

DC SHPO ARCHAEOLOGICAL REPORT # \_\_\_\_\_

**A PHASE IA INTENSIVE BACKGROUND INVESTIGATION  
OF THE  
EASTERN MARKET METRO PARK PROJECT  
WASHINGTON, D.C.**

Prepared For

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March 2019

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## **ABSTRACT**

During February 2019, Applied Archaeology and History Associates, Inc. conducted a Phase IA intensive background investigation of the Eastern Market Metro Park located at 701 Pennsylvania Avenue SE in Washington, District of Columbia. The District of Columbia Department of General Services intends to reconfigure the Eastern Market Metro Park. The District of Columbia State Historic Preservation Office archaeologist requested a phased archaeological survey to ensure that no potentially significant archaeological resources would be impacted.

The Eastern Market Metro Park Study Area comprises a rectangular area including several park reservations bisected by Pennsylvania Avenue SE and the former right-of-way of South Carolina Avenue SE. These include Reservations 044, 044A, 045, 046, 047, 047A, 048, and 049. The Eastern Market Metro Station entrance, consisting of a tunnel to the platform, a bank of escalators, and an elevator shaft, is located in the western portion of the Study Area. The Historic Building Survey of Washington, D.C. designated this area Eastern Market Square (HABS DC-670).

Background research found that this area has been public land since the inception of the city, set aside in L'Enfant's original plan for Washington. It has spent almost 230 years under public ownership, with triangular park improvements between road rights-of-way installed by the late 19<sup>th</sup> century. In 1862, Washington's first streetcar line was installed through the Study Area, on its way from Georgetown via Pennsylvania Avenue SE to the Navy Yard via 8<sup>th</sup> Street SE. Structures fronting the park had been built by the late 1850s. The park maintained its late 19<sup>th</sup>-century configuration into the 1970s, when a large portion of it was disturbed during the cut-and-cover construction of the Washington Metro Blue Line and Eastern Market Metro Station. Portions of the Study Area that were not directly impacted by cut-and-cover activities were used as staging areas for the excavation. The park was then rebuilt into its current configuration. GIS cut-and-fill analysis indicates that the current ground surface of the Study Area is approximately 1.5 to 3.0 ft above its 1872 ground surface level.

The Phase IA intensive background investigation on the Eastern Market Metro Park reveals documented disturbance across most, but not all, of the Study Area. The greatest source of disturbance is the Washington Metro Blue Line, which cuts across the Study Area under Pennsylvania Avenue SE, and the Eastern Market Metro Station. Both of these transportation features were constructed using cut-and-cover techniques, which would have resulted in significant disturbance in the west, southeast, and central portions of the Study Area in Reservations 044, 044A, 046, 047, and 047A and the intervening road rights-of-way. The undisturbed portions of the Study Area, including Reservations 045, 048, and 049, have the potential for archaeological resources that could provide information on the evolution of public spaces in Washington from the city's foundation to the present.

Large portions of the Study Area have been disturbed and have very limited potential for intact archaeological resources. However, some portions of the Study Area may possess some archaeological integrity, with the disturbance possibly only impacting surface deposits and not buried archaeological deposits. Geomorphological soil tests are recommended in portions of Reservations 045, 048, and 049 to assess whether buried archaeological resources could be present within these areas.

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## **INTRODUCTION**

### **Purpose of the Investigation**

During February 2019, Applied Archaeology and History Associates, Inc. (AAHA) conducted a Phase IA intensive background investigation of the Eastern Market Metro Park located at 701 Pennsylvania Avenue SE in Washington, District of Columbia. The District of Columbia Department of General Services (DGS) intends to reconfigure the Eastern Market Metro Park. The District of Columbia State Historic Preservation Office (DC SHPO) archaeologist requested a phased archaeological survey to ensure that no potentially significant archaeological resources would be impacted. This Phase IA intensive background investigation was undertaken in consultation with the DC SHPO to determine the likelihood of an archaeological site being present within the Eastern Market Metro Park Study Area.

This report represents the results of the Phase IA conducted by AAHA. It includes historic background research and a geographical information systems (GIS) cut-fill analysis. All work was conducted in accordance with the provisions specified in Washington, D.C., Historic Preservation Office, Office of Planning Guidelines for Archaeological Investigations in the District of Columbia (D.C. Preservation League 1998), as well as the various standards and guidelines set forth by the Secretary of the Interior in the Standards and Guidelines for Archaeology and Historic Preservation (Federal Register 1983) and Section 106 Archaeology Guidance (ACHP 2009).

The background research and GIS analysis were conducted by W. Brett Arnold. Jeanne A. Ward served as principal investigator and project manager.

### **Description of the Eastern Market Metro Park Study Area**

The Eastern Market Metro Park Study Area comprises approximately 4.161 acres bounded to the north and south by one-way extensions to D Street SE, to the east by 9<sup>th</sup> Street SE, and to the west by 7<sup>th</sup> Street SE (Figures 1-2). It is roughly rectangular in shape and includes six park reservations separated by Pennsylvania Avenue SE. It includes Reservations 044, 044A, 045, 046, 047, 047A, 048, and 049. The park reservations mainly consist of lawns interspersed with deciduous trees, brick-paved pathways, and planting features (Figures 3-4). It is crosscut by the north-to-south-running right-of-way of 8<sup>th</sup> Street SE (Figure 5). The Southeast Neighborhood Library is located across 7<sup>th</sup> Street SE from the Study Area (Figure 6). The Study Area appears to be heavily landscaped and artificially leveled. The Eastern Market Metro Station entrance, consisting of a tunnel to the platform, a bank of escalators, and an elevator shaft, is located in the western portion of the Study Area on Reservation 044 (Figures 7-8). Additionally, bus stops are located on both sides of Pennsylvania Avenue SE. Unlike Seward Square to the northwest and Lincoln Square to the north, this rectangular intersection does not have a historic name. The Historic Building Survey of Washington, D.C. designated this area Eastern Market Square (HABS DC-670).

The Study Area occupies a space at the intersection of two of Washington's major historic thoroughfares, Pennsylvania Avenue SE and South Carolina Avenue SE. This space has been set aside as public land since the inception of the city, one of many rectilinear public spaces occupying the intersections of D.C.'s axial avenues. This land was set aside by the designer of



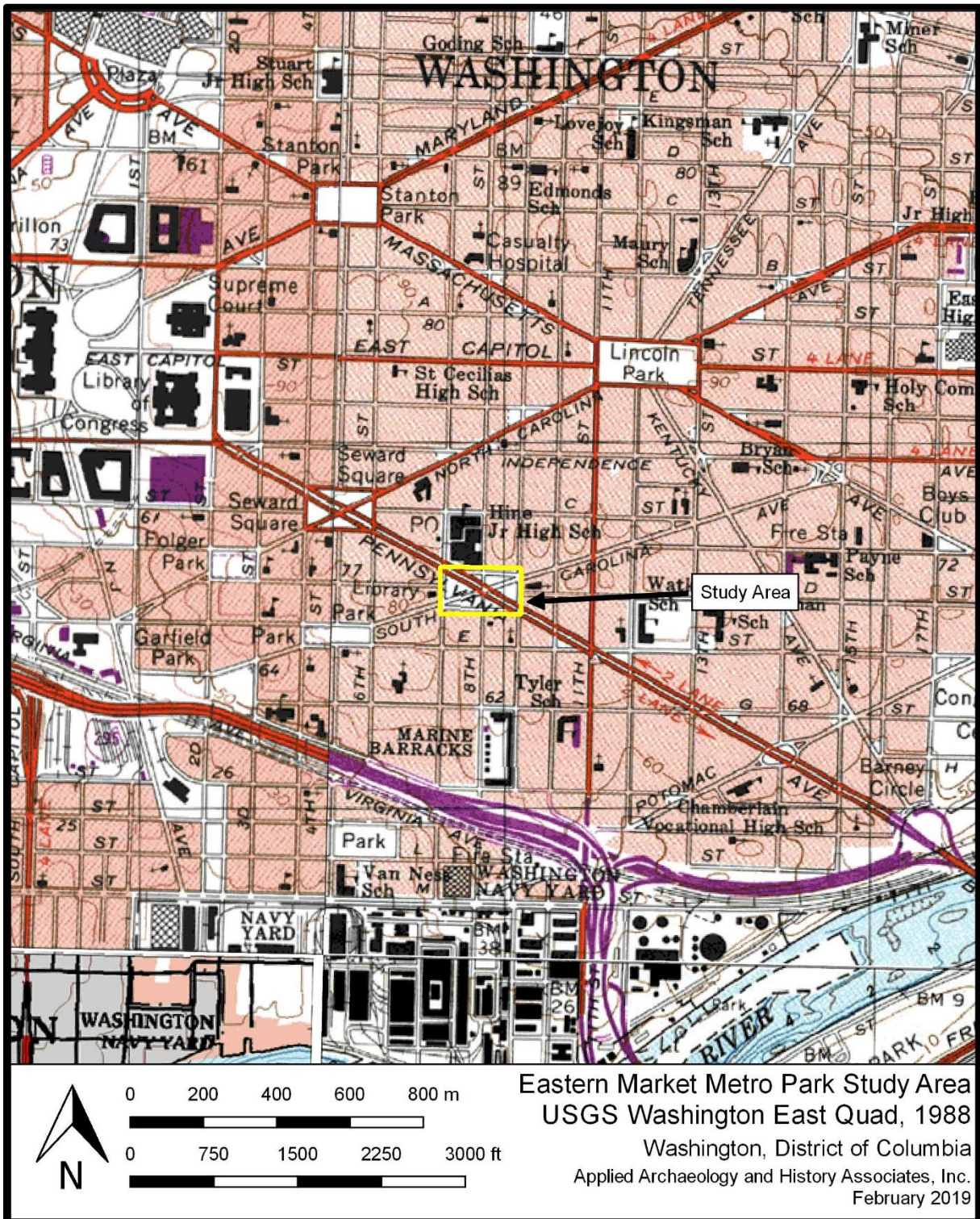


Figure 1. Detail of the 1988 USGS Washington East Quadrangle, 1988 edition, showing the location of the Study Area along Pennsylvania Avenue SE, southeast of the U.S. Capitol Building and north of the Washington Navy Yard.



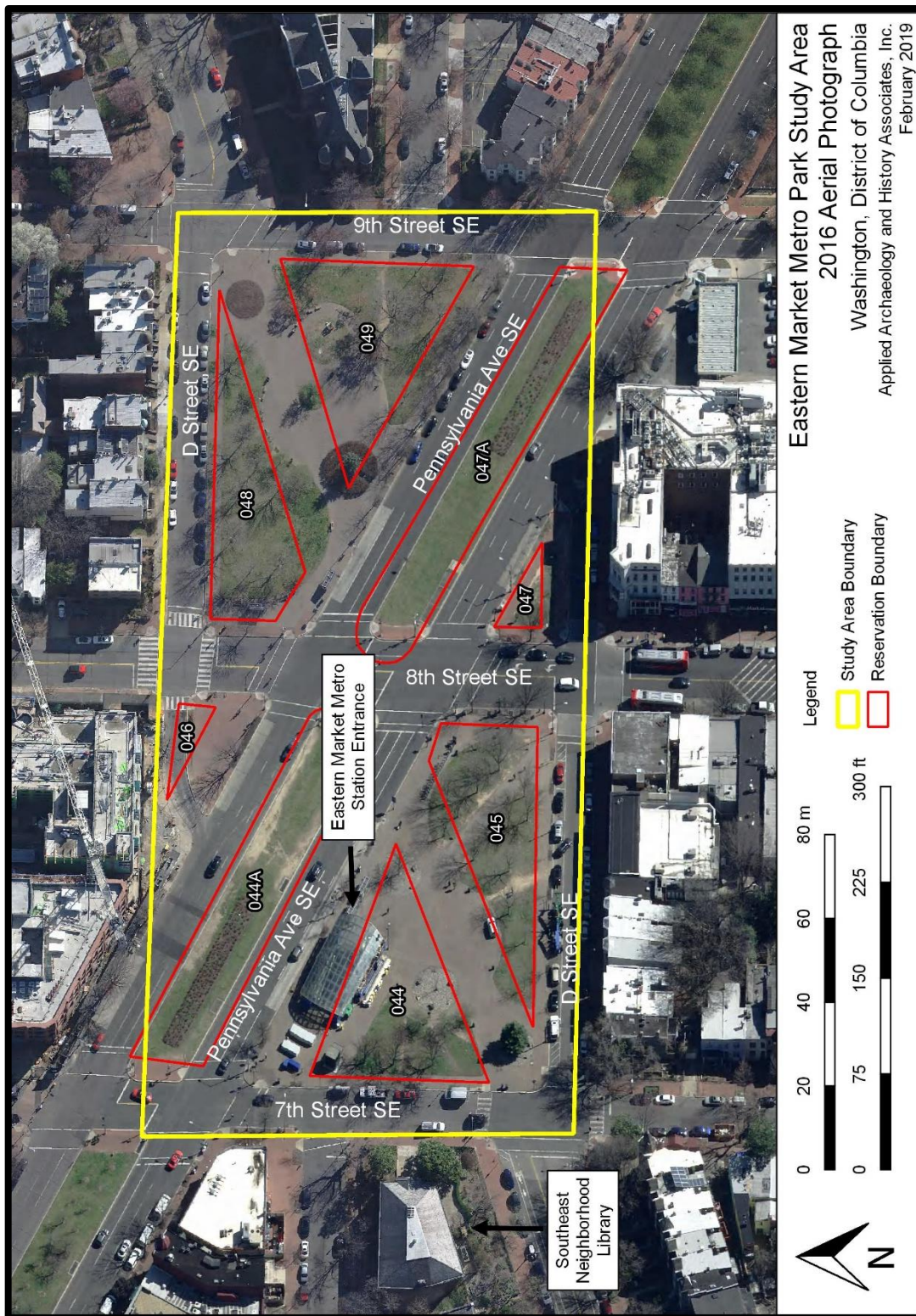


Figure 2. Aerial photograph showing former park reservation parcels, street names, and existing structures in and related to the Study Area





Figure 3. View across former Reservation 044 toward the corner of D Street SE and 8<sup>th</sup> Street SE, showing lawn, landscaped planting feature, and brick walkway. Facing southeast.



Figure 4. View along the former alignment of South Carolina Avenue SE (continuing in the background) toward the historic Grace Baptist Church, showing planting feature and brick walkway. Facing northeast.





Figure 5. Intersection of Pennsylvania Avenue SE and 8<sup>th</sup> Street SE in the approximate center of the Study Area, toward a recently-constructed commercial development. Facing northwest.



Figure 6. East façade of the Southeast Neighborhood Library across 7<sup>th</sup> Street SE. Facing west.



