FOLEY SQUARE FEDERAL COURTHOUSE AND OFFICE BUILDING NEW YORK, NEW YORK

FINAL RESEARCH DESIGN FOR ARCHEOLOGICAL AND HISTORICAL INVESTIGATIONS OF FIVE POINTS (COURTHOUSE BLOCK) NEW YORK, NEW YORK

Final

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GENERAL SERVICES ADMINISTRATION REGION 2

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FINAL RESEARCH DESIGN FOR ARCHEOLOGICAL AND HISTORICAL INVESTIGATIONS OF FIVE POINTS (COURTHOUSE BLOCK) NEW YORK, NEW YORK

PREPARED FOR

EDWARDS AND KELCEY ENGINEERS, INC.
70 SOUTH ORANGE AVENUE
LIVINGSTON, NJ 07039

AND

GENERAL SERVICES ADMINISTRATION
REGION 2
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, NY 10278

PREPARED BY

JOHN MILNER ASSOCIATES, INC.
309 NORTH MATLACK STREET
WEST CHESTER, PA 19380

AND

HOWARD UNIVERSITY
WASHINGTON, DC 20059

NOVEMBER 30, 1993

A NOTE ON THE PREPARATION OF THIS RESEARCH DESIGN

This Research Design was prepared through the cooperative effort of a number of scholars representing several professional disciplines. These individuals, together with their professional affiliations and anticipated Five Points project roles, include the following:

Daniel G. Roberts, Project Director, John Milner Associates
John P. McCarthy, Associate Project Director, John Milner Associates
Rebecca Yamin, Principal Archeologist, John Milner Associates
Thelma Wills Foote, Principal Historian, University of California, Irvine
Sherrill D. Wilson, Consulting Principal Ethnohistorian/Director, Office of Public Education and Interpretation
Warren T. D. Barbour, Consulting Archeologist, State University of New York at Buffalo
Gary McGowan, Laboratory Director and Conservator, John Milner Associates
Cheryl LaRoche, Associate Conservator, John Milner Associates

A first draft of this Research Design, combined in one document with the Research Design for the African Burial Ground, was submitted for review on October 15, 1992; a revised draft of the research design for the investigation of Five Points was submitted on April 22, 1993. Many thoughtful and insightful comments were received from concerned members of the New York community, review agencies, and other interested parties in response to both documents. In addition, Dr. Michael L. Blakey of Howard University and Scientific Director of the African Burial Ground project worked in close cooperation with all members of the team noted above as this research design evolved. We are hopeful that this Final Research Design accurately reflects the concerns and comments of all concerned parties.

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1.0 INTRODUCTION

1.1 Purpose of this Document

The purpose of this document is to satisfy requirements and guidelines under the responsibilities and provisions of the National Historic Preservation Act (NHPA), as amended, and the National Environmental Policy Act (NEPA). In addition, this document has been generated because of the administrative and scientific need to separate two distinct, but closely related, archeological projects. These two projects are the Five Points project, addressed in this Research Design, and the African Burial Ground project, addressed in a companion Research Design document.

The Public Buildings Service of the United States General Services Administration (GSA) has undertaken the construction of two new buildings, a federal courthouse and an office building, on two noncontiguous sites located at Foley Square in lower Manhattan, New York City. The new office building is slated for a parcel of land bounded by Broadway, Duane, Elk, and Reade Streets, and is the site where the African Burial Ground was archeologically excavated. This block is also known as the Broadway Block. The new courthouse is slated for a parcel between Pearl and Worth Streets, in the vicinity of Cardinal Hayes Place (Figure 1), and is known as the Courthouse Block. The Research Design for the African Burial Ground and the Broadway Block is presented in a companion document prepared by Howard University and John Milner Associates (JMA). The present document, prepared by JMA and Howard University, presents the Research Design for the Courthouse Block only. Taken together, the two documents constitute the Research Designs for the mitigation of adverse effects to cultural resources present in both blocks.

In accordance with its responsibilities under provisions of the NHPA and NEPA, the GSA retained consultants who prepared an Environmental Impact Statement (Edwards and Kelcey 1990) that included a Stage IA cultural resources survey to identify known and potential cultural resources that might be affected by the proposed construction project in both the Broadway and Courthouse

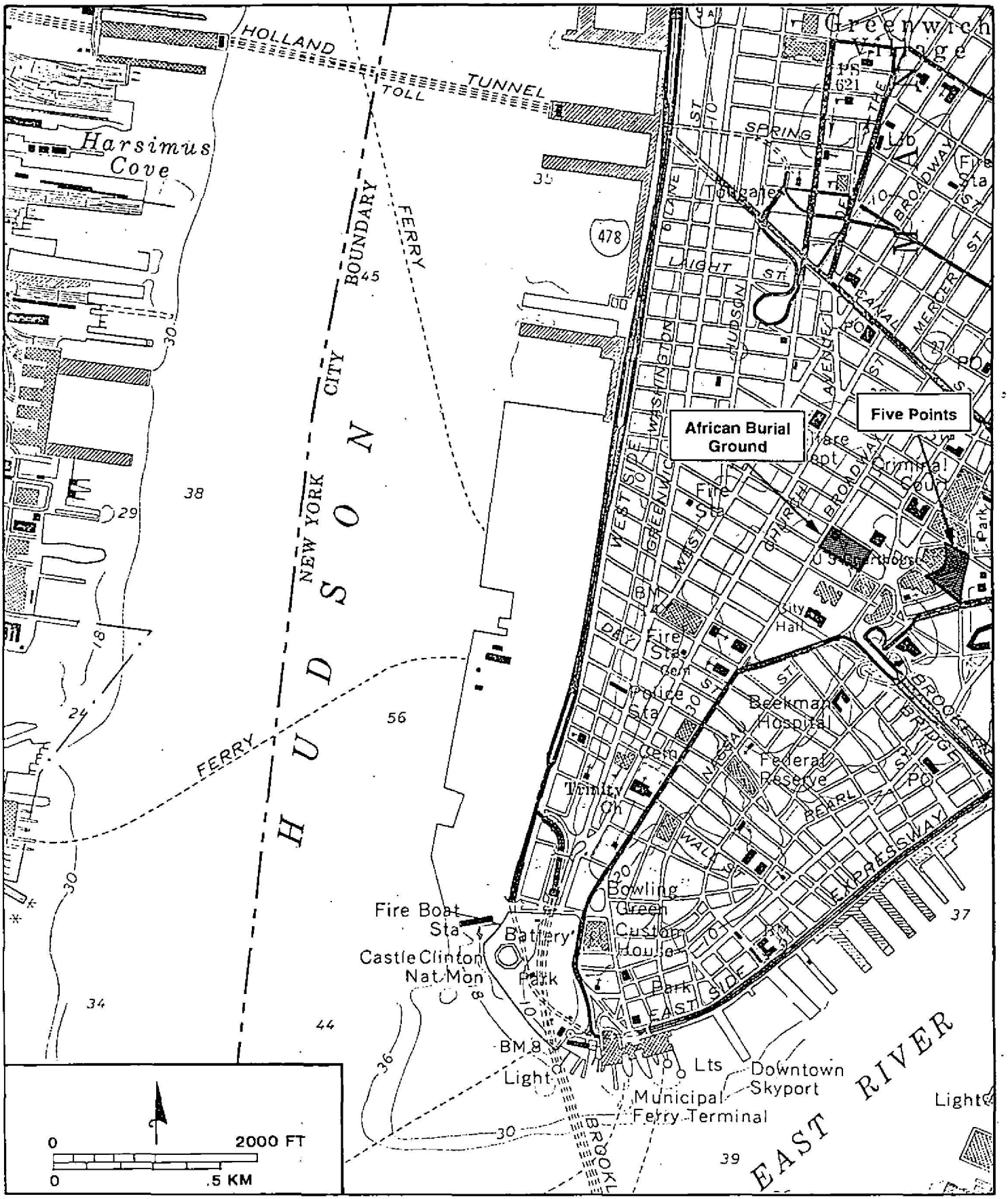

Figure 1. Project Area Location, USGS 7.5 Minute Series, Jersey City, NJ-NY Quadrangle, Photorevised 1981

blocks (Ingle et al. 1990). Subsequently, archeological investigations were undertaken at both sites to confirm the presence and significance of archeological resources and to recover representative archeological data for analysis and preservation.

