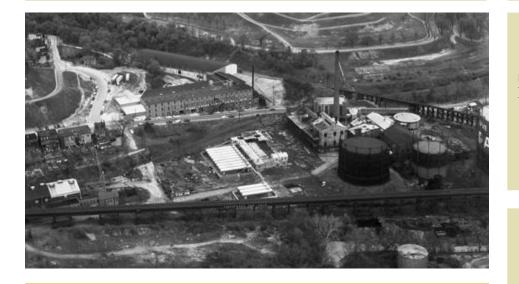
REPORT >

FULTON GAS WORKS SITE CULTURAL RESOURCE ASSESSMENT AND CURRENT CONDITIONS REPORT

DATE > JANUARY 2017

LOCATION > Richmond, Virginia

PREPARED FOR >
Timmons Group



PREPARED BY >
Dutton + Associates, LLC

Dutton + Associates CULTURAL RESOURCE SURVEY, PLANNING, AND MANAGEMENT

FULTON GAS WORKS SITE CULTURAL RESOURCE ASSESSMENT AND CURRENT CONDITIONS REPORT

RICHMOND, VIRGINIA

PREPARED FOR:
TIMMONS GROUP

PREPARED BY:
DUTTON + ASSOCIATES, LLC
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JANUARY 2017

ABSTRACT

The results of the study revealed that the project area was in the vicinity of the earliest settled area of Rocketts Landing. Historic maps and documents indicate that early development would have been consigned primarily to the western portion of the project area. Gillies Creek flowsd south and east of the project area, and at times possibly within it. The tributary Bloody Run, now filled, bisected the project area. Development had occurred in the western portion of the land by the early nineteenth century in form of dwellings and a tobacco factory.

Following the incredible success of the City Gas Works on Cary Street between 15th and 16th streets, the City purchased land in Rocketts Landing for the construction of a new plant. The plant began operations in 1856. The Civil War, multiple floods, and changes in manufactured gas technology necessitated multiple repairs and rebuildings of the Gas Works. Changes between the 1920s and 1950s created the more modern layout of the site. What had become known as Fulton Gas Works continued operations until 1972 from which time it has remained vacant.

ARCHITECTURAL RESOURCES

Fulton Gas Works was surveyed in 2007 and 2016. In 2007 it was recommended potentially eligible for listing in the NRHP. VDHR determined it to be eligible for listing in 2016 under Criterion A, Community Planning & Development. Based on the results of this assessment it is D+A's opinion that VDHR's finding of eligibility in 2016, is still appropriate.

ARCHAEOLOGICAL RESOURCES

Use of the property for heavy industrial purposes has significantly impacted the integrity of the soils and potential for intact archaeological deposits to remain. While archaeological material is likely present in various areas throughout the property, the amount of documented subsurface disturbance associated with construction and operation of the gas works and its attendant underground utilities has substantially impacted the vertical and horizontal integrity of any remaining archaeological contexts and therefore substantially diminished their ability to provide new or important information about settlement and use of the area. Given the documented soil conditions and presence of various by-products associated with past industrial uses of the property, the overall potential for intact significant archaeological deposits or sites to be present on the property is considered to be very low. As such, it is D+A's recommendation that no archaeological survey is warranted for the property.

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1 INTRODUCTION

Under contract to Timmons Group, Dutton + Associates, LLC (D+A), completed a cultural resources assessment and current conditions report for the Fulton Gas Works property in Richmond, Virginia. The study was conducted in December 2016, and involved review of existing historic context and survey data; collection of additional research including but not limited to primary and secondary maps and documents, historic photographs and aerials; and field inspection of existing buildings and structures documenting their current conditions. The results of the study are organized chronologically and thematically according to the Virginia Department of Historic Resources' (VDHR) guidance titled *How to Use Historic Contexts in Virginia: A Guide for Survey, Registration, Protection, and Treatment Projects* (VDHR 2011). Narratives and developmental patterns for each time period are discussed, followed by a discussion of existing conditions, extant resources, and archaeological potential.

STUDY AREA LOCATION

The proposed project area is located within the portion of the City of Richmond commonly referred to as Fulton. The project area lies on flat land between the James River and Chimborazo Park. A railroad line and Williamsburg Avenue form the northern and northeastern boundary for the project area. Channelized Gillies Creek forms the eastern and southern boundary, a second railroad line forms the southwestern boundary, and a gravel parking lot forms the northwestern boundary (Figure 1-1).

STUDY PURPOSE

The study was undertaken to aid Timmons Group and the City of Richmond in understanding the prehistoric and historic use and settlement of the project area, along with the types, nature, extent, and current condition of the resources that remain. The study is intended to be used as a planning document to aid in the development of appropriate identification, documentation, and treatment strategies for the historic property, as well as provide a current photo and documentary record of existing resources and their condition.



Figure 1-1. Project area location (red). Source: Google Earth 2016

2 METHODOLOGY

The first step in completing this study was to undertake a literature review and background search of previously conducted cultural resource studies covering the area to identify known and documented historic sites and properties. This entailed a search of the VDHR archives, the Virginia Cultural Resource Information System (V-CRIS) database, and local repositories. Information gleaned from this search was used in conjunction with additional research in order to gain a thorough understanding of the history of the study area.

Background research was undertaken in traditional state archival repositories including the Library of Virginia. Materials examined included census data, historic maps and aerials, photographs, newspaper and magazine articles, and books. All resources were reviewed in an effort to develop an overall understanding of the project area's development and history.

Lastly, a field inspection of the study area was conducted to document and photograph the current conditions of existing buildings and structures, as well as assess the likelihood for intact subsurface archaeological deposits to be present.

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3 PREVIOUS INVESTIGATIONS

This section includes a summary of all cultural resource management events that have taken place within the project area registered at VDHR through November 2016. It also lists all previously identified architectural resources and archaeological sites located within the project area, as well as within one quarter mile of the project area.

PREVIOUS SURVEYS WITHIN ONE MILE

Research at the VDHR reveals that four archaeological surveys have been conducted within 0.25 mile of the project area (Figure 3-1). None of these surveys have taken place within the project area.

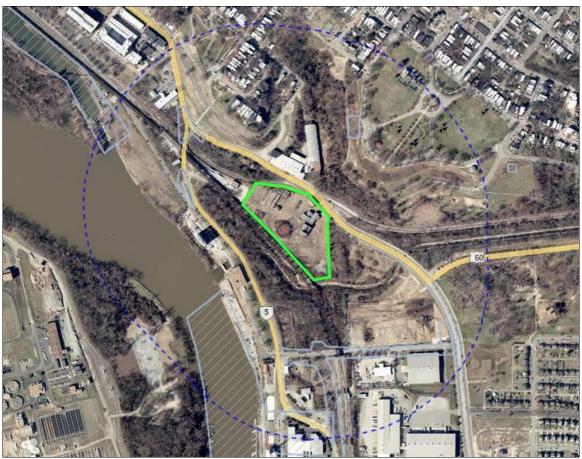


Figure 3-1. Previous surveys (gray cross hatching) conducted within 0.25 mile (dotted blue) of the project area (green). Source: V-CRIS

PREVIOUSLY IDENTIFIED ARCHAEOLOGICAL SITES WITHIN ONE MILE

Review of the VDHR V-CRIS inventory records indicated 14 previously recorded archaeological resources located within 0.25 mile of the project area; none of these sites are within the project area (Table 3-1, Figure 3-2). The previously identified sites include one canal lock, one factory,

one hospital, one kiln, one mill, one railroad, two dwellings, two identified as null or other, and four Native American camps. Four of the sites have been formally evaluated and have been determined to be potentially eligible for listing in the NRHP.



Figure 3-2. Detail of project area showing all archaeological resources (red) located within 0.25 mile (green) of the project area (light blue). Source: V-CRIS

Table 3-1. Previously identified archaeological sites located within 0.25 mile of the project area. Properties highlighted in orange have been determined potentially eligible for listing on the NRHP.

VDHR ID# Site Type		Cultural Designation	Time Period	NRHP Status
44CF0461	Mill	Indeterminate	18th Century: 2nd half (1750 - 1799), 19th Century (1800 - 1899)	Not Evaluated
44HE0057	Camp, temporary	Native American	Middle Archaic (6500 - 3001 B.C.), Woodland (1200 B.C 1606 A.D.)	DHR Staff: Potentially Eligible
44HE0058	Camp, temporary, Dwelling, multiple	Native American, Indeterminate	Woodland (1200 B.C 1606 A.D.), 19th Century: 3rd quarter (1850 - 1874), 20th Century (1900 - 1999)	Not Evaluated
44HE0082	Dwelling, single	Indeterminate	19th Century (1800 - 1899)	Not Evaluated
44HE0407 Canal lock Indetern		Indeterminate	Historic/Unknown	Not Evaluated
44HE0671	null	Indeterminate	18th Century (1700 - 1799),	Not Evaluated

VDHR ID#	Site Type	Cultural Designation	Time Period	NRHP Status
			19th Century (1800 - 1899)	
44HE0774	Railroad	Indeterminate	erminate 19th Century (1800 - 1899), 20th Century (1900 - 1999)	
44HE0806	Kiln, pottery	Indeterminate	19th Century (1800 - 1899)	Not Evaluated
44HE0854	Other	Euro-American	18th Century (1700 - 1799)	Not Evaluated
44HE0997	Hospital, Park, Trash pit	Indeterminate	19th Century (1800 - 1899), 20th Century (1900 - 1999)	Not Evaluated
44HE1079	Camp, Trash scatter	Native American, Indeterminate		
44HE1080	Dwelling, single	Indeterminate	19th Century (1800 - 1899)	DHR Staff: Potentially Eligible
44HE1081	Camp	Native American	Prehistoric/Unknown (15000 B.C 1606 A.D.)	DHR Staff: Potentially Eligible
44HE1162	Factory	Euro-American, Indeterminate	19th Century: 2nd half (1850 - 1899), 20th Century (1900 - 1999)	Not Evaluated

PREVIOUSLY IDENTIFIED ARCHITECTURAL RESOURCES WITHIN ONE MILE

Review of the VDHR V-CRIS inventory records indicated 98 previously recorded architectural properties located within 0.25 mile of the project area, 79 of which are individually recorded resources in historic districts and will not be discussed separately (Table 3-2, Figure 3-3). The project area is within the boundaries of one resource: Fulton Gas Works (VDHR #127-6255). According to V-CRIS this dates to c.1925 and it was determined eligible for listing in the NRHP in 2016.

The remaining architectural resources include six bridges dating to the nineteenth and twentieth centuries, two twentieth century commercial buildings, one marker, one twentieth century Quonset hut, one nineteenth century dwelling, two early twentieth century warehouses, and five historic districts dating to the eighteenth and nineteenth centuries. Seven of the resources are listed in the NRHP. These include Richmond National Battlefield Park (VDHR #043-0033), the James River and Kanawha Canal Historic District (VDHR #127-0171), Church Hill (VDHR #127-0192), Shockoe Valley & Tobacco Row Historic District (VDHR #127-0344), Oakwood-Chimborazo Historic District (VDHR #127-0821), the John Woodward House (VDHR #127-0119), and the Armitage Manufacturing Company (VDHR #127-6693). Two resources, including the Gas Works, have been determined to be eligible for listing and one has been determined to be potentially eligible for listing. Seven previously identified resources have been determined to be not eligible for listing and two have not been formally evaluated.



Figure 3-3. Detail of project area showing all architectural resources (blue) and individual historic district properties (light blue) located within 0.25 mile (dotted blue) of the project area (green). Source: V-CRIS

Table 3-2. Previously identified architectural sites located within 0.25 mile of the project area. Properties highlighted in orange are NHL, listed on the NRHP, or have been determined eligible for listing on the NRHP.

NKIP.					
VDHR ID#	Resource Name	Туре	Year	NRHP Status	
043-0033	Richmond National Battlefield Park (NRHP Listing)	Historic District	1862Ca	NRHP Listing, VLR Listing	
127-0119	John Woodward House, 3017 Williamsburg Avenue (Historic/Location), Woodward House (NRHP Listing)	Single Dwelling	1872Pre	NRHP Listing, VLR Listing	
127-0171	James River and Kanawha Canal Historic District (Historic), James River and Kanawha Canal Historic District: From Ship Locks to Bosher's Dam (NRHP Listing)	Historic District	1795Ca	NRHP Listing, VLR Listing	
127-0192	Church Hill (Historic), St. John's Church Historic District (NRHP Listing)	Historic District	1739Ca	NRHP Listing, VLR Listing	
127-0257	Bridge #8067, Water Street, Gillie	Bridge	1938	DHR Staff:	

VDHR ID#	Resource Name	Туре	Year	NRHP Status
	Creek (Function/Location), Rocketts Street Bridge (Historic), Water Street Bridge (Current)			Potentially Eligible
127-0344	Shockoe Valley & Tobacco Row Historic District (NRHP Listing)	Historic District	1737Post	NRHP Listing, VLR Listing
127-0821	Oakwood-Chimborazo Historic District (NRHP Listing)	Historic District	1820Post	NRHP Listing, VLR Listing
127-0854	Bridge #1850, E Main Street, spanning Southern Railway (Function/Location), Lester Street Bridge (Historic), Southern Railway's Main Street Bridge (Historic)	Bridge	1913Ca	DHR Evaluation Committee: Eligible
127-6252	Industrial Building, 4400 East Main Street (Function/Location)	Commercial Building	1929	DHR Staff: Not Eligible
127-6253	City of Richmond Intermediate Terminal Warehouse #3 (Current)	Warehouse	1937	DHR Staff: Not Eligible
127-6254	Quonset Hut, East Main Street (Function/Location)	Quonset Hut	1955Ca	DHR Staff: Not Eligible
127-6255	Fulton Gas Works (Current), Richmond Gas Works (Historic)	Other	1925Ca	DHR Evaluation Committee: Eligible
127-6256	Historic Marker, East Main Street (Function/Location)	Monument/Marker	1915	DHR Staff: Not Eligible
127-6258	CSX Bridge, North of Orleans Street (Function/Location)	Bridge	1956	DHR Staff: Not Eligible
127-6259	CSX Bridge, Nicholson Street (Function/Location)	Bridge	1956	DHR Staff: Not Eligible
127-6261	CSX Bridge, East Main Street (Function/Location)	Bridge	1956	DHR Staff: Not Eligible
127-6693	Armitage Manufacturing Company (Historic/Current), Fibre Board Container Co. (Historic), Warehouse, 3200 Williamsburg Avenue (Function/Location)	Warehouse	1900	NRHP Listing, VLR Listing
127-6974	Railroad Structure, South of Williamsburg Road (Descriptive)	Bridge	1894Pre	Not Evaluated
127-6975	Platform, Wharf Street (Function/Location)	Commercial Building	1952Pre	Not Evaluated



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4 CULTURAL CONTEXT

The following section provides a brief summary of the general overarching regional prehistoric and historic themes relevant to Virginia, Richmond City, the Fulton Bottom area (earlier known as Rocketts Landing), and Fulton Gas Works. The primary emphasis of this context focuses on the anthropological and material culture trends in prehistory and history, and describes how people throughout time could have left their archaeological mark on the landscape of the project area specifically. Prehistoric and historic occupation statistics and trends were analyzed, as were historic maps and available first-hand accounts which aided in establishing the appropriate cultural context for the project area as defined by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* and the Virginia Department of Historic Resources' *How to use Historic Contexts in Virginia: A Guide for Survey, Registration, Protection, and Treatment Projects* (VDHR 2011). Descriptions of settlement patterns, cultural characteristics, and a general description of relevant material culture of the time periods are presented below, along with comments on how these anthropological elements directly relate to the present project area.

