

**HISTORICAL AND ARCHAEOLOGICAL
INVESTIGATION OF ROBERDEAU'S WHARF
AT HARBORSIDE
ALEXANDRIA, VIRGINIA**

Submitted to:

**400 South Union Street Joint Venture
Alexandria, Virginia**

July, 1989

**Engineering-Science, Inc.
1133 Fifteenth St. N.W.
Washington, D.C. 20005**

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**Dennis A. Knepper
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ABSTRACT

Historical and archaeological investigations of the Harborside development property were conducted on behalf of the 400 South Union Street Joint Venture (Alexandria, Virginia) in April and May of 1989. The property consisted of a 3.5 acre parcel at the south end of the Alexandria waterfront. Historical research indicated that most of the lot consisted of made-land, built as a wharf extending towards the Potomac River channel beginning in the late eighteenth century. The property was used as a commercial wharf and shipyard in the eighteenth and nineteenth centuries, contained a brewery and a large iron foundry and locomotive works in the nineteenth century, and an electric power generating plant in the first half of the twentieth century. Backhoe trenching revealed remains of the eighteenth century wharf surface, in the form of wood planking and a compressed wood chip and pine tar surface; portions of a brick furnace and coal bin associated with the brewery complex; and the remains of various structures related to the operation of the power plant. The cove in which the wharf was built in the eighteenth century appeared to have been quite shallow. Wharf fill was recorded as little as 2 to 3 feet in thickness in most areas tested; bulkheads probably served as retainers. Although no more archaeological work is scheduled, development of an interpretive display associated with a public easement planned at the entrance to the complex is recommended.

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I. Introduction

Project Description and Location

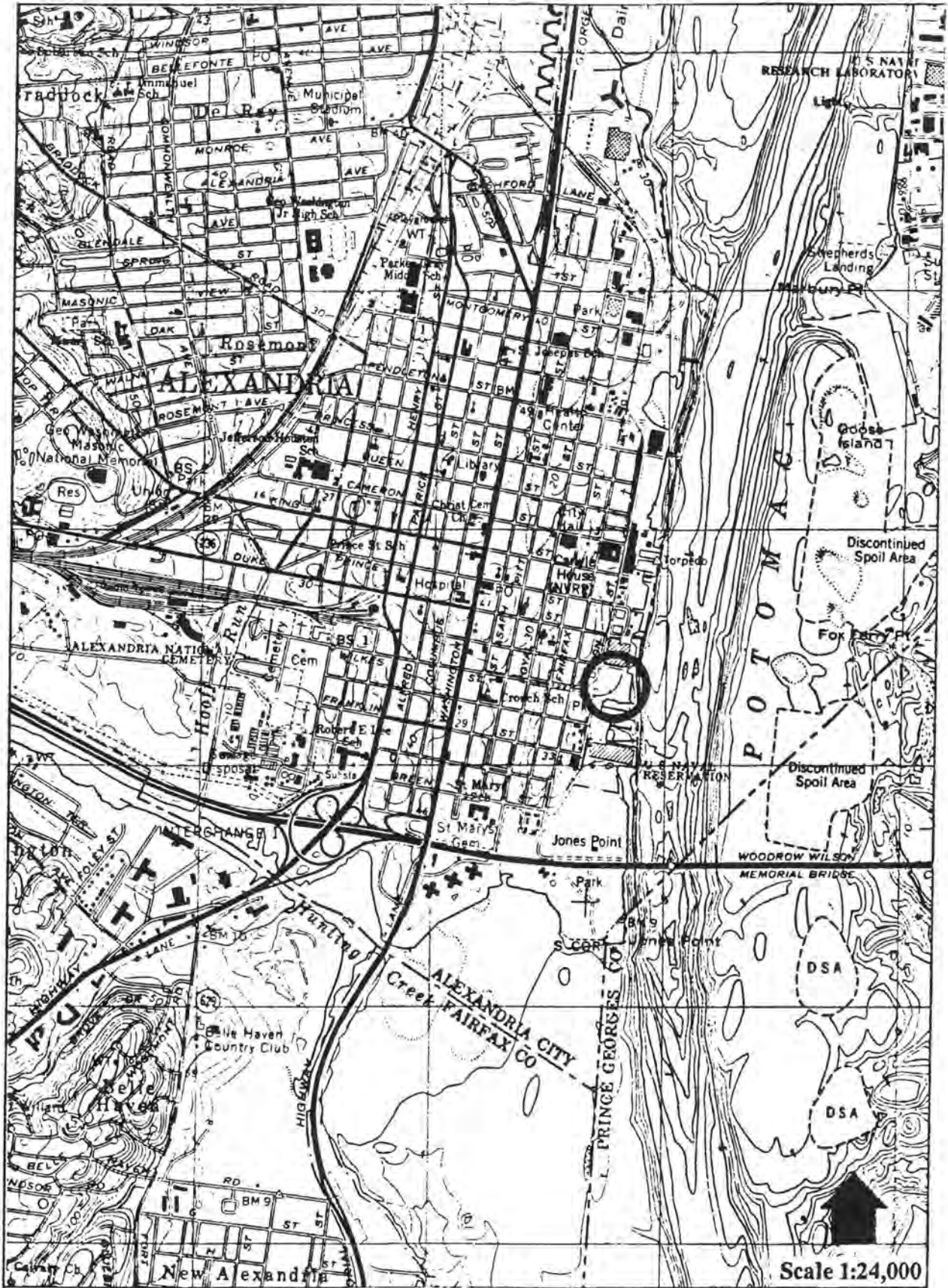
In April and May of 1989, an archaeological and historical study was carried out by Engineering-Science, Inc., at the Harborside property at 400 South Union Street in Alexandria, at the request of the 400 South Union Street Joint Venture, of 109 Oronoco Street, Alexandria, Virginia. The study consisted of archival research and on site archaeological testing in coordination with Alexandria Archaeology. The project was conceived of and funded by the 400 South Union Street Joint Venture.

The project area consisted of a 3.5 acre parcel at the southern end of the waterfront in Alexandria, bounded on the north by Wolfe Street, on the south by Wilkes Street, on the west by Union Street, and on the east by the Potomac River (*Figure 1*). As part of the survey, an official site number was requested from the Virginia Division of Historic Landmarks: the number 44AX114 was assigned.

Research Orientation

The main goal of the present investigation was the completion of a survey of the project area to determine the type of cultural resources remaining on the property and the degree of current depositional integrity. It was known from previous documentation that the area consisted almost entirely of made-land and that the site has seen a large amount of heavy industry, some of it begun quite early in the history of the site. The survey was conducted to test for remains of the early wharf which extended into the Potomac and for the presence of early structures associated with the wharf, for evidence of early industrial use of the property, and to determine the degree of disturbance resulting from later industry. A further aim was the initiation of a study of artifacts recovered from various test locations on the site for data relevant to general site chronology and use.

To this end, historical documentation was evaluated for data concerning past land use patterns. Based on this research, the presence of subsurface features was predicted and an appropriate field methodology developed, involving the excavation of a series of backhoe trenches. Greatest consideration was given to early deposits, which were assumed to lie in the west portion of the property along Union Street. The following report details the methods and results of the study and includes recommendations for further treatment of identified resources.



Source: USGS Alexandria 1983 Harborside

Figure 1 Project Location

II. PRESENT SITE CONDITIONS

The project area as it existed at time of survey consisted of a 3.5 acre lot (slightly over 152,000 square feet) bounded to the north by Wolfe Street, to the west by Union Street, to the south by Wilkes Street, and to the east by the Potomac River. The lot was almost entirely clear of standing structures. Historically, the north and south halves of the lot have been under separate ownership and have seen different uses. At the start of survey work, approximately two-thirds of the north half of the lot was surfaced with asphalt and used as a public parking facility. In the extreme northwest corner of the property, a small power substation operated by the Virginia Electric Power Company covered approximately 7,600 square feet and was enclosed by portions of a brick screening wall along Union and Wolfe Streets and by chain link fencing.

Brick walls ran along all or part of the north, west and south bounds of the lot. The west edge of the property, running the length of the block along Union Street, was bounded by a brick wall topped with barbed wire. Two walkway openings and two drive openings in the wall were secured by iron gates. The south edge of the property consisted of a 100 foot length of brick wall formed by the remnants of a twentieth century structure at the corner of Union and Wilkes, part of whose raised concrete slab remained in a relatively undisturbed state. To the north of the slab lay a deteriorated asphalt driveway and several low concrete ledges or footings. Chain link fencing, obscured by vines and small trees, ran the remainder of the south property line eastward to the waterfront.

The north edge of the lot consisted of a continuation of the wall which ran along Union Street, extending some 80 feet along Wolfe to the edge of the VEPCO substation, at which point a 16 foot opening with an iron gate served as an exit for the parking lot. To the east of the drive lay the remains of an older brick wall, which appeared to be the north wall of a foundry building erected by Thomas and Richards Smith in the 1830s. The wall was quite overgrown, almost completely obscured from Wolfe Street by trees and heavily covered with vines, including, to the chagrin of one observer who climbed the wall to measure its dimensions, poison ivy. The interior of the wall showed signs of repeated re-use, in the form of numerous and varied iron fittings attached to both brick and mortar, and several filled-in windows, some of which exhibited fairly complex histories of patching and refilling. The original floor of the building may have been considerably lower than the present grade, as evidenced by two pairs of window openings near the east end of the wall which appeared to continue below ground level. The corners of truncated walls running to the south were visible at either end of the wall, and sections of newer brickwork finished out the length of the present wall for 5 feet to the west and 3 feet to the east. Chain link fencing ran part of the remainder of the block toward the river's edge. Eighty feet east of the end of the foundry wall and several feet south of the fence lay a large concrete rail head, positioned as the terminus for a rail line extending eastward from the Wilkes Street tunnel and curving to the north to meet the rail head. Workers at the Robinson Terminal Warehouse, which occupies the block to the north across Wolfe Street, reported that

when the power plant was in operation, rail cars ran up to the rail head to off-load coal onto conveyors which carried it directly to the furnaces in the basement of the plant.

In general, the surface of the property was flat, with elevations ranging from 10 feet along Union Street, to 7.5 feet along the concrete bulkhead forming the east bound of the project area at the river. A slight rise southeast of the center of the lot was topped by a large iron I-beam set in concrete, another remnant of the power plant support facilities.

III. Previous Land Use

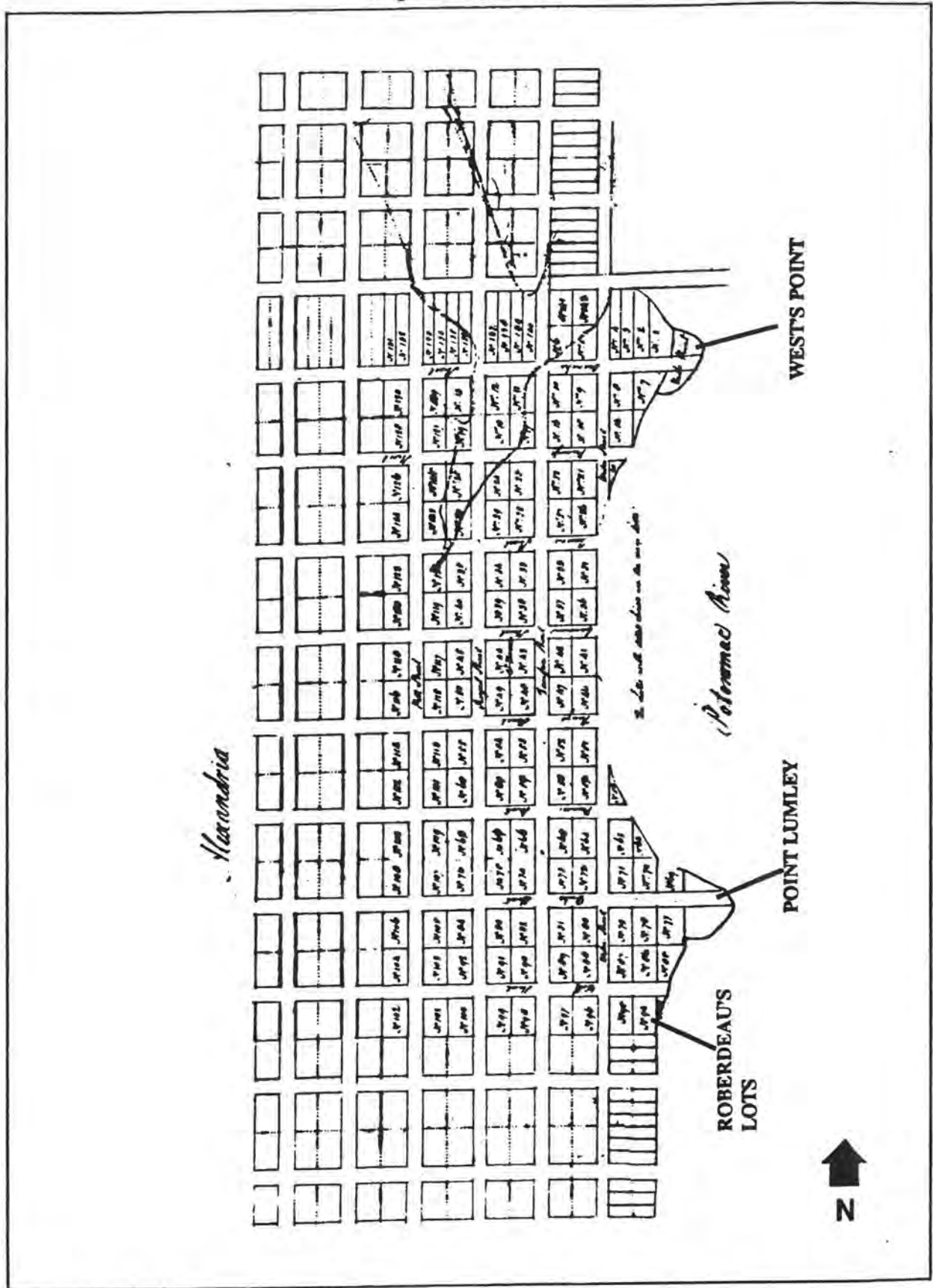
The town of Alexandria was officially organized in 1748 when an Act of the General Assembly called for the erection of a town on a portion of the lands belonging to Philip Alexander, John Alexander and Hugh West, lying on the west bank of the Potomac River at the mouth of Great Hunting Creek (*Figure 2*). The Act of the Assembly called for a survey of the 60 acres of land and the laying out of lots to be put up for public sale or auction. These lots were not to exceed a half acre of land each, and a portion of the 60 acres was to be set aside for a market place and a public landing. Furthermore, it was enacted that the buyer of the lot or lots

shall within two years next after date of the conveyance for the same, erect, build and finish on each lot so conveyed, one house of brick, stone or wood, well framed, of the dimensions of twenty feet square and nine feet pitch at the least or proportionately thereto (in Powell 1928: 28)

In July 1749, the County Surveyor, John West Jr., assisted by the young George Washington, staked out lots for the founding of the town. Sixty-six lots were initially delineated, nine streets were laid and two public landings, West's Point and Point Lumley, were established at either end of the town's waterfront. Several days subsequent to the laying of the lots, public auction was held and thirty-one lots were sold.

In 1753 the town was resurveyed and the bounds were marked with white oak posts. All of the buildings were ordered to front towards the streets, with gables only where streets crossed and with chimneys made of brick or stone (Powell 1928: 33). The streets were laid out north to south with the points of the compass. At this time, Water Street (now Lee Street) was the easternmost street in the town, running closest to the river, the shoreline of which created a curved harbor area or cove (*Figure 3*). While both of the public wharves at either end of the town provided access to the deep waters of the Potomac, the cove itself was a shallow bay or shoal that extended some distance from the banks of the river. Therefore, in order to better take advantage of Alexandria's position on the river, the Alexandria Board of Trustees wrote on September 1, 1760, that "every purchaser of Riverside Lotts by the terms of the sale was to have the benefit of extending the said Lotts into the River..." (Proceedings of the Alexandria Trustees: 34).

This act greatly encouraged development along the waterfront, especially in the central harbor area, so that eventually the town counted no less than 26 wharves and a variety of commercial and industrial sites along the river's edge (Miller n.d.). Growth occurred progressively. Banks as high as 10 feet ran along the water front and the shoal extended the length of the main frontage. To remedy this problem, the Virginia legislature moved in 1782 to grade and develop Water Street and add a new avenue, Union Street, to the east. The land was most likely extended in part by the sinking of derelict watercraft to form bulkheads, behind which fill, taken from the graded banks, could be placed (Shomette 1985; Miller 1987a). The extension of the land and the addition of Union Street followed the established grid laid out for



Source: George West 1763 Harborside

Figure 3 Alexandria Waterfront in 1763

the city until eventually the curve of the Alexandria harbor had vanished, was replaced by a straightened shoreline (*Figure 4*).

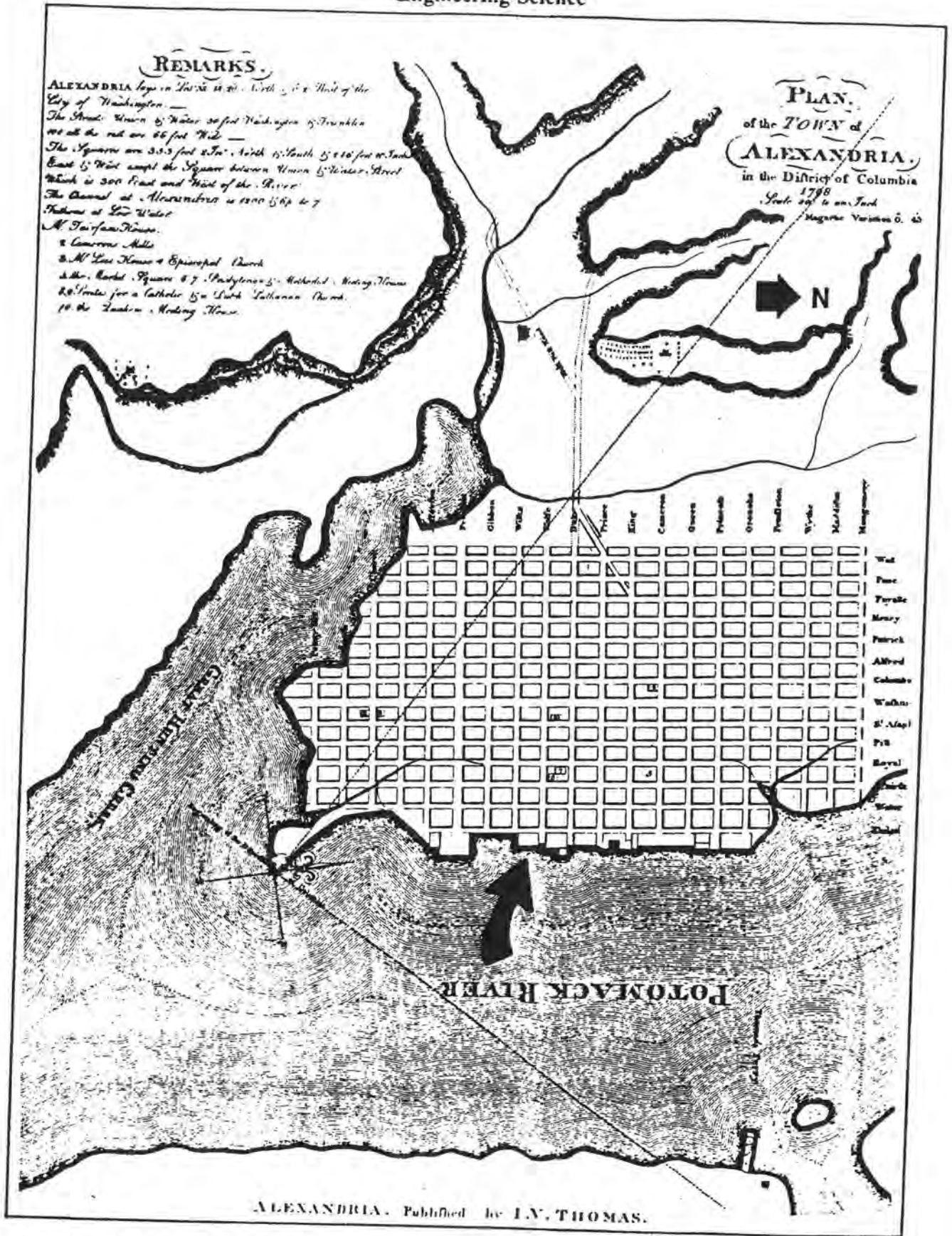
The addition of Union Street and the extension of the land to the east brought the present Harborside site into existence, bounded as it is today by Wilkes and Wolfe Streets to the south and north, by Union Street to the west and by the Potomac River to the east. Originally, before the establishment of Union Street, the easternmost area between Wilkes and Wolfe Streets consisted of a large block divided into halves, each measuring approximately 200 feet along the Water Street edge. The north half of the area was delineated into three lots numbered 93, 94 and 95 (*Figure 3*), while the south half remained as one large parcel, not yet divided into separate lots. Lots 94 and 95 were of equal size, while lot 93 was cut off at an angle by the waterline of the Potomac. Union Street was eventually placed between lots 93 and 94.

While lots 93, 94 and 95 were all bought together by John Hughes in 1765, the south half of the original site was conveyed directly from John Alexander to several different merchants of Alexandria as late as 1774. At this time, according to the deed, John Alexander agreed that "a street 66' wide by the name of Wilkes shall be laid out and be forever kept open on the south side of the hereby granted two lots, beginning at Potomac River and running from thence to the westward and parallel to Wolfe Street..." (Fairfax County Deedbook M:127). The south half of the site was immediately contiguous to lots 93, 94 and 95, which were transferred from the Town of Alexandria to John Hughes in 1765. Nine years later, John Hughes' widow then sold the lots to Daniel Roberdeau, a distinguished general in the Revolutionary War, member of the Continental Congress and signer of the Articles of Confederation (Buchanan 1876), who erected a distillery complex on the site. A description of the complex, found in the December 1, 1774 issue of the *Virginia Gazette*, described it as consisting of several buildings including a stone distillery house, a store house, a wood frame structure, a cooper's shop and a woodyard. The main building, the stone distillery, measured 71 feet by 39 feet and conformed to the requirements of the 1748 Act of the General Assembly obligating owners to build a house of brick, stone or wood on the lot bought by them. The second building was a stone storehouse measuring 50 feet by 50 feet, with granaries in 2 stories above the ground floor and a sail or rigging loft above. The cooper's shop was a wood frame building with a "suitable chimney" and measured 23 feet by 16 feet. The article continued by describing the number and type of stills, and finished by giving the distillery's location:

The whole of these improvements are situated in Alexandria, below the bank; the distillery on said ground, and the cisterns fixed above the highest tide waters; the stores and yard on a wharf which, with the public wharf adjoining, of 66 feet makes an extent of more than 200 feet in width, 156 feet of which run 300 feet into the Potowmack.

(*Virginia Gazette*, 1 Dec 1774)

At this point the area of land below the bank was most likely part of lot 94 and the majority of lot 93. The distillery building itself was located at what is today the



Source: George Gilpin 1798 Harborside

Figure 4 Roberdeau's Wharf in 1798

northwest corner of Union and Wolfe Streets, across from Harborside, along with the stores and yard. One or more of the outbuildings may have been located on a wharf extending 300 feet into the river.

A few months later in April 1775, Roberdeau's distillery products were advertised in the *Gazette*:

Roberdeau and Jackson have for sale at the new Distillery--Alexandria Rum which they engage to be equal in quality, flavour, agreeableness of smell, to any made in this Country. They propose to sell for CASH ONLY delivered to ship at the distillery wharf.

(*Virginia Gazette* 21 April 1775)

Thus, Roberdeau made immediate use of his land and presumably derived a measure of profit from it. Yet, while he devoted this first year to the production of rum, Roberdeau's long term intentions for the land were most likely associated with the shipping and trade industries.

By 1784 Union Street had been laid out along the waterfront (Miller n.d.), and ran between lots 93 and 94. By the 1790s, Roberdeau was extending lot 93 into the water, advertising a wharf to "accommodate Vessels of the deepest Draught of Water, also with the convenience of stores for their cargoes," and offered free wharfage in exchange for ballast (*Alexandria Gazette*, 23 September 1790). In a later entry in March 1791, Roberdeau advertised for materials to be used in the construction of his wharf which was in the process of being completed. A map of Alexandria, surveyed by Andrew Ellicot in 1791 and produced by Col. George Gilpin in 1798, begins to show the extension of Roberdeau's land east into the Potomac River (*Figure 4*). Although the map does not articulate the newly constructed wharves and slips, it is the first map that shows the intermediate extension of land and the area of infill between Wilkes and Wolfe Streets east of Union Street (see also the slightly later map of 1803: *Figure 5*). By May of 1791, Roberdeau's Wharf appeared to have been finished, as he was then advertising to let his various buildings:

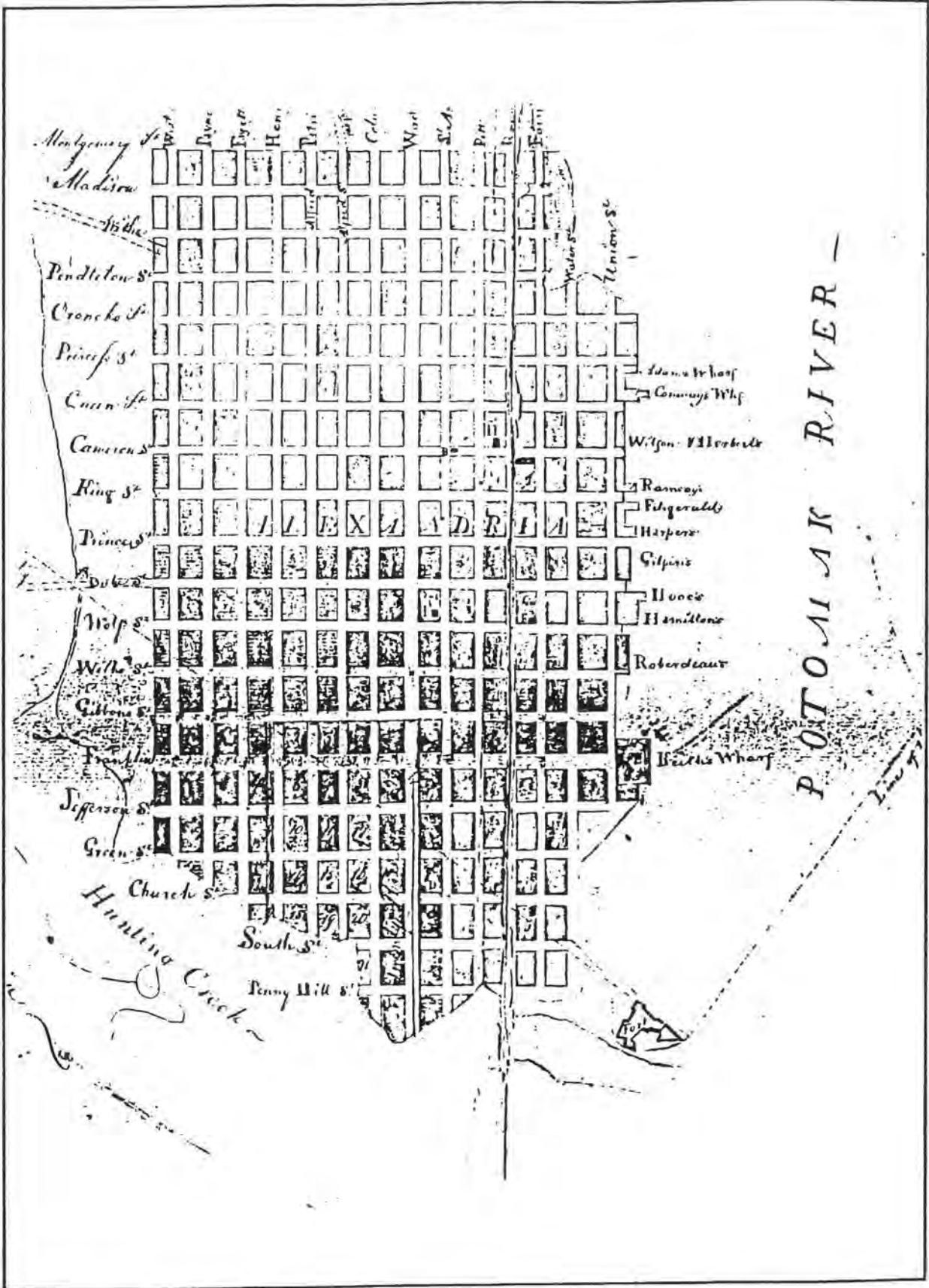
He has also a large Stone warehouse, with eleven or twelve different apartments, all private, and a Sail-Loft 50 feet square; either of these unoccupied may be immediately entered upon, monthly, or yearly; or the whole together

(*Alexandria Gazette*, 12 May 1791).

At least one of these buildings being advertised, the square Sail-Loft, was most likely the same building used at Roberdeau's distillery complex. At that time the structure was described as:

A second building, 50' X 50', served as a store with the two stories above the main floor serving as granaries, with a sail or rigging loft above.

(*Alexandria Gazette*, 1 December 1774)



Source: Anonymous 1803 Harborside

Figure 5 Roberdeau's Wharf in 1803

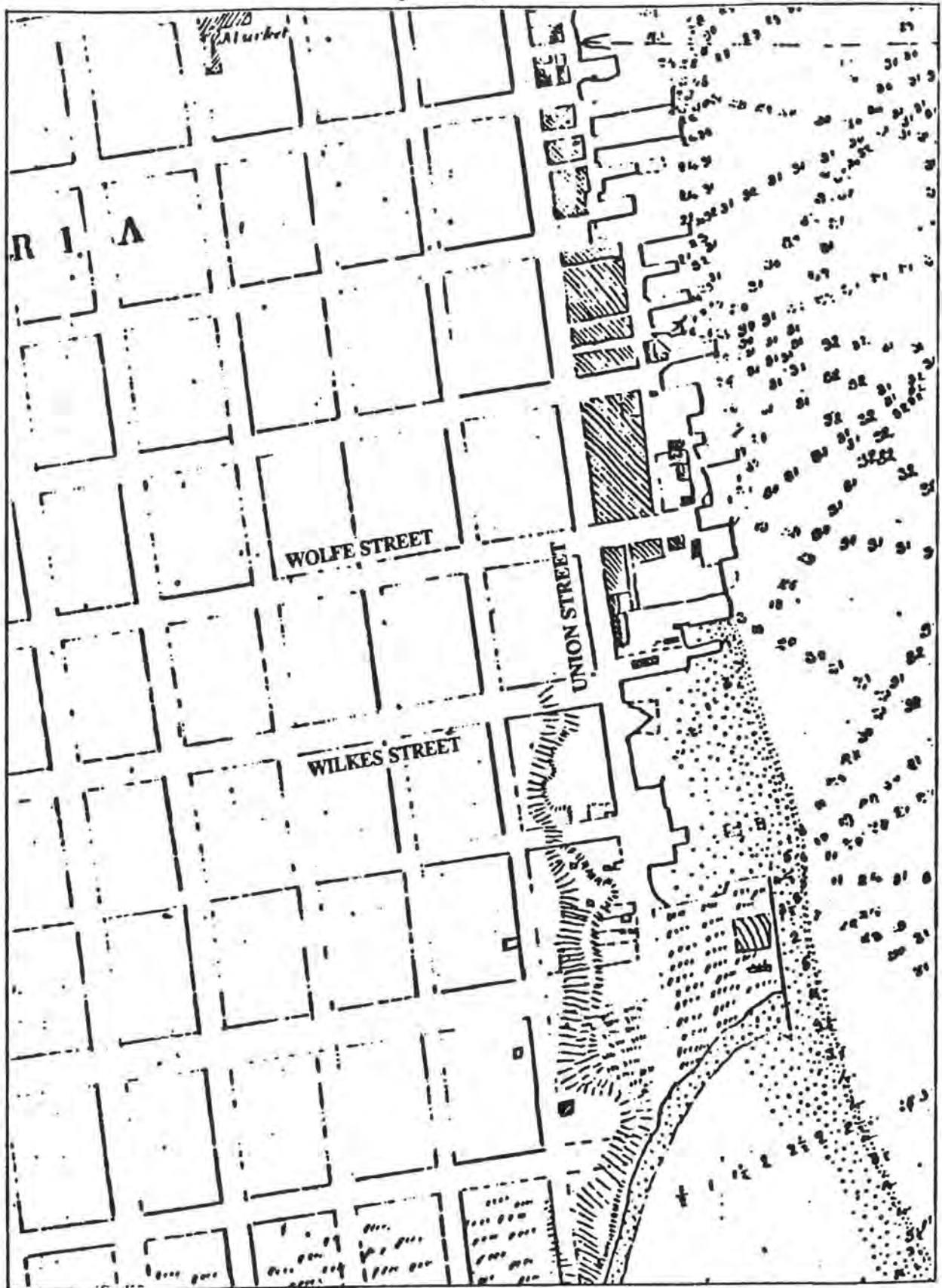
The idea of combining business, such as sail making and chandlery, became quite commonplace in the mid-nineteenth century when the United States was at the height of its shipping and shipbuilding industry. Men from vessels using the port could take advantage of stores on the wharves and not necessarily be obligated to go into town for certain purchases. A recently excavated site at the Bank Street Waterfront in New London, Connecticut provided archaeologists with a sail-loft which may not have been dissimilar to the one described at the Roberdeau property (Artemel *et al.* 1984). Historical evidence determined that the Bank Street sail-loft was four stories in height, with the upper levels used for sail-making, and the lower ones for ship chandlery. Other examples of combined businesses and sail-lofts can be found in the Boston area, indicating that this was a practice used up and down the east coast.

Roberdeau's advertisements eventually paid off when, in 1794, he leased all of lots 93, 94 and 95 to Abraham Morhouse, as well as the wharf extension running east into the Potomac River (Shomette 1985). Furthermore, the southern half of the original block of land was similarly extended towards the river and divided into two long and narrow lots, each measuring 78' 3 1/2" in width, separated by a 20' alley.

In 1794 Abraham Morhouse sold his lease to Robert Smock and Daniel Ketcham. It is not known to what use these men put the property, but according to the Mutual Assurance Records of 1796, Robert Smock actually occupied an adjacent lot, also owned by John Fitzgerald, at the southwest corner of Union and Wolfe Streets. Immediately west of the Harborside site stood several stone or frame structures associated with Roberdeau's early distillery.

A series of transactions occurred in the years between 1794 and 1810 that resulted in the parceling up of the northern half of the block into several smaller lots and its extension even further into the river. By the early nineteenth century, the Strand, a small road east of Union Street, extended from Wolfe Street to the center of the site. The majority of the parcels were by this period leased to Isaac Entwistle, who also leased the area west of Union Street on which the distillery, now referred to in deeds as a brewhouse, was located. Thus the area east of Union Street at the foot of Wolfe, originally Roberdeau's Wharf, was known briefly as Entwistle's Wharf. By 1836, the wharf area between Wilkes and Wolfe Streets was no longer depicted as a rectangular extension of the land into the Potomac, but was articulated as a series of recessions and projections serving as slips and wharves on the U.S. Army Topographical Engineer's Map of 1836 (*Figure 6*).

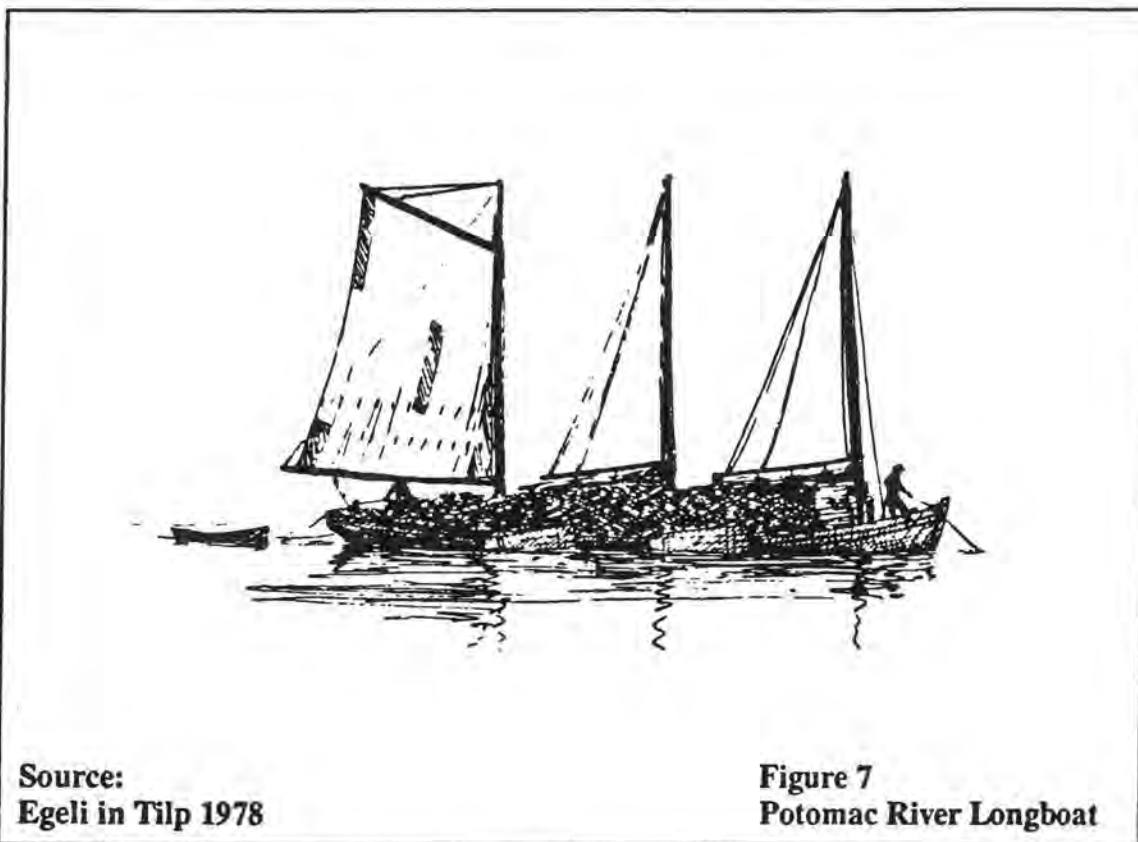
In the meantime, the southern half of the block from Wilkes Street to the center of the site remained fairly stable. By 1803, the area was divided into narrow halves. One of the owners, John Fitzgerald, sold the lease on his property to John Hunter, the noted shipwright, while the owner of the adjoining lot, William Herbert, leased his portion to the same. According to deed records, the 12 year lease was in tenure by John Hunter to be used by him as a shipyard. Conflicting accounts, none of which are substantiated, contend that John Hunter established the shipyard at the foot of Wilkes Street, adjacent to Roberdeau's wharf, as early as 1783. It is possible



Source: Topographic Engineer
Department, U.S. Army 1836
Harborside

Figure 6
Southern End of
Waterfront with
Bathymetric Readings

that while Hunter's name does not appear in the deed books prior to 1803, he was subletting the site and using it as a shipyard. In any case, Hunter's Shipyard was one of the earliest in Alexandria (Lyman 1952), supported in part by business from merchants and shippers of the port of Georgetown--John Mason being perhaps the most prominent example--who shifted much of their shipbuilding and repair work to Alexandria from the increasingly silted in yards along the Anacostia waterfront at Bladensburg (Mason Family Papers, Manuscripts Division, Library of Congress). It was also at Hunter's yard that the so-called "Potomac River Longboat" was first produced, in 1815 (*Figure 7*). A low slung, schooner-rigged boat drawing only 18 inches of water when empty and 3 feet fully loaded, the Potomac Longboat was slow but economical, and particularly well-suited for the relatively quiet waters of the river. It was likewise known as the "wood-boat," because of its main cargo: cordwood, brought upriver to Washington, Georgetown and Alexandria, piled so high that the sails had to be shortened to the limit of their useful lengths (Tilp 1978).



Source:
Egeli in Tilp 1978

Figure 7
Potomac River Longboat

The Hunter yard remained in operation until after mid-century. No mention of buildings or structures is made in the existing deed, but Tax Assessor records indicate Hunter as "resident" and employing a small number of slaves, who may have lived on site. Small offices, warehouses and sail-lofts were probably also situated on this half of the property.

In the early 1830s, both the north and south halves of the site changed hands. Hunter's Shipyard continued to occupy the center of the south half of the wharf to

the river's edge, but was eventually offered for lease in September 1851. At that time the yard was described in the *Gazette* as "376 feet to the end of the wharf where there is 21 feet of water--the warehouse is 78 feet front, 2 stories of brick with a shed of 136 feet from the warehouse toward the wharf 20 feet covered with shingles." In the Virginia Directory for 1853, the property was still listed as a "Steam Saw Mill and Ship Yard" operated by Robert Hunter.

Portions of the north half of the property were sold to James and William H. Irwin, while the rest was bought by a Hugh Smith, a local entrepreneur dealing in a variety of commodities including china. The land bought by the Irwins included Entwistle's holdings both east and west of Union Street, with the brewhouse and outbuildings remaining from Roberdeau's distillery. Business commenced during the 1830s, and thus the brewery may have comprised one or more of the buildings shown along the east side of Union Street on the Army Engineer's map of 1836 (*Figure 6*). As it is marked on the Maskell Ewing map of Alexandria in 1845 (*Figure 8*, No. 15), the brewery was situated along Union Street running from Wolfe southward at least half the distance toward Wilkes. In 1853, the brewery, listed as the Porter and Ale Brewery in the Virginia Directory of that year and owned by W. H. Irwin, produced 3000 barrels of beer.

Hugh Smith began purchasing lots to the east of the brewery as early as 1829. At approximately the same time, Thomas W. and Richards C. Smith set up a factory for the manufacture of steam engines on the property. Smith's Foundry, officially known as the Alexandria Foundry of T. W. and R. C. Smith, was built on the south side of Wolfe Street between Union Street and the Potomac River in the early 1830s. In 1835 T. W. Smith was advertising in the *Gazette* to "execute orders for High and Low Pressure Steam Engines, Fire Engines, Patent Rope Machinery..." (*Alexandria Gazette*, 15 April 1835). The map shows this main building to be located along the edge of Wolf Street, east of Union with several other dependencies attached to it. The foundry was a leader in the new art of locomotive construction, and by 1850 the Census of Manufacturers records that the Iron Foundry was producing \$40,000 a year worth of machinery and castings. Smith's Foundry produced the first engine for the Orange and Alexandria Railroad, as reported on May 7, 1851 in the *Alexandria Gazette*. The newspaper account announced that this locomotive, named the Pioneer,

was put upon the track of the Orange and Alexandria Railroad yesterday and in the afternoon steam was got up and the locomotive run over the line from the north end of Union Street (at Oronoco) to the tunnel on Wilkes Street. The performance was good and gave general satisfaction. Great numbers of our citizens collected and much joy was manifested at the successful commencement of railroad travel through our town.

(*Alexandria Gazette*, 7 May 1851)

But despite the publicity that this accomplishment received, the greatest achievement of Smith's Foundry was later considered to be a 14 horsepower engine

built in 1837 for the Richmond, Fredericksburg and Potomac Railroad locomotive called the Washington (Macoll 1977).

In 1851 the Smith Foundry was joined by Thatcher Perkins, former master mechanic for the B&O Railroad, and for the next few years the business was known as the Smith and Perkins Foundry. The partners concentrated on the manufacture of locomotives, of which at least eight were sold to the Orange and Alexandria Railroad, making use of the newly opened Wilkes Street Tunnel, inaugurated on May 7, 1851, which linked the Orange and Alexandria directly with the commercial waterfront. An article on December 1, 1852 describes the Smith and Perkins establishment as follows:

This establishment in Alexandria, Virginia is one of the most extensive in the country. The Locomotive and Car Works cover 51,000 Square feet of ground, front 177 feet on the Potomac river, which has an average depth of 18 feet for several miles above and below the works, and are connected by a turn-out with the Orange and Alexandria Railroad. The Machine Shop is a three story building, 130 feet long by 40 feet in width. On the first floor there are three tracks for setting up Locomotive Engines...On the same floor is the Tool Shop, in which we observed two facing lathes...

The second floor is occupied, in part, for office and drafting room, but we also observed, in well-appointed apartments, fourteen power lathes, four planeing machines, three drill presses and very large bolt cutters. The third story is exclusively occupied as a Pattern Shop and is fitted up with suitable apartments for depositing patterns, models, &c. The Foundry building covers 81 by 60 feet and turns out from 3 1/2 to 4 tons casting per day. The Blacksmith Shop, 100 feet by 36 has 12 fires and a powerful steam hammer for heavy work--the Boiler Shop, 112 feet by 40, and the Car Shop 150 by 40 containing four tracks for setting up and removing cars.

(Alexandria Gazette, 1 December 1852)

The article continued by announcing that Smith and Perkins were building other structures in addition to those mentioned in the account, while another newspaper account in 1855 claimed that the company was turning out 30 locomotives and 300 freight cars a year (Miller 1987b).

During the 1850s Smith and Perkins grew to include a large number and variety of buildings on the central and eastern portions of the Harborside site. In February of 1854, the General Assembly of Virginia incorporated Smith and Perkins as the Virginia Locomotive and Car Manufacturing Company, and stipulated that the annual stock be not less than \$100,000 or more than \$500,000 (Quenzel 1954). It was the largest and most important foundry in Alexandria, but the firm apparently became overextended, suffering banking and credit difficulties, and suspended its operations in March of 1855. The company reopened temporarily in May to complete the orders on hand, but closed again immediately afterwards. In 1856 the company was put up for sale, but was withdrawn because bids offered were too low.

At this point a group of citizens greatly desiring the reopening of the plant to promote the prosperity of the community organized a meeting to assist the company. It was determined that the earnings of the company during a four year period had been \$89,000, and that business could recommence if the citizens would put up \$50,000 in stock. Because of this intervention by the local citizens, the locomotive and car works opened again in 1857. In the same year, the company went bankrupt in the financial panic of 1857, and the plant was abandoned (Quenzel 1954).

During the Civil War, commercial and manufacturing activity on the waterfront came to a virtual halt, and many of the industrial structures were abandoned and eventually destroyed. According to the Union Quartermaster Map of 1865 (*Figure 9*), only the Smith Foundry, labeled the "Old Iron Foundry," and some scattered dependency structures remained on the Harborside site (*Plate 1*). The main foundry building and its additions had been converted into storehouses, and a portion of the wharf designated a Hay Wharf. Still other portions of the wharf may have been among the few areas on the Alexandria waterfront that was permitted to service local fishing vessels (Tilp 1987). Hunter's Shipyard is no longer indicated on the Quartermaster's map, and is reported to have been destroyed at some point during the war (Miller 1987b).

