

March 15, 2021



## CORN ISLAND ARCHAEOLOGY

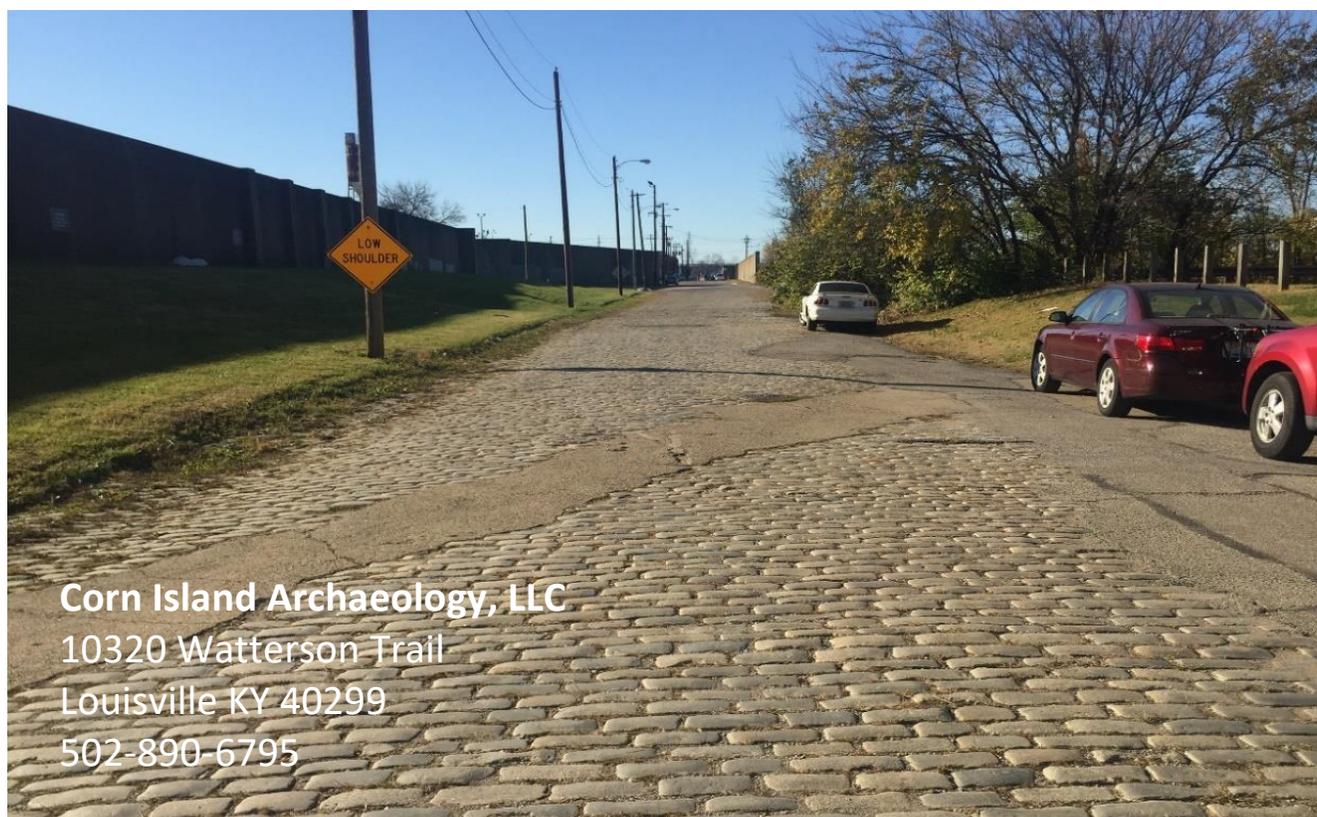
# Cultural Historic and Archaeological Documentation of JFL-502, Rowan Street, at the Intersection of Rowan and 11<sup>th</sup> Streets, Louisville, Jefferson County, Kentucky

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PROJECT NO. PR18008 • CULTURAL RESOURCES REPORT TR21009

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**Cultural Historic and Archaeological Documentation of JFL-502, Rowan Street, at the Intersection of Rowan and 11<sup>th</sup> Streets, Louisville, Jefferson County, Kentucky**

KHC Project No. FY17-2636

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Project No. 18008  
Technical Report No. PR21009



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March 15, 2021

## **ABSTRACT**

In March 2018, Corn Island Archaeology LLC was engaged by Hazen and Sawyer to support the Louisville and Jefferson County Metropolitan Sewer District as part of its Downtown Combined Sewer Overflow Interceptor project. In response to a Memorandum of Agreement, Corn Island completed cultural historic documentation and conducted archaeological monitoring during construction of a sewer line through Rowan Street at the intersection with 11<sup>th</sup> Street. This report summarizes Corn Island's findings at the 0.08-hectare, or 0.2-acre, project site at Rowan and 11<sup>th</sup> streets. The work extended along the southern side of Rowan Street from a pump station at the southwestern corner of Rowan and 10<sup>th</sup> streets to a diagonal crossing just east of the intersection of Rowan and 11<sup>th</sup>. The total area excavated covered 0.08 hectare, or 0.2 acre.

The cultural historic documentation included several required elements. The first was to complete or update a Kentucky Heritage Council site form for Rowan Street and acquire a Kentucky Heritage Council site number. It was learned that this resource already had a site number (JFL-502), so the site form was updated during this documentation, and the resource was updated to include the blocks between 11<sup>th</sup> and 13<sup>th</sup> streets. In addition, the documentation must include a map of Area 1 of the Downtown Combined Sewer Overflow Interceptor project. A historic context was also prepared along with a statement of eligibility for the resource. It was recommended that the block of Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> is individually eligible for listing in the National Register of Historic Places as it retains sufficient integrity despite the impacts from the sewer line extension. However, the section of the resource between 11<sup>th</sup> and 13<sup>th</sup> streets is recommended as ineligible due to a lack of integrity. Finally, the documentation must include the findings and a schematic profile of the roadbed as seen in the archaeological monitoring, discussed below.

The Metropolitan Sewer District required archaeological monitoring to determine whether archaeological or historic resources existed within the project area of potential effect. Monitoring revealed that the project area had once been a naturally sloped terrace edge along the river that was subsequently leveled with fill. The historic roadbed was constructed on top of this fill. An earlier macadamized road surface, which was found to be part of this profile, proved older than the street's granite boulder block surface, which dated to the late 1800s (a feature of historic interest in that it may indicate early efforts at paving the intersection). However, no features or below-ground resources eligible for listing in the National Register of Historic Places were found.

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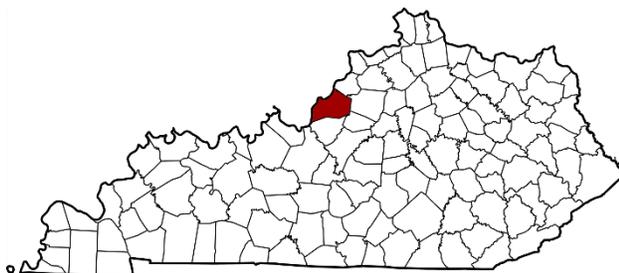
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# 1

## INTRODUCTION

As outlined in a Memorandum of Agreement (MOA) dated July 26, 2018 between Louisville Metropolitan Sewer District (MSD) and the Kentucky Heritage Council (KHC), it was determined that a section of Rowan Street (JFL-502) in downtown Louisville, Jefferson County, Kentucky (**Figure 1**), which has been determined eligible for listing in the National Register of Historic Places (NHRP), would be adversely affected by implementation of the Downtown CSO (Combined Sewer Overflow) Interceptor Project (described below). Site JFL-502 is comprised of a section of granite boulder block street pavers. MSD required an approximately 12-x-21-meter (m), or 40-x-70-foot (ft), trench be cut through the street to lay a sewer line related to the overall project. The planned sewer line corridor extends along the southern side of Rowan Street from a pump station at the southwestern corner of Rowan and 10<sup>th</sup> streets to a diagonal crossing just east of the intersection of Rowan and 11<sup>th</sup> streets (**Figure 2**). The area of potential effect (APE) for the trench excavation was situated at the intersection of the two streets and encompassed 0.08 hectare (ha) (0.2 acre).



**Figure 1. Location of Jefferson County, Kentucky.**

As stipulated in the MOA, several tasks are required to mitigate impacts of the undertaking. These tasks include the removal and safe storage of the affected granite pavers; archaeological monitoring of the trench excavation and documentation of the vertical profile of the Rowan Street roadbed; preparation of a cultural historic report detailing the significance of the granite paved street; and preparation of an interpretive display to be placed in the Portland Museum. On behalf of MSD, Corn Island Archaeology LLC was engaged by Hazen and Sawyer to complete the cultural historic report and perform the archaeological monitoring services at this site. This document provides findings of the cultural historic documentation and the archaeological monitoring, which was completed in the Fall of 2019.

### PROJECT DESCRIPTION

The Downtown CSO Interceptor Project is one of four components of the Ohio River Tunnel (ORT) Project. The project was awarded to the Hazen team following the 60 Percent Design Submittal of the Lexington and Payne CSO Basin and Interceptor project. At that time, the Rowan CSO Tunnel Project was extended to provide storage associated with both the Story and Main CSO Basin and the Lexington and Payne CSO Basin. The basin components have now been eliminated from the project.

The project consists of diversion and control gate structures as well as new sewers north of and including Main Street at North 13<sup>th</sup> Street, North 13<sup>th</sup> Street between Main and Rowan Streets, North 12<sup>th</sup> Street at Rowan Street, Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> Streets, and North 8<sup>th</sup> Street at West Washington Street. The purpose of the project is to provide a level of control of

eight (8) overflows per year (LOC 8) for 11 CSOs on the northern side of the floodwall. Three (3) aboveground control structures will be built north of the floodwall, one (1) at the Franklin and Buchanan Street intersection (Area 3), one (1) at the 10<sup>th</sup> and Rowan Street intersection (Area 1), and another at the 8<sup>th</sup> and Washington intersection (Area 2). These control structures will be at the same elevation as the floodwall. Additionally, four (4) control structures will be built south of the floodwall, at grade, at the intersections of 12<sup>th</sup> and Rowan, 8<sup>th</sup> and Washington, 7<sup>th</sup> and Washington, 6<sup>th</sup> and Washington, and 5<sup>th</sup> and Main streets.

To accomplish LOC 8, the Hazen team will divert overflows from existing sewers to new sewers routed toward vertical drop shafts which lead to the ORT. The ORT will be constructed approximately 61 m (200 ft) below the surface. Existing sewers will be reused where practical to improve constructability and minimize floodwall crossings and traffic impacts. The alignment of the new sewers leading to the ORT drop shafts will terminate approximately 15 m (50 ft) short of the drop shafts. The connection of the new sewers to the drop shafts will be designed and constructed as a separate project.

Site JFL-502, the paved section of Rowan Street, lies in Area 1 of the project footprint, as seen in **Figure 3**. **Figure 4** shows the extent of the paved blocks of Rowan Street, including those sections that had been covered with asphalt in the past. Overall views of Rowan Street are provided in **Figure 5** and **Figure 6**.

### **COMPLIANCE REQUIREMENTS**

The cultural resource investigations are required to satisfy compliance requirements with Section 106 of the National Historic Preservation Act (NHPA) of 1966. The U.S. Environmental Protection Agency (EPA) is the lead agency of record. The fieldwork and reporting are in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* located at 48 F.R. 44716, as well as specifications and guidelines regarding NHPA compliance developed by the State Historic Preservation Office (SHPO) in Frankfort, which is seated in the KHC.

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
Louisville, Jefferson County, Kentucky

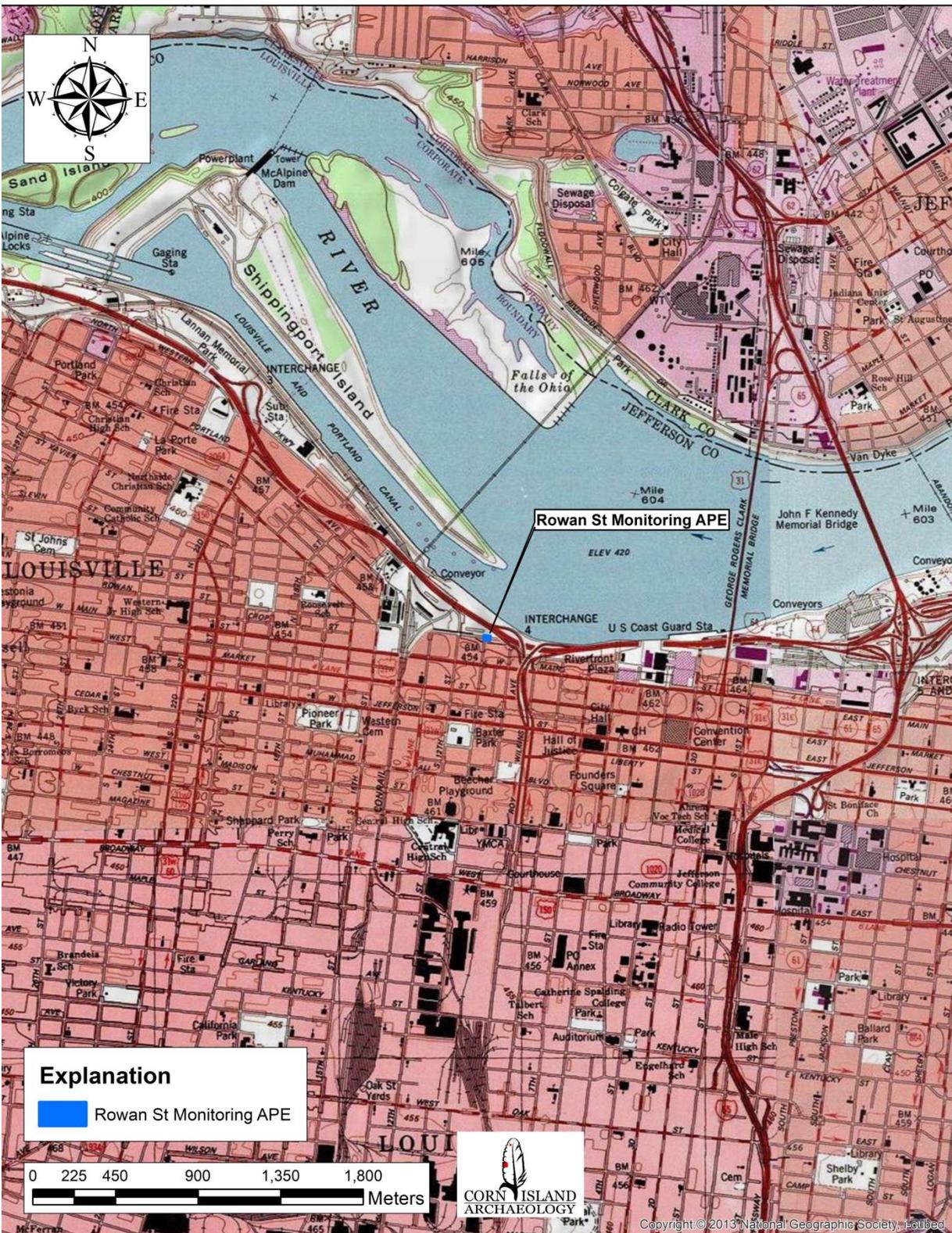


Figure 2. 7.5' 1993 Jeffersonville IN-KY topographic map showing the location of the Rowan Street monitoring APE (United States Geological Survey [USGS] 1993).

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
Louisville, Jefferson County, Kentucky

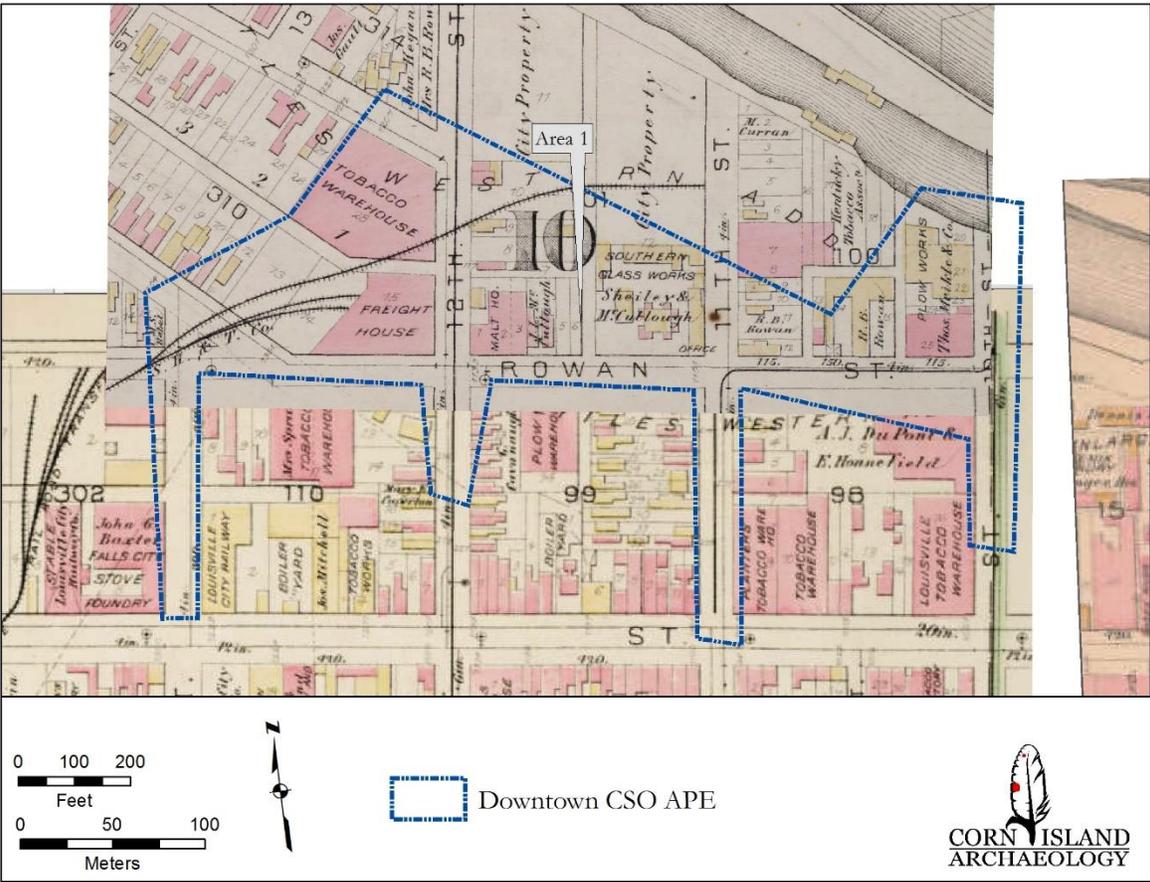


Figure 3. Area 1 on georeferenced 1884 atlas of Louisville (Hopkins 1884).

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
Louisville, Jefferson County, Kentucky

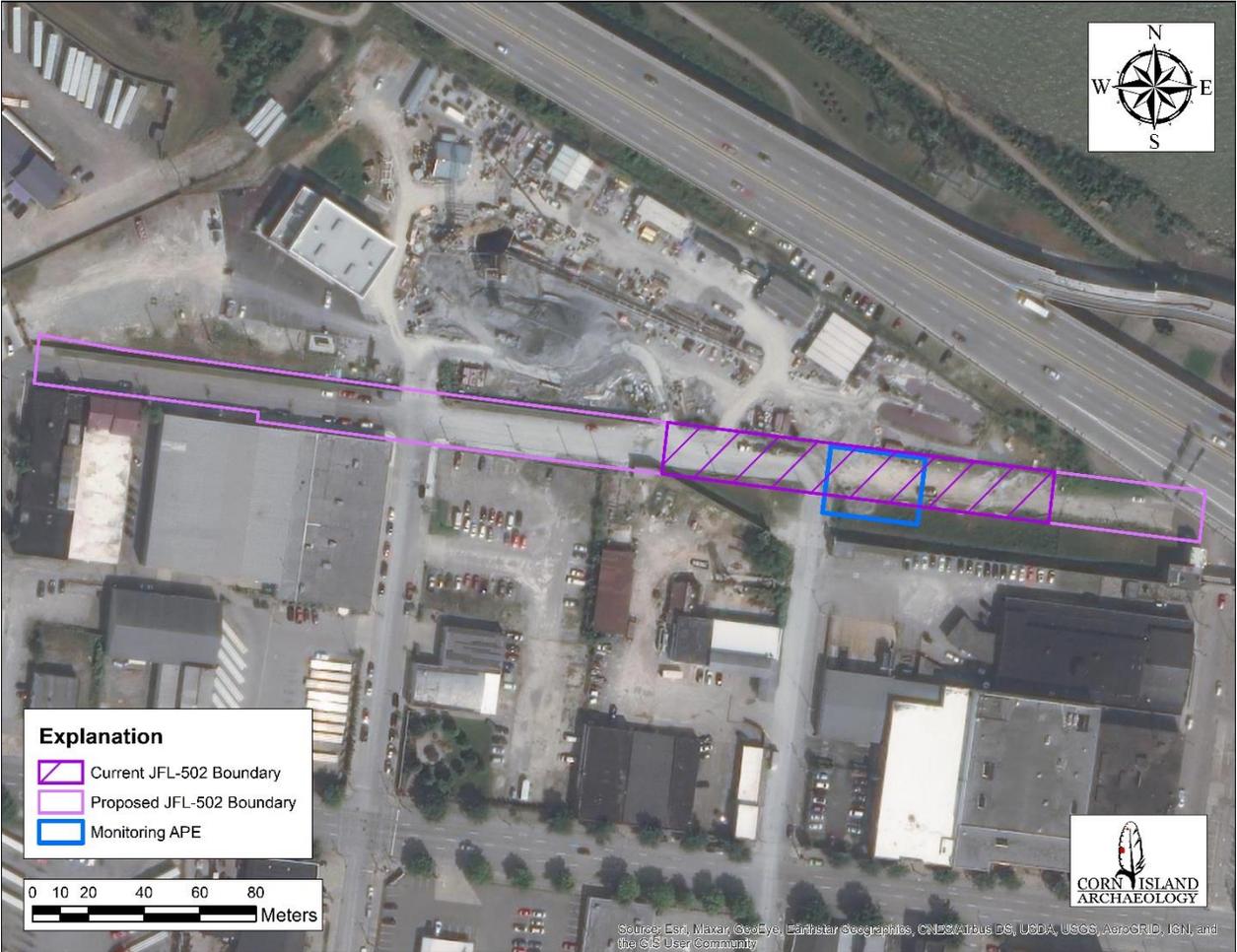


Figure 4. Rowan Street (JFL-502) and monitoring APE.



**Figure 5. View of Rowan Street, facing west from 10<sup>th</sup> Street intersection.**



**Figure 6. Rowan Street, facing west toward 11<sup>th</sup> Street intersection.**

### **SUMMARY OF RECOMMENDATIONS**

One previously surveyed resource, JFL-502, the Rowan Street boulder blocks, were identified within the APE for direct effects. This resource was previously determined eligible for listing in the NRHP, and the proposed project would have an adverse effect on this resource. Through an MOA with the SHPO, it was determined that the following mitigation measures be taken: an in-depth cultural historic report of the stone street on Rowan Street to include a historic context, archaeological monitoring, and an assessment of the NRHP eligibility for Rowan Street. The final recommendation is that the stone paver section of Rowan Street is individually eligible for listing in the NRHP under Criteria A, as evidence of patterns of city development in the 1880s.

The archaeological monitoring identified no buried cultural resources. The profile of the roadbed was documented and is described in this report.

# 2

## METHODS

The methodology for the project was completed using guidelines set forth in the *Secretary of the Interior Standards and Guidelines for Archaeology and Historic Preservation and Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports*. The Principal Investigator (PI), Melissa Thompson, meets the requirements for professional architectural historian as detailed in the Secretary of the Interior standards. The investigation included a review of maps and literature, background research, and survey.

An updated KHC inventory form, photographs, and mapping were prepared using guidelines set forth by KHC in *Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports*, revised in 2017, and in *Instructions for Completing the Individual Buildings Survey Form (KHC 2014-1)*, and in the updated mapping policy dated July 23, 2015.

Adverse effects to the resources were considered based on direct impacts. The proposed action resulted in a loss of integrity as a portion of the street was removed to allow the excavation of a trench to lay pipelines for the CSO project.

### **NRHP BULLETIN #15, HOW TO APPLY THE NATIONAL REGISTER CRITERIA FOR EVALUATION**

The NRHP utilizes four criteria defined by the U.S. Secretary of the Interior for the evaluation of significance. For a cultural resource to be considered eligible for listing in the NRHP, it must meet at least one of these criteria in association with an important historic context and retain sufficient historic integrity to convey this significance (U.S. Department of the Interior 2004). The four criteria are:

**Criterion A:** *Associated with events that have made a significant contribution to the broad patterns of our history.*

**Criterion B:** *Associated with the lives of significant persons in our past.*

**Criterion C:** *Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.*

**Criterion D:** *That have yielded or may be likely to yield, information important in prehistory or history.*

In addition to these four criteria, a structure or property's physical integrity is addressed. As stated in the National Register Bulletin #15 *How to Apply the National Register Criteria for Evaluation*, "Integrity is the ability of a property to convey significance" (U.S. Department of the Interior 2002). Integrity of a structure must be judged in accordance with the four criteria, and while it is "...sometimes a subjective judgment....it must always be grounded in an understanding of a

property's physical features and how they relate to its significance" (U.S. Department of the Interior 2002). There are seven aspects of integrity as identified by the National Park Service:

**Location:** Location is the physical setting in which a structure was built or a historic event occurred. This is important to understanding the *how and why* of a structure or property, and to recapturing the historic event. If a property is moved, it affects the historic associations of the structure.

**Design:** Design includes the form, plan, space, structure, and style of a property, and results from decisions made during the original conception of the property or during its alteration. Design applies to function and technology as much as it applies to aesthetics. It includes decisions that made the plan of the property, including use of space, fenestration (windows), ornamentation, and layout.

**Setting:** Setting is not equivalent to location. It is the property's physical environment and involves the manner in which the character of the property was created. It includes the actual physical setting of the property – topographic features, vegetation, and manmade features. The relationship between the property and these features defines setting.

**Materials:** Materials are the physical elements used or deposited during a specific period of time and in a particular pattern to create a structure or property. Materials show not only the preferences of the person(s) who created the structure but may also indicate what materials were available or popular at the time of construction or alteration. If a structure has been altered, the original materials relative to the structure's period of significance must be present.

**Workmanship:** Workmanship is evidence of the technology of a particular culture or a group of people during a particular period of time. It provides information on age, aesthetic styling, and methodology of design. Workmanship in historic structures includes carving, painting, joinery, tooling, and graining.

**Feeling:** Feeling is defined in the bulletin as "a property's expression of the aesthetic or historic sense of a particular period of time" (U.S. Department of the Interior 2002). It conveys the property's historic significance through the presence of physical features.

**Association:** Association is the direct connection between a historic event or person with the structure or property. To satisfy the criterion of *integrity of association*, the structure must retain its original location and physical features that convey the property's historic significance.

To properly evaluate integrity, the presence of the physical features must be determined and defined, if visible. Second, it must be determined if the property is a rare or single example of its kind, or if it can be compared with other, similar properties. Finally, the aspects of integrity must be identified and established as essential to the historic significance of a property.

## **DETERMINING THE NRHP SIGNIFICANCE OF A ROADWAY**

The NRHP is a listing of structures, archaeological sites, historic roads, and other important cultural landscape features generally-but not always-over 50 years of age that have been determined significant to acquiring an understanding of the past. The listing is maintained by the National Park Service (NPS). While NRHP listing does not guarantee any sort of long-term protection, it does ensure, in specified cases, that adverse impacts to a significant resource be mitigated under Section 106 of the NHPA. Some local and state governments also have guidelines that provide some layers of protection for NRHP-listed resources.

Guidelines for the evaluation of significance of any cultural resource are provided in numerous publications circulated by the Department of the Interior, the NPS, and independent researchers. The notion of roads as historically significant cultural resources is relatively new; therefore, an appropriate evaluation is aided by incorporating several approaches as outlined in the following:

- NRHP Bulletin #15, *How to Apply the National Register Criteria for Evaluation* (U.S. Department of the Interior 2002);
- *Saving Historic Roads* (Marriott 1998); and
- *From Milestone to Mile-Markers* (Marriott 2004).

These resources define the concept of “road” and introduce the criteria for the evaluation of roads as independent resources. Roads are direct evidence of human activity on the landscape. Roads can yield information on technology in design and construction and aboveground information on design, usage, and settlement patterns over time. Sometimes, abandoned roads are considered significant as components of larger resources such as the site of the Civil War Richmond Battlefield. Association with a notable historic event, such as the blazing of the famed Wilderness Road, also provides a compelling rationale for assessing NRHP significance.

Transportation routes define cultural views of movement over the landscape. The routes of the earliest tracks to those of modern superhighways are dependent on numerous factors that change over time. Cultural as well as environmental factors determine the development of road systems. Environmental influences tend to dominate the development of the earliest road systems and considerations include access to exploitable resources, natural barriers, and the reuse of animal traces. Cultural influences include religion, the economy, legal boundaries, trade, and political power. These tend to become more important as the culture becomes more complex.

### **Paul Daniel Marriott’s *Saving Historic Roads***

In 1998, Paul Daniel Marriott published *Saving Historic Roads*, a book that has become a primer on the identification, interpretation, and preservation of historic roads and their design guidelines and principles. For the purpose of this project, Marriott’s book offers very useful information on defining historic roads, identifying types of historic roads, and evaluating historic roads as individual elements outside the rural-historic landscape. The most important summary from the book that can be applied to the identification and evaluation of historic roads lies in Chapter 2, *Historic Roads Defined*. In this chapter, Marriott writes:

*“In general, historic roads are roads that, through design, experience, or association, have contributed to our culture in a meaningful way. The type of road,*

*its history, and current condition will determine the most appropriate action for preservation” (Marriott 1998).*

This statement efficiently and effectively summarizes how historic roads should be evaluated for NRHP significance: by considering their usage, design, and integrity. Marriott, as a preservationist, combines these elements with the four NRHP criteria, and thus allows for the individual evaluation of roads. He identifies three types of roads: aesthetic routes, engineered routes, and cultural routes. The first is significant for its natural or designed beauty and includes scenic highways. Examples of historic roads meeting this criterion are the Blue Ridge Parkway for its artistic values and the Grand Rounds parkway system designed by noted landscape architect H.W.S. Cleveland (Marriott 2004). The second evaluation criterion addresses the issue of outstanding engineering in design and construction. Examples of historic roads meeting this criterion are the Baroque street plans of St. Mary’s City in Maryland because they offer information on seventeenth-century streets and the granitoid streets of Grand Forks, North Dakota, because they offer insight into the technology of these streets (Marriott 2004). The final category deals with the issue of historical association. Examples of historic roads meeting this criterion are those associated with Revolutionary or Civil War campaigns, and Route 66 for its association with westward migration during the Dust Bowl era (Marriott 2004). Other examples of historic roads meeting this criterion include the Mount Vernon Memorial Highway for its association with George Washington and the Selma to Montgomery Highway for its association with Dr. Martin Luther King (Marriott 2004).

### **Paul Daniel Marriott’s *From Milestones to Mile-Markers***

Marriott wrote a second book in 2004, *From Milestones to Mile-Markers*, which is also useful in identifying and assessing historic roads. This book differs from his previous one in that it provides a historic context for historic roads, whereas the earlier book discussed design guidelines and policies. Marriott takes the opportunity to break down those characteristics that constitute a historic road: the road proper, the right-of-way (ROW) and the setting (Marriott 2004).

The road comprises the actual physical roadway and features multiple elements including the travel way, pavement, alignment, subsurface, crown, curb, gutter, shoulder, and structures (Marriott 2004). Many of these elements, such as crowns, curbs, and shoulders, are not present on early or rural roadways.

The ROW comprises various elements of a roadway that lie immediately beyond the road itself. Elements such as the swale or ditch, barriers, lighting, signs, sidewalks and paths, trees, utilities, service structures and areas, and waysides can make up the ROW, although, as noted above, most of these elements are not present along early historic and rural roadways (Center for Preservation Education and Planning 2004).

The setting of a historic road is also important in understanding how the elements of the road and ROW function within a greater historical context. Features associated with roads include roadside structures, landscaping, character, and viewshed (Marriott 2004). Each of these elements are important to early historic roadways and can have a profound impact on establishing its cultural integrity.

The National Scenic Byways Program of the Federal Highways Administration (FHWA) Historic Roadways recommends 14 points (taken from the FR Vol. 60, No. 96) to be used when developing

a corridor management plan (CMP) (Center for Preservation Education and Planning 2004). While these are FHWA recommendations, they are applicable to the present task of evaluating the significance of Rowan Street. The 14 points are as follows:

- A map identifying the corridor boundaries and the location of intrinsic qualities (scenic, historic, cultural, natural, recreational, and archaeological) and different land uses within the corridor.
- An assessment of such intrinsic qualities and of their context.
- A strategy for maintaining and enhancing those intrinsic qualities.
- A schedule and a listing of all agency, group, and individual responsibilities in the implementation of the corridor management plan, and a description of enforcement and review mechanisms, including a schedule for the continuing review of how well those responsibilities are being met.
- A strategy describing how existing development might be enhanced and new development might be accommodated while still preserving the intrinsic qualities of the corridor. This can be done through design review, and such land management techniques as zoning, easements, and economic incentives.
- A plan to assure ongoing public participation in the implementation of corridor management objectives.
- A general review of the road's or highway's safety and accident record to identify any correctable faults in highway design, maintenance, or operation.
- A plan to accommodate commerce while maintaining a safe and efficient level of highway service, including convenient user facilities.
- A demonstration that intrusions on the visitor experience have been minimized to the extent feasible, and a plan for making improvements to enhance that experience.
- A demonstration of compliance with all existing local, state, and federal laws regarding control of outdoor advertising.
- A signage plan that demonstrates how the state will make the number and placement of signs more supportive of the visitor experience.
- A narrative describing how the National Scenic Byway will be positioned for marketing.
- A discussion of design standards relating to any proposed modification of the roadway. This discussion should include an evaluation of how the proposed changes may impact the intrinsic qualities of the byway corridor.
- A description of plans to interpret the significant resources of the scenic byway.