The archeological investigations in the Courthouse Block revealed a complex of features and artifacts relating to one of the most dynamic periods in New York City's history. Begun in the late eighteenth century as an artisan-class residential district, the neighborhood reflected the growth of New York City and the transition from mercantile to industrial capitalism. Immigrants of several European nationalities and Africans/African Americans crowded into the formerly industrial area along the eastern edge of the Collect Pond. (Note: Throughout this document the term "African American" is used in reference to post-colonial communities of African descent. Historic communities are referred to as "African", "Irish", etc., as appropriate in reference to both first generation and eighteenth-century communities prior to the nation's establishment). Within 25 years, the neighborhood had become known as Five Points, gaining international notoriety as an urban slum. Charles Dickens (1842, 1985 edition:80) visited during his American travels in the 1840s, describing it as "reeking everywhere with dirt and filth," a perceived condition that attracted some of the best known reformers of the day.

The study of *Five Points* has a strong historical connection to the study of the nearby African Burial Ground, also under investigation. The African/African-American residents of Five Points at the turn of the nineteenth century for the most part belonged to the same community that used the African Burial Ground during the eighteenth century. As such, they represent the immediate descendants of the Africans buried in the burial ground. No longer enslaved, the African-American residents of Five Points founded their own church and lived side-by-side with immigrant groups that had only recently arrived in New York. As the neighborhood became overcrowded, the African Americans moved northward. The dynamics of this basic demographic shift relate directly

to the development of race relations in early New York City. It is anticipated, then, that the study of Five Points will focus on the very core of the multiracial/multicultural mosaic that is New York.

The GSA entered into a Memorandum of Agreement (MOA), which was subsequently amended, with the Advisory Council for Historic Preservation (ACPH) and the New York City Landmarks Preservation Commission (LPC). The MOA outlined procedures for the protection and management of significant resources relating to both the African Burial Ground and the Courthouse Block, including provisions for archeological, historical, and bioanthropological investigations. In accordance with the amended MOA, this Research Design has been prepared to guide the investigations, and specifies other measures to mitigate the adverse effects of the development project, on the Courthouse Block.

1.2 Location of the Project Area

As briefly noted earlier, the site of the new courthouse straddles Cardinal Hayes Place between Pearl and Worth Streets (Figure 1). It consists of the majority of historic Block 160, the long-closed portion of former Baxter Street between Worth and Pearl streets, and the northwest corner of historic Block 161. It is referred to throughout this document as the Courthouse Block or the Five Points District.

1.3 Organization of this Document

This document consists of six principal sections of text followed by an anticipated schedule. Following this introduction, the history and archeology of the project area are summarized and the significance of the archeological resources is evaluated in terms of the Criteria of Eligibility for the National Register of Historic Places (36 CFR 60.4). Having identified National Register eligible resources in the project area, three plans are then presented to mitigate the adverse effects of the development project: 1) a data recovery plan, 2) a conservation/curation plan, and 3) a

public education plan. Plans for project documentation and professional dissemination are then discussed. An anticipated schedule for completing the work and a list of references cited complete the document. The resumes of key personnel involved in the preparation of the Research Design, and anticipated to be involved in the execution of the project, are included as Appendix A.

2.0 EVALUATION OF SIGNIFICANCE

2.1 Introduction

This section of the *Research Design* presents an evaluation of the significance of the archeological resources present in the project area in terms of National Register criteria. Cultural resources are afforded certain protections from federally funded, licensed, or approved undertakings under the provisions of Section 106 of the National Historic Preservation Act, as amended, provided that the resources are listed on or eligible for the National Register of Historic Places. The Criteria for Evaluation of the National Register (36 CFR 60.4) are as follows:

> The quality of significance in American history, architecture, archeology, engineering and culture is present in districts, sites, buildings, structures and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and
>
> (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> (b) that are associated with the lives of persons significant in our past; or
>
> (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> (d) that have yielded, or may be likely to yield, information important in prehistory or history.

The project area's cultural resources are evaluated in terms of these criteria.

2.2 Summary History

The name "Five Points" refers to the five corners that formed the intersection of Baxter, Park, and Worth Streets in nineteenth century New York City's Sixth Ward. However, Five Points did not emerge as a distinct neighborhood until the first decade of the nineteenth century when, according to the grid plan of 1810, orderly streets were laid out there.

Earlier, during colonial times, the High Road to Boston provided the only convenient access to the area that was then located beyond the city's limit and later became known as the Five Points District. That section of colonial Manhattan was part of an undifferentiated countryside, part of the Collect Pond area that was distinguished by its hilly terrain and picturesque landscape. The Collect Pond provided a retreat for town-dwellers who amused themselves while skating, boating, and fishing on the pond or picnicking along its banks and surrounding meadows.

tanneries in area - eg Marshall 1754

By the middle of the eighteenth century New York City's population had expanded northward, encroaching upon the Collect Pond area. At that time Magazine (now Pearl), Mulberry, Mott, and Bayard streets were laid out there, but with little regard for the orderly construction of city streets (Figure 2). By the Revolutionary War period an ill-fashioned assortment of dwellings had been erected on several lots along present-day Pearl Street. In 1774 several New York landowners called the "Nine Partners" held title to twenty lots along Pearl Street and ten lots along Park Street (Porter 1992). Located on four of these lots was a tannery that burned in 1797.

swamp + peat deposits

A source of fresh water during most of the colonial era, Collect Pond was also used as a dump for industrial waste. In addition to the tannery, several other industries–for example, slaughterhouses, glue factories, and breweries--were located near the pond. Refuse from these industries was disposed at the pond which, by the 1780s, had become so polluted that it posed a serious health hazard. The Common Council for the city of New York ordered the filling of Collect Pond in 1803, and that public works project was completed in 1817 (Stokes III: 540-541).

Real estate in the Collect Pond area now became valuable rental property as extensive population and economic growth created a housing shortage. At that time, poor whites discovered that they could no longer find affordable housing in the city's older wards and removed to the Collect Pond area. Members of wealthy New York families and other real estate speculators who owned

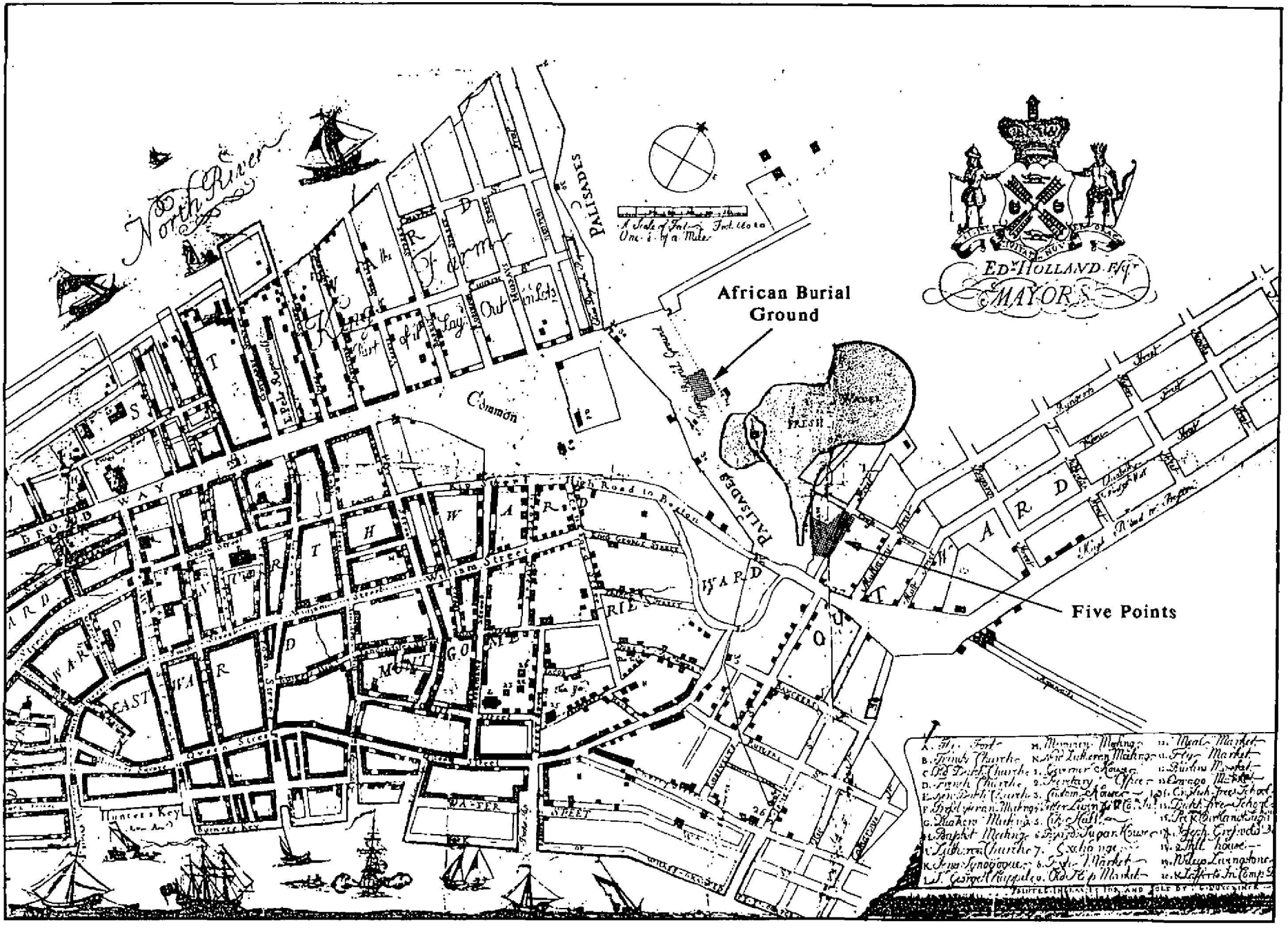

Figure 2. Maerschalck (1754) Map

property in the area erected two- or three-story wooden buildings which housed poor tenants, light industry, and shops of many kinds. By the early nineteenth century then, following the filling in of Collect Pond, lots in the Five Points District contained buildings used for both residential and commercial purposes (Blackmar 1989:184-189).