Several unattached buildings, randomly sited on the property, served as Contraband Quarters, housing runaway slaves (*Plate 2*). These runaways caused a great deal of conflict during the war, as slaveholders considered them escapees and demanded their return, while Abolitionists encouraged their emancipation. Though Union generals often issued opposing orders over blacks in their jurisdictions, it had been established early on by Union General Benjamin F. Butler that they be considered Confederate property, or "contraband," and thus need not be returned (Netherton *et al.* 1978). The Union Army holding Alexandria obviously respected this early order and provided several quarters for the Contrabands on the Harborside site.

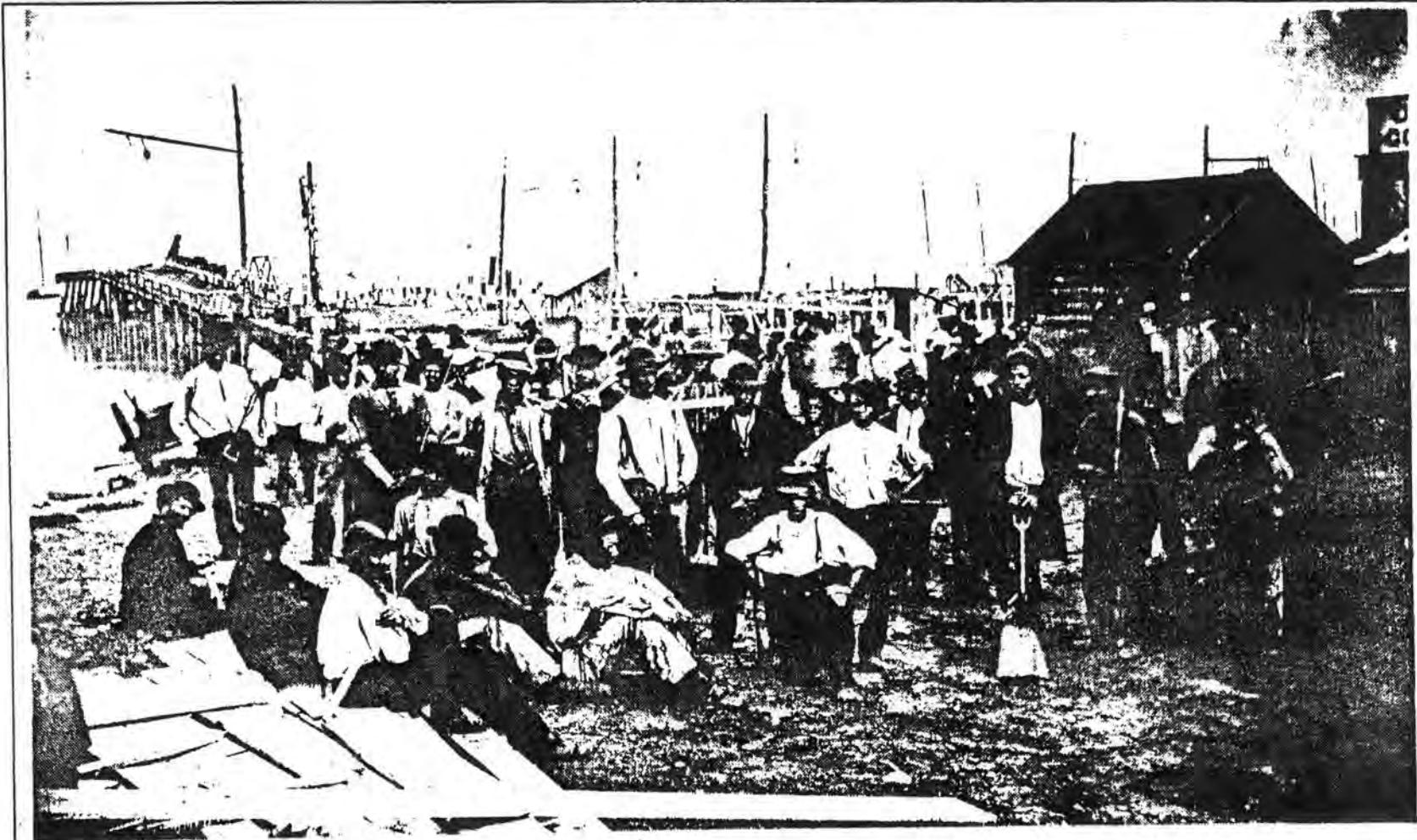
After the War, Smith's Foundry was succeeded by the firm of Jamieson and Collins in 1876, who continued to manufacture steam engines, machinery and castings. Theirs was a shortlived enterprise that was superceded only a year later by the well known and wealthy coal entrepreneur, J. P. Agnew. The history of the J.P. Agnew Yard, located on the entire northern half of the Harborside site, actually began in 1849 at a nearby location at the end of Franklin Street, known as the Keith and Harper Wharf, and presently the site of the Old Ford Plant. During this year, Alexandria's sixth shipbuilding yard, the Alexandria Marine Railway Company, was established at Keith and Harper's Wharf specifically to repair and refit vessels of all sizes, which it did until the Civil War. In the 1870s, Robert Portner, "a Prussian from New York City," took over the shipyard and renamed it the Alexandria Marine Railway and Shipbuilding Company (Tilp 1987). Although Portner's main concern was to provide maintenance services on the fleet of coal schooners that worked out of Alexandria and Georgetown in the 1870s, he soon began to produce large three-masted ocean going schooners and a wide variety of smaller craft, on an average of 10 a year. By 1880 the company had six iron forges, a heating furnace and a 21-ton



Quartermaster's Wharf, Alexandria, Va.

Source: Library of Congress
Harborside

Plate 1
Harborside During Civil War
View Southeast From Foundry



3440

Quartermaster's Wharf, Alexandria, Va.

Source: Library of Congress
Harborside

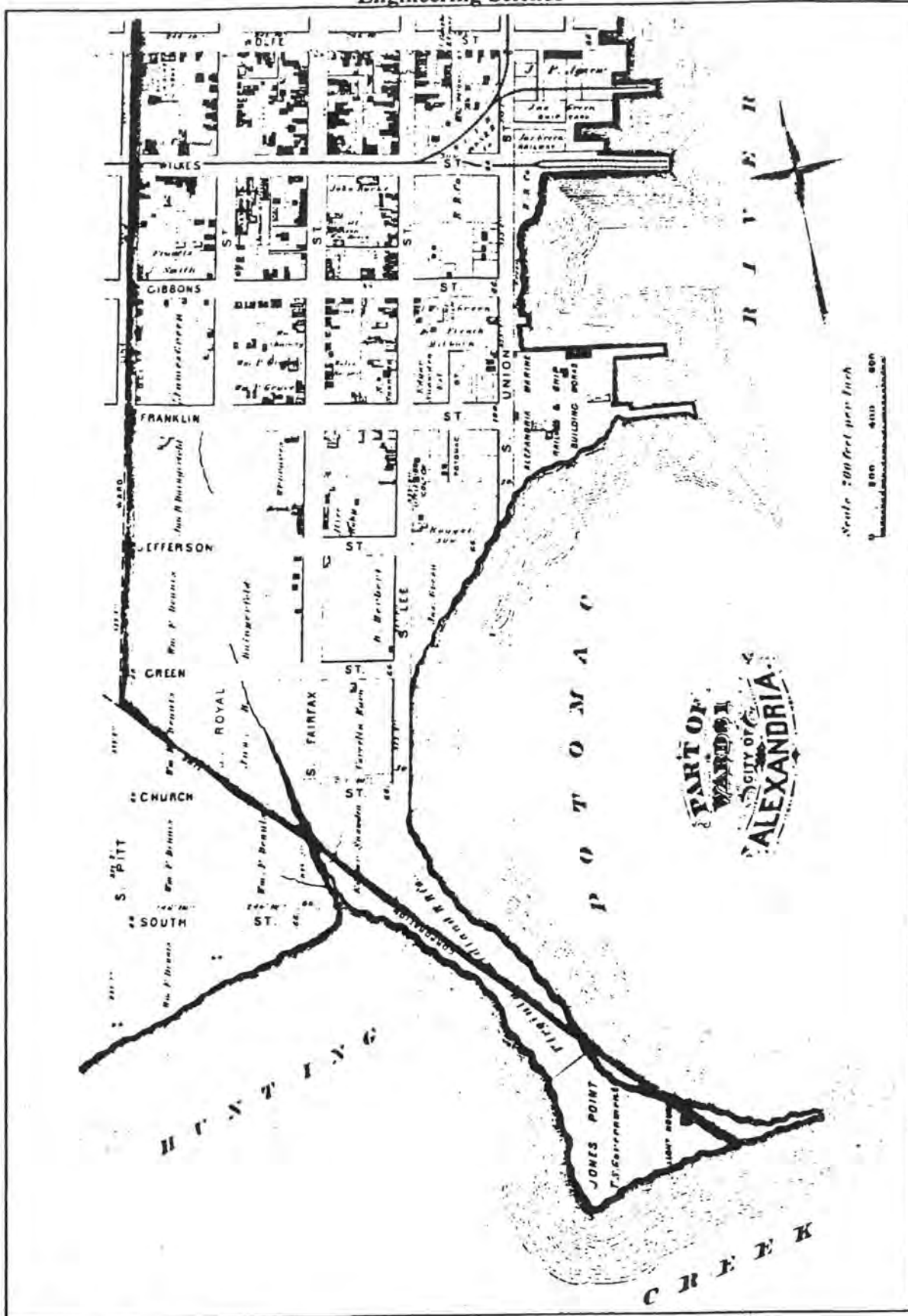
Plate 2
Contrabands at
Quartermaster's Wharf

steam hammer. This successful trend continued when J.P. Agnew bought, first the site of Smith's Foundry at the Harborside site for use as a coal yard, and then, in 1883 Portner's Marine Railway and Shipbuilding Co. He changed the name of the company to the Virginia Iron Ship Building Company, and eventually the Alexandria Marine Railway, Shipbuilding and Coal Company, seeking to combine the efforts of the two companies by which he could build a his own fleet of schooners to carry his coal.

The J.P. Agnew Yard was located on the northern half of the block between Wolfe and Wilkes Streets and is indicated on the 1877 Hopkins Map of Alexandria (Figure 10). The site, although essentially the same since just before the Civil War, began to show two long wharf extensions that carry spurs of the Washington City, Virginia Midland, and Great Southern Railroad, controlled by the B & O Railroad, to the waterfront. The main railroad track ran east down Wilkes Street and through the Wilkes Street Tunnel. After the war the old O & A RR, along with several other Virginia railroads were incorporated into the W. C. V. M. & G. S. Railroad Co. (Lloyd House Vertical Files: Railroads). One spur of the main track continued as an extension of Wilkes Street beyond the tunnel and several hundred feet down a wharf into the Potomac. Another track split off immediately after the tunnel to bisect the Harborside site. This track similarly ran east through the site and extended into the river. These two spurs created separate slip areas between them in which the schooners could be filled with coal.

While J.P. Agnew was operating his Shipbuilding and Coal companies at two separate sites, the south half of the Harborside site was being redeveloped by James Green, an Alexandrian, who bought the site of the old Hunter Yard and rejuvenated it to serve once again as a shipyard. By 1877 he was building two-masted schooners and pungyboats, often for Agnew, whose sites were immediately adjacent to his in both the north and south directions. In 1880 Green leased the yard to Charles Ward of Kennebunkport, Maine, who renamed it the Potomac Manufacturing Co. In December of that year, the James Boyce, Jr., a 186 foot, three-masted schooner, was launched, destined to carry 1100 tons of coal, undoubtedly for Ward's neighbor, Agnew. In 1883, a 152 foot three-master, the Wilson and Hunting, was built for a firm in Baltimore (Tilp 1987).

Although the details are not known, the demise of Agnew's Coal Yard was quick to come. The yard is not indicated on the Sanborn Insurance Map of 1885, and by 1896 it had been replaced by the Haskin Wood Vulcanizing Plant, which had by that date already closed. That the plant was in operation by 1893 is indicated by an item in the *Gazette* (11 February 1893) stating that the company had been charged with the task of sealing the abandoned Pioneer Mill building lying to the north, across Wolfe Street. The Haskin plant consisted of one large brick building divided into various spaces to include rooms for vulcanizing boilers, engines and furnaces. This structure appeared to have remained from Smith's Foundry. It was a substantial structure with, according to maps, solid brick exterior walls, 12" thick, which reached 1-3 stories in height. The south side of the structure was pierced with windows or door openings separated by 4" pilasters, and the whole was covered with either a tin or a slate roof.



Source: G.M. Hopkins 1877
Harborside

Figure 10
Southern Waterfront
in 1877

By 1902 the building was occupied by the Osage Manufacturing Co., which manufactured ground ore for paints, and then, by 1907, by the Alexandria Light and Power Company, later the Alexandria County Lighting Company. Between 1921 and 1931 the structure was enlarged several times, and by 1941, a further annex had been added. By this time the plant, now operated by the Virginia Public Service Company, covered most of the western portion of the property, from Wolfe to Wilkes Streets. All of the new additions and the renovated original portion of the building were rectangular in shape and were built of brick, two stories in height, with basements and covered with raised iron roofs.

Although the importance of the south side of the site similarly decreased, its decline was less somewhat drastic. In 1900 Charles Dean of Maryland bought Green's shipyard, continuing the business, specializing in the repair of smaller river vessels (Tilp 1978). Small one story wood frame structures located along the continuation of Wilkes Street and next to the railroad tracks extending into the Potomac, served as offices, bunks, storage spaces and a boat house. While Dean moved his business to another site in 1917, the small structures remained at least until the early 1930s, after which they were removed for power plant renovation.

IV. PREVIOUS INVESTIGATIONS

The earliest record of occupation of the Alexandria area results from John Smith's voyage up the Potomac in 1608. On his map of the region, Smith recorded the presence of four villages on the west side of the river near the present site of Alexandria, inhabited by Native American groups now referred to as Virginia Algonquians (Feest 1978). The exact location of these villages is the subject of disagreement among scholars, but none of the villages seems to have been situated within the city itself.

Two late nineteenth-century archaeological studies indicated the presence of prehistoric sites on the Potomac both above and below the city. One site was located north of the city along Four Mile Run (Proudfit 1889), and the other lay to the south of Great Hunting Creek (Holmes, Dinwiddie, and Fowke 1891).

The foundation of Alexandria Archaeology in 1977 prompted a recompilation of all known archaeological sites within the city. This survey documented the locations of 22 prehistoric sites, only one of which was near the city's waterfront, with the remainder situated inland (Henry 1983). The shoreline, site 44AX53, was located immediately south of the project area near Jones Point, and was the subject of a recent study by LeeDecker and Friedlander (1984). The lithic material and ceramics found during the investigation indicated the site was occupied during the Late Archaic (3000-1000 B.C.) and Middle Woodland (A.D. 300-800) periods.

Thirteen prehistoric sites have been identified further to the south, along Great and Little Hunting Creeks. A survey of Mt. Vernon Memorial Highway, undertaken in 1985 by the National Park Service, investigated four of these sites, as well as identifying another, previously unrecorded site. The remaining sites were not fully explored (Inashima 1985).

Research into Alexandria's historic past has been shaped by the work of Alexandria Archaeology. Emphasis has been placed on the concept of the "city-site," focusing on historical development within a city-wide context, and using a tripartite division of the city's history. The developmental periods are:

Mercantile Capitalism (mid-eighteenth century)

Indigenous Commercial Capitalism (late eighteenth to mid-nineteenth century)

Industrial Capitalism (late nineteenth to early twentieth century)

(Cressey and Stephens 1982; Cressey 1985).

With the assistance of an enthusiastic volunteer force, Alexandria Archaeology has conducted numerous archaeological investigations within the city, including extensive, and in some cases ongoing work at the Lee-Fendall House at Washington and Oronoco Streets, the Stabler-Leadbeater Apothecary Shop in the 100 block of South Fairfax Street, and at the Sugar House, site of a nineteenth century sugar refinery at Cameron and Alfred Streets. Of immediate relevance to

the current project at Harborside were excavations at the sites of two pottery factories in the city: in 1977 at a ceramic located at Wilkes and Washington Streets and owned variously by John Swann, Hugh Smith, and B.C. Milburn (Myers 1982), and a second, in 1984, at a pottery owned by Tildon Easton in the 1400 block of King Street (Magid 1986). Salvage excavations have also been conducted at the Carlyle-Dalton Wharf at the lower end of Cameron Street, which documented remains of large, yellow pine timbers related to wharf underpinning, and across Union Street from Harborside at the site of Daniel Roberdeau's eighteenth century distillery, where a large wooden vat and a cache of wine bottle glass were recorded (Steven Shephard 1989, personal communication).

And finally, a Phase I archival study was conducted in 1986 for the Old Ford Plant property, two blocks south of Harborside at the foot of Franklin Street (Cheek and Glendening 1986), followed later by limited Phase II subsurface testing, which identified materials potentially related to Keith and Harper's Wharf, constructed in the late eighteenth century (Artemel *et al.* 1988).

V. METHODOLOGY

Field

Sampling

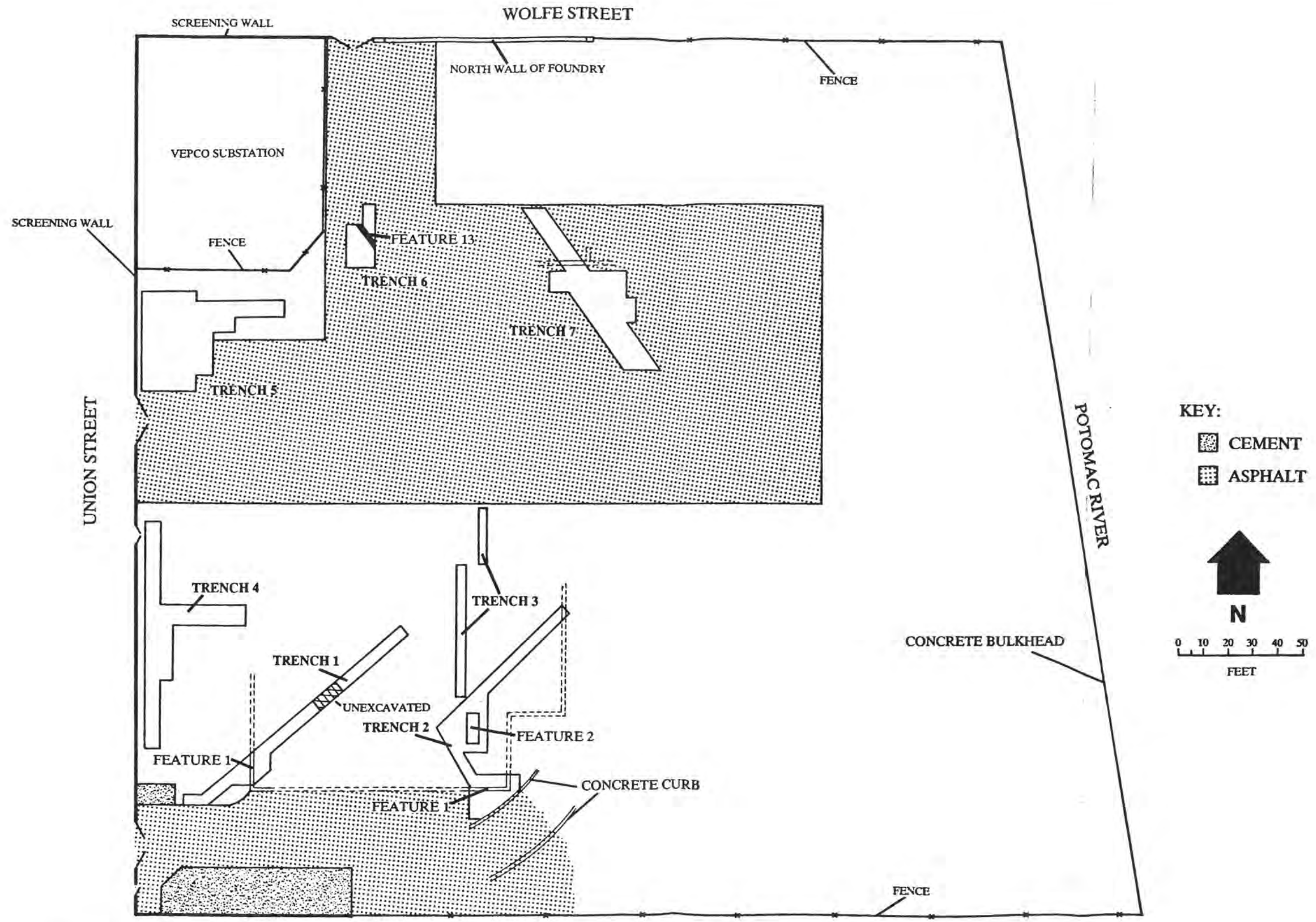
Fieldwork conducted at Harborside consisted of the mechanical excavation of a total of 677 linear feet of trench (*Figure 11*). The locations chosen for individual trenches resulted from the implementation of a non-systematic sampling procedure, which was developed through the study of eighteenth and nineteenth century maps and written descriptions of the property. Trenches were excavated on lines which exhibited the highest potential for intercepting known or suspected structural features. Certain modifications to the proposed locations of trench excavations were necessary due to unexpected modern obstructions, often located just below ground surface, or due to archaeological features encountered which required width or directional changes to provide maximum feature exposure.

Testing was concentrated in the western portion of the site as the area in which early remains were most likely to occur, and in which the least amount of modern disturbance was expected. The eastern portion of the property had been shown to contain remains of later shipyard operations, with less likelihood of significant structural remains or associated artifact assemblages. The resource potential in this part of the project area was thus considered lowest and the area given lowest testing priority.

Modern Obstructions and Water Control

Several unforeseen problems hampered excavation. Extensive twentieth century debris was encountered in most areas tested: thick, raised concrete slabs or asphalt and concrete driveways were located on the south edge of the lot; massive amounts of rubble associated with the demolition of the twentieth century power plant were encountered in both the south and north portions of the property; and numerous concrete foundations, piers and equipment staging platforms along Union Street, also associated with the power plant, made the clearing of sufficient fill to allow exposure of relevant features a slow and at times impractical task. The continued use of the north half of the property as a commuter parking lot was as much an inconvenience as an actual hindrance, making it necessary to fence in open excavations, for the safety of archaeologists and public alike, and necessitating close planning to ensure that both an adequate area was blocked off for the following day's work, and that a maximum degree of efficiency was maintained in terms of trench placement so as to cause the least possible disturbance to traffic flow.

Conversely, problems with water control, while significant, were somewhat less severe than anticipated. A geotechnical engineering survey conducted by Schnabel Engineering Associates (1989) indicated that the water table varied across the site, being reported as high as 3 feet along Union Street, and at depths ranging to 6 to 7 feet further to the east. In fact, backhoe trenching indicated that the higher water levels recorded by Schnabel were the result of the tapping of pockets of surface drainage which had either collected in gravelly layers of fill, which acted as localized aquifers, or had been trapped in concrete floored basements. In several of



Source: Engineering-Science Harborside

WILKES STREET

Figure 11 Site Map

the archaeological trenches, layers of water retaining fill were disturbed causing the rapid flooding of the excavation. It was usually possible to manage this type of influx by means of a combination of sump excavation and pumping. At depths of 7 to 8 feet, or more in some cases, the actual water table was reached within a silty sand deposit representing the river floodplain during the early historic period. Due to the loose nature of these deposits and the weight of the overlying, harder packed fill layers, deep excavation proved difficult, and water control was not feasible with the means at our disposal. Nevertheless, excavation to depths of 13 to 14 feet was usually possible, allowing adequate assessment of deposition. Entry into deeper trenches to clean and closely examine profiles was considered too hazardous to attempt. Caution proved to be warranted, since in every instance major cave-ins occurred as the wet, unconsolidated deposits sloughed into the excavation, undercutting the overlying fill, which eventually fell to the bottom of the trench in large chunks.

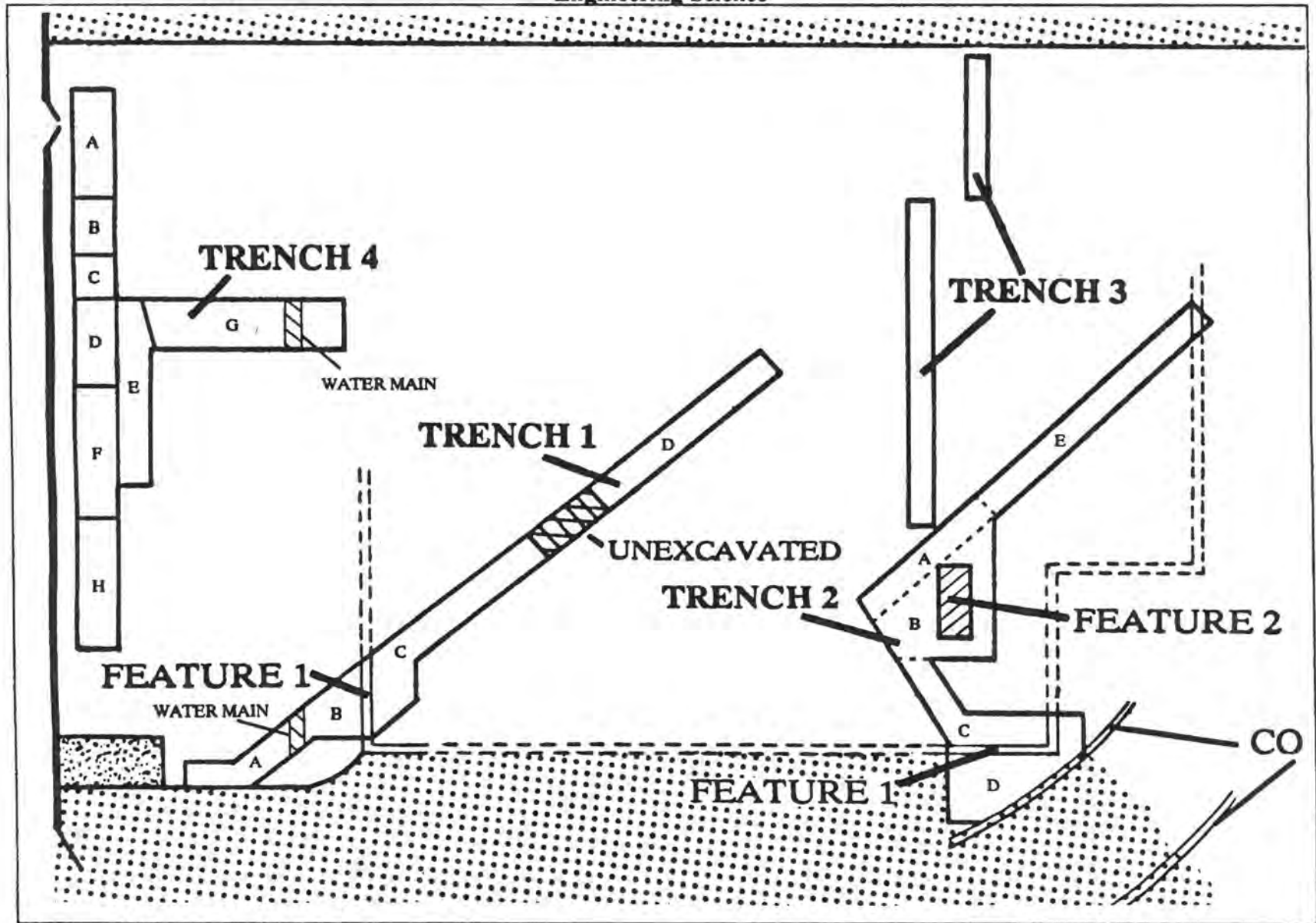
Excavation Techniques and Field Documentation

Trenches ranged in width from 3 to 12 feet or more. In several cases, excavations were greatly widened, as in Trench 5, for example, to expose large areas of structural features as an aid in assessment of function and dating. Trench depths ranged from 3 to 4 feet, in rubble fill deposits within building interiors, to a maximum depth of 14.5 feet. While most trenches were excavated to from 5 to 8 feet below current grade, depending on the level of features encountered, at least one area in each trench (except Trench 3) was excavated to at least 10 feet, well below the base of the fill layers.

Trenches were subdivided at convenient points, such as transecting modern utility disturbances or concrete obstructions near ground surface, with each Trench Section designated separately (*Figure 12, 13*). Stratum designations were unique to each Trench Section, though in cases in which correspondences between Sections were significant, in Trench 4, for example, universal designations were assigned during analysis--the correspondences are listed within the text. In an effort to save on the amount of paperwork generated in the field, modern utility disturbances and concrete structural features were not assigned feature numbers. Feature 1 was the sole exception, since its significance as a twentieth century feature was not immediately recognized.

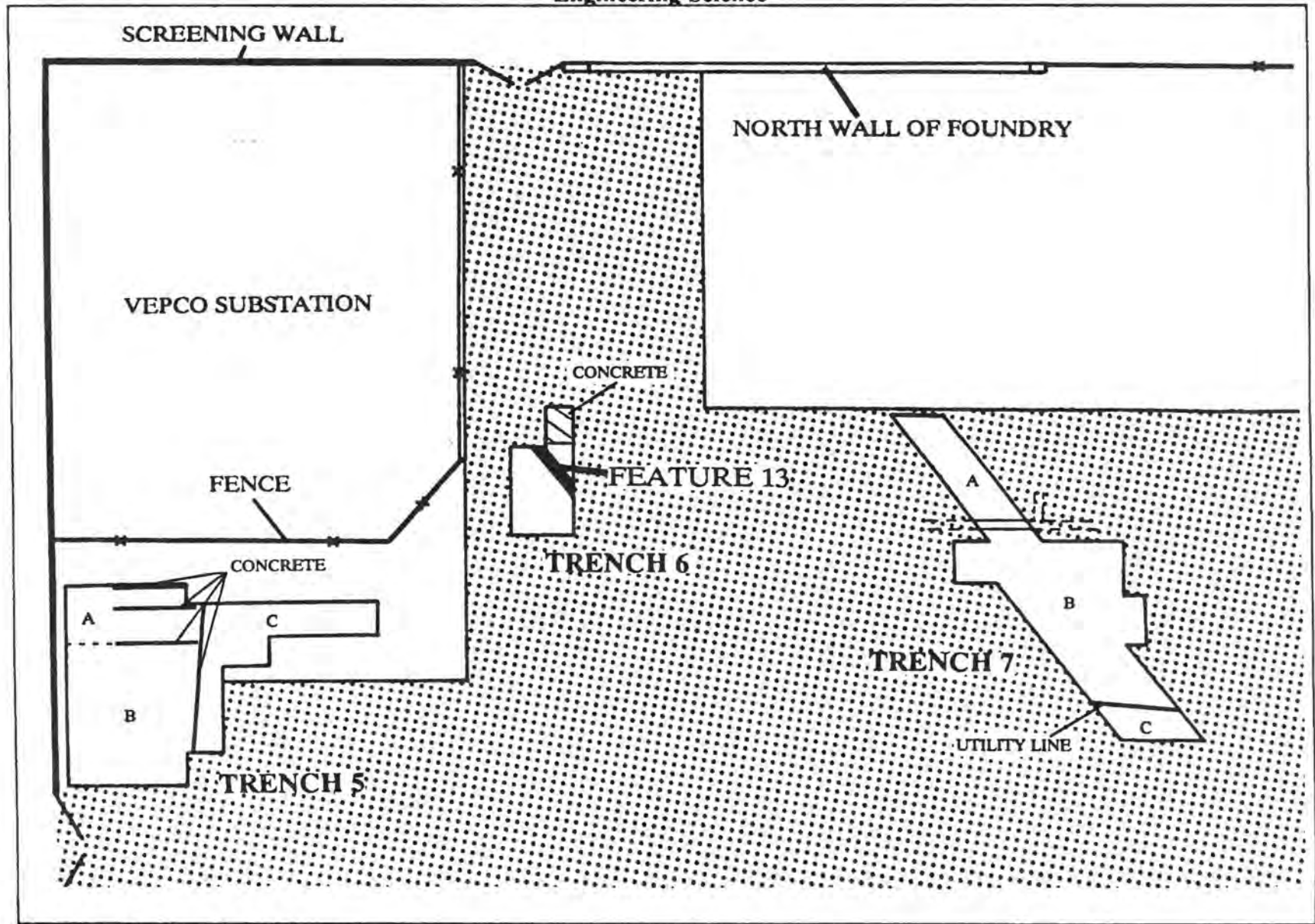
Elevations were taken from ground surface, and are so presented in the text. Ground surface elevations, as extrapolated from elevations recorded by Schnabel and Associates during their testing program, are given in the summary preceding the description of each trench. When accurate relative elevations were required, as in Trenches 4 and 5 along Union Street, vertical datum points were established along the brick screening wall paralleling the street. These points were later tied in with actual elevations using a transit.

Careful excavation with the backhoe allowed deposits to be kept separate. Most materials from fill layers was trowel sorted after removal, though occasional bucket loads were screened through 1/4 inch mesh hardware cloth. Each trench was drawn to scale in plan view and relevant column profiles were recorded on standard



Source: Engineering-Science
Harborside

Figure 12
Trench Sections
Trenches 1-4



Source: Engineering-Science
Harborside

Figure 13
Trench Sections
Trenches 5-7

excavation forms. Scale drawings were made of all significant features, both in plan view and, if excavated, in profile. Trench profiles and features were extensively documented photographically, and a site map, drawn to scale, was prepared in the field.

In the interest of efficiency in laboratory processing, artifacts from layers of obviously mixed twentieth century fill were collected only as representative samples. Construction materials were for the most part noted by type and discarded, and only samples of modern ceramics and automatic bottle glass were collected. Those artifacts actually collected were placed in resealable polyethylene bags along with a label detailing complete provenience information written in indelible marker. Bags were numbered consecutively, and all information from each bag recorded on a Bag Inventory Sheet.

Hand excavations were carried out in selected locations. Several informal shovel tests were conducted to quickly assess the nature and integrity of certain deposits which had been exposed mechanically. Soils from these tests were either trowel sorted or a sample passed through 1/4 inch mesh screening to enhance artifact recovery. In addition, two formal Test Units were excavated using standard stratigraphic techniques: excavation was carried out according to natural or observed stratigraphy and all soils passed through 1/4 inch mesh screening. Stratigraphy was recorded on standard excavation forms, and upon completion, representative profiles from each unit were photographed and drawn to scale.

Laboratory Methods

After their arrival in the lab, all artifacts were cleaned. Non-organic materials, such as glass and ceramics, were washed. Iron artifacts were dried, if removed from wet soil environments, or dry brushed, if from dry soils, and packed in silica gel to retard further deterioration. Damp wooden objects were rinsed, placed in resealable polyethylene bags containing distilled water, and refrigerated to inhibit the formation of mold, while awaiting the final disposition of the assemblage. Several samples of compressed wood wharf surfacing were processed by soaking in hot water to loosen the resinous binding material, followed by careful examination using trowels, tweezers and dissecting needles.

Artifacts were dried on mesh screens and inventoried directly onto computer disk. All processed artifacts were stored in resealable polyethylene bags by type, in order to facilitate retrieval and minimize damage to fragile objects. Each bag was labeled with site name and bag number. An acid free tag with complete provenience information was placed in each provenience bag. Bags were stored by bag number order in archival quality "Hollinger" boxes. An acid free label was attached to each box listing the site name and the number of the box in the series.

VI. INVENTORY OF EXISTING RESOURCES: STRATIGRAPHY AND FEATURES

The following is a presentation of the results of the field survey program conducted at Harborside, providing detailed information on the stratigraphy, structural features and artifactual materials observed and recorded. Trench locations and dimensions are listed and deposits summarized, or where appropriate, described in detail. The presentation is for the most part descriptive only: temporal and functional analyses are left to succeeding sections of the report. For easier reference, trench sections, relevant stratigraphic deposits and features have been rendered in bold type on their first occurrence in the text.

Trench 1 (*Figure 12*)

Length: 115 feet
Orientation: NE/SW
Width Range: 3.5 to 10 feet
Depth Range: 3 to 11 feet
Surface Elevation: 9 feet

Location: Southwest corner of property

While no specific structures were known in this portion of the lot, the entire southern half of the property has been the site of several shipyards since the late eighteenth century, and it was assumed that wharfing or structures related to maritime activities might still remain in the area. The trench was planned to run on a northeast diagonal for at least 100 feet to provide the greatest probability of intersecting structural features oriented at right angles to property lines.

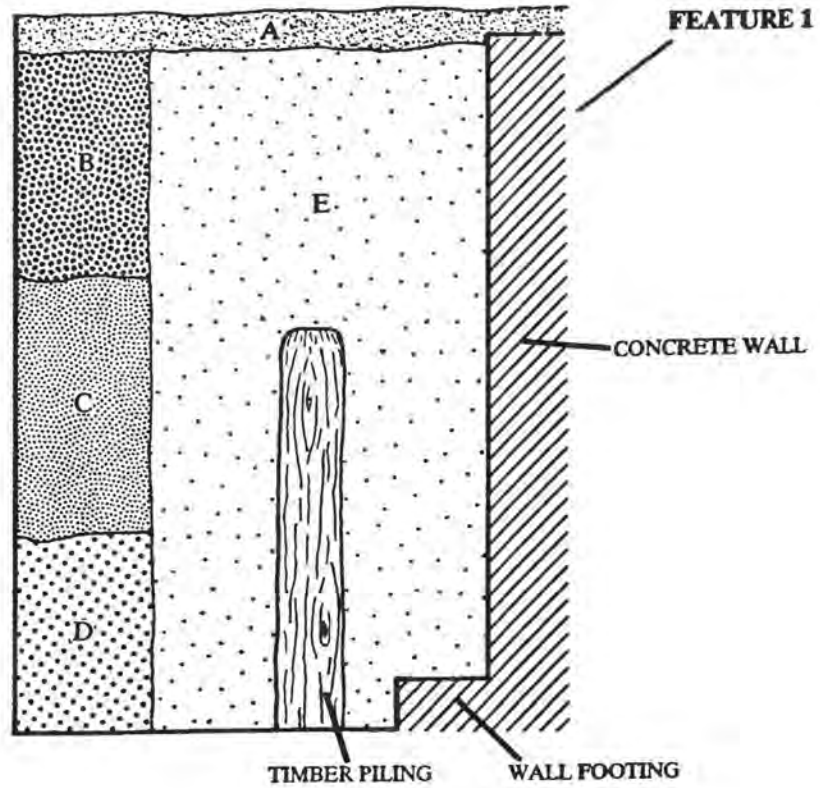
Trenching began within the asphalt surfaced driveway between two twentieth century concrete foundations, as near to the southwest boundary of the property as possible. Immediately below the asphalt lay a second, concrete driveway surface which resisted attempts at removal with the backhoe bucket. An edge of the concrete was found approximately 20 feet to the northeast, along a buried curbing east of a smaller section of concrete slab which extended from the screening wall along Union Street. A series of clay, gravel, coal and cinder fill deposits was encountered lying directly under a thin mantle of gravelly topsoil. Contained within the fill layers was a mixture of late nineteenth and early-to-mid twentieth century glass and ceramic artifacts, along with small amounts of brick, mortar, and metal construction debris, the latter including railroad spikes and lengths of braided copper grounding cable of various gauges left in place from the power plant. Due to the obviously disturbed nature of the deposits in this section of the trench, designated **Section A**, no artifacts were collected.

Water seepage from a gravel and rubble fill layer lying at a depth of 4 feet filled the trench, obscuring stratigraphy. The trench was extended to the northeast to allow for the excavation of a deep sump to drain the water. At a point 18 feet to

the north and at a depth of approximately 3 feet, a 42 inch water main was encountered, constructed of rolled steel plates, which were welded and coated with a tar-like substance to impede corrosion.

Trenching continued northeast of the utility line. Approximately 8 feet to the east, a concrete wall or foundation, which had been sheared off at ground level during demolition, was encountered just below the recently accumulated topsoil, running north/south parallel with the property line along Union Street. The wall, 16 inches in width, was designated **Feature 1**. The eight foot section of trench excavated between the 42 inch main and Feature 1 was designated **Section B** and was excavated on the assumption that it was the only accessible and relatively undisturbed portion of ground in the southwest corner of the lot. This did not prove to be the case, since fill was recorded almost to the base of the excavation. Excavation alongside the watermain did not expose evidence of a wide builder's trench east of the pipeline, though yellow clay fill and several pieces of lightweight wood planking were observed below the pipe itself. While the wood did not appear randomly placed within the deposits, the pieces appeared too flimsy to have served as part of a system of shoring in the heavy clays, and thus were assumed to have been either inadvertently added to the fill or to be part of an earlier construction episode: the presence of the utility line made further investigation unfeasible.

A series of fill layers lay below topsoil to the east of the watermain (*Figure 14*), including a 3 foot 6 inch deposit of black, coal stained clay loam, coal and cinder (Stratum B), containing small fragments of pearlware, yellow ware, Rockingham, whiteware, ironstone, porcelain, milk glass lid liner, automatic machine-made bottle glass, cut and wire nail, brick, roofing slate and oyster shell. Below lay an additional 4 feet of gray brown silty sand (Stratum C), containing an assortment of nineteenth and twentieth century artifacts similar to that observed in Stratum B above, with the addition of late nineteenth century mold blown bottle glass, twentieth century milk bottle glass, unglazed redware and butchered animal bone. Below this deposit lay a lighter gray sand (Stratum D) which was saturated and thus was obscured by water which drained with increasing speed from looser portions of the trench wall in Stratum C above. A builder's trench, designated Stratum E, containing a mixture of soils from Strata B and C was observed extending an average 5 feet 6 inches westward from the edge of Feature 1. The wall continued to a depth of 10 feet 2 inches below grade, at which point a poured concrete footing measuring 18 inches in width was encountered. A round, 13.5 inch diameter timber of yellow pine was located 2 feet west of Feature 1, the top lying 5 feet below grade. The timber continued well into the underlying sandy silt deposits, still solidly in place when excavation in that section of the trench was halted. Due to the confined area between the watermain and Feature 1, water management was impractical, and thus excavation ceased before the base of the builder's trench and of the footing west of Feature 1 were ascertained. The final depth excavated within Section B of the trench was approximately 11 feet. No early wharf structure was observed in this portion of the trench: the upright timber alongside Feature 1 was located within the builder's trench for the feature, and thus appeared to have been associated with the construction of wooden forms into which the concrete wall was poured.



KEY:

- A DARK BROWN LOAM AND GRAVEL: TOPSOIL
- B BLACK SILT LOAM, COAL AND RUBBLE
- C GRAY BROWN SILTY SAND
- D LIGHT GRAY BROWN SILTY SAND
- E DARK BROWN TO BLACK LOAM AND RUBBLE: BUILDER'S TRENCH

0 6 12 24
INCHES

Source: Engineering-Science
Harborside

Figure 14
Trench 1 Section B
North Profile

Excavation continued northeast of Feature 1 in what quickly became apparent was the lower floor or basement of a large twentieth century structure-- maps showing the footprint of the building were not acquired prior to excavation, and thus its exact location was unknown. In **Section C** of Trench 1, immediately adjacent to the east face of Feature 1, a deep layer of orange sandy loam fill was encountered. The fill layer contained a large amount of heavy brick and concrete rubble, along with decomposed mortar, concrete reinforcement rods (rebar) and other light and heavy metal debris, quarter-inch window glass (plain and wired varieties), and small fragments of nineteenth and twentieth century domestic ceramic and glass. Standing water was reached at a depth of 4 feet, indicating the presence of a concrete floor below. In an attempt to identify the north wall of the structure, and thus to locate an area of undisturbed ground between that building and known structural disturbances dating to the mid-to-late nineteenth century in the north half of the lot (the Smith Foundry and its later additions), **Section C** of Trench 1 was extended some 35 feet to the northeast of Feature 1. **Section D** extended an additional 35 feet, following a gap of 12 feet which was left unexcavated. The deposits in **Section D** were identical to those in **Section C**: no wall was found. At one point within **Section D**, the rubble deposit was excavated to the concrete basement floor, slightly over 7 feet below grade. Because of the depth of standing water within the structure (over 3 feet), the floor was only identified indirectly, by dragging the backhoe bucket across its smooth hard surface.

Trench 2 (*Figure 12*)

Total Length: 146 feet
 Orientation: NW/SE and NE/SW
 Width Range: 5 to 20 feet
 Depth Range: 4 to 13.5 feet
 Surface Elevation: 10 feet

Location: 50 feet south of Trench 1

Trench 2 was excavated to further define the dimensions of the structure represented by Feature 1, the concrete wall encountered in Trench 1. Excavation in **Section A** began in a northeastwardly direction from a point approximately 120 feet east of the screening wall along Union Street and 75 feet north of the fence along the Wilkes Street property line. Immediately below a thin topsoil and gravel layer lay a rubble deposit composed mainly of dense yellow firebrick and metal debris, all apparently the remnants of a large boiler. Several large sections of the metal superstructure were found, along with iron gratings from catwalks, steampipe scales, a section of boiler plate and an assortment of custom made brick--half-beveled, ribbed, concave, convex--in a variety of sizes. Water was reached within the rubble deposit between 4.5 and 5 feet below grade.

Approximately 15 feet along the trench, the corner of a brick lined metal enclosure was located. Trenching was continued southward from the southern edge

of Section A of the trench to expose the brickwork. Excavation in this portion of the trench, labeled **Section B**, disclosed the feature as a boiler firebox measuring 10 feet 9 inches (north/south) by 3 feet 6 inches (east/west), lined with yellow firebrick surrounded by iron plating. Designated **Feature 2**, the box was found to extend to a depth of 6 feet below ground level. The floor of the feature was never visible due to standing water beginning at a depth of 4.5 feet. An attempt was made to pump out the water so that a close examination of construction techniques might be made, but after half an hour of pumping it became clear that water was entering between the brickwork from the rest of the basement, and that short of emptying the entire structure, it would not be possible to see the base of the feature.

Section C of Trench 2 was excavated at right angles to Section A (to the southeast), beginning at the south end of the trench. The yellow brick rubble in Section A ended abruptly, replaced by rubble made up of common red brick, mortar, concrete, and fragments of quarter inch window glass, some embossed with a hobnail design and others plain but wired. A concrete wall, apparently the southern wall of the structure represented by Feature 1 in Trench 1, was encountered 50 feet north of the Wilkes Street fence. As in Trench 1, the wall was approximately 16 inches wide and had been sheared off when the structure was razed. Three-quarter inch rebar was visible extending upward from the wall in several locations along the 17 foot length exposed, including at a small interior pilaster and at the 90 degree corner found at the south end of the trench, which appeared to be the southeast corner of the structure. In most cases the wall was damaged somewhat, where the concrete had cracked and spalled as the rebar was wrenched during demolition. Other rebar fragments seemed to extend horizontally both to the north and south from the top of the feature, suggesting reinforcement for a poured concrete floor. North of the wall, within the structure, water was encountered at 5 to 5.5 feet below grade.