PALEOINDIAN PERIOD (PRIOR TO 8000 B.C.)

Pre-Clovis people and later paleoindian populations in Mid-Atlantic encountered an ice-age environment. The Laurentide Ice Sheet covered much of northern North America, lowering temperatures in the region and creating an ideal environment for a boreal forest dominated by Jack Pine and Spruce (Delcourt and Delcourt 1981). Paleoindians apparently survived in this environment through opportunistic hunting and gathering, probably hunting smaller mammals, fishing, and gathering wild plants (Fiedel 2001). Seasonally mobile, paleoindians utilized different food sources at different times of the year. This extensive subsistence pattern required a large territory possibly leading paleoindians to construct central base camps in addition to hunting and processing camps elsewhere.

Most known paleoindian sites are small and scattered, suggesting that the groups lived in small familial bands distributed across the landscape. The lack of status items among their archaeological remains suggests that these groups recognized little differentiation in status, and probably employed an egalitarian social structure. Ethnographic analogies suggest that paleoindians might have maintained this rough equality by shunning aspiring leaders, and methods of property redistribution.

The paleoindian's scattered settlement pattern and simple material culture contribute to the limited number of paleoindian sites in the region, fewer than 75 sites have been identified in present-day Virginia and only 25 have been positively identified in the entire Chesapeake (Turner 1989; Dent 1995). Many sites were likely destroyed when warming global temperatures melted the glaciers and inundated the low-lying paleoindian settlements (Meltzer 1988; McAvoy 1992). The majority of remains in Virginia are represented by isolated projectile point finds at small temporary camps (Magoon et al. 2007: 10).

Researchers differentiate the Paleoindian Period into three smaller periods reflecting the changes in the morphology of projectile points. During the first phase, from 9500 to 9000 B.C., paleoindians produced large fluted Clovis points, a style widespread throughout North America, which could be affixed to a spear shaft. In the second phase of the Paleoindian Period (9000 to 8500 B.C.), Clovis points were modified resulting in the elimination of fluting in some cases and the addition of "ears" at the base of the point. The appearance of these new types might reflect changes in subsistence patterns as the result of rising global temperatures. These changes intensified during the final centuries of the Paleoindian Period, the third period (8500 to 7900 B.C.), resulting in an increased number of changes in projectile point morphology.

Despite the relative dearth of paleoindian sites within Virginia, Henrico and Hanover Counties have a few sites. On the south side of the Chickahominy River, site 44HE0251 had seven paleoindian points as well as remains from later prehistoric periods. Additionally, a paleoindian point was discovered at the Posnik Site (44HE0003), a large multi-component archaic camp on the south side of the Chickahominy River. In Hanover County, a paleoindian site (44HE0251) was found associated with a high-grade chalcedony deposit near the fall line, west of Rockville (Magoon et al. 2007:10).

ARCHAIC PERIOD (8000 – 1200 B.C.)

Beginning some 10,000 years ago, dramatic climactic changes prompted a reconfiguration of prehistoric people's subsistence strategies and social organization. Global temperatures began rising which simultaneously shrank the glaciers and raised the sea levels. In North America, the Laurentide Ice Sheet gradually receded northward, making the southeastern portion of the modern-day United States warmer and dryer. The boreal forest of the Pleistocene era slowly gave way to a mixed conifer and northern hardwood forest. The area began to assume its modern-day climate and floral and faunal species. This warming also resulted in dramatic hydrological changes for coastal Virginia. As temperatures rose and the glaciers melted, sea levels, which had previously rested some 230 feet below current levels, gradually climbed (Anderson et al. 1996). For every 0.3 meters that sea levels rose, approximately 510 cubic meters of land was flooded which resulted in the formation of the Chesapeake Bay (Brush 1986).

These climateic changes created new food sources for prehistoric peoples. The warmer, drier climate led to a greater biodiversity, especially floral, allowing humans to rely more heavily on gathering wild plants, nuts, and berries. The creation of the Chesapeake Bay, furthermore, allowed archaic people to exploit seafood, such as anadromous fish and shellfish. To exploit all of these new resources, archaic people likely intensified their seasonal movement, splitting their time between a semi-permanent base camp and smaller, dispersed hunting and gathering camps. Bands of as many as 30 people may have gathered in the base camps for part of the year, and then dispersed into "microbands," composed of a single family or two, in other seasons (Griffin 1952; Anderson and Hanson 1998; Ward and Davis 1999).

The Archaic Period can be divided into three sub-periods based on technologies used to shape tools. During the Early Archaic Sub-period (8000 to 6500 B.C.), people began using ground stone technology, in addition to flaking, to shape tools. Such methods produced mortars, pestles, and soapstone vessels which allowed the natives to process plant materials more effectively.

Some evidence points to the use of grinding technology to make atlatl weights in this period. The period also saw innovations in projectile point manufacturing. Rather than hafting the points to a wood shaft by means of fluting, archaic people made notched or stemmed points and serrated the blades (Custer 1990).

Middle Archaic Sub-period (6500 to 3000 B.C.) contexts can be distinguished from early archaic sites by changes in the projectile points. Middle archaic people produced stemmed points which were fitted into a hole in the spear shaft. Researchers have also pointed out that contexts from this period contain a larger amount of "expedient" stone tools, owing in part to the rapid environmental changes of the Climatic Optimum, which dates from 6000 to 2000 B.C. (Wendland and Bryson 1974; Claggett and Cable 1982; Ward and Davis 1999). These tools were makeshift and less formal, allowing their owners to use them for a wider variety of activities than tools designed for specific uses.

By the Late Archaic Sub-Period (3000 to 1200 B.C.), the more congenial climate and more abundant food sources led to dramatic population increases. To be certain, this apparent increase might be exaggerated because late archaic people had a richer material culture than previous peoples and hence left more archaeological evidence of their existence (Klein and Klatka 1991). Nonetheless, the greater number of late archaic sites relative to earlier periods suggests that the human population did in fact expand over the course of the Archaic Period. As humans occupied the land more densely, they also became more sedentary and less mobile, perhaps owing to the greater reliance on plant-based food resources compared to hunting and fishing.

The proto-cultivation of wild plants might explain the dramatic demographic growth of the Late Archaic Sub-period. Some evidence indicates that, at least in parts of the southeast, late archaic people experimented with the cultivation of squash and other native plants (Yarnell 1976; Chapman and Shea 1981). This may have been done to create a semi-sedentary population based on the cultivation of maize, imported from Mesoamerica via the Mississippi Valley, as well as squash, beans, and other crops.

The highest concentration of prehistoric sites in Henrico County dating to the Archaic Period are along primary drainage systems. Sites in Henrico near Richmond include 44HE0062, 44HE0084, 44HE0493, 44HE1016, 4HE1029, 44HE0674, 44HE0792, and 44HE0798 (Magoon et al. 2007:11). It should be noted that prehistoric sites that consist of lithic debitage, no diagnostic artifacts, and an absence of ceramic artifacts likely date to the Archaic Period. These sites are described in the records as "Prehistoric/Unknown," however they are most likely to date to this period despite not having a specific temporal designation.

WOODLAND PERIOD (1200 B.C. – 1600 A.D.)

Horticulture activity, along with the development of ceramics, and a dense, increasingly-stratified social structure differentiate the Woodland Period from previous ones. Anthropologists break the period up into three smaller phases based on changing projectile points and ceramics, as well as settlement patterns. Although archaic people had carved out vessels from soft soapstone, prehistoric Americans did not begin shaping ceramic vessels until around 1200 B.C.; the introduction of this technology serves as the chief distinguishing factor for this period.

The beginning of the Early Woodland Sub-period (1200 to 500 B.C.) is defined by the appearance of ceramics from prehistoric archaeological contexts. Ceremonialism associated with the burial of the dead also appears at about 500 B.C. with stone and earth burial cairns and cairn clusters in the Shenandoah Valley (McLearen 1992; Stewart 1992). Early woodland settlements in the Piedmont region of Virginia are located along rivers as well as in interior areas and there is evidence to suggest the Piedmont early woodland people developed a more sedentary lifestyle during this period (Klein and Klatka 1991; Mouer 1991). Many early woodland sites in the Piedmont and James River are permanent or semi-permanent villages that were large and intensively occupied. This corresponds with the domestication of weedy plants such as goosefoot and sunflower along intentionally cleared riverine areas. Previous investigations along the James River have identified relatively large sites in the fall line, immediately west of Richmond, as well as a number of smaller sites in the inner Coastal Plain along the James and Chickahominy Rivers (Magoon et al. 2007: 15).

During the Middle Woodland Sub-period (500 B.C. to 900 A.D.), there is an increase of sites along major trunk streams and estuaries as people move away from smaller tributary areas and begin to organize into larger groups (Hantman and Klein 1992). The middle woodland diet becomes more complex as people begin to exploit nuts, amaranth, and chenopod seeds in addition to fish, deer, waterfowl, and turkey. Evidence of rank societies emerges more clearly with the spreading of religious and ritual behavior including symbols and regional styles apparent in ceramic styles and other sociotechnic and ideotechnic artifacts. Variance in ceramic manufacture is a hallmark of the Middle Woodland Sub-period.

Previous investigations on along the James and Chickahominy Rivers demonstrate extensive use of small tributary streams in addition to major river floodplains through the Middle Woodland Sub-period. A typical site consists of remnants of a single or few encampments occupied at various times (Magoon et al. 2007: 17).

By the Late Woodland Sub-period (900 to 1600 A.D.) the use of domesticated plants had assumed a role of major importance in the prehistoric subsistence system and settlement patterns. Expanses of arable land became a dominant settlement factor, and sites were located on fertile floodplain soils or, in many cases, on higher terraces or ridges adjacent to them. Native Americans began to organize into villages and small hamlets that were highly nucleated and occasionally fortified with palisades.

Chiefdom-level societies began to form in coastal Virginia during this time. The Powhatan Chiefdom expanded from a core of six to nine districts in the middle- to late sixteenth century to eventually encompass the coastal portion of the James and York River Valleys. This vast area is indicated on John Smith's map of Virginia in 1610. A number of these fortified villages occupied high ground near rivers and major tributaries while small seasonal camps and satellite camps were along smaller streams in the interior. The site of Powhatan Town (043-0172; 44HE0413) is located southeast of Richmond, east of Rocketts along the lowgrounds of Almond Creek (Mouer 1992:71). Other important late woodland sites are near the confluence of the James and Chickahominy Rivers (44JC0308), along the Appomattox River (44PG0004 and

44CF0014), on the floodplain of the James River (44PG0302, 44PG0307, and 44HE0493), and the outer Piedmont and fall zone (44GO0030) (Magoon et al. 2007:18-20).

SETTLEMENT TO SOCIETY (1607 – 1750)

At the time of European contact, the area encompassing Richmond was occupied by the Algonquian-speaking people, the Powhatans and Arrohattecks. Both of these tribes were under the control of the ruler Wahunsunacaugh, better known as Chief Powhatan (Magoon 2007:20). In the early seventeenth century, these people occupied the shorelines of the major rivers east of the fall line. The hilly terrain near the falls was an ideal location for villages providing high, less flood-prone land (Tyler-McGraw 1994:11). Investigations have revealed that the King's Village of Arrohatteck was likely near Osborne's Landing, about three-miles below Wilton, and had approximately 60 fighting men (Magoon 2007:20) (Figure 4-1). The King's Village of Powhatan likely stood in the vicinity of Fulton Hill or Tree Hill Farm with approximately 50 warriors. The Village of Powhatan served as the western limit to the Powhatan Chiefdom; west of the falls was occupied by the Monacans (Mouer 1992:71).

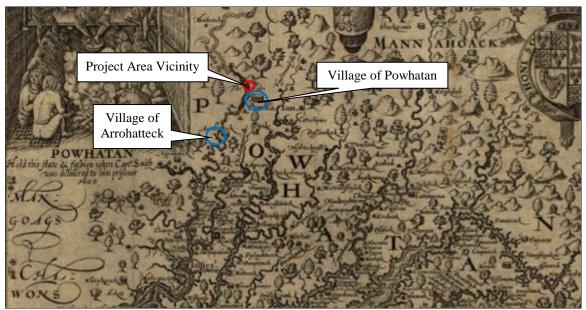


Figure 4-1. Detail of *Virginia*, *Discovered and Discribed*, by John Smith, showing the vicinity of the project area in the vast land under control of the Powhatans. Source: Library of Congress

In May 1607, Captain Christopher Newport led an expedition up the James River and upon reaching the falls he erected a cross on one of the small islands in the middle of the river at the approximate location of present-day Richmond's downtown. On their journey to and from erecting this cross, the explorers stayed at Powhatan Village which was described as twelve houses "pleasantly seated on a hill" (Dabney 1992:2). Between the hill and the river was a plain covered with "wheate, beane, peaze, tobacco, pompions, gourdes, Hempe, flaxe &c [sic]" (Dabney 1992:2). According to Daniel Mouer, "the Gilly's Creek Valley and surrounding margins were undoubtedly loci of Indian house, gardens, fishweirs, and graveyards for many centuries before English settlement" (Mouer 1992:72). The project area is located on the north side of Gillies Creek.