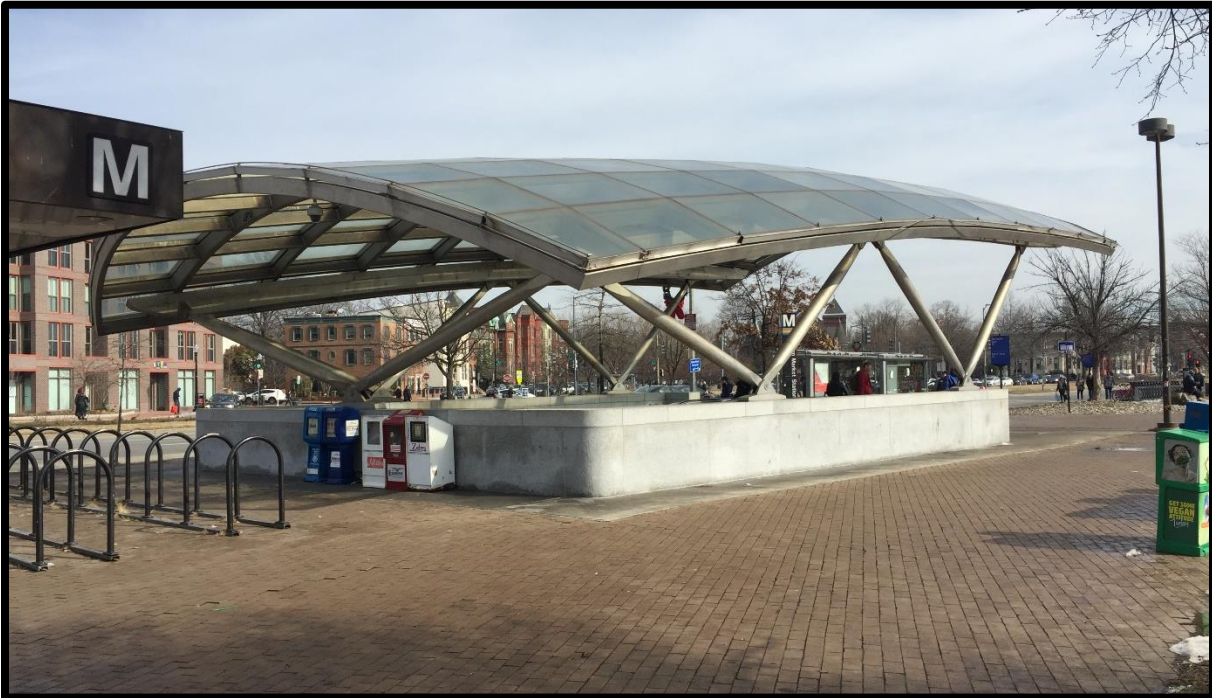


Figure 7. Eastern Market Metro Station, escalator entrance and surrounding brick walkway. Facing northeast.



Figure 8. Eastern Market Metro Station, elevator entrance and surrounding brick walkway along 7<sup>th</sup> Street SE. Facing north.

Washington, Pierre Charles L'Enfant, in his original plan for the city. The surrounding area is a mix of residential and commercial properties known as the Capitol Hill neighborhood, situated east of the U.S. Capitol Building and north of the Washington Navy Yard. The Eastern Market, which has existed in the vicinity of the Study Area (although not at the same location) since the early 19<sup>th</sup> century, is located a short distance north of the Study Area, and the Old Naval Hospital is located a short distance southeast. Most of the structures that face the park are one-to-three-story commercial buildings, beyond which are blocks of the narrow townhouses that characterize the neighborhood.

### **Organization of the Report**

This report presents four (4) sections of text and a list of references cited. Following this introduction, which includes the goals of the study and a description of the Study Area, a summary of the historic background of the Study Area is presented. The third section presents the methods and results of the field investigation and a discussion of the research questions which guided the investigation. The final section presents a summary of the investigation and recommendations. References cited are followed by an appendix listing the qualifications of the preparers.

## **BACKGROUND RESEARCH**

This section presents an historic background for the Eastern Market Metro Park Study. Background research methods are presented followed by the results of this research, including deed and census research.

### **Methods**

A review of existing data on regional and local prehistory, history, and the environment was conducted consisting, in part, of an examination of the pertinent literature and historic maps in the collections of the Library of Congress and National Archives as well as a number of other online sources. In addition, records of known archaeological sites and archaeological surveys in the vicinity of the Study Area, as recorded in the Data Request issued by the DC SHPO, were also considered.

### **Results**

#### *Physiographic Conditions*

The Study Area falls within the Atlantic Coastal Plain in the Foggy Bottom Area District (#512501) in the Western Shore Lowlands. This physiographic province represents some of the youngest soils in eastern North America, characterized by rolling landscapes over sedimentary or unconsolidated bedrock bisected by deep-cut streams feeding tidal rivers and estuaries that empty into the Atlantic Ocean or the Chesapeake Bay. Natural soils tend to be sandy or silty with irregular clay lenses.

#### *Soils*

Soils in the Study Area consist almost entirely of Urban land (Ub) (Web Soil Survey 2017; Figure 9). Urban land has been disturbed by urban development and rarely maintains subsurface integrity. It may have been cut and/or filled to reach its current ground surface level. Urban land is often impervious to water and has a very high runoff classification. It can include a mix of textural constituents, but is most often clay. Urban land is typically compacted and often contains gravel inclusions. A very small portion of the Study Area's northeast corner belongs to the Urban-Chillum complex (UeB). Urban-Chillum soils have been disturbed, but possess part or all of a Chillum series soil profile. Neither Urban land nor Urban-Chillum complex soils are prime farmland. Slopes in the Study Area range from 0-8 percent.

#### *Prehistoric and Contact Period Overview*

The prehistory of eastern North America has traditionally been divided into three major cultural/temporal periods: Paleo-Indian, Archaic, and Woodland. The District of Columbia tends to conform to the sequence defined for the Middle Atlantic region with these broad designations in turn having been divided into various sub-periods. The generalized periods approximate cultural and environmental changes associated with the prehistoric and contact period cultures of the Middle Atlantic region.

Paleo-Indian populations (ca. 11,000-8,000 BC) began to migrate into the study region at the end of the Late Glacial to early Post Glacial climate episodes. Climatic conditions at that time differed significantly from those of today and Paleo-Indian cultures would have adapted to a





Figure 9. Soils in the Eastern Market Metro Park Study Area (Web Soil Survey 2017).

tundra or Jack Pine-Spruce forest (Hatch *et al.* 1986:100). Consequently, the Paleo-Indians were highly mobile hunters who tracked the large game that inhabited the region. Researchers in the upper Delaware Valley have found that the Paleo-Indian diet also included fish, berries, and fruit (Dent 1991; 1999; McNett 1985) but it appears that the movement of game and proximity to lithic sources were the prime factor in the movement of these peoples (Gardner 1980). Most documented sites that have yielded Paleo-Indian material consist only of an isolated fluted projectile point or two, which is the prime diagnostic artifact of the period (Funk 1969; Gardner 1974; Adovasio *et al.* 1977; Dent and Kauffman 1978). These points are almost always recovered from the surface of plowed fields. Early collectors within the District of Columbia recovered four fluted points; three along the Anacostia River and one in the northwestern part of the city (Humphrey and Chambers 1977:8). Although much evidence for the Paleo-Indian occupation of the Mid-Atlantic is believed to have been lost as low-lying water courses became inundated with the melting of the glaciers, Wagner has recently demonstrated that upland sites have been preserved in rare and somewhat localized cases where wind-blown Aeolian deposits, known as loess, buried these older landscapes at the end of the Pleistocene/beginning of the Holocene periods (Wagner 2008). Areas with the potential for loess deposits have been identified, among other locations, to the immediate east of the Anacostia River.

The beginning of the Archaic Period (ca. 8,000-1,000 BC) is approximately coeval with the shift from cool, wet Pleistocene climates and environments to those of the essentially modern Holocene. Climatic conditions did fluctuate during the period, however, resulting in changes in the forest composition and faunal communities. By ca. 3,000 BC essentially modern climatic conditions were established with the onset of the Sub-Atlantic episode, although minor fluctuations persisted. Archaic groups, which were increasing in number, site size, and functional diversity, had modified their adaptive strategies in response to environmental changes. These changes are reflected in the archaeological record by the appearance of more diverse tool styles including specialized tools such as manos, metates, and pitted stones, which indicate a more intensive exploitation of edible plant foods, and netsinkers and fishhooks, which signify a greater dependence on fish resources (Bryan 1980:363). These peoples also procured an increased quantity of smaller mammals, as well as birds. Diagnostic projectile point forms are recognized for the Early, Middle, and Late Archaic, and include notched-, bifurcated-, and stemmed-base styles. The majority of Archaic Period sites have been identified within the northwestern corner of the District, along the banks of the Potomac and along the tributaries of Rock Creek. Intact Early and Middle Archaic deposits have rarely been identified, but those associated with the Late Archaic occupation of the District are more plentiful. Again, Rock Creek Park has been shown to contain many sites with Late Archaic components with one of the most famous being the Piney Branch Quarry Site (51NW1) that was identified by Holmes in the latter part of the 19<sup>th</sup> century (Holmes 1897).

The appearance of ceramic technology traditionally has marked the beginning of the Woodland Period (ca. 1,000 BC-Contact) (Gardner 1980:3). The Early Woodland Period was characterized by a continuation of terminal Late Archaic settlement/subsistence systems, although populations were increasingly sedentary and continued to expand in size and density. The use of cultigens became more prevalent (Curry and Custer 1982:4; Cushman 1981:14). This period is characterized by the presence of ceramics including Marcey Creek, Accokeek, and Elk Island ceramics (Egloff and Potter 1982:97-99). Projectile points continue to be stemmed. It is postulated that small groups moved down rivers in order to establish base camps and exploit the extensive shellfish beds during the fall and winter but took advantage of anadromous fish runs along freshwater streams in the spring and summer (Gardner 1982:60).

The Middle Woodland Period is characterized by an expansion of regional and extra-regional exchange networks and the apparent development of ethnic boundaries based on regional variations in pottery styles such as Pope's Creek and Mockely (Wanser 1982:142; Egloff and Potter 1982:99-104). Lithics transitioned to triangular points such as Levanna and Selby Bay. In portions of the Mid-Atlantic lifestyles became more sedentary with food surpluses, ranked societies, extensive trade networks, and elaborate mortuary rituals (Custer 1982:30-33). It has been postulated that groups in the District of Columbia, Maryland, and Northern Virginia did not develop ranked societies as they were isolated from these developments (Gardner 1982:65-67). Much like the Archaic Period before it, the majority of prehistoric sites dating to the Early and Middle Woodland within the District have been identified in the northwestern portion of the city. One of the most important Woodland sites identified within the District is a Middle Woodland cremation burial excavated as part of the Whitehurst Freeway project (Knepper *et al.* 2006). The burial is believed to display similarities with the Kipp Island Phase that has been noted in New York/Ontario and is indicative of the existence of long distance trade and influence that existed during Prehistory (Knepper *et al.* 2006). Why this portion of the District has proven to be so popular with the prehistoric inhabitants of the area has been a topic of discussion. It has been suggested that the presence of the rapids in this general portion of the Potomac River would have forced people canoeing upstream to disembark and portage their canoe making it a nexus for transport and trade.

By the Late Woodland Period (ca. AD 900-1580) there is evidence for the cultivation of corn, beans, and squash and also for the establishment of semi-permanent villages. By at least AD 900, corn and squash were cultivated in the Piedmont. Horticulture played a major role in subsistence; however, gathering and fishing remained important, although these activities were scheduled around the horticultural cycle (Hatch *et al.* 1986:103). During this period, settlements shifted away from estuaries to floodplains that featured the large expanses of arable land necessary for a horticultural-village lifeway (Gardner 1980). Some village sites were fortified with stockades, and smaller hamlets were dispersed as satellites, usually no more than a few kilometers from the village. Small hunting and gathering sites were located farther afield (Hatch *et al.* 1986:103). This pattern of land use was observed at the time of European contact which began as early as the 1580s (Feest 1978:242). Material culture influences during this time reflect the development of ceramic and cultural traditions specific to localized geographic areas. Common ceramics in the vicinity of the District of Columbia include Townsend and Potomac Creek wares while Madison/Clarksville projectile points are common (Egloff and Potter 1982:107-112).

With the arrival of European settlers came written records of the indigenous people of the District. Colonists from James Town describe making contact with indigenous people, called the Necotsins, on the eastern bank of the Lower Anacostia and record the presence of houses scattered among agricultural fields. A palisaded village, known as Nacotchan, was also recorded in this locale, but by 1694 it would appear that the Necotsins had merged with the Piscataway and moved away from the area (Fiedel *et al.* 2008). The remains of Nacotchan have never been identified.

#### *Historic Period Overview*

Originally part of Maryland until the creation of the District of Columbia in 1790, a review of the historic context of the Study Area cannot be undertaken without incorporating the pre-revolutionary history of Maryland. Permanent settlement in Maryland was established in St. Mary's City and spread northward along the Potomac throughout that century (Figure 10). Predominantly agricultural in nature, with tobacco as the most prominent crop, settlement was structured by large grants of land to gentlemen of influence (Bryan 1914:14). Population increased throughout the 18<sup>th</sup> century with an economy still based primarily upon tobacco cultivation. During the early 18<sup>th</sup> century slaves accounted for only one-quarter of the area's population but this percentage had increased to over half of the area's population by the end of the century (Wesler *et al.* 1981:141). By the time of the American Revolution a full 60 percent of the area's household were tenants farming portions of larger plantations and forty percent of these tenants in turn held slaves.

The District of Columbia was originally created as 10 square miles incorporating portions of Maryland and Virginia but Alexandria, Virginia was eventually returned to Virginia. Survey of the District began in 1792 by Major Charles Pierre L'Enfant, who was retained by the Federal government as the planner and architect of the new city. The plan was finished by Andrew Ellicott, an assistant to L'Enfant. The design of the city was originally intended to create a collection of independent centers that contributed a specific function to the District. The area to the east of the Anacostia was not platted for construction and was retained in its agricultural format to enable it to produce local farm goods for the District (Figure 11).





Figure 10. Figure 10. Study Area Vicinity on Herrmann's 1673 Map of Virginia and Maryland.

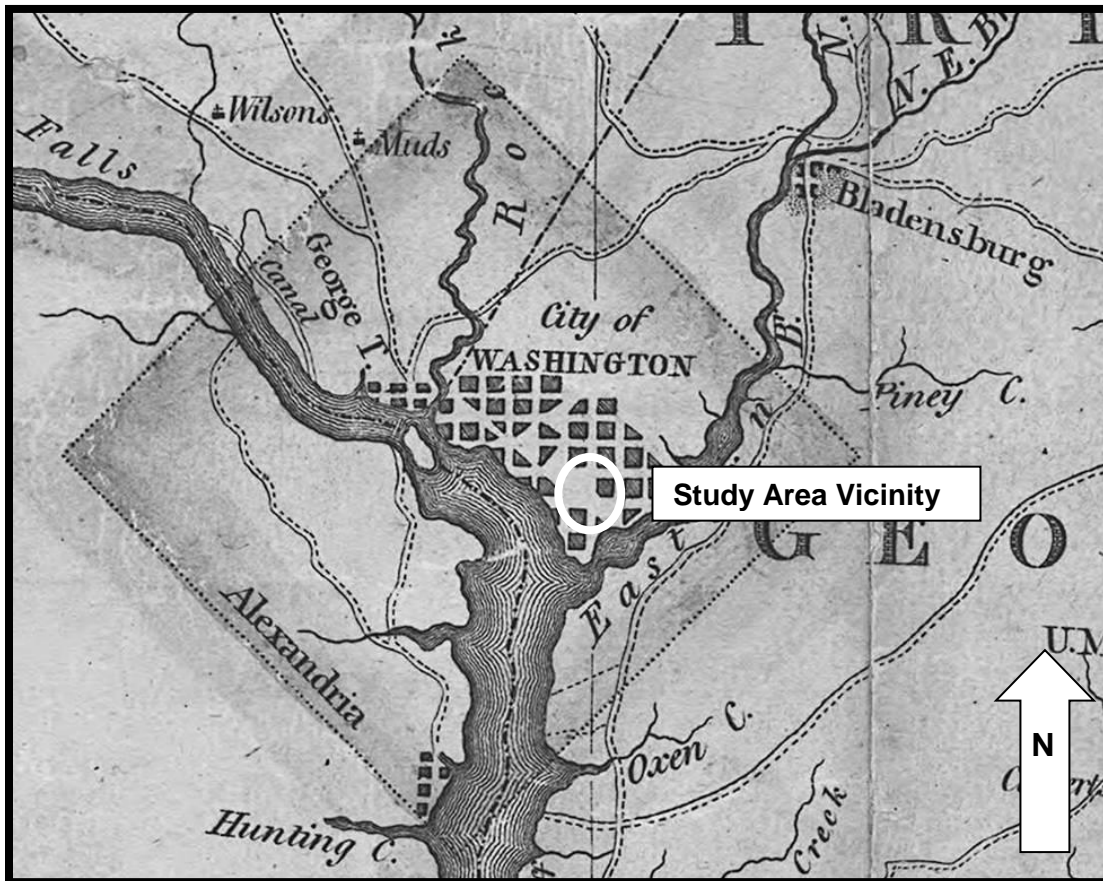


Figure 11. Study Area Vicinity on Griffith's 1794 Map of Maryland.