The preservation of cultural resources, and historic roads in particular, have many benefits including increasing our knowledge of the past as they pertain to culture and landscape development, potential tourism on scenic roadways, and the preservation of cultural landscape.

The NRHP eligibility of the resource known as Rowan Street pertains most appropriately to Criterion A (*association with events that have made a significant contribution to the broad patterns of our history*).

## PREVIOUS INVESTIGATIONS

Several cultural historic surveys have been conducted that include a portion of the boulder block section of Rowan Street. The three most relevant are discussed below.

Rowan Street was documented as part of the Louisville-Southern Indiana Ohio River Bridges Project (LSIORB). During that time, a survey form was completed for this resource, JFL-502, which stated the road was NRHP eligible as contributing to the West Main/10<sup>th</sup> Street Industrial Historic District (Community Transportation Solutions, Inc. 2000, 2002a, 2002b). The survey determined the boundaries of the historic district included the following: parts of the northern side of Rowan Street between 10<sup>th</sup> and 12<sup>th</sup> streets, and the southern side of Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> streets.

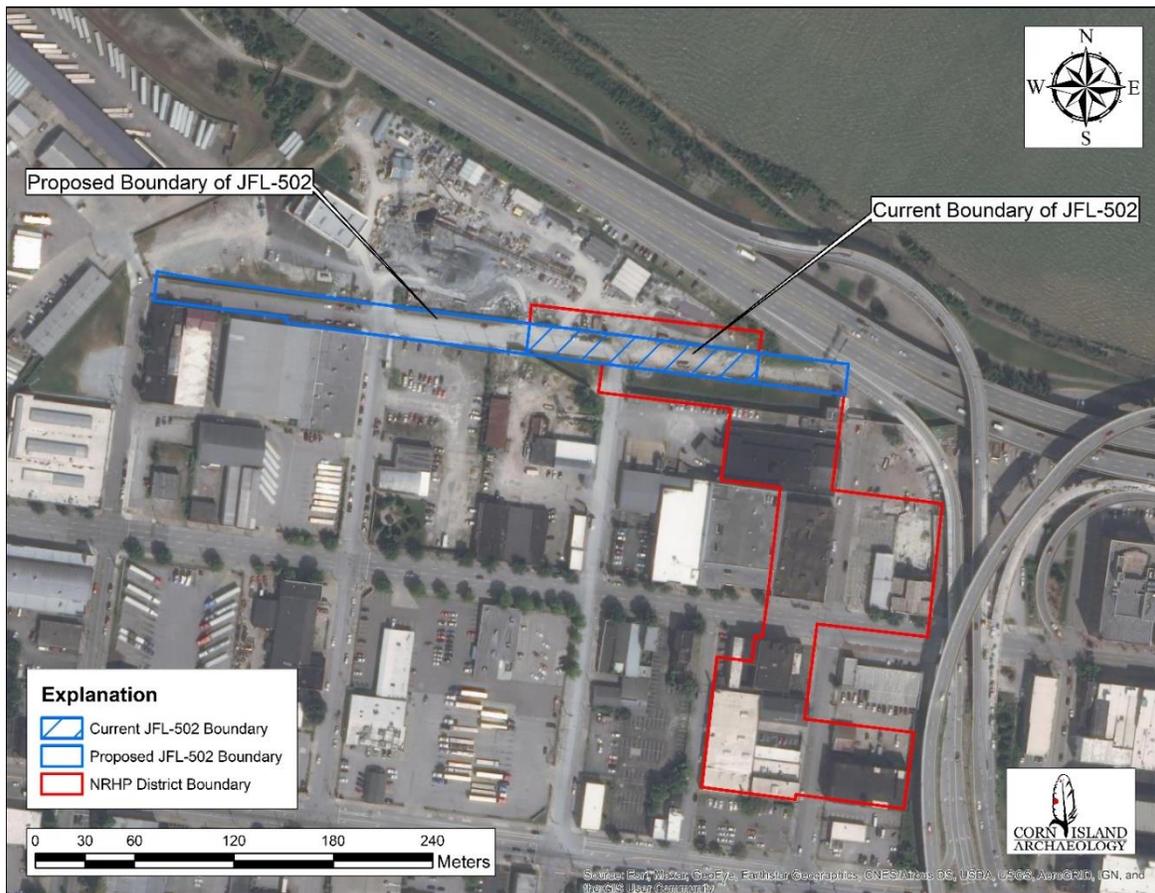
In February 2017, Corn Island conducted a cultural historic investigation in Louisville at the request of Hazen and Sawyer in support of the proposed Louisville and MSD Downtown CSO Interceptor Project (Scherer 2017). The survey was conducted to ascertain the presence of significant architectural resources within the project APE. The project was in three discontinuous parcels (labeled Areas 1, 2, and 3). Two of these parcels were located on the Ohio River riverfront directly to the south of Interstate I-64 extending to Main Street. Area 1 extended from 13<sup>th</sup> to 10<sup>th</sup> streets. Area 2 extended between 8<sup>th</sup> and 5<sup>th</sup> streets and Area 3 was located directly to the northeast of the intersection of Buchanan and Franklin streets. Rowan Street (JFL-502) is confined to Area 1, and Areas 2 and 3 are not further discussed in the current report. The investigation identified 16 resources within the Area 1 APE as previously documented, of which three (3) are listed individually in the NRHP. During the 2017 project, the stone road at Rowan Street was documented, but was not re-assessed.

Later, in June 2017, AECOM conducted a cultural historic survey on behalf of Louisville Metro Government (Turner 2017). The scope of work was to identify all historic resources within the APE for the planned River Road Extension from 7<sup>th</sup> Street to Northwestern Parkway. Louisville Metro planned to increase connectivity between the Central Business District of the city and the western neighborhoods of Portland and Shippingport. Eight alternatives for the road extension were initially identified; four were selected for further evaluation. In Section 1 of the project, the Rowan Street “cobblestones” (JFL-502) were identified in Alternative 5 (Turner 2017:36). AECOM further documented the resource as 122 m long and 10 m wide (400 ft long and 34 ft wide), running between North 10<sup>th</sup> Street and North 11<sup>th</sup> Street (Turner 2017:16). The selection of Alternate 5 was determined to have an adverse effect on JFL-502. JFL-503, the Portland Avenue “cobblestones,” were also present in this section of the River Road Extension project. However, no adverse effects were projected for resource JFL-503. Consultation was recommended between the SHPO and the FHWA/KYTC to develop an MOA for resolving the adverse effects. Recommendations were made to photograph, remove, and store the paving stones, and to potentially utilize these in the design of River Walk Trail of the Louisville Loop Expansion under development with the Waterfront Development Authority.

### WEST MAIN/10<sup>TH</sup> STREET INDUSTRIAL HISTORIC DISTRICT

The West Main Street Historic District was listed in the NRHP in 1973 and included the 600, 700, and 800 blocks of West Main Street (Cullinane 1973). The West Main Street Historic District was nominated for its association with Criterion A, for the role of Main Street in the development of the city of Louisville, and Criterion C, for its cast-iron storefronts in high-Victorian styles dating between 1870 and 1890. The West Main Street Historic District was expanded in 1976 to include the 100, 200, 300, 500, and 900 blocks of West Main Street and the east side of block 100 of South 7<sup>th</sup> Street (Jones and McNulty 1976). A second expansion nomination was completed in 1979 to include buildings in each block not previously included (Hedgepeth 1979).

The portion of Rowan Street with exposed boulder blocks lies within the West Main/10<sup>th</sup> street Industrial Historic District and was listed as a contributing resource to that district (**Figure 7.** West Main/10<sup>th</sup> Street Industrial District and JFL-502.). The West Main/10<sup>th</sup> street Industrial Historic District encompasses the area between West Main Street, 10<sup>th</sup> Street, and Rowan Street. It includes four contributing resources: the New Enterprise Tobacco Warehouse on West Main Street (JFWP-134), the Tobacco Realty/Kentucky Peerless Distilling Company at 118-126 North 10<sup>th</sup> Street (JFWP-137), the U.S. Post Office at 1001 West Main Street (JFWP-138), and the Rowan Street Cobblestones (JFL-502). Only the Rowan Street Cobblestones (JFL-502) lie within the project APE.



**Figure 7. West Main/10<sup>th</sup> Street Industrial District and JFL-502.**

## MAP REVIEW

Historic maps and heritage publications related to downtown Louisville were reviewed in Corn Island's office library. In addition, historic maps, atlases, and plats were acquired from Louisville Metro Archives and online from the University of Louisville's Digital Collection (ULDC), Kentucky Geological Survey (KGS), the Kentuckiana Digital Library (KDL), and the Jefferson County Clerk (JCC). Historic mapping, when available, is a powerful tool in understanding how urban landscapes are modified over time. Unlike most rural areas, cities often have numerous maps spanning large timeframes that detail how cities grew across a landscape. Louisville has had large numbers of maps produced for various purposes, such as historical, commercial, civic, military, etc. Unfortunately, many historical maps can be very vague or distorted at the scale of an individual residential lot or city block. However, available mapping for the current project area during the latter half of the nineteenth and into the twentieth century is quite good. Starting in 1858, the detail level of mapping for the city makes it possible to identify the vicinity of the project area. The maps reviewed as part of this investigation are listed in (**Table 1**).

**Table 1. Aerials and Maps of Project Area, Jefferson County, Kentucky.**

<b>Date</b>	<b>Title</b>	<b>Author</b>
1831	<i>Plan of the City of Louisville and its Environs in 1831</i>	E.D. Hobbs
1832	<i>City of Louisville and Its Enlargements</i>	E.D. Hobbs
1848	<i>Condition of the Louisville and Portland Canal</i>	Stephen Harriman Long
1856	<i>New Map of Louisville KY</i>	W. Lee White
1858	<i>Map of Jefferson County, Kentucky</i>	G.T. Bergmann
1865	<i>Louisville and its Defenses</i>	Simpson et al.
1873	<i>Map of Louisville, Kentucky, New Albany and Jeffersonville, Indiana.</i>	German and Bro.
1876	<i>Map of Louisville, Kentucky</i>	Louisville Abstract and Loan Association
1884	<i>Atlas of the City of Louisville, Ky., and Environs</i>	Griffith Morgan Hopkins
1892	<i>Map of Louisville, Kentucky</i>	Sanborn Map Company
1905	<i>Map of Louisville, Kentucky</i>	Sanborn Map Company
1913	<i>Atlas of Louisville</i>	Hunter
1925	<i>City of Louisville, Kentucky, Gateway to the South</i>	R. F. Wharton
1937	<i>Louisville and the Record 1937 Flood</i>	Commissioners of Sewerage, City of Louisville
1940	<i>Map of Louisville, Kentucky</i>	Sanborn Map Company
1949	Aerial photograph	USGS
1951	<i>7.5-minute New Albany, IN-KY quadrangle</i>	USGS
1952	Aerial photograph	USGS
1955	Aerial photograph	USGS
1960	<i>7.5-minute Jeffersonville, IN-KY 7.5-minute quadrangle</i>	USGS
1965	Aerial photograph	USGS
1978	Aerial photograph	USGS

The oldest of the maps, E.D. Hobbs' *Plan of the City of Louisville and Its Environs in 1831* (**Figure 8**), shows the plats of building lots for the city of Louisville. Rowan Street (called Monroe at this time) is denoted on the map, with large land parcels on each side of the street. These parcels had not yet been separated into individual building lots and had not yet been numbered as building lots. A few buildings are denoted on the map, however, no buildings are denoted along Rowan Street (Monroe).

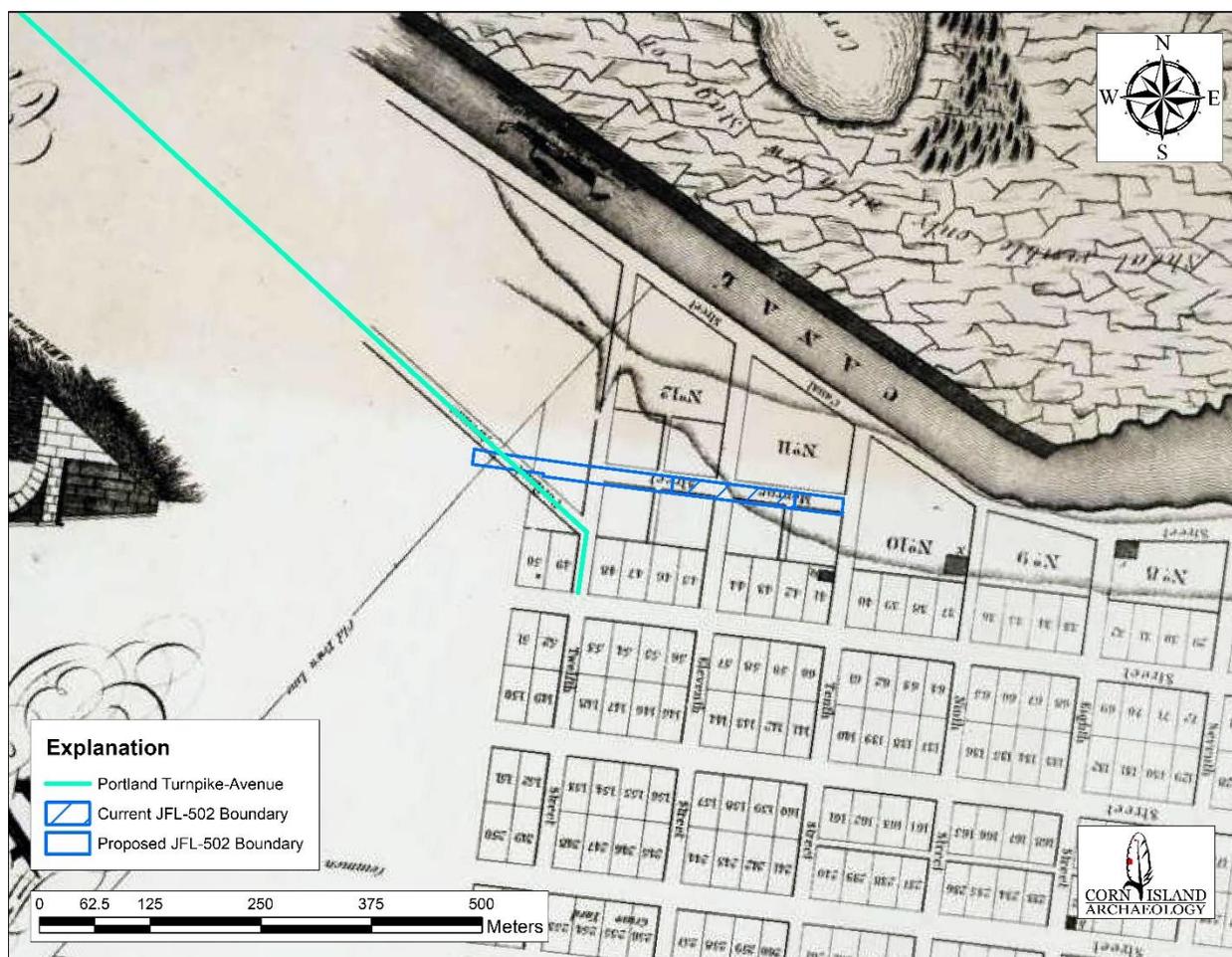


Figure 8. E.D. Hobbs, 1831.

E.D. Hobbs' *City of Louisville and Its Enlargements in 1832* (Figure 9) indicates that by this date, Rowan Street, then called Monroe Street, had been platted with large parcels on each block between 10<sup>th</sup> and 12<sup>th</sup> streets. The parcels had not yet been platted out into individual building lots. Due to the map's scale, it is unclear whether any structures existed along Rowan (Monroe) at that time, however, it is unlikely because the land had not yet been parceled out into individual building sites, nor had it been sold to individual property owners.

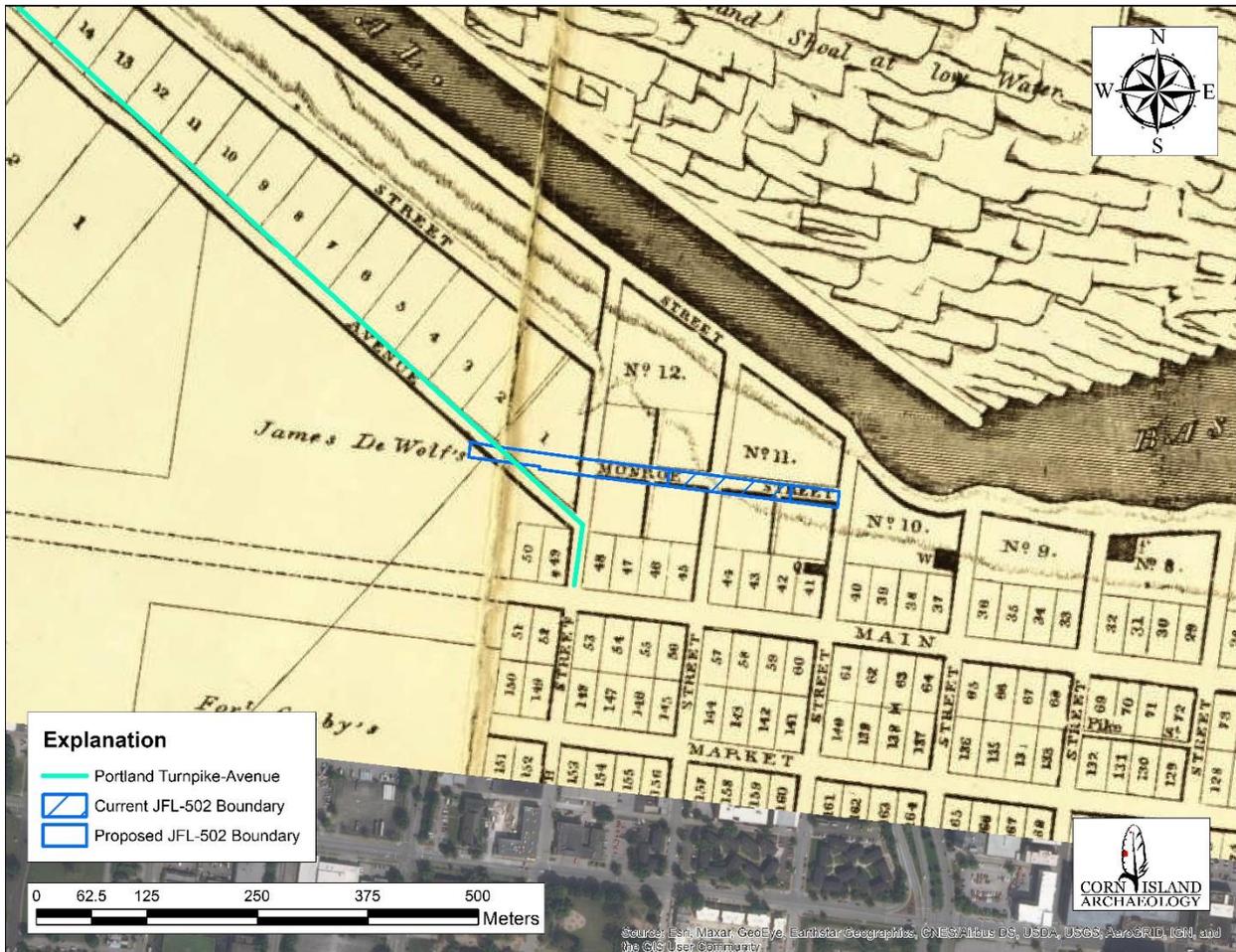


Figure 9. E.D. Hobbs, 1832.

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
Louisville, Jefferson County, Kentucky

The map of the *Condition of the Louisville and Portland Canal* created by Stephen Harriman Long around 1848 (**Figure 10**) includes only the streets of Shippingport, north of the Canal, and a few streets in the northernmost part of Louisville that relate to the Canal. Rowan Street (Monroe) is not named on this map. No buildings or parcels are shown on this map.



**Figure 10. Long 1848.**

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
Louisville, Jefferson County, Kentucky

A map from 1856 entitled *New Map of Louisville KY* (**Figure 11**), published by W. Lee White, shows Rowan Street (Monroe) developed with alleys running between the blocks on both sides of the street, from 10<sup>th</sup> Street to 12<sup>th</sup> Street. In general, only a few buildings are denoted on this map citywide. There are no buildings marked along Rowan Street, however, there is an artesian well marked there.

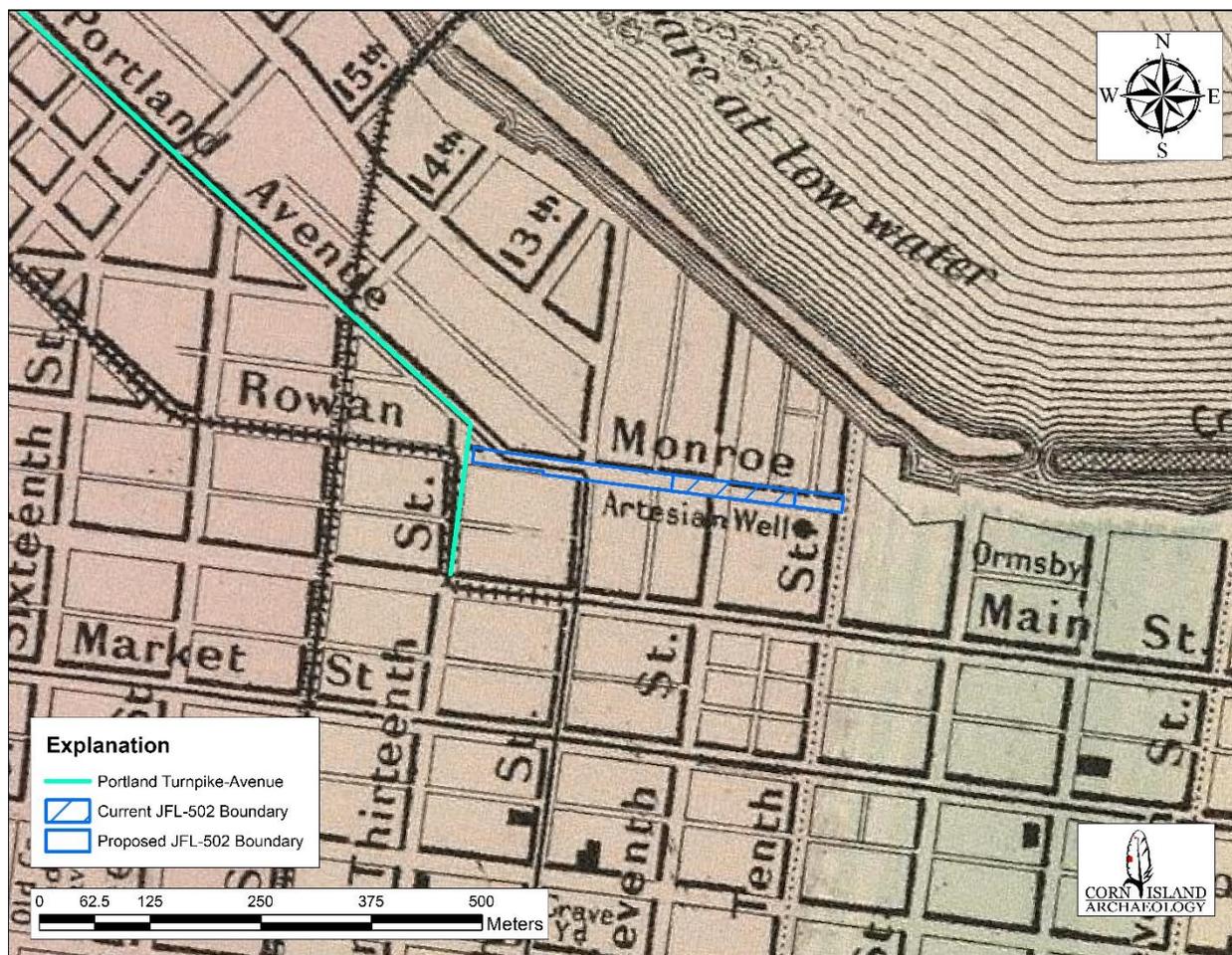


Figure 11. White 1856.

The 1858 Bergmann map depicts only selected structures, and no structures are depicted within any of the project areas. However, a steamboat landing is labeled somewhere around the end of 8<sup>th</sup> Street (**Figure 12**).

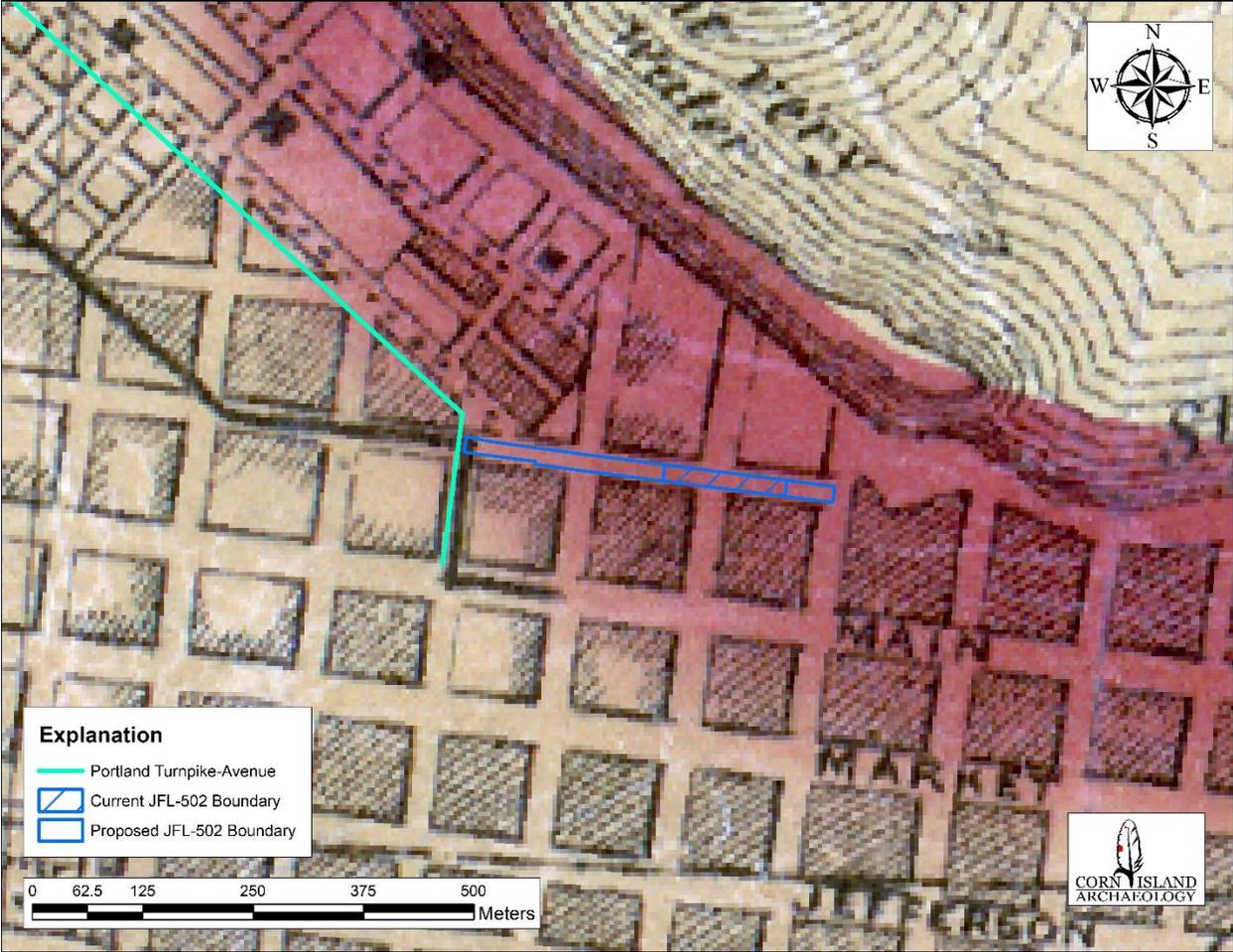


Figure 12. G.T. Bergmann 1858.

An 1865 map of Louisville also displays only selected buildings, and none within the project footprint, but a trolley line is depicted as skirting the southern boundary.



Figure 13. Simpson et al. 1865.

An 1873 map depicts a structure that appears to be labeled “Lou. ST. RR CC” and an unnamed structure, as well as a paper mill and a tobacco warehouse along Rowan Street (**Figure 14**). This map appears to only show larger buildings, as there were most likely smaller buildings and residences along Rowan Street at that time that are not marked on this map.

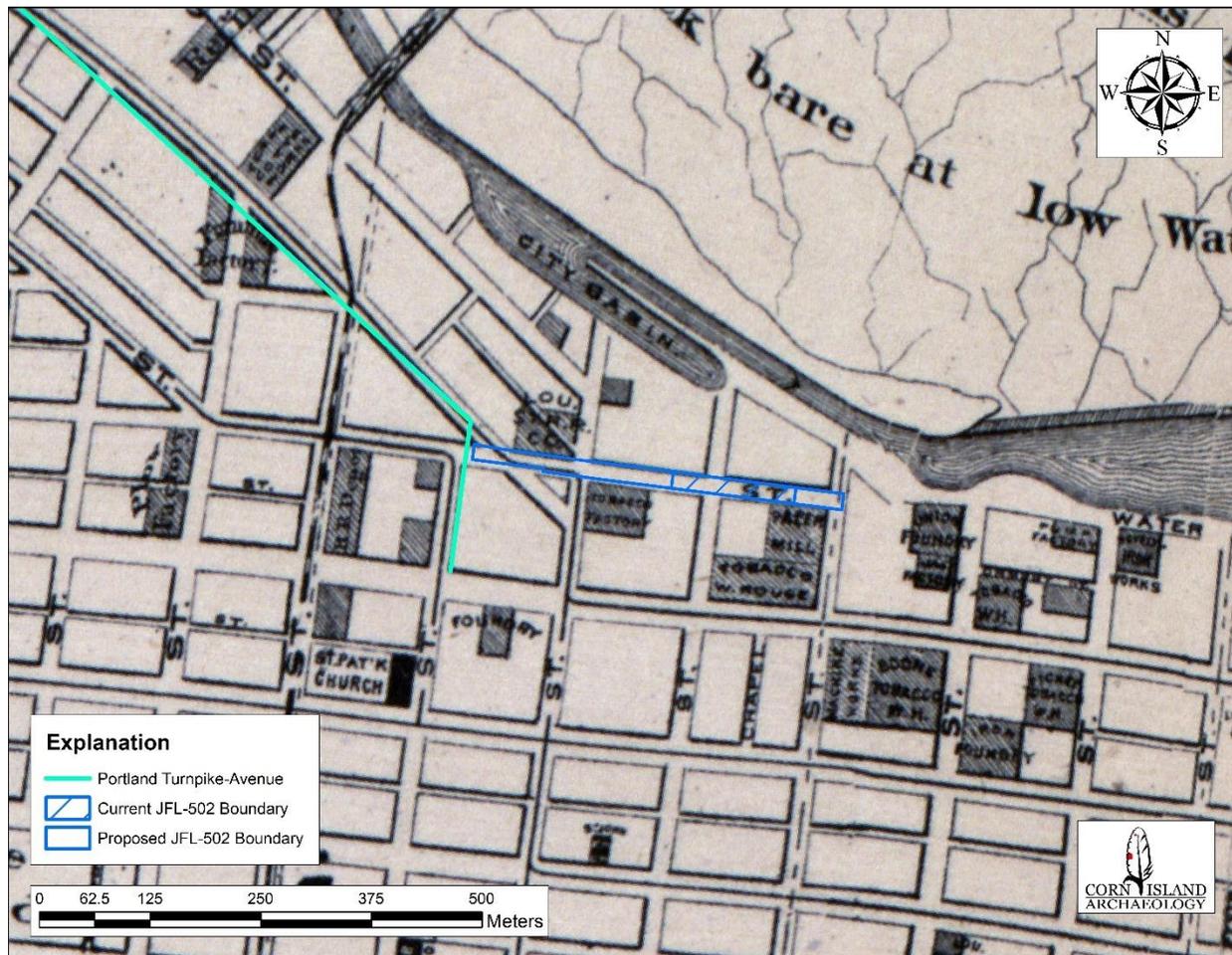


Figure 14. German and Brothers Map of 1873.

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
Louisville, Jefferson County, Kentucky

The copy of the 1876 *Atlas of Louisville* consulted in this study unfortunately lacked the detailed plates of the western half of Rowan Street. However, it does depict a number of named properties and structures, such as the Thomas Meikle & Co. building. This company manufactured plows and elevators. It also shows the Dupont Paper Mill, and multiple residential and small business buildings (Figure 15).

