preservation exists, metal artifacts can be useful not only in dating an assemblage, but also in establishing construction dates for architectural and mechanical features.

Masonry
This category includes material types that do not fit into any of the above categories but that share a general similarity of function such that it is practical to create a category for them rather than simply including them in the broad category of "Other" (see below). Material types that fall under the masonry category include brick, mortar, concrete, and dressed stone.

Plastic
Although long ignored by archaeologists, plastic is increasingly becoming a focus of research as more and more 20th-century sites pass the 50-year threshold for NRHP eligibility. The very first plastics, including materials known as gutta percha, vulcanite, and hard rubber, were made of natural materials and were produced as early as the 1840s. Modern plastics are made from mostly synthetic materials and can be divided into thermosetting plastics (those that are formed into a fixed shape by heating and stay in that shape even if re-heated) and thermoplastic plastics (those that are heated for shaping, become firm when cooled, but soften again if re-heated) (Young 2004:113). The first modern plastic, trademarked as Bakelite, was introduced in 1907. Bakelite is a very hard plastic that was used for electrical and telephone parts. Pyralin plastic was invented in 1915 and was used for items such as combs, tooth brushes, pens, toys, and kitchen tools. Melmac plastic was trademarked in 1940 and used in the production of tableware; just five years later Tupperware was invented (Miller et al. 2000:16-17).

Faunal
On historic archaeological sites, faunal remains can indicate the degree to which a site's occupants were self-sufficient or participated in the broader local economy; the financial and social status of the residents; and even their ethnicity (based on generalized ethnic preferences for different types and cuts of meat). Faunal remains on historic sites can also include the remains of domesticated animals such as pets, livestock, and draft animals. Faunal remains are analyzed using standard identification guides (e.g., *Mammal Remains from Archaeological Sites* [Olsen 1964], *Mammalian Osteology* [Gilbert 1990], *Avian Osteology* [Gilbert et al. 1996], and *Fish, Amphibian and Reptile Remains from Archaeological Sites* [Olsen 1968]) following the methods set forth in O'Connor's *The Archaeology of Animal Bones* (2000) and Beisaw's *Identifying and Interpreting Animal Bones: A Manual* (2013).

Other
This category encompasses all material types that cannot be classified as ceramic, glass, metal, masonry, plastic, or faunal. Examples of such material include textiles (e.g., clothing), floral remains (e.g., wood, charcoal), paper products, lithic artifacts (e.g., roofing slate), and mineral artifacts (e.g., coal). The *Other* category also includes composite artifacts, or those that are made of multiple material types or composite materials. Some examples include asphalt; glass jars with metal lids still attached; porcelain electrical insulators with metal pins; and flashlights with metal, plastic and/or glass parts.

Functional Categories
Historic artifacts are also separated into functional categories in order to determine the function of features and sites. The functional categories used in the present study include:

1. *Kitchen,* which is divided into food preparation, food service, food storage, and dietary remains (including floral and faunal remains);
2. *Architecture*, which is divided into construction materials, architectural hardware (e.g., nails), fixtures (e.g., window glass, door hinges, coat hooks, etc.), utilities (e.g., electrical wiring, plumbing-related artifacts, utility pipes, etc.), and miscellaneous;
3. *Domestic,* which is divided into lighting and electrical items, furnishings and housewares (furniture, decorative tableware, knick-knacks, etc.), domestic labor supplies (e.g., sewing needles, bleach bottles, etc.), appliances/appliance parts, landscaping-related artifacts (e.g., flower pots), and miscellaneous domestic items (e.g., door keys);
4. *Personal*, which is divided into clothing (fasteners [such as buttons], footwear, and miscellaneous), indulgence (pipes, etc.), personal adornment (jewelry, cosmetics, etc.), religion (e.g., religious tokens, rosary beads, etc.) coins, communication (writing supplies, etc.), toys (dolls, miniature tea sets, games, figurines, etc.), education (e.g., writing slates, slate pencils), pets (faunal remains of domesticated pets, pet toys, license/vaccination tags, etc.), recreation (sports, hobbies, etc.), health and hygiene (toothbrushes, hair supplies, pharmaceutical, etc.), and miscellaneous;
5. *Commercial,* which includes paper or plastic advertisements, packaging materials for commercial goods, etc.
6. *Transportation,* which includes non-automotive vehicular parts, automotive parts, aeronautical equipment and parts, associated items such as motor oil cans, sections or pieces of former roads, etc.;
7. *Agriculture,* which includes agricultural tools, storage, agricultural machinery, transportation equipment, infrastructure (e.g., drainage tiles), livestock/domesticated work animals (i.e., faunal remains), livestock artifacts (e.g., horse shoes, bridal buckles, other livestock-related equipment and tools, etc.), and miscellaneous agricultural items (i.e., artifacts related to ancillary activities, such as kiln bricks);
8. *Industry,* which includes machinery and machinery parts, transportation equipment, raw materials, infrastructure, industrial hardware, and industrial by-products or waste (e.g., slag);
9. *Arms*, which includes weapons and weapon parts, ammunition, etc.;
10. *Miscellaneous,* which includes fuel (including coal and charcoal), fuel storage, storage, miscellaneous hardware, tools, power generation (e.g., batteries), utility infrastructure (e.g., sewer or drainage pipes, telephone insulators), and non-industrial waste byproducts (e.g., slag, rust concretions);
11. *Indeterminate,* which includes indeterminate ceramic items, glass vessels that may be either pharmaceutical *or* kitchen, metal cans for which the original contents cannot be identified, etc.;
12. *Non-Cultural,* which consists of unmodified natural objects (i.e., natural rocks) and non-cultural faunal and floral remains. (Non-cultural objects that were collected during fieldwork were cataloged but not included in functional analyses of individual sites.)

4.1.4 Artifact Disposition

All cultural materials collected during professional archaeological investigations are the property of the landowner. Therefore, MSG will notify all property owners whose land contains an archaeological site documented during this survey. For each site *not* recommended for further testing or mitigation, property owners will be asked to choose whether they want the artifacts from the site(s) on their property to be returned to them, or whether they want to donate the artifacts to a curation or museum facility. For sites that have been recommended for further testing or mitigation, the artifact collections will be retained until such time as all investigations at the site(s) have been completed. At that time, the relevant property owners will be given the same choice regarding return or donation of artifacts.

If a property owner requests that artifacts from their property be returned to them, MSG will package the artifacts along with a complete catalog and ship them back to the property owner. If a property owner wishes to donate his or her artifacts to a curation or museum facility, MSG will facilitate such donation, including all applicable standards for preparing the collection(s) prior to delivery.

4.2 Survey Results

The archaeological survey area is characterized by several changes in elevation (see Appendix C, Photos 6, 8, 9, 22). The western boundary of the survey area is marked by a ditch at the base of the Norfolk-Southern Railroad bed, while the southern boundary of the survey area is the Blanchard River. The eastern boundary of the survey area is marked by Meeks Court (to the south) and a specialty automotive engine repair shop (to the north). The survey area gradually slopes down toward the west, with the western end being frequently inundated; the southern edge slopes down sharply to the river. The eastern half of the project area is located several feet above the surrounding city streets.

4.2.1 Shovel Test Survey Results

A total of 30 primary STPs were placed within the survey area, along with 10 radial and judgmental STPs. Of these, 14 STPs yielded cultural material from apparently intact stratigraphic contexts; 12 STPs were negative for cultural material; 10 STPs exhibited evidence of historic or modern disturbance to the stratigraphic profile, or could not be excavated due to inaccessibility of the ground surface (e.g., the presence of extant structures, dead trees, etc.); 3 STPs could not be excavated due to wet or inundated soils; and 1 STP was not excavated due to steep slope (>20%) (Figure 4.1). Natural and cultural landscape features within the survey area are shown on Figure 4.2.

The majority of positive STPs were located within the boundaries of 33HK0777 (six positive STPs) and 33HK0810 (six positive STPs). These will be discussed in more detail in the sections below. However, two other locations within the survey area bear some discussion.

4.2.1.1 Elevated Landform South of [location redacted]

The two positive STPs that were not located within previously recorded archaeological site boundaries were both located at the western edge of the elevated landform [location redacted] (Figure 4.2; Appendix C, Photo 6). Currently devoid of structures, this parcel was first improved sometime between 1908 and 1915. In the latter year, the Sanborn Fire Insurance map of Findlay depicts a two-story structure in this location (see Appendix A, Figure A4). The structure does not, however, have a functional designation on the map. On the 1924 and 1930 Sanborn map, the two-story portion of the structure is labeled as an automotive garage, while the one-story portion of the structure remains unlabeled (Appendix A, Figures A5-A6). By 1949, however, this structure had been replaced by a two-story residential duplex with a detached one-story garage (Appendix A, Figure A7). Unfortunately, high-altitude aerial photographs from 1939-2004 (Appendix A, Figures A8-A15) do not provide any additional information about this parcel – tree cover obscures any structures that were present in this location. Both the duplex and the garage had been removed by the time MSG conducted archaeological monitoring at [location redacted] in the fall of 2010.

Figure 4.2
REDACTED

The two positive STPs located on this parcel were adjacent to each other – one primary STP and its western radial – [location redacted]. Despite being located just 5 m (16.4 ft) apart, however, the two STPs exhibited strikingly different stratigraphic profiles. STP C3 (to the east) exhibited a profile consisting of a 10YR 3/2 very dark grayish brown silt loam A horizon that extended to a depth of 15 cm (5.9 in) below ground surface (bgs), a gravel layer that extended from 15-30 cm (5.9-11.8 in) bgs, and a 10YR 5/4 yellowish brown clay loam subsoil horizon that extended to the limit of excavations at 40 cm (15.7 in) bgs. STP C3, Radial 5 m West, on the other hand, exhibited a profile consisting of a 10YR 5/4 yellowish brown gravelly loam A horizon that extended to 30 cm (11.8 in) bgs, overlying a 10YR 4/3 brown sandy loam B horizon with approximately 80% gravel inclusions that extended to the limit of excavations at 40 cm (15.7 in) bgs.

In addition to these positive STPs, four other STPs on the same landform could not be excavated to a depth of more than 5 cm (2.0 in) bgs due to extremely heavy gravel inclusions. One of these STPs was judgmentally placed in a small depression measuring approximately 3 m x 3 m (9.8 ft x 9.8 ft). [location redacted]. It is unclear what this depression represents, although one possibility is that it was the location of the detached garage depicted on this parcel on the 1949 Sanborn fire insurance map.

The two positive STPs yielded a variety of materials. A total of 40 historic-period artifacts were collected, including ceramic, glass, masonry, metal, plastic, and "other" artifacts as well as one faunal remain (Table 4.1; Appendix E, Table E2). One diagnostic artifact was recovered – a rim fragment from a green Depression glass goblet or bowl bearing the Hocking Glass Company's pressed-glass "Cameo" pattern. This pattern was made from 1930-1934 (Florence 1996; see Appendix C, Photo 33). Four functional artifact categories are present within the assemblage from the elevated landform: Architecture (n=10; 25%), Miscellaneous (n=10; 25%), Kitchen (n=4; 10%), and Indeterminate (n=16; 40%).

Table 4.1 Artifacts Recovered by Provenience on Elevated Landform

	Material Category							
Provenience	Ceramic	Faunal	Glass	Masonry	Metal	Plastic	Other	Total
STP C3	1	0	10	1	1	0	5	*18*
STP C3, Radial 5m West	3	1	2	2	11	1	2	*22*
Total	*4*	*1*	*12*	*3*	*12*	*1*	*7*	*40*

It is possible that the artifact assemblage recovered from the elevated landform at the [location redacted] of the archaeological survey area is related to the occupation of this parcel during the 20th century. However, the landform appears to have been artificially raised at some point by the placement of gravel fill, with a sod cap placed on top. Due to the lack of stratigraphic integrity in this part of the archaeological survey area, along with the possibility that the recovered artifacts represent dirty fill rather than *in situ* evidence of cultural deposition, this location has not been assigned an OAI number. Furthermore, since it does not appear to represent an intact archaeological site, its eligibility for the NRHP will not be assessed in this report.

4.2.1.2 [location redacted] (Residential Parcel)

A residential parcel with the address [location redacted]. A 792-ft^2, one-story, wood frame structure sits on this parcel (Appendix C, Photos 1-4). A two-story wood frame structure was present in this location by at least 1895; this structure was either replaced or expanded to the south by 1901. In this latter year, the Sanborn fire insurance map labels the structure as a mattress factory. By 1908 this structure shared the label of "Upholstering and Mattress Factory" with a one-story structure to the south (on the parcel at [location redacted]. Sometime between 1915 and 1924 the structures became vacant, but by 1930 were re-occupied by a furniture repair business. By 1949 the structure at [location redacted] appears to have been reduced to its original size again and converted to a residence, with a detached garage located just to the south (Appendix A, Figures A1-A7).

It is unclear from available historical documentation when the garage was removed from the property, but it was no longer extant in 2010 when MSG conducted archaeological monitoring of the demolition at [location redacted]. During the current archaeological survey, it was observed that the ca. 1900-1930s foundation of the expanded building is still intact, with the southern (former) half of the building – where the garage was located in 1949 – now occupied by a grassy yard that appears to be modern fill. In addition, a small pile of concrete and asphalt extends to the south off of the southwest corner of this foundation. One judgmental STP was excavated within the yard area enclosed by the foundation, and exhibited mottled, gravelly soil that extended to the limit of excavations at 50 cm (19.7 in) bgs.

The house at [location redacted] is located on a low terrace above the floodplain to the west. One primary STP was excavated adjacent to the house on this terrace and exhibited a soil profile consisting of 10YR 5/4 yellowish brown silty clay loam that extended to the limit of excavations at 50 cm (19.7 in) bgs. Slate inclusions were noted to increase toward the bottom of the STP. A judgmental STP was excavated in the floodplain 3 m (9.8 ft) west of the primary STP and exhibited a disturbed soil profile consisting of 10YR 5/3 brown silty clay loam heavily mottled with 10YR 6/4 light yellowish brown clay that extended to the limit of excavations at 50 cm (19.7 in) bgs. This STP yielded only a small fragment of brick.

In summary, the parcel at [location redacted], although historically associated with 33HK0810 [location redacted], appears to have experienced considerably more disturbance than its neighbor as a result of successive modifications to the primary structure on the property as well as the construction and removal of a garage. The likelihood of intact archaeological resources being present on this parcel appears to be very low.

4.2.2 33HK0777

Originally identified during archaeological monitoring of structural demolition in 2010, 33HK0777 corresponds to the parcel located at [location redacted]. This parcel measures approximately 39 m (128 ft) north-south by 15 m (49 ft) east-west. Prior to its demolition, the residence located on the parcel was a vernacular, two-story, front-gabled structure with a concrete block stoop on the front (north) façade; a shed-roofed wing with an enclosed side porch and open carport was located on the rear (south) façade.

The structure was built ca. 1900 and was originally a cigar factory. Sometime between 1908 and 1915 a shed was constructed to the rear of the factory, and by 1924 the factory had been converted to a dwelling and the shed became home to the cigar manufacturing operation

(Appendix A, Figures A1-A5). This evidence is corroborated by city directories, which list Christoff Seib, cigar manufacturer, as inhabiting the property until at least 1916. The property appears to have remained associated with the cigar factory, perhaps as a residence for the factory manager or other employees, until the 1930s. The shed-cum-cigar factory was still in existence as recently as 1949 (Appendix A, Figures A6-A7), but it appears to have been removed from the property by 1957 (Appendix A, Figure A10).

During the archaeological monitoring in 2010, a total of 175 artifacts associated with the parcel's domestic use (primarily dating to the mid-20th century) were collected. Although none of the artifacts were collected from secure feature proveniences, the presence of the artifacts along with the documented history of the parcel led MSG to recommend additional investigation of 33HK0777 to determine whether it is eligible for the NRHP under Criterion D for its ability to yield data about small industries and working-class life in Findlay during the 20th century (Chidester and Johnson 2017:12).

At the time of the current survey, the only remnants of the occupation of [location redacted] were a small concrete retaining curb along the northern edge of the site and a concrete slab walkway leading from the sidewalk on Meeks Avenue to the former location of the stoop on the northern façade of the house (see Figure 4.2). A total of eight primary STPs and one radial STP were excavated within the boundary of 33HK0777; of these, six were positive for material culture, two were negative, and one could not be excavated due to an impenetrable layer of gravel immediately beneath the ground surface (Figure 4.1). The silt loam A horizon within the site varied from 10YR 3/2 (very dark grayish brown) to 10YR 4/3 (brown) and extended to an average depth of 25 cm (9.8 in) bgs. Across most of the site, the A horizon was underlain by a layer of large sandstone and limestone gravel. However, three STPs in the northeastern corner of the site encountered poured concrete immediately beneath the A horizon.

Based on the shovel-testing results, two 1 m x 1 m (3.3 ft x 3.3 ft) excavation units were opened within 33HK0777. Test Unit (TU) 1 was expanded from STP G7, Radial 3 m North, with the shovel test forming the southwestern quadrant of the excavation unit. The edge of a poured concrete slab was encountered approximately 3 cm (1.2 in) bgs along the southern edge of the excavation unit (see Appendix C, Photos 11-16). TU 1 was excavated in three natural levels corresponding primarily to changes in the size of the gravel inclusions in the soil matrix, ranging from small to medium-sized gravel in Level 1 to large gravel and cobbles in Level 3. The soil matrix consisted of 10YR 4/2 dark grayish brown silty clay mottle with 10YR 5/4 yellowish brown silty clay. Designated as Feature 1, the concrete slab was found to be approximately 10 cm (3.9 in) thick, and was underlain by a layer of loose rocks that was designated Feature 2 (coterminous with Level 2). The unit was terminated at a depth of 62 cm (24.4 in) bgs when the bottom 5 cm (2.0 in) of Level 3 yielded just two artifacts (see Appendix D, Figures D1-D8). It appears that the concrete slab in this unit may have been associated with the former house stoop, with Feature 2/Level 2 representing a prepared ground surface associated with the construction of the stoop.

TU 2 was located in the southwestern corner of 33HK0777, 2.5 m (8 ft) north of STP F4, in the hopes of encountering remains associated with the former shed/cigar factory. TU 2 exhibited little in the way of soil stratigraphy; as with TU 1, it was excavated in natural levels that corresponded to changes in the size of gravel inclusions in the soil matrix (see Appendix C, Photos 17-21). The first three levels consisted of 10YR 3/4 dark yellowish brown silty clay with moderate to heavy large gravel content. Level 4, which began at approximately 74 cm (29.1 in) bgs and was terminated at a depth of 95 cm (37.4 in) bgs), consisted of 10YR 6/4 light yellowish brown clay mottled with 10YR 6/3 pale brown clay and approximately 70% large gravel/cobble inclusions (see Appendix D, Figure D9). No subsurface features were identified in TU 2.

A total of 424 historic-period artifacts were recovered from 33HK0777 during the current survey, including ceramic, glass, masonry, metal, plastic and "other" artifacts as well as faunal remains (Table 4.2). No tightly diagnostic artifacts were recovered, with the exception of an aluminum ring pull-tab (1965-1983) from the top level in TU 1. Nearly 50 square cut nails (ca. 1805-1890) were recovered from all levels within the two test units, but over twice as many wire nails (post-1885) were recovered from the same proveniences. Both test units also yielded a variety of iron hardware, including bolts, wood screws, nuts, a threaded pipe joint, and an upholstery staple (Appendix E, Table E2; Appendix C, Photos 34-48). In contrast to the artifact assemblage collected during monitoring in 2010, the artifacts collected from 33HK0777 during the current survey appear primarily to reflect the parcel's industrial history.

Table 4.2 Artifacts Recovered by Provenience, 33HK0777 (Current Survey)

	Material Category							
Provenience	Ceramic	Faunal	Glass	Masonry	Metal	Plastic	Other	Total
STP F4	2	0	1	1	1	0	1	*6*
STP F5	0	0	0	0	0	1	0	*1*
STP G4	0	0	1	0	0	0	0	*1*
STP G5	0	0	0	1	2	0	2	*5*
STP G6	0	0	0	1	0	0	0	*1*
STP G7, Radial 3m North	0	0	0	1	0	0	3	*4*
TU 1, Level 1	1	0	10	1	27	1	1	*41*
TU 1, Level 2	0	2	1	1	24	0	3	*31*
TU 1, Level 3	0	2	4	4	35	0	5	*50*
TU 2, Levels 1/2	7	0	26	7	46	0	0	*86*
TU 2, Level 3	0	0	3	6	168	0	0	*177*
TU 2, Level 4	0	0	0	0	21	0	0	*21*
Total	*10*	*4*	*46*	*23*	*324*	*2*	*15*	*424*

When the entire artifact assemblage from 33HK0777 (both monitoring and current survey) is considered, nine functional categories are present: Architecture (n=319, 53.3%), Miscellaneous (n=96, 16.0%), Kitchen (n=52, 8.7%), Personal (n=17, 2.8%), Domestic (n=13, 2.2%), Transportation (n=3, 0.5%), Industry (n=2, 0.2%), Indeterminate (n=91, 15.2%), and Non-Cultural (n=6, 1.0%). The architecture category is dominated by a large percentage of architectural hardware (n=264, 82.8%), with smaller percentages of architectural fixtures (n=27, 8.5%), Construction Materials (n=23, 7.2%), lighting and electrical artifacts (n=3, 0.9%), and utilities-related artifacts (n=2, 0.6%). The Miscellaneous category is similarly dominated by miscellaneous hardware artifacts (n=76, 79.2%), much of which may more appropriately be categorized under the Industry category if it can be associated with the parcel's history as a cigar factory. Finally, a majority of the Indeterminate artifacts consist of glass or metal container artifacts for which the original contents cannot reasonably be surmised (n=57, 62.6%).

The lack of clear stratigraphy and the presence of large amounts of limestone and sandstone gravel within the soil matrix across much of the site would seem to indicate that 33HK0777 consists of fill material. However, the large amount of metal hardware throughout the site and the lack of artifacts clearly associated with the later domestic occupation of the site below the upper-most excavated levels in TU 1 and 2 suggest that the fill layers may actually be associated with the early 20th-century cigar manufacturing operation. While a few artifacts were recovered from shovel tests in the area occupied by the former house, no evidence for buried living surfaces or intact features was observed, and it is unlikely that the demolition of the house in 2010 left intact archaeological

resources in these areas. On the other hand, the approximately 15 m x 6 m (49 x 20 ft) area at the northern edge of the parcel (the front yard) and the approximately 15 m x 15 m (49 ft x 49 ft) area at the southern end of the parcel (the rear yard, where the former shed-turned cigar factory was located) were not so disturbed and appear to contain information that could further elucidate the history of the parcel, and in particular the various building and demolition episodes associated with the evolution of the parcel from an industrial use to a domestic one during the second quarter of the 20th century. In addition, more detailed examination of the metal hardware assemblage from this site could yield important insights into the process of small-scale cigar manufacture during the early 20th century, including changes in technology, labor processes, and working conditions.

4.2.3 33HK0810

Originally identified during archaeological monitoring of structural demolition in 2010, 33HK0810 corresponds to the parcel located at [location redacted]. This parcel measures approximately 16 m (52.5 ft) north-south by 35 m (115 ft) east-west. Prior to its demolition, the residence located on the parcel was a vernacular, one-story, gabled-roofed structure with a porch and an exterior basement entrance on the north façade and multiple small wing additions on the south and west façades.

The structure was built ca. 1900 and was originally a picker room associated with the mattress factory located at [location redacted]. After the mattress factory closed in the 1920s, the building at [location redacted] was used as a shed for a furniture repair shop that took over the mattress factory; the structure was not converted into a dwelling until sometime around 1940 (Appendix A, Figures A1-A7). City directories list just three different occupants between 1941 and 1985 (including the same occupant from 1960 to 1985), a rare case of residential longevity in this part of Findlay. Unfortunately, the property cannot be clearly seen on high-altitude aerial photographs from 1939-2004 due to tree cover (Appendix A, Figures A8-A15).

During the archaeological monitoring in 2010, a total of 113 artifacts were collected. Many of these artifacts appear to be associated with the parcel's post-1930s domestic occupation, although some artifacts (such as mattress spring fragments) likely represent its earlier industrial use. Although none of the artifacts were collected from secure feature proveniences, the presence of the artifacts along with the documented history of the parcel led MSG to recommend additional investigation of 33HK0810 to determine whether it is eligible for the NRHP under Criterion D for its ability to yield data about small industries and working-class life in Findlay during the 20th century (Chidester and Johnson 2017:12).

At the time of the current survey, the only remnant of the occupation of [location redacted] was a small, circular depression at the rear (western) end of the parcel, adjacent to the swale at the base of the railroad grade (see Figure 4.2; Appendix C, Photo 32). This depression was designated Feature 1, but was not excavated. The western end of the parcel is relatively flat and low-lying, and appears to be frequently flooded. Beginning approximately 7 m (23 ft) east of Feature 1, the parcel begins to slope gently upward to the east. The easternmost 9.5 m (31 ft) of the parcel, where the factory/house once stood, is level (Appendix C, Photo 22).

A total of six primary STPs and four radial STPs were excavated within the boundary of 33HK0810; of these, six were positive for material culture, two were negative, one was blocked by fallen trees, and one was blocked by the pile of concrete and asphalt extending from the corner of the old foundation associated with [location redacted]. (Figure 4.1). In the low-lying western end of the parcel, the stratigraphy consists of a 10YR 3/1 very dark gray or 10YR 4/2 dark grayish brown silt loam A horizon that extends to an average depth of 45 cm (17.7 in) bgs. In the central portion of the parcel the shovel tests exhibited a 10YR 3/2 very dark grayish brown silt

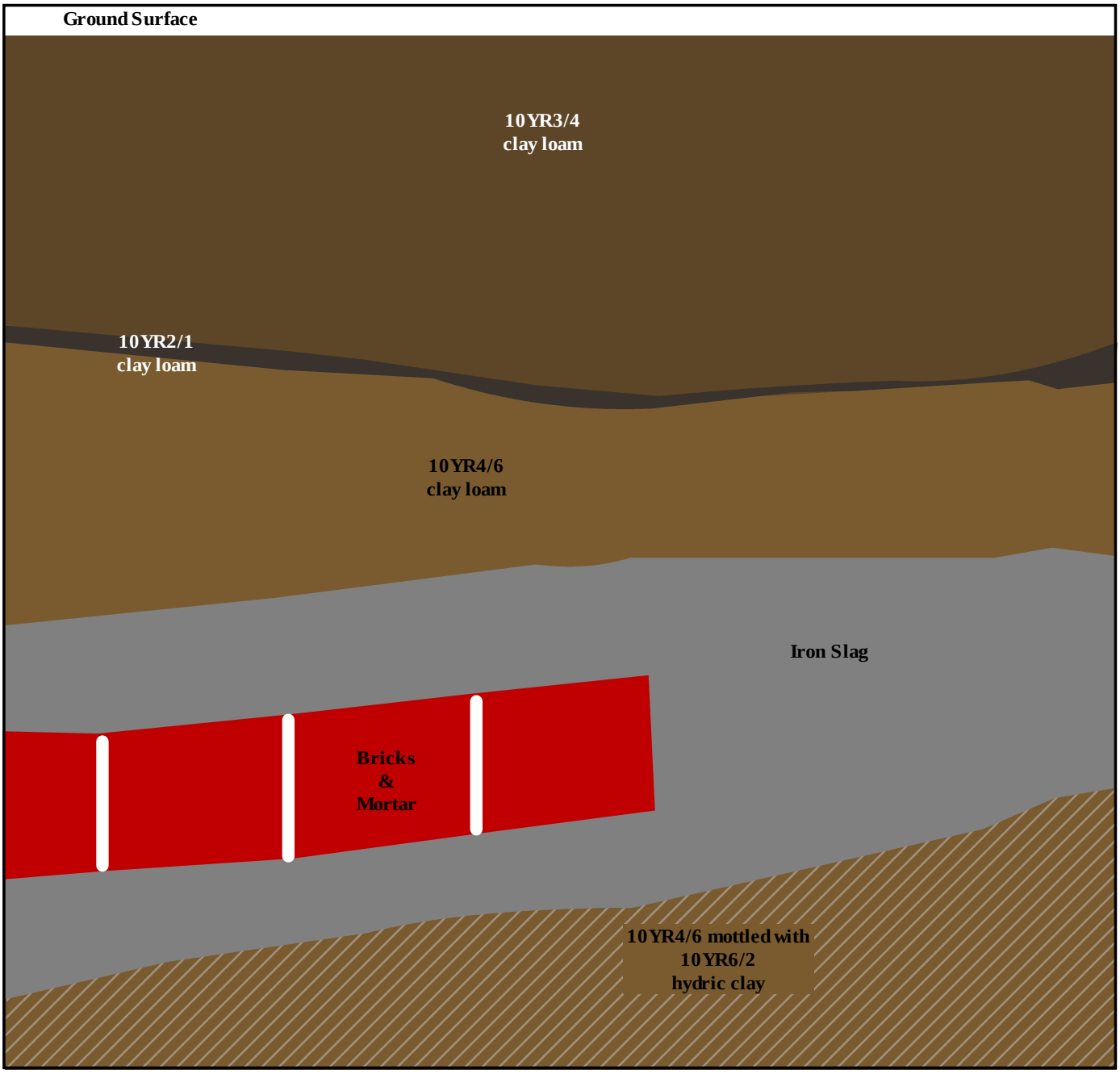
loam A horizon that extended to a depth of 12 cm (4.7 in) bgs; a 10YR 4/3 brown clay loam mottled with 10YR 5/3 brown clay loam Bt1 horizon that extended to a depth of 40 cm (15.7 in) bgs; and a 10YR 5/3 brown silty clay Bt2 horizon that ended at a gravel impasse at 45 cm (17.7 in) bgs.

In the eastern end of the parcel, the natural A horizon appears to have been removed during the demolition of the factory/house in 2010. The soil profile within the former structure area consists of 10YR 4/3 brown clay loam mottled with 10YR 5/3 brown clay loam to a depth of at least 50 cm (19.7 in) bgs. However, this appears to be limited to the ground area directly occupied by the house. STP E6, located approximately beneath or adjacent to the former structure's porch, revealed a more complicated stratigraphy (Appendix C, Photo 23). As shown in Figure 4.3, the top 12 cm (4.7 in) of this STP consisted of 10YR 3/4 dark yellowish brown clay loam, underneath which was a thin stratum of 10YR 2/1 black clay loam that reached a maximum depth of 18 cm (7.1 in) bgs; a stratum of 10YR 4/6 dark yellowish brown clay loam from 18-28 cm (7.1-11.0 in) bgs; a thick deposit of iron slag from 28-39 cm (11.0-15.4 in) bgs; and a hydric layer of 10YR 4/6 dark yellowish brown clay mottled with 10YR 6/2 light brownish gray clay with some coal inclusions that extended to the limit of excavation at 51 cm (20.1 in) bgs. Within the deposit of iron slag, a group of four articulated brick pavers was encountered. It is unlikely that these brick pavers represent an *in situ* structural surface, however.

While the results of the initial primary STPs within 33HK0810 were not particularly promising, the four radial STPs were placed at the base of the slope occupying the central section of the parcel. When all four of these radial STPs yielded material culture, a 1 m x 1 m (3.3 ft x 3.3 ft) excavation unit was opened in between them and designated as TU 3. This unit was excavated by natural levels, and revealed a complex stratigraphic profile (Appendix C, Photos 24-31). Six stratigraphic levels were excavated and a seventh was uncovered before time constraints forced the closing of the TU. However, a tarp was placed in the bottom of the unit prior to backfilling in the event that additional excavations are undertaken at this site in the future.

As shown in Figures D10-D12, Level 1 was a thin humous layer of 10YR 2/1 black clay loam that reached a maximum depth of 3 cm (1.2 in) bgs. At the base of Level 1, an irregularly-shaped soil stain was observed occupying the northern half of the unit. This stain, which consisted of 10YR 2/1 black silty clay loam mottled with 10YR 3/3 dark brown silty clay loam, was bisected and excavated in eastern and western halves. It turned out to be an ephemeral stain, likely either a very shallow planting or erosional feature, less than 2 cm (0.8 in) in depth. It was contained within Level 2, which consisted of a relatively thick layer of 10YR 2/2 very dark brown sandy clay loam that extended to a maximum depth of 32 cm (12.6 in) bgs. Level 2 gave way to Level 3, which consisted of 10YR 4/3 brown clay loam mottled with approximately 20% 10YR 4/4 dark yellowish brown clay loam that extended to a maximum depth of 45 cm (17.7 in) bgs. An approximately 20-cm (7.9-in) wide band on the eastern edge of this level exhibited heavy charcoal content.

Level 4 consisted of two uneven layers that were excavated together but proved to be separate levels in the wall profile, and were designated as Levels 4a and 4b. Level 4a consisted of 7.5YR 5/4 brown sandy loam that averaged approximately 3 cm (1.2 in) thick, while Level 4b consisted of 7.5YR 8/1 white sandy loam that also averaged approximately 3 cm (1/2 in) thick. Level 5 consisted of 10YR 2/1 black sandy loam with moderate slag inclusions that extended to a depth of 62 cm (24.4 in) bgs. Level 6 was another layer of 7.5YR 8/1 white sandy clay loam with a distinctly ashy texture, and also containing moderate slag inclusions. This level extended to the limit of excavation at a maximum depth of 75 cm (29.5 in) bgs. Beneath Level 6 was yet another layer of 10YR 2/1 black sandy clay loam which, as noted above, was not excavated.



0 10
inches
centimeters
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Figure 4.3
33HK0810: STP E6, West Wall Profile
Phase II Hydraulic Improvements
HCFRRP
Findlay, Ohio

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A total of 679 historic-period artifacts were recovered from 33HK0810 during the current survey, primarily from TU 3 (n=609). Material types included ceramic, glass, masonry, metal, plastic and "other" artifacts as well as faunal remains (Table 4.3). Outside of TU 3, the only relatively tightly diagnostic artifact recovered is a utilitarian stoneware jug sherd with cobalt decoration (ca. 1860-1900). Within TU 3, several diagnostic artifacts were recovered that indicate stratigraphic integrity. These include a 1996 U.S. penny recovered from Level 1; various bottle/jar fragments dating from the 1920s-1940s (including fragments of a jadite vessel [1930s]) recovered from Level 2; a shoe polish bottle dating from 1905-1930 and an 1892 U.S. Indian-head penny recovered from Level 3; and a cellulose acetate hair pin (1868-1920) recovered from Level 4 (Appendix E, Table E3; Appendix C, Photos 49-65). While no tightly diagnostic artifacts were recovered from levels 5 or 6, the presence of one iron wire nail (post-1885) and one galvanized steel wire nail (post-1893) in Level 6 indicate that a rapid depositional process was responsible for creating Levels 3-6. In contrast to the artifact assemblage collected during monitoring in 2010, the artifacts collected from 33HK0810 during the current survey primarily reflect the parcel's industrial history.

Interestingly, one prehistoric artifact was also recovered from 33HK0810 during the current survey. This artifact, an Early Archaic Kirk Corner-Notched projectile point made of Cedarville/Guelph chert (see Appendix E, Tabe E4; Appendix C, Photos 49-50), was recovered from TU 3, Level 3, along with historic artifacts diagnostic of the late 19th-early 20th centuries. The presence of this artifact in this stratigraphic level may be incidental, a result of flood deposition, or possibly evidence of prehistoric artifact collecting activity on the part of the early 20th-century occupants of the property.

Table 4.3 Artifacts Recovered by Provenience, 33HK0810 (Current Survey)

	Material Category								
Provenience	Prehistoric Lithic	Ceramic	Faunal	Glass	Masonry	Metal	Plastic	Other	Total
STP C5, Radial 2.5m East	0	5	0	8	5	1	0	0	*19*
STP C5, Radial 2.5m East + 5m North	0	6	1	17	1	1	2	1	*29*
STP D5	0	0	0	2	1	1	0	0	*4*
STP D5, Radial 2.5m West	0	1	0	0	2	1	0	0	*4*
STP D5, Radial 2.5m West + 5m North	0	0	0	1	0	4	0	0	*5*
STP E6	0	3	0	1	2	2	2	0	*10*
TU 3, Level 1	0	1	0	7	0	3	4	5	*20*
TU 3, Feature A	0	5	0	6	0	6	4	2	*23*
TU 3, Level 2	0	25	15	108	15	60	11	45	*279*
TU 3, Level 3	1	12	13	40	7	85	1	29	*188*
TU 3, Level 4	0	3	1	37	0	17	1	6	*65*
TU 3, Level 5	0	1	0	3	1	8	0	1	*14*
TU 3, Level 6	0	3	1	0	3	9	0	4	*20*
Total	*1*	*65*	*31*	*230*	*37*	*198*	*25*	*93*	*680*

When the entire artifact assemblage from 33HK0810 (both monitoring and current survey) is considered, nine functional categories are present: Architecture (n=273, 34.5%), Miscellaneous (n=116, 14.7%), Kitchen (n=94, 11.9%), Domestic (n=56, 7.1%), Personal (n=23, 2.9%), Industry (n=6, 0.8%), Transportation (n=2, 0.3%), Commercial (n=1, 0.1%), and Indeterminate (n=221, 27.9%). The architecture category is divided amongst the sub-categories of architectural hardware

(n=126, 46.2%), architectural fixtures (n=82, 30.0%), and Construction Materials (n=53, 19.4%), with a small percentage of utilities-related artifacts (n=12, 4.4%). The Kitchen category is similarly divided amongst dietary remains (n=36, 38.3%), Food Service artifacts (n=31, 33.0%), and Food Storage artifacts (n=24, 25.5%), with a small percentage of artifacts that could belong to either the Food Service or Food Storage categories (n=3, 3.2%). Finally, the Indeterminate category is dominated by glass or metal container artifacts for which the original contents cannot reasonably be surmised (n=166, 75.1%).

At first glance, the lack of industrial-related artifacts recovered from 33HK0810 is surprising given the presence of multiple levels within TU 3 (Levels 3-6) that appear to clearly date to the property's period of use as a picker room / mattress factory / furniture repair business. However, it may be the case that a number of the Kitchen, Domestic, and Personal artifacts recovered from the lower levels of TU 3 reflect the late 19th – early 20th-century labor force at this site, or the possibility that it served as both an industrial facility *and* a home during this time. When looking at the artifact assemblage from a gendered perspective, several artifacts stick out as indicators of a female presence on the site: cellulose acetate and Bakelite hair comb fragments from Level 2, a "French Gloss"-brand shoe polish bottle (this brand was marketed specifically for use on women's and children's shoes [Boot and Shoe Recorded 1911]) and a cellulose acetate button mimicking mother-of-pearl from Level 3, and a cellulose acetate hair pin from Level 4.