what about first commercial/resid. uses of area along Pearl St were native-born only? mixed artisan residences, eg carpenter, baker

Among the early residents of the Five Points District were recently emancipated African Americans, who first peopled the area to the southeast of the Collect Pond (including the project area) during the 1790s (White 1991:172). Many of the neighborhood's African-American residents had removed from the households of their enslavers in the old Dock, South, and East wards during the process of gradual emancipation between 1799 and 1827. By 1810 African Americans comprised nearly one-fourth of the Sixth Ward's total population of 8,216 residents (Pernicone 1973:23). In 1796 a congregation of African-American Methodists founded the Mother A.M.E. Zion Church on Cross (now Park) Street and on July 30th, 1800 laid the cornerstone for a church building in the vicinity of Five Points. One year later a local congregation of German Lutherans built a church edifice nearby (Harris 1958:42).

See page 22

Beginning in the mid-1820s and reaching its peak between 1845 and the eve of the Civil War, a huge influx of immigrants arrived in the Five Points District and other parts of the city's Sixth Ward. These newcomers dramatically transformed the neighborhood's demographic landscape. Over the years the flood of aliens precipitated the exodus of native-born residents, both African and Euro-Americans. The African Americans removed to the Fifth and Eighth Wards or the heart of so-called "Little Africa," a corridor of African settlement that contained a large proportion of the city's African-American population extending from lower Thompson Street to what is present-day Soho up to the streets near the old Minetta Creek on the south side of Washington Square Park. The native-born Euro-Americans who also fled the Sixth Ward following the arrival of European immigrants settled in the Bowery and Greenwich Village.

By the first decade of the nineteenth century Five Points was one of the city's most densely populated neighborhoods. At that time approximately 31 percent of the city's immigrant population and nearly 12 percent of the city's total African/African-American population lived there (Pernicone 1973:23). Five Points was also the poorest city neighborhood. These Sixth Ward residents earned the lowest per capita income of any city ward, $178 compared with the city's average per capita income of $320 (Pernicone 1973: 23).

The arrival of so many impoverished immigrants in such a short interval alarmed long-time city residents, and nativist fears emerged to cast Sixth Ward inhabitants in a negative light, as a threat to the city's moral and social fabric. Attention focused on the Five Points District within the city's Sixth Ward, where thousands of Irish immigrants and a sizeable number of recent arrivals from Germany had settled in high concentrations.

While many German immigrants arrived in New York City with capital sufficient to establish themselves in respectable businesses or in the skilled trades, most Irish immigrants entered the city destitute of the means necessary to begin a new life of financial security. Irish workingmen found employment in the city's booming construction and shipping industries; Irish workingwomen became domestic servants in the households of wealthy New Yorkers, and others worked at home, taking in laundry or becoming outworkers in New York's garment industry. By 1819 approximately 21 percent of all women in the Sixth Ward took in sewing (Pernicone 1973: 30). Workingmen earned an average weekly wage of approximately $5.00, while workingwomen earned from $1.50 to $2.00 each week (Blackmar 1989:88). Poor youngsters provided a cheap and exploitable child labor force. When the children of Five Points could not find regular employment, they turned to begging and theft. These so-called "street urchins" were a ubiquitous presence in Five Points.

At the end of the week, the income of working-class families barely added up to a subsistence wage, keeping these kinship units on the brink of starvation. The families of the Five Points District lived in inferior housing consisting, in most instances, of two rooms, one room approximately 8 by 10 feet and the other, a tiny bedroom. Nearly 70 percent of Irish households contained at least four members and nearly one-quarter of these households contained six or more members. Many families took in boarders in order to supplement their meager incomes (Pernicone 1973: 59). Yet eviction and time in the poorhouse were not uncommon experiences among the residents of Five Points. By 1837 a barracks for the poor stood on Park Street.

Several dancehalls and theaters in and around the Five Points District provided the city's working class with a diversion from their troubles. The plays of Shakespeare and an American melodrama entitled "Mose the Bowery Boy" were local favorites. Five Points was also the scene of a rowdy, working-class street life. Grogshops or "grocers", saloons, brothels, and gambling houses lined the streets. These establishments generated rents for New York landlords and revenue for the municipal government and, for this reason, were seldom forced to close. Prostitution, fighting, and public drunkenness were regular features of life in Five Points.

Charles Dickens visited Five Points during his 1842 tour of the United States, and he later wrote in his *American Notes*:

> This is the place, these narrow ways, diverging to the right and left, and reeking everywhere with dirt and filth. Such lives as are led here, bear the same fruits here as elsewhere. The coarse and bloated faces at the doors have counterparts at home, and all the wide world over. Debauchery has made the very houses old. See how the rotten beams are tumbling down, and how the patched and broken windows seem to scowl dimly like eyes that have been hurt in drunken frays. (Dickens 1842, 1985 edition: 80)

Dickens's overwrought representation of Five Points reflects the jaundiced gaze of a bourgeois observer who had only superficial contact with New York City's urban masses. In his personification of Five Point's tenements, Dickens confused poverty's causes with its effects, and

he was quick to blame the victims of unbridled capitalism for their own poverty rather than assigning blame to the system for creating the conditions that left the city's working class in such perilous circumstances.

Protestant reformers agreed with the English novelist's assessment of the Five Points District and its residents. Contemporary accounts drawn by New Yorkers depicted the neighborhood as a "nest of vipers", a "plague spot" inhabited by "rioting demons at lewd and hellish orgies" whose "blood-curdling screams could be heard throughout the night" (Pernicone 1973:193). Sherrill Wilson has suggested that the multi-ethnic and racially mixed character of the Five Points District is one of the factors that disturbed reformers (Future Search Conference, New York University Law School, September 18, 1992). An anonymous New Yorker gave the following unsympathetic description of the situation of an interracial couple living in Five Points:

> A Negro man and a stout, hearty, rather good-looking young white woman. Not sleeping together? No, not exactly that--there is no bed in the room--no chair--no table--no nothing--but rags, and dirt, and vermin, and degraded, rum-degraded human beings. (quoted in Sante 1991:29)

Nineteenth century engravings also revealed middle-class biases and portrayed working-class lifestyles as depraved. David Ward (1989:17) notes that:

> engravings shifted their focus from the main streets to unpaved and poorly drained alleys and yards enclosed by dilapidated buildings connected by fragile stairways. These efforts to represent the horrific environmental conditions of the slums implied an inevitable depravity amongst their residents.

Clearly, Five Points had become the locus onto which white, middle-class New Yorkers projected their anxieties regarding the city's rapidly changing social order.

As early as the 1820s missionaries arrived in Five Points, and they embarked upon a crusade aimed at rescuing its mostly foreign-born, Catholic residents from a life of poverty, indolence, and vice. Five Points was an affront to the bourgeois values of these Protestant reformers, who regarded that working-class and immigrant neighborhood as a place of licentiousness, a slum needing uplift to

the standards of respectable, middle-class ideals. In 1850 the Methodist Episcopal Church founded the Ladies Home Mission Society in the heart of the Five Points District at 1 Little Water Street, a location that previously contained an establishment known as "Old Brewery".

The residents of Five Points greeted the endeavors of the Methodists and other missionaries with indifference. According to Paul Boyer (1978:59), a New York City Tract Society missionary reported in 1845 that the response he most frequently encountered in slums such as Five Points was not hostility but "Oh, we are so poor--we have such trouble to get our daily bread, so destitute of comfortable and decent apparel, that we have no time to think about religion."