Section D consisted of a 10 by 20 foot trench segment excavated immediately south of the Feature 1. A builder's trench similar to that observed in Trench 1 extended approximately 5 feet to the south from the concrete wall. At the east end of the trench, within the builder's trench, another round timber piling (13.5 inch diameter, yellow pine) was encountered at a level 42 inches below grade. At a depth of 9 feet 6 inches, a wide concrete footing was reached. Parallel to the footing was a 10 by 10 inch oak timber, 15 feet 9 inches in length, abutting the round piling. Below lay a series of forms for the footing, left in place after the wall was poured.

An attempt to extend Section D of the trench to the south was stopped by the presence of a poured concrete curb which curved to the northeast on a line with portions of curbing visible in eroded areas farther to the south and west. The curb formed the north edge of a concrete surfaced drive, 22 feet in width, and passed within 2.5 feet of the corner of Feature 1. The concrete curb extended 2 feet below grade and proved to be too substantial to be removed by the backhoe.

Stratigraphy in Section D consisted of three modern fill layers--crushed or bank run gravel, brown clayey loam and crushed brick, and black cinder, coal dust and iron slag--to a depth of 2 feet below grade, capping the builder's trench adjacent

to Feature 1 and a series of earlier fill layers to the south. The uppermost of the latter, Stratum D, was a layer of brown clayey sand heavily mixed with mortar, gravels, and brick bats, and contained late nineteenth and early twentieth century artifacts, including fragments of bottle glass from the Robert Portner Brewing Company in Alexandria, a complete mold blown bottle with slug plate and blob top finish, various other pieces of blown and molded glass, and fragments of undecorated and flow blue whiteware, undecorated ironstone, butchered animal bone and part of a glass thermometer. The remaining deposits consisted of brown and gray silty sands, interspersed with lenses of coal and containing scattered brick bits. Water seepage became a problem at a depth of 8 feet, obscuring stratigraphy somewhat and contributing to the slumping of the lower silty deposits which eventually led to the partial collapse of the southern trench wall. The final depth excavated was 13 feet 6 inches, the maximum extent of the backhoe arm within the constricted area of the trench section.

Trench 2 was then extended to the northeast an additional 55 feet to locate the east or north wall of the structure represented by Feature 1. Rubble in this portion of the trench, **Section E**, was increasingly heavy, including large cutstone lintels or window ledges, several of which were partially encased in copper alloy sheathing, long sections of steamline and electrical conduit, asbestos sheeting and segments of concrete roof slab reinforced with heavy gauge wire mesh and coated with tar and tarpaper. Water was reached consistently at a depth of 5 feet. A deteriorated section of the concrete wall was encountered 175 feet east of the screening wall along Union Street and 120 feet north of the Wilkes Street fence. This point was well beyond the line extrapolated from the portion of the feature visible in Section C, indicating the presence of a corner between the wall segments exposed.

Due to scheduling priority, areas closest to Union Street were to be investigated first, and thus excavation was not immediately continued to the south, outside the structure.

Trench 3 (*Figure 12*)

Total Length: 76 feet

Orientation: N/S

Width: 5 feet

Depth Range: 4 to 6 feet

Surface Elevation: 9.5 feet

Location: North of Trench 2

Trench 3 was excavated as an extension of Trench 2, northward from the north edge of Feature 2, the brick lined firebox, in an effort to locate the north edge of the structure represented by Feature 1. Fill encountered in the trench was similar to that recorded in Section E of Trench 2, consisting mainly of dense yellow firebrick, mixed with red brick, brown sandy loam, decomposed mortar, cut stone, metal debris and tangled masses of heavy wire mesh, some with portions of tarred

concrete slab still attached. Few non-structural artifacts were noted. Those observed were small bits of late nineteenth and early-to-mid twentieth century ceramic or glass: none were collected.

The trench was excavated in two sections. The density of the rubble fill in one portion of the trench made it more practical to shift excavation to a parallel line, though the relative uniformity of the rubble fill made it unnecessary to designate a separate trench section. As in Trench 2, water was encountered at a depth of 5 feet all along the trench, confirming the continuation of the concrete floor below.

Trench 4 (Figure 12,15,16)

Total Length: 150 feet
 Orientation: N/S with E/W extension
 Width Range: 4.5 to 8 feet
 Depth Range: 4 to 10 feet
 Surface Elevation: 9 to 10 feet

Location: Adjacent to Union Street, south half of property

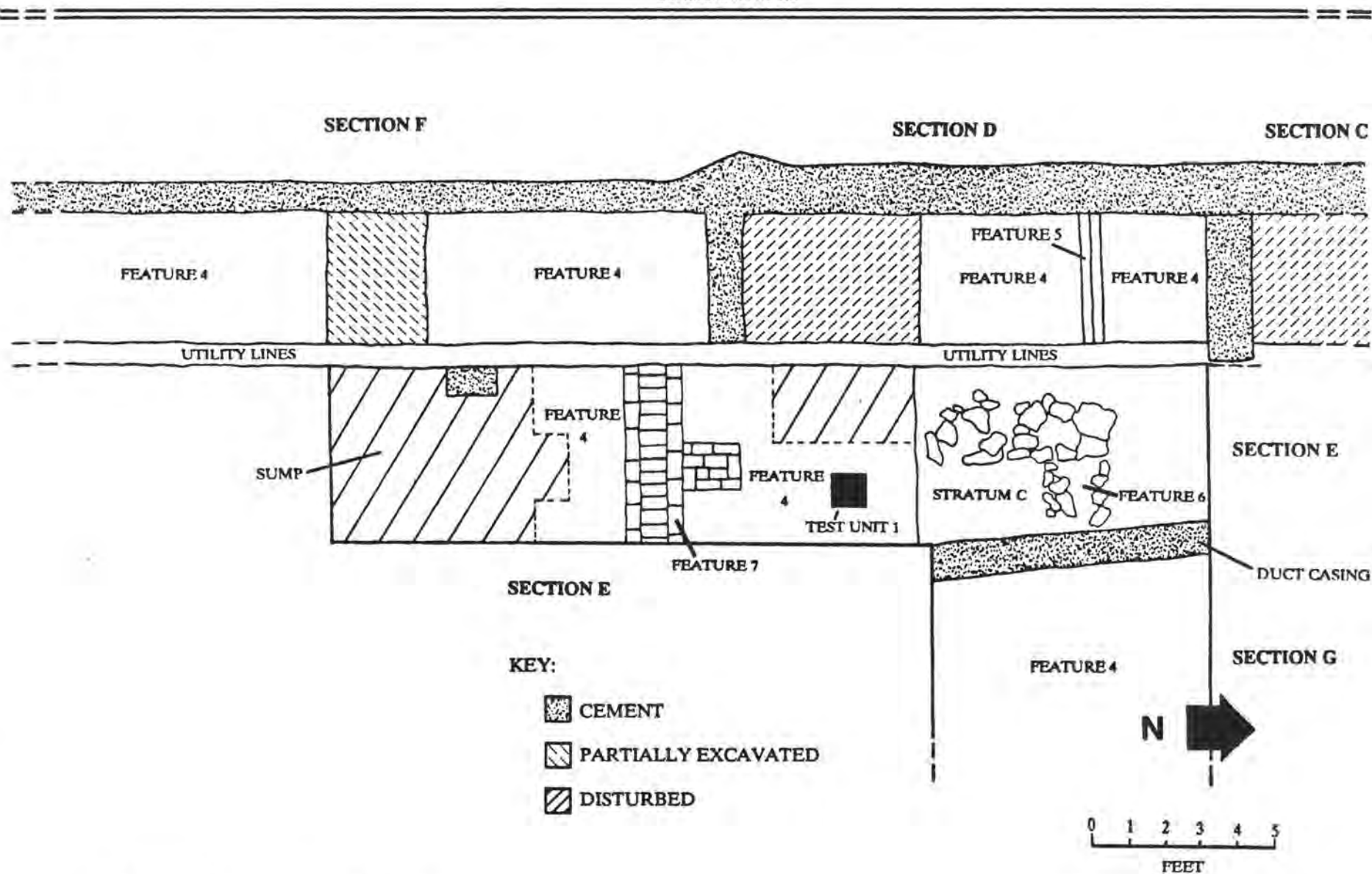
As early as the late eighteenth century, wharf construction had extended the natural bank of the Potomac eastward from Union Street toward the main channel of the river. The portion of the project area lying along Union Street was thus judged to exhibit the highest potential for the discovery of early historic remains. Wharf and shipyard industries were once situated in this part of the site, though the details and locations of specific structures are not known. Maps do indicate that later in the nineteenth century several buildings were constructed along Union Street, at least one of which was eventually used as housing for Contrabands during the Civil War. Trench 4 was placed along Union Street to document the presence of remaining eighteenth and nineteenth century features. Excavation was initiated at a point approximately midway along the block and continued to the south, keeping as near to the screening wall along Union Street as possible while maintaining sufficient space within which to step trench walls if necessary for safety.

Trench 4 was subdivided into seven sections, the divisions based on twentieth century disturbances encountered in the form of concrete foundations, concrete piers or utility lines intersecting the excavation (*Figure 12*). Sections A through D, F and H were excavated on a north/south line, Section E on a parallel adjacent to Section D, and Section G at right angles from Section E.

Ground surface along Trench 4 sloped gently to the south. Several extensive fill deposits exhibiting similar slopes were followed along much of the length of the trench. The deposits in the main north/south line of the trench, Sections A-D, F and H, are summarized below, followed by a more detailed treatment of the individual trench sections, including descriptions of features. The deposits in Sections E and G varied somewhat from those in the main line of the trench and will be described separately.

UNION STREET

SCREENING WALL



Source: Engineering-Science
Harborside

Figure 16
Trench 4 Sections D-G
Plan View

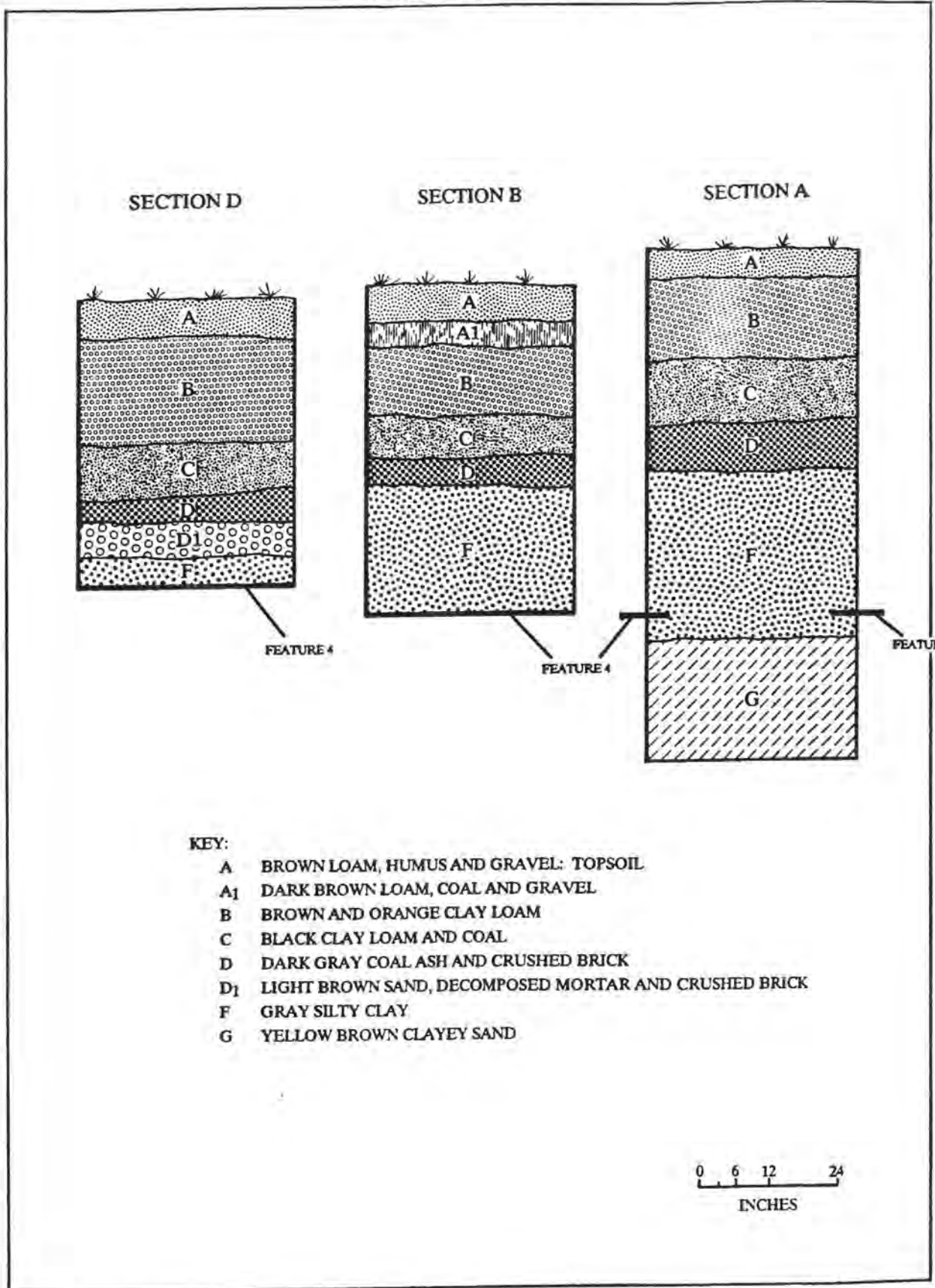
At a depth of from 4 to 6 inches below grade lay a truncated concrete foundation or wall footing, which ran the entire length of the excavation along a line 5 feet east of the screening wall. Due to the lack of space for safe excavation between the footing and the screening wall, the concrete became the west boundary of the trench. The footing was 16 inches in width and measured from 22 to 25 inches in depth. At the same level, a perpendicular footing extended eastward across the main line of the trench at a point 1.5 feet from its north end: excavation began south of this footing. Parallel with the footing along Union Street and at roughly the same depth lay a series of iron utility lines. On average the lines were situated 4 feet east of the foundation line running along the length of the trench, and thus formed the east edge of the excavation.

Throughout the trench, topsoil, designated Stratum A, extended to a depth of from 4 to 6 inches and was often quite gravelly in content. Below lay three main strata, B, C and F, only one of which, Stratum F, continued unbroken in all sections of the trench (*Figure 17,18*).

Stratum B, consisted of a layer of relatively modern fill described as a brown and orange clayey loam variously mixed with gravels, brick, bits of coal and cinder, roofing slate, glass and ceramic electrical insulators, lengths of copper alloy grounding cable and a variety of late nineteenth and early-to-mid twentieth century domestic ceramics and glass, none of which were collected. While the deposit averaged from 18 to 24 inches in depth in the north portions of the trench (in Sections A, B and D), it was not observed in the north half of Section F, and was only 3 to 5 inches thick in the south half of Section F and in Section H.

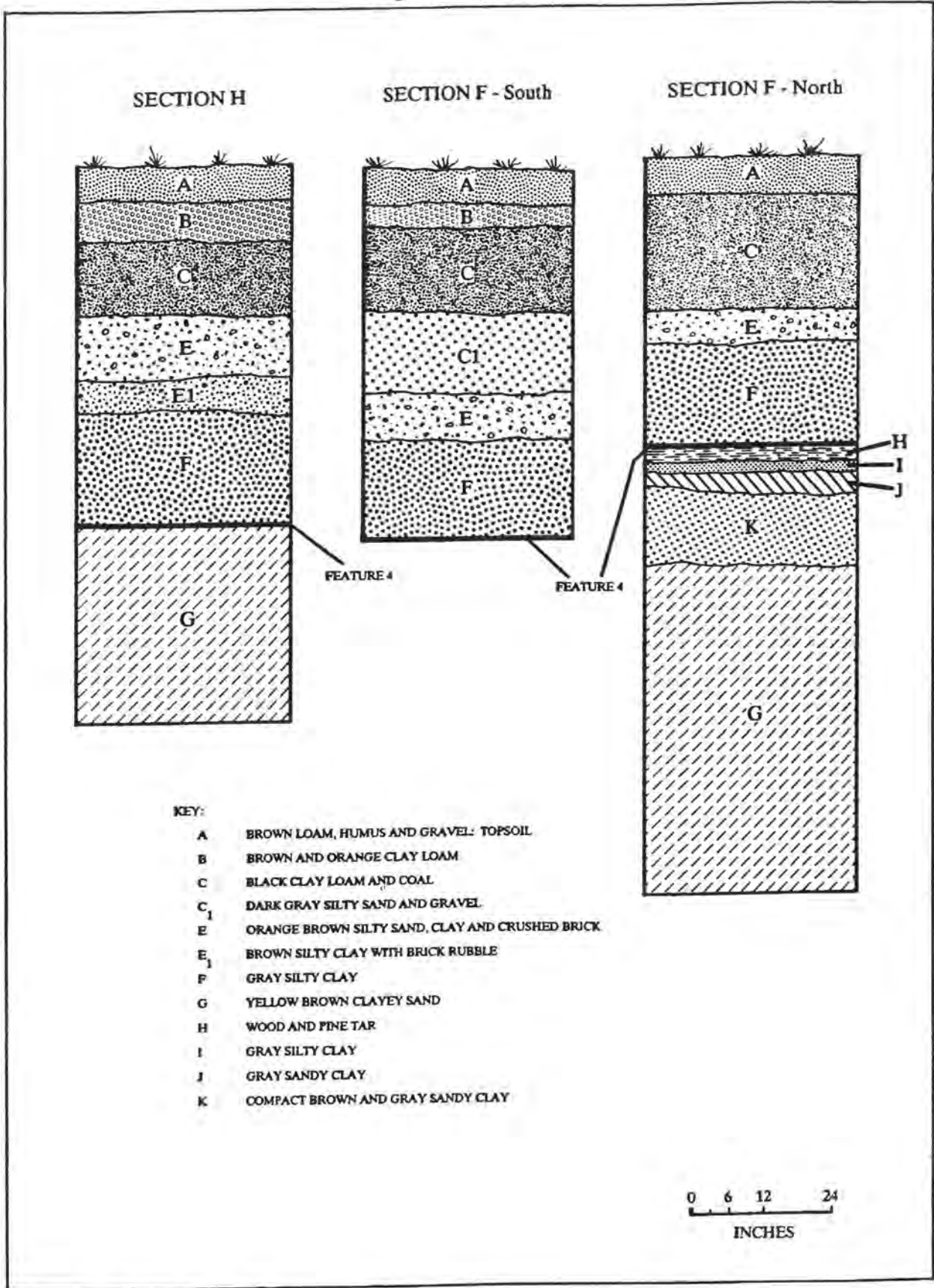
The second main layer was Stratum C, consisting of a 9 to 12 inch deposit of black, coal-rich clay loam mixed with cinder, slag, gravels, pockets of small cobbles, crushed brick, cut and wire nails, fragments of ceramic electrical insulator, oyster and clam shell and late nineteenth and early twentieth century domestic materials, including small fragments of white salt glazed stoneware, creamware, pearlware, whiteware, ironstone, yellow ware, locally manufactured blue and gray stoneware, Chinese and domestic porcelain, free and mold blown bottle glass, and kaolin and stoneware tobacco pipe fragments. Stratum C was not observed in all portions of the east wall of the trench--it was thin and patchy in Section A, for example--and it occurred at a much higher level in the south end of the trench, in Sections F and H, indicating a break in the layer between Section D and F. The artifact content of Stratum C was virtually the same throughout the trench, suggesting that although not a single continuous deposit, the two segments constituted the same type of fill, perhaps dumped and spread in several layers during the same episode of filling.

Below Stratum C, deposits varied from north to south in the trench. In the north, Sections A through D, lay Stratum D, a thin stratum of coal ash and crushed brick, while to the south, in Sections F and H, Stratum C was followed by an increasingly deep layer of orange silty sand, clay and brick rubble, Stratum E. Several intervening layers, consisting of transitional zones between more prominent strata, were recorded (e.g., Stratum C₁ in the south half of Section F).



Source: Engineering-Science
Harborside

Figure 17
Trench 4
Sections A/B/D
West Column Profiles



Source: Engineering-Science
Harborside

Figure 18
Trench 4
Sections F&H
West Column Profiles

The third main deposit, Stratum F, was continuous throughout the length of the trench. It consisted of a sticky gray to gray brown silty clay ranging from 12 to 24 inches in thickness and resting on Feature 4, a layer of wood chips and pine tar comprising the eighteenth century wharf surface (see below). Few artifacts were recovered from Stratum F. Those which were consisted of late eighteenth and early nineteenth century materials--white salt glazed stoneware, creamware, pearlware, locally made gray stoneware, ironstone, and cut and hand wrought nails.

Several features were encountered at or near the base of Stratum F in various portions of the trench. **Feature 3** lay at the north end of Section A, consisting of a series of heavy, waterlogged planks lying horizontally at a depth of approximately 4.5 feet below grade at the base of Stratum F. The planks were oriented north/south, on line with the trench, with only 1 to 1.5 feet extending into the trench from the north wall of the excavation. Only one plank was sufficiently exposed to allow a width measurement (12 inches); all were approximately 1.5 inches thick and had been sawn off at an oblique angle. Deeper excavation into a disturbed area south of the feature eventually led to the collapse of the west wall of the trench, exposing another plank set on edge and running east/west into the trench wall. Due to the proximity of the screening wall along Union Street, no further investigation of the perpendicular planking was attempted. Below Feature 3 lay a bed of black sandy gravel and coal varying in thickness to 1 inch, atop thick gray, brown and orange clayey silt which continued beyond the final depth excavated, 7 feet.

Feature 4 was a hard, floor-like surface encountered 6 feet to the south of Feature 3 and at approximately the same level as the horizontal planking of that feature. The surface originally appeared to be a form of laminated wood, but close examination showed it to consist of wood shavings and sawdust bonded with a black adhesive substance which gave off the pungent, resinous odor of pine tar. The north edge of the feature was truncated by the disturbance south of Feature 3. In profile, the surface measured less than 1 inch thick, lying atop 3 to 4 inches of hard packed gray sandy clay containing bits of brick and plaster, followed by a 3 to 4 inch layer of silty sand and coal bits, and the deep layer of clayey silt recorded below Feature 3. It was unclear at this point whether Feature 4 was the interior floor of a large structure or the surface of the early wharf.

Excavation of Section A was halted by the presence of a square concrete junction box visible at ground level. South of this obstruction, excavation continued in **Section B** of the trench. Feature 4 was encountered at a depth similar to that recorded in Section A, approximately 53 inches in this case. Section B was cut short after 9 feet by a second east/west concrete footing. Rapid and continuous accumulation of water from looser fill layers made detailed investigation of Feature 4 in this portion of the trench impractical. **Section C** to the south was only partially excavated--yet another concrete footing intersected the trench after only 6 feet, rendering water management even more of a problem than in Section B.

In **Section D**, to the south, Feature 4 was reached at a similar elevation (approximately 45 inches below grade, with the southward slope at surface making the relative depth comparable to that in Sections A and B). Section D of the trench remained relatively dry, and here the surface of Feature 4 was found to be extremely hard. A drain or gutter, set within the floor surface, was encountered 40 inches from the north trench wall. Cross-cutting the trench at nearly right angles, the gutter, designated **Feature 5**, was formed of two 1 by 5 inch planks forming a V-shape 7 1/8 inches wide at the floor surface and 3 1/4 inches deep. When first identified, the gutter was filled with sawdust, straw, small gravels, oakum, bits of leather and a hand wrought nail, all coated or impregnated with the same resinous pine tar observed binding the flooring of Feature 4.

Section D was truncated after 13 feet by another east/west concrete footing. To the south, **Section F** was excavated in two segments with a 30 inch balk left across the center of its length as an aid in water control. The horizontal extent of Feature 4, by this point observed in three trench sections over a distance of more than 50 feet, suggested that it was in fact the surface of the eighteenth century wharf. Excavation to the south, in Section F, was carried out to further define the southern limits of the feature.

In the north half of Section F, Feature 4 was again encountered, here at a depth of approximately 48 inches, similar to that in Section D. The flooring appeared less well preserved in this part of the trench. Taking advantage of the less hard packed surface, a shovel test was excavated near the north wall of the trench section. The resinous floor surface (shown in *Figure 18* as Stratum H) was 2.5 to 3 inches thick and may have consisted of more than a single layer, though the state of deterioration made such a determination uncertain. Directly below lay 1 to 1.5 inches of gray silty clay (Stratum I) containing bits of brick, mortar, wine bottle glass, a fragment of refined earthenware too badly burned to type, lead glazed redware, bone and oyster shell. Below lay 3.5 inches of gray sandy clay (Stratum J) containing brick, mortar and coal bits, wrought and cut nails, fragments of burned earthenware, bits of leather, bone and shell. In the north wall of the trench, two planks measuring 2.75 by 7.5 inches extended a short distance from the trench wall within this lower stratum, 4 inches below the base of the flooring. The final layer observed was a brown and gray, hard packed sandy clay (Stratum K). The backhoe was then used to dig more deeply below the level of the floor surface. To a depth of 10 feet, a brown, coarse grained sandy silt (Stratum G) was encountered. Water influx proved to be a problem in this section of the trench, and eventually caused the west wall of the trench to collapse.

Excavation in Section F continued further to the south, beyond a 30 inch balk left to retain the large amount of water collected in the north end of the trench section. Feature 4 was encountered at a depth of 59 inches, 10 inches lower than in the excavations to the north, suggesting either a step-down lying between the two portions of Section F, or disturbance, possibly in the form of settling, in the southern end of the lot. The surface of the feature was in an even more highly deteriorated state in this part of the trench. Water drainage from the fill layers in the trench

walls again presented problems in excavation, and may have contributed over time to the poor preservation of the wharf surface below.

In the final section of the trench, **Section H**, Feature 4 was reached at the same level as in the south half of Section F, but was so deteriorated that it was almost missed in excavation. Whereas in the northern portions of the trench--Section D, for example--the surface had resisted the backhoe teeth, there was no resistance in Section H. In fact, the feature was more readily seen in the profile of the trench than as a distinct surface in plan view. Near the southern end of the section, the surface disappeared altogether within increasingly mixed deposits, though no formal end was observed. Below lay very wet, brown silty sand to a depth of at least 8 feet. Excavation to the south in Trench 4 was halted after a total distance of 92 feet, due to the disturbed nature of the deposits in the southwest corner of the lot, in the form of concrete platforms visible at ground level, and in the form of highly mixed subsurface deposition.

Section E was opened east of Section D to expose a larger segment of the wooden drain, Feature 5. Stratigraphy in the northern portion of Section E was similar to that in Section D to the west, except that the coal layer, Stratum C, was much less evident. At a depth of approximately 35 inches, 10 inches above the level of Features 4 and 5, the base of a roughly laid foundation was discovered. Labeled **Feature 6**, the foundation consisted of cobble sized pieces of green and gray steatite broken from larger cut blocks (portions of wire sawn faces were visible on some pieces) along with several brick bats, all bonded with gray and brown mottled loamy clay. The feature measured 18 to 24 inches in width and formed a right angle, with one arm running east and the other south. Contained within the dark gray silty loam fill over the feature (Stratum G of trench Section E) were fragments of creamware, whiteware, ironstone, yellow ware, gray salt glazed stoneware, cut nails, press molded glass, a pair of porcelain and brass collar studs and a silver three cent piece dated 1853. The east arm of the foundation entered the east wall of the trench: further excavation in that direction was obstructed by a concrete duct casing which lay 12 to 14 inches below grade and housed several utility lines. Five feet to the south, the foundation was truncated by a large concrete pier extending to a depth of more than 4 feet. Feature 6 was left in place, but the pier was removed and excavation was continued to the south, revealing Feature 4 at a depth of 45 inches. The surface was followed another 10 feet to the south, by which point it lay 3 to 4 inches lower than in the north part of the trench section. Another large concrete pier was removed at this point, but the deposits were very disturbed both below the pier and further south in the trench. Water control was maintained by the excavation of a deep sump at the south end of the section, into the brown and gray silty sand which formed the basal deposit in this portion of the trench: the maximum depth excavated was approximately 12 feet.

Feature 7 was located in Section E just north of the disturbed area at the south end of the excavation. It consisted of a wall fragment composed of red brick 18 inches in width and running east/west, continuing into both walls of the trench. Midway along the north edge of the wall lay a rectangular pad, 17 by 22 inches, butted against the wall forming a pilaster. The brick work in Feature 7 was bonded

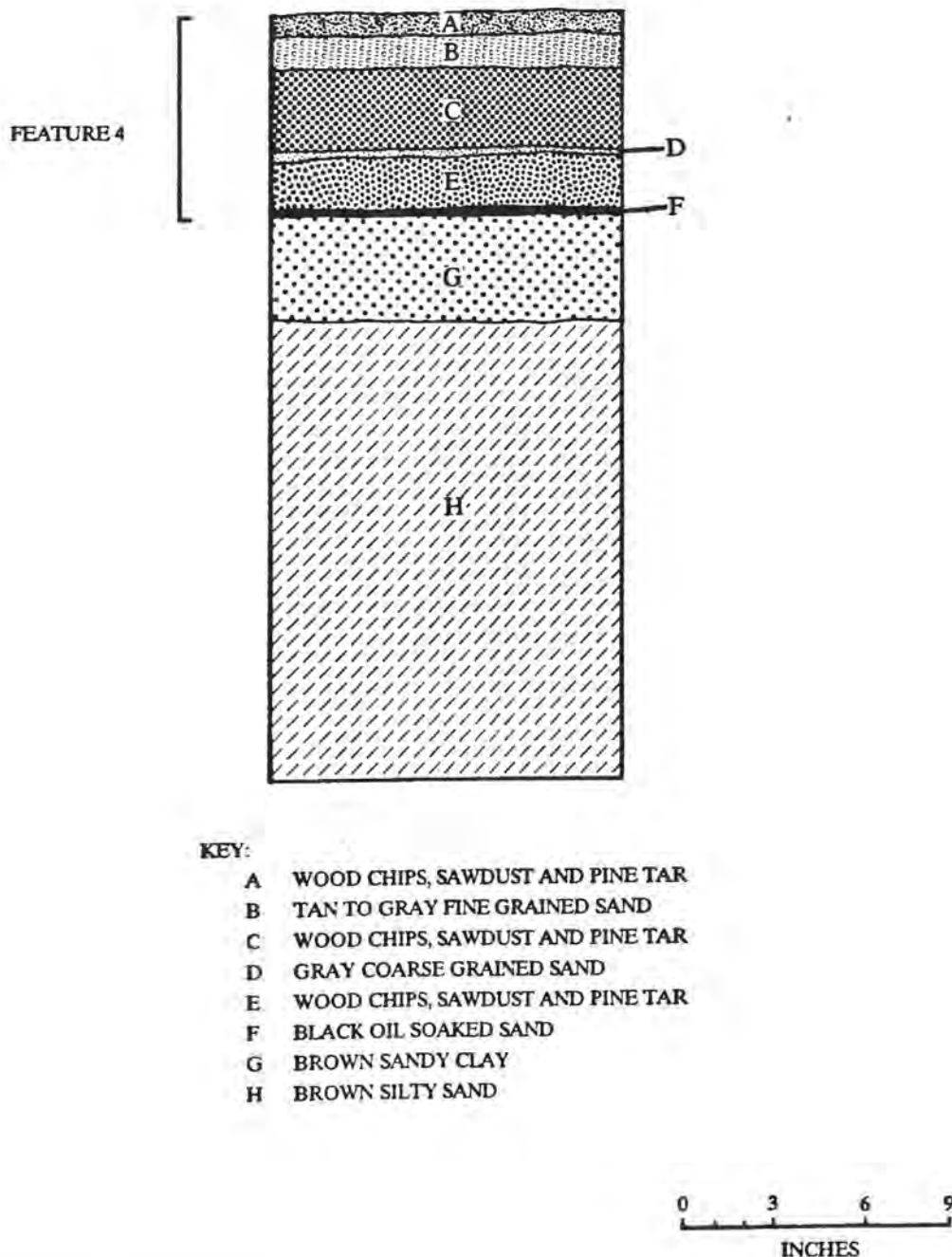
with a dark gray, coarse grained sand and lime mortar. The initial remaining course of brick was encountered approximately 1 inch below the surface of Feature 4. The composite surface did not appear to have been cut nor was a builder's trench apparent along either edge, while the flooring material had overlapped a portion of the brick on one corner of the rectangular pilaster segment, all suggesting that the wall was either contemporary with or predated the wood surface. While the feature was not fully excavated, bricks were removed in one section revealing the wall continuing at least 3 courses (8 inches) below the surface of Feature 4. After the profiles of the trench section were cleaned, a narrow trench filled with brick rubble was observed in the west profile corresponding with the line of Feature 7, beginning 28 inches below grade, suggesting that the wall had at one point been buried, later excavated and robbed of its brick, and the resulting trench then refilled with rubble. The disturbance caused by the concrete pier lying over the feature had obscured traces of this trench in the east profile, and masked its presence during excavation--some of the rubble had found its way back into the fill around the pier, and made the robber's trench virtually unrecognizable in plan view. Feature 7 did not appear in trench Section F, to the west.

To further investigate the composite wharf surface, Feature 4, a 1 by 1 foot hand excavation, **Test Unit 1**, was placed in Section E between Feature 6 and Feature 7. At least three distinct surfaces were recorded (*Figure 19*), each one hard and thick enough to require the use of an iron wedge and hand sledge for removal. The strata are summarized as follows (note: stratum designations are unique to the unit; elevations are from present grade):

- Stratum A: 45-46 inches wood shavings and pine tar, with small gravels and small pieces of clear flat glass and olive green wine bottle glass, brick bits and a small wrought iron spike
- Stratum B: 46-47 inches light brown to gray sand
- Stratum C: 47-48.5 inches wood shavings and pine tar, with pieces of canvas, sissal rope and oakum, a wooden dowel, brick bits, a cut nail and a wrought, flat headed canvas nail, fragments of cockle shell, fish scales, and several kernels of corn
- Stratum D: 48.5-49 inches gray, coarse grained sand, with a kaolin pipe stem fragment, a fragment of coral and a fish scale
- Stratum E: 49-50.5 inches wood shavings and pine tar, with small gravels, small pieces of olive green wine bottle glass, oakum, brick bits and straw
- Stratum F: 50.5 inches 1/8 inch layer of black oily sand
- Stratum G: 50.5 inches + brown to gray silty sand, with small sherds of creamware and pearlware, and cut nails with hand wrought heads

Strata A, C and E were identified as wharf surfaces, and Stratum F as either the earliest, oiled surface or an oiled base for the first wood and pine tar surface.

Section G of Trench 4 was excavated eastward from Section E, beyond the concrete duct casing which formed the east wall of that excavation. Investigation in this area was aimed at intercepting Feature 6, the steatite foundation segment, or at



Source: Engineering-Science
Harborside

Figure 19
Test Unit 1
North Profile

a lower level, Feature 5, the wooden gutter set in Feature 4. The trench section measured approximately 8 feet in width and 28 feet in length.

Below the topsoil layer of light brown loam and gravel lay Stratum B, the mixed brown clay loam fill deposit containing gravels, brick fragments and assorted nineteenth and twentieth century glass and ceramic artifacts. Stratum B ran to a depth of 3.5 feet below grade, notably deeper than in the trench sections to the west. Small fragments of steatite were observed within the lower portions of Stratum B, but since none appeared to be in place, Feature 6 could not be identified within this section of the trench.

Underlying Stratum B was a 5 inch deposit of black clay loam, Stratum C, full of coal and cinder. While not directly connected with Stratum C in the main line of the trench, the corresponding nature of the soil and artifact contents in the two areas suggested that the deposits represented similar, if not the same, fill deposits. Clustered in the northwest corner of the trench within Stratum C was a concentration of artifacts including construction materials in the form of window glass, ceramic tile and drain pipe fragments; mold blown bottle glass in a variety of colors (e.g., clear, amber, aqua, blue, dark olive green), representing several molding techniques (e.g., 2-piece molds with post and cup bottoms) and finishes (e.g., tooled patent lip, early crown cap lip); press molded glass tableware; molded lamp chimney glass; opaque white, or milk glass; fragments of undecorated creamware, transfer printed pearlware, undecorated and transfer printed whiteware, undecorated and decal decorated ironstone, yellow ware, European porcelain, Rockingham/Bennington earthenware, lead glazed redware, locally produced blue and gray salt glazed stoneware (most of which appeared to be from 2 crock-like vessels, though only a few pieces actually mended), a molded red clay pipe bowl fragment, a porcelain button and a fragment of shoe leather.

Stratum C lay atop a 3 inch layer of dark gray and red coal ash and sandy mortar and plaster, Stratum D, which was hard packed and contained an assortment of artifacts similar to those in Stratum C above: fragments of mold blown bottle glass, olive green wine bottle glass, several complete or fragmentary post-bottom pharmaceutical bottles, fragments from a mold blown ink bottle with a fire polished finish, clear and opaque white press molded glass tableware, undecorated whiteware, unglazed redware, local blue and gray salt glazed stoneware (including several pieces from a single vessel which cross mended with fragments from Stratum C), a small copper alloy buckle, a porcelain button and several cut nails.

Stratum E, below, was an 8 to 11 inch deposit of black, clayey silt and gravel, similar to Stratum C above, though more compact and clayey. It also contained numerous late nineteenth and early twentieth century artifacts, including bits of mortar and plaster, a cut nail, fragments of mold blown bottle glass, olive green wine bottle glass (including a base fragment with sand tipped pontil mark), undecorated creamware, whiteware and ironstone, and locally made blue and gray salt glazed stoneware.

Feature 4 was identified at the base of Stratum E, approximately 5 feet below grade, considerably lower than in trench Sections D and E to the west. Though poorly preserved and hardly recognizable in plan view, two resinous wood chip layers were identified in profile. The upper layer was 1.5 to 2 inches thick, beginning at a slightly higher elevation to the north. Hand excavation was not attempted, but a single cut nail was recovered from the deposit during machine excavation. Sandwiched between the two layers of composite wood material were a 2.5 inch layer of green gray silty sand containing bits of wood, brick and shell, similar to Stratum F in the western sections of the trench, and a 1.5 inch layer of coarse white sand, similar to Stratum D in Test Unit 1, between the second and third wood surfaces in that excavation. The sand was designated Stratum G in this section of the trench, and a small piece of water worn coral was recovered from it as a result of cursory examination during excavation. The lower resinous wood deposit averaged less than 1 inch in thickness and was very deteriorated. Below lay a 1 to 1.5 inch layer of dark gray oily sand and silt, followed by waterlogged gray silty sand beyond the maximum depth excavated, 8 feet.

Trench 5 (Figure 20)

Length: 85 feet

Orientation: N/S with E/W extension

Width Range: 10 to 20 feet

Depth Range: 3 to 11 feet

Surface Elevation: 10 feet

Location: Northwest corner of lot, south of VEPCO substation

According to the earliest maps of lots in the southern portion of Alexandria, the early shoreline of the Potomac dipped in toward the southwest from Point Lumley (where the Robinson Warehouse Terminal sits today), leaving a small section of dry land in the northwest corner of Lot 93. It was predicted that the northwest corner of the Harborside lot would hold high potential for both eighteenth and nineteenth century structures, including portions of Roberdeau's wharf structure, outbuildings associated with his distillery, as well as structural remains of Irwin's brewery. Trench 5 was excavated along the southern edge of the VEPCO substation, as near to the present northwest corner of the lot as possible, in an attempt to locate the position of the shoreline and any early structural remains which might exist.

Excavation of Section A of Trench 5 began at a point 5 feet west of the screening wall along Union Street and 10 feet south of the chain link fence forming the edge of the VEPCO property. The initial deposits consisted of a surface layer of 3 inches of light gray sand and bank run gravel, followed by 5 inches of yellow brown silty clay loam and gravel fill. Two narrow concrete footings, 12 inches wide, 17 feet in length and 24 inches deep, were encountered within 6 inches of ground surface, running east/west, perpendicular to the screening wall. The footings lay 30 inches apart, and the chamfered edges and sheared bolts along the surface of the concrete

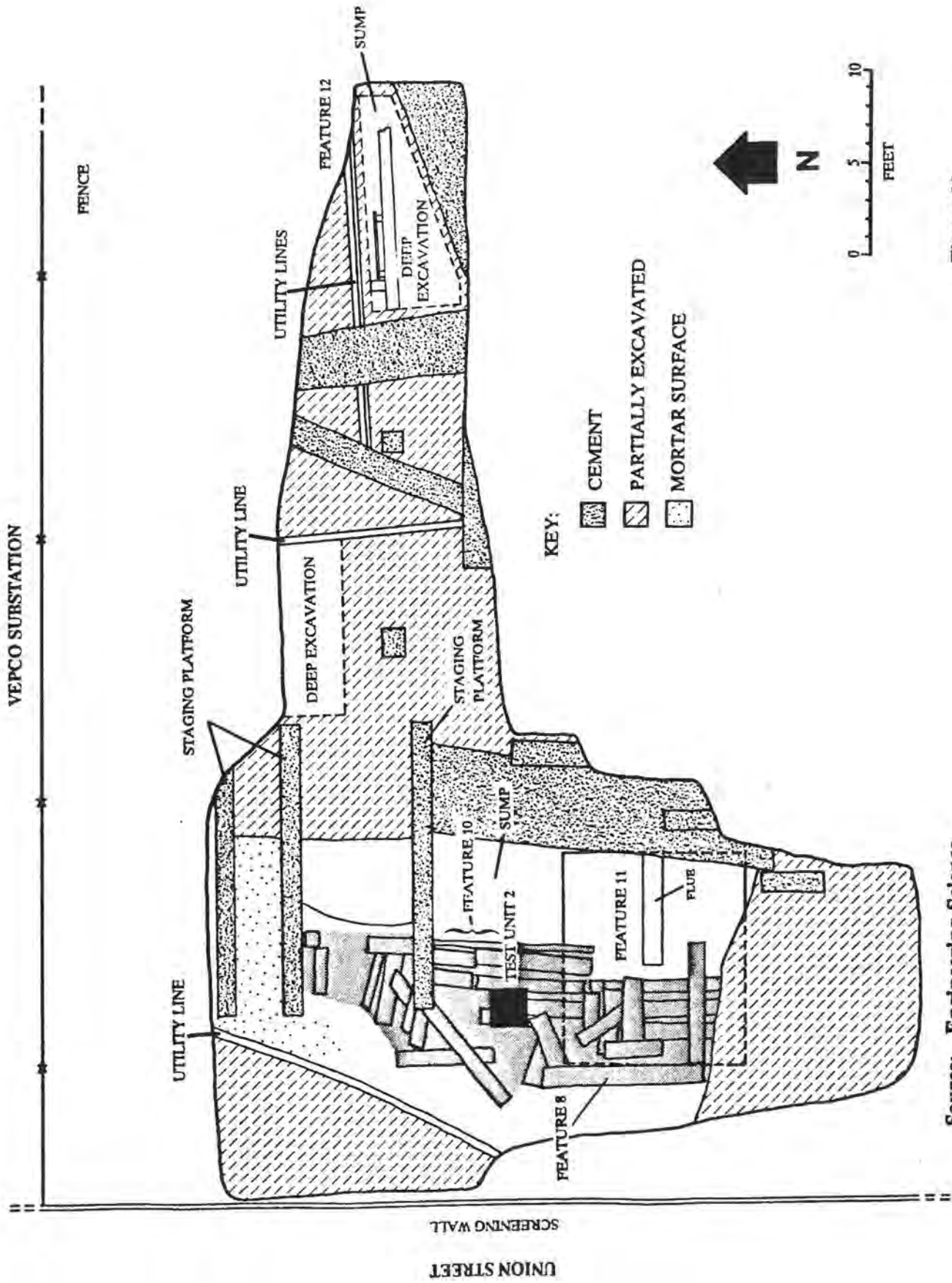


Figure 20
Trench 5: Plan View

Source: Engineering-Science
Harborside

indicated that they were in fact supports or staging platforms for heavy electrical equipment, similar to those still visible within the VEPCO yard to the north (note: several of the footings in Trench 4 probably served the same purpose). Excavation was shifted south of the platforms.

At the west end of the trench section, near the screening wall, a pair of 3 inch metal utility lines was encountered beneath 3 feet of mixed clay loam fill, Stratum B, running on a northeast/southwest diagonal to a concrete junction box adjacent to the wall. A third concrete staging platform was encountered approximately 6.5 feet south of the two previously identified it was of the same shape and dimensions. Contained within Stratum B between the three platforms were small fragments of late nineteenth century artifacts, including fragments of whiteware, ironstone, yellow ware, Rockingham/Bennington earthenware, and locally produced gray salt glazed stoneware, along with mold blown bottle glass, and oyster shell. At a depth of 4 feet, a series of wooden planks was encountered running beneath the southernmost staging platform. Designated **Feature 8**, the wood extended to a point 2 feet north of the concrete (*Figure 20*). At approximately the same level, 4.5 feet in this case, a short, 5 x 8.5 inch timber lay adjacent to the southern edge of the central concrete platform, with a 6 x 6 inch upright at its eastern end. Below the wood between all three platforms, at a depth of 5 feet, lay a hard mortar surface running under the utility line to the west and becoming increasingly deteriorated to the east, though clearly visible within the trench profile.

Further examination of the profiles between the staging platforms indicated that there was a slight difference in fill directly over **Feature 8**. Designated Stratum C, the fill above the feature was somewhat more mixed, containing brick and mortar rubble and coal, as opposed to the combination of orange brown sandy clay with lenses of coal and scattered brick bits to the east. Due to the similarity of the deposits in plan view, there may have been a degree of mixing during excavation, so that the artifacts described may have come from either stratum, a situation which highlights one of the pitfalls inherent in backhoe excavation; i.e., deposits of similar color and consistency can become mixed as the backhoe bucket pulls across them, obscuring the line of separation. Later excavation in Section B of the trench, south of the staging platforms (see below), indicated that while the two deposits were in fact distinct, the difference was not chronologically significant.

Water which had collected in the looser deposit over **Feature 8** rapidly filled the trench, forcing the excavation of a sump through the deteriorated mortar floor in the east end of trench Section A. Soil excavated from the sump area consisted of a brown sandy clay to the maximum depth excavated, between 9.5 and 10 feet.

