

Archaeological Monitoring:

Subsurface Utility Engineering (SUE) Investigation by T2 Utility Engineers as part of the Elanco Development Program Management (Henry Street) in the City of Indianapolis, Center Township, Marion County, Indiana

Prepared for:

Crawford, Murphy, Tilly, Inc./The City of Indianapolis/ and the Indiana Department of Natural Resources/Division of Historic Preservation and Archaeology

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Management Summary

In response to a request by Crawford Murphy & Tilly, Inc. (CMT), Weintraut & Associates, Inc. (W&A) conducted archaeological monitoring of the Subsurface Utility Engineering (SUE) project by T2 Utility Engineers, as part of the Elanco Development Program Management project, of which a part is the Henry Street Bridge and Road Construction Project in the City of Indianapolis, Center Township, Marion County, Indiana. Five separate work areas were investigated through the use of a vacuum truck to physically verify the locations and depths of multiple subsurface fiber optic utility lines.

Two of the five SUE work areas (Areas 4 and 5) were located west of the West Fork of the White River; these two areas were not archaeologically monitored. The remaining three work areas (Areas 1 to 3), located on the east side of the White River and within the Henry Street corridor, were archaeologically monitored due to the investigations being within what was the Greenlawn Cemetery boundaries. In consultation with the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology (IDNR, DHPA), archaeological monitoring was undertaken to meet requirements of Section 106 of the National Historic Preservation Act (NHPA), as amended, and 36 Code of Federal Regulations (CFR) Part 800 (2016) (Advisory Council on Historic Preservation [ACHP] 1966).

The Area of Potential Effects (APE) for this project is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." (36 § CFR 800.16[d] 2016). The APE for this project is referred to as the "project area" and "survey area" interchangeably throughout the report. The Henry Street project area corridor, extending between Kentucky Avenue and the White River bank, totals approximately 1.01 hectare [ha] (2.5 acres [ac]), of which only a small portion was the subject of the current monitoring project. After delineated areas were drawn to encompass each of the vacuum investigation areas, the practical extents total approximately 0.05 ha (0.12 ac), or approximately 500 square meters.

An archaeological records check of the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) of the IDNR,DHPA, was originally conducted on July 20, 2021. Since then, W&A has revisited the records check multiple times (e.g., August 31, 2021; February 2022; March 2023; and most recently April 8 and 9, 2024). The results of the records check indicated professional

archaeologists have never previously surveyed the project area.

Archaeological monitoring of the vacuuming operations was completed between July 18 and 20, 2023. Twelve vacuum excavated holes were opened to validate the locations of subsurface fiber optic utility lines. During archaeological examination and screening operations, a second metacarpal of a human right hand was recovered from tailings removed from Test Hole 15. After proper notifications to the IDNR, DHPA and the Marion County Coroner's Office, the bone was secured at W&A offices in a fireproof vault before being transferred by a chain of custody document to Indiana University Indianapolis for evaluation.

Furthermore, unprovenanced artifacts were hand collected

during a later visit to the project location. These objects were surrendered to the IDNR,DHPA, who then transferred them into W&A possession. These items, along with other surface finds were cataloged and classified. An archaeological site number, 12MA1108, was obtained from the IDNR,DHPA and assigned to all artifacts located within the Henry Street right-of-way.

Due to its historical background and the presence of significant archaeological deposits in the form of human interments, site 12MA1108 appears to meet the National Register of Historic Places (NRHP) eligibility requirements under, at minimum, Criterion D and is, therefore, recommended as being potentially eligible for listing in the Indiana Register of Historic Sites and Structures (IRHSS) and/or inclusion in the NRHP. Additionally, given the unknown fill depths, in combination with the likelihood of intact human burials within the project area, avoidance or systematic archaeological investigations are highly recommended.

Due to the limited scope of the vacuuming operations, it is currently unknown whether the human hand bone is an isolated element or part of a nearby intact interment. Therefore, special attention should be given to that recovery location for the presence of additional human remains or interments.

Table of Contents

Management Summary	i
List of Figures	V
List of Tables	vi
Introduction	1
Project Description	1
Project Area	6
Scope of Work	ϵ
Environmental Setting	8
Cultural Background	ý
Greenlawn Cemetery Historical Overview	20
Archaeological Records Check	33
Methodology	43
Results of the Reconnaissance	45
12MA1108	49
Conclusions and Recommendations	61
References Cited	63
Attachments	93

List of Figures

Figure 1. Aerial photograph (2022) showing the location of the project corridor and the overall Area of Potential Effects.	2
Figure 2. SUE work areas as denoted by T2 Utility Engineers.	3
Figure 3. Cad drawing showing the SUE test locations in Area 1.	3
Figure 4. Cad drawing showing the SUE test locations in Area 2.	4
Figure 5. Cad drawing showing the SUE test locations in Area 3.	4
Figure 6. Conceptual Henry Street Bridge design.	5
Figure 7. Portion of the USGS 7.5'-series Indianapolis West, Indiana, topographic quadrangle map showing the Henry Street right-of-way and Area of Potential Effects.	7
Figure 8. Survey Map for the City of Indianapolis (Indiana State Board of Accounts 1831:31).	21
Figure 9. The 1831 map of Platted Indianapolis shows the location of the Old Grave Yard and the land that was later platted for Union Cemetery. (Indiana State Board of Accounts 1831:Index)	21
Figure 10. Munsell 1852 Map of the City of Indianapolis showing the Old Burying Ground, New Burying Ground (Outlot 133), and a second New Burying Ground (Peck Addition, Section 134).	22
Figure 11. 1848 Map from the 1848-1856 Plat Book.	23
Figure 12. 1895 White River Interceptor Map that shows the remains that were removed and then reburied (Indiana Historical Society 1895).	25

Figure 13. Deed records of town lots showing the condemned parcel.	26
Figure 14. A 1906 Bass Photo showing the relatively level Greenlawn Cemetery with the Van Camp Packing Company building in the background (W.H. Bass Photo Company 1906).	27
Figure 15. An image of the 1937 dam improvement. The GM plant can be seen in the background center of the image.	29
Figure 16. Plans from the Diamond Chain Collection at the Indiana Historical Society showing the location of tracks and part of the Federal League Ball Park. (Indiana Historical Society)	29
Figure 17. The image shows the encroaching industry on the cemetery with many standing headstones.	30
Figure 18. The 1927 Baist Map Sheet 17 showing the location of the Union Traction Freight House and the THI & E Freight Company.	32
Figure 19. Representative photograph of a [hydro] vacuum truck in operation.	44
Figure 20. Manhole feature partially exposed by hydro vacuuming operations at Citizens Energy Group just to the north of the Henry Street project.	44
Figure 21. Aerial (2022) showing the GPS plotted locations of the SUE test holes in Areas 1 and 2.	46
Figure 22. Aerial (2022) showing the two investigation holes along Kentucky Avenue in Area 3.	48
Figure 23. Aerial (2022) showing the site boundaries of 12MA1108.	50
Figure 24. Portion of the USGS 7.5'-series Indianapolis West, Indiana, topographic quadrangle map showing the Henry Street right-of-way and 12MA1108 site boundary.	51

Figure 25. Photographic plate of brick, clinker and coal fragments, and a terra cotta sherd (2nd row, second from left, lower).	53
Figure 26. Plate of assorted clinkers, stones, and a metal nail fragment.	53
Figure 27. Ceramic sherds recovered from the exposed ground surface.	54
Figure 28. Glass artifacts recovered from the site.	54
Figure 29. Porcelain vessel showing the backmark.	5.5
Figure 30. Shaped sandstone gravestone fragment.	57
Figure 31. Granite paver fragment with saw-cutting blade remnant on face.	58
Figure 32. Browning and Son Apothecaries Hall medicine bottle.	59
List of Tables	
Table 1. Archaeological Sites and Accidental Discoveries within the Project Bounds and within a one-mile radius of the Project Area.	34
Table 2. Archaeological Investigations located in and within 1.6 km (1 mi) of the Investigation Area.	37
Table 3. Summary of Test Holes opened by T2 Utility Engineers in Areas 1 and 2.	47

Introduction

Weintraut & Associates, Inc. (W&A), under contract with Crawford Murphy & Tilly, Inc. (CMT), has conducted an archaeological records check and Phase Ia field reconnaissance for the Subsurface Utility Engineering (SUE) investigation by T2 Utility Engineers as part of the Elanco Development Program Management Project (Henry Street) in the City of Indianapolis, Center Township, Marion County, Indiana (Figure 1). Three of the five work areas (Figure 2) (Areas 1 [Figure 3, page 1], 2 [Figure 4, page 2], and 3 [Figure 5, page 3]), located on the east side of the White River within the proposed Henry Street corridor, were archaeologically monitored due to the investigations being within what was once the Greenlawn Cemetery boundaries. It was anticipated that there remained the potential for human interments to remain within the proposed Henry Street corridor. The remaining two SUE work areas (Areas 4 and 5 [see Figure 2]), located west of the White River, were not archaeologically monitored.

For the current project, Craig Arnold, M.A., served as Principal Investigator, report author, and also supervised the archaeological records check and field reconnaissance. Aaron Kidwell, B.A., created geographic information system (GIS) graphics. Elizabeth Warn, M.F.A., completed report layout. Jade Coulter, B.A., provided tech review, and Linda Weintraut, Ph.D., provided final edits and review.

Project Description

As part of infrastructure improvements on the west side of the White River in downtown Indianapolis, the Henry Street Bridge is being constructed to enhance connectivity, accessibility, and economic growth in the area. The City of Indianapolis has two water crossings over the White River near the development of the former GM Stamping plant site: Washington Street to the north and Oliver Street to the south. The purpose of the proposed bridge project is to provide vehicular and pedestrian connectivity between facilities on each side of the White River and to reduce the existing congestion on adjacent roadways (Oliver and Washington Streets). The bridge is needed to address the existing and proposed congestion due to development and to provide improved access to area facilities.

The project is expected to involve a five-span bridge, with the two end spans measuring 130.75 feet (ft) in length and three interior spans measuring 140.7 ft each. The overall width of the bridge will be 65 ft, which includes a roadway of 26 ft, a multi-use trail of 31 ft, and a sidewalk of 6 ft. The bridge structure begins at Station 43+60.81 and ends at Station 50+97.63, with the proposed finished grade near elevation 700 ft above mean sea level (AMSL). In addition to the basic construction of the bridge, the structure will also feature decorative

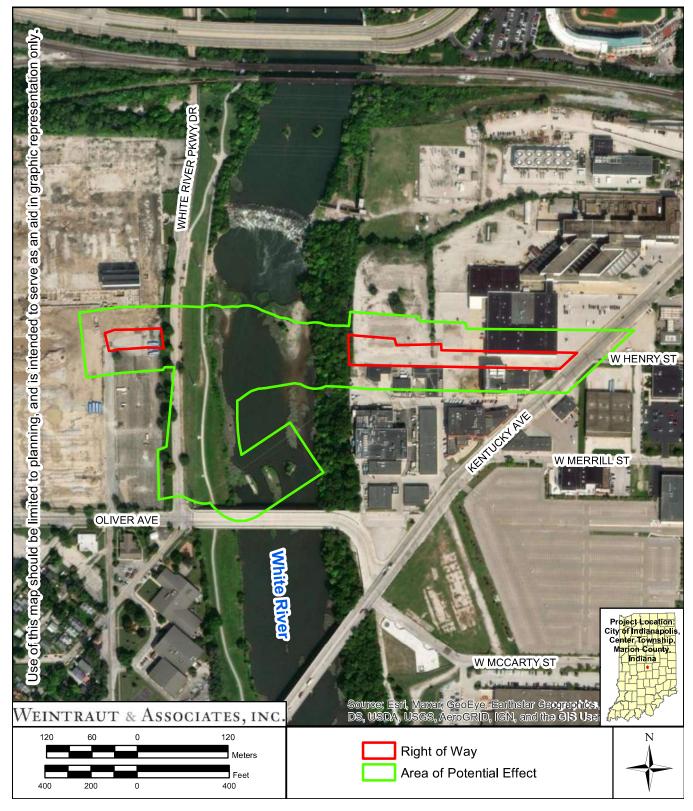


FIGURE 1. AERIAL PHOTOGRAPH (2022) SHOWING THE LOCATION OF THE PROJECT CORRIDOR AND THE OVERALL AREA OF POTENTIAL EFFECTS.



FIGURE 2. SUE WORK AREAS AS DENOTED BY T2 UTILITY ENGINEERS.

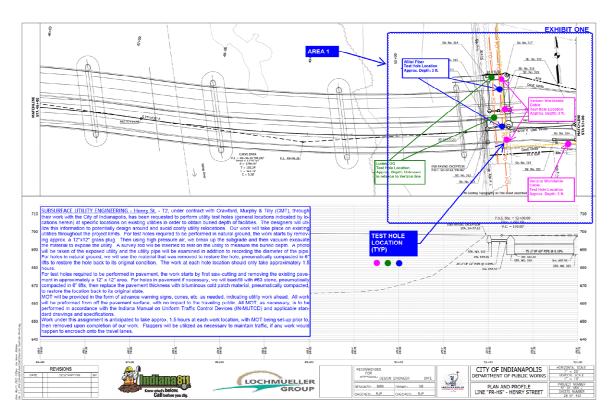


FIGURE 3. CAD DRAWING SHOWING THE SUETEST LOCATIONS IN AREA I.

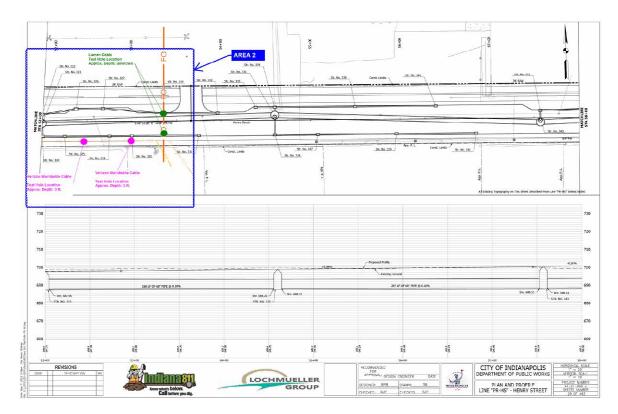


FIGURE 4. CAD DRAWING SHOWING THE SUETEST LOCATIONS IN AREA 2.

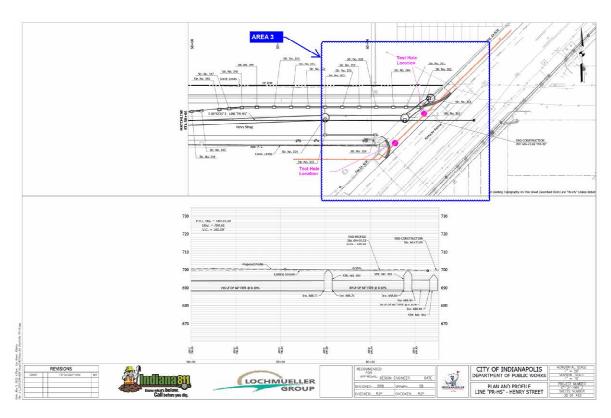


FIGURE 5. CAD DRAWING SHOWING THE SUETEST LOCATIONS IN AREA 3.

architectural rings that follow the design concept known as the Circle City Gateway. The concept is based on the idea of creating a circular gateway that welcomes visitors to the city and highlights the city's unique cultural and architectural features. A conceptual representation of the bridge's proposed design can be found in Figure 6.

The new bridge will be constructed over a section of the White River and will connect to a new roadway, constructed through existing industrial developments. On the west end of the project area the bridge will be constructed from White River Parkway Drive West, which is a portion of the levee system, to the no longer

extant Diamond Chain property on the east end. Currently, End Bent 1 will be constructed on the west bank levee of the White River, and End Bent 6 will be constructed on the City's right-of-way (R/W) on the east bank of the river. Existing ground cover varies, with grass sloping down to the White River Trail along the western edge of the river, water in the river limits, and a steep bank with a flat area at the bottom on the east bank before a gravel parking area on the terrace east of the river. Sand islands in the river are typically exposed during the shallow water period.

Approximately 500-ft south of the proposed bridge, there are abandoned foundations from



FIGURE 6. CONCEPTUAL HENRY STREET BRIDGE DESIGN.

an old bridge structure that will be removed during construction of the proposed bridge. In addition, the Citizen's White River Tunnel crosses within the project limits, below the proposed bridge between Interior Bents 4 and 5. The top of the tunnel is estimated to be at elevation 487.0 ft AMSL, approximately 170 feet below the riverbed elevation, and therefore, is not expected to be encountered or disturbed due to the proposed construction.

The project undertaking is located east of the West Fork of the White River and north of Oliver Avenue within the City of Indianapolis, Marion County, Indiana. The project area is more specifically located in the N ½ of the SW ¼ of the SE ¼ of the NW ¼; and the N ½ of the SE ¼ of the NW ¼ of Section 11 (anchored NW corner), Township 15 North, Range 3 East of the United States Geological Survey (USGS) 7.5-Minute series Indianapolis West, Indiana, topographic quadrangle map (Figure 7).