Overall, the presence of an intact, stratified midden deposit along with additional buried deposits related to the architectural evolution of the factory/home at [location redacted] indicates that additional investigation of the site could yield important insights into small-scale industry during the early 20th century, including working conditions and the composition and behaviors of the labor force.

5.0 CULTURAL RESOURCE EVALUATIONS AND ASSESSMENT OF EFFECTS

The objective of the current study is to identify any cultural resources within the APE for the proposed Norfolk Southern Railroad Improvements for the HCFRRP; to evaluate the significance of those resources; and to assess the effects the proposed project on them. After cultural resources are identified within the APE through documentary research and fieldwork, significance evaluations of those resources are made in terms of their eligibility for listing in the NRHP. According to 36 CFR 60.4 of the National Historic Preservation Act (NHPA), properties may be eligible for listing in the NRHP if they meet one or more of the following criteria:

> *The quality of significance in American history, architecture, archaeology, engineering, and culture is present in the districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:*
>
> *A. Association with events that have made a significant contribution to the broad patterns of American history;*
> *B. Association with the lives of historically significant persons;*
> *C. Embodiment of distinctive characteristics of a type, period, or method of construction; representative of the work of a master; possession of high artistic values; or representation of a significant and distinguishable entity whose components may lack individual distinction (for archaeological sites associated with standing architecture, or yielding related architectural evidence); or*
> *D. Ability to yield information important to the study of North American prehistory or history.*

Archaeological properties are most often determined to be eligible for the NRHP under Criterion D. Therefore, it is important to note that in order for archaeological remains to satisfy the criteria considerations and to yield information important to the study of North American prehistory or history, the materials should be within the depositional environment in which they were originally interred or accumulated (i.e., undisturbed contexts). An isolated find site may be considered any site that produces a single material object indicative of past human life or activity; such sites are not generally eligible for the NRHP.

5.1 Historic/Architectural Resources

The history/architecture survey identified and documented one property over 50 years of age in the APE, the Norfolk Southern bridge over the Blanchard River (HAN0067808). The bridge was built by the Lake Erie & Western Railway Company. The LE&W was the second railway built through Hancock County, and was instrumental in catalyzing the local economy in the mid-19th century and beyond.

The railway was organized and chartered as the Fremont & Indiana Railroad Company in 1853 but experienced several false starts and mergers, and was further hampered by the financial depression of 1856-57 (Warner 1910:312). In 1859 a railroad bridge across the Blanchard River was begun, and by 1860 construction of the line between Findlay and Fostoria was completed. However, the railway was sold in December of that year. The purchasers incorporated as the Fremont, Lima & Union Railroad Company in 1861, which consolidated in 1865 with an Indiana company, and was sold and reorganized in 1871 as the Lake Erie & Pacific Railroad Company (Kimmel 1910:82).

Considerable effort was made by the new company to extend the route to Lima. That goal was achieved when the last rail connecting Findlay with Lima was laid in November 1872, and by the spring of 1873 the railway business along that line was booming. In 1877 the company reorganized and in 1879 consolidated with the Indianapolis & Sandusky Railroad Company of Indiana as the Lake Erie & Western Railway (LE&W) Company (Warner 1910:315). The line was completed to Indiana in 1879, and by 1910 connections were extended as far as Chicago and St. Louis.

In 1901, Findlay's local paper reported that "[F]or the accumulation of its fast-growing freight business the Lake Erie and Western will soon replace its bridge across the Blanchard river in this city with a new steel structure of most approved pattern" (*Morning Republican* 1901:5). According to the article, H.E. Manchester, a civil engineer with LE&W of Indianapolis, was in town inspecting the bridge site to prepare plans for a new river crossing. The company had recently purchased a fleet of mammoth freight engines. Known as "battleships," they were heavier than earlier engines, and the existing Findlay bridge was one of only two on the LE&W line that couldn't carry the larger load (Ibid).

To keep up with its competitors – the Toledo & Ohio Central having recently built a similar replacement bridge in Findlay – the new bridge would require a center abutment or stone pier to provide additional support for the heavy trains that would soon come into service. In March 1902 several carloads of sand were delivered for the construction of piers, and in November 2002 the bridge crew was unloading the iron sides for the new bridge, each the length of two freight cars and loaded in pairs. Still in use, the old bridge would be taken down and used elsewhere. In January 1903 the last section of the railroad bridge was placed in position by the workmen, and construction was completed (*Weekly Jeffersonian* 1903:8).

In 1900, the LE&W came under the control of the New York Central Railroad. After operating it as a separate entity for two decades, New York Central sold the LE&W to the Nickel Plate Road in 1922 (Wikepedia 2020:np). With that important acquisition, the Nickel Plate became a 1683-mile system serving the industrial, agricultural, and distributing region between the Mississippi River on the west, the Great Lakes on the north, and the Niagara Frontier on the east, with close traffic arrangements and service to the New England States and the Atlantic Seaboard reached through connecting lines (Nickel Plate Road Historical & Technical Society nd:np). The Findlay segment is now part of the Norfolk Southern system.

The Norfolk Southern bridge is a through two (or twin) riveted built-up girder structure. Of the more common historic bridge types, the built-up, riveted plate-girders were popular with railroads for watercourse crossings and for grade separation structures where there was a need to achieve maximum vertical clearance between the rail deck and the water feature or the roadway (Parsons Brinkerhoff 2005:3-111). While the structural integrity is good, the abutments and center support do not appear to be original, and the bridge is not recommended eligible for NRHP listing.

5.2 Archaeological Resources

Two previously recorded archaeological sites are present within the current project area – 33HK0777 [location redacted] and 33HK0810 [location redacted]. As a result of archaeological monitoring, shovel testing, and limited test unit excavation, both sites have been shown to contain intact, stratified deposits associated with both early 20th-century light industrial activity and mid-20th century domestic activity. Further excavation of these sites is likely to yield additional information that can clarify the histories of the two properties as well as shed light on an important but understudied topic in both the history of Findlay – the development of light industries as the local economy became more diversified in the early 20th century, following the decline of the natural gas and oil extraction industries. 33HK0777 and 33HK0810 present an unusual opportunity to study technological change, labor processes, and social dynamics in such light industrial settings. For these reasons, it is the Principal Investigator's opinion that both sites are eligible for the NRHP under Criterion D.

It is currently anticipated that both sites will be directly impacted by activities associated with the proposed Norfolk Southern Railroad Improvements. Such direct impacts will constitute adverse effects on these two sites. In the case of 33HK0810, the southwestern end of the site will be destroyed by the proposed floodplain benching associated with improvements to the Norfolk-Southern Bridge, while the northeastern end of the site will be used for heavy equipment staging and access to the construction zone around the bridge. Similarly, the location of 33HK0777 will be used for heavy equipment staging and access.

For 33HK0777 and for the eastern half of 33HK0810, MSG recommends that efforts be made to protect these sites from damage by heavy equipment and stored construction materials, if possible. If this is not possible, then MSG recommends that the USACE, Hancock County and the MWCD consult with the SHPO to negotiate a plan to mitigate the anticipated adverse effects through data recovery efforts. For the western half of 33HK0810, MSG also recommends that the USACE, Hancock County and the MWCD consult with the SHPO to negotiate a plan to mitigate the anticipated adverse effects of the floodplain benching through data recovery efforts.

6.0 SUMMARY AND RECOMMENDATIONS

In April 2017, Stantec contracted MSG to conduct Section 106 consultation activities for proposed hydraulic improvements along the Blanchard River in the City of Findlay, Hancock County, Ohio. The hydraulic improvements represent the current stage of the HCFRRP, which began in the fall of 2016. Implementation of the proposed hydraulic improvements will require an individual Section 404 permit from the USACE and is therefore considered a federal undertaking subject to review and consultation under Section 106 of the NHPA. This consultation will proceed according to a series of steps detailed in a Section 106 Consultation Plan for the HCFRRP that was negotiated by the SHPO, the USACE, and the Project Team and finalized in July 2017.

In September 2017 MSG initiated consultation with the SHPO regarding the potential impacts of the proposed hydraulic improvements on cultural resources. In October 2017 MSG submitted a Work Plan for Phases I and II of the proposed hydraulic improvements. Phase I includes the removal of four low-head dam/riffle structures and floodplain bench widening along the Blanchard River. Phase II, now referred to as the Norfolk Southern Railroad Improvements project, involves modification to the Norfolk-Southern Railroad trestle, which crosses the river downstream of the Cory Street Dam. The results of a Phase I survey of the APE for the Phase I hydraulic improvements was submitted separately. This report contains the results of a Phase I/II survey of the APE for the current Norfolk Southern Railroad Improvements.

The proposed project consists of modifications to the Norfolk Southern railroad bridge that spans the Blanchard River just west of Cory Street and the excavation of a floodplain bench. The existing bridge will be removed and replaced, with an additional span of approximately 47m (140ft) constructed on the northerly end of the bridge. The new span will allow for excavation of a floodplain bench on the northerly bank of the river. The proposed work site will be accessed from parcels adjacent to the existing railroad ROW on Meeks Court (on the north side of the river) and from a parcel adjacent to the railroad tracks owned by Norfolk Southern on Washington Street (on the south side of the river). Given the scale of new construction and the character of the surrounding environment (a wooded riparian setting), the visual impacts from the proposed bridge modifications will be limited to the nine parcels that immediately adjoin the railroad ROW. These parcels constitute the APE for this project.

Background research included archival research on the environmental, prehistoric, and historic contexts of the city of Findlay and Hancock County, as well as a literature review of previous cultural resource survey and documentation efforts in the downtown Findlay area. The literature review revealed that two previously recorded archaeological resources are located within the project area – 33HK0777 and 33HK0810 -- both of which are historic-period sites representing light industrial and domestic activity during the 20th century. The literature review also revealed that the Norfolk Southern railroad bridge has not been previously documented, but that all other resources over 50 years of age in the APE were surveyed in 2010.

Field investigations identified one previously unrecorded history/architecture resource over 50 years of age within the APE, the Norfolk Southern Railroad bridge. MSG photographed and documented the bridge (HAN0067808) using the SHPO's online IForm system. Originally built by the Lake Erie & Western Railroad Company in 1903, it is a through two (or twin) riveted built-up girder structure. While the structural integrity is good, the abutments and center support do not appear to be original, and the bridge is not recommended eligible for NRHP listing. Because no eligible properties were identified, the current proposed project will have no effect on historic/architectural resources.

The archaeological survey consisted of shovel testing and limited test unit excavation. No intact archaeological resources apart from 33HK0777 and 33HK0810 were identified within the archaeological survey area. However, intact, stratified deposits were identified at both sites, representing both their early 20th-century industrial occupations and mid-20th-century residential occupations. Further excavation of these sites is likely to yield additional information about the development of light industries in Findlay as the local economy became more diversified in the early 20th century. 33HK0777 and 33HK0810 present an unusual opportunity to study technological change, labor processes, and social dynamics in such light industrial settings. Therefore, it is the Principal Investigator's opinion that both sites

are eligible for the NRHP under Criterion D. MSG recommends that efforts be made to protect these sites from damage during construction efforts. If the sites cannot be protected, then the USACE, Hancock County and the MWCD should consult with the SHPO to negotiate a plan to mitigate the anticipated adverse effects through data recovery efforts.

7.0 REFERENCES CITED

Alkire, R. L.
1951 *Report of Investigations No. 8 (Petroleum and Natural Gas Series No. 1)*. Ohio Department of Natural Resources, Division of Geological Survey, Columbus.
1952 Part I: Oil and Gas Well Drilling Statistics for 1951. In *Report of Investigations No. 13 (Petroleum and Natural Gas Series No. 3)*, compiled by Robert L. Alkire. Ohio Department of Natural Resources, Division of Geological Survey, Columbus.
1953 *1952 Oil and Gas Well Drilling Statistics*. Report of Investigations No. 19 (Petroleum and Natural Gas Series No. 4). Ohio Department of Natural Resources, Division of Geological Survey, Columbus.
1954 *1953 Oil and Gas Well Drilling Statistics*. Report of Investigations No. 20 (Petroleum and Natural Gas Series No. 5). Ohio Department of Natural Resources, Division of Geological Survey, Columbus.
1955 *1954 Oil and Gas Developments in Ohio*. Report of Investigations No. 24 (Petroleum and Natural Gas Series No. 7). Ohio Department of Natural Resources, Division of Geological Survey, Columbus.

American Chemical Society
2015 "The Columbia Dry Cell Battery: National Historic Chemical Landmark." Electronic document available at http://www.acs.org/content/acs/en/education/whatischemistry/landmarks/drycellbattery.html. Last accessed September 19, 2017.

Bagley, J.
n.d. "Historic Ceramic Types." *Diagnostic Artifacts in Maryland*. Jefferson Patterson Park & Museum, St. Leonard, MD. Electronic resource available at http://www.jefpat.org/diagnostic/HistorcCeramicTypesChart.pdf. Last accessed January 11, 2018.

Beardsley, D. B.
1881 *History of Hancock County from Its Earliest Settlement to the Present Time.* Republic Printing Company, Springfield, OH.

Beisaw, A. M.
2013 *Identifying and Interpreting Animal Bones: A Manual.* Texas A&M University Press, College Station.

Belford, I. and C. T. Lewis (compilers)
1885 *The Municipal Code of the City of Toledo*. Revised version. Spear, Johnson & Co., Toledo.

Bellis, M.
2017 "The History of Shoes." *ThoughtCo.* Electronic document available at https://www.thoughtco.com/history-of-shoes-1992405. Last accessed June 23, 2017.

Bender, N. E.
2016 *Historic Bottle and Jar Closures.* Left Coast Press, Walnut Creek, CA.

Boot and Shoe Recorder
1911 "Whittemore's Polishes." [Advertisement.] *Boot and Shoe Recorder* Vol. 59, 24 May, pp. 82.

Bowman, B.
n.d. "AC Spark Plug Division." *GM Heritage Center: Generations of GM History.* Electronic document available at https://history.gmheritagecenter.com/wiki/index.php/AC_Spark_Plug_Division. Last accessed September 20, 2017.

Brose, D.
1997 "Explorations." *The Encyclopedia of Cleveland History*. Electronic document available at http://ech.case.edu/ech-cgi/article.pl?id=E14. Last accessed March 6, 2014.
2000 Late Prehistoric Societies of Northeastern Ohio and Adjacent Portions of the South Shore of Lake Erie: A Review. In *Cultures before Contact: The Late Prehistory of Ohio and Surrounding Regions,* edited by R. A. Genheimer, pp. 96-122. The Ohio Archaeological Council, Columbus.

Bulbs.com
n.d. "History of the Light Bulb." *Bulbs.com: The LED Authority.* Electronic document available at http://www.bulbs.com/learning/history.aspx. Last accessed September 19, 2017.

Busch, J.
1981 An Introduction to the Tin Can. *Historical Archaeology* 15(1):95-104.

Camp, M. J.
2006 *Roadside Geology of Ohio*. Mountain Press Publishing Company, Missoula, Montana.

Chidester, R. C., K. J. Hayfield, R. T. Botkin, B. N. Smith, K. Wagner, B. P. Agosti, T. A. Kalka and M. R. Shimel
2011 *Report of a Phase I Archaeological Reconnaissance Survey in Three Proposed Flood Mitigation Corridors, Findlay (Hancock County) and Ottawa (Putnam County), Ohio*. Report submitted to the Northwest Ohio Flood Mitigation Partnership, Inc., Findlay, OH by The Mannik & Smith Group, Inc., Maumee, OH.

Chidester, R. C. and M. Johnson
2017 *Work Plan: Cultural Resources Investigations, Hancock County Flood Risk Reduction Program, Hydraulic Improvements along the Blanchard River, City of Findlay, Hancock County, Ohio.* Report submitted to Stantec, Toledo by The Mannik & Smith Group, Inc., Maumee, OH.

Claney, J. P.
2004 *Rockingham Ware in American Culture, 1830-1930: Reading Historical Artifacts*. University Press of New England, Lebanon, NH.

Clark, A.
2015 "The Beechcraft A36 Bonanza: Reliability, Comfort, and Performance." *Disciples of Flight.* Electronic document available at https://disciplesofflight.com/beechcraft-a36-bonanza/. Last accessed June 14, 2017.

Cuff, C.
2008 "Mini-Light: 'Illuminus Annoyus.'" *Old Christmas Tree Lights: A History.* Electronic document available at https://oldchristmastreelights.com/1960s_page_4.htm. Last accessed December 15, 2017.

Cushion, J. P.
1980 *Handbook of Pottery and Porcelain Marks*. Faber and Faber, London and Boston.

Davis, L. E.
1938 *A Story of Findlay and Hancock County, and Findlay's Golden Celebration of Oil and Gas, 1937*. Typescript available in the Local History and Genealogy Department, Toledo-Lucas County Public Library (Main Branch), Toledo.

Debolt, G. C.
1994 *Debolt's Dictionary of American Pottery Marks.* Collector Books, Paducah, KY.

Deiss, R. W.
1981 *The Development and Application of a Chronology for American Glass*. Midwestern Archaeological Center, Illinois State University, Normal.

DeRegnaucourt, T. and J. Georgiady
1998 *Prehistoric Chert Types of the Midwest*. Occasional Monograph No. 7, Upper Miami Valley Archaeological Research Museum, Arcanum, OH.

Downes, R. C., K. M. Keller, G. H. Orians, M. S. Revett, G. A. Riegler, and N. F. Stolzenbach
1954 *Industrial Beginnings …* Historical Society of Northwestern Ohio, Toledo.

Feldman, R. M., A. H. Coogan, and R. Heimlich
1977 *Field Guide—Southern Great Lakes.* K/H Geological Field Guide Series. Kendall Hunt Publishing Co., Dubuque, Iowa.

Findlay Courier
1910 "Railroad Notes". *Findlay Courier*, October 30, 1901, p. 8.

Florence, G.
1996 *Collector's Encyclopedia of Depression Glass*. 12th edition. Collector Books, Paducah, KY.

Forsyth, J.
1968 *A Study of Physical Features for the Toledo Regional Area*. Regional Report No. 8.2, Toledo Regional Area Plan for Action, Toledo, Ohio.

Freudenrich, C.
2007 "How Plastics Work." *How Stuff Works: Science.* Electronic document available at http://science.howstuffworks.com/plastic.htm. Last accessed December 12, 2017.

Gibson, E.
2011 *Ceramic Makers' Marks.* Left Coast Press, Walnut Creek, CA.

Gilbert, B. M.
1990 *Mammalian Osteology*. Missouri Archaeological Society, Columbia.

Gilbert, B. M., L. D. Martin, and H. G. Savage
1996 *Avian Osteology*. Missouri Archaeological Society, Columbia.

Glass, J. A.
2000 The Gas Boom in East Central Indiana. *Indiana Magazine of History* 96(4):313-335.

Gramly, R. M.
1988 Paleo-Indian Sites South of Lake Ontario, Western and Central New York State. In *Late Pleistocene and Early Holocene Paleoecology and Archaeology of the Eastern Great Lakes Region*, edited by R. S. Laub, N. Miller and D. Steadman, pp. 265-280. Bulletin of the Buffalo Society of Natural Sciences No. 33.

Graves, L.
1977 Reconstruction of the Environmental Conditions for Human Cultural Development in the Western Lake Erie Basin during Late Holocene Times. Unpublished Master's thesis, Department of Geology, University of Toledo.

Greer, G. H.
2005 *American Stonewares: The Art and Craft of Utilitarian Potters*. 4th edition. Schiffer Publishing, Atglen, PA.

Hardesty, H. H.
1875 *Illustrated Historical Atlas of Hancock County, Ohio*. H.H. Hardesty, Chicago.

Heminger, R. L.
1965 *Across the Years in Findlay and Hancock County.* Republican-Courier, Findlay, OH.

Herdendorf, C. E., C. P. Labadie and W. K. Pape
2003 Maritime and Industrial Archaeology of the Kelleys Island Limestone Industry. *Ohio Valley Historical Archaeology* 18:152-174.

Hernandez, J.
2009 The 1983 Copper Cent. *PCGS Library.* Electronic document available at https://www.pcgs.com/News/The-1983-Copper-Cent. Last accessed June 21, 2017.

Historical Information Gatherers
2018 *Phase II Hydraulic Improvements, 210 Meeks Court, Findlay, OH: Aerial Photographs, 1939-2015*. Historical Information Gatherers, Hopkins, MN.

Holcombe, T. L., L. A. Taylor, D. F. Reid, J. S. Warren, P. A. Vincent, and C. E. Herdendorf
2003 Revised Lake Erie Postglacial Lake Level History Based on New Detailed Bathymetry. *Journal of Great Lakes Research* 29:681-704.

Horizon Global Corporation
2017 "About Draw-Tite®". *Draw-Tite.com.* Electronic document available at http://www.draw-tite.com/about. Last accessed September 18, 2017.

Howe, H.
1977 *History of Hancock County, Ohio, 1820-1889; excerpted from 1898 edition of Howe's* Historical Collections of Ohio. The Bookmark, Knightstown, IN.

Humphrey, W.
1940 *A Brief History of Gas and Oil in Findlay, Together with an Account of the Celebration of June, 1937*. Findlay Printing and Supply Co., Findlay, OH.
1961 *Findlay: The Story of a Community.* Findlay Printing and Supply Co., Findlay, OH.

Jackson, H. E.
1991 The Trade Fair in Hunter-Gatherer Interaction: The Role of Intersocietal Trade in the Evolution of Poverty Point Culture. In *Between Bands and States*, edited by S. A. Gregg, pp. 265-286. Occasional Paper No. 9, Center for Archaeological Investigations, Southern Illinois University-Carbondale.

Johnson, M. and R. C. Chidester
2010 *Section 106 Review of 16 Properties in the City of Findlay, Hancock County, Ohio.* Report submitted to the Northwest Ohio Flood Mitigation Partnership, Inc., Findlay, OH by The Mannik & Smith Group, Inc., Maumee, OH.

Johnson, M., R. M. Schumaker, R. C. Chidester, B. P. Agosti, K. Hayfield, S. Gordon, K. Dallos, M. Megyesi, and D. Lewon
2011 *Report of a Phase I Architectural Reconnaissance Survey in Three Proposed Flood Mitigation Corridors, Findlay (Hancock County) and Ottawa (Putnam County), Ohio.* Report submitted to the Northwest Ohio Flood Mitigation Partnership, Inc., Findlay, OH by The Mannik & Smith Group, Inc., Maumee, OH.

Jones, O. R.
2000 A Guide to Dating Glass Tableware: 1800 to 1940. In *Studies in Material Culture Research*, ed. K. Karklins, pp. 141-232. The Society for Historical Archaeology, California, PA.

Jones, O. R. and C. Sullivan
1989 *The Parks Canada Glass Glossary for the Description of Containers, Tableware, Flat Glass, and Closures.* Revised Edition. Parks Canada, Ottawa, ON.

Justice, N. D.
1987 *Stone Age Spear and Arrowpoints of the Midcontinental and Eastern United States*. Indiana University Press, Bloomington, Indiana.

Karasek, R.
2012 "Goebel Brewing Company, Detroit, Michigan, 1936-1964." *Michigan Beer Cans.* Electronic document available at http://www.mbcinfo.com/mi/data/Breweries/Goebel/Brewery.html. Last accessed September 20, 2017.

Keller, J. and D. Ross
2014 *Jadite: Identification and Price Guide.* 4th edition. Schiffer Publishing, Atglen, PA.

Kelley, R. W. and W. R. Farrand
1967 *The Glacial Lakes Around Michigan.* Michigan Geological Survey Bulletin No. 4. Michigan Department of Conservation, Lansing.

Ketchum, Jr., W. C.
1975 *A Treasury of American Bottles*. Rutledge Books, New York.
1983 *Pottery and Porcelain*. Alfred A. Knopf, New York.
1987 *American Country Pottery: Yellowware and Spongeware*. Alfred A. Knopf, New York.

Ketchum, Jr., W. C. and E. von Habsburg
2000 *The Antique Hunter's Guide: American Pottery and Porcelain*. Black Dog and Leventhal Publishers, New York.

Kimmell, J. A.
1910 *20th Century History of Findlay and Hancock County and Representative Citizens.* Richmond-Arnold, Chicago.

Lake, D. J.
1863 *Map of Hancock County, Ohio*. Cowles & Titus, Philadelphia.

Lehner, L.
1988 *Lehner's Encyclopedia of U.S. Marks on Pottery, Porcelain and Clay*. Collector Books, Paducah, KY.

Lindsey, B.
2016a "Bottle Bases." *Historic Glass Bottle Identification & Information Website.* Electronic document available at http://www.sha.org/bottle/bases.htm. Last accessed June 23, 2017.
2016b "Bottle Body Characteristics and Mold Seams." *Historic Glass Bottle Identification & Information Website.* Electronic document available at http://www.sha.org/bottle/body.htm. Last accessed January 26, 2017.
2016c "Bottle Dating." *Historic Glass Bottle Identification & Information Website.* Electronic document available at http://www.sha.org/bottle/dating.htm. Last accessed June 22, 2017.
2016d "Bottle Finishes & Closures." *Historic Glass Bottle Identification & Information Website.* Electronic document available at http://www.sha.org/bottle/closures.htm. Last accessed October 1, 2017.
2016e "Bottle / Glass Colors." *Historic Glass Bottle Identification & Information Website.* Electronic document available at http://www.sha.org/bottle/colors.htm. Last accessed June 20, 2017.
2016f "Bottle Typing (Typology) & Diagnostic Shapes." *Historic Glass Bottle Identification & Information Website.* Electronic document available at http://www.sha.org/bottle/typing.htm. Last accessed June 22, 2017.

Lockhart, B.
2006 The Color Purple: Dating Solarized Amethyst Container Glass. *Historical Archaeology* 40(2):45-56.
2010 "Chapter 7c: Pepsi-Cola Bottling Co. of El Paso." In *Bottles on the Border: The History and Bottles of the Soft Drink Industry in El Paso, Texas, 1881-2000*, pp. 271-284. Revised edition. Privately published. Electronic document available online at http://www.sha.org/bottle/pdffiles/EPChap7c.pdf. Last accessed September 26, 2017.
2015 A Tour Through Time in Vaseline Jars. *Historic Glass Bottle Identification & Information Website.* Electronic document available at https://sha.org/bottle/pdffiles/Vaseline2015.pdf. Last accessed June 20, 2017.

Lockhart, B. and R. Hoenig
2015 "The Bewildering Array of Owens-Illinois Glass Co. Logos and Codes." Electronic document available at http://www.sha.org/bottle/pdffiles/OwensIllinois2015.pdf. Last accessed March 17, 2017.

Lockhart, B. and B. Porter
2010 The Dating Game: Tracking the Hobble-Skirt Coca-Cola Bottle. *Bottles and Extras* September-October:46-61.

Lockhart, B., B. Schriever, B. Lindsey, and C. Serr
2013 Anchor Hocking Glass Corp. In *Encyclopedia of Manufacturers Marks: Volume A* by the Bottle Research Group, pp. 423-443. Electronic document available at http://www.sha.org/bottle/pdffiles/AnchorHocking.pdf. Last accessed September 20, 2017.
2015c Foster-Forbes Glass Co. In *Encyclopedia of Manufacturer's Marks on Glass Containers: Volume F*, edited by The Bottle Research Group, pp. 235-244. Electronic document available online at http://www.sha.org/bottle/pdffiles/FosterForbes.pdf. Last accessed June 20, 2017.

Lockhart, B., B. Schriever, and C. Serr
2016 The Hamilton Family Glass Companies. In *Encyclopedia of Manufacturer's Marks on Glass Containers: Volume H & I*, edited by The Bottle Research Group, pp. 13-34. Electronic document available online at http://www.sha.org/bottle/pdffiles/Hamilton.pdf. Last accessed August 16, 2017.

Lockhart, B., B. Schriever, C. Serr, B. Lindsey, and J. Sears
2013 Ball Brothers Glass Mfg. Co. In *Encyclopedia of Manufacturer's Marks on Glass Containers: Volume B*, edited by The Bottle Research Group, pp. 51-80. Electronic document available online at http://www.sha.org/bottle/pdffiles/BallBros.pdf. Last accessed June 20, 2017.

Lofstrom, E. U., J. P. Tordoff, and D. C. George
1982 A Seriation of Historic Earthenwares in the Midwest, 1780-1870. *The Minnesota Archaeologist* 41(1):3-29.

Logopedia
n.d. "DuPont." *Logopedia.* Electronic document available at http://logos.wikia.com/wiki/DuPont. Last accessed June 22, 2017.

Lorrain, D.
1968 An Archaeologist's Guide to Nineteenth-Century American Glass. *Historical Archaeology* 2:35-44.

Madden, M. J. and J. C. Hardison
2004 *An Easy Identification Guide and Typology for Eighteenth, Nineteenth and Twentieth Century Bottles*. Special Publication No. 42, Archeological Society of Virginia, Richmond. 2nd edition.

Mansberger, F.
1988 *The Archaeology of Historic Galena, Illinois*. Cultural Resources Study No. 7, Illinois Historic Preservation Agency, Springfield.

Marathon Oil Company
2008 "Our History." Marathon Oil Company, Houston. Electronic document available at http://www.marathon.com/About_Marathon/Corporate_Profile/History/. Last accessed January 8, 2010.

Maryland Archaeological Conservation Lab
2015a "North American Stoneware." *Diagnostic Artifacts in Maryland*. Jefferson Patterson Park & Museum, St. Leonard, MD. Electronic resource available at http://www.jefpat.org/diagnostic/Post-Colonial%20Ceramics/NorthAmericanStoneware/index-NorthAmericanStoneware.html. Last accessed January 8, 2018.
2015b "Printed Underglaze Earthenware." *Diagnostic Artifacts in Maryland*. Jefferson Patterson Park & Museum, St. Leonard, MD. Electronic resource available at http://www.jefpat.org/diagnostic/post-colonial%20ceramics/Printed%20Earthenwares/index-PrintedEarthenwares.htm. Last accessed January 8, 2018.
2016 "Bone China." *Diagnostic Artifacts in Maryland*. Jefferson Patterson Park & Museum, St. Leonard, MD. Electronic resource available at http://www.jefpat.org/diagnostic/Porcelain/PorcelainWareDescriptions/BoneChina-intro.html. Last accessed January 8, 2018.

Mayfield, H. F.
1969 Changes in the Natural History of the Toledo Region Since the Coming of the White Man. *Toledo Area Aboriginal Research Bulletin* 1(1):11-31.

Maxwell, D. B. S.
1993 Beer Cans: A Guide for the Archaeologist. *Historical Archaeology* 27(1):95-113.

McComsey, D. W.
2002 Zinc-Carbon Batteries (Leclanché and Zinc Chloride Cell Systems). In *Handbook of Batteries*, 3rd edition, D. Linden and T. B. Reddy, eds., pp. 8.1-8.45. McGraw-Hill, New York.

Measell, J. and D. E. Smith
1986 *Findlay Glass: The Glass Tableware Manufacturers, 1886-1902*. Antique Publications, Marietta, OH.

Meyers, J. T.
1970 *Chert Resources of the Lower Illinois Valley*. Illinois State Museum Reports of Investigation No. 18, Research Papers Vol. 2, Illinois Valley Archaeological Program, Springfield.

Miller, G. L.
1980 Classification and Economic Scaling of 19th-Century Ceramics. *Historical Archaeology* 14:1-40.
1991 A Revised Set of CC Index Values for Classification and Economic Scaling of English Ceramics from 1787 to 1880. *Historical Archaeology* 25(1):1-25.

Miller, G. L. and R. Hunter
2001 How Creamware Got the Blues: The Origins of China Glaze and Pearlware. In *Ceramics in America 2001*, edited by R. Hunter, pp. 135-161. University Press of New England, Lebanon, NH.

Miller, G. L. and T. McNichol
2012 Dates for Suction-Scarred Bottoms: A Chronology for Early Owens Machine-Made Bottles. *Northeast Historical Archaeology* 41(1):75-95.

Miller, G. L., with contributions by P. Samford, E. Shlasko, and A. Madsen
2000 Telling Time for Archaeologists. *Northeast Historical Archaeology* 29:1-22.

Morning Republican
1901 "New Iron Bridge: L.E. & W. Will Build Stronger Structure for Big Engines." *The Morning Republican* (Findlay), October 30, 1901, p. 5.
1902a "Along the Lines." *The Morning Republican* (Findlay), March 24, 1902, p. 8.
1902b "Along the Lines." *The Morning Republican* (Findlay), November 13, 1902, p. 5.

Newson, R. (ed.)
n.d. "A History of Pre-War Automotive Tootsietoys" by Clint Seeley. Electronic document available at http://www.tootsietoys.info/. Last accessed June 14, 2017.

Nickel Plate Road Historical & Technical Society
2021 "Lake Erie & Western." Electronic document available at https://www.nkphts.org/lakeeriewestern. Last accessed April 5, 2021.

Noël Hume, I.
1969 *A Guide to Artifacts of Colonial North America*. Alfred A. Knopf, New York.

O'Connor, T.
2000 *The Archaeology of Animal Bones.* Texas A&M University Press, College Station.

Ogden, J. G., III
1969 Correlation of Contemporary and Late Pleistocene Pollen Records in the Reconstruction of Post-Glacial Environments in Northeastern North America. *Mitt. International, Verein, Limnol.* 17:64-77.
1977 The Late Quaternary Paleoenvironmental Record of Northeastern North America. In "Amerinds and Their Paleoenvironments in Northeastern North America," edited by Walter S. Newman and Bert Salwen, pp. 16-34. *Annals of the New York Academy of Sciences* 288.

Ohio Historic Preservation Office
1994 *Archaeology Guidelines*. Ohio Historical Society, Columbus.

Ohio History Connection (OHC)
n.d.a "Early Woodland Period." *Ohio History Central.* Electronic document available at http://www.ohiohistorycentral.org/w/Early_Woodland_Period. Last accessed January 16, 2015.

n.d.b "Historic Period." *Ohio History Central.* Electronic document available at http://www.ohiohistorycentral.org/w/Historic_Period. Last accessed January 16, 2015.

n.d.c "Late Woodland Cultures." *Ohio History Central.* Electronic document available at http://www.ohiohistorycentral.org/w/Late_Woodland_Cultures. Last accessed January 16, 2015.

Olsen, S. J.

1964 *Mammal Remains from Archaeological Sites, Part I: Southeastern and Southwestern United States*. Papers of the Peabody Museum of Archaeology and Ethnology 51(1), The Peabody Museum, Cambridge, MA.

1968 *Fish, Amphibian and Reptile Remains from Archaeological Sites, Part 1: Southeastern and Southwestern United States.* Papers of the Peabody Museum of Archaeology and Ethnology 56(2), The Peabody Museum, Cambridge, MA.

Pacheco, P. J.

1996 Ohio Hopewell Regional Settlement Patterns. In *A View from the Core: A Synthesis of Ohio Hopewell Archaeology*, ed. P. J. Pacheco, pp. 16-35. The Ohio Archaeological Council, Columbus, Ohio.

Palm, J. A.

2015 An era of mattress evolution: Some early 20th-century bedding components are recognizable – others, not. In "Celebrating 100 Years: 1915-1940: An Industry Comes Together." *BedTimes: The Business Journal for the Sleep Products Industry,* March:58-62. Electronic document available at http://onlinedigeditions.com/publication/?i=247151&p=42#{"issue_id":247151,"page":0}. Last accessed September 19, 2017.

Parsons Brinkerhoff and Engineering and Industrial Heritage

2005 *A Context for Common Historic Bridge Types.* Report prepared (NCHRP Project 25-25, Task 15) under the National Cooperative Highway Research Program for the Transportation Research Council, National Research Council.

Powers, V.

1993 *A National Historic Chemical Landmark: The Bakelizer.* American Chemical Society, Washington, D.C.

Pratt, G. M.

1993 *The Johnson Site, 33 HY 207: The Mitigation of the Proposed Realignment of S.R. 110, Henry County, Ohio.* Report submitted to the Ohio Department of Transportation, Columbus by the Heidelberg Archaeological Survey, Tiffin, OH.

Purtill, M. P.

2009 The Ohio Archaic: A Review. In *Archaic Societies: Diversity and Complexity Across the Midcontinent*, edited by T. E. Emerson, D. L. McElrath, and A. C. Fortier, pp. 565-606. State University of New York Press, Albany.

Putnam, H. E.

1965 *Bottle Identification*. OTB Worldwide Publishers, Salem, OR.

Randall, M. E.

1971 Early Marbles. *Historical Archaeology* 5:102-105.

Raycraft, D. and C. Raycraft

1990 *Collector's Guide to Country Stoneware and Pottery*. Collector Books, Paducah, KY.

Ritchie, W. A.
1961 *A Typology and Nomenclature of New York Projectile Points*. Bulletin No. 384, New York State Museum and Science Service, Albany.

Robbins, R. A., M. M. Feusner, and J. A. Glanville
2006 *Soil Survey of Hancock County, Ohio.* United States Department of Agriculture, Natural Resources Conservation Service, Washington, D.C.

Rock, J. T.
2000 Cans in the Countryside. In *Approaches to Material Research for Historical Archaeologists*, edited by D. R. Brauner, 2nd edition, pp. 275-289. The Society for Historical Archaeology, California, PA.

Rogers, L. D., C. J. Lutzow, and T. J. Martin
1988 *The Ratcliff (13MA400) and Stortes/Crookham (13MA262) Sites: Data Recovery at Two Historic Farmsteads, Lake Red Rock, Iowa.* Cultural Resources Management Report No. 129, American Resources Group, Ltd., Carbondale, IL.

Samford, P.
1997 Response to a Market: Dating English Underglaze Transfer-Printed Wares. *Historical Archaeology* 31(2):1-30.