While religion and moral uplift did not greatly interest Five Points' residents, politics and social protest did. The Democratic Party's appeal to the common people won over thousands of Irish/Irish-American workingmen who enjoyed the political privileges of Jacksonian America's universal, white manhood suffrage. A political machine headed by ward bosses mobilized the immigrant masses behind the Democratic Party. Distressed by the display of political power on the part of the urban masses, the New York State Assembly, controlled by the Republican Party, passed legislation aimed at reducing the influence of the Democratic Party in New York City. In 1857 the Assembly retaliated against Irish immigrants who supported the Democrats by staging a crackdown on the saloons of the Five Points District. The police were ordered to harass local purveyors of liquor and to enforce the Sabbath-day ban on the sale of alcohol. On Sunday, July 4, 1857, Five Points residents defied the ban and filled the neighborhood saloons. When the police attempted to close the taverns, the local patrons resisted. A riot ensued, leaving twelve dead. The Five Points Riot of 1857 demonstrated working-class, immigrant resolve to defend their community and lifestyle against those who wished to stereotype them as a public menace (Ernst 1949).

The streets of the Five Points District may have been lined with saloons, groceries, used clothing stores, and gambling dens, but the living quarters above were the homes of extended family units, often three generations sharing the same cramped dwellings. The residents of Five Points endured deplorable living conditions. During the cholera years of 1833 and 1852, epidemics of that lethal disease devastated the neighborhood's population, carrying away large numbers of its residents. Inadequate sanitary facilities, poor ventilation, and damp cellars bred disease.

The use of cisterns and privies among the urban poor lasted well into the twentieth century. It was not until the late 1870s that urban landlords began to replace the dilapidated wooden structures erected nearly a century earlier with multi-story, brick buildings. In 1916 many of these brick structures were demolished in order to make way for the construction of the original New York County Courthouse.

By the middle of the nineteenth century thousands of Irish immigrants and numerous German immigrants and other European newcomers resided in the Sixth Ward--by 1855 14,000 Irish, 5,200 German, 1,200 English and Scottish, 1,000 Italian and Polish, and 1,500 other European immigrants inhabited the ward. By that date the neighborhood had witnessed a sharp decline in its African-American population, from 14 percent of its total population in 1815 to only 4 percent of its total population in 1855 (Pernicone 1973:36).

By the 1880s Five Points' demographic landscape was again altered as that neighborhood witnessed the influx of immigrants from southern Italy. According to a review of the 1880 census record, nearly 51 percent of the Sixth Ward's total population were Italian American and 38 percent were Irish American (Ingle et al. 1990). Italian-American families dominated Baxter Street, while Pearl Street remained an Irish-American enclave. A mixture of ethnic groups inhabited Park Street.

Italian immigrants and vagabonds peopled the so-called Mulberry Street Bend, a nascent working-class neighborhood located one block east of the Five Points District.

The recently arrived Italian immigrants took up residence in tenements that had previously housed generations of Irish immigrants. They lived in decayed dwellings that had been erected nearly a century earlier. Like the immigrants who preceded them, the Italians received a hostile reception from bourgeois reformers who once again perceived the influx of aliens as a threat to the city's social fabric. In the following description of "the Bend", published in 1890, Jacob Riis echoed pre-Civil War reform attitudes toward working-class, immigrant neighborhoods:

> In scores of back alleys, of stable lanes and hidden byways, of which the rent-collector alone can keep track, they share such shelter as the ramshackle structures afford with every kind of abomination rifled from the dumps and ash barrels of the city. Here, too, shunning the light, skulks the unclean beast of dishonest idleness. "The Bend" is the home of the tramp as well as the ragpicker. (Riis 1890, 1971 ed.: 42)

Although Riis was a self-proclaimed champion of New York City's impoverished immigrant masses, he shared with Charles Dickens and others an unsympathetic view of working-class lifestyles, and he depicted poor immigrant neighborhoods as the abodes of filthy, wanton idlers. Yet the struggle of the city's unwashed masses tells a different story: the residents of the Five Points District, the Mulberry Street Bend, and other immigrant, working-class neighborhoods endured substandard living conditions such as inferior housing, sanitation, and diets, but managed to maintain stable families and create a rich cultural life that sustained them as they struggled to survive in the belly of the urban, industrial behemoth that was nineteenth-century New York City.

2.3 Summary of Archeological Resources

Portions of 14 city lots were subjected to archeological investigation on the Courthouse Block (Figure 3). The majority of these contained the truncated remains of backyard and courtyard features constructed for the on-site disposal of waste water and sewage. Twenty of the approximately 50 features uncovered were either sampled or completely excavated (Bianchi 1992).

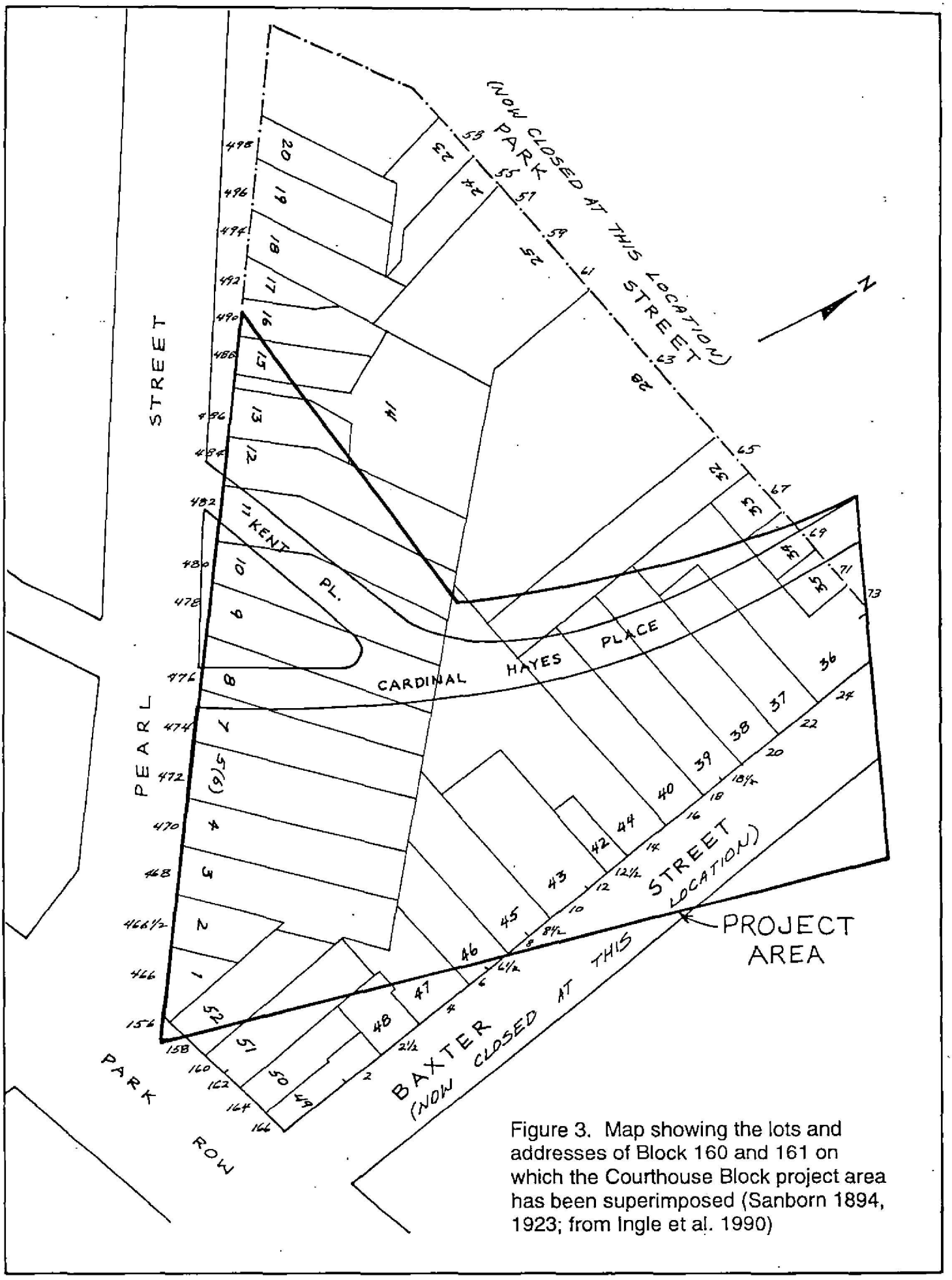

Figure 3. Map showing the lots and addresses of Block 160 and 161 on which the Courthouse Block project area has been superimposed (Sanborn 1894, 1923; from Ingle et al. 1990)

A comprehensive list of the features that were identified (taken from Figure 9A, in Rutsch and Staff 1992) and a description of each (based on field observations) is presented below. The stratigraphic records, i.e. provenience sheets, field notebooks, drawings, and photographs, have not yet been analyzed and it is therefore not possible to describe the extent to which each feature was investigated at this time. The field director, Leonard Bianchi, was consulted, however, and provided a written summary of the resources that were investigated within each lot. It should be noted that preliminary dates assigned to features in the field often need to be modified after analysis. Since beginning the processing of the Courthouse material in July 1993, it has become clear that Feature AM in Lot 52, for instance (see discussion below), does not date as early as was originally thought.