Project Area

The Area of Potential Effects (APE) is defined as, the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist" (36 Code of Federal Regulations [CFR] 800.16[d] 2016). For archaeological resources, the APE is the construction footprint. The APE for this project is referred to as the "project area" and

"survey area" interchangeably throughout the report.

The Henry Street project area corridor, extending between Kentucky Avenue and the White River bank, totals approximately 1.01 hectare [ha] (2.5 acres [ac]), of which only a small portion was the subject of the current monitoring project. After delineated areas were drawn to encompass each vacuum excavation area the practical investigation extents total approximately 0.05 ha (0.12 ac), or approximately 500 square meters.

Scope of Work

The purpose of this study was to monitor subsurface work for the occurrence of any archaeological resources that may be present within the survey area, and if extant, to make a preliminary assessment of their significance in meeting the criteria for listing in the Indiana Register of Historic Sites and Structures (IRHSS) and/or the National Register of Historic Places (NRHP). Archaeological sites and historic burial sites are protected under the Indiana Historic Preservation Act (Indiana Code [IC] 14-21-1 and 312 Indiana Administrative Code [IAC] 21 and 22); and Section 106 of the National Historic Preservation Act (NHPA) (Advisory Council on Historic Preservation [ACHP] 1966), as amended, and 36 Code of Federal Regulations (CFR) Part 800 (2016).

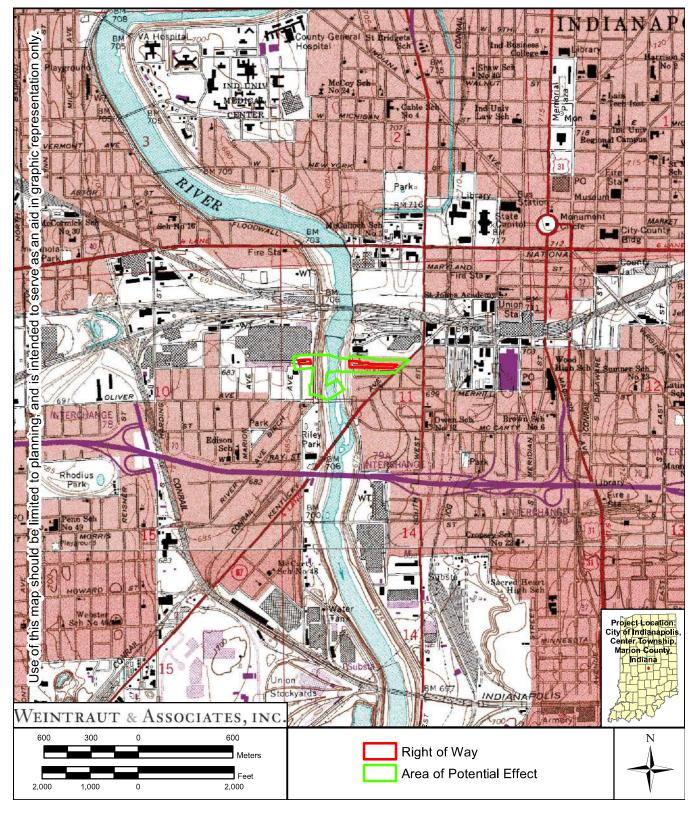


FIGURE 7. PORTION OF THE USGS 7.5'-SERIES INDIANAPOLIS WEST, INDIANA, TOPOGRAPHIC QUADRANGLE MAP SHOWING THE HENRY STREET RIGHT-OF-WAY AND AREA OF POTENTIAL EFFECTS.

Environmental Setting

The project is located in the Tipton Till Plain Section of the Central Till Plain Natural Region (Indiana Geographic Information Office [IGIO] 2024). The location of the survey area is also described as being within the Newcastle Till Plains and Drainageways (IGIO 2024). In this region, the landscape was formed by the advance and subsequent melting of "narrow tongues" of glacial ice during the Wisconsinan glaciation (Gray 2000:6). The plain is generally flat with the exception of the valleys formed by moderately sized streams draining the area in a south to southwesterly direction to either the Wabash River or the West Fork of the White River (Gray 2000:6). The Tipton Till Plain Section is characterized by clayey Wisconsinan till formerly covered by an extensive beechmaple-oak forest (Homoya et al. 1985:255). Although now heavily altered, the terrace and low bluffs adjacent to the White River within the survey area would have been attractive locations for Precontact habitation.

The bedrock member consists of dolomite and limestone of the Muscatatuck Group formed during the Devonian period (IGIO 2024) mantled by a considerable depth of glacial till and glacial outwash that form the parent material of the soils in the project area (United States Department of Agriculture [USDA] 1991:56). No outcrops of chert or Precontact quarries have been documented in the region

of the project area (Cantin 2008:9) but Fall Creek chert has been documented within gravel deposits, and a possible source of Jeffersonville chert has been identified in adjacent Hamilton County (McCord 2010:7).

Soils in the survey area belong to the Sawmill-Lawson-Genesee and the Westland-Ockley-Fox associations (IGIO 2024). The Sawmill-Lawson-Genesee, located at the extreme west end of the project area where the edge of the T1 terrace turns downslope toward the White River, formed on the floodplains of large creeks such as the White River. These alluvial soils were formed following the retreat of the Wisconsinan glaciation and have sufficient depth and potential for stratified alluvium (Soil Survey Staff [SSS] 2024; USDA 1991:5,12), and therefore, have the potential to contain buried archaeological sites.

The Westland-Ockley-Fox association consists of very deep, very poorly drained to well-drained soils that are very deep to calcareous, stratified gravelly and sandy outwash. These soils are formed in loamy material that can be capped with loess or silty material. They are in depressions and on flats on outwash plains, stream terraces, valley trains, glacial drainage channels and moraines, and less commonly on kame moraines and eskers. However, the specific soil type present within the project area

is Udorthents (Ua), an urban landform resulting from manipulated cut and filled soils (IGIO 2024; SSS 2024).

Based on the field survey, the site topography generally slopes steeply from the developed sections on either side of the river to the riverbed. The existing ground surface elevation ranges from approximately 657 ft AMSL in the middle of the river to approximately 698 ft AMSL on the east and west sides of the river.

Cultural Background

At the time of this report, over 1,100 archaeological sites have been registered within Marion County (IDNR,DHPA 2024), with over 90 in Center Township. Sites present in the township span the Early Archaic period to the Historical occupations of the region.

The Paleoindian period (prior to 7500 BC) was a time when the climate and environment were undergoing dynamic changes as the Pleistocene Wisconsinan glaciations were ending. Early Paleoindian hunter-gatherers entered Indiana as the glaciers retreated northward, a period associated with the well-known fluted Clovis point. Most Paleoindian sites in the region are isolated points or small lithic scatters discovered on the surface or in the plow zone having little contextual information, and few Early Paleoindian habitation sites have been identified. One exception is the Alton site in southern Indiana, a multicomponent site on the Ohio River that has yielded numerous artifacts associated with the period (Kellar 1958:32; Smith 1984:35-38; Tomak 1980a:84-90).

Clovis and other fluted points have been recorded across Indiana (Tankersley et al. 1990) and studies in the raw material procurement patterns indicate that Paleoindian populations practiced "unrestricted lithic resource procurement and exploitation and highly mobile foraging" (Tankersley and Munson 1987:8). Changes in projectile point forms and more common use of local raw materials during the Late Paleoindian period reflect decreased mobility and increased territoriality (Tankersley et al. 1990:310). There are no recorded Paleoindian sites in Center Township, but four others have been documented in Marion County (IDNR,DHPA 2024).

The Early Archaic period (ca. 8000+ - 6000 BC) is characterized by a greater number of sites and greater diversity in cultural traditions in Indiana. The period is also well known for the proliferation of projectile point types (Kellar 1983:27). A recent study of associated radiocarbon dates refined the projectile point sequence relevant to southern and central

Indiana; with Early Side-Notched points associated with the beginning of the Early Archaic Period, followed by Thebes points, then Kirk points with some overlap, and finally Kirk points are replaced by Stilwell and Bifurcate points at the very end of the period (Stafford and Cantin 2009). Other temporally diagnostic biface types associated with the Early Archaic include the variety of forms included in the Rice Lobed Cluster and LeCroy Cluster (Justice 1987:85-97).

Sites in the Ohio River region of Indiana such as the Jerger Site (Tomak 1979), Swan's Landing, (Tomak 1994), and the Farnsley site (Stafford and Cantin 2009) indicate that by the Early Archaic, numerous large base camps had been established in major river valleys, and that they were used in combination with less intensively occupied camps to exploit resources over large territories. Accordingly, large sites from this period are rare in central Indiana but, based on projectile points included in an inventory of the White River resource system, within Marion and Hamilton Counties the Early Archaic is well represented in the region (Beard 1983:36-37). This is bolstered by a large number of Early Archaic sites in Marion County (n=38). In Center Township, known habitation begins in the Early Archaic period with two archaeological sites associated with this period (IDNR,DHPA 2024).

The Middle Archaic period (ca. 6000 - 3500 BC), is a transitional period between the highly mobile Early Archaic and the semi-sedentary Late Archaic populations. A significant increase in the frequency and distribution of ground stone artifacts, some of which are thought to be indicative of plant food processing technologies, characterizes this period. Kirk, Thebes, Rice Lobed, and LeCroy cluster point types are replaced by Raddatz Side Notched and Stanly Stemmed in Indiana (Justice 1987:67-68, 97).

Much of what is known of the Middle Archaic period in the state comes from sites excavated in southern Indiana and Illinois. Excavations conducted as part of the Caesars Archaeology Project in Harrison County and at the Bluegrass Site in Warrick County (Stafford 1997), documented Middle Archaic (6,270 to 7,220 radiocarbon years before present [RCYBP]) occupations used to define the Knob Creek Complex and associated Knob Creek Stemmed projectile points (Stafford and Cantin 2009:3). The Bluegrass Site is a late Middle Archaic base camp occupation with a mortuary component located in an interior upland drainage basin of southwestern Indiana, with rock-filled pits and a well-preserved faunal assemblage (Stafford et al. 2000). Comparisons with faunal assemblages from base camps situated on the terraces or floodplain levees of major rivers indicate that white-tailed deer and hickory nuts were the basis for the logistical foraging strategy in upland settings, rather than aquatic resources,

such as those found at Koster (Brown and Vierra 1983:188-189; Stafford et al. 2000:324-329). At the Bluegrass Site, Koster, and Modoc, large quantities of fire-altered rock and hickory nut remains are interpreted as evidence that food processing for the extraction of nutmeats and oil were an important subsistence activity towards the end of the Middle Archaic in upland and riverine environments (Stafford 1994:221; Stafford et al. 2000:332-333).

As in most counties in Indiana, there are fewer Middle Archaic components compared with the number associated with the Early and Late Archaic periods in Marion County. Middle Archaic components are limited to 12 components documented outside of Center Township (IDNR,DHPA 2024).

The Late Archaic period (ca. 4000 - 1000 BC) is better represented in Indiana with numerous examples from all regions of the state. During the Late Archaic period, site size continued to increase and site locations were situated to exploit seasonal resources. Subsistence patterns shifted to include the exploitation of starchy plants as well as hunting, and tool assemblages became more diverse, adding axes and adzes used for woodworking; and mortars/pestles used to grind plant foods (Jones and Johnson 2016). In an analysis of sites associated with the Late Archaic period in central Indiana, Brinker (1984:15, Table 2) found that the majority were located on floodplain and terrace settings,

with upland landforms being less frequently inhabited. In southern and central Indiana, Matanzas projectile points and bone pins are associated with the French Lick phase (Munson and Cook 1980). Other temporally diagnostic biface types associated with the Late Archaic period include Lamoka cluster points (Justice 1987:127-130) and the Brewerton Eared forms included in the Matanzas Cluster (Justice 1987:119-124).

In their study of projectile point types and associated radiocarbon dates, Stafford and Cantin (2009:305) found Matanzas style projectile points to be associated with Early French Lick assemblages with dates ranging from 5,300 - 4,500 RCYBP. They propose an Early French Lick phase associated with "the appearance of rock-filled pits and shell middens in southern Indiana" (Stafford and Cantin 2009:305). Stafford and Cantin (2009:288, 305-306) interpret variation in the geographic distribution of projectile points, associated with the period after 4,500 RCYBP, as evidence for a late French Lick phase spanning a period of 4,500 to 3,600 RCYBP, possibly distinguishing the Ohio River Valley from the "hill country," a region defined as the unglaciated region slightly south of the current survey area.

"Late Archaic stemmed types increased in frequency after about 4,500 RCYBP...By 4,000 RCYBP, Late Archaic stemmed points may have been exclusively represented in the Ohio River Valley. In the hill country to the north, Karnak (both stemmed and unstemmed) varieties appear to dominate some assemblages postdating to 4,500 RCYBP... This geographic division between McWhinney in the Ohio River Valley and Karnak in the hill country may represent two separate style zones (or perhaps separate phases) (Stafford and Cantin 2009:305-306)."

In his inventory of projectile points in Hamilton and Marion Counties, Beard documented Brewerton types and Scherschel projectile points, among others (Beard 1983:37). Scherschel points present in Marion County may represent a cultural connection with the region of Monroe, Lawrence, and Jackson Counties where these points, along with Modesto types, are characteristic of the Scherschel phase (Beard 1983:37; Tomak 1980b, 1983). This is, perhaps, implied by Beard in his assertion that Scherschel projectile points are similar (i.e., morphological correlative) to the aforementioned Karnak stemmed type (Beard 1983:37; Justice 1987:139). At site 12MA228, a Crooked Creek type projectile point was recorded, a correlate of the Buck Creek Barbed, associated with the Late Archaic to Early Woodland period (INDR/DHPA 2024; Justice 1987:183-184).

Settlement patterns changed to include a broader range of environmental settings during the Late Archaic. Perhaps due to changes in population or environment, settlement was not as restricted to the major river valleys as it appears to have been during the Middle Archaic period, and average site sizes increase. Upland campsites and rock overhangs became more common (Sieber et al. 1989:35-39), and sites with denser remains occur in smaller river valleys and other secondary resource zones (Munson 1986). In an analysis of Late Archaic sites in central Indiana, Brinker (1984:15, Table 2) found that the majority were located on floodplain and terrace settings, and it was within these environments that the cultivation of native plants, such as squash, gourd, and perhaps sunflower, is first recognized archaeologically (Yarnell 1988), and the exploitation of other wild food resources intensified. Components associated with the Late Archaic period return to similar numbers of sites recorded for the Early Archaic period for Center Township (n=2) and greater Marion County (n=62)(IDNR,DHPA 2024). This is consistent with the aforementioned regional inventory, in which the abundance of Late Archaic diagnostic projectile points "... indicates intense occupation during this period" (Beard 1983:37).

The Terminal Archaic Riverton Culture (ca.1500 - 700 BC) was first defined by Winters (1963) as being characterized by camps and settlements with storage pits located on low bluffs above the terraces of large rivers in the central and lower Wabash River Valley. The

Riverton Culture was first identified in the central to lower Wabash Valley but has since been expanded to other parts of southern Indiana (Anslinger 1986:35; Tomak 1970, 1983, 1984). The sites in the lower Wabash River Valley are characterized by several diagnostic projectile point types and often accompanied by the presence of shell middens (Winters 1967). Tomak (1983, 1984) indicates that Riverton Culture sites are numerous throughout both the West Fork and East Fork of the White River (Anslinger 1986). Two Riverton components have been recorded in Center Township, consisting of a lithic scatter and an isolated find (IDNR,DHPA 2024). As a result, little is known of Riverton habitation in the area.

The Early Woodland Period (1000 BC -200 BC) is characterized by an increase in ceremonial and interregional exchange, and mortuary rituals including burial mounds and grave goods. In addition, the period witnessed the appearance of cord-marked or fabricimpressed pottery, earthworks, and the earliest evidence for horticulture (Willey 1966:267). Lithic technologies are nearly identical to those of the Late Archaic Period and are similarly characterized by a wide variety of stemmed projectile points. Early Woodland period stemmed cluster points (Justice 1987:184) include Kramer (Munson 1966, 1971), Cresap Stemmed (Converse 1973, Dragoo 1963), and Robbins points (Dragoo 1963, Perino 1971).

The Early Woodland period is not as well understood in central Indiana as it is in other regions the state, such as in southeast Indiana, where the C. L. Lewis Stone Mound in Shelby County (Kellar 1960) and the Nowlin Mound in Dearborn County (Black 1936) are typical of what have been traditionally identified as Early Woodland burial mounds associated with the Adena culture. No sites associated with the Early Woodland period have been documented in Center Township, and associations at sites in other parts of Marion County are tentative (IDNR,DHPA 2024).

Distinguished from the Early Woodland, the Middle Woodland (200 BC - AD 400) is characterized by a more elaborate burial mound and earthwork complex, traditionally termed "Hopewell." In addition, an elaboration of a trade network, known from earlier periods is indicated by a widespread distribution of "exotic" materials from western, northern, and southern coastal regions of North America. This trade network has been explained as the "Hopewell Interaction Sphere" by Caldwell (1964) and is more well-known in Ohio and Illinois. Just as burial mounds have been traditionally associated with Adena, enclosuretype earthworks have been traditionally associated with the early Middle Woodland period and the Hopewell culture. In east-central Indiana, these traditional cultural and temporal associations have been argued to represent a single ceremonial system. Within this system,

variation in artifact assemblages and earthwork construction are attributed mainly to subgroup representation, possibly on the level of moieties subdivided into clans or lineages engaging in separate ceremonial activities at different types of sites (McCord and Cochran 2008:356-359).