Sanborn Map Company
1884 *Findlay, Ohio* (Fire Insurance Map). Sanborn Map & Publishing Company, Ltd., New York.
1887 *Findlay, Ohio* (Fire Insurance Map). Sanborn Map & Publishing Company, Ltd., New York.
1890 *Findlay, Ohio* (Fire Insurance Map). Sanborn-Perris Map Company, Ltd., New York.
1895 *Insurance Maps of Findlay, Hancock County, Ohio*. Sanborn-Perris Map Company, Ltd., New York.
1901 *Insurance Maps of Findlay, Hancock County, Ohio*. Sanborn-Perris Map Company, Ltd., New York.
1908 *Insurance Maps of Findlay, Hancock County, Ohio*. Sanborn Map Company, New York.
1915 *Insurance Maps of Findlay, Hancock County, Ohio*. Sanborn Map Company, New York.
1924 *Insurance Maps of Findlay, Hancock County, Ohio*. Sanborn Map Company, New York.
1930 *Insurance Maps of Findlay, Hancock County, Ohio*. Sanborn Map Company, New York.
1949 *Insurance Maps of Findlay, Hancock County, Ohio*. Updated from 1930 maps. Sanborn Map Company, New York.

Snyder, J. B.
1997 *Fiesta: The Homer Laughlin China Company's Colorful Dinnerware.* Schiffer Publishing, Atglen, PA.

South, S. A.
1977 *Method and Theory in Historical Archeology*. Academic Press, New York.

Spaythe, J.
1903 *History of Hancock County, Ohio*. Wade Printing Co., Toledo, OH.

Sprague, R. L.
2002 China or Prosser Button Identification and Dating. *Historical Archaeology* 36(2):111-127.

Spude, C.
2015 "Common 20th-Century Artifacts – A Guide to Dating." Electronic document available at https://sha.org/resources/20th-century-artifacts/. Last accessed December 19, 2017.

Stothers, D. M.
1996 Resource Procurement and Band Territories: A Model for Lower Great Lakes PaleoIndian and Early Archaic Settlement Systems. *Archaeology of Eastern North America* 24:173-216.
1999 Late Woodland Models for Cultural Development in Southern Michigan. In *Retrieving Michigan's Buried Past: Prehistoric and Historic Archaeology of the Great Lakes State*, edited by J. R. Halsey, pp. 194-211. Cranbrook Institute of Science, Bloomfield Hills, MI.
2000 The Protohistoric Time Period in Southwestern Lake Erie: European-Derived Trade Material, Population Movement, and Cultural Realignment. In *Cultures before Contact*, edited by R. A. Genheimer, pp. 52-94. The Ohio Archaeological Council, Columbus.

Stothers, D. M., and T. J. Abel
1991 Earliest Man in the Southwestern Lake Erie Basin: A 1990 Perspective. *North American Archaeologist* 12(3):195-242.
1995 The Inception and Consequences of Maize Cultivation: A Perspective from the Western Lower Great Lakes Region. Paper presented at the 60th Annual Meeting of the Society for American Archaeology, Minneapolis.
1997 Early Woodland Prehistory (ca. 1000-1 B.C.) in the Western Lake Erie Region. Paper presented at the Sixth Annual Meeting of the Ohio Archaeological Conference, Chillicothe.

Stothers, D. M., T. J. Abel, and A. M. Schneider
2001 Archaic Perspectives in the Western Lake Erie Basin. In *Archaic Transitions in Ohio and Kentucky Prehistory*, edited by O. H. Prufer, S. E. Pedde, and R. S. Meindl, pp. 233-289. The Kent State University Press, Kent, OH.

Stothers, D. M., J. R. Graves, S. K. Bechtel, and T. J. Abel
1994 Current Perspectives on the Late Prehistory of the Western Lake Erie Region: An Alternative to Murphy and Ferris. *Archaeology of Eastern North America* 22:135-196.

Stothers, D. M., J. R. Graves, and B. G. Redmond
1981 *An Archaeological Survey and Reconnaissance of the Mid-Maumee River Valley: A Phase II Archaeological Survey Report (Flatrock, Liberty, Napoleon and Washington Townships, Henry County, Ohio).* Laboratory of Ethnoarchaeology, The University of Toledo.

Stothers, D. M., G. M. Pratt, and O. C. Shane III
1979 The Western Basin Middle Woodland: Non-Hopewellians in a Hopewellian World. In *Hopewell Archaeology*, ed. D. S. Brose and N. Greber, pp. 47-58. Midcontinental Journal of Archaeology Special Paper No. 3. Kent State University Press, Kent, OH.

Stothers, D. M. and A. M. Schneider
1997 The Earthwork Defended Seaman's Fort Site (33ER85): Implications for Competition, Conflict, and Warfare During the Early Woodland Time Period. Paper presented at the Sixth Annual Meeting of the Ohio Archaeological Conference, Chillicothe.

Sussman, L.
1977 Changes in Pearlware Dinnerware, 1780-1830. *Historical Archaeology* 11:105-111.
1997 *Mocha, Banded, Cat's Eye, and Other Factory-Made Slipware*. Studies in Northeast Historical Archaeology No. 1, Council for Northeast Historical Archaeology, Boston.

Tod, J. H.
1977 *A History of the Electrical Porcelain Industry in the United States.* Privately published, Phoenix.

Toulouse, J. H.
1971 *Bottle Makers and Their Marks*. Thomas Nelson, Inc., New York.

Transeau, E. N.
1935 The Prairie Peninsula. *Ecology* 16:205-218.

U.S. Census Bureau (USCB)
n.d. "QuickFacts." *United States Census Bureau*. Electronic database available at https://www.census.gov/quickfacts/fact/table/US/PST045217. Last accessed January 6, 2018.

Wall, D. diZ.
1994 *The Archaeology of Gender: Separating the Spheres in Urban America*. Plenum Press, New York.

Warner, Beers & Co.
1886 [1978] *History of Hancock County, Ohio.* Warner, Beers & Co., Chicago. Reprinted by Unigraphic, Inc., Evansville, IN.

Weekly Jeffersonian
1903 "Bridge Now in Place." *Weekly Jeffersonian* (Findlay), January 8, 1903, p. 8.

Weiland, J.
2009 A Comparison and Review of Window Glass Analysis Approaches in Historical Archaeology. *Technical Briefs in Historical Archaeology* 4:29-40.

Weiser, P. J. and R. Kern
1999 *A Pictorial History of Findlay, Hancock County, Ohio*. Hancock Historical Museum, Findlay, and Heritage House Publishing, Marceline, MO.

Wells, T.
1998 Nail Chronology: The Use of Technologically Derived Features. *Historical Archaeology* 32(2):78-99.

Whitten, D.
2017a "Boyd's Genuine Porcelain Lined Cap." *Glass Bottle Marks: Collecting History of the Glass Manufacturing Industry*. Electronic document available at http://www.glassbottlemarks.com/boyds-genuine-porcelain-lined-cap/. Last accessed January 8, 2018.
2017b "Whittemore Boston U.S.A. / Antique Bottles." *Glass Bottle Marks: Collecting History of the Glass Manufacturing Industry*. Electronic document available at https://www.glassbottlemarks.com/whittemore-boston-antique-bottles/. Last accessed December 20, 2017.

Wickstrom, L. and J. Gray
1994 Boom Towns: Oil and Gas in Northwest Ohio. *Timeline* 11(6):2-15.

Wikepedia
2020 "Lake Erie and Western Railroad." Electronic document available at https://en.wikipedia.org/wiki/Lake_Erie_and_Western_Railroad. Last accessed April 5, 2021.

Williams, A. S.
1974 *Late-Glacial and Post-Glacial Vegetational History of the Pretty Lake Region, Northeastern Indiana*. Professional Paper No. 686-B, U.S. Geological Survey, Washington D.C.

Windmill Publications
1992 *Hancock County, Ohio Historical Atlas: A Combined Reprint of Cowles & Titus 1863 Map, H. H. Hardesty 1875 Atlas and the Findlay Republican 1902 Map.* Windmill Publications, Mt. Vernon, IN.`

Yohn, K.
n.d. "Collectors Info: Crowns – AKA Bottle Caps." *The Bottle Cap Man.com.* Electronic document available at http://www.thebottlecapman.com/Collectors%20Info.htm. Last accessed June 23, 2017.

Young, A. L.
1994 Spatial Patterning on a 19th-Century Appalachian Houselot: Evidence from Nail Analysis. *Southeastern Archaeology* 13(1):56-63.

Young, L.
2004 Plastics – The Good, the Bad and the Really Bad. *Journal of Middle Atlantic Archaeology* 20:113-118.

APPENDIX A
HISTORIC MAPS AND AERIAL PHOTOGRAPHS

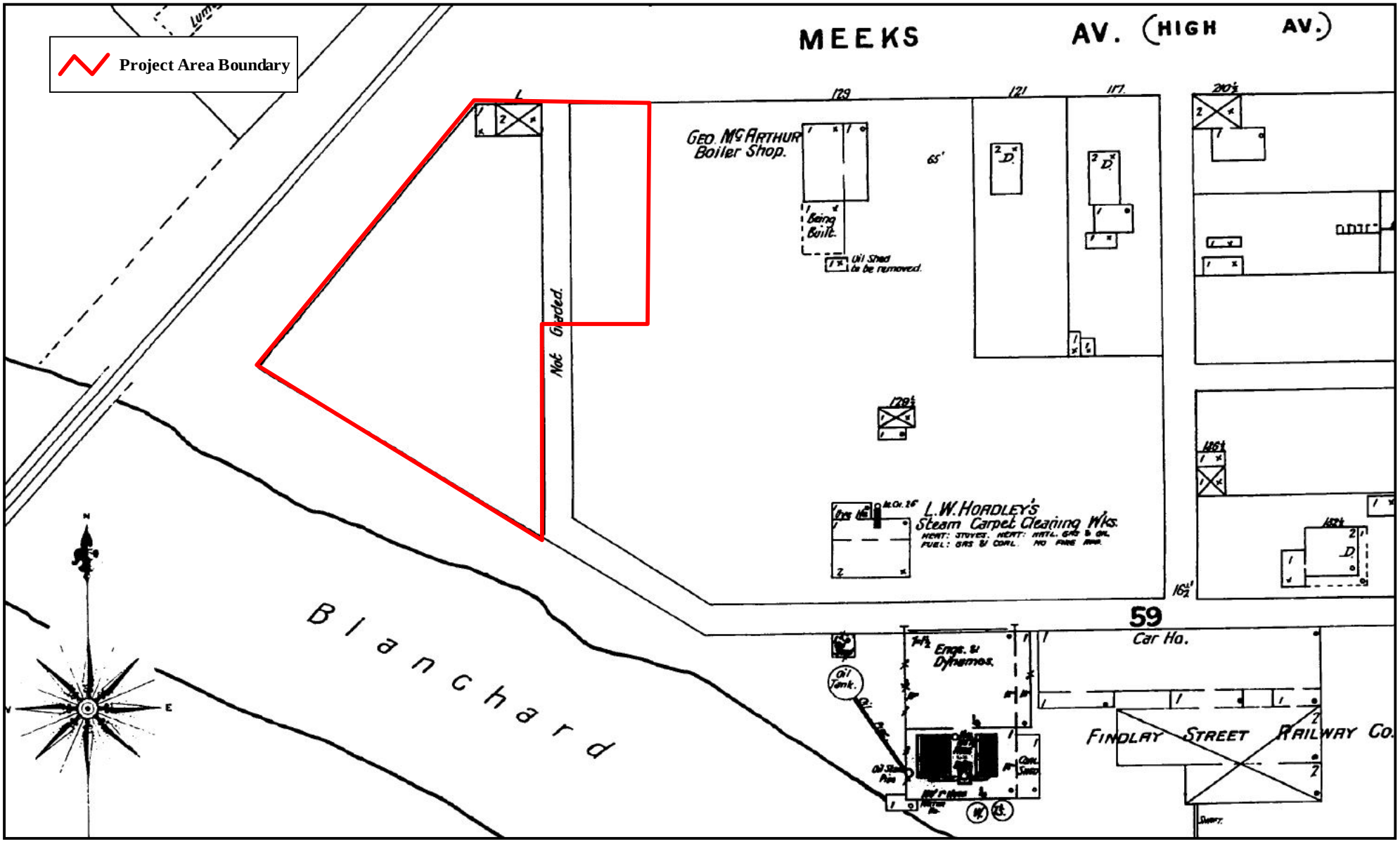

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Figure A1
1895 Sanborn Fire Insurance Map
Findlay, Ohio

N

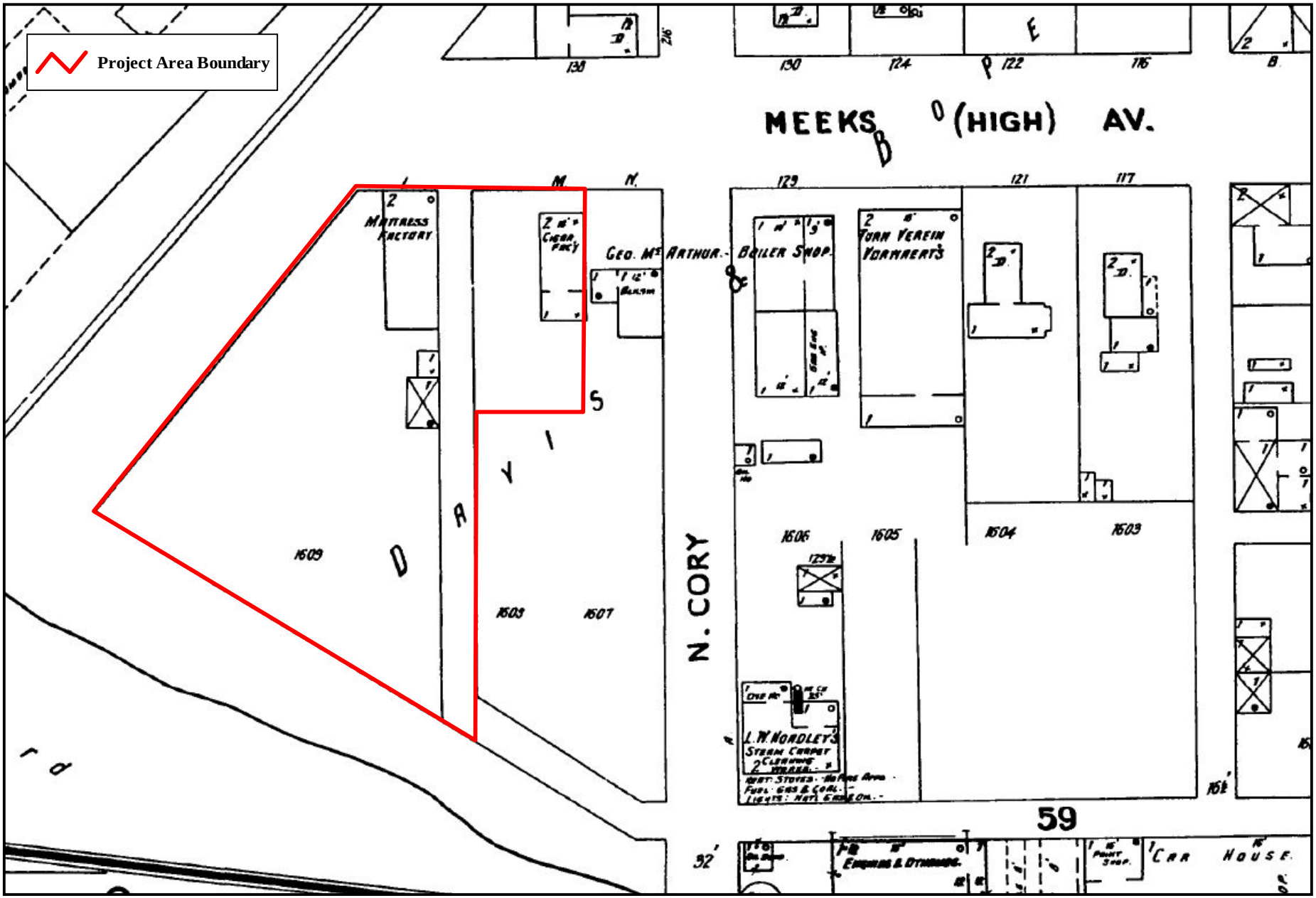

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Figure A2
1901 Sanborn Fire Insurance Map
Findlay, Ohio

N

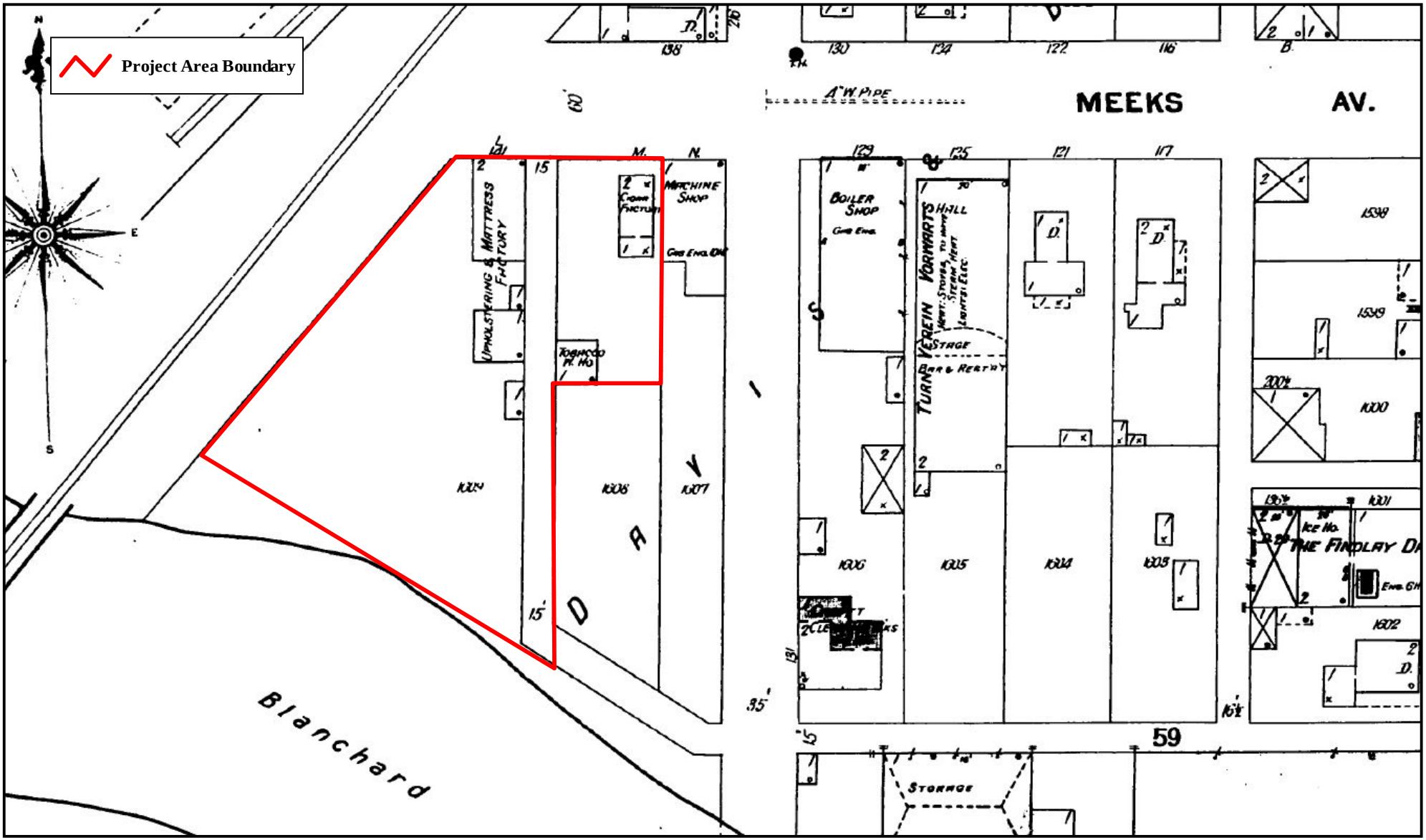

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Figure A3
1908 Sanborn Fire Insurance Map
Findlay, Ohio

N

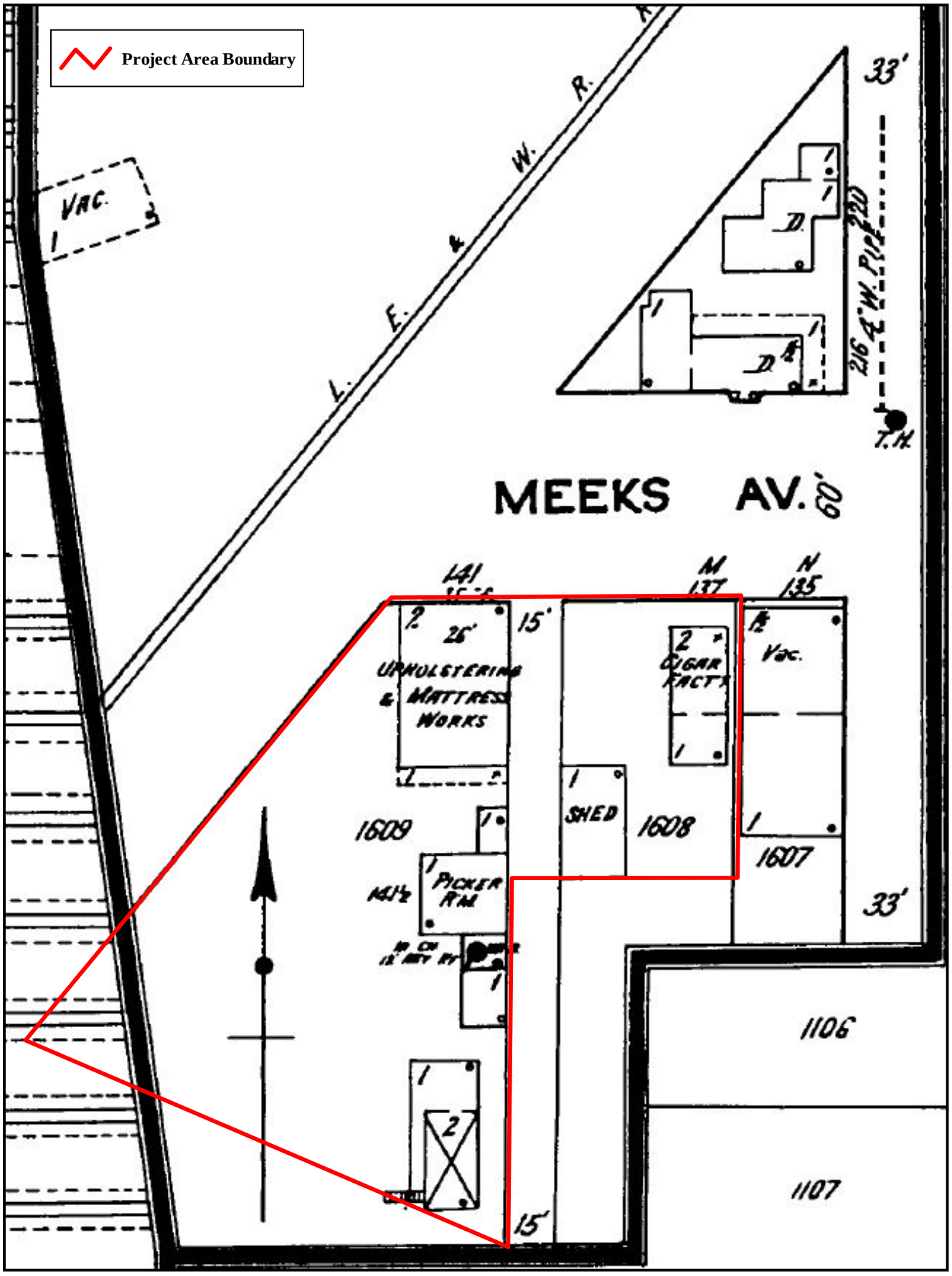

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Figure A4
1915 Sanborn Fire Insurance Map
Findlay, Ohio

N

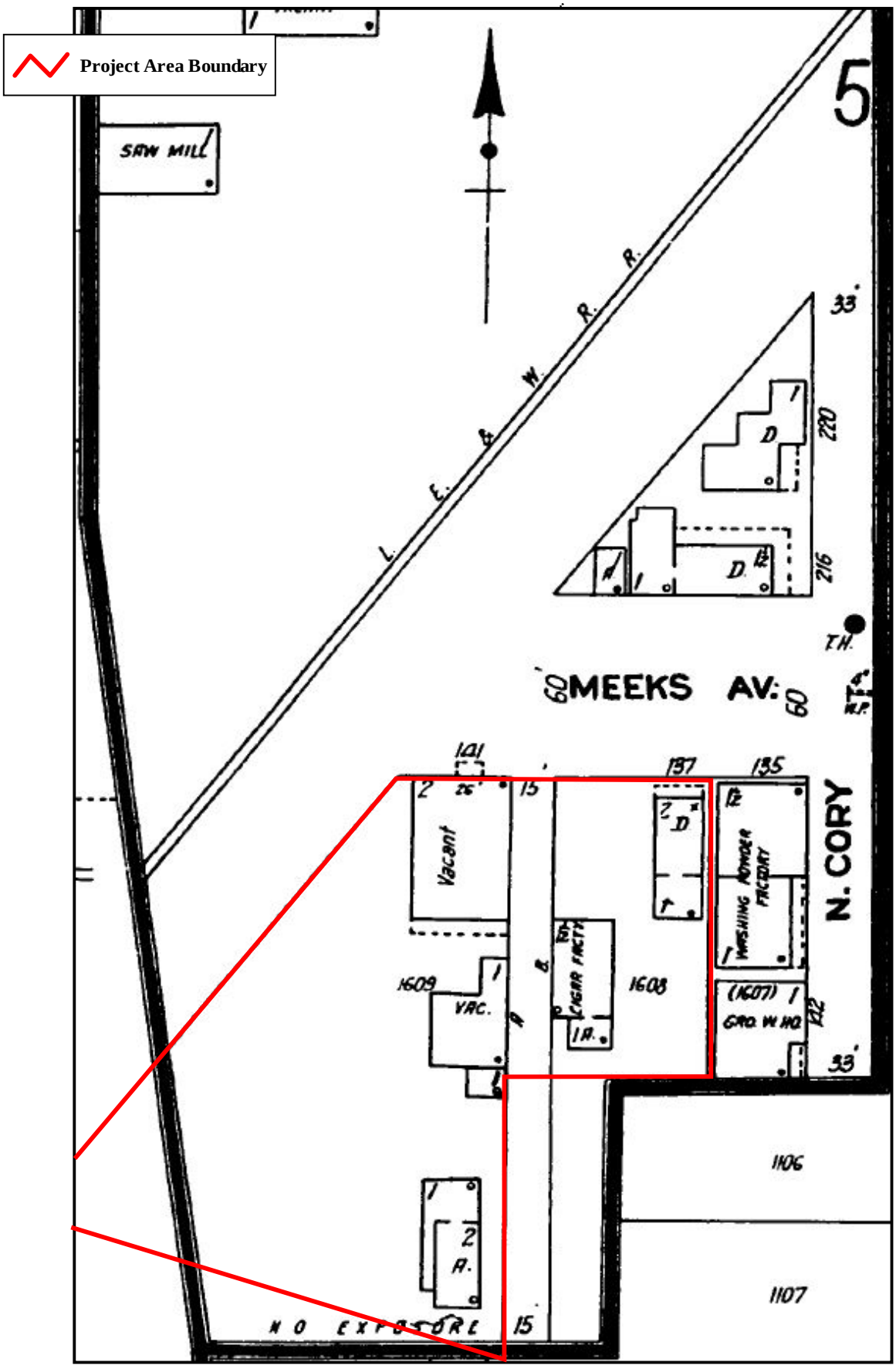

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Figure A5
1924 Sanborn Fire Insurance Map
Findlay, Ohio

N

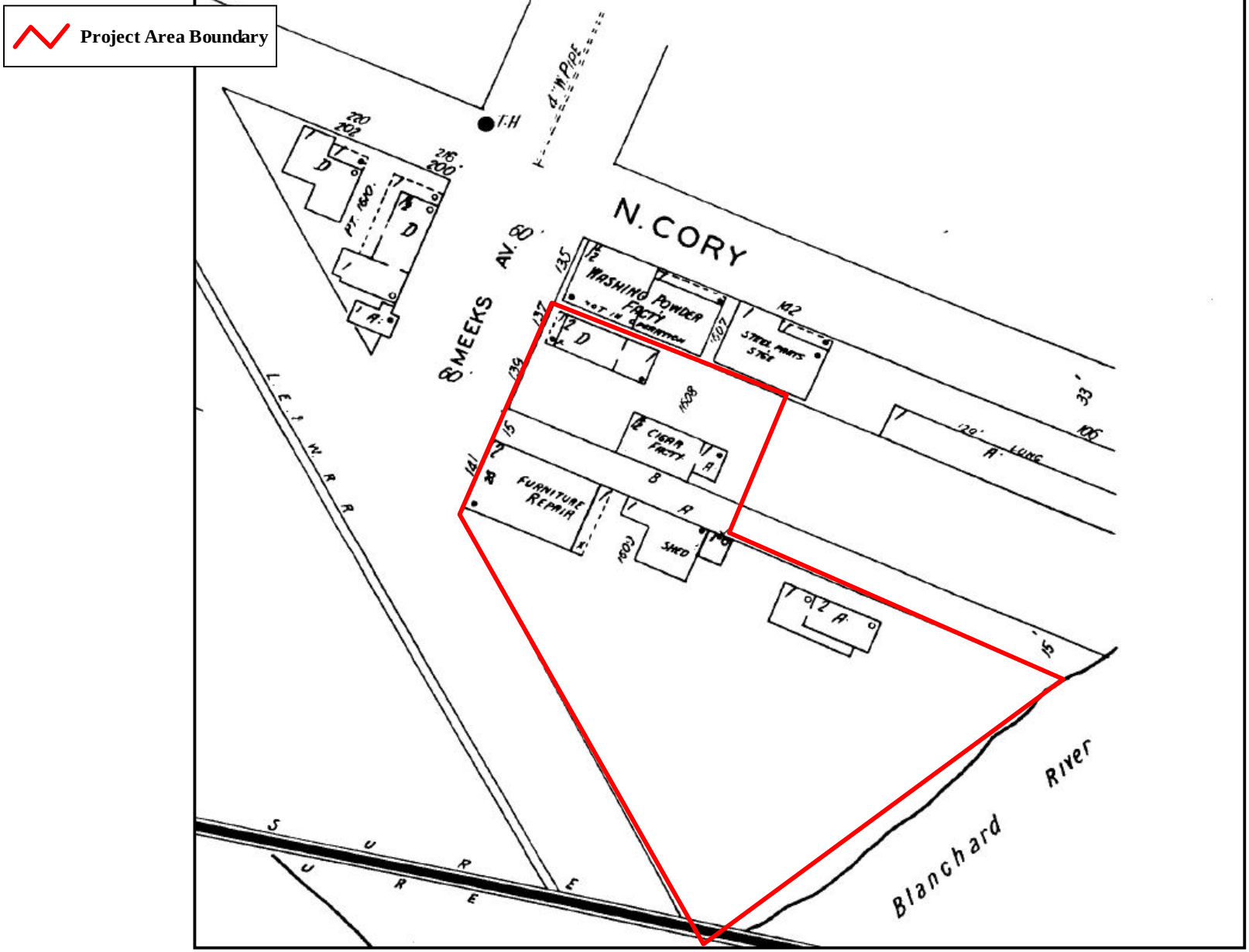

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Figure A6
1930 Sanborn Fire Insurance Map
Findlay, Ohio

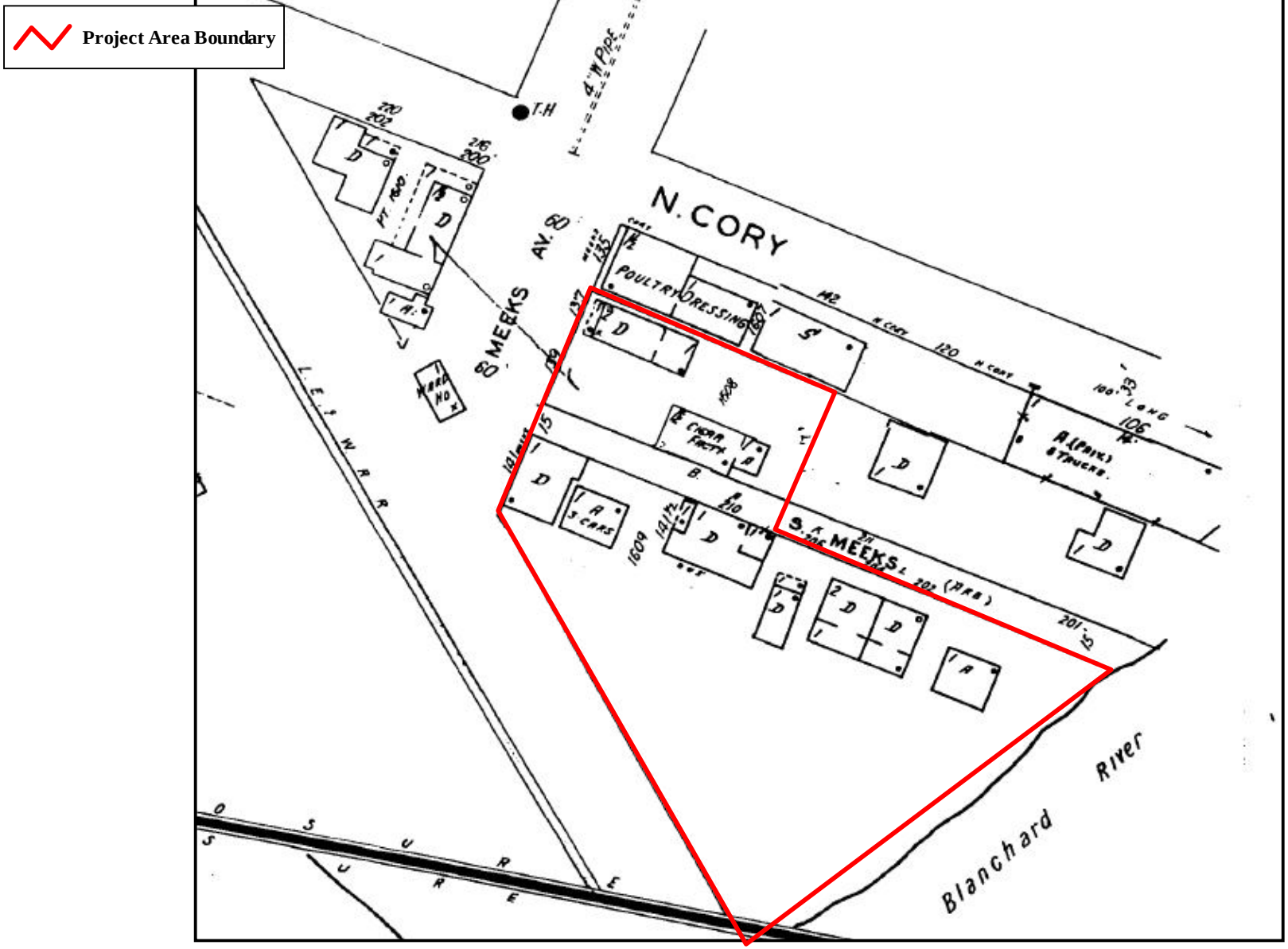

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Figure A7
1930/1949 Sanborn Fire Insurance Map
Findlay, Ohio

N

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Figure A8
1939 High-Altitude Aerial Photograph
Hancock County
(HIG 2018)

N

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Figure A9
1949 High-Altitude Aerial Photograph
Hancock County
(HIG 2018)

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Figure A10
1957 High-Altitude Aerial Photograph
Hancock County
(HIG 2018)

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Figure A11
1969 High-Altitude Aerial Photograph
Hancock County
(HIG 2018)

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Figure A12
1979 High-Altitude Aerial Photograph
Hancock County
(HIG 2018)

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Figure A13
1988 High-Altitude Aerial Photograph
Hancock County
(HIG 2018)

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Figure A14
1994 High-Altitude Aerial Photograph
Hancock County
(HIG 2018)

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Figure A15
2004 High-Altitude Aerial Photograph
Hancock County
(HIG 2018)

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Figure A16
2015 High-Altitude Aerial Photograph
Hancock County
(HIG 2018)

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APPENDIX B

HISTORY/ARCHITECTURE PHOTOGRAPH LOG

REDACTED

APPENDIX C
ARCHAEOLOGY PHOTOGRAPH LOG

Pages 1-8
REDACTED

Photo 33: STP C3, Radial 5 m West: Green Depression glass fragment with "Cameo" pattern (Object 13.01).

Photo 34: 33HK0777: Selected iron bolts (Object 180.01-19).

Photo 35: 33HK0777: Iron cobbler's mold (Object 90.01).

Photo 36: 33HK0777: Blue-edged whiteware sherds (Object 8.01 [left] and 58.01 [right]).

Photo 37: 33HK0777: Decal-decorated ceramic figurine fragment (Object 89.01).

Photo 38: 33HK0777: Porcelain insulator fragments (Object 92.01 [left] and 37.01 [right]).

Photo 39: 33HK0777: Ball "PERFECT MASON" canning jar fragment (Object 86.01).

Photo 40: 33HK0777: Vaseline jar with cap (Object 36.01).

Photo 41: 33HK0777: Base of vaseline jar (Object 36.01).

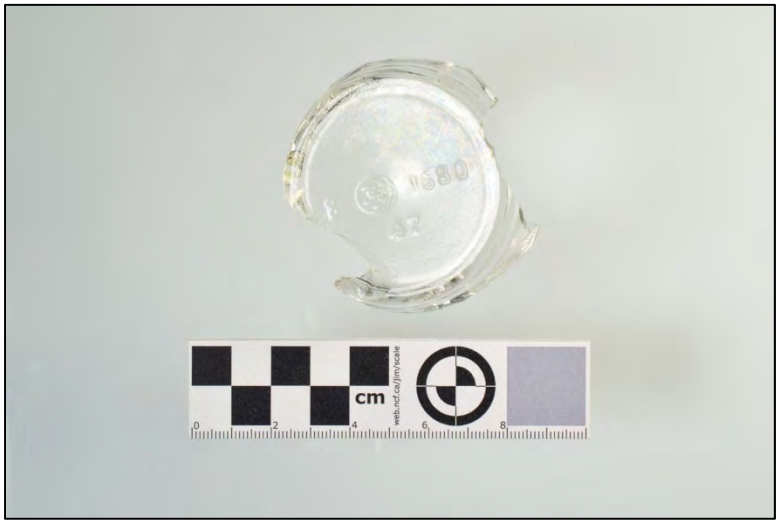


Photo 42: 33HK0777: Bottle base embossed with Foster-Forbes Glass Co. logo (Object 21.01).

Photo 43: 33HK0777: Machine-made packer jar (Object 79.01).