The 19<sup>th</sup> century saw severe fluctuations in tobacco prices which, along with soil depletion due to poor agricultural practices, caused economic stagnation. Diversification in agriculture, particularly market produce and orchards in the areas close to urban centers, assisted in some modest economic revival by the time of the Civil War though tobacco continued to be an important agricultural product.

As the Civil War began Fort Washington was the primary defense for the city on the Potomac, which left it vulnerable to invasion by sea. The capital of the Confederacy was only 100 miles south and Virginia, just across the Potomac River, had joined the Confederacy. Maryland was also a slave-holding state, but it did not secede. As such the capital had to improve its defenses. Construction of a 37-mile circle of fortifications around Washington included 93 batteries, 3 wooden blockhouses, and miles of rifle pits and connecting roads (CHEP 2004). Troops began arriving in early 1861 and the Army of the Potomac used the District's location on the Potomac River as a supply and embarkation point. Private homes and public buildings were acquired, or confiscated, by the Union forces and transformed into military quarters and hospitals (Junior League of Washington 1977:201, 212).

Upon the conclusion of the Civil War the District showed considerable destruction to both public and private property making reconstruction of the City difficult. A rebuilding effort was initiated and by 1870 improvements were underway. This included paving roads, new public buildings, and gas lighting (Junior League of Washington 1977: 201, 234-235). The Organic Act, passed in 1871, resulted in the incorporation of the several municipalities that comprised the District of Columbia, including Georgetown and Washington County, into the City's current boundaries.

As the 20<sup>th</sup> century dawned developers began to expand the city into what had previously been large agricultural parcels, especially in the southeast corner and along the eastern bank of the Anacostia. Public transportation, including a streetcar system, was the herald of the early 20<sup>th</sup> century in the District, making for fast and easy travel throughout the City (Tindall 1918:26). As with much of the United States, as the automobile became more affordable after World War II, the streetcars faded away and the final line was dismantled in the 1960's.

## **The Study Area**

A brief summary of the Study Area is presented in the Washington, D.C. Historic Building Survey, where the area is designated Eastern Market Square (HABS DC-670) (District of Columbia Inventory of Historic Sites n.d.: 58). The history of the Study Area contained in the inventory, which describes it as a public square set aside by the city's original plan that later featured a streetcar line and park reservations, is largely corroborated by the results of this Phase IA intensive background research. The historic building survey suggests that the first improvements to the square were made in the 1880s, and that a series of six triangular park features had been delineated, fenced, and planted by 1904. The overall configuration of the park was revised in 1962, when South Carolina Avenue SE was discontinued across the square.

### *Property History*

Property ownership of the Study Area is divided between public land reservations and public transportation right-of-way. A full title search was attempted, but transfers of ownership for specific public land parcels within the District of Columbia are very difficult to trace. Administration for the public parks in Washington has gone through a number of federal agencies over their approximately 230-year history. The foundation of the city's park system

was laid in 1791, when a series of park reservations was incorporated into the plan for the City of Washington (National Park Service 1951). Responsibility for the park system in the national capital was first assumed by a Federal superintendent or commissioner in charge of the city's parks and public buildings. In 1849, these responsibilities were assumed by the Department of the Interior, and would mainly fall under the purview of the United States Army Chief of Engineers throughout the latter half of the 19<sup>th</sup> century. In 1922, responsibility for maintaining the public spaces in Washington would be assumed by the National Capital Park and Planning Commission, which would be folded into the National Park Service in 1933 and 1934 (National Park Service 1951). Since then, many park reservations have been acquired by the District of Columbia, with the remaining National Park Service parks in the vicinity administered by National Capital Parks-East.

A draft cultural landscape inventory of the Pennsylvania Avenue SE corridor compiled for the National Park Service indicates that most of the park reservations in the Study Area were transferred to the District of Columbia in the 1970s (National Park Service 2016:12). This does not include Reservations 044A or 047A, both of which fall in the median of Pennsylvania Avenue SE, which were retained by the National Park Service (National Park Service 2016:10). Current parcel boundaries join Reservations 044 and 045 and Reservations 048 and 049 across the former alignment of South Caroline Avenue SE.

### *Historic Maps*

Historic maps largely show the Study Area as the intersection between Pennsylvania Avenue, South Carolina Avenue, and 8<sup>th</sup> Street SW, with no detail to suggest any improvements until the 1880s. It is one of many such open intersections spread across the city that were set aside for public recreational use. It appears to have been intended for this purpose during the initial planning stages of the city by the city's designer, Pierre Charles L'Enfant, as it appears as an open square in his 1792 *Plan of the City of Washington* (Figure 12). As laid out by L'Enfant, Pennsylvania Avenue was to run southeast to northwest the entire length of the city and pass both the Capitol Building and the President's House, making it one of the city's longest and most prestigious avenues. While L'Enfant's *Plan* comprehensively depicts the city's roadways, it does not label the individual squares that make up the majority of the city's land area. The first map to label the surrounding squares is the 1822 S.A. Eliot *Plan of the City of Washington, Seat of the Government of the United States* (Figure 13). In this map, the Study Area is still an open intersection with no discernible features within.

The 1851 *Map of the City of Washington, D.C.* depicts the location of buildings, showing that the squares just outside the Study Area had been partially developed by that time (Figure 14). The main foci of settlement in the city were set away from the Study Area, however, with more of the city build up around the Marine Barracks and Navy Yard to the south and the Capitol building to the northwest. The 1857 Boschke map of Washington provides a more detailed depiction of these structures, showing lot lines around them (Figures 15). A small wetland and body of water are shown on the eastern edge of the Study Area. Comparing the Boschke map to the 1851 map, the level of overall development appears to be fairly similar, although some buildings, notably in Squares 901 and 902, appear to have been torn down in that time. Johnson's 1862 *Map of Georgetown and Washington* shows federal buildings, but not privately-owned structures (Figure 16). No federal buildings are shown in the direct vicinity of the Study Area. Throughout the mid-19<sup>th</sup>-century maps, the Study Area appears as an open intersection with no discernible features or structures.



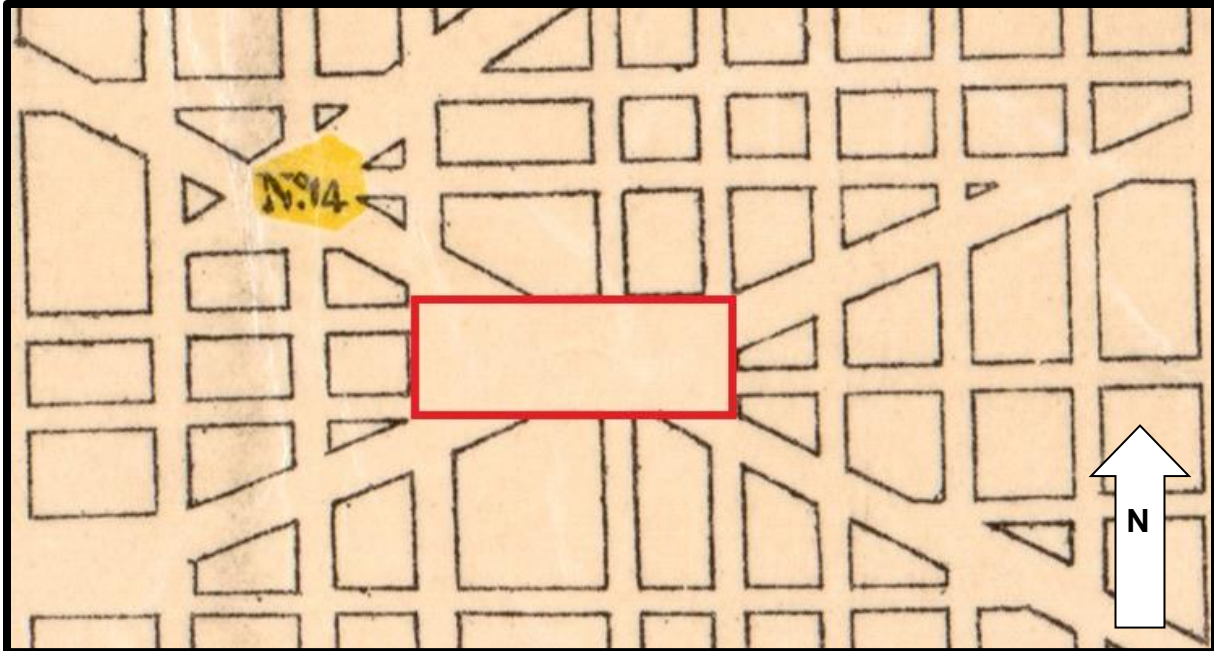


Figure 12. Detail of the 1792 L'Enfant Plan of the City of Washington showing the Study Area.

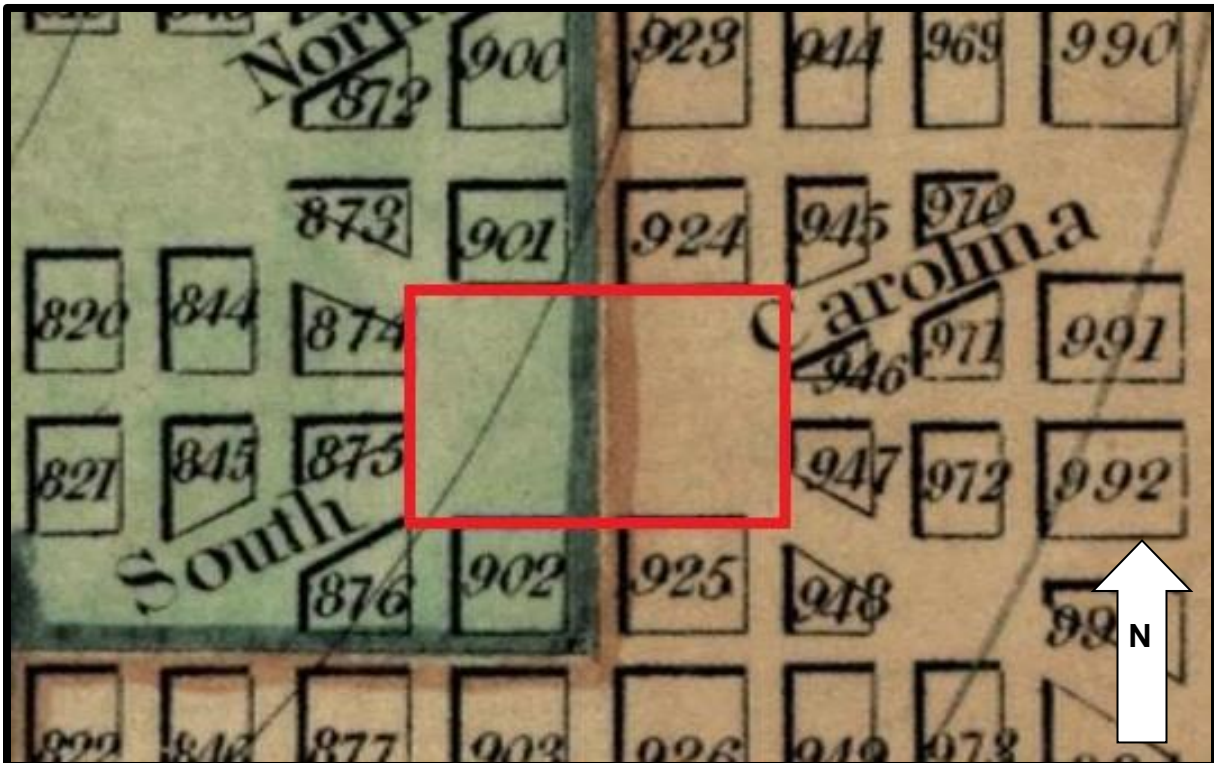


Figure 13. Detail of the 1822 S.A. Eliot Plan of the City of Washington, Seat of the Government of the United States showing the Study Area.



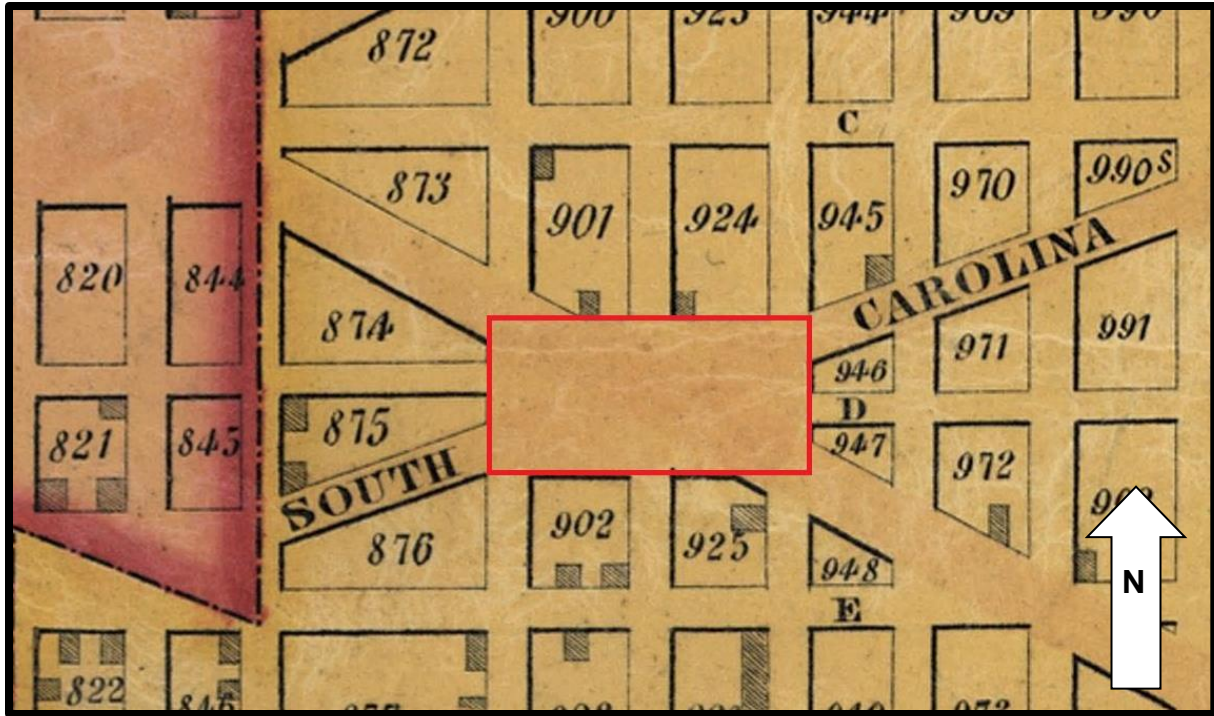


Figure 14. Detail of the 1851 *Map of the City of Washington, D.C.* showing the Study Area.