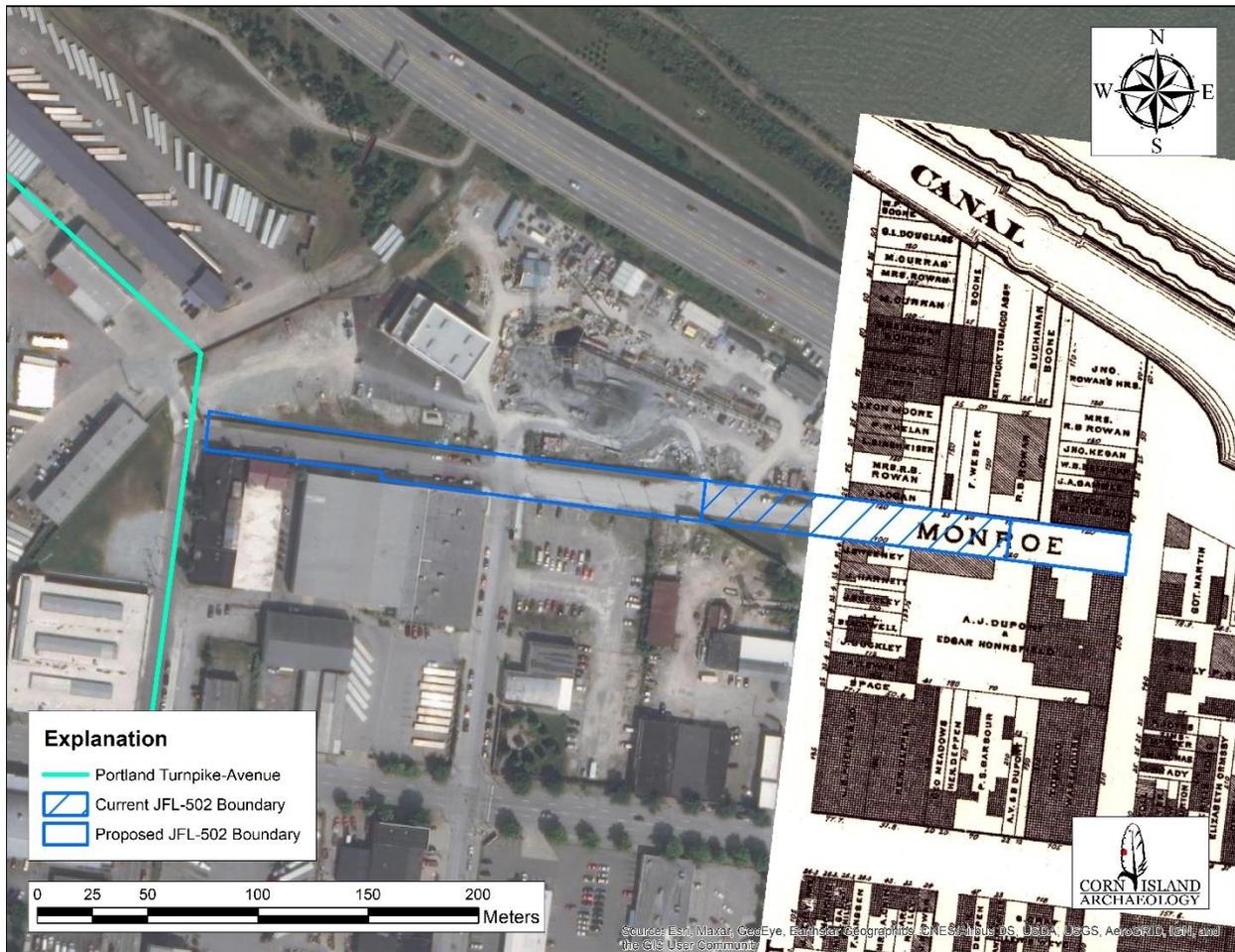


Figure 15. Louisville Abstract and Laon Association 1876.

The *Atlas of the City of Louisville, KY and Environs, 1884* (Figure 16) shows the following buildings: on the eastern side of 11<sup>th</sup> Street, moving south from Rowan Street to Main Street, three frame residences and two smaller brick buildings. On the northern side of Main Street, moving east from 11<sup>th</sup> Street to 10<sup>th</sup> Street are the following buildings, all brick: Planters Tobacco Warehouse, another tobacco warehouse, a series of small brick buildings most likely used for industrial purposes, and the Louisville Tobacco Warehouse. On the west side of 10<sup>th</sup> Street, moving north from Main Street to Rowan Street are the following buildings: east elevation of the same Louisville Tobacco Warehouse that fronted on Main Street, and a paper mill owned by A.J. Dupont and E. Honnefield. Along the southern side of Rowan Street, from 10<sup>th</sup> Street to 11<sup>th</sup> Street, there are the following buildings: the northern elevation of the Dupont Paper Mill, an open shed building, and the north side of a wood frame residence that fronts on 11<sup>th</sup> Street.

The 1884 *Atlas of Louisville* also shows the following buildings along Rowan Street, between 11<sup>th</sup> Street and 13<sup>th</sup> Street: a Plow Warehouse, Mrs. Spratt's Tobacco Warehouse, Southern Glass Works, a Malt House, Thomas Meikle & Company's Plow Works, and numerous residences and small business buildings. This is also the earliest map that depicts a railroad line, which intersects with Rowan at 13<sup>th</sup> Street.

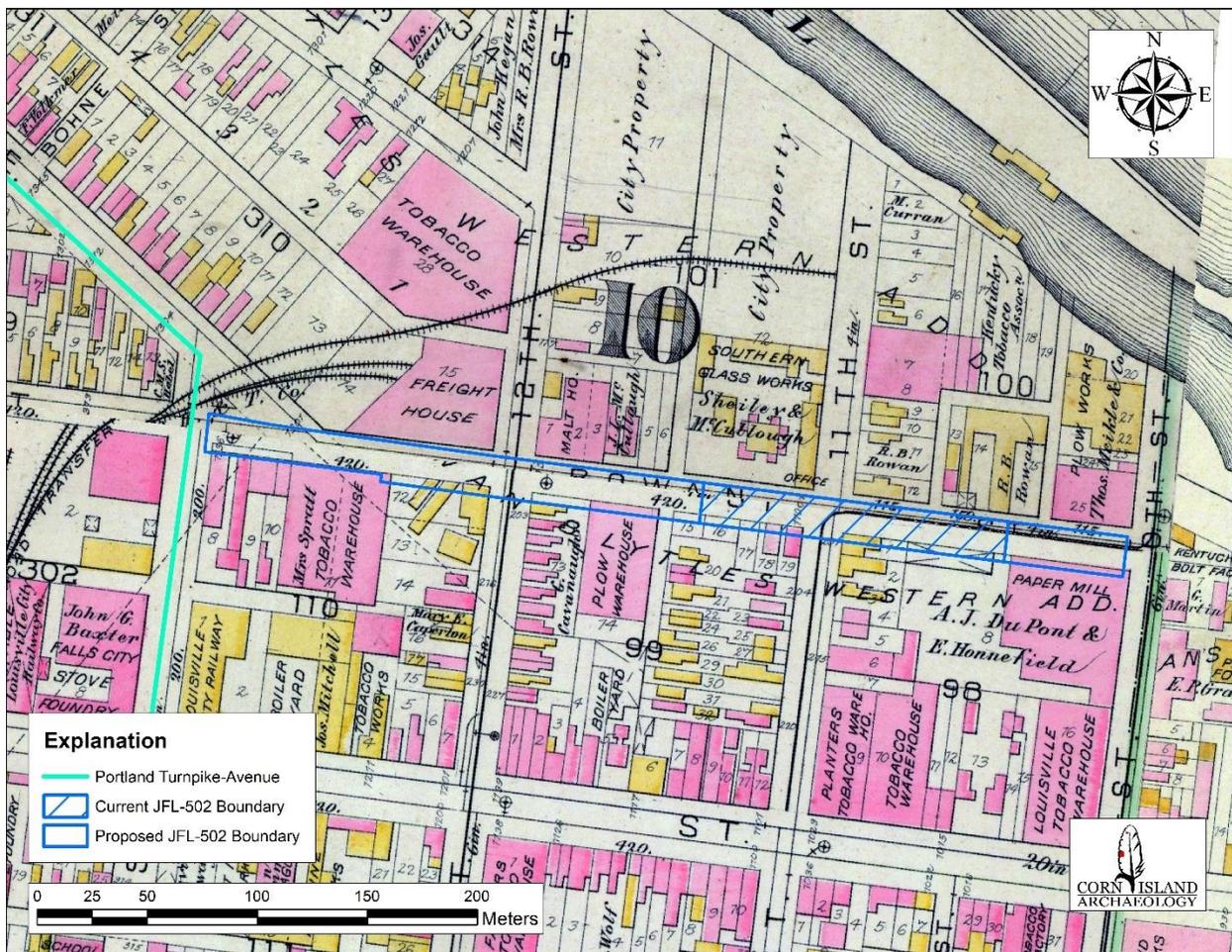


Figure 16. Hopkins 1884.

The Sanborn Fire Insurance Map for Louisville, Jefferson County, Kentucky in 1892 (**Figure 17**) shows the following buildings: the eastern side of 11<sup>th</sup> Street, going south from Rowan Street to Main Street shows four wood frame residential buildings with associated outbuildings, being the same buildings denoted in the first three residential parcels on the 1884 map. Following that are two vacant lots where the small, square brick building denoted on the 1884 map used to be. This building appears to have been demolished. Next is a long brick building that houses the J.S. Bethel and Co. Tobacco Warehouse, the same building denoted on the 1884 map. Following that is the western elevation of the Planters Tobacco Warehouse. Along the northern side of Main Street, moving west to east, are three large tobacco warehouses that abut each other; first, the Planters Tobacco Warehouse, followed by the Central Tobacco Warehouse, and next the Edwards, Bernard and Co. Central Tobacco Warehouse. There is a note between the Central Tobacco Warehouse and the Edwards, Bernard and Co. Warehouse that says "Burned out Feb 6<sup>th</sup> 1882. Being rebuilt March 1892." The parcel on the corner of Main Street and 10<sup>th</sup> Street where the Louisville Tobacco Warehouse was on the 1884 map is vacant. The western side of 10<sup>th</sup> Street, moving north from Main Street to Rowan Street has the following buildings: a large vacant lot on the corner, followed by a small brick building located about halfway down the block, which is marked as an Office Storage building, and was vacant at the time the map was made. Next is the eastern elevation of the Louisville Paper Company Paper Mill. Along the southern side of Rowan Street, moving west from 10<sup>th</sup> Street to 11<sup>th</sup> Street, are the following buildings: the northern elevation of the Louisville Paper Company, which is a collection of large brick buildings that abut each other, followed by an open access point to the street, and then another brick building associated with the paper mill, and then more open access to the street. Some of these buildings were present on the 1884 map, however, it appears the paper mill has been expanded since then. Next is a wood frame shed, and the northern side of the residential parcel that fronts on 11<sup>th</sup> Street. On the northern side of Rowan, are the following buildings: "Formerly Thomas Meikle & Co. Plow Works, Burnt Feb. 4, 1892, Walls left standing", the Calumet Fire Clay Company, the "Ruins of Southern Glass Works," F. F. Lutz's City Malt House, as well as numerous residences and small business buildings.

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
Louisville, Jefferson County, Kentucky

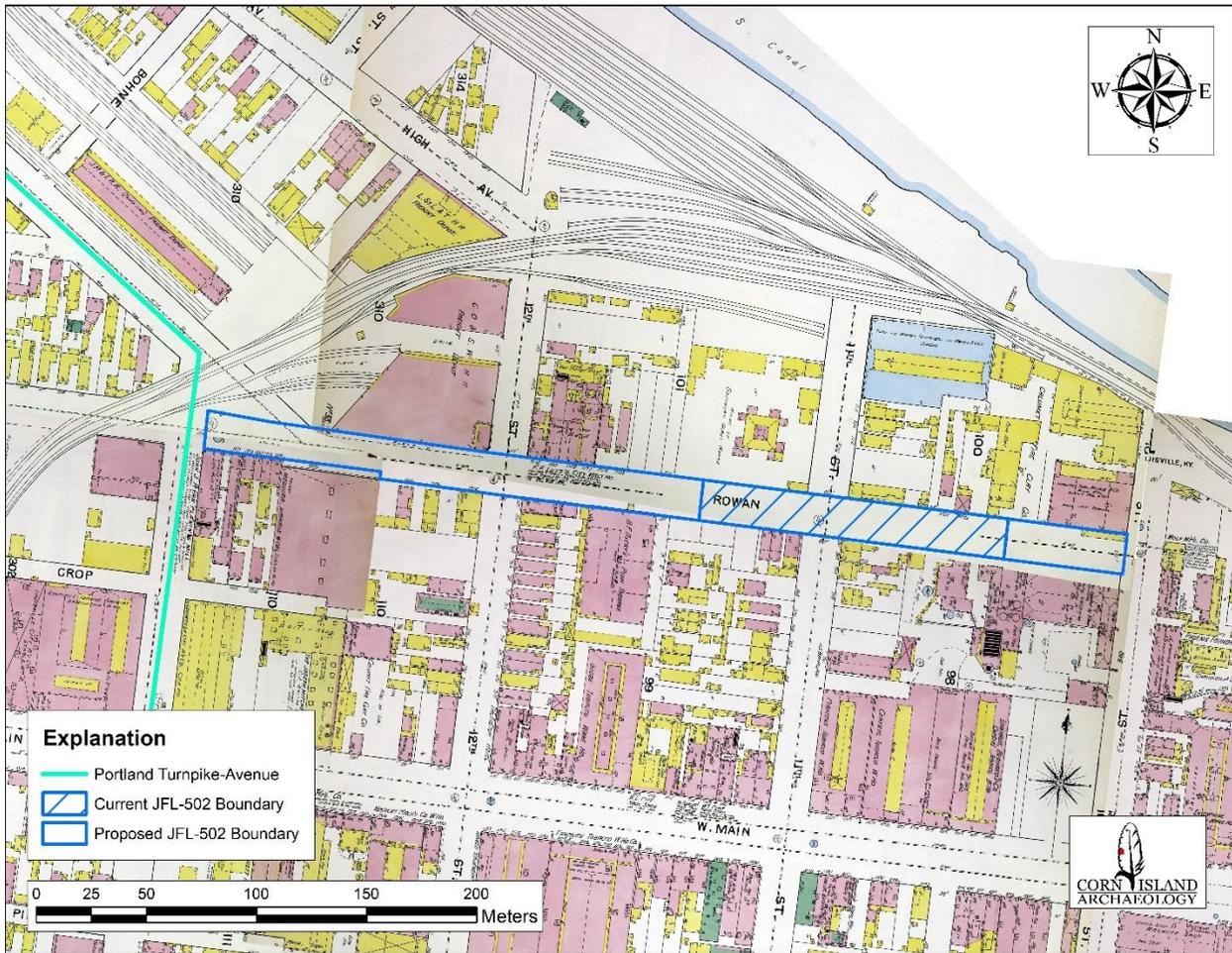


Figure 17. Sanborn Fire Insurance Map (1892).

The Sanborn Fire Insurance Map from Louisville, Jefferson County, Kentucky in 1905 (**Figure 18**) shows the following buildings: on the eastern side of 11<sup>th</sup> Street, moving south from Rowan Street to Main Street, three wood frame residences with associated outbuildings, which are the same buildings as on the 1892 map; the fourth frame residence that was denoted on the 1892 map has been demolished and is now an empty lot, followed by two more empty lots, then followed by a brick building housing the Louisville Bed Springs Company owned by the J. M. Buckner Jr. & Co. is next, followed by the western elevation of the brick Planters Tobacco Warehouse. The north side of Main Street, moving east from 11<sup>th</sup> Street to 10<sup>th</sup> Street is made up of a solid, massive brick structure home to the Louisville Tobacco Ware House Company, which is actually composed of three separate brick warehouse buildings that abut one another, an alleyway, and then another warehouse. The warehouses are in the following order: the Planters Warehouse, the Growers Warehouse, the Central Warehouse, and the Farmers Warehouse. The Farmers Warehouse has been constructed on what was a vacant lot on the 1892 map. The western side of 10<sup>th</sup> Street, moving north from Main Street to Rowan Street has the following buildings; the eastern elevation of the Farmers Warehouse, followed by a large vacant lot. It appears the Louisville Paper Company that was on the 1892 map has been demolished. The southern side of Rowan Street, moving west from 10<sup>th</sup> Street to 11<sup>th</sup> Street, has a large vacant lot, previously home to the Louisville Paper Company, and the northern side of the residential lots that front along 11<sup>th</sup> Street.

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
Louisville, Jefferson County, Kentucky

On the northern side of Rowan Street are the following buildings: the Louisville Lighting Company and a train yard extending to the western part of this parcel; freight houses belonging to the Louisville, Henderson, and St. Louis Railroad, and to the Illinois Central Railroad; and numerous residences and small business buildings. The freight sheds depicted between 12<sup>th</sup> and 13<sup>th</sup> streets on the 1892 Sanborn map are gone, replaced by a linear freight shed to the north of Rowan Street.

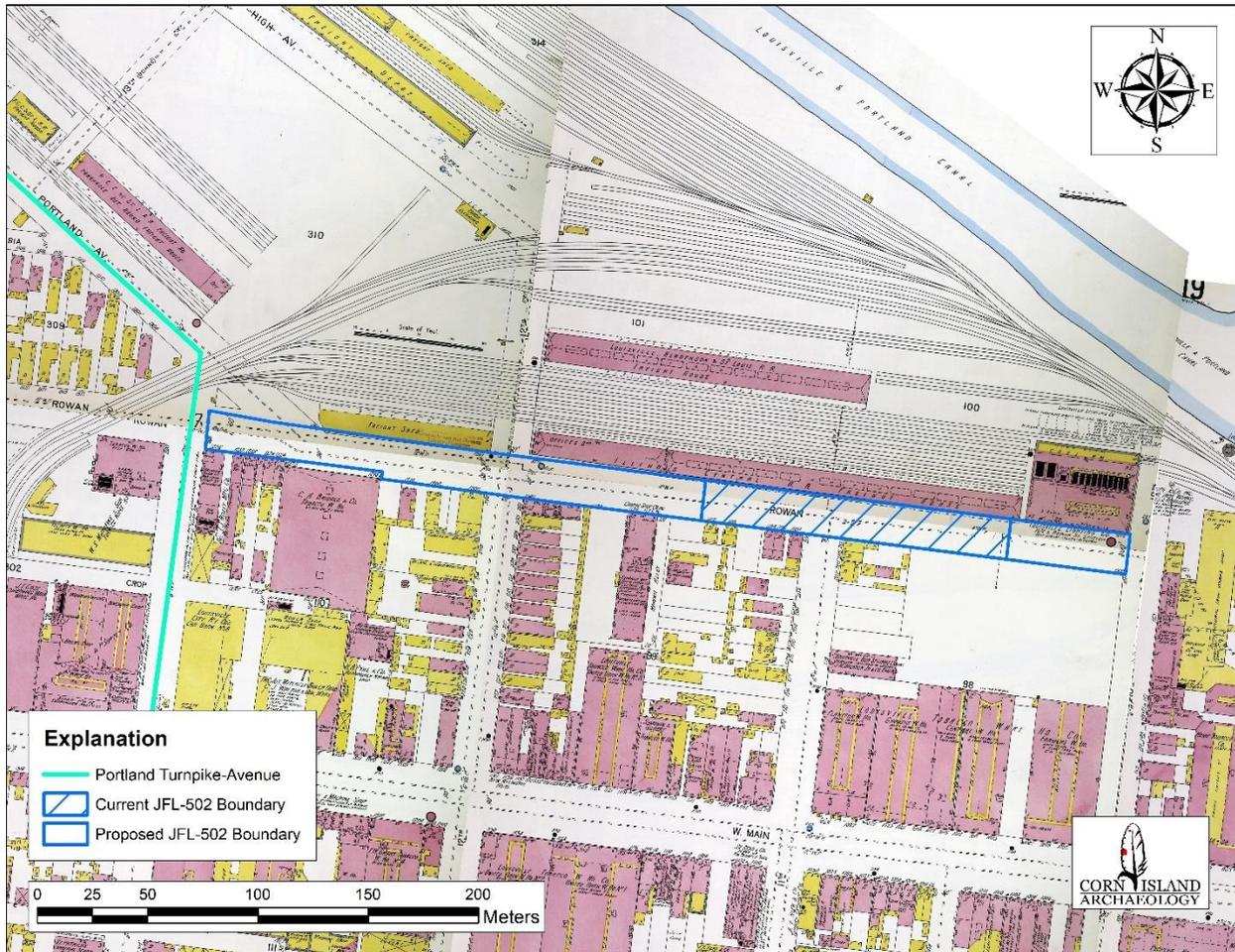


Figure 18. Sanborn Fire Insurance Map (1905).

On the 1913 *Title Atlas of Louisville* few individual buildings are depicted. The Rowan Street area is primarily filled with rails (**Figure 19**).



Figure 19. Hunter 1913.

The 1925 R.F. Wharton map depicts buildings on the northern side of Rowan Street, in what was a railyard. The buildings are most likely train sheds associated with the railyard. Otherwise, no other buildings are depicted along Rowan Street, however, the map does show lots of train tracks.

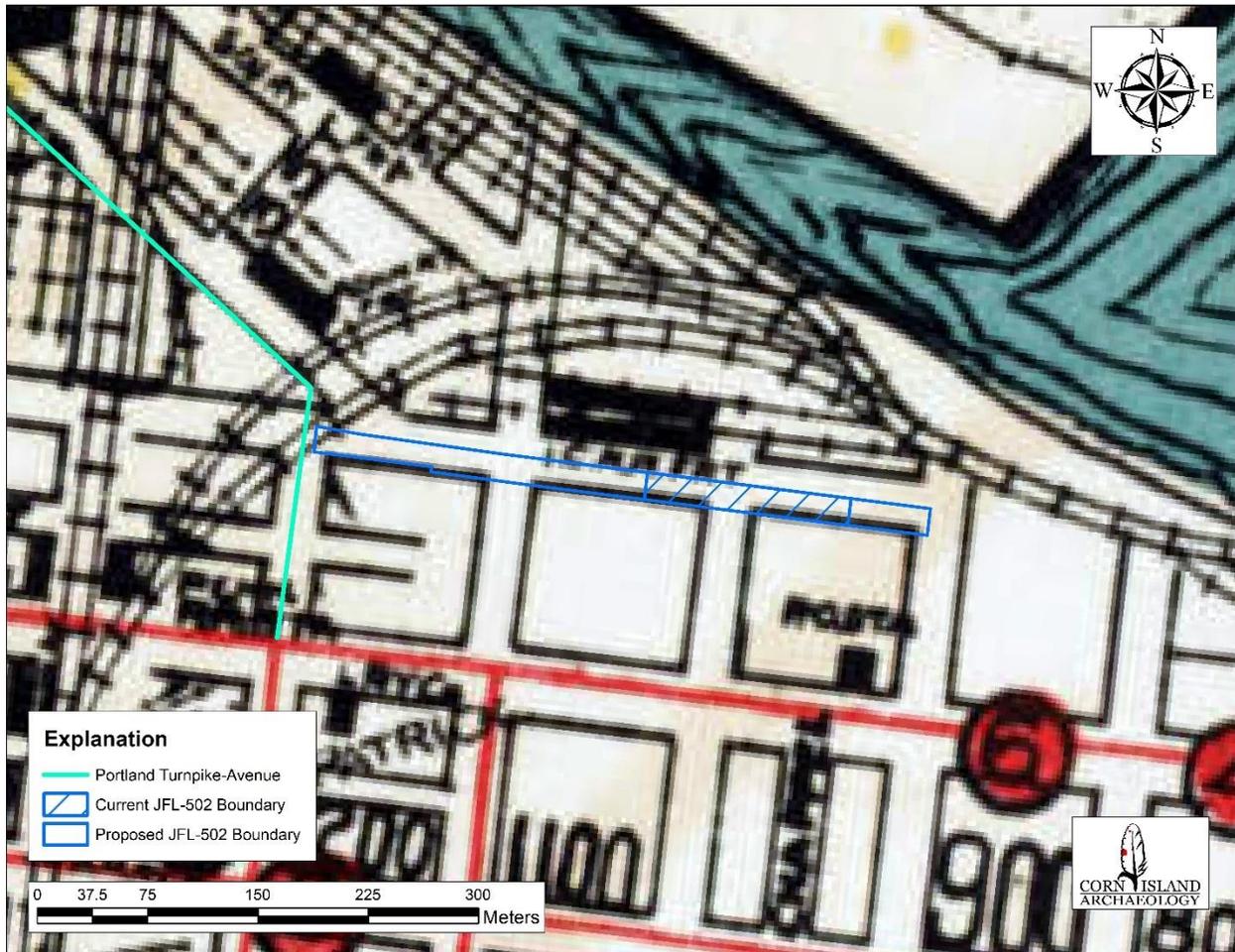


Figure 20. R.F. Wharton (1925).

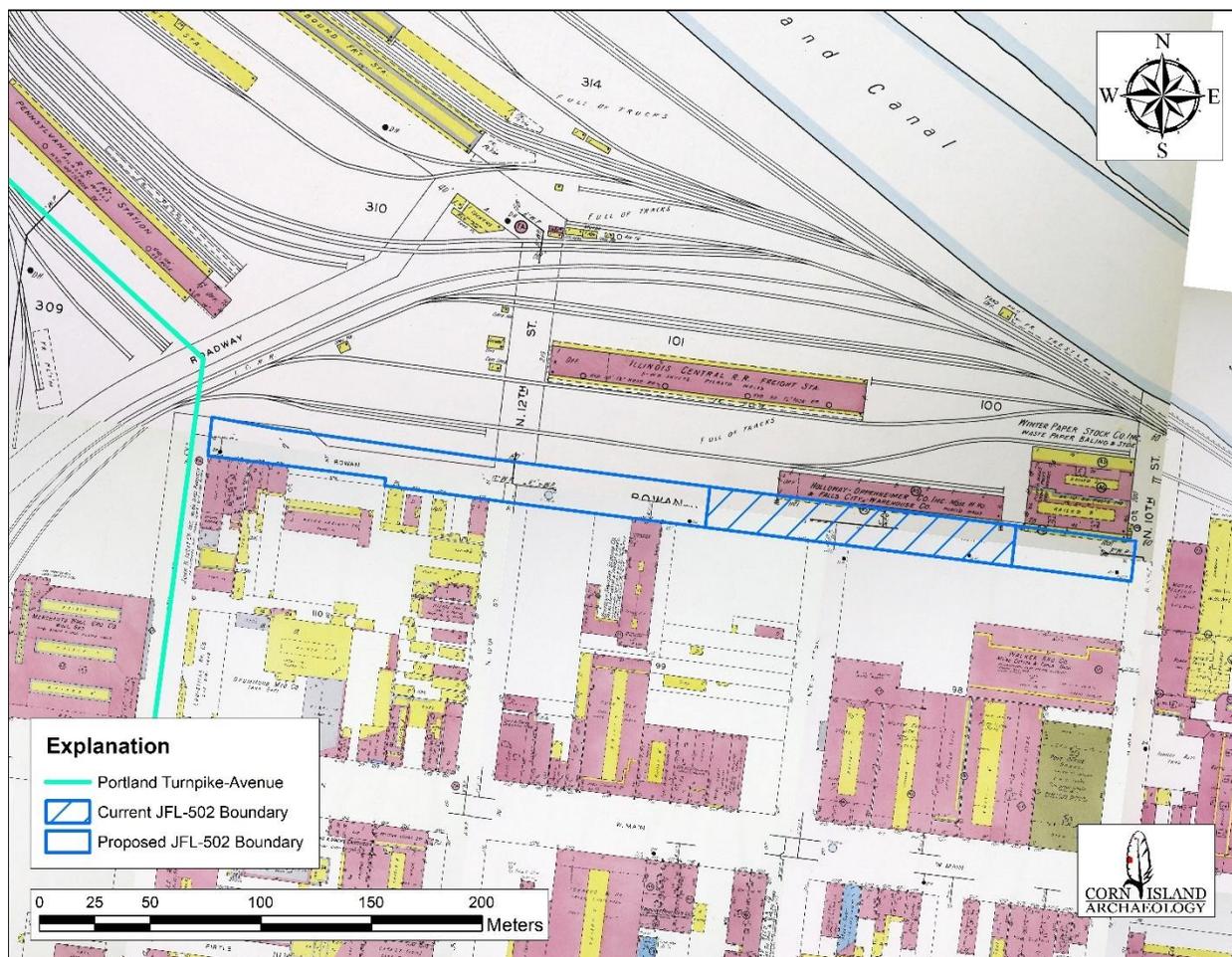
A 1937 map from the *Commissioners of Sewerage* shows the Rowan Street area during the flood of 1937 (**Figure 21**). A 1937 flood limits map adds no new data on structures but indicates the area was within the flood limits.



**Figure 21. Commissioners of Sewerage (1937).**

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
Louisville, Jefferson County, Kentucky

The Sanborn Fire Insurance map of 1940 (**Figure 22.** Sanborn Fire Insurance (1940).) shows the following buildings along Rowan Street: the John Isert Steel Factory, a Motor Freight station, the Kentucky Sanitary Bedding Company (makers of mattresses and upholstered furniture), a few freight stations and railroad warehouses, and several residences.



**Figure 22. Sanborn Fire Insurance (1940).**

A 1949 USGS aerial photograph shows that this area is filled with rails (**Figure 23**). A building with a footprint identical to that of the Louisville Lighting Company depicted on the 1905 Sanborn map is present directly to the north of Rowan Street. The freight shed between 12<sup>th</sup> and 13<sup>th</sup> streets has been demolished. Also, the western margin of the Illinois Central R. R. House appears to have been demolished, with the remaining (or new) structure extending from the Louisville Lighting Co. Building to between 11<sup>th</sup> and 12<sup>th</sup> streets. The structure labeled the Louisville, Henderson & St. Louis R.R. Freight House on the 1905 Sanborn map appears unchanged.

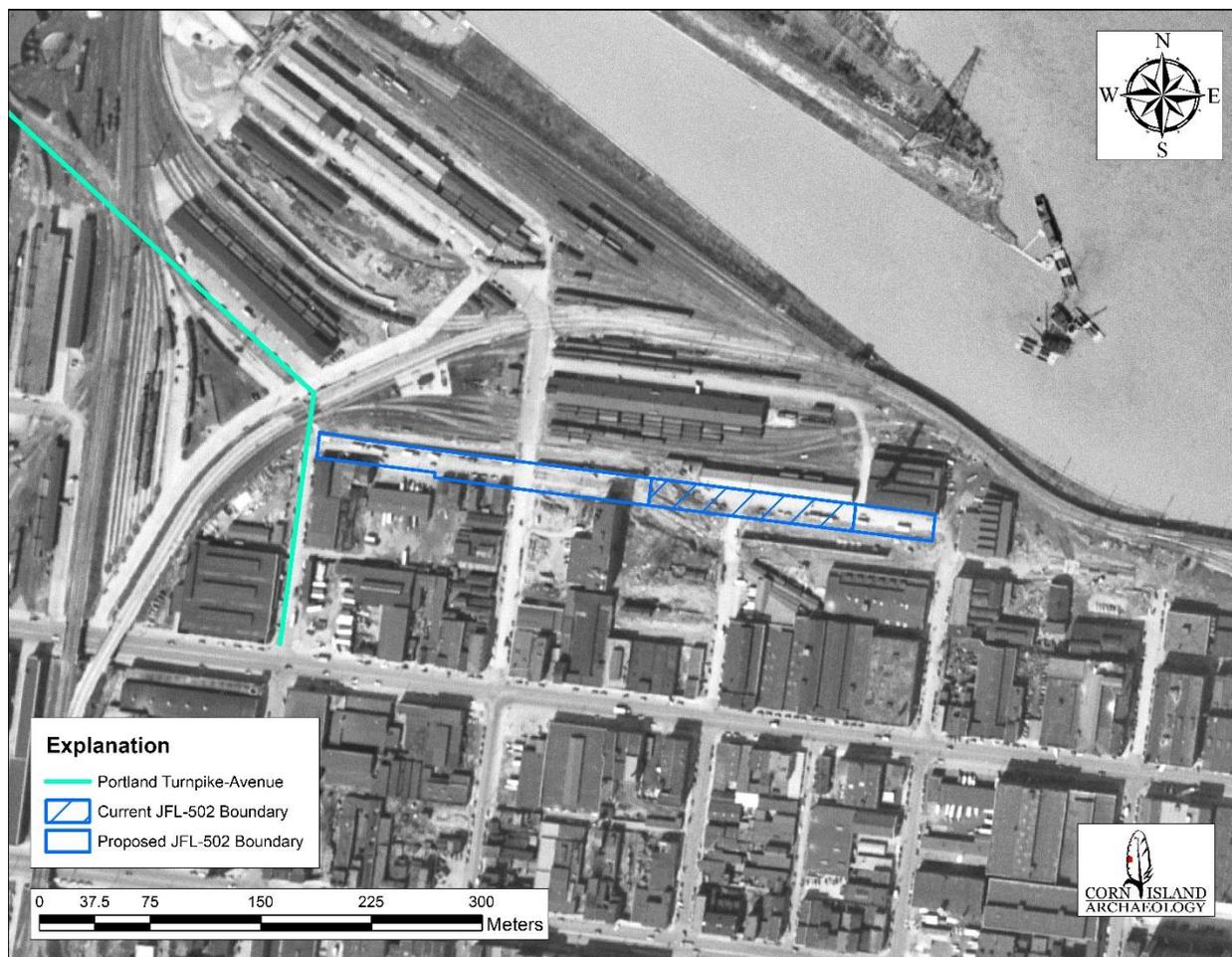


Figure 23. Historic aerial photograph (USGS 1949).

The buildings along Rowan Street appear largely unchanged on 1952 and 1955 USGS aerial photos (**Figure 24** and **Figure 25**). This is generally consistent with information on the 1960 topographic map (**Figure 26**). In addition, no substantial changes are visible on the 1965 aerial photograph (**Figure 27**).