Photo 44: 33HK0777: Base of packer jar embossed with Owens-Illinois Glass Co. logo and date code (Object 79.01).

Photo 45: 33HK0777: Drinking glass fragment with applied color decoration (Object 85.01).

Photo 46: 33HK0777: Unidentified large mammal bone (Object 53.01).

Photo 47: 33HK0777: Tootsie Toy "Big Chief" toy car (Object 17.01).

Photo 48: 33HK0777: "Beechcraft Bonanza" toy airplane (Object 2.01-02).

Photo 49: 33HK0810: Early Archaic Kirk Corner-Notched projectile point, side #1 (Object 238.01).

Photo 50: 33HK0810: Early Archaic Kirk Corner-Notched projectile point, side #2 (Object 238.01).

Photo 51: 33HK0810: Mattress spring fragments (Object 40.01-04).

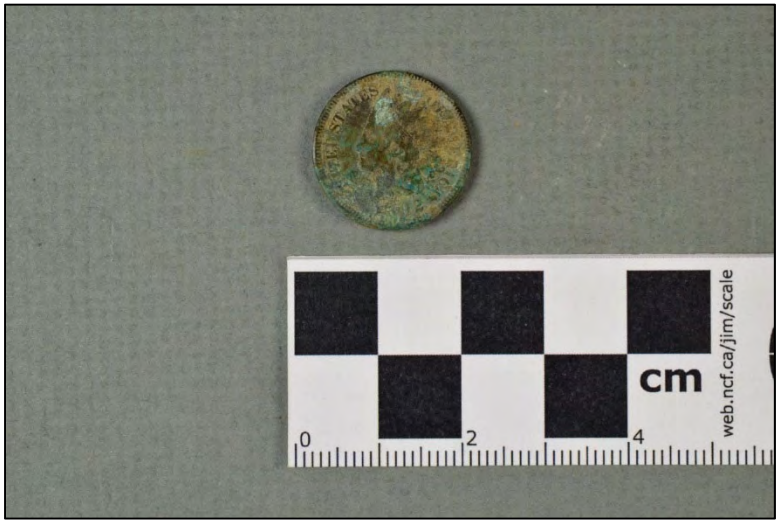


Photo 52: 33HK0810: 1892 Indian Head penny (Object 218.01).

Photo 53: 33HK0810: "French Gloss" shoe polish bottle, front side (Object 208.01).

Photo 54: 33HK0810: "French Gloss" shoe polish bottle, back side (Object 208.01).

Photo 55: 33HK0810: Prosser button fragment and cellulose acetate button (Object 202.01 [left] and 230.01 [right]).

Photo 56: 33HK0810: Cellulose acetate hair pin (Object 256.01; top), Bakelite comb fragment (Object 183.01; center), and cellulose acetate comb fragment (Object 182.01; bottom).

Photo 57: 33HK0810: Bottle base with J.T. & A. Hamilton Co. logo (Object 12.01).

Photo 58: 33HK0810: Cup-bottom molded bottle with tooled prescription finish and paper label remnants (Object 13.01).

Photo 59: 33HK0810: Whiteware sherd with dark blue transfer-printed design (Object 200.01).

Photo 60: 33HK0810: Whiteware sherd with brown transfer-printed wheat pattern (Object 201.01).

Photo 61: 33HK0810: Whiteware sherd with red transfer-printed rim pattern (Object 241.01).

Photo 62: 33HK0810: Butchered mammal bone fragments (Object 56.01-06).

Photo 63: 33HK0810: Butchered mammal jaw fragment (Object 205.01).

Photo 64: 33HK0810: "JIM EDMISTON DAIRY" milk bottle (Object 23.01).

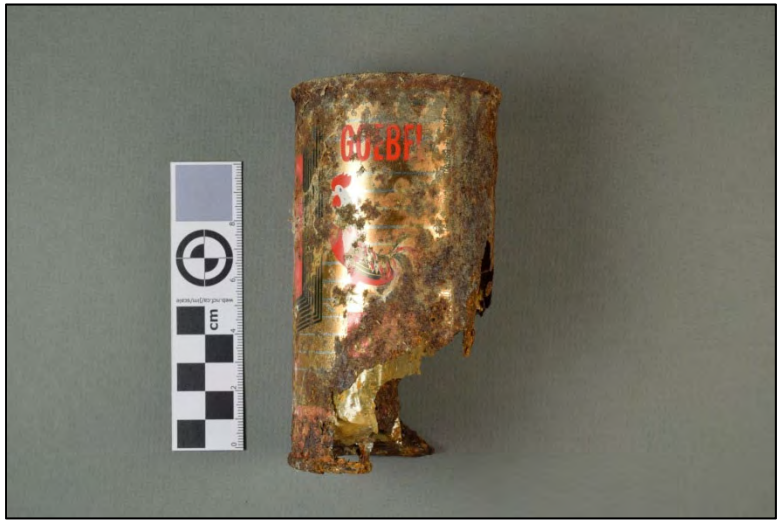
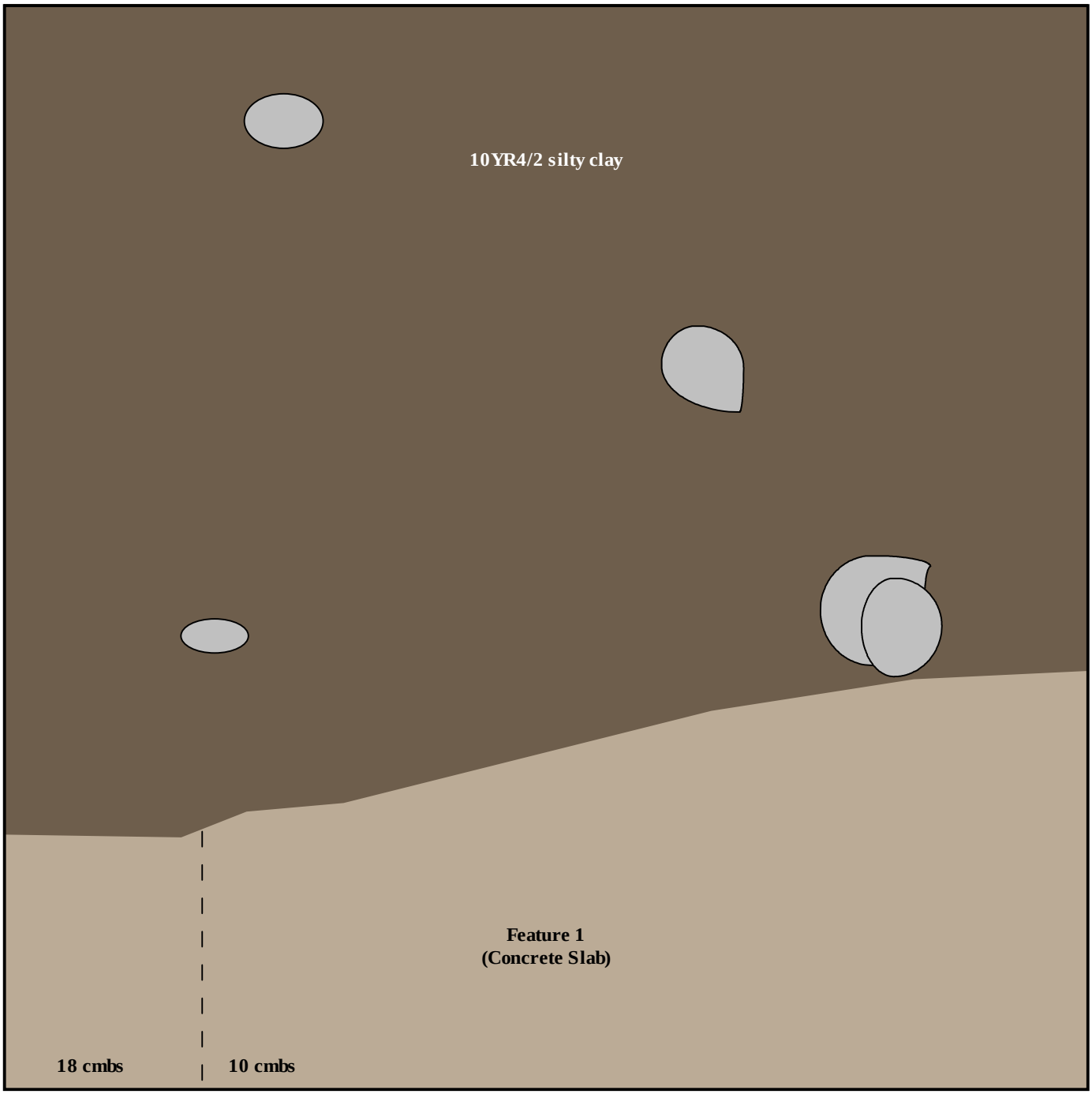


Photo 65: 33HK0810: Goebel punch-top beer can fragment (Object 38.01).

APPENDIX D
ARCHAEOLOGICAL TEST UNIT DRAWINGS



Rock

0 10
inches
centimeters
0 25

N

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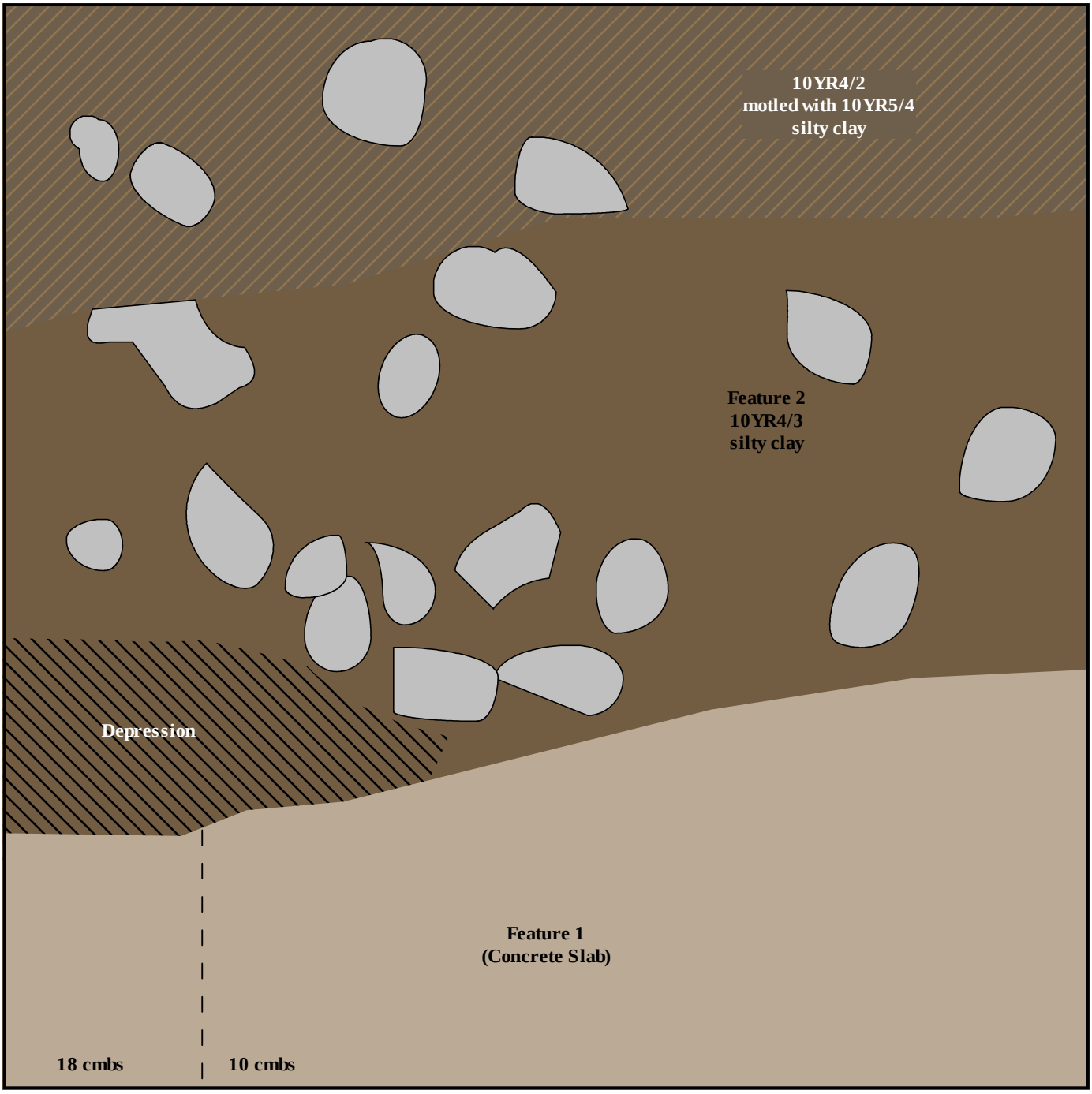
Figure D1
33HK0777 - Test Unit 1
Feature 1, Planview
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio



Rock

0 10
inches
centimeters
0 25

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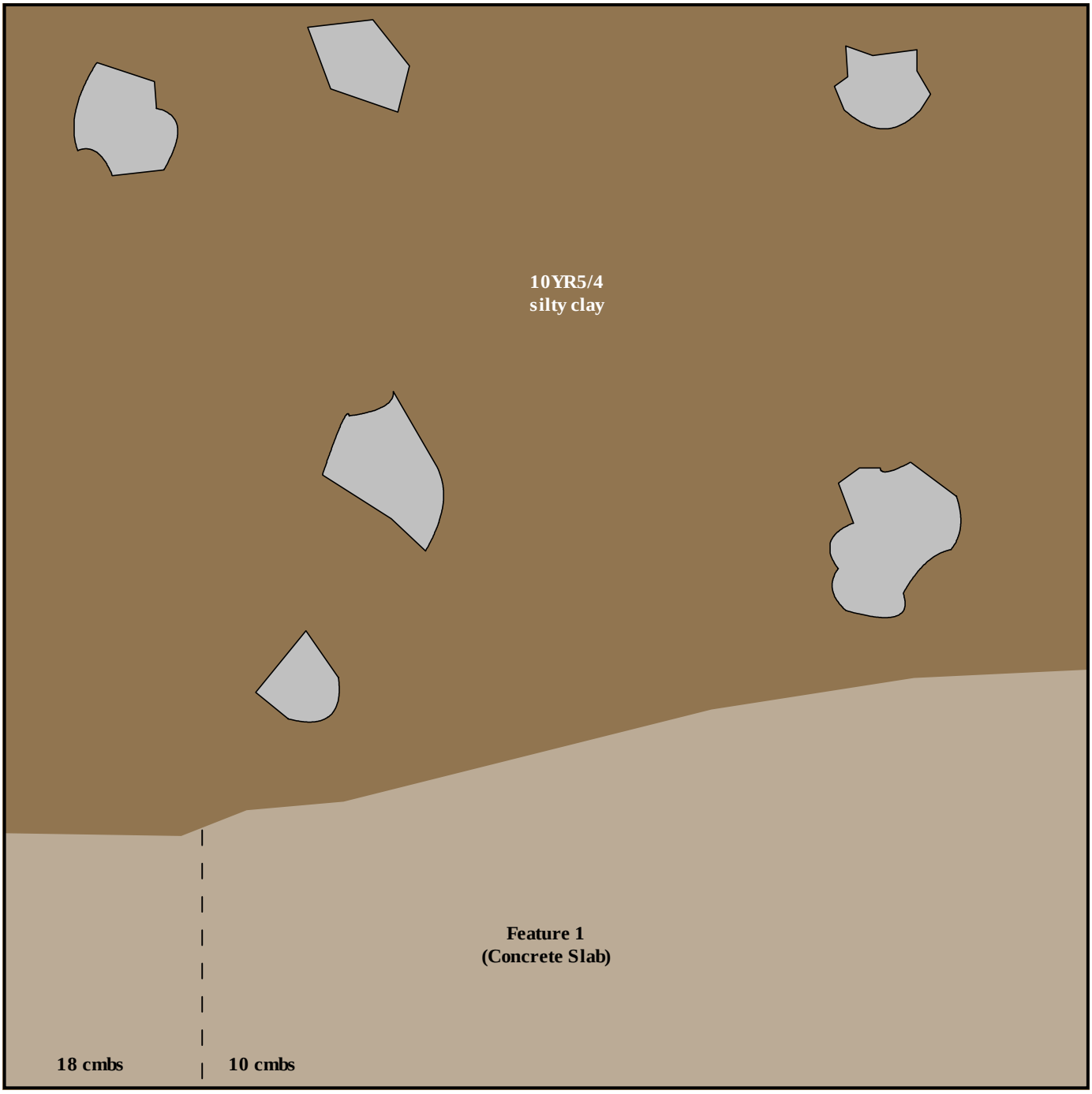
Figure D2
33HK0777 - Test Unit 1
Planview, Level 1
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio

N



Rock

0 10
inches
centimeters
0 25

N

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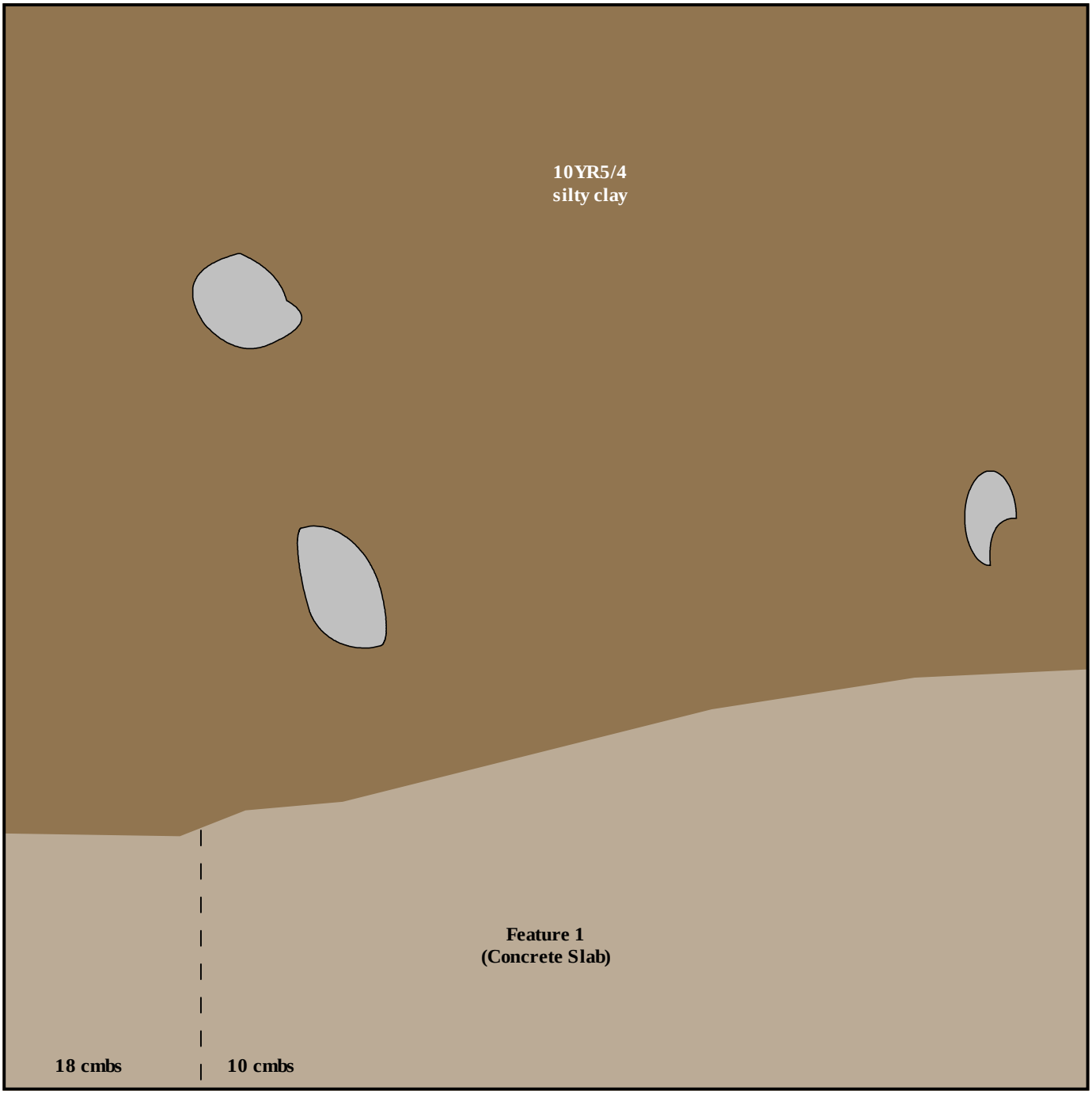
Figure D3
33HK0777 - Test Unit 1
Planview, Level 2
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio



Rock

0 10
inches
centimeters
0 25

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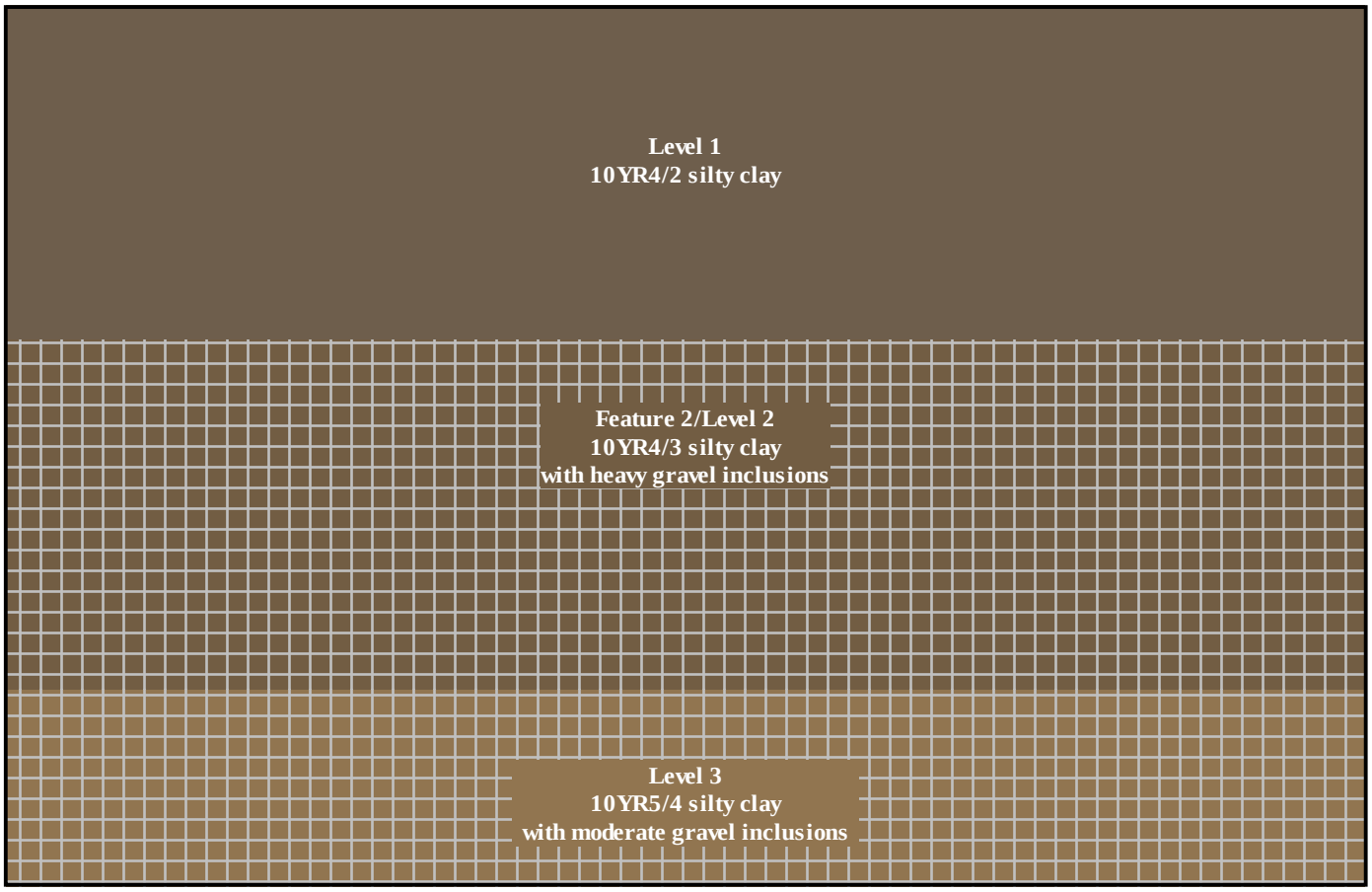
Figure D4
33HK0777 - Test Unit 1
Planview, Level 3
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio

N



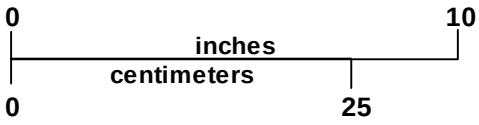


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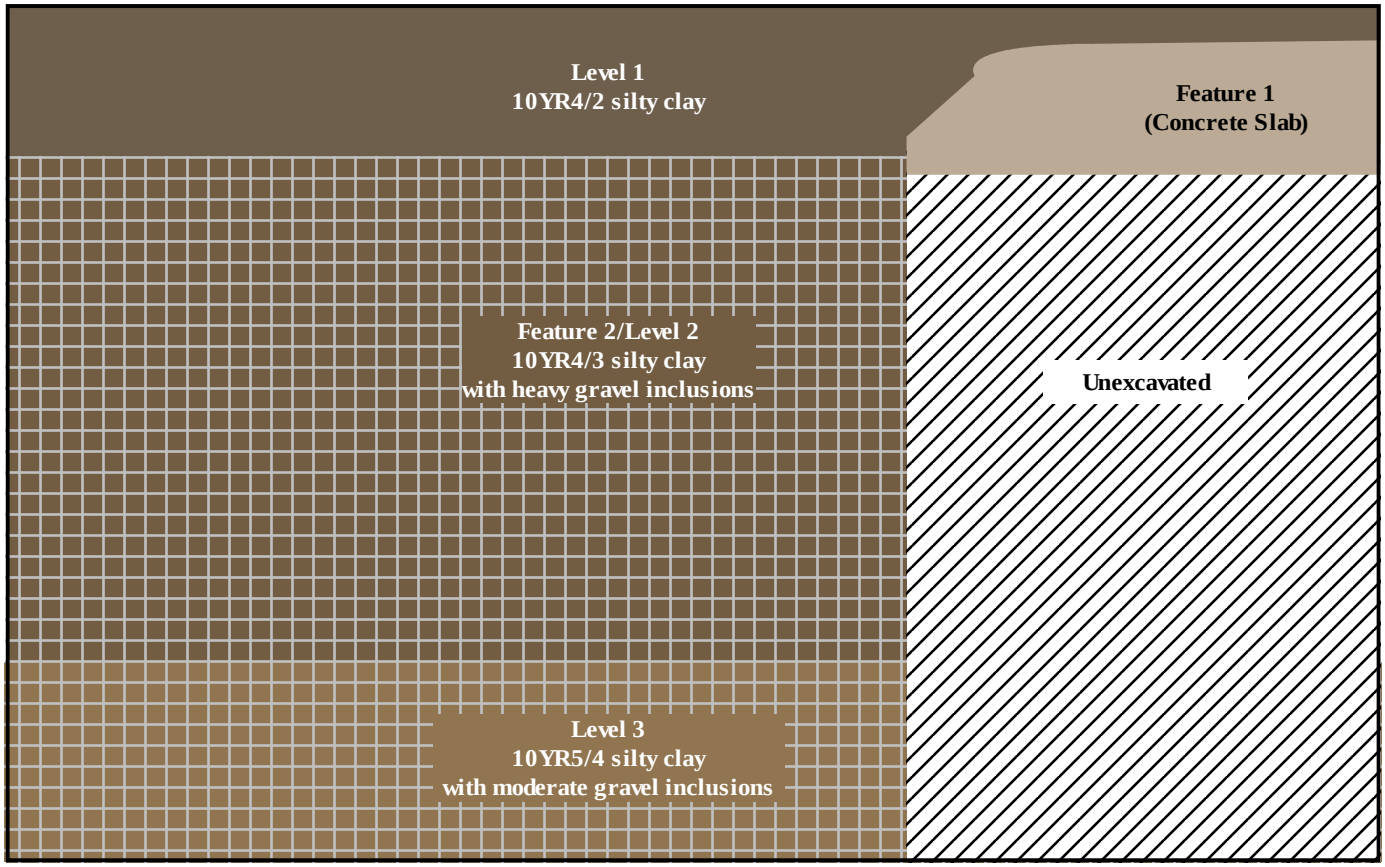
Figure D5
3HK0777 - Test Unit 1
North Wall Profile
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio



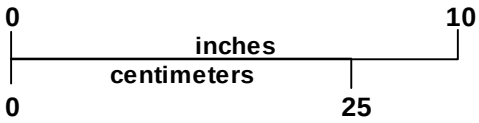


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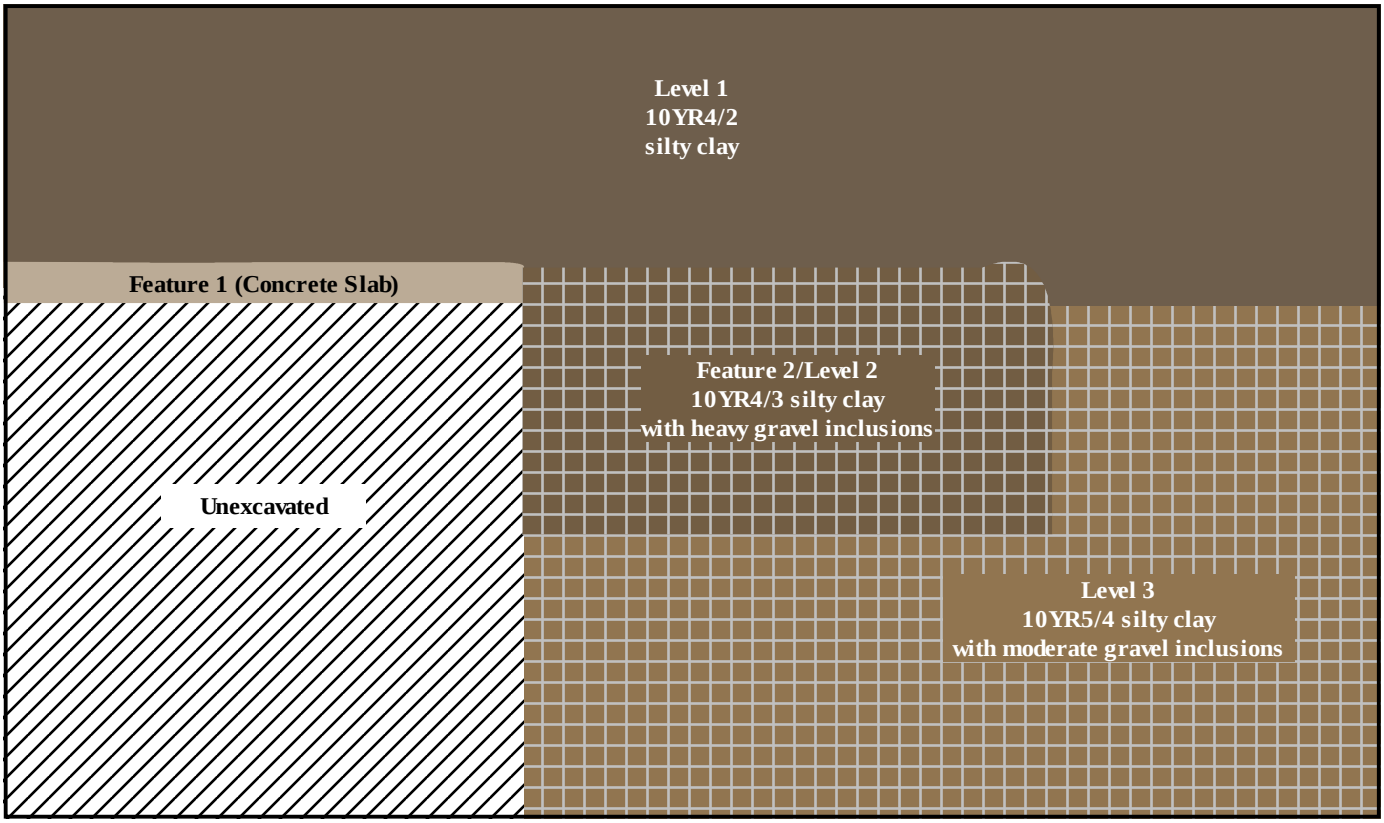
Figure D6
33HK0777 - Test Unit 1
East Wall Profile
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio



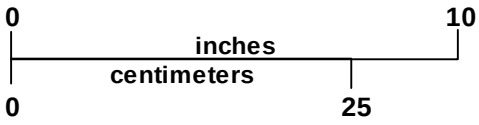


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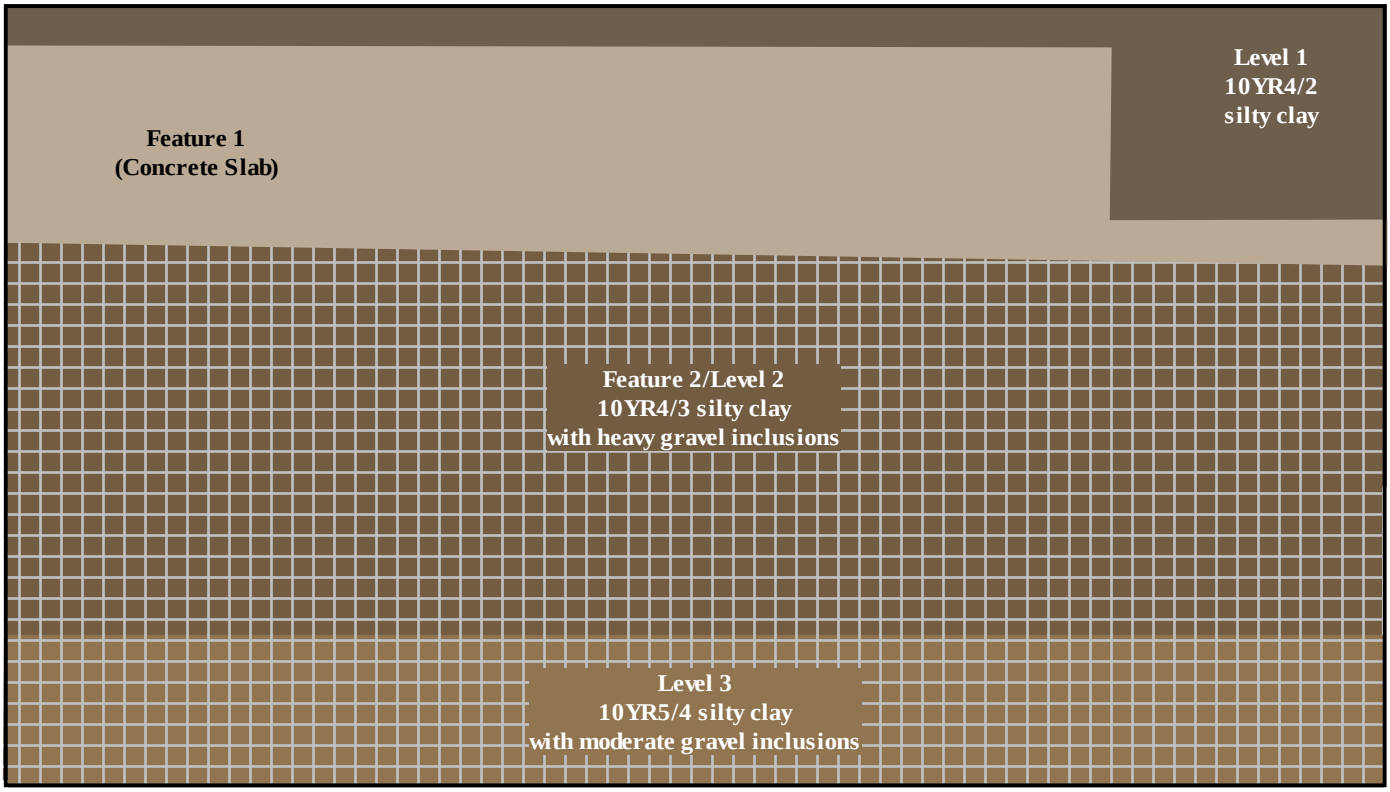
Figure D7
33HK0777 -Test Unit 1
West Wall Profile
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio



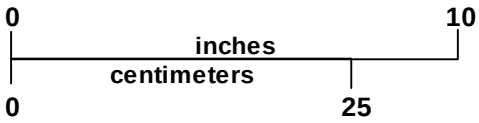


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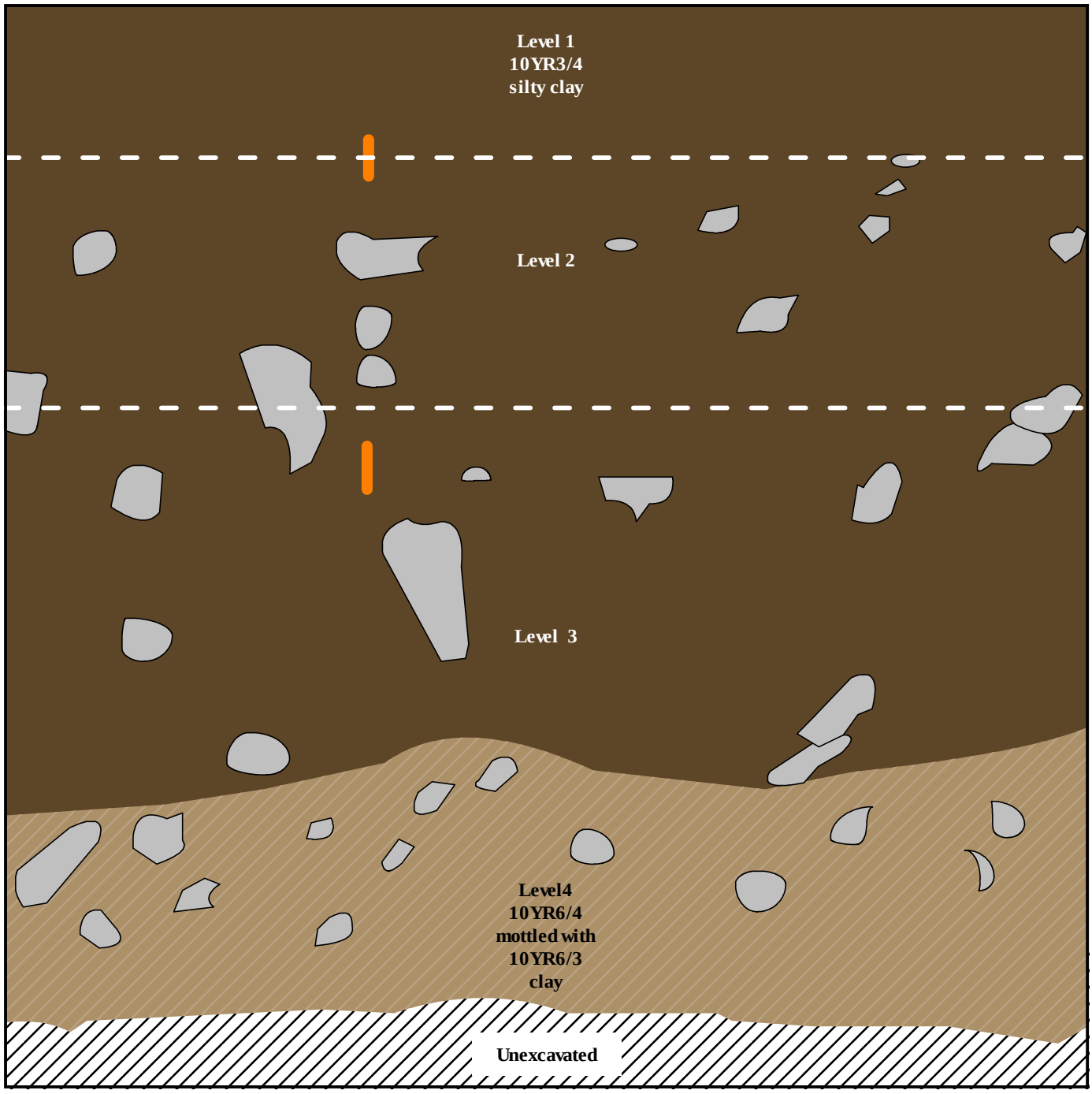
Figure D8
33HK0777 - Test Unit 1, Feature 1
South Wall Profile
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio



Rock

Nail

0 10

inches

centimeters

0 25

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Figure D9
33HK0777 - Test Unit 2
North Wall Profile
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio

0 10
inches
centimeters
0 25

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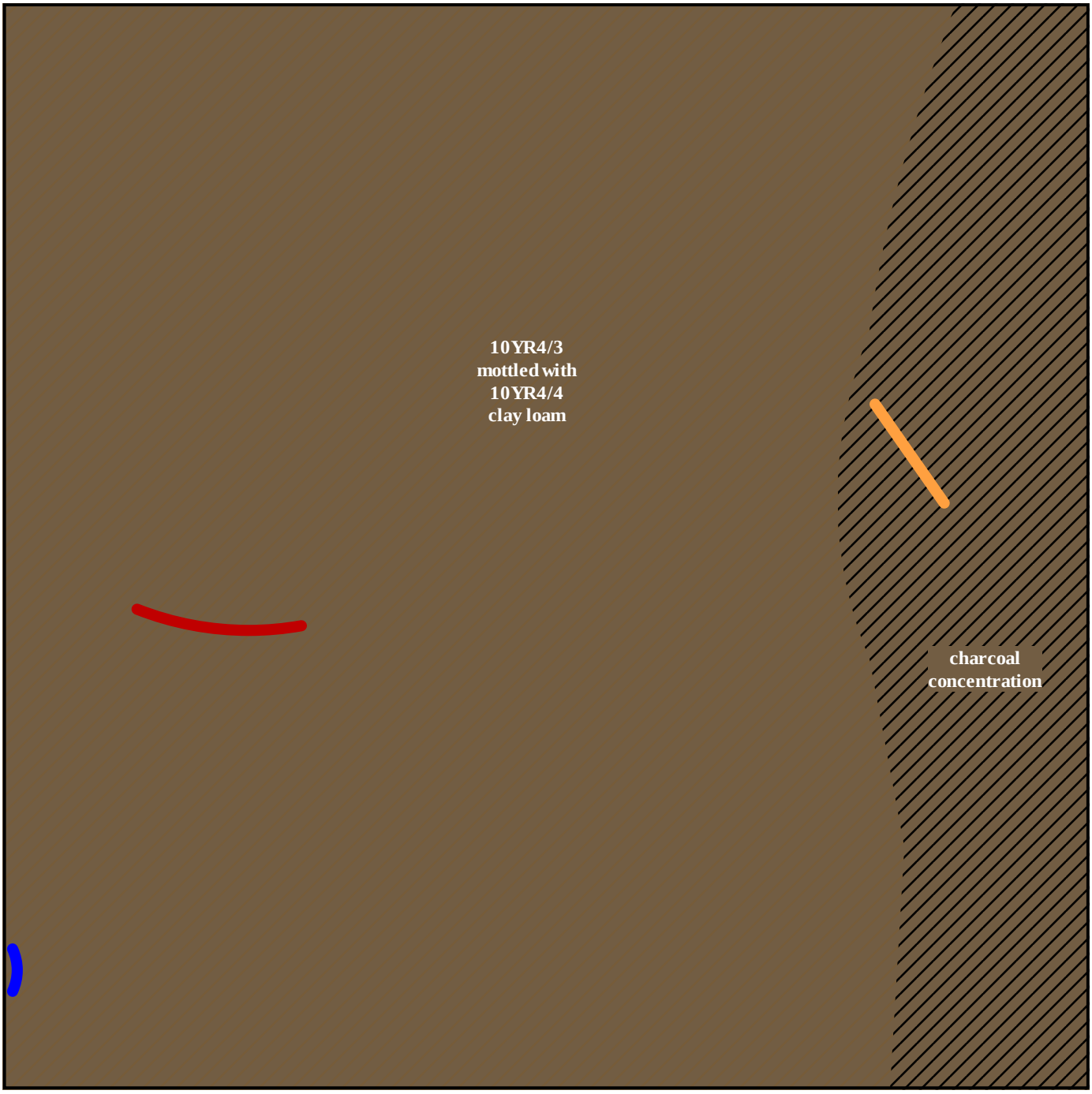
Figure D10
33HK0810 - Test Unit 3
Planview, Level 1
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio

N



Brick Fragments
Root
Zipper in Wall

0 10
inches
centimeters
0 25

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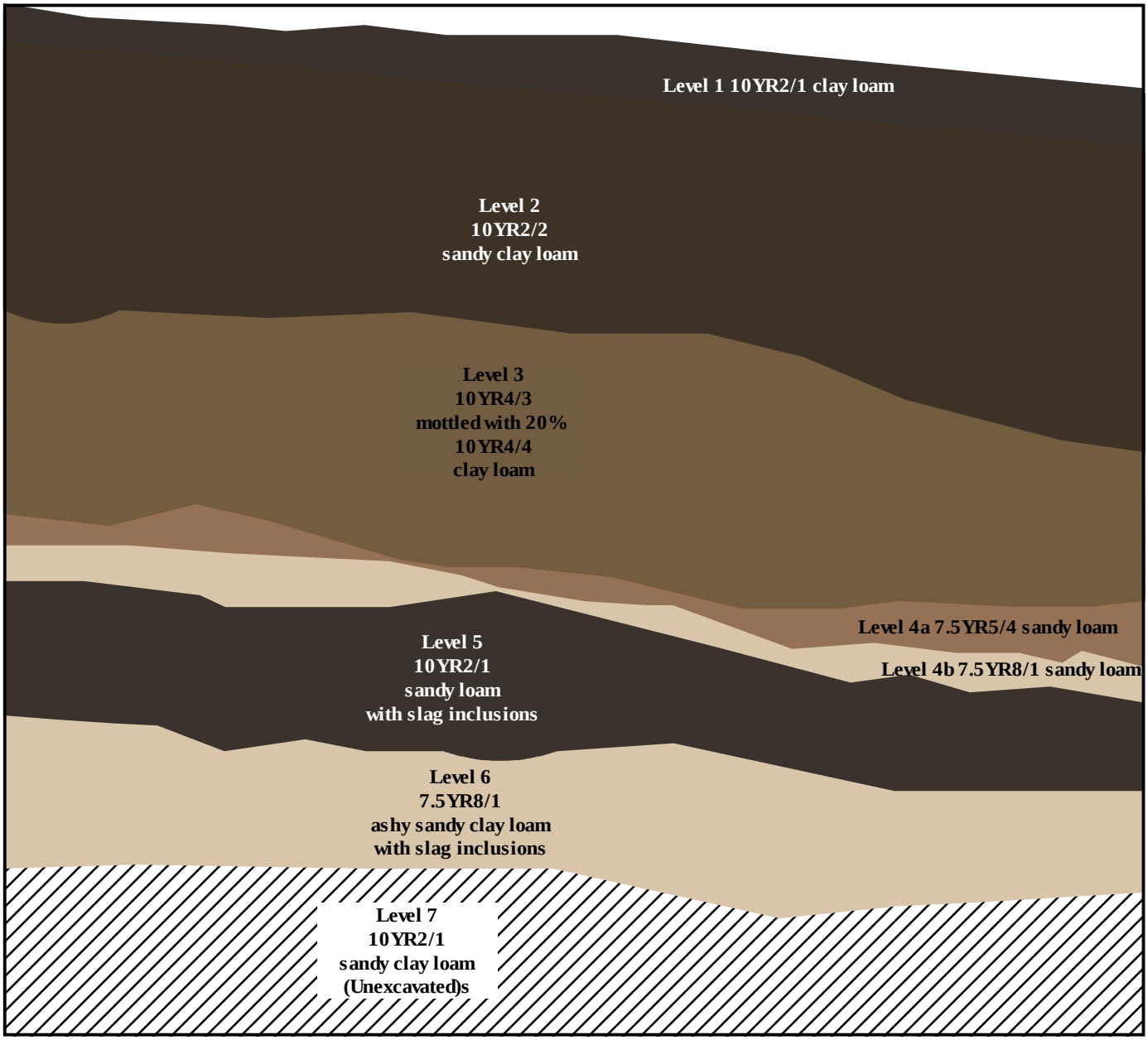
Figure D11
33HK0810 - Test Unit 3
Planview, Level 2
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio

N



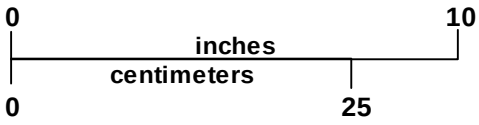


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Figure D12
33HK0810 - Test Unit 3
South Wall Profile
Norfolk Southern Railroad Improvements
Findlay, Hancock County, Ohio

APPENDIX E
ARTIFACT CATALOG

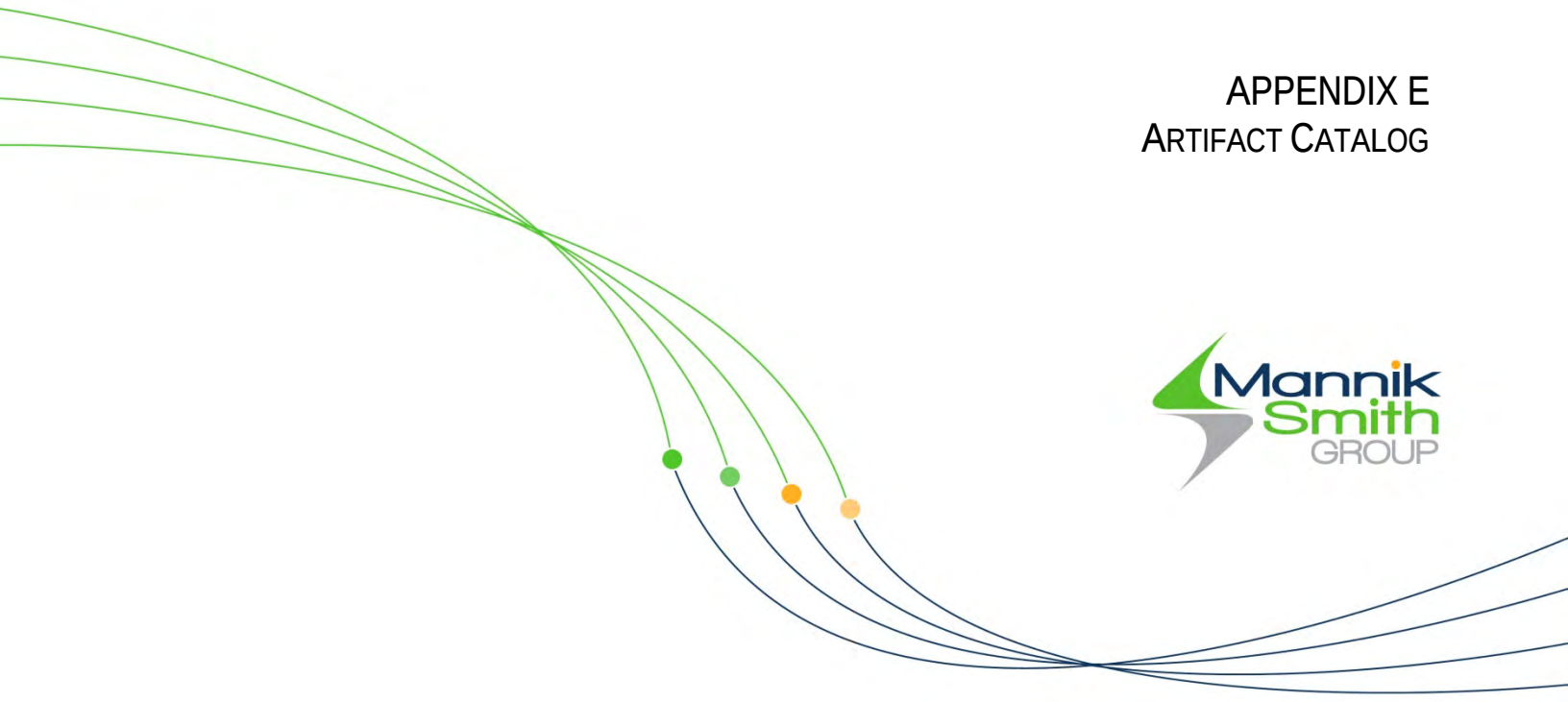

Table E1
Non-Site Proveniences - Historic Artifact Catalog

PROVENIENCE				DESCRIPTION							MISCELLANEOUS		
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	10	1.01	STP C3	Ceramic	Porcelain	Hard-Paste Bowl sherd	Kitchen	Food Service	1				Part of footring present; interior appears to be molded; otherwise undecorated.
Phase I Survey	10	2.01	STP C3	Glass	Milk Glass	Unidentified Vessel fragment	Indeterminate	Indeterminate	1				
Phase I Survey	10	5.01	STP C3	Masonry	Conglomerate	Concrete fragment	Architecture	Construction Materials	1	6.3			
Phase I Survey	10	6.01	STP C3	Metal	Ferrous	Wire Nail	Architecture	Architectural Hardware	1		1885-	Wells 1998	3-penny nail.
Phase I Survey	10	8.01	STP C3	Other	Mineral	Unspent Coal	Miscellaneous	Fuel	1	<0.1			
Phase I Survey	10	3.01-3.04	STP C3	Glass	Clear	Bottle / Jar fragments	Indeterminate	Storage	4				At least two different vessels represented. One fragment exhibits orange-peel texture on the exterior.
Phase I Survey	10	4.01-4.05	STP C3	Glass	Clear	Window fragments	Architecture	Fixtures	5				All are ridged on one side.
Phase I Survey	10	7.01-7.04	STP C3	Other	Lithic	Quartzite Gravel	Indeterminate	Indeterminate	4	31.5			Function may be Domestic (Landscaping), or Non-Cultural.
Phase I Survey	13	9.01	STP C3, Radial 5m West	Ceramic	Porcelain	Unidentified Hard-Paste sherd	Indeterminate	Indeterminate	1				Unglazed sherd could be from a figurine (Domestic or Personal), an insulator (Architecture), or an unidentified industrial object (Industry). One exterior surface is flat and appears to be the base of the object; another exterior surface is sloped.
Phase I Survey	13	10.01	STP C3, Radial 5m West	Ceramic	Refined Earthenware	Whiteware Saucer sherd	Kitchen	Food Service	1		1820-	Miller et al. 2000	Rimsherd; lightly scalloped, with a raised band on the marley paralleling them rim.
Phase I Survey	13	11.01	STP C3, Radial 5m West	Faunal	Mammalian	Unidentified Mammal Bone fragment	Kitchen	Dietary Remains	1	1.9			Rib? One edge is cut.
Phase I Survey	13	12.01	STP C3, Radial 5m West	Glass	Clear	Bottle fragment	Indeterminate	Storage	1		1905-	Miller et al. 2000	Rim fragment from a machine-made bottle with a threaded screw-cap finish.
Phase I Survey	13	13.01	STP C3, Radial 5m West	Glass	Green-tinted	"Depression" Glass Bowl or Goblet fragment	Kitchen	Food Service	1		1930-1934	Florence 1996	Rim fragment; embossed, textured decorative pattern - decorative scrollwork, stylized "feathers" surrounding a central image of a ballerina waving a streamer. Pattern is Hocking Glass Co.'s "Cameo" pattern.
Phase I Survey	13	14.01	STP C3, Radial 5m West	Ceramic	Stoneware	Drain Pipe fragment	Miscellaneous	Infrastructure	1				Dark red paste, with a very thin, dark red slip on both interior and exterior. Fragment is from the end of the pipe, and is 2.8 cm thick.
Phase I Survey	13	16.01	STP C3, Radial 5m West	Metal	Ferrous	Wire Nail fragment	Architecture	Architectural Hardware	1		1885-	Wells 1998	
Phase I Survey	13	17.01	STP C3, Radial 5m West	Metal	Ferrous	Square-cut Tack	Miscellaneous	Miscellaneous Hardware	1				
Phase I Survey	13	18.01	STP C3, Radial 5m West	Metal	Ferrous	Can fragment?	Indeterminate	Storage	1				Appears to have a rolled rim.

Table E1
Non-Site Proveniences - Historic Artifact Catalog

PROVENIENCE				DESCRIPTION							MISCELLANEOUS		
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	13	19.01	STP C3, Radial 5m West	Metal	Ferrous	Hexagonal Nut	Miscellaneous	Miscellaneous Hardware	1				3.7 cm side-to-side, 4 cm corner-to-corner; 1.6 cm thick. Interior hole is threaded. Heavy-duty, likely for machinery.
Phase I Survey	13	23.01	STP C3, Radial 5m West	Plastic	Composite	Gray Tube with Black Rubber Insulator	Indeterminate	Indeterminate	1				Gray tube is approx. 2.4 cm long with a 4 mm-diameter interior shaft; fragment of rubber insulator is 1.2 cm exterior diameter.
Phase I Survey	13	24.01	STP C3, Radial 5m West	Other	Floral	Wood fragment	Indeterminate	Indeterminate	1	2.9			Fragment is 6.5 cm long; may be Non-Cultural.
Phase I Survey	13	25.01	STP C3, Radial 5m West	Other	Mineral	Unspent Coal	Miscellaneous	Fuel	1	20.2			
Phase I Survey	13	15.01-15.02	STP C3, Radial 5m West	Masonry	Clay	Brick fragments	Architecture	Construction Materials	2	2395.3			One is approx. 3/4 of a brick and the other is approx. 1/5 of a brick. Two different bricks.
Phase I Survey	13	20.01-20.03	STP C3, Radial 5m West	Metal	Ferrous	Unidentified Hardware / Hardware fragments	Miscellaneous	Miscellaneous Hardware	3				One object is a flat rectangle measuring 5.2 x 1.2 cm. One is a triangle measuring 6.9 cm along its long edge with a 3.5-cm hypotenuse; object doubles in thickness from 0.6 cm along long edge to 1.2 cm at the point. Third object appears to have been a strap or blade, basically flat with one straight edge and one curved edge - possibly a chaveta knife blade?
Phase I Survey	13	21.01-21.02	STP C3, Radial 5m West	Metal	Ferrous	Unidentified Iron fragments	Indeterminate	Indeterminate	2				One object appears to be star-shaped, but heavy rust concretion obscures its original shape.
Phase I Survey	13	22.01-22.02	STP C3, Radial 5m West	Metal	Indeterminate	Unidentified Strap fragments	Miscellaneous	Miscellaneous Hardware	2				Both fragments appear to be from the same original object, though one is only slightly curved and the other is curved into a U shape. Both fragments are flat (2 mm thick) and 5 mm wide. One appears to have a small rivet hole near the end. Both were original a gray metal and exhibit chalky oxidation.
								Total	*40*				

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PROVENIENCE				DESCRIPTION							MISCELLANEOUS		
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Monitoring	1	1.01	East Steps Area	Faunal	Avian	Unidentified Bone fragment	Indeterminate	Indeterminate	1	0.0			May be Kitchen (Dietary Remains), but no clear butchery marks present; possibly a long bone.
Monitoring	2	2.01-2.02	East Steps Area	Other	Composite	Toy Airplane	Personal	Toys & Games	2		1947-	Clark 2015	One of the tail wings has broken off. Metal die-cast airplane painted blaze orange, with rubber wheels and ferrous wire axel. Both wings have embossing on underside - one "BEECHCRAFT", the other "BONANZA"
Monitoring	3	3.01	East Steps Area	Glass	Clear	Jar Lip shard	Indeterminate	Storage	1				External, continuous-threaded screw cap finish. Closely resembles a wide-mouth canning jar with external cap seat under threading.
Monitoring	3	5.01	East Steps Area	Glass	Clear	Bottle Body shard	Indeterminate	Storage	1		1933-	Lindsey 2016c	ACL decoration - yellow with red band and what appears to be black lettering on orange background - too fragmentary to discern wording or design.
Monitoring	3	6.01	East Steps Area	Glass	Brown / Amber	Bottle Body shard	Indeterminate	Storage	1				
Monitoring	3	8.01	East Steps Area	Ceramic	Refined Earthenware	Whiteware Plate / Saucer sherd	Kitchen	Food Service	1		1820-	Miller et al. 2000	Blue feather-edged decoration. Portion of well is present.
Monitoring	3	9.01	East Steps Area	Ceramic	Refined Earthenware	Whiteware Saucer sherd	Kitchen	Food Service	1		1890-	Miller et al. 2000	Polychrome floral decal on marley - red roses and blue flowers with yellow center amongst green leaves and stems.
Monitoring	3	4.01-4.06	East Steps Area	Glass	Clear	Bottle / Jar Body shards	Indeterminate	Storage	6				
Monitoring	3	7.01-7.04	East Steps Area	Glass	Clear	Window fragments	Architecture	Fixtures	4				MNI=2 based on differences in thickness.
Monitoring	4	10.01	East Steps Area	Ceramic	Porcelain	Electrical Insulator Part	Architecture	Lighting and Electrical	1		1890-	Tod 1977	"250W - 250V" embossed in a recessed panel on top. Object is a ring with threaded interior. Measures 1.7 cm thick x 4.4 cm external diameter (on top side) x 2.6 cm internal diameter
Monitoring	5	11.01	East Steps Area	Glass	Brown-tinted	Bead	Personal	Personal Adornment	1				Ornamental bead coated in a metalic gold coating that is flaking off the artifact. Openings on two opposing ends for suspension.
Monitoring	6	12.01	East Steps Area	Metal	Ferrous	Wire Nail fragment	Architecture	Architectural Hardware	1		1885-	Wells 1998	
Monitoring	6	14.01	East Steps Area	Metal	Ferrous	Bracket	Miscellaneous	Miscellaneous Hardware	1				Plate folded over and fastenings passing between top and bottom- as though it was fastened to the edge of a countertop or the edge of some object that it was holding together.
Monitoring	6	15.01	East Steps Area	Metal	Aluminum	Paste Tube	Indeterminate	Storage	1				Rolled up, empty, aluminum sqeeze tube with the appearance of an oil paint tube or other semi-liquid / paste tube.
Monitoring	6	13.01-13.13	East Steps Area	Metal	Ferrous	Unidentified Nail fragments	Architecture	Architectural Hardware	13				
Monitoring	7	16.01-16.03	Back Porch	Metal	Ferrous	Motorcycle License Plate fragments	Transportation	Vehicular Fixtures	3				Three fragments (one large) of an Ohio motorcycle license plate. Embossed "OHIO" is barely discernable at bottom center of plate. Plate size is therefore too small for a car / truck. Crimped edges form ridge on front and dentation on back and follows edge. One fastening hole near the bottom left is present.
Monitoring	8	17.01	Back Porch	Other	Composite	Toy Car	Personal	Toys & Games	1		ca. 1950s-1960s	Newson n.d.	Under car roof is embossed "TootsieToy / Chicago". Underside of trunk is marked "Big Chief / [??]299". Die-cast car is painted red. Has plastic wheels with tread marks. Axels are ferrous. Based on style of the car, likely dates to the 1950s-1960s.
Monitoring	9	18.01	Back Porch	Glass	Milk Glass	Orange-Flashed Vessel shard	Indeterminate	Storage	1		ca. 1880-	Jones 2000	Color has faded to a rose-like tint. Original form / function of the vessel is unclear, though likely decorative.
Monitoring	9	19.01	Back Porch	Glass	Milk Glass	Milk Glass shard	Kitchen	Food Preparation / Food Service	1				Remnants of green paint adhere to both surfaces - likely from a bowl.
Monitoring	9	21.01	Back Porch	Glass	Clear	Bottle Base / Heel fragment	Kitchen	Food Storage	1		1942-1983	Lockhart, Schriever et al. 2015c	Seams end at heel. Base is embossed "8 [(stylized) FF in a circle] 1680 / 47" - Foster-Forbes Glass Co.

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PROVENIENCE				DESCRIPTION							MISCELLANEOUS		
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Monitoring	9	22.01	Back Porch	Glass	Aqua-tinted	Canning Jar Body shard	Kitchen	Food Storage	1		1895-	Lockhart, Schriever, Serr et al. 2013	Portion of a script 'B' Ball logo is embossed on the exterior, but too fragmentary to date firmly.
Monitoring	9	23.01	Back Porch	Glass	Aqua-tinted	Bottle / Jar Body shard	Indeterminate	Storage	1		Pre-1930	Lindsey 2016e	Exterior is heavily patinated.
Monitoring	9	25.01	Back Porch	Glass	Green	Bottle shard	Indeterminate	Storage	1		20th century	Lindsey 2016e	
Monitoring	9	26.01	Back Porch	Glass	Olive-tinted	Bottle Body shard	Kitchen	Food Storage	1				Exterior is heavily patinated.
Monitoring	9	27.01	Back Porch	Glass	Clear	Bottle Lip shard	Kitchen	Food Storage	1				Partial lip shard exhibiting a beaded finish, likely for a crown cap.
Monitoring	9	28.01	Back Porch	Glass	Clear	Bottle Shoulder shard	Indeterminate	Storage	1		1940-	Lindsey 2016a	Stippling on shoulder.
Monitoring	9	31.01	Back Porch	Glass	Clear	Window fragment	Architecture	Fixtures	1				
Monitoring	9	33.01	Back Porch	Ceramic	Porcelain	Hard-Paste Vessel sherd	Kitchen	Food Service	1				Hand-painted underglaze cobalt design - appears to be a simplified stem and leaf pattern.
Monitoring	9	34.01	Back Porch	Ceramic	Refined Earthenware	Whiteware Saucer sherd	Kitchen	Food Service	1		1890-	Miller et al. 2000	Rimsherd; polychrome floral decal on top side. Red and yellow roses with amber and blue flowers as well as green leaves.
Monitoring	9	36.01	Back Porch	Other	Composite	Brown / Amber Vaseline Jar with Ferrous Screw Cap	Personal	Health & Hygiene	1		1950-1955	Lockhart 2015	Machine-made, 2.5-oz bottle. Straight, cylindrical body. Base is embossed, "CHESEBROUGH / . / MFG. / CO CD / 2 / NEW YORK". Bottle still has some vaseline in it.
Monitoring	9	91.01	Back Porch	Glass	Pink-tinted	Decorative Vessel fragment	Domestic	Furnishings	1				Very thin glass; etched stem-and-leaf design on exterior.
Monitoring	9	20.01-20.05	Back Porch	Glass	Clear	Pepsi-Cola Bottle fragments	Kitchen	Food Storage	5		ca. 1943-1958	Lockhart 2010	Largest shard marked with white ACL "LIMA, OHIO" underneath a white ACL logo. Perpendicular to the writing is embossed, "[PE]PSICOLA" in a band that is surrounded by patterned hatch-marks. Another shard is marked with white ACL oval with red ACL lettering within, "Pep[si-Cola]". Another shard has red ACL lettering, "OHIO". Another shard has white ACL with red stipes and a small amount of blue - pattern to fragmentary to discern, though likely Pepsi-Cola. Another shard has white and red ACL bands and fragmentary red lettering (illegible). At least two different Pepsi bottles represented, possibly more.
Monitoring	9	24.01-24.03	Back Porch	Glass	Brown / Amber	Bottle Body shards	Indeterminate	Storage	3				
Monitoring	9	29.01-29.14	Back Porch	Glass	Clear	Bottle / Jar shards	Indeterminate	Storage	14				Three appear to exhibit ribbing or fluting on the exterior. One has a light pinkish tint and appears to be from a shoulder. One is slightly melted.
Monitoring	9	30.01-30.13	Back Porch	Glass	Clear	Bottle shard	Kitchen	Food Storage	1		1934 - mid-1960s	Lindsey 2016f	Embossed, "FED[ERAL LAW FORBIDS SALE] / OR [RE-USE OF THIS BOTTLE]" - liquor bottle.
Monitoring	9	32.01-32.02	Back Porch	Glass	Aqua-tinted	Window fragments	Architecture	Fixtures	2				
Monitoring	9	35.1-35.3	Back Porch	Ceramic	Refined Earthenware	Whiteware Plate / Saucer sherds	Kitchen	Food Service	3		1820-	Miller et al. 2000	MNI=2; one sherd exhibits a small footring.
Monitoring	10	37.01	Back Porch	Ceramic	Porcelain	Electrical Wiring Cleat fragment	Architecture	Lighting and Electrical	1		1906-1910	Tod 1977	"US..." embossed in a recessed panel on front of cleat. United States Electric Porcelain Company (AKA Findlay Electric Porcelain Company post-1910).
Monitoring	10	38.01	Back Porch	Metal	Aluminum	Foil Sanitary Bottle Seal	Indeterminate	Storage	1				
Monitoring	10	39.01	Back Porch	Glass	Clear	Marble	Personal	Toys & Games	1		1926-	Randall 1971	Blue and white swirls. Apx 1.25cm diameter. Machine-made.
Monitoring	11	43.01	Back Porch	Faunal	Mammalian	Rodent Mandible fragment	Non-Cultural	Faunal	1	0.0			Two teeth present.
Monitoring	11	44.01	Back Porch	Faunal	Mammalian	Rodent Tooth	Non-Cultural	Faunal	1	0.0			
Monitoring	11	40.01-40.05	Back Porch	Faunal	Mammalian	Cut Mammal Bone fragments	Kitchen	Dietary Remains	5	14.4			Three are likely rib fragments and the fourth is a cross-sectioned long-bone fragment. Appear to be from immature or small mammals.
Monitoring	11	41.01-41.02	Back Porch	Faunal	Mammalian	Unidentified Mammal Bone fragments	Indeterminate	Indeterminate	2	0.6			Likely Kitchen (Dietary Remains), but fragments are small and no cut marks are obvious.

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Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Monitoring	11	42.01-42.04	Back Porch	Faunal	Mammalian	Small Mammal Bones	Non-Cultural	Faunal	4	1.0			Likely rodent bones. One appears to be a rib bone and another appears to be a long bone.
Monitoring	12	45.01	Back Porch	Other	Composite	Leather Key Holder	Personal	Miscellaneous	1				Oblong leather, folded over and bound together at two ends by ferrous rivots and a snap button closure in the middle. One key is attached by one of the rivots. Two other keys are stored within the pouch. Leather has a red coating. Likely homemade as key is built into the pouch.
Monitoring	13	48.01	Back Porch	Metal	Ferrous	Crown Bottle Cap fragment	Kitchen	Food Storage	1		1892-	Miller et al. 2000	No liner present.
Monitoring	13	49.01	Back Porch	Metal	Ferrous	Wheel / Coaster	Indeterminate	Indeterminate	1				Appears to be a wheel from a utilitarian object- closely resembles metal wheels found on hydraulic car jacks for example. Apx 5cm diameter and 2cm wide
Monitoring	13	46.01-46.02	Back Porch	Metal	Ferrous	Wire Nail fragments	Architecture	Architectural Hardware	2		1885-	Wells 1998	
Monitoring	13	47.01-47.08	Back Porch	Metal	Ferrous	Wire Nails / Nail fragments	Architecture	Architectural Hardware	8		1885-	Wells 1998	
Monitoring	13	50.01-50.05	Back Porch	Metal	Ferrous	Unidentified Metal fragments	Indeterminate	Indeterminate	5				Two fragments refit and may be from a small disc weight (2.5 cm diameter x 1 cm tall)
Monitoring	13	51.01-51.03	Back Porch	Other	Composite	Ferrous Bottle Caps with Plastic Lining	Kitchen	Food Storage	3		Late 1960s-	Yohn n.d.	Plastic interior coating is melted in one of the specimens.
Monitoring	14	52.01-52.04	Miscellaneous Demolition	Ceramic	Refined Earthenware	Black Clay Pigeon fragments	Personal	Recreation	4		1948-	Logopedia n.d.	Yellow paint on top side. One fragment is embossed, "DUPONT (in an oval)" on the underside and "Ro..." on the reverse - Remington Blue Rock pigeons.
Monitoring	15	53.01	Miscellaneous Demolition	Faunal	Mammalian	Unidentified Large Mammal Bone	Indeterminate	Indeterminate	1	81.7			No visible butchery marks; bone appears to be relatively intact. Rodent gnaw marks visible. Likely Kitchen (Dietary Remains), although possibly Personal (Pets).
Monitoring	16	54.01	Miscellaneous Demolition	Ceramic	Porcelain	Hard-paste Plate / Saucer sherd	Kitchen	Food Service	1		1870-	Miller et al. 2000	Upper side of rim has a gold gilded band. Below the band on the marley is an undecorated scallop texture.
Monitoring	16	55.01	Miscellaneous Demolition	Ceramic	Porcelain	Hard-paste Bowl sherd	Kitchen	Food Service	1		1890-	Miller et al. 2000	Distinctively raised foot ring and ghosted remnant of decal decoration on interior are present.
Monitoring	16	56.01	Miscellaneous Demolition	Ceramic	Refined Earthenware	Whiteware Plate sherd	Kitchen	Food Service	1		1820-	Miller et al. 2000	Portions of rim, marley and well are present. Rim exhibits broad scallops. The marley is textured with a fish-scale pattern.
Monitoring	16	57.01	Miscellaneous Demolition	Glass	Clear	Bottle / Jar Base shard	Indeterminate	Storage	1		ca. 1900-1950	Lindsey 2016a	Base and small portion of heel present. Base has orange peel texture and exhibits embossed concentric circles eminating from the center. Above the second widest ring is embossed "2". Valve ejection mark present near center.
Monitoring	16	58.01	Miscellaneous Demolition	Ceramic	Refined Earthenware	Whiteware Plate / Saucer sherd	Kitchen	Food Service	1		1820-	Miller et al. 2000	Scalloped rimsherd. Marley has a painted cobalt band which fades inward toward the well.
Monitoring	16	60.01	Miscellaneous Demolition	Glass	Clear	Window fragment	Architecture	Fixtures	1				3/4 cm thick
Monitoring	16	61.01	Miscellaneous Demolition	Glass	Olive	Bottle Heel shard	Kitchen	Food Storage	1				Heel with a small portion of base and body present. Push-up base - likely a wine bottle.
Monitoring	16	59.01-59.02	Miscellaneous Demolition	Glass	Clear	Bottle / Jar Body shards	Indeterminate	Storage	2				
Monitoring	17	62.01	Miscellaneous Demolition	Plastic	Unidentified	Construction Worker Figurine	Personal	Toys & Games	1				Yellow hardhat detaches from head. Face marked with sunglasses, a moustache, and smile. Head shows a little bit of brown hair below the hardhat and ears. Figure has a blocky torso decorated with a pink buttondown shirt with red accents. Arms move independently, have 3/4 pink sleeve. Legs move independently and are decorated with blue trousers and each foot in a grey boot. The underside of each boot is embossed (his right: "7"; his left: "21").