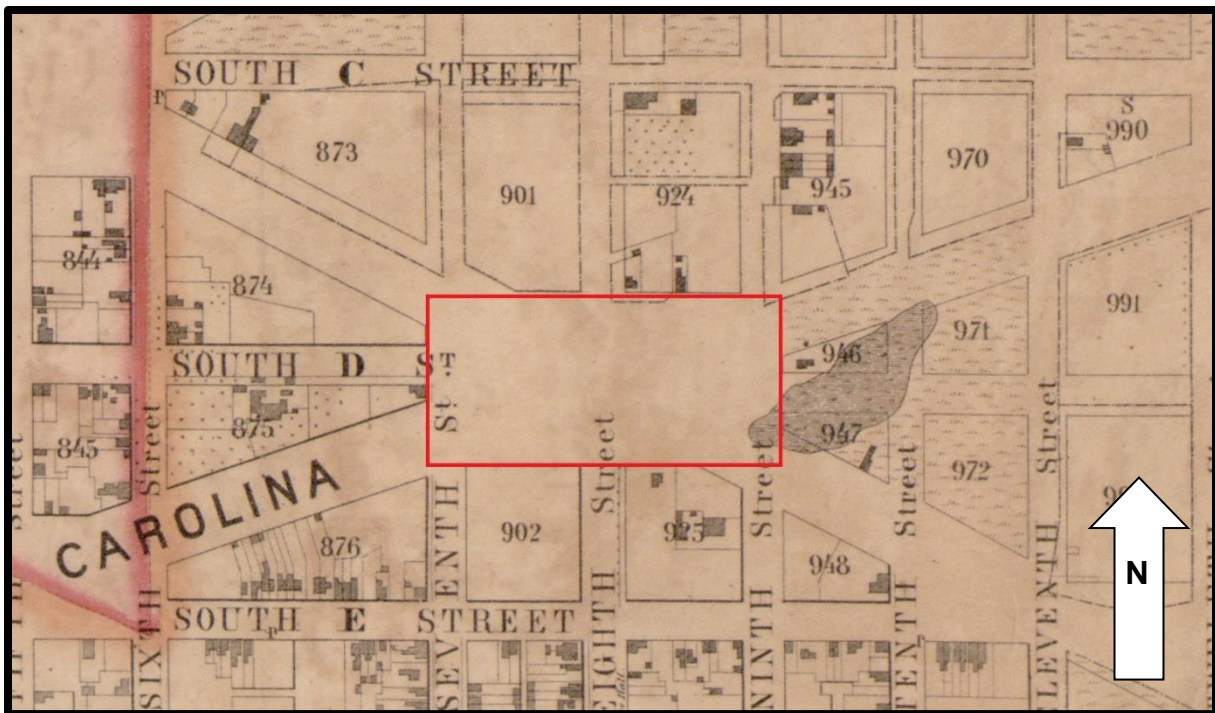


Figure 15. Detail of the 1857 *Boschke Map of Washington* showing the Study Area and surrounding structures and landscape features. This map depicts a pond and wetland just east of the Study Area.

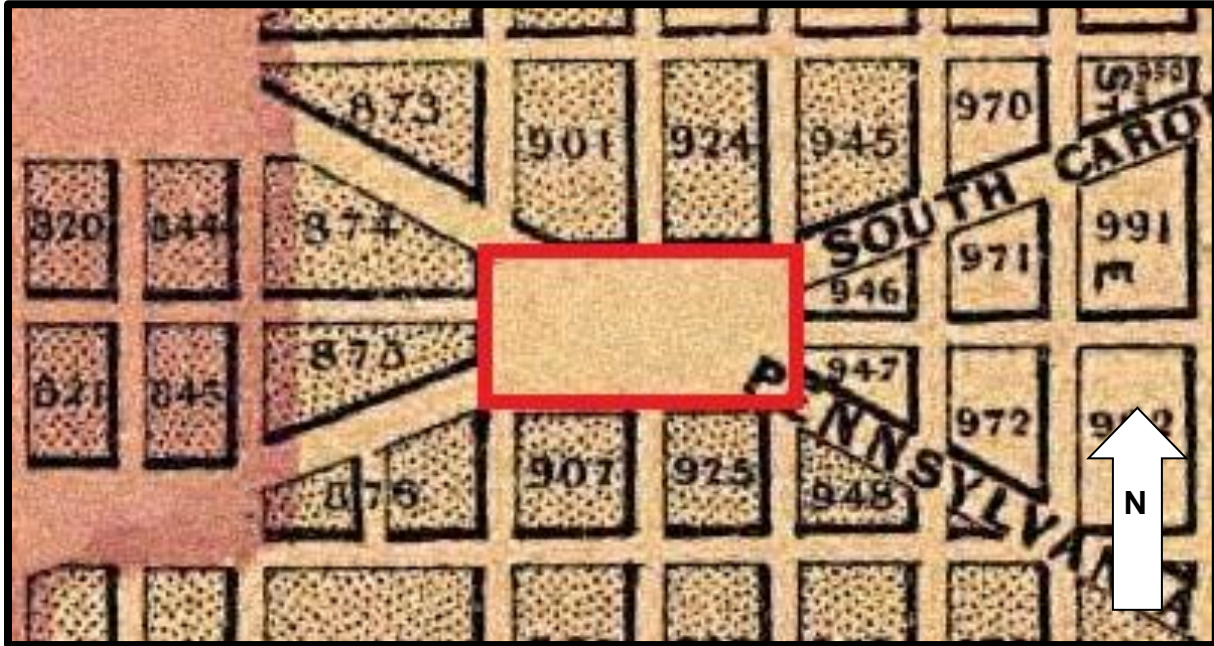


Figure 16. Detail of Johnson's 1862 *Map of Georgetown and Washington* showing the Study Area.

The first detailed map of the Study Area is the Bastert and Enthoffer 1872 *Map of the City of Washington*, where the Study Area is mainly depicted on Sheet 7 (Figures 17). Sheet 7 shows the Washington and Georgetown Railroad (labeled the Georgetown and Navy Yard Horse Railroad) entering the Study Area from the northwest and turning south to continue along 8<sup>th</sup> Street SE toward the Navy Yard. The Bastert and Enthoffer map sheets do not depict the locations of buildings, but do show property lines and contours at five-foot intervals, as well as absolute elevations at each street corner. These elevations indicate that most of the Study Area was 70-76 feet above datum. These elevations are corroborated by the later 1880 Green and Bruff City of Washington Statistical Map 2, showing the Street Grades, which again shows elevations generally between 70-76 feet (Figure 18). An 1883 isometric birds-eye drawing of the city includes the Study Area, offering the first suggestion of the specific layout of the public spaces within it (Figure 19). A birds-eye drawing is not necessarily an accurate depiction of the Study Area, but can provide a general sense of the its layout at the time. It shows the eastern portion as bare and level with the street, but the western portion has three triangular parks or planting features and a median within the right-of-way for Pennsylvania Avenue. This suggests that the modern layout of Market Park, with its triangular green spaces, may have been retained from the space's late 19<sup>th</sup>-century design.

In the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, maps of U.S. cities with detailed depictions of buildings, streets, and other urban features became more common. The Library of Congress has curated and digitized many of these maps, including the Sanborn Fire Insurance Maps and Baist Real Estate Maps. The 1888 Sanborn Fire Insurance Map does not show the Study Area, although the Study Area is shown generally in the index (Figure 20). Early 20<sup>th</sup>-century maps including the 1903 Baist Real Estate Map (Figure 21) and 1906 Sanborn Fire Insurance Maps (Figures 22-24) include a detailed view of the Study Area and the surrounding structures, revealing that



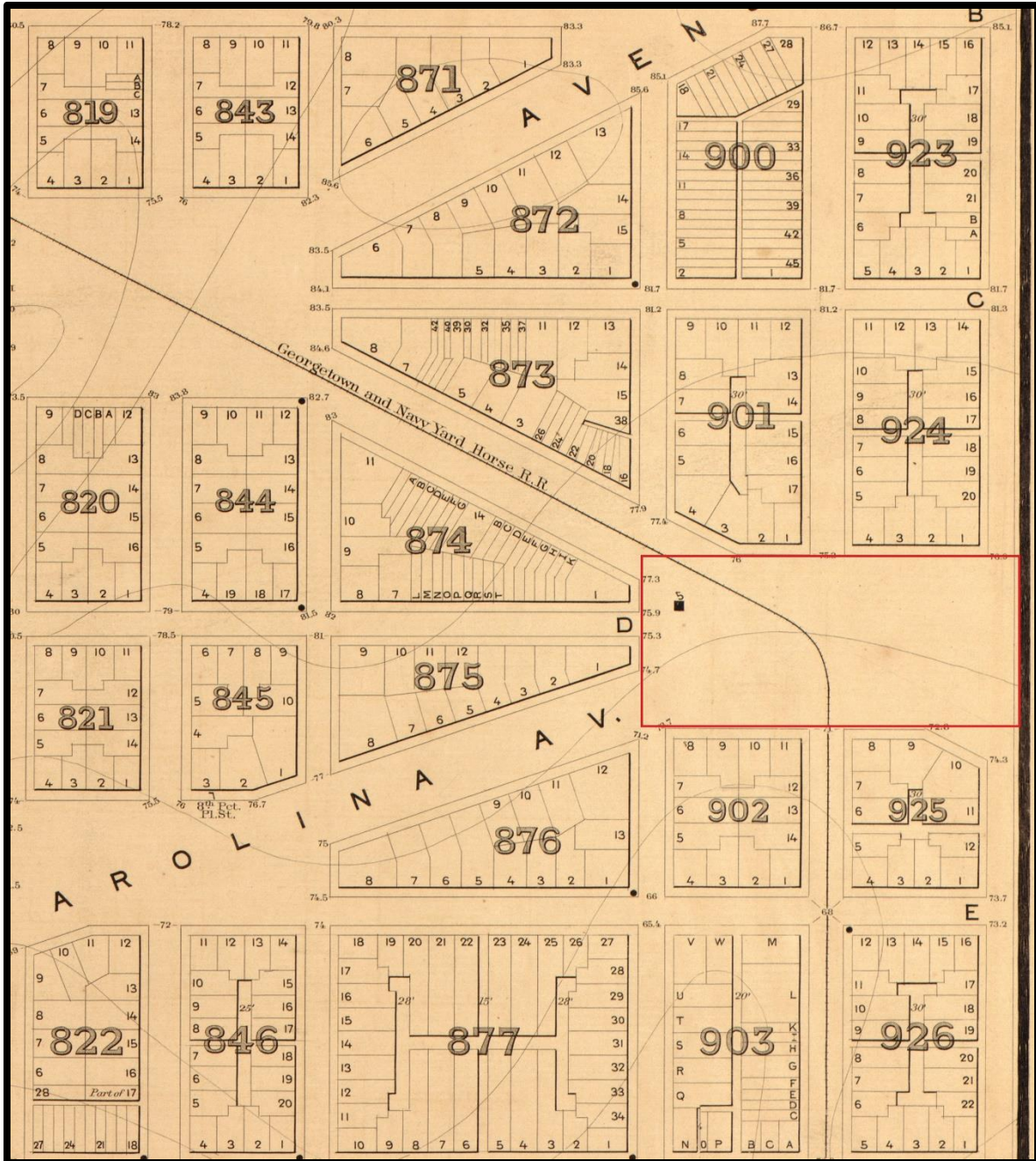


Figure 17. Bastert and Enthoffer 1872 Map of the City of Washington, Sheet 7, showing the Study Area. This map includes the Georgetown and Navy Yard Horse Railroad (also known historically as the Washington and Georgetown Railroad) running down the center of Pennsylvania Avenue SE and turning within the Study Area to follow 8<sup>th</sup> Street SE.



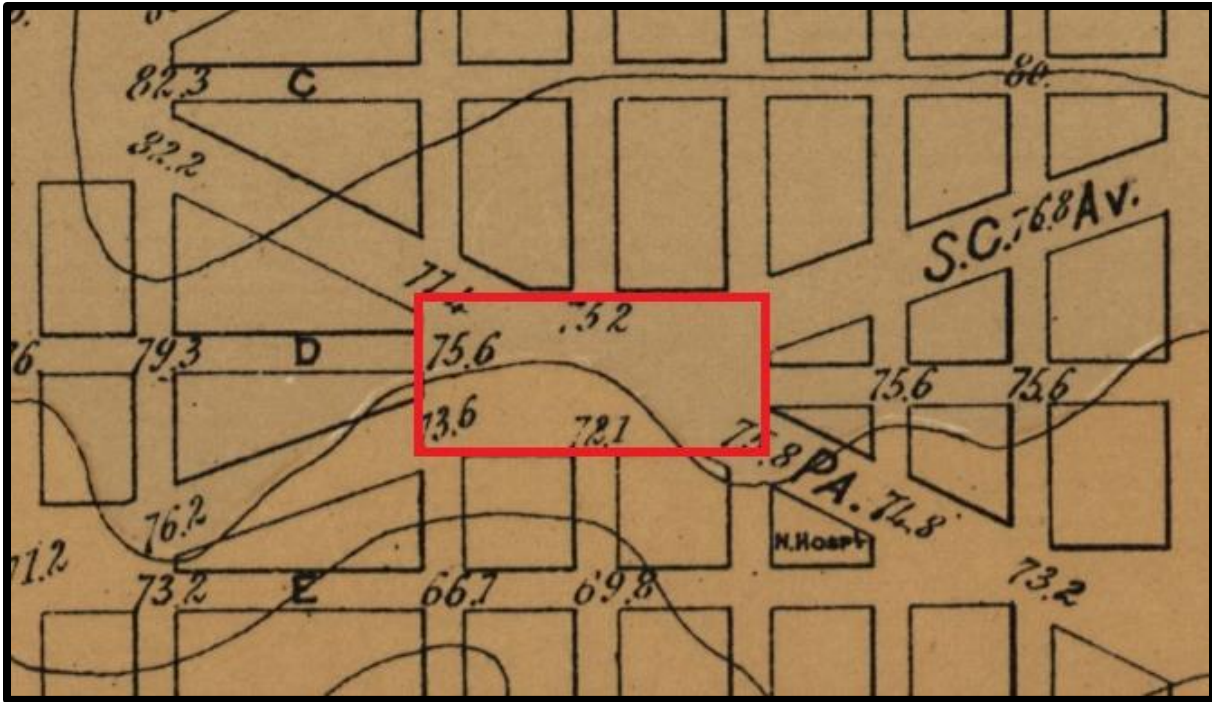


Figure 18. Detail of the 1880 Green and Bruff City of Washington Statistical Map 2, Street Grade Contours, showing the Study Area.

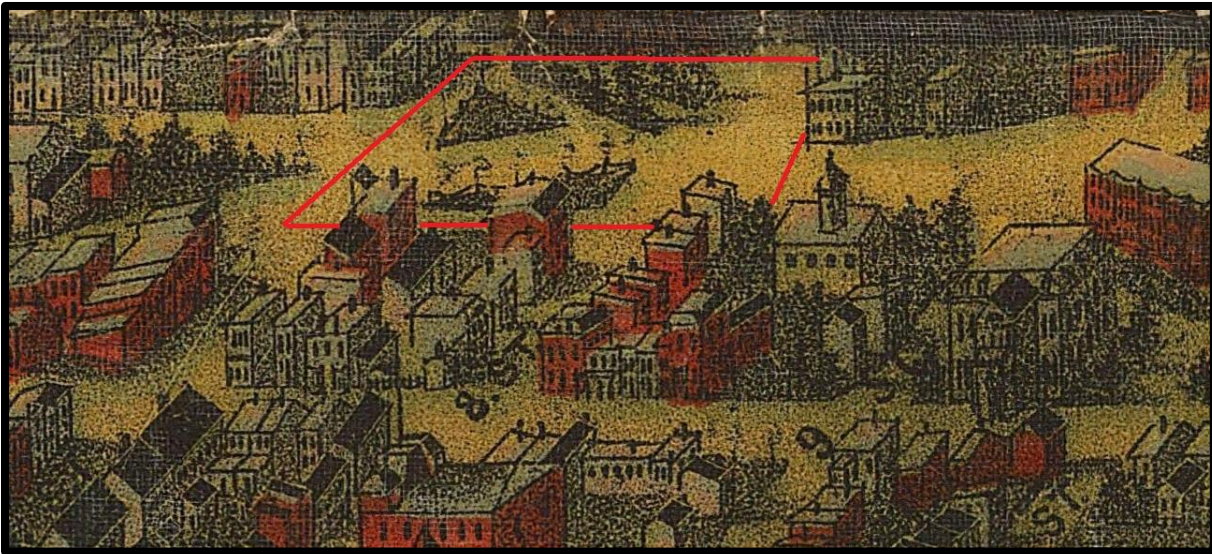


Figure 19. Detail of an 1883 isometric birds-eye drawing of the City of Washington showing the Study Area with three improved triangular park reservations and an improved median running along the center of Pennsylvania Avenue SE (Sachse 1883).