In 1609, the first permanent English settlement in the vicinity of the future Richmond began in the district that would become known as Rocketts. Later that year, Capt. John Smith purchased the tract of land on which the Powhatan village stood from the Native Americans. This tract was located about three miles from the initial settlement. Smith named it "Nonesuch" for its unparalleled beauty and attempted to establish a small garrison. Perpetual attacks by the local Native Americans, however, forced abandonment of the land and the English took up residence along the river, probably in present-day Fulton Bottom, for a short time before returning back to Jamestown (Mouer 1992:71). Despite the hardships endured, the English continued to attempt a permanent settlement along the James River. The village of Henricus was established in 1611 followed by Henrico County which encompassed 11 present-day counties (HCHS n.d.).

Soon after the founding of Henricus, a wealthy English businessman and investor named John Rolfe claimed a large plantation east of the town to grow tobacco for the purpose of undercutting the high Spanish prices. He became one of the earliest tobacco growers in the colony on his plantation known as Varina. Rolfe married Pocahontas, the daughter of Chief Powhatan (HCHS n.d.).

This union helped ease the tensions that continued to simmer between the local native tribes and the English; however the peace was short lived and in 1622 the tribes staged a massive coordinated attack against villages and plantations throughout the colony. Despite these adverse conditions, the Virginia Company continued to order settlers to re-occupy abandoned land for fear of losing their investment in the colony. People clustered initially along rivers and navigable creeks, then moved inland as the most desirable land was exhausted (Moore 1976). Tobacco and its subsequent profits determined the pattern of nearly every aspect of early life in Virginia, encompassing the economy, the cultural landscape, and social relations (Kulikoff 1986; Moore 1976).

On April 18, 1644, the natives of the Powhatan Confederacy made another attempt to drive the colonists back east. The colonists responded by erecting forts at the fall lines of the major rivers, including Fort Charles at the falls of the James River. A year later, however, a peace treaty was made with the Indians which helped to quell the violence (Hening 1809-1823).

During the following peaceful time, in the spring of 1656 the Native Americans and English formed an uneasy alliance. An aggressive band of Native Americans, and proclaimed enemies of the Pumunkeys, the Recahecrean, who were possibly members of the Cherokees, Senecas, or Monacans, moved east from the Piedmont and settled on the north side of the James River. The Pamunkey and English mounted a joint expedition to force them out (Mouer 1992:72). It is believed that fighting took place in the vicinity of present-day Marshall and 31st Streets in Richmond. And it is local lore that the voracity of the fighting caused the waterway that drains into Gillies Creek, at the northern end of the project area, to be named Bloody Run (Dabney 1992:5). The battle resulted in defeat of the Virginians and Pamunkeys. Additionally, Chief Totopotomoy was killed and Edward Hill of Shirley, commander of the militia, was shamed (Mouer 1992:72).

Between 1659 and 1663, Thomas Stegg, Jr acquired 1,800 acres on the south side of the James River, on which his home "Falls Plantation" stood, and 1,280 acres on the north side of the river (James et al. 2007:14). The project area lies within his large landholdings. It appears that the rough topography of "steep hills and rocky ravines" led him to abandon his land on the north side of the James River (Mouer 1992:80). Following his death in 1671, Stegg's nephew William Byrd inherited the land. Byrd established a trading post at the fall line and increased his landholdings to 26,000 acres (TCC 1989). In 1702, William Byrd I sold 100 acres to Gilly Gromarrin who lends his name to Gillies Creek. It appears that his land was along the James River south of Gillies Creek; a hill in the area has alternatively been called Powhatan, Fulton's, Marrin's, or Marrian Hill (Mouer 1992:82-83). An early plat of Byrd's land illustrates the project area as part of his landholdings (Figure 4-2). The flow of Gillies Creek has been altered over time, it is now channelized to the south and east of the project area.

As population slowly increased in Virginia and the western frontier shifted farther west, settlers cleared uplands and drained wetlands for tobacco cultivation (James et al. 2007:15). The early eighteenth century landscape along the James River was a haphazard assortment of worn and working tobacco fields and frame dwellings; small villages began to form around tobacco warehouses (Tyler-McGraw 1994:35). There was a mill at Rocketts Landing and a plantation; additional land was leased land to tenants (Willis n.d.).

The Warehouse Act of 1730 designated the falls of the James River as a required location for a tobacco inspector station. This increased the importance of the area and Byrd built a tobacco warehouse. By 1730, Robert Rocketts established a ferry near the confluence of Gillies Creek and the James River, across from Falls Plantation and just downstream from the James River falls. (James et al. 2007:15). This area became known as Rocketts Landing.

Seeing the potential of his land flanking the fall line of the river, Colonel William Byrd II had a town laid out on east of Shockoe Creek, northwest of the project area, in 1737. Likewise, a small settlement developed around Gillies Creek and Rockett's ferry; this was outside of the original boundaries of Richmond which extended as far east as present-day 25th Street. As the town of Richmond grew, Rocketts became a bustling port town itself.

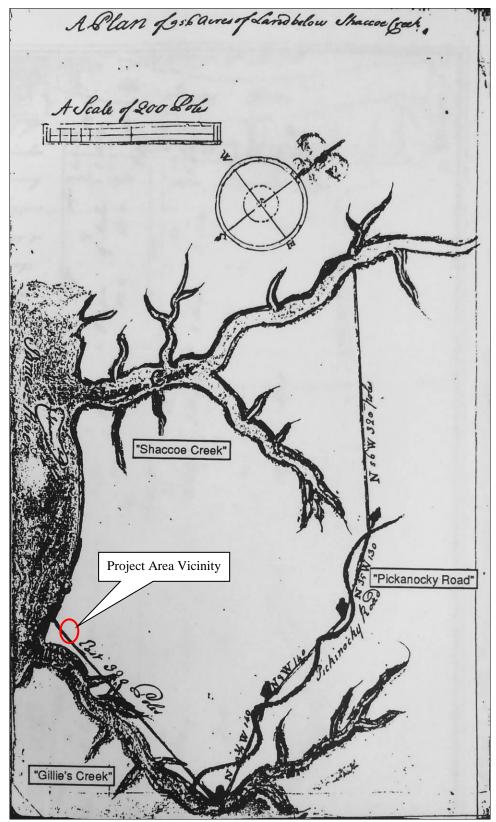


Figure 4-2. Plat of William Byrd's land on the north side of the James River and the dividing line between Byrd's and Gillie Gromarrin's land. Source: Mouer 1992

COLONY TO NATION (1750 – 1789)

In 1755, when Joshua Fry published his well-known map of the most inhabited parts of Virginia, they depicted Richmond as a settled town between Shockoe Creek to the west and Gillies Creek to the east (Figure 4-3). By 1752, the early success of Richmond was exemplified by its selection as the seat of Henrico County, replacing the earlier location at Varina.

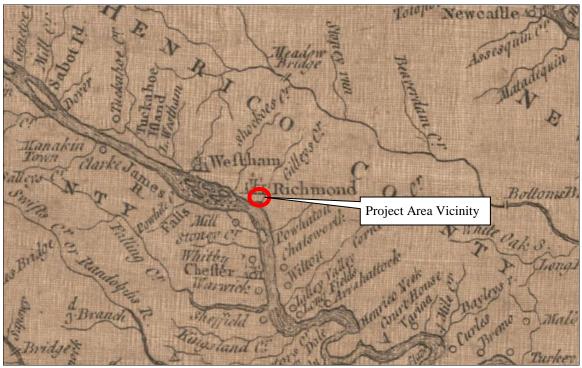


Figure 4-3. Detail of *A map of the most inhabited part of Virginia*, by Joshua Fry in 1751, depicting study area. Source: Library of Congress

Throughout the Colonial Period, land adjacent to Richmond, including Rocketts, consisted of a few middling to large plantations. Most of the land that would become Rocketts was owned by Gilly Gromarrin's descendants; it would be developed and rented for commercial purposes (Mouer 1992:73-74). As trade and population of the region grew, large landowners, subdivided their land into half acre parcels and Rocketts Landing continued to transition away from the plantation economy (Gottlieb 2005:39).

Rocketts Landing and the growing town of Richmond were nearly destroyed in May 1771 when the James River flooded, destroying buildings and tobacco alike and demonstrating the fragility of the community and the strength of the waterways at the time (Christian 1912:12; TCC 1989). Gillies Creek drained an area of approximately 16 square miles into the James River (Army 1966:3). Most of Rocketts Landing lies within the 100 year flood plain (Mouer 1992:74).

This flood may have spurred those with the means to move to higher land in the late eighteenth and early nineteenth centuries leaving the low-lying land of Rocketts Landing to stores, warehouses, and tenements (Mouer 1992:74). Richmond, especially Rocketts, at this time was described as a crudely made "shabby looking village of log houses, with wooden chimneys"

(quoted in TCC 1989). Archaeology conducted northwest of the project area, however, found early substantial brick foundations for frame or brick buildings (Mouer 1992:74).

The Port of Rocketts handled ocean-going ships by 1771 and by 1788 Virginia's General Assembly recognized it as one of five James River ports. While tobacco and shipping were certainly the most significant industries of Rocketts it was by no means the only industry, there were lumber, hemp, and auction houses; mills, a rope walk, and a tavern; and even an illegal gambling establishment (VHLCS 1974).

With the importance of maritime navigation in the Rocketts Landing and Richmond area, ropeworks played an essential role in the region's history. The Chatham Rope Yard was established on Shockoe Hill and in 1772 the Richmond Ropewalk was set up at Rocketts Landing on the east side of Gillies Creek (TCC 1989; James et al. 2007:17). Producing both rope and sailcloth, it proved essential to the nation's reliance on waterborne navigation and commercial success.

The growing importance of the town increased significantly with the relocation of the colony's capital from Williamsburg to Richmond in 1780, assuring Richmond's permanence in Virginia as it continued to grow as a center of commerce and trade. With this change, the population of Richmond quickly swelled from 684 in 1780 to over 1,000 the following year, attracting politicians, lawyers, clerks, printers, shoemakers, tailors, and white, free black, and slave artisans (Historic Richmond Foundation 1989; Works Progress 1940:286; Tyler-McGraw 1994:64).

Also contributing to the town's importance was a transportation project undertaken in the 1780s. This major infrastructure project was the construction of a canal on the north side of the river leading past the fall line; a massive undertaking first conceived of by George Washington that would connect to a larger system of canals and eventually meet the Ohio River.

With increasing development in the new capital came excessive silting of the James River at the confluence of Shockoe Creek making it difficult for ships to reach Shockoe Landing and the tobacco warehouses there. In 1781, Virginia's House of Delegates petitioned to establish a tobacco inspection station further down the James River at Rocketts Landing. Wealthy landowner Charles Lewis, a member of the Gromarrin family by marriage, constructed the warehouse on his property at Dock and Peach Streets, west of the project area (James et al. 2007:15-16). This area proved to be the best place for oceangoing vessels to dock, just downstream from the developing Kanawha Canal (Gottlieb 2005:39). As such, the City of Richmond annexed Rocketts Landing, including the project area, in 1780 (ArcGIS 2011). Rocketts attracted a significant amount of the local tobacco trade which led to the creation of ancillary businesses including chandleries, liveries, blacksmiths, warehouses for merchants, taverns and hotels, and small retail shops (Mouer 1992:75). The City of Richmond was officially incorporated in 1782.

At the onset of the American Revolution, Richmond had a population of approximately 1,800 citizens, half of whom were slaves. With the coming of the war, many of the men in town did their patriotic duty by enlisting and leaving Richmond. In this weakened state, the war came to the town in January 1781 when British Brig. Gen. Benedict Arnold sailed up the James River.

Arnold and his troops encamped at the Ropewalk in Rocketts Landing (Mouer 1992:76) (Figure 4-4). From here he marched his troops into the city and burned many of its public and private buildings, as well as a large quantity of tobacco.

In April 1781, Gen. Lafayette and his troops also encamped at the Ropewalk in Rocketts Landing (Mouer 1992:76). The large number of the militia prevented an approaching attack from British Gen. William Phillips crossing the James River from Manchester. Finally in June 1781, Gen. Charles Cornwallis occupied Richmond and destroyed tobacco, stores, and supplies (TCC 1989). The ropewalk was partially burned by an arsonist in 1783 but repairs were made and operations were able to continue (Ward and Greer 1977:137).

The importance of Richmond continued to grow with transportation improvements. Towards the end of the eighteenth century, transportation in the central Virginia region greatly improved by means of the use of steamboats up the James River (1784), the creation of a long transportation route known as the Southern Stage (1786), and opening of the first Mayo bridge across the James River (1788) (Sanford 1975:68). These transportation developments opened the city even more to its surrounding agricultural fields and allowed its economy to expand.