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Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Monitoring	18	63.01	Miscellaneous Demolition	Ceramic	Porcelain	Cabinet / Drawer Knob	Domestic	Furnishings	1				Top is 2.7 cm diameter. Hole in the middle is 6 mm diameter and exhibits ferrous residue.
Monitoring	18	64.01	Miscellaneous Demolition	Other	Composite	Porcelain Lightbulb Base with Cuprous Conductor	Domestic	Lighting and Electrical	1		ca. 1890-	Tod 1977	Externally threaded base. Hollow interior with cuprous staining. Porcelain appears unglazed.
Monitoring	19	65.01	Miscellaneous Demolition	Metal	Ferrous	Muleshoe	Indeterminate	Livestock	1				May have been from a mule used for pulling carts, or may have been collected as a curio / decoration.
Monitoring	19	70.01	Miscellaneous Demolition	Other	Composite	Unidentified Ferrous fragment with Unspent Coal	Miscellaneous	Waste By-Products	1				Ferrous fragment is very rusty; coal is adherd to the object by the rust.
Monitoring	19	71.01	Miscellaneous Demolition	Metal	Cuprous	Unidentified Ring / Band	Miscellaneous	Miscellaneous Hardware	1				Hollow. 1.7cm external diam; 1.5 internal diam. 1.5cm long. Slightly flattened on one side.
Monitoring	19	72.01	Miscellaneous Demolition	Metal	Aluminum	Caulking Gun Applicator Tip	Miscellaneous	Miscellaneous Hardware	1				
Monitoring	19	73.01	Miscellaneous Demolition	Metal	Aluminum	Coffee Pot Lid?	Kitchen	Food Service	1				Exhibits perforated holes on underside of lid. A small hook is connected to two of the holes.
Monitoring	19	74.01	Miscellaneous Demolition	Metal	Ferrous	Unidentified Steel Object	Indeterminate	Indeterminate	1				Plate with a coupling holding a decompressed spring. Plate has a flap that presumably opened. Function unkown, but resembles a commercial fire sprinkler.
Monitoring	19	66.01-66.03	Miscellaneous Demolition	Metal	Ferrous	Unidentified Band fragments	Miscellaneous	Miscellaneous Hardware	3				All bands are 2 cm wide. One is bent into staple shape where side A is 19 cm, side B is 9 cm and side C is 19 cm in legth. 2nd band is bent into L-shape, side A 4.5 cm, side B 9 cm in length. These first two pieces are roughly 1 cm thick. The third piece differs in this respect, roughly 1 / 10 cm in thickness, length is 14 cm.
Monitoring	19	67.01-67.04	Miscellaneous Demolition	Metal	Ferrous	Wire / Wire fragments	Miscellaneous	Miscellaneous Hardware	4				
Monitoring	19	68.01-68.02	Miscellaneous Demolition	Metal	Ferrous	Unidentified Steel fragments	Indeterminate	Indeterminate	2				
Monitoring	19	69.01-69.04	Miscellaneous Demolition	Metal	Ferrous	Unidentified Nails / Nail fragments	Architecture	Architectural Hardware	4				
Monitoring	20	75.01	Miscellaneous Demolition	Other	Composite	Leather Boot	Personal	Clothing	1		ca. 1890s-	Bellis 2017	Leather upper. Rubber sole embossed, "2 1/2 / MADE IN U.S. of A." - likely a girl's boot.
Monitoring	20	76.01	Miscellaneous Demolition	Plastic	Unidentified	Decorative Plastic fragment	Indeterminate	Indeterminate	1				Fragment is molded with a scrolling leaf/tulip pattern. Possibly part of a flowerpot / planter? Plastic appears to have originally been white or off-white but has yellowed a bit with age.
Monitoring	21	77.01	Front Porch Area	Metal	Brass	Penny	Personal	Money	1		1982	Hernandez 2009	1982 U.S. penny. Given weight, this is a brass penny.
Monitoring	21	78.01	Front Porch Area	Metal	Composite	Penny	Personal	Money	1		2000-2009	Hernandez 2009	200(?) U.S. penny (damaged where the last number of the date would appear). Given date, coin is composed of copper-plated zinc.
Monitoring	22	79.01	Front Porch Area	Glass	Clear	Packer Jar	Kitchen	Food Storage	1		1965 / 1975 / 1985	Lockhart and Hoenig 2015	Machine-made, wide-mouth packer jar with discontinuous external threaded finish. Shoulders taper out slightly and body tapers back in slightly toward base. Base is embossed, "5 [I-(in an oval)] 5 / 29" Owens-Illinois Glass Co., Charlotte, MI plant. Likely a condiment, pickle, or relish jar. Date code could indicate 1965, 1975, or 1985.
Monitoring	22	80.01	Front Porch Area	Glass	Clear	Jar Base / Heel shard	Kitchen	Food Storage	1		1933- ca. 1970	Lockhart, Schriever, Serr et al. 2013	Orange-peel textured base is embossed, "...233-16 / E18... / (script) Ball".
Monitoring	22	81.01	Front Porch Area	Glass	Clear	Champagne / Wine Glass Base	Kitchen	Food Service	1				Broken where stem meets base.
Monitoring	22	82.01	Front Porch Area	Glass	Clear	Bottle / Jar Body shard	Indeterminate	Storage	1				Body shard with very small portion of heel present. Body is embossed, "[U].S.A[.]".

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Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Monitoring	22	83.01	Front Porch Area	Glass	Clear	Bottle / Jar Body shard	Indeterminate	Storage	1				Embossed, "...Y".
Monitoring	22	85.01	Front Porch Area	Glass	Clear	Drinking Glass fragment	Kitchen	Food Service	1		1934-	Lindsey 2016c	ACL decoration on exterior is robbins' egg blue and dull gray in the pattern of flower petals and a flower cone - reminiscent of a Magnolia cone. Rim and body fragment.
Monitoring	22	86.01	Front Porch Area	Glass	Aqua-tinted	Canning Jar Body shard	Kitchen	Food Storage	1		1923-1933	Lockhart, Schriever, Serr et al. 2013	Embossed, "[script] B[all] / PER[FECT] / MA[SON]" - based on style of script B, likely 1923-1933.
Monitoring	22	87.01	Front Porch Area	Glass	Clear	Window fragment	Architecture	Fixtures	1				3/4 inch thick
Monitoring	22	88.01	Front Porch Area	Glass	Aqua-tinted	Window fragment	Architecture	Fixtures	1				
Monitoring	22	89.01	Front Porch Area	Ceramic	Refined Earthenware	Whiteware Figurine	Domestic	Furnishings	1		1890-	Miller et al. 2000	Appears to be a hollow figurine of a little girl. Object missing top to waist. Below waist is a wind-blown skirt. Figure has flexed knees with feet set toward each other in boots. Portion of base and one foot are missing. Skirt shows remnant of green and amber decal.
Monitoring	22	84.01-84.05	Front Porch Area	Glass	Clear	Bottle / Jar Body shards	Indeterminate	Storage	5				
Monitoring	23	90.01	Front Porch Area	Metal	Composite	Shoemaker's Mold	Industry	Industrial Hardware	1				Ferrous shoemakers mold / cobbler's form with cuprous elements attached to socket that would have supported the form on a pedestal. Too corroded to discern any markings indicating size, but mold is approx. 26.7 cm long x 5.8 cm wide at the heel x 8.1 cm wide at the ball.
Phase I Survey	1	92.01	STP F4	Ceramic	Porcelain	Insulator fragment	Architecture	Lighting and Electrical	1		1890-	Tod 1977	Does not match any of the examples illustrated in Tod 1977, but likely a type of cleat or wireholder - irregular shape, glazed on top surface only, with two small recesses on either side around a pin or wire hole.
Phase I Survey	1	93.01	STP F4	Glass	Clear	Bottle / Jar fragment	Indeterminate	Storage	1				Unmarked body or base fragment.
Phase I Survey	1	94.01	STP F4	Masonry	Clay	Brick fragment	Architecture	Construction Materials	1	>0.1			
Phase I Survey	1	95.01	STP F4	Metal	Ferrous	Nail or Screw	Miscellaneous	Miscellaneous Hardware	1				Object is too coated with rust to determine specific type of hardware.
Phase I Survey	1	96.01	STP F4	Ceramic	Refined Earthenware	Unidentified Whiteware sherd	Indeterminate	Indeterminate	1				Blocky, lacking any original surface - resembles lithic shatter.
Phase I Survey	1	97.01	STP F4	Other	Lithic	Limestone Gravel	Indeterminate	Indeterminate	1	28.6			May be from fill, or may be remnant of gravel sub-base for architectural or infrastructure feature.
Phase I Survey	2	98.01	STP F5	Plastic	Indeterminate	Tile fragment	Indeterminate	Indeterminate	1				"Tile" is 1.5 mm thick and flat. Cream-colored. One original, straight edge still present.
Phase I Survey	4	100.01	STP G5	Masonry	Clay	Brick fragment	Architecture	Construction Materials	1	16.4			
Phase I Survey	4	101.01	STP G5	Metal	Ferrous	Wire Nail	Architecture	Architectural Hardware	1		1885-	Wells 1998	9-penny nail.
Phase I Survey	4	102.01	STP G5	Metal	Cuprous	Unidentified Brass Object fragment	Indeterminate	Indeterminate	1				Object was originally bowl-shaped, with the rim flaring slightly outward. 3.6 cm diameter at rim, approx. 2 cm diameter at "base"; very thin - >1 mm. Appears to be tin-plated. Possibly a lamp burner part, or part of a decorative furniture attachment.
Phase I Survey	4	103.01-103.02	STP G5	Other	Conglomerate	Asphalt fragments	Miscellaneous	Infrastructure	2	180.5	1871-	Miller et al. 2000	Gravel inclusions.
Phase I Survey	5	104.01	STP G6	Masonry	Clay	Fire Brick fragment	Architecture	Construction Materials	1	775.3			Approx. 1/4 of brick. Burnt on three faces. Mortar still adhering to one of the burnt faces.

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PROVENIENCE				DESCRIPTION							MISCELLANEOUS		
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	6	105.01	STP G7, Radial 3m North	Masonry	Conglomerate	Concrete fragment	Architecture	Construction Materials	1	282.8			
Phase I Survey	6	107.01	STP G7, Radial 3m North	Other	Lithic	Limestone Gravel	Indeterminate	Indeterminate	1	132.3			May be from fill, or may be remnant of gravel sub-base for architectural or infrastructure feature.
Phase I Survey	6	106.01-106.02	STP G7, Radial 3m North	Other	Lithic	Sandstone Gravel	Indeterminate	Indeterminate	2	413.6			May be from fill, or may be remnant of gravel sub-base for architectural or infrastructure feature.
Phase I Survey	11	99.01	STP G4	Glass	Clear	Bottle fragment	Indeterminate	Storage	1				Appears to be a chamfered corner fragment from a paneled bottle.
Phase I Survey	19	151.01	Test Unit 2, Levels 1/2	Ceramic	Unrefined Earthenware	Redware Tile or Planter sherd	Domestic	Landscaping	1				
Phase I Survey	19	152.01	Test Unit 2, Levels 1/2	Ceramic	Unrefined Earthenware	Redware Planter sherd	Domestic	Landscaping	1				
Phase I Survey	19	153.01	Test Unit 2, Levels 1/2	Ceramic	Unrefined Earthenware	Redware Drain Pipe fragment	Architecture	Utilities	1				Unglazed.
Phase I Survey	19	154.01	Test Unit 2, Levels 1/2	Ceramic	Stoneware	Drain Pipe fragment	Architecture	Utilities	1				Brown paste with a clear lead glaze.
Phase I Survey	19	155.01-155.02	Test Unit 2, Levels 1/2	Ceramic	Porcelain	Bone China Tableware sherds	Kitchen	Food Service	2		1790s-	MAC Lab 2016	One is an undecorated plate or saucer sherd. The other is a hollowware rimsherd with an underglaze, hand-painted, scalloped blue line along the outside of the rim and an overglaze, hand-painted brown line (likely part of a polychrome design) on the exterior of the body.
Phase I Survey	19	156.01	Test Unit 2, Levels 1/2	Ceramic	Porcelain	Bone China Tableware sherd	Kitchen	Food Service	1		1870-	Miller et al. 2000	Rimsherd from a vessel of unidentified form. Liquid gold scrollwork design on the inside of the rim.
Phase I Survey	19	157.07-157.02	Test Unit 2, Levels 1/2	Glass	Clear	Unidentified Vessel fragments	Indeterminate	Indeterminate	2				Both fragments are frosted on the exterior; unclear if they represent a bottle / jar, a tableware vessel, or something else.
Phase I Survey	19	158.01-158.03	Test Unit 2, Levels 1/2	Glass	Clear	Press-Molded Vessel fragments	Domestic	Furnishings	3		1825-	Jones 2000	Two of the fragments re-fit, and all three appear to be from the same vessel (bowl, vase, or something similar), with a press-molded floral pattern.
Phase I Survey	19	159.01-159.04	Test Unit 2, Levels 1/2	Glass	Aqua-tinted	Bottle / Jar fragments	Indeterminate	Storage	4		Pre-1930	Lindsey 2016e	All appear to be from the same vessel and exhibit a milky patina.
Phase I Survey	19	160.01	Test Unit 2, Levels 1/2	Glass	Aqua-tinted	Canning Jar fragment	Kitchen	Food Storage	1		Pre-1937	Lindsey 2016e	Unmarked body fragment.
Phase I Survey	19	161.01-161.08	Test Unit 2, Levels 1/2	Glass	Aqua-tinted	Window fragments	Architecture	Fixtures	8				Six are 2 mm thick and the other two are 3 mm thick. Minimum 3 windows represented.
Phase I Survey	19	162.01-162.02	Test Unit 2, Levels 1/2	Glass	Milk Glass	Canning Jar Lid Liner fragments	Kitchen	Food Storage	2		1869-	Miller et al. 2000	Different lid liners represented. One fragment is embossed with a diamond.
Phase I Survey	19	163.01	Test Unit 2, Levels 1/2	Glass	Milk Glass	Handle fragment	Kitchen	Food Service	1				Unidentified vessel form. Handle was 1.4 cm wide, so likely a serving vessel.
Phase I Survey	19	164.01-164.02	Test Unit 2, Levels 1/2	Glass	Milk Glass	Lamp Shade fragments	Domestic	Lighting and Electrical	2				One fragment appears to have remnants of a painted design.
Phase I Survey	19	165.01-165.03	Test Unit 2, Levels 1/2	Glass	Milk Glass	Unidentified Object fragments	Indeterminate	Indeterminate	3				All three fragments may be lamp shade fragments, or may be bottle / jar or tableware fragments. One fragment is a flat rim fragment, indicating tableware.
Phase I Survey	19	166.01-166.07	Test Unit 2, Levels 1/2	Masonry	Clay	Brick fragments	Architecture	Construction Materials	7	640.6			Based on differences in color and paste, at least three different bricks are represented.
Phase I Survey	19	167.01	Test Unit 2, Levels 1/2	Metal	Cuprous	Copper Wire fragment	Miscellaneous	Miscellaneous Hardware	1				4 mm diameter.

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PROVENIENCE				DESCRIPTION							MISCELLANEOUS		
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	19	168.01	Test Unit 2, Levels 1/2	Metal	Indeterminate	Caster Wheel or Sppol	Industry	Industrial Hardware	1				Possibly lead, with what appears to be gold paint on the exterior, flaking off. 1 cm wide x 2.5 cm diameter, with central spoke/axle hole being 4 mm diameter.
Phase I Survey	19	169.01	Test Unit 2, Levels 1/2	Metal	Ferrous	Threaded Bolt	Miscellaneous	Miscellaneous Hardware	1				Bolt is 7.7 cm tall with a square head; the corners on the top of the head are chamfered. Shank is 1.5 cm diameter.
Phase I Survey	19	170.01-170.13	Test Unit 2, Levels 1/2	Metal	Ferrous	Bolts / Bolt fragments	Miscellaneous	Miscellaneous Hardware	13				Various lengths and gauges. All are heavily rusted, but no threading visible on any of them. 6 have square heads, 5 have round heads, 1 has an intermediate head (square with rounded corners?), and one is missing its head.
Phase I Survey	19	171.01-171.06	Test Unit 2, Levels 1/2	Metal	Ferrous	Square Nails / Nail fragments	Architecture	Architectural Hardware	6		1805-1890	Wells 1998	The intact nails are a 40-penny nail and a 16-penny nail.
Phase I Survey	19	172.01-172.21	Test Unit 2, Levels 1/2	Metal	Ferrous	Wire Nails / Nail fragments	Architecture	Architectural Hardware	21		1885-	Wells 1998	The 13 apparently intact nails include a 30-penny nail, a 20-penny nail, a 16-penny nail, two 10-penny nails, two 9-penny nails, four 8-penny nails, and two 6-penny nails.
Phase I Survey	19	173.01-173.03	Test Unit 2, Levels 1/2	Metal	Ferrous	Unidentified Nails / Nail fragments	Architecture	Architectural Hardware	3				All are too heavily rusted to determine type of nail.
Phase I Survey	20	174.01-174.05	Test Unit 2, Level 3	Masonry	Clay	Brick fragments	Architecture	Construction Materials	5	754.6			Based on differences in color and paste, at least three different bricks are represented.
Phase I Survey	20	175.01	Test Unit 2, Level 3	Masonry	Conglomerate	Concrete fragment	Architecture	Construction Materials	1	2471.0			Large triangular chunk measures 16.5 x 18.5 cm along original edges x 5 cm thick.
Phase I Survey	20	176.01	Test Unit 2, Level 3	Metal	Cuprous	Copper Wire fragment	Miscellaneous	Miscellaneous Hardware	1				2.5 mm diameter.
Phase I Survey	20	177.01-177.63	Test Unit 2, Level 3	Metal	Ferrous	Wire Nails / Nail fragments	Architecture	Architectural Hardware	63		1885-	Wells 1998	Various gauges, ranging from 20-penny nails to 4-penny nails.
Phase I Survey	20	178.01-178.22	Test Unit 2, Level 3	Metal	Ferrous	Square Nails / Nail fragments	Architecture	Architectural Hardware	22		1805-1890	Wells 1998	Various gauges, ranging from a 30-penny nail downward. Most are incomplete.
Phase I Survey	20	179.01-179.46	Test Unit 2, Level 3	Metal	Ferrous	Unidentified Nails / Nail fragments	Architecture	Architectural Hardware	46				All are heavily rusted. Identification as nails is only tentative - some may in fact be screws, bolts, or other types of hardware.
Phase I Survey	20	180.01-180.19	Test Unit 2, Level 3	Metal	Ferrous	Bolts / Bolt fragments	Miscellaneous	Miscellaneous Hardware	19				Various gauges. 14 have round heads. 5 have square/rectangular heads. One has a square nut and a washer at one end, but no visible head.
Phase I Survey	20	181.01	Test Unit 2, Level 3	Metal	Ferrous	Screw	Miscellaneous	Miscellaneous Hardware	1				1.5 in long.
Phase I Survey	20	182.01	Test Unit 2, Level 3	Metal	Ferrous	Staple fragment?	Miscellaneous	Miscellaneous Hardware	1				May just be a bent wire nail or piece of wire.
Phase I Survey	20	183.01	Test Unit 2, Level 3	Metal	Ferrous	Wire Hook	Miscellaneous	Miscellaneous Hardware	1				7.5 cm tall with a 2-cm wide open hook at one end. 3.5 mm diameter.
Phase I Survey	20	184.01	Test Unit 2, Level 3	Metal	Ferrous	Metal Band fragment	Miscellaneous	Miscellaneous Hardware	1				1 cm wide x 6.1 cm long.
Phase I Survey	20	185.01-185.02	Test Unit 2, Level 3	Metal	Ferrous	Can fragments	Indeterminate	Storage	2				Both appear to be lid fragments.
Phase I Survey	20	186.01-186.05	Test Unit 2, Level 3	Metal	Ferrous	Wire fragments	Miscellaneous	Miscellaneous Hardware	5				One is bent like a fish hook.
Phase I Survey	20	187.01	Test Unit 2, Level 3	Metal	Ferrous	T-hook fragment?	Miscellaneous	Miscellaneous Hardware	1				
Phase I Survey	20	188.01	Test Unit 2, Level 3	Metal	Ferrous	Unidentified Hardware	Miscellaneous	Miscellaneous Hardware	1				Object is 14.8 cm long, although appears to be broken off at one edge; 1.5 cm wide and flat, except for two ridges running along the long axis on both sides; one end terminates in a 1.8-cm diameter circle that may originally have been open (now is rusted closed). Pail or bucket handle?

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PROVENIENCE				DESCRIPTION							MISCELLANEOUS		
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	20	189.01	Test Unit 2, Level 3	Metal	Ferrous	Unidentified Iron fragment	Indeterminate	Indeterminate	1				Triangular fragment measures 3 x 5 cm along its original, square sides; 5 mm thick.
Phase I Survey	20	190.01-190.03	Test Unit 2, Level 3	Metal	Ferrous	Unidentified Iron fragments	Indeterminate	Indeterminate	3				All three may be nail fragments, although all three may also just be rust concretions.
Phase I Survey	20	191.01	Test Unit 2, Level 3	Glass	Clear	Window fragment	Architecture	Fixtures	1				3 mm thick.
Phase I Survey	20	192.01	Test Unit 2, Level 3	Glass	Clear	Bottle / Jar fragment	Indeterminate	Storage	1				Unmarked. Fragment is too small to determine which part of the vessel it is from.
Phase I Survey	20	193.01	Test Unit 2, Level 3	Glass	Aqua-tinted	Window fragment	Architecture	Fixtures	1				3 mm thick.
Phase I Survey	21	194.01	Test Unit 2, Level 4	Metal	Cuprous	Copper Wire fragment	Miscellaneous	Miscellaneous Hardware	1				2 mm diameter.
Phase I Survey	21	195.01-195.07	Test Unit 2, Level 4	Metal	Ferrous	Iron Slag	Miscellaneous	Waste By-Products	7	84.4			
Phase I Survey	21	196.01	Test Unit 2, Level 4	Metal	Ferrous	Bolt fragment	Miscellaneous	Miscellaneous Hardware	1				1 cm square nut at one end. The shaft is too heavily rusted to see threads.
Phase I Survey	21	197.01	Test Unit 2, Level 4	Metal	Ferrous	Square Nail fragment	Architecture	Architectural Hardware	1		1805-1890	Wells 1998	
Phase I Survey	21	198.01-198.05	Test Unit 2, Level 4	Metal	Ferrous	Wire Nail fragments	Architecture	Architectural Hardware	5		1885-	Wells 1998	
Phase I Survey	21	199.01-199.02	Test Unit 2, Level 4	Metal	Ferrous	Washers	Miscellaneous	Miscellaneous Hardware	2				One is 2.6 cm diameter, the other is 1.7 cm diameter.
Phase I Survey	21	200.01-200.02	Test Unit 2, Level 4	Metal	Ferrous	Unidentified Nail fragments	Architecture	Architectural Hardware	2				
Phase I Survey	21	201.01-201.02	Test Unit 2, Level 4	Metal	Ferrous	Unidentified Iron fragments	Indeterminate	Indeterminate	2				One might be the head of a bolt; the other might be the head of a nail. Both are too heavily rusted for firm identification.
Phase I Survey	22	108.01	Test Unit 1, Level 1	Ceramic	Refined Earthenware	Whiteware sherd	Kitchen	Food Service	1		1820-	Miller et al. 2000	Undecorated; vessel form unidentified.
Phase I Survey	22	109.01-109.03	Test Unit 1, Level 1	Glass	Clear	Bottle / Jar fragments	Indeterminate	Storage	3				Two are body fragments, one of which is frosted on the inside and exhibits a mold seam; the third fragment appears to be from a shoulder.
Phase I Survey	22	110.01-110.04	Test Unit 1, Level 1	Glass	Clear	Window fragments	Architecture	Fixtures	4				Three of the fragments are 3 mm thick; the fourth is 2 mm thick.
Phase I Survey	22	111.01	Test Unit 1, Level 1	Glass	Clear	Marble fragment?	Personal	Toys & Games	1				Fragment is lens-shaped, with one edge appearing to be "finished," but clear glass exhibits orange and white swirling like a marble.
Phase I Survey	22	112.01	Test Unit 1, Level 1	Glass	Blue	Unidentified Object fragment	Indeterminate	Indeterminate	1				Small object is curved like a handle; blue color is splotchy, with lighter and darker patches.
Phase I Survey	22	113.01	Test Unit 1, Level 1	Glass	Milk Glass	Canning Jar Lid Liner fragment	Kitchen	Food Storage	1		1869 - ca. 1950s	Whitten 2017a	One side is embossed, "BOY[D'S] …"
Phase I Survey	22	114.01	Test Unit 1, Level 1	Masonry	Comglomerate	Mortar fragment	Architecture	Construction Materials	1	14.8			Gravel-temepered.
Phase I Survey	22	115.01	Test Unit 1, Level 1	Metal	Aluminum	Ring Pull-tab	Kitchen	Food Storage	1		1965-1983	Maxwell 1993	Shape of the tab (triangular) suggests it is a later form rather than earlier.
Phase I Survey	22	116.001	Test Unit 1, Level 1	Plastic	Indeterminate	Silver Toy Wheel	Personal	Toys & Games	1				One side is molded into the shape of a wheel with spokes; the other side is embossed, "SNAP / WHEELS AND / EASEL INTO / POSITION". Wheel is flat and 1.8 cm in diameter.
Phase I Survey	22	117.01	Test Unit 1, Level 1	Other	Composite	Christmas Mini-Light Bulb	Domestic	Furnishings	1		ca. 1960s-	Cuff 2008	Glass bulb with metal filament is intact. Painted dark pink / magenta on outside. Missing the aluminum or plastic base.
Phase I Survey	22	118.01	Test Unit 1, Level 1	Metal	Ferrous	Upholstery Staple	Domestic	Furnishings	1				2.4 cm tall, 1 cm wide.

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PROVENIENCE				DESCRIPTION							MISCELLANEOUS		
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	22	119.01	Test Unit 1, Level 1	Metal	Ferrous	Wire fragment	Miscellaneous	Miscellaneous Hardware	1				Approx. 2 mm diameter - rust makes it difficult to discern exactly.
Phase I Survey	22	120.01	Test Unit 1, Level 1	Metal	Ferrous	Threaded Bolt	Miscellaneous	Miscellaneous Hardware	1				Appears to be intact. 2 cm tall; shaft is 8 mm diameter; hexagonal head (or possibly a hexagonal nut threaded onto it?) is 1.5 cm corner-to-corner width.
Phase I Survey	22	121.01	Test Unit 1, Level 1	Metal	Ferrous	Threaded Bolt fragment	Miscellaneous	Miscellaneous Hardware	1				4.5 cm tall x 1 cm diameter; square bolt (1.8 cm wide) is threaded onto it.
Phase I Survey	22	122.01-122.05	Test Unit 1, Level 1	Metal	Ferrous	Threaded Wood Screws	Miscellaneous	Miscellaneous Hardware	5				One is 4 cm tall; one is 3.3 cm tall; two are 2.3 cm tall; and one is 2 cm tall. All have flat heads, though the drive type on each is obscured by rust.
Phase I Survey	22	123.01-123.03	Test Unit 1, Level 1	Metal	Ferrous	Square Nails / Nail fragments	Architecture	Architectural Hardware	3		1805-1890	Wells 1998	One is a 10-penny nail with large-width shaft (1 cm wide at junction with head) and what appears to be a hexagonal head (2.3 cm corner-to-corner width). One is an 8-penny nail with a large piece of mortar attached. The last is just a fragment.
Phase I Survey	22	124.01-124.14	Test Unit 1, Level 1	Metal	Ferrous	Wire Nails / Nail fragments	Architecture	Architectural Hardware	14		1885-	Wells 1998	Seven are complete, including a 12-penny nail, an 8-penny nail, a 7-penny nail, a 6-penny nail, two 5-penny nails, and a 2-penny nail. One nail fragment has a piece of limestone gravel adhering to it.
Phase I Survey	23	125.01	Test Unit 1, Level 2	Glass	Clear	Bottle / Jar fragment	Indeterminate	Storage	1				Unmarked body fragment.
Phase I Survey	23	126.01-126.02	Test Unit 1, Level 2	Faunal	Mammalian	Sawn Vertebrae fragments	Kitchen	Dietary Remains	2	8.0			Might originally have been from the same vertebra. Species unidentified.
Phase I Survey	23	127.01	Test Unit 1, Level 2	Masonry	Clay	Brick fragment	Architecture	Construction Materials	1	10.6			
Phase I Survey	23	128.01	Test Unit 1, Level 2	Metal	Ferrous	Threaded Bolt	Miscellaneous	Miscellaneous Hardware	1				5.7 cm tall, with a slightly rounded square head (1.3 x 1.2 cm) and a washer and square nut (1.3 cm wide) threaded onto it at the bottom end.
Phase I Survey	23	129.01	Test Unit 1, Level 2	Metal	Ferrous	Steel Square Nut?	Miscellaneous	Miscellaneous Hardware	1				Object is heavily rusted so no hole is visible, but measures 3 cm square x 1.1 cm tall.
Phase I Survey	23	130.01	Test Unit 1, Level 2	Metal	Ferrous	Pipe Joint?	Miscellaneous	Miscellaneous Hardware	1				3 cm exterior diameter, 2 cm interior diameter, 2.2 cm tall.
Phase I Survey	23	131.01-131.10	Test Unit 1, Level 2	Metal	Ferrous	Wire Nails / Nail fragments	Architecture	Architectural Hardware	10		1885-	Wells 1998	Four appear to be complete, and include a 10-penny nail, a 9-penny nail, and two 7-penny nails.
Phase I Survey	23	132.01-132.08	Test Unit 1, Level 2	Metal	Ferrous	Square Nails / Nail fragments	Architecture	Architectural Hardware	8		1805-1890	Wells 1998	Two appear to be complete and include a 9-penny nail and a 7-penny nail.
Phase I Survey	23	133.01-133.03	Test Unit 1, Level 2	Metal	Ferrous	Unidentified Nails / Nail fragments	Architecture	Architectural Hardware	3				All are heavily rusted.
Phase I Survey	23	134.01-134.03	Test Unit 1, Level 2	Other	Mineral	Spent Coal	Miscellaneous	Fuel	3	4.6			
Phase I Survey	24	135.01	Test Unit 1, Level 3	Faunal	Mammalian	Unidentified Cut Bone fragment	Kitchen	Dietary Remains	1	2.8			
Phase I Survey	24	136.01	Test Unit 1, Level 3	Faunal	Avian	Unidentified Bone fragment	Kitchen	Dietary Remains	1	<0.1			Likely chicken.
Phase I Survey	24	137.01	Test Unit 1, Level 3	Glass	Clear	Bottle / Jar fragment	Indeterminate	Storage	1				Unmarked body fragment.
Phase I Survey	24	138.01-138.03	Test Unit 1, Level 3	Glass	Light Green-tinted	Window fragments	Architecture	Fixtures	3				All are 2 mm thick and exhibit a flaky, opalescent patina.
Phase I Survey	24	139.01-139.03	Test Unit 1, Level 3	Masonry	Clay	Brick fragments	Architecture	Construction Materials	3	569.1			Two of the fragments are very small, but the third represents about 1/4 to 1/3 of a brick. Based on differences in color and texture, three different bricks are represented.
Phase I Survey	24	140.01	Test Unit 1, Level 3	Masonry	Conglomerate	Concrete fragment	Architecture	Construction Materials	1	29.2			Gravel-temepered.

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PROVENIENCE				DESCRIPTION							MISCELLANEOUS		
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	24	141.01	Test Unit 1, Level 3	Other	Mineral	Compressed Carbon Rod fragment	Miscellaneous	Utilities	1		ca. 1880-	Belford and Lewis 1885	1.3 cm diameter. Likely from an arc-lighting street lamp.
Phase I Survey	24	142.01	Test Unit 1, Level 3	Other	Mineral	Unspent Coal	Miscellaneous	Fuel	1	2.5			
Phase I Survey	24	143.01-143.05	Test Unit 1, Level 3	Other	Mineral	Spent Coal	Miscellaneous	Fuel	3	6.2			
Phase I Survey	24	144.01	Test Unit 1, Level 3	Metal	Ferrous	Can fragment	Indeterminate	Storage	1				
Phase I Survey	24	145.01	Test Unit 1, Level 3	Metal	Ferrous	Threaded Bolt fragment	Miscellaneous	Miscellaneous Hardware	1				Fragment is 9 mm diameter, with a square nut (1.5 cm wide) threaded onto one end.
Phase I Survey	24	146.01-146.02	Test Unit 1, Level 3	Metal	Ferrous	Iron Slag	Miscellaneous	Waste By-Products	2	2.2			
Phase I Survey	24	147.01-147.03	Test Unit 1, Level 3	Metal	Ferrous	Iron Strap fragments	Miscellaneous	Miscellaneous Hardware	3				All of the fragments are flat. Two of the fragments are 2.2 cm wide, while the third is 3.1 cm wide.
Phase I Survey	24	148.01-148.07	Test Unit 1, Level 3	Metal	Ferrous	Wire Nails / Nail fragments	Architecture	Architectural Hardware	7		1885-	Wells 1998	All are heavily rusted, but none appear to be complete.
Phase I Survey	24	149.01-149.07	Test Unit 1, Level 3	Metal	Ferrous	Square Nails / Nail fragments	Architecture	Architectural Hardware	7		1805-1890	Wells 1998	All are heavily rusted, but none appear to be complete.
Phase I Survey	24	150.01-150.14	Test Unit 1, Level 3	Metal	Ferrous	Unidentified Nails / Nail fragments	Architecture	Architectural Hardware	14				All are heavily rusted, and it is unclear if any are complete. Six of the nails/fragments have pieces of gravel adhering to them.
								Total	*599*				

Table E3
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PROVENIENCE				DESCRIPTION							MISCELLANEOUS		
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Monitoring	1	18.01	Miscellaneous Demolition	Ceramic	Refined Earthenware	Ironstone Bowl sherd	Kitchen	Food Service	1		1840-1930	Miller et al. 2000	Undecorated.
Monitoring	1	21.01	Miscellaneous Demolition	Ceramic	Stoneware	Utilitarian Crock sherd	Kitchen	Food Storage	1				Base sherd. Irridescent black / brown glaze on interior face; bottom side is unglazed.
Monitoring	1	24.01	Miscellaneous Demolition	Ceramic	Unrefined Earthenware	Redware Pot Lid sherd?	Kitchen	Food Storage	1				Burned.
Monitoring	1	25.01	Miscellaneous Demolition	Ceramic	Porcelain	Doll Arm	Personal	Toys & Games	1				Right arm and hand from a doll. Lavender in color and burnt. 4.8 cm long.
Monitoring	1	26.01	Miscellaneous Demolition	Other	Composite	Melted Plastic and Aluminum Foil	Indeterminate	Indeterminate	1				Sparkly blue, orange, and purple plastics melted together, with aluminum foil trapped in the plastic.
Monitoring	1	27.01	Miscellaneous Demolition	Metal	Cuprous	1979 U.S. Penny	Personal	Currency	1		1979		Very corroded.
Monitoring	1	29.01	Miscellaneous Demolition	Other	Composite	Spark Plug	Transportation	Automotive Parts	1		1909-	Bowman n.d.	Ceramic insulator portion has green banding on raised ribs and is marked in green, "AC. R45TS". Electrode is copper.
Monitoring	1	30.01	Miscellaneous Demolition	Metal	Steel	Switchblade Knife Blade	Industrial	Tools	1				Triangular blade measures 1.7 cm tall x 6 cm long. Irregularly serrated cutting edge. Two holes, one at the top of the blade and the other at the back end (this one with a rivet in it).
Monitoring	1	31.01	Miscellaneous Demolition	Metal	Steel	Electrical Box Knockout	Architecture	Utilities	1				2.5 cm diameter. 1.5 mm thick.
Monitoring	1	32.01	Miscellaneous Demolition	Metal	Brass	Snap-Button Back	Personal	Clothing	1				Male half of a snap-button. 1.2 cm diameter.
Monitoring	1	33.01	Miscellaneous Demolition	Metal	Brass	Zipper Pull	Personal	Clothing	1		1913-	Miller et al. 2000	
Monitoring	1	34.01	Miscellaneous Demolition	Metal	Ferrous	Pinback Button fragment	Personal	Adornment	1				Front of the button is missing. Approx. 5.5 cm diameter.
Monitoring	1	35.01	Miscellaneous Demolition	Metal	Ferrous	Suspender Strap Fastener	Personal	Clothing	1				
Monitoring	1	36.01	Miscellaneous Demolition	Metal	Ferrous	Unidentified Hardware fragment	Miscellaneous	Miscellaneous Hardware	1				Shaped like an anchor, with a nut screwed onto the shaft projecting beyond the "bottom" of the anchor.
Monitoring	1	37.01	Miscellaneous Demolition	Other	Composite	Incandescent Lightbulb Base	Domestic	Lighting and Electrical	1		1906-	Bulbs.com n.d.	Cuprous base and (tungsten?) filament with part of interior glass support.
Monitoring	1	39.01	Miscellaneous Demolition	Metal	Ferrous	Steel Truck / Trailer Ball Hitch	Transportation	Automotive Parts	1		1946-	Horizon Global Corporation 2017	Ball and shank portion of the hitch, with a large square nut at the base of the shank. Top of ball is stamped "DRAW / 1-7/8 / TITE"
Monitoring	1	42.01	Miscellaneous Demolition	Metal	Ferrous	Faceplate fragment	Industrial	Indeterminate	1				Rectangular iron plate measures 9 cm tall x apx .25 cm thick. Black enamel one one side, with what appears to be a cartouche with lettering - but too corroded to read.
Monitoring	1	43.01	Miscellaneous Demolition	Metal	Ferrous	Unidentified Ferrous Object	Industrial	Indeterminate	1				Circular object with a central ring and four spokes radiating outward to a second ring. Outer ring is approx. 5.7 cm diameter; object is convex and likely slotted over a shaft of some type.
Monitoring	1	44.01	Miscellaneous Demolition	Metal	Ferrous	Rectangular "Snap"	Miscellaneous	Miscellaneous Hardware	1				Remainder of a fastening pin (?) attached to back. The object is less than 1 mm thick, and measures 3 cm x 1.6 cm. Has a dimple at one end and a round snap base at the other, likely both for snapping onto other similar objects. Appears to have letters stamped on the back side, but illegible due to corrosion.