Lithic technology of the Middle Woodland Period differs from that of the Early Woodland Period mainly in the appearance of stone bladelet and core tradition (Pi-Sunyer et al. 1965). Projectile points of the period include a variety of stemmed and notched types such as Snyders (Justice 1987). Settlement patterns may have included villages, but certainly semipermanent residential hamlets, camps, and special purpose sites.

Little is known of the Middle Woodland Period in Marion County, with one Hopewell component recorded: site 12MA254. This site is located in Washington Township and was defined by an isolated find of a Snyders projectile point (IDNR,DHPA 2024). There are no Middle Woodland sites recorded in Center Township, and only six with Middle Woodland designated components in the county (IDNR,DHPA 2024).

The Allison-Lamotte Culture was originally defined for the Middle Woodland period in the central and lower Wabash River Valley (Kellar 1979; Winters 1963). Allison-Lamotte sites are characterized by central mounds surrounded by

villages located on the terraces of large rivers (Winters 1963). More recently, Allison-Lamotte has been redefined geographically, extending into central Indiana; and chronologically, spanning the Middle to Late Woodland periods (Barth 1991; Redmond and McCullough 2000).

The Late Woodland period (500 - 950 AD) is characterized by the absence of traits from the preceding period. By the Late Woodland, trade networks and earthworks construction appear to have greatly diminished in scale. Horticultural maize production continued to increase, and settlement patterns appear to have been adapted to better optimize yields by being strategically located near fields. Sites become semipermanent by the end of the Late Woodland and are commonly situated on terraces, located atop bluffs, and within the major river valleys. The Late Woodland is not well represented in Center Township, but 21 components have been recorded elsewhere in Marion County, including components of large multicomponent villages, and smaller sites related to the period by the presence of small triangular projectile points (IDNR, DHPA 2024).

The Albee Culture was originally defined for the period of 800 - 1000 AD in the central and lower Wabash River Valley based on the Chenowith site, Albee Mound (MacLean 1931) and Catlin sites (Winters 1963). Albee sites are characterized by villages and camps with Mounds Stemless projectile points (Winters 1963). Although originally associated with the Wabash Valley in western Indiana and Illinois, the distribution of Albee sites has been enlarged to include east central Indiana based on the Hesher Site in Henry County (Cochran et al. 1988). The cultural chronology of the Albee Phase has also been refined, with recent studies finding radiocarbon dates in the range of AD 800 to 1200 (calibrated AD 800 to 1300), spanning the end of the Late Woodland and extending into the Late Prehistoric Period (McCord and Cochran 2003a:35-36).

The Late Prehistoric Period (AD 950 - 1650) witnessed a widespread intensification of maize agriculture and other tropical cultigens (beans and squash), although wild game, including deer, remained an important component. In the Ohio Valley, two well-known Late Prehistoric traditions developed: Mississippian in the Lower Ohio Valley and Fort Ancient in the Middle Ohio Valley. However, in central Indiana, the Oliver Phase has been identified, most notably in the Indianapolis area along the White River, northeast of the current project area.

The Oliver phase was first identified in Marion and Hamilton Counties along the White River (Dorwin 1971; Griffin 1943). Most large Oliver phase sites are located in these two counties, including the Oliver site (12MA1) in Washington Township (Griffin 1935, 1943; Helmen 1950, 1953; Householder 1945). The Oliver phase is characterized as "a sedentary,

village-dwelling society that settled along the drainages of the east and west forks of the White River between about AD 1200 and 1450" (McCullough et al. 2004:28).

The Strawtown enclosure, located in Hamilton County is possibly the earliest Oliver site in Indiana, characterized as "foundational in the origins of the Oliver phase," and as a place "where both groups (Fort Ancient and Great Lakes Basin) were interacting by AD 1200" (Graham and McCullough 2010:21). The Strawtown enclosure is an earthen embanked, ditched, and palisaded village (Graham and McCullough 2010). The exterior ditch parallels an embankment with a palisade protecting the interior. The interior consists of activity areas that surround a nearly empty central plaza; and a habitation area that exhibits hearths and storage pits filled with refuse, midden areas, postmolds, postholes, and human interments (Arnold et al. 2007; White et al. 2002).

Cultural exchange is evident at Strawtown, with pottery from three cultural groups: Anderson/Madisonville phase Fort Ancient, Western Basin Tradition, and Oneota-like Taylor Village recovered from midden contexts within the Strawtown enclosure (White et al. 2002, 2003). The ceramic assemblages from Oliver sites are most similar to those of the Anderson and Madisonville phases of Middle Fort Ancient (McCord 2010:75-76), as are the radiocarbon dates, features, and site structure

of the Strawtown enclosure (AD 1200-1400) (Graham and McCullough 2010:20). The newly defined Castor phase (AD 1020-1400) has re-defined the Great Lakes Basin Tradition Bowen ceramics as pre-dating the Oliver phase at sites such the Castor Farm site, only a couple hundred yards north of the Strawtown enclosure (McCord and Cochran 2003b; McCullough 2005; McCullough et al. 2004:188-196). Castor is also found in association with Taylor Village at Strawtown in deposits that post-date Oliver (Graham and McCullough 2010:21, 23). Taylor Village and its shell-tempered pottery are associated with the Oneota (Griffin 1943; McCullough 2000) and have most often been encountered in deposits post-dating Oliver at the Strawtown enclosure (White et al. 2002, 2003).

There are no Oliver sites on record within Center Township, and there is only one site listed as Fort Ancient, the Indianapolis Ball Park Site (IDNR,DHPA 2024). The Indianapolis Ball Park Site (12MA3) is described as one of the large village sites containing Woodland and Fort Ancient pottery located on the White River, i.e., Oliver (IDNR,DHPA 2024). It is likely that a dynamic of cultural interaction similar to what was documented at Strawtown existed at 12MA3.

The Historical Period (beginning AD 1492) encompasses the period beginning with the well-documented arrival of Christopher

Columbus in the Western Hemisphere. The arrival of Europeans on a large scale into the Western Hemisphere had a profound impact on indigenous populations. The identity of the first people in the region of the project area to be influenced by Europeans is unknown. Radiocarbon dates associated with the Oliver phase date from the eleventh to mid-fifteenth centuries, well before indirect influence would have been possible, but little is known of many of the villages that once dotted the terraces and floodplains of the White River in Marion County. The geographic range of Fisher and Huber groups and Oneota-related expressions extends into central Indiana, including the Crouch site (McCullough and Wright 1997), Taylor Village (Arnold et al. 2007:24; McCord and Cochran 2003b:32-34), and the Strawtown Enclosure (Arnold et al. 2007; Graham and McCullough 2010; McCullough 2008; McCullough et al. 2004; White et al. 2003). If Oneota-related groups (or other groups) were present south of Hamilton County in villages on the White River, habitation may have persisted well into the Historic Period, similar to northern Illinois, where historical trade goods and metal tools have been documented archaeologically at Huber sites, indicating that at least indirect trade was occurring in the region by the late 1600s (Schurr 2003:12).

In the early eighteenth century, Native Americans, including the Miami, Potawatomi, and Delaware, were the largest groups inhabiting the modern Indiana region. The Delaware built villages along the White River and settled in much of what is now central Indiana, including Hamilton and Marion Counties (Bodenhamer et al. 1994:1042; Parker 1997:368). There is also evidence that during the early-nineteenth century, at least one Nanticoke village was located along the White River (Bodenhamer et al. 1994:1042). After the Treaty of Greenville in 1795, Chief Little Turtle claimed much of central Indiana on behalf of the Miami (Bodenhamer et al. 1994:1042).

Indiana territorial governor William Henry Harrison, who would later become the ninth president of the United States, negotiated a series of forceful land cessions with Native Americans in the territory beginning in 1800. Two years after Indiana became a state (1816), both the Delaware and the Miami tribes relinquished claims in central Indiana as part of the New Purchase Treaty, also known as the St. Mary's Treaty, of 1818 (Howe 1908:304; Indiana Historical Bureau [IHB] 1999:3,9; Madison 1986:39). A portion of the land which was relinquished by the Delaware and Miami tribes later became Marion County. William Conner, who was noted by at least one historian to be the only white man to permanently settle in the area prior to 1818, assisted in brokering the agreements (Larson and Vanderstel 1984:311; Shirts 1901:7-8).

Not long after the St. Mary's Treaty, the first Euro-American settlers began to arrive in the area that would become Indianapolis, John McCormick, and George Pogue among them. These earliest settlers were squatters along the White River and Fall Creek (Bodenhamer et al. 1994:52) who likely took advantage of clearings created by Native Americans. Evidence that the banks of the White River in the area of Indianapolis had been inhabited by Native Americans not long before is found in an account of an early traveler of the region "... who ascended the river a few years prior to the settlement [and] saw the banks frequently dotted with wigwams and the stream enlivened by Indian canoes..." (Sulgrove 1884:21).

In 1820, shortly after federal surveys were completed on the area of the St. Mary's Treaty, the state legislature appointed a committee to select a more central site for a permanent state capital (Howe 1908:315). This committee met in Hamilton County at William Conner's house, one of the earliest constructed in the region. The committee chose the location of the small settlement near the White River, and in January 1821, the General Assembly approved the location and named the new capital "Indianapolis" (Larson and Vanderstel 1984:313-314; Sulgrove 1884:19). Marion County was founded the same year and eventually divided into nine townships with Center Township serving as the home of Indianapolis (Bodenhamer et al. 1994:394, 963-964).

In the short span of time between 1821 and 1847, Indianapolis transformed from a small pioneer village into a bustling state capital with the dawn of the railroad era. Before the railroad, overland transportation was paramount to the settlement and economic development of Indianapolis, owing to naturally poor conditions for navigating the White River and a failed effort to build a canal between the White River and the Wabash River (Bodenhamer et al. 1994:395). The earliest road from points east to the vicinity of Indianapolis was known as Whetzel's Trace, connecting Laurel (near Brookville) and Waverly, a small settlement on the White River south of the survey area (Wilson 1919:399). Jacob Whetzel obtained permission to cut the trace from Chief Anderson of the Delaware Tribe in 1818 and completed the route soon after, providing access to the area by the earliest white settlers (Wilson 1919:399-400). Later road projects were larger in scope. The Michigan Road, completed in 1826, provided a north-south corridor connecting the Ohio River and Great Lakes to central Indiana (Bodenhamer et al. 1994:1002). The National Road was completed through Indiana by 1830, creating an east-west corridor connecting the Potomac River to the Ohio River and points west (Bodenhamer et al. 1994:1039). The arrival of railroads in the 1840s and 1850s resulted in rapid growth of both population and economic enterprise (Bodenhamer et al. 1994:25, 55, 63, 133, 244, 1160-1164).

By the mid-nineteenth century, Indianapolis had transitioned from a "capital in the wilderness" to a large urban center with a thriving economy (Howe 1908:338). The construction of the Central Canal had brought Irish immigrants to the city, and once travel by railroad was possible, the number of residents tripled (2,692 to 8,091) between 1840 and 1850, and then more than doubled (8,091 to 18,611) between 1850 and 1860 (Bodenhamer et al. 1994:1504).

Before 1852, there was only one bridge spanning the White River in the region of Indianapolis, constructed by the federal government as part of the National Road, also called the Cumberland Road, north of the project area at Washington Street (Sulgrove 1884:15). A second bridge was built that year, and by 1876, the "Old Cemetery Wagon Bridge" spanned the river within the project area, one of nine that crossed the river to convey railroad or wagon traffic, all "of iron or mixed of iron and timber" construction (Andreas 1876:110; Sulgrove 1884:15). This bridge is depicted spanning the distance between "River Street" on the west bank of the White River and "Oliver Avenue" on the east bank, and then continuing southwest in its present location (Andreas 1876:110). Several of the bridges from this era, including the "one at River avenue," within the survey area were found to be "unsafe, if not absolutely dangerous" early in the twentieth century (Indianapolis Journal 1902:8; Mullins 2021).

The industrial setting of the project area began to develop as early as the 1870s when the Belt Line Railway and the Union Stockyards were constructed, spurring associated industries, such as tanning and meat packing in the vicinity of the project area (Urban Land Institute 2011:4). The Overland Wagon Works Company was founded near the project area in 1871, beginning a period of 140 years of transportation-related industry. Also, in the vicinity of the project area, the Great Woodburn Savern Wheel Company, was purchased by outside interests in 1884 who renamed it the Parry Manufacturing Company (Urban Land Institute 2011:4). The company "manufactured buggies, wagons, and carriages in a sprawling, 19-building complex which employed 2,800 workers" (Urban Land Institute 2011:4).

Industrialization and urban population growth prompted several attempts to beautify Indianapolis and plan for its development with a system of parks and boulevards. However, it was not until 1908, after the city hired landscape architect George Kessler, that a formal plan was developed and adopted, along with a plan for funding it equitably (Bodenhamer et al. 1994:868). The plan called for a series of parks and recreational spaces linked by a system of parkways and wide boulevards that emphasized the city's natural features, especially its waterways, including the White River, Fall Creek, and other streams (Jones et. al 2002:Section 8, pg. 18). The parkways and

boulevards that were constructed, along with necessary bridges over the city's waterways, such as the Oliver Avenue/River Avenue Bridge and the Kentucky Avenue Bridge over the White River, linked not only the city's existing and new parks, but also the city's established and planned communities, as well as downtown and industrial areas, with each other (Jones et. al 2002:Section 8, pg. 19). While the development of the system went more slowly than hoped, significant sections of the plan were implemented, particularly along the White River, with the boulevard on the west bank of the river completed through the project footprint sometime prior to 1927 (Baist 1927), and Kessler Boulevard was completed by 1929 (Bodenhamer et al. 1994:869).

Other infrastructure improvements along the White River were prompted by the Great Flood of 1913 (Indiana Historical Society 2022). A levee along the west bank was planned and constructed under Mayor Joseph E. Bell, completed in 1917 (Bodenhamer et al. 1994:317; Indiana Historical Society 2022).

By the first decade of the twentieth century, Indianapolis was poised to capitalize on its industrial capacity as the fledgling automobile industry grew rapidly. The construction of the Indianapolis Motor Speedway, along with adjacent and related industrial and residential additions in and near the town of Speedway on the west side of the city during this decade,

facilitated this transformation (Archer et. al 2004:15). By 1909, Indianapolis boasted seventeen automobile and parts manufacturers and a year later was ranked fourth in automobile manufacturing in the nation (Archer et. al 2004:Section 7 and 8, 12). While the city did not sustain this ranking, it remained a significant producer of automobile-related parts and technology into the twentieth century, expanding into aeronautical products beginning as early as the late 1920s (Archer et. al 2004: Section 7 and 8, 15-16).

Greenlawn Cemetery Historical Overview.

The project area is comprised of sections of two early Indianapolis cemeteries. The first being the "Old Burying Ground," also called the "City Cemetery," located near the river. The other Cemetery, known as the "Old New Burying Ground," also called "Union Cemetery," was platted in Outlot 133 in 1835. The work for this monitoring report occurred only in the Old Burying Ground (also known as the "graveyard") (Figure 8).

In 1816, when the United States Congress granted statehood to Indiana, the grant included a provision for a section of federal land for the state capital, later known as the "Indianapolis Donation" (Indiana Archives and Records Administration). The state approved the location in 1821, and at that time a survey, and plat of the town of "Indianapolis" was authorized (Indiana Archives and Records

Administration). The plat of the town would include Outlot 133, and an area dedicated as the "graveyard" (Indiana State Board of Accounts 1831:Index) (Figure 9).

In 1822, Daniel Shaffer, James Blake, and Mathias Nowland chose the land where the cemetery would be placed. Shaffer would be the first person buried in the cemetery, after dying just days after the site was chosen (Nowland 1870:35). In that same year, the General Assembly appropriated, "as a public burying ground", the four acres "known by the citizens of Indianapolis, by the name of the Grave Yard," and directed the county surveyor to "survey, and lay off the same, wither in a square or in a parallelogram, as may best suit the situation of the ground", officially designating the area as the City Cemetery (Indiana General Assembly 1823:28, see Indiana Acts 1822-23). Newspapers during that time noted that friends and families of the deceased could pick the location of the grave anywhere they pleased in the old burying ground (*Locomotive* 1848). This would prove troublesome years later when there were no accurate records to help in removals and relocations from the graveyard. As the city and the population continued to grow, and the Old Graveyard started to fill up, more land was bought and laid out for cemetery purposes (Holloway 1870:261).