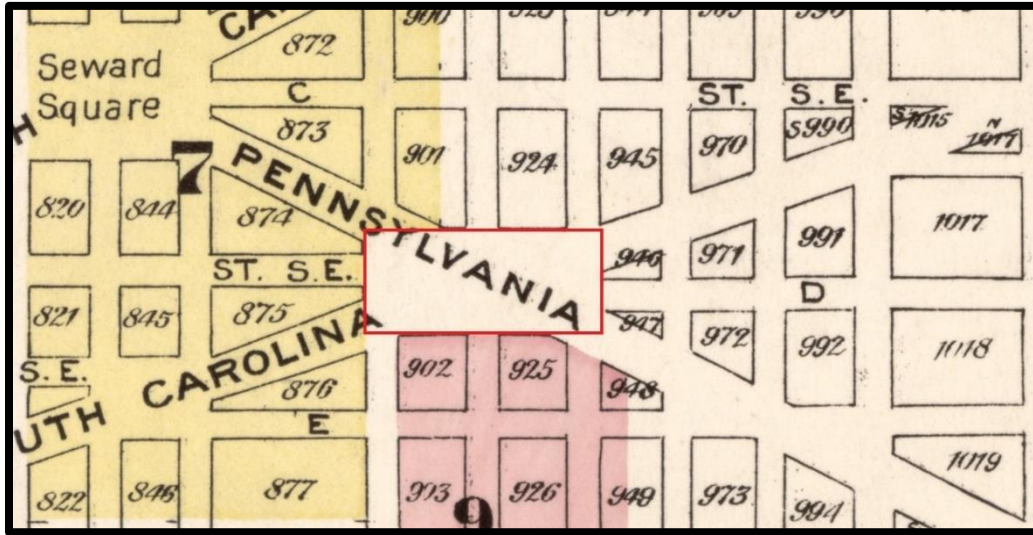


Figure 20. Index to the 1888 Sanborn Fire Insurance Map of Washington, D.C. showing the Study Area. Note that the Study Area is not present in Sheet 7 or Sheet 9 and this is the highest level of detail available on this set of maps.

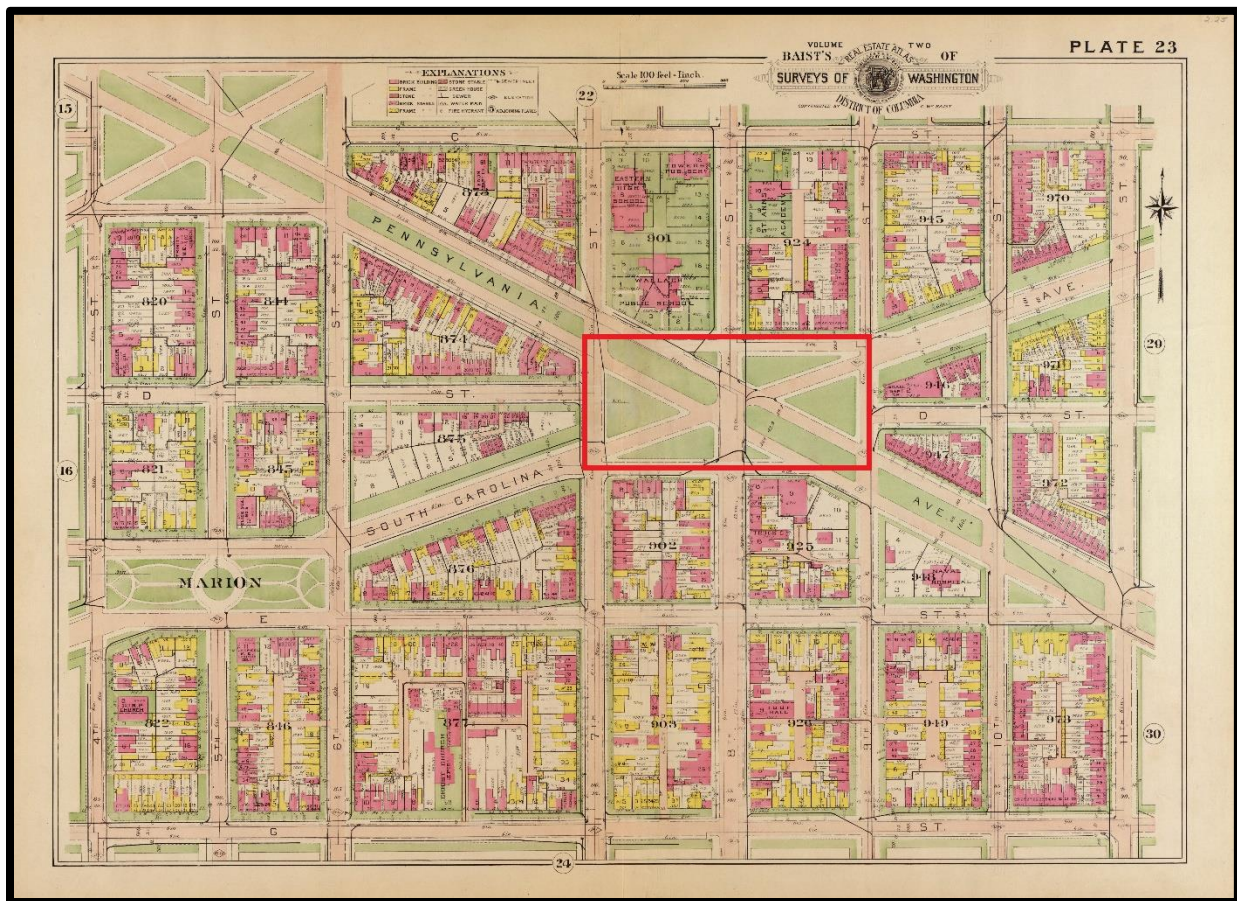


Figure 21. The 1903 Baist Real Estate Map of Washington, D.C., Plate 23, showing the Study Area.



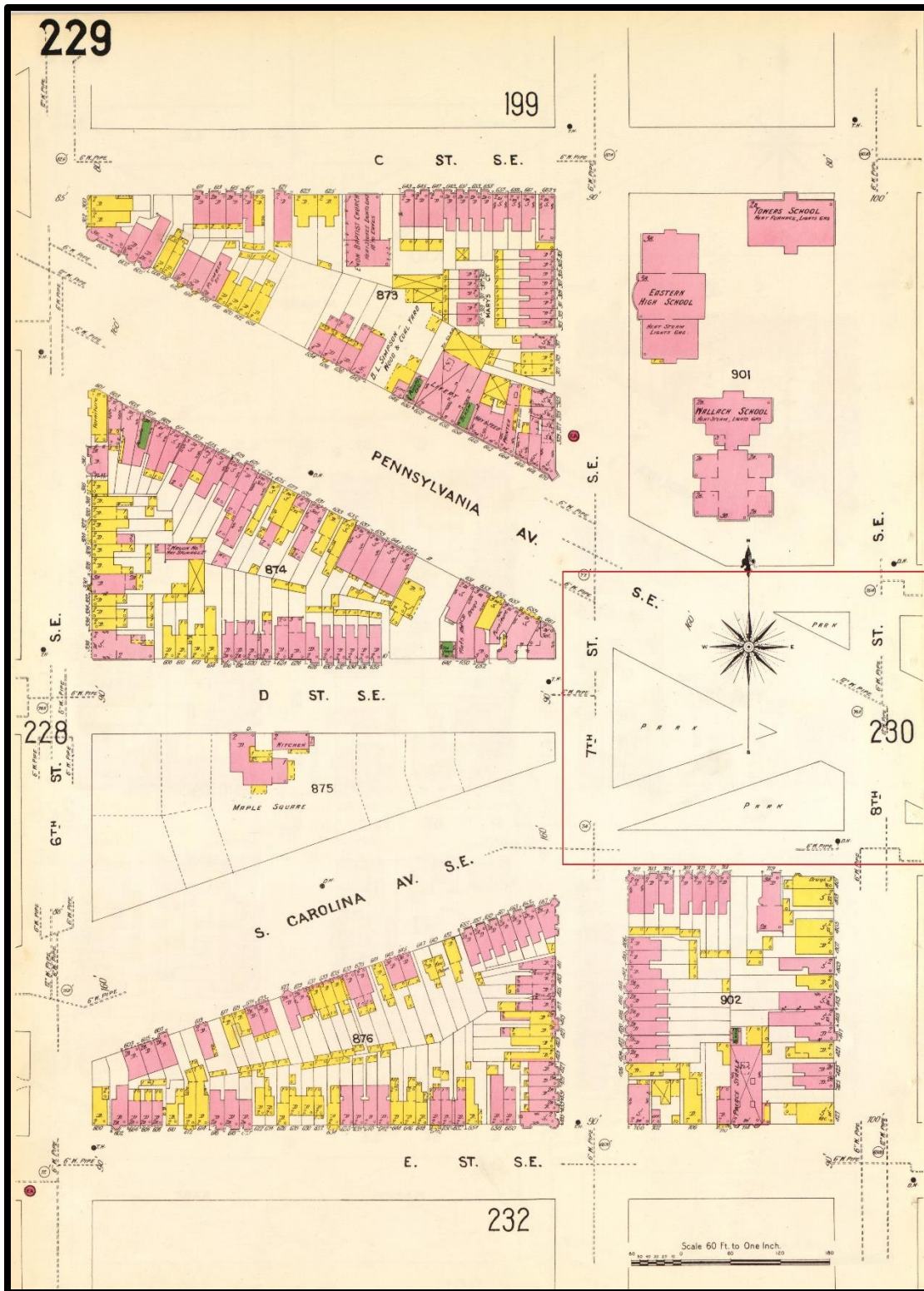


Figure 22. The 1906 Sanborn Fire Insurance Map of Washington, D.C., Sheet 229, showing the western portion of the Study Area.

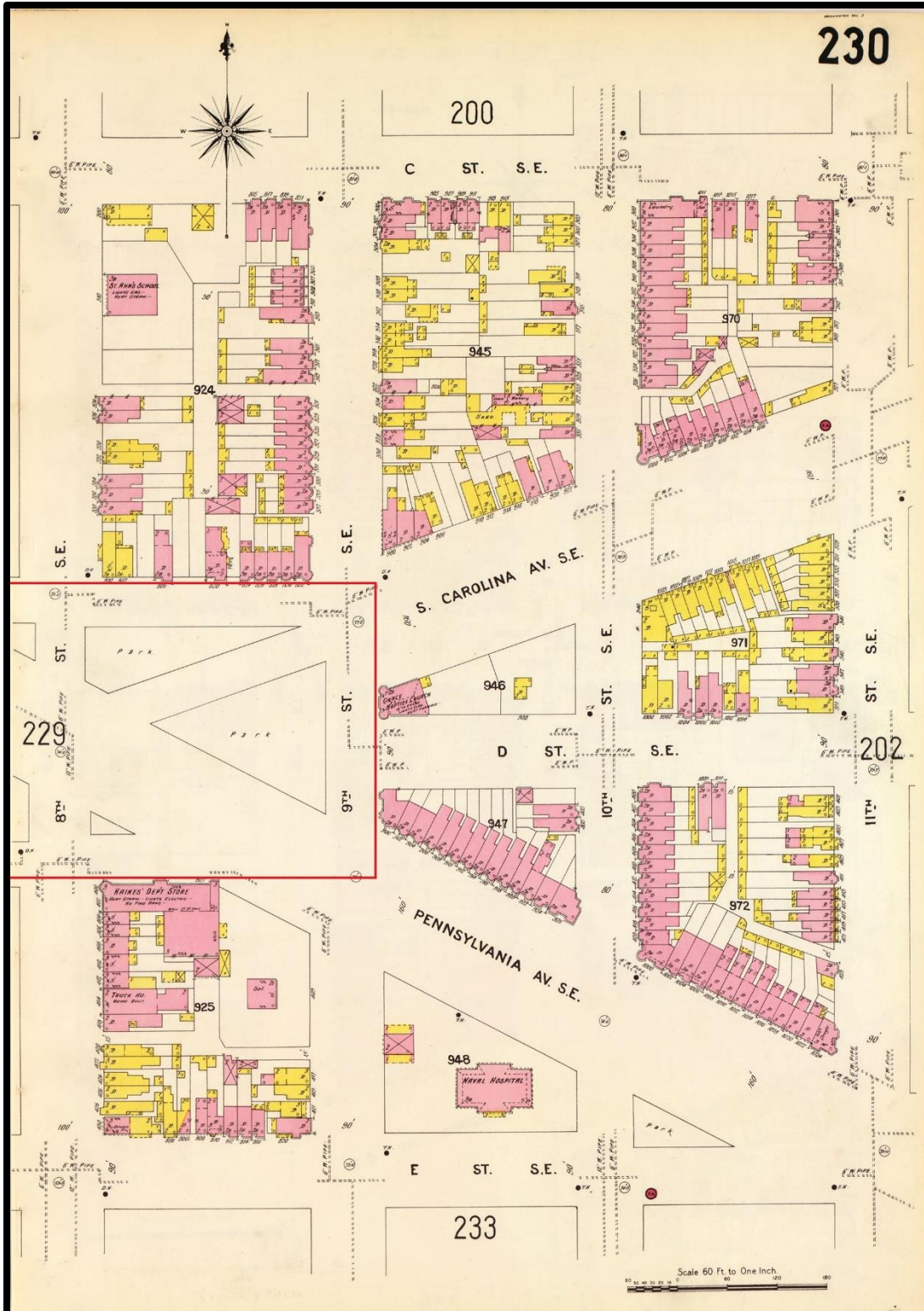


Figure 23. The 1906 Sanborn Fire Insurance Map of Washington, D.C., Sheet 229, showing the western portion of the Study Area.



by this time most of the surrounding structures were made from brick masonry (Figures 22-23). Frame buildings were also present, with larger concentrations of frame buildings located in the squares south of the Study Area. Only a small portion of the Study Area itself is shown, consisting of two triangular plots that roughly match the configuration from the 1883 isometric drawing. Both Sheet 23 of the 1903 Baist Real Estate Map and Sheets 229 and 230 of the 1904 Sanborn Fire Insurance Map depict the full Study Area, showing triangular park reservations separated by roadways. In all late 19<sup>th</sup>- and early 20<sup>th</sup>-century maps, South Carolina Avenue extends the entire way across the Study Area. This contrasts with its modern alignment, where it ends at Eastern Market Metro Park's northeast corner and resumes at the southwest corner.

USGS maps from the late 19<sup>th</sup> and early 20<sup>th</sup> centuries show less detail than the Bastert and Enthoffer Map or the Sanborn Fire Insurance Maps. Early topographic maps do not show individual buildings surrounding the Study Area, but do continue to show it as open space at the intersection of Pennsylvania Avenue and South Carolina Avenue. The 1899 and 1906 USGS *Patuxent, Maryland* quadrangles include the Study Area, but not in sufficient detail for features within the Study Area to be discerned (Figures 24-25). The 1900 USGS *Washington, MD* quadrangle does show a general outline for structures around the Study Area, but again does not show features within it (Figure 26). In the 1945 USGS *Washington East* quadrangle, the Study Area is shown in more detail, with both Pennsylvania Avenue and South Carolina Avenue extending across the corners separating triangular reservations like those depicted in the 1883 isometric drawing and Sanborn Fire Insurance maps (Figure 27). USGS maps show no significant changes in the Study Area between the 1945 and 1988, the last year from which historic USGS maps are available for the Study Area (Figure 1).