Section B of Trench 5 was excavated southward from the third, or southernmost concrete staging platform to more fully expose the wooden planking of **Feature 8**. Below the 6 to 8 inches of gravel, coal and silt loam fill at ground surface lay a continuation of Stratum B, 18 to 22 inches in depth in this area and consisting of dark brown to black, coal-rich sandy loam, containing gravels, brick bats, a 6 foot length of railroad track, heavy cast iron deck plates (several with spikes and portions of wood still attached), a nineteenth century bayonet, roofing

slate, cut nails and a variety of glass and ceramic fragments with manufacture and use dates ranging from the eighteenth through the twentieth centuries, including white salt glazed stoneware, creamware, pearlware, whiteware, Shaw brown slipped stoneware, locally produced gray salt glazed stoneware, lead glazed redware, and mold blown and automatic bottle glass. Stratum C, below and extending to the top of Feature 8, consisted of brown loam with brick and mortar rubble, becoming increasingly mixed with decomposed wood near the surface of the feature. The deposit contained cut nails along with various other pieces of ferrous metal hardware and gas or electrical conduit, window glass, roofing slate, a fragment of Devon gravel tempered earthenware, small amounts of creamware and pearlware, a much larger representation of whiteware, ironstone, yellow ware, local salt glazed stoneware, mold blown bottle glass, a porcelain button and a small fragment of coral.

The planking of Feature 8 was very uneven, encountered variously between 4 and 4.5 feet below surface, probably disturbed by the rubble fill placed on top during later infilling. Judging from the least disturbed areas at the south end of the trench excavation, there were originally at least three layers of planking put down perpendicularly, for the most part without fasteners. The eastern edge of the feature lay 14 feet from the wall along Union Street, finished with a 1 x 8 inch plank set on edge. The western edge of the feature was less well defined: laid boards were encountered to within 6 feet of the Union Street wall, but scattered lumber and fill were found still closer to the wall. The southern end of Feature 8 was not located. A large, 4 x 6 inch timber lay across the width of the feature on a line 14 feet south of the concrete staging platforms, but probing indicated that planking continued to the south. These planks were not fully exposed, and excavation was discontinued due to the close proximity to the entry way to the modern parking lot and the potential of wall slump undercutting and destabilizing the asphalt pavement.

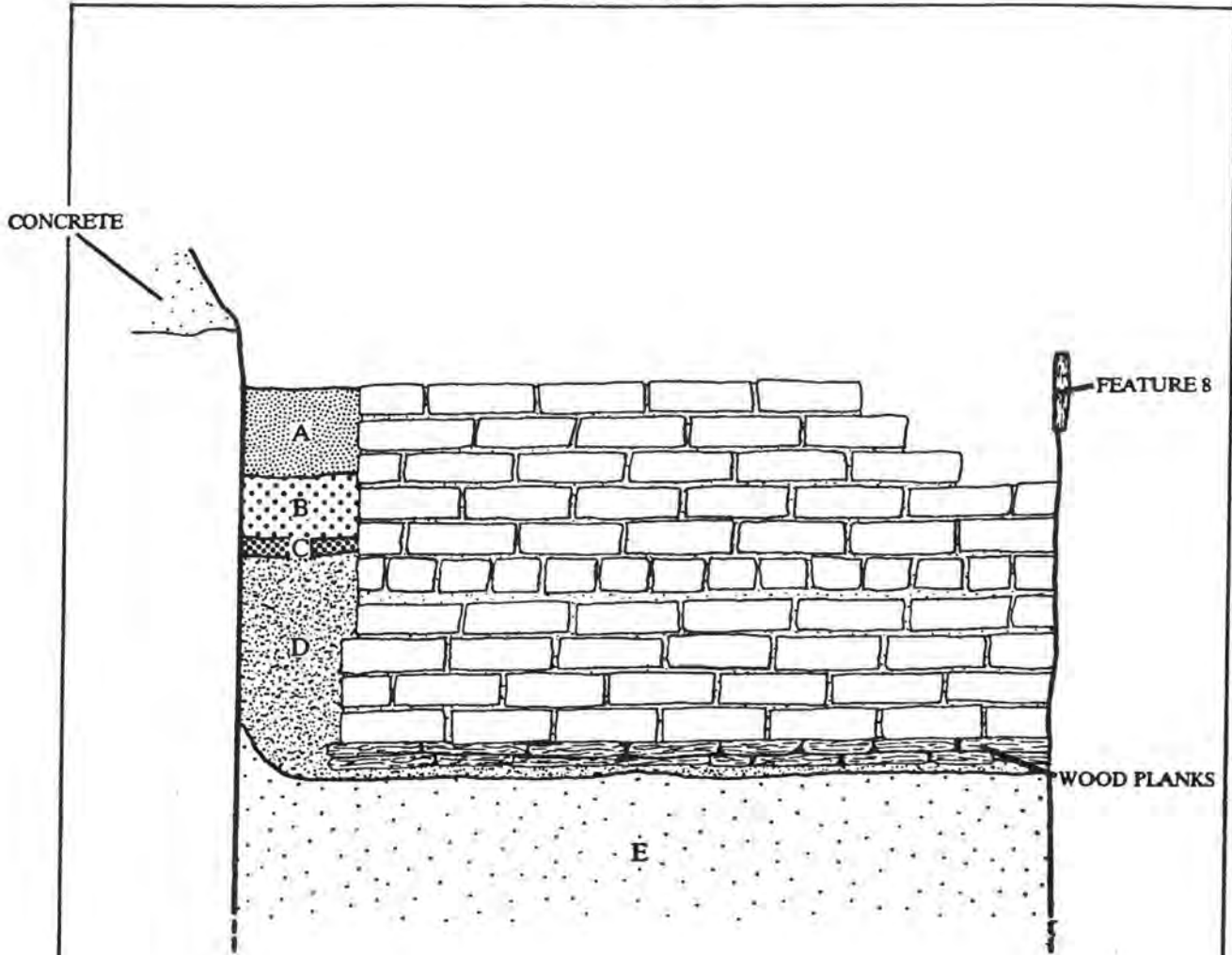
The accumulation of water from the disturbed fill layers in this portion of the trench required the excavation of a sump east of the edge of Feature 8, within a deep deposit of brown sandy clay fill. The area available for the sump was limited to the east by a rough edged concrete surface lying approximately 18 inches below grade. The concrete was at least 4 feet in width and 6 to 9 inches thick, and appeared to serve as a protective casing for electrical conduits. On several occasions over a period of three days, the sump was pumped out and silt runoff excavated. The maximum depth reached during excavation was approximately 11 feet. The exact depth of fill in the sump area was difficult to determine due to the wet nature of the excavation, but it appeared to extend between 8 and 9 feet below grade.

An open plywood box, 28 inches square, was encountered lying approximately 15 feet south of the staging platforms and southeast of Feature 8. Designated **Feature 9**, the box first occurred at a depth 3 feet below grade and continued approximately 18 inches into the fill. The box appeared to be a wooden form constructed for a concrete pier which was never poured.

Feature 9 was removed and a brick platform exposed below, lying at a depth of 5 feet. Designated **Feature 11**, the platform measured 10.5 by 11.5 feet, composed of well-laid, reddish-orange brick bonded with a friable sand and lime mortar. The platform lay partially under and to the southeast of Feature 8. One to three courses of brick had been removed from the western portion of Feature 11 before the planking of Feature 8 was laid down. To the east, the surface was level, though mortar adhering to the upper surfaces of the brick indicated that other courses had been removed when the structure was demolished. Running east/west across the middle of the platform and extending 6 feet in from the eastern edge was a trough, 15 inches wide and 1 course in depth. Soils removed from the base of the trough were gravelly and contained more coal and coal ash than the overlying fill (trench Stratum C), and the brick within the trough was stained a dark gray, suggesting that the trough may have functioned as a flue beneath a furnace structure. In the south profile exposed by the sump excavation alongside Feature 8 (*Figure 21*), the platform was seen to continue approximately 2.5 feet, 10 courses, in depth. At the base of the feature was a thin, 1 inch layer of dark brown loamy fill into which two layers of overlapping 1 x 4 and 1 x 6 inch planks had been laid (oriented north/south). Three courses of brick were then laid in common bond, followed by another course of stretchers, stepped in approximately 1 inch. The next layer was a course of headers followed by five courses laid in common bond. The sandy mortar was thick in some places and in others had deteriorated greatly, so that when the excavated sump hole was pumped out at the start of work in the morning, water which had collected on top of the feature overnight poured out from between the bricks. Portions of a builder's trench with stratified fill deposits was visible to the east of Feature 11, but the full profile was not accessible due to the presence of the concrete duct casing above. Excavation to the east or southeast was impeded by the casing and a further series of concrete staging platforms, these oriented north/south. No well-defined builder's trench was apparent in either the east or west walls of the sump excavation.

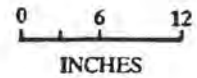
The west profile of the sump did reveal that a wide, shallow notch had been cut into the plank edging Feature 8 to allow it to fit over a 4 x 7 inch timber running to the west beneath the feature (*Figure 22*). Also revealed was **Feature 10**, a pier composed of red brick lying below the timber. At least 2 inches of mortar-rich fill dirt separated the pier from the overlying timber, indicating that their alignment was not intentional. The pier consisted of three courses laid in common bond, measuring a total of 26 inches in width, with a base course of headers measuring a total of 29 inches. The face exposed in the profile appeared finished, and thus undisturbed. Probing between the boards in Feature 8 indicated that the pier extended at least 18 inches to the west.

To further investigate Feature 8 and its relationship with the brick features, Features 10 and 11, below, a section of wood planking was cleared, and a 2 x 2 foot hand excavation, **Test Unit 2**, placed in the underlying soil deposits. Four layers of planking were removed, including the skewed upper layer covered with rubble. At least one of the lower planks was secured with a cut nail. Sandy silt occurred between each layer of planking along with artifacts similar to those in the overlying fill layer, Stratum C.



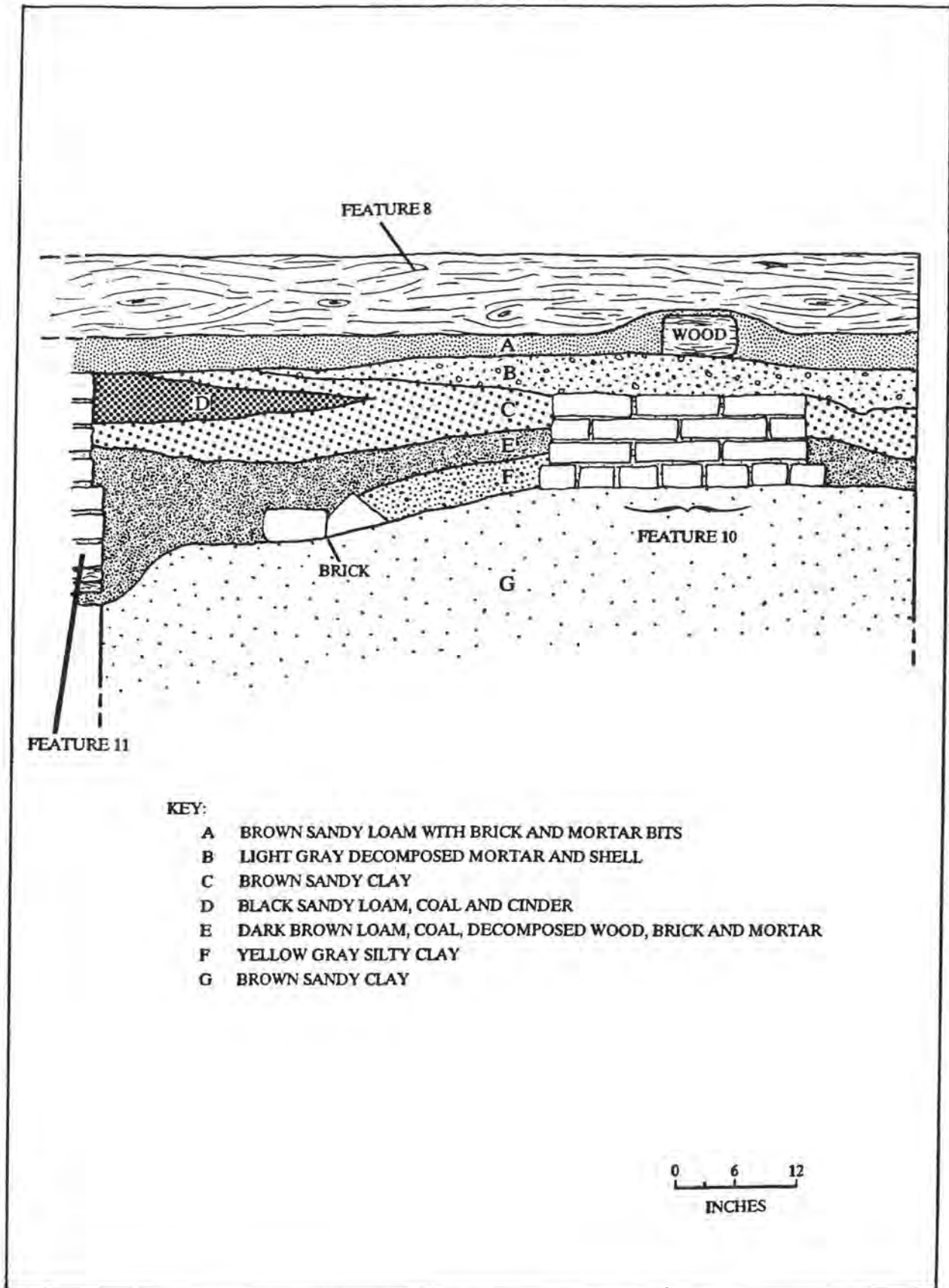
KEY:

- A BROWN SANDY CLAY AND DECOMPOSED MORTAR
- B YELLOW BROWN SILTY SAND
- C BLACK CRUSHED COAL
- D DARK BROWN LOAM AND RUBBLE
- E BROWN SANDY CLAY



Source: Engineering-Science
Harborside

Figure 21
Feature 11
South Profile



Source: Engineering-Science
Harborside

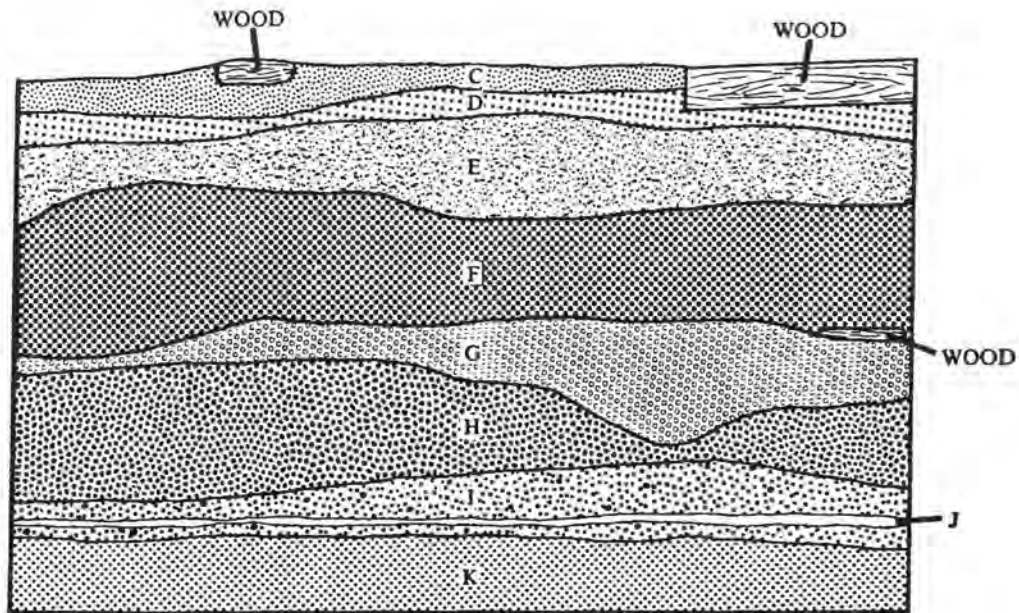
Figure 22
Feature 8/9/11
West Profile

The test unit was located 9 feet east of the screening wall along Union Street, and 4 feet south of the concrete staging platforms, in line with the southern edge of Feature 10. The base of the wood, and thus the surface of the underlying deposits, lay 59 inches below grade. All deposits were continuous across the unit, and can be summarized as several thin layers of sandy silt or decomposed mortar near the base of Feature 8, followed by thicker and darker coal stained sand and rubble deposits, a thin flat mortar surface lying 12 inches below the feature and finally, brown silty sand fill (*Figure 23*). Details are listed as follows (note: stratum designations are continuous with trench strata; elevations are relative to present grade):

- Stratum C: 59-60 inches dark brown to gray silty loam; continuation of overlying fill deposit with a similar mixture of nineteenth and twentieth century artifacts: pearlware, whiteware, ironstone, mold blown bottle glass, window glass and cut nail
- Stratum D: 60-61 inches light gray decomposed sandy mortar with small fragments of brick and slate
- Stratum E: 61-63.5 inches yellow brown sand mottled with gray sandy clay with bits of brick and mortar, a portion of wood planking pierced by a cut nail with hand wrought head, a fragment of pearlware and several small animal bone fragments (probably rodent)
- Stratum F: 63.5-67 inches dark brown to black loam, heavily mixed with coal, coal slag and cinder, and small brick and mortar rubble and wood bits; loose, holding oily water
- Stratum G: 67-68 inches brown to olive green compact silty clay with scattered bits of brick and mortar
- Stratum H: 68-71 inches brown to gray sand and silt loam with decomposed mortar, brick bits, slate, coal, coal dust, slag, oyster shell fragments and a single corroded cut nail; loosely packed
- Stratum I: 71-75 inches compact brown silty sand; Stratum J transects deposit 1 inch below surface
- Stratum J: 72 inches deteriorated gray sandy mortar surface, less than one-half inch thick
- Stratum K: 75 inches + brown silty sand

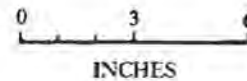
Because of the increasing number of obstacles along the south and southeast edges of Section B of Trench 5, excavation was continued to the east, toward the river from Section A. This eastern extension of Trench 5 was designated **Section C**. East of the southern concrete staging platform, several further modern impediments were encountered, including utility lines, a concrete pier and a section of concrete curbing. Excavation in these disturbed portions of Section C did not extend below 3 feet.

A narrow patch of unobstructed ground was located east of the center staging platform (*Figure 20*), at which point a deeper trench, measuring 4 by 9 feet at surface, was excavated. The surface deposit in this area consisted of 6 to 8 inches of yellow and gray sandy clay and gravel fill. Below lay a deep layer of brown to dark brown sandy loam fill to an average depth of 54 inches below grade. The deposit



KEY:

- C DARK BROWN SILTY LOAM AND DECOMPOSED WOOD
- D LIGHT GRAY SAND AND MORTAR
- E YELLOW BROWN SAND, MORTAR AND CLAY
- F BLACK COARSE SAND LOAM AND CLAY
- G BROWN TO GREEN COMPACT SILTY CLAY
- H GRAY BROWN SAND AND SILT LOAM
- I COMPACT BROWN SILTY SAND
- J DETERJORATED GRAY MORTAR
- K BROWN SILTY SAND



contained gravels, coal, brick and only a few non-diagnostic glass and ceramic artifacts, none of which were collected. Following this deep fill layer was an 18 inch stratum of oily gravels and cobbles mixed with sandy clay and brick rubble, to a final depth of 72 inches below grade. This deposit was relatively loose in spots and acted as an aquifer, collecting surface drainage and discharging it when disturbed by the backhoe bucket. Below this layer lay dark greenish gray sandy silt containing small bits of wood, brick and mortar in the upper 6 to 10 inches. Excavation continued to a depth of over 9 feet, with little variation noted. Judging from the character and depth of the deposit, the sandy silt was provisionally interpreted as an intact alluvial deposit with artifactual materials intrusive either from overlying fill layers or washed into the silts from the earlier shoreline.

Deep excavation was continued some 12 feet further to the east beyond another series of utility lines, duct casings and concrete piers. Stratigraphy was similar in this portion of the trench, with 8 inches of sandy clay and bank run gravels at the surface, followed by a series of loamy clay fill layers, variously containing brick rubble, coal and gravels, to a depth of 70 inches. No diagnostic artifacts were observed within these deposits. Below lay a 4 inch stratum of yellow gray, coal stained clay, followed by 2 inches of gray to black loam with coal, coal ash, gravel and oyster shell fragments, and 6 inches of gray brown to green silty sandy clay containing coal and decayed wood, to a final depth of 82 inches below grade. At this level, a segment of wooden cribbing, designated **Feature 12**, was encountered consisting of two intersecting 4 x 6 inch timbers. One timber extended from the west profile, running parallel to the north edge of the trench for a distance of 10 feet, at which point it had been roughly truncated. Several cut nails were observed in the timber, though the pieces they had attached were no longer present. The second timber extended from the north wall of the trench 10 inches, butting against the first timber. Two 4 x 6 inch piles supported the long timber along its north edge. They were set 39 inches apart and were faced with three-quarter inch planking to the north. North of the planking lay a deposit of coal and coal dust 8 inches deep, underlain by a 10 inch layer of mixed fill consisting of brown sandy loam with small amounts of coal, ash, coal slag, brick and mortar. To the south of the long timber lay a 12 inch deposit of dark brown decayed wood and sawdust, interbedded with a 6 inch lens of yellow gray clay. Contained within the sawdust were cut nails, fragments of wine bottle glass, a small fragment of transfer printed earthenware and animal bone fragments. The long timber was removed revealing a continuation of the brown decayed sawdust deposit, which contained a hand wrought nail, a wrought iron hinge, a fragment of creamware and more pieces of free blown wine bottle glass, including a complete base fragment with sand tipped pontil mark.

Obstructions were present on all sides of the excavation, making more extensive investigation of the feature impossible. Water influx was managed by means of a small sump excavated at the narrow, east end of the trench. Oily sludge drained from the trench walls, which tended to slough into the sump. Several episodes of excavation to clean the sump indicated the presence of dark greenish gray sandy silt below the fill deposits which lay under the feature, running to a depth of at least 9.5 feet. With the small amount of the feature exposed, interpretation was difficult, but based on the structural characteristics and associated artifacts,

Feature 12 was assumed to have been a late eighteenth or early nineteenth century coal bin.

Trench 6 (Figure 13)

Length: 26 feet

Orientation: N/S

Width: 12 feet

Depth: 10 feet

Surface Elevation: 9 feet

Location: Southeast corner of VEPCO substation

Excavation in this portion of the site was aimed at further investigating the shoreline of the river as it existed prior to the construction of Roberdeau's Wharf, and of the location structural remains related to the wharf or other early commercial and industrial use of the property. Late nineteenth and early twentieth century maps of the property indicated that only a small area south of the VEPCO lot had the potential of yielding deposits undisturbed by later industrial structures, including western and southern extensions to the original foundry building, as well as the present power substation. Thus, excavation began 67 feet south of the screening wall along Wolfe Street and 16 feet east of the VEPCO lot, at a point judged to be just inside the south wall of one of the late nineteenth century additions to the original foundry. Because of the small area of undisturbed deposits assumed to be available for investigation, it was hoped that the wall could be located and excavation could proceed southward from it, maximizing efforts in the restricted area.

Below the existing asphalt parking surface lay a second, earlier tarmac surface separated from the present blacktop by 2 to 3 inches of brown sandy clay and gravel fill. The two asphalt layers were together designated Stratum A, and measured on average a total of 8 inches. Underlying the asphalt was a thin layer of gray sand, coal ash, cinder and gravels lying on a concrete slab, which was at first assumed to be the floor of the building west of the foundry. The slab was followed southward for a distance of 8 feet, at which point a formal edge was encountered. The slab measured between 4 and 5 inches thick. No wall or foundation was visible, and for this reason it was assumed that the south wall of the building lay slightly to the north of the excavation, and that the slab in fact represented an apron adjacent to the wall.

Excavation continued south of the apron, revealing several layers of fill--hard packed yellow brown sandy clay and brick rubble, or dark brown clayey sand, cinder and brick rubble--to a depth of 29 to 30 inches below grade. Except for rubble debris, no artifacts were observed in these fill layers, and so they were lumped together as Stratum B.

Stratum C consisted of a layer of black, compact loam, heavily mixed with coal, cinder and gravels. The deposit also contained brick rubble, fragments of creamware, pearlware, gray salt glazed stoneware, wine bottle glass, a portion of what appeared to be a wooden bung or barrel stopper, and several fragments of animal bone. At the base of Stratum C, at a depth of 3.5 feet, lay **Feature 13**, a wooden walkway consisting of two parallel lines of 3 x 6 inch timbers of varying lengths, set on edge approximately 1 foot apart and covered with planking approximately 1 inch thick and 15 to 17 inches wide. The feature ran on a line roughly northwest/southeast. Several aspects of the feature suggested that it had been intended for short term use: the timbers were merely butted together and though at least two were notched as if for splicing, the notches were not aligned; various cut nails were observed in the timbers on all faces, but none were used to either fasten the timbers together or to fasten the overlying planks to the timbers; and last, the timbers were laid directly on the surrounding sandy deposit with no supporting bed. At least two badly deteriorated 1 x 5 inch uprights were observed along the interior of the feature supporting the parallel beams. As noted, the feature rested within Stratum D, a gray, coarse grained sand deposit, with no discernable builder's trench below or to either side. Stratum D contained fragments of tin-glazed earthenware, pearlware, undecorated porcelain, unglazed redware, free blown wine bottle glass, fragments of shoe leather, animal bone, oyster and cockle shell, bits of coral and numerous large and small pebbles, including several types of flint.

Along the east wall of the trench lay a large terra cotta utility line, running along the western edge of the foundry building and obstructing further excavation in that direction. The trench was widened to the west to a total width of 12 feet, but little more of Feature 13 was uncovered before it entered the north wall of the excavation, which was obstructed at that point by the concrete apron lying just below present grade. Excavation to the south was stopped after a total of 26 feet due to the presence of another concrete obstruction, a foundation situated at a point consistent with the mapped location of a late nineteenth century extension south of the foundry building.

Informal hand excavation into Stratum D revealed the deposit to extend 5 to 6 inches in depth, or about 4 feet below grade. Below it lay a dark greenish gray silty sand, **Stratum E**, which exhibited a hard packed, dark gray to black surface, layered in places in the top quarter to one-half inch of the deposit. Within the upper 3 to 4 inches of Stratum E, bits of resinous wood chips were observed, along with brick bits, wooden pegs, free blown wine bottle glass fragments, including a base fragment with a glass tipped pontil mark, a fragment of tin-glazed earthenware and a prehistoric artifact--a quartzite biface.

Water problems in Trench 6 existed in the form of slow drainage from the rubble layers in Strata B and C. Both Stratum D and Stratum E were waterlogged and required care in excavation. Stratum E was increasingly unconsolidated with depth, causing the walls of the excavation to slough off periodically, finally undercutting the overlying fill layers. At a depth of 8 to 8.5 feet, the backhoe bucket met a buried obstruction running east/west across the south end of the trench within

the otherwise soft matrix of Stratum E. The machine was unable to move the obstruction, but was able to break off a section of rough cut timber 6 feet in length. Nothing could be seen within the trench itself due to the loose, wet soils, and there was insufficient space within which to excavate a usable sump. Excavation was shifted to the north end of the trench, leaving a slight balk across the center of the excavation to hold back some of the water accumulated in the deep hole to the south. A second obstruction, again running east/west, was encountered at a similar depth 8 feet north of the first occurrence. While the soil matrix was equally loose and waterlogged, the backhoe was able to scrape across the surface of the obstruction before it was inundated. Though the shape and dimensions were not determined, enough of the impediment was exposed to indicate that it consisted of a large, yellow pine timber. Again, due to the restricted area, with brick or concrete obstacles on all sides, it was impossible to widen the trench to allow a sump to be excavated so that more of the timbers might be exposed. From their horizontal positions, it is assumed that the materials may have represented a portion of cribbing used either in the construction of the eighteenth century wharf or as support for a large structure on the wharf.

Trench 7 (Figure 24)

Length: 79 feet

Orientation: NW/SE

Width Range: 8-25 feet

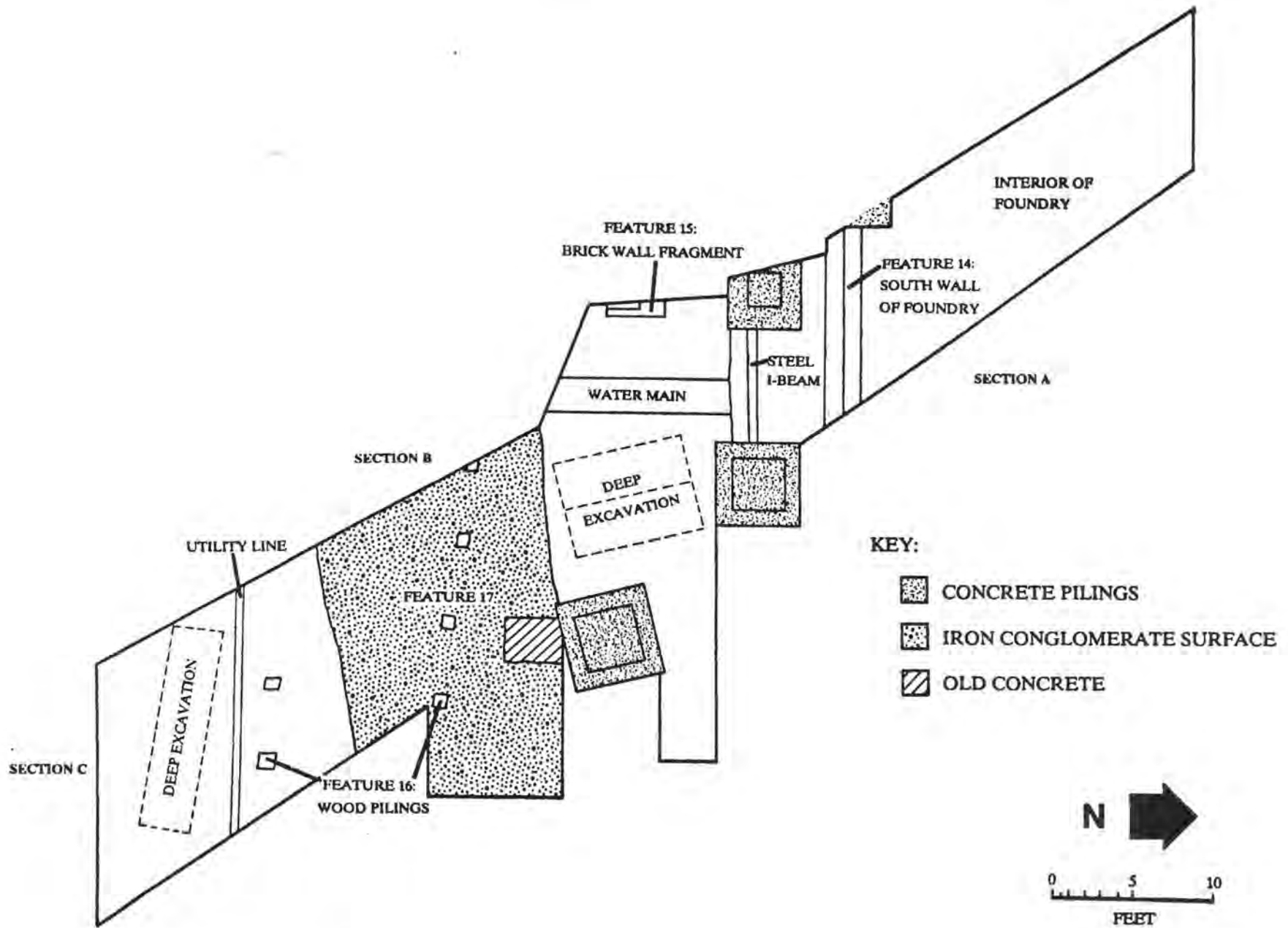
Depth Range: 7 to 14.5 feet

Surface Elevation: 8 feet

Location: North central portion of the lot near southern edge of foundry building

The location of the Smith foundry in the northern half of the lot has been well documented, and in fact a portion of the original wall of the building was still standing along Wolfe Street, exhibiting many brick and mortar patches and concrete and iron attachments on its southern elevation to indicate a long history of reuse. Late nineteenth and early twentieth century maps of the project area suggested that little heavy structural disturbance should be expected south of the building and east of an extension erected in the 1920s at the southwest corner. Trench 7 was excavated to locate the south wall of the foundry near the southeast corner of the building, and to investigate the potentially undisturbed ground to the south for further evidence of wharf related structural remains.

Excavation began farther inside the building than was originally planned in order to allow the backhoe to work from the edge of the asphalt parking surface which covered the central portion of the property. The description below follows the trench as it was excavated from northwest to southeast. In preface, it should be noted that because of the length of the trench and the relative complexity of the fill deposits, few of which contained artifacts other than brick rubble, only the most pertinent strata will be listed by formal stratum designation.



Source: Engineering-Science
Harborside

Figure 24
Trench 7: Plan View

Section A of Trench 7 began within the interior of the original foundry building. Two layers of asphalt with an intervening layer of sand and gravel fill lay at the surface of the trench to a depth of 5.5 to 6 inches. Immediately below lay heavy brick and mortar rubble from which fragments of concrete, roofing slate, structural metal debris and two large counter weights made of cut slate with numerous iron fittings attached were excavated. Interbedded with the rubble were several thin layers of orange brown sandy clay and gravel. Very few bits of late nineteenth and early twentieth century glass and ceramic artifacts were observed within the rubble--none were collected. Standing water was reached at approximately 4 feet below grade. It was impractical to clear the rubble fill from the trench in the time allotted, but a level floor, presumably of poured concrete, was located with the backhoe bucket at a depth of 7 feet.

At a point 89 feet from the foundry wall along Wolfe Street, the south wall of the building was encountered, the top remaining course lying just below the base of the asphalt layers, some 6 inches below grade. Designated **Feature 14**, the wall stood three courses wide (13 inches), with a second three course run apparently serving as a footing or buttress along the interior, 36 inches below grade. A later concrete pier had been poured against the wall at this lower level, presumably to support a heavier addition to the interior of the structure.

South of the wall, outside the building, lay a black, coal-rich sandy loam deposit containing cinder, ash and brick rubble. Two concrete piers, roughly 5 feet square, were located 2 feet south of the wall just below the asphalt surface layers. Connecting the piers was a pair of steel I-beams, 8 inches wide with 6 inch webbing, lying 2 feet below grade. South of the piers lay several strata of hard packed yellow brown clay and gravel fill, interbedded with black sand, coal and cinder. No diagnostic artifacts were encountered within these deposits. At a depth of 6 feet below grade, a layer of hard, yellow and gray, coal stained clay fill was reached.

Another brick wall fragment, designated **Feature 15**, was encountered 11.5 south of the foundry wall, beginning 4 feet below grade and running east/west, parallel with the foundry wall. The wall was three courses in width (13 inches) and extended 10 courses, to a depth of almost 6.5 feet, with a one course, stepped footing. The final course lay atop two layers of thin wooden planks, which in turn rested on yellow and gray clay fill. No builder's trench was visible in the profile exposed by the trench excavation, and the fill deposits were uniformly mixed on either side of the wall. There were no artifacts observed within the fill. Judging from its relative depth and structural characteristics--the use of similar brick and mortar and a similar width--the feature may have been an outbuilding associated with the original foundry operation. The wall had been truncated to the east by a wide trench excavated on a north/south line for the laying of a 28 inch water main, similar to the 42 inch line encountered in Trench 1. The pipe lay 4 feet east of **Feature 15**, beginning at 4 feet 10 inches below grade. It was manufactured of rolled and welded steel plates coated with an anti-corrosive substance. Excavation of the wet clay fill between the feature and the utility line located a hard, flat surface 9 feet below grade, but the continual influx of water and tight space made sufficient cleaning for an absolute definition of its composition impossible.

Excavation shifted to the east, beyond the water main disturbance: the area south and east of the utility line was designated **Section B**. The same varied fill layers noted west of the pipe line were observed in this portion of **Section B** to a depth of approximately 5 feet. There were no artifacts other than brick rubble within the fill strata, and there was no evidence of a continuation of **Feature 15**.

Below the fill lay greenish gray sandy silt, presumed to be the original river silts. A deep trench, 8 feet in length, was excavated into this deposit on a northwest/southeast diagonal to test for underlying structural materials, such as cribbing, within the silts. A few small brick bits were observed in the upper 6 to 9 inches, but otherwise the deposit was sterile. The soil was wet and unconsolidated in patches throughout, and the walls of the trench began to slump uncontrollably at a depth of 10 feet, at which point excavation was halted. Using this first trench as a sump, a second parallel trench was excavated to the east, with a narrow balk left to minimize immediate flooding. The maximum depth excavated in the second trench was 12.5 to 13 feet: the character of the deposit was the same, and no structural remains were encountered.

Excavation of **Section B** of the trench continued to the southeast. Along the east wall of the trench, another large concrete pier, 5.5 feet square, was exposed just below the asphalt surface deposits, set slightly askew from the line of the foundry wall. Within the black, coal rich fill layer lying 18 inches below grade (**Stratum C**), several complete or partially complete milk bottles from a local dairy in operation during the 1930s were recovered, the only diagnostic artifacts observed within this portion of the trench.

Further to the south, beginning on a line 17 feet south of the south wall of the foundry, a hard, iron conglomerate surface was uncovered at a depth of 4 feet below grade. At surface, the deposit appeared to be composed largely of iron slag, along with cinder and gravels, solidly packed and partially cemented by corrosion from the ferrous metal. The surface of the deposit was hard and level enough to resemble an intentionally laid surface, and thus was designated **Feature 17**. A 3 foot square section of deteriorated concrete lay on top of the surface in the east wall of the trench. The concrete was 7 inches thick and also contained a large amount of slag and cinder. The underlying conglomerate surface, **Feature 17**, stretched 13 to 14 feet to the south: the edges, both north and south, were ill-defined. Along the north edge, an informal shovel test showed the conglomerate to extend 5 inches in depth, and to contain, along with iron tailings and cinder, fragments of brick, coal, oyster shell and cut nail. Several 2 to 2.5 inch thick layers of clay, crushed brick and hard packed sandy clay lay below, followed by a second 5 inch conglomerate deposit composed of iron slag, brick, coal and gravels. Below the second iron deposit lay a 6 inch layer of yellow and brown hard packed clay fill, similar to that observed below **Feature 15**, the wall fragment south of the south foundry wall, containing gravels and small bits of brick and coal. Green gray sandy silt was reached at a depth of approximately 72 inches, 1 foot lower than in the deep trenches excavated to the northeast.

Approximately 21 feet from the south wall of the foundry, a row of four 8 x 10 inch upright timbers was encountered. The top of each had been truncated at different levels, the highest lying against the west wall of the trench, just under the blacktop surface (about 9 inches below grade at this point). Collectively the timbers were designated **Feature 16**. They were set into the surface of **Feature 17**, ranging between 42 and 51 inches apart, on a line slightly north of west. Ten and one-half feet to the south, 2 additional pilings were encountered, set 49 inches apart on a line parallel with the first line of pilings: they were also designated as **Feature 16**. The iron conglomerate deposit, **Feature 17**, was deteriorated beyond recognition at this point. In the west profile of the trench, the end of a truncated horizontal beam was visible. Measuring 8 x 10 inches, it appeared to have been attached at one time to the south face of the upright standing at the trench wall, on a level 12 inches below the base of the recent asphalt surfaces, and to have extended to the east, probably connecting with several of the other pilings in **Feature 16**.

The character of the fill layers differed on either side of the north line of **Feature 16**. To the north lay mixed clay loam and gravels, while to the south, lay a distinct stratum of black crushed coal and coal dust, 8 to 10 inches in depth, and corresponding in elevation with the the horizontal timber in the west profile. Although no similar timber was observed to the east in the excavation or in the east wall of the trench (the upright near the east wall was almost completely rotted away), the coal layer was visible, if at a somewhat deeper level--beginning at a depth of 25 inches--and appeared somewhat thicker, extending a total of 18 inches. Below the coal layer lay a series of clay loam strata containing brick, ash, coal and gravels, running to the surface of **Feature 17**, which lay 48 inches below grade. Again, other than brick fragments, no artifacts were observed in any of the deposits.

Approximately 1 foot from the southern edge of **Feature 16** (the southern pair of pilings), and 35 feet from the south wall of the foundry, a 5.5 inch metal utility line was encountered 4.5 feet below grade. The area south of the line was designated **Section C**. The upper fill layers there appeared more mixed than to the north, over **Feature 16**, and there was no indication that the iron conglomerate surface, **Feature 17**, extended southward into this portion of the trench. At and below the level of the utility line, a dark brown to black layer of sandy loam, 18 to 24 inches thick and containing coal, gravels, small cobbles and oyster shell fragments, was recorded. The deposit was followed by a 15 to 18 inch layer of dense yellow and gray clay fill, **Stratum L**, which contained a large number of ceramic fragments. Most of the ceramics were wasters, portions of misfired vessels. Of the nearly 700 pieces, approximately 69% were gray salt glazed stoneware, some with blue cobalt decoration, and 31% were coarse earthenware, or redware, exhibiting a variety of lead glazes. Along with the vessel fragments, nearly 200 pieces of kiln furniture--bricks or tiles lining the kiln, various stilts or caps to prop up or protect the unfired vessels--were recovered. The conclusion drawn was that the fill deposit was derived from a dump or trash area associated with a pottery, either on-site or relatively near the wharf. Also contained in the deposit were fragments of animal bone, oyster shell, brick, wine bottle glass, creamware and pearlware and a large quartz flake.

Below Stratum L lay green gray silty sand. Again, as in Trench 6, the upper several inches of the deposit contained small bits of wood and brick. A deep trench was excavated into the silts on a northwest/southeast line for a length of 18 feet to investigate the presence of structural features related to the early wharf. At the north end of the excavation, at a depth of 9 feet, a 1 inch layer of badly preserved laminated wood was encountered within the silts. The wood lay on a 30 degree angle sloping down to the southeast, occurring at a depth of almost 10 feet at the south end of the trench cut, and appeared to have been refuse introduced into the silts before or during the infilling process. Below lay a continuation of the silty sand deposit, very wet and unconsolidated at increasing depths. The maximum depth excavated was 14.5 feet. No structural features were encountered. Excavation was halted at this point due to time limitations.

VII. Artifact Analysis

Trench excavation and a limited amount of controlled hand excavation was utilized at Harborside to examine and record stratigraphy and subsurface structural and non-structural features, as well as to permit the collection of artifacts from provenienced locations. Artifacts were subsequently catalogued directly onto computer disk, recording a variety of physical and functional attributes. These attributes formed the basis for categorization which, in combination with contextual and archival data, permitted analysis of the chronological placement and to some extent functional interpretation of the features encountered at the site.

The artifacts recovered from the Harborside excavations were sorted hierarchically, in accordance with several widely used classification schemes. The system used is largely an amalgam of the Seneca Taxonomy (Comer 1981), employed by the National Park Service, and South's (1977) artifact typology. Following these methods, artifacts were categorized primarily on a functional basis in increasingly generalized sets--Type, Class, Group--to allow analysis at varying levels of detail. The resulting adaptation is considered to more aptly suit the artifact types commonly encountered in the Mid-Atlantic region, while maintaining sufficient regularity to make possible comparison with sites analyzed according to the original systems.

In general, the main emphasis was placed on classification at the Group and Class levels. Since the purpose of analysis at this preliminary stage of investigation was to allow the determination of gross patterns of chronology and function through a study of artifact type and distribution, finer distinctions, while recorded as observed, were not targeted for immediate intensive analytical review.

In the following section, summary descriptions of the major artifact types from Harborside will be presented, including physical attributes and date ranges for manufacture and use, when applicable. More detailed consideration of certain significant or unusual items will also be presented, along with a summary analysis of intrasite vertical and horizontal artifact distribution.

Analysis of the artifact assemblage from Harborside indicated the recovery of a total of 1708 artifacts. The assemblage was not a truly representative sample of all of the materials on the site, since the vast majority of artifacts consisted of bricks and other forms of nineteenth and twentieth century construction material, which were neither collected nor quantified. While some of the artifacts collected did include construction materials (Architectural Group), most of those in the form of nails or fragments of window glass, the majority of the assemblage of recovered artifacts consisted of Domestic Group items, ceramics and glass, along with a small number of artifacts from the Personal and other miscellaneous Groups.

Ceramics

The ceramic artifacts from Harborside included materials manufactured and used from the eighteenth through the twentieth centuries. Ceramics were subdivided by ware between porcelains, coarse earthenwares, refined earthenwares and stonewares.

Porcelains

Porcelain, a dense, highly vitrified and translucent ceramic, was represented by several fragments of Canton, or Chinese export porcelain, so-called because it was produced in quantity specifically for the export market (Mudge 1962). The date range for the occurrence of this ceramic on historic sites in the United States is 1800-1830 (South 1977). Also recovered were a variety of European and domestic porcelains, both undecorated types as well as types bearing molded, transfer printed and hand painted decoration, the latter both under and over glaze. Most of these types date to the nineteenth century or later, though dating of these sorts of porcelains in general is not precise, since a comprehensive survey of porcelain from the period from archaeological contexts has not been published (Majewski and O'Brien 1987). The problem is compounded in the the present instance by the small sizes of the sherds in the sample. Most appeared to be of mid-nineteenth to mid-twentieth century manufacture. A single fragment of Japanese porcelain, probably of recent manufacture, was also recovered.

Refined Earthenwares

The history of the manufacture of refined earthenwares can at least in part be summarized as an extended attempt to imitate the fine, hard and white porcelains produced in China, both those made domestically in the seventeenth and eighteenth centuries, and the later, nineteenth century export wares. An early attempt involved the addition of tin oxide to the lead glazing, a process which produced a thick, opaque white glaze, mimicking the white surface of porcelain. The resulting ware, referred to as delft or delftware, had been produced in Europe in more colorful, painted forms by Spanish and Italian potters beginning in the fourteenth century, but the ceramic was rather thick and the glaze soft and easily chipped or spalled. The two examples from Harborside were white glazed, one exhibiting a blue painted decoration, and were probably English in origin, dating to the mid-eighteenth century (Noel Hume 1969).