**Figure 24. Historic aerial photograph (USGS 1952).**

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
Louisville, Jefferson County, Kentucky

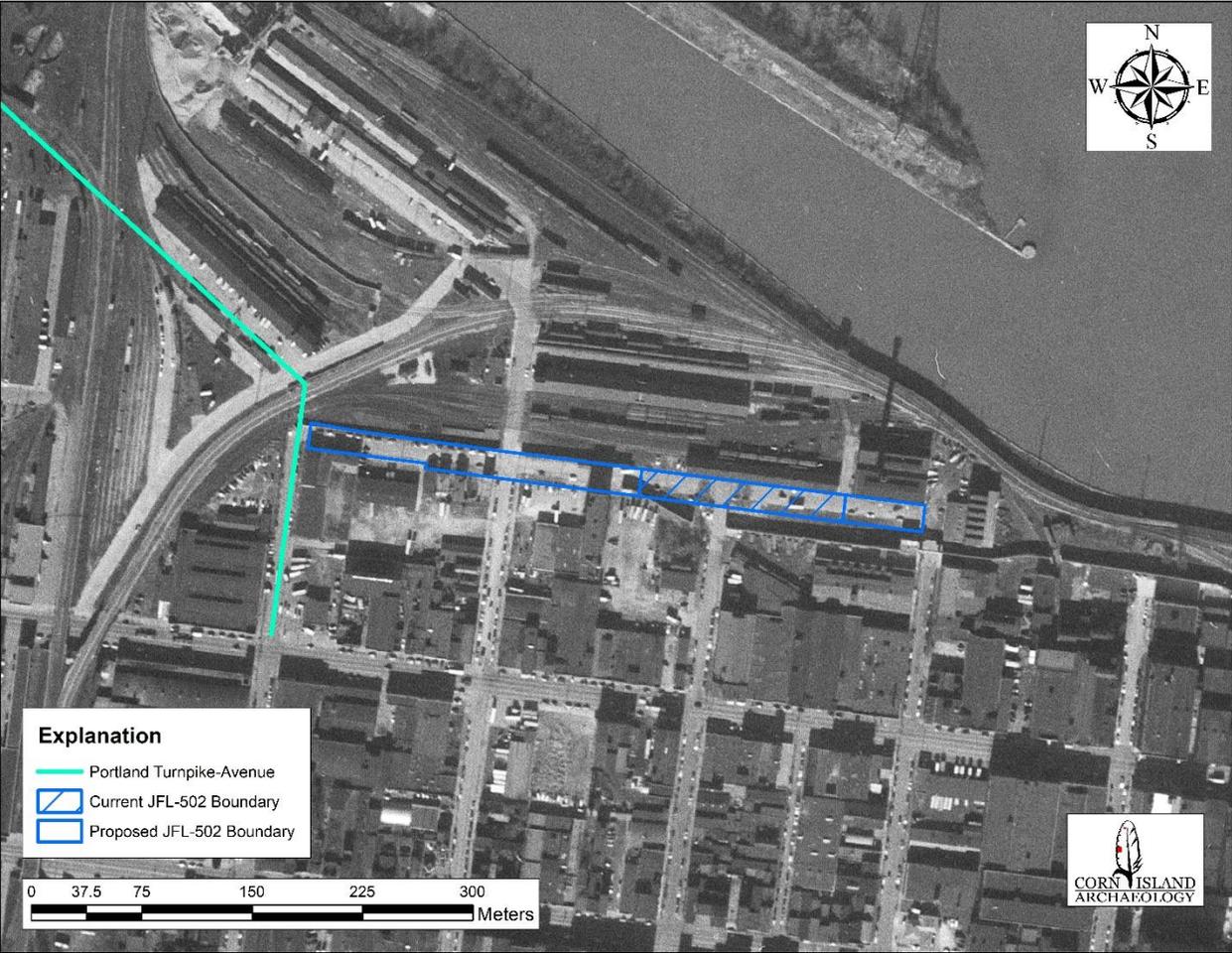


Figure 25. Historic aerial photograph (USGS 1955).

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
Louisville, Jefferson County, Kentucky

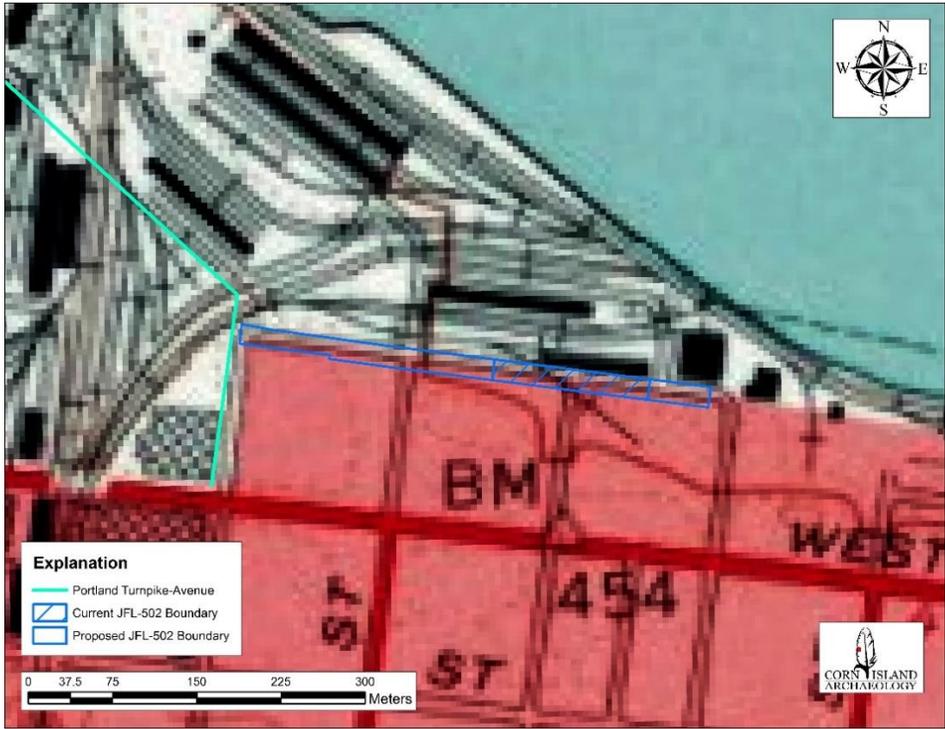


Figure 26. USGS 1960 *New Albany, IN-KY* (USGS 1960).

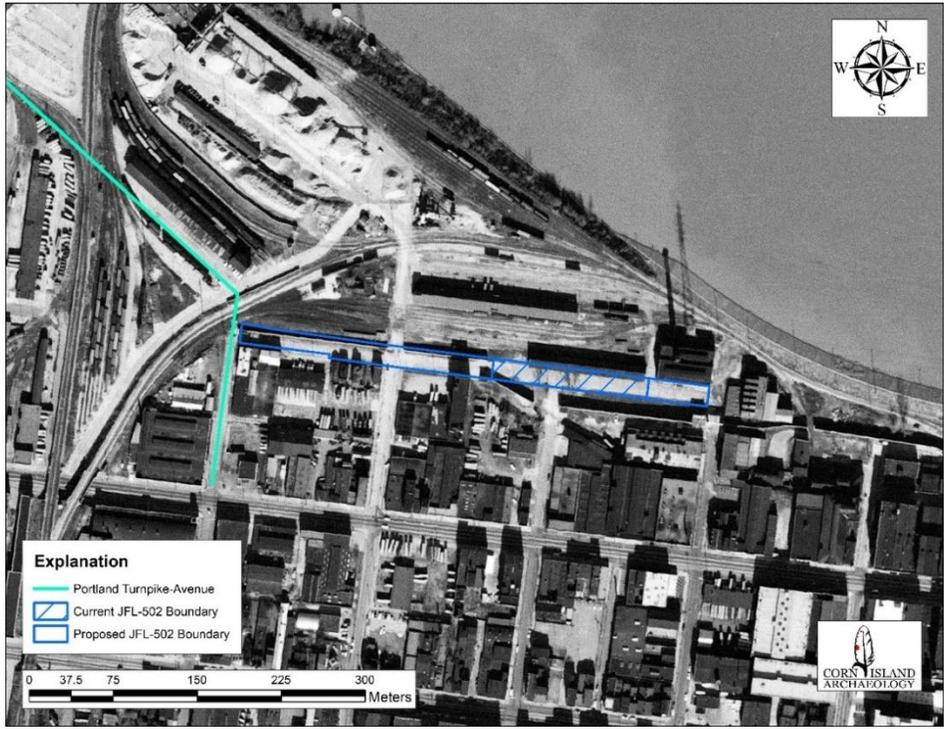


Figure 27. Historic aerial photograph (USGS 1965).

The 1971 aerial photos display substantial changes to the area (**Figure 28**). Along Rowan Street, the Louisville Lighting Co. Building is demolished.

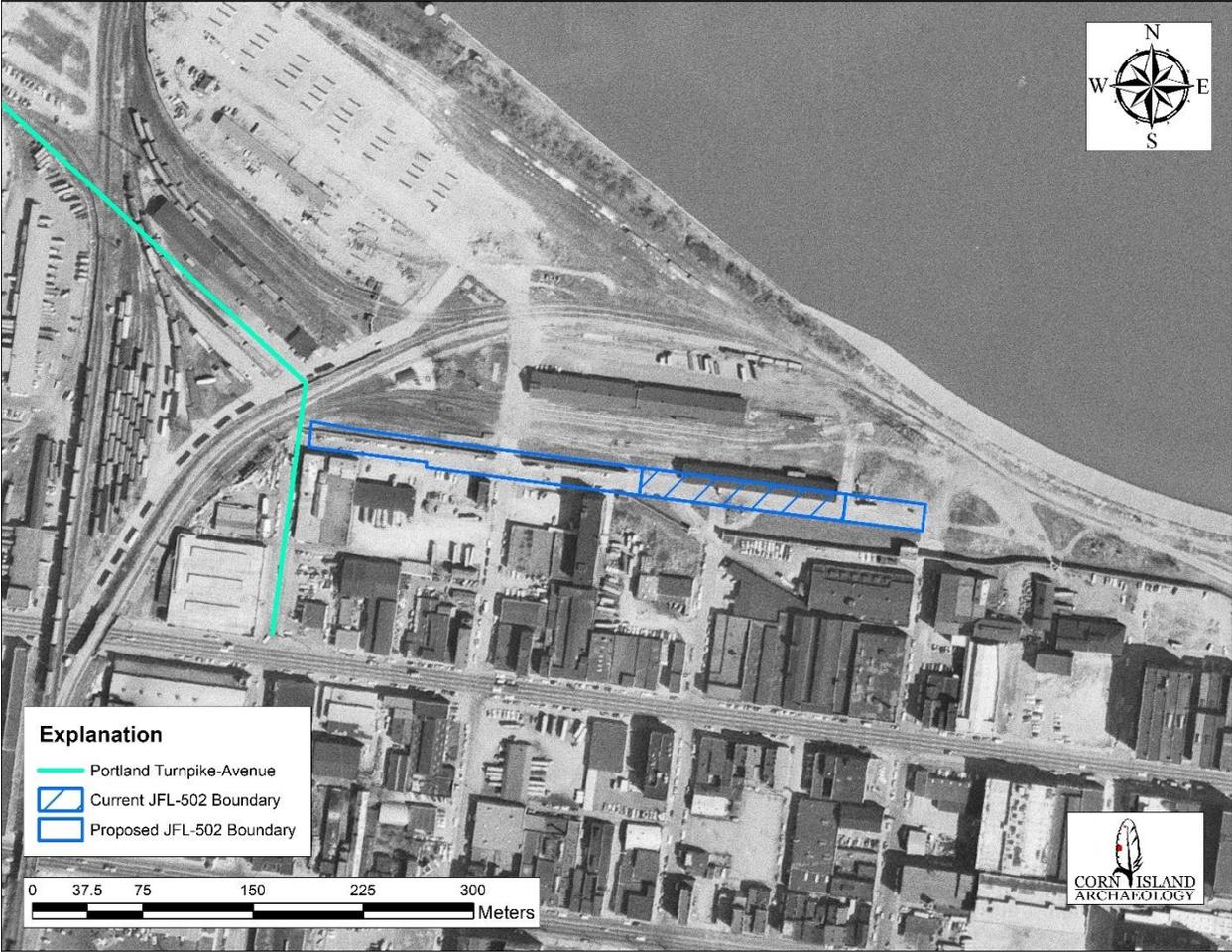


Figure 28. Historic aerial photograph (USGS 1971).

The 1978 aerial photograph is the first in which I-64 is completed. The resolution of this photograph is coarser than the previous ones but several changes are visible. One warehouse near the center of Rowan Street appears to have been destroyed, while the linear warehouse directly to the north of Rowan Street is still standing.

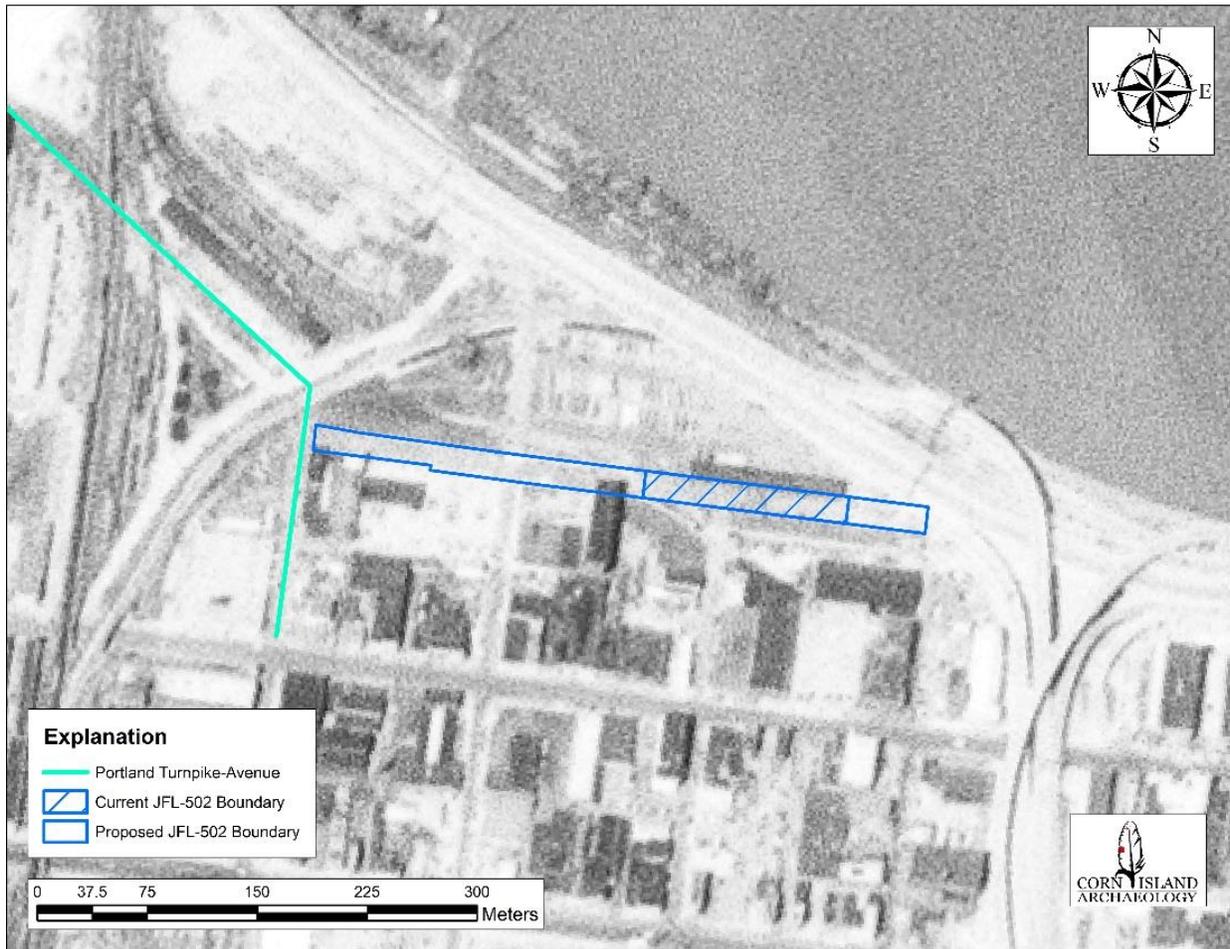
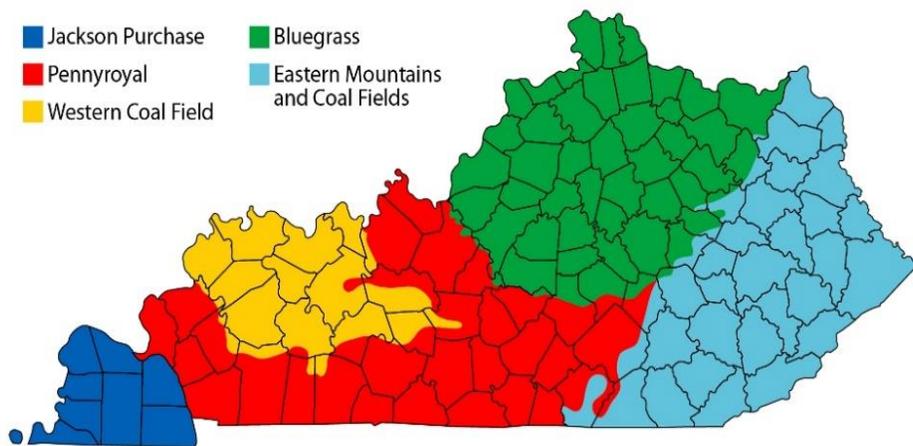


Figure 29. Historic aerial photograph (USGS 1978).

# 3

## ENVIRONMENTAL AND HISTORIC CONTEXTS

Louisville, Kentucky encompasses all of Jefferson County. It is considered part of the Outer Bluegrass Region. The Outer Bluegrass is defined as the perimeter portion of the region. It is characterized by slightly rolling terrain, with fewer hills than the adjacent Inner Bluegrass and the Knobs regions. The project area is characterized as urban and lies within the Bluegrass Cultural Landscape (**Figure 30**).



**Figure 30. Kentucky's cultural landscape regions map.**

### JEFFERSON COUNTY

Jefferson County is one of Kentucky's three original counties, having been created from a part of Virginia in May 1780 by the Virginia General Assembly. The 3,642-ha (9,000-acre) county is named after Thomas Jefferson and was one portion of the vast Virginia holdings that ran from the Chesapeake Bay to the Ohio River (Morgan and Jett 2002). Like much of the territory west of the Appalachian Mountains, Native American tribes used the area as a hunting ground and as well as habitation. European exploration of the area had been minimal until the mid-1700s.

Euro-American historic exploration of the area began during the 1770s. The Falls of the Ohio area, at present-day Louisville, was surveyed in 1773 by Thomas Bullitt. The area was re-examined the following year by John Floyd. As early as 1774, the area along Pond Creek was explored and mapped. This occurred largely due to its location along the Wilderness Road, one of the major thoroughfares of westward expansion. This historic roadway extended through Jefferson County paralleling the route of present-day Preston Highway. By the time the American Revolution erupted, pioneer leaders including Bullitt, James Harrod, Daniel Boone, and Michael Stoner were establishing small settlements in the interior of Kentucky.

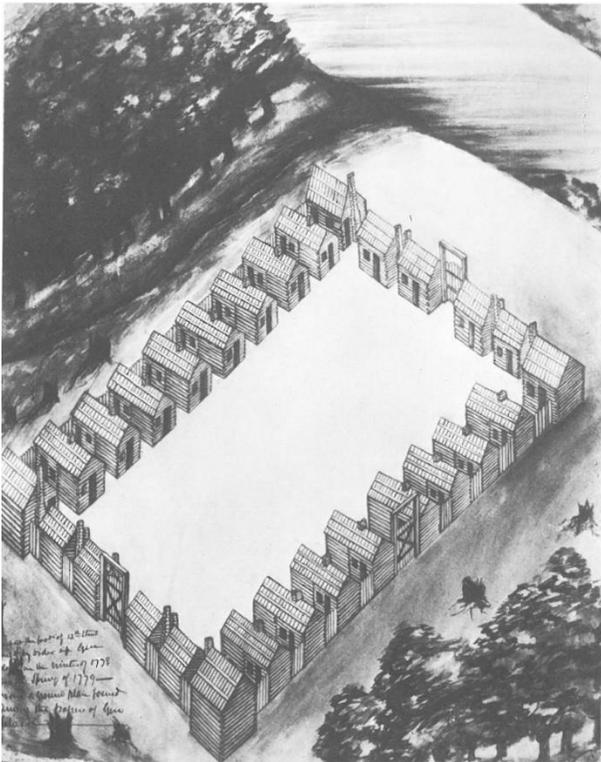
The Fincastle Survey occurred in 1774, in which roughly one-third of the county was surveyed (Morgan and Jett 2002:1). At this time, land east of the Alleghenies had been claimed, land prices had risen, and much land had become exhausted (Crews 1987). After the Revolution, an economic depression and subsequent tax hike contributed to migration (Crews 1987). One of the earliest documented settlements in the area occurred in July 1776 when Samuel Pearman, of the Virginia-based Shane, Sweeney, and Company, travelled to the mouth of Salt River. The party claimed several thousand acres along the Ohio and Salt rivers.

In May 1778, General George Rogers Clark traveled from Pittsburgh with 175 militiamen and numerous settlers to launch an offensive to gain control of Canadian lands (Indiana and Illinois); the settlers desired the surveyed land of Jefferson County (Kleber 1992). Clark landed at Corn Island at the Falls of the Ohio in 1778 with a regiment of troops and several families. Shortly afterwards, Clark and his regiment left the families behind on Corn Island, on Station-on-Island, as they began their campaign into the Illinois country and eventually captured the British forts of Kaskaskia, Cahokia, and Vincennes.

Soon after Clark's success in Illinois, France allied with the United States against the British. Clark sent orders to the Corn Islanders to establish a mainland settlement (Bell 2016; Durrett 1896:41-43). Construction of a fort on the mainland, referred to as Fort-on-Shore (Station-on-Shore), began in the autumn of 1778, in the vicinity of present-day 12<sup>th</sup> and Rowan streets (**Figure 31** and **Figure 32**) (Bell 2016; Casseday 1852:31). Historic sources describe the location of Fort-on-Shore as being on "the eastern side of the large ravine which formerly entered the river at the present termination of Twelfth Street," (Casseday 1852:30-31) "immediately opposite to the cabins on [Corn I]sland," (Durrett 1896:41). A map by R.C. Ballard Thruston in 1910 showing the relationship of the fort to present-day Rowan Street is shown in **Figure 33**. The fort, designed by Richard Chenoweth, was built with the help of all able-bodied Corn Islanders, including the women, and is described in detail by Reuben T. Durrett:

"The fort planned by Chenowith was exceedingly simple. It was a parallelogram two hundred feet long by one hundred feet wide consisting of eight single-story double log cabins on each of the two long sides and four on each of the two short sides. At each of the four corners was a block house two stories high and twenty-four feet square. All these buildings surrounded an inner court which served for a musterground, a place for storage, and a coral for cattle and horses. As the 25th of December 1778 approached, the fort was near enough completion for partial occupancy, and the islanders determined to move into it and there celebrate their first Christmas in the wilderness" (1896:41).

Fort-on-Shore celebrated its first wheat crop in 1779. By that time, the population had doubled to 100 people, some living on Corn Island, some in the fort, and some in White Home, a settlement outside the walls of Fort-on-Shore but within range of its guns (Casseday 1852:31; Durrett 1896:43). The citizens of Louisville at that time used hand-mills to process both corn and wheat, and lived in cabins with either earthen or puncheon floors, using "wooden vessels either turned or coopered," as furniture (Casseday 1852:31). Borrowing from the notes of Doddridge (1824) on frontier life, Casseday notes that at Fort-on-Shore, like other settlements, residents would have slept in beds of buffalo hide on the floor or on slab beds supported by "forks set in the earthen floor," and that items such as tin cups, iron forks, and gold or silver coins would have been remarkably rare among household possessions (1852:31-33). Some common items would have been hunting knives, tomahawks, scalping knives in leather sheaths, and moccasins made using an awl "made of the back spring of an old clasp knife...with [a] buck-horn handle" (Casseday 1852:31, 33-34).



**Figure 31. A likely inaccurate rendering of Fort-on-Shore sketched for Reuben Durrett (Thomas 1971:14).**



**Figure 32, Historic marker on Rowan Street commemorating Fort-on-Shore.**

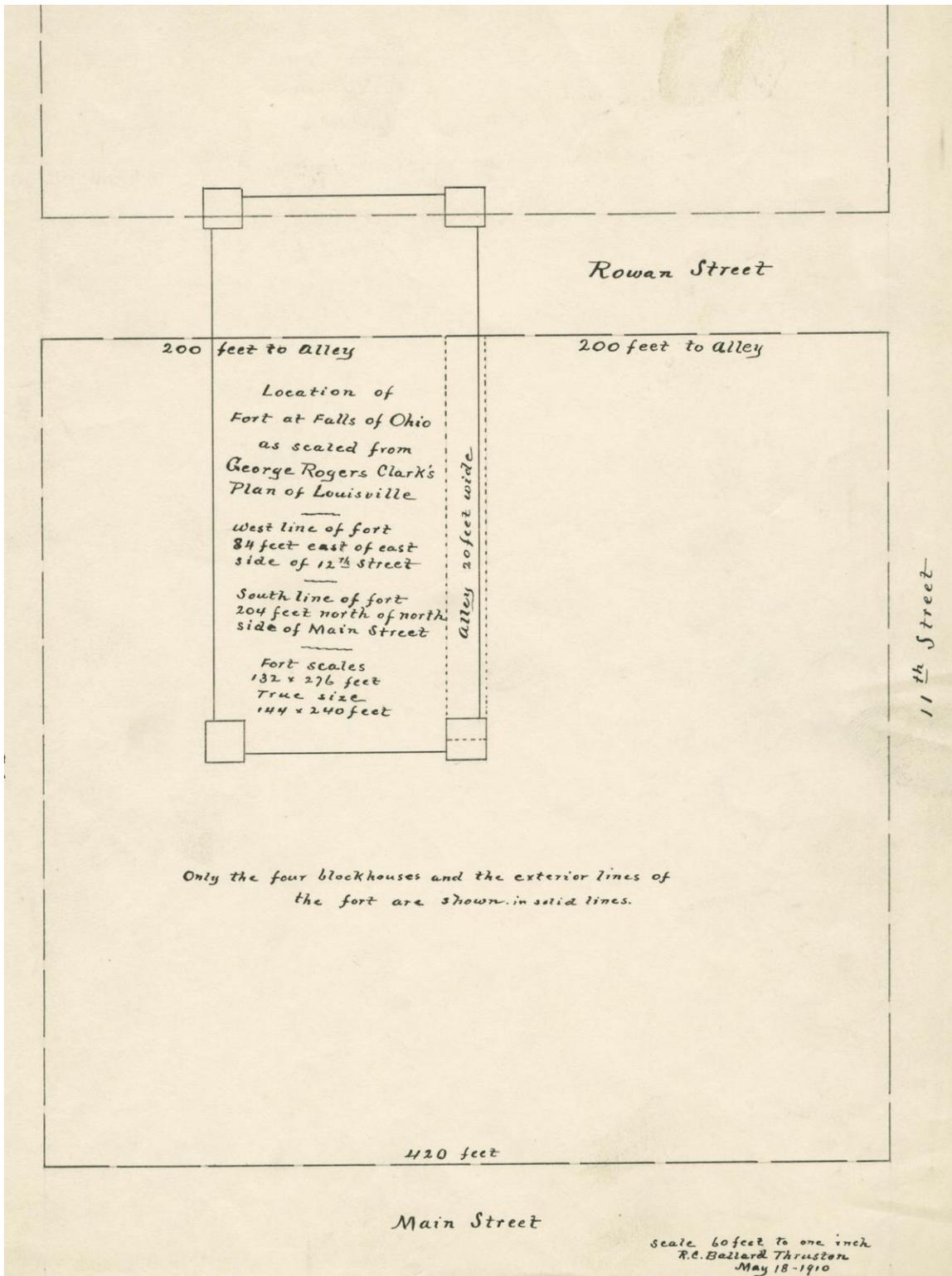


Figure 33. 1910 schematic of Fort-on-Shore drafted by M. Ballard Thruston.

European American settlement of the area began in earnest in the spring of 1779, when the Court of Kentucky sent out to its forts and stations a recommendation to establish permanent property and begin improving the land, while remaining as “compact as possible...settling themselves in Towns and Forts” (qtd. in Durrett 1896: 42-43). Rivers and streams provided the easiest and earliest routes of transportation for travelers. These, along with buffalo traces and Native American trails, served as the primary arteries of travel. At those places where streams and roads intersected, villages became established. This occurred not only because of the intersection of various routes but because it was in these locations that goods and passengers were loaded and unloaded as they changed the mode of conveyance. The non-navigable streams within Jefferson County were at the center of both agricultural and industrial development. Large plantation-type farms with fortified settlements, called “stations,” were constructed in the eastern portion of Jefferson County until the threat of Indian attacks diminished in the early nineteenth century. Over time, these larger farms were divided and sold off as the county grew.

During the initial settlement period, Jefferson County saw the most growth in the east along Beargrass Creek and in Louisville. Settlement patterns in the south of the county started slow and originally centered around salt licks and salt springs found near the Salt River. These naturally occurring salt springs would attract wildlife, and the salt could be extracted for use or trade. One of these salt-processing areas was at Mann's Lick in present-day Fairdale. This miniature industrial site would have been filled with rows of iron kettles to boil the salt out of water drawn from the springs. Often slaves were the primary labor source for this process. Roads began to appear from the more settled areas to the salt licks. Portions of the road to Mann's Lick can still be found in southern Jefferson County although the name had been contracted to Manslick (Yater 1979:18).

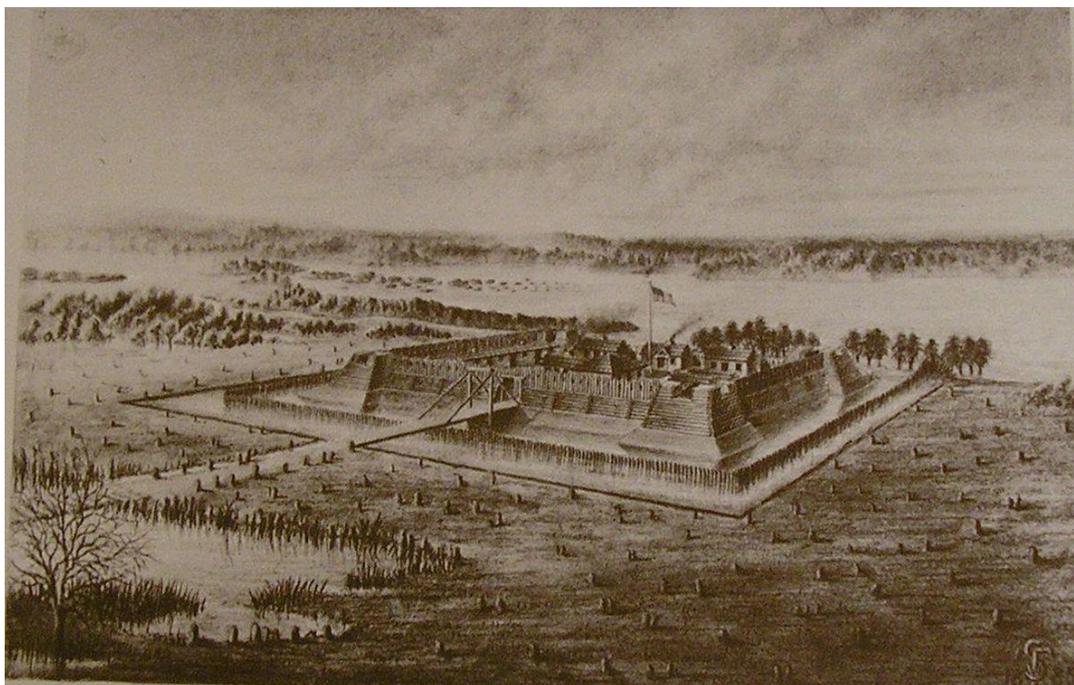
Kentucky remained part of Virginia until 1792, at which time it was incorporated. Named for Thomas Jefferson, the county had been created in 1780 by the Virginia General Assembly. The population of the county concentrated around the Falls of the Ohio River and extended into tributary streams, notably Beargrass Creek. Rivers and streams provided the easiest and earliest routes of transportation for travelers. These, along with buffalo traces and Native American trails, served as the primary arteries of travel. At those places where streams and roads intersected, villages became established. This occurred not only because of the intersection of various routes but because it was in these locations that goods and passengers were loaded and unloaded as the mode of conveyance changed (Kramer 2001:59). Government support of infrastructure was slow to ensure adequate transportation networks, even after the Commonwealth was incorporated in 1792. Gradually, though, packhorse trails that often followed buffalo trails were enlarged to wagon roads and plank turnpike roads. Trans-Appalachian migration grew steadily.

According to Kleber (1992), African-American populations entered Kentucky during the years of early exploration as slaves. By the time of the first census, 1790, the population of African Americans in Jefferson County included 903 slaves and five freedmen (Hudson 1976). Almost from the beginning, the African-American population was higher in the Louisville area than in the rest of the state, although the average slaveholding family in the Louisville area owned just 4.3 slaves—a much lower number than the averages for North Carolina (6.7), Maryland (7.5), and South Carolina (12.1). In the Louisville area, the main industries using slave labor included hemp plantations such as Farmington and salt works such as Mann's Lick. The largest percentage of African-American population prior to the Civil War was in 1820, when 4,824 slaves and 29 freedmen comprised 38.1 percent of Jefferson County's population.