In 1835, Nicholas McCarty, John B. Brown, James M. Ray, James Blake, and Isaac Coe

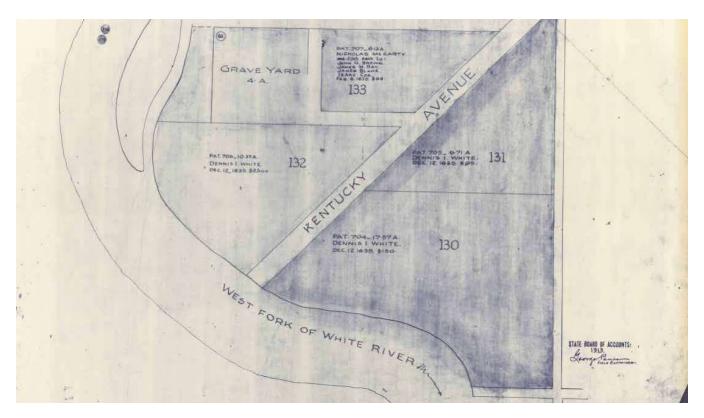


FIGURE 8. SURVEY MAP FOR THE CITY OF INDIANAPOLIS

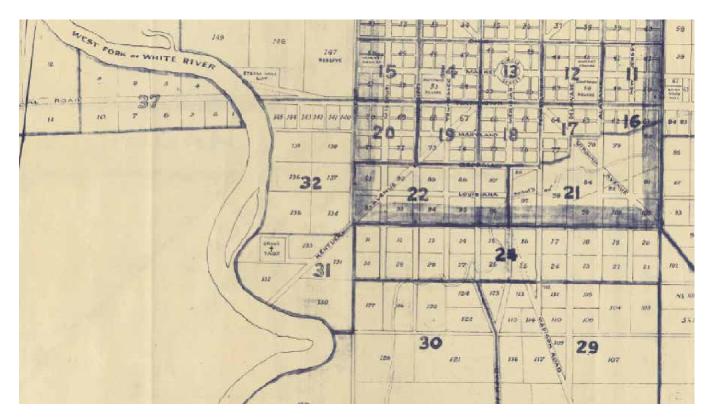


FIGURE 9. THE 1831 MAP OF PLATTED INDIANAPOLIS SHOWS THE LOCATION OF THE OLD GRAVEYARD AND THE LAND THAT WAS LATER PLATTED FOR UNION CEMETERY (INDIANA STATE BOARD OF ACCOUNTS 1831:INDEX).

purchased Outlot 133 of the Indianapolis Donation for 88 dollars (Indiana State Board of Accounts 1831:31). The land was purchased for cemetery purposes and would be known as the Old New Burying Ground or Union Cemetery (Figure 10).

Holloway claims that with the creation of Union Cemetery, the only people buried in the Old Graveyard were those who had relatives there, special reasons for not seeking burial in the new cemetery, or those not allowed to be buried in Union Cemetery (Holloway 1870:79).

Early pioneers of Indianapolis including governors and other prominent citizens found their final resting place within these two cemeteries. In 1827, Alexander Ralston, who designed the plat for the city of Indianapolis, was buried in the Old Graveyard. The location of Ralston's remains was contested. Some reports say his remains were removed to Crown Hill; however, others say the relocated remains were not Ralston's, and still others claim he was buried in the part of the cemetery that was washed away by the river (*Indianapolis News* 1891a, 1891b). Figure 11 is an 1848 plat map of the Union Cemetery.

The creation of Crown Hill Cemetery in 1863 shifted burials from the cemetery, and initiated removals from cemeteries in the area

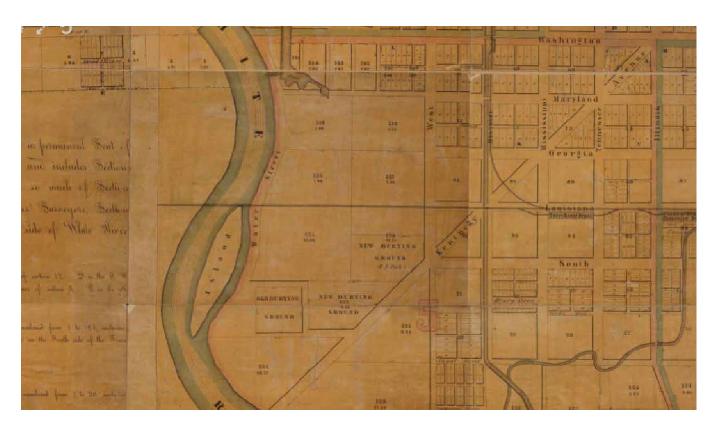


FIGURE 10. MUNSELL 1852 MAP OF THE CITY OF INDIANAPOLIS SHOWING THE OLD BURYING GROUND, NEW BURYING GROUND (OUTLOT 133), AND A SECOND NEW BURYING GROUND (PECK ADDITION, SECTION 134).

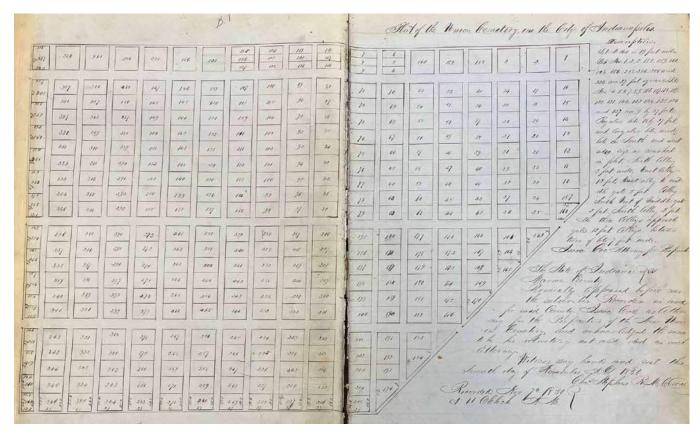


FIGURE 11. 1848 MAP FROM THE 1848-1856 PLAT BOOK.

(Thornbrough et al. 1981:430, 443). As early as 1844, the Old Graveyard had been deemed inadequate (*Indianapolis News* 1894b), and reports of the cemetery's disrepair would continue until the cemetery was eventually abandoned. Clavin Fletcher reported that the cemetery "has been considered quite objectionable for years," and was "nearly full," and proved a "source of disease and unhealthiness" (Thornbrough et al. 1981:207). In 1873, talks of abandoning the cemetery and removing the interments were considered, but nothing would come of the discussions at the time, and conversations would continue for several more years (*Indianapolis News* 1873, 1875a).

The disrepair and occupancy of the cemetery would be reported for many years. In 1874 and 1875, the sexton reported that the Old Burial Ground or the pauper burial ground was full and offered two solutions: purchase more land for burial purposes and sell the plots of those who had been removed to make room for more burials (*Indianapolis News* 1874a, 1875b). In 1882, the deplorable conditions of the cemetery surfaced again. Apparently, the sexton was using roads and pathways to bury remains (*Indianapolis News* 1882a). A newspaper noted, "In the portion allotted to the burial of colored people, there is not sufficient left of the roadway to drive in a carriage..." (*Indianapolis News* 1882a).

Rumors of one or more skulls were encountered from old graves while digging new ones, and of graves being placed under fences. Furthermore, the sexton did not know how many people were buried in one grave (*Indianapolis News* 1882a). Newspapers were not the only place where the disrepair was being reported.

The records of the Common Council document neglect and disrepair of the City Cemetery (Indianapolis City Council 1839-1847, 1864-1905). There were reports of burials happening within the cemetery without the knowledge of the sexton or the undertakers, sometimes over other sets of remains or in a plot that had been purchased by someone else (Journals of the Common Council, Board of Aldermen, and the Joint Conventions of Said Bodies from June 5th, 1882, to and including May 28th, 1883 [Indianapolis City Council] 1883:247-248, 1094). Reports persisted of multiple, sometimes clandestine, burials in the same plot (Indianapolis City Council 1883:247; Indianapolis News 1882b, 1883). Sometimes the sexton made these reports; some of the reports also included supposed misdeeds by the sexton.

Grave robbers proved a persistent problem for the City Cemetery. Several medical education institutions in the city that required corpses for learning, and lawful requisition failed to provide enough bodies for this (Indiana Historical Bureau 2022). Grave robbing was becoming such an issue by the 1870s that the sexton was reported saying he was disgusted and asked that two nightwatchmen be hired (*Indianapolis News* 1874b; Indianapolis City Council 1874:1324). There is no indication that nightwatchmen were hired, and the grave robbing supposedly continued.

In August 1888, a newspaper reported that the Board of Health found bodies buried three deep, and that the removal of some of the bodies in the cemeteries could have the risk of spreading infectious disease (*Indianapolis Journal* 1888). A newspaper reported on the sexton saying that in "the lower part of the cemetery a number of cases of black smallpox..." and "I do not much like to dig down there, but I don't know exactly where all the small-pox graves are located" (*Indianapolis News* 1888). It also "makes apparent the danger pointed out by Dr. Ferguson that to dig in that over-crowded cemetery is simply to expose disease germs, putrefaction and danger" (*Indianapolis News* 1888).

A renewed call for the abandonment of City Cemetery, now sometimes commonly referred to as Greenlawn, occurred in 1890 because of its risks to public health (*Indianapolis News* 1890). In 1891, a bill was passed allowing for Greenlawn Cemetery to be vacated (*Indianapolis Journal* 1891). Not long after, there was discussion on vacating the cemetery grounds for a park, and the conversation would be had again in 1894 (*Indianapolis Journal* 1894a). That conversation included the City's cost to remove and rebury the deceased and who had the power to vacate (*Indianapolis News* 1894c). That same year, a City

ordinance declared Greenlawn a public nuisance (Brown and Thornton 1904:335-337). This order required the removal of all corpses and other contents from vaults and the subsequent removal or destruction of those vaults (Brown and Thornton 1904:336). Meanwhile, the city moved forward with capital improvement projects including the White River Interceptor whose footprint cut through the cemetery (Figure 12). Multiple interments were impacted during this undertaking.

The *Indianapolis Journal* and *Indianapolis News* described the "rejuvenation" of the "dilapidated" Greenlawn was in response to the City Ordinance. The *Journal* reported that general landscaping changes, such as weeding and

trimming, but also noted that leveling graves and gravestones would occur if the City "has the legal right to order it." Undertakers would be required to "remove all bodies from the vaults and to tear down the vaults" (*Indianapolis Journal* 1894b). The *Indianapolis News* (1894a) reported that workmen had gathered fallen tombstones and clarified that, on advice from the City's attorney, existing graves and standing stones in the cemetery would not be leveled, a day later.

Around 1896-1897 the City began maintaining Greenlawn as part of its park network (Third Annual Park Report of the City of Indianapolis [Board of Park Commissioners] 1897:241-242; Tenth Annual Report of the City of Indianapolis [Board of Park Commissioners] 1904:188).

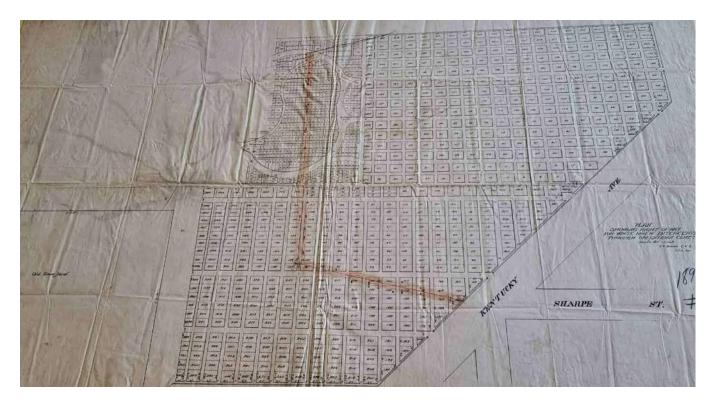


FIGURE 12. 1895 WHITE RIVER INTERCEPTOR MAPTHAT SHOWS THE REMAINS THAT WERE REMOVED AND THEN REBURIED (INDIANA HISTORICAL SOCIETY 1895).

The annual park report for 1897 described the work that occurred at Greenlawn, including the removal of dead trees and wooden fences; the removal of "[s]everal bodies" by relatives; and "straightened up" tombstones. Park custodians used "several thousand loads of soil" to fill sunken graves and other low places on the site and also "sloped and graded the bank along" Kentucky Avenue (Third Annual Park Report of the City of Indianapolis 1897:241-242). Later reports describe sunken graves, holes, water holes, and low places being filled within the park in later years. (Annual Park Board Report [Board of Park Commissioners] 1898, 1899, 1900, 1901, 1902).

In addition to work within the cemetery, the City expressed interest in improvements to the stretch of land between the cemetery and the White River. In 1896, park commissioners stated they wanted "to improve the dump grounds between the cemetery and the river and use the same for park purposes" (*Indianapolis Journal* "Park at Greenlawn" 1896). Later in 1898, the City of Indianapolis Department of Public Works successfully condemned portions of Outlots 132 and 133—bordered by the White River, the west boundary of the Greenlawn Cemetery, and River Avenue—and appropriated the condemned land for park purposes (Deed

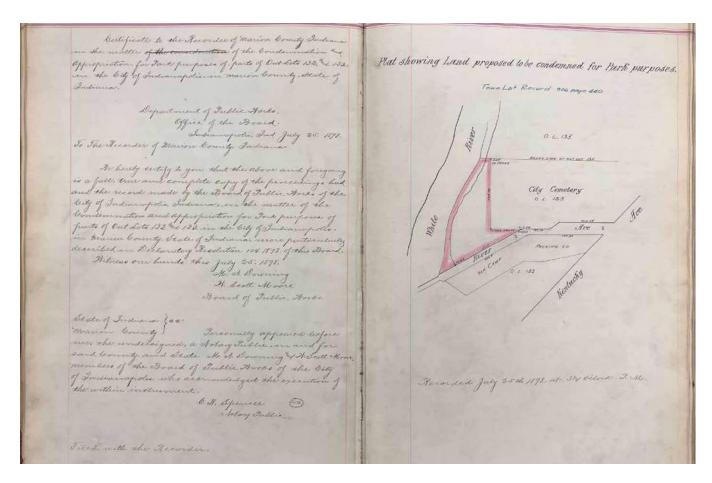


FIGURE 13. DEED RECORDS OF TOWN LOTS SHOWING THE CONDEMNED PARCEL.

Records Town Lots, Marion County, Vol 306, 1898) (Figure 13). The condemned area became part of Greenlawn Park and had been "filled as rapidly as possible with material from cellars and street excavations" (Annual Park Board Report [Board of Park Commissioners] 1899). The Park Board reported that the "bank bordering on White river has been dressed and seed sown" by the turn of the century (Annual Park Board Report [Board of Park Commissioners] 1901).

The Park Board continued to maintain and make improvements even while acknowledging the City did not own the property outside the condemnation area, as documented in annual reports and minutes. The City continued to

maintain portions of Greenlawn park until about 1915, when annual reports show no expenditures for the property (Twentieth Annual Report Board of Park Commissioners 1914:60; Twenty-first Annual Report Board of Park Commissioners 1915:59). There is little information available for this interim period, but a photograph taken in 1906 shows a level and maintained cemetery landscape with many evident gravestones remaining in place (Figure 14).

The project area constantly underwent erosional and topographical changes, due to flooding and efforts to mitigate inundations. For example, a White River flood in 1847 caused a change in the landscape and flooded the cemetery (Holloway 1870:84).



FIGURE 14. A 1906 BASS PHOTO SHOWING THE RELATIVELY LEVEL GREENLAWN CEMETERY WITH THE VAN CAMP PACKING COMPANY BUILDING IN THE BACKGROUND (W.H. BASS PHOTO COMPANY 1906).

"A considerable breadth of the high bank, along where the pork houses and railroad bridges now stand, was cut away making the first approach to the change which has since brought the river to the very edge of the cemeteries. There used to be a small island a hundred or two hundred yards long, in the river, opposite the 'Old Grave-Yard,' and separated from the eastern bank by a narrow stream, sometimes entirely dry in summer. This island was covered with large trees, and at the head of it was a drift which for many years was a favorite place for catching 'redeyes,' cat-fish, and bad cold. Between the 'chute' west of that island and the Grave-Yard was a considerable breadth of forest. Now that island and that whole breadth of forest are on the west side of the river, on McCarty's sand-bar, and the water has actually cut into the Grave-Yard. (Holloway 1870:84)"

Additionally, there was once a feature called the 'grave yard pond.' This pond was three or four hundred yards long by a hundred wide and was supplied by springs and the overflow of the river (Holloway 1870:79; Sulgrove 1884:11). For many years, it was a favorite skating place until it disappeared (Holloway1870:79).

In March of 1913, Indiana witnessed a storm that caused some of the worst flooding the state had seen (Bell 2006; Bodenhamer 2021). In four days, three months of rainfall fell, topping nine inches in the southern half of the state,

but more than half of the water fell in just one twenty-four-hour period (Bell 2006). Because of the widespread, intense rain, many creeks and rivers across the state flooded (Bell 2006). The Great Flood of 1913 prompted infrastructure improvements along the White River (Bell 2006). A levee, planned and constructed under Mayor Joseph E. Bell, along the west bank was completed in 1917 (Bell 2006; Bodenhamer et al. 1994:317) (Figure 15).

In 1914, construction started on the Federal League Baseball Field, on land that was previously Union Cemetery (Outlot 133) (*Indianapolis Star* 1914) (Figure 16). The field was short-lived; in 1916, the baseball stadium was closed and torn down to make room for freight houses from the Indianapolis Traction and Terminal Company (*Mitchell* 2019a, 2019b).