In the mid-eighteenth century, the Staffordshire potters, Thomas Astbury and Thomas Whieldon, together developed a thin, hard-bodied refined earthenware by mixing ground flint into their clays to produce a cream colored ware which, dipped in a clear lead glaze, exhibited a creamy or pale yellow, if occasionally slightly green finish. Fragments of creamware were recovered from several locations at Harborside: the generally accepted date range of the ware is 1762-1820 (South 1977). Also recovered were fragments of pearlware, produced by the addition of cobalt bluing to the lead glaze, which resulted in a whiter, though somewhat blue tinted finish. The technique was initially developed by Josiah Wedgwood as an alternative to the existing cream colored wares. But the resulting ceramic did have the bluish, slightly translucent appearing cast prized in the finer porcelains,

especially as the technique was refined at the turn of the century, when the popularity of the ware overtook that of the creamwares (Majewski and O'Brien 1987). The accepted date range for pearlware manufacture is 1780-1820 (South 1977).

The most frequently occurring ceramic types from general trench proveniences at Harborside were whiteware and ironstone. Researchers often consider whiteware as part of a technological continuum beginning with the introduction of creamwares in the mid-eighteenth century and developing through pearlware to whiteware (Miller 1980). Gradually, the cream colored paste characteristic of pearlware was whitened and hardened somewhat, and the amount of cobalt in the glaze reduced, to produce a clear glazed white ceramic. The years 1820-1830 are usually taken as the period by which whiteware had largely replaced pearlware (South 1977). Ironstone was developed at about the same time as whiteware, around 1840. Although sometimes difficult to distinguish from whiteware in small sherds, ironstone characteristically exhibits a hard, dense, semi-vitreous paste, slightly gray in color, and is finished with a clear lead glaze. Exact dating of whitewares and ironstones without the help of maker's marks which can be traced to particular potteries is difficult, since both ceramic types are still manufactured today with virtually the same appearance as in the nineteenth century.

Several of the ironstone fragments from Harborside appear to have been made in England in the mid-to-late nineteenth century. Several flatware base fragments from Trench 4 bear portions of identifiable maker's marks. One from Section E of the trench contains the inscription "EDWARD C..." within a Royal Arms motif in a style used after 1837. The inscription probably refers to Edward Clarke and Company, of Tunstall, in England, who used a similar mark from 1865-1877 (Godden 1964). A second fragment contains the partial names "...ESS & GODDARD", also within a post-1837 style Royal Arms motif. While the potters are not readily identifiable, the form of the mark indicates the piece to be of later nineteenth century English manufacture. A third fragment bears the partial inscription "TRADE/MADDOC.../...ORDSHIP/EN...". John Maddock of Burslem, employed a similar mark from 1842-1855, as did the reorganized John Maddock and Son, after 1855. The phrase "TRADE MARK" was introduced around 1862, thus placing the sherd in the latter half of the nineteenth century. Resemblances to later marks used by Maddocks may push the date to near the turn of the twentieth century, ca. 1896 (Godden 1964).

Certain decorative techniques in refined earthenwares can be chronologically diagnostic. For example, transfer printing, in which a specially inked copper engraving was used to produce a thin paper lithograph which was then transferred to the surface of the ceramic prior to glazing and firing, was used to decorate pearlware after 1795 (Coysch 1974). The technique is less useful for dating whiteware or ironstone, since it was employed almost from the earliest production of those wares (Magid 1983).

The so-called shell-edged pattern appeared on several sherds from Harborside. This rim decoration consisted of a combination of relief molding and

painting which produced a feather-like pattern emanating from the rim edge. As a rule, the care in execution of the decoration deteriorated with time, the early examples being on the whole more finely molded and with individual, precise brush strokes apparent, while in later examples, both molding and paint tended to occur almost casually around the edge of the rim (Ingersoll 1971). While the quality of the decoration is not a very precise guide to dating, a poorly executed design was generally more prevalent in later wares, especially whitewares, such as the examples from Harborside (Luckman 1984).

Also recovered from various trench proveniences at Harborside were fragments of yellow ware and Rockingham/Bennington. Yellow ware is a highly fired earthenware with a relatively thick, buff colored paste and a transparent lead glaze, producing a deep yellow surface finish. The ware was manufactured as early as the 1830s, but saw general popularity from 1840 to around 1900 (Ramsay 1947). After 1845, vessels were frequently annular decorated, with horizontal bands of white or blue slip, often combined with a dendritic or "mocha" pattern, as in the example from Trench 5, produced with a mixture of tobacco juice and urine.

Rockingham is a similarly buff bodied earthenware with a mottled yellow and brown glaze. The ware originated in Swinton, in England, in the late eighteenth century, but was later manufactured in America by Norton and Fenton in Bennington, Vermont, beginning in the early 1840s (Guiland 1971). In the eastern U.S., a popular decoration consisted of relief molding depicting a scene known as "Rebecca-at-the-Well," of which several fragments occurred at Harborside (Ramsay 1947).

Coarse Earthenwares

Coarse earthenwares were general utilitarian wares produced in large quantities throughout the seventeenth through twentieth centuries. Often referred to as redwares, from the reddish color imparted by the iron content of the clay forming the paste, the wares were either left unglazed or were dipped in a clear lead glaze before firing. Occasionally vessels were coated with slip, a lighter colored, refined clay which was watered down to the consistency of double cream, or decorated with designs produced with slip which, when glazed, resulted in a yellowish color against the red or brown body of the ceramic.

Most of the redwares from Harborside appear to be locally produced. In Alexandria, coarse earthenwares were manufactured from clay available from extensive deposits lying north of Montgomery Street (Luckman 1985), or along a stream bed flowing south of the city into Hunting Creek (Myers 1983). The paste in several of the Harborside pieces exhibited a high mica content, not uncommon in wares produced from local clays (Barbara Magid 1989, personal communication). As early as 1792, Captain Henry Piercy was producing "Philadelphia style" slip decorated earthenwares at a pottery located at Duke and Washington Streets. Lewis Plum assumed ownership of the establishment in 1799, eventually moving it to Columbus Street, between Wilkes and Wolfe, where he operated until 1821. Other potters working in Alexandria during the nineteenth century, either with Piercy or Plum as apprentices or partners, or working as independent producers, included

Thomas Hewes, Thomas Fisher and James Miller. Since so many of these potters worked together during their careers, it is often difficult to tell their products apart or to date them precisely (Magid 1986).

The largest portion of the coarse earthenware sherds from Harborside were recovered from a single location, a lower fill layer at the south end of Trench 7, where they were mixed with a large number of stoneware wasters, fragments of misfired vessels. Relatively few of the coarse earthenware fragments were identified as wasters, i.e., as either malformed or exhibiting glaze or other evidence of firing on the face of a break to indicate fracture in the kiln. Some of the Harborside fragments were unglazed, probably representing flower pots. Also present were large numbers of flat and hollow ware vessels exhibiting clear to dark brown lead glazes, many mottled by the addition of small bits of iron oxide to the glaze. Several sherds were finished with a green tinted, copper oxide glaze. Slip decorated pieces were present in the form of trailed slipware, with its characteristic concentric bands on a flatware surface. While some sherds appear similar to pieces known to have been manufactured by Piercy in the 1790s (Magid 1989, personal communication), it was not possible to definitely assign any piece to a specific potter.

One other coarse earthenware of note was a fragment of North Devon gravel tempered ware. This English utilitarian ceramic exhibited a pink body with gray core, indicating partial oxidation during firing, and a light brown or, as in the present case, green lead glaze. The ware was manufactured in the southwest of England between 1650 and 1775.

Stonewares

Prior to the development of the refined earthenwares such as creamware and pearlware, a high fired, white bodied stoneware was produced in competition with the finer Chinese porcelains. Manufactured as early as the 1740s in Staffordshire, in England, the ceramic was glazed by the addition of salt to the kiln during firing. The salt vaporized and reacted with the surface of the clay to form a clear, if somewhat pitted surface. The resulting ware was white and harder than the then popular delftwares, but was quite brittle. Several characteristic molded rim patterns were produced, including the dot, diaper and basket pattern seen on two fragments from Harborside. Many of these patterns were transferred to the more durable and less expensive creamware, which began to replace white salt glazed stoneware in the last quarter of the eighteenth century. Three fragments of creamware from the Harborside assemblage bear the so-called Royal edge pattern, retaining the rim shape of the earlier, more elaborate stoneware designs (Noel Hume 1969).

Another refined stoneware recovered from the Harborside excavations, Shaw brown slipped stoneware, was represented by a single sherd. Produced by Ralph Shaw in the second quarter of the eighteenth century, the ware was most often used in tea sets, and exhibited a hard red or purple paste with a brown slip on exterior surfaces, which was often decorated with trailed or molded white slip, and a white slipped interior. The vessels were usually salt glazed (Noel Hume 1969).

Gray salt glazed stonewares have been manufactured in America since the latter half of the eighteenth century, and in Alexandria since the turn of the nineteenth century (Magid, Beidleman and Napoli 1982). Like the coarse earthenwares, stonewares were utilitarian in nature, used largely as kitchenwares for storage or occasionally as serving vessels. Stonewares appeared in a variety of forms, as jugs, jars, crocks, chamber pots or pans of various function. Like the more delicate white salt glazed stonewares, gray stonewares were glazed by the addition of salt to the hot kiln, and thus only the exterior of narrow mouthed vessels appears glazed. Decoration occurred in several forms: as a brown, iron oxide wash applied to the upper portion of the vessel, as hand painted cobalt blue ornamentation, or as incising, usually annular in character in the locally produced wares. Maker's marks and vessel capacities were often impressed on hollow ware containers. One fragment from Trench 4, for example, has the partial mark "E.J. Mil..." above the letters "ALE..." indicating that the vessel, a crock, was produced for Elisha J. Miller, who sold local stoneware from 1865 to 1876. Though rare in Alexandria stonewares, interiors of vessels were occasionally slipped: a popular dark brown slip, known as Albany slip, after the place of origin of the constituent clay in New York, was introduced around 1805.

In Alexandria, stoneware was first produced as early as 1799 by Lewis Plum, working with Henry Piercy at Duke and Washington, while William Reynolds was producing stoneware by 1807 (Magid 1986). John Swann, a one-time apprentice of Plum, opened the Wilkes Street pottery, located at the southwest corner of Wilkes and Washington, in 1815. A victim of rising costs and delinquent accounts, Swann sold his pottery ten years later to Hugh Smith, a prominent local entrepreneur and china merchant, the same Hugh Smith who purchased lots on the Harborside property at about the same time. Smith and his son, Hugh Charles Smith, operated the Wilkes Street establishment until 1841, when it was purchased by B.C. Milburn. Other stoneware producers in Alexandria included Tildon Easton, who operated a kiln for a several years in the early 1840s in the 1400 block of King Street (Magid 1986).

Most of the stoneware from Harborside was recovered from a single location, the collection of wasters from the south end of Trench 7. The pastes in the two ceramic types from the deposit, stoneware and coarse earthenware, were similar in many specimens. Normally, stoneware exhibits a hard, gray, non-porous paste, while the paste of coarse earthenwares is red to buff in color, and is soft and porous in texture. As has been observed, Alexandria stonewares and coarse earthenwares were manufactured from the same clays, and thus began with the same paste (Luckman 1985). The difference in the wares resulted entirely from the higher firing temperature and salt glazing by which the stonewares were treated. The similarity in pastes is readily seen in the materials from Trench 7, where incompletely fired sherds of stoneware are indistinguishable from the earthenwares on the basis of paste alone. Thus, in the current assemblage, glazing has been used as the determinant factor in assigning type: specimens with evidence of salt glazing were considered stonewares; unglazed or lead glazed specimens, earthenwares. For possible comparative analysis in terms of failure rates, stonewares were further categorized as completely fired or low fired.

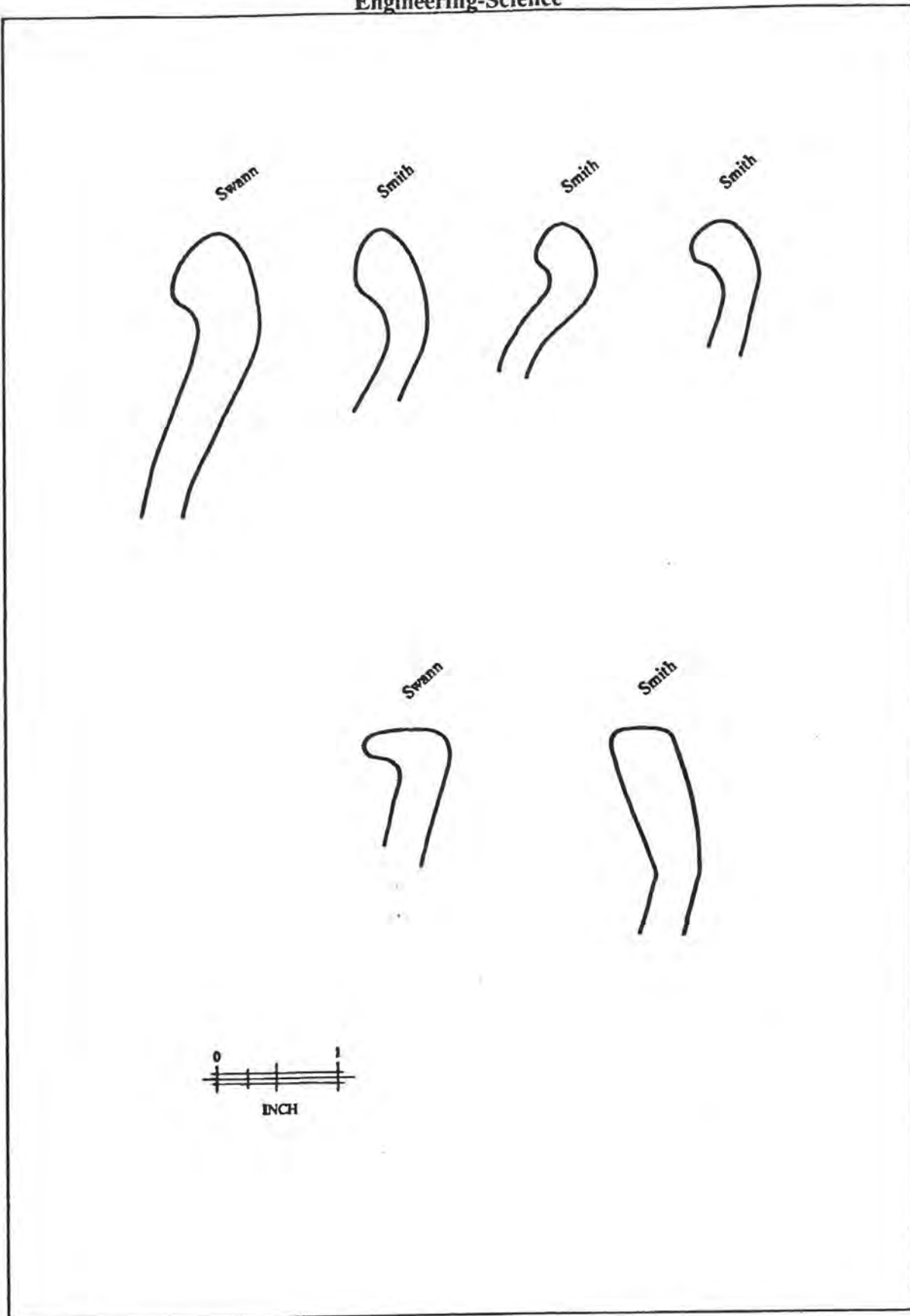
In total, 879 fragments of stoneware and coarse earthenware were recovered from Trench 7. Of these, 697 were vessel fragments, 68.5% of which (n=477) were stoneware, 30.8% earthenware (n=215), and 0.7% bisque, the latter from vessels fired once and awaiting glazing (n=5). In addition to the vessel fragments, 178 pieces of kiln furniture were identified, consisting of the following: tiles, firebars or bricks, used to line the interior of the kiln; small, hand-fashioned dumbbell-like shapes referred to as slugs or stilts, used to prop up vessels during firing; wedge or crescent shapes, also used as props or separators, and like the stilts, hand-fashioned, with finger marks and thumb prints readily visible; and sagers, straight-sided bowls placed upside-down over jugs or other closed vessels to protect the neck and handles and thus allow stacking.

The materials from Trench 7 appear to be the product of a single pottery; that is, they represent a portion of a waster pile, probably from a single kiln. There is no record of a pottery located on the Harborside property, but coincidental land ownership suggests that Hugh Smith is indirectly responsible for the presence of the kiln dump at the site. A pottery, such as the Wilkes Street pottery which Smith owned, would have generated a large amount of refuse in the form of wasters and used kiln furniture, materials which would serve well as bulky fill. That the ceramics in Trench 7 were mixed with yellow and gray sandy clay, characteristic of subsoil in the area, supports the notion that Smith was using refuse from his Wilkes Street property to add to the fill on his waterfront lots.

Looking at the ceramics themselves, it has already been pointed out that local redwares are difficult to attribute to a particular potter. Stylistically, stonewares are somewhat easier to trace. One indication is the painted decoration. For example, Easton's designs occurred evenly around the vessel, while on vessels produced by the Wilkes Street potters, Smith and later Milburn, decoration was usually concentrated on one side (Magid 1986). Unfortunately, there are not enough large, decorated pieces among the sherds from Harborside to allow recognition of particular decorative techniques.

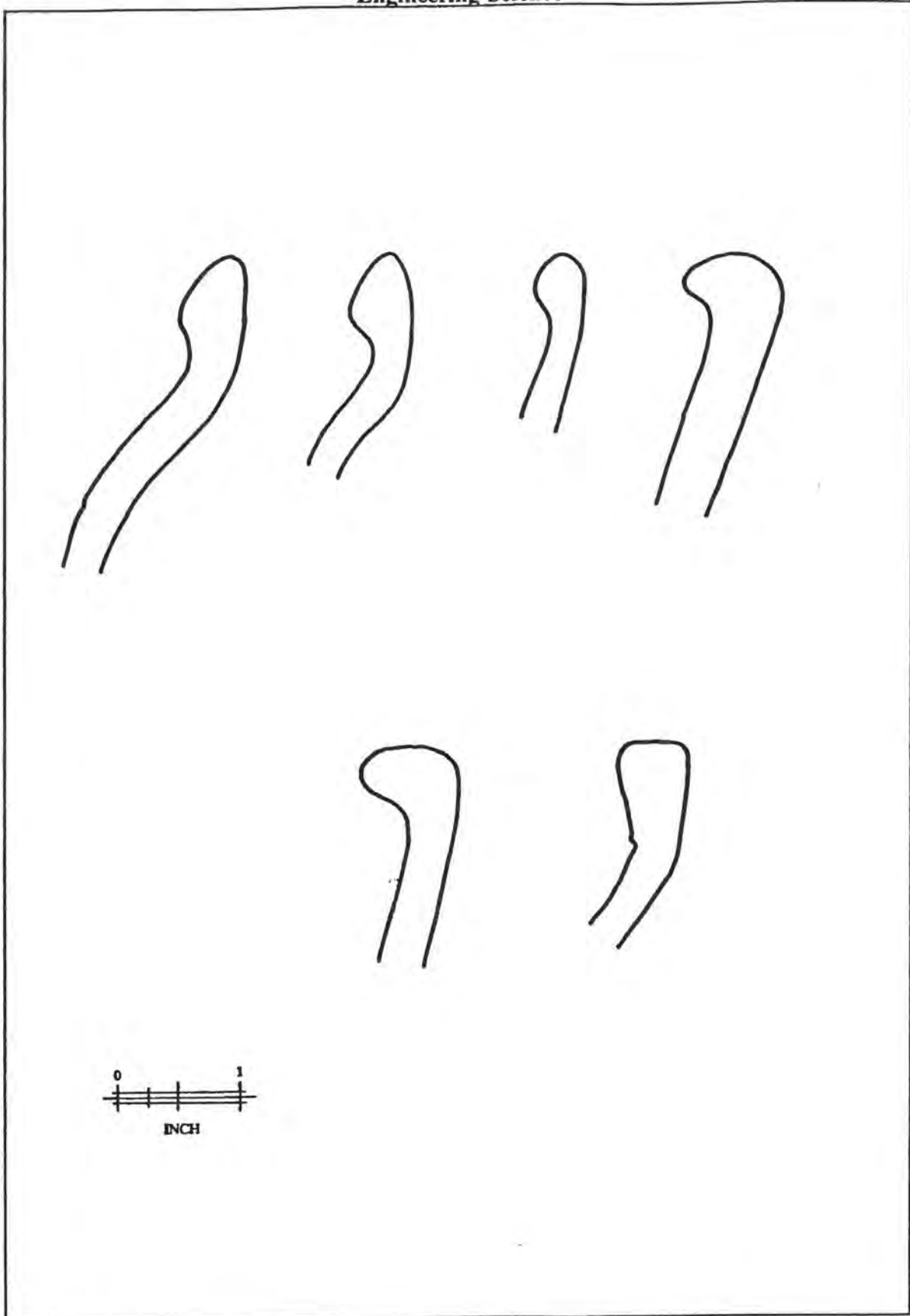
Vessel shapes can also be indicative, and are more informative in smaller fragments such as are available from Harborside. For instance, certain jar, chamber pot and milk pan rims from the Harborside deposit are similar to published rim shapes from Smith's Wilkes Street establishment (*Figure 25,26*). Perhaps more telling may be jug or bottle rims. Swann, who began the Wilkes Street pottery, produced jugs with reeded, multi-ringed necks, often dipped in a brown, iron oxide wash which was allowed to drip freely onto the body of the vessel. Jugs manufactured later by Smith were undecorated and bore plainer rims (Myers 1983). As can be seen, the present examples more closely resemble rim styles attributed to Swann (*Figure 27*).

It would appear from stylistic evidence, then, that the Harborside materials were related to both Swann and Smith's operations. Since Smith purchased the Wilkes Street pottery in 1825, at about the time that he began buying lots at Harborside, it seems that he soon began hauling dirt and remnants of kiln dump



Source: Myers 1982
Harborside

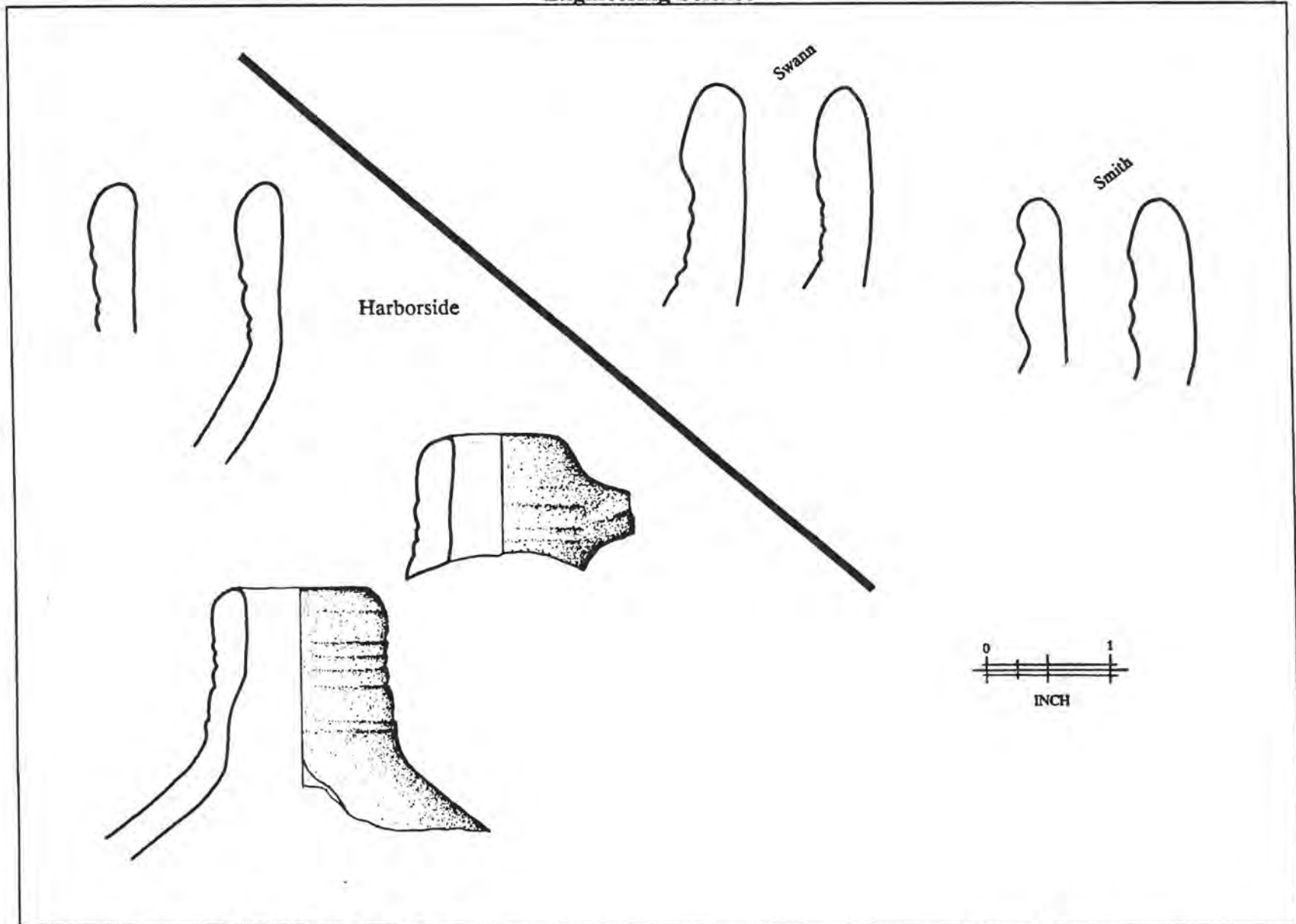
Figure 25
Stoneware Rim Profiles
Swann and Smith



Source: Engineering-Science
Harborside

Figure 26
Stoneware Rim Profiles
Trench 7 Stratum L

Engineering-Science



Source: Myers 1982/Engineering-Science
Harborside

Figure 27
Stoneware Jug Rims

from the Wilkes Street property to add to the existing fill on the wharf as a form of land improvement. That the process occurred early in Smith's ownership of the Harborside lots is suggested by the presence of wasters apparently left from Swann's earlier firings.

Glass

Before the nineteenth century, glass containers were formed by a relatively laborious process, being blown by mouth through a metal blowpipe and shaped freehand. After the body of the vessel was formed, a rod, known as a pontil, was attached to the base so that the blowpipe could be removed from the neck of the container and a lip or rim produced, either by the addition of glass, or formed from the existing glass at the finish of the neck. Free blown vessels are generally recognized by their lack of symmetry, varying from slight to pronounced depending on the skill and care taken by the glassblower.

The nineteenth century, and in particular the latter half of the century, was somewhat of a transitional period in terms of glass manufacturing techniques. The great numbers of glass bottles and bottle fragments from sites of the late nineteenth century reflect the production of increasingly cheap, and thus expendable, glass articles (Ingersoll 1971). Containers were still produced in large part by a technique introduced early in the century in which glass was blown by mouth into various types of mold. The partially completed container was removed from the mold and held at the base by a pontil, or later by a small frame known as a snap case, and finished with a clamp-like "lipping tool," which was fitted into the bore of the neck and then turned to form the lip or rim. By the early 1890s, wide-mouthed, semi-automatic machine made containers were entering into large scale production, using a multi-stage system which pressed and blew glass into molds. In 1903, Michael Owens patented the first fully automatic machinery for the production of glass containers (Jones and Sullivan 1985).

The dating of glass containers can be accomplished with varying precision by examining one or more physical attributes related to form or manufacturing technology. For example, the use of the pontil to hold the container while the neck was finished was largely discontinued in the mid-nineteenth century, with the introduction of the snap case (Lorrain 1968). But the pontil mark alone is not sufficient as a diagnostic tool, as seen in the Harborside assemblage in which two common pontil types--sand tipped and glass tipped--which can date as early as the early eighteenth century (Jones 1971), were recognized occurring on both free blown wine bottle bases and on bases from vessels which were blown into molds.

Mold types can be somewhat more sensitive chronological indicators. Each mold leaves unique seams on certain portions of the container, allowing the technique, and thus an approximate date of manufacture, to be determined. Many of the specimens from the current investigation, for example, were blown into a two-piece mold with separate base, a type of mold which saw widespread use after 1820 and which was probably the most common mold type in use in the late nineteenth

and early twentieth centuries (Kendrick 1966). Various fragments bore evidence of a post bottom, a late nineteenth century mold feature which produced a circular indentation forming a regular, raised base (Lorrain 1968). On several other pieces, a horizontal seam was visible around the body near the join with the base, characteristic of the cup bottom mold, also a late nineteenth century mold feature (Klamkin 1971). The three-piece Ricketts-type mold was patented in 1821, and was used to produce dark green wine bottles through 1840 (Jones and Sullivan 1985). In 1857, a removable base plate, which could be embossed to allow for the easy changing of lettered bases, was introduced. Of the three Ricketts mold base fragments recovered from the Harborside deposits, two bore embossed lettering. Similar interchangeable plates on the sides of vessels made cheaper embossed lettering on other standard bottle forms possible. The first examples, appearing in 1867, were square or rectangular shaped vessels, referred to as panel bottles (Lorrain 1968). An unembossed, round slug plate occurred on a bottle from the current excavations, dating to approximately the same time period.

Semi-automatic and automatic machine manufactured bottles, introduced at the turn of the present century, are distinguishable by the numerous mold seams exhibited, including one or more at the rim or lip, since the finish was molded at the same time as the body and not in a separate step as had previously been the case. The difference between semi-automatic and fully automatic manufacture was related to the amount of mechanization in production, and involves no process-specific trace marks (Miller and Sullivan 1984). Liquor and beer bottles appeared to predominate among the machine made specimens at Harborside, especially in the uppermost deposits. Most machine made container glass was not collected during the present survey, in the interests of economy in lab processing, but was merely recorded as present.

Vessel shape may also be of use in dating glass containers. As mentioned, free or off-hand blown bottles can usually be identified by a perceptible degree of asymmetry, and can normally be attributed to pre-nineteenth century manufacture. Mold blown pharmaceutical or patent medicine (bitters) bottles, of which both round and paneled types occurred at Harborside, were popular from 1860 to the end of the century (Lorrain 1968). An example of another distinctive vessel style, the eight-sided, conical "umbrella" inkwell, was found at Harborside. This particular vessel was made of amber colored glass which had been blown into a cold metal mold, judging from the pitted surface, and given a fire polished lip, in a process in which the blowpipe was snapped from the neck after the body of the vessel had been formed, and the resulting rough edge smoothed by the reapplication of heat. Conical "umbrella" inkwells were manufactured by several companies from the 1820s through the 1880s (Munsey 1970). Soda and milk bottles such as those found at Harborside were for the most part machine made, and appeared in forms attributable to at the earliest the second quarter of the twentieth century.

Several of the later finish styles recognized on the glass containers from Harborside may also provide useful dates. Most of the finishes on mold blown containers in the collection were formed with one of a variety of lipping tools, a technique first used around 1850 (Lorrain 1968). At least one bottle had a thick,

rounded finish similar to a type referred to as a blob top, which often occurred in combination with one of the specialized closures developed in the last quarter of the nineteenth century, the Hutchinson stopper. The "Hutchinson's Patent Spring Soda Bottle Stopper," patented in 1879, consisted of an internal seal connected to a wire loop which was pulled up into the neck of the bottle to seat the gasket (Jones and Sullivan 1985). The seal was broken by striking the wire loop from above, producing a popping sound as the pressure was released, leading to the modern term "pop" bottle (Lorrain 1968). The form of the bottle from Harborside, with a long neck segment, suggested that if it had been closed with a Hutchinson type stopper, it was a very late example of the use of the technique, probably from the early part of the first quarter of this century. Alternatively, the bottle may have been sealed using a combination wire and ceramic closure with a rubber gasket, known as the lightning stopper, which also dates to the turn of the twentieth century (*ibid.*)

The crown finish and cap, common until a few years ago on beer and soda bottles, was patented in 1892 (Jones and Sullivan 1985). The finish was originally applied with a lipping tool, the use of which is given away by slight irregularities in symmetry and by an occasional amount of excess glass pushed out onto the neck below the bottom of the tool. Probably due to difficulties in producing a reliable seal on containers finished with a lipping tool, the crown cap did not become popular until the advent of automatic bottle machines (Ingersoll 1971). Both tooled and automatic crown cap finishes appeared among the Harborside examples.

Perhaps the most accurate device for dating bottles can come from the embossed lettering occurring on sides or bases. Unfortunately, most of the fragments from the present sample were too small to contain sufficiently recognizable lettering. Among those which did were a body fragment from the Robert Portner Brewing Company, which operated in Alexandria from 1861 to 1911. The fragment appears to have been mold blown and was aqua in color, and thus may be earlier in date than the brown, semi-automatic examples made until 1927 at the Old Dominion Glass Works in Alexandria (Magid in Artemel *et al.* 1987).

A green, mold blown bottle bore the legend "Army and Shinn/Georgetown D.C." on one face. Charles Army and Reilly A. Shinn were successful entrepreneurs in the Washington area in the mid-nineteenth century. They were bottling beverages from their warehouse at 30th and Olive Streets in Georgetown by 1858, according to Boyd's Washington City Directory, though by 1862, Shinn alone was listed as proprietor, and Army disappeared from record altogether. Later bottles from the company are known embossed only "R.A. Shinn," suggesting that the present example, while it may have been reused, was manufactured and first used before or just after the beginning of the Civil War. Shinn continued to be successful, and was touted as the third richest man in the city in the 1860s. By the 1870s he had quit the bottling business, becoming a contractor in 1874 (Robert Lyle, Curator of the Peabody Room, Georgetown Regional Library 1989, personal communication).

Several machine made milk bottles or milk bottle fragments were recovered from Trench 7, embossed "Alexandria Dairy Products Company, Inc." The form of

the bottles suggested a post-1930 manufacture date, confirmed by Alexandria City Directory listings for the dairy located at 334 North Pitt from 1931 through 1938.

Other types of glass, both container and non-container, were recovered from the Harborside deposits. Fragments of lamp chimney glass occurred in Trench 4, for example. Lamp chimneys were not commonly produced in North America until the advent of kerosene burners, designed to be used with chimneys, in the 1860s (Woodhead *et al.* 1984). While semi-automatic machine production of lamp chimneys began in the late 1890s, up to 50% were still blown off hand as late as 1927 (Ingersoll 1971). Though small, the fragments from the present investigations bear a scalloped rim treatment which was applied with a hand held tool. Judging from the rapid expansion of the body below the rim, the pieces were from a large, bulbous type of lamp chimney popular from around 1885 to the early twentieth century (Woodhead *et al.* 1984).

Press molded glass, produced by a technique in which glass is forced into molds with a plunger, usually occurs in the form of tableware or open, wide mouthed containers, the latter since the size of the plunger determined the width of the container opening. Used in North America by the 1820s, the process became mechanized (using steam powered presses) in the 1860s and 1870s, though large scale production did not occur until well into the last quarter of the century (Ingersoll 1971). The fragments from Harborside occurred mostly in the form of tumbler fragments. One specimen, a portion of a goblet base, was made of solarized glass, in which manganese was added to remove the green or yellow tint imparted by iron oxide impurities in the sands from which the molten glass was produced. Manganese reacts with prolonged exposure to ultraviolet light, such as occurs in sunlight, lending an incidental light purple or amethyst cast to the glass. The use of manganese as a decolorizing agent dates from the 1880s through the first decades of the twentieth century (Jones and Sullivan 1985).

Several press molded jars from Harborside were made of semi-opaque white glass, widely referred to as milk glass. Milk glass vessels were popular in the late nineteenth and early twentieth centuries as containers for medicines, ointments, cosmetics, or for meat extracts (Ingersoll 1971). Milk glass lid liners such as those from the site were first patented by Lewis Boyd in 1869 for use with the zinc capped jar developed by John Mason, which is still known today as the Mason jar. Several specimens bore all or portions of the legend "BOYD'S GENUINE PORCELAIN LINED," suggesting that they were manufactured around the turn of the present century (Toulouse in Inashima 1980).

Other Items

Personal

A final type of white glass item from the site consisted of buttons or collar studs. Buttons were manufactured of milk glass and porcelain as early as 1848 in

New York, and their manufacture continued in various locations into the twentieth century (Ingersoll 1971).

Other personal items recovered from the Harborside deposits included tobacco pipe fragments made of kaolin clay, terra cotta and stoneware. The bore diameter of stem fragments has been used as a rough indicator of manufacture date, the rule of thumb being the larger the bore, the earlier the pipe. The fragments from Harborside had bores measuring $5/64$ and $4/64$ of an inch, suggesting dates of 1710-1750 and 1750-1780 respectively (Noel Hume 1969). As a cautionary note, these dates, especially the latter, should not be considered specific, since it has been shown that the bore/date relationship tends to break down somewhat around the nineteenth century (Ingersoll 1971).

While the stem fragments recovered were made of white kaolin clay, usually assumed to be of European origin, the bowl fragments were manufactured from different clays, and were probably produced domestically. One fragment was made of terra cotta, or red clay. Examples of red clay pipes are known from both Native American and Colonial contexts (Henry 1979; Mitchell 1983). The present example was probably one of the so-called "Powhatan Clay Pipes," manufactured commercially by the Akron Smoking Pipe Company, predominantly at their factory in Pamplin City, in Appomattox County, Virginia (Hamilton and Hamilton 1972). The second bowl fragment was from a stoneware reed-stem pipe, a pipe in which a hollow reed served as a replaceable mouthpiece. The exterior of the present example was fluted, and both interior and exterior were lead glazed. Similar stoneware pipes were manufactured by the Akron Company at their Mogadore, Ohio factory (Murphy and Reich 1974). There is, in fact, some debate as to which style of pipe was produced from which facility. The Akron Company purchased the Pamplin plant in 1892, continuing the already established manufacture of red clay pipes. Initial production of stoneware pipes at the Virginia plant probably did not begin before a date ranging from 1890 to 1895, when full production of the style was assumed after the Mogadore factory was closed in 1896. The company continued to market pipes of both sorts from the Pamplin facility until 1919 (Sudbury 1986). But regardless of the debate, both of the Harborside examples appear to date to around the turn of the present century.

The silver three-cent piece recovered from Section E of Trench 4 was minted in 1853 at the Philadelphia Mint. First produced in 1851, the three-cent piece was the smallest silver U.S. coin minted, and was composed of 75% silver and 25% copper. It bore a six-pointed star and shield on one face and the Roman numeral III within a large "C" on the other. A second variety of the coin was minted beginning in 1854, bearing an olive sprig and arrows above and below the Roman numeral. The coin continued in production until 1873, when it was phased out in favor of the slightly larger, nickel three-cent piece, which had been introduced in 1865. The mint run of 11,400,00 in 1853 was the second largest for silver three-cent pieces (Yeoman 1987).

Arms

The bayonet recovered from Stratum B of Trench 5 was relatively small and did not conform well to available descriptions of bayonet types, though the heavy state of corrosion made inspection of certain diagnostic details, such as flute initiations or maker's marks impossible. The blade measured 12.75 inches in length, 0.84 in width, tapering to 0.57 at the tip, and 0.41 inches in thickness tapering to 0.30 inches. The shank connecting the blade and socket measured 1.57 inches, and the socket itself 2.65 inches in length with a 0.65 inch bore. The blade was not parallel with the socket on a balanced plane, but dipped down at a slight angle, indicating use with a muzzle loading weapon, where room would be needed to operate the ramrod. Flutes, or blood grooves, began at the point of the blade; corrosion obscured the shank end so that the depth of fluting at the elbow, a defining characteristic in some bayonet types, was not visible. The lateral edges of the blade were not sharp, but were squared off, and the tip slightly rounded or blunted. The stud mortise, used to secure the socket to the barrel, began on the bottom of the socket, turning 90 degrees to the left (facing the muzzle) to run parallel with the barrel. There was no indication of a clamping device, but corrosion hindered close examination.

The bayonet appeared to be of pre-Civil War manufacture, possibly produced in the 1840s, and to have been a cadet model, judging from its overall size, and the blunt edges and blade point. Later bayonets were considerably longer, the blades ranging from 4 to 6 inches longer than the present example, and exhibiting deeper and more prominent flutes (Reilly 1970). Of the U.S. bayonets recorded, the Harborside bayonet most closely resembled either the Jenks model, issued by the U.S. Navy in 1838 or the U.S. Cadet Musket bayonet of 1841, though in both cases the blades were somewhat longer and were parallel with the barrel, and the stud mortise began on the top surface of the socket (Hardin 1964).

Architectural Materials

As previously mentioned, construction debris represented the great majority of the materials found at the Harborside site. Most of the debris, the brick, concrete, wood and metal structural materials, was not collected. Only a relatively small percentage of the architectural material recorded consisted of window glass. All of those fragments observed or collected appeared in the form of sheet glass, mechanically produced by a technique developed at the turn of the century and responsible for over 75% of the window glass manufactured in the country by the 1920s (Davis in Inashima 1980). Many fragments were thick and wire reinforced, a production feature introduced around 1880 and common since then in industrial applications requiring added strength or security (Jones and Sullivan 1985).

Three main types of nail are identified according to manufacturing technique: hand wrought, machine cut, and drawn or extruded wire nails. Hand wrought nails, of which a several examples occurred at Harborside, date from 1620 and are still manufactured today, though they were gradually replaced in general application by machine cut nails beginning around 1790. Cut nails were stamped from a metal plate, and thus are usually more regular in appearance than wrought nails. At least 5 examples of cut nail from Harborside bear hand wrought heads, an

early finishing technique, the use of which dates only as late as 1820 (Nelson 1968). Several other examples were headless, dating 1800-1850 (Ingersoll 1971). Wire nails were initially made between 1840 and 1850, though the first examples were small. Mass production and general use of wire nails did not begin until around 1890 (Nelson 1968). All of the nails from Harborside were made of iron.

Wood from the Harborside trenches consisted for the most part of planks, lathing or heavy structural timbers. Several smaller, shaped pieces were recovered including a large, round barrel stopper or bung, a number of dowels, which were hand shaped, probably using a draw knife, and a peg 6.75 inches in length and 0.75 to 1 inch in diameter at the head. The latter was unused, but may have been intended as a treenail, or trunnel, used in ship construction or repair, or in pegging wharf timbers (Heintzelman-Muego 1983). The dowels may similarly have been unfinished trunnels.

VIII. Evaluation of Resources

Summary Analysis

Backhoe testing was conducted at Roberdeau's Wharf at Harborside as a means of surveying the property prior to development to determine the location and integrity of historically significant deposits remaining below the present ground surface. Archival research indicated that the site had seen primarily commercial and industrial use in the past. These land use patterns, and in particular the latter, tend to involve high intensity activity, with the potential for a great amount of disturbance to previously existing deposits. For this reason, several matters related to site formation were addressed, both in the design of the testing program and in the analysis of the findings.

Site Formation Processes

Urban archaeological sites are subject to several developmental processes, the recognition of which are essential to the proper interpretation of site structure. Gradual deposition, though the most informative in terms of detailed site use, is often the agent which contributes least in terms of volume to the formation of an urban site. The process involves the slow build up of material occurring as a direct result of various long term activities on site, or as a result of soil deposition from wind or water. In contrast, construction and demolition produce much more rapid and extreme changes to site appearance. Features are added to existing deposits as foundations are excavated and structures erected, for example, or soils are added or removed as grading or filling alter the local topography, either in preparation for construction or following demolition. Finally, a third set of processes is seen on urban sites in the actions of natural agents, not only in the form of the gradual deposition of wind or water-borne soils, already mentioned, but as naturally induced perturbances of existing stratigraphy, through root action or rodent burrowing, for example.

The Harborside Site: Overview

With the possible exception of the extreme northwest corner of the lot, the entire site at Harborside consisted of made-land, probably produced by a form of banking out conducted in one or more episodes during the late eighteenth and early nineteenth centuries. Thus, fill was expected throughout the site as evidence of the main depositional mechanism above the alluvial silts of the original river bottom, with remnant areas of gradual deposition, representing historic ground surfaces, appearing in portions of the site undisturbed by later construction. Little in the way of natural formation processes were expected since there has probably been a minimum of biological activity within the soils.

The mixed nature of the deposits was quickly made apparent during excavation by the wide range of artifact dates occurring throughout most layers. Similarly, the small size of the individual artifacts suggested that the soils may in fact have been deposited and redeposited several times. All ceramic artifacts occurred as small fragments, and only a few whole or nearly complete glass bottles were recovered: a large early twentieth century soda bottle inexplicably survived in the

heavy rubble in Trench 2, and several small patent medicine bottles were found nearly complete in the concentration of refuse in Section G of Trench 4.

Most of the southern half of the site, and in particular the west portion, was grossly disturbed in the twentieth century by the erection of a 25,000 square foot building for the Virginia Public Service Company. Deposits within the walls of the building consisted of heavy rubble, in the form of brick, reinforced concrete, cut stone, and structural metal debris. Mixed clay loam fill layers, most containing a large amount of coal, occurred outside of the building. All of the strata in Trench 1 were mixed, containing early nineteenth century mold-blown wine bottle glass and pearlware, but also containing small amounts of twentieth century glass and ceramics throughout. Thus, from the vertical arrangement of artifacts in the trench, it appeared that all of the deposits were related to either the construction or demolition of the building, with the earlier materials redeposited or intermixed from earlier contexts. Trenches 2 and 3 showed evidence of the same vertical distribution, indicating that the deposits in those areas were similarly related to the power company.

The base of the plant structure consisted of a concrete floor beginning at least 7 feet below present grade. Considering the heavy turbines and furnaces which would have been in use within the plant, the concrete floor may be several feet thick in places, possibly reinforced with deep set piers. Exterior wall footings were recorded as extending over 10 feet below grade. Testing in other portions of the site suggested that the original river silts occurred within 4 to 6 feet of ground surface in the western half of the lot, indicating that twentieth century construction had removed most evidence of early land use in this area. South of the building, to the south edge of the property, the ground surface was covered by a concrete driveway and a raised foundation, and was thus inaccessible for testing. Due to time constraints, the southeast corner of the property was not tested.

In the north half of the property, various relatively extensive fill deposits were encountered within 3 to 4 feet of surface. Those in the west and northwest portions of the lot appeared to be related to the construction and later demolition of the twentieth century power plant structures. Access was somewhat restricted in areas along Union Street by the presence of numerous concrete piers and staging platforms used to support transformers and other large electrical equipment. These modern features extended to depths varying from 2 to 4.5 feet, and while many did not disturb the lower deposits, they did make excavation difficult and time consuming. Most of the upper fill layers in the trenches along Union Street--Strata A, B, and C in the various sections of Trench 4 and 5--contained recognizably modern container glass and construction debris, and in particular, ceramic or glass insulators and copper grounding cable, along with earlier, nineteenth century materials, indicating that these strata, like the deposits in Trenches 1-3, resulted from the most recent land use, probably from leveling carried out after demolition of the power plant in the 1940s.