Historic aerial photographs of the Study Area from 1949, 1951, 1957, 1963, 1964, and 1980 were consulted as part of the analysis. Each of the pre-1980 aerial photographs show that the Study Area contains six triangular park reservations that closely correspond with the Baist Real Estate Map, Sanborn Fire Insurance Map and the mid-20<sup>th</sup>-century USGS maps. These reservations are separated by the rights-of-way of Pennsylvania Avenue, South Carolina Avenue, and 8<sup>th</sup> Street SE. South Carolina Avenue appears to narrow as it crosses the Study Area. Most of these aerials show these triangular areas as parks edged with deciduous trees. Additionally, streetcars and streetcar tracks are clearly visible in the Study Area on the aerials from 1949 and 1951. The configuration of the parks does not change until 1980, after the Eastern Market Metro Station was constructed. This resulted in a major reorganization of the park space, with the most obvious changes being the addition of the metro station entrance along the eastern edge of the Study Area and the conversion of the former South Carolina Avenue alignment into two broad paved footpaths. The trees lining the parks had been removed and grass planted in their place. The removal of the existing trees would have been necessary during the cut-and-cover construction of the Blue Line and Eastern Market Metro Station. Additionally, the streetcar line had been removed from the median of Pennsylvania Avenue and replaced by a grassy median. This layout has been maintained in the Study Area ever since, with the addition of new trees and bushes in the grassy areas.

#### *Public Transit in the Study Area*

The Study Area's placement at the intersection of Pennsylvania Avenue, South Carolina Avenue, and 8<sup>th</sup> Street SE has rendered it an important transportation artery since the inception of the city. The Study Area's association with public transportation began in the early 19<sup>th</sup>-century and continues to the present day. The original L'Enfant Plan of Washington, D.C. set the Study Area aside as public space at this intersection, one of several planned public spaces along the Pennsylvania Avenue southeast of the Capitol Building. Pennsylvania Avenue

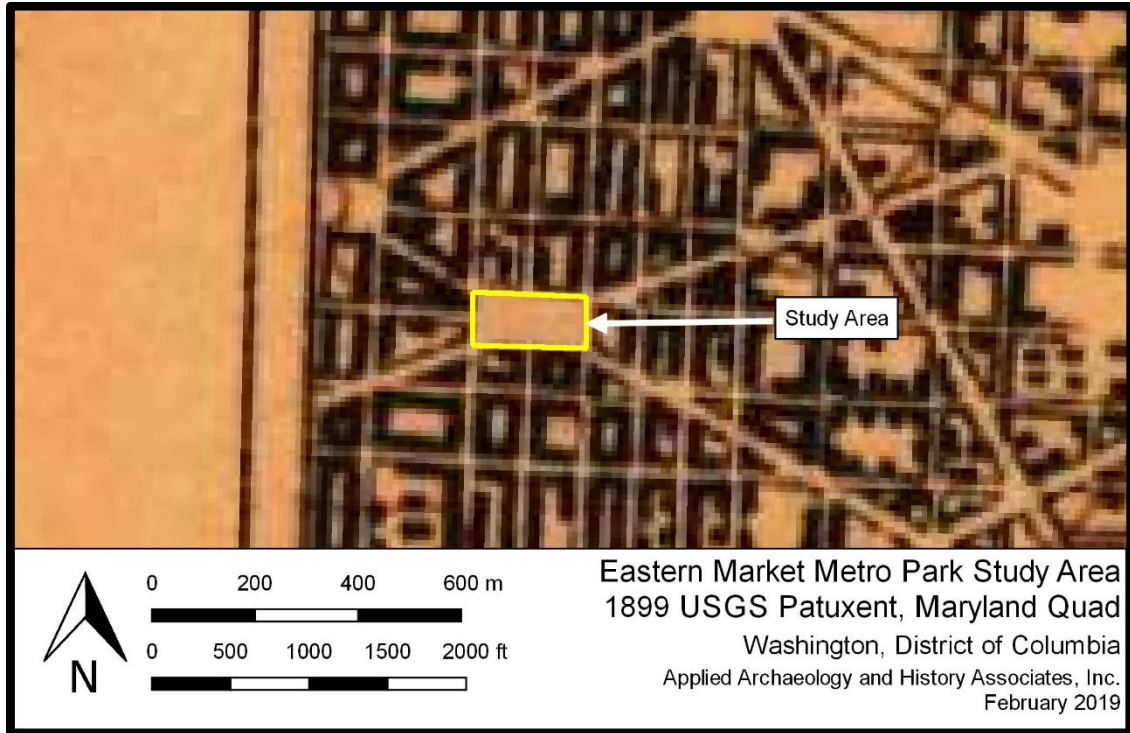


Figure 24. Detail of the 1899 USGS *Patuxent, Maryland* Quadrangle showing the Study Area.

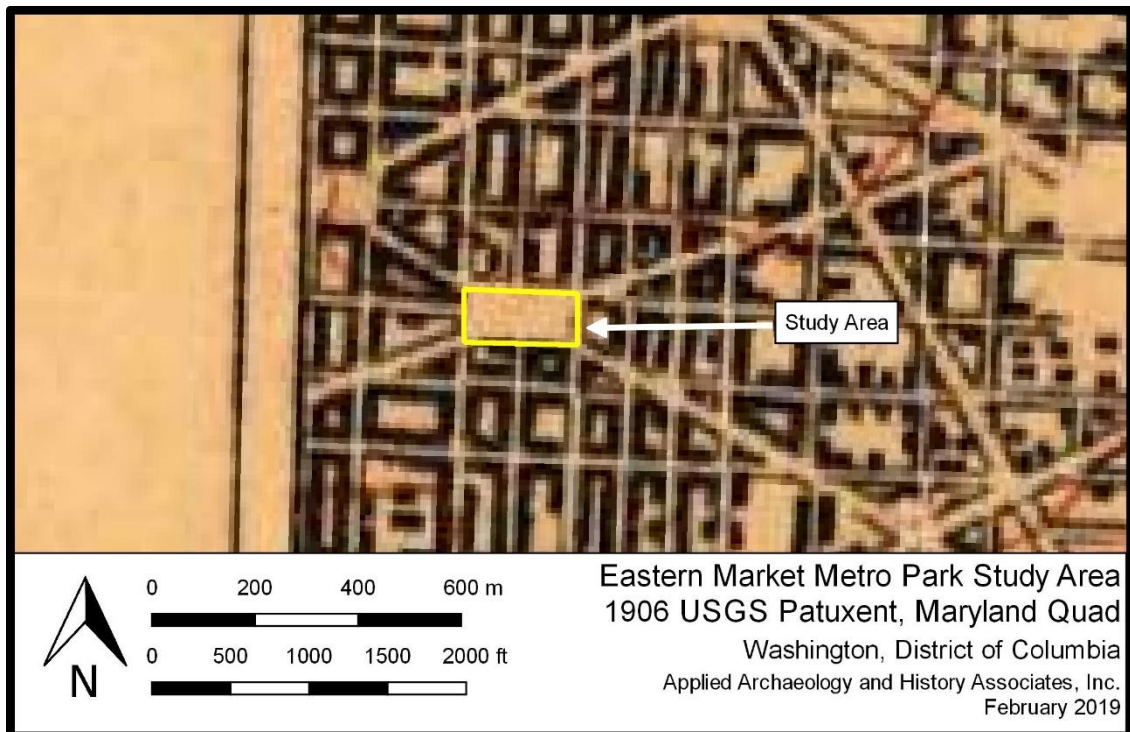


Figure 25. Detail of the 1906 USGS *Patuxent, Maryland* Quadrangle showing the Study Area.



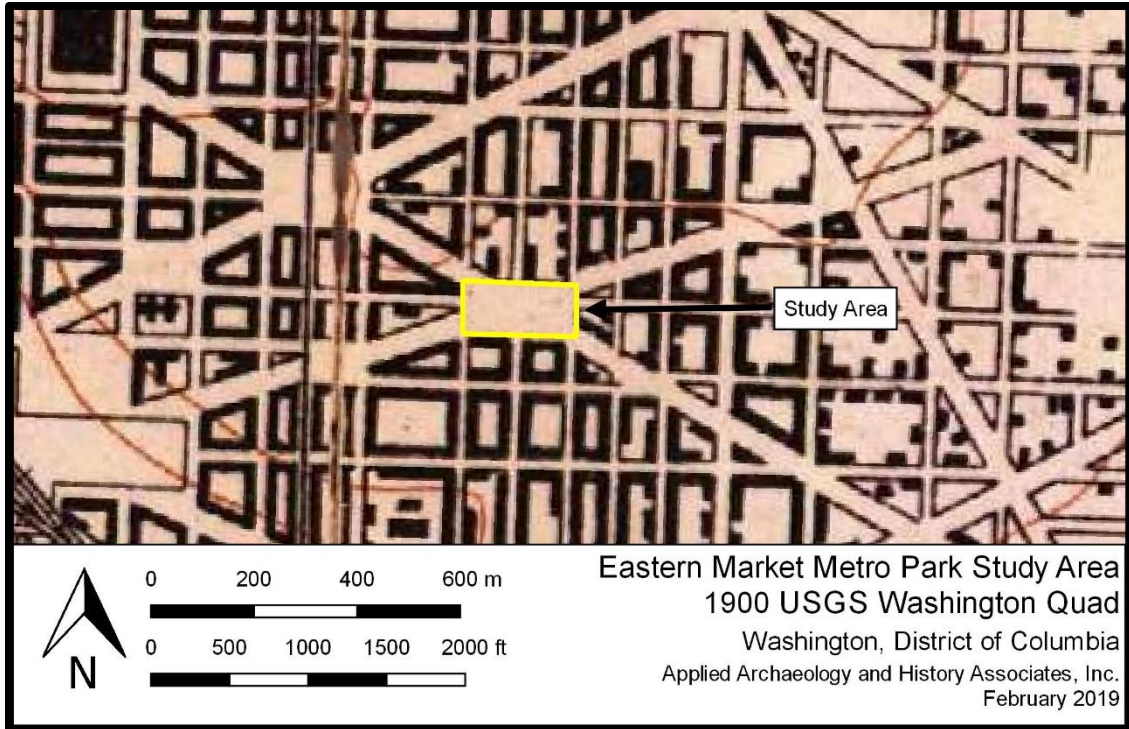


Figure 26. Detail of the 1900 USGS Washington Quadrangle showing the Study Area.

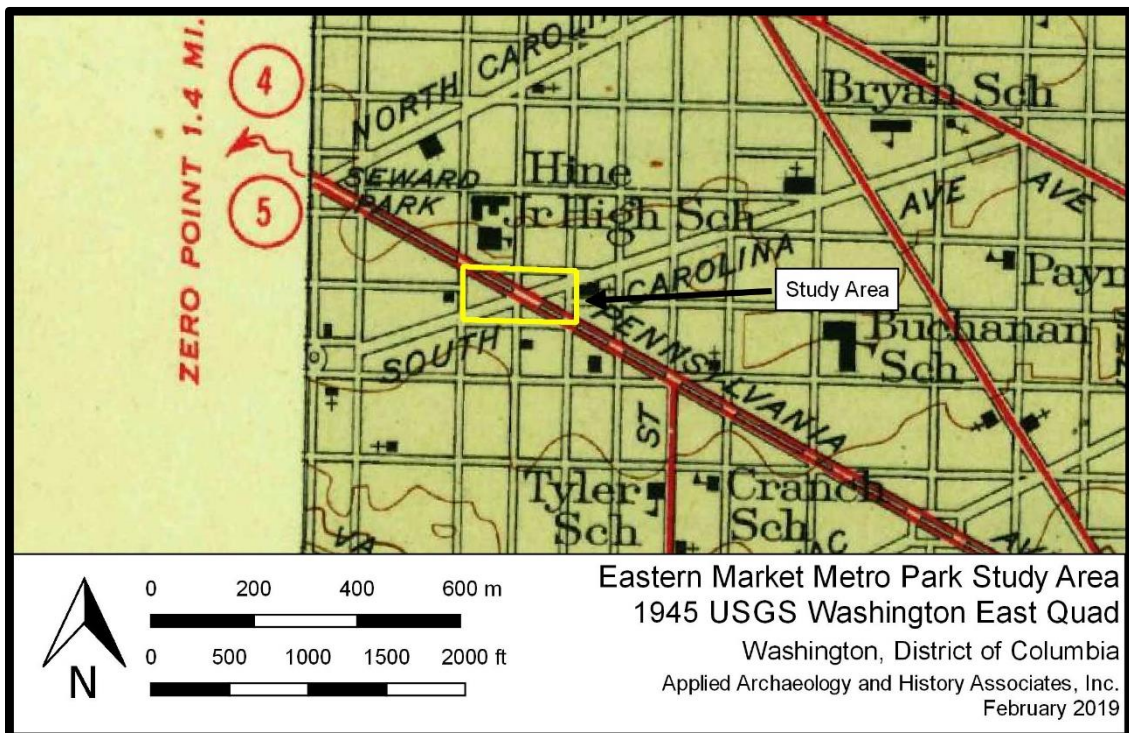


Figure 27. Detail of the 1945 USGS Washington East Quadrangle showing the Study Area.

became one of Washington's busiest thoroughfares in the early 19<sup>th</sup> century, and by 1830 public passenger transportation was operating between Georgetown and the Navy Yard (Tindall 1917:25-27). The omnibus, as it was called, consisted of horse-drawn carriages following Pennsylvania Avenue until it reached the Study Area, where it turned south toward the Navy Yard along 8<sup>th</sup> Street SE.

Washington's first street railroad, the Washington and Georgetown Railroad, was incorporated in 1862 and followed the earlier omnibus route (Tindall 1917:27; Figure 17). The Washington and Georgetown Railroad was built to the standard gauge of the Baltimore and Ohio Railroad and operated horse-drawn carts along the course of its tracks. These tracks were made from strap-rails, consisting of a flanged iron surface nailed to a wooden stringer that rested on wooden crossties (Tindall 1917:59). The railroad line more or less followed the center lines of Pennsylvania Avenue and 8<sup>th</sup> Street SE. In the ensuing years, the Washington and Georgetown Railroad would construct additional lines connecting other parts of the city, none of which were located in or near the Study Area. The 1872 Bastert and Enthoffer Map of Washington, D.C. (sheet 7) shows the Washington and Georgetown Railroad line (labeled Georgetown and Navy Yard Horse Railroad) heading southeast along Pennsylvania Avenue from the Capitol and turning south along 8<sup>th</sup> Street SE (Bastert and Enthoffer 1872a).

Horse-drawn streetcars operated on the Washington and Georgetown line until 1890, when they were replaced by underground cable propulsion (Tindall 1917:54). The Washington and Georgetown had created a steam-powered car two decades earlier that sometimes ran on Pennsylvania Avenue, but it was only brought out as a novelty and never put into permanent service (Tindall 1917:51). Horse-drawn cars for public transit were slowly phased out between 1889 and 1894, when they were outlawed in the District (Tindall 1917:56). During this time, the Washington and Georgetown's original rails were replaced with a flat-grooved rail to bring it in line with new District regulations (Tindall 1917:59). While the installation of underground cables and new, heavier rails would have impacted archaeological resources within the Study Area, it would have been largely restricted to the area directly beneath the tracks, which fell within the current median of Pennsylvania Avenue and the current 8<sup>th</sup> Street SE right-of-way.