### City of Louisville

A year after Fort-on-Shore was established with 20 people, 300 more settlers arrived looking to settle there (Kleber 1992:574). An influx of new settlers arrived from Virginia, erecting cabins just south of the fort in Louisville's first neighborhood, White Home (Collins 1878:358; McMurtrie 1819:107-108). At that time, the settlers established a new fort, Fort Nelson (**Figure 34**). Fort Nelson, located north of Main Street between 6<sup>th</sup> and 8<sup>th</sup> streets, was completed in 1782 (Collins 1878:359; Bell 2016). While it superseded Fort-on-Shore as a military installation, Fort-on-Shore, and White Home continued to be the principal area of development. Filson's 1800 map of Kentucky depicts a square fort surrounded by homes (**Figure 35**). The square likely represents Fort Nelson, as Fort-on-Shore would have been further toward the bend in the Ohio River at the western edge of Louisville.

Louisville was built partially within the 405-ha (1,000-acre) property of Dr. John Connolly, who sided with the British during the Revolution. Though his allegiance to Britain technically made his land forfeit, no official act had passed regarding confiscation of Connolly's land. Louisville's first citizens petitioned the legislature of Virginia for legal sanction of their seizure of his property. An act was passed in 1780 granting Connolly's land to the trustees of Louisville, along with a further 405 ha (1,000 acres) belonging to Irish-born John Campbell, who had purchased his land from Connolly before being taken prisoner by Native Americans in 1779 while on a trip to Pittsburgh (Durrett 1896:38-48). When Campbell returned to the Falls in 1783, a legal battle ensued between Campbell and the trustees of Louisville, described in detail by Durrett (1896:53-55).



**Figure 34. 1885 Sketch of Fort Nelson (Wikimedia).**

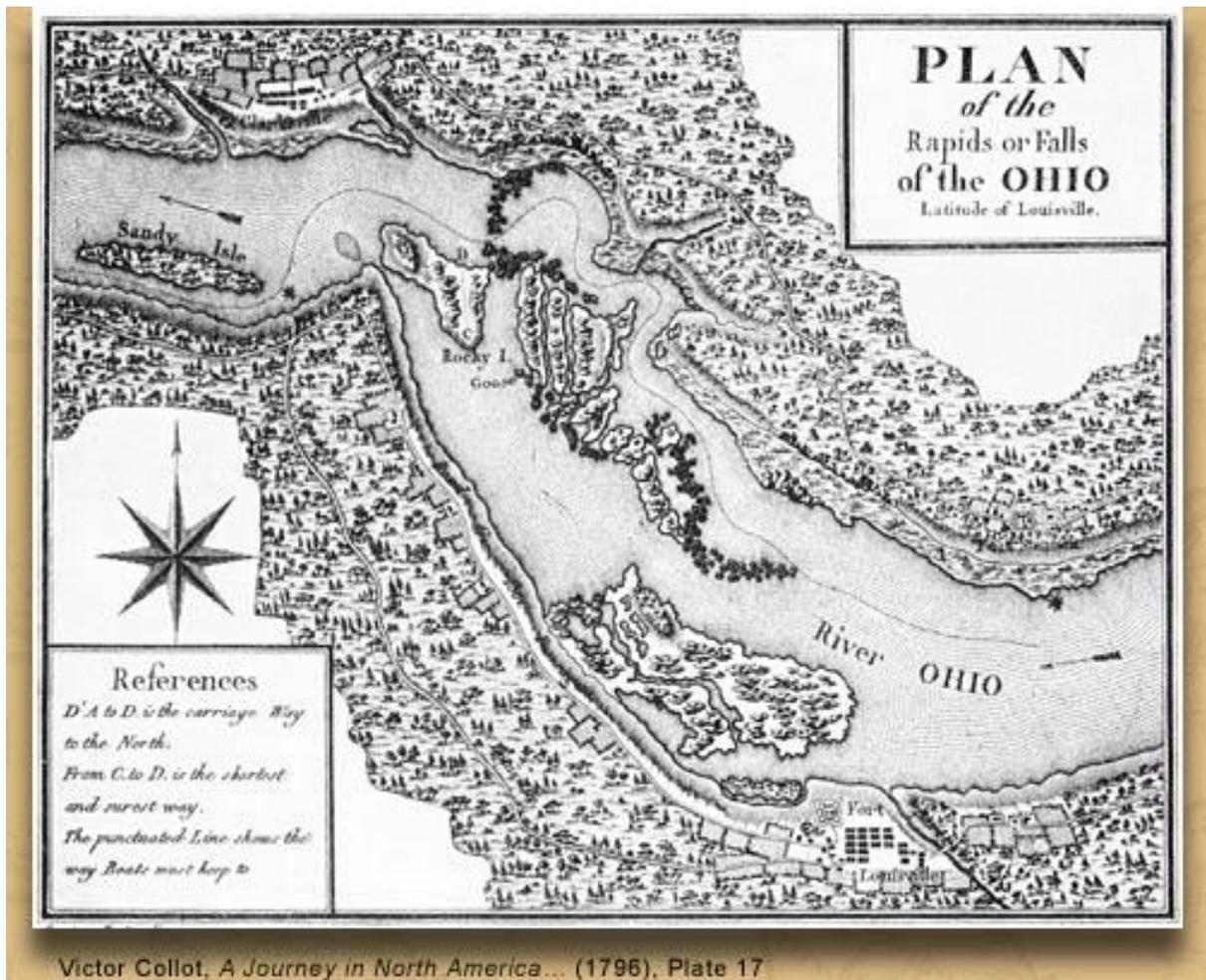


**Figure 35. J. Filson's Map of Kentucke, 1800 (Library of Congress)**

Louisvillians suffered through the “Hard Winter” of 1779-1780, which killed game and livestock alike. Nonetheless, the population increased to 600 during the year 1780. Some of the additions came from births, others from an “influx of young, unmarried women,” and some from the quartering at Fort-on-Shore of Colonel George Slaughter and 150 state troops (Casseday 1852:43, 53, 58-59). With the arrival of the soldiers, Casseday writes, “men became more careless and unguarded, and...the very strength of the settlement and the security of its inhabitants” drew attack from Native Americans from across the Ohio River in Indiana (1852:53).

As a secure location, Fort-on-Shore served as the courthouse and was the site of the meetings of Louisville trustees beginning in February 7, 1781. However, the attempt to auction off the first lots in April of the same year was cut short by an attack; after soldiers were shot near Fort-on-Shore and, in the Bearsgrass settlement, George Rogers Clark ordered a row-galley with four-pound cannon to be built to patrol the river. Another, unnamed fort was constructed at the Falls (Casseday 1852:58-59; Collins 1878:359; Durrett 1896:47). According to Casseday, “History gives us no information either as to the name or location of this position of defense. Its very name and history is swallowed up in that of Fort Nelson, which must have been built very soon after” (1852:59-60).

In 1780, the town of Louisville was officially organized and named for Louis XVI of France (Drager 2020). Shortly after its incorporation, town plats were drawn up to establish the city’s early street grid system. While the streets were being established and the earliest buildings being built, most of Louisville’s inhabitants lived in the fort (Collot 1796) (**Figure 36**). Under the constant threat of Indian attacks, the settlers sought the safety of Fort Nelson, even while they bravely continued construction of the town they were hoping to inhabit.



Victor Collot, *A Journey in North America ...* (1796), Plate 17  
**Figure 36. Collot map of 1796 showing location of the fort.**

In 1783, Daniel Brodhead opened the first general store in the town of Louisville and was the first settler to move out of the Fort. The first house was built by Jonathan Cessna, and James John Floyd was the first judge in the town. A fire department had already been established by this time, and the courthouse was built in 1784. By 1784, Louisville had “63 clapboard finished houses, 37 partly finished, 22 uncovered houses, and over 100 log cabins” (Casseday 1852). In the next five years, the town of Louisville gained its first church, first hotel, and first post office. By 1800, the town of Louisville had 359 residents (Casseday 1852).

Louisville’s newly appointed trustees (William Harrod, Richard Chenoweth, Edward Bulger, James Patton, Henry French, Marsham Brashears, and Simeon Moore) met in April of 1779 for town planning and the establishment of a government. John Corbly drew up a map (**Figure 37**) based on the decisions of the trustees:

“That a number of lots, not exceeding 200 for the present, be laid off to contain half an acre each, 35 yards by 70 where the ground will admit of it, with some public lots and streets. That each adventurer draw for only one lot by equal

chance. That every such person be obliged to clear off the undergrowth and begin to cultivate part thereof by the 10<sup>th</sup> of June and build thereon a good covered house 16 feet by 20 by the 25<sup>th</sup> of December [1779]. That no person sell his lot unless to some person without one, but that it be given up to the Trustees to dispose of to some new adventurer on pain of forfeiture thereof" (qtd. in Durrett 1896:43).

According to Durrett, William Bard drew a map of these lots in 1779, after ownership had been established (**Figure 38**). There were 88 half-acre lots along both sides of Main Street from 1<sup>st</sup> to 12<sup>th</sup> and 28 lots north of Main ending at 14<sup>th</sup> Street in the bend of the Ohio River. The Bard map included the initials of the lot owners. Yet another map drawn up in 1779 was that of General George Rogers Clark (**Figure 39**). This was a plan for the layout of Louisville, which was not adopted; it included half-squares set aside for public ground as parks of undisturbed forest throughout the town. Clark's map also depicts the islands of the Ohio River at the Falls, as well as the actual layouts of settlements at both Corn Island and Fort-on-Shore (Durrett 1896:43). Samuel W. Thomas refers to these three 1779 maps in the notes for *Views of Louisville Since 1766*, speculating that only the Corbly map is authentic, that the Clark and Bard maps were both drawn by the same person and are frauds created for or by Reuben T. Durrett (1971:251). Collins (1872) states that Thomas Bullitt had mapped the first plan for Louisville in 1773, while McMurtrie (1819) states that the city was first laid out by William Pope in 1780. These sources, as well as Casseday (1852), state that a new lot plan was drawn up later in 1780 by Peyton and Sullivan. All three historians also note that these surveys and plans had disappeared and were perhaps intentionally destroyed sometime before 1819 (Casseday 1852:46-47; Collins 1872:21; McMurtrie 1819:111).

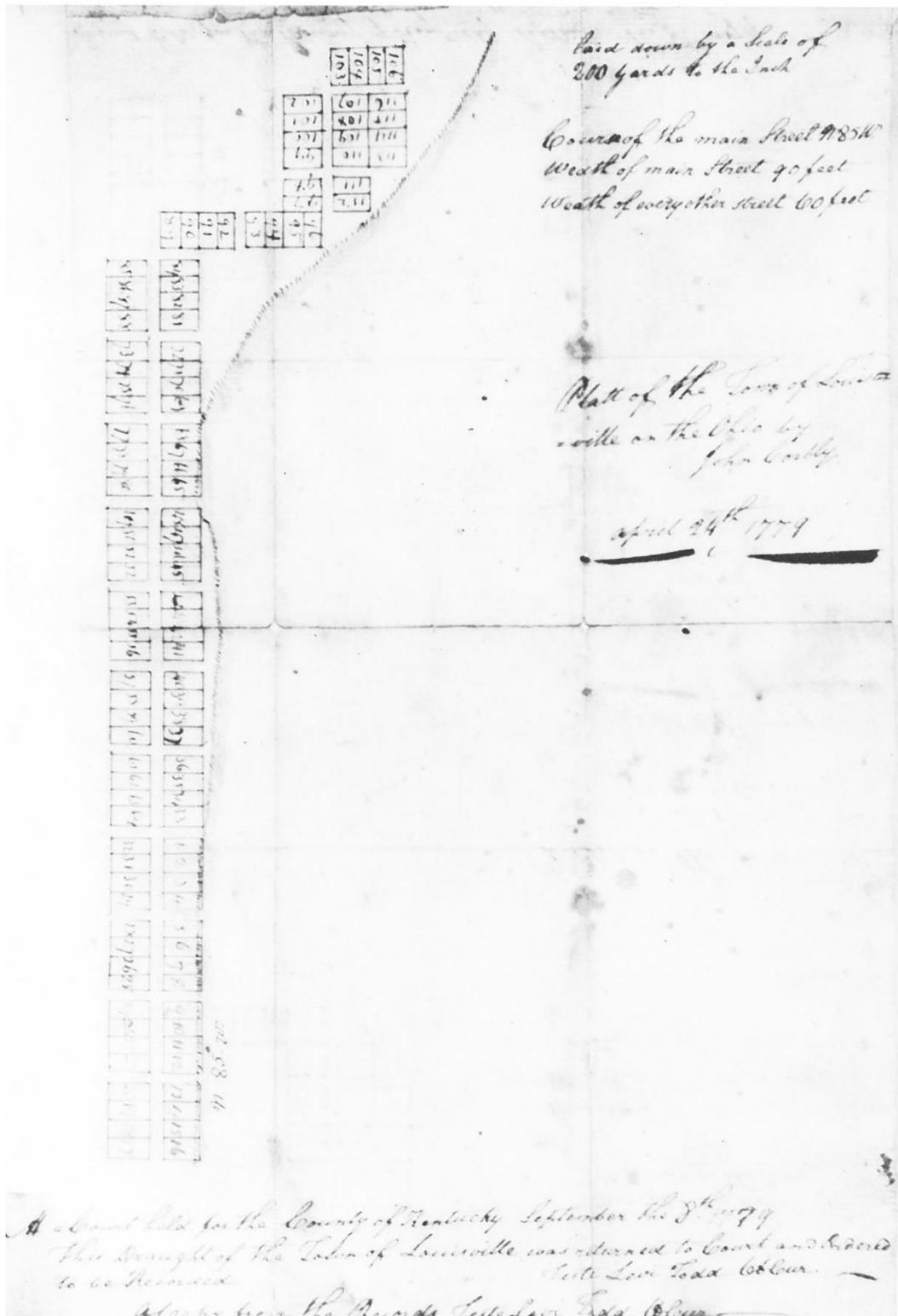


Figure 37. John Corbly 1779 map.

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
Louisville, Jefferson County, Kentucky

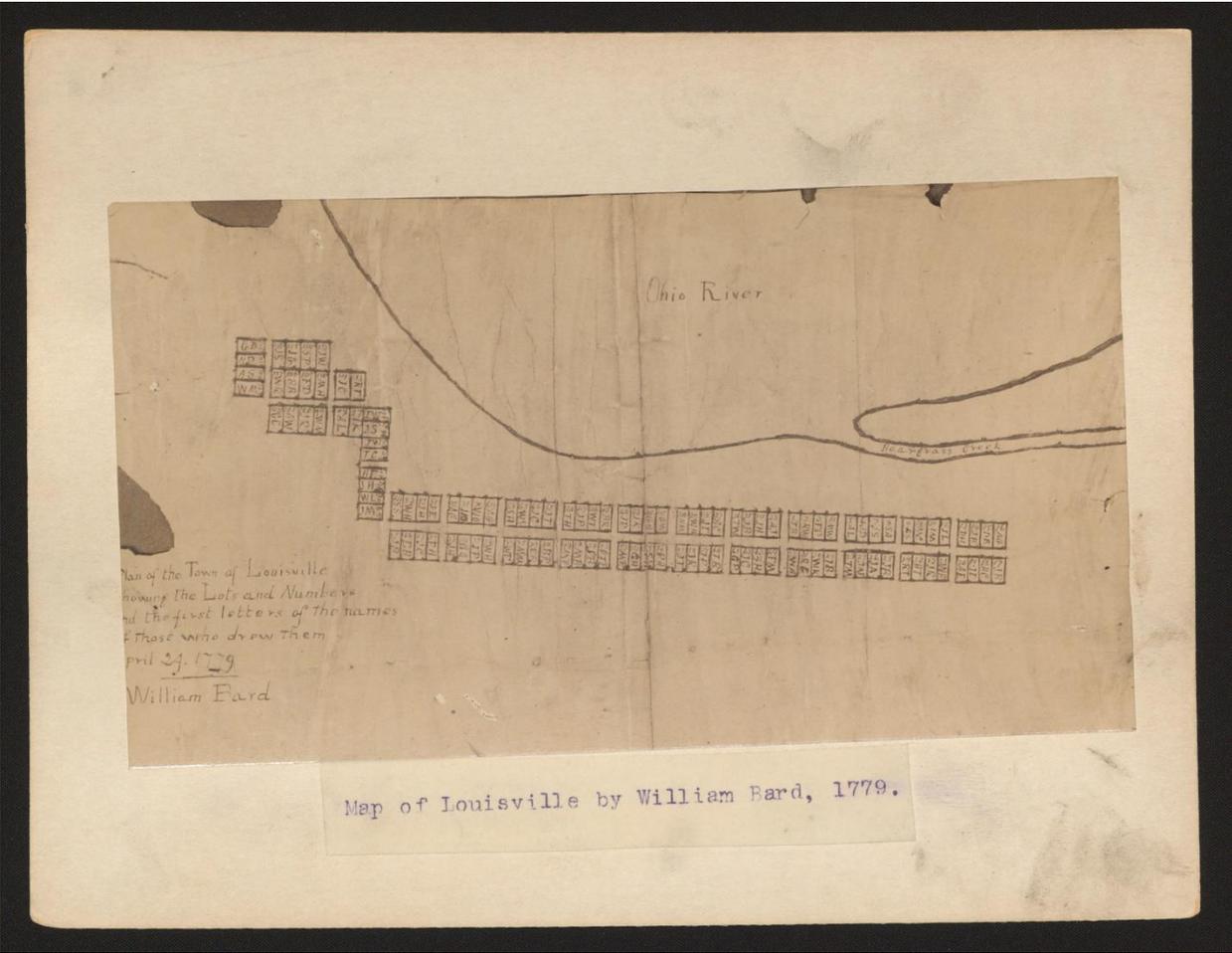
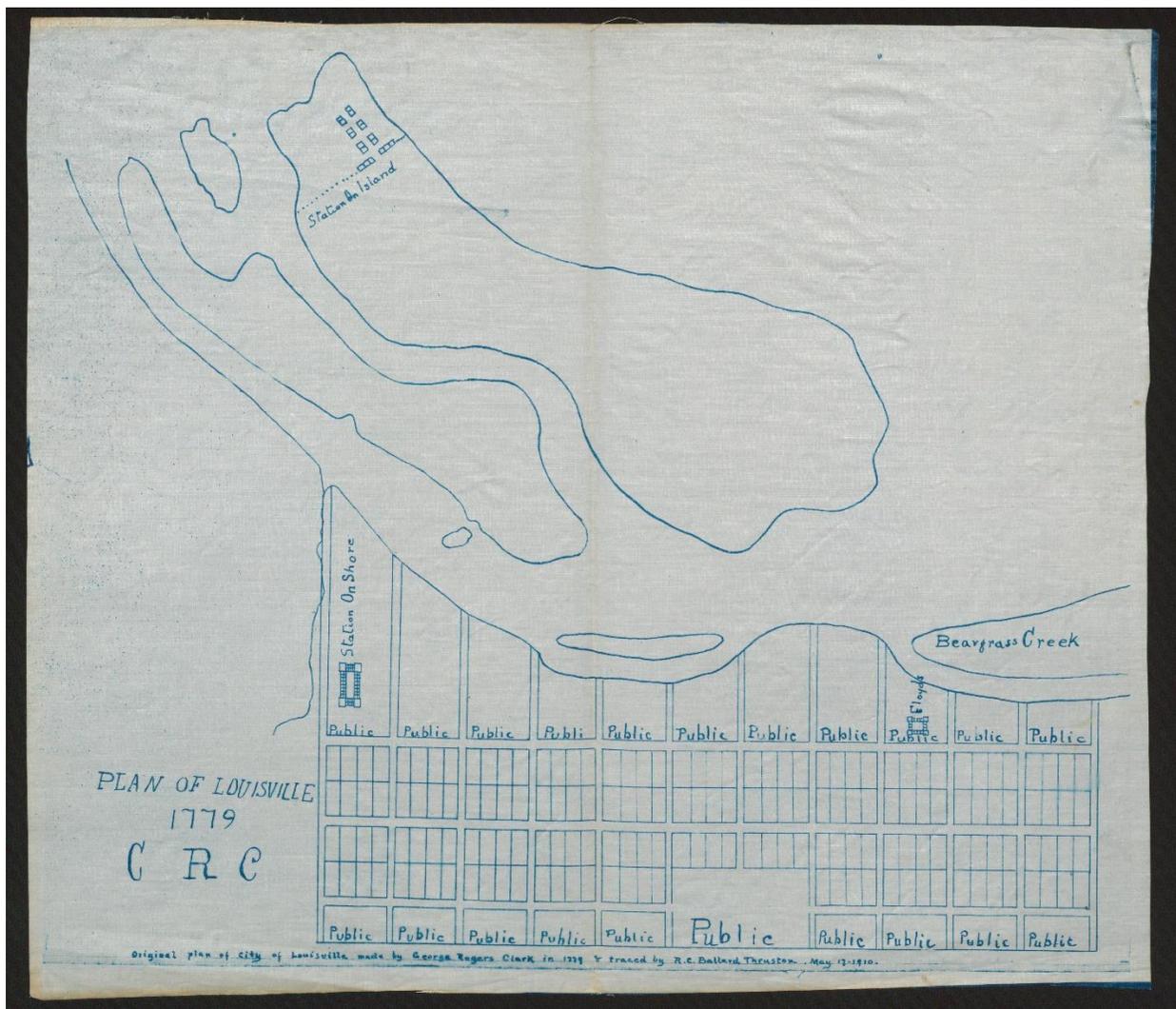


Figure 38. 1779 William Bard map of Louisville.



**Figure 39. Original plan of Louisville made by George Rogers Clark in 1779 and traced by R.C. Ballard Thruston in 1910.**

A surviving plat created by Jared Brooks in 1806 (**Figure 40**) and adopted in 1812, however, is based on the lost records of Pope and Peyton and Sullivan (McMurtrie 1819:111; Durrett 1896:46-47).



**Figure 40. Brooks 1806 Map (Library of Congress).**

Although town growth had been slow during the first twenty years after incorporation, the town of Louisville hit a growth spurt over the next two decades. By 1820, Louisville's population stood at 4,012. Much of this population boom was due to the town's location along the Ohio River. Just west of Louisville are the Falls of the Ohio, an impassable series of waterfalls and rapids that bar any boat traffic from passing through. The last place to dock before the Falls was at the Louisville Wharf. All boat traffic had to pull off, transport their goods onto horse and wagon, and travel to the other side of the Falls, where they could reload their goods onto another boat. The constant influx of travelers coming into the town at the Wharf, and traveling through Louisville along roads and turnpikes, meant lots of opportunity for commerce (Figure 25 and Figure 26). Industry also came to Louisville during this time. By 1820, Louisville was home to multiple mills, factories, and became a building place for steamboats (Wikipedia). Also during this time, the Louisville Library Company, the first city library, was established, as was the University of Louisville, which was a consolidation of three other schools that were already operating in Louisville: Jefferson Seminary, Louisville Medical Institute, and Louisville Collegiate Institute (Cox and Morrison 2000).

Louisville's population continued to grow rapidly and, by 1830, it had become the largest city in the state with a population of 7,000. Also, between 1820 and 1830, the Louisville and Portland Canal was constructed (Johnston 1975). This canal made it possible for boats to bypass the Falls of the Ohio and rejoin the Ohio River safely on the other side, without having to unload the boat. It was now possible for a boat to travel continuously from Pittsburg to New Orleans. During the 1820s the first public school was established in Louisville, and the Louisville Marine Hospital was also established. A new city government was established, with John Bucklin elected as the first Mayor. The city was now able to collect taxes from its residents and could fund city improvement and infrastructure projects (Wikipedia).

Between 1830 and 1840, Louisville began developing into an elegant and cultured city that could rival cities back east. In 1831, Presentation Academy, a Catholic school for girls, was established, as was St. Vincent Orphanage ([presentationacademy.org](http://presentationacademy.org)). The famous Galt House hotel was built in 1834 and, in 1839, the first horse race was held at Old Louisville's Oakland Race Course. The Kentucky School for the Blind was also established in 1839 (Wikipedia). It was during this time that many city streets were covered with macadam, or paved, for the first time. Louisville was no longer a town of log cabins and mud roads.

In the 1840s, William Gibson started the city's first school for African-American children, and William Burke Belknap began the Belknap Hardware and Manufacturing Company. Zachary Taylor, a native Louisvillian, was elected president of the United States, bringing national attention to the growing and thriving city (Wikipedia).

After the 1850 Census, Louisville was listed as the tenth-largest city in the country. The Louisville and Nashville Railroad was established in 1850 and, by 1859, construction of the railroad was complete, making Louisville a central hub for railroad transportation from all over the country. Other industry boomed throughout the city. In 1858, the American Printing House for the Blind was established, and served as the nation's primary developer and producer of educational and communication materials for the blind community (APH Museum).

During the Civil War, Louisville served as a major hub of activity for Union forces. Louisville was in a strategic location for the Union, situated at a central point of the country's railroad transportation lines and had centralized access to the country's water transportation routes. Though officially south of the Mason-Dixon line, Kentucky did not officially join the Confederacy, nor did it officially join the Union. As a border state, Kentucky was a land divided within itself, brothers fighting brothers, with the constant threat of destruction from both sides. During the war, an army base for Union forces was established in the Louisville. Somehow the city avoided any attacks during the war and escaped largely unscathed (Bladen 2020).

The 1870s saw renewed growth in Louisville. The Louisville, Harrods Creek and Westport Railway was established in 1870, and was the catalyst for development of Louisville's eastern suburbs. On May 17, 1875, the first Kentucky Derby was held at the Louisville Jockey Club (Britannica). In 1876, the Louisville Grays baseball team joined the National League, spawning the birth of the Louisville Slugger factory. In 1877, the Southern Baptist Theological Seminary was established, and a new campus was built downtown.

As the Industrial Revolution dawned, the 1880s saw modernization and technological innovations come to Louisville. From 1883 to 1887, Louisville was home to the Southern Exposition, a World's Fair that showcased the world's latest scientific and artistic inventions. Included in the Southern Exposition was the largest installation of incandescent light bulbs ever seen, invented by Louisvillian Thomas Edison (Bratcher).

Architectural innovations began in the 1890s with several skyscrapers built downtown. In 1891, renowned landscape architect Fredrick Law Olmstead, who designed Central Park in New York City, designed, and built Louisville's parkway road system (Southern Parkway, Eastern Parkway), and a series of city parks (Shawnee Park, Cherokee Park, Iroquois Park) (Olmstead Parks Conservancy). Louisville's first passenger train station, Union Station, was built in 1891 giving the city the largest train station in the South. In 1893, the Louisville Presbyterian Seminary was established in a new campus downtown. During the 1890s, a massive road improvement project

began throughout the city, replacing older macadam, wood plank, or limestone paved roads with granite boulder block paving stones. On March 27, 1890, a massive tornado tore through the city, destroying 766 buildings and killing 120 people (Wikipedia).

### **Louisville Roads and Turnpikes**

Louisville's prosperity has depended on transportation connections. Stagecoach routes were important links between the smaller communities along the routes as well as the larger destination cities. Toll gates existed along major arteries as noted on the 1858 Bergmann map. During this time, stagecoach companies competed for business, and, at times, this competition was less than friendly. Conflict between these private companies' rights to the market, their responsibilities in road upkeep, and the public's right to transportation routes continued throughout the 1800s and represent a continued theme throughout the nation's transportation history. Along these stagecoach lines, however, populations could continue to grow, mail could be delivered keeping communication lines on a more regular schedule, and businesses complementary to the operation could blossom. Barns offered water, feed, and replacement horses. Taverns served many important functions, including meetings that today occur at libraries, community centers, law offices, or boardrooms. As the government increased its regulation of the industry and the rise of rail lines, the monopoly of the stagecoach lines declined.

The first legislative act pertaining to the paving of Louisville's streets was passed in 1811, authorizing the city's trustees to begin the process. These early paved streets were either constructed from wooden planks or from crushed limestone being laid as a road bed and in some places boulder stones from the river, laid down (Johnston 1896:338). The following year, improvements began on Main Street between Third and Six streets (Collins and Collins 1882; Johnston 1896). Landowners on corner lots were obliged to pay for the paving of intersections, and if a majority of residents along a street petitioned for paving, all lot owners were required to contribute to the project. Initially "paved" with wooden planks, flatboat gunwales, and macadam, Louisville's roads were "long encumbered with stumps and interfered with by the ponds...It was not until well into the [nineteenth] century before any effort was made to improve the streets except to fill up the mudholes and low places, and no attempt to drain ponds was made until after the great [cholera] epidemic of 1822" (Johnston 1896:338).

From Johnston's perspective, at the end of the century the city's early roads may have seemed primitive but, in 1819, at least one resident seemed pleased with Louisville's progress: "The roads leading from Louisville to the different parts of the county, will shortly be as good as excellent turnpikes can make them. The one to Shippingport and Portland will be finished this summer" (McMurtrie 1819:140). Now known as Portland Avenue, the turnpike McMurtrie refers to was a toll road constructed by the Louisville and Portland Company and connected to an additional toll road to the Shippingport community (Commonwealth of Kentucky 1818). Prior to completion of the Louisville and Portland Canal in 1830, which allowed river traffic to bypass the Falls of the Ohio, such land connections to the two port towns would have been vital to trade.

### **Portland and Shippingport Turnpikes**

Just west of Louisville, in the Ohio River, are a series of large waterfalls that made passage by boat impossible. These waterfalls are called the Falls of the Ohio. In the late 18<sup>th</sup> century and into the 19<sup>th</sup> century, the Ohio River was one of the busiest transportation routes in the country, moving goods and people downriver from Pennsylvania to the Mississippi River. When boats reached the Falls of the Ohio, they had to stop, unload everything from the boat, transport it by wagon or by

foot to the other side of the Falls, and board a different boat to continue their journey downriver (Figure 41). The stopping point on the east side of the Ohio River became the town of Louisville. The stopping point on the west side of the river was the town of Portland. Shippingport grew up between the two towns (Figure 42 and Figure 43). Due to this natural impediment to travel, land transportation routes emerged between the two docking points. The main route between these two points was the Portland Turnpike.

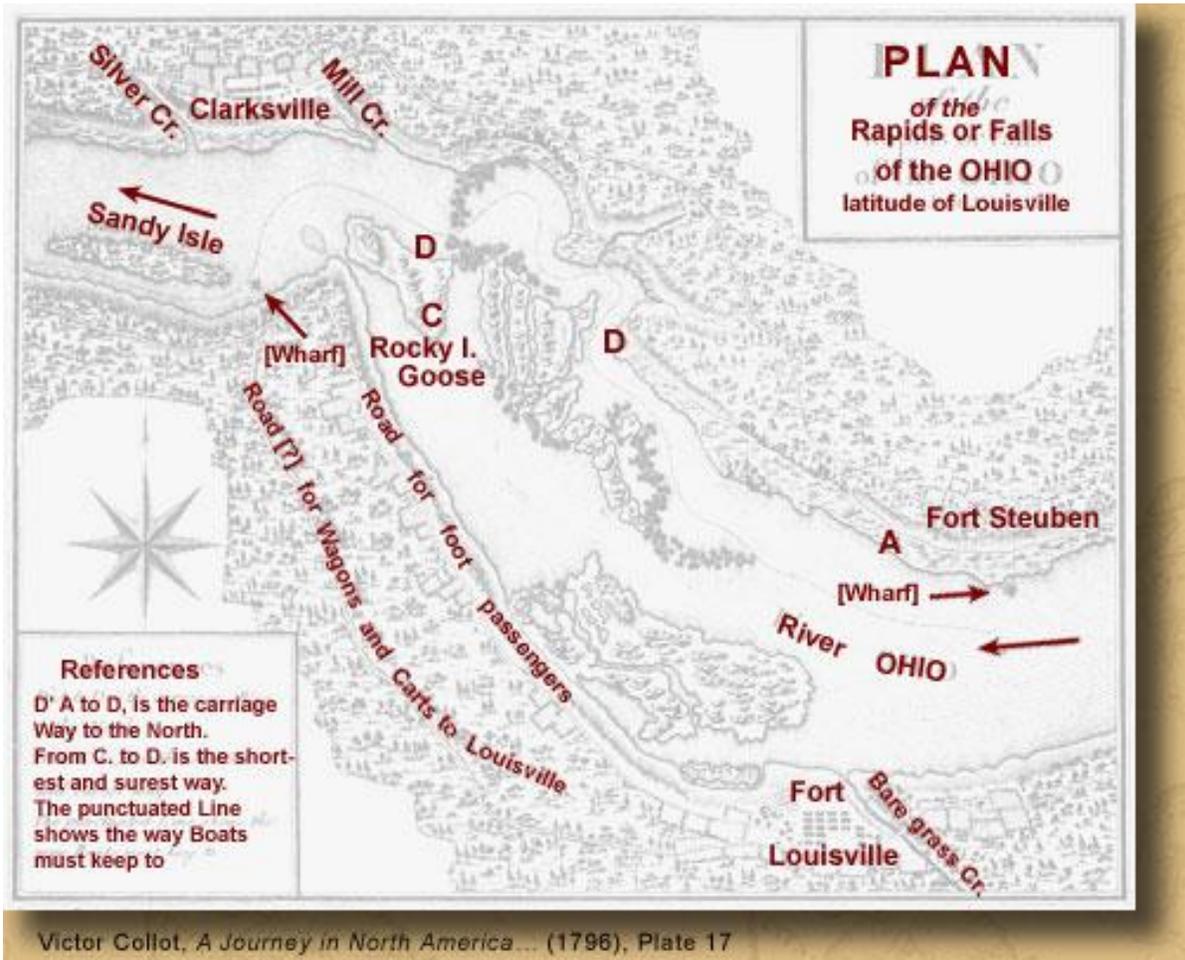


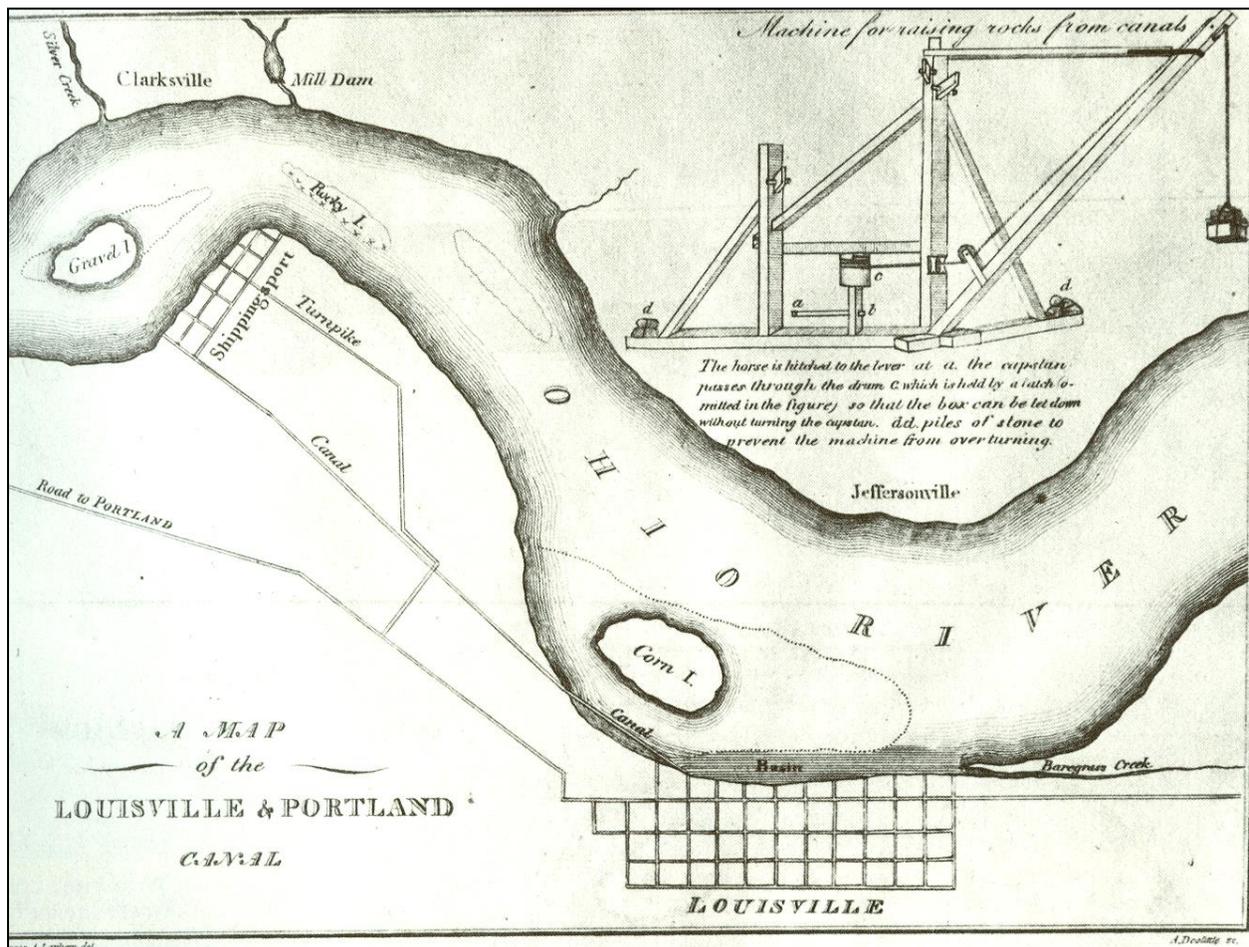
Figure 41. Overlay of 1796 Collot Map Showing Location of wharf at the foot of the Falls and routes for foot and wagon traffic at Shippingport (From Discovering Lewis and Clark <http://www.lewis-clark.org/content/content-article.asp?ArticleID=1886>).