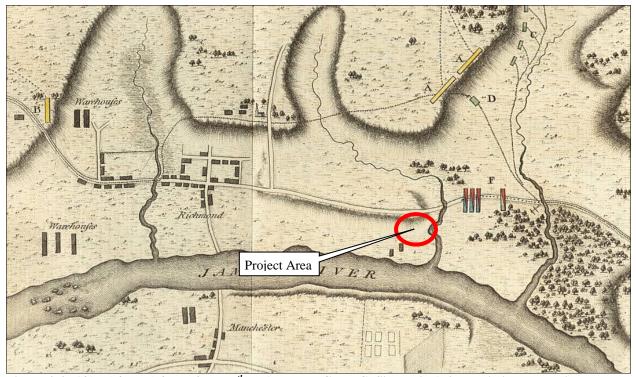


Figure 4-4. Skirmish at Richmond Jan: 5^{th} , 1781, by Lt. Col. J.G. Simcoe in 1787, depicting the project area and the nearby British army. Source: Boston Public Library

EARLY NATIONAL PERIOD (1789 – 1830)

Prior to the revolution, England generally discouraged the manufacturing of goods in the colonies, seeing them simply as a source of raw materials (TCC 1989). In the years following it, however, this changed dramatically. By 1794, the canal through Richmond had been completed to the point of removing the difficulty of passing the rapids and by 1822, the Richmond Dock, a

long wooden lock extending between 14th Street and the navigation at Rocketts Landing at approximately 27th Street, was in operation (Christian 1912:41; TCC 1989). The completion of the canal in addition to the abundant water power of the falls helped Richmond grow as an important commercial center. Though tobacco continued to form the backbone of its economy, other industries opened. By the early nineteenth century, the region surrounding Richmond began to flourish and expand and the city's population more than doubled between 1790 and 1800 (from 2,000 to 5,700 residents) (USCB).

The fledgling community around Rocketts Landing grew as a transition point between plantation society and the area's emergence as a multicultural mercantile center (Figure 4-5) (Gottleib 2005:37). After 1780, Rocketts was vigorously developed primarily by a small group of men, most of whom were recent immigrants engaged in mercantile and maritime trades; this included John Hague, George Nicholson, John Lester, and Joseph Simpson (Mouer 192:77). In 1790, they petitioned the City of Richmond to build a drawbridge over Gillies Creek at Rocketts Street or Lester Street (present-day E. Main Street), at their own expense, to connect their planned lots to the city. By 1794, they were looking to build a fixed bridge to replace the drawbridge (Mouer 1992:94).

Rocketts early in this period had an "amorphous relationship" with Richmond until a series of laws and ordinances adopted 1798-1808 strictly defined it as a part of the city (VHLCS 1974). In 1808, the roads through Rocketts were legally named (Mouer 1992:77). Around and through the project area were Bloody Run Street (Williamsburg Avenue), Poplar Street, Elm Street, and Maple Street (Figure 4-6). Among these streets, the blocks were divided into half-acre lots like elsewhere in the city. It appears that the project area consisted of multiple lots. This included all of Lots 207, 208, 209, 22, 23, 33, 35, and 37 and parts of Lots 200,201, 202, 213, 214, 18, 19, 20, 21, 24, 25, 31, 32, 34, and 36. The large land owner Thomas Rutherford owned a large portion of the southeast quarter of the project area. Gillies Creek bisected the settlement; the earliest development appears to have been on the west side of the Creek (Mouer1992:73).

Rocketts Landing would have played an integral role in Gabriel Prosser's ill-fated uprising in 1800. The plan was to set fire to the wooden buildings along the waterfront and wait for the rush of people from Church Hill and Shockoe Hill to attend to the flames at which point slaves would enter the city from the north to the capital and armory. The slaves would then engage with the white people exhausted from fighting the fire. Prosser's plan was foiled by two slaves of Mosby Sheppard, Pharaoh and Tom, and was further disrupted by a torrential storm (Dabney 1992:54-55).

Between 1814 and 1819, Richmond as a whole experienced flush times. After the War of 1812, specie payments were suspended for a time which created a strong spirit of speculation and real estate in and around the city rose in value. It was during this time that Thomas Rutherford amassed a significant amount of land in every quarter of the city. The man was engaged in milling, importing and exporting ("Thomas Rutherford" n.d.). Also in Rocketts, Nicholson, Hague, Lester, and Simpson, were individually successful in addition to developing the area. By the 1790s, George Nicholson had a lumber warehouse along the James River near the mouth of Gillies Creek; this may have been a building to store lumber or something akin to a pawn shop (Mouer 1992:75). He also had two docks in the neighborhood, as did John Lester. In 1788,

Captain John Hague and John Lester were partners in the land-owning firm Hague & Lester; John Hague was also appointed harbor master at Rocketts by Henrico County (Mouer 1992:93; Manarin and Dowdey 2007:101).

By the late eighteenth century and certainly by the 1820s, Rocketts was known as a rough town. Goats and hogs roamed freely, sailors patronized the Rocketts Landing Tavern, and "backcountry farmers, Indians, merchants, free blacks and hired-out slave artisans and laborers, traders, innkeepers, ship captains, and stevedores comingled along the port's wharves and in the village community" (Gottlieb 2005:37). In 1830, the area of Rocketts Landing consisted large brick warehouses and stores along the streets near the river and dense clusters of houses filling the side streets with domestic affairs filling the alleyways and common yards between houses and shops. City Directories show that the area was largely comprised of "white and free black tenant laborers with some larger land-owning merchants and craftspersons" and a large portion of immigrants and hired out slaves (Mouer 1992:77).

Mutual Assurance policies provide some sense of development of the project area in the first half of the nineteenth century. In 1817, there was a three story brick tobacco manufactory on the south side of Bloody Run Street (present-day Williamsburg Avenue) between Elm and Maple Streets insured for descendants of Marion (or Marrin) Price. While due to changes in the orientation of Bloody Run Street this is likely outside of the project area, portions of it and other buildings associated with Price may lie within the project area including a wooden dwelling, wooden stable, and wooden kitchen (Figure 4-7) (MASA 1817:#973). At least between the years 1822 and 1858, William Rowlett and his relatives occupied Lot 207 on the south side of Elm Street. His buildings consisted of a two-story wood house, one-story wood house, and one-story wood kitchen (Figure 4-8) (MASA 1822, 1829, 1844, 1858).

Even as Rocketts thrived, areas throughout the state and nation were growing and witnessing improvements previously unimaginable. In 1816, Baltimore, Maryland became the first city in the United States to use manufactured gas to light its streets. This gas was made by converting coal into a gas creating a byproduct called tar that is believed to contain 500 to 3,000 different toxic compounds ("Fulton Gas Works" 2012). The first efforts to bring gas into the City of Richmond occurred in the early 1800s when an exhibit displaying the new invention of "Inflammable Air" was shown. Attendees of the experiment testified that they believed "gas produced from pit coal yields a more mild and uniform light than that from wood, and by comparison with the light from animal oil and tallow it appears to us, as it proceeded from a tube of about one fourth of an inch in diameter, to be nearly in the proportion of one to twenty. We have witnessed with pleasure the gas applied to cooking purposes" (quoted in Christian 1912:55). While the public remained skeptical, the exhibit did result in the construction of an octagon light tower on Main Street at a height of 40 feet, although its popularity and use did not last and streets continued to be dark or lit by sperm-oil lamps (Christian 1912:55, 146; Mordecai 1860:303).

Land east of Williamsburg Avenue also began to develop as a result of Rocketts Landing's success as a thriving waterfront town. This area would become known as Fulton, a name that would eventually encompass Rocketts. It was likely named for James Alexander Fulton. Around

1800, Fulton married Eliza Mayo, great granddaughter of William Mayo, and built her a home known as "Mount Erin" on the site of the former Powhatan Village (James et al. 2007:17).



Figure 4-5. View down James River from Mr. Nicholson's House above Rocketts, by Benjamin Henry Latrobe in 1796. Source: Tyler-McGraw

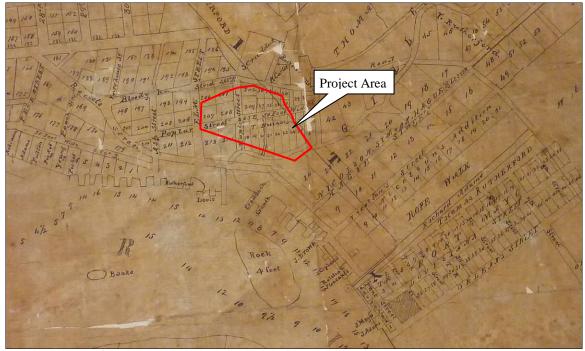


Figure 4-6. Detail of *Map of the City of Richmond and its Jurisdiction*, by Richard Young in 1817, depicting the project area. Source: Library of Virginia

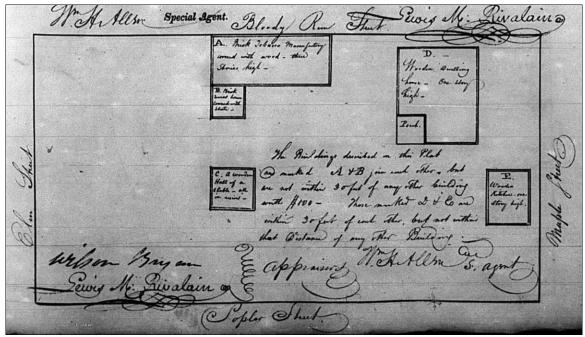


Figure 4-7. Mutual Assurance Policy for Marrin Price in 1817. Source: MAS 1817:#973

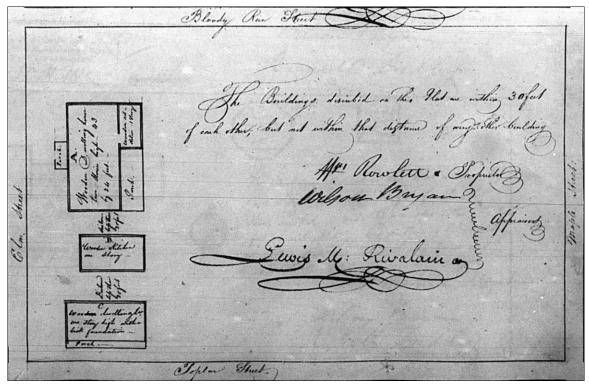


Figure 4-8. Mutual Assurance Policy for William Rowlett in 1822. Source: MAS 1822:#4735

ANTEBELLUM PERIOD (1830 – 1860)

By the mid-nineteenth century, Richmond had achieved the commercial growth and industrial production it had sought and as the antebellum period approached, the city was flourishing and was further stimulated by transportation and infrastructure developments (Tyler-McGraw 1994:105).

This prosperity drew in more northern workers, European immigrants, and hired-out slaves. By 1830 "the landscape at Rocketts no longer resembled its Colonial predecessor...Large brick warehouse and stores had grown up all along the streets near the river. Dense clusters of houses filled blocks, and much of domestic social life must have taken place in the myriad of narrow alleyways and small common yards between houses and shops" (Figure 4-9) (Mouer 1992:77). Working class neighborhoods developed and grew around the docks and east of Richmond including Fulton, Mount Erin, and Port Mayo (Gottlieb 2005:39).

Like much of Richmond during this period, social stratification was becoming more apparent in the neighborhoods. Those with the means moved to the heights surrounding Rocketts such as Libby Terrace and Chimborazo Hill away from the "workers and sailors and the attendant vices and grime of a lowland port subject to flooding" (Gottlieb 2005:39). Rocketts Landing, especially east of Gillies Creek, was largely occupied by laborers, including hired slaves. Occupational and economic class division were pronounced in the community despite the total absence of the very wealthy (Mouer 1992:107).

With the decrease of emancipation of slaves after 1806 there was an increase in hired out slaves. "Just under 40 percent of Richmond's population was black in the 1850s, but more than 70 percent of the unskilled labor jobs were held by African Americans" many of which were held by hired slaves (Mouer 1992:108-109). While the ethnic composition of any Richmond neighborhood during this period is difficult to determine, Rocketts had a very large population of African Americans, including domestic slaves, freed persons, and hired slaves. Additionally, during this period there was a large influx of German and Irish immigrants to Richmond, many of whom initially settled at Rocketts Landing and Shockoe Bottom. These new arrivals began competing with blacks for more menial jobs, competition which at times grew violent (Mouer 1992:109). As the Antebellum Period wore on, some area residents grew more suspicious of the ethnic mixing and took action, a large part of this was done by the Rocketts Regulators who intimidated residents (Gottlieb 2005: 40).

Rocketts survived the economic downturns of the time and continued to flourish. Additional buildings were constructed, lots were subdivided and filled in, more roads were paved and broadened, new bridges were erected over the creeks, and building along the waterfront continued. With the advent of steamships, port cities of Richmond, Norfolk, Alexandria, Baltimore, Philadelphia, New York, Boston, and Charleston grew (Mouer 1992:108). By 1860, approximately 300 ocean-going vessels were carrying goods to and from Richmond annually and the wharfs at Rocketts Landing were the busy center (TCC 1989).

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¹ In 1806, Virginia passed a law that continued for the allowance of private manumissions but required the freed slave to leave the state within a year or risk being reenslaved. This led to a rush of manumissions before the law went into effect followed by a drastic decrease.

The growth of Rocketts is also reflected in the establishment of the Third Presbyterian Church in 1835. George Hutchison, with his residence on the south side of Bloody Run likely just outside of the project area, began as a member of the First Presbyterian Church and worked in gathering individuals in Rocketts Landing until a congregation was formed under Rev. Alexander Mebane. The organization took place in the home of William Rowlett. Thomas Rutherford donated land to the church on the north side of Bloody Run opposite the present-day Gas Works (Figure 4-10). As the settlement of Rocketts changed and shifted west, the church was relocated to Broad and 25th Streets in 1850 (Goodrich 1936).

Among the major changes to irrevocably effect Rocketts Landing were the advent of the railroad and gas works. The Richmond, Fredericksburg, and Potomac Railroad was chartered in 1834 to run between Richmond and Fredericksburg and the Potomac River and had its first train run in Richmond in 1836 (Sanford 1975:70). The Richmond and Petersburg Railroad was chartered in 1836 and began construction in 1838. The Louisa Railroad, chartered in 1835 in Louisa County, entered Richmond in 1851 as the Virginia Central Railroad. The Richmond and Danville Railroad was chartered in 1848 and completed in 1856. The Richmond and York River Railroad, chartered in 1853 and completed in 1859, connected Richmond with the deep water port at West Point (Bowels n.d.). This railroad began at the docks at Dock and 23rd streets and paralleled the James River before curving east at Gillies Creek, on the north side of the project area.