In the north central portion of the property, in the area around the original foundry building, deposits were somewhat more complex, but for the most part

exhibited many disturbances related to the long term use and refitting of the building for a variety of heavy industrial activities. Time constraints precluded testing in the northeast section of the property, as was the case to the southeast.

Roberdeau's Wharf

Several methods of wharf construction were in common use along the eastern seaboard during the eighteenth and nineteenth centuries, employing technology derived from established practices in England and Holland (Heintzelman-Muego 1983; Huey 1984). Cribbing, for example, consisted of the laying of long timbers tied with cross-members to form a large, deep lattice of open squares or rectangles which were then filled with wood, earth or stone to build up to a desired height. Crib wharves have been documented in numerous locations: at the Long Wharf, in Boston (Bower *et al.* 1984), Old Slip in New York City (Huey 1984) and the Carlyle-Dalton Wharf in Alexandria (Steven Shephard, personal communication 1989). Cobb-type wharfs were built on a foundation of large box-like structures of timber which were floated into position, and then filled with stone and sunk. Examples include Douglass Wharf, in New London, Connecticut (Artemel *et al.* 1984) and the Old Derby Wharf in Salem, Massachusetts (Snell 1974). A less elaborate method of wharf construction was known as banking out, or bulkheading, in which piles were driven and a bulkhead of large timbers laid around the perimeter of the wharf, which served to retain fill introduced from the shore, as at Central Wharf in Salem, Massachusetts (Wilson and Moran 1980), and Town Dock, Charlestown (Pendery 1982).

From the evidence at hand, Roberdeau's Wharf does not appear to have been constructed using an elaborate subsurface structural system such as cribs or cobs, but was probably constructed using a system of bulkheads. An advertisement by the Baltimore contractor David Sharon describes methods which may have been similar to those originally employed at Harborside:

He professes...the capability of building a complete pile driver, one being sufficient for the whole place, and recommends the driving of large piles on the outside walls of every wharf, which is the custom in Baltimore even in the Bason; but is peculiarly suitable here from the steepness with which the channel of Potomack is formed.
(*Alexandria Gazette*, July 12, 1785)

Sharon was advertising at that time for those interested to make "the earliest application to him at Mr. Roberdeau's wharf," suggesting that he may well have had a hand in the construction of that wharf.

The cove within which the Harborside lot lay in the late eighteenth century was a relatively shallow, silted bay lying south of Point Lumley, and a system of piles and bulkheads would have been sufficient to retain earthen fill at least as far as the edge of the deeper channel. Silting of the rivers in the area began quite early as a direct consequence of run-off from increasingly heavy agricultural use of land adjacent to the waterways. For example, George Washington noted that depths within the cove between West and Lumley Points, the heart of the Alexandria

waterfront, decreased by as much as three feet between 1748 and 1749 (Shomette 1985). Similarly, Bladensburg, on the Anacostia upstream from Alexandria, was losing much of its port traffic due to silt build up by 1830, even though the channel was dredged early in the century (Wright 1977; Bandler 1988); by the turn of the present century the channel was completely silted in and the port permanently closed (Williams 1942).

Roberdeau's property lay was situated south of the public wharf at Point Lumley (Preisser 1977), in an eddy or current shadow, which would have enhanced its tendency to collect silts borne along the main channel. Though there are no known maps showing river depths during the eighteenth century, a U.S. Army Engineers map from 1836 (*Figure 6*) shows similar shallow waters south of Harborside, then known as Entwhistle's Wharf, as well as farther south in Battery Cove, in the shadow of Keith's Wharf, now the Old Ford Plant. The present archaeological investigations indicated that the land had probably not been raised more than a few feet above the river floodplain to form the wharf surface in the eighteenth century, at least as far east as the center of the property. Deposits identified as river silts were encountered between 4 and 6 feet below modern grade in this portion of the site, the slightly higher elevations occurring to the west, while the wharf surface lay only 4 feet below grade in Trench 4. Soil test borings conducted by geotechnical engineers in the eastern portions of the site indicated that the depth of fill there was markedly different, varying to depths of 7 feet in the northeast and as much as 17 feet in the southeast. More substantial underpinning was probably required in these areas and may have existed in one of the more elaborate forms previously discussed, buttressed by deep pilings such as those advertised by Sharon in the *Gazette*.

George West's map of the city in 1763 (*Figure 3*) shows the original shoreline running along what was to become Union Street in 1784, leaving only a small corner of Roberdeau's Lot 93, one of the lots which was extended into the river as the wharf. The present excavations suggested that the shoreline ran from the northeast, under what is now the VEPCO substation, through the western portion of Trench 5 and continued along just west of Union Street in the vicinity of Trench 4. In deep excavations in Section F of Trench 4 and Section A and B of Trench 5, brown sandy clay was encountered to depths of as much as 10 feet. It was at first assumed that this clay deposit represented fill taken from the bluffs to the west below Lee Street, to fill in the cove, but further examination of the trench profile showed no evidence of an underlying layer of darker alluvial silt, which would be expected were there fill lying over the edge of the river floodplain. In Trench 4, a thin layer of gray silt (Stratum J) lay on top of the brown clay and appeared to be the floodplain deposit. In contrast, gray green silts were recorded in Section C of Trench 5 at relative depths ranging from 3 to 4 feet (see *Table 1* for a reconciliation of recorded and relative depths), and in somewhat disturbed condition in Section E of Trench 4 at around 5 feet. Further east, in Trenches 6 and 7, the alluvial silts were encountered at depths consistent with a gradual drop off: 5 feet in Trench 6, and 4 feet in Trench 7. The apparent undulation can be attributed to either variations in the original surface of the floodplain caused, for example, by small tidal eddies, or to differential settling of the relatively soft silts due to differences in the weight of overlying fills.

Artifacts were found within the silt deposits, which suggested at first that the silts were themselves fill, perhaps dredged from the channel and used to build up the wharf surface. The deposits were deep, 14 or more feet below grade, or 9 to 10 feet below the overlying clay fill deposits, and there was no evidence of a break between the supposed dredging spoil and intact alluvium below. Thus, if the silts were actually fill, the original depth of the bay would have been over 14 feet, well

	Depth Below Grade	Surface Grade	Relative Depth
Trench 5/Section C	6-7 feet	10 feet	3-4 feet
Trench 4/Section E-G	4.5 feet	9.5 feet	5 feet
Trench 6	9 feet	4 feet	5 feet
Trench 7/Section B	8 feet	4 feet	4 feet

Table 1. Relative Depths of Alluvial Silts

beyond the depth expected for such a small cove. In fact, the artifactual materials recovered from the silts occurred within the uppermost foot of the deposit, and may thus be interpreted as either intrusive, having migrated downward from the overlying fill, or more likely introduced from dry land in run-off drainage, or discarded or lost from the edge of the wharf during the process of banking out. Spillage into deeper alluvial deposits along a wharf or shoreline before or during infilling has been reported at various wharf locations, but normally the materials involved include complete or nearly complete glass or ceramic vessels, ships rigging, shoes or the like (Huey 1984). The small amount of materials and small sizes of artifacts occurring in the Harborside silts would seem to indicate a low intensity of shoreline use prior to the construction of the wharf by Roberdeau.

Only a small portion of Feature 3, a segment of wood planking, was uncovered, and thus little can be said with certainty concerning it. The planks lay on a level with Feature 4, and so may represent a wood surfaced portion of the original wharf. Another section of planking was observed further to the south in the trench, in Section F, below Feature 4. Similar planking was recorded on the waterfront in Georgetown lying between a wharf surface and the underlying river silts (Artemel *et al.* 1985). There the wood was interpreted as an attempt at stabilizing the alluvium before the construction of the wharf, as part of an earlier or a temporary landing, or part of the wharf construction procedure itself. Such an interpretation could apply in the present case, though due to the overlying concrete obstructions, too little of the wood could be exposed to allow positive identification.

Feature 4 consisted of one or more layers of wood chips, shavings and sawdust saturated with a tacky, dark colored pine resin or pine tar. The composite material was as much as 2 inches thick in places, but very deteriorated in others. Test Unit 1 was excavated through the feature in Section E of the trench, and three superimposed 1 foot square segments of the material were removed and brought to

the lab to be broken down for close inspection using hot water as a solvent. The material contained surprisingly few artifacts. The wood shavings appeared to be the result of the planing of flat planks, and judging from the width and thickness of the scraps, much of the work had been accomplished with a draw knife. Several larger wood chips bore saw marks. After the wood materials, the most numerous types of artifacts were bits of sissal rope and oakum, used in caulking boat seams. Also found were bits of canvas, a kaolin pipe stem fragment, one fragment each of creamware and pearlware, several hand wrought and hand headed cut nails, and a flat headed canvas nail, along with gravels, small bits of brick, coral, fish scales, straw and several large kernels of corn. Taken as a whole, the materials appeared typical of refuse from a wharf area at the turn of the nineteenth century.

Dating of Features 3 and 4 was based on the presence of only a few artifacts, but the date appeared consistent with the known period of earliest wharf use and with the date determined for the fill layer capping the features. Several methods have been proposed for assigning dates to historic fill deposits using the chronologically diagnostic artifacts within them. At Puddle Dock in Portsmouth, New Hampshire, for example, Ingersoll produced graphs of *central dates*, using the mid-year of the date ranges of ceramic maker's marks (Ingersoll 1971). In a somewhat wider context, South proposed a technique which gauges the relative proportion of the complete artifact assemblage represented by each type present, producing a *mean ceramic date* (South 1977).

Mean ceramic dates were calculated for only two deposits at Harborside, since most of the fill layers excavated were obviously mixed. Because of small sample sizes and the attendant problems with bias, the results from even these two deposits should be considered as provisional. The date calculated for Stratum F of Trench 4, which capped Feature 4, was 1808*, which may be slightly early for a fill layer presumably in place by the mid-nineteenth century when Feature 6, the stone and brick rubble wall footing in Section E, was constructed. The small number of ceramic fragments used to calculate the date may account for the discrepancy.

It is possible that Feature 4 may not have been a formal surface at all, but rather a trash area where shavings were dumped. From present evidence, it appeared that the material may in fact have been intentionally scattered across the area, both as a means of disposing of the waste products of ship refitting and as a means of resurfacing the working area, yet the feature appeared as a flat surface, not a domed refuse pile. Intentional scattering would indeed account for the fact that so few artifacts occurred within the material, since the deposit would not have accumulated in place along with other discarded or lost material, but would have been redeposited from a stockpile containing little else but wood scraps. There were in fact layers of sand, between the wood layers, in which most of the gravels and brick bits were observed. These layers may have represented gradual build up

*using South's median dates for white salt glazed stoneware (1753), creamware (1791), shell edged and handpainted pearlware (1805), and ironstone (1857), and a median date for Alexandria stoneware (1845) based on known dates of manufacture.

on an open surface, which was periodically covered with the wood chips bonded with pine tar to produce a waterproof floor, which may then have been finished with a thin layer of sand spread on top to minimize tackiness. In the end, the best evidence that the feature was an intentionally laid surface was the presence of Feature 5, a wooden gutter which probably functioned to carry off rain water. Feature 4 may have been used for some specific activity, such as coopering or even fish cleaning, with the gutter serving to drain away the by-products after the floor was washed down, but the lack of artifactual evidence associated with either feature makes the matter conjectural at best.

From the data at hand, it appeared that Feature 7, the brick foundation in Section E of Trench 4, may have predated the wood surface (Feature 4). No evidence of a builder's trench was observed in association with the brick. Due to time constraints, detailed hand excavation of the feature was not carried out, and thus a stratigraphic profile was not available for analysis. The condition of the wood surface to the south of the wall was difficult to assess due to disturbances from several deep piers associated with the twentieth century power plant. Precise dating of the feature is difficult: no records exist of structures standing in this part of the site during the earliest periods of site use, and though a building is shown in the approximate area on the 1836 Army Engineers map (*Figure 6*), there is no direct evidence to link it with Feature 7. A portion of the wall represented by the feature probably remained in position through much of the nineteenth century. In the west profile of the trench section, there was evidence of a trench excavated over the wall, presumably to remove brick for use elsewhere. The trench began less than 2 feet below grade, indicating that the wall was still standing when the later nineteenth century fill layers were introduced. Power plant construction had disturbed the wall to the east, and there was no evidence of the feature in trench Section F to the west.

Trench 6 also contained deposits which appeared related to wharf construction and the earliest periods of site use, though again the materials were surrounded by modern concrete features. As in other areas of the site, the upper deposits in Trench 6 contained a mixture of nineteenth and twentieth century artifacts. Datable materials from Stratum C, including creamware, pearlware, gray salt glazed stoneware and mold blown glass, suggested an early-to-mid nineteenth century date for the fill layer. At a depth of 3.5 feet, directly below the nineteenth century fill layer, lay Feature 13, a wooden walkway. The walk appeared to have been rather hastily laid, using second-hand lumber, and was placed directly onto a layer of coarse sand (Stratum D). This sand deposit contained artifacts which suggested an earlier date than the loam fill layer, Stratum C: fragments of delft, hand painted pearlware and free blown wine bottle glass, along with numerous fragments of oyster and cockle shell, and large and small waterworn pebbles, including several fragments of chalky flint of European origin. Gravels such as these were occasionally used as ballast in ships coming from Europe relatively free of cargo, and have been found in quantity at port locations throughout the Atlantic Coast (Emery *et al.* 1968), and regionally on the Chesapeake (Owens 1927; Miller and Keeler 1986) and as far up the Potomac estuary as Georgetown (Artemel *et al.* 1989). Beneath the sand lay the alluvial silts of the Potomac floodplain. The upper portions of the silts also contained artifacts similar to those in the overlying sands:

delft and free blown wine bottle glass, along with wooden pegs or trunnels from early wharf construction or shipwright activities. The surface of the silt was hard and may have been oiled at one time, with the coarse sands containing scattered refuse, Stratum D, strewn on top to consolidate the surface. The walkway may, then, have served as a means of traversing the waterlogged deposits during wharf construction.

Also located within the alluvial silts, at a depth of 8 feet below grade, approximately 4 feet into the silt deposit, were two large timbers which were initially assumed to represent wharf cribbing. No other such substructures were identified during the survey, suggesting that the wharf was built through a form of banking out, using bulkheads to extend the land toward the river channel. Nevertheless, cribbing may have been used in some areas nearer the edge of the deep channel or in isolated spots such as in Trench 6. The timbers in Trench 6 may alternatively have been used as support for a specific structure which is no longer apparent.

Nineteenth and Twentieth Century Land Use

Feature 6 represented the corner of a foundation or wall footing made of reused brick and fragments of cut steatite block. A mean ceramic date of 1833* was calculated for the overlying fill layer, Stratum G (note: the same caveat regarding bias due to sample size applies as for Stratum F, overlying Feature 4). The date may be somewhat early in light of other materials from the deposit such as nineteenth century porcelain, pressed glass, and cut nails, but it does support the use of the date on the silver three-cent piece from the layer as a *terminus post quem*, the date after which the fill was deposited, and thus as a *terminus ante quem*, or date before which the underlying feature was laid.

Records indicate that during the Civil War, a structure serving as Contraband quarters stood along Union Street, though the exact configuration and location are unclear. If the building were a frame structure built specifically for the purpose, no evidence of it was observed in the area of Trench 4. An existing structure may have been used, and if so, either Feature 6 or Feature 7 could have represented the remains, though there was no direct evidence linking either feature to such use.

Feature 8, in Trench 5, consisted of several layers of wood planking apparently serving as a floor surface. The wood was probably put in place in the late nineteenth century, as indicated by artifacts encountered between and directly below the boards, including fragments of glass bottles blown into post-bottom molds, sherds of whiteware, ironstone and Rockingham/Bennington earthenware, and machine headed cut nails. Little datable material was recovered from below the feature in Test Unit 2, though a fragment of pearlware and a hand headed cut nail in Stratum E suggested that the fill beneath Feature 8 may have been somewhat earlier in date. Many of the planks were lying askew, some apparently thrown in with the fill, others probably disturbed by infilling with heavy rubble. The break in

*using South's median dates for creamware (1791), handpainted porcelain (1808), ironstone (1857), whiteware (1860), and median dates for shell edged whiteware (1850) and yellow ware (1865), from date ranges indicated by Miller (1980) and Ramsay (1947) respectively.

the fill east of the feature, seen in profile during excavation of Sections A and B of the trench, indicated that the feature had been excavated into the existing fill. There was no evidence of a wall footing, suggesting that if the feature were the floor of a basement, the overlying building would probably have been an earthfast structure, at most set on small brick or wooden piers. Alternatively, the feature may have served as a large storage bin. If so, the bin was either never used or was well cleaned after it was abandoned, since there was no apparent trace of any material stored there.

Feature 11 was the base of a large brick structure. More courses once lay above those presently visible, as indicated by mortar still adhering to the upper faces of the exposed brick. The number of courses removed, the horizontal dimensions of the original structure and possible associations with other nearby structures were impossible to determine. The fill on all sides of the brick showed little evidence of builder's trenches, and no artifactual materials were found in association with the feature. Thus, dating of the structure was relative: a portion of the wood plank floor, Feature 8, lay directly above Feature 11 (in fact several additional courses of brick had been removed from the north half of the feature to accommodate the laying of the floor), indicating that the brickwork predated the late nineteenth century wooden floor. Based on the overall configuration of the feature, the presence of what appeared to be the bottom of a flue, and on other, circumstantial evidence, such as its general location on the lot, Feature 11 was considered to be the base of a furnace associated with Irwin's Brewery, which was in operation on the northwest corner of the property beginning in the 1830s. Modern obstructions near ground surface made further, more extensive investigation of the surrounding area impractical within the given time limits. Feature 10, a small brick pier composed of brick similar to that in Feature 11, was probably the base of an associated feature. The mortar surface below Feature 8 in Section A of the trench may have been a form of surfacing laid on fill or subsoil during construction of the brewery.

Feature 12, situated to the east, in Section C of Trench 5, consisted of several articulated timbers with associated coal and decayed wood deposits, lying beneath 6 feet of nineteenth and twentieth century fill. Artifacts recovered from within the woody deposits against and below the timbers included fragments of creamware, free blown wine bottle glass and wrought and cut nails, suggesting a late eighteenth to early nineteenth century date for the feature. Though little of the feature was visible on which to base functional interpretation, due to the small area accessible between later, overlying obstructions, Feature 12 appeared to have served as a coal bin associated with early use of the property, perhaps with Irwin's Brewery, judging from its location near the known site of that facility.

Unfortunately, the locations in which trenches were placed against the Smith Foundry building, Trench 6 to the west and Trench 7 to the south, were both disturbed. Thus little can be said with regard to the construction and underpinning of that building. The use of planking at the base of both Feature 15, south of the foundry, and Feature 11, the furnace in Trench 5, suggested that those two structures may have been erected during the same general period, the beginning of the second quarter of the nineteenth century, though there was no artifactual

evidence available to confirm the supposition. The foundry wall itself was not exposed, and thus it was not possible to compare it with the other features. The fill strata south of the foundry were very mixed, exhibiting an apparently random vertical distribution of artifact types, which reflected the large amount of disturbance in the area from the construction and eventual demolition of the foundry building and its many additions. South of the structure, a hard surface was encountered, Feature 17, formed of corrosively cemented iron slag and cinder, presumably derived from the foundry. The material may represent part of the ground surface around the building at the height of operation in the 1840s and early 1850s, and as such would be an example of on-site refuse disposal and recycling. Also south of the foundry in Trench 7 lay a large coal bin, the remnants of which were recorded as Feature 16. No artifactual materials were recovered by which to date the feature, but the pilings were probably set--as opposed to driven--into Feature 17, which would indicate that they were contemporary with the surface. Infilling in the early half of the century was evidenced by redeposited materials, in the south end of Trench 7, from Hugh Smith's pottery at Wilkes and Washington Streets, used to consolidate portions of the earlier wharf fill which may have been sinking, or to build up the surface for a specific use.

A final artifact of note from the silts in Trench 6 was a prehistoric chipped stone tool, a small quartzite biface, which could represent evidence of prehistoric occupation along the original shoreline. The presence of prehistoric Native American groups has been documented in several locations along the Alexandria waterfront, both north of the city along Four Mile Run (Proudfit 1889) and to the south, at Great Hunting Creek (Holmes, Dinwiddie and Fowke 1891). More recent surveys have identified sites south of Hunting Creek (Inashima 1985) and at Jones Point, just south of Harborside (LeeDecker and Friedlander 1984). Prehistoric sites often occur near the resource rich tidal marshes which form at the confluences of freshwater and estuary streams. The potential for prehistoric sites is high in such areas as Ralph's Gut at the foot of Oronoco Street, for example, though several hundred years of intensive historic land use along the waterfront have probably disturbed most evidence of their presence. Other, smaller streams would have flowed into the Potomac along portions of the waterfront, and thus sites were probably situated at various spots along the length of the river bank. The biface from Trench 6 appeared to have been either discarded or washed into the river from a site nearby.

IX. Conclusions and Recommendations

A sampling strategy was developed specifically for the Harborside survey and was used to assign testing priorities to particular sections of the property according to the archaeological resources presumed to be present and to the degree of disturbance from modern industrial site use expected. Within this strategy, the western portions of the lot were given highest priority and were tested first. The eastern portion of the property, with a lower potential for significant resources, was assigned a low priority. In the end, major twentieth century disturbances were encountered in most sections of the property tested, though the degree to which the disturbances had affected the deeper, early deposits varied from area to area. No attempt has been made to detail the later nineteenth and twentieth century fill sequences in the upper levels of the excavations.

Wharf related deposits dating to the earliest periods of site use were encountered in Trench 4 in the form of wooden surfaces--planking (Feature 3) and a composite wood and pine tar surface (Feature 4), through which ran a wooden drain or gutter (Feature 5). A well-laid brick foundation or wall footing (Feature 7) was encountered associated with the composite wood floor and probably dated to the same period. Also dating to the early wharf period was a wooden walkway (Feature 13), encountered in Trench 6, set in a waterlogged sand deposit. The walk was probably used during the original construction of the wharf bulkhead. Timbers buried within the alluvial silts, also in Trench 6, were of unknown function, but may have been associated with underpinning for a section of the wharf or a heavy structure on the wharf surface.

Later structural features identified at the site included Feature 6, a mid-nineteenth century foundation lying in deposits less than 1 foot above the wharf surface (Feature 4) in Trench 4; Feature 8, the wooden floor of a late nineteenth century structure or storage facility in Trench 5; and Features 10, 11 and 12, also in Trench 5, which consisted of brick or wood structures related to the operation of Irwin's Brewery in the second quarter of the nineteenth century. Feature 10 consisted of a pier, Feature 11 the base of a large brick furnace, and Feature 12, at the east end of the trench, the base of a wood frame coal bin. Based on the amount of material remaining in Trench 5, it is presumed that more structural features related to the brewery probably survive beneath the VEPCO substation to the north of the trench.

In Trench 7, foundry related materials were encountered in quantity. South of Feature 14, the southern wall of the original foundry building built by the Smiths in the 1830s, lay Feature 15, a fragment of brick wall probably associated with the foundry as part of an early outbuilding. Further to the south lay Feature 16, a portion of a large coal storage bin, and Feature 17, a hard iron slag and cinder surface which may have been the ground surface outside the foundry building during its operation in the 1840s and 1850s.

The wharf built by Roberdeau at the Harborside property appeared to have been constructed by a process known as banking out, using a series of bulkheads to extend the perimeter of the wharf in stages. There was little need for deep substructures in the shallow, silted bay within which the wharf was situated, though at the eastern edge of the wharf, where soil test borings indicated that the river bottom fell off rapidly to the deep channel, a more elaborate system such as cribbing or cobb construction may have been employed to stabilize the fill introduced to form the wharf surface. The present archaeological testing program encountered only evidence of earthen fill, measuring as little as 2 to 3 feet in depth in most areas, lying below 4 to 6 feet of later nineteenth and twentieth century fill. Artifacts were recovered throughout these overlying fill layers representing several periods of site use, but unfortunately no undisturbed areas of original wharf fill, containing significant quantities of artifacts from the early periods immediately prior to and during wharf construction, were positively identified.

The position of the original shoreline was identified as having run through the west portion of Trench 5 and, as suggested by eighteenth century maps, extending northeastward under the VEPCO substation and across Wolfe Street to Point Lumley, under the Robinson Terminal Warehouse. To the south, the line appeared to lay east of Union Street near the western edge of Trench 4, where a thin layer of gray sandy silt appeared to represent the edge of the eighteenth century floodplain deposits.

Recommendations

The original grading plans for the Harborside development called for the removal of several feet from the surface of the site prior to the driving of deep pilings on which townhouses would be supported. Based in part on the findings of the present archaeological survey, and in particular on the discovery of large amounts of heavy demolition rubble associated with the twentieth century power plant structures, the grading plan was altered somewhat. Piers will still be used to support the townhouse units, but the site will be essentially left at grade and capped with a concrete slab. While capping a site has in the past been seen as a viable alternative as a form of preservation, the practice may not be as effective in the long term as it might at first seem. Ongoing deterioration of underlying deposits will continue, so that with time, less and less of the existing resources will be available for study. In addition, there is no guarantee that at some unspecified time in the future when the site is redeveloped, effort will be expended to remove the concrete to allow further investigation. And as was seen in the present investigation, excavation around even shallow piers is difficult, and may not be economically feasible under certain conditions.

The pier layout along Union Street, where the most intact archaeological deposits were encountered in the present survey, calls for wider spacing than in other portions of the site, and thus there will be less direct impact on the resources in that area. A public easement is slated for the northwest corner of the lot, along Union Street in the area of Trench 5, and there will thus be no direct impact to the

resources encountered there or to those presumed to lie beneath the portion of the VEPCO substation which is to be removed when that facility is reduced in size.

Disturbance to the resources located in the central and eastern portions of the property due to the drilling and sinking of piers will be greater than along Union Street, since construction plans call for more closely spaced supports. Due to the sampling procedure employed in the present survey, less is known about specific archaeological remains in those portions of the site, and thus less can be predicted in terms of the ultimate impact of development in those areas.

The archaeological testing program conceived of and sponsored by the 400 South Union Street Joint Venture at Harborside has provided valuable insights into an otherwise less well-known portion of Alexandria's past. The project serves as an example of the type of responsible treatment of cultural resources which benefits the entire community, residents and developers alike. It is hoped that the historic preservation efforts thus far made will be emphasized by the establishment of an interpretive display within the public easement along Union Street, using plaques relating the history of the property and describing the materials remaining below ground.

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APPENDIX A
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Laboratory Archaeologists:	Edith Baird Terry Reimer Ray Wood
Graphics:	Robert Chase
Word Processing:	Mark White
Backhoe Operation:	Bob Anderson, Laurel Equipment

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES			
C	0	B	0	1	ARCH	HARD	FA	WIREN																
C	0	B	0	1	ARCH	WG	GL															W/ EMBEDDED CHICKEN WIRE		
C	0	B	0	1	DOM	BOTT	GL		WINE	NECK	CORKC			DSTRING								OLV		
C	0	B	0	1	DOM	BOTT	GL	BLOWN		BOD						EMBOS						AQU	"DIX..."	
C	0	B	0	1	DOM	BOTT	GL	BLOWN		NECK/LIP	CORKC	LTOOL	DLIP										AMB	
C	0	B	0	1	DOM	FSTOR	GL		LIDLINR							EMBOS						WHT	"PORCELA..."	
C	0	B	0	1	DOM	FSTOR	SW		HW	BOD	G/I	SG/E	UNDEC									BRN	RED	SAND TEMPERED
C	0	B	0	1	DOM	VESS	GL		TUMBLER	BASE													CLR	
C	0	B	0	1	PER	FAST	PORC		BUTTON														WHT	1 PC., 4 HOLE
D	0	B	0	1	ARCH	WG	GL																AQU	
D	0	B	0	1	ARCH	WG	GL																AQU	W/ EMBEDDED CHICKEN WIRE
D	0	B	0	1	DOM	BOTT	GL			BOD													GRN	
D	0	B	0	1	DOM	BOTT	GL	AUTO		BASE						EMBOS							CLR	"L..P.."
D	0	B	0	1	DOM	BOTT	GL	BLOWN		BASE													GRN	
D	0	B	0	1	DOM	FC/S	RE	PW	FW	BASE			UNDEC											
D	0	B	0	1	DOM	FC/S	RE	WW	HW	RIM			TP	RP	DEC/IE								BLU	
D	0	B	0	1	DOM	VESS	GL																WHT	
D	0	B	0	1	DOM	VESS	GL																WHT	

** Subtotal **

53

** TRENCH 2

D	0	D	0	1	ARCH	HARD	FA	UNRECN																
D	0	D	0	1	DOM	BOTT	GL		WINE	BASE														OLV
D	0	D	0	1	DOM	BOTT	GL		WINE	NECK/LIP	CORKC	LTOOL		DSTRING										OLV
D	0	D	0	1	DOM	BOTT	GL	2P		NECK/LIP	CORKC	LTOOL	PLIP											CLR
D	0	D	0	1	DOM	BOTT	GL	2P/SEP		BASE					POST		EMBOS						WHT	"11"
D	0	D	0	1	DOM	BOTT	GL	2P/SEP		WHOLE	CORKC	BLOB			POST								AQU	SLUG PLATE ON SIDE, POST 1860
D	0	D	0	1	DOM	BOTT	GL	BLOWN		BOD						EMBOS							AQU	"..BERT PORT...BREWIN.."

01/02/80

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES
D	0	D	0	1	DOM	FC/S	PORC	EURO	HW	BASE				UNDEC							
D	0	D	0	1	DOM	FC/S	RE	IS	HW	BOD				UNDEC							
D	0	D	0	1	DOM	FC/S	RE	IS	PITCHER	RIM							MOLD				
D	0	D	0	1	DOM	FC/S	RE	WW	HW	BOD				UNDEC							
D	0	D	0	1	DOM	FC/S	RE	WW	HW	RIM				UNDEC							
D	0	D	0	1	DOM	FC/S	RE	WW	PLATE	RIM				FLOW	DEC/I	FLORAL	MOLD				BLU MOLDED RIM
D	0	D	0	1	DOM	FSTOR	GL		LIDLINR								EMBOS				WHT "BOYD'S GENUINE PORC. LINED"
D	0	D	0	1	DOM	VESS	GL			BOD											WHT
D	0	D	0	1	DOM	VESS	GL		TUMBLER	BASE											WHT
D	0	D	0	1	FAUN	MAMM	BONE			LONGB							BUTCH				CLR
D	0	D	0	2	IND	G/MM	SLAG														
D	0	D	0	1	MED	TOOL	GL		THERM												
** Subtotal **				20																	
** TRENCH 4																					
A	0	C	0	1	ARCH	HARD	FA	WIREN													
A	0	C	0	1	DOM	FC/S	PORC	CHIN	FW	RIM			HP	DEC/I	CANTON						BLU
A	0	C	0	1	DOM	FC/S	PORC	SEMI	HW	BOD				UNDEC							
A	0	C	0	1	DOM	FC/S	RE	IS	HW	RIM	LG/I	LG/E		UNDEC				BUF	BUF		THICK, CREAMY GLZ
A	0	C	0	1	DOM	FC/S	RE	WW	HW	BOD				ANN							BLU
A	0	C	0	1	DOM	FC/S	RE	WW	HW	RIM				HP	BAND						POL DEC=GRN,BRN
A	0	C	0	1	DOM	FC/S	RE	YW	HW	BOD				ANN							POL DEC=BLUE,BRN
A	0	C	0	1	DOM	FSTOR	SW	AMSW	HW	BOD				HP							BLU
A	0	E	0	1	ARCH	HARD	FA														LG. SQUARE ROD, N.END ON TOP PLANKS
B	0	D	0	1	DOM	BOTT	GL	FREE	WINE	NECK/LIP	CORKC	LTOOL		DSTRING							OLV
B	0	D	0	1	DOM	FC/S	RE	IS	HW	BOD				UNDEC							POSS 18TH C.
B	0	D	0	1	DOM	FC/S	RE	PW	HW	BOD				HP							BLU
B	0	D	0	1	DOM	FC/S	RE	PW	PLATE	RIM				SE	DEC/E	ORIENT					GRN
B	0	D	0	1	DOM	FC/S	RE	WW		BASE				UNDEC							
B	0	D	0	1	DOM	FSTOR	SW	AMSW	HW	BASE	G/I	SG/E		UNDEC							GRY

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES	
D	0		6	1	ARCH	CM	STEAT															
D	0		6	1	ARCH	CM	STEAT															
D	0	C	0	1	ARCH	HARD	FA	CUTN														
D	0	C	0	1	DOM	BOTT	GL		WINE													
D	0	C	0	1	DOM	BOTT	GL	BLOWN		BASE												OLV
D	0	C	0	1	DOM	BOTT	GL	BLOWN		BOD/BSE					POST		EMBOS		AQU			"DE..."
																	EMBOS		AQU			"ARNY&SHINN/GEORGETOWN / THIS BOTTLE IS NEVER SOLD"
D	0	C	0	1	DOM	FC/S	PORC	SEMI	HW	BOD			SP		DEC/E							RED
D	0	C	0	1	DOM	FC/S	PORC	UNREC	HW	BOD			UNDEC									
D	0	C	0	1	DOM	FC/S	RE			BOD	G/I	LG/E	MOTT									WHT BUF
D	0	C	0	1	DOM	FC/S	RE	CW	PLATE	RIM				ROYAL								MOTT. YEL INTERIOR
D	0	C	0	1	DOM	FC/S	RE	IS	FW	BASE			UNDEC									MAKERS
																						MARK=CROWN+UNICORN
D	0	C	0	1	DOM	FC/S	RE	WW	HW	BOD			HP		DEC/E							POL DEC=RED,GRN
D	0	C	0	1	DOM	FC/S	RE	WW	HW	RIM			UNDEC									
D	0	C	0	1	DOM	FC/S	RE	YW	HW	BOD			ANN		DEC/E							WHT
D	0	C	0	1	DOM	FC/S	SW	WSG		BASE			UNDEC									
D	0	C	0	1	DOM	FC/S	SW	WSG	HW	BOD			UNDEC									
D	0	C	0	1	DOM	FSTOR	CE	RW	HW	BOD	UG/I	UG/E	UNDEC									RED
D	0	C	0	1	DOM	FSTOR	SW	AMSW	CROCK	RIM/HAND	G/I	SG/E					INCIS		GRY	GRY		"E.J.MIL.../ALE"
D	0	C	0	1	DOM	FSTOR	SW	AMSW	HW	BOD	W/I	SG/E	UNDEC									GRY
D	0	C	0	1	DOM	FSTOR	SW	AMSW	HW	BOD	W/I	SG/E	HP		DEC/E							GRY
D	0	C	0	1	DOM	FSTOR	SW	AMSW	HW	RIM	G/I	SG/E	UNDEC									GRY
D	0	C	0	1	DOM	FSTOR	SW	AMSWLOW	HW	BOD	UG/I	SG/E	UNDEC									BRN
D	0	C	0	1	DOM	UNREC	GL															WHT
D	0	C	0	1	DOM	VESS	GL			BASE												AQU
D	0	C	0	1	ELECT	L/H	PORC		INSUL		G/I	G/E	MOTT									BRN
																						WHT
																						AQU
																						FLUTED
																						MOTT. IRON OXIDE
																						GLZ(INT/EXT)
D	0	C	0	1	FAUN	CLAM	SHELL															
D	0	C	0	1	PER	TOB	KAOLIN	5/64	PIPE	PSTEM			UNDEC									
D	0	C	0	1	PER	TOB	SW		PIPE	PBOWL	G/I	G/E										
D	0	C	0	1	UNREC	HARD	FA									MOLD		CLR	GRY			REED PIPE BOWL, FLUTED FLAT FRAG, PLATED

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES	
E	1	A	4		1 D/I		GL	FLAT														
E	1	A	4		1 DOM	BOTT	GL		WINE	BOD												CLR
E	1	A	4		1 FAUN	O	CORAL															OLV
E	1	A	4		1 SAMPL		COMP															
E	1	C	4		1 ARCH	CM	BRICK															
E	1	C	4		1 ARCH	HARD	FA	CUTN														
E	1	C	4		1 FAUN	COCK	SHELL															
E	1	C	4		10 FAUN	FISH	SCALE															
E	1	C	4		3 FLORA		SEED		CORN													
E	1	C	4		1 NAUT	CM	FA	HWN	CANVAS													
E	1	C	4		1 NAUT	CM	TEX		CANVAS													
E	1	C	4		1 NAUT	CM	TEX		OAKUM													
E	1	C	4		1 NAUT	CM	TEX		ROPE													
E	1	C	4		1 NAUT	CM	WOOD		DOWEL													WOODEN PLUG
E	1	C	4		1 SAMPL		COMP															
E	1	D	4		1 FAUN	FISH	SCALE															
E	1	D	4		1 PER	TOB	KAOLIN 4/64		PIPE	PSTEM			UNDEC									
E	1	E	4		1 ARCH	CM	BRICK															
E	1	E	4		1 DOM	BOTT	GL		WINE	BOD												OLV
E	1	E	4		1 FLORA		OPP		STRAW													
E	1	E	4		1 NAUT	CM	TEX		OAKUM													
E	1	E	4		1 SAMPL		COMP															
E	1	G	4		3 ARCH	HARD	FA	CUTN														HAND WROUGHT HEADS
E	1	G	4		1 DOM	FC/S	RE	CW		BOD			UNDEC				SPALL					
E	1	G	4		1 DOM	FC/S	RE	PW	FW	BOD			UNDEC									
F	0	F	0		1 ARCH	HARD	FA	CUTN														HAND HEADED
F	0	F	0		1 ARCH	HARD	FA	HWN														
F	0	F	0		2 DOM	FC/S	RE		HW	RIM			UNDEC				BURN		BUF			
F	0	F	0		1 DOM	FC/S	RE	CW	HW	BOD			UNDEC									
F	0	F	0		1 DOM	FC/S	RE	IS		BASE			UNDEC									
F	0	F	0		1 DOM	FC/S	RE	IS	HW	BOD			TP		DEC/IE	FLORAL						PUR
F	0	F	0		1 DOM	FC/S	RE	PW	FW	BASE			PPLT		DEC/I	FLORAL						GRN
F	0	F	0		1 DOM	FC/S	RE	PW	FW	RIM				SE	DEC/I							BLU

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES		
F	0	F	0	1	DOM	FC/S	SW	WSG	FW	RIM				DD/B			MOLD						
F	0	F	0	1	DOM	FC/S	SW	WSG	HW	BOD			UNDEC										
F	0	F	0	1	DOM	FSTOR	SW	AMSW	HW	BOD	UG/I	SG/E	UNDEC					GRY	GRY		WASTER		
F	0	I	0	2	ARCH	CM	SHMORT																
F	0	I	0	1	DOM	BOTT	GL		WINE	BOD											OLV		
F	0	I	0	1	DOM	FC/S	RE		HW	RIM	LG/I	LG/E	HP	DEC/IE		BURN					BUF	BLU	
F	0	I	0	1	DOM	FSTOR	CE	RW	HW	BOD	LG/I	UG/E	UNDEC								BLK	RED	
F	0	I	0	1	DOM	FSTOR	CE	RW	HW	BOD	LG/I	LG/E	MOTT								BRN	RED	
F	0	I	0	1	FAUN	MAMM	BONE		ARTIO	LONGB													
F	0	I	0	1	FAUN	OYS	SHELL																
F	0	J	0	2	ARCH	CM	MORT																
F	0	J	0	1	ARCH	CM	SCHIST																
F	0	J	0	3	ARCH	HARD	FA	CUTN															
F	0	J	0	1	ARCH	HARD	FA	HWN															
F	0	J	0	8	DOM	FC/S	RE		FW	BOD							BURN				BUF		
F	0	J	0	1	FAUN	CLAM	SHELL																
F	0	J	0	7	FAUN	MAMM	BONE			LONGB													
F	0	J	0	2	UNREC	UNREC	LEATH																
G	0	B	0	1	ARCH	CM	CER		TILE			G/E											
G	0	B	0	1	ARCH	D/P	CER		DPIPE		G/I	G/E											
G	0	B	0	7	ARCH	WG	GL															AQU	
G	0	B	0	1	D/I	L/H	GL		LAMP	RIM							MOLD				CLR	SCALLOPED RIM	
G	0	B	0	1	DOM	BOTT	GL			NECK/LIP	CORKC	LTOOL	VLIP									AMB	
G	0	B	0	4	DOM	BOTT	GL		WINE	BOD												OLV	
G	0	B	0	1	DOM	BOTT	GL	2P	PHARM	NECK/LIP	CORKC	LTOOL	PLIP									AQU	LG. BOTTLE
G	0	B	0	2	DOM	BOTT	GL	BLOWN		BOD												AMB	POSS. INK BOTTLE
G	0	B	0	5	DOM	BOTT	GL	BLOWN		BOD													AQU
G	0	B	0	1	DOM	BOTT	GL	BLOWN		NECK/LIP	CCAP		CCLIP										CLR
G	0	B	0	1	DOM	BOTT	SW		BEER	BASE	AG/I	AG/E						INCIS	BUF	BUF		"B"	
G	0	B	0	1	DOM	CONTN	GL		JAR									EMBOS		WHT		POSS. COLD CREAM JAR	
G	0	B	0	2	DOM	CONTN	GL		JAR	RIM	OCLOS							MOLD		AQU			
G	0	B	0	1	DOM	FC/S	PORC	EURO		BASE													
G	0	B	0	4	DOM	FC/S	PORC	EURO	FW	BASE			UNDEC										MAKER'S MK. ANCHOR

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES
G	0	B	0	3	DOM	FC/S	PORC	EURO	FW	RIM			TP		DEC/I	FLORAL					BLU
G	0	B	0	1	DOM	FC/S	PORC	EURO	FW	RIM							MOLD				
G	0	B	0	3	DOM	FC/S	RE	CW	FW	BOD			UNDEC								
G	0	B	0	1	DOM	FC/S	RE	IS		BASE											MAKER'S
G	0	B	0	1	DOM	FC/S	RE	IS		BASE											M."CHINA/BURS.."
G	0	B	0	1	DOM	FC/S	RE	IS		BASE											MM."TRADE/
G	0	B	0	1	DOM	FC/S	RE	IS		BASE											MADDOC../.ORDSHIP./
G	0	B	0	1	DOM	FC/S	RE	IS		BASE											EN.."
G	0	B	0	1	DOM	FC/S	RE	IS		BASE											MM."PATENT/..ONSTONE/.
G	0	B	0	1	DOM	FC/S	RE	IS	BOWL	RIM/BSE			UNDEC								.ESS&GODDARD"
G	0	B	0	1	DOM	FC/S	RE	IS	CUP	BASE			UNDEC								SHALLOW BOWL
G	0	B	0	5	DOM	FC/S	RE	IS	CUP	BOD			UNDEC								
G	0	B	0	2	DOM	FC/S	RE	IS	FW	BASE			UNDEC								
G	0	B	0	4	DOM	FC/S	RE	IS	FW	BOD			UNDEC								
G	0	B	0	5	DOM	FC/S	RE	IS	FW	RIM			UNDEC								
G	0	B	0	2	DOM	FC/S	RE	IS	HW	BASE			UNDEC								
G	0	B	0	2	DOM	FC/S	RE	IS	HW	BASE											MAKER'S
G	0	B	0	1	DOM	FC/S	RE	IS	HW	RIM			UNDEC								M."IRONSTON.../J.M.
G	0	B	0	6	DOM	FC/S	RE	IS	SAUCER	RIM/BSE			UNDEC								&..."
G	0	B	0	1	DOM	FC/S	RE	PW	FW	BASE			UNDEC								POSS.CHAMBER POT
G	0	B	0	1	DOM	FC/S	RE	PW	FW	BOD			TP		DEC/I						BLU
G	0	B	0	1	DOM	FC/S	RE	RB	HW	KNOB			TP		DEC/I	FLORAL					BLU
G	0	B	0	2	DOM	FC/S	RE	WW		BASE							MOLD				FLOWER KNOB
G	0	B	0	1	DOM	FC/S	RE	WW	FW	BOD			TP		DEC/I						MAKER'S M."...AIN..."
G	0	B	0	1	DOM	FC/S	RE	WW	FW	BOD			TP		DEC/I	LAND					BLU
G	0	B	0	1	DOM	FC/S	RE	WW	FW	RIM			UNDEC								BLU
G	0	B	0	2	DOM	FC/S	RE	WW	HW	BASE			UNDEC								
G	0	B	0	7	DOM	FC/S	RE	WW	HW	BOD			UNDEC								
G	0	B	0	1	DOM	FC/S	RE	WW	HW	BOD			GILD		DEC/E						
G	0	B	0	1	DOM	FC/S	RE	WW	HW	RIM			TP		DEC/I						BLU

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES	
G	0	B	0	6	DOM	FC/S	RE	WW	HW	RIM											UNDEC	
G	0	B	0	1	DOM	FC/S	SW	UNRECG	HW	BOD	G/I	G/E										BUF GRY REFINED, POSS. BURN
G	0	B	0	1	DOM	FSTOR	CE	RW	HW	BOD	LG/I	LG/E										BLK RED
G	0	B	0	1	DOM	FSTOR	RE	YW	HW	BOD					DEC/I							CLR YEL WHT WHT INT.YEL EXT., 20TH C.
G	0	B	0	1	DOM	VESS	GL			BOD												CLR
G	0	B	0	1	DOM	VESS	GL		GOBLET	STEM/BOD												CLR FACETED
G	0	C	0	1	DOM	BOTT	GL			BASE						EMBOS						AQU "A 146" ON BASE (MIRROR IMAGE)
G	0	C	0	1	DOM	BOTT	GL	2P		BOD/BSE				CUP		EMBOS						AQU "...RRMANN.../...SOR TO./WASH.D.C./ REG./...SOLD EMP."
G	0	C	0	1	DOM	BOTT	GL	2P	PHARM	NECK/LIP	CORKC	LTOOL	PLIP									CLR MOLDED LINES AROUND NECK
G	0	C	0	1	DOM	BOTT	GL	2P/SEP	PHARM	WHOLE	CORKC	LTOOL	PLIP		POST							CLR THIN 4" LONG BOTTLE
G	0	C	0	1	DOM	BOTT	GL	BLOWN		BOD						EMBOS						CLR "...E/ ...RK" AND SEAL
G	0	C	0	1	DOM	BOTT	GL	BLOWN		BOD												CLR
G	0	C	0	1	DOM	BOTT	GL	BLOWN	WINE	BASE												OLV
G	0	C	0	1	DOM	FC/S	PORC	EURO	HW	BASE					DEC/E							POL DEC=GRN,BLU,PUR, UNUSUAL DESIGN
G	0	C	0	2	DOM	FC/S	PORC	EURO	PLATE	RIM/BSE			TP		DEC/I	FLORAL						BLU
G	0	C	0	1	DOM	FC/S	RE	WW	PLATE	RIM				SE	DEC/I							BLU
G	0	C	0	1	DOM	FSTOR	CE		HW	RIM	LG/I	G/E	ALBANY									BRN BUF BRN
G	0	C	0	1	DOM	FSTOR	SW	UNRECG	HW	BOD	W/I	W/E	UNDEC									BRN GRY
G	0	C	0	1	DOM	UNREC	GL			BOD												WHT VERY THIN
G	0	C	0	1	DOM	VESS	GL			BASE												CLR
G	0	C	0	1	DOM	VESS	GL			BOD			CUT									CLR PROB. VASE
G	0	C	0	1	DOM	VESS	GL			BOD												WHT FACETED
G	0	C	0	1	DOM	VESS	GL			RIM						MOLD						CLR PROB. VASE OR LAMP
G	0	C	0	1	DOM	VESS	GL			RIM						MOLD						BLU OPAQUE, RIBBED MACHINE MADE
G	0	C	0	1	PER	C/F	LEATH		SHOE	SOLE												1 PC. 4 HOLE, DECAYED
G	0	C	0	1	PER	FAST	PORC		BUTTON													
G	0	C	0	1	PER	TOB	CER		PIPE	PBOWL						MOLD						ORG MOLDED LINE