The Portland Turnpike was a three-mile-long toll road constructed in 1819, running northeast following the Ohio River to Shippingport, then southeast to Louisville. Originally, the turnpike was simply a cleared, graded dirt road. An early mention of the Portland Turnpike in 1819 states:

*“The roads leading from Louisville to the different parts of the county, will shortly be as good as excellent turnpikes can make them. The one to Shippingport and Portland will be finished this summer, as will a considerable portion of the great Lexington road that runs through Shelbyville”* (McMurtrie 1819:141).

An 1828 map shows the Portland Turnpike is actually a series of turnpikes (**Figure 44**). One leads from Portland and ends at a perpendicular intersection with Main Street in Louisville. It is believed that portage traffic would then take Main Street down to the Louisville wharf. A second turnpike goes from Shippingport southeast and intersects with the Portland Turnpike about halfway between Portland and Louisville (Thomas 1971:55). Shortly after the Portland Turnpike was constructed, plans were drawn up to construct a canal that would allow boats to go around the Falls without having to unload and reload. The canal construction was completed in 1830.



**Figure 44.** Increase Lapham, age 16, prepared this illustration for *Silliman’s American Journal of Sciences and Arts* in 1828 (Thomas 1971:55).

After the Portland Canal was built, portage traffic along the Portland Turnpike decreased greatly. At that point, it was renamed Portland Avenue, and the southern end of the road was incorporated into the city street system of Louisville. An 1831 map shows the southern end of Portland Avenue as it enters the city limits of Louisville (See **Figure 8**. E.D. Hobbs, 1831. above). Portland Avenue intersects with 12<sup>th</sup> Avenue at an angle, halfway between Monroe Street (Rowan Street) and Main Street (Hobbs 1831). While Portland Avenue was still a major land transportation thoroughfare between Louisville and Portland, it was no longer the major portage line it had been before the canal was built.

An 1832 map (see **Figure 9**. E.D. Hobbs, 1832. above) shows the same configuration of Portland Avenue as the 1831 map, with Portland Avenue intersecting with 12<sup>th</sup> Street at an angle, halfway between Monroe (Rowan) Street and Main Street (Hobbs 1832). Any major traffic to the Louisville wharf would have followed 12<sup>th</sup> Street half a block south, then turned east down Main Street, and followed Main Street to the wharf (See **Figure 10. Long 1848**. above). A map from 1848 does not have much detail in the city streets, but shows the roads connecting Portland, Shippingport, and Louisville (Long 1848). The roads follow the same routes as the earlier turnpikes.

A newspaper article from 1851 (**Figure 45**) describes how poor the roadbed conditions of the Portland Turnpike had become.

*“The citizens of the Eighth Ward particularly, and all the businessmen and hundreds of others who are conversant with the facts, are making loud complaints of the wretched condition of the Portland turnpike. In bad weather it is almost impassable, and large petitions are made for appropriations to repair the road” (The Louisville Daily Courier, August 14, 1851).*

It is unclear whether the Portland Turnpike had ever been paved prior to this point, but it is apparent that by 1851 the road was in horrible condition (**Figure 46**). By October of that same year, improvements to the Portland Turnpike had been completed, and the residents of Louisville were much happier with its condition (*The Louisville Daily Courier*, October 28, 1851).

**CITY COUNCIL—PORTLAND PLANK ROAD—THE TURNPIKE.**—The General Council is, we believe, to be in session to-day, and it is to be hoped that some definite action will be taken in regard to the Portland Plank Road. The general interests of the city demand its immediate construction, and the delay in having the route located, and the work contracted for is unaccountable.

The citizens of the Eighth Ward particularly, and all the business men and hundreds of others who are conversant with the facts, are making loud complaints of the wretched condition of the Portland turnpike. In bad weather it is almost impassable, and large petitions are made for appropriations to repair the road.

Figure 45. *Louisville Daily Courier*, August 14, 1851.

**PORTLAND TURNPIKE AND PLANKROAD.**—The turnpike from this city to Portland is now in thorough repair and good order, the indefatigable contractor, John Graham, having completed the work a week before the time of his contract expired. It is an excellent job, but we think a good covering of sand should be placed on the road to keep the broken stones from being scattered.

The work on the plankroad is also progressing, and Mr. Graham thinks it will be completed in December. He has four culverts to construct. About 7,000 yards of the route have already been graded, and the workmen will be ready to commence planking in two weeks, provided the material is furnished.

Figure 46. *Louisville Daily Courier*, October 28, 1851.

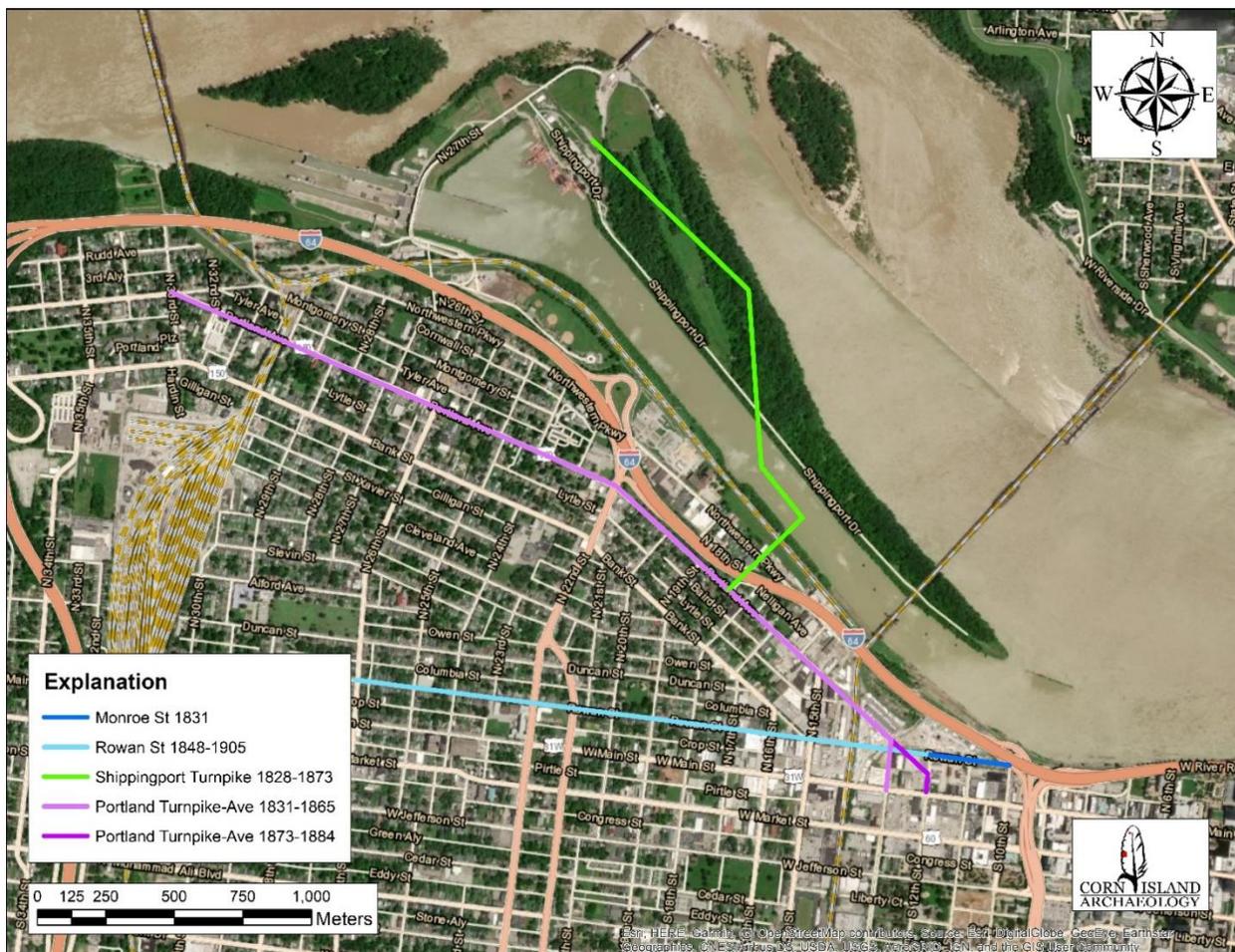
By 1856 the Louisville and Portland Railroad had built railroad tracks along the Portland Turnpike, stretching from Grove Street in Portland, with access to the Portland wharf, east along Third Street in Portland, then south along Fulton Street in Portland and southeast along Portland Turnpike, intersecting with 15<sup>th</sup> Street at an angle in Louisville, turning east to follow Monroe (Rowan) Street for two blocks, then turning south at 13<sup>th</sup> Street and again turning east onto Main Street in

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
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Louisville (White 1856). A map from 1865 shows the same configuration for the Louisville and Portland Railroad and the surface streets as the 1856 map (Simpson 1865).

The 1884 map shows that the Louisville and Portland Railroad appears to have been removed, and Portland Avenue was returned to pedestrian and wagon traffic. Portland Avenue continues to have the same configuration as before, intersecting with Rowan Street at an angle, halfway between 13<sup>th</sup> Street and 12<sup>th</sup> Street (Hopkins 1884).

**Figure 47** shows the relationship of Rowan Street to several of the early turnpikes.



**Figure 47. Composite map showing location of Rowan Street in relation to the Portland and Shippingport turnpikes.**

### **Boulder Blocks, Pavers, and the History of Louisville Road Surfaces**

The city's first engineer, Edward D. Hobbs, worked to drain the swamps and ponds downtown and improve roads during the 1830s, which involved grading and the use of curbstones and limestone and river boulder roadbeds. Some streets were paved with vitrified brick, others with blocks of wood (referred to as "Nicholson" blocks) rather than the planks of the 1810s-1820s. Curbstones were exclusively, by ordinance, made of locally quarried limestone, which was also the source material for macadam, a layered crushed stone paving in Louisville. Macadam paving uses a layer of crushed limestone that can fit through a two-inch ring followed by a binder layer such as sand, lime, or bitumen, then compacted with a roller (Williams 2018). The locally quarried limestone is soft, does not hold an edge over time, and disintegrates in weather, calling for the curbs to be replaced every 15 to 20 years. Most of the work done by prisoners in Louisville's workhouse (constructed in 1879) involved quarrying and breaking stone for streets, curbs, and gutters.

A newspaper article from the *Chicago Daily Tribune* from 1883 gives a history of Chicago roads from 1831 to 1883. The article states that roads in the 1830s through 1855 were "planked," meaning wooden planks were laid over the dirt roads. By 1855, planked roads were becoming obsolete and were being replaced by macadam streets (*Chicago Daily Tribune* 1883). Macadam paved streets were used up until 1870 when the streets were improved through the use of wooden blocks or Nicholson blocks. In Chicago, streets paved with cobblestone and granite blocks were experimented with on a few streets in 1855 but did not last long as the cobblestone streets were ordered replaced by wooden blocks.

Granite boulder stones were different than their predecessors, the cobblestone. **Figure 48** shows a section of paving at Northwestern Parkway and 16<sup>th</sup> Street that shows both treatments. Cobblestones are natural, unworked, river stones placed as a road paving material (**Figure 49** and **Figure 50**). **Figure 51** shows the size of cobblestones. The disadvantage of cobblestones is their surface is uneven, making travel over them by horse and carriage bumpy and at times even dangerous. Also, due to their natural, river-smoothed surface, cobblestones tend to become slippery when wet. In 1858, Chicago experimented with boulder stone-paved roads, in which granite stones from the river were laid on the streets. By 1862 the last boulder stone had been placed: all boulder stone paved roads would be replaced by wooden blocks by 1871 in Chicago (*Chicago Daily Tribune* 1883).



**Figure 48. Image of former road surface of Northwestern Parkway in Louisville that shows transition from cobblestone to boulder block paving.**



**Figure 49. Section of cobblestone paving at Northwestern Parkway and 16<sup>th</sup> Street, Louisville.**



**Figure 50. View of cobble eroding from cobblestone pavement, Northwestern Parkway and 16<sup>th</sup> Street, Louisville.**



**Figure 51. Cobblestone, showing scale in relation to hand.**

In the 1870's Johnston explains the Louisville streets were paved with costly Nicholson wooden blocks. According to Johnston, "...It was not until early in the [eighteen] eighties that Main Street was paved with granite and experiments made in asphalt. The last wooden blocks were supplanted in 1890 with asphalt on Chestnut Street" (1896:338). Johnston explains that from the 1830s to present (1895 at the time of publishing) "Louisville has passed through all the gradations of experimental street making and wasted many thousands of dollars before reaching the present stage of improvement" (1896:338). Johnston complains that Louisville has abundant asphalt rock and superior shale for making vitrified brick and that there is no reason Louisville should not have superior low-cost streets of native materials except for the fact contractors have influence on the materials used. He lists the following miles of road by material: *Boulder streets 10.19, Granite 19.06, Asphalt 6.57, Brick 17.58, Macadam 96.84, Gravel 38, total length of streets in miles 151.52, Total length of alleys in miles 49.8* (Johnston 1896:339). Johnston (1896:339) also notes the total amount of money the city of Louisville spent in 1895 on the construction of new roads, which was \$173,849.11 for 3.93 miles of road, and the amount of money spent reconstructing roads, totaling \$89,598.58 for 2.79 miles of road. The overall cost of constructing and reconstructing roads in 1895 in Louisville was \$263,447.64 for 6.72 miles of road. Johnston also estimated the expense of street cleaning per year as approximately \$100,000, with macadamized streets accounting for the majority of the cost (\$82 per mile) due to the amount of upkeep required (Johnston 1896:340).

The transition to granite blocks (also referred to as boulder, or "Belgian," blocks) as pavers was initiated by the 1888 Kentucky Legislature (Kleber 2001). "Boulder" is a term that refers to a large, smooth (rounded) mass of rock detached from its place of origin. Belgian blocks are hand-chiseled rectangular blocks, usually of granite which often vary in size and were mainly used in heavily trafficked areas (Williams 2018). Although the source of Louisville's boulder blocks has been debated, a brief article noted in 1884, just four years prior to the legislation, that the

Richmond Granite Company (headquartered in Philadelphia) operated a quarry in Henrico County, Virginia, which “supplied large quantities of Belgian blocks to Louisville, Ky., 120 pieces to the ton” (Hotchkiss 1884). The quarry was four miles north of Richmond, Virginia, and had been in operation since 1868 supplying blocks for paving, curbstones, and monuments in Louisville, Washington, D.C., and New Orleans (see **figure 52**) (Henrico County Historical Society 2010). Most likely, then, Rowan Street’s bowlder block paving came from this company’s quarry and was laid down in the 1880s. By 1890 an experiment was conducted using vitrified brick to pave 5<sup>th</sup> Street between Walnut and Chestnut streets (Johnston 1896:338). After this, nearly 20 miles of streets were paved with similar materials across Louisville.

Transportation along roadways continued to be hazardous and expensive until additional governmental regulation, public influence, and organizations brought about change. Federal responsibilities were acknowledged in 1894 with the creation of the Office of Road Inquiry, and the Good Roads Movement, organized by the League of American Wheelmen, pushed for better roadways, particularly for cyclists (Reid 2015). The construction specifics of transportation routes consumed industry journals. Such roads were often based on designs by Scotsmen John Loudon MacAdam and Thomas Telford but, as recorded in a number of early twentieth-century industry reports, a number of materials were tested. Both fine and coarse aggregate stone cemented with coal tar was noted as being prevalent, although not optimal, in early turnpike construction (Richardson 1909). Succeeding years saw experimentation with various ratios of coal tar, bitumen and, finally, asphalt mixtures were produced. The coal tar bitumen macadam, known as Evans pavement, was used as early as the late 1860s (National Asphalt Pavement Association 2014). Asphalt pavement is known to have been constructed in 1870 by Edmund J. DeSmedt (National Asphalt Pavement Association 2014). This asphalt concrete or asphalt macadam proved more durable (Richardson 1909). The size of the rock used in construction was prescribed through these industry papers and reports as well as legislation. Stones 2 to 4 centimeters (cm) (0.75 to 1.5 inches) were suitable for the base layer, while stones up to 7.6 cm (3 inches) were used for the upper layer.



**figure 52. Richmond Granite Company quarry, 1906 (Henrico County Historical Society 2010).**

### **Rowan Street**

The Map Review section of this report shows that Rowan Street was initially named Monroe. Maps indicate that the street bore this name from at least 1831 to around 1884 when maps show the name changed to Rowan. However, an 1859 newspaper article indicates the road was called Rowan at that time (*Courier Journal* 1959). The street was platted by 1832, but no buildings yet appear on mapping for that time. However, an 1837 newspaper notice shows that lots were being sold on Rowan Street at that time, which were 7.6 m wide and 45.7 m deep (25 ft wide and 150 ft deep) (**Figure 53**). Buildings appear on mapping dating to 1856, and a trolley line also skirts the western end of Monroe Street.

**LARGE SALE OF VALUABLE REAL ES-  
TATE IN LOUISVILLE & PORTLAND,  
AT AUCTION.**

*On Saturday, 15th of April next, at 10 o'clock, A. M.*

Will be sold by Thos. Anderson & Co., at their  
*Auction Room*, the following valuable property,  
maps of which may be seen at their Counting-  
room, viz:

Square No. 12, Lot No. 22, on 12th street, 25 feet  
front, about 200 feet deep to an alley.

Lot No. 13, in square No. 12, 25 feet front on  
Monroe street, about 150 feet deep to an alley.

Lots Nos. 29, 30 and 34, in square No. 12, each 25  
feet front, on 11th street, about 200 feet deep to an  
alley.

Lots No. 50, 51, 52 and 53, in square No. 11, 25  
feet front each, on 11th street, about 120 feet deep,  
to a 20 feet alley.

Lots No 37, 38 and 39, in square No. 11, 25 feet  
front each, on Monroe street, 150 feet deep, to an  
alley 20 feet wide.

Lot No. 28, in square No. 11, 25 feet front, on 10th  
street 100 feet deep.

Figure 53. 1837 *Courier Journal* notice.

By 1884, the street was largely industrial with commercial buildings and warehouses. The blocks on Rowan Street between 10<sup>th</sup> and 13<sup>th</sup> have historically been characterized by industrial buildings. According to the *Atlas of the City of Louisville, Ky. and Environs, 1884*, the block of Rowan between 10<sup>th</sup> and 11<sup>th</sup> streets was home to a paper mill owned by A.J. Dupont and E. Honnefield. The other side of the block, along Main Street between 10<sup>th</sup> and 11<sup>th</sup> streets, was home to three tobacco warehouses and various outbuildings associated with these warehouses. Further down Rowan Street, between 11<sup>th</sup> and 12<sup>th</sup> streets, there was a plow warehouse, a boiler yard, and a collection of smaller brick and wood frame buildings, which may have been residences. Newspaper articles from the 1890s provide detailed descriptions of some of these buildings and their functions (Figure 54).

**AUCTION SALES.**

**By MEDDIS & SOUTHWICK, Auctioneers — HARRY STUCKY, Assignee.**

**ASSIGNEE'S SALE.**

F. F. Lutz's "City" and "Louisville" Malt Houses, and personalty therein contained, north and south sides Monroe street, between Eleventh and Twelfth; also the residence of said F. F. Lutz, No. 1932 West Jefferson street,

**AT AUCTION!**

On **MONDAY, APRIL 2, 1894**, at 10 o'clock, I will sell, to the highest bidder, the "City" Malt House, north side of Monroe street, between Eleventh and Twelfth. This property has a frontage of 75 by 150 feet, upon which is an admirably built three-story brick structure covering the entire lot, suitable for tobacco, grain or hay storage, or for any manufacturing purpose.

I will also sell the "Louisville" Malt House, situated on the south side of Monroe street, between Eleventh and Twelfth, having a frontage of 100 by a depth of 200 feet, upon which is a three-story brick structure of 100 by 160 feet, admirably adapted for warehouse or manufacturing purposes.

Terms of sale on the above two pieces—One-third cash, balance in one and two years, 6 per cent., semi-annually, and lien.

I will also sell the personalty, consisting of 2 fine draft horses, 2 large grain wagons, 1 barouche, stock of brandy, whisky, grain bags, office furniture, etc.

Terms on personalty—Cash.

Order of sale will be announced at beginning. At 4 O'CLOCK PROMPT I will sell, on the premises, the two-story brick residence, No. 1932 West Jefferson street (subject to lien of \$4,750).

Terms on residence—Buyer to assume mortgage of \$4,750, and pay balance in cash.

**HARRY STUCKY, Assignee of F. F. Lutz.**

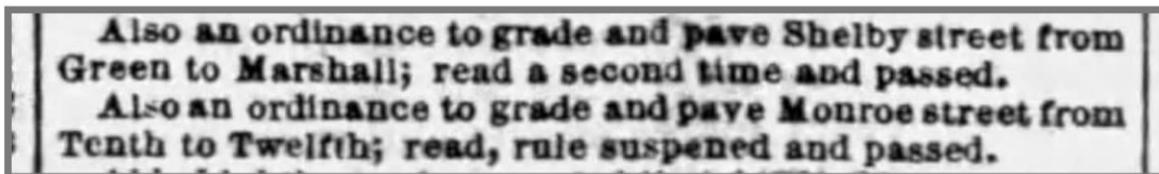
**MEDDIS & SOUTHWICK, Auctioneers.**

Figure 54. *Courier Journal* March 25, 1894, sale of buildings on Rowan Street.

By 1913, the area north of Rowan Street becomes a rail yard, and numerous lines are shown on the mapping. This resulted in the loss of some buildings. By 1940, only a few buildings remain, including factories and commercial enterprises. Even more buildings were demolished in 1971 and, by 1978, few of the older structures remained. Maps of this period show the construction of Interstate I-64. Today, there are no buildings along this stretch of Rowan Street, and the block is dominated by floodwalls which protect the city of Louisville from the Ohio River, and the elevated portion of Interstate I-64.

The city of Louisville underwent a large-scale road paving project in the 1850s and 1860s, in which local limestone boulder paving blocks were used. These blocks were quarried from locally available limestone, which is abundant in the Louisville area. Limestone was a material that was locally available, abundant, and cheap, so it made sense for Louisville to utilize this material in their first large-scale attempt at paving the city streets in something other than macadam, wooden planks, or wooden blocks. Unfortunately, limestone is a porous stone with a high density of lime, which deteriorates in wet environments. Because limestone was not a very durable material, the road surface had to be re-paved every 20 years. Finally, in the 1880s, the city of Louisville decided to move to granite, a more expensive, but more durable street surfacing material. Granite is not available locally so the city of Louisville had to turn to a quarry in Henrico County, Virginia, for granite boulder blocks. These blocks were carefully cut into identically sized and shaped blocks that could be tightly pieced together to create a smooth and uniform road paving surface. Unlike cobblestones, the surface was uniform with no bumps or ridges, unlike limestone, the granite pavers could last for many decades without deterioration. In the 1880s the city of Louisville began its second widescale paving project, but this time granite paving stones were used.

There were plans to pave Monroe Street (Rowan Street) as early as 1852 (**Figure 55**). At this time, plans called for the street to be paved only to 12<sup>th</sup> Street. Plans to extend paving westward were made in the late 1850s.



**Figure 55. *Courier Journal* October 9, 1852.**

As can be seen in **Figure 56** and **Figure 57**, the legend for the 1884 Hopkins Map of Louisville indicates three surface treatments for streets in the vicinity of the project area, namely McAdam (in a peach color), boulder (in light blue color), and black stone (in pale green color). Streets colored in red are not identified by type on the legend. Of interest in this project is a section of Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> streets. As can be seen in **Figure 56**, Rowan Street was paved in boulder blocks for a three-block section of its length between 10<sup>th</sup> and 13<sup>th</sup> streets in 1884, as well as the north-south intersecting blocks of 10<sup>th</sup> and 12<sup>th</sup> streets. A newspaper account from 1883 suggests there were plans to pave the north-south intersecting block of 11<sup>th</sup> as well (**Figure 58**) (*Courier Journal* May 19, 1883).

The block between 10<sup>th</sup> and 11<sup>th</sup> street is shown facing west in **Figure 56**. This part of the street lies between the Ohio River floodwall and Interstate I-64, which is elevated in this location. No buildings currently lie along this block. Sections of Market Street between 10<sup>th</sup> and 11<sup>th</sup> also were paved with Boulder blocks. **Figure 56** confirms that some of the boulder block pavement likely exists beneath asphalt along Rowan Street.

Cultural Historic Survey for the MSD Sewer Line Crossing at the Intersection of Rowan and 11<sup>th</sup> Streets,  
 Louisville, Jefferson County, Kentucky

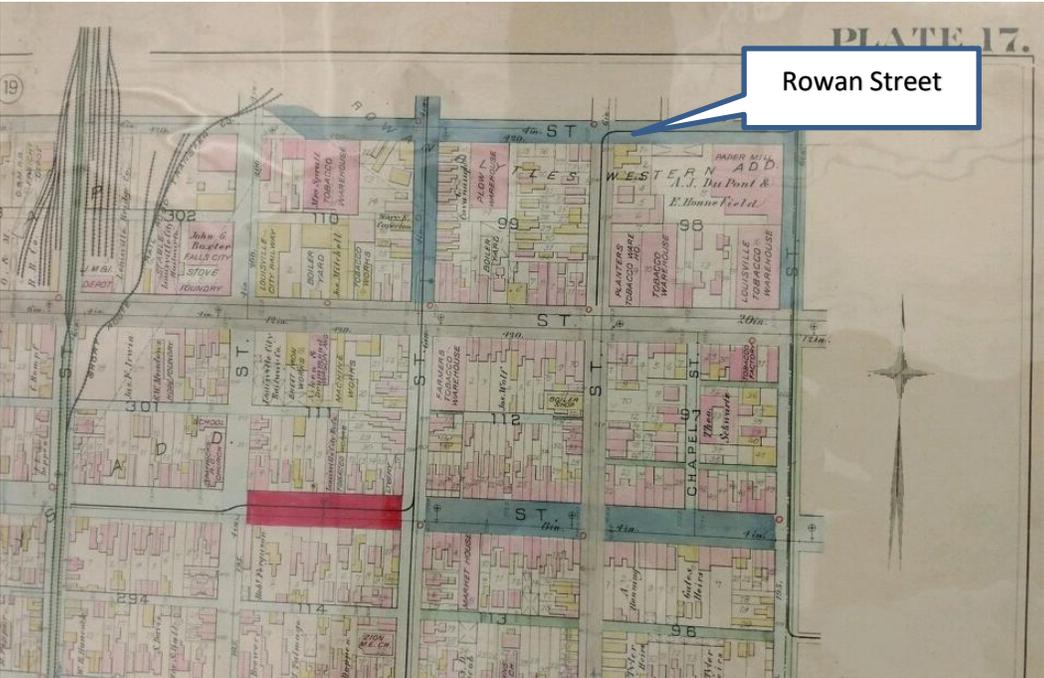


Figure 56. 1884 Hopkins map showing various road surface treatments in the project vicinity.

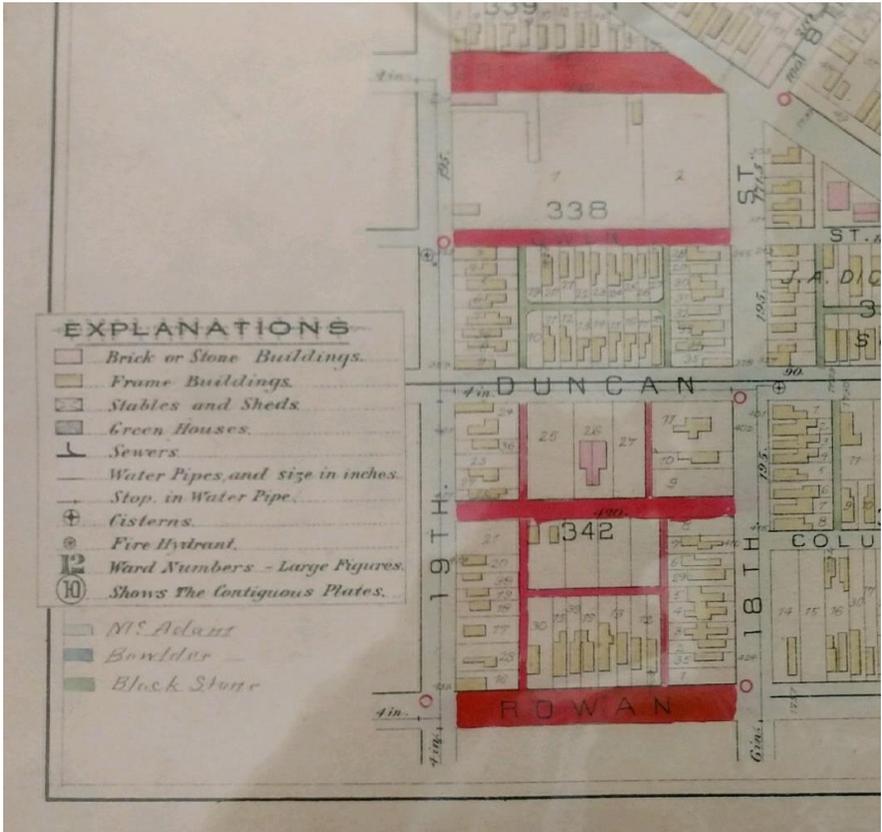


Figure 57. Detail of 1884 Hopkins map showing legend of street surface treatments. Boulder B block streets shown in light blue.

**NEW YORK.**  
 The proceeds obtained are to be applied to the reconstruction of the streets and sewers, and it is proposed to distribute the money as follows:

To repairing the Western outfall sewer..	\$200,000
To the construction of new sewers will be appropriated.....	200,000
For repairing the damages done by the recent flood to that part of the city known as the Point.....	25,000
For general sewer repair.....	75,000

For repairing streets, \$1,000,000 will be appropriated as arranged by the Council, based upon estimates made by the City Engineer, viz:

Campbell street, from Fulton to Broadway, with bowlders....	\$ 47,565
Eleventh street, from Rowan to Broadway, with granite.....	33,316
Fourth street, from Kentucky to Market	

Figure 58. *Courier Journal*, May 19, 1883.

# 4

## SITE DESCRIPTION

One resource, JFL-502, will be adversely affected by the undertaking. The following provides an updated description and effects assessment of the resource.