List of Features

Feature A	School sink, Lot 6
Feature B	Early 19th century circular stone privy, Lot 6
Feature C	Privy or trash deposit, Lot 6
Feature D	Privy or trash deposit, Lot 6
Feature E	Privy or trash deposit, Lot 6
Feature F	Privy or trash deposit, Lot 6
Feature G	Stone drywell (?), Lot 6
Feature H	Early 19th century circular stone privy, Lot 45
Feature I	Builder's trench for rear structure, Lot 6
Feature J	Mid 19th century circular stone cesspool, Lot 6
Feature K	Charcoal deposit, Lot 6
Feature L	Charcoal deposit, Lot 6
Feature M	Privy or trash deposit, Lot 6
Feature N	Stone-lined oval privy or trash deposit, Lot 7
Feature O	Larger stone-lined oval privy or trash deposit, Lot 7
Feature P	Privy or trash deposit, Lot 7
Feature Q	Brick cistern, Lot 45
Feature R	Rectangular stone privy, Lot 46
Feature S	Wood-lined privy, Lot 5
Feature T	Rectangular brick feature within Feature J, Lot 6
Feature U	Brick drywell, Lot 6
Feature V	Brick cistern, Lot 6
Feature W	Heavy shell (oyster) deposit, Lot 5
Feature X	Unidentified wood structure, Lot 5
Feature Y	Rectangular stain, Lot 6
Feature Z	Brick cistern, Lot 6
Feature AA	Brick privy, Lot 3
Feature AB	Dark stain, Lot 3
Feature AC	Wall segments, Lot 3
Feature AD	Privy, Lot 5

Feature AE	Unidentified yellow bricks (reused?), Lot 7
Feature AF	Wood-lined privy, Lot 7
Feature AG	Circular stone privy, Lot 23
Feature AH	Oval stone feature, Lot 3
Feature AI	Circular red sandstone privy, Lot 46
Feature AJ	Circular black stain, Lot 47
Feature AK	Circular red sandstone privy with possible square or rectangular top, Lot 3
Feature AL	Circular stone-lined privy, Lot 3
Feature AM	Early 19th century rectangular stone privy, Lot 52
Feature AN	Early 19th century brick cistern, Lot 37
Feature AO	Unidentified stone feature, Lot 44
Feature AP	Late 18th century bakehouse oven, Lot 8
Feature AQ	Late 18th century wood-lined privy, Lot 8
Feature AR	Late 19th century school sink, Lot 8
Feature AS	Late 18th century oval wood-lined cistern (?) backed by rammed clay, Lot 8
Feature AT	Wood-lined privy within Feature AH, Lot 3
Feature AU	Late 18th century wood-lined cistern backed by rammed clay, Lot 8
Feature AV	Unidentified red brick feature, Lot 8
Feature AW	Unidentified coarse red sand feature, Lot 8
Feature AX	Post mold, Lot 8
Feature AY	Rectangular deposit of mortar and red brick rubble

According to field estimates, the earliest features date to the initial residential and commercial development of the lots in the late eighteenth century. Additionally, features containing deposits from the second and third quarters of the nineteenth century are attributable to a period when the block was characterized by multi-family housing and tenements.

No *in situ* architectural remains of the early eighteenth century tanyards were found within the project area. By-products and waste material from the industrial processes, however, were uncovered in deep tests along Pearl Street. A number of tests provided information on how this locality, originally an industrial center, was improved as land suitable for development and given a residential and commercial focus. The commercial aspect of the block's late eighteenth century history is best represented in the remains of a bakery found on Lot 8.

Standing structures on the parcels along the southeast corner of Block 160, in lots numbered 1 through 6 facing Pearl Street and lots 45 through 52 facing Baxter and Park streets, were evidently

occupied into the second quarter of the twentieth century. The remainder of the lots to the north and west were demolished in preparation for the construction of the New York County Courthouse in 1917. The following summary of the resources investigated is paraphrased from Bianchi (1992), who directed the field work for the previous consultant.

Lot 6 (472 Pearl Street)

Portions of front and rear structures and the courtyard in between plus 16 features were excavated on Lot 6 (see previous List of Features for specific feature identifications). A very thin, concrete floor at a depth of approximately 10 feet below the present surface and two cellar fireplaces were exposed at the northwest corner of the front building; a single flight of stone steps led from the cellar into the courtyard. The demolition debris in the courtyard was very shallow, ca. five feet. A "school sink" (Feature A) extended along the west side of the courtyard between the stairs and the foundation of the rear building. Circular stone-lined features, including a brick cistern, a brick drywell, a wood-lined privy, and a mid nineteenth century stone cesspool, were investigated in the center of the courtyard. The rear structure on the lot was represented by portions of a concrete floor, a dirt floor, and a single flight of stairs leading to the courtyard from the southwest corner of the cellar. The most prominent feature investigated in this area was a circular stone-lined privy (Feature B) believed to date to the early nineteenth century. An early fill layer associated with the post-industrial use of the block and the original ground surface, which sloped downward to the south in the direction of the former outlet for the Collect Pond, were identified in deep test units at the front of the lot. The original ground surface was covered by a layer of shell.

Lot 7 (474 Pearl Street)

Portions of front and rear structures and a courtyard were also excavated on Lot 7. In the rear building, the fill extended to a depth of approximately six to eight feet below the surface. The floor of the basement was covered in some places by a layer of cobblestone. Two stone and brick

structural supports were located in a line near the center of the room. The front structure was not thoroughly excavated. Three privies, two dating to the late eighteenth century and one to the mid-nineteenth century, were found beneath the basement of the rear building. Two brick-lined privies were also revealed in the courtyard.

Lot 5 (470 Pearl Street)

A cellar with a concrete slab floor and walls overlay the remains of a wooden floor and an area paved with blue stone on Lot 5. A narrow, sunken courtyard was uncovered at the rear of the lot. Two wood-lined privies, both dating to the late eighteenth century, were excavated.

Lot 45 (8 - 8 1/2 Baxter Street)

At a shallow depth below the surface of Lot 45, *in situ* remains of foundation walls and a stone feature were uncovered in a narrow alleyway along the rear of the property. An entrance to the cellar of the structure, consisting of two flights of stairs, was also uncovered near the southwest corner of the property. A thick layer of fill and the base of a cistern were found beneath the concrete floor of the cellar. A stone-lined privy, filled in the early nineteenth century, was also found.

Lot 46 (6 - 6 1/2 Baxter Street)

The west (rear) foundation wall of a structure, a narrow landing, and a small courtyard were uncovered on Lot 46. A long rectangular brick and stone feature, probably a "school sink", was excavated in the northwest corner of the lot.

Lot 3/4 (468 Pearl Street)

A thick layer of stratified fill dating to the original improvement of the properties for residential use in the late eighteenth century was found beneath about four feet of recent fill on Lot 3/4. In

the rear part of the lot the early fill strata measured only three to four feet thick, and a ground surface covered by a layer of shell, dating to the pre-residential development of the block, was uncovered. The shell stratum sloped sharply downward to the south. In the southern end of Lot 6 the shell layer was found at a depth of approximately 15 feet below the surface. Five major features, including a nineteenth century shell/trash deposit, the remains of a wooden backyard structure, and a brick "school sink", were investigated. Additional identified deposits may relate to the early development of the lot. Supplemental research is needed to determine the configuration of the rear property.

Lot 47 (4 Baxter Street)

The *in situ* remains of foundation walls and support structures were uncovered at a depth of less than five feet below the surface on Lot 47. Two of the features appear to hold the remains of an upper well-head or coping stone (the covering course of a wall). Four privies were identified on this lot, two of them filled in the eighteenth century and two in the nineteenth. A circular soil discoloration was also uncovered.

Lot 52 (158 Park [Chatham] Street)

A narrow, sunken courtyard was identified along the rear west portion of the Lot 52 property at a depth of approximately 10 feet below the surface. Immediately to the east was the cellar of the most recent structure on the lot. A stone-lined privy (Feature AM) was the only feature found beneath the cellar floor. While this feature was characterized as "filled in the early nineteenth century" in the field, the artifacts from the unstratified fill actually span a much longer period. There are, for instance, bottle finishes that were apparently manufactured in the first half of the eighteenth century, but there are also empontilled vessels formed in two-piece molds that could not date earlier than the mid nineteenth century. Ceramics include creamwares and pearlwares (a significant number with mocha decoration), but there are also panelled softpaste porcelains

decorated in the neo-classical style that date after the Civil War, and numerous ironstones also decorated in the neo-classical style.