01/02/80

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES						
G	0	D	0	2	ARCH	HARD	FA	CUTN																			
G	0	D	0	1	D/I	L/H	CLINK																				
G	0	D	0	1	DOM	BOTT	GL			BASE					POST												
G	0	D	0	1	DOM	BOTT	GL		INK	BASE											AQU	"8" ON BASE					
G	0	D	0	5	DOM	BOTT	GL		INK	BOD												AMB					
G	0	D	0	1	DOM	BOTT	GL		INK	NECK/LIP		FIREP										AMB					
G	0	D	0	1	DOM	BOTT	GL		WINE	BASE												AMB					
G	0	D	0	4	DOM	BOTT	GL		WINE	BASE												OLV					
G	0	D	0	1	DOM	BOTT	GL	2P		BOD					POST							OLV					
G	0	D	0	1	DOM	BOTT	GL	2P	PHARM	WHOLE	CORKC	LTOOL	PLIP		POST		EMBOS					AQU	SQUARE BOTTLE, C.1860-1880				
G	0	D	0	1	DOM	FC/S	RE	WW														CLR	"CATARRH REM./DR.SAGE'S/BUFF."C .1860-1880				
G	0	D	0	5	DOM	FC/S	RE	WW	BOWL	RIM												UNDEC	DECAYED				
G	0	D	0	1	DOM	FSTOR	CE	RW	HW	BASE	UG/I	UG/E	UNDEC										UNDEC	SHALLOW BOWL/CROSS MENDS			
G	0	D	0	2	DOM	FSTOR	SW	AMSW	CROCK	BASE	W/I	SG/E	UNDEC										RED				
G	0	D	0	2	DOM	FSTOR	SW	AMSW	CROCK	BOD	W/I	SG/E	HP		DEC/E	FLORAL							GRY GRY	GRY/BRN GLZ, MENDS			
G	0	D	0	2	DOM	FSTOR	SW	AMSW	CROCK	BOD	W/I	SG/E	UNDEC										GRY GRY	GRY/BRN GLZ, MENDS			
G	0	D	0	1	DOM	FSTOR	SW	AMSW	CROCK	RIM	W/I	SG/E	HP		DEC/E	FLORAL	INCIS						GRY GRY	GRY/BRN GLZ, INCISED LINE, MENDS/CROSS MENDS			
G	0	D	0	3	DOM	FSTOR	SW	AMSW	HW	BOD	W/I	SG/E	UNDEC										GRY GRY	BRN BROWN INT. WASH			
G	0	D	0	6	DOM	VESS	GL			BOD													CLR				
G	0	D	0	2	DOM	VESS	GL	PRESS		LID							MOLD							CLR			
G	0	D	0	1	DOM	VESS	GL	PRESS	TUMBLER	BASE			CUT				FLORAL	MOLD						WHT	FANCY LID, BURNED		
G	0	D	0	1	PER	FAST	CA		BUCKLE															CLR			
G	0	D	0	1	PER	FAST	PORC		BUTTON																		
G	0	E	0	1	ARCH	CM	PL																				
G	0	E	0	1	ARCH	HARD	FA	CUTN																			
G	0	E	0	1	ARCH	HARD	FA	CUTN																			
G	0	E	0	1	D/I	L/H	GL		LAMP	BOD																	
																										CLR	UPPER FLOOR

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES	
B	0	B	0	1	DOM	BOTT	GL	AUTO	SODA	BOD/BSE					POST		EMBOS	AQU			"DR. PEPPER/MIN. CONT 6FL.OZS""DURAGLAS" ON BASE	
B	0	B	0	1	DOM	BOTT	GL	BLOWN		BOD											AMB	
B	0	B	0	1	DOM	BOTT	GL	RICKETT	WINE	BASE							EMBOS				OLV	"...T TERD..."
B	0	B	0	1	DOM	BOTT	SW		HW	BASE	AG/I		UNDEC								WHT	WHT
B	0	B	0	1	DOM	FC/S	PORC	SEMI		BASE			UNDEC									
B	0	B	0	1	DOM	FC/S	RE	CW		BASE			UNDEC									
B	0	B	0	1	DOM	FC/S	RE	PW	PLATE	RIM				SE	DEC/I							BLU
B	0	B	0	2	DOM	FC/S	RE	WW		BASE			UNDEC									
B	0	B	0	1	DOM	FC/S	RE	WW	HW	BOD			ANN		DEC/E							BLU
B	0	B	0	1	DOM	FC/S	RE	WW	HW	BOD			HP		DEC/E	FLORAL						POL DEC= RED, GRN
B	0	B	0	1	DOM	FC/S	SW	SHAW	HW	HANDLE	LG/I	LG/E	SD		DEC/I							CLR RED WHT WHT INT. SLIP
B	0	B	0	1	DOM	FC/S	SW	WSG	PLATE	BOD				DD/B			MOLD					
B	0	B	0	1	DOM	FSTOR	CE	RW	HW	BOD	LG/I	UG/E	UNDEC									RED
B	0	B	0	1	DOM	FSTOR	CE	RW	HW	RIM	UG/I	UG/E	UNDEC									RED POSS FLOWER POT
B	0	B	0	1	DOM	FSTOR	SW	AMSW	HW	BASE	W/I	SG/E	UNDEC									GRY GRY BRN INT. BRN WASH
B	0	B	0	1	DOM	UNREC	GL															WHT
B	0	C	0	2	ARCH	CM	BRICK															RED
B	0	C	0	1	ARCH	CM	LTMORT															
B	0	C	0	1	ARCH	CM	SHMORT															
B	0	C	0	1	ARCH	CM	SHPL															
B	0	C	0	1	ARCH	CM	SLATE															
B	0	C	0	1	ARCH	HARD	FA		HOOK													
B	0	C	0	1	ARCH	HARD	FA	CUTN														
B	0	C	0	1	ARCH	HARD	FA	CUTN														
B	0	C	0	2	ARCH	HARD	FA	UNRECN														
B	0	C	0	1	ARCH	HARD	FA	WIREN														
B	0	C	0	1	D/I	L/H	COAL															
B	0	C	0	2	D/I	L/H	COAL															
B	0	C	0	1	D/I	UNREC	WOOD															SLAT
B	0	C	0	1	D/I	UNREC	WOOD															
B	0	C	0	1	DOM	BOTT	GL			BASE					POST							CLR

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES	
B	0	C	0	1	DOM	BOTT	GL			BOD												
B	0	C	0	1	DOM	BOTT	GL			BOD												AQU
B	0	C	0	2	DOM	BOTT	GL		WINE	BOD												AQU
B	0	C	0	1	DOM	BOTT	GL	2P	PHARM	NECK/LIP	CORKC	LTOOL	PLIP									OLV
B	0	C	0	1	DOM	BOTT	GL	BLOWN		BOD												AQU
B	0	C	0	1	DOM	BOTT	SW		BEER	BASE	AG/I	AG/E	UNDEC				EMBOS					AQU
B	0	C	0	1	DOM	FC/S	PORC	EURO	FW	RIM			HP		DEC/I	FLORAL	MOLD					WHT WHT
B	0	C	0	1	DOM	FC/S	PORC	SEMI		BOD			UNDEC									PUR MOLDED FLOWER
B	0	C	0	1	DOM	FC/S	PORC	UNREC	FW	RIM			UNDEC									
B	0	C	0	2	DOM	FC/S	RE	CW	FW	BOD			UNDEC				SPALL					
B	0	C	0	1	DOM	FC/S	RE	IS		BASE			UNDEC									
B	0	C	0	6	DOM	FC/S	RE	IS	FW	BOD			UNDEC									
B	0	C	0	2	DOM	FC/S	RE	IS	FW	RIM			UNDEC									
B	0	C	0	1	DOM	FC/S	RE	IS	FW	RIM			UNDEC									
B	0	C	0	4	DOM	FC/S	RE	IS	HW	BOD			UNDEC									
B	0	C	0	1	DOM	FC/S	RE	IS	HW	BOD			TP		DEC/IE							PUR
B	0	C	0	2	DOM	FC/S	RE	IS	HW	HANDLE			UNDEC									
B	0	C	0	1	DOM	FC/S	RE	IS	HW	RIM			UNDEC									
B	0	C	0	2	DOM	FC/S	RE	IS	HW	RIM/BOD							MOLD					POSS. CHAMBERPOT FLUTED
B	0	C	0	1	DOM	FC/S	RE	PW		BOD			UNDEC									
B	0	C	0	1	DOM	FC/S	RE	PW	HW	BOD			HP		DEC/E		BURN					BLU
B	0	C	0	1	DOM	FC/S	RE	WW		BOD			UNDEC									
B	0	C	0	1	DOM	FC/S	RE	WW		RIM			UNDEC									
B	0	C	0	1	DOM	FC/S	RE	WW		RIM			TP									BLU
B	0	C	0	1	DOM	FC/S	RE	WW	FW	BASE			TP		DEC/I							PUR
B	0	C	0	2	DOM	FC/S	RE	WW	HW	BOD			UNDEC									
B	0	C	0	2	DOM	FC/S	RE	WW	HW	BOD			TP		DEC/IE							BLU
B	0	C	0	1	DOM	FC/S	RE	WW	HW	BOD			TP		DEC/E							BLU
B	0	C	0	2	DOM	FC/S	RE	WW	PLATE	RIM				SE	DEC/I							BLU
B	0	C	0	1	DOM	FC/S	RE	YW		BOD			UNDEC									
B	0	C	0	1	DOM	FSTOR	CE	DEVONGT	HW	BOD	LG/I	LG/E	UNDEC				BURN					YEL PUR
B	0	C	0	1	DOM	FSTOR	SW	UNRECG	HW	BOD	W/I	SG/E	UNDEC									GRY GRY
B	0	C	0	1	DOM	VESS	GL			RIM												BRN W/ATTACHED MORTAR CLR

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES			
B	O	C	0	1	DOM	BOTT	GL	AUTO	MILK	NECK/LIP	OCLOS						EMBOS	CLR			"SEAL.../P..."			
B	O	C	0	1	DOM	BOTT	GL	AUTO	MILK	WHOLE	OCLOS				POST		EMBOS	CLR			"ALEXANDRIA DAIRY/ PRODUCTS CO. INC./ONE PINT LIQU"			
C	O	L	0	1	ACT	PM	CE	RW		BASE		UG/E									RED	SPALL		
C	O	L	0	5	ACT	PM	CE	RW		BASE	G/I	UG/E									RED	BURNED OR DECAYED GLAZE		
C	O	L	0	19	ACT	PM	CE	RW		BOD		UG/E									RED	SPALL		
C	O	L	0	1	ACT	PM	CE	RW	BOWL	RIM	LG/I	UG/E	UNDEC								CLR	RED		
C	O	L	0	7	ACT	PM	CE	RW	CROCK	BOD	LG/I	UG/E	UNDEC								CLR	BUF		
C	O	L	0	2	ACT	PM	CE	RW	CROCK	RIM	LG/I	UG/E	UNDEC								CLR	BUF		
C	O	L	0	4	ACT	PM	CE	RW	FW	BOD	LG/I	UG/E	UNDEC								GRN	BUF	GREENISH-YELLOW GLAZE	
C	O	L	0	1	ACT	PM	CE	RW	FW	BOD	LG/I	UG/E	SD	DEC/I							CLR	BUF	GRN	SLIP W/ APPLE GREEN DEC
C	O	L	0	1	ACT	PM	CE	RW	HW	BASE	LG/I	UG/E	UNDEC								BRN	RED		
C	O	L	0	1	ACT	PM	CE	RW	HW	BASE	LG/I	UG/E	UNDEC								BRN	RED		
C	O	L	0	2	ACT	PM	CE	RW	HW	BASE	LG/I	LG/E	UNDEC								BRN	RED		
C	O	L	0	1	ACT	PM	CE	RW	HW	BASE	LG/I	UG/E	UNDEC								GRN	RED	COPPER OXIDE INT. GLAZE	
C	O	L	0	9	ACT	PM	CE	RW	HW	BOD	LG/I	UG/E	UNDEC								BRN	RED		
C	O	L	0	5	ACT	PM	CE	RW	HW	BOD	LG/I	LG/E	UNDEC								BRN	RED		
C	O	L	0	55	ACT	PM	CE	RW	HW	BOD	LG/I	UG/E	UNDEC								BRN	RED		
C	O	L	0	45	ACT	PM	CE	RW	HW	BOD	LG/I	LG/E	UNDEC								BRN	RED		
C	O	L	0	1	ACT	PM	CE	RW	HW	BOD	LG/I	LG/E	UNDEC								BRN	RED	CLEAR EXT. GLAZE	
C	O	L	0	1	ACT	PM	CE	RW	HW	BOD	LG/I	LG/E	UNDEC								BRN	RED	W/ HOLE PUNCHED THROUGH	
C	O	L	0	3	ACT	PM	CE	RW	HW	BOD	LG/I	LG/E	SD	DEC/I							CLR	RED	YEL	MOTTLED
C	O	L	0	1	ACT	PM	CE	RW	HW	BOD	LG/I	LG/E	UNDEC								POL	BUF		COPPER OXIDE INT. GLAZE, BROWN EXT GLZ.
C	O	L	0	5	ACT	PM	CE	RW	HW	BOD	LG/I	LG/E	MOTT	DEC/IE							CLR	BUF	BRN	
C	O	L	0	3	ACT	PM	CE	RW	HW	BOD	LG/I	LG/E	UNDEC								CLR	RED		
C	O	L	0	1	ACT	PM	CE	RW	HW	BOD	LG/I	LG/E									BRN	RED		YELLOWISH-BROWN INT GLZ

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES	
C	O	L	0	1	ACT	PM	CE	RW	HW	BOD	LG/I	UG/E	MOTT					BRN	RED		MOTTLED INTERIOR GLAZE	
C	O	L	0	1	ACT	PM	CE	RW	HW	BOD	G/I	LG/E						BRN	RED		BURNED, INT. GLZ RUINED	
C	O	L	0	1	ACT	PM	CE	RW	HW	HANDLE		LG/E	UNDEC					BRN	RED			
C	O	L	0	4	ACT	PM	CE	RW	HW	RIM	LG/I	UG/E	UNDEC					BRN	RED			
C	O	L	0	1	ACT	PM	CE	RW	HW	RIM	LG/I	LG/E	UNDEC					BRN	RED			
C	O	L	0	1	ACT	PM	CE	RW	HW	RIM	LG/I	LG/E	UNDEC					CLR	RED			
C	O	L	0	12	ACT	PM	CE	RW	HW	RIM	LG/I	UG/E	UNDEC					BRN	RED		ROUNDED RIM	
C	O	L	0	4	ACT	PM	CE	RW	HW	RIM	LG/I	LG/E	UNDEC					BRN	RED		STRAIGHT RIM	
C	O	L	0	1	ACT	PM	CE	RW	HW	RIM	LG/I	LG/E	UNDEC					BRN	RED		ROUNDED RIM	
C	O	L	0	1	ACT	PM	CE	RW	HW	RIM	LG/I	LG/E	UNDEC					CLR	RED			
C	O	L	0	1	ACT	PM	CE	RW	JUG	RIM	LG/I	LG/E	UNDEC					BRN	RED		NARROW MOUTH	
C	O	L	0	1	ACT	PM	CE	RW	MILKPAN	BASE	LG/I	UG/E	TRAIL		DEC/I			CLR	RED	YEL		
C	O	L	0	3	ACT	PM	CE	RW	MILKPAN	BOD	LG/I	UG/E	TRAIL		DEC/I			CLR	RED	YEL		
C	O	L	0	7	ACT	PM	CE	RW	MILKPAN	BOD	LG/I	UG/E	SD		DEC/I			CLR	BUF	YEL	PLAIN SLIP	
C	O	L	0	1	ACT	PM	CE	RW	MILKPAN	RIM	LG/I	UG/E	TRAIL		DEC/I			CLR	RED	YEL		
C	O	L	0	1	ACT	PM	CE	RW	MILKPAN	RIM	LG/I	UG/E	SD		DEC/I			CLR	BUF	YEL	PLAIN SLIP	
C	O	L	0	4	ACT	PM	CER										BURN				RED	
C	O	L	0	6	ACT	PM	CER															
C	O	L	0	1	ACT	PM	CER		BISQUE	BASE												
C	O	L	0	1	ACT	PM	CER		BISQUE	BOD												
C	O	L	0	4	ACT	PM	CER		HW	BOD	UG/I	UG/E					INCIS				RED	
C	O	L	0	14	ACT	PM	CER	KILNFRN														
C	O	L	0	33	ACT	PM	CER	KILNFRN	CSHAPE													GRY
C	O	L	0	13	ACT	PM	CER	KILNFRN	FIREBAR													
C	O	L	0	84	ACT	PM	CER	KILNFRN	SAGGERS													GRY
C	O	L	0	16	ACT	PM	CER	KILNFRN	STACKTIL													RED
C	O	L	0	14	ACT	PM	CER	KILNFRN	STILT													GRY
C	O	L	0	4	ACT	PM	CER	KILNFRN	WEDGE													RED
C	O	L	0	2	ACT	PM	SW	AMSW	CROCK	RIM	UG/I	SG/E	UNDEC					GRY	GRY			
C	O	L	0	1	ACT	PM	SW	AMSW	CROCK	RIM	W/I	SG/E	UNDEC					GRY	GRY			BROWN INT WASH
C	O	L	0	1	ACT	PM	SW	AMSW	CROCK	RIM	W/I	SG/E	UNDEC					GRY	GRY			BROWN INT WASH
C	O	L	0	1	ACT	PM	SW	AMSW	CROCK	RIM	W/I	SG/E						INCIS	BRN			BROWN INT. WASH

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES	
C	0	L	0	1	ACT	PM	SW	AMSW	CROCK	RIM	UG/I	SG/E	UNDEC					BRN				
C	0	L	0	1	ACT	PM	SW	AMSW	CROCK	RIM	W/I	SG/E					INCIS	BRN				BROWN INT. WASH
C	0	L	0	1	ACT	PM	SW	AMSW	HW		UG/I	SG/E	UNDEC					GRY	GRY			WARPED
C	0	L	0	1	ACT	PM	SW	AMSW	HW	BASE	UG/I	SG/E	UNDEC					GRY	GRY			
C	0	L	0	3	ACT	PM	SW	AMSW	HW	BASE	UG/I	SG/E	UNDEC					GRY	GRY			
C	0	L	0	3	ACT	PM	SW	AMSW	HW	BASE	W/I	SG/E	UNDEC					BRN				BROWN INT. WASH
C	0	L	0	31	ACT	PM	SW	AMSW	HW	BOD	UG/I	SG/E	UNDEC					GRY	GRY			
C	0	L	0	4	ACT	PM	SW	AMSW	HW	BOD	UG/I	SG/E					INCIS	GRY	GRY			INCISED LINES
C	0	L	0	14	ACT	PM	SW	AMSW	HW	BOD	W/I	SG/E	UNDEC					GRY	GRY			BROWN INT WASH
C	0	L	0	22	ACT	PM	SW	AMSW	HW	BOD	UG/I	SG/E	UNDEC					GRY	GRY			
C	0	L	0	1	ACT	PM	SW	AMSW	HW	BOD	UG/I	SG/E					INCIS	GRY	GRY			
C	0	L	0	14	ACT	PM	SW	AMSW	HW	BOD	W/I	SG/E	UNDEC					GRY	GRY			BROWN INT WASH
C	0	L	0	2	ACT	PM	SW	AMSW	HW	BOD	W/I	SG/E					INCIS	GRY	GRY			BROWN INT WASH
C	0	L	0	17	ACT	PM	SW	AMSW	HW	BOD	UG/I	SG/E	UNDEC					BRN				
C	0	L	0	4	ACT	PM	SW	AMSW	HW	BOD	UG/I	SG/E					INCIS	BRN				
C	0	L	0	2	ACT	PM	SW	AMSW	HW	BOD	W/I	SG/E					INCIS	BRN				BROWN INT. WASH
C	0	L	0	8	ACT	PM	SW	AMSW	HW	BOD	W/I	SG/E	UNDEC					BRN				BROWN INT. WASH
C	0	L	0	6	ACT	PM	SW	AMSW	HW	BOD	UG/I	SG/E	UNDEC					BRN				
C	0	L	0	3	ACT	PM	SW	AMSW	HW	BOD	W/I	SG/E	UNDEC					BRN				BROWN INT. WASH
C	0	L	0	2	ACT	PM	SW	AMSW	HW	BOD	UG/I	SG/E	HP		DEC/E			GRY		BLU		
C	0	L	0	1	ACT	PM	SW	AMSW	HW	BOD/HAND	W/I	SG/E	UNDEC					GRY	GRY			BROWN INT WASH
C	0	L	0	3	ACT	PM	SW	AMSW	HW	HANDLE		SG/E	UNDEC					GRY	GRY			
C	0	L	0	1	ACT	PM	SW	AMSW	HW	HANDLE		SG/E	UNDEC					GRY	GRY			
C	0	L	0	3	ACT	PM	SW	AMSW	HW	HANDLE	UG/I	SG/E	UNDEC					BRN				BODY, LG. HANDLE
C	0	L	0	2	ACT	PM	SW	AMSW	HW	HANDLE	UG/I	SG/E	UNDEC					BRN				SML. HANDLE
C	0	L	0	1	ACT	PM	SW	AMSW	HW	HANDLE	UG/I	SG/E	UNDEC					BRN				
C	0	L	0	1	ACT	PM	SW	AMSW	HW	HANDLE		SG/E	HP		DEC/E			GRY		BLU		
C	0	L	0	1	ACT	PM	SW	AMSW	HW	RIM	UG/I	SG/E	UNDEC					GRY	GRY			
C	0	L	0	1	ACT	PM	SW	AMSW	JUG	BASE	W/I	SG/E	UNDEC					GRY	GRY			BROWN INT WASH
C	0	L	0	3	ACT	PM	SW	AMSW	JUG	BOD/HAND	UG/I	SG/E	UNDEC					BRN				
C	0	L	0	1	ACT	PM	SW	AMSW	JUG	BOD/HAND	UG/I	SG/E	UNDEC					BRN				
C	0	L	0	2	ACT	PM	SW	AMSW	JUG	RIM	W/I	SG/E					INCIS	GRY	GRY			BROWN INT WASH, NARROW MOUTH

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES	
C	0	L	0	1	ACT	PM	SW	AMSW	PITCHER	RIM	UG/I	SG/E	UNDEC					GRY	GRY			
C	0	L	0	1	ACT	PM	SW	AMSW	PITCHER	RIM	W/I	SG/E	UNDEC					GRY	GRY		BROWN INT WASH	
C	0	L	0	1	ACT	PM	SW	AMSWLOW		BASE	UG/I	SG/E	UNDEC					YEL	BUF		YELLOWISH GLAZE	
C	0	L	0	2	ACT	PM	SW	AMSWLOW	CROCK	RIM	UG/I	SG/E	UNDEC					GRY			GRAY/RED MIXED BODY	
C	0	L	0	3	ACT	PM	SW	AMSWLOW	CROCK	RIM	UG/I	SG/E	UNDEC					GRY			GRAY/RED MIXED BODY	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	CROCK	RIM	W/I	SG/E	UNDEC					BRN			MIXED BODY BROWN INT. WASH	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	CROCK	RIM	W/I	SG/E	UNDEC					BRN			MIXED BODY, BROWN INT. WASH	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	HW	BASE	UG/I	SG/E	UNDEC					BRN			MIXED BODY	
C	0	L	0	4	ACT	PM	SW	AMSWLOW	HW	BASE	UG/I	SG/E	UNDEC					BRN			MIXED BODY	
C	0	L	0	2	ACT	PM	SW	AMSWLOW	HW	BASE	UG/I	SG/E	MOTT					BUF	BUF		LIGHT MOTTLED EXTERIOR	
C	0	L	0	3	ACT	PM	SW	AMSWLOW	HW	BASE	UG/I	W/E	UNDEC							RED		
C	0	L	0	3	ACT	PM	SW	AMSWLOW	HW	BASE	W/I	W/E	UNDEC							RED		
C	0	L	0	54	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	SG/E	UNDEC					GRY			GRAY/RED MIXED BODY	
C	0	L	0	2	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	SG/E					INCIS	GRY			GRAY/RED MIXED BODY	
C	0	L	0	10	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	SG/E	UNDEC					GRY			GRAY/RED MIXED BODY	
C	0	L	0	11	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	SG/E	UNDEC					BRN			MIXED BODY	
C	0	L	0	2	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	SG/E					INCIS	BRN			MIXED BODY	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	HW	BOD	W/I	SG/E	UNDEC					BRN			MIXED BODY BROWN INT. WASH	
C	0	L	0	6	ACT	PM	SW	AMSWLOW	HW	BOD	W/I	SG/E	UNDEC					BRN			MIXED BODY, BROWN INT. WASH	
C	0	L	0	116	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	SG/E	UNDEC					BRN			MIXED BODY	
C	0	L	0	4	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	SG/E	UNDEC					BRN			BUFF BODY, MICA IN CLAY	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	SG/E	HP		DEC/E			GRY	BLU		GRAY/RED MIXED BODY	
C	0	L	0	5	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	SG/E	UNDEC					GRY	GRY		VERY LIGHT BODY/ GLAZE	
C	0	L	0	2	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	SG/E	MOTT					PNK	PNK	BRN		
C	0	L	0	7	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	SG/E	MOTT					BUF	BUF		LIGHT MOTTLED EXTERIOR	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	HW	BOD	W/I	UG/E	UNDEC							GRY		BROWN INT. WASH
C	0	L	0	1	ACT	PM	SW	AMSWLOW	HW	BOD	W/I	SG/E	UNDEC					BLK	RED		BROWN INT. WASH	
C	0	L	0	4	ACT	PM	SW	AMSWLOW	HW	BOD	W/I	UG/E	UNDEC							RED		

01/02/80

APPENDIX B
HARBORSIDE
ARTIFACT INVENTORY

SEC	UNT	STR	FEA	BCH	GROUP	CLASS	MATERL	TYPOLGY	FUNCTION	SEGMENT	SUB1	SUB2	SUB3	SUB4	SUB5	SUB6	SUB7	GCL	BCL	DCL	NOTES			
C	0	L	0	13	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	W/E	UNDEC								RED			
C	0	L	0	1	ACT	PM	SW	AMSWLOW	HW	BOD	G/I	G/E	UNDEC				BURN				RED			
C	0	L	0	1	ACT	PM	SW	AMSWLOW	HW	BOD	UG/I	SG/E	MOTT		DEC/E						GRY	RED	YELLOW MOTTLING	
C	0	L	0	2	ACT	PM	SW	AMSWLOW	HW	BOD/HAND	W/I	SG/E	UNDEC								BRN		MIXED BODY, LG. HANDLE, BROWN INT. WASH	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	HW	BOD/HAND	UG/I	SG/E	UNDEC								BRN		MIXED BODY	
C	0	L	0	10	ACT	PM	SW	AMSWLOW	HW	BOD/HAND	UG/I	SG/E					INCIS				BRN		MIXED BODY	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	HW	HANDLE		SG/E	UNDEC								BRN		MIXED BODY, SML. HANDLE	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	HW	HANDLE		SG/E	UNDEC								BRN		MIXED BODY, LG. HANDLE	
C	0	L	0	2	ACT	PM	SW	AMSWLOW	HW	HANDLE		SG/E	UNDEC								BRN		MIXED BODY, LG. HANDLE	
C	0	L	0	3	ACT	PM	SW	AMSWLOW	HW	HANDLE		SG/E	UNDEC								BRN		MIXED BODY, SML. HANDLE	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	HW	HANDLE		SG/E	UNDEC								GRY		MIXED BODY, SML. HANDLE	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	HW	HANDLE		SG/E	HP		DEC/E						GRY	BLU	GRAY/RED MIXED BODY	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	JUG	BASE	UG/I	SG/E	UNDEC								GRY		GRAY/RED MIXED BODY	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	JUG	BASE	UG/I	SG/E	UNDEC								BRN		MIXED BODY	
C	0	L	0	2	ACT	PM	SW	AMSWLOW	JUG	BOD	UG/I	SG/E	UNDEC								BRN		MIXED BODY	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	JUG	BOD/HAND	UG/I	SG/E	UNDEC								GRY		GRAY/RED MIXED BODY	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	JUG	RIM	UG/I	SG/E	UNDEC								GRY		GRAY/RED MIXED BODY, NARROW MOUTH	
C	0	L	0	4	ACT	PM	SW	AMSWLOW	JUG	RIM	W/I	SG/E					INCIS				BRN		MIXED BODY, BROWN INT. WASH	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	JUG	RIM/BOD	UG/I	SG/E	UNDEC								GRY		GRAY/RED MIXED BODY, NARROW MOUTH	
C	0	L	0	1	ACT	PM	SW	AMSWLOW	PITCHER	RIM/HAND	UG/I	SG/E	UNDEC								GRY		GRAY/RED MIXED BODY	
C	0	L	0	2	ACT	PM	SW	UNRECB	HW	BOD	LG/I	SG/E					INCIS				BRN	BUF		
C	0	L	0	1	ACT	PM	SW	UNRECG	HW	BOD	W/I	SG/E	HP		DEC/E		INCIS				GRY	GRY	BLU	INCISED DEC AND COBALT BLUE, BROWN INT WSH
C	0	L	0	5	ARCH	CM		BRICK																
C	0	L	0	7	ARCH	CM		BRICKG														RED		
																						RED		HIGHLY FIRED

HARBORSIDE DATABASE CODES

GROUP

ACT	Activity
ARCH	Architectural
D/I	Domestic/Industrial
DOM	Domestic
ELECT	Electrical
FAUN	Fauna
FLORA	Floral
IND	Industrial
MED	Medical
NAUT	Nautical
PER	Personal
PREH	Prehistoric
SAMPL	Sample
UNREC	Unrecognizable

CLASS

BI	Biface (prehistoric)
BIRD	Bird Bone
BOTT	Bottle
C/F	Clothing and Footwear
C/T	Coin and Token
CM	Construction Material
COCK	Cockle
CONTN	Container
D/P	Drainage and Plumbing
F	Flake (prehistoric)
FAST	Fastener
FC/S	Food Consumption and Serving
FISH	Fish Bone
FPREP	Food Preparation
FSTOR	Food Storage
G/H	Grooming and Hygiene
G/MM	Glass and Metal Manufacturing
HARD	Hardware
L/H	Lighting and Heating
MACHN	Machine Part
MAMM	Mammal Bone
O	Other
OYS	Oyster
PM	Pottery Manufacturing
REC	Recreation
TOB	Tobacco
UNREC	Unrecognizable
VESS	Vessel
WG	Window Glass

MATERIAL

BRICK	Brick, Unglazed
BRICKG	Brick, Glazed
CA	Cupreous Alloy
CE	Coarse Earthenware
CER	Ceramic
CLINK	Clinker
COMP	Composite Materials
FA	Ferrous Alloy
GL	Glass
LEATH	Leather
LTMORT	Later Mortar
MARB	Marble
MORT	Mortar
OPP	Other Plant Parts
PL	Plaster
PLSTC	Plastic
PORC	Porcelain
QTZT	Quartzite
QU	Quartz
RE	Refined Earthenware
SHMORT	Shell Mortar
SHPL	Shell Plaster
STEAT	Steatite
SW	Stoneware
SYN	Synthetic
TEX	Textile
UNREC	Unrecognizable

TYOLOGY

2P	2 Piece Mold
2P/SEP	2 Piece Mold-Separate Base
AMSW	American Stoneware
AUTO	Automatic
BLOWN	Blown in Mold
CHIN	Chinese
CUTN	Cut Nail
CUTS	Cut Spike
CW	Creamware
DEVONGT	North Devon Gravel Tempered
EURO	European Porcelain
FREE	Free Mold
HWN	Hand Wrought Nail
HWS	Hand Wrought Spike
IS	Ironstone
PRESS	Press Mold
PW	Pearlware

RB	Rockingham/Bennington
RICKETT	Rickett's-Type 3 Piece Mold
RW	Redware
SAUTO	Semi-Automatic
SHAW	Shaw Ware
TYPE#	South's Button Typology 1-32
UNREC	Unrecognizable Porcelain
UNRECB	Unrecognizable Brown Stoneware
UNRECG	Unrecognizable Grey Stoneware
UNRECN	Unrecognizable Nail
UNRECS	Unrecognizable Spike
WIREN	Wire Nail
WIRES	Wire Spike
WSG	White Salt Glazed
WW	Whiteware
YW	Yellow Ware

FUNCTION

ARTIO	Artiodactyla
CANVASN	Canvas Nail
CHAMBER	Chamber Pot
COLLAR	Collar stay
CSHAPE	C-Shape Kiln Furniture
DPIPE	Drain Pipe
DVESS	Dessert Vessel
FW	Flat Ware
HW	Hollow ware
INK	Ink Bottle
INSUL	Electrical Insulator
LAMP	Lamp Chimney Glass
LIDLINR	Lid Liner
LMAMM	Large Mammal
PHARM	Pharmaceutical
PIPE	Tobacco Pipe
SOUPB	Soup Bowl
STACKTIL	Stacking Tile (Kiln Furniture)
TBOWL	Tea Bowl
TCUP	Tea Cup
THERM	Thermometer
TOOTHBR	Tooth Brush

SEGMENT

BOD	Body
BOD/BSE	Body and Base
BOD/HAND	Body and Handle
LONGB	Long Bone
PBOWL	Pipe Bowl
PELV	Pelvis

PSTEM	Pipe Stem
RIM/BOD	Rim and Body
RIM/BSE	Rim and Base
RIM/HAND	Rim and Handle
SOLE/HL	Sole and Heel of Shoe
STEM/BOD	Stem and Body

SUBTECH 1

AG/I	Alkaline Glaze Interior
CCAP	Crown Cap
CORKC	Cork Closure
G/I	Glazed Interior
LG/I	Lead Glaze Interior
OCLOS	Other Closure
TG/I	Tin Glaze Interior
UG/I	Unglazed Interior
W/I	Wash Interior

SUBTECH 2

AG/E	Alkaline Glaze Exterior
BLOB	Blob Top
FIREP	Firepolished
G/E	Glazed Exterior
LG/E	Lead Glaze Exterior
LTOOL	Lipping Tool
SG/E	Salt Glaze Exterior
TG/E	Tin Glaze Exterior
UG/E	Unglazed Exterior
W/E	Wash Exterior

SUBTECH 3

ALBANY	Albany Slip
ANN	Annular
CCLIP	Crown Cap Lip
DECAL	Decalomania
DLIP	Davis Lip
FLOW	Flow Blue
GILD	Gilded
HP	Hand Painted
MOTT	Mottled
PLIP	Patent Lip
PPLT	Peasant Pallette
SD	Slip Decorated
SP	Sponge Ware
TRAIL	Trailed Slipware

TP	Transfer Printed
TP/G	Transfer Printed and Gilded
UNDEC	Undecorated
VLIP	V-Shaped Lip

SUBTECH 4

BAND	Banded
DD/B	Dot, Diaper and Basket
DSTRING	Down Tooled String Rim
ORIM	Other Rim
RP	Rim Painted
SE	Shell Edge

SUBTECH 5

CUP	Cup Bottom
DEC/E	Decoration on Exterior
DEC/I	Decoration on Interior
DEC/IE	Decoration on Interior and Exterior
GTIP	Glass Tipped Pontil
POST	Post Bottom
STIP	Sand Tipped Pontil

SUBTECH 6

GEO	Geometric
LAND	Landscape
ORIENT	Oriental
RMNTC	Romantic

SUBTECH 7

BURN	Burned
BUTCH	Butchered
COMP	Composite Material
EMBOS	Embossed
INCIS	Incised
MOLD	Molded
MOLT	Molten
OG	Overglaze
SPALL	Spalled
WORK	Worked

**COLOR:
BODY, GLAZE AND DECORATION**

AMB	Amber
AQU	Aqua
BLK	Black
BLU	Blue
BRN	Brown
BUF	Buff
CLR	Clear
GLD	Gold
GRN	Green
GRY	Grey
OLV	Olive
ORG	Orange
PNK	Pink
POL	Polychrome
PUR	Purple
SIL	Silver
WHT	White
YEL	Yellow

APPENDIX C

VIRGINIA DIVISION OF HISTORIC LANDMARKS

SITE FORM



VIRGINIA
DIVISION OF HISTORIC LANDMARKS
RESEARCH CENTER FOR ARCHAEOLOGY
ARCHAEOLOGICAL SITE INVENTORY FORM

County

Alexandria

Name of Site: Harborside

Site Number: 44AX114

Type of Site: Historic: Industrial,
 Military

Cultural Affiliation: Late 18th to 20th Century

State/National Register Status:

USGS Map Reference:

U.T.M. Zone 18 Easting 322780 Northing 4296350

(Attach photocopy of appropriate section of USGS 7.5 minute series topographical map showing site boundaries.)

Owner/Address/Telephone: 400 S. Union St. Joint Venture, 109 Oronoco St., Alexandria, VA.

Tenant/Address/Telephone: Same

Site Informant/Address/Telephone:

Surveyed By (name, address, affiliation, date): Dennis Knepper April, 1989

Engineering-Science, Inc.

1133 15th Street, N.W.

Washington, D.C. 20005

General Environment and Nearest Water Source:

Urban; made land; Potomac River forms east boundary.

Dimensions of Site: 355' (N/S) x 450' (E/W)

Site Description and Survey Techniques: Backhoe trenching using a non-systematic survey procedure based on findings of archival research. Limited hand excavations conducted within intact strata or beneath intact features.

Condition and Present Land Use: One half of lot abandoned and clear; one half used as an open public parking lot and electric power substation. Property slated for development.

Specimens Obtained and Depository: Approximately 1,700 fragments of late 18th through early 20th century glass and ceramic - very few in other than small pieces. One turn of 19th century bayonet. One quartzite biface, one quartz flake - questionable contexts. Conservation at Engineering-Science, Inc., Washington, D.C., to be eventually deposited with Alexandria Archaeology, Alexandria, VA.

Specimens Reported and Owners/Addresses:

None known.

Map Sheet

Alexandria, VA-DC-MD

Site Number 44AX114

Other Documentation (field notes, survey/excavation reports, historical accounts and maps, etc.) and Depository:

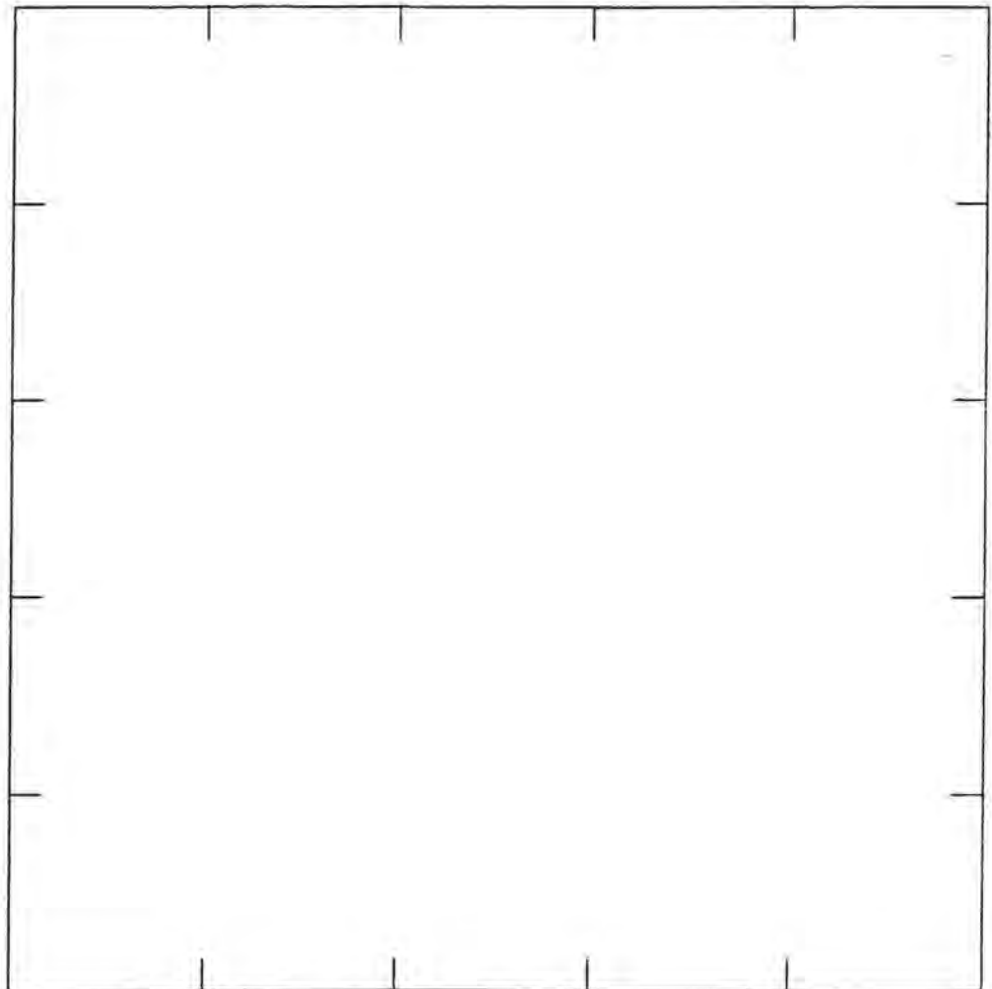
Various notes, historic maps, etc. on file at Engineering-Science, Inc., Washington, D.C. Technical report of survey in preparation.

Photographic Documentation and Depository: 12 x 36 exposure rolls of slide film- on file at Engineering-Science, Inc., Washington, D.C.

Recommendations:

Further investigation of areas of site under direct development impact is recommended.

Additional Comments:



Scale:

Form Completed By (name, address, affiliation, date):

Dennis Knepper Engineering-Science, Inc.
1133 15th Street, N.W.
Washington, D.C. 20005

DHL Number Assigned By:

Tony Opperman

Date:

6/22/89

APPENDIX D
DEED ABSTRACTS

ROBERDEAU'S WHARF and HUNTER'S SHIPYARD

bounded by Wolfe Street on the North
by Water Street on the West
by Wilkes Street on the South
by Potomac River on the East

9 May 1763

Trustees of Town of Alexandria
to
John Hughes Lots 93 and 94 for £60.10
Fairfax County Deeds F:439, 441, 445. 451 [missing -
see L:282 and Trustees Minute Book (TM) page 50]

Trustees of Town of Alexandria
to
John Potts Lot 95 [TM:50, no deed found]

18 Mar. 1774

Sarah Hughes, widow, and Stephen Paschall, Exrs. of
John Hughes, dec., late of Merion, Philadelphia
County, Pennsylvania, who was one of the sons of John
Hughes, Esq., late Collector of His Majesty's Customs
at Charlestown, South Carolina, dec.
to
Daniel Roberdeau of the City of Philadelphia

WHEREAS: by deed 30 May 1765 John Muir and Harry
Piper, two of the Trustees of the Town of Alexandria,
sold to John Hughes, the elder, one half acre bounded
by Potomack River and Wolfe Street and numbered in
plan and survey of said town No. 93 and 94, and one
other half acre lot bounded by Wolfe and Water Streets
and numbered 95.

John Hughes by will 31 January 1772 devised residue of
estate to sons John and Isaac; they sold the lots for
£400 lawful money of Pennsylvania. [Fairfax Deeds
L:282]

20 Dec. 1774

John Alexander of Stafford County, Virginia
to
Andrew Stewart and William Herbert, joint merchants
and partners, and
John Fitzgerald and Valentine Peers, merchants
all of Alexandria, for rents, covenants and agreements
hereinafter mentioned

two lots situate on and adjoining the the South side
of two other lots of land lying in the town of
Alexandria and represented in the plan of the town by
lots 94 and 95, the westernmost of the hereby granted
lots containing half an acre, the easternmost not so

much, bounded as follows:

beg. SW corner lot 95 on Water Street, then running easterly with the south side of lots 94 and 95 to Potomac River and returning from thence to beg. and running from beginning southerly with a line at right angles with first line the same distance that is contained in the west side of said lot 95, viz. 176', thence easterly with line parallel to first to Potomac River, then northerly up river meanders to termination of first mentioned line at River Potomac

paying L39.10 yearly to John Alexander forever and within two years Stewart, Herbert, Fitzgerald and Peers are to build, or cause to be built on each lot a brick, stone or wooden framed house 20' square each, so as to cover 400 square feet, with a brick or stone chimney to each.