Other cities followed Baltimore's example in the adoption of gas lighting: Boston in 1822, New York in 1823, and Evansville, Indiana in 1833 (Peters 2008:21). Richmond was much slower in adopting the utility. Forty years after the first introduction of gas in the City of Richmond, a vote was made to create a committee on the Richmond Gas Work and establish a gas plant; the movement failed. By the mid-1840s however residents were getting more frustrated by the lack of light, a night watch that provided little security, and money getting spent on other projects. The public wanted light: "Let us have light; now we are compelled to grope in darkness through our rugged and dangerous streets" (quoted in Christian 1912:153). While the issue had broad support there was an unwillingness in providing the necessary capital (Peters 2008:22).

It was not until November 1849 that Richmond adopted an ordinance to create a "Committee on Light" tasked to construct "suitable works for the manufacture and distribution of carbureted hydrogen gas from bituminous coal for the purpose of illumination through the streets, lanes, and alleys of the city" ("An Ordinance" 1849). The first site of the gas works was on Cary Street between 15th and 16th Streets and operations began in 1851. A newspaper article reported, "We have rarely seen more general satisfaction and delight diffused throughout the city than this event gave birth to" (quoted in Peters 2008:23). The use of gas quickly became popular, with the number of customers increasing from 45 to 627 in the first year of service and a larger plant was almost immediately required (Peters 2008:23).

Space limitations on Cary Street, and possibly the smell associated with the production of gas, led to the city purchasing a new site at Rocketts Landing in 1853 (Eastman 2008:10). Proposals were received for construction at Rocketts Landing in 1854 for the new plant and 200,000-cubic-foot holder ("Proposals" 1854). Production there began in 1856 (Eastman 2008:10). The Gas Works sat on the southeast corner of Maple Street and Williamsburg Avenue, extending

southeast to Gillies Creek. To make the gas, coal or coke was raised to white heat in a tall cylindrical furnace by passing an air current over the coal fire. The hot coal was then subjected to a jet of steam resulting in blue gas, a mixture of carbon monoxide and hydrogen. The mixture was capable of producing 300 British thermal units, but the standard called for 525 BTUs. Thus, the gas had to be fortified and later purified ("City Gas Works" 1977).

As a result of these major improvements, industry and agriculture within Richmond and the surrounding region flourished. By 1858, there were 91 manufacturing establishments in the city which employed 11,811 people and produced \$19,488.896 worth of products. The tobacco industry was, by far, the most important, making up more than half of these numbers, followed by flour milling and thirdly the iron industry (Sanford 1975:46).

Rocketts Landing began to diversify its economy by shifting away from exportation of tobacco and importation of consumer goods to manufacturing and growing the retail trade. This included manufactured tobacco products such as cigars, snuff, and pipe tobacco. The result was the construction of tobacco manufactories and warehouses along the waterfront as far east as Almond Creek. Rocketts also saw an increase in the exportation of wheat and flour which led to the erection of mills along the lower Gillies Creek and Bloody Run. The waterways were channelized at this time in order to power grist, bark, and saw mills, such as the saw mill north of the project area. There was also an increase in retail business and Rocketts Street became a focus for grocers and local merchants in addition to hotels and taverns (Figure 4-11) (Mouer 1992:106-107).

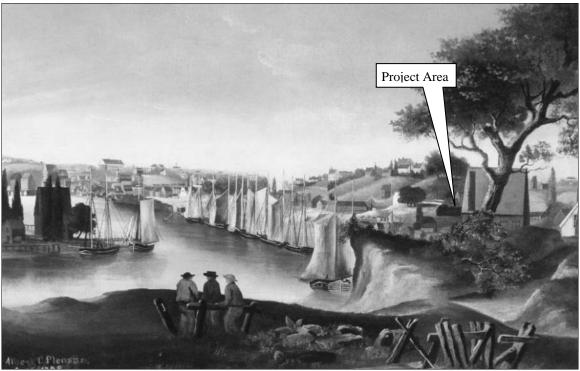


Figure 4-9. View of Rocketts and the City of Richmond, signed by Albert C. Pleasant Anno 1798 but likely painted c.1841. Source: Gottlieb

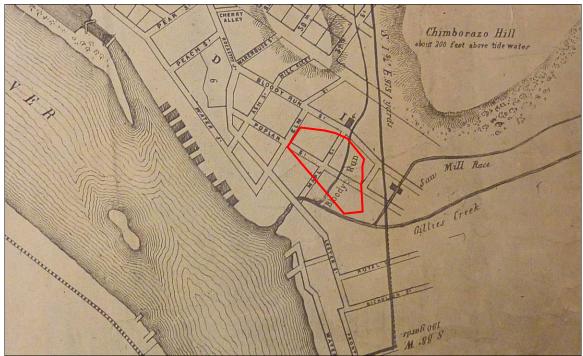


Figure 4-10. Detail of *Plan of Richmond (Henrico County) Manchester and Spring Hill, Virginia*, by Charles Morgan in 1848, depicting the project area. Source: Library of Virginia

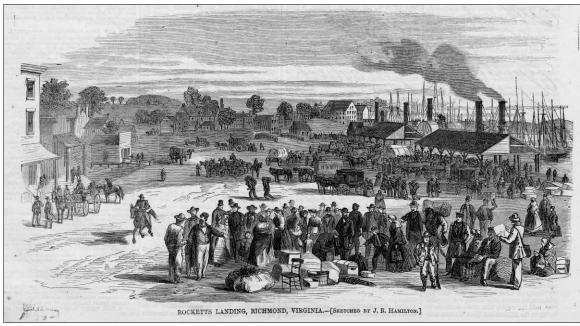


Figure 4-11. *Rocketts Landing, Richmond, Virginia*, by Hamilton in 1865, illustrating the busy waterfront. Source: VCU

CIVIL WAR (1861 – 1865)

With Richmond as the capitol of the Confederacy and its accessibility, the city played an important role in the Civil War but avoided the intense fighting see elsewhere in the Commonwealth. Richmond's industrial and manufacturing network adapted in order to supply

the Confederate Army. Factories produced uniforms, equipment, and other supplies at an exceptional rate. Most of the heavy industry such as the iron works, arsenal, and equipment manufactories were on west side of town near Tredegar Iron Works, as was the Richmond Depot, a major producer of uniforms, shoes, and flags that occupied the Crenshaw Woolen Mill.

As men left the city to join the fighting, some industries, such as the City Gas Works, changed their workforce. The Committee on Light put forth a proposal to buy slaves to replace those workers that left; City Council approved the resolution and \$30,000 was provided for the purchase (Eastman 2008:10). Gas continued to be produced throughout the war although prices escalated due to the difficulty of acquiring raw materials (Peters 2008:23). In 1861, the Gas Works produced about 190,000 feet per day ("The Gas Works" 1862).

As the principle port in Richmond, Rocketts Landing likewise became a principle port of the Confederacy (Mouer 1992:125). During the Peninsula Campaign, the Union secured Chesapeake Bay leading to the evacuation of Norfolk and the loss of the Portsmouth Navy Yard in 1862. With Rocketts Landing no longer able to supply Richmond and the upper south its use shifted and a Confederate Navy Yard was established, with additional facilities in Manchester. The Confederate States Navy Yard was located on the river, west of Gillies Creek and the end of Ash Road. Here, three ironclads were completed (*C.S.S. Richmond, C.S.S. Virginia II*, and *C.S.S. Fredericksburg*) as was an iron-plated railroad car mounting for a heavy cannon which would be used in the Seven Days Campaign. The area also became the base for the Confederate Naval Academy and James River Squadron, though the ships were stationed at Drewry's Bluff (TCC 1989). As the war drew on, transportation corridors into the city continued to be destroyed. By 1864, only the westernmost two-and-one-half miles of the Richmond & York River Railroad was in use, supplying the city's defenses (Mouer 1992:123).

Above Rocketts Landing, a large Confederate hospital was constructed on Chimborazo Hill which consisted of hundreds of tents and dozens of buildings (Figure 4-12). Closer to the river, a number of tobacco factories on Main Street and in Rocketts Landing were used to house Union prisoners. Rocketts would become a major point for the exchange and housing of prisoners (Mouer 1992:126).

As the state's capital and main industrial center for the Confederacy, Richmond was the objective of numerous Union army advances throughout the war, however the city's defenses held until the end. In April 1865, Gen. Robert E. Lee reported to President Jefferson Davis that he could no longer hold the line in Petersburg to the south and that the government should abandon Richmond. In the wake of the retreat, several stores of armament, cotton, tobacco, and other supplies, as well as the Navy Yard, were burned to prevent their capture by the Union Army, however the flames spread and by the time they were extinguished, a substantial portion of the city lay in ruins. The close proximity to the burning Navy Yard led to the complete shutdown of the Gas Works on April 3, 1865 this prevented explosions and even more widespread destruction (Figure 4-13) (Peters 2008:24).

On April 4, 1865, President Lincoln arrived at Rocketts Landing from whence he walked through the City of Richmond (TCC 1989).

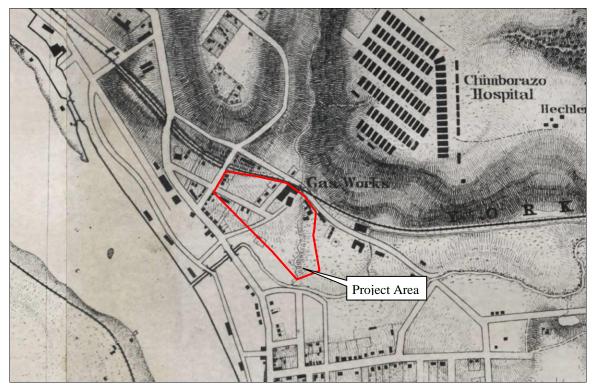


Figure 4-12. Detail of *Military map of Richmond and vicinity*, by the U.S. Coast Survey in 1864, depicting the project area. Source: Library of Congress

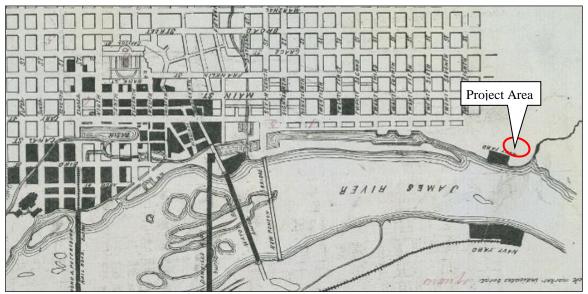


Figure 4-13. Detail of *Map of part of the city of Richmond showing burnt districts*, by C.L. Ludwig in 1865, depicting the project area. Source: Library of Congress

RECONSTRUCTION AND GROWTH (1865 – 1917)

Unlike many areas of Virginia, Richmond escaped much of the destruction caused by the war, its worst being from the evacuation fire. During the Civil War the city had gained in population and in industrial capacity. These factors encouraged a quick recovery during Reconstruction

compared to other cities in the south (Tyler-McGraw 1994:172). A reflection of this speedy recovery was the annexation of a fairly large portion of Henrico County in 1867. One of the major stimulators to recovery in Richmond and throughout Virginia was the reconstruction of transportation corridors, particularly railroads.

Following the war, the Richmond & York River Railroad was unserviceable due to wartime damage and deferred maintenance. In 1867, the line was rebuilt, using northern funding, to provide a transportation outlet for southern agricultural products; it reopened in 1869. That the railroad simply connected two inland port towns, without any outside connections, led to a shortfall of freight revenue. With its financial difficulties the railroad was sold in 1873 and it became the Richmond, York River and Chesapeake Railroad. By 1880, it was the Richmond and West Point Terminal Railway and Warehouse Company, controlled by the Richmond and Danville; in 1896 it was absorbed into the Southern Railway System (Mouer 1992:123-124).

In 1868, the Virginia Central Railroad and Covington and Ohio Railroad consolidated forming the Chesapeake and Ohio Railway; by 1873, 414 miles of rail connected Richmond and Huntington, West Virginia. In 1871, Richmond voted on a bond issue to allow for the construction of a nearly 4,000 foot long tunnel through Church Hill which would connect the C&O depot on Main Street to Rocketts Landing thereby linking the navigable parts of the Ohio and James rivers. The C&O line continued east to Newport News in 1882 (Mouer 1992:139-140).

To relieve delays from trains going through Richmond, caused by quick elevation changes, a long viaduct was constructed from Lee Street at Hollywood Cemetery to the yards at Rocketts, now known as Fulton. Completed in 1901, the James River Trestle, or Fulton Viaduct, was more than 2.8 miles long, the longest double track railway bridge in the world. The trestle is also unique in that at 18th and Dock streets it crosses both the Southern line to West Point at ground level and the elevated Seaboard mainline thereby forming the world's only three-tiered rail crossing. The elevation of the line addressed problems caused by flooding of the James River and its tributaries as well as the steep incline on the east side of Shockoe Valley which was eliminated with the relatively level gradient. With the completion of the viaduct, the Church Hill tunnel became redundant and it unfortunately collapsed in 1925 killing three (Mouer 1992:140-141). The development of the railroad and shift of maritime activity to Newport News and Portsmouth curtailed Richmond's maritime activity in Rocketts Landing (Gottlieb 2005:40).

The construction of the Chesapeake & Ohio Railroad would completely change the character of western Rocketts Landing as right-of-way condemnations forced many established families out. The railroad formed part of the southwestern boundary of the project area. The area was further changed with the establishment of the Richmond Union Passenger Railway Company in 1887. The streetcar would have a line along Lester Street (now E. Main Street) and making a loop south of Gillies Creek.

A second industry that was quickly repaired after the war was the gas works. After being forced to shut down during the evacuation fire, Gas Inspector John H. Knowles was summoned by Federal Brig. Gen. George Shepley and asked to restart the gas works primarily for restoring "nighttime lighting for security and military construction" (quoted in Peters 2008:24).

In late September-early October 1870, the James River flooded. Like much of lower Richmond, Rocketts and the Gas Works were submerged (Christian 1912:321). Equipment was destroyed but the "prompt and heroic conduct of the men" prevented violent explosions that might have otherwise occurred (quoted in Peters 2008:28). This situation would repeat itself in the flood of 1877 and many times in more recent history (Christian 1912:357).