Lot 51 (160 Park [Chatham] Street)

A sunken courtyard, paved with bluestone, was uncovered along the rear west side of Lot 51 at a depth of approximately 10 feet below the surface. The courtyard was bounded on the east by the cellar of the most recent structure on the lot. A single feature, the base of a cistern, was uncovered in the northwest corner of the cellar at a shallow depth below the concrete cellar floor.

Lot 2 (456 Pearl Street)

Only a small triangular backyard area in Lot 2 was archeologically examined. Recent demolition debris was excavated to a depth of approximately 10 feet below the surface. No features were uncovered.

Lot 43 (10 Baxter Street)

Lot 43 was the first parcel examined on which the last structures were demolished prior to 1917. Removal of recent demolition debris and coal ash fill uncovered a narrow, sunken courtyard along the rear west portion of the property at a depth of approximately 10 feet below the surface. Adjacent to the east was the cellar of the most recent structure on the lot. The cellar floor also occurred at a depth of approximately 10 feet below the surface. Only a portion of the concrete floor was removed. A single privy, denoted by the collapsed concrete floor, was uncovered near the center of the cellar. The feature's sidewalls were approximately one to two feet below the concrete. It was infilled in the early nineteenth century.

Lot 44 (14 Baxter Street)

The majority of Lot 44 was disturbed to culturally sterile subsoil by the installation of two large fuel oil tanks for the New York County Courthouse. However, an irregular I-shaped alley or courtyard and an *in situ* foundation for a backyard tenement structure(s) were uncovered at relatively shallow depths below the surface in the western portion of the lot. A possible stone feature was found near the northwest corner of the lot.

Lot 37 (22 Baxter Street)

After removing a layer of cobble-stone and concrete, a single feature, a cistern filled in the early nineteenth century, was uncovered in the southwest corner of Lot 37 at a depth of approximately four to five feet below the surface. To the east of the cistern a large octagonal concrete base, which formerly supported a statue of Columbus (since removed to another city park) was uncovered. The base extended to at least 10 feet below the surface, and penetrated the subsoil. A portion of the lot adjacent to the south (Lot 38) was excavated, but no features were found.

Lot 8 (476 Pearl Street)

The archeological features and structures in Lot 8 included the remains of four late eighteenth century buildings, one of which contained the base of a brick and stone bake oven. Additional cultural resources included two interior living surfaces (two small test units in one of the structures uncovered a variety of artifacts dating to the late eighteenth and early nineteenth centuries, including an 1816 coin and a quantity of household and faunal remains), an exterior alleyway/activity area, and at least four major subsurface features. These features appear to be associated with the light-industry bakery, historically documented as being established in the 1780s, and for the on-site disposal of human waste. Three of the features were wood-lined, circular deposits with an exterior ring of packed clay. Their construction suggests that they functioned as

wood-lined cisterns. Some evidence indicating that the alleyway features were connected was also present.

2.4 Statement of Significance

As noted earlier, archeological resources are normally considered eligible for the National Register based on their research potential and significance under Criterion (d), that is, for their ability to yield important information concerning the past. In addition, the Courthouse Block appears to be significant in terms of Criterion (a), that is, for its association with the broad patterns of our history, specifically with early working class history and reform movements in New York. This section outlines how archeological resources in the Courthouse Block fulfill the National Register's Criteria of Evaluation.

The Courthouse Block site is unique, both for its historical importance and its archeological richness, with deposits representing a sequence of change from the late eighteenth through the nineteenth centuries. The site contains significant data relating to demographic changes in the neighborhood over time—from native-born to mostly immigrants and from racially mixed to mostly Euro-American—and how those changes contributed to New York City's growth. The site also contains significant information on economic changes over time and how those changes contributed to the transformation of a respectable artisan-class neighborhood into what was characterized as New York City's worst nineteenth century slum. Five Points, as it became known, was apparently one of the city's attractions. Blackmar (1989: 80) has suggested that "New York's claims to the status of a European city were backhandedly achieved when Dickens likened the Points to London's notorious East End." As part of Five Points, the Courthouse Block is significant as a sample of the material culture and circumstances that were characterized as a slum and how that characterization took shape.

The history and archeology of the Courthouse Block include a record of the processes of urbanization and the development of race relations. In the documents and archeological remains is significant information on the physical and sociocultural aspects of adaptation to more congested living circumstances and of response to the more diversified economy created by the Industrial Revolution. The information pertains to working class New Yorkers, people primarily of African, Irish, and German descent, who continue to be important to the city's vitality. The specific experience of each of these groups within the block over time will contribute significantly to our understanding of the role ethnicity has played in New York's development, how it is expressed in material culture, and how the expressions of ethnicity, race, and class intersect.

One of the most important aspects of eighteenth century development of the project area is its mixed industrial/residential character. According to deed research conducted for the Stage IA cultural resources survey (Ingle et al. 1990), Lots 6-9 along Pearl Street had structures described as dwellings/shops (in three cases) and a dwelling/bake house by 1774. Analysis of the remnants of small businesses, residential quarters, and industrial operations in proximity to one another will contribute to a better understanding of this important phase in the city's urban development. The functional analysis of archeological remains and features relating to the multiplicity of activities on each lot will contribute to our understanding of how the early city was organized. It is also possible that lot-specific documentary research will provide new insights into the separation of home and work place. Although this theme has been investigated for elite segments of New York City's population (Wall 1987), preliminary research suggests that the working class also restructured the relationship between home and work.

At least one tannery (sited at 480-488 Pearl Street on Lots 10-15) was located very near the project area during the eighteenth century. Although ownership cannot specifically be traced to the first half of the century, it is likely that this and other tanneries were in operation by the 1730s (Ingle

et al. 1990:23). The tanyards along Pearl Street represented one of several industries located in the area of the Collect Pond. No archeological remains of any of these industries near the Collect -- including a slaughterhouse, numerous rendering plants, glue factories, bone mills, and breweries -- have been studied in New York. Nor does any documentary information, other than representations on maps (Maerschalck 1754; Holland 1757) and references in deeds, exist which provides insight into the operation of the eighteenth century tanyards. According to Ingle et al. (1990), only three archeological investigations have been undertaken at tanyard sites, none of which is equivalent in time period or locational context to that of the project area. Thus, any cultural materials relating to the tanyards along Pearl Street are significant for the information they can provide on the tanning industry as it was practiced in New York City in the eighteenth century. They also may contribute to our understanding of technological changes made during the century. Their significance lies not only as a record of a specific industry but also as one of several industries established along the edge of the Collect Pond, a focal point for recreational activities and industrial development in eighteenth century New York.

Although mid-eighteenth century maps show an alignment of tanyards along the East River outlet of the Collect Pond, the relationship between the outlet and Pearl Street is not understood. The project area includes the locus bordering the outlet and could provide information on its changing configuration. This record is significant in the sense that it could contribute new information on the establishment of New York City's grid pattern and the methods used to modify a natural feature in the process of creating urban space.

The infilling of the Collect Pond in the early nineteenth century and the transformation of adjacent blocks, including the project area, into what has been characterized as an urban "slum" (Sante 1991) is significant in a number of ways. The detailed histories of each lot can provide information on structural accommodations associated with increased density of population as well

as demographic changes over time. The physical remains of these accommodations promise to add detail and authenticity to the written record. The density of archeological features is unlike any other block excavated in New York City, suggesting major differences between other working class neighborhoods and the Five Points (Jean Howson, personal communication, September 18, 1992). The study of the spatial distribution of newly arrived European immigrant groups and Africans within the project area and occupational and behavioral differences between them will contribute to a better understanding of similarities and differences in the adaptive strategies used by those groups. Both historical research and the analysis of archeological remains associated with specific groups may reveal distinctive consumer patterns, acquisition networks, and acculturation strategies.

That the project area was part of the infamous area known as Five Points makes it particularly significant in that both historic period and contemporary accounts (newspaper articles published during the excavation of the Courthouse Block) distort through middle class bias what was undeniably an impoverished working class neighborhood but what may not have been the "den of iniquity" portrayed. Five Points is also significant as a place known throughout the nation and even abroad and associated with some of the most celebrated early reform movements. In 1850 the New York Ladies Methodist (Episcopal) Home Missionary Society established a mission at 61 Park Street in the Old Brewery Building (just to the south of the project area). Jacob Riis, the well-known late nineteenth century New York reformer, praised the efforts of these "noble women" as well as those of Reverend Lewis M. Pease, who managed the mission and the House of Industry across the street. These premises contained dormitories for the destitute, a common dining room, a chapel, and a school for children (Riis 1890, 1971 edition:128). The more objective picture of life in the Five Points neighborhood that will be derived from the historical and archeological analysis should illuminate the particular prejudices reflected in these missionary's accounts.