### Site 1/JFL-502

**Name: Rowan Street Boulder Blocks**

**Address: Surface of Rowan Street, between 13<sup>th</sup> Street and 10<sup>th</sup> Street**

**Date: 1883-1889**

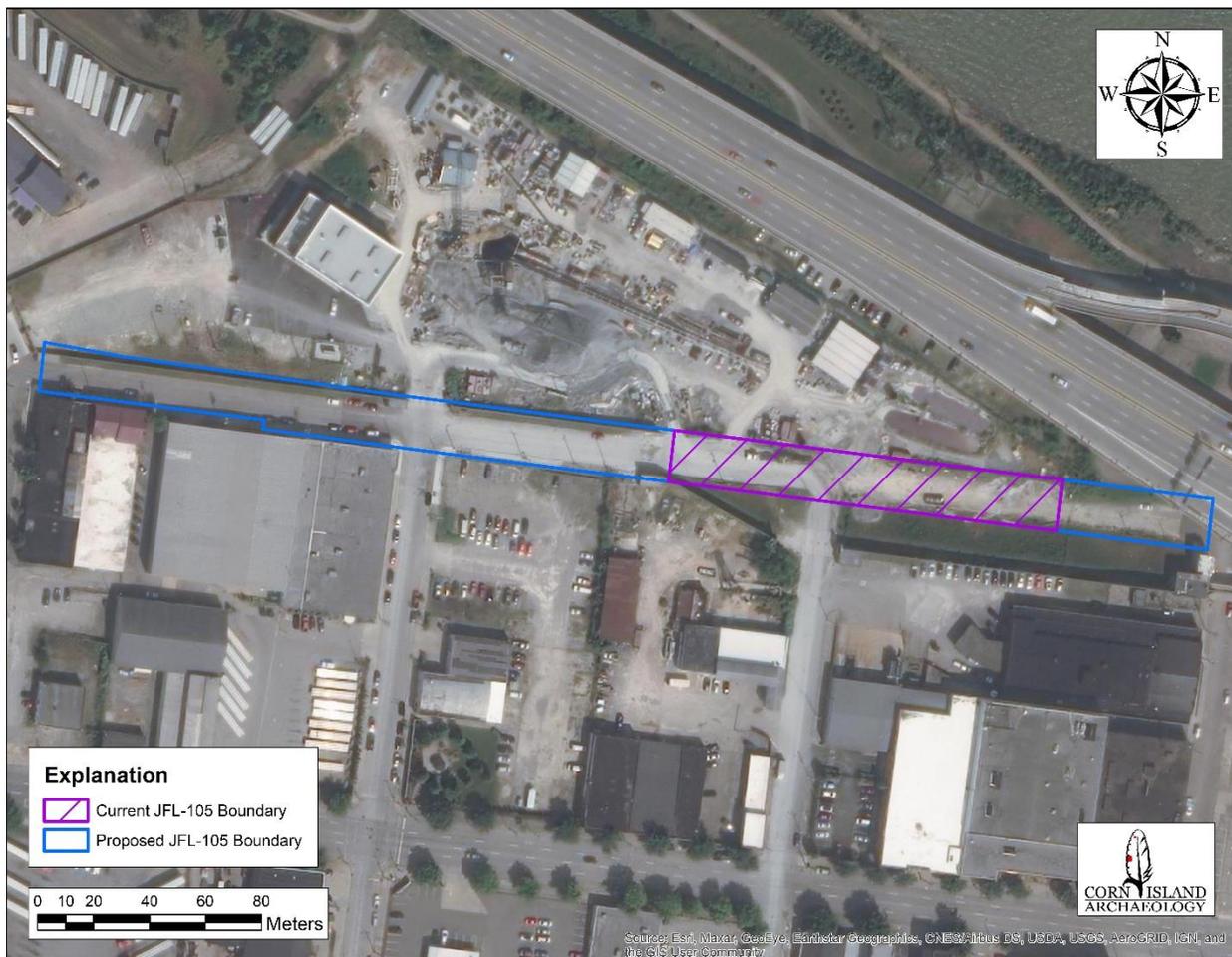
**Latitude, Longitude: NE: 16S 607934 4235285, SE: 16S 607931 4235267, SW: 16S 607514 4235324, NW: 16S 607516 4235341**

### *Description*

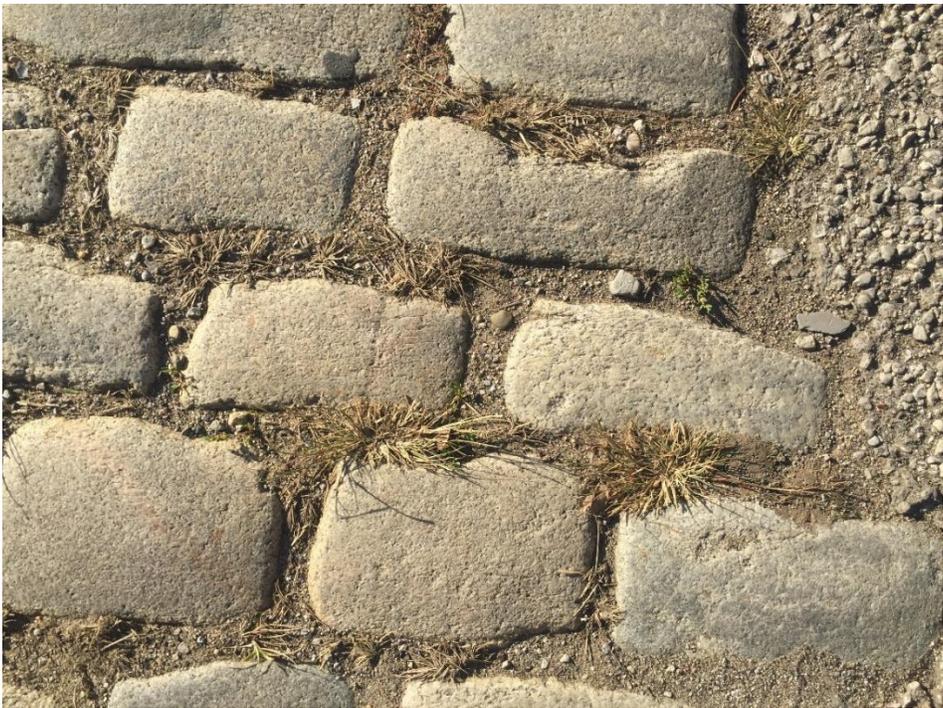
The currently recorded resource known as JFL-502 consists of an exposed granite boulder block road surface that extends from 10<sup>th</sup> to 11<sup>th</sup> streets along Rowan Street (**Figure 59**). The resource was originally thought to only include the exposed segment of roadbed. However, the resource is now known to have extended two additional blocks to 13<sup>th</sup> Street. The historic road surface between 11<sup>th</sup> and 13<sup>th</sup> streets is highly damaged, and mostly covered by modern asphalt. The roadbed of Rowan Street, between 10<sup>th</sup> and 13<sup>th</sup> streets is made up of a series of tightly laid granite blocks; however, the granite pavers between 11<sup>th</sup> and 13<sup>th</sup> streets have been covered with layers of asphalt and are only visible through holes in the modern pavement. The granite boulder block pavers that comprise this resource have rounded edges that are irregular in size and shape (**Figure 60, Figure 61, Figure 62, Figure 63, and Table 2**). They were recorded on the original KHC form as limestone but are in fact made of granite and are quite heavy. Similar blocks have been identified elsewhere in the city beneath asphalt pavement. While these pavers were once thought to have been limestone cobblestones, archaeology and research have proven that these blocks are actually made from granite and are cut blocks, not naturally shaped cobblestones. Other sources have stated these stones date from the 1700s, however, a newspaper article in the *Courier Journal* on May 19, 1883 confirm that plans called for granite paving stones to be used in this portion of Rowan Street (*Courier Journal* 1883). In addition, on September 21, 2017 Dr. Jay Stottman, who specialized in Portland archaeology and history, stated that the Portland town trustees did not pave Rowan and that Rowan Street was probably not paved with blocks until the late 1800s by the city of Louisville.

While this street originally had limestone curbs along either side of the road, very few of the curbs remain. The road disappears on each end into modern blacktop, with patches of blacktop on top of the granite boulders, and which covers the remainder of the surrounding roads. The edges of the roadbed disappear into grass on either side. Portions of Rowan Street have been blacktopped over, but it is believed there are granite boulder block stones underneath the paving. In addition, some recent excavations have been done across portions of Rowan Street, and the boulder block stones in those areas have been removed, and the street surface blacktopped.

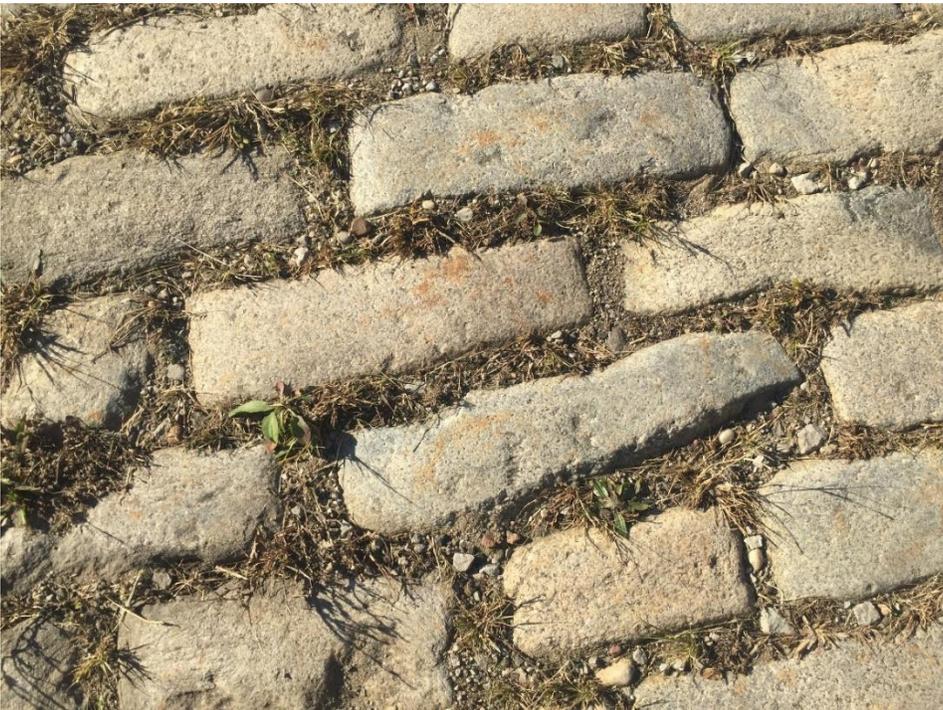
The area immediately surrounding this stretch of Rowan Street is characterized as industrial. It is bounded by several buildings and the elevated portion of Interstate 64 on the north and east, continuation of Rowan Street on the west, and is bounded by the Louisville floodwall on the south extending from 10<sup>th</sup> Street to 12<sup>th</sup> Street. No other resources from the 19<sup>th</sup> century remain along this stretch of Rowan Street.



**Figure 59. Map showing current and proposed boundaries of JFL-502.**



**Figure 60. Close-up of boulder blocks.**



**Figure 61. View of boulder blocks showing differences in sizes/shapes.**

The Rowan Street boulder blocks, while all rectangular and generally the same thickness, are not the same size. **Table 2** shows the variation in a sample of six blocks. **Figure 62** and **Figure 63** illustrate these differences visually.

**Table 2. Measurements of Selected Boulder Blocks.**

Block	Weight (kg)	Weight (lbs)	Height (cm)	Width (cm)	Length (cm)
1	5.7	12.4	9.6	13.7	17.9
2	5.95	13	9.6	14	19.8
3	8.3	18.2	11.8	14.6	23
4	9.4	20.5	8.6	14.7	29.8
5	12.6	27.8	10.1	17.5	32.6
6	17.7	38.7	11.5	16	30.2



**Figure 62. View of boulder blocks from the side.**



**Figure 63. View of boulder blocks from the top.**

Rowan Street was originally lined with limestone curbs, which is consistent with information presented in early newspaper accounts. Remnants of the limestone curbs still exist along the south side of Rowan between 10<sup>th</sup> and 11<sup>th</sup> streets, and on the south side of Rowan between 11<sup>th</sup> and 12<sup>th</sup> streets (**Figure 64**). No limestone curbing remains between 12<sup>th</sup> and 13<sup>th</sup> streets (**Figure 65** and **Figure 66**). If these curbs are similar to what exists in other parts of west Louisville, they could be as deep as 45.7 cm (18 inches) (**Figure 67**).



**Figure 64. Section of limestone curb between 10<sup>th</sup> and 11<sup>th</sup> streets.**



**Figure 65. Section of limestone curb on south side of Rowan between 11<sup>th</sup> and 12<sup>th</sup> streets.**



**Figure 66. Close-up of limestone curb between 11<sup>th</sup> and 13<sup>th</sup> streets.**



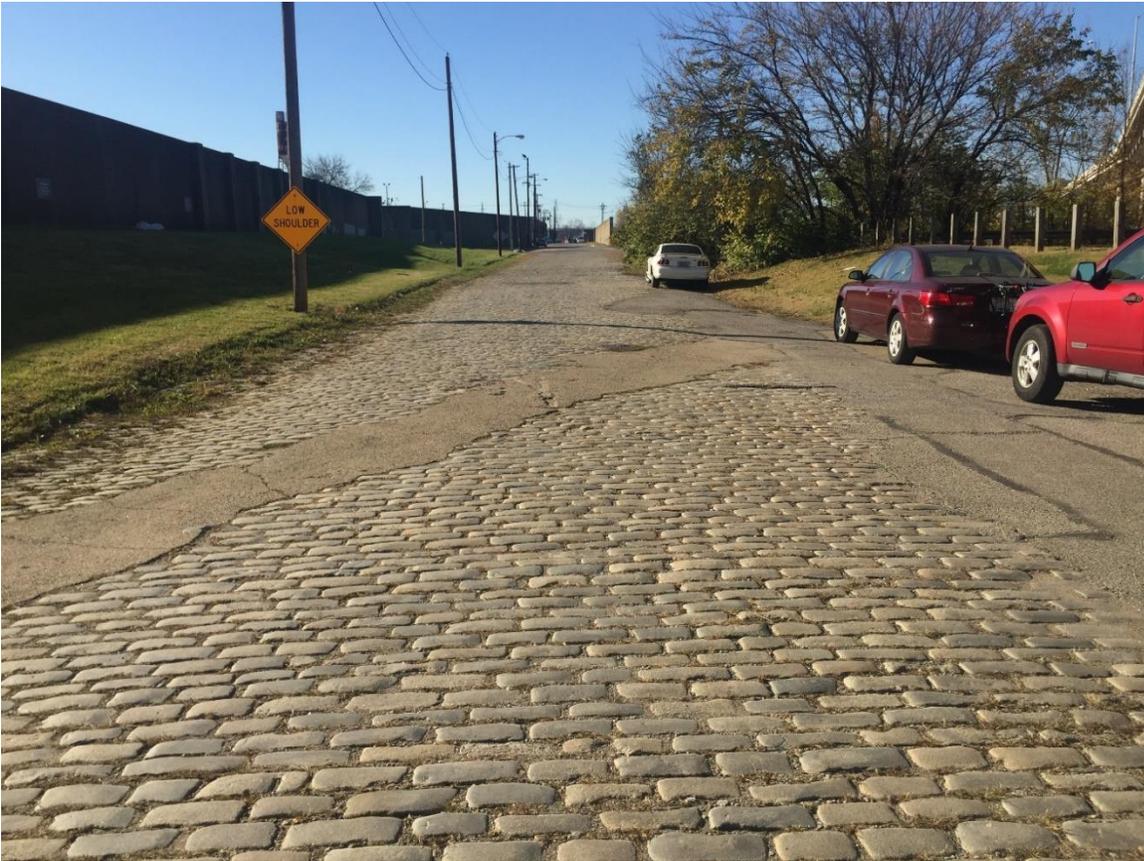
**Figure 67. Example of limestone curb in west Louisville along brick sidewalk.**

The portion of Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> streets is currently the only exposed portion of the boulder block pavement. The pavement may extend slightly to the east below the interstate overpass, but it is not known how far this may be as the 1884 map is cut-off at the 10<sup>th</sup> Street intersection (**Figure 68**). It is known, however, that the boulder block pavement continues to the 13<sup>th</sup> Street intersection, although the blocks between 11<sup>th</sup> and 13<sup>th</sup> have long been covered with asphalt. Holes within the asphalt revealed granite pavers below.

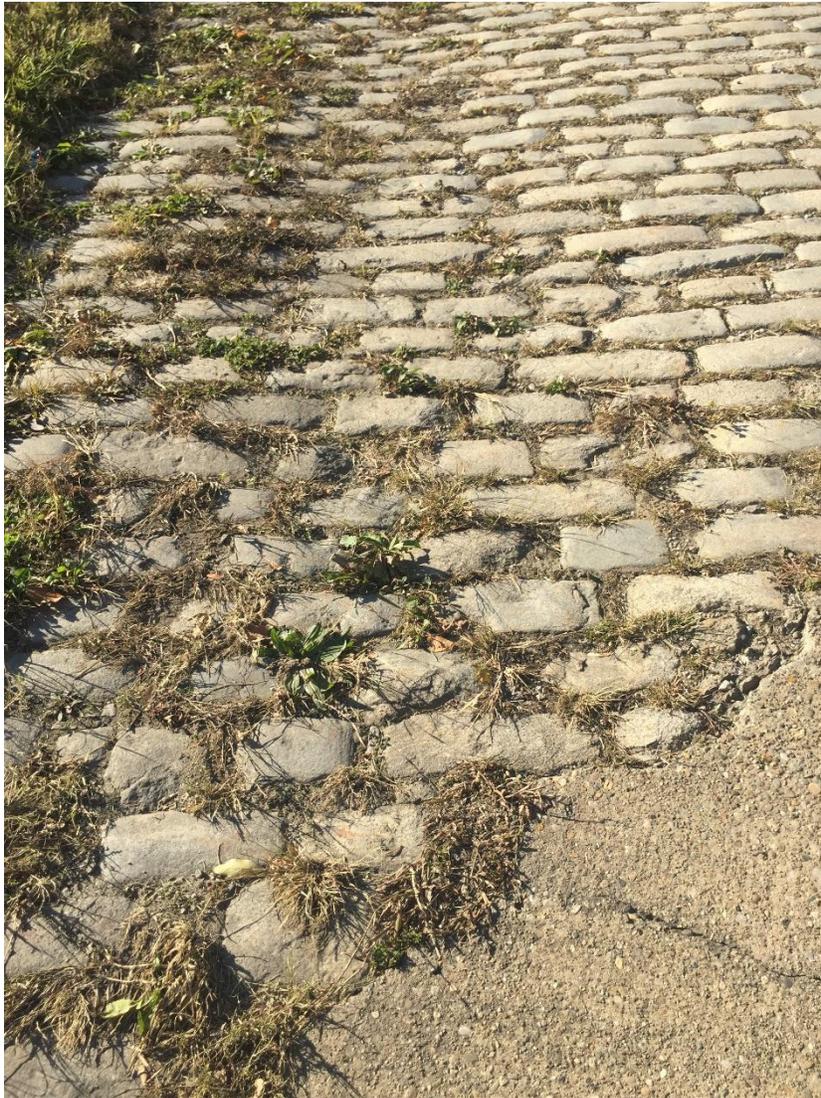
Aside from the asphalt covering, other impacts have occurred to the block between 10<sup>th</sup> and 11<sup>th</sup>. Previous utility trenches have been cut diagonally across the road, and the pavement filled in with asphalt (**Figure 69**). Further subsidence along the sides of the granite-paved road has occurred, making the surface uneven (**Figure 70**). This may relate to the removal of limestone curbs.



**Figure 68. Boulder blocks extending beneath asphalt paving.**



**Figure 69. Earlier trench cut across Rowan Street.**



**Figure 70. Uneven surface of some parts of pavement.**

The road beneath Rowan Street between 12<sup>th</sup> and 13<sup>th</sup> have been significantly disturbed. Detailed schematic drawings show that previously existing CSO 050 and two diversion structures (DV-1 and DV-2) lay beneath Rowan Street near the intersection of 12<sup>th</sup> and 13<sup>th</sup> streets. Furthermore, an existing below-street gravity sewer ran through Rowan Street between 11<sup>th</sup> and 12<sup>th</sup> streets. This was a large brick sewer line 30 to 86 inches (2.6 to 7.2 ft) in diameter. This large brick sewer line was subjected to repairs 10 to 15 years ago and the brick was encased in concrete at that time. The construction of this line years ago caused significant impacts to any intact portions of the boulder block pavement of Rowan Street that may have been present at that time.

### **Eligibility**

The boulder block road surface along Rowan Street was previously determined as contributing to the West Main Street/10<sup>th</sup> Street Industrial Historic District. This district also includes two individually eligible buildings, the New Enterprise Tobacco Warehouse (JFWP-134) and the Tobacco Realty/Kentucky Peerless Distilling Company (JFWP-137), and one other contributing resource, the U.S. Post Office Garage (JFWP-138). The district also included JFWP-469, ICRR Freight Depot, which has been demolished. Based on Sanborn Maps, JFWP-134, the New Enterprise Tobacco Warehouse was built in 1926. According to the NRHP nomination, resource JFWP-137, the Tobacco Realty/Kentucky Peerless Distilling Company, was built in 1912. Based on Sanborn maps, the U.S. Post Office Garage (JFWP-138) was built in 1923. None of these resources fall within the period of significance for the Rowan Street pavers, which were laid in 1883, and therefore do not contribute to NRHP eligibility.

In 1895, Louisville had 31 kilometers (km) (19.06 miles) of granite boulder block paved streets (Johnston 1896:339). Of these 31 km (19.06 miles), very few remain today. Along this stretch of Rowan Street between 10<sup>th</sup> Street and 12<sup>th</sup> Street, no other structures from the 19<sup>th</sup> century remain. Everything along this block has been demolished and replaced by an elevated interstate, massive floodwall, and MSD pump stations. However, the granite stone boulder block street remains. Even in the absence of any other historic structures, this boulder block road has the ability to transport the visitor back to a different time. It is easy to envision the brick warehouses that once surrounded it and imagine the sound of horses' hooves and wagon wheels on the stone street, as deliveries were made and goods hauled away. One can imagine the sooty atmosphere from the surrounding factory smokestacks. This block of granite boulder stones is not just an isolated, forgotten road that had somehow escaped being paved over. It is representative of a larger piece of American history, the history of American cities during the Industrial Revolution.

By the late 19<sup>th</sup> century, Manhattan in New York City had 225 km (140 miles) of granite block streets and, due to their rugged and durable nature, most of these streets were along the waterfront or in heavily traveled industrial areas (Williams 2017). In Cincinnati, Ohio, in 1883, there were 163 km (101 miles) of streets paved in granite boulder stones (John Shillito Company 1883). Baltimore, Maryland; Lynchburg, Virginia; Minneapolis, Minnesota; Providence, Rhode Island; Roanoke, Virginia; Savannah, Georgia; and St. Louis, Missouri are just a few American cities that retain some of their historic granite boulder block streets (Williams 2021). Using granite boulder blocks as a road surfacing material was a statement that a city had entered the Industrial Age.

Granite boulder blocks were the most expensive road surfacing option available. They were so expensive, in fact, that the city of Chicago experimented with them in the 1880s but replaced them with wood blocks because of the cost to replace or repair damaged blocks (*Chicago Daily Tribune* 1883). When a city decided to take on the cost of paving streets with granite boulder stones, it meant two things. First, it meant the city was wealthy enough to afford this luxury. The city of Louisville had to import its granite boulder stones from a quarry in Virginia, which added considerably to the cost. Second, because of its expense, granite boulder stones were only used where they were needed most, namely, the most heavily trafficked industrial areas. For a city to go to this expense, it meant the city had a large enough industrial area to justify the cost. This small portion of Rowan Street, which is paved with granite boulder block stones, is representative of a time in Louisville's history when the city was wealthy enough to afford such paving material and was in the midst of an industrial boom, when there was a need to pave streets with such a durable material.

The stone paved street at the intersection of Rowan Street and 11<sup>th</sup> Street is part of a larger pattern of city development during the 1880s seen in Louisville and throughout the country. The segment of exposed stone paved street along Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> streets retains much of its integrity and, as such, should be considered individually eligible for listing in the NRHP under Criteria A. The remainder of the resource that lies between 11<sup>th</sup> and 13<sup>th</sup> streets is mostly covered by modern asphalt and has been heavily damaged. Therefore, it is not currently considered eligible.

Overall, the granite boulder stone street surface of Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> streets retains integrity of location, design, materials, workmanship, feeling, and association. Due to the fact that surrounding properties have been demolished and replaced by the floodwall and Interstate 64, the street no longer retains integrity of setting. Despite changes in the landscape surrounding the granite boulder block paved section of Rowan Street, the pavers retain enough integrity to be eligible for listing in the NRHP.

# 5

## ARCHAEOLOGICAL MONITORING

This chapter describes the archaeological monitoring at MSD excavations of a trench across Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> streets. The objective was to document the construction of the boulder block road through an examination of its profile. Furthermore, if intact archaeological features were encountered, the parameters of the monitoring called for them to be cleared of overburden within the confines of the work area and appropriately documented by photography and hand-drawn maps.

The specific objectives of the investigation included the following:

- Monitoring of ground-disturbing activities along the block of Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> streets;
- Maintaining a record of monitoring “sessions,” and documenting any discovered remains;
- Clearing and examining a vertical profile of Rowan Street to document, to the extent possible, construction techniques of the roadway;
- Ascertaining the nature, depth, and integrity of cultural deposits, if any, were identified;
- Requesting a halt to construction activities and initiating coordination with the appropriate agencies if intact, potentially significant, cultural remains were found;
- Conducting archival research, as necessary, to identify and evaluate the remains;
- Excavating features, as necessary, that are considered significant; and
- Preparing a summary report on the findings of the monitoring.

### FIELDWORK

Archaeological monitoring was carried out over 13 days between September 24 and October 25, 2019. During this time, excavations for a new MSD sewer interceptor line were observed to document the construction of the boulder block sections of Rowan Street. Additional objectives were to identify archaeological features that may have been present in this area and to ascertain the subsurface landform via documentation of exposed soil profiles. Fieldwork was overseen by David Schatz, MA. He was assisted in the field by Sara Deurell, BA, and Dora Abel, BA. Anne Bader, MA, Corn Island’s principal, was periodically on site over the course of fieldwork.

### Trenching

Fieldwork for this project was limited to monitoring the progress of mechanical trenching across the APE in an effort to identify possible cultural features that might be impacted by the new sewer line installation. The survey methodology for this project, therefore, consisted of a simple ground surface inspection of the entire APE, and mechanical trenching. Trenching was utilized to access and identify the presence of intact soil strata beneath the existing roadbed of Rowan Street. The intent of the trenching was to expose any cultural features (both prehistoric and historic) that may indicate the presence of human habitation within the APE. The trenches were placed based on the construction design and were generally stepped for access and safety.

Excavations were monitored by a professional archaeologist. The machines utilized during the excavations were equipped with toothed buckets, which made observation of trench floors difficult. The trenching area encompassed 0.05 ha (0.12 acre) and included a main trench approximately 37 m (121 ft) in length divided into two segments, one totaling approximately 17 m (55.7 ft) while the other was 20 m (65 ft). Two secondary trenches were excavated to remove and replace a waterline and an existing sewer line, both of which were approximately 20 m (65 ft) long. The main trench was approximately 6.7 m (22 ft) deep, while the waterline trench was 2 m (6.6 ft) and the sewer line trench was 4.6 m (15 ft) deep. When archaeologists were on site, the excavation occurred in shallow passes and the operator was instructed to keep the floor as level as possible. Any anomaly detected during trenching in areas that were safe to enter was examined to determine if it was a cultural feature. Where feasible, trench sections were cleaned and inspected to identify and define sediment units, soil horizons, and cultural deposits. The exposed stratigraphy was photographed and described, and detailed profiles were drawn. Corn Island staff followed Occupational Safety and Health Administration (OSHA) trench safety guidelines at all times.

### Site Conditions

Site conditions within the project area were a mixture of disturbed soils adjacent to an existing intersection. The area on the south side of Rowan Street and east of 11<sup>th</sup> Street was heavily disturbed when Corn Island personnel arrived, consisting of an existing open trench, a steep stepped cut face, and the city floodwall (**Figure 71**). Prior to construction this area had been a narrow grass cover embankment between the street and the floodwall (**Figure 72**). The trench works were a continuation of a trench extending from a new pump station at the corner of Rowan and 10<sup>th</sup> streets. Rowan Street, in the area where the trench was to cross, was part of a block-long segment that still had exposed boulder block paving (**Figure 73**).

### Project Overview and Excavation Results

Construction of the new sewer main involved laying an additional pipe section and installation of a concrete manhole with iron frame and lid. This area was, unfortunately, unstable due to what was likely a paleo-channel of the Ohio River. This channel caused water to up-well into the trench works, causing subsidence and fractures to occur around the trench box and slowing progress considerably (**Figure 74**). It was during this part of the trenching that two profiles were cleaned and drawn along the steps cut into the trench walls for safety. These profiles are discussed below. While stabilization measures were undertaken, the boulder blocks were removed and stockpiled offsite for use in repairing other sections of Rowan Street (**Figure 75**).

Following stabilization and the installation of trench watering pumps, sewer pipe, and a concrete manhole (**Figure 76**), trenching commenced diagonally across Rowan Street. Before deep trenching could commence, the water main that crossed the APE needed to be capped and removed. Trenching was done on each side of the line to a depth of approximately 2 m (6.7 ft) to facilitate the cutting and capping (**Figure 77**). Two profiles at each end of this trench were taken and are detailed below. After this process, trenching commenced in sections across Rowan Street since water infiltration was a continual problem.



**Figure 71. Overview of site investigations upon arrival of Corn Island personnel, facing southwest.**



**Figure 72. The project area prior to construction, facing southeast.**



**Figure 73. Boulder block paved section of Rowan Street prior to excavations, facing east toward 11<sup>th</sup> Street intersection.**



**Figure 74. Fractures and subsidence along the trench edge, facing southwest.**



**Figure 75. Boulder block removal in progress, facing southwest.**



**Figure 76. Vertical concrete manhole, facing south.**



**Figure 77. Excavation underway to expose water main for capping and removal, facing east.**

Along the southern edge of Rowan Street, an abandoned phone cable was encountered within a ceramic tile conduit (**Figure 78**). This conduit contained four cavities that would presumably accommodate other cables, although there was no evidence that they were ever used. With the water main removed, excavation proceeded across Rowan Street in segments due to the ground water infiltration problem, especially after an existing sewer line had been cut. This sewer line was still connected further west on Rowan, so the trench works would periodically flood, necessitating the cessation of work to pump water out (**Figure 79**). It was during this time that there were work stoppages for shoring and compaction issues, which made monitoring sporadic. Stability issues precluded trench entry without the use of trench boxes. Some work was undertaken without monitoring, especially toward the end of the project, but on those days when Corn Island representatives were present, the soils exposed were consistent with profiles documented earlier in the project. All soils removed from the trench works were hauled offsite and shot rock and compacted gravel were used to backfill (**Figure 80**).



**Figure 78. Ceramic tile conduit for abandoned phone cable, facing west.**



**Figure 79. Example of periodic flooding from severed sewer line, facing south.**



**Figure 80. Original sewer line replacement underway, showing shot rock and gravel backfill, facing east.**

During the course of this project, four profiles were documented. Two were from the southern side of Rowan Street, and one at either end of the water main removal trench that crossed the APE close to the middle of the street (**Figure 81**). The two profiles on the southern side of the street were taken about three to four days apart, as only a single bench was exposed early in the monitoring process (**Figure 82**), which extended to approximately 140 cm (55 inches) below surface (bs). As stability issues became a problem, a second bench was cut exposing the second deeper profile (**Figure 83**) that extended from approximately 140 to 260 cm (55 to 102 inches) bs. These two were combined into a single profile to demonstrate the soil stratigraphy on the southern side of the street (**Figure 84**). These combined profiles showed the stratigraphy of the northern wall of the trench at the approximate southern edge of Rowan Street.

### Profile 1

Fourteen soil zones were identified below the pavers. The boulder block pavers were all approximately 15 cm (6 inches) thick and averaged approximately 10 cm (4 inches) in width. The length varied considerably from 15 to 30 cm (6 to 12 inches). The boulder blocks were laid over approximately 5 cm (2 inches) of very dark grayish brown to dark grayish brown (Munsell 10YR 3/2-4/2) ashy sand (I). From approximately 20 to 40 cm (8 to 15.7 inches) bs the soil was a dark yellowish brown (10YR 4/4) compacted rocky clay (II). Below this zone was a thin layer of brown (7.5YR 4/4) clay mixed with small brick fragments that extended to

approximately 50 cm (19.7 inches) bs (III). The next soil zone extended from 50 to 80 cm (19.7 to 31 inches) bs and consisted of a mottled very dark grayish brown to dark brown (Munsell 10YR 3/2-3/3) ashy silt clay (IV). This was followed by a mottled yellowish brown (Munsell 10YR 5/4-5/8) rocky clay that extended from 80 to 100 cm (31 to 39.3 inches) bs (V). From 100 to 120 cm (39.3 to 47 inches) bs the soils were a mottled yellowish brown to brownish yellow (Munsell (10YR 5/4-6/8) silty clay with limestone fragments (VI). The final zone of the first profile extended from 120 to 145 cm (39.3 to 57 inches) bs (VII). This soil consisted of a dark yellowish brown (Munsell 10YR 4/4) silty clay mixed with angular gravel.