As the city recovered, industries transitioned to wage labor leading to increased competition for unskilled jobs which often took on racist tones in the ethnically and culturally mixed neighborhoods of Richmond. Between 1865 and 1870 there were several race riots in the city, some of which occurred at Rocketts. Despite labor tensions, industries began to flourish in the area, particularly smaller ones and by the end of the nineteenth century, Rocketts was almost completely a working class neighborhood (Mouer 1992:126-127).

By 1877, the Gas Works filled the southeastern half of the project area though structures appear only to have been near Williamsburg Avenue and Maple Street (Figure 4-14). The 1876-77 City Directory indicates that the Gas Works had a lab at the corner of Maple Street and Williamsburg Avenue. Houses were situated along the streets in the western half of the project area, though it does not appear to have been densely built. An 1889 map illustrates the addition of several small structures and a railroad spur (Figure 4-15).

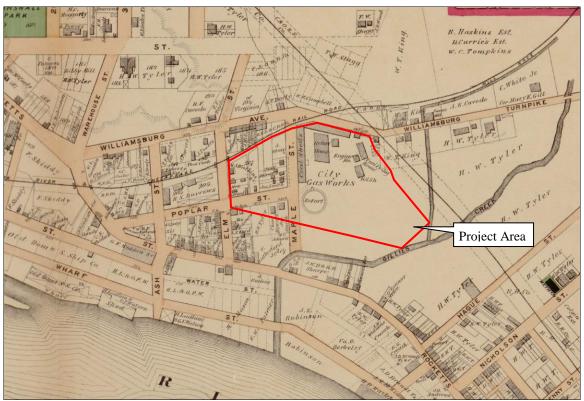


Figure 4-14. Detail of *Illustrated atlas of the* city *of Richmond*, Va, by F.W. Beers in 1877, depicting the project area. Source: Library of Congress

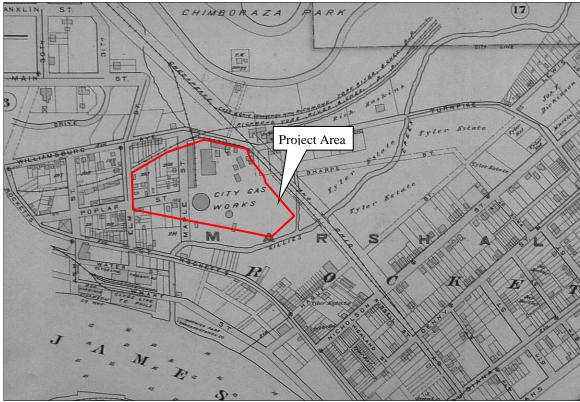


Figure 4-15. Detail of *Atlas of the City of Richmond*, by Baist in 1889, depicting the project area. Source: Library of Virginia

By the end of the nineteenth century, more white residents were moving out of Rocketts Landing. Conversely, as African Americans moved to the city they chose to settle in Jackson Ward, Shockoe Bottom, or Fulton. Fulton drew both the poor, with its "shanties and two-room shacks" with low rental rates and the more well-off with its detached houses and duplexes with low sale prices (Davis 1988:27). By the 1880s, Marshall Ward, in which the project area was located, was approximately 40 percent African American; when the streetcar came to the neighborhood, Fulton grew as a strong black streetcar suburb, especially south of Gilles Creek (Gerteis 2007; Sinclair 2011).

Like elsewhere in the city, such as at Shockoe Creek, waterway and wastewater improvements were made during this period. In the late 1800s, Gillies Creek was incorporated into the Richmond's wastewater system and Bloody Run was filled in 1884, although the fill material has proved to be unstable over the years (UVA 2011).

By the early twentieth century Fulton was seen as a factory town (Davis 1988:27). Williamsburg Turnpike served as a dividing line in Fulton, the land west of the road was largely occupied by industries and tenements while the east was largely residential with better housing. On the west side of Williamsburg Avenue, the City Gas Works expanded. Despite competition with electricity, the use of gas expanded after an initial drop. In 1907, a resolution was passed to enable the city to acquire property near the Lower Gas Works for an extension of operations ("Resolution" 1907). It is likely that this would have been the land between Maple and Elm Streets. The promotion of the use of gas continued well into the middle of the 20th century with

expanded gas service providing heat as well as cooking fuel for residences and businesses (Peters 2008:30). By 1920 over four times as much gas was produced as in 1900 (UVA 2011). Beginning in 1886, the Gas Works bi-products were mitigated through the production of paint and roofing material by the Armitage Manufacturing Company who originally had a facility on the site; in 1900 they built a new building at 3200 Williamsburg Avenue (VDHR #127-6693).

WORLD WAR I AND WORLD WAR II (1917 – 1945)

To aid in the war effort during World War I, Richmond increased the production of goods. To accomplish this, large, temporary factories were erected and existing factories were expanded upon. For example, the American Locomotive Co., which built locomotives and parts for southern railroads, produced munitions during the war (Sanford 1975:112). With the new jobs created for wartime materials, Richmond's population increased by more than 25 percent from 127,628 in 1910 to 171,667 in 1920 (USCB). Because of war demands during World War I, few improvements were made to the Gas Works despite an increase in demand of 50 percent between 1913 and 1918 (Peters 2008:30).

At the end of the war, Richmond eagerly entered the "roaring twenties" just like cities throughout the nation. In these flush times the city developed in many ways as new businesses opened and multi-story buildings were constructed. Much of this development, however, occurred on the west side of the city, no doubt aided by the rise in popularity of the automobile. The Gas Works also underwent multiple changes. As repair to buildings and equipment were not made hastily throughout its history, the plant slipped further into disrepair and in 1920 the City adopted a new form of manufacturing gas. The Carburreted Water Gas Process would insure that the gas would reach all households necessary by using crude oil instead of coal in its manufacture (Chryst 2011). Between 1919 and 1924, the city rebuilt nearly all of the facility at a cost of \$800,000 (Chen and Collins 2007:13). Indeed, a 1925 Sanborn map illustrates a different configuration of the property (Figure 4-16).

Although the Great Depression of the 1930s hit Richmond hard, the city's diversified industry and tobacco industry aided in keeping the economy above average. Unfortunately, it had severe effects on the factory town of Fulton. Within the first three years, a quarter of Fulton's residents left (Davis 1988:41, 45). The shipping industry was able to survive, and even expand, as evidenced by the construction of the shipping depot at Intermediate Terminal Warehouse No. 3 at Lester Street and Gillies Creek in 1937 (Harrison 2011).

Even with the financial difficulties the Depression presented, multiple changes were made at the Gas Works. This included the installation of a new waste-heat boiler along with new equipment to clean gas in 1930-31. The growth of Richmond's West End and in Ginter Park, which had been annexed by the City in 1914, likely led to a drastic increase in new gas lines between 1935 and 1936 and an increase in services by more than 100-percent in two years (Peters 2008:36, 40).

The new steam-generating plant was completed at the Fulton Gas Works, resulting in a far greater degree of efficiency and in 1937 a new boiler plant was under construction. The building, on Williamsburg Avenue, was placed on concrete piers 16-feet above ground level to avoid

future flooding issues. The Richmond Gas Works was the recipient of the Richmond Safety Council Award for 1937. By 1939, all the gas manufacturing equipment was situated above flood levels (Peters 2008:38-40). A new "12-foot gas generating set designed by Barlett-Haywood Division of the Koppers Company" was put into service and in 1938 the city had 32,157 gas customers (quoted in Peters 2008:40, 41).

By 1942, the city had recouped most of the losses of the Depression and business was forging ahead, although Fulton continued on its downward spiral. Unlike the extreme growth during the First World War, during World War II, Richmond remained relatively steady in both population and economy (Sanford 1975:170). Richmond's gas industry, however, faced challenges in new government restrictions and limited raw supplies although the promotion of gas continued (Peters 2008:44).

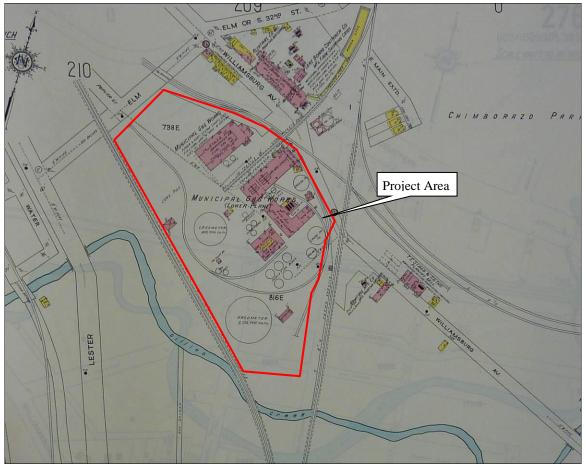


Figure 4-16. Detail of *Richmond*, *Henrico County*, *Virginia*, by the Sanborn Fire Insurance Map Company in 1925, depicting the project area. Source: Library of Virginia

NEW DOMINION (1945 – PRESENT)

Following World War II, Richmond had a population of 304,541 people and was witnessing the construction of thousands of new homes. While tobacco manufacturing remained her primary industry, chemicals and allied products were also growing (Sanford 1975:185). The city continued to expand, particularly westward. This expansion is reflected in the more than 11-

percent increase in gas usage. Most of the gas made was used for cooking and refrigeration as there was an insufficient supply for heating; most homes and businesses use oil or coal for heating (Peters 2008:45, 47).

Drastic changes occurred to the Gas Works once more after the Second World War. With advances in metallurgy and transportation, in conjunction with the increasingly bad reputation of the nation's gas works, newer forms and uses of energy were developed, namely natural gas (Chryst 2011). In 1950, the Federal Power Commission allocated the delivery of natural gas via pipeline to Richmond and by November 27, 1950, Richmond had entirely converted to natural gas (Peters 2008:50; Chryst 2011). Concurrent with the switch, Fulton Gas Works was converted to a Propane/Air Peak Shaving Plant to produce a gas comparable to natural gas which would act as a supplement in times of high demand (Figure 4-17). A Kopper-Hasche reforming plant and three storage tanks for production of peak shave gas from propane or butane were constructed at a cost of \$325,000. This new form of production was cheaper and the gas formed burned more efficiently (Peters 2008:50). Between 1950 and 1963, there was a sevenfold increase in gas distribution, with 49,692,000 cubic feet of natural gas delivered on a single day in the winter of 1963 (Peters 2008:60).

By the 1950s, as jobs and housing became more available outside of Fulton, those that had grown up in the neighborhood moved out. This in combination with rising slum rentals resulted in a severe downturn of Fulton's housing stock and number of residents and the neighborhood as a whole became more detached from the city (Davis 1988:46). By the 1960s, the once thriving community had fallen into disrepair. A lifelong resident recalled in the late 1960s that "Fulton at that time, like people said, was a bad neighborhood, but it was only bad housing. We wouldn't call it a bad neighborhood as far as crime or anything of that nature" (quoted in Tyler-McGraw 1994:303).

The Richmond Housing Authority described Fulton as follows:

For the years that have swept over Fulton Bottom have battered it into a state of virtual ruin. Age, neglect abuse and the encroachment of industry have transformed Fulton Bottom into a slum, the worst in Richmond...Reports and statistics cannot sharply convey the dismal mood of a slum like Fulton Bottom. Only a visit to its streets and into its homes can reveal its bitterness and despair (quoted in Richardson 2007:95).

A 1968 aerial depicts the Fulton Gas Works as a large operation surrounded by land that was increasingly becoming vacant (Figure 4-18). A newspaper article from 1967 described Fulton Bottom as being "...dominated by towering water tanks and smokestacks, symbols of the industry that has moved into the area. Scattered throughout the community are junkyards heaped with the rusting skeletons of automobiles and other metallic rubbish" (Grimsley 1967).

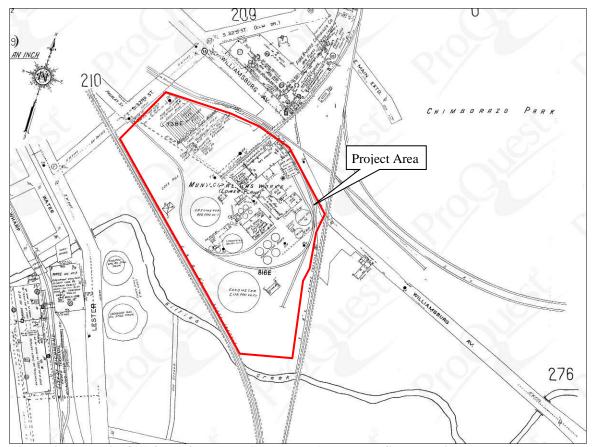


Figure 4-17. Detail of *Richmond, Henrico County, Virginia*, by the Sanborn Fire Insurance Map Company in 1950, depicting the project area. Source: Library of Virginia

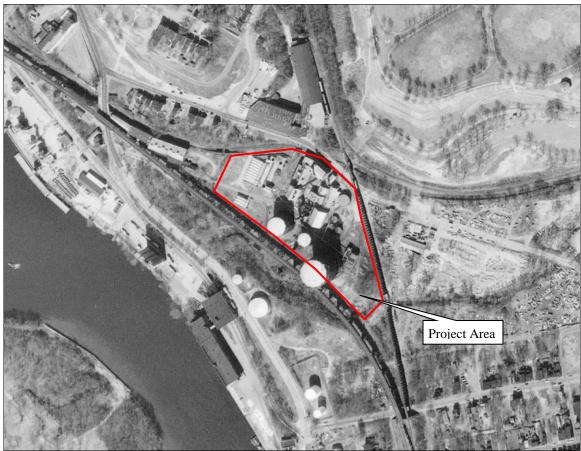


Figure 4-18. Detail of a 1968 aerial illustrating the project area. Source: USGS

In the 1970s, the Fulton Urban Renewal Plan was implemented by having the Richmond Redevelopment and Housing Authority demolish "859 blighted structures" in the 1970s (Sinclair 2011; Bass 2007). This predominantly African-American working-class neighborhood had been commercially viable into the mid-twentieth century. The original plan had been to completely bulldoze the mostly residential neighborhood and create an industrial part with a few new dwellings (Tyler-McGraw 1994:303). However, to the 2,939 inhabitants of the neighborhood it was "home-a place to protect, to preserve, and if possible, to perfect. Impoverished, yes, but not unloved" (quoted in Richardson 2007:95). With support from the Richmond Community Action Program, an Ad Hoc Committee created a plan limiting the industrial site and marking the rest for housing (Tyler-McGraw 1994:304). This plan created a buffer of retail and businesses along Williamsburg Avenue to separate the residential neighborhood east of Williamsburg from the industries along the river (Richardson 2007: 95).