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Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Monitoring	1	46.01	Miscellaneous Demolition	Metal	Ferrous	Unidentified Iron Hardware fragment	Industrial	Industrial Hardware	1				One end is spade shaped (with a pointed end) and slightly curved so as to allow it to puncture. The flat shaft is oriented perpindicular to the flat spade end. Spade is 2 cm wide and 3cm long; shaft is 3.5 cm long but broken off. Spade is apx 2 mm thick.
Monitoring	1	47.01	Miscellaneous Demolition	Metal	Ferrous	Ferrous Strap fragment	Miscellaneous	Miscellaneous Hardware	1				Bent into an L-shape. Strap is 2.5 cm wide, apx 1 mm thick, and 21 cm long. Nail heads in either end. Likely furniture hardware.
Monitoring	1	48.01	Miscellaneous Demolition	Metal	Ferrous	Unidentified Ferrous Object	Domestic	Furnishings	1				Approx. 13 cm in length, 1.75 cm wide, 1 cm thick, and slightly curved with one rounded end. The other end of the object appears to be broken off. The backside of the object is concave and the front of the object is convex. Possibly a decorative element for attachment to furniture.
Monitoring	1	50.01	Miscellaneous Demolition	Metal	Lead	Melted Lead	Miscellaneous	Waste By-Products	1				
Monitoring	1	53.01	Miscellaneous Demolition	Metal	Ferrous	Bolt	Miscellaneous	Miscellaneous Hardware	1				Square head measures 1.7 cm x 1.7 cm; shaft measures 1 cm diameter and 7.9 cm long.
Monitoring	1	54.01	Miscellaneous Demolition	Metal	Ferrous	Ferrous Rod fragment	Indeterminate	Indeterminate	1				7 cm in length, 0.5 cm in diameter. Unclear if broken at either end.
Monitoring	1	55.01	Miscellaneous Demolition	Other	Lithic	Slate Roofing Shingle fragment	Architecture	Construction Materials	1				Drilled hole for a nail is present. Fragment measures approx. 16 cm x 7 cm.
Monitoring	1	59.01	Miscellaneous Demolition	Metal	Ferrous	Square Nail	Architecture	Architectural Hardware	1		1805-1893	Wells 1998	4-penny nail.
Monitoring	1	60.01	Miscellaneous Demolition	Metal	Ferrous	Screw	Miscellaneous	Miscellaneous Hardware	1				Round-headed, 3.75 in long; corrosion obscures head type.
Monitoring	1	61.01	Miscellaneous Demolition	Glass	Clear	Vial fragment	Personal	Health & Hygiene	1				Vial would have been approx. 1.5 cm diameter.
Monitoring	1	15.01-15.02	Miscellaneous Demolition	Glass	Clear	Marbles	Personal	Toys & Games	2		1926-	Randall 1971	Both are technically clear glass, but with swirls so dense that they appear opaque. One is cornflower (1.3 cm diameter), the other mint with darker green swirls (1.4 cm diameter). Modern machine-made marbles.
Monitoring	1	17.01-17.03	Miscellaneous Demolition	Ceramic	Porcelain	Hard-Paste Figurine sherds	Domestic	Furnishings	3				One sherd is the uppermost portion of a face, tan in color with black eyebrows, black hair (or hat?) and one gray eye present. The other two sherds are all black. Sherds are unglazed and the decoration is hand-painted.
Monitoring	1	19.01-19.02	Miscellaneous Demolition	Ceramic	Refined Earthenware	Whiteware sherds	Kitchen	Food Service	2		1820-	Miller et al. 2000	Both are undecorated. One sherd appears to be from the heel of a bowl with a footring; the other is too small to identify vessel form.
Monitoring	1	20.01-20.02	Miscellaneous Demolition	Ceramic	Refined Earthenware	Rockinghamware sherds	Kitchen	Food Service	2		1830-1930	Claney 2004	
Monitoring	1	28.01-28.02	Miscellaneous Demolition	Other	Composite	Zinc-Carbon AA Batteries	Miscellaneous	Fuel	2		20th century	American Chemical Society 2015; McComsey 2002	Standard dry-cell, AA-size zinc-carbon batteries. One is fragmentary. Both are too corroded to determine brand, if any.
Monitoring	1	40.01-40.04	Miscellaneous Demolition	Metal	Ferrous	Iron Spring Coil fragments	Domestic	Furnishings	4		ca. 1920s-	Palm 2015	Likely mattress springs.
Monitoring	1	41.01-41.03	Miscellaneous Demolition	Metal	Ferrous	Can Lid fragments	Indeterminate	Storage	3		1904-	Rock 2000	At least two different cans represented, with lid diameters of 7 cm and 6 cm. Sanitary cans.

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Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Monitoring	1	45.01-45.02	Miscellaneous Demolition	Metal	Ferrous	Ferrous Band / Strap fragments	Miscellaneous	Miscellaneous Hardware	2				Both pieces are 1.5 cm wide and are flat. One fragment is 4.5 cm long and the other is 3 cm long, but it is unclear whether they are broken.
Monitoring	1	49.01-49.03	Miscellaneous Demolition	Metal	Ferrous	Unidentified Iron fragments	Indeterminate	Indeterminate	3				Appear to be primarily rust and gravel concretions.
Monitoring	1	51.01-51.12	Miscellaneous Demolition	Metal	Ferrous	Wire Nails / Nail fragments	Architecture	Architectural Hardware	12		1885-	Wells 1998	Various gauges.
Monitoring	1	52.01-52.04	Miscellaneous Demolition	Metal	Ferrous	Unidentified Nails / Nail fragments	Architecture	Architectural Hardware	4				Various gauges.
Monitoring	1	6.01-6.03	Miscellaneous Demolition	Glass	Clear	Bottle / Jar body fragments	Indeterminate	Storage	3				Two fragments have opalescent patination, and one of these has a slightly recessed area - may actually be from a base, or from a label area. The non-patinated fragment may be associated with Object #5.1-5.5.
Monitoring	2	1.01	Miscellaneous Demolition	Glass	Clear	Packer Jar	Kitchen	Food Storage	1		1900-1950		Machine-made jar exhibits a valve ejection mark on the base and a discontinuous-threaded, wide-mouth screw cap finish above a sharp bead. Body is straight sided; volume is 14.25 oz. No manufacturer's mark or labeling.
Monitoring	2	2.01	Miscellaneous Demolition	Glass	Clear	Bottle	Personal	Health & Hygiene	1		ca. 1900-	Lindsey 2016c	Miniature machine-made bottle - 1/2-oz. volume. External continuous screw cap finish with a bead immediately underneath. Squared body with chamfered corners. Base is embossed "13". Base is 1.8 cm square; height (base to lip) is 4.5 cm. Likely held nail polish or a liquid medicine that required a dropper for application.
Monitoring	2	3.01	Miscellaneous Demolition	Glass	Light Green-tinted	Bottle Body / Heel fragment	Kitchen	Food Storage	1				Embossed on body "[FINDL]AY. O." Likely was a beverage container.
Monitoring	2	4.01	Miscellaneous Demolition	Glass	Clear	Bottle / Jar Base fragment	Indeterminate	Storage	1		1948	Lockhart and Hoenig 2015	Base is embossed, "9 [diamond O-I logo] 48" - Owens-Illinois Glass Co., Streator, IL plant.
Monitoring	2	9.01	Miscellaneous Demolition	Glass	Aqua-Tinted	Bottle fragment	Indeterminate	Storage	1		Pre-1930	Lindsey 2016e	Small, but appears to be from the finish of a blob-top bottle.
Monitoring	2	10.01	Miscellaneous Demolition	Glass	Brown / Amber	Bottle Body fragment	Indeterminate	Storage	1				Flaky, opalescent patination.
Monitoring	2	11.01	Miscellaneous Demolition	Glass	Green	Bottle / Jar Body fragment	Indeterminate	Storage	1				Unmarked body fragment. Darker than the typical 7-Up green.
Monitoring	2	12.01	Miscellaneous Demolition	Glass	Clear	Bottle Base / Body fragment	Indeterminate	Storage	1		1900 - ca. 1920	Lindsey 2016a, 2016b, 2016c; Lockhart, Schriever and Serr 2016	Rectangular body shape with rounded corners. Appears to be a cup-bottom-molded bottle, but may have been made by an early non-Owens automatic machine. Base is embossed with an "H" in a triangle logo - J.T. & A. Hamilton Co. Given thickness of the visible mold seams, likely not machine-made.
Monitoring	2	13.01	Miscellaneous Demolition	Glass	Clear	Medicine Bottle	Personal	Health & Hygiene	1		ca. 1875-1920	Lindsey 2016a, 2016d	Cup-bottom molded bottle with a tooled prescription finish. Body is rectangular in shape with rounded corners and sloping shoulders. Interior is coated with a milky substance, with a green patch at the shoulder on one side. Remnants of paper label on the front. Based is embossed with a single character that is either a "5", a script "S", or a backwards "2". Base is 3 x 5.5 cm, height (base to lip) is 15 cm, and width is 5.2 cm. Volume is approx. 5.5 oz.

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Monitoring	2	14.01	Miscellaneous Demolition	Glass	Clear	Bottle / Jar Base and Body fragment	Indeterminate	Storage	1		1983?	Lockhart, Schriever, Lindsey and Serr 2013	Straight sided cylindrical body with opalescent patination. Base diameter is 6 cm. Heel has orange peel texture. Base is embossed, "3[???] / 6 83 / [anchor-H logo]" Anchor-Hocking Corp., Salem, NJ plant, likely 1983.
Monitoring	2	22.01	Miscellaneous Demolition	Faunal	Molluscan	Bivalve Shell fragment	Indeterminate	Indeterminate	1	0.6			Could be Kitchen (Dietary Remains), but more likely Personal (Recreation - hobbies / collectibles) or Domestic (Furnishings).
Monitoring	2	38.01	Miscellaneous Demolition	Other	Composite	"Goebel" Punch-top Beer Can	Kitchen	Food Storage	1		1953	Karasek 2012	A portion of the body and the entire base are missing, but the can was originally 12 oz. The top of the can has two triangular perforations at opposing sides of the lid. The body has red, white and black label over a banded copper background. Label is partially obscured but reads, "(script) Light Lager / (script) Goebel / [LUX]U[RY] BEER"; each side of the can is marked "GOEBEL" in red with a red and white rooster below it, and below the rooster a red block with white text (illegible on both sides). Interior of can has a plastic lining.
Monitoring	2	57.01	Miscellaneous Demolition	Masonry	Conglomerate	Cement fragment	Architecture	Construction Materials	1	6.7			Fragment is roughly rectangular and measures 6 x 1 x 0.8 cm.
Monitoring	2	16.01-16.04	Miscellaneous Demolition	Glass	Clear	Window fragments	Architecture	Fixtures	4				At least three different windows represented. One fragment has a dried black substance (paint?) on one side.
Monitoring	2	5.01-5.05	Miscellaneous Demolition	Glass	Clear	Clear Bottle / Jar Base / Heel fragments	Indeterminate	Storage	5		Early 1990s-	Lockhart and Hoenig 2015	Based on unusual "jigsaw" breakage pattern, all five fragments appear to be from the same bottle. Faint knurling around the edge of the base and embossed dot code on heel.
Monitoring	2	56.01-56.06	Miscellaneous Demolition	Faunal	Mammalian	Cut Bone fragments	Kitchen	Dietary Remains	6	74.9			Four are long bone fragments, three of which are sawn cross-sections. All from medium to large-sized mammals.
Monitoring	2	58.01-58.03	Miscellaneous Demolition	Other	Paper	Newspaper fragments	Miscellaneous	Miscellaneous Communication	3				Very fragile, but could likely be identified by newspaper and date if copies are digitized somewhere.
Monitoring	2	62.01-62.02	Miscellaneous Demolition	Faunal	Avian	Cut Bone fragments	Kitchen	Dietary Remains	2	4.5			One is a long bone fragment.
Monitoring	2	7.01-7.02	Miscellaneous Demolition	Glass	Aqua-Tinted	Bottle Body fragments	Indeterminate	Storage	2		Pre-1930	Lindsey 2016e	Both fragments are weathered and exhibit opalescent patination - likely from the same bottle.
Monitoring	2	8.01-8.04	Miscellaneous Demolition	Glass	Aqua-tinted	Window fragments	Architecture	Fixtures	4				At least two different windows represented.
Monitoring	3	23.01	FS #1	Glass	Clear	"Jim Edmiston" Dairy Bottle	Kitchen	Food Storage	1		1939	Lockhart and Hoenig 2015	Intact bottle made on a press-and-blow machine - horizontal mold seam around cap-seat finish and valve ejection mark on base. Embossed sinuous line on neck. Body is embossed on one face "ONE QUART / LIQUID" above an embossed circle, inside of which is embossed,"JIM / EDMISTON / DAIRY / FINDLAY / OHIO"; heel is embossed,"REGISTERED SEALED BB48 / B ML490-155 58". Base is embossed with a large "E", above which is embossed, "18 [diamond O-I logo] 9" - Owens-Illinois Glass Co., Columbus, OH plant.
Phase I Survey	3	88.01	STP D5, Radial 2.5m West	Ceramic	Stoneware	Drain Pipe fragment	Miscellaneous	Infrastructure	1				Coarse black paste with brown glaze.
Phase I Survey	3	89.01	STP D5, Radial 2.5m West	Masonry	Clay	Brick fragment	Architecture	Construction Materials	1	894.7			Approx. half of a brick. Some gravel-tempered mortar still attached to one surface.
Phase I Survey	3	90.01	STP D5, Radial 2.5m West	Masonry	Conglomerate	Mortar fragment	Architecture	Construction Materials	1	151.0			

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Phase I Survey	3	91.01	STP D5, Radial 2.5m West	Metal	Ferrous	Wire Nail	Architecture	Architectural Hardware	1		1885-	Wells 1998	6-penny nail.
Phase I Survey	7	63.01	STP C5, Radial 2.5m East	Ceramic	Stoneware	Utilitarian Crock sherd	Kitchen	Food Storage	1		ca. 1860-1900	MAC Lab 2015a	Salt-glazed exterior with cobalt decoration; brown slip-glazed interior.
Phase I Survey	7	67.01	STP C5, Radial 2.5m East	Glass	Clear	Bottle fragment	Indeterminate	Storage	1		Pre-1920	Lindsey 2016d	Lip fragment exhibiting a threaded finish and a ground rim. Mouth-blown bottle.
Phase I Survey	7	68.01	STP C5, Radial 2.5m East	Glass	Clear	Window fragment	Architecture	Fixtures	1				
Phase I Survey	7	69.01	STP C5, Radial 2.5m East	Glass	Clear	Lamp Shade fragment	Domestic	Lighting and Electrical	1				Rim fragment; ground rim and frosted exterior.
Phase I Survey	7	71.1	STP C5, Radial 2.5m East	Glass	Light Green-tinted	Bottle fragment	Indeterminate	Storage	1				
Phase I Survey	7	72.1	STP C5, Radial 2.5m East	Metal	Ferrous	Iron Ring	Miscellaneous	Miscellaneous Hardware	1				Ring has an intentional break. Slightly oblong, measuring 2 x 2.5 cm.
Phase I Survey	7	64.01-64.02	STP C5, Radial 2.5m East	Ceramic	Unrefined Earthenware	Redware Flower Pot sherds	Domestic	Landscaping	2				
Phase I Survey	7	65.01-65.02	STP C5, Radial 2.5m East	Ceramic	Refined Earthenware	Whiteware sherds	Kitchen	Food Service	2		1820-	Miller et al. 2000	Both sherds are undecorated. One appears to be from a bowl or cup and the other from a plate or saucer.
Phase I Survey	7	66.01-66.02	STP C5, Radial 2.5m East	Glass	Clear	Bottle / Jar fragments	Indeterminate	Storage	2				Two different vessels represented. One is embossed, "O…".
Phase I Survey	7	70.01-70.02	STP C5, Radial 2.5m East	Glass	Aqua-Tinted	Bottle / Jar fragments	Indeterminate	Storage	2		Pre-1930	Lindsey 2016e	Two different vessels represented. Both exhibit an opalescent patina.
Phase I Survey	7	73.01-73.05	STP C5, Radial 2.5m East	Masonry	Clay	Brick fragments	Architecture	Construction Materials	5	51.4			
Phase I Survey	8	92.01	STP D5, Radial 2.5m West + 5m North	Glass	Clear	Bottle / Jar fragment	Indeterminate	Storage	1		1940-	Lindsey 2016a	Base / heel fragment. Exhibits knurling on base inside footring.
Phase I Survey	8	93.01-93.04	STP D5, Radial 2.5m West + 5m North	Metal	Ferrous	Wire Nails	Architecture	Architectural Hardware	4		1885-	Wells 1998	One 6-penny nail, one 7-penny nail, and two 8-penny nails.
Phase I Survey	9	95.01	STP E6	Ceramic	Stoneware	Floor Tile fragment	Architecture	Construction Materials	1				Orange paste with light brown glaze on both top and bottom. Flat tile is 2.3 cm thick.
Phase I Survey	9	96.01	STP E6	Glass	Clear	Press-Molded Vessel fragment	Domestic	Furnishings	1		1825-	Jones 2000	Geometric press-molded pattern. Likely from a decorative bowl or vase.
Phase I Survey	9	94.01-94.02	STP E6	Ceramic	Unrefined Earthenware	Redware Drain Pipe fragments	Architecture	Utilities	2				Both appear to be rim fragments from the same pipe.
Phase I Survey	9	97.01-97.02	STP E6	Masonry	Conglomerate	Mortar fragments	Architecture	Construction Materials	2	2.2			
Phase I Survey	9	98.01-98.02	STP E6	Metal	Ferrous	Wire Nails / Nail fragments	Architecture	Architectural Hardware	2		1885-	Wells 1998	The complete nail is a 16-penny nail; the fragment is missing its head, but is likely the same or a 20-penny nail.
Phase I Survey	9	99.01-99.02	STP E6	Plastic	Polystyrene	Styrofoam Insulation fragments	Architecture	Construction Materials	2		1944-	Miller et al. 2000	Both fragments are blue.
Phase I Survey	12	74.01	STP C5, Radial 2.5m East + 5m North	Ceramic	Porcelain	Hard-Paste Bowl sherd	Kitchen	Food Service	1				Base sherd with footring; undecorated.

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Phase I Survey	12	76.01	STP C5, Radial 2.5m East + 5m North	Faunal	Mammalian	Knuckle Bone	Kitchen	Dietary Remains	1	3.9			Species unidentified.
Phase I Survey	12	79.01	STP C5, Radial 2.5m East + 5m North	Glass	Aqua-Tinted	Bottle / Jar fragment	Indeterminate	Storage	1		Pre-1930	Lindsey 2016e	Unmarked body fragment.
Phase I Survey	12	80.01	STP C5, Radial 2.5m East + 5m North	Glass	Brown / Amber	Bottle / Jar fragment	Kitchen	Food Service	1				Appears to be a neck fragment, likely from a beer bottle.
Phase I Survey	12	81.01	STP C5, Radial 2.5m East + 5m North	Glass	Milk Glass	Melted Glass fragment	Indeterminate	Indeterminate	1				
Phase I Survey	12	82.01	STP C5, Radial 2.5m East + 5m North	Glass	Milk Glass	Canning Jar Lid Liner fragment	Kitchen	Food Storage	1		1869 - ca. 1950s	Whitten 2017a	Embossed around the edge, "BOYD'S GEN[UINE PORCELAIN LINE]D"
Phase I Survey	12	83.01	STP C5, Radial 2.5m East + 5m North	Masonry	Conglomerate	Concrete fragment	Architecture	Construction Materials	1	1.0			
Phase I Survey	12	84.01	STP C5, Radial 2.5m East + 5m North	Metal	Ferrous	Can fragment	Indeterminate	Storage	1				
Phase I Survey	12	85.01	STP C5, Radial 2.5m East + 5m North	Other	Mineral	Coal Slag	Miscellaneous	Waste By-Products	1	1.6			
Phase I Survey	12	86.01	STP C5, Radial 2.5m East + 5m North	Plastic	Polyethylene	Clear Melted Plastic fragment	Indeterminate	Indeterminate	1		1934-	Freudenrich 2007	Thin sheet of plastic.
Phase I Survey	12	87.01	STP C5, Radial 2.5m East + 5m North	Plastic	Indeterminate	Red Plastic fragment	Indeterminate	Indeterminate	1				Fragment is flat.
Phase I Survey	12	75.01-75.05	STP C5, Radial 2.5m East + 5m North	Ceramic	Unrefined Earthenware	Redware Flower Pot sherds	Domestic	Landscaping	5				One is a base sherd with part of the rim of the hole in the center.
Phase I Survey	12	77.01-77.03	STP C5, Radial 2.5m East + 5m North	Glass	Clear	Window fragments	Architecture	Fixtures	3				Two fragments are 2 mm thick, the third is 3 mm thick.
Phase I Survey	12	78.01-78.10	STP C5, Radial 2.5m East + 5m North	Glass	Clear	Bottle / Jar fragments	Indeterminate	Storage	10				One is an unmarked shoulder fragment, one is a rim fragment with a bead finish, while the rest are unmarked body fragments. One of the body fragments is frosted on the interior.
Phase I Survey	14	100.01	Test Unit 3, Level 1	Ceramic	Stoneware	Salt-glazed Vessel sherd	Kitchen	Food Storage	1		1705-1930	Miller et al. 2000	Gray paste with a clear salt glaze. Sherd is too small to determine vessel form.
Phase I Survey	14	101.01	Test Unit 3, Level 1	Glass	Clear	Tumbler fragment	Kitchen	Food Service	1				Rim fragment.
Phase I Survey	14	104.01	Test Unit 3, Level 1	Glass	Milk Glass	Unidentified Vessel fragment	Indeterminate	Indeterminate	1				May be part of a handle.
Phase I Survey	14	105.01	Test Unit 3, Level 1	Metal	Zinc	U.S. Penny	Personal	Money	1		1996	Hernandez 2009	Penny is badly corroded and significantly nicked around the edges, but the date is clearly visible.

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Phase I Survey	14	107.01	Test Unit 3, Level 1	Plastic	Indeterminate	Unidentified Red-tinted Plastic fragment	Indeterminate	Indeterminate	1				
Phase I Survey	14	108.01	Test Unit 3, Level 1	Plastic	Indeterminate	Unidentified Yellow-Gray Plastic fragment	Indeterminate	Indeterminate	1				Flat; one side is textured like fiber-glass, and the other appears to be corroded. The inside appears milky white.
Phase I Survey	14	111.01	Test Unit 3, Level 1	Other	Mineral	Unspent Coal	Miscellaneous	Fuel	1	4.0			
Phase I Survey	14	112.01	Test Unit 3, Level 1	Other	Floral	Wood Bark	Indeterminate	Indeterminate	1	0.7			May be either Non-Cultural, or Domestic (Landscaping) - possibly from a decorative shrub.
Phase I Survey	14	102.01-102.02	Test Unit 3, Level 1	Glass	Clear	Bottle / Jar fragments	Indeterminate	Storage	2				Unmarked body fragments. One exhibits a mold seam.
Phase I Survey	14	103.01-103.03	Test Unit 3, Level 1	Glass	Green	Unidentified Vessel fragments	Indeterminate	Indeterminate	3				One fragment is from the rim of the vessel. It does not appear to be from a tumbler, but may be from a bowl.
Phase I Survey	14	106.01-106.02	Test Unit 3, Level 1	Metal	Ferrous	Wire Nails / Nail fragments	Architecture	Architectural Hardware	2		1885-	Wells 1998	The intact nail is a 12-penny nail.
Phase I Survey	14	109.01-109.02	Test Unit 3, Level 1	Plastic	Indeterminate	Cup fragments	Kitchen	Food Service	2				Now yellowed, the fragments were likely originally translucent white. Both are rim fragments with rolled rims.
Phase I Survey	14	110.01-110.03	Test Unit 3, Level 1	Other	Lithic	Slate Roofing Shingle fragments	Architecture	Construction Materials	3	3.8			
Phase I Survey	15	113.01	Test Unit 3, Feature A, West Half	Ceramic	Unrefined Earthenware	Redware sherd	Indeterminate	Indeterminate	1				No original surface present. Sherd is too small to determine original form or function.
Phase I Survey	15	115.01	Test Unit 3, Feature A, West Half	Glass	Clear	Bottle / Jar fragment	Indeterminate	Storage	1				Unmarked body fragment.
Phase I Survey	15	116.01	Test Unit 3, Feature A, West Half	Metal	Ferrous	Iron Slag	Miscellaneous	Waste By-Products	1	1.0			
Phase I Survey	15	117.01	Test Unit 3, Feature A, West Half	Metal	Ferrous	Wire Nail	Architecture	Architectural Hardware	1		1885-	Wells 1998	4-penny nail.
Phase I Survey	15	118.01	Test Unit 3, Feature A, West Half	Metal	Ferrous	Threaded Bolt	Miscellaneous	Miscellaneous Hardware	1				Hexagonal head (1.5 cm wide corner-to-corner); 2.3 cm tall; shaft is 8 cm diameter.
Phase I Survey	15	119.01	Test Unit 3, Feature A, West Half	Plastic	Indeterminate	Unidentified Translucent White Plastic fragment	Indeterminate	Indeterminate	1				Ultra-thin and flat.
Phase I Survey	15	121.01	Test Unit 3, Feature A, West Half	Other	Composite	Orange Shag Carpet fragment?	Architecture	Fixtures	1				Five strands of orange yarn, all anchored in an off-white rubber base. Matches Object #188.
Phase I Survey	15	122.01	Test Unit 3, Feature A, West Half	Other	Textile	Red Ribbon fragment	Personal	Adornment	1				Ribbon is 8 mm wide and 25.5 cm long, with one intact end having an arrow shape.
Phase I Survey	15	114.01-114.02	Test Unit 3, Feature A, West Half	Glass	Clear	Window fragments	Architecture	Fixtures	2				One fragment is 2.5 mm thick, the other is 3 mm thick.

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Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	15	120.01-120.02	Test Unit 3, Feature A, West Half	Plastic	Indeterminate	Unidentified Light Blue Plastic Film fragments	Indeterminate	Indeterminate	2				
Phase I Survey	16	124.01	Test Unit 3, Feature A, East Half	Glass	Clear	Bottle / Jar fragment	Indeterminate	Storage	1				Unmarked body fragment.
Phase I Survey	16	126.01	Test Unit 3, Feature A, East Half	Metal	Ferrous	Iron Slag	Miscellaneous	Waste By-Products	1	4.0			
Phase I Survey	16	127.01	Test Unit 3, Feature A, East Half	Metal	Ferrous	Unidentified Nail	Architecture	Architectural Hardware	1				Appears to be complete; if so, a 7-penny nail. Too rusted to determine type of nail.
Phase I Survey	16	128.01	Test Unit 3, Feature A, East Half	Metal	Ferrous	Threaded Bolt	Miscellaneous	Miscellaneous Hardware	1				Hexagonal head (1.5 cm wide corner-to-corner); 2.3 cm tall; shaft is 8 cm diameter.
Phase I Survey	16	129.01	Test Unit 3, Feature A, East Half	Plastic	Indeterminate	Unidentified Black Plastic fragment	Indeterminate	Indeterminate	1				Rim fragment with an everted rim.
Phase I Survey	16	123.01-123.04	Test Unit 3, Feature A, East Half	Ceramic	Unrefined Earthenware	Redware Flower Pot sherds	Domestic	Landscaping	4				
Phase I Survey	16	125.01-125.02	Test Unit 3, Feature A, East Half	Glass	Clear	Light Bulb fragments?	Domestic	Lighting and Electrical	2		1879-	Miller et al. 2000	Fragments are 1 mm thick.
Phase I Survey	17	130.01	Test Unit 3, Level 2	Ceramic	Unrefined Earthenware	Kaolin Pipe Stem fragment	Personal	Indulgence	1				Possible tooth clench marks on stem. Bore hole diameter is 2 mm.
Phase I Survey	17	133.01	Test Unit 3, Level 2	Ceramic	Stoneware	Jug sherd	Kitchen	Food Storage	1		19th century	MAC Lab 2015a	Appears to be a shoulder sherd; brown slip on exterior, unglazed interior.
Phase I Survey	17	134.01	Test Unit 3, Level 2	Ceramic	Stoneware	Albany Slip-Glazed Crock or Jug sherd	Kitchen	Food Storage	1		1805-1920	Miller et al. 2000	Body sherd; Albany slip is on both interior and exterior.
Phase I Survey	17	136.01	Test Unit 3, Level 2	Ceramic	Refined Earthenware	Whiteware Teacup sherd	Kitchen	Food Service	1		1820-	Miller et al. 2000	Rimsherd; blue floral transfer-print pattern on both interior and exterior of a paneled body.
Phase I Survey	17	137.01	Test Unit 3, Level 2	Faunal	Indeterminate	Unidentified Bone fragment	Indeterminate	Indeterminate	1	0.9			No obvious butchery marks; may be either Kitchen (Dietary Remains) or Non-Cultural.
Phase I Survey	17	148.01	Test Unit 3, Level 2	Glass	Light Green-tinted	Coca-Cola Bottle fragment	Kitchen	Food Storage	1		1923-	Lockhart and Porter 2010	Shoulder fragment. Part of the script "Cola" is present, above which are the characteristic molded columns. Appears to be either the 1923 patent or 1937 patent design.
Phase I Survey	17	150.01	Test Unit 3, Level 2	Glass	Green	Bottle / Jar fragment	Indeterminate	Storage	1				Fragment is too small to determine which part of the vessel it is from. Not from the same bottle as Object #149.
Phase I Survey	17	155.01	Test Unit 3, Level 2	Glass	Clear	Bottle / Jar fragment	Indeterminate	Storage	1		1940-	Lindsey 2016a	Base fragment with knurling.
Phase I Survey	17	156.01	Test Unit 3, Level 2	Glass	Clear	Packer's Tumbler fragment	Kitchen	Food Service / Food Storage	1		ca. 1920s-	Bender 2016	Machine-made. Rim fragment; beaded rim.
Phase I Survey	17	157.01	Test Unit 3, Level 2	Glass	Clear	Press-Molded Bottle / Jar fragment	Indeterminate	Storage	1		1825-	Jones 2000	Press-molded pattern appears to be fluted columns.
Phase I Survey	17	160.01	Test Unit 3, Level 2	Glass	Clear	Jar fragment	Kitchen	Food Storage	1		1905-	Miller et al. 2000; Bender 2016	Rim fragment; jar accepted a vacuum or anchor cap.

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Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	17	164.01	Test Unit 3, Level 2	Metal	Aluminum	Bag Tie?	Miscellaneous	Miscellaneous Hardware	1				
Phase I Survey	17	165.01	Test Unit 3, Level 2	Metal	Aluminum	Bottle Cap	Indeterminate	Storage	1				Screw cap; 4 cm diameter. Originally painted black.
Phase I Survey	17	166.01	Test Unit 3, Level 2	Metal	Cuprous	Sheet Copper fragment	Indeterminate	Indeterminate	1				
Phase I Survey	17	167.01	Test Unit 3, Level 2	Metal	Lead	Lead Sprue	Industrial	Industrial Waste	1	54.5			
Phase I Survey	17	169.01	Test Unit 3, Level 2	Metal	Ferrous	Screw	Miscellaneous	Miscellaneous Hardware	1				7.7 cm long, 7 mm shaft diameter; for a flat-head screwdriver.
Phase I Survey	17	172.01	Test Unit 3, Level 2	Metal	Ferrous	Galvanized Steel Wire Nail	Architecture	Architectural Hardware	1		1893-	Wells 1998	9-penny nail.
Phase I Survey	17	173.01	Test Unit 3, Level 2	Plastic	Indeterminate	Unidentified Light Green Plastic fragment	Indeterminate	Indeterminate	1				Appears to have been part of a hollow object.
Phase I Survey	17	174.01	Test Unit 3, Level 2	Plastic	Indeterminate	Unidentified Light Blue Plastic fragment	Indeterminate	Indeterminate	1				Flat; 2 mm thick.
Phase I Survey	17	175.01	Test Unit 3, Level 2	Plastic	Indeterminate	Unidentified Bright Green Plastic fragment	Indeterminate	Indeterminate	1				Slightly curved; ridge on interior side, three parallel depressed lines on exterior side.
Phase I Survey	17	176.01	Test Unit 3, Level 2	Plastic	Indeterminate	Unidentified Dark Green Plastic fragment	Indeterminate	Indeterminate	1				Appears to have been part of a vessel of some sort; embossed fishnet pattern on part of exterior.
Phase I Survey	17	177.01	Test Unit 3, Level 2	Plastic	Indeterminate	Unidentified White Plastic fragment	Indeterminate	Indeterminate	1				Flat; 2 mm thick. Yellowed on one side; on the other, remnants of black paint.
Phase I Survey	17	178.01	Test Unit 3, Level 2	Plastic	Indeterminate	Unidentified Black Plastic fragment	Indeterminate	Indeterminate	1				Very fine ridges on one side. Flat; 2 mm thick.
Phase I Survey	17	179.01	Test Unit 3, Level 2	Plastic	Indeterminate	Unidentified White Plastic fragment	Indeterminate	Indeterminate	1				Small oblong blob measuring approx. 7 x 5 x 3 mm. Translucent.
Phase I Survey	17	180.01	Test Unit 3, Level 2	Plastic	Polyvinylidine Chloride	Cellophane fragment	Commercial	Packaging	1		1924-	Spude 2015	
Phase I Survey	17	181.01	Test Unit 3, Level 2	Plastic	Polystyrene	Styrofoam fragment	Indeterminate	Indeterminate	1		1944-	Miller et al. 2000	
Phase I Survey	17	182.01	Test Unit 3, Level 2	Plastic	Cellulose Acetate	Comb fragment	Personal	Health & Hygiene	1		1900-	Spude 2015	Translucent splotchy brown; partially melted.
Phase I Survey	17	183.01	Test Unit 3, Level 2	Plastic	Bakelite	Comb fragment	Personal	Health & Hygiene	1		1907-	Powers 1993	
Phase I Survey	17	188.01	Test Unit 3, Level 2	Other	Composite	Orange Shag Carpet fragment?	Architecture	Fixtures	1				One strand of orange yarn, anchored in an off-white rubber base. Matches Object #121.
Phase I Survey	17	191.01	Test Unit 3, Level 2	Other	Lithic	Slate Roofing Shingle fragment	Architecture	Construction Materials	1				
Phase I Survey	17	192.01	Test Unit 3, Level 2	Other	Lithic	Basalt chunk	Indeterminate	Indeterminate	1	187.0			Appears to be natural and unmodified, with veins of iron running through it. Possibly Non-Cultural.
Phase I Survey	17	131.01-131.09	Test Unit 3, Level 2	Ceramic	Unrefined Earthenware	Redware Flower Pot sherds	Domestic	Landscaping	9				At least one base sherd; the rest are unidentifiable.
Phase I Survey	17	132.01-132.02	Test Unit 3, Level 2	Ceramic	Stoneware	Drain Pipe fragments	Architecture	Utilities	2				One is a large fragment of the "female" end of a pipe, with a dark brown paste and a clear glaze; the other fragment is smaller, with a red paste and clear glaze.

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Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	17	135.01-135.10	Test Unit 3, Level 2	Ceramic	Refined Earthenware	Whiteware Tableware sherds	Kitchen	Food Service	10		1820-	Miller et al. 2000	Six are body sherds, one is a footring sherd (from a bowl?), one is a rimsherd from a bowl, and two are rimsherds from plates. All are undecorated.
Phase I Survey	17	138.01-138.02	Test Unit 3, Level 2	Faunal	Mammalian	Unidentified Bone fragments	Indeterminate	Indeterminate	2	<0.1			No obvious butchery marks; may be either Kitchen (Dietary Remains) or Non-Cultural.
Phase I Survey	17	139.01-139.02	Test Unit 3, Level 2	Faunal	Mammalian	Cut Long Bone fragments	Kitchen	Dietary Remains	2	1.0			Both are from small mammals.
Phase I Survey	17	140.01-140.10	Test Unit 3, Level 2	Faunal	Avian	Cut Long Bone fragments	Kitchen	Dietary Remains	10	3.1			Likely chicken bones.
Phase I Survey	17	141.01-141.14	Test Unit 3, Level 2	Glass	Clear	Window fragments	Architecture	Fixtures	14				Three fragments are 3 mm thick; one is 2.5 mm thick; eight are 2 mm thick; and two are 1.5 mm thick.
Phase I Survey	17	142.01-142.04	Test Unit 3, Level 2	Glass	Light Green-tinted	Window fragments	Architecture	Fixtures	4				Three fragments are 2 mm thick, and one is 2.5 mm thick.
Phase I Survey	17	143.01-143.10	Test Unit 3, Level 2	Glass	Aqua-Tinted	Window fragments	Architecture	Fixtures	10				Two fragments are 2.75 mm thick; one is 2.5 mm thick; one is 2.25 mm thick; three are 1.75 mm thick; 1 is 1.5 mm thick; and two are 1 mm thick.
Phase I Survey	17	144.01-144.02	Test Unit 3, Level 2	Glass	Clear	Light Bulb fragments?	Domestic	Lighting and Electrical	2		1879-	Miller et al. 2000	One is very lightly frosted on the interior.
Phase I Survey	17	145.01-145.03	Test Unit 3, Level 2	Glass	Cobalt Blue	Bottle / Jar fragments	Indeterminate	Storage	3				Body fragments.
Phase I Survey	17	146.01-146.02	Test Unit 3, Level 2	Glass	Brown / Amber	Bottle / Jar fragments	Indeterminate	Storage	2				Body fragments.
Phase I Survey	17	147.01-147.02	Test Unit 3, Level 2	Glass	Aqua-Tinted	Bottle / Jar fragments	Indeterminate	Storage	2		Pre-1930	Lindsey 2016e	Body fragments. Two different vessels represented.
Phase I Survey	17	149.01-149.02	Test Unit 3, Level 2	Glass	Green	Soda Pop Bottle fragments	Kitchen	Food Storage	2		1934-	Lindsey 2016c	Both are body fragments; appear to be from the same bottle. One fragment has a white and orange ACL decoration - white box around a silhouette image of a person with arms up in the air and white bubbles, and an orange bar.
Phase I Survey	17	151.01-151.02	Test Unit 3, Level 2	Glass	Olive Green	Bottle / Jar fragments	Indeterminate	Storage	2				Body fragments. Two different vessels represented.
Phase I Survey	17	152.01-152.02	Test Unit 3, Level 2	Glass	Jadite	Unidentified Vessel fragments	Indeterminate	Indeterminate	2		1930s	Keller and Ross 2014	Both fragments have a white substance on all surfaces (including broken surfaces) - unclear whether this represents deterioration of the glass or a foreign substance adhering to it. One of the fragments exhibits a press-molded floral pattern on the exterior.
Phase I Survey	17	153.01-153.02	Test Unit 3, Level 2	Glass	Milk Glass	Unidentified Vessel fragments	Indeterminate	Indeterminate	2				One appears to have been burnt. Two different vessels represented.
Phase I Survey	17	154.01-154.49	Test Unit 3, Level 2	Glass	Clear	Bottle / Jar fragments	Indeterminate	Storage	49				All are unmarked body fragments. One fragment is partially melted.
Phase I Survey	17	158.01-158.02	Test Unit 3, Level 2	Glass	Clear	Patent Medicine Bottle fragments	Personal	Health & Hygiene	2				Based on font differences, the two fragments appear to represent two different bottles. Both bottles were square or rectangular with indented side panels. One fragment is embossed, "…T…". The other fragment is embossed, "…[B?]EAL… / …BEGGS C… / … , OHIO."
Phase I Survey	17	159.01-159.02	Test Unit 3, Level 2	Glass	Clear	Bottle / Jar fragments	Indeterminate	Storage	2		1905-	Miller et al. 2000	Fragments re-fit to form part of the base and heel of a small-diameter bottle or jar.