John Alexander agrees that a street 66' wide by the name of Wilkes Street shall be laid out and be forever kept open on the south side of the hereby granted two lots, beginning at Potomac River and running from thence to the westward and parallel to Wolfe Street until it extends 66' beyond two lots or 1/2 acre of land lying to the westward of Pitt Street in the same town, that from thence a street by the name of St. Asaph Street running northerly and parallel with Pitt Street aforesaid and of same width of Wilkes Street, shall be laid out and forever be kept open, till it intersects a straight line produced from Cameron Street in the said town; that Water, Fairfax, Royall and Pitt streets in the town shall be produced and expanded from the place of their last termination until they communicate with and intersect Wilkes Street; that Wolfe, Duke, Prince and King Streets running nearly east and west, in like manner shall be produced and expanded until intersect Saint Asaph Street, and

that the said two streets called Wilkes and Saint Asaph Streets and the new produced and extended parts of the said several other streets aforesaid shall be for the use and benefit of the said Andrew Stewart, William Herbert, John Fitzgerald and Valentine Peers...in common with the inhabitants of the said town of Alexandria and others.
[Fairfax County Deed Book M:127]

19 Jan. 1784 Valentine Peers and Margaret his wife, of Alexandria to
William Lyles
for £100 one undivided fourth part of two piece of ground granted by John Alexander....

beg. east side of Water Street at distance of 176'6"
to southward of intersection of Wolfe Street and at NW
corner of lot 95

Eastwardly with 94 and 95 to Potomac River, then
back to beg.

Southwardly at right angle with first line the
same distance of west side of 95, viz. 176'6"

Eastwardly parallel first line to Potomac River
Northwardly up River to termination first line

and the water and landing places and every advantage
to the undivided fourth part of the said two pieces of
ground begonging or in anywise appertaining and also
the right of digging and taking away the dirt from
Wilkes Street in common with Andrew Stewart, William
Herbert and John Fitzgerald.

[Fairfax Deed Book O:440]

1 Dec. 1784

William Herbert of Town of Alexandria and
John Potts, Jr. of Philadelphia, Pennsylvania
and

John Fitzgerald and William Lyles, Jr. of Town of
Alexandria

Andrew Stewart died; by will directed his Exrs. to
dispose of lots; Exrs. sold lot to John Potts, Jr.
All parties agree to division:

to John Fitzgerald and William Lyles, Jr.

(1) beg. on Water Street at Wilkes Street

Northwardly with Water Street 88'3 1/2"

Eastwardly parallel Wilkes as far as Union

Southwardly with Union to Wilkes

Westwardly with Wilkes to beginning

(2) beg. east side Union 88'3 1/2" north of
intersection of Wilkes

Eastwardly parallel Wilkes as far as lot extends
into Potomac, then back to beginning

Northwardly with Union 88'3 1/2" to line lot 94

Eastwardly with line of lot and line parallel

Wilkes as far as lot extends into Potomac

Southwardly with Potomac to termination of
first line

Fitzgerald and Lyles to pay to John Alexander and
heirs £19.15 current money of Virginia yearly.

to William Herbert and John Potts, Jr.

(1) beg. Water Street 88'3 1/2" north intersection
Wilkes

Northwardly with Water 88'3 1/2" to line lot 95

Eastwardly with lot and parallel Wilkes to Union

Southwardly with Union 88'3 1/2"

Westwardly to beginning

(2) beg. east side Union at intersection with Wilkes
Eastwardly with Wilkes to Potomac River, then
back to beginning
Northwardly with Union 88'3 1/2"
Eastwardly parallel to Wilkes to Potomac River
Southwardly with River to termination of first
line at River

William Herbert and John Potts, Jr. to pay to John
Alexander and heirs \$19.15 current money of Virginia
yearly.

ALSO, William Herbert and John Potts, Jr. and heirs
and assigns will leave open and unenclosed 10' of
ground on east side Union, beginning at distance of
78'3 1/2" north of intersection with Wilkes and
extending from thence Northwardly with Union Street
the said 10', then Eastwardly the same breadth to
Potomac River, for use, benefit and advantage of John
Fitzgerald and William Lyles, Jr., in common with
William Herbert and John Potts, Jr.

ALSO, John Fitzgerald and William Lyles, Jr. to leave
open 10' alley on east side Union, beginning on Union
at distance of 88'3 1/2" north of intersection Wilkes,
then with Union Northwardly 10', then Eastwardly the
same breadth to River...for benefit of Fitzgeralds and
Lyles, in common with Herbert and Potts....

at no time or times hereafter stop up, obstruct or
interrupt, but leave alley forever free and open.
[Fairfax Deed Book P:305]

7 May 1785

Daniel Roberdeau and Jane his wife, Town of Alexandria
to
John Fitzgerald and William Lyles, Jr.

A certain parcel of ground on South side Wolfe Street
and West side of Union, beginning at intersection
Southwardly with Union 115'
Westwardly parallel with Wolfe 62'6"
Northwardly parallel with Union 115' to Wolfe
Eastwardly 62'6" to beginning

Reserving unto Daniel Roberdeau and his heirs the
right and liberty of cutting down the bank contained
in said premises to the level of the streets and
removing the dirt therefrom to the Wharf which he is
now running out and filling in with earth

and also in case Daniel Roberdeau, his heirs or
assigns shall incline to erect any brick or stone
building /a necessary excepted/ adjoining the line
dividing the premises hereby granted from the other

ground of Roberdeau before John Fitzgerald and William Lyles, Jr. or their heirs or assigns may incline to erect building adjoining the line, Roberdeau reserves full liberty and power to lay the foundation wall of such building nine inches upon the premises hereby granted...and to carry up the wall of such building from the surface of the earth to the top thereof, four inches and an half upon the premises.

John Fitzgerald and William Lyles can put a building foundation the same 9 inches on Daniel Roberdeau's ground, but

who shall first build upon the dividing line which separates the ground shall lay the foundation wall of such, building fully eighteen inches thick, and carry up the said wall from the surface of the earth to the top thereof fully nine inches thick...and the person upon whose ground foundation is built has liberty, permission and authority to join any other building thereto /a necessary excepted/

The wall is to be valued if both parties cannot agree on the value, by a third party to be called

also, if either shall join a building to one already erected, the joists of the new building shall not be placed opposite to the joists in the other building but as nearly in the center between those joists as they can be placed

Rent £106.5.6 1/2 [Alexandria Hustings Court Deed Book C:297]

8 May 1790

Daniel Roberdeau and wife Jane of City of Alexandria to secure George Gilpin and William Hodgson who became securities and join bound with him to Isaac Nicholls of Loudoun County for payment of L600 to be paid in May, 1791.

(1) beginning on Water Street 148'3" from intersection of Water and Wolfe

Southwardly with Water Street 28'4"
Eastwardly with line parallel Wolfe 125' to
Potomac Street

Northwardly with that Street 28'4"
then to beginning

(2) beginning intersection Union and Wolfe

Southwardly with Union 50'
Eastwardly parallel to Wolfe 50'
Northwardly parallel to Union 50' to Wolfe
with Wolfe to beginning

[Fairfax Deeds T:61]

22 Apr. 1794 John Fitzgerald of Alexandria
to
Abraham Morhouse
farm let (lease) of lot conveyed by Daniel Roberdeau
unto John Fitzgerald and William Lyles, west side
Union, south side Wolfe,

and also the distillery and all the houses and
buildings erected upon the ground and the several
still worms, tubs, cisterns, casks, pumps and every
piece of machinery and other articles in and about the
distillery,

also, the wood yard at the end of the wharf below the
said piece of ground as the same now is enclosed,

and also use and labor of two men slaves,

for ten years, to have the use and labour of said
slaves Jack and Matt for term of two years,

paying upon the last day of May in each year the rent
of \$1,000 and also feeding and clothing in a proper
manner and paying the taxes and other charges of the
said slaves during the two years.

Abraham Morhouse may at his own proper costs and
charges erect any additional buildings or works upon
the piece of ground hereby demised and make any
alteration and improvement in the distillery and other
buildings which he may judge necessary for the conduct
of his business, provided that such additional
buildings or work...do not destroy the buildings
already erected upon the piece of ground or materially
injure them.

At expiration of said term of ten years may remove
from the premises any stills, worms, tubs or any
vessel, utensil or implement furnished and provided by
him...but not to take down, injure or destroy any
additional buildings or works made by him other than
those works for the support of the still, worms and
tubbs so far as may be necessary for their removal...

If Abraham Morhouse converts the said distillery and
premises into a brewery as well as a distillery, they
will yield to John Fitzgerald at end of term all and
singular of said premises as changed and altered for
purpose of brewing as well as distilling, in good
condition. [Alexandria Hustings Court Deed Book F:20]

4 July 1794 Daniel Roberdeau and Jane his wife, of Alexandria
to

Archibald McClean
for £120, lot East of Water and South of Wolfe
beg. upon Water Street 97' South of Wolfe
Southwardly with Water Street 24'
Eastwardly parallel with Wolfe 125' to Potomack
Street
and binding thereupon 24'
Westwardly with straight line to beginning,
being a part of lot granted to John Hughes and
conveyed to Daniel Roberdeau. [Alexandria Hustings
Court Deed Book G:277]

29 July 1794 Daniel Roberdeau and Jane his wife
to
Abraham Morhouse

WHEREAS: Daniel Roberdeau by deed 17 May 1785 granted
to John Fitzgerald and William Lyles, Jr. a part of
lot for rent of L130.18, and sold to Archibald McLean
one parcel...[discrepancy in date, price, and spelling
of McLean]

Roberdeau demised and farm let the rest and residue of
lots 93, 94 and 95 and wharf adjacent to lot 93 for
rent of £430 and 50 dozen bottled porter of his
brewery and bottling. [Alexandria Hustings Court Deed
Book F:27]

13. Dec. 1794 Abraham Morhouse of Alexandria, merchant
to
Robert Smock of Philadelphia, Pennsylvania and
Daniel Ketchum, Esq., of Middletown, Monmouth County,
New Jersey

WHEREAS: John Fitzgerald some years ago leased from
Daniel Roberdeau a lot subject to yearly rent of
L131.18 Virginia currency payable to Daniel Roberdeau
forever and said Fitzgerald erected a distillery on
said lot, then agreed to sell his right, title and
interest in said premises to Abraham Morhouse by
agreement 22 July 1794 subject to annual rent of £300
Virginia currency as follow, to wit £131.18 (part of
£300) being original ground rent yearly to Daniel
Roberdeau and sum of £168.2 (remainder of £300) to
John Fitzgerald, but sum of £168.2 to be extinguished
at any time within space of 10 years after 22 July
1794 by payment of principal sum of £300, and

WHEREAS: Abraham Morhouse by agreement 9 July [29
July in Alex. HC DB F:27] between Daniel Roberdeau and
Abraham Morouse, entered into and executed, took from
him the said Roberdeau those three lots 93, 94 and 95,
being together 176' on Water Street and extending that
width in straight lines to the channel of Potomack
River, bounded

Westwardly by Water Street
Northwardly by Wolfe
Eastwardly by River Potomack
Southwardly by John Fitzgerald's other ground

part of which ground being the ground heretofore let to John Fitzgerald and conveyed to said Abraham Morhouse, excepting out of said bounds of the three described lots a lot previously sold by Daniel Roberdeau to Archibald McClane containing 24' front on Water Street and extending that width to Potomack Street

subject to yearly rent charge of £131.18 originally made payable by the said John Fitzgerald and under and subject to payment of further rent £298.2 and 50 dozen bottles of Porter, said two sums of money and parter making together the sum of £430 of money aforesaid and 50 dozen bottles payable yearly from and during term of ten years next from and after 9 July 1794 to Daniel Roberdeau and his heirs and assigns, but said rent charge to be extinguished at anytime in space of 10 years after 9 July 1794 by payment of principal sum of £6,450, and

WHEREAS: divers buildings were erected on the aforesaid lots of ground by Abraham Morhouse and Baldwin Dade who were jointly concerned and interested in the same with the Abraham Morhouse. A settlement was made with Baldwin Dade upon a dissolution of their concern by instrument of writing 1794, charge the aforesaid premises with sum of \$250 also with three barrels beer and further with 100 bushels grains, payable and delivered annually forever to said Baldwin Dade his heirs and assigns, but to be extinguished at any time thereafter by payment of the principal sum of £2,810.

Abraham Morehouse for \$40,633.33 sold to Robert Smock and Daniel Ketcham and they agreed to pay and discharge the several sums of money and do and perform covenants and agreements herein before recited...all right, title and interest in lot and distillery and brewery numbered 93, 94, 95, except lot to Archibald McClane 24' on Water Street....also all implements and utensils appertaining to said Brewery and distillery as per inventory of same under hand of Abraham Morhouse...subject to rents due:

John Fitzgerald	£168.10
Daniel Roberdeau	£430 and 50 dozen bottle Porter
Baldwin Dade	£250 and 3 barrels beer and 100 bushels of grain

[Fairfax Deed Book X:593]

19 Aug. 1795 Daniel Ketcham of Monmouth County, New Jersey
to
Robert Smock of Philadelphia
for £1300 lawful money of Pennsylvania
one full undivided moiety or half of certain
messuages, tenements, distillery and brewery and lots
of ground rent whereon the same are erected conveyed
from Abraham Morhouse.
[Fairfax Deed Book Y:189]

3 Oct. 1795 Robert Smock of Philadelphia, Pennsylvania
to
David Allison of Philadelphia, Pennsylvania, Esq.

bound to Allison for payment of sums of money \$37,166
trust on distillery, brewery and lots on which erected
[Fairfax Deed Book Y:165]

13 Oct. 1797 Robert Smock of Town of Alexandria
to
Charles Young of Philadelphia, Pennsylvania
[recites history of lots 93, 94 and 95] conveyed all
but that sold to Archibald McClain. Deed to Abraham
Morhouse and Company and the wharf made and extended
by him from the lots of ground into the River
Potomack. Morhouse to pay to Daniel Roberdeau £430
current money of Virginia and deliver to said
Roberdeau yearly and every year at his place of
residence 50 dozen of bottled porter. Roberdeau would
convey in fee simple on payment to Roberdeau of £4,650
and all rents and part of rents

WHEREAS: John Fitzgerald and William Lyles erected
upon the piece of ground granted them by Daniel
Roberdeau a distillery which they furnished and
supplied with stills and every implement and utensil
necessary to carry on the distilling business upon a
large scale, afterwhich the said William Lyles sold
and conveyed unto the said John Fitzgerald his heirs
and assigns his moiety of the piece of ground, stills
and implements, who afterwards, by indenture 22 April
1794 granted the said piece of ground, houses, stills
and utensils and implements unto the said Abraham
Morhouse for full term of 10 years subject to payment
of rents, etc....would convey at any time to him....

Robert Smock, for rents and covenants to be kept and
performed by Charles Young the elder...and for \$58,680
paid to Robert Smock by Charles Young....granted lots
93, 94 and 95, with exception noted, and with right of
demanding a grant and conveyance of said piece of
ground in fee simple at any time before expiration of
said term, upon payment of £1,800 current money of
Virginia. [Alexandria Hustings Court Deed Book K:233]

20 Jan. 1798 Charles Young of Philadelphia, merchant
to
John Wilson and Edward Edwards of same city, merchants

lots 93, 94, and 95....conveyed by Robert Smock to
Charles Young 13 October 1797...the whole of the
premises subject to yearly rent charges. [Alexandria
Hustings Court Deed Book K:203]

13 Mar. 1802 William Herbert
to
John Hunter

farm let [leased] all that lot of ground and wharf
belonging unto him the said William Herbert in said
Town of Alexandria bounded on the West by Union
Street, South by Wilkes Street, North by a 20' alley
which divides the ground late the property of John
Fitzgerald, dec., and on East by the River Potomac,
with use of said 20' alley in common with others,

which ground is now in the tenure of him the said John
Hunter and by him used as a shipyard

lease for 12 years with yearly rent of \$133.33 money
of United States

and in the space of two years from the commencement of
the said term, Hunter is to rebuild and repair in neat
strong and workmanlike manner similar to the wharf of
Jonathan Swift called Merchants Wharf, the whole of
the said William Herbert's part of the wharf hereby
demised and including therein one half of the said
twenty foot alley, the wooden parts of the said wharf
to be of good sound white oak raised to the height of
nine inches above the level of the wharf on that part
opposite Fitzgerald's warehouse and in a direct line
therefrom 32 feet to the southward of the said Alley,
the whole to be raised and to be filled in of that
height with clay, stone and gravel only, and after
repairing the waid wharf in manner aforesaid, keeping
the same in that state of repair during the residue of
the said term.
[Alexandria Deed Book E:160]

22 Apr. 1803 This Indenture Quadripartite, made between
Thomas Atwood Digges and James Keith, acting Exrs of
last will and testament of John Fitzgerald, late of
County of Fairfax, Virginia,
and
Jane Fitzgerald, widow and relict of said John
Fitzgerald, of second part,
and
William Lyles of County of Prince Georges in State of
Maryland, of the third part,

and
John Hunter of the Town and County of Alexandria, of
the fourth part

WHEREAS: [recites history of lots purchased from John Alexander 20 December 1774 up to partition, which is called a partition between William Herbert who had purchased the part of Andrew Stewart, William Lyles who had purchased from Valentine Peers, and John Fitzgerald, by which one half of said lots of land and of the wharf made thereto by the said William Herbert, William Lyles and John Fitzgerald, was by certain metes and bounds divided in half; William Herbert had half and William Lyles and John Fitzgerald half. Lyles and Fitzgerald later made a partition between them on which that part of lots of land allotted them lying upon Water Street and extending to Union Street, subject to 1/4 of rent reserved to John Alexander, was allotted unto said William Lyles and the part upon Union extending into River Potomac was allotted to John Fitzgerald, but from some neglect, the said Deed of Partition was not recorded and cannot now be found

for \$4,550 paid by John Hunter, parties of first, second and third parts sold to him

beg. East side Union Street at center of the square formed by Wolfe and Wilkes Street, being 176.7" from each street and running

Eastwardly parallel to Wolfe and Wilkes into
River Potomac, then to beginning
Southwardly with Union 78'3 1/2" to 20' alley
Eastwardly with line of alley and parallel to
Wolfe and Wilkes into Potomac River
Northwardly with line parallel Union 78'3 1/2'
to first line

Hunter to pay John Alexander yearly rent of L9.17.6.
Jane Fitzgerald for \$505.55 of the said \$4,550,
released her interest.

[Alexandria Deed Book F:58]

26 Feb. 1806 Thomas Patten and Mary his wife, of Alexandria, to James Russell in trust to secure Jacob Hoffman ground rent on lot 115' x 62' allotted to Selenah Nicholls and Mary Patten, two daughter of Daniel Roberdeau and Lots #1, 2, 11 and 12 in division [#1 and #2] on East side of Water and South of Wolfe beg. on Water Street
Northwardly with Water Street 51'3" to 4' Alley
Eastwardly parallel with Wolfe 125'
Southwardly parallel with Water Street 51'3"
Straight line to beginning...upon which piece of ground the mansion house and other buildings are erected

also two other pieces adjacent each other on West side
of Union South of Wolfe

Southwardly with Union 41'
Westwardly parallel with Wolfe 125'
Northwardly parallel with Union 41`
Straight line to beginning

on death of Jane Roberdeau, property will descend to
Isaac Roberdeau, Ann Swift, Mary Patten, Selenah
Nichols, Jane Annen, James Milligan Roberdeau and
Harriet Roberdeau. One-seventh of revision expected
on death of Jane is conveyed.
[Alexandria Deed Book L:516]

26 Feb. 1806 Thomas Patten and Mary his wife, of Alexandria, D.C.
to
Jacob Hoffman
for £659.10
one moiety or half part of rent of £131.18; if Jacob
can't sell 1/2 rent in two years for £659.10, Thomas
Patten and wife will make up difference.

18 Aug. 1806 Thomas Patten and Mary his wife, daughter of Daniel
Roberdeau, dec.,
and
Silena Nicholls of Fairfax County, daughter of Daniel
Roberdeau, dec.

Estate of Daniel Roberdeau to be divided in seven
parts; could not divide lots in seven parts

to Thomas and Mary Patten [lots 8 and 16 in division]
(8) beg. South side Wolfe Street 83'6" West of Union
Westwardly with Wolfe Street 21'
Southwardly parallel with Union 115`
Eastwardly parallel with Wolfe 21`
then straight line to beginning

(16) beg. East side Union supposed to be equidistant
from intersection of Wolfe and Wilkes
Northwardly with Union 37'
Eastwardly parallel with Wolfe and Wilkes 80`
Southwardly parallel with Union 37'

(22) beg. South side Wolfe at Strand
Westwardly with Wolfe 80' to 20' akket
Southwardly with line of Alley 26'7"
Eastwardly parallel with Wolfe 80' to
Strand
Northwardly with Strand to beginning
[Alexandria Deeds W:136] [see W:525]

- 19 Dec. 1806 Daniel Anning of Jefferson County, Virginia, and Jane his wife, daughter and devisee of Daniel Roberdeau to
John Crips Vowell & Thomas Vowell
 for \$650, lot East side of Strand Street and to Southward of Wolfe Street
 beg. upon Strand Street 88'3 1/2" Southwardly of Wolfe
 Southwardly with Strand 88'3 1/2"
 Eastwardly parallel with Wolfe into River
 Northwardly parallel with Strand 88'3 1/2"
 Straight line to beginning
 Lot #24 in division of Daniel Roberdeau allotted Jane [Alexandria Deed Book L:516]
- 30 Oct. 1807 Daniel Anan and Jane his wife of Jefferson Co., Va. to
John Crips Vowell & Thomas Vowell
 for \$500 Lots #3 and #4 in division of D. Roberdeau beg. East side Water Street 96' South of Wolfe upon North line of 4' Alley
 Northwardly with Water Street 24'
 Eastwardly parallel with Wolfe 125' to Potomac Street
 Southwardly with Potomac Street 24' to 4' Alley with Alley to beginning
 beg. North line of above described lot on Water Street
 Northwardly with Water Street 24'
 Eastwardly parallel with Wolfe Street 125' to Potomac Street
 Southwardly with Potomac Street 24' to line of above described lot
 with above ground to beginning
 [Alexandria Deed Book P:450]
- 25 Sept. 1812 Isaac Roberdeau and Susan his wife of Philadelphia to
Isaac Entwisle of Alexandria, D.C.
 for \$2,500 lot South side Wolfe East of Union beg. intersection of saide streets
 Eastwardly with Wolfe 80' to 20' Alley
 Southwardly with line of Alley parallel with Union 50'
 Westwardly parallel with Wolfe 80' to Union
 Northwardly with Union 50' to beginning
 [Alexandria Deed Book W:504]
- 9 Feb. 1813 Edward Conrad of Winchester, Frederick County, Virginia and Harriet his wife to
Isaac Entwisle
 for \$1,575...lot East side Union South of Wolfe beg. on Union...Southwardly 44'7"
 Eastwardly parallel with Wolfe 80'
 Northwardly parallel with Union 44'7"

Westwardly parallel with Wolfe 80'
[Alexandria Deed Book W:495]

- 29 Mar. 1813 John C. Vowell and Mary J. his wife, of Town of Alexandria, D.C.
to
Isaac Entwisle
for \$800...lot [16] conveyed by Thomas Patten and wife to Robert Young 18 August 1806 and by Robert Young conveyed to John C. Vowell 30 June 1812
beg. East side Union equal distance from Wilkes and Wolfe
Northwardly on Union 37'
Eastwardly parallel with Wolfe 80'
Southwardly parallel with Union 37'
Westwardly to beginning
[Alexandria Deed Book W:534]
- 22 Apr. 1813 Silena Nicholls of Alexandria
to
Isaac Entwisle
for \$1,000 ...Lot #22 on South side Wolfe and West side of Strand, beginning at intersection
Westwardly with Wolfe 80' to 20' Alley
Southwardly with line Alley 26'7"
Eastwardly parallel Wolfe 80' to Strand
Northwardly parallel Strand to beginning
[Alexandria Deed Book W:525]
- 19 Aug. 1813 Archibald McLean of Town and County of Alexandria
to
Bushrod Washington and Lawrence Lewis Acting Exrs. of the last will and testament of George Washington, dec. purchase price not given ...paid to Archibald McLean by the said George Washington in his lifetime, the receipt whereof he doth hereby acknowledge...and for further sum of \$1

lot on East side Water Street to SE of Wolfe Street
beg. on Water 97' to Southward of Wolfe Street
Southwardly with Water Street 24'
Eastwardly parallel Wolfe 125' to Potomac Strand
Northwardly 24'
Straight line to beginning
sold to Archibald McLean by Daniel Roberdeau and wife Jane 4 July 1794.
[Alexandria Deed Book I2:63]
- 22 Oct. 1813 Jonathan Swift and Ann his wife
to
Isaac Entwisle
for \$4,000 Lots #5, 6 and 23 allotted to Ann Swift, daughter of Daniel Roberdeau

(23) on East side Potomac Strand sometimes called

Strand and on South side Wolfe, beginning at intersection

Southwardly on Potomac Strand 88'3 1/2"
Eastwardly into Potomac
Northwardly to Wolfe
Westwardly on Wolfe to beginning

(5 and 6) on East side Wolfe and East side of Water beg. at intersection

Southwardly on Water Street 47'4"
Eastwardly 125' to Potomac Strand
Northwardly on Potomac Street 47'4" to Wolfe
Westwardly on Wolfe 125' to beginning
[Alexandria Deed Book Y:84; trust Y:72 to Thomas Vowell]

- 5 Nov. 1813 Selina Nicholls of Winchester, daughter of Daniel Roberdeau
to
Jacob Hoffman to secure debt to Thomas Vowell
one half of rent of L131 on 115' x 62' lot
[Alexandria Deed Book X:142]
- 8 Dec. 1814 Thomas Vowell
to
Isaac Entwisle
Lots conveyed to Vowell by Isaac Entwisle and Ann his wife 23 October 1813...releases trust
[Alexandria Deed Book A2:175]
- 15 Apr. 1815 Edward Conrad and Harriet his wife of Frederick Co.
to
Isaac Entwisle of Alexandria, D.C.
for \$550
two lots, #7 and #10
(7) beg. East side street 50' wide laid out through property of heirs of Daniel Roberdeau, called Potomac Street, at intersection of said street with South side Wolfe, supposed to be 175' to East of Water Street,
Eastwardly on Wolfe 20'6"
Southwardly parallel to Potomac Street 115'
Westwardly parallel with Wolfe 20'6" to Potomac Street
Northwardly on Potomac Street 115' to beginning
- (10) beg. East side Potomac Street 115' South of Wolfe
Southwardly on Potomac Street 20'7"
Eastwardly parallel to Wolfe 125' to Union
Northwardly on Union 25'7" [?] to 4' Alley
Westwardly parallel to Wolfe 125' to beginning
[Alexandria Deed Book Z:141]
- 1 Aug. 1815 James M. Roberdeau of Winchester
to
Isaac Entwisle of Town of Alexandria, D.C.

for \$3,150
beg. East side Union 94'7" South of Wolfe
Southwardly on Union 45'
Eastwardly parallel to Wolfe 80'
Northwardly parallel to Union 45'
Westwardly parallel to Wolfe to beginning
#15 in division of estate of Daniel Roberdeau
and allotted to James M. Roberdeau in division

plus two other lots #21 and #22 [#20 and #21?] in said
division allotted to James M. Roberdeau
beg. East side 20' Alley leading Southwardly from
Wolfe to East of Union at distance of 26'7" to the
Southwardly of Wolfe
Southwardly on Alley 60'
Eastwardly parallel to Wolfe 80' to Strand St.
Northwardly on Strand 60'
Westwardly to beginning
[Alexandria Deed Book A2:481]

5 Aug. 1815 James Milligan Roberdeau of Winchester
to
John Crips Vowell of Town of Alexandria, D.C.
for \$600 ...lot #19 in Daniel Roberdeau division
beg. on East side of 20' Alley leading from Wolfe to
the East of Union Street at the distance of 86'7" to
the South of Wolfe Street
Southwardly on said Alley 30'
Eastwardly parallel with Wolfe 80'
Northwardly on Strand 30'
Westwardly parallel with Wolfe to beginning
[Alexandria Deed Book Z:335]

30 June 1815 Isaac Roberdeau and Susan Shippen his wife of
Germantown, Pennsylvanic
to
Isaac Entwisle
for \$315 Lot #9, allotted to Isaac in the division of
Daniel Roberdeau, on South side of Wolfe West of Union
beg. on Wolfe 41'6" Eastwardly of Potomac Street
Eastwardly on Wolfe 21'
Southwardly parallel to Union 115'
Westwardly parallel to Wolfe 21'
Northwardly parallel to Union 115' to beg.
[Alexandria Deed Book C2:109]

31 July 1815 John C. Vowell and Mary J. his wife
to
William Veitch
for \$7,000, Lot #24, lot and wharf on East side of
Strand Street, conveyed to John & Thomas Vowell 19
December 1806 [Alex. DB N:419], and on partition of
their joint estate 5 May 1812, conveyed by Thomas
Vowell and wife to said John C. Vowell in severalty.
[Alexandria Deed Book B2:52]

- 20 Oct. 1815 John C. Vowell and Mary Jacqueline his wife of
Alexandria, D.C.
to
William Veitch of same
for \$3,100
(1) lot on North side of Wolfe and East of Fairfax,
and (2) Lot #19 in division of Daniel Roberdeau,
conveyed to John C. Vowell by James M. Roberdeau
5 August 1815. [Alexandria Deed Book B2:48; trust of
Robert J. Taylor C2:316]
- 24 June 1822 James Carson & James Entwisle and Eliza
to
Aquilla Emerson of District of Columbia
for \$540 lot South side Wolfe and East side of Strand
beg. intersection of said streets
Eastwardly on Wolfe 20'
Southwardly parallel Strand 70'
Westwardly parallel Wolfe 20' to Strand
Northwardly on Strand 70' to beg.
Conveyed by Isaac Entwisle to James Carson in trust;
James pays purchase money to Carson toward discharge
of debts of said Isaac. [Alexandria Deed Book M2:225]
- 22 Sept. 1822 John Hunter
to
Robert Hunter
for \$6,265
the houses and wharf known by the name of Hunter's
Ship Yard on East side Union to North of Wilkes
beg. on Union at middle of Alley which divides said
premises from the lot and wharf belonging lately to
Hunter and Marbury and now occupied by Smoot and
Company;
Northwardly with Union 88' more or less to
property of late Gen. Roberdeau now Entwisle's
Eastwardly and parallel to Wilkes into Potomac
River
Southwardly with river 88' more or less to
middle of said Alley extended
Westwardly with middle of Alley and parallel
Wilkes to Union Street, the beginning
with all houses, warehouses, wharfs, alley, docks &c.
[Alexandria Deed Book M2:461]
- 30 Dec. 1829 James Entwisle and Eliza his wife, John Gird, and
James Carson
to
Hugh Smith (all parties of Alexandria)
for \$5,000 three lots South side Wolfe and East of 20'
Alley 80' West of Potomac Strand. One lot sold to
Isaac Entwisle by Selena Nichols and two lots sold by
Daniel M. Roberdeau.

beg. intersection Wolfe and Alley
Southwardly on Alley 86'7"
Eastwardly parallel Wolfe 80' to Potomac Strand
Northwardly on Strand 86'7" to Wolfe
Westwardly on Wolfe 80' to beginning

also, lot on South side Wolfe, beg. on Wolfe 20' East
of Potomac Strand at East line Aquila Emerson's lot
Southwardly with that line parallel Potomac
Strand 70'

Westwardly with another line of Emerson parallel
Wolfe 20' to Potomac Strand

Southwardly on Strand 18'3 1/2"

Eastwardly parallel Wolfe into River Potomac
and bounded on North by south line of Wolfe
running from that place to beginning

conveyed by Jonathan Swift and Ann his wife; lot
descended from Isaac Entwisle to James his only child
and heir at law; Isaac Entwisle had trusts to Gird and
Carson which James Entwisle paid and discharged.

[Alexandria Deed Book S2:45]

30 Sept. 1831 James Entwisle and Eliza of Town of Alexandria, DC
to

James Irwin and William H. Irwin of same, as tenants
in common, for \$14,000 5 lots [including lots #13,
14, 15, 16 in division of Daniel Roberdeau's estate]
and a lot on North side of Wolfe and West side Union.

Bounds are given for the four lots #13, 14, 15, and 16
and then "together with the Brew house, out houses,
building erected on above mentioned lots...."

[Alexandria Deed Book T2:56]

24 Apr. 1832 John C. Herbert and Mary his wife of Prince Georges
County, Maryland, and Thomas Fairfax and Margaret his
wife, William Herbert and Maria his wife, Ann Herbert,
and Eliza P. Herbert

to

Hugh Smith

for \$4,000

(1) beg. at NE corner, intersection Wilkes and Union
Northwardly with Union 88' more or less to line
of the late John Hunter
Eastwardly with line of Hunter into Potomac
Southwardly with said river to Wilkes Street
extended 88' more or less
Westwardly with Wilkes to beginning

also, one other lot on Water Street and extending to
Union Street, beg. on Water Street 88'3 1/2" to North
of Wilkes Street

Eastwardly across the square parallel with
Wilkes to Union

Northwardly on Union 88' more or less

Westwardly parallel first line across the square
to Water Street
Southwardly 88' more or less to beginning

part of land conveyed from John Alexander 19 December
1774 to James Stewart, William Herbert, John
Fitzgerald and Valentine Peers...ground rent L39.10

Also, parties of first part covenant that William H.
Morris, Eliza M. Norris, and Edward C. Norris,
children of the late Oliver Norris under the age of 21
who are entitled to one undivided sixth part of said
ground hereby conveyed, will on their arrival at full
and lawful age execute a good deed to perfect title.
[Alexandria Deed Book U2:324]

17 Oct. 1832 William Veitch and Rachel his wife of Town of
Alexandria, D.C.
to
Hugh Smith
for \$3,750 lot of ground and wharf on east side of
Strand Street
beg. on Strand 88'3 1/2" South of Wolfe
Southwardly on Strand 88'3 1/2"
then extending into River Potomac the same
breadth as in front on Strand Street, and bounded on
the North and South by lines parallel to Wolfe,
extending from Strand Street into River, conveyed to
said William Veitch by deed from John C. Vowell and
wife 31 July 1815

also three other lots on West side Strand Street
to Southward of Wolfe and on east side of 20' Alley
leading from Wolfe Street between Union and Strand,
Lots #17, 18, 19 in division of Daniel Roberdeau and
conveyed to William Veitch by J. C. Vowell and wife 20
October 1805.
[Alexandria Deed Book U2:55]

19 Apr. 1833 James Entwisle and Eliza his wife, of Town of
Alexandria, D.C.
to
James and William H. Irwin, copartners in trade, firm
of James and William H. Irwin
for #100 Lot #10 in division of Daniel Roberdeau

beg. East side Street 50' (Potomac Strand) laid out at
distance of 115' to South of Wolfe Street,
Southwardly on Potomac Strand 20'7"
Eastwardly parallel to Wolfe 125' to Union
Northwardly on Union 20'7" to 4' Alley
Westwardly parallel to Wolfe 125' to beg.
assigned to Harriet, daughter of Daniel Roberdeau in
division of estate and conveyed by Edward Conrad to
Isaac Entwisle, father of James, 15 April 1815

Smith for \$460.74 releases Robert W. Hunter from rent.
[Alexandria Deed Book W2:11]

23 Sept.1835 Martha Roberdeau, wife of James M. Robertdeau
to
Hugh Smith
for \$100 her interest in part of dower of Jane
Roberdeau.
[Alexandria Deed Book W2:14]

27 May 1836 Aquilla Emerson and Ann his wife
to
Hugh Smith (all of Town of Alexandria, D.C.)
for \$1,250 current money of the United States
lot on South side Wolfe and East of Strand, conveyed
by deed from James Carson and James Entwisle and wife
24 June 1822.
[Alexandria Deed Book W2:304]

10 June 1836 Harriet Conrad, widow of Edward Conrad late of
Frederick County, Virginia
to
Hugh Smith of Alexandria
for \$115...her rights and interest to dower and
interest assigned to Jean Roberdeau, widow of Daniel.
[Alexandria Deed Book X2:92]

29 June 1853 Hugh Smith of Alexandria
to
James P. Smith

WHEREAS Richard C. Smith and Thatcher Perkins, joint
partners under the same and firm of Smith and Perkins,
are indebted to said Hugh Smith in the sum of
\$7,600...bond 1 Feb. 1853 payable 8 years after date,
the interest thereon being payable semi-annually.

Hugh Smith sets apart interest for sole use and
benefit of Elizabeth A. Smith, the wife of said
Richard C. and the bond and debt is transferred to
James P. Smith in trust for use of said Elizabeth.
[Alexandria Deed Book P3:15]

1 May 1854 Richard C. Smith and Thatcher Perkins
to
James P. Smith (all of Alexandria)

the following, in trust, to secure payment of bond

a piece of ground bounded on North by Wolfe, on West
by alley separating the same from the property of
William H. Irwin, on South by property of Robert W.
Hunter, and on East by the channel of the River
Potomac, with use of said alley and all rights and
appurtenances thereto belonging, ALSO

20 lathes and boring machines
 10 drilling machines
 11 planers
 2 bolt cutters
 1 slotting machine
 1 steam hammer
 1 steam engine and boiler, used for running machinery
 1 wood plainer
 1 tenoning machine
 1 mortising machine
 5 punching machines
 2 shearing machines
 50 vices
 20 anvils, shafting pulleys, hangers and small tools
 all contained in the buildings on the ground hereby
 conveyed...in trust to secure Hugh Smith \$32,448.46,
 note dated 1 May 1854, payable 10 years after date,
 the interest to be paid quarterly; also, to secure
 bond of \$1437.59 ...machinery and building to be
 insured in some solvent insurance company to amount of
 \$20,000.
 [Alexandria Deed Book Q3:40] [Q3:41, same to same, to
 secure \$7,600, due Hugh Smith, dated 1 Feb. 1853, and
 transferred to James P. Smith in trust for Elizabeth
 A. Smith]

13 Apr. 1855 Hugh Smith
 to
 James P. Smith

in trust to secure payment of the bond of Hugh Smith
 for \$10,500, dated 13 April 1855, payable 5 years
 after date to Richard C. Smith, Exr. of Hugh C. Smith,
 dec. ...following property

beg. east side Water Street 121'4" south of Wolfe
 Southwardly with Water Street (passing the mouth
 of, and including the ground of a 4' alley)
 55'3" more or less to middle of the square
 Eastwardly parallel Wolfe to Union 300'
 (crossing and including the ground of
 street 50' wide laid out to run from Wolfe
 southwardly midway between Water and Union
 Northwardly with Union 41'
 Westwardly parallel Wolfe 125' to east line of
 said 50' street
 Northwardly with that east line 14'3"
 Westwardly parallel Wolfe 175' to beginning
 subject always to the legal rights of the parties
 entitled to the use of the said alley and street.

ALSO: that piece of ground beginning on east side of
 Water Street on North side of Wilkes at their
 intersection and running North with Water Street to

the middle of the square, then Eastwardly parallel Wilkes Street to the line of the Orange and Alexandria Rail Road Company, then with the line of said Company to Wilkes Street, with Wilkes Street to beginning.

ALSO: beginning East side Water Street at middle of square between Wilkes and Gibbons....
[Alexandria Deed Book Q3:557]

25 Mar. 1869 Joseph Hunter
to
John W. Green
Agreement for sale

I have this day sold to Mr. John W. Green the Ship Yard property belonging to Joseph and Wilkinson Hunter, situated on Union Street between Wolf and Wilkes Street, fronting on Union Street about 135' and extending into the Potomac to the channel of the River in front on the River half square say about 175' on the following terms \$2,000 cash to be paid as the deeds are prepared and 2,000 in 1, 2 & 3 years with interest to be secured by deed of trust.

Joseph Hunter

Witness: William D. Nutt and Peter Wise.
[Alexandria Deed Book Z3:280]

28 Apr, 1869 Joseph H. Hunter and Mary E. his wife, and Elizabeth Hunter, widow of Robert W. Hunter, dec. to James Green for \$4,000, parcel of ground known as Hunter's Shipyard, with improvements, Joseph H. Hunter interest is one-half and Elizabeth has her dower interest.

beg. on west side Union 30' North of Wilkes
Northwardly on Union 146'3 1/2" more or less to line of property formerly owned by Entwisle and now owned by Irwin
Eastwardly parallel Wilkes into Potomac River back to beginning
Eastwardly with Swann's line and parallel to Wilkes Street 190'
Southwardly parallel Union 30' to Wilkes
Eastwardly on Wilkes Street to Potomac River
Northwardly with River to second line

being same property conveyed to Robert W. Hunter by two deeds from John Hunter dated 2 September 1822, the other from Hugh Smith and wife 1 May 1833
[Alexandria Deed Book Z3:288]

10 May 1872 Reuben Johnston, Peter E. Hoffman of Loudoun County, trustee, William H. Irwin, Mary Irwin, Ann Irwin, Ruth Irwin, Grace Irwin and Rebecca Irwin, only surviving descendants of Ann B. Irwin and William H. Irwin to John P. Agnew

WHEREAS William H. Irwin 14 April 1843 conveyed to Thomas Semmes the piece of ground hereinafter conveyed in trust to secure to Peter E. Hoffman as trustee for Ann B. Irwin under deed of marriage settlement between her and her husband 3 October 1839...the sum payment of \$3,678.82. Reuben Johnston was substituted as trustee for Turner Dixon, who by like order had been substituted as such for Thomas Semmes... for \$650 and further for \$350 William H., Mary, Ann, Ruth Grace, Rebecca release all rights... beg. East side Union 50' South of Wolfe Street and running South with Union 126'7" to Hunter's line Eastwardly parallel Wolfe 80' to Alley 20' wide running into Wolfe Northwardly with said Alley and parallel Union the length of first line then straight line to beginning with right of way over said alley [Alexandria Deed Book 2:225]

27 May 1872

W. Arthur Taylor, Commissioner in suit William H. Irwin v Taylor to John P. Agnew for \$500 lot South side Wolfe and East side Union beg. intersection of said streets Eastwardly with Wolfe 80' to 20' Alley Southwardly 50' parallel Union and with line alley Westwardly parallel Wolfe 80' to Union Northwardly with that street 50' to beg. lot conveyed by Isaac Entwisle and wife to George Deneale to secure payment to Isaac Roberdeau; lot conveyed by Isaac Roberdeau and Susan his wife 25 September 1823 to Isaac Entwisle [Alex. DB W:509] [Alexandria Deed Book 2:222]

29 May 1872

James P. Smith, Trustee, C.W. Wattles, Trustee, James P. Smith and Richard C. Smith, Exrs. of Hugh Smith dec., and The Fire Insurance Company of Alexandria to John P. Agnew

WHEREAS Hugh Smith, dec., by deeds 6 April 1850 conveyed to W.C. Page and C.W. Wattles in trust to secure the Fire Insurance Company the payment of \$12,000 [Alexandria Deed Book L3:300 and the trust has been fully paid and whereas W.C. Page has long since departed this life leaving C.W. Wattles as surviving trustee....real estate was in consideration of sum of \$32,448 by deed 1 May 1854 conveyed by Hugh Smith to partnership firm of Smith and Perkins, who by deed of like date conveyed to James P. Smith to secure \$32,448.46 and \$1,437.59 [Alexandria Deed Book

Q3:39-40] Smith and Perkins defaulted in payment of said sum. J.P. Agnew, at sale paid \$12,050 for real estate lately known as the Virginia Locomotive and Car Manufacturing Company, having a front on the Potomac River of 176' and on Wolfe Street of 205',

bounded on West for 176 1/2' by 20' Alley and on South for 250' by North line s of Hunter's Ship Yard

containing upwards of 44,000 square feet or area with a good and substantial wharf 98' by 85' running into the river with a front privilege of 206' to the channel, being same property conveyed to James P. Smith by deed from Smith and Perkins 1 May 1854. [Alexandria Deed Book 4:491]

- 14 June 1881 Sarah G. Smith, Exx. of Francis L. Smith, dec. and Andrew Jamieson of first part
John P. Agnew of second part
R.C. and J.P. Smith, Exrs. of Hugh Smith, dec., of third part
Agnew to secure R.C. and J.P. Smith to Andrew Jamieson tract lakely known as Virginia Locomotive and Car Manufacturing Company...same description...
released to Agnew
[Alexandria Deed Book 9:543]
- 2 July 1881 J.B. Archer and Helen his wife of City of Washington, to
Mary Virginia Agnew
for \$10 and trusts specified
property known as "The Agnew Coal Wharf and Forge bounded on East by Potomac River, on North by Wolfe Street, on West by Union and on South by the Green property formerly known as Hunter's Ship Yard...and all building and structures thereon or which may be constructed and all machinery, engines, tools and appurtenances...as it now is...having been conveyed to J.B. Archer by John P. Agnew and Matilda E. his wife by deed of even date...in trust to secure J.P. Agnew and Company of seven promissory notes, each for \$5000.
[Alexandria Deed Book 9:548]
- 2 July 1881 John P. Agnew and Matilda E. his wife of Washington to
J.B. Archer for \$40,000, property known as the Agnew Coal and Forge Property, conveyed to J.P. Agnew by three deeds (1) by James B. Smith, Trustee, 29 May 1872, (2) by Reuben Johnston, Trustee &c 10 May 1872 and (3) by W. Arthur Taylor, Com., 27 May 1872
[Alexandria Deed Book 9:565]

HUNTER

William Hunter, Will Book A:284 14 February 1804
 Thomas Preston, Richard Hunter, Philip Wanton and
 George M. Munn bound to George Gilpin, Esq. for
 \$2,000. Thomas Preston and Richard Hunter, Admrs.
 of goods and chattles of William Hunter

Will Book A:316 6 April 1804 Inventory and
 appraisement of estate of William Hunter

The Brick and Materials of the Buit [Burnt?]
 House on Union Street

	\$220.00
1 dining table	3.00
1 pr. and Irons	1.50
5 common chairs	1.04
2 looking glasses	7.00
1 sweeping brush	.40
1 square looking glass	1.25
1 small table	.50
½ dozen knives and forks	1.50
2 silver tea spoons	.75
1 table	1.25
12 plates	.50
cups, saucers and bowls	.40
pots, kettles and kitchen furniture	2.00
2 beds and 1 bedstead	12.00
	253.09
	253.09

#87 1850 census Alexandria City and County

Joseph H. Hunter - ship carpenter	32	m	b.Va
Mary	25	f	b.Md
Wilkinson - clerk	22	m	b.Md
G.W.	4	m.	b.Md
Joseph A.	3	m	b.Md
Mary Ida	6	f	b.Va

*transcribed by Marjorie D. Tallichet
 Heritage Books, Inc., 1986

Alexandria Deed Book R2:511 Division, or partition of
 estate of John Hunter. Heirs:

1. Elizabeth Davidson, late Elizabeth Hunter
2. Robert W. Hunter
3. John Hunter
4. Margaret M. Dyer, late Margaret M. Hunter

Indenture of four parts (division of real estate...not in
 area of Wilkes, Water, Wolfe and Potomac).