## Profile 2

The second profile was approximately 50 cm (19.7 inches) south of the first profile. From approximately 145 to 160 cm (57 to 63 inches) bs, the soil was a homogeneous dark yellowish brown (10YR 4/6) silty clay (VIII). This was underlain by a dark yellowish brown (10YR 4/4) sand mixed with inclusions of dark yellowish brown to yellowish brown (10YR 4/6-5/4) silty clay that extended from 160 to 185 cm (63 to 73 inches) bs (IX). The next soil zone was relatively thin, extending from 185 to 192 cm (73 to 75.5 inches) bs and consisted of a dark yellowish brown (Munsell 10YR 4/6) fine silty clay (X). From 192 cm (75.5 inches) to between 215 and 220 cm (84.6 to 86.6 inches) bs, the soils were a mix of dark yellowish brown (Munsell 10YR 4/4) sand and inclusions of brown to pale brown (Munsell 10YR 5/3-6/3) clay and brown (Munsell 10YR 4/4) fine silty clay (XI). This zone is comparable to the layer found between 160 and 185 cm (63 and 73 inches) bs. A tapered soil zone extending from 215 to 225 cm (84.6 to 88.5 inches) bs consisted of a yellowish brown (Munsell 10YR 5/4) silty clay mixed with sand (XII). This overlaid a dark yellowish brown (10YR 4/6) silty sand that extended from 225 to 235 cm (88.5 to 92.5 inches) bs (XIII). The final zone documented was a heavily mottled mix of dark yellowish brown (Munsell 10YR 4/4) sand with inclusions of pale brown (Munsell 10YR 6/3) clay and clumps of yellowish brown to pale brown (Munsell 5/4-5/8 and 6/3) clay (XIV).

It appears the soils that extended from below the boulder block pavers to approximately 145 cm (57 inches) bs were fill intended to facilitate leveling the roadbed area. This is not surprising considering that the 1831 Hobbs map of Louisville shows this area to be a slope leading from an upper terrace to a lower terrace of the Ohio River. Below 145 cm (57 inches) bs the soils appeared to be more natural, without historic inclusions such as brick, gravel, and cinders that were present in many of the upper zones. These soils likely represent natural deposition layers from flooding episodes with the sandy and heavily mottled zones representing high-velocity events and the finer silts representing lower-velocity deposition.

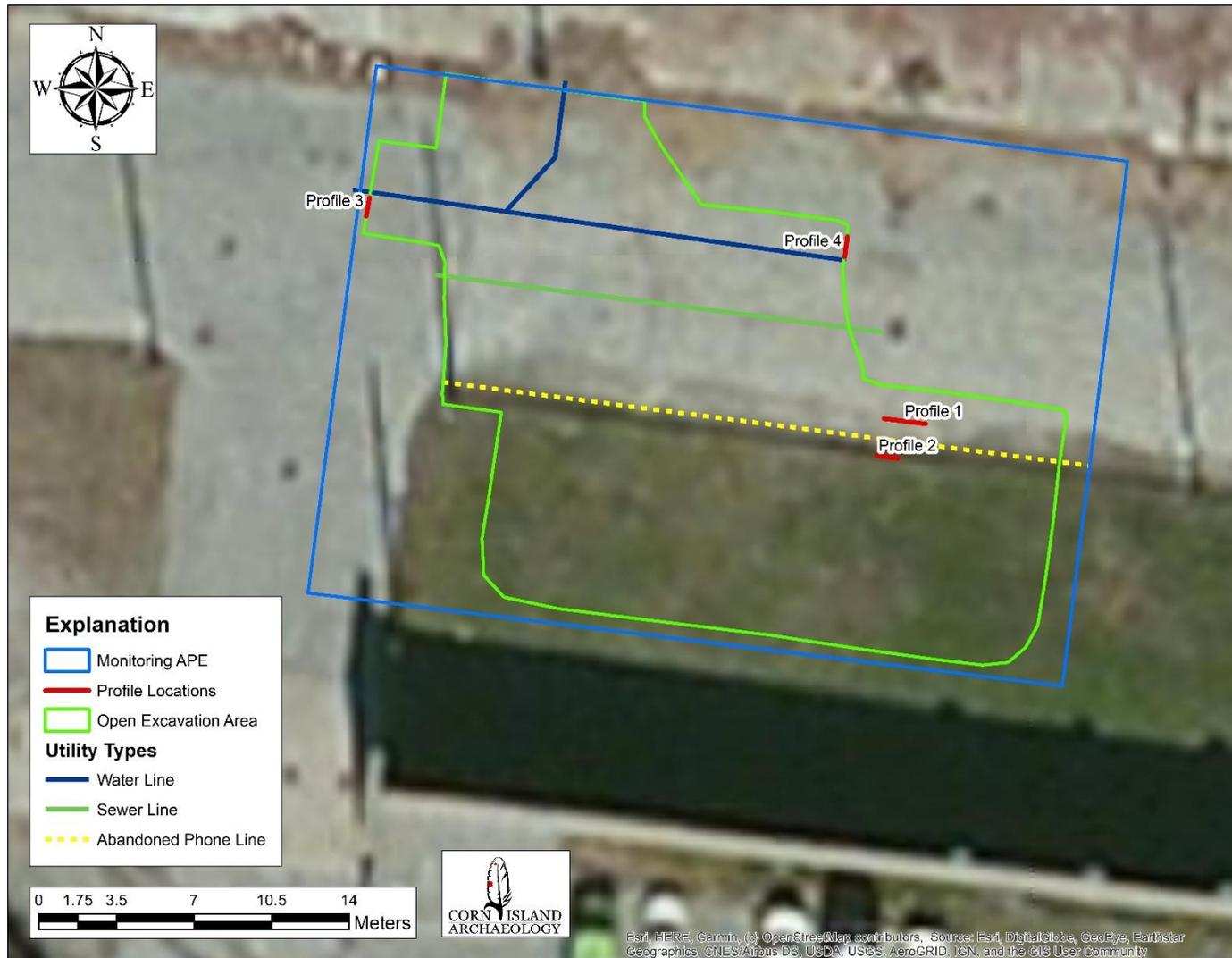


Figure 81. Project area showing excavation boundary, profile locations, and various utility disturbances.



**Figure 82. Profile 1 extending from the road surface to approximately 150 cm (59 inches).**



**Figure 83. Profile 2, extending from approximately 150 cm to 260 cm (59 to 102 inches).**

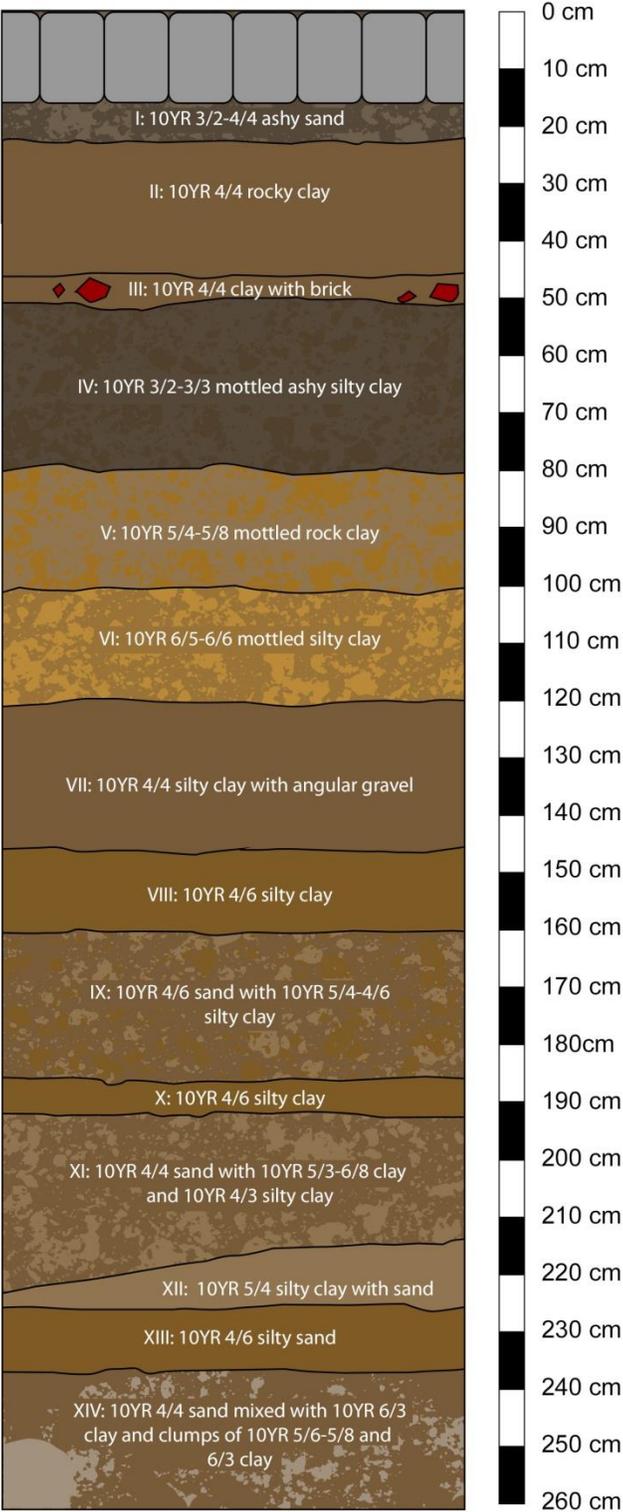


Figure 84. Profiles 1 and 2 combined, facing north toward Rowan Street.

### Profile 3

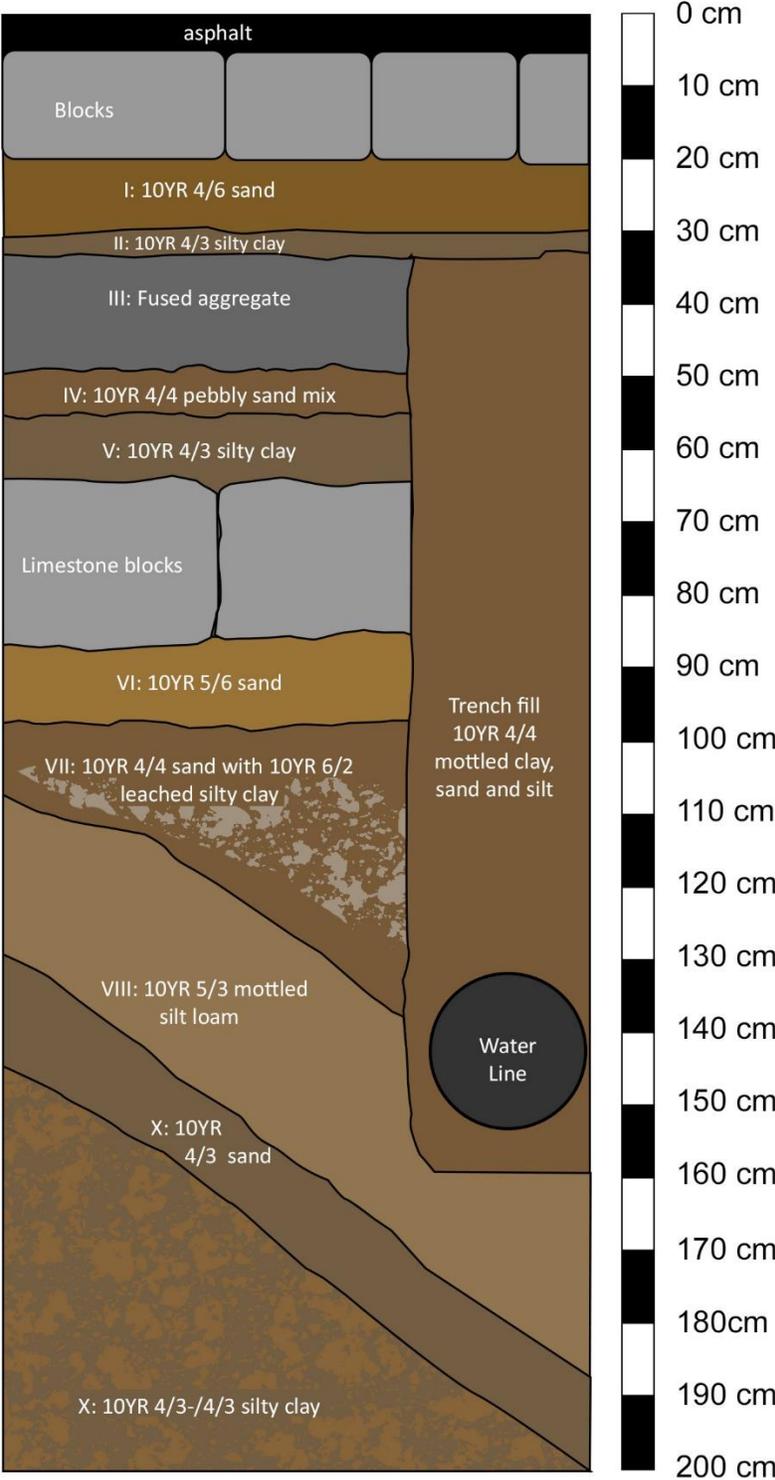
Profile 3 was located at the western end of the water main removal trench (**Figure 81**). The stratigraphy of this profile and Profile 4 differed from the first two in that they cross-cut both the roadbed and the various fill layers used to extend the original second terrace toward the river north of the APE (**Figure 85**). The soils here fell into two categories: fill and roadbed. Roadbed soils were generally horizontal across the profiles, while the fill episodes were sloped toward the lower river terrace (**Figure 86**). The upper 5 cm (2 inches) of Profile 3 consisted of a layer of asphalt, which overlay the original boulder block pavers that extended from 5 to 20 cm (2 to 8 inches) bs. Below the pavers was a 10-cm (4-inch) thick layer of dark yellowish brown (Munsell 10YR 4/6) ashy sand (I). Below this layer of sand was a 2-cm (0.8-inch) layer of brown (Munsell 10YR 4/3) silty clay (II). From approximately 32 to 50 cm (12.5 to 19.7 inches) bs, the soils consisted of a layer of fused compacted gravel aggregate (III). This overlay a 5-cm (2-inch) thick layer of dark yellowish (10YR 4/4) pebbly sand to approximately 55 cm (21.6 inches) bs (IV). Below this was another thin layer of soil that extended from 55 to 65 cm (21.6 to 25.5 inches) bs consisting of a brown (Munsell 10YR 4/3) silty clay mixed with ash and pebbles (V).

Below these thin layers was a layer of limestone blocks from approximately 65 to 85 cm (25.5 to 33.4 inches) bs. It is unclear what these blocks were utilized for as none of the other profiles contained them. They did not extend to the east where active excavation was underway, but they did appear in the wall profile on the northern side of the water main trench, although not in a contiguous fashion. They were dry laid, without mortar, so they may have been related to an abandoned utility of some sort at the eastern edge of the intersection of Rowan and 11<sup>th</sup> streets. Another possibility is that the intersection may have needed additional stability, so a layer of limestone was included toward the base of the roadbed. Unfortunately, due to project constraints, further work to the west was not conducted for more extensive exploration of this layer.

Below the limestone was a layer of yellowish brown (Munsell 10YR 5/6) sand that extended from approximately 85 to 95 cm (33.4 to 37.4 inches) bs (VI). This was also the final horizontal soil zone identified in this profile, indicating it was the base of the prepared roadbed. The next soil zone consisted of a heavily mottled dark yellowish brown (Munsell 10YR 4/4) sand mixed with a leached light brownish gray (Munsell 10YR 6/2) silty clay (VII). This zone extended from 95 to 110 cm (37.4 to 43.3 inches) bs on the southern side of the profile to approximately 140 cm (55 inches) bs on the northern side of the profile, where it intersected the water main trench. The following zone also sloped downward to the north, extending from 110 to 130 cm (43.3 to 51 inches) bs on the southern side of the profile and 140 to 185 cm (55 to 73 inches) bs on the northern side (VIII). This zone consisted of a mottled brown (Munsell 10YR 5/3) silt loam with inclusions of pebbles and brick fragments. The next zone extended from 130 to 145 cm (51 to 57 inches) bs on the southern side and 185 to 195 cm (73 to 77 inches) bs on the northern side and consisted of a heavily mottled brown (Munsell 10YR 4/3) sand (IX). The lowest zone extended from 145 cm (57 inches) bs to the base of the trench at 200 cm (78.7 inches) bs on the southern side and 195 to 200 cm (77 to 78.7 inches) bs on the southern side and consisted of a mottled brown to dark yellowish brown (Munsell 10YR 4/3-4/4) silty clay mixed with brick fragments (X).



**Figure 85. Profile 3 at the western end of the water main removal trench.**



**Figure 86. Graphic representation of Profile 3 at the western end of the water main removal trench.**

The water main trench on the northern side of the profile extended from the base of Zone II at approximately 32 cm (12.6 inches) bs to partially through Zone VIII at a depth of 160 cm (63 inches) bs. The water main itself was approximately 25 cm (10 inches) in diameter and was first encountered at 130 cm (51 inches) bs. The trench fill consisted of a heavily mottled mix of dark yellowish brown (Munsell 10YR 4/4) clay, sand and silt with inclusion of gravel, cinders, and brick fragments. It was apparent from this profile that there was no natural soil stratigraphy present and that extensive filling had occurred in the area to augment the landform of the upper Ohio River terrace. This was done to facilitate not only the construction of Rowan Street but also commercial development in the mid nineteenth century north of the APE.

#### Profile 4

Profile 4, at the eastern end of the water main trench, showed similar stratigraphy to Profile 3 (**Figure 87** and **Figure 88**). Unlike Profile 3, Profile 4 was capped with boulder blocks like Profile 1/2. Like the boulder block pavers in the other profiles, these extended to approximately 15 cm (6 inches) bs and were underlain with 5 cm (2 inches) of yellowish brown (Munsell 10YR 5/6) sand (I). No cinders or ash were mixed with the base in this area. From 20 to 45 cm (8 to 17.7 inches) bs, the soil consisted of a compacted fused aggregate (II). This was underlain by a pebbly dark yellowish brown (Munsell 10YR 4/4) sand clay mix that extended from 45 to 65 cm (17.7 to 25.5 inches) bs (III). From 65 to 85 cm (25.5 to 33.4 inches) bs, the soil consisted of a brown (Munsell 10YR 4/3) silty clay mixed with brick and angular gravel (IV). This was underlain by a mottled zone 5 to 8 cm (2 to 3 inches) thick that extended from 85 to 90 cm (33.4 to 35.4 inches) bs. This zone (V) consisted of a brown (Munsell 10YR 5/3) plaster and sand mix with a large pocket of coal cinders. This zone formed the base of the horizontal roadbed.

Below Zone V the soil stratigraphy sloped from south to north. The first fill zone began at approximately 90 cm (35.4 inches) bs on both sides of the profile and then angled to a depth of 130 cm (51 inches) bs on the north side (VI). This zone consisted of a mottled yellowish brown (Munsell 10YR 5/6) silty clay. Below this was a leached mottled light brownish gray (Munsell 10YR 6/2) silty clay that was approximately 2 cm (0.8 inch) thick on the southern side of the profile from 90 to 92 cm (35.4 to 36 inches) bs and expanded 10 cm (4 inches) on the northern side from 130 to 140 cm (51 to 55 inches) bs (VII). The next soil zone sloped diagonally from 92 cm (36.2 inches) on the southern side to 140 cm (55 inches) bs on the northern side and was approximately 40 cm (15.7 inches) thick terminating at 140 cm (55 inches) bs and 180 cm (71 inches) bs, respectively (VIII). The final zone began at 140 cm (55 inches) bs on the southern side of the trench and 180 cm (71 inches) bs on the northern side and extended to the base of the trench at 185 cm (73 inches) bs (IX). The soils in this zone consisted of a mottled dark yellowish brown (Munsell 10YR 4/4) silty clay. The water main trench extended from the base of the fused aggregate (Zone II) at approximately 45 cm (17.7 inches) bs to approximately 160 cm (63 inches) bs. This depth is similar to the western end of the trench, but the pipe was shallower with the top of the 25-cm (10-inch) diameter pipe at approximately 120 cm (47.2 inches). Taking into account the 5 cm (2 inches) of asphalt at the western end, it is only 5 cm (2 inches) closer to the block paver road surface. The fill in the water main trench consisted of a heavily mottled mix of dark yellowish brown (Munsell 10YR 4/4) clay, sand and silt with inclusion of gravel, cinders, and brick fragments.

The profiles show a wide range of soil types with Profiles 3 and 4 having the most similarities. All of the profiles have a bed of compacted sand just below the paver blocks and a layer of densely packed rocky clay or fused aggregate as a rigid zone below the pavers and sand. This crushed stone layer may have been the original macadam road surface prior to being re-paved with boulder blocks. Below this, all of the profiles have layers of roadbed fill of various types, including clays, sand, and limestone blocks. All three profiles appear to have a horizontal prepared road

surface that begins approximately 90 to 95 cm (35.4 to 37.4 inches) bs, although discerning this on Profile 1 is difficult because the stratigraphy in this profile does not crosscut the soil zones like those in Trenches 3 and 4. The natural soil horizons were not encountered in either of these trenches but appear to have been encountered in Profile 1/2 at approximately 140 cm (55 inches) bs, which is not unlikely given that it was closer to the early historic terrace edge. A systematic profile of deeper soils could not be undertaken due to stability and access issues, but at approximately 300 cm (118 inches) bs the soils across the APE became layers of bedded sand to a depth of approximately 670 cm (264 inches) bs, where river gravel was encountered, likely source of the ground water that continually infiltrated the trench works.



**Figure 87. Profile 4 at the eastern end of the water main removal trench.**

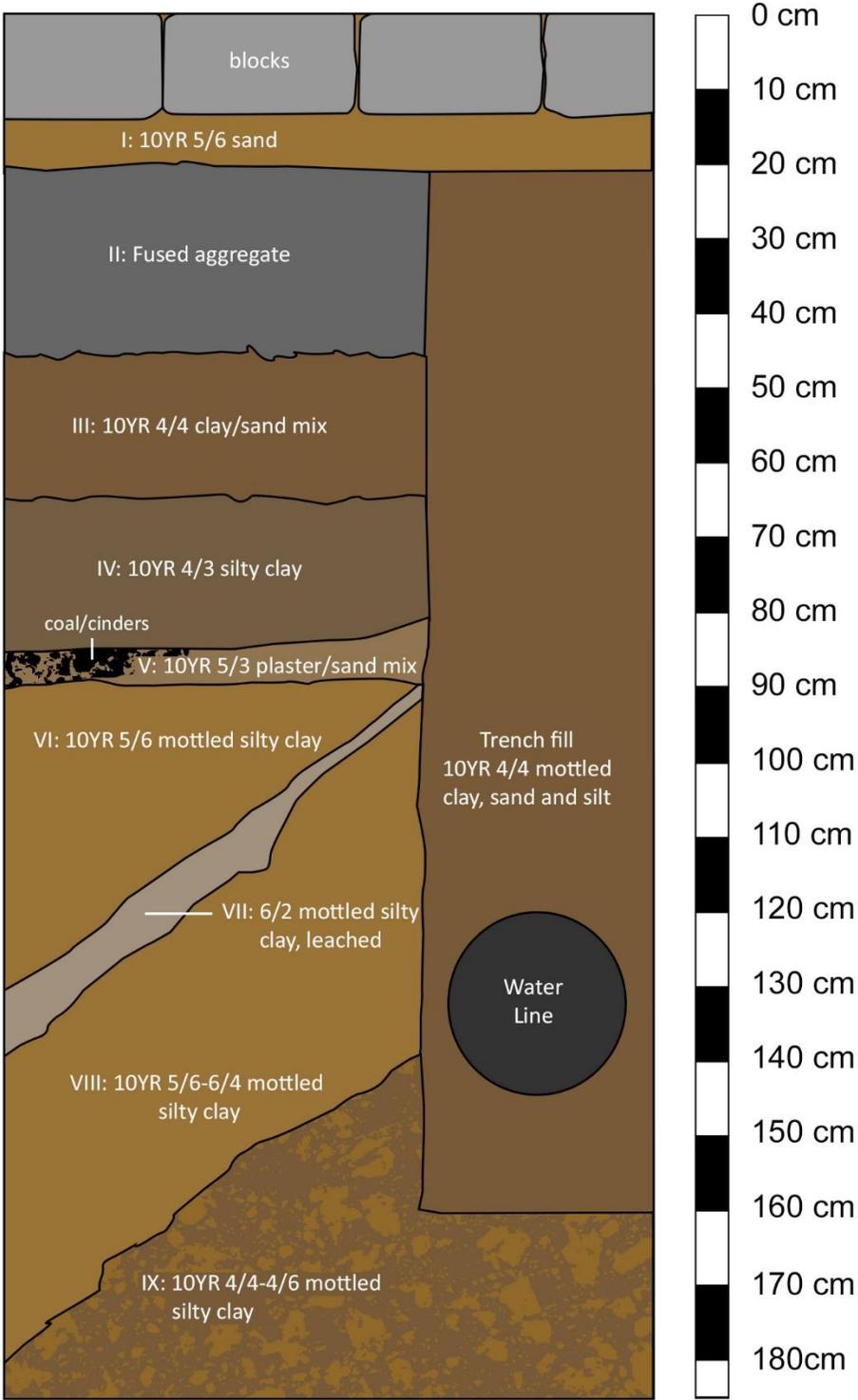


Figure 88. Graphic representation of Profile 4 at the western end of the water main removal trench.

### **Summary**

The archaeological monitoring documented physical evidence of the construction of the boulder block roadbed. It documents a series of road construction over the years, potentially starting with an episode that was buried at a depth of 90 to 95 cm (35.4 to 37.4 inches) below street level at the time of the monitoring. The series of building and rebuilding is confirmed by historic newspaper articles, and relay a history of grading, deposition of sand or other fill, and the placement of new roadbeds. These appear to have been of various materials, beginning with crushed stone or macadam which was later overlaid with additional fill topped with granite pavers. The boulder block street was lined with limestone curbs.

The man-made modifications to the landscape are evident in the placement of large amounts of fill along the edge of a natural terrace that dropped to the river. The fill on this sloped terrace is evident in its diagonal configuration, in an effort to level the ground for the roadbed. Once the fill had been deposited, the use of the area is evident in the horizontal grading and layers of actual road base.

No unexpected features were identified, although some large limestone blocks of unknown function were encountered in one profile. No buried Native American resources or materials were observed.

# 6

## SUMMARY AND RECOMMENDATIONS

On behalf of MSD, Corn Island Archaeology LLC was engaged by Hazen and Sawyer to complete a cultural historic report and perform archaeological monitoring services at Site JFL-502, Rowan Street, in downtown Louisville, Jefferson County, Kentucky. Site JFL-502 is comprised of a section of historic granite boulder block street pavers. JFL-502 has been recommended eligible as a contributing resource to the West Main/10<sup>th</sup> Street Industrial Historic District. As outlined in an MOA dated July 26, 2018 between MSD and the KHC, it was determined that a section of Rowan Street (JFL-502) would be adversely affected by implementation of the Downtown CSO Interceptor Project. MSD required a trench 12-21 m (40-70 ft) in dimensions to be cut through the pavers to lay a sewer line related to the overall project. The sewer line corridor extends along the southern side of Rowan Street from a pump station at the southwestern corner of Rowan and 10<sup>th</sup> streets to a diagonal crossing just east of the intersection of Rowan and 11<sup>th</sup> streets.

As stipulated in the MOA, several tasks are required to mitigate the impacts of the undertaking. These tasks include the removal and safe storage of the affected pavers; archaeological monitoring of the trench excavation and documentation of the vertical profile of the Rowan Street roadbed; preparation of a cultural historic report detailing the significance of the granite-paved street; and preparation of an interpretive display to be placed in the Portland Museum.

The cultural historic documentation was to incorporate several tasks, among which was completing a site form for Rowan Street and acquiring a KHC site number. In addition, the documentation must include a map of Area 1 of the Downtown CSO Interceptor project. A historic context must be prepared along with a statement of eligibility for the resource. Finally, the documentation must include the findings and a schematic profile of the roadbed as seen in the archaeological monitoring.

## CONCLUSIONS AND RECOMMENDATIONS

It was learned during this project that the boulder block section of Rowan Street had been previously recorded and assigned a KHC number of JFL-502. The resource was named the Rowan Street cobblestones. It was recorded in 2002 (Community Transportation Solutions, Inc.) as part of the LSIORB project and determined to be a contributing element of the West Main/10<sup>th</sup> Street Industrial District. Because the site had already been recorded, Corn Island updated the form and notes the following recommended changes.

- 1) The Rowan Street cobblestones resource, as originally recorded, included only the block of Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> streets. This section was 12-m (40-ft) wide and 122-m (400-ft) long. The updated form expands the resource to include 10<sup>th</sup> Street to 13<sup>th</sup> Street to include two blocks of boulder block paving that were not known because they were covered with asphalt paving.
- 2) It is recommended that the resource name be changed to reflect the fact that the pavement is not in fact “cobblestone” but is instead comprised of boulder block pavers, sometimes referred to as Belgian block. Furthermore, as the pavers themselves are not limestone as reported in Turner 2017 but in fact granite, that correction to the form will be noted as well.

- 3) Site JFL-502 was previously recommended as eligible as a contributing resource to the West Main/10<sup>th</sup> Street Industrial District. As a result of the current study, it is recommended that JFL-502 is individually eligible. The granite stone street pavers that are visible above ground along a portion of Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> streets do have enough significance and retain enough integrity to be considered eligible for listing in the NRHP, under Criterion A. The stone-paved street at the intersection of Rowan and 11<sup>th</sup> streets is part of a larger pattern of city development during the 1880s seen both throughout Louisville and the country as a whole. The use of granite boulder blocks as a paving surface on a city street is evidence of an economically stable city with a large industrial area. Granite boulder blocks were expensive and used primarily in heavily trafficked industrial areas in the 1880s. The stone paved street retains much of its integrity, and as such, should be considered individually eligible for listing in the NRHP under Criterion A. The remainder of the granite boulder blocks that are currently covered by modern asphalt, between 11<sup>th</sup> and 13<sup>th</sup> streets, are not currently considered eligible due to lack of integrity.
  
- 4) JFL-502 is currently considered a contributing element of the West Main/10<sup>th</sup> Street Industrial district. However, buildings in the district are anywhere from 20-40 years later than this section of Rowan Street. Furthermore, Rowan Street is physically and visually separated from the rest of the district by the floodwall. As such, JFL-502 may not be suitably placed within that district. Resource JFL-502 would be better suited as part of an MRA that includes other historically paved streets throughout Louisville. This MRA should include streets paved with historic boulder block, cobblestone, and brick. For example, Northwestern Parkway in Portland has exposed cobblestone and boulder block paving. Peterson Street is paved with historic brick, as are many surrounding streets and alleyways. This MRA should also include limestone curbing and historic sidewalks.

**Figure 89** through **Figure 94** show current conditions of the block of Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> streets.



**Figure 89. Drone shot showing current conditions of Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> streets, facing east.**



Figure 90. Current drone view of Rowan Street between 10<sup>th</sup> and 11<sup>th</sup> streets, facing west.



**Figure 91. Drone shot, facing down, showing intact portion of Rowan Street.**



**Figure 92. Street-level view facing west of current condition of intact portion of Rowan Street.**



**Figure 93. Extant portion of Rowan Street boulder block pavers facing south.**



**Figure 94. Extant portion of Rowan Street boulder block pavers facing north.**

### Archaeological Monitoring

Between October 25 and November 20, 2019, Corn Island Archaeology LLC performed a cultural historic survey and archaeological monitoring along Rowan Street, between 10<sup>th</sup> and 11<sup>th</sup> streets. The APE was situated just east of the intersection of Rowan and 11<sup>th</sup> streets and encompassed 0.08 ha (0.2 acre). The total area excavated was 0.05 ha (0.12 acre). These cultural resources services supported Louisville MSD as part of its larger CSO project.

The purpose of the archaeological monitoring was twofold. One goal was to determine, if possible, the manner in which the boulder block road had been constructed. Related to this was identifying, if present, evidence of earlier construction techniques. The latter could include remnants of wooden logs, as in the old corduroy road construction. A second objective was to ensure that no deeply buried cultural remains, midden, or features were present that could be impacted by excavation of the trench. These could consist of deeply buried Native American materials.

As a result of the monitoring, the following conclusions can be made with confidence:

- 1) The excavation monitoring showed that in the early 1800s the project area was situated on a sloped terrace edge later augmented with considerable amounts of fill to facilitate development of the area. Part of this development was the construction of Monroe Street, later called Rowan. The historic roadbed was built on top of these layers of fill and was discerned by horizontal layers of soil rather than layers of fill, which were deposited in a diagonal configuration. Visible within Profile 4 of the trench beneath the boulder block surface of Rowan Street was possible evidence of an earlier macadamized road. This roadbed, located at 90 cm (35.4 inches) bs, consisted of a layer of silty clay mixed with brick and angular gravel, underlain by plaster and sand mix with a large pocket of coal cinders. This zone formed the base of the horizontal roadbed, overlying the fill episodes, and may represent remnants of the earliest roadbed in the corridor.
- 2) Monitoring of the Rowan Street sewer crossing demonstrated there were no other unexpected or intact cultural features containing meaningful information which would enhance an understanding of the cultural and historic development of this area of Louisville. However, in the area of Profile 3, a layer of limestone blocks from approximately 65 to 85 cm (25.6 to 33.5 inches) bs. It is unclear what these blocks were utilized for as none of the other profiles contained them. They were dry laid, without mortar, but had no patterning. They may have been related to an abandoned utility of some sort at the eastern edge of the intersection of Rowan and 11<sup>th</sup> streets. Another possibility is that the intersection may have needed additional stability, so a layer of limestone was included toward the base of the roadbed.

Of note is that this monitoring, in conjunction with the historic research, laid to rest speculation that Rowan Street may have followed the corridor of the old Portland Turnpike, or that it was initially a corduroy road. The Portland Turnpike was located to the south of Rowan Street and appears to be well-documented. Likewise, no evidence was found to indicate that Rowan Street was ever part of a corduroy road in the area.

# 7

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