In 1917, work was said to have begun on the construction of the Terre Haute, Indianapolis & Eastern Traction Company freight house where the baseball park once stood. During construction, workmen encountered human remains. The coroner ordered reburial in the Mt Jackson Cemetery. The coroner also commented that when the baseball park was built, all the remains were supposed to have been removed (*Indianapolis News* 1917b; *Indianapolis Star* 1916). Vice President of the Indianapolis Traction and Terminal Company, E.J. Peck, directed the proposed building project (*Indianapolis News* 1917a). In 1917, the



FIGURE 15. AN IMAGE OF THE 1937 DAM IMPROVEMENT. THE GM PLANT CAN BE SEEN IN THE BACKGROUND CENTER OF THE IMAGE.

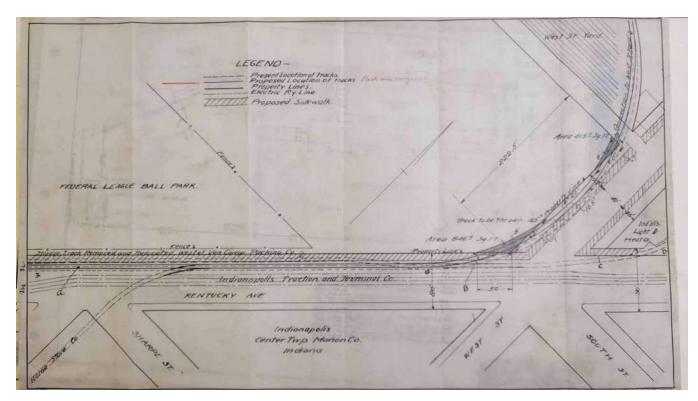


FIGURE 16. PLANS FROM THE DIAMOND CHAIN COLLECTION AT THE INDIANA HISTORICAL SOCIETY SHOW-ING THE LOCATION OF TRACKS AND PART OF THE FEDERAL LEAGUE BALL PARK. (INDIANA HISTORICAL SOCIETY)

newspaper reported three freight houses to be constructed, ranging from 400 to 600 ft in length (*Indianapolis News* 1917a). The traction freight houses were to alleviate crowding in the business district and to skirt the downtown district (*Indianapolis News* 1917a). The land in Union Cemetery would also be used for the Union Traction and Terminal Company. Despite all the talk of removals, discoveries of human remains would continue to occur into the twentieth century.

In 1920, a history teacher, J.R.H. Moore, from Emmerich Manual Training High School saw the disrepair in Greenlawn and recorded all of the headstones still standing in the cemetery. This document lists the inscriptions and provides images of some of the standing stones. The document was bound and given to the Indiana State Library. One of the images included in the document shows a landscape with many upright tombstones (Figure 17).

In 1923, the city began thinking about selling the cemetery to build a railway terminal (*The Indianapolis Times* 1923). Later that year the Terminal Realty Corporation took bids to start building their freight terminal and began to make arrangements for the removal and reburial of those interred there. It was reported that graves that could be identified would be moved and marked appropriately. A newspaper reported



FIGURE 17. THE IMAGE SHOWS THE ENCROACHING INDUSTRY ON THE CEMETERY WITH MANY STANDING HEADSTONES.

that "identification of many graves is impossible, but every effort will be made to give this work consideration and care" (*Indianapolis News* 1923).

Removals from the "Old Burying Ground" occurred in 1924 from land bought by the Terminal Realty Company. These removal records were documented and bound before being taken to the Indiana State Library. The recovery was organized by grids and recorded the number of identified and unidentified remains removed from the cemetery (Terminal Realty Corporation 1924). A book called *Part* of Greenlawn Burials Moved 1924 (Garmen and O'Neel 1924b) supplements that of the cemetery lots. Part of Greenlawn Burials Moved, documents the condition of headstones, and offers remarks for what happened to them after the remains were removed. Another document called Part of Greenlawn Cemetery Gravestone Inscriptions Graves Moved 1924 to Other Cemeteries (Garmen and O'Neel 1924a), documents the location and inscriptions on those headstones at the time of removal. Figure 18 is part of a 1927 Baist map illustrating the increasing industrialization of the area that was once the Greenlawn Cemetery.

In the years after the construction of the Union Traction Freight House, human remains were discovered. In 1925, a project digging a large pit to backfill the Kentucky Avenue Bridge unearthed human remains (*Indianapolis News* 1925). Ten years later, more human remains

were encountered during work on a flood prevention project, when members of the Works Progress Administration (WPA) were moving dirt from the east bank of the river, in the area of the dump and "free potter's field," and moving it to the west bank. This was being done in an effort to widen the flood channel and create a higher levee on the west side (*Indianapolis Star* 1935). The newspaper at the time estimated that the remains had been buried at least seventy-five years and could not be identified because the grave markers had been removed (*Indianapolis Star* 1935).

The Old Burying Ground and Union Cemetery had been surrounded by industry, and few traces of a cemetery remained. Later expansions to Diamond Chain and the surrounding industries would lead to accidental discoveries of human remains that had once been interred in the city cemetery.

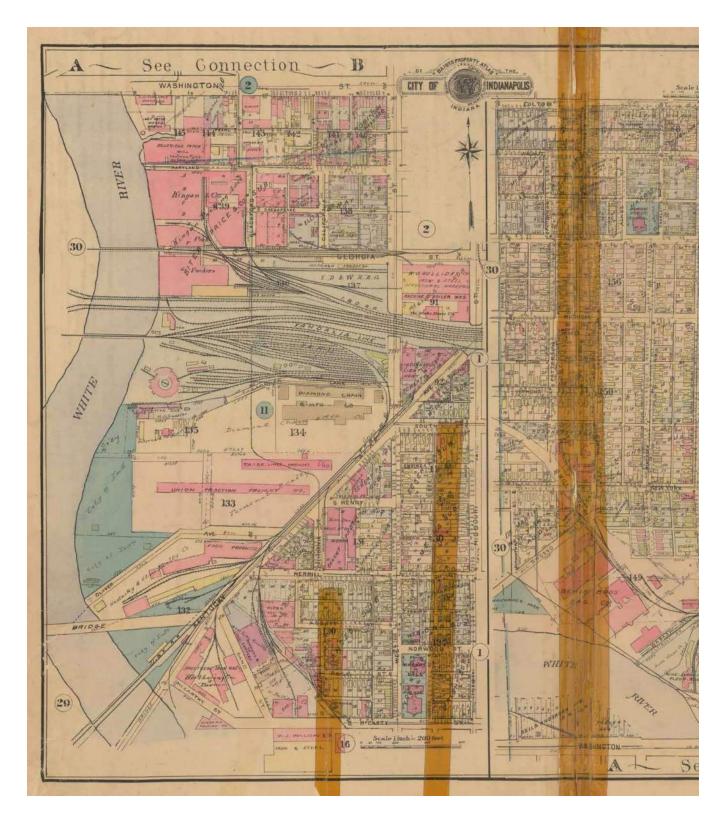


FIGURE 18. THE 1927 BAIST MAP SHEET 17 SHOWING THE LOCATION OF THE UNION TRACTION FREIGHT HOUSE AND THE THI & E FREIGHT COMPANY.

Archaeological Records Check

On March 28 and April 9, 2024, the author conducted an archaeological records check of the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) (INDR/DHPA 2024). The records check utilized site files in the Indiana Cemetery and Burial Registry (ICBR), SHAARD archaeological report and site access database, and SHAARD GIS in order to identify known and expected cultural resources that might be affected by this project. The records check includes all archaeological investigations and sites within a 1.6 kilometer (km) (1 mile [mi]) radius of the survey area, in order to identify any previous surveys or sites within the project area and to contextualize any potential archaeological resources that may be encountered during current archaeological monitoring.

An examination of SHAARD indicates that there are, at present, no archaeological sites recorded within the project area. However, recent archaeological work associated with the demolition of the former Diamond Chain complex adjacent to this project resulted in the discovery of Precontact and Historical artifacts for which a site number (12MA1110) was assigned by the IDNR,DHPA.

According to SHAARD GIS, within the greater one-mile radius of this project, there are at least 29 archaeological sites on record (Table 1[not

including resurveyed sites]). Additionally, there have been at least five documented accidental discoveries of human remains associated with the former Greenlawn Cemetery, on which the Diamond Chain Company Complex and nearby buildings were erected (see Table 1). One of these (DHPA No. 980039) may have been within the current project area.

Of these 29 sites, three are Precontact, four have both Precontact and Historical components, and the remainder are Historical. One of the Precontact components is associated with a specific period, the Late Archaic, but the site was razed after mitigation efforts. Some of the historical sites include the Central Canal and related features, transportation-related sites (e.g., National Road, trolley tracks, railroads, historic building foundations, commercial sites, and the Indiana State Capitol). Three sites are listed on the NRHP: site 12MA739, the Indiana State Capitol (12MA985), and Military Park (12MA608). Twelve are recommended as eligible, potentially eligible, or indeterminate, including two large, linear sites, the National Road (12MA622) and the Central Canal (12MA739). Portions of both 12MA622 and 12MA739 have since been recommended as either indeterminate or not eligible, respectively (see Table 1, and Goldbach 2017, 2019).

TABLE 1. ARCHAEOLOGICAL SITES AND ACCIDENTAL DISCOVERIES WITHIN THE PROJECT BOUNDS AND WITHIN A ONE-MILE RADIUS OF THE PROJECT AREA.

Site Number	Cultural Affiliation	Site Type	NRHP Eligibility	Reference	Within Project Area
I2MA0608	Unidentified Prehistoric; Historic	Lithic Scatter; Historic Scatter	In Register	Gaw 1992	No
I2MA0608 RI	Unidentified Prehistoric; Historic	Lithic Scatter	Ineligible	Gaw 1992; Bamann 1997	No
12MA0618	Historic	Canal	Indetermi- nate	Kearney and Bailey 1994	No
I2MA0622	Euroamerican	Road	Indetermi- nate	Kearney 1994; Kearney and Bailey 1994	No
12MA0622 R1	Euroamerican	Civil	Potentially Eligible	O'Brien 1995b	No
12MA0622 R2	Historic	Civil; Road	Eligible	O'Brien 1995c	No
I2MA0623	Euroamerican; 19th Century	Historic Scatter	Indetermi- nate	Kearney 1994; Kearney and Bailey 1994	No
12MA0623 R1	Historic	Urban;Wall	Ineligible	O'Brien 1996	No
I2MA0624	Euroamerican; 19th-20th Century	Foundation	Indetermi- nate	Kearney 1994; Kearney and Bailey 1994	No
I2MA0625	Euroamerican; 19th-20th Century	Foundation; Historic Scatter; Wall	Indetermi- nate	Kearney 1994; Kearney and Bailey 1994	No
I2MA0626	Euroamerican; 19th-20th Century	Historic Scatter	Indetermi- nate	Kearney 1994; Kearney and Bailey 1994	No
I2MA0627	Euroamerican; 19th-20th Century	Trolley Tracks	Indetermi- nate	Kearney 1994; Kearney and Bailey 1994	No
12MA0627 R1	Euroamerican; 19th-20th Century	Civil	Ineligible	O'Brien 1995b	No
I2MA0704	Historic	Bridge; Canal	Ineligible	Mann 1995	No
I2MA0739	Euroamerican	Commercial; Factory	Ineligible	O'Brien 1995b	No
I2MA0739 RI	Euroamerican; 19th-20th Century	Civil; Commer- cial	Eligible	O'Brien and Pirkl 1996	No
I2MA0739 R2	19th Century	Canal	Ineligible	Goldbach 2017; 2019	No
I2MA0739 R3	19th Century	N/A	In Register	Goldbach 2019	No
12MA0741	Euroamerican	Commercial; Factory; Foun- dation	Potentially Eligible	O'Brien 1995b	No
I2MA0742	Unidentified Prehistoric	Lithic Scatter	Ineligible	Miller et al 1995	No

I2MA0743	Unidentified Prehistoric	Isolated Find	Ineligible	Miller et al 1995	No
I2MA0744	Unidentified Prehistoric	Isolated Find	Ineligible	Miller et al 1995	No
I2MA97I	19th-20th Century	J.W. Riley home	Potentially Eligible	Andrews and Greene 2013	No
I2MA0978	Historic	Transportation	N/A	SHAARD Site Card; IDNR/ DHPA 2024	No
I2MA0979	Late Archaic; Historic	Animal Facility	Destroyed after mon- itoring and documenta- tion	Favret 2015; 2019	No
I2MA979_RI	N/A	Animal Facility	Destroyed	Terheide et al. 2023	No
I2MA0985	19th-20th Century	Capitol	In Register	Draeger-Williams 2019	No
12MA0985 R1	19th-20th Century	Capitol	In Register	Draeger-Williams 2018a; 2018b	No
12MA0985 R2	N/A	Capitol	In Register	Draeger-Williams 2018b	No
12MA0985 R3	19th-20th Century	Capitol	In Register	McCord 2020	No
I2MA0985 R4	19th-20th Century	Urban	In Register	Tharp 2021	No
12MA0985 R5	19th-20th Century	Capitol	In Register	Lockhart-Sharkey 2022	No
12MA1014	20th Century	Transportation; Railroad	Ineligible	Mustain and Klinge 2017	No
12MA1015	Historic	Railroad	Ineligible	Mustain and Klinge 2017	No
12MA1023	19th-20th Century	Foundation; Historic Scatter	Ineligible	Grob et al. 2018; Settle et al. 2018	No
12MA1032	19th-20th Century	Dump;Artifact Scatter	Ineligible	Settle et al. 2018	No
12MA1033	19th-20th Century	Artifact Scatter	Ineligible	Settle et al. 2018	No
12MA1034	19th-20th Century	Foundation; Historic Scatter	Ineligible	Settle et al. 2018	No
12MA1063	19th-20th Century	Cistern	Ineligible	Grob et al. 2021	No
12MA1102	20th Century	Factory	Ineligible	Goldbach 2023	No
12MA1103	20th Century	Bridge piers	Ineligible	Goldbach 2023	No

12MA1109	19th-20th Century	Foundations; Rail related; Brick manhole	No eligibility recommen- dation at present	In progress	No
12MA1110	Precontact, Unidentified temporal period; 19th- 20th Century	Greenlawn Cemetery; Diamond Chain factory complex	No eligibility recommen- dation at present	In progress	No
900022	Historic	Burial	N/A	Accidental Discovery 900022; IDNR/DHPA 2024	No
910010	Historic	Burial	N/A	Ellis et al. 1991; Accidental Discovery 910010	No
960036	Historic	Burial	N/A	Accidental Discovery 960036; IDNR/DHPA 2024	No
980039	Historic	Burial	N/A	Nawrocki 1998;Accidental Discovery 980039	Yes
Park Tudor	Historic	Burial	N/A	Accidental Discovery Park Tudor; IDNR/DHPA 2024	No

A review of records for previous archaeological reconnaissance-related projects resulted in the identification of seven previous archaeological studies completed within the project area (see Table 2), and one immediately adjacent to it. All seven of these are associated with the proposed Henry Street Bridge and the Indy Eleven developments. Furthermore, within the one-mile search radius there have been at least another 80 previous archaeological-related studies conducted. Nearly all of these are focused on capital improvements, including various transportation related undertakings, cellular communications facilities, and a variety of other enhancement and development projects.

Some of these projects include three survey efforts resulting in recording sites recommended for no further investigation (Grob et al. 2018; Miller et al. 1995; Settle et al. 2018). Two Phase

Ia surveys identified sites that were recommended for further archaeological investigations (Kearney 1994; Kearney and Bailey 1994).

At the time of this report, SHAARD records indicate that W&A submitted five monitoring work plans, some as amendments, to the IDNR,DHPA for the examination of geotechnical engineering test borings, which were placed within the Henry Street corridor to collect data for bridge design. Also, an accidental discovery of human remains during installation of storm sewer catch basins likely occurred within the Henry Street footprint, although no associated report was located during the records review (Nawrocki 1998). Otherwise, no prior archaeological surveys were identified as having been conducted within the monitoring area, and no sites had been previously recorded within its boundaries.

TABLE 2. ARCHAEOLOGICAL INVESTIGATIONS LOCATED IN AND WITHIN 1.6 KM (1 MI) OF THE INVESTIGATION AREA.