The Washington and Georgetown Railroad was one of nearly a dozen streetcar companies operating in D.C. in the 1880s and 1890s. Over the course of the early 20<sup>th</sup> century, these individual companies would go through a complicated series of mergers and acquisitions. The Washington and Georgetown merged with Rock Creek Railway in 1895, forming the Capital Traction Company. In 1933, the Capital Traction Company merged with the Washington Railway and Electric Company to form the Capital Transit Company, which controlled the entirety of Washington's streetcar network. The Capital Transit Company was dissolved in 1956 and its assets were sold to O. Roy Chalke, who agreed to cease streetcar operations in favor of buses. Chalke's company was called DC Transit, which discontinued streetcar service in 1962 and was ordered to dismantle the tracks. Rather than do so, Chalke simply paved over them (Shrag 2006:149). Most of DC Transit's assets were acquired by the newly created Washington Metropolitan Area Transit Authority (WMATA) in 1973.

The public space containing the Study Area remains an integral part of Washington's public transit network, with the Eastern Market Metro Station opening on July 1, 1977 (Feaver 1977). The Eastern Market Metro Station originally opened to serve the Blue Line, which ran approximately 12 miles between RFK Stadium and National Airport. The Blue Line was one of the original lines planned by WMATA and construction commenced in 1969, concurrently with the Red Line. The portion of the Blue Line containing the Study Area roughly follows the center line of Pennsylvania Avenue SE and would probably have required the rerouting of several

buried utilities. The Eastern Market Metro Station was initially given the name Marine Barracks, but pushback from the surrounding neighborhood caused it to be named for the Eastern Market, a historic commercial structure on 7<sup>th</sup> Street SE (Feaver 1978).

Construction of the early Metro tunnels was largely undertaken by cut-and-cover techniques, in which the tunnel was laid in a single massive excavation that was filled back over when it was finished. This was augmented by a boring machine, which contemporary sources called a “cookie cutter” or a “Big John” (Shrag 2006:147). Because it was significantly less expensive than boring, cut-and-cover techniques were generally employed on public land like the Study Area, particularly in the part of the city on the Atlantic Coastal Plain. An attempt was made to obtain records of the Eastern Market Metro Station’s construction, but these records could not be located. A 1973 environmental impact survey indicates that the Eastern Market Metro Station would be located in a cut-and-cover tunnel and the remainder of the park area would be closed and used as a staging area (WMATA 1973:96, 199).

### *Cut-Fill Analysis*

A GIS cut-and-fill analysis was employed to assess areas that have been cut or graded, areas that had been filled, or areas that remained relatively the same. A GIS cut-and-fill analysis calculates changes to a landscape’s elevation over a period of time. We used the “Interpolation” and “Raster Calculator” tools in QGIS 3.4.4 to compare elevations from the 1872 Bastert and Enthoffer Map of Washington, D.C. (sheets 7 and 8), with five (5) ft. contour lines, against the current DC GIS two (2) foot topographic contour lines data layer resulting in a Digital Elevation Model (DEM) showing values of change between the two periods. This shows areas of cutting, filling, or little change. The elevation range is displayed as a color ramp with green representing a filled area, red representing cutting or grading, and yellow representing little to no change. All elevation ranges are shown in feet, plus (+) for fill and negative (-) for cut/graded with a  $\pm$  three (3) feet to account for the change in vertical elevation change between time periods.

According to Katz *et al.* (2013), the way in which vertical elevations have been measured has changed over the years. Until 1899, elevations in the District of Columbia were tied to the half-tide level of the Potomac River measured at gauges in the District. A national vertical datum was established by the Coastal and Geodetic Survey in 1899 and revised in subsequent years. An updated national vertical datum was established in 1929 (the National Geodetic Vertical Datum of 1929) and then revised in 1988 (the North American Vertical Datum of 1988). To account for the series of changes, and in accordance with guidance from professional surveyors, the 1872 elevations were subtracted by 2.2 feet when they were compared with the current elevations (Katz *et al.* 2013:18, footnote; Report 531).

This comparison revealed elevations across the Study Area have generally increased by 1.5 to 3.0 ( $\pm$ 3) feet (Figures 28-29). The level of infilling is relatively consistent, with slightly higher levels in the southeast and southwest corners of the Study Area. This is an expected outcome given the Study Area’s function as a public park space and street intersection in L’Efant’s original plan for Washington, D.C., and its continued recreational and transportation usage to the present. Two small portions of the Study Area along D Street SE show negative elevation changes, indicating that limited cutting activity has taken place. It should be noted that the positive elevation changes across the Study Area Pennsylvania Avenue probably do not represent fill episodes over intact soils. The presence of the Blue/Orange/Silver Line and the Eastern Market Metro Station, which were probably constructed using the cut-and-cover method, indicates extensive disturbance beneath the overlying fill.

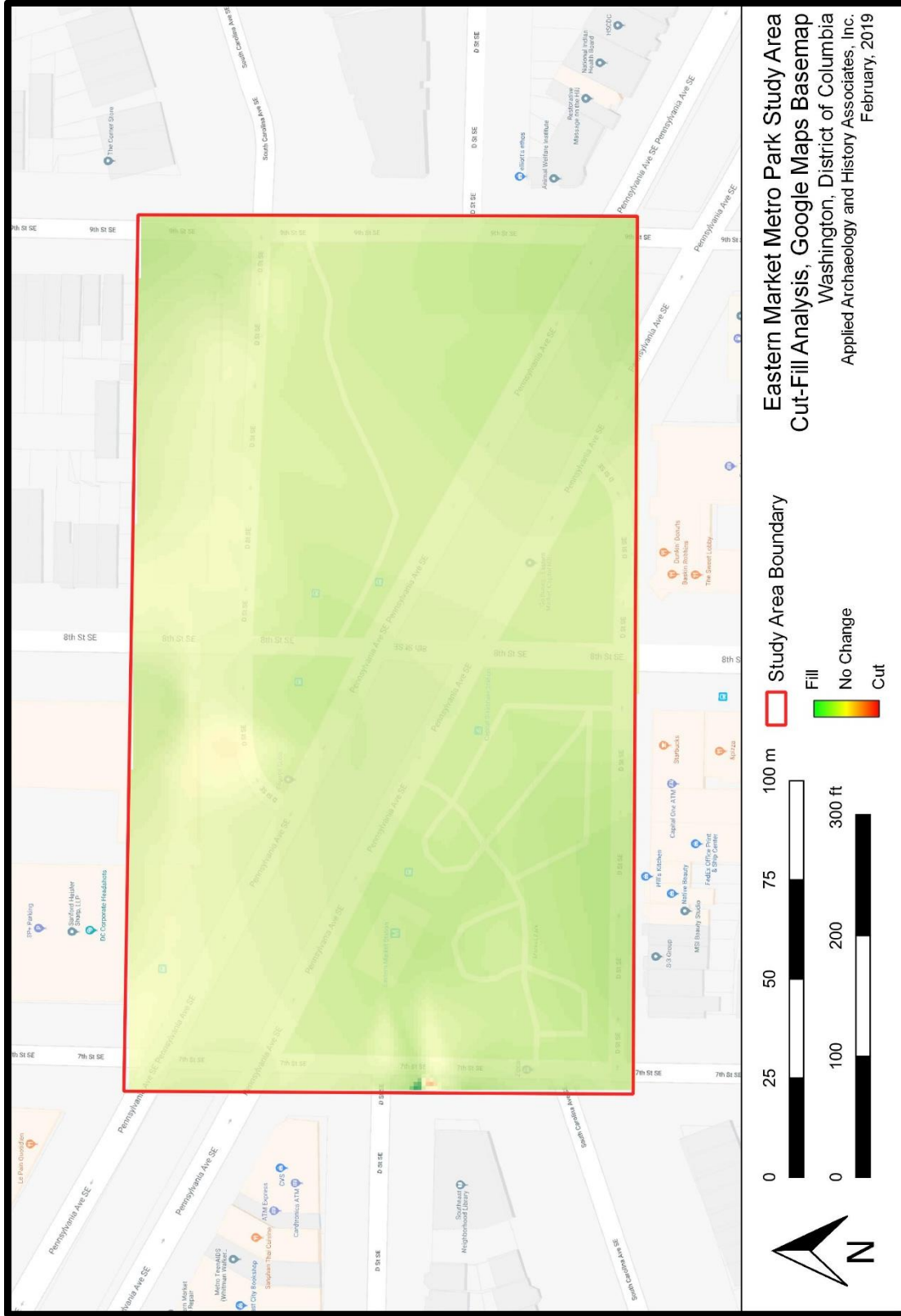


Figure 28. Cut-and-fill map showing difference in elevation between 1872 and 2016 ground levels (20% transparency) over a Google maps basemap.



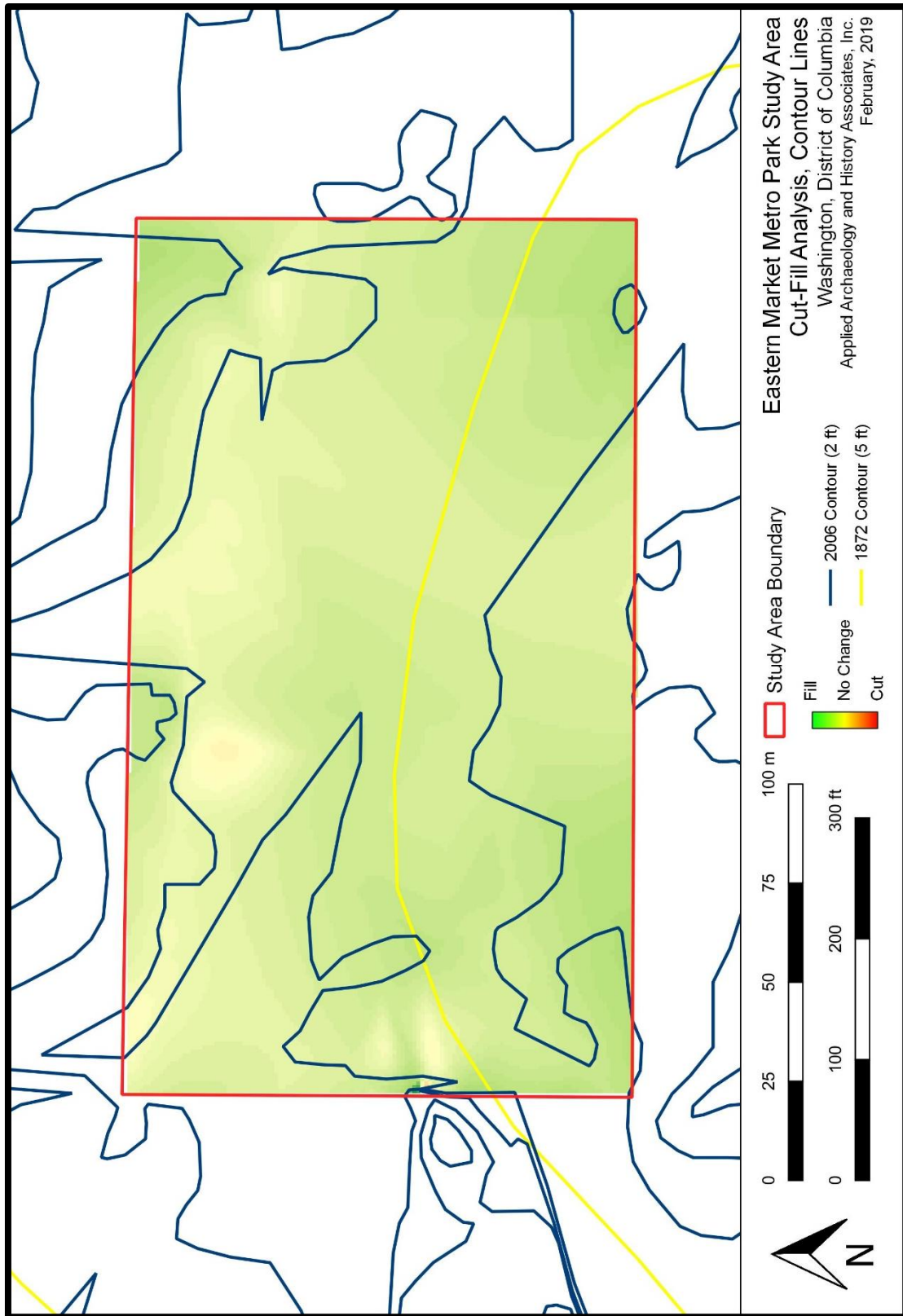


Figure 29. Cut-and-fill map showing difference in elevation between 1872 and 2016 ground levels (no transparency) with five-foot 1872 contours and two-foot 2006 contours.



*Previous Research and Recorded Sites*

There are five identified archaeological sites within one-quarter mile of the Study Area, all of which postdate the mid-19<sup>th</sup> century. The Old Naval Hospital Site (51SE037) is associated with the Old Naval Hospital, located just southeast of the Study Area on Pennsylvania Avenue SE. Two of these sites, the Commandant’s House Marine Barracks (51SE068) and Cistern, Marine Barracks, on parade near Quarters 1 (H040), are associated with the Marine Barracks two blocks south of the Study Area. One unnamed historic cemetery (H66) within one-quarter mile of the Study Area has not been relocated and is only known from a Washington Post article.

**TABLE 1. ARCHAEOLOGICAL SITES WITHIN ONE-QUARTER MILE OF THE STUDY AREA**

Reprinted from Eastern Market Metro Park, Project Data Request – Archaeology (Troccoli 2018)

Site Number	Location	Report #	Reference	Site Name	Project	Site Type	NRHP Status	Time Period
51SE037	Old Naval Hospital	258, 420	Koski Karrel 1994; Harris 2010	Old Naval Hospital	Youth Services; Hill Center	H	NR-listed	1865-1963
51SE068	Commandant’s House Marine Barracks, 801 G St	N/A	NA – Unanticipated Discovery	Commandant’s House	House rehab	H	Eligible	1840-1912
51SE076	1229 E St, SE	686	DC HPO 2015	The Shotgun House	The Shotgun House Archaeology Project	H	Not evaluated	Mid-19 <sup>th</sup> to 20 <sup>th</sup> century
H040	Cistern, Marine Barracks, on parade near Quarters 1	376, 209	Bryant 2001; Tunderbird 1998	Marine Barracks Cistern	Marine Barracks unanticipated discovery	H	NHL	Post-1900
H66	150 11 <sup>th</sup> St. SE	N/A	Washington Post article (dated 7-17-1971)	Unnamed	N/A	H	Not relocated, unevaluated	Historic Cemetery, 1890-1920

A number of formal archaeological investigations have taken place within one-quarter mile of the Study Area (Table 2).

In 1979, Jonathan Haas of the Smithsonian Institution undertook an archaeological investigation at the south foundation of the Friendship House (Haas 1979). This work was done in advance of a planned trench that would waterproof and stabilize the basement of the Friendship House, which was built in 1796. The excavation included ten grid squares measuring 100 cm by 50 cm along the foundation and found that the proposed trench would have no impact on surviving features or deposits relating to the historic occupation of the house. In 2011, Greenhorne and O’Mara, Inc. conducted a Phase IB archaeological survey of the Friendship House Property and the adjacent Maples Property (Kreisa 2011). This investigation also did not reveal any potentially significant archaeological deposits.

In 1984, Thunderbird Research Corporation conducted a Phase I survey of 19 District of Columbia playgrounds administered by the Department of Recreation (Henley 1984). This work was conducted in advance of any project the Department of Recreation might undertake at these 19 playgrounds and by modern standards would be considered a Phase IA intensive background research, as limited subsurface testing was conducted. Most of these playgrounds were recommended for further testing, including the Virginia Avenue Park playground, which is located south of the current Study Area.

In 1994, R. McGhee and Associates, Robinson and Associates, and Karell Archeological Services conducted an archaeological investigation of the Old Naval Hospital (Koski-Karell 1994). The archaeological study consisted of controlled surface collection and two test units measuring 3 ft by 3 ft. This investigation resulted in the identification of the Old Naval Hospital site (51SE037), which was recommended as a contributing resource to the Old Naval Hospital. This site is located a short distance southeast of the Study Area.