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Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	17	161.01-161.04	Test Unit 3, Level 2	Glass	Clear	Jar fragments	Kitchen	Food Storage	4		1905-	Miller et al. 2000; Bender 2016	Three fragments are from one jar, while the fourth is from a different jar. Both jars, however, were machine-made with wide-mouth, exterior screw-cap finishes.
Phase I Survey	17	162.01-162.02	Test Unit 3, Level 2	Masonry	Conglomerate	Mortar fragments	Architecture	Construction Materials	2	2.3			
Phase I Survey	17	163.01-163.13	Test Unit 3, Level 2	Masonry	Clay	Brick fragments	Architecture	Construction Materials	13	85.6			Based on differences in color and texture, at least five different bricks represented.
Phase I Survey	17	168.01-168.19	Test Unit 3, Level 2	Metal	Ferrous	Can fragments	Indeterminate	Storage	19		1837-	Miller et al. 2000	At least three different cans represented. One was rectangular with a rolled edge.
Phase I Survey	17	170.01-170.14	Test Unit 3, Level 2	Metal	Ferrous	Square Nails / Nail fragments	Architecture	Architectural Hardware	14		1805-1890	Wells 1998	Only three appear to be complete, and include a 30-penny nail, an 8-penny nail and a 5-penny nail.
Phase I Survey	17	171.01-171.18	Test Unit 3, Level 2	Metal	Ferrous	Wire Nails / Nail fragments	Architecture	Architectural Hardware	18		1885-	Wells 1998	Six appear to be intact, and include a 20-penny nail, two 16-penny nails, two 7-penny nails, and a 2-penny nail.
Phase I Survey	17	184.01-184.02	Test Unit 3, Level 2	Other	Mineral	Lime chunks	Indeterminate	Indeterminate	2	1.0			Possibly Non-Cultural, or possibly used as flux for an industrial process.
Phase I Survey	17	185.01-185.08	Test Unit 3, Level 2	Other	Mineral	Spent Coal	Miscellaneous	Fuel	8	4.7			
Phase I Survey	17	186.01-186.13	Test Unit 3, Level 2	Other	Mineral	Unspent Coal	Miscellaneous	Fuel	13	29.1			Several pieces are partially spent.
Phase I Survey	17	187.01-187.11	Test Unit 3, Level 2	Other	Floral	Charcoal	Miscellaneous	Fuel	11	1.0			
Phase I Survey	17	189.01-189.03	Test Unit 3, Level 2	Other	Lithic	Burnt Sandstone fragments	Miscellaneous	Waste By-Products	3	5.6			Possibly Non-Cultural.
Phase I Survey	17	190.01-190.05	Test Unit 3, Level 2	Other	Lithic	Sedimentary Rocks	Indeterminate	Indeterminate	5	110.8			One is a sizable piece of sandstone, another is a smaller piece of what appears to be slate or shale. The other three are small slate fragments. All are possibly Non-Cultural, or possibly Domestic (Landscaping).
Phase I Survey	17	193.01-193.03	Test Unit 3, Level 2	Metal	Ferrous	Iron Slag	Miscellaneous	Waste By-Products	3	35.1			Two of the pieces are very small.
Phase I Survey	18	277.01	Feature #1, Surface	Other	Mineral	Compressed Carbon Rod	Miscellaneous	Power Generation	1		ca. 1886-	McComsey 2002	5.6-cm long, 8-mm diameter rod; zinc-carbon battery core.
Phase I Survey	18	278.01	Feature #1, Surface	Metal	Ferrous	Can Lid	Indeterminate	Storage	1		1837-	Miller et al. 2000	6.9-cm diameter; crimped edge.
Phase I Survey	25	196.01	Test Unit 3, Level 3	Ceramic	Unrefined Earthenware	Bisque Bowl or Cup sherd	Kitchen	Food Service	1				Rimsherd; unglazed, no decoration.
Phase I Survey	25	197.01	Test Unit 3, Level 3	Ceramic	Refined Earthenware	Pearlware Teacup sherd	Kitchen	Food Service	1		1775-1830	Bagley n.d.	Undecorated sherd with portions of the rim, body and handle present. Blue pooling around the handle attachment.
Phase I Survey	25	198.01	Test Unit 3, Level 3	Ceramic	Refined Earthenware	Ironstone Soup Plate sherd?	Kitchen	Food Service	1		1840-1930	Miller et al. 2000	Molded decorative motif on interior side - scallops?
Phase I Survey	25	199.01	Test Unit 3, Level 3	Ceramic	Refined Earthenware	Whiteware Tableware sherd	Kitchen	Food Service	1		1820-	Miller et al. 2000	Undecorated body sherd - vessel form unidentified.
Phase I Survey	25	200.01	Test Unit 3, Level 3	Ceramic	Refined Earthenware	Whiteware Bowl sherd?	Kitchen	Food Service	1		1825-1846	MAC Lab 2015b	Rimsherd with dark blue transfer-print design - parallel lines along the rim, dots and rounded points underneath the lines, and a ribbon pattern on the marley.
Phase I Survey	25	201.01	Test Unit 3, Level 3	Ceramic	Refined Earthenware	Whiteware Plate sherd	Kitchen	Food Service	1		1818-1869	MAC Lab 2015b	Sherd represents the junction between the well and the marley; top side has a brown transfer-printed wheat motif that crosses from the well onto the marley.

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Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	25	202.01	Test Unit 3, Level 3	Ceramic	Porcelain	Prosser Button fragment	Personal	Clothing	1		1840-1950s	Sprague 2002	Four-hole, dish-type button; 1.5 cm diameter.
Phase I Survey	25	205.01	Test Unit 3, Level 3	Faunal	Mammalian	Cut Jaw fragment	Kitchen	Dietary Remains	1	17.3			Right jaw fragment with four teeth still in place. Taxon unidentified.
Phase I Survey	25	206.01	Test Unit 3, Level 3	Faunal	Mammalian	Tooth	Kitchen	Dietary Remains	1	0.7			Type of tooth and taxon unidentified.
Phase I Survey	25	208.01	Test Unit 3, Level 3	Glass	Clear	Shoe Polish Bottle	Personal	Miscellaneous	1		1905-1930	Boot and Shoe Recorder 1911; Miller and McNicol 2012; Whitten 2017b	Intact, machine-made bottle measures 11.6 cm tall, with the rectangular body measuring 8.5 cm tall x 4.9 cm wide x 3.2 cm thick (4.5 oz volume). Simple bead finish for a cork closure. Base exhibits an Owens suction scar and is embossed, "3". One side of the bottle is embossed, "FRENCH / GLOSS", while the other side is embossed, "WHITTEMORE / BOSTON". A black substance adhering to the inside of the bottle is likely the original shoe polish. Bottle has a flaky opalescent patina. French Gloss was marketed specifically for women's and children's shoes.
Phase I Survey	25	210.01	Test Unit 3, Level 3	Glass	Clear	Liquor Bottle fragment	Kitchen	Food Storage	1		1905-	Miller et al. 2000	Body / heel fragment from a flask-style liquor bottle; mold seam visible on the heel. Re-fits with Object #244.
Phase I Survey	25	211.01	Test Unit 3, Level 3	Glass	Clear	Bottle fragment	Indeterminate	Storage	1		1905-	Miller et al. 2000	Neck / shoulder fragment from a machine-made bottle; appears to have an external screw-cap finish.
Phase I Survey	25	212.01	Test Unit 3, Level 3	Glass	Clear	Press-molded Bowl fragment	Domestic	Furnishings	1		1825-	Jones 2000	Rim fragment; press-molded circles on the interior just underneath the rim.
Phase I Survey	25	213.01	Test Unit 3, Level 3	Glass	Milk Glass	Bottle fragment	Indeterminate	Storage	1				Appears to be a neck fragment.
Phase I Survey	25	214.01	Test Unit 3, Level 3	Glass	Milk Glass	Lamp Shade fragment	Domestic	Lighting and Electrical	1				Undecorated.
Phase I Survey	25	218.01	Test Unit 3, Level 3	Metal	Cuprous	Indian Head Penny	Personal	Money	1		1892		Front side is visible though exhibiting moderate oxidation; reverse side is completely obscured by oxidation.
Phase I Survey	25	219.01	Test Unit 3, Level 3	Metal	Aluminum	Hardware Crown?	Miscellaneous	Miscellaneous Hardware	1				Approx. 1.3 cm diameter and 7 mm tall, with dimples around the top; appears to be intended for fitting over a screw or other exposed piece of metal hardware, such as on furniture.
Phase I Survey	25	220.01	Test Unit 3, Level 3	Metal	Ferrous	Screw	Miscellaneous	Miscellaneous Hardware	1				3.3 cm tall; shaft diameter approx. 6 mm, though object is encased in rust.
Phase I Survey	25	221.01	Test Unit 3, Level 3	Metal	Ferrous	Upholstery Staple	Domestic	Furnishings	1				3.4 cm tall x 2 cm wide (at base).
Phase I Survey	25	222.01	Test Unit 3, Level 3	Metal	Ferrous	Faceplate or Tag	Industrial	Miscellaneous	1				Object is an elongated hexagon, measuring 5.4 cm on its long axis x 2 cm on its short axis x 1 mm thick. A circular hole near one of the long edges appears to be a nail hole. Possibly intended to be a manufacturer's identification tag.
Phase I Survey	25	229.01	Test Unit 3, Level 3	Metal	Ferrous	Unidentified Iron fragment	Indeterminate	Indeterminate	1				Could be either a nail fragment or a can fragment. Too rusty to identify firmly.
Phase I Survey	25	230.01	Test Unit 3, Level 3	Plastic	Cellulose Acetate	Button	Personal	Clothing	1		1868-1920	Miller et al. 2000	Two-hole button. 1.3 cm outside diameter with the holes set into a 6-mm diameter recess. Button is off-white, likely intended to mimic mother-of-pearl.
Phase I Survey	25	231.01	Test Unit 3, Level 3	Other	Composite	Tar Paper fragment	Architecture	Construction Materials	1	6.9			
Phase I Survey	25	237.01	Test Unit 3, Level 3	Other	Mineral	Coal Slag	Miscellaneous	Waste By-Products	1	1.9			

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Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	25	194.01-194.03	Test Unit 3, Level 3	Ceramic	Stoneware	Drain Pipe fragments	Architecture	Utilities	3				Two of the fragments appear to be from the same pipe, with a dark brown paste and a clear lead glaze; one of these fragments is from the "female" end of the pipe. The third fragment has a red paste with a clear lead glaze and is stamped on the exterior, " [illegible due to breakage] / ... AKRON . ...".
Phase I Survey	25	195.01-195.02	Test Unit 3, Level 3	Ceramic	Stoneware	Jug or Pitcher sherds	Kitchen	Food Service / Food Storage	2		1805-1920	Miller et al. 2000	Both sherds have a yellowish-gray paste and an Albany slip glaze. One sherd is a handle sherd, while the other is a small body or base sherd.
Phase I Survey	25	203.01-203.05	Test Unit 3, Level 3	Faunal	Mammalian	Cut Long Bone fragments	Kitchen	Dietary Remains	5	186.6			One is a large (approx. 18 cm long, mid-shaft diameter 3.9 cm) long bone with one end still intact; the others are all smaller fragments. Taxa unidentified.
Phase I Survey	25	204.01-204.06	Test Unit 3, Level 3	Faunal	Mammalian	Unidentified Cut Bone fragments	Kitchen	Dietary Remains	6	9.3			One fragment may be part of a vertebra. Taxa unidentified.
Phase I Survey	25	207.01-207.02	Test Unit 3, Level 3	Glass	Brown / Amber	Bottle fragments	Kitchen	Food Storage	2		1905-	Miller et al. 2000	Both appear to be from the same bottle, likely a beer bottle. One is an unmarked body fragment; the other is a body / heel base fragment. This larger fragment exhibits a thick footring, an Owens suction scar, and is embossed, "16N" on the heel and "... CO. INC." just above the heel. Appears to be a very early machine-made bottle.
Phase I Survey	25	209.01-209.10	Test Unit 3, Level 3	Glass	Clear	Bottle / Jar fragments	Indeterminate	Storage	10				All are unmarked body fragments. One is a chamfered corner fragment from a square/rectangular bottle.
Phase I Survey	25	215.01-215.22	Test Unit 3, Level 3	Glass	Aqua-Tinted	Window fragments	Architecture	Fixtures	22				Three fragments are 3 mm thick; five fragments are 2.25 mm thick; six fragments are 2 mm thick; six fragments are 1.75 mm thick; one fragment is 1.5 mm thick; and one fragment is 1.25 mm thick. Most of the fragments have an opalescent patina.
Phase I Survey	25	216.01-216.02	Test Unit 3, Level 3	Masonry	Clay	Brick fragments	Architecture	Construction Materials	2	607.8			One is a large fragment that represents about 1/4 of a brick. The other is a small fragment that is burned on the outside surface.
Phase I Survey	25	217.01-217.05	Test Unit 3, Level 3	Masonry	Conglomerate	Mortar fragments	Architecture	Construction Materials	5	141.8			Four are small fragments; one is a larger, flat fragment with pieces of brick adhering to one side.
Phase I Survey	25	223.01-223.02	Test Unit 3, Level 3	Metal	Ferrous	Wire fragments	Miscellaneous	Miscellaneous Hardware	2				One fragment is 6 mm diameter x 24.3 cm long (though very rusty at one end); the other is 4.5 mm diameter x 12.5 cm long.
Phase I Survey	25	224.01-224.17	Test Unit 3, Level 3	Metal	Ferrous	Can fragments	Indeterminate	Storage	17				All are very rusty; unable to determine method of manufacture or minimum # of vessels.
Phase I Survey	25	225.01-225.16	Test Unit 3, Level 3	Metal	Ferrous	Square Nails / Nail fragments	Architecture	Architectural Hardware	16		1805-1890	Wells 1998	Of those that appear to be intact, two are 40-penny nails, one is a 20-penny nail, and one is a 6-penny nail.
Phase I Survey	25	226.01-226.18	Test Unit 3, Level 3	Metal	Ferrous	Wire Nails / Nail fragments	Architecture	Architectural Hardware	18		1885-	Wells 1998	Of those that appear to be intact, one is a 10-penny nail and the other is a 7-penny nail.
Phase I Survey	25	227.01-227.15	Test Unit 3, Level 3	Metal	Ferrous	Unidentified Nail fragments	Architecture	Architectural Hardware	15				All are too rusty to determine type of nail, or whether any are intact. One has a piece of wood still attached.
Phase I Survey	25	228.01-228.11	Test Unit 3, Level 3	Metal	Ferrous	Iron Slag	Miscellaneous	Waste By-Products	11	112.2			
Phase I Survey	25	232.01-232.02	Test Unit 3, Level 3	Other	Composite	Wooden Board fragments with Tar Paper	Architecture	Construction Materials	2	34.5			
Phase I Survey	25	233.01-233.08	Test Unit 3, Level 3	Other	Floral	Charcoal	Miscellaneous	Fuel	8	4.2			It is possible that some of these fragments were originally structural wood fragments that were burned in a fire.
Phase I Survey	25	234.01-234.03	Test Unit 3, Level 3	Other	Lithic	Slate Roofing Shingle fragments	Architecture	Construction Materials	3				

Table E3
33HK0810 - Historic Artifact Catalog

PROVENIENCE				DESCRIPTION							MISCELLANEOUS		
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	25	235.01-235.03	Test Unit 3, Level 3	Other	Mineral	Unspent Coal	Miscellaneous	Fuel	3	24.1			
Phase I Survey	25	236.01-236.11	Test Unit 3, Level 3	Other	Mineral	Spent Coal	Miscellaneous	Fuel	11	344.5			Most are small fragments, but one is a large fragment weighing 331.5 g.
Phase I Survey	26	239.01	Test Unit 3, Level 4	Ceramic	Stoneware	Drain Pipe fragment	Architecture	Utilities	1				Reddish-brown paste with a clear lead glaze; rim fragment that appears to be from the "female" end of the pipe.
Phase I Survey	26	240.01	Test Unit 3, Level 4	Ceramic	Refined Earthenware	Whiteware Tile fragment	Architecture	Construction Materials	1				Corner tile intended to wrap around a wall or door corner; exterior is glazed. 1.2 cm thick.
Phase I Survey	26	241.01	Test Unit 3, Level 4	Ceramic	Refined Earthenware	Whiteware Teacup sherd	Kitchen	Food Service	1		1829-1869	MAC Lab 2015b	Rimsherd with red transfer-printed design - floral/diamond pattern along rim. The rim pattern is repeated on both top side and underside of rim.
Phase I Survey	26	242.01	Test Unit 3, Level 4	Faunal	Avian	Unidentified Long Bone fragment	Kitchen	Dietary Remains	1	2.2			Calcined, with rust particles adhering to both interior and exterior; appears to be cut. Taxon unidentified.
Phase I Survey	26	245.01	Test Unit 3, Level 4	Glass	Clear	Bottle fragment	Indeterminate	Storage	1		1905-	Miller et al. 2000	Machine-made neck / lip fragment. Narrow-mouth, external, continuous-threaded screw-cap finish.
Phase I Survey	26	246.01	Test Unit 3, Level 4	Glass	Olive Green	Bottle fragment	Indeterminate	Storage	1				Unmarked body fragment.
Phase I Survey	26	252.01	Test Unit 3, Level 4	Metal	Ferrous	Galvanized Steel Wire Nail fragment	Architecture	Architectural Hardware	1		1893-	Wells 1998	
Phase I Survey	26	254.01	Test Unit 3, Level 4	Metal	Ferrous	Steel Slag	Miscellaneous	Waste By-Products	1				May have originally been a nail.
Phase I Survey	26	255.01	Test Unit 3, Level 4	Metal	Cuprous	Unidentified Copper Object fragment	Indeterminate	Indeterminate	1				Fragmentary object has a wire-like tail protruding from a wider, flat surface. Object is encrusted with mortar, bits of coal, etc.
Phase I Survey	26	256.01	Test Unit 3, Level 4	Plastic	Cellulose Acetate	Hair Pin	Personal	Health & Hygiene	1		1868-1920	Miller et al. 2000	Brown; 7 cm tall, with a 1.8-cm wide head.
Phase I Survey	26	257.01	Test Unit 3, Level 4	Other	Floral	Charcoal	Miscellaneous	Fuel	1	<0.1			
Phase I Survey	26	258.01	Test Unit 3, Level 4	Other	Mineral	Coal Slag	Miscellaneous	Waste By-Products	1	23.3			
Phase I Survey	26	243.01-243.02	Test Unit 3, Level 4	Glass	Clear	Bottle / Jar fragments	Indeterminate	Storage	2				Unmarked body fragments.
Phase I Survey	26	244.01-244.02	Test Unit 3, Level 4	Glass	Clear	Liquor Bottle fragments	Kitchen	Food Storage	2		1905-	Miller et al. 2000	Fragments re-fit to form part of body, heel and base of a machine-made, flask-style liquor bottle. Base fragment also re-fits with Object #210.01.
Phase I Survey	26	247.01-247.16	Test Unit 3, Level 4	Glass	Clear	Lamp Shade fragments	Domestic	Lighting and Electrical	16				All are clear with white flashing on interior surface, giving the effect of frosted glass when viewed from the outside. Two fragments are from the base; one of these exhibits a ground bottom edge.
Phase I Survey	26	248.01-248.06	Test Unit 3, Level 4	Glass	Aqua-Tinted	Window fragments	Architecture	Fixtures	6				Four fragments are 3.25 mm thick, while the other two are 3 mm thick.
Phase I Survey	26	249.01-249.09	Test Unit 3, Level 4	Glass	Light Green-tinted	Window fragments	Architecture	Fixtures	9				Seven fragments are 3.25 mm thick, while the other two are 3 mm thick.
Phase I Survey	26	250.01-250.07	Test Unit 3, Level 4	Metal	Ferrous	Iron Strap fragments	Indeterminate	Indeterminate	7				Original strap(s) 2 cm wide and flat. Fragments are heavily rusted and encrusted with mortar, spent coal, and other debris.
Phase I Survey	26	251.01-251.05	Test Unit 3, Level 4	Metal	Ferrous	Wire Nail fragments	Architecture	Architectural Hardware	5		1885-	Wells 1998	None appear to be complete.
Phase I Survey	26	253.01-253.02	Test Unit 3, Level 4	Metal	Ferrous	Unidentified Nail fragments	Architecture	Architectural Hardware	2				Fragments are too rusty to determine nail type. One fragment has two pieces of spent coal adhering to it.

Table E3
33HK0810 - Historic Artifact Catalog

PROVENIENCE				DESCRIPTION							MISCELLANEOUS		
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Sub-type	Description	Functional Group	Functional Sub-group	Count	Weight (g)	Approximate Date Range	Reference(s)	Notes
Phase I Survey	26	259.01-259.04	Test Unit 3, Level 4	Other	Mineral	Spent Coal	Miscellaneous	Fuel	4	3.6			
Phase I Survey	27	260.01	Test Unit 3, Level 5	Ceramic	Porcelain	Bone China Vessel sherd	Kitchen	Food Service	1		1790s-	MAC Lab 2016	Embossed dot on exterior. Sherd is too small to identify vessel form, except to say that it was a hollowware vessel.
Phase I Survey	27	261.01	Test Unit 3, Level 5	Glass	Clear	Bottle / Jar fragment	Indeterminate	Storage	1				Unmarked body fragment.
Phase I Survey	27	263.01	Test Unit 3, Level 5	Masonry	Clay	Brick fragment	Architecture	Construction Materials	1	11.9			Mortar adhering to two surfaces.
Phase I Survey	27	266.01	Test Unit 3, Level 5	Other	Mineral	Unspent Coal	Miscellaneous	Fuel	1	151.9			
Phase I Survey	27	262.01-262.02	Test Unit 3, Level 5	Glass	Clear	Light Bulb fragments	Domestic	Lighting and Electrical	2		1879-	Miller et al. 2000	
Phase I Survey	27	264.01-264.02	Test Unit 3, Level 5	Metal	Ferrous	Wire fragments	Miscellaneous	Miscellaneous Hardware	2				One fragment is 3.5 mm thick and may actually be a nail fragment; the other fragment is 2.5 mm thick.
Phase I Survey	27	265.01-265.06	Test Unit 3, Level 5	Metal	Ferrous	Can fragments	Indeterminate	Storage	6				
Phase I Survey	28	268.01	Test Unit 3, Level 6	Faunal	Avian	Unidentified Cut Long Bone fragment	Kitchen	Dietary Remains	1	2.2			Cut at one end.
Phase I Survey	28	269.01	Test Unit 3, Level 6	Masonry	Clay	Brick fragment	Architecture	Construction Materials	1	15.0			Fragments of mortar adhering to one surface.
Phase I Survey	28	272.01	Test Unit 3, Level 6	Metal	Ferrous	Galvanized Steel Wire Nail fragment	Architecture	Architectural Hardware	1		1893-	Wells 1998	
Phase I Survey	28	273.01	Test Unit 3, Level 6	Metal	Ferrous	Iron Slag	Miscellaneous	Waste By-Products	1	350.1			
Phase I Survey	28	275.01	Test Unit 3, Level 6	Other	Mineral	Spent Coal	Miscellaneous	Fuel	1	98.2			
Phase I Survey	28	276.01	Test Unit 3, Level 6	Other	Mineral	Coal Slag	Miscellaneous	Waste By-Products	1	3.5			
Phase I Survey	28	267.01-267.03	Test Unit 3, Level 6	Ceramic	Stoneware	Drain Pipe fragments	Architecture	Utilities	3				Two fragments appear to be from the same pipe and exhibit a two-toned gray paste with a brown lead glaze. The third fragment is a rim fragment with a reddish-brown paste, a clear lead glaze, and a layer of mortar coating the inside and the rim.
Phase I Survey	28	270.01-270.02	Test Unit 3, Level 6	Masonry	Conglomerate	Concrete fragments	Architecture	Construction Materials	2	508.0			One fragment has two large pieces of gravel and one brick fragment within its matrix.
Phase I Survey	28	271.01-271.07	Test Unit 3, Level 6	Metal	Ferrous	Wire Nails / Nail fragments	Architecture	Architectural Hardware	7		1885-	Wells 1998	Three of the nails have pieces of spent coal adhering to them. The two apparently complete nails are both 8-penny nails.
Phase I Survey	28	274.01-274.02	Test Unit 3, Level 6	Other	Composite	Iron / Coal Slag	Miscellaneous	Waste By-Products	2	35.7			Both objects consist of a mixture of iron and coal slag.
Phase I Survey	N/A	N/A	STP D5	Masonry	Conglomerate	Concrete fragment	Architecture	Construction Materials	1				Discarded in the field.
Phase I Survey	N/A	N/A	STP D5	Glass	Clear	Window fragment	Architecture	Fixtures	1				Discarded in the field.
Phase I Survey	N/A	N/A	STP D5	Glass	Milk Glass	Unidentified fragment	Indeterminate	Indeterminate	1				Discarded in the field.
Phase I Survey	N/A	N/A	STP D5	Metal	Ferrous	Iron Slag	Miscellaneous	Waste By-Products	1				Discarded in the field.
								Total	*792*				

Table E4
33HK0810 - Prehistoric Artifact Catalog

PROVENIENCE				DESCRIPTION								MEASUREMENTS											MISCELLANEOUS			
Phase of Investigation	Bag #	Object #	Provenience	Material Type	Material Variety	Functional Type	Functional Sub-Type	Projectile Description	Portion	Basal Form	Cortex 1=Y 0=N	Faces Worked	Margins Worked	Maximum Length (mm)	Maximum Width (mm)	Maximum Thickness (mm)	Basal Width (mm)	Basal Height (mm)	Notch Depth (mm)	Shoulder Width (mm)	Blade Length (mm)	Weight (g)	Count	Date Range	Reference(s)	Notes
Phase I Survey	25	238.01	Test Unit 3, Level 3	Lithic	Cedarville / Guelph chert	Tool	Projectile Point	Kirk Corner-Notched	Complete	Slightly rounded corners; straight, beveled base; off-center.	0	2	2	40	31	7	21	9	5	31	31	7.3	1	7500-6900 BC (Early Archaic)	Justice 1987	Slight breakage at the tip. Has the appearance of being weathered - arris lines are nearly indistinguishible, although this is possibly due to the rough texture of the material used. Found in context with late 19th-early 20th-century material; may represent an example of historic-period collecting.
																						Total	*1*			

APPENDIX F
OHIO HISTORIC INVENTORY FORMS

Ohio Historic Preservation Office
800 E. 17th Avenue
Columbus, OH 43211
614/298-2000

OHIO HISTORIC INVENTORY

Draft Form - Not Reviewed by OHPO

Section 106/RPR Review: RPR Number:

1. No. HAN0067808 **NEW**	4. Present Name(s): **Norfolk Southern Railroad Bridge**
2. County: **Hancock**	5. Historic or Other Name(s): **Lake Erie & Western Railway Company Bridge**

6. Specific Address or Location:
Downstream of N. Cory Street

6a. Lot, Section or VMD Number:

7. City or Village:
Findlay

9. U.T.M. Reference
Quadrangle Name: Findlay

Zone: 17 Easting: 276995 Northing: 4546904

10. Classification: Structure

11. On National Register? NO

13. Part of Established Hist. Dist? NO

15. Other Designation (NR or Local)

16. Thematic Associations:
Railroad Lines

17. Date(s) or Period:
1903

17b. Alteration Date(s):

18. Style Class and Design:
None

18a. Style of Addition or Elements(s):

19. Architect or Engineer:

19a. Design Sources:

20. Contractor or Builder:

21. Building Type or Plan:

22. Original Use, if apparent:
Rail Related

23. Present Use:
Rail Related

24. Ownership: Private

25. Owner's Name & Address, if known:
Norfolk Southern Corp.
Three Commercial Place
Norfolk, VA 23510

26. Property Acreage: .05

27. Other Surveys:

28. No. of Stories:

29. Basement?

30. Foundation Material:

31. Wall Construction:

32. Roof Type:

Roof Material:

33. No. of Bays: Side Bays:

34. Exterior Wall Material(s):

35. Plan Shape:

36. Changes associated with 17/17b Dates:
17. Original/Most significant construction

17b.

37. Window Type(s):

38. Building Dimensions:

39. Endangered? NO
By What?

40. Chimney Placement:

41. Distance from & Frontage on Road:
384'

51. Condition of Property:

52. Historic Outbuildings & Dependencies
Structure Type(s):

Date(s):

Associated Activity:

53. Affiliated Inventory Number(s):
Historic (OHI):

Archaeological (OAI):

8. Site Plan (location map) with North Arrow

46. Prepared By: **Maura Johnson**
47. Organization: **Mannik & Smith Group**
48. Date Recorded: **04/05/2021**
49. PIR Reviewer:
50. PIR Review Date:

2. County: **Hancock**
4. Present or Historic Name(s): **Norfolk Southern Railroad Bridge**
6. Specific Address or Location: **Downstream of N. Cory Street**

1. No. HAN0067808

4. Present Name(s): Norfolk Southern Railroad Bridge

2. County Hancock

5. Historic or Other Name(s): Lake Erie & Western Railway Company Bridge

Door Selection:
Door Position:
Orientation:
Symmetry:

Report Associated With Project:

Primary Author	Secondary Author(s)	Year	Title
Johnson, Maura	Chidester, Robert C.	2021	Phase I/II Cultural Resources Survey: Hancock County Flood Risk Reduction Program, Norfolk Southern Railroad Improvements, City of Findlay, Hancock County, Ohio

42. Further Description of Important Interior and Exterior Features

The Norfolk Southern bridge is a through two (or twin) riveted built-up girder structure. Of the more common historic bridge types, the built-up, riveted plate-girders were popular with railroads for watercourse crossings and for grade separation structures where there was a need to achieve maximum vertical clearance between the rail deck and the water feature or the roadway. While the structural integrity is good, the abutments and center support do not appear to be original.

43. History and Significance

The Norfolk Southern bridge over the Blanchard River was built by the Lake Erie & Western (LE&W) Railway Company in 1903. The LE&W was the second railway built through Hancock County, and was instrumental in catalyzing the local economy in the mid-19th century and beyond.

The railway was organized and chartered as the Fremont & Indiana Railroad Company in 1853 but experienced several false starts and mergers, and was further hampered by the financial depression of 1856-57. In 1859 a railroad bridge across the Blanchard River was begun, and by 1860 construction of the line between Findlay and Fostoria was completed. However, the railway was sold in December of that year. The purchasers incorporated as the Fremont, Lima & Union Railroad Company in 1861, which consolidated in 1865 with an Indiana company, and was sold and reorganized in 1871 as the Lake Erie & Pacific Railroad Company.

Considerable effort was made by the new company to extend the route to Lima. The last rail connecting Findlay with Lima was laid in November 1872, and by the spring of 1873 the railway business was booming. In 1877 the company reorganized and in 1879 consolidated with the Indianapolis & Sandusky Railroad Company of Indiana as the Lake Erie & Western Railway Company. The line was completed to Indiana in 1879, and by 1910 connections were extended as far as Chicago and St. Louis.

In 1901, Findlay's local paper reported that "[f]or the acomodation of its fast-growing freight business the Lake Erie and Western will soon replace its bridge across the Blanchard river in this city with a new steel structure of most approved pattern." According to the article, H.E. Manchester, a civil engineer with LE&W of Indianapolis, was in town inspecting the bridge site to prepare plans for a new river crossing. The company had recently purchased a fleet of mammoth freight engines. Known as "battleships," they were heavier than earlier engines, and the existing Findlay bridge was one of only two on the LE&W line that couldn't carry the larger load.

To keep up with its competitors – the Toledo & Ohio Central having recently built a similar replacement bridge in Findlay – the new bridge would require an additional center abutment or stone pier to provide additional support for the heavy trains that would soon come into service. In March 1902 several carloads of sand were delivered for the construction of piers, and in November 2002 the bridge crew was unloading the iron sides for the new bridge, each the length of two freight cars and loaded in pairs. Still in use, the old bridge would be taken down and used elsewhere. In January 1903 the last section of the railroad bridge was placed in position by the workmen, and construction was completed (*Weekly Jeffersonian* 1903:8).

In 1900, the LE&W came under the control of the New York Central Railroad. After operating it as a separate entity for two decades, New York Central sold the LE&W to the Nickel Plate Road in 1922. With that important acquisition, the Nickel Plate became a 1683-mile system serving the industrial, agricultural, and distributing region between the Mississippi River on the west, the Great Lakes on the north, and the Niagara Frontier on the east, with close traffic arrangements and service to the New England States and the Atlantic Seaboard reached through connecting lines. The Findlay segment is now part of the Norfolk Southern system.

44. Description of Environment and Outbuildings (See #52)

The Norfolk Southern Bridge crosses the Blanchard River approximately 425 ft downstream of the Cory Street (vehicular) bridge in downtown Findlay. The south end of the bridge is located in a residential neighborhood; the north end is a former landfill, now redeveloped as green space.

45. Sources of Information

Kimmell, J. A.. *20th Century History of Findlay and Hancock County and Representative Citizens.* Richmond-Arnold, Chicago. 1910.

Warner, Beers & Co. *History of Hancock County, Ohio.* Warner, Beers & Co., Chicago. Reprinted by Unigraphic, Inc., Evansville, IN. 1886 [1978]

Wikepedia. "Lake Erie and Western Railroad." Electronic document available at https://en.wikipedia.org/wiki/Lake_Erie_and_Western_Railroad.

Morning Republican. "New Iron Bridge: L.E. & W. Will Build Stronger Structure for Big Engines." *The Morning Republican* (Findlay), October 30, 1901, p. 5.

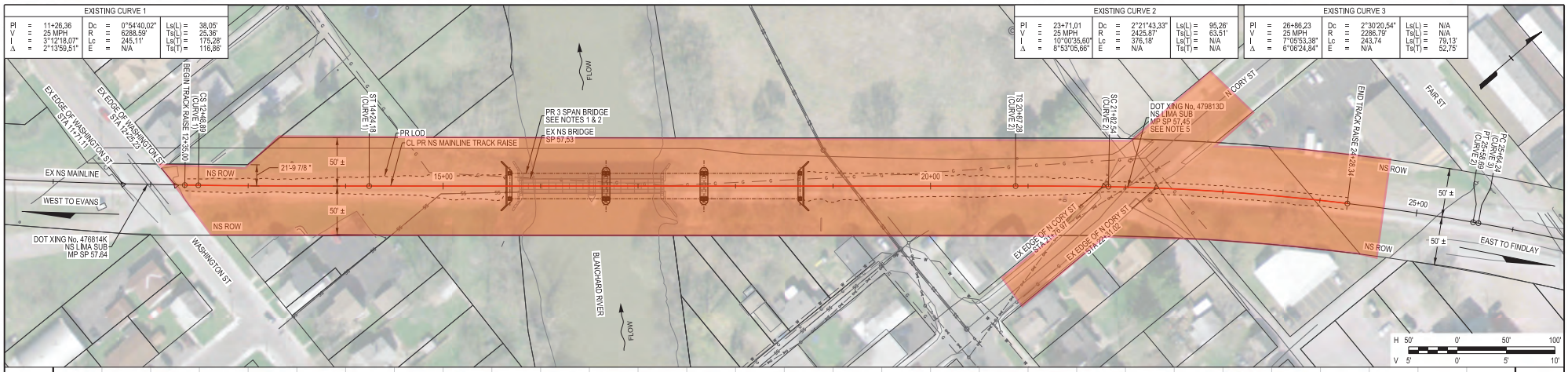
Weekly Jeffersonian. "Bridge Now in Place." *Weekly Jeffersonian* (Findlay), January 8, 1903, p. 8.

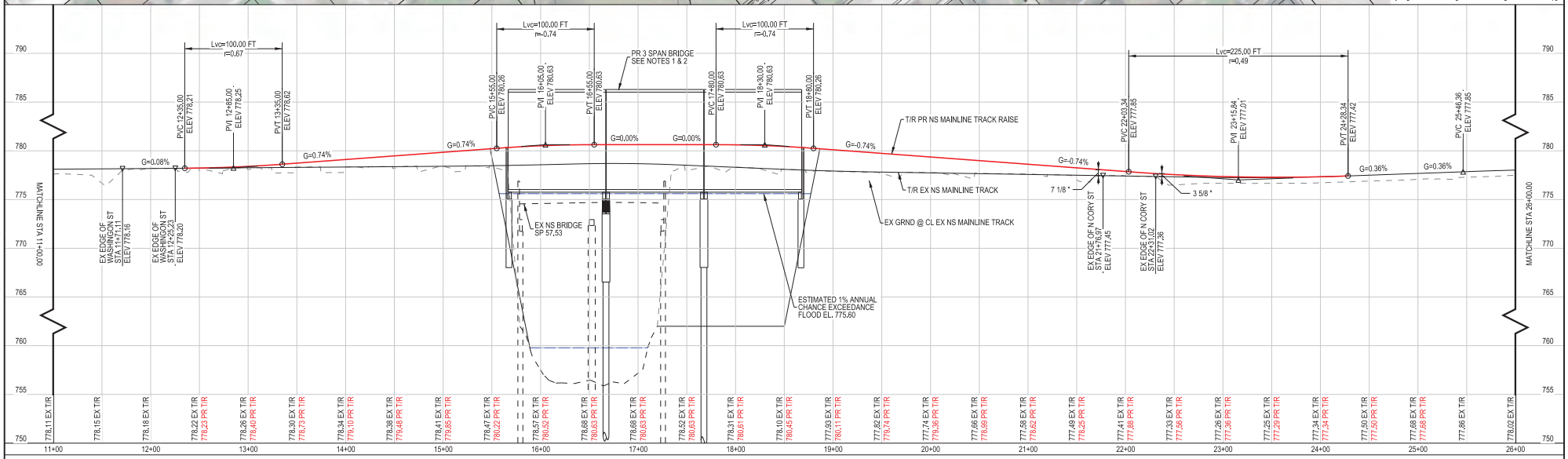
APPENDIX G

OHIO ARCHAEOLOGICAL INVENTORY FORMS

REDACTED

APPENDIX H
30% DESIGN PLANS





NOTES

1. FOR PROPOSED 3 SPAN BRIDGE ALTERNATIVE PLAN AND PROFILE SEE SHEET No. S-301.
2. FOR PROPOSED BRIDGE TYPICAL SECTION SEE SHEET No. S-201.
3. FOR PROJECT CONTROL POINTS SEE SHEET No. CT-102.
4. FOR NS STANDARD CLEARANCE PLAN 7-1 SEE SHEET No. CT-901.
5. FOR NS AT-GRADE CROSSING DETAILS SEE SHEET No. CT-902.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

DRAWN BY : N. R. WIENKE DATE : 2/25/2020
CHECKED BY : DATE :
DESIGN ENGINEER OF RECORD: DATE :

Stantec
Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-6866
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www.stantec.com
License No. F-0672

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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MAUMEE WATERSHED CONSERVANCY DISTRICT
FINDLAY, OH
30% REVIEW
TRACK
PLAN AND PROFILE
3 SPAN ALTERNATIVE

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	CT-301
1			3			TOTAL SHEETS
2			4			5 OF 23