Type of Investigation	Reconnaissance Method	Project Type	Recommendations/ Comments	Reference	Within Project Area
Phase Ia	Shovel Probes	Riley House Visitor & Education Center	Archaeological monitor- ing recommended during construction	Andrews and Greene 2013	No
Phase Ia	Shovel Probes	Bridge Rehabilitation and Replacement	No further archaeological work recommended	Arnold 2014	No
Phase Ia	Pedestrian Survey	Pole Structure	No further archaeological work recommended	Ball 2017	No
Phase Ia	Visual Survey	Road Widening	No further archaeological work recommended	Baltz 1985	No
Phase Ia	Shovel Probes, Met- al Detection, Soil Coring, Backhoe Trenching	Pipeline	No further archaeological work recommended	Bamann 1997	No
Phase Ia	Shovel Probes, Met- al Detection	Concrete Walk	Further archaeological work recommended	Beard 2004	No
Phase Ia	Shovel Probes, Visual Survey	Transformer Pad and Ditch	No further archaeological work recommended	Blanton 2000	No
Phase Ia	Pedestrian Survey	Telecommunications Site	No further archaeological work recommended	Branstner 2017	No
Phase Ia	Pedestrian Survey	Telecommunications Site	No further archaeological work recommended	Branstner 2020	No
Phase Ia	Pedestrian Survey	Interplant Connector	Cemetery Development Plan recommended	Carson 2007a	No
Phase Ia	Shovel Probes, Visual Survey	Telecommunications Site	No further archaeological work recommended	Carson 2007b	No
Phase Ia	Shovel Probes	Tree Plantings	No further archaeological work recommended for this portion of I2Ma985	Draeger-Wil- liams 2018a	No
Phase Ia and Monitoring	Shovel Probes	Foundation Repair and Steps Reconstruction	No further archaeological work recommended for this portion of I2Ma985	Draeger-Wil- liams 2018b	No
Monitoring	Archaeological Monitoring	Camera Installation	No further archaeological work recommended for this portion of I2Ma985	Draeger-Wil- liams 2019	No
Accidental Discovery	Shovel Shaving and Trowelling	Steam Well Pit	N/A	Ellis et al. 1991	No
Monitoring and Excavation	Archaeological Monitoring	Julia M. Carson Transit Center; IndyGo Down- town Transit Center	Additional Monitoring, Site Assessment, and hand excavation of test units	Favret 2015	No

Archaeological Monitoring	Archaeological Monitoring and documentation of features, artifact recovery	Julia M. Carson Transit Center; IndyGo Down- town Transit Center	Site recommended eligible to NRHP under A, B, and D, for the data recovered and research potential; No further work recommended as all relevant data collected during construction	Favret 2019	No
Phase II and Monitoring	Archaeological Monitoring, Hand Excavation	Transit Center	Recommended as Eligible in the NRHP; however, no additional field investigations are warranted	Favret and Leary 2016	No
Phase la	Shovel Probes	Military Park	No further archaeological work recommended	Gaw 1992	No
Phase Ia	Pedestrian Survey; Visual Walkover; Shovel Probes	Utility Pole Installation	No further archaeological work recommended	Geidel 2015a	No
Phase Ia	Pedestrian Survey; Visual Walkover; Shovel Probes	Utility Pole Installation	No further archaeological work recommended	Geidel 2015b	No
Phase la	Pedestrian Survey; Visual Walkover; Shovel Probes	Utility Pole Installation	No further archaeological work recommended	Geidel 2015c	No
Phase Ia	Pedestrian Survey; Visual Walkover; Shovel Probes	Utility Pole Installation	No further archaeological work recommended	Geidel 2015d	No
Phase la	Pedestrian Survey; Visual Walkover; Shovel Probes	Utility Pole Installation	No further archaeological work recommended	Geidel 2015e	No
Phase Ia	Pedestrian Survey; Visual Walkover; Shovel Probes	Utility Pole Installation	No further archaeological work recommended	Geidel 2015f	No
Phase la	Visual Walkover; Oakfield T-probes	White River Intake	Two sites; One portion recommended for further work	Goldbach 2017	No
Archaeological Monitoring	Visual inspection	White River Intake	No intact archaeological deposits or features; No further work	Goldbach 2019	No
Phase Ia	Visual Walkover	Elanco Headquarters	Not eligible, No further archaeological work recommended	Goldbach 2023	No
Phase Ia	GPR, Vacuum Truck Excavation, Deep Test Pit	DigIndy Drop Shaft	No further archaeological work recommended	Grob et al. 2018	No
Accidental Discovery	Photo Documen- tation, Screening, Historic background research	Cistern on Madison Ave	Cistern destroyed after documentation complete. No further work.	Grob et al. 2021	No
Permit request	Monitoring Plan	Henry Street Bridge	Authorization request	Jones III 2021a	Yes

Permit request	Monitoring Plan, Addendum	Henry Street Bridge	Authorization request	Jones III 2021b	Yes
Permit request	Monitoring Plan, Amendment	Henry Street Bridge	Authorization request	Jones III 2022	Yes
Phase Ia	Monitoring	Henry Street Bridge	Minimum of archaeologi- cal monitoring in ground disturbing areas	Jones III 2023	Yes
Permit request	Monitoring Plan	CEG chilled water piping	Authorization request	Jones III and Arnold 2023a	No
Permit request	Monitoring Plan	Henry Street Bridge	Authorization request	Jones III and Arnold 2023b	Yes
Permit request	Monitoring Plan	Eleven Park Development	Authorization request	Jones III and Arnold 2023c	Yes
Phase Ia	Pedestrian Survey; Visual Walkover; Shovel Probes	Capital City Landing Project	Further archaeological work recommended	Kearney 1994	No
Phase la	Pedestrian Survey; Visual Walkover; Shovel Probes	Capital City Landing Project	Further archaeological work recommended	Kearney and Bailey 1994	No
Phase Ia	Pedestrian Survey	Utility Pole Installation	No further archaeological work recommended	Kistler and DuBois 2017	No
Phase Ia	Visual inspection	Telecommunications Site	No further archaeological work recommended	Ledezma et al. 2023	No
Archaeological Monitoring	Visual inspection	Historical marker installation	No further archaeological work recommended	Lock- hart-Sharkey 2022	No
Phase Ia	No field survey	Utility Pole Installation	No further archaeological work recommended	Lowman and Beazley 2020	No
Phase la	Shovel probes; Ground penetrating radar	IndyGo Downtown Transit Project-Red Line Rapid Transit	Two sites; Neither recommended eligible for listing in NRHP. Further work where GPR identified potential interurban rail lines below pavement	McBride et al. 2016	No
Monitoring	Archaeological Monitoring	Step Repair	No further archaeological work recommended for this portion of I2Ma985	McCord 2020	No
Subsurface Investigation	Excavations	Water Pipeline	No further archaeological work recommended on this portion of site I2Ma0704	Mann 1995	No
Phase Ia	Shovel Probes,Visual Survey	White River Redevelop- ment	No further archaeological work recommended	Miller et al. 1995	No
Phase II	Mechanical excava- tion with backhoe and jackhammer	Interurban trolley lines	Investigation of 4 sites; Not eligible, No further archaeological work rec- ommended	Mustain and Klinge 2017	No

Accidental Discovery	Excavations	Henry Street storm sew- er and catch basins	No information	Nawrocki 1998	Yes
Subsurface Investigation	Excavations	Capital City Landing Project	No further archaeological work recommended	O'Brien 1995a	No
Subsurface Investigation	Excavations	N/A	No further archaeological work recommended	O'Brien 1995b	No
Subsurface Investigation	Excavations; Back- hoe trench	Capital City Landing Project_Urban	No significance; No fur- ther work	O'Brien 1996	No
Subsurface Investigation	Excavations	Canal Walk Extension	No further archaeological work recommended	O'Brien and Pirkl 1996	No
Monitoring Plan	Inspection and possible human remains recovery	Diamond Chain factory quench pit excavation	No information	Plunkett 1999	No
Records Check	Records Review	Pedestrian walkway on Georgia Street	No further archaeological work recommended	Plunkett 2010	No
Phase la	Shovel Probes,Visual Survey	Telecommunications Site	No further archaeological work recommended	Rich 2017a	No
Phase la	Visual Walkover	Telecommunications Site	No further archaeological work recommended	Rich 2017b	No
Phase Ia	Visual Walkover	Telecommunications Site	No further archaeological work recommended	Rich 2017c	No
Phase Ia	Visual Walkover	Telecommunications Site	No further archaeological work recommended	Rich 2017d	No
Phase Ia	Visual Walkover	Utility Pole Installation	No further archaeological work recommended	Rich 2017e	No
Phase Ia	Visual Walkover	Telecommunications Site	No further archaeological work recommended	Rich 2017f	No
Phase Ia	Visual Walkover	Telecommunications Site	No further archaeological work recommended	Rich 2017g	No
Phase Ia	Visual Walkover	Telecommunications Site	No further archaeological work recommended	Rich et al. 2020	No
Subsurface Investigation	Shovel Probes, Excavations	Concrete Walk	No further archaeological work recommended	Schneider 2005	No
Phase Ia	GPR,Vacuum Truck Excavation, Deep Test Pits	DigIndy Deep Tunnel	No further archaeological work recommended	Settle et al. 2018	No
Phase Ia	Visual Walkover, Soil Coring, Shovel Probes	Sewer Interceptor	No further archaeological work recommended	Snyder 2009	No
Phase Ia	Shovel Probes	Street Improvement	No further archaeological work recommended	Stillwell 2011	No
Sensitivity Assessment	No field survey; Re- cords Check only	Telecommunications Site	No further archaeological work recommended	Swisher 2022a	No
Sensitivity Assessment	No field survey; Re- cords Check only	Telecommunications Site	No further archaeological work recommended	Swisher 2022b	No

Di I	Visual walkover,	IndyGo Downtown Tran-	Eight sites identified; Not eligible for listing in NRHP;	Terheide et al.	NI.
Phase la	Phase Ia Shovel probes, Soil sit Project		No further work recom- mended	2023	No
Phase Ia	Shovel Probes, Mon- itoring	Indiana State Capitol Building Step Replace- ment	No significant artifacts discovered. Work recommended on future projects	Tharp 2021	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2016a	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2016b	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2016c	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2016d	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2017a	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2017b	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2017c	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2017d	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2017e	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2017f	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2017g	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2017h	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2017i	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2017j	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2017k	No
Sensitivity Assessment	No field survey	Telecommunications Site	No further archaeological work recommended	Wilk 2019	No

Sanborn Fire Insurance Maps and Baist Maps were examined as part of the records review (Baist 1901 to 1941; Baist & Sons 1929, 1941; City of Indianapolis, MapIndy 2024; years 1887 to 1941). The Sanborn maps from 1887 and 1898 depict the project area as being part of the Greenlawn Cemetery. The 1915 Sanborn map depicts the west portion of the project area as Old Greenlawn Cemetery and the east part being the Federal League Baseball Park (City of Indianapolis, MapIndy 2024:1887, 1898, and 1915). The 1916 Baist map depicts similar results to that of the aforementioned 1915 Sanborn map, but notes Greenlawn is condemned while the east part is now in private ownership (City of Indianapolis, MapIndy 2024:1916). By 1927, the Union Traction Freight Company occupied the corridor (City of Indianapolis, MapIndy 2024:1927). In 1941, the area had warehousing, owned by the South Construction Company (City of Indianapolis, MapIndy 2024:1941). The 1956 Sanborn map, although the specific project area is blacked out, depicts the expansion of the Diamond Chain Complex with buildings now adjacent to the Henry Street corridor, including ownership of structures south of the project area.

Available aerial imagery from various years shows the transitional nature of the project area over time. Aerial photography from 1937 and 1941 show the warehouses depicted on the 1941 Baist map. The 1950 aerial photograph is similar to the 1937 and 1941 imagery but with evident

expansions to the warehouse facility (City of Indianapolis, MapIndy 2024:1937, 1941, 1950).

Currently, there is one newly assigned archaeology site number (12MA1108) within the project area. However, the former Greenlawn Cemetery and Diamond Chain facility, which bounds the north side of the Henry Street corridor, has recently been assigned archaeological site number 12MA1110 due to work completed by W&A. It is almost a certainty that the potential exists for the Henry Street Bridge project to encounter both previously impacted and intact archaeological deposits associated with the former Greenlawn Cemetery, and possibly Precontact cultural features and deposits due to the environmental setting.

Methodology

Field methods conformed to the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* (48 Federal Register [FR] 44716), the current *Guidebook for Indiana Historic Sites and Structures Inventory - Archaeological Sites* issued by the IDNR,DHPA (2024), and recent amendments to the Indiana Historic Preservation Act (IC 14-21-1). The field work, laboratory analysis, and preparation of the final report and recommendations were accomplished or directly supervised by a Principal Investigator meeting the standards set forth in 36 CFR 61 of the NHPA and 312 IAC 21.

Field methods during these investigations were developed in cooperation with the IDNR,DHPA. Archaeological monitoring of the vacuum operations west of the White River was determined to be unnecessary, given the documented construction history of levees and the low probability for such structures to contain archaeological deposits, or human remains, although this has been historically documented on occasion. The portion of the Henry Street Bridge project within the current undertaking was determined to be a sensitive area, as part of the Greenlawn Cemetery, and would necessitate, at minimum, archaeological monitoring.

The field methods are outlined in the previously approved W&A work plans and subsequent phone amendments with the IDNR,DHPA

office. A distillation of those methods is presented here. T2 Utility Engineers staged a vacuum truck at each proposed testing location where Indiana 811 locators marked the utility. If the ground surface was capped by a hardscaped material (i.e., concrete or asphalt) then an access cut was opened. From the point below the hardscaped surface, dry vacuuming was employed using compressed air to excavate into the soils (Figures 19 and 20). The resulting spoil was removed using a vacuum hose which deposited these materials into the trucks holding tank.

W&A archaeologists monitored cutting progress in order to identify any cultural materials or features that may have been exposed during removal operations. The excavation floor and walls of the exposed cut were periodically examined for the presence of cultural items. Upon completion of the vacuuming excavations, after encountering the target utility, archaeologists more fully inspected the open cut for the presence of any cultural materials. After the completion of T2 Utility Engineers documentation, the trucks holding tank was opened and the collected spoil was deposited adjacent to the open hole for archaeological inspection. All soil removed from the borings. with evidence of, or the potential for, artifacts or cultural deposits was appropriately examined and inspected for the presence of human remains and/or artifacts.



FIGURE 19. REPRESENTATIVE PHOTOGRAPH OF A [HYDRO] VACUUM TRUCK IN OPERATION.



FIGURE 20. MANHOLE FEATURE PARTIALLY EXPOSED BY HYDRO VACUUMING OPERATIONS AT CITIZENS ENERGY GROUP JUST TO THE NORTH OF THE HENRY STREET PROJECT.

W&A archaeologists alternately trowel sorted and screened the spoil through ¼" hardware cloth in efforts to identify and recover any cultural materials that may have been present. After screening and sorting efforts were complete, the backdirt was shoveled back into

the open excavation. T2 Utility Engineers then closed and capped the excavations.

All visible features were recorded with a Trimble R1 receiver having sub-meter accuracy, coupled with an Apple iPad, utilizing ArcGIS Field Map to collect test locations and record field data.

Results of the Reconnaissance

Archaeological monitoring of the vacuuming operations was completed on July 18 and 19, 2023. Twelve vacuum excavated holes were opened to validate the locations of subsurface fiber optic utility lines. The total delineated areas drawn to encompass each of the two vacuum areas are approximately 0.05 ha (0.12 ac), or approximately 500 square meters. For the organization of this report, survey areas one through three are referred to as survey fields. Fields 1 and 2 are open staging areas located toward the west end of Henry Street, just prior to the transition to an area sloping down to the White River, owned by the City of Indianapolis (see Figure 2). Field 3 is an area of Kentucky Avenue fronting Henry Street (see Figure 2).

Fields 1 and 2

Fields 1 and 2 were designated at the west end of Henry Street where the setting transitions from an open staging/parking area to the wooded, sloped riverbank owned by the City of Indianapolis. Ten separate test locations, designated by T2 Utility Engineers as TH15 to

TH23, and TH20A, were opened in these two areas on July 18 and 19, 2023 (Figure 21). It should be noted that Figure 2 designates there were to be 12 test holes opened in Fields 1 and 2, with eight and four in each area, respectively. The following table presents pertinent information about these test holes.

In TH15, a fourth metacarpal of a right human hand was recovered from the backdirt while inspecting soil from the excavation. The Marion County Coroner's Office (MCCO) and the IDNR,DHPA were notified of the finding on July 19th. The initial discovery was made after the close of the IDNR,DHPA office hours on July 18. An archaeology site number was secured for this project: it is 12MA1108. At present, the 12MA1108 site assemblage includes the human metacarpal isolate, surface artifacts selectively collected during earlier geotechnical engineering test borings, and artifacts surface collected from the sloped terrain on the City of Indianapolis property by non-archaeologists.

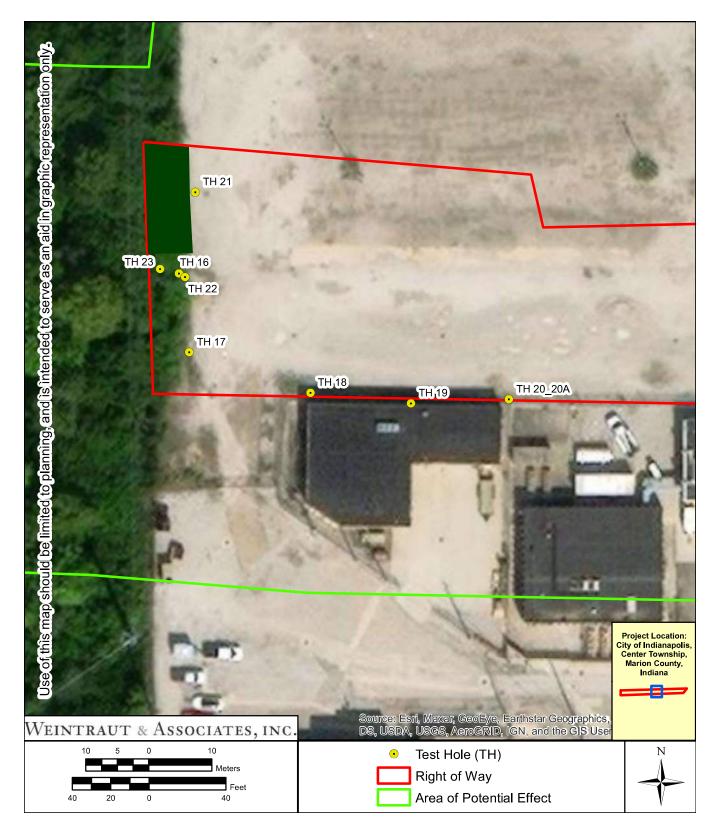


FIGURE 21. AERIAL (2022) SHOWING THE GPS PLOTTED LOCATIONS OF THE SUETEST HOLES IN AREAS I AND 2.