To add insult to injury, in 1972, the James River flooded under Hurricane Agnes resulting in the loss of fifty homes and the abandonment of the City Gas Works. The James River at 27.5 feet above the flood level of nine feet on June 23, 1972 (Peters 2008:75). This flood began to drain the will of the residents. By the mid-1970s much of neighborhood was demolished (Richardson 2007:97-98).

This was certainly not the first flood that the Gas Works witnessed. In addition to the eighteenth century floods, there were floods in 1886, 1887, as well as in 1935, 1936, 1937, and then again in 1940. In the 1936 flood, the boiler and pump room, which had at the time been situated on ground level, was flooded and had to be replaced. It was after the floods of the 1930s that the structures were raised out of the flood plain (Chryst 2011). The 1972 flood would be the last for the Gas Works. Damages at the Fulton Gas Works reached \$425,000 with 29,000 gallons of liquid propane lost. Later that year, the propane air-peak shaving plant was moved from Fulton to the South Gate location in Chesterfield County (Peters 2008:78). Some of the structures would be demolished by 1979 (Figure 4-19).

In response to the flooding, Gillies Creek was rechanneled and realigned to its north in an effort to alleviate future severe flooding. As part of the work it was deepened to a 15-year flood level, although the total height of the banks would be able to contain water equivalent to a 100-year flood level (McLean 1972).

Concurrently, Williamsburg Avenue was improved and realigned to its current configuration to carry heavy truck traffic out of Fulton (McLean 1972). Both railroads continue to operate through Fulton, the Richmond & York River Railroad under the Southern Railway System almost exclusively to serve the Westvaco paper plant in West Point and the Chesapeake & Ohio Railroad as part of the CSX Corporation (Mouer 1992:124, 142). While the City eagerly embraced the Fulton Urban Renewal Plan and quickly demolished the neighborhood's dwellings, it was slow in rebuilding Fulton and it was not until the 1980s when new houses began to be constructed (Sinclair 2011). Demolition of some structures at the Gas Works continued (Figure 4-20).



Figure 4-19. 1979 aerial depicting the project area. Source: USGS



Figure 4-20. Modern aerial depicting the project area. Source: GoogleEarth



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5 EXISTING CONDITIONS

The project area is situated in eastern Richmond in what was historically known as Rocketts Landing and today is known as Fulton. The project area lies on flat land between the James River and Chimborazo Park. A railroad line and Williamsburg Avenue form the northern and northeastern boundary for the project area. Channelized Gillies Creek forms the eastern and southern boundary, a second railroad line forms the southwestern boundary, and a gravel parking lot forms the northwestern boundary. The parcel is enclosed by a chain-link fence with barbed wire.

As noted in the Cultural Context, the project area was in the vicinity of the earliest settled area of Rocketts Landing. Historic maps and documents indicate that early development would have been consigned primarily to the western portion of the project area. Gillies Creek flowed south and east of the project area, and at times possibly within it. The tributary Bloody Run, now filled, bisected the project area (Figure 5-1). Though blocks were laid off and numbered between Maple Street and Bloody Run, it is unclear if development occurred before construction of the Gas Works.

The western block, bounded by Bloody Run, Maple, Poplar, and Elm streets did witness construction at least by the early nineteenth century. Mutual Assurance policies indicate that there may have been at least three residences (Figures 5-2 through 5-5).² Additionally, it appears that around 1840 a tobacco factory along Bloody Run Street was replaced by residences. Because a railroad forms the northern boundary of the project area and not the street, it is unlikely that the buildings for the tobacco factory and residences along Bloody Run Street were inside the project area although associated structures could have been. The policies indicate that the dwellings were wood and brick, one to two stories high, some noted with brick foundations, some with basements, and with associated wood kitchens. The tobacco factory was constructed of brick, covered with wood, and was three stories. Although there appear to be no Mutual Assurance policies for structures along Poplar Street, later maps indicate construction there (Figure 5-6).

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² Due to errors in mapping in the policies, it is unclear if each of the policies were in fact for buildings on the block in question or on the one immediately west.

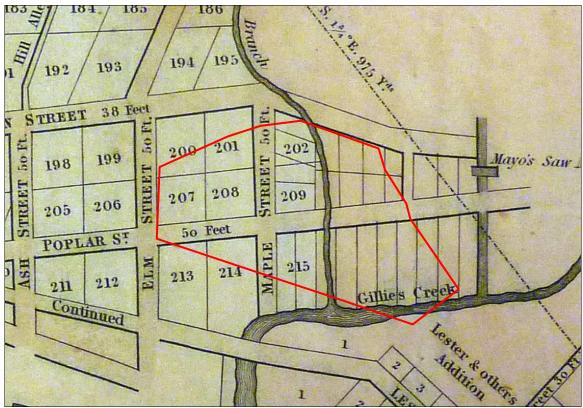


Figure 5-1. Detail of *Plan of the City of Richmond*, by Bates in 1835, depicting the project area. Source: LVA

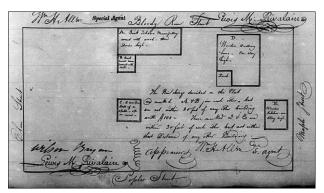


Figure 5-2. Mutual Assurance Policy for Marrin Price in 1817. Source: MAS 1817:#973

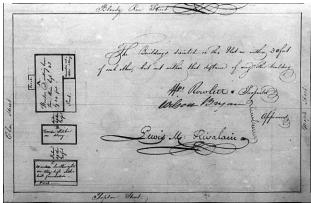


Figure 5-3. Mutual Assurance Policy for William Rowlett in 1822. Source: MAS 1822:#4735

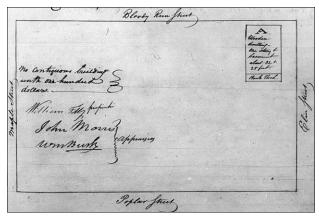


Figure 5-4. Mutual Assurance Policy for William Tilby in 1840. Source: MAS 1817:#11108

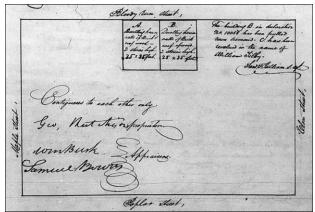


Figure 5-5. Mutual Assurance Policy for George Hutchinson in 1840. Source: MAS 1817:#11109

In the 1850s, construction for a new City Gas Works was underway on the southeast corner of Maple and Bloody Run streets. An 1864 map depicts the Gas Works as fronting Bloody Run and Maple streets with an additional building to its rear and others (possibly associated with the Gas Works) on the opposite side of Bloody Run (Figure 5-6). Floods in the 1870s would necessitate repairs and new construction. An 1877 map shows Coal Sheds, a Retort House, Engine House, Purifying House, Office, Retort, and B.S.Sh (Figure 5-7). An 1889 map depicts a slightly different configuration, possibly to allow for a railroad spur from the north (Figure 5-8). The block to the west of the Gas Works continued to have dwellings likely into the early twentieth century.

As the manufacture of gas changed, the Gas Works was altered in the 1920s. The property began to have a more familiar layout with the inclusion of the western block (Figures 5-9 and 5-10). Among the structures and brick buildings depicted on a 1925 Sanborn map are a railroad trestle, Gasometer, oil and tar tanks, Purifying Boxes, Condensers, Office and Store Room, Engine Room, Gas Machines, and Oil Pump Room. At least one building had a basement. Additionally illustrated was the no longer used Coal Gas House, which had likely been constructed in the early twentieth century when the western portion of the project area was purchased by the City.

After additional alterations in the 1930s, the manufacturing of gas changed once more in the 1950s leading to a final major alteration of the property and buildings (Figures 5-11 through 5-13). The western block now had liquid gas condenser tanks and a pump house. Other structures included a gas plant, boiler house, gasometers, purifying boxes, oil tanks, office and storage room, condensers, and engine room. The Gas Works was used until the 1970s after which portions would be demolished (Figures 5-14 and 5-15).



Figure 5-6. Detail of *Military map of* Richmond and vicinity, by the U.S. Coast Survey in 1864, depicting the project area. Source: Library of Congress



Figure 5-7. Detail of *Illustrated atlas of the* city of *Richmond, Va*, by F.W. Beers in 1877, depicting the project area. Source: Library of Congress

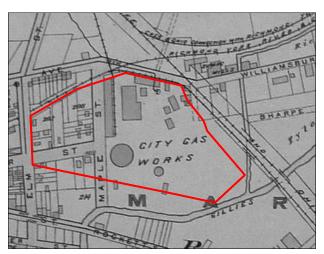


Figure 5-8. Detail of *Atlas of the City of Richmond*, by Baist in 1889, depicting the project area. Source: Library of Virginia



Figure 5-9. Detail of *Richmond*, *Henrico County*, *Virginia*, by the Sanborn Fire Insurance Map Company in 1925, depicting the project area. Source: Library of Virginia



Figure 5-10. Bird's eye view of the Gas Works in the 1920s or 1930s. Source: CHPN



Figure 5-12. Bird's eye view of the Gas Works in 1955 by the Adolph B. Rice Studio. Source: LVA



Figure 5-14. Detail of a 1968 aerial illustrating the project area. Source: USGS



Figure 5-11. Detail of *Richmond, Henrico County, Virginia*, by the Sanborn Fire Insurance Map Company in 1950, depicting the project area. Source: Library of Virginia



Figure 5-13. Fulton Gas Works in 1956 by the Adolph B. Rice Studio. Source: LVA



Figure 5-15. 1979 aerial depicting the project area. Source: USGS

Today, the site of the Fulton Gas Works is vacant. It was surveyed in 2007 and 2016. At the time, the complex consisted of "two standing buildings (buildings 1 & 2), the remains of a gas storage tank, and the concrete foundation of a building attached to three small sheds (building 3)". These building numbers and structure is referenced in Figure 5-16 as well as the assigned name as depicted in the 1950 Sanborn Map. Additionally, there is a brick wall along the northern boundary of the property separating it from the rail line as well as the remains of supports for liquid gas condenser tanks. Aerials also clearly depict the location of buildings and structures no longer present (Figures 5-17 through 5-21). Additionally, Timmons Group mapped utility clearances and completed ground penetrating radar of the site (Figures 5-22 and 5-23).



Figure 5-16. Modern aerial of Fulton Gas Works. Source: Google Earth



Figure 5-17. Bird's eye view of Fulton Gas Works before April 2016. Source: Bing



Figure 5-18. View northwest of Fulton Gas Works from parking lot.



Figure 5-19. View west of Fulton Gas Works from Williamsburg Avenue.



Figure 5-20. View southeast of Fulton Gas Works from Williamsburg Avenue.



Figure 5-21. View southeast of Fulton Gas Works from gravel parking lot.



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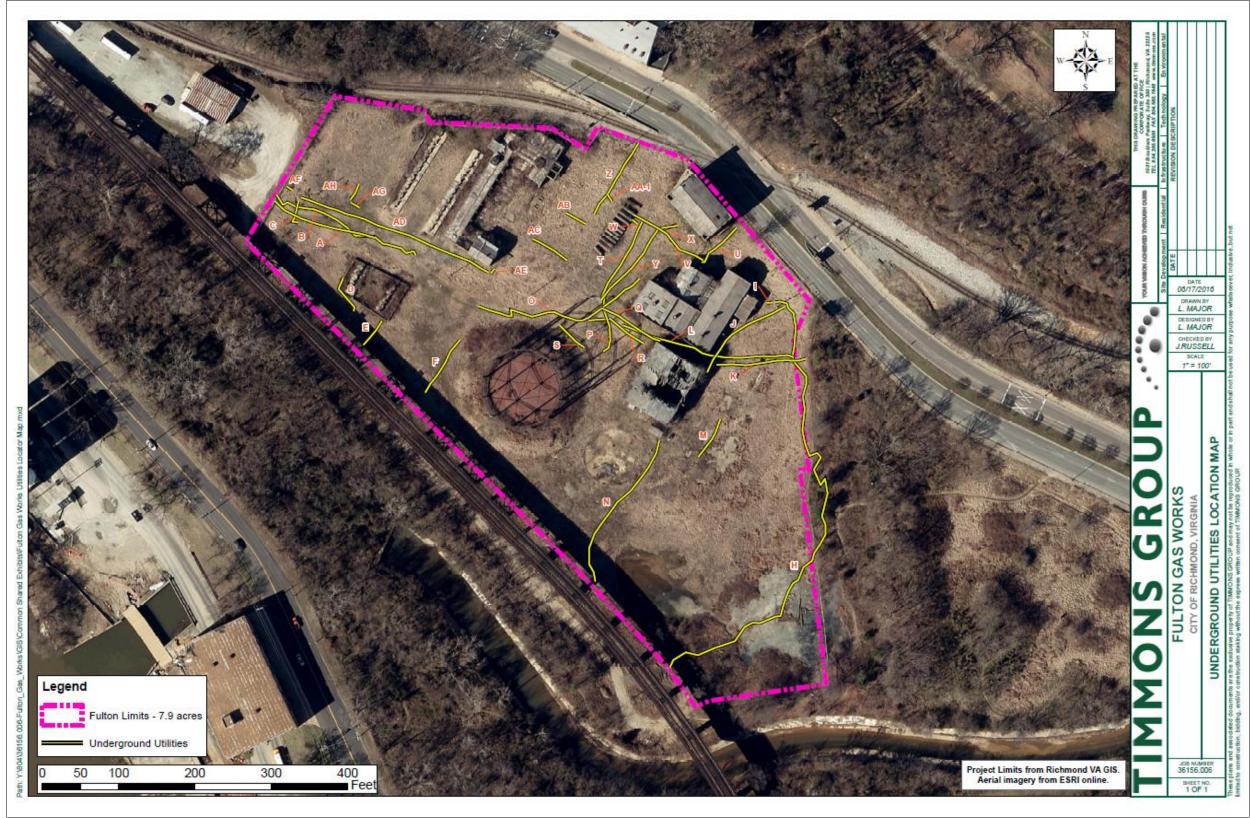