Although the relationships between conditions in nineteenth century impoverished neighborhoods and the transmission of disease have been studied in general (e.g. Brieger 1985), the historic and archeological record of a place in New York which was a stronghold of the 1833 and 1852 cholera epidemics has significance for adding detail to the specific history of health and hygiene in New York City. Such significance lies both in terms of services provided and responses used to cope with abhorrent conditions during the nineteenth century.

The laboring poor immigrants who inhabited Five Points were part of a much larger stream of more than five million immigrants that arrived in America's industrializing urban centers during the nineteenth century and made, during these years, indispensable contributions to the nation's economy and society. Also, the Five Points District was a central part of the nation's long history of enslavement and its demise, for many of the African residents of the district were recently emancipated freedmen who were part of the first wave of free Africans that inaugurated the historic pattern of free African migration into urban centers following emancipation in the northern states between 1786 and 1841. As discussed by Shane White (1991:154), the 1790, 1800, and 1810 census records show increasing numbers of African- American households in the area immediately southeast of the Collect Pond, and it is not unlikely that African Americans were represented in the project area. During the transition from enslavement to freedom these free Africans made invaluable contributions to the nation's economic, political, and cultural life.

The social interactions between recently emancipated Africans and European newcomers within tightly confined urban spaces like Five Points engendered novel race relations that transformed the ways these previously inchoate groups perceived themselves in relation to society as a whole. In the process of forming an industrial working class, groups within that class began to define themselves along ethnic and racial lines. Although they all confronted similar living conditions and exploitation in the workplace, much in their circumstances gave rise to conflicts across racial

and ethnic boundaries. While it is expected that material remains relating to working class households will have much in common, it is also possible that the tensions and boundaries between groups within that class will be expressed through possessions or even through spatial organization.

The significance of the archeological features and artifacts recovered on the Courthouse Block is not limited to the history of New York City, for they have the potential to yield important information that will augment an understanding of the broad contours of the nation's past. The history of Five Points is significant as an integral part of the national dynamic of territorial expansion and interregional economic growth that included, among other things, the transformative impact of America's Industrial Revolution with its unprecedented investment of huge sums of capital in factories and transportation networks, and the influx of thousands of immigrants into American cities such as Chicago, Pittsburgh and, of course, New York.

The examples of material culture uncovered on the Courthouse Block embody clues to the meaning that urbanization, mass migration and/or immigration, industrialization, and emancipation--the broad contours of the nation's history--held for the day-to-day experiences of ordinary working Americans of many ethnic origins. The material remains also embody clues to the meaning of poverty as it was experienced by segments of New York City's population whose descendants continue to make significant contributions to the city's vitality.

2.5 Summary

Archeological resources contained in the Courthouse Block appear to fulfill the National Register's Criteria of Evaluation under both Criteria (a) and (d). The Courthouse Block, as a sample of the urban transformation that took place between the late eighteenth century and the last quarter of the nineteenth century, is of utmost significance in the history of New York and, indeed, the nation. It contains historical and archeological information relating to groups whose contributions to the

development of New York and the nation have not been well-studied -- recently emancipated Africans and the variety of European immigrants who crowded into New York during the nineteenth century. Five Points, the name for the neighborhood in the middle decades of the nineteenth century, represents a specific place, named and known, but never before revealed to this extent by physical evidence. It is only fitting that the groups who lived there, and who made such important contributions to New York City's development into one of the world's leading urban centers, now receive the scholarly attention that they so richly deserve.

3.0 DATA RECOVERY PLAN

3.1 Introduction

The execution of a data recovery research program for the Courthouse Block is the principal means of mitigating the adverse effects of proposed construction activities on significant archeological resources. The data recovery plan includes a discussion of research questions and appropriate methods for addressing the questions, as well as a brief description of field and laboratory procedures.

3.2 Research Questions and Methods

The historical and archeological analysis of the Courthouse Block provides an opportunity to examine a part of New York City that has gone through many transformations. Historically, the block began as a mixed residential and manufacturing area, eventually evolving into a densely occupied poor urban neighborhood, and finally into the site of important civic institutions. The physical, demographic, and economic changes that the neighborhood underwent over time will be the major focus of the proposed research. The neighborhood achieved notoriety during the early-to mid-nineteenth century as one of New York's worst slums, Five Points. How that happened and how and why Five Points became a virtual symbol of poverty will also be a major focus of the research. In spite of the many written sources that portray Five Points as an urban "slum," how its residents actually organized their lives is not known. It is in this area that archeology, with its capacity to get at peoples' private lives and possessions, has the potential to contribute important new information.

The principal value of the archeological data recovered on the Courthouse Block is that it constitutes a physical record of the unknown history of working class men and women who left behind few written records of their experiences. In order to understand the meaning of the complex patterns of behavior embodied in the material culture recovered from the Courthouse

Block, researchers must place that behavior within a broad historical context, a frame of reference derived from a close review of documentary sources including, for example, census records, deeds, court files, and ethnic and foreign language newspapers. The following discussion outlines an interdisciplinary approach to the data recovery program that includes research questions derived from several current approaches to archeological and historical inquiry.

In recent years historical archeologists have come to realize the importance of working closely with historians. Though few and far between, interdisciplinary research efforts have focused on addressing significant historical questions, the subject, for example, of an entire session at the annual meeting of the Society for Historical Archaeology in 1992 (Seasholes 1992) and a major concern of Bert Salwen (1988), who developed a degree program at New York University in the 1980s that "bridged" between the history and anthropology departments. While historical archeologists have recognized the need for documenting the local historical context for the purpose of archeological inquiry, they have been less adept at placing archeological sites in the broader context of significant historical concerns. A lack of familiarity with historic method and theory is certainly part of the problem (McCarthy 1990), but another is the relative rarity of direct interaction between archeologists and professional historians. This data recovery plan reflects an interactive approach that will continue throughout the project.

The interdisciplinary research program will focus on five broad domains of research, as follows:

Research Domain 1.	the socioeconomic and ideological processes that contributed to the social construction of the Five Points "slum";
Research Domain 2.	the construction of class, race, and ethnicity in an urban context;
Research Domain 3.	the nature of family, kinship, and household organization;
Research Domain 4.	work and industry in a developing capitalist economy;
Research Domain 5.	health and hygiene in an urban context.

Specific research questions relating to each of these areas are posed below. Strategies for approaching the questions are briefly enumerated for each set of questions. A more detailed discussion of both historical and archeological analytical procedures is presented in sections 3.5 and 3.6 of this document. Because it is likely that other questions will arise during the research program, the methods proposed are sufficiently general to be expanded as appropriate.

Research Domain 1. The socioeconomic and ideological processes that contributed to the social construction of the Five Points "slum".

The area abutting the eastern shore of the Collect Pond, eventually known as Five Points, was first developed as a residential and manufacturing enclave characterized by modest trade houses and shops (Blackmar 1989:92) in the late eighteenth century. By the end of the first decade of the nineteenth century, an influx of immigrants and African Americans had contributed to making the area one of the most densely occupied in the city. By the next decade, the area was known as Five Points, perhaps the most famous "slum" in New York City's history.

The nineteenth-century perception of Five Points revolved around the juxtaposition of "slum" with "neighborhood". Areas of the city inhabited by the working class were depicted as the loci of moral degeneracy, while sections of the city populated by more affluent New Yorkers were represented or described as respectable. More often than not the term "slum" was intended to indicate something about the moral integrity of the working class rather than a recognition of the economic and social forces that created poverty and its attendant ills. To be sure, Five Points changed from a neighborhood of artisans living in relatively comfortable circumstances to a poverty-stricken working class enclave within the space of less than 25 years. In this same period it became a nationally and even internationally known symbol of urban degeneracy. The rhetoric that announced this transformation seldom made visible its economic causes. Research will consider the nineteenth century understanding of Five Points as a symbol of depravity.

The following group of questions examines the socioeconomic and ideological processes that contributed to the social construction of the Five Points slum. The analysis will focus on archeological and documentary evidence for change through time.

- Does the archeological record, particularly the spatial relationship of features, reflect increasing population density through time?
- Did the organization of space within individual lots change over time?
- Can variation in the use and organization of space be correlated with lot size; are there differences between interior and exterior lots?] all lots are exterior
- What does analysis of archeological and documentary data reveal about changes in social stratification through time? broad question
- Do acquisition networks for goods like cosmetics and beverages change over time, suggesting changing relationships with the wider city?
- Does a comparison of archeological features and artifacts from the Courthouse Block and other lower Manhattan blocks (including the nearby Broadway Block) suggest separate social and economic trajectories toward the formation of distinctive neighborhoods? huh?