TABLE 3. SUMMARY OF TEST HOLES OPENED BY T2 UTILITY ENGINEERS IN FIELDS I AND 2.

Test Hole Designator	Date of Excavation	Depth of Test Hole to Utility	Utility Description	Remarks
THI5	7/18/2023		2" iron, coated	Human remain, 4 th metacarpal, right hand
THI6	7/19/2023	5.56'	Black/orange pipe	Large stone cobbles present
THI7	7/18/2023	4.76'	Two 2" plastic PVC	Old rail track and ties
THI8	7/18/2023	3.74'	Metal pipe	Loose pea gravel
THI9	7/19/2023	3.96'	One 2" metal and one 4" plastic PVC pipe	
TH20	7/19/2023	3.34'	2" iron, coated	
TH20A	7/19/2023	4.13'	24"	
TH21	7/18/2023	3.84'	Two 2" metal, one 4" plastic PVC	
TH22	7/19/2023	5.81'	Two 2" plastic PVC	
TH23	7/19/2023	2.41'	18" concrete	

Field 3

Field 3 is a paved area, comprised of a concrete sidewalk and roadway at the eastern terminus of Henry Street, fronting Kentucky Avenue. Two test holes, designated by T2 Utility Engineers as TH13 and TH14 were opened at this location on July 18, 2023 (Figure 22). TH13 was excavated after the removal of four inches of overlying concrete to a depth of 6.77 ft where a bundle of four one-inch plastic PVC, PE, HDPE fiber optic lines were exposed. TH14 was placed in an area where the hardscaping had been previously removed. Three one-inch PVC conduits were briefly exposed at 8.29 ft below

surface prior to the hole sidewalls collapsing. Neither hole exposed cultural materials nor were any recovered from the inspected spoils.

Site Description

A site number was requested for the Henry Street project due to the discovery of an isolated human hand element, and the recovery of cultural artifacts from within the rightof-way footprint (Figure 23). The following site description details the discovery and identification of these materials.

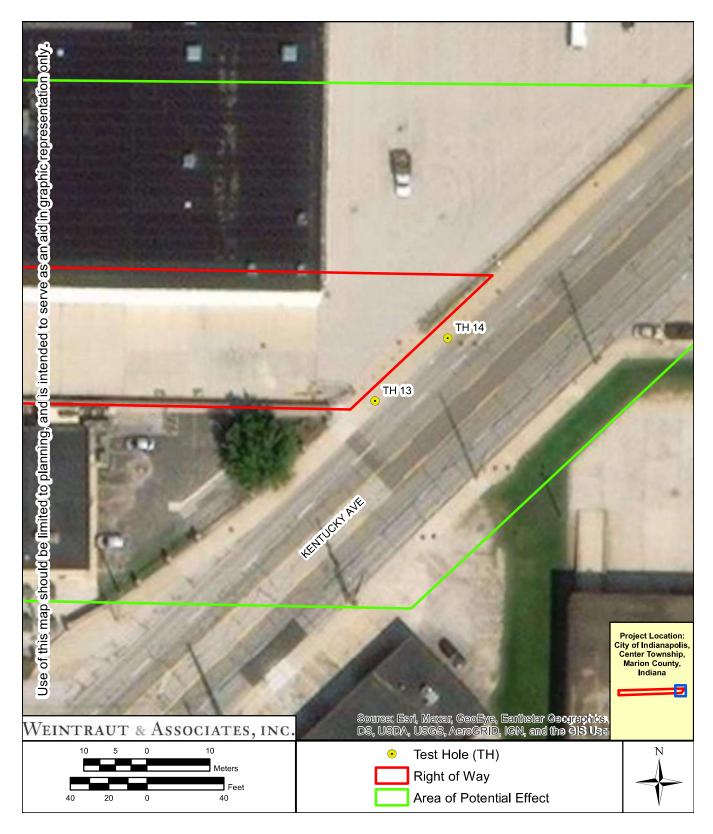


FIGURE 22. AERIAL (2022) SHOWING THE TWO INVESTIGATION HOLES ALONG KENTUCKY AVENUE IN AREA 3.

12MA1108

UTM Coordinates (WGS 84): Location 1: TH15; Metacarpal [16N 507867 E, 4401517 N].

Location 2: Geotechnical Test Borings 4 and 5 [16N 570783 E, 4401516 N].

Location 3: Trotter surface collection [16N 570857E, 4401522N]

Cultural Period: Location 1: Unknown, thought to be 19th to 20th centuries.

Location 2: 19th and 20th centuries

Location 3: 19th and 20th centuries

Site dimensions: Location 1: [Metacarpal] 1 m (3 ft) E/W x 1 m (3 ft) N/S

Location 2: 33 m E/W (108 ft) x 27 m (89 ft) N/S

Location 3: Unknown extent

Elevation: Location 1: 213.06 m (699 ft) AMSL

Location 2: 204 m (670 ft) AMSL

Location 3: 207 to 212 m (680 to 695 ft) AMSL

Topographic setting: Location 1: T1 Primary Terrace

Location 2: White River, Island on river floodplain, T-1 Margin

Location 3: T-1 Margin; slope between White River and T1 Primary Terrace

Soil type: Udorthents (Ua)

Nearest water source: West Fork of White River

Distance and direction to nearest water: 0 to 51.8 m (170 ft) west

Surface Visibility: 0%, pavers and gravel to 50% on the White River gravel bar

Site 12MA1108 consists of artifacts recovered from within the Henry Street corridor to date. Specifically, this site description details three distinct and separate collections. One, a human metacarpal isolate was recovered during vacuuming operations of the SUE project (see Attachment 1). Second, an assemblage of artifacts (n =188), surface and subsurface, was recovered from an island in the White River and the riverbank slope upward to the T1 terrace during geotechnical drilling operations. These items resulted from a combination of selective hand collection and through the inspection of geotechnical bore hole tailings. Third, an assemblage of artifacts (n = 3)was hand collected presumably from the slope between the White River and the T1 terrace. Each of these three collections is described in the following paragraphs.

Location 1, the human isolated element, is in the NW ¼ of the SW ¼ of the SE ¼ of the NW ¼ of Section 11 (anchored SE corner), Township 15 North, Range 3 East, as shown on the USGS 7.5'-series Indianapolis West, Indiana, quadrangle map (Figure 24). Location 2 is in the SE ¼ of the SE ¼ of the SW ¼ of the NW ¼ of Section 11 (anchored SE corner), Township 15 North, Range 3 West, also on the Indianapolis West topographic map. Location 3 is in the NW ¼ of the SW ¼ of the SE ¼ of the NW ¼ of Section 11 (anchored SE corner), Township 15 North, Range 3 East, on the Indianapolis West topographic map.

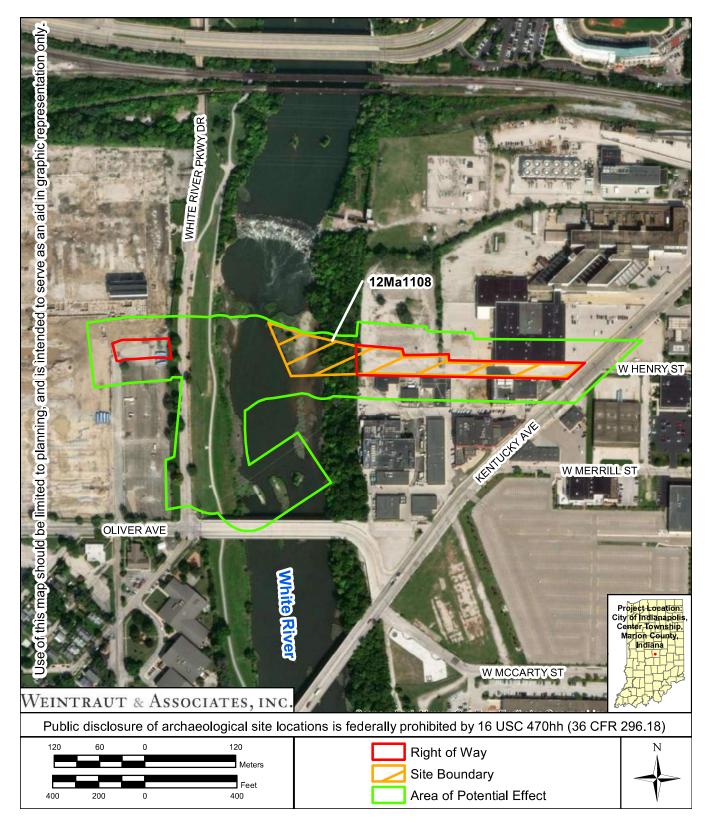


FIGURE 23. AERIAL (2022) SHOWING THE SITE BOUNDARIES OF 12MAI 108.

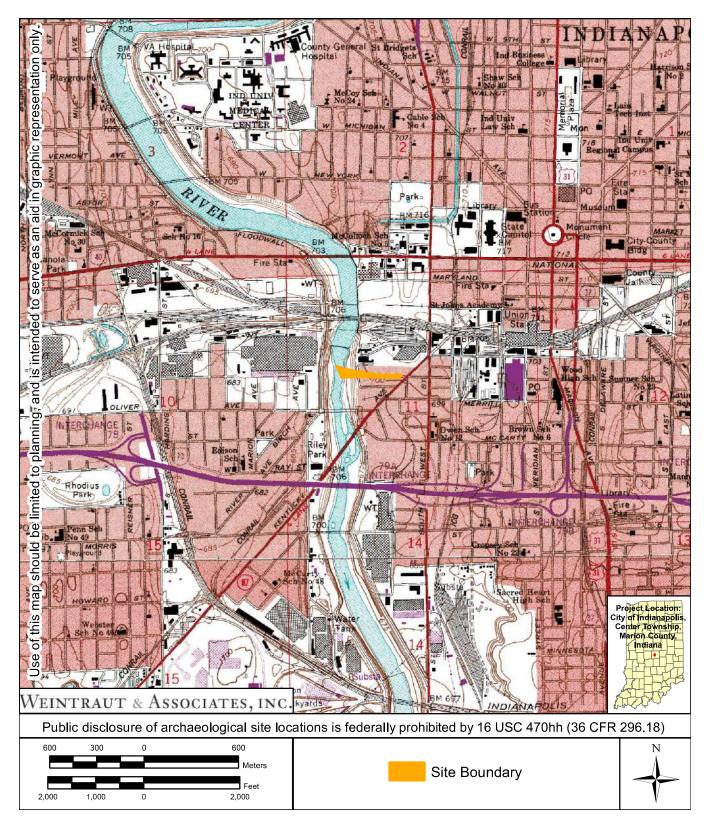


FIGURE 24. PORTION OF THE USGS 7.5'-SERIES INDIANAPOLIS WEST, INDIANA, TOPOGRAPHIC QUADRANGLE MAP SHOWING THE HENRY STREET RIGHT-OF-WAY AND 12MA1108 SITE BOUNDARY.

Human Remains. While conducting vacuum truck work to locate and verify subsurface utilities as part of the engineering scoping process, a human hand bone was identified and recovered from the backdirt spoil removed from Test Hole 15 (see Figures 2 and 21). Test Hole 15 was opened to a depth of 4.95 ft below surface where a two-inch iron coated utility line was exposed and documented. Subsequent to identification of the utility the spoil removed from the test hole was deposited on the ground surface adjacent to the excavation. During W&A efforts to sort and screen the materials, a bone thought to be from a human individual was recovered. Further consultation of osteological manuals and with W&A archaeologist Dr. James R. Jones III, confirmed the bone as human, specifically, it being a fourth metacarpal from the right hand.

On July 19, 2024, Beth McCord at the INDR,DHPA was notified of the finding, and requested the Marion County Coroner's Office (MCCO) be notified. A subsequent phone conversation with MCCO Deputy Jones, requested text photographs from W&A, to confirm the finding and make an initial assessment whether the bone was human. Upon receiving the texted photographs and further confirming the bone to be human, Deputy Jones then requested an on-site meeting, scheduled for 11 am on July 20, 2024.

During the on-site meeting, staff archaeologist Jessica Simpson detailed the discovery and subsequent chain of notifications by W&A to the MCCO; a discussion also occurred regarding this location being part of the earlier Greenlawn Cemetery. The MCCO determined the bone was from the Historic era and therefore, outside of their authority. This determination resulted in the purview and oversight falling under the IDNR,DHPA umbrella. The MCCO also requested no additional contact on any future discoveries unless they were of a more recently deceased individual.

The metacarpal was assigned a Field Specimen number and then secured in a fireproof safe at the W&A offices. The specimen was later transferred to Jeremy Wilson, Ph.D., at Indiana University Indianapolis for evaluation. Attachments 1 and 2 document the discovery process and subsequent evaluation of this human skeletal element.

Geotechnical Engineering Artifacts.

An artifact assemblage totaling 188 historic era items, having a mass of 755.0 grams, was recovered by a combination of hand collection from the ground surface, and from urban fills exposed during geotechnical engineering boring operations. The items recovered from the exposed ground surface were encountered near boring locations or in transit between the staging area on the terrace and the geotechnical investigation areas. Ten of the 188 artifacts were recovered from exposed surface contexts while the remaining 178 pieces are from the geotechnical boring cuttings. Figures 25 to 28 are photographic plates of the items recovered.



FIGURE 25. PHOTOGRAPHIC PLATE OF BRICK, CLINKER AND COAL FRAGMENTS, AND A TERRA COTTA SHERD $(2^{ND}$ ROW, SECOND FROM LEFT, LOWER).



FIGURE 26. PLATE OF ASSORTED CLINKERS, STONES, AND A METAL NAIL FRAGMENT.



FIGURE 27. CERAMIC SHERDS RECOVERED FROM THE EXPOSED GROUND SURFACE.



FIGURE 26. GLASS ARTIFACTS RECOVERED FROM THE SITE.

The ten hand collected items from a surface context include nine ceramics (see Figure 27) and one piece of clear container glass (FS 11 to 14). The ceramics include ironstone (n =5), porcelain (n = 2), and whiteware (n = 2). The five ironstone pieces total two pieces of hotel ware, each exhibiting three annular green bands. One is a small plate and the second is a rim sherd fragment. The other three ironstone items include an undecorated small, shallow bowl piece, and two body sherds; one displays green annular banding while the second has polychrome annular banding of multiple blue, yellow, and black lines. Ironstone has a generalized production range between 1842 and 1930 (Majewski and O'Brien 1987;

Miller 1991; Noël Hume 1969:131). Annular banding decoration was introduced prior to the commencement of ironstone production.

The two porcelain artifacts are a nearly complete bowl and a rim sherd. The bowl exhibits a decal applied multicolor flower pattern on the face with a backmark indicating Japan as its manufacturing origin (Figure 29). Japanese porcelain imported to the United States after 1921 was no longer marked with "Made in Nippon" but rather as Japan (Kovel and Kovel 1986:232; Miller et al. 2000:9). However, the presence of underglaze decals does not help in refining the temporal production as they were introduced around 1908 (Miller et al. 2000:13). Similarly, the presence of



FIGURE 29. PORCELAIN VESSEL SHOWING THE BACKMARK.

gold gilding on the rim sherd was introduced on English wares after 1870 (Miller et al. 2000:13). Therefore, the rim sherd having decals and gold gilding can only have a generalized post 1908 date of manufacture. However, a further search of *Kovels' New Dictionary of Backmarks* (Kovel and Kovel 1986:74F) identifies this as a likely Noritake product. Although none of the Noritake marks presented in the book are identical to this specific backmark, the wreath, capital N script, and Japan registered mark below the wreath match this firms stamp with their production facility being in the city of Nagoya. If so, this vessel has a post 1953 date of production.

The two whiteware items are both body sherds. One has a molded appearance and a light blue glaze while the second exhibits a blue transfer print. Whiteware has a post 1820s production range with flow blue printing first being imported to the United States after 1845 (Miller et al. 2000:13). It is almost certain the ceramics recovered from a surface context have their origins related to the riverbank being employed as a dumping ground for household refuse as discussed in the historical background discussion of the Greenlawn Cemetery.

The one glass shard is a clear soda bottle container piece embossed with a Pepsi Cola logo in a cursive script (see Figure 28). This artifact has a mid-20th century origin.