Figure 5-22. Underground utilities and anomalies at Fulton Gas Works. The lettering system on the map was used to differentiate findings. Source: Timmons Group

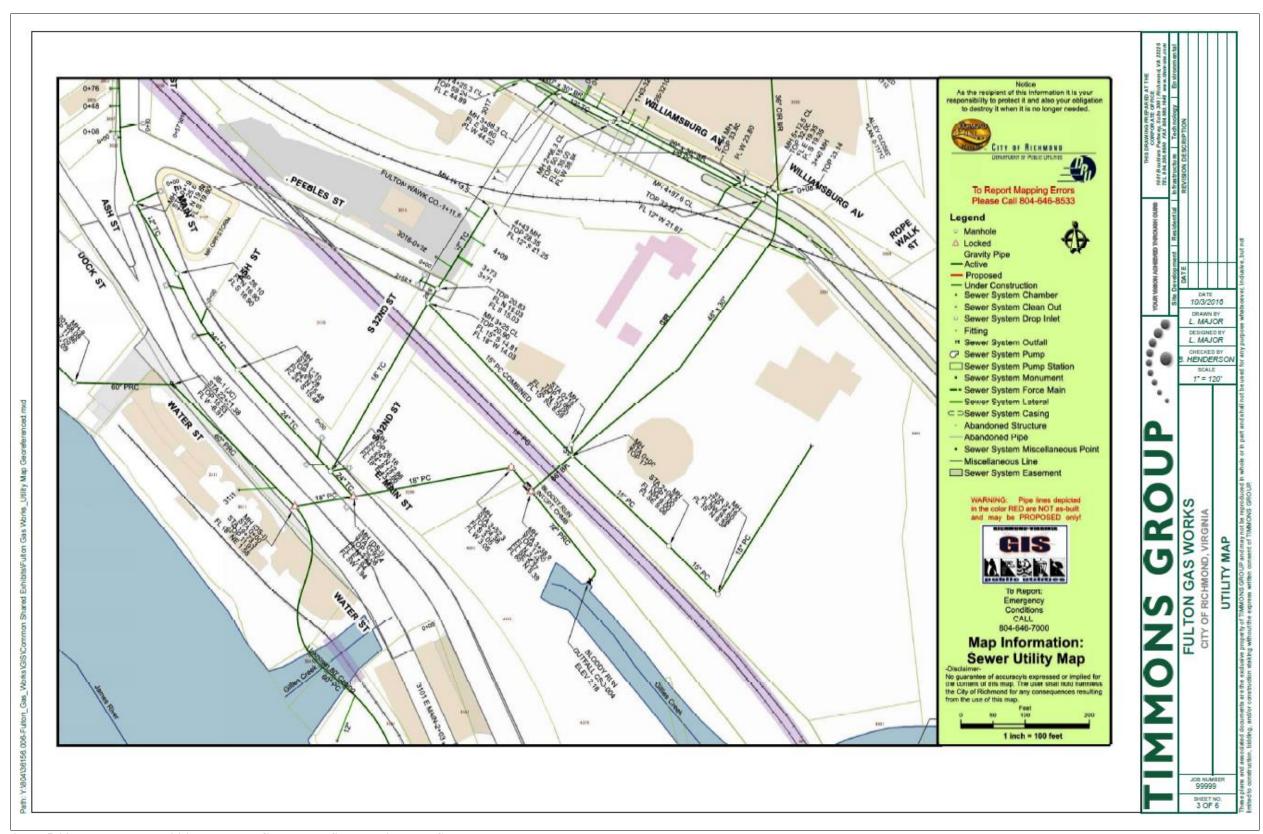


Figure 5-23. Underground utilities at Fulton Gas Works. Source: Timmons Group

Building #1: Boiler House

As the most visible, the Boiler House is seen as the main building of the complex and is oriented northwest-southeast along Williamsburg Avenue (Figures 5-24 through 5-26). Concrete clad steel piers raise the structure one-story above ground level. Brick walls and large industrial windows enclose an open space that rises an additional three stories. A shallow front gable roof covers the building. It is hidden at each end by a stepped gable with decorative tiles with the City of Richmond's seal, tiles with DPU for the Department of Public Utilities, and tiles reading "FULTON GAS WORKS". Covered metal steps lead to the doorway on the southeast elevation. The building housing the Oil Pump Room, Gas Machines, and Gas Plant that was adjacent to the Boiler House's northwest elevation has been demolished and a portion of this building's northwest elevation have been partially infilled with corrugated siding. Inside the building, the equipment continues to fill the western quadrant, one of the pieces of equipment has the date 1954.



Figure 5-24. Building 1, view west from Williamsburg Avenue.



Figure 5-25. Building 1, view northeast.



Figure 5-26. Building 1, interior view west.

Building #2: Engine Room, Boiler Room, Pipe Storage

Just south of the Boiler House lies a series of interconnected buildings that once housed the Engine Room, Boiler Room, and Pipe Room (Figures 5-27 through 5-30). An Office and Store Room that was immediately to its south has been demolished leaving behind a concrete floor with the date FEB 25/32 inscribed. Aerials show that it came down between 2014 and April 2016.

The brick interconnected buildings are one-story with front-gable roofs covered with corrugated asbestos. Though probably constructed around the same time, there are differences in brick detailing. Two of the buildings have stepped gables; other brick features included corbelled brick, inset panels, and arched windows that have been bricked in. Equipment continues to fill the open interiors. On the east elevation is a newer concrete block addition with a flat roof.



Figure 5-27. Building 2, view southeast.



Figure 5-28. Building 2, view northwest.

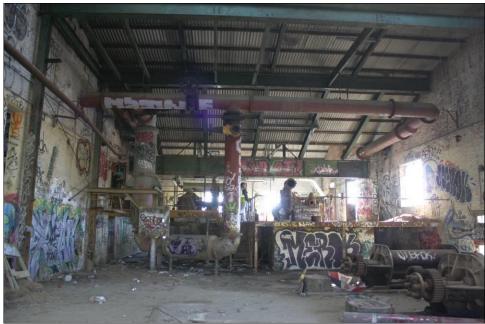


Figure 5-29. Building 2, interior of Engine Room, view southeast.



Figure 5-30. Building 2, remains of Office and Store Room, view northeast.

Building #3: Concrete Platform, Pump House

Building 3 consists of a 10-foot high concrete platform spanning between three raised sheds covered with corrugated asbestos (Figure 5-31 through 5-37). The larger shed has a side-gable roof and is divided into two sections by a concrete party wall. Metal steps lead up to the entrances on the north elevation below a shed roof porch. Inside the building is equipment, one of which has the date of 1949. The shed is connected to the concrete platform by a metal catwalk. The other, smaller, sheds are near the northern end of the platform. Also covered with corrugated asbestos, they have shed roofs. One shed is located directly on the platform and the

other is slightly off the west side and is accessed by steps. There are two round openings in the northern end of the platform and what appear to be tracks for a rail line.

Immediately west of the concrete platform are the remains of the concrete supports for the liquid gas condenser tanks. Another small set of these supports are located to the south. Just north of the concrete platform, a brick wall with a concrete base, follows the property line, separating it from the rail line. There is a single doorway on the wall at the liquid gas condenser tanks.



Figure 5-31. Building 3, view northwest.



Figure 5-32. Building 3, Liquid Gas Condenser Tank supports, view northeast.



Figure 5-33. Building 3, large shed, view southwest.



Figure 5-34. Building 3, interior of large shed, view southeast.



Figure 5-35. Building 3, small sheds, view southwest.



Figure 5-36. Building 3, southern Liquid Gas Condenser Tank supports, view west.



Figure 5-37. Building 3, brick wall and door, view north.

Gas Storage Tank: Gasometer

Centered near the southwestern border of the property is what is labeled in the 1950 the 600,000 cubic foot Gasometer. Now it is a steel frame structure with a steel base (Figure 5-38). On its north side is a small shed. East of the structure is a second small shed. Both sheds have shed roofs.



Figure 5-38. Gas Storage Tank, view northwest.

Other than the demolition of the Office and Storage Room, little change as occurred on the property since it was surveyed in 2007 (Figures 5-39 through 5-42). In 2007, the consultant recommended that the:

Fulton Gas Works was potentially eligible for the NRHP under Criterion A (Community Planning & Development). During the 1920s the City of Richmond was quickly expanding. Areas around Richmond were being developed and new houses were constructed with modern gas, water, and electrical systems while older houses were upgraded. The Fulton Gas Works provided essential utilities necessary during the period of rapid development of Richmond in the early to mid-twentieth century. As a result of the 2007 survey, the extant resources at the Fulton Gas Works were found to represent an important period in the history of Richmond, and the buildings were evaluated as retaining their architectural and historical integrity.

In 2016, VDHR's National Register Evaluation Committee aggreed that it was eligible for listing. Survey of the resource in December 2016 finds that the Fulton Gas Works retains integrity and should remain eligible for listing in the NRHP.

It should also be noted that the area also continues to be "environmentally unsafe due to the toxic waste produced by the Fulton Gas Works" (Holma 2016). In addition to the environmental hazards that the site itself presents, the buildings and structures themselves have a large amount of stable and loose asbestos, corroding concrete around structural steel members, corroding steel members, and loose bricks (Figures 5-43 through 5-46).





Figure 5-39. View southeast from Williamsburg Avenue towards Buildings #1 and #2, VDHR archives (left), December 2016 (right)

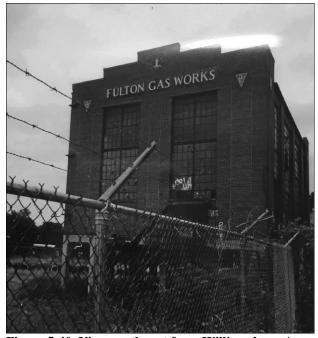




Figure 5-40. View northwest from Williamsburg Avenue towards Building #1, VDHR archives (left), December 2016 (right).





Figure 5-41. View southwest towards Building #2, VDHR archives (left), December 2016 (right).





Figure 5-42. View southwest from Williamsburg Avenue towards Building #3, VDHR archives (left), December 2016 (right).



Figure 5-43. Detail of corrugated asbestos.



Figure 5-44. Detail of flaking asbestos.



Figure 5-45. Detail of corroding concrete and steel.



Figure 5-46. Detail of loose bricks.



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6 ARCHAEOLOGICAL POTENTIAL

As revealed through background research, the operation of a gas works facility within the limits of the existing property occurred as early as the Civil War and continued up through the last half of the twentieth century. While the western portion of the current property was characterized by nineteenth-century residential development the majority of the project area was used for industrial purposes for the better part of the property's documented use.

Historically, Bloody Run Branch bisected the property with residential uses on the west side of the creek and industrial uses on the east side. By the 1870s and 1880s, Gillies Creek had been channelized and relocated further east and Bloody Run Branch filled opening up the western portion of the project area for further industrial expansion. As depicted on the 1925 Sanborn Insurance Map, the gas works facility by that time had expanded to fully encompass the current property boundaries and consisted of multiple buildings and gas storage facilities. As the gas works continued to expand and modernize its facilities to meet customer demands, processing and storage facilities were remodeled, expanded, removed, and constructed on the property. In addition, numerous underground utilities crossing the property were installed and are still present today.

The early presence of Bloody Run Branch running through the property and its junction with Gillies Creek at the southern edge of the property would likely have made the area attractive for Native American settlement and resource extraction. As such, the potential for prehistoric period archaeological deposits associated with use and occupation of the area is present. Similarly, documented residential uses of the western half of the property as early as the mid-nineteenth century indicates that the potential for archaeological deposits associated with domestic use of the area are also present.



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7 CONCLUSIONS AND RECOMMENDATIONS

The results of the study revealed that the project area was in the vicinity of the earliest settled area of Rocketts Landing. Historic maps and documents indicate that early development would have been consigned primarily to the western portion of the project area. Gillies Creek flowed south and east of the project area, and at times possibly within it. The tributary Bloody Run, now filled, bisected the project area. Development had occurred in the western portion of the land by the early nineteenth century in form of dwellings and a tobacco factory.

Following the incredible success of the City Gas Works on Cary Street between 15th and 16th streets, the City purchased land in Rocketts Landing for the construction of a new plant. The plant began operations in 1856. The Civil War, multiple floods, and changes in manufactured gas technology necessitated multiple repairs and rebuildings of the Gas Works. Changes between the 1920s and 1950s created the more modern layout of the site. What had become known as Fulton Gas Works continued operations until 1972 from which time it has remained vacant.

ARCHITECTURAL RESOURCES

Fulton Gas Works was surveyed in 2007 and 2016. In 2007 it was recommended potentially eligible for listing in the NRHP. VDHR determined it to be eligible for listing in 2016 under Criterion A, Community Planning & Development. Based on the results of this assessment it is D+A's opinion that VDHR's finding of eligibility in 2016 is still appropriate.

ARCHAEOLOGICAL RESOURCES

Use of the property for heavy industrial purposes has significantly impacted the integrity of the soils and potential for intact archaeological deposits to remain. While archaeological material is likely present in various areas throughout the property, the amount of documented subsurface disturbance associated with construction and operation of the gas works and its attendant underground utilities has substantially impacted the vertical and horizontal integrity of any remaining archaeological contexts and therefore substantially diminished their ability to provide new or important information about settlement and use of the area. Given the documented soil conditions and presence of various by-products associated with past industrial uses of the property, the overall potential for intact significant archaeological deposits or sites to be present on the property is considered to be very low. As such, it is D+A's recommendation that no archaeological survey is warranted for the property.



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