In 1995, Edward Otter conducted an archival and archaeological investigation at the Ellen Wilson Dwellings in Square 878 in Southeast Washington, D.C. (Otter 1995a; 1995b). The Ellen Wilson Dwellings were constructed as low-income housing in the 1940s on the site of a former lower- and middle-class neighborhood that was first occupied in the 1850s. Otter's background research revealed that photographs were taken of the area before and after the low-income housing was constructed. These photographs documented significant ground disturbance that resulted from that construction project, destroying any archaeological resources that may have been present.

In 1999, Thunderbird Archaeological Associates, Inc. conducted a Phase I survey of portions of the Marine Barracks Facility (Gardner *et al.* 1999). The Marine Barracks are located south of the current Study Area. Subsurface testing was limited to two areas where ground alterations were thought to be least intrusive, but neither of these two areas exhibited buried surfaces and no potentially significant archaeological deposits were encountered. A later project resulted in the unanticipated identification of a historic cistern on Marine Barracks Facility (Bryant 2001). The cistern was located in the barracks' parade ground near the Quarters 1 building.

In 2009 and 2010, EAC/A, Inc. conducted an archaeological investigation of the Old Naval Hospital property (Harris and Comer 2011). This investigation consisted of shovel test pits placed at 25-ft intervals across testable areas of the property and 12.5-ft intervals along the edges of the property. This investigation revealed that much of the Old Naval Hospital property had been disturbed in the early 20<sup>th</sup> century, resulting in two historic cultural strata. The first contained a mixture of 19<sup>th</sup>- and 20<sup>th</sup>-century material and was interpreted as fill or plowed soil. The second contained predominantly 19<sup>th</sup>-century material, but was noted as having been disturbed by infilling and compaction.

In 2011, John Milner Associates, Inc. conducted a Phase IB survey along the CSX Virginia Avenue Tunnel in Reservations 122 and 126 (LaVigne *et al.* 2011). The field investigation consisted of six Geoprobe cores across the two reservations, indicating that both reservations had been cut and filled and possessed no archaeological integrity. Further work along the Virginia Avenue tunnel was conducted in 2017 and 2018 (Bupp *et al.* 2017; 2018). Although this work involved investigating or monitoring known archaeological deposits, no sites from either project were documented within one-quarter mile of the Study Area.

Also in 2011, EAC/A conducted a series of Phase I surveys and Phase II investigations for the 11<sup>th</sup> Street Bridge Improvements Project (Harris *et al.* 2011). Their investigations included six small areas south of the current Study Area and did not identify any archaeological sites within one-quarter mile of the Study Area.

In 2016 and 2017, the DC SHPO, in association with the College of William and Mary and the University of Maryland, conducted a public archaeology project to investigate the Shotgun House site (51SE076) a short distance southeast of the Study Area (Ames 2018). The Shotgun House was constructed between 1850 and 1853 by John Biegler in a part of the city that was, according to historic maps, sparsely developed. It was owned by a succession of working-class

immigrants through the late 19<sup>th</sup> century, and occupied until the mid-1980s. The excavation encountered a midden in the rear yard of the house and an intact cold cellar cut into subsoil. Analysis of the site is ongoing, but so far it has provided important insights into a German-American working-class neighborhood on the edge of Capitol Hill.

**TABLE 2. HISTORIC STRUCTURES WITHIN ONE-QUARTER MILE OF THE STUDY AREA**

Reprinted from Eastern Market Metro Park, Project Data Request – Archaeology (Troccoli 2018)

Survey Area Name	Project Type	Report #	Related Report	Agency	Who By	Mandate	Squares
Friendship House	Phase I Intensive	112	476	NPS Grant Smithsonian Res. Assoc. Program	Haas 1979	Section 106	875
Rumsey/Capitol Hill East Natatorium	Phase I Reconnaissance	134	0	DPR	Thunderbird 1984	Section 106	
Marine Barracks Phase I	Phase I Intensive	209	0	USMC	Thunderbird 1999 (Gardner, Hurst & Snyder)	Section 110	927
Ellen Wilson Dwellings, Sq 878	Phase IA	235	236	DC Department of Public and Assisted Housing	Otter 1995		878
Old Naval Hospital	Phase I Intensive	258	420	DC Youth Services	Karrell Archaeological Associates 1994		948
Old Naval Hospital	Phase I Intensive	420		DRES	EAC/A, Inc. 2011	DC Section 106	948
11 <sup>th</sup> St Bridges CSX ROW, Northern Portion	Phase I Reconnaissance	432	710, 731	DDOT; FHWA; HNTB	EAC/A 2011	Section 106	Multiple
The Maples/Friendship House	Phase I Intensive	476	112	OPM	Greenhorne and O'Mara 2011	DC HPA	875
CSX Virginia Ave Tunnel RR, Res 122- Areas 1 & 2, Geoarchaeology	Phase I Intensive	478	710, 731	DOT; FRA	Milner 2011 (LaVigne <i>et al.</i> )	Section 106	Res 122
1229 E St SE, Shotgun House Archaeology Project	Excavation non-compliance	686	0	DC HPO	DC SHPO 2016-2017 (In Prep)	Non-compliance	1019

### Archaeological Potential of the Study Area

#### *Prehistoric Resources Potential*

The Study Area is located on a relatively level terrace about 1,160 m (3,805 ft) northwest of the Anacostia River. There are no identified prehistoric sites within one-quarter mile of the Study Area. Historic maps show a wetland and a small body of water just west of the Study Area that would have provided food resources for prehistoric populations. Thus, the Study Area possesses a moderate to high potential for prehistoric sites, but given the Study Area's classification as Urban Land it is probable that prehistoric archaeological remains would not be intact.



### *Historic Resources Potential*

There are five historic sites within one-quarter mile of the Study Area. The Study Area has been set aside as public space since L'Enfant's original plan for the city. Historic maps do not show any structures in the Study Area, but do show that it contained park improvements from at least the 1880s. The Study Area contained part of the Washington and Georgetown streetcar line, which followed the center of Pennsylvania Avenue SE and made its turn south toward the Navy Yard along the center of 8<sup>th</sup> Street SE within the Study Area. Unfortunately, most of this streetcar line was destroyed during the cut-and-cover construction of the Blue Line and the Eastern Market Metro Station, and any potential remains are beneath the pavement of 8<sup>th</sup> Street SE. The Study Area's proximity to the Old Naval Hospital, the Marine Barracks, the Washington Navy Yard, and the Capitol Building may suggest military activity in the Study Area during the Civil War, but this would be difficult to assess archaeologically. Much of the Study Area was , including include most or all of Reservations 044, 044A, 046, 047, and 047A, were disturbed by the metro station or the metro line. The northeastern and southern portions of the Study Area, including Reservations 045, 048, and 048, were used as staging yards during metro construction that may not have significantly disturbed buried archaeological resources. These reservations have a high potential to contain buried surfaces that could provide information on the public land use and improvements within the Study Area over the development of the city. The areas between the park reservations have mostly been bricked over but were probably also disturbed as the former right-of-way of South Carolina Avenue SE.

## **SUMMARY AND RECOMMENDATIONS**

### **Summary**

During February 2019, AAHA conducted a Phase IA intensive background investigation of the Eastern Market Metro Park located at 701 Pennsylvania Avenue SE in Washington, DC. The District of Columbia Department of General Services intends to reconfigure the Eastern Market Metro Park. The DC SHPO archaeologist requested a phased archaeological survey to ensure that no potentially significant archaeological resources would be impacted. This Phase IA intensive background research was undertaken in consultation with the DC SHPO to determine the likelihood of an archaeological site being present within the Eastern Market Metro Park Study Area. It consisted of historic background research and a geographical information systems (GIS) cut-fill analysis. All work was conducted in accordance with the provisions specified in Washington, D.C., Historic Preservation Office, Office of Planning Guidelines for Archaeological Investigations in the District of Columbia (D.C. Preservation League 1998), as well as the various standards and guidelines set forth by the Secretary of the Interior in the Standards and Guidelines for Archaeology and Historic Preservation (Federal Register 1983) and Section 106 Archaeology Guidance (ACHP 2009).

The Eastern Market Metro Park Study Area comprises a rectangular area including several park reservations bisected by Pennsylvania Avenue SE and the former right-of-way of South Carolina Avenue SE. These include Reservations 044, 044A, 045, 046, 047, 047A, 048, and 049. The park reservations consist of lawns interspersed with deciduous trees, brick-paved pathways, and planting features crosscut by 8<sup>th</sup> Street SE. The Eastern Market Metro Station entrance, consisting of a tunnel to the platform, a bank of escalators, and an elevator shaft, is located in the western portion of the Study Area. The Historic Building Survey of Washington, D.C. designated this area Eastern Market Square (HABS DC-670).

Background research found that this area has been public land since the inception of the city, set aside in L'Enfant's original plan for Washington. It has spent almost 230 years under public ownership, with triangular park improvements between road rights-of-way installed by the late 19<sup>th</sup> century. In 1862, Washington's first streetcar line was installed through the Study Area, on its way from Georgetown via Pennsylvania Avenue SE to the Navy Yard via 8<sup>th</sup> Street SE. Structures fronting the park had been built by the late 1850s. The park maintained its late 19<sup>th</sup>-century configuration into the 1970s, when a large portion of it was disturbed during the cut-and-cover construction of the Washington Metro Blue Line and Eastern Market Metro Station. Portions of the Study Area that were not directly impacted by cut-and-cover activities were used as staging areas for the excavation. The park was then rebuilt into its current configuration. GIS cut-and-fill analysis indicates that the current ground surface of the Study Area is approximately 1.5 to 3.0 ft above its 1872 ground surface level.

The Phase IA intensive background investigation on the Eastern Market Metro Park reveals documented disturbance across most, but not all, of the Study Area. The greatest source of disturbance is the Washington Metro Blue Line, which cuts across the Study Area under Pennsylvania Avenue SE, and the Eastern Market Metro Station. Both of these transportation features were constructed using cut-and-cover techniques, which would have resulted in significant disturbance in the west, southeast, and central portions of the Study Area in Reservations 044, 044A, 046, 047, and 047A and the intervening road rights-of-way. The undisturbed portions of the Study Area, including Reservations 045, 048, and 049, have the

potential for archaeological resources that could provide information on the evolution of public spaces in Washington from the city's foundation to the present.

### **Recommendations**

Large portions of the Study Area have been disturbed and have very limited potential for intact archaeological resources. However, some portions of the Study Area may possess some archaeological integrity, with the disturbance possibly only impacting surface deposits and not buried archaeological deposits. Geomorphological soil tests are recommended in Reservations 045, 048, and 049 to assess whether buried archaeological resources could be present within these areas which are detailed on Figure 30.



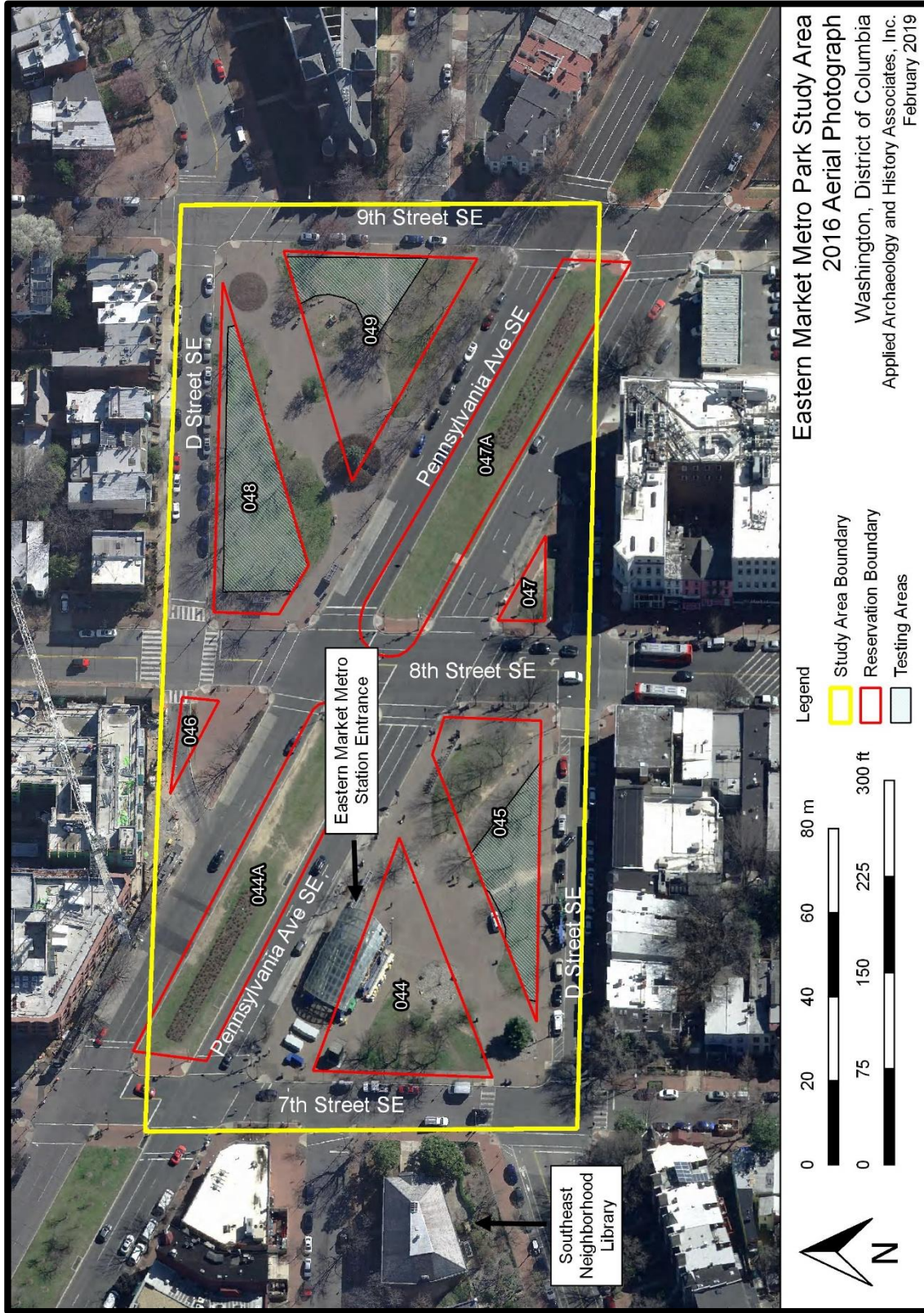


Figure 30. Aerial photograph showing former National Park reservations, relevant standing structures, and portions of the Study Area recommended for soil bore testing.

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## **APPENDIX A**

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**EDUCATION**

*Master of Science in Anthropology*

2011 - 2014 University of Wisconsin, Milwaukee, Milwaukee, WI.

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*Ms. Jeanne A. Ward, RPA*, a cultural resources management consultant with over 40 years of professional experience, is President of Applied Archaeology and History Associates, Inc. (AAHA). Ms. Ward's academic credentials include a BA in anthropology from the University of Georgia and an MA in anthropology from the University of Tennessee, Knoxville. Her experience encompasses both historic and prehistoric archaeology and historic structure identification and evaluation. Projects have ranged from cultural resource sensitivity studies, through location/identification surveys, evaluations of significance, National Register of Historic Places nominations, and large-scale data recovery excavations. Ms. Ward's professional qualifications exceed all U. S. Department of the Interior criteria for archaeologists and historians (36 CFR 61). In addition, she is a Registered Professional Archaeologist (RPA), a national evaluation and certification of professional qualifications. Ms. Ward is the author, co-author, or contributor to over 350 cultural resources management reports and has presented numerous papers at professional conferences.

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