The remaining 178 artifacts were recovered from within the urban fill levels of the geotechnical borings, examined by W&A archaeologists. From the Boring 1 cuttings (FS 4, 5, 10, and 15), 141 items (111.1 g) were recovered including ceramics (n = 13), glass (n = 13)= 2), ferrous metal (n = 1), and mineral/stone (n = 1)= 125) pieces. The 13 ceramic pieces totaled 11 earthenware brick fragments, one undecorated porcelain body sherd, and one bisque terra cotta body sherd, probably from a flowerpot. The two glass items are an amber colored container body shard, and a colorless, complete small perfume bottle with a threaded finish (see Figure 28). The perfume bottle base is embossed with what is likely a manufacturer or production run numbers but there is no information helpful in identifying a specific maker.

The ferrous metal artifact is a nail shank fragment of an unidentified type. The largest contributing category is mineral/stone items comprised of clinker fragments (n = 125) and a lone coal piece.

The Boring 1 artifact assemblage is typical of fills routinely encountered in urban environments. Heating byproducts, like clinkers, along with other debris are casually discarded or intentionally deposited as fill materials.

Cultural materials from Boring 2 total 30 artifacts with a mass of 434.0 grams (FS 3, 6, 7, 8, and 9). These items are comprised of

ceramics (n = 6), glass (n = 1), mineral/stone (n = 22), and fauna (n = 1). The ceramic items are all earthenware brick fragments, while the mineral/stone are cinder/slag and clinker pieces. The one glass item is a colorless 1/8 quart milk bottle with an embossed base for a manufacturer that could not be identified (see Figure 28). The faunal item is a hinge fragment of a freshwater mussel, likely originating from the White River.

Artifacts from Boring 3, total four items weighing only 2.6 grams (FS 2). These are comprised of one brick fragment, two clinker fragments, and one coal fragment. Boring 4 artifacts (FS 1) total three pieces including two clinker fragments and one brick fragment.

Surface Collected Materials.

Three artifacts were recovered from a surface context, presumably from the slope between the White River and the flat terrace to the east. These three items have a combined mass of 1,440.7 grams. Of these artifacts, one (416.0 g) is Greenlawn graveyard related, a shaped headstone fragment with a carved, decorative edge margin (Figure 30). Dimensionally, it is 106 millimeters (mm) in length, 79.4 mm wide, and is 27.8 mm thick.

Item two is what appears to be a granite paver fragment with evidence of a wet saw cut on one face (Figure 31). A first inspection suggests this may be a gravestone fragment, but it is more



FIGURE 30. SHAPED SANDSTONE GRAVESTONE FRAGMENT.



FIGURE 31. GRANITE PAVER FRAGMENT WITH SAW-CUTTING BLADE REMNANT ON FACE.

likely a displaced paver like those covering much of the staging area near this location. Additionally, it is similar in appearance and material type to pavers that were removed during the Diamond Chain facility demolition. It measures 121.4 mm long, 112.2 mm wide, and is 26.0 mm thick.

The third artifact is a complete glass medicine bottle (Figure 32). The container exhibits a slight solarized tinting having a light purple appearance. One face is embossed, "Browning and Son Apothecaries Hall, Indianapolis." A cursory exploration of the interwebs reveals the Browning and Son Apothecaries Hall originated in the David Craighead store before becoming

Browning and Sloan, followed by Browning and Son (*Indianapolis Journal* 1887:12). The Browning and Son partnership came into existence in 1887 which explains the solarized color of the recovered bottle. Solarized glass has a manufacturing range in the United States extending from 1880 into the 1930s (Deiss 1981:78-83; Lockhart 2006:45-46). The container specimen measures 108.4 mm in length, 26.0 mm wide, and has a 26.0 mm thickness.

The site 12MA1108 assemblage is comprised of three distinct subdivisions of recovered materials. These are the human hand element, the W&A artifacts collected during geotechnical



FIGURE 32. BROWNING AND SON APOTHECARIES HALL MEDICINE BOTTLE.

drilling operations, and the hand collected materials from the sloped City of Indianapolis property. Of the 192 total items only two hold significance as related to the Henry Street Project. One is the human metacarpal element of the right hand; the second is the sandstone headstone fragment. The remaining 190 artifacts appear unrelated to the Henry Street project and appear indicative of typical fills encountered in urban environments.

Upon acceptance of this report by IDNR,DHPA, W&A will transfer the artifacts to the City of Indianapolis through a chain of custody document. The human hand

element will be transferred into Stantec's possession for reinterment along with any individuals recovered during future archaeology investigations of the Henry Street corridor. Likewise, the headstone fragments will be transferred for possible reinterment. The area surrounding the hand element recovered from TH 15 should be prioritized for further systematic archaeological investigations to discover whether the recovery was an isolated displaced element or if there remains a nearby human interment. Based on a shallow recovery depth of less than five feet, serious deliberation should be considered for the systematic archaeological screening of all soils

from within the Henry Street corridor. This recommendation is bolstered by the Historical documentation of previous removal efforts and reported discoveries of human skeletal remains in and near this undertaking (e.g., removals from the Federal ballfield [1914]; Nawrocki 1998; and the Terre Haute, Indianapolis & Eastern Traction Company freight house construction [1917]).

The remaining artifacts, although a few are interesting, hold little additional research value and are therefore recommended as noncontributing to the remainder of the 12MA1108 site. However, the entirety of site 12MA1108 has a great potential to yield important historical information through human interments that likely exist within the Henry Street corridor east of the White River. Although crass, these interments hold a large body of data with regard to the early population development of Indianapolis, and as such hold substantive value in understanding the history of the city. This site most certainly meets the NRHP eligibility threshold under Criterion D for research potential and W&A is recommending site 12MA1108 eligible for listing in the IRHSS and/or the NRHP. Systematic mitigation archaeological investigation is warranted and should proceed under a work plan acceptable to the IDNR, DHPA with accompanying research questions.

Conclusions and Recommendations

W&A, on behalf of CMT, has completed archaeological monitoring of the SUE project and geotechnical borings for the Henry Street Bridge and Road Construction Project as part of the Elanco Development Program in downtown Indianapolis. The survey area measured 0.05 ha (0.12 ac), or approximately 500 square meters. Because an isolated human hand skeletal element and cultural artifacts were identified within the project corridor, as a result of archaeological monitoring, site number 12MA1108 is assigned to the project footprint east of the White River.

Site 12MA1108 is comprised of artifacts recovered from within the Henry Street corridor. Specifically, the site currently includes three distinct and separate assemblages. One, a human metacarpal isolate was recovered during vacuuming operations of the SUE project. Custody of this skeletal element will be transferred to the City of Indianapolis for reinterment at a later date, along with any other human remains that are subsequently recovered during archaeological investigations. Second, an assemblage of surface artifacts was selectively hand collected by W&A archaeologists from an island in the White River and the riverbank slope upward to the T1 terrace during geotechnical drilling operations. A third assemblage of artifacts was arbitrarily hand collected, presumably from the slope between

the White River and the T1 terrace. One item, a headstone fragment, should be retained by the City of Indianapolis until its disposition is addressed with a reburial plan to be submitted by Stantec at a future date.

The immediate area surrounding the hand element recovered from TH 15 should be prioritized for further systematic archaeological investigations to investigate whether the recovery is an isolated displaced element, or if there remains a nearby undiscovered intact human interment. Furthermore, the recovery of the hand element from a depth of less than five feet should be cautionary and consideration should be thoughtfully approached for the archaeological screening of all soils removed within the Henry Street right-of-way. This recommendation is further bolstered by previous historical removal efforts (e.g., the Federal ballfield [1914], Terre Haute, Indianapolis & Eastern Traction Company freight house [1917]) where either burials were removed or subsequently discovered after previous removal efforts. There remains a high likelihood of there being both intact burials and scattered, isolated elements of individuals impacted during earlier episodes (removal and construction).

The remaining artifacts, although a few are interesting, hold little additional research

value and are, therefore, recommended as noncontributing to the remainder of the 12MA1108 site. However, the entirety of site 12MA1108 east of the White River has a great potential to yield important historical information through human interments that likely exist within the Henry Street corridor east of the White River, part of the original burying ground and greater Greenlawn Cemetery. These most certainly meet the NRHP eligibility threshold under Criterion D for research potential and W&A is recommending site 12MA1108 eligible for listing in the IRHSS and/or the NRHP. Future systematic archaeological investigations in the form of mitigation are warranted and should proceed and be guided by accompanying research questions under a work plan acceptable to the IDNR, DHPA.

Finally, Attachment #3 is an abbreviated management summary drafted by the Indianapolis Department of Public Works. It is included here for your consideration.

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Attachments

Attachment 1

Attachment 2

Attachment 3

Attachment 1

WEINTRAUT & ASSOCIATES, INC.

To: CMT From: W&A

Date: July 21, 2023 RE: BURIAL NO. I

On July 18, 2023, an isolated human skeletal element was recovered during Subsurface Utility Excavations (SUE), which utilized a vacuum truck to verify and document the presence of multiple buried fiber optic lines.

Archaeologists recovered a right-hand element, comprised of a 4th metacarpal, while inspecting soil collected in the vacuum truck holding tank from the location of Test Hole 1-1 TH 15 in the T2 designated area. The boring was located within the Diamond Chain complex, east of the White River, inside the chain-link fence delineating the industrial property from that of the City of Indianapolis, Board of Public Works parcel which parallels the White River. It was recovered from a depth of less than five feet, but from soils exhibiting no obvious soil stratification, being indicative of infilled materials. The vacuuming process did not allow for a greater degree of accuracy with regard to the depth of recovery. The principal investigator inspected the 12-inch boring but did not see any further evidence of human remains. Vacuum tests were not halted due to the nature of the discovery.

The bone was bagged and labeled; then recorded in a W&A field specimen log: FS Log – Burial No. 1. Since it was late in the day (after state offices had closed), the bone was returned to the W&A offices, where it was placed in a fireproof safe.

CMT was notified following an established chain of command notifications list for this project.

Craig Arnold, M.A., verified the initial element identification, that it was indeed a 4th metacarpal with James R. Jones, III, Ph.D.

Arnold then notified Beth McCord at the Division of Historic Preservation and Archaeology by phone on July 20 (8:54 AM); she did not immediately answer her phone so he left a message and she returned his call 15 minutes later (9:09 AM). McCord and Arnold's conversation centered around the context of the discovery and if it was associated with intact soils; Arnold informed her that with the vacuum process, the soil profile had the appearance of being fill, and not a natural, stratified soil profile. She elected not to come to the site but asked him to notify the Coroner.

At the same time on July 20, 2023, the director of DPW was informed of the discovery.

Arnold spoke with Deputy Jones of the Marion County Coroner's Office who requested photographs of the bone to be texted to their office to aid in a preliminary identification. An employee of the Coroner's office arranged a site visit to the property and met with Jessica Simpson, W&A archaeologist. The Coroner cleared the site once the Deputy learned that the bone had been recovered from the confines of the Greenlawn burial ground.

W&A subsequently notified the United States Army Corps of Engineers (USACE) per the stipulations of the Memorandum of Agreement signed for the Henry Street Project.

The bone will remain at W&A's offices in a fireproof safe until the contract is signed and finalized with Indiana University. As a result of this discovery, the area in which the bone was recovered will receive careful scrutiny by the archaeologist during future archaeological investigations for this project.

Attachment 2

On July 18th, 2023, a right fourth metacarpal (i.e., MC4) was discovered by archaeologists from Weintraut & Associates during the Subsurface Utility Engineering (SUE) investigation in advance of the Henry Street extension and bridge across the White River (aka City of Indianapolis-Department of Public Works' White River Innovation District Infrastructure Project). Notes on the associated provenience bag indicate that the MC4 was encountered at a depth of zero to five feet during boring in Hole #1 (T2 Utility Engineers Test Hole [TH] 15) near the "back fence" and collected as Field Specimen #1 by "JS" and "CRA." The accidental discovery was reported to Deputy State Historic Preservation Officer Beth McCord at the time and later transferred to Dr. Jeremy Wilson in the Department of Anthropology at IU Indianapolis on January 16th, 2024 for analysis.

As depicted in Figure 1 below, the MC4's color, staining, adhering soil, and weight are consistent with human skeletal remains from the former grounds of the Greenlawn Cemetery and other historic burying grounds where wooden coffins were frequently utilized. Postmortem damage was noted on the lateral aspect of the MC4's proximal base where it articulates via demifacets with the third metacarpal (i.e., MC3). The proximal base and distal head are both fused, a developmental milestone that happens between 14 and 17 years of age in biological females and males (Scheuer and Black 2000: 334). As a result, the MC4 originates from a late adolescent or adult individual interred at the Greenlawn Cemetery at an unknown time. The small pseudo-epiphysis on the palmar aspect of the distal head in Figure 1 is associated with discontinuities in the cartilage cell columns during ossification, suggesting that the MC4 likely originated from a younger individual as opposed to an older adult. The absence of degenerative, age-related changes on and around the proximal and distal articular surfaces corroborates this assessment.

The MC4 has a maximum length of 58.9 mm and medio-lateral distal breadth of 12.5 mm. A measurement of the medio-lateral breadth of the proximal base was not possible due to post-mortem damage. Both viable measurements suggest that the metacarpal originated from either a biological male or larger biological female. Nevertheless, caution should be exercised as it relates to the determination of biological sex from metacarpal dimensions as prior studies have revealed population-specific variability and accuracy rates between 65 and 90+% (Scheuer and Elkington, 1993; Lazenby, 1994; Falsetti, 1995). Assuming the MC4 does originate from a biological male and a European biogeographic ancestry, Meadows and Jantz's (1992) regression formulae for stature estimation predict of height of 5'6" (170.5 cm) with a 95% confidence interval of 5'2" to 5'9". If of African biogeographic ancestry, the stature prediction for a biological male is 5'5" with a 95% confidence interval of 5'1" to 5'8". No additional details about the biological profile of this individual can be assessed at this time.



Figure 1: The Right MC4 in palmar (left) and dorsal (right) views discovered on July 18th, 2023 by Weintraut & Associates during geotechnical boring.

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Attachment 3

Beth K. McCord
Deputy State Historic Preservation Officer
Director, Division of Historic Preservation and Archaeology

Re: Archaeological monitoring plan for the Henry Street Bridge Project within the old Greenlawn Cemetery (CR-49-6) in Marion County, Indiana (DHPA #28221)

Dear Ms. McCord

The Indianapolis Department of Public Works is providing this management summary to close out the monitoring plan (#2023025) submitted on our behalf. Over the past year, the City formed a Community Advisory Group (CAG), the CAG is comprised of stakeholders focused on the care taken when human remains or artifacts are discovered and the memorialization and documentation of those buried at Greenlawn. In partnership with the CAG, we plan to complete a systematic recovery of the remains that are within the footprint of the infrastructure required for the Henry Street bridge and roadway. More details will be forthcoming on this approach along with an excavation plan for your Department's approval. With this change to our approach, we are providing the following information to close out the current monitoring plan.

We understand that the typical process for closing out a monitoring plan includes a plan for reinternment of human remains and curation or reburial of artifacts. It is the City's desire to hold off on such activities until after the systematic recovery of remains that would be impacted by our project is complete. The CAG has expressed a strong desire to rebury all remains together and the City wishes to honor this request. Until the recovery is completed, we will not know the amount of space needed for the reburial plan.

Summary of Isolated Human Skeletal Element

Under the aforementioned monitoring plan, one isolated human skeletal element was encountered on July 18, 2023 during subsurface utility engineering (SUE) work which utilized a vac truck to remove dirt. The purpose of the work was to identify the exact location of buried utilities. The location of the SUE work is shown in Attachment #1. The City's consultant Weintraut & Associates, Inc was onsite during the SUE work as required by the approved monitoring plan. The summary of their observations and response to finding the isolated human skeletal element is included in Attachment #2. On January 16, 2024 the isolated human skeletal element was transferred to Dr. Jeremy Wilson in the Department of Anthropology at IU Indianapolis. His analysis is included in Attachment #3.

Summary of Artifacts

In 2023, a member of the public visiting the site recovered a portion of a dressed pieced of limestone, a glass bottle, and a brick paver from the surface of the site. These items were turned over to the SHPO, who in turn transferred the artifacts to the City's consultant. With the City's change in approach, these items will be transferred to the consultant completing the systematic removal and fully documented as part of that report. A summary of the artifacts recovered from this site is included in Attachment #4

Conclusions

Given the single human remain found, the City's monitoring consultant is unable to answer the research questions posed in the initial monitoring plan. The City expects that any remains found during the

systematic discovery may be able to provide insights into the questions posed in this plan and future plans related to the City's work in this area.

The City appreciates, the SHPO's collaboration to date on this project and looks forward to our continued work together as we move to a systematic recovery. Please do not hesitate to reach out to me or Craig Arnold with any questions related to this monitoring plan close out document or the project.

Sincerely,

Shannon Killion, PE, ENV SP Engineering Stormwater Administrator Indianapolis Department of Public Works Craig Arnold
Principal Investigator
Weintraut & Associates, Inc.

Copy: project file

Attachments: #1 Location of SUE Work

#2 Summary of Observations to Finding the Isolated Human Skeletal Element

#3 Dr. Wilson Analysis of the Isolated Skeletal Element

#4 Summary of Artifacts