This is broad

- How do the structures and features in this neighborhood compare with contemporaneous structures and features relating to areas in other cities where poor people lived, e.g. Baltimore, Philadelphia, Washington, Providence, Boston?
- What does a comparison of the physical features uncovered on the Courthouse Block with nineteenth century written observations (including those produced by the Methodist reformers who operated a mission in the neighborhood) reveal about the symbolic representation of working class neighborhoods during the reform era? + material remains / residents
- What does a comparison of the physical features uncovered on the Courthouse Block with nineteenth century engravings of Five Points reveal about the symbolic representation of working class neighborhoods during the reform era? + PKC engravings

This is really broad

- How do working class, ethnic, and foreign language newspapers of the period reflect the self-perception and collective identity of Five Points residents?
- What can we learn from these newspapers about the political behavior of Five Points' residents and about their own understanding of the causes of poverty and injustice?

Historical methods to address the research questions in Research Domain 1 will include the following:

- Intensive study of deeds, census records, and city directories relating to all lots within the Courthouse Block.

- Analysis of housing permits and records relating to the Courthouse Block.
- Review of writings by nineteenth century reformers who discuss Five Points.
- Review of lithographs and other graphic representations of Five Points.

Archeological methods to address the research questions in Research Domain 1 will include the following:

- Stratigraphic and depositional analysis using provenience records, field notebooks, drawings, and photographs of all excavated areas within the Courthouse Block.
- Computer-assisted comparative analysis of structural change over time.
- Identification of all artifact categories focusing on function.
- Quantification and dating (using terminus post quem, TPQ, and ceramic formula dating derived from diagnostic artifacts) of specific artifact deposits relating to particular households.
- Quantification and dating of contemporaneous artifact assemblages relating to the neighborhood.
- Comparative analysis of variability within particular assemblages.
- Ceramic cost index calculations for vessels from deposits relating to particular research questions.
- Comparison of archeological data with data from the Broadway Block and from other contemporaneous sites (as presented in site reports) investigated in Manhattan and other cities.

Research Domain 2. The construction of class, race, and ethnicity in an urban context.

The artisans and working people who lived in the project area at the end of the eighteenth century were both native born and new arrivals. Some of the earliest residents in the vicinity of the project area during the late eighteenth and early nineteenth centuries were recently emancipated African Americans (White 1991), followed shortly thereafter by Irish and other immigrant groups. Whether these groups maintained distinct identities in the eighteenth century is not well studied. However, White (1991:187) has suggested that "New York blacks [at the end of the eighteenth century] did not enter their freedom in a vacuum but as people with a cultural lifestyle that made them distinct." White (1991:199) further argues that African Americans used distinctive style in language, dress, and body movements to "create an appearance that, considered as a whole, was new." How

African Americans interacted with recent Irish immigrants is of particular interest, since ultimately it was the African Americans who moved out of the neighborhood, beginning the general movement of African Americans uptown. Very little is known about race relations at the level of everyday life in the late eighteenth and nineteenth centuries in New York City, making the historical research and archeological data relating to members of these groups within the project area of particular significance.

As the process of industrialization in the nineteenth century transformed the occupational structure, a working class emerged that was different than the artisan class that had existed in earlier times. How racial and ethnic groups maintained distinct identities within that class is another area for research. Because many ethnic groups were represented within the project area by the second quarter of the nineteenth century, it is likely that the attribution of at least some artifact deposits with specific ethnic groups can be made. A body of scholarly literature sheds some light on this topic in a general way because it explores the way material culture reveals the relationships between race, ethnicity, and class (e.g. McGuire 1982; Cook 1989; Cheek and Friedlander 1990). This literature will be reviewed and considered in combination with the literature on boundary maintenance strategies (e.g., Hodder 1979; Yamin 1988, 1989; Burley 1989). Several researchers have also advanced the idea that artifact assemblages can reflect the hopes and values of their users in ways not evident from their form and function alone (e.g. Cook 1989; Beaudry et al. 1991; Hall 1993; Glassie 1982) and that this kind of analysis can shed light on peoples' group identities.

As economic stratification became increasingly visible, nineteenth-century New Yorkers began to recognize another concept, i.e. class, as a relevant category of collective identity. Assimilating the realities of New York City's burgeoning class society into their construction of identity and interest, city residents began to reposition themselves with respect to a changing social order. Historians now have a fairly clear and detailed picture of how the upper stratum of nineteenth-

century New York City's social hierarchy viewed themselves in relation to the rest of society. The diaries, letters, and journals of these mostly literate residents reveal an increasing willingness on their part to recognize class as a constituent of their collective identity and to seek the advantages a capitalist society had to offer them. Still others lamented the passing of the older order and saw few advantages in the new forms of social organization. In an article from the *New York Observer* entitled "No Community of Interest...No Community of Feeling, An Old Apprentice Laments Modern Times," and printed in October, 1826, a master craftsman in the city of New York portrayed the democratic laws and the free market economy as threats to social order. He wrote:

> The tendency of our laws, which give masters no control over their apprentices, or the manner in which these laws are enforced or abused, by affording to unruly apprentices inducements to complain or, and to mortify and perplex their masters, has induced the solution on the part of the most respectable master mechanics, not to take apprentices at all. It is a fact well known to many, that there are great numbers of poor and friendless boys in our streets, who are yet honest, and desirous to work, but who, in consequence of this state of disorganization, are unable to obtain the knowledge of a trade. These may be seen wandering about...(Gilje 1992:58).

Other New Yorkers shared the concerns of "the Old Apprentice" and predicted that one of the most pernicious consequences of the current ideals of equality and *laissez faire* philosophy would be the collapse of social order.

Because of the dearth of written sources that express their attitudes toward identity and interest, the collective perceptions of the city's propertyless wage earners is less well known. Often, articulate spokesmen for propertyless workers expressed class grievances in the language of republicanism, while others grafted a class analysis onto the rhetoric of rights (Wilentz 1984). Again, the artifacts and features uncovered at the Courthouse Block will provide additional insights into the extent to which the residents of Five Points produced a material culture that was in significant ways distinct from the material culture of other New Yorkers. In other words, a careful

How to measure "distinct"? Comparative collection

study of the artifacts and features will help scholars articulate the extent to which these residents, who left few written sources behind, understood that their interest was shaped by the social relations of the new capitalist economy and society.

Specific research questions relating to ethnicity, race, and class include:

- Do the artifact assemblages give any indication of the ethnic and racial identity of the residents who inhabited the lot or property where the artifacts were found?
- Is there evidence for change over time in the expression of ethnic and racial identity?
- What do the artifact assemblages tell us about the role ethnicity played in the process of adaptation to the evolving urban environment?
- Do the lot-specific histories in combination with what we have learned from the assemblages tell us anything about the ways in which ethnic and racial boundaries were established and maintained in the late eighteenth century?
- Do the artifact assemblages tell us the degree to which the nineteenth century residents of the area that had become known as Five Points were able to forge autonomous, culturally distinctive enclaves within the neighborhood?
- What do the floral and faunal assemblages tell us about the foodways of the various ethnic and racial groups that inhabited the project area in different periods?
- What do the artifact assemblages tell us about the extent to which these racial and ethnic groups retained Old World customs and values and how they were transformed through time?
- What was the role of ethnicity and race in the construction of class identity in the project area?

Historical methods to address the research questions in Research Domain 2 will include the following:

- Detailed analysis of all New York State decennial census records and other census records covering the relevant time period, with particular attention to racial and ethnic identity.
- Intensive analysis of the 1855 New York State household census, which includes particularly detailed information on household composition.
- Analysis of working class, ethnic, and foreign language newspapers dating to the relevant time period.

Archeological methods to address the research questions in Research Domain 2 will include the following:

- Analysis of faunal remains, with particular attention to distinctive butchering practices and dietary patterns.
- Analysis of floral remains, including those recovered from flotation of soil samples, for information on diet and yard plants.
- Functional identification of ceramic and/or glass vessels that might relate to dietary or other practices distinctive of particular ethnic or racial groups.
- Identification of decorative motifs and patterns on ceramics or other objects that might have held meaning for particular groups.
- Identification of combinations of artifacts associated with specific groups.

Research Domain 3. The Nature of family, kinship, and household organization

It is assumed that family and household organization varied within the project area, perhaps as a reflection of ethnic background, and possibly changed in relation to increasing population density and worsening economic conditions. It will therefore be important to identify as many specific households as possible through documentary research and associate them with artifactual and structural remains. Although data on household organization in the first half of the nineteenth century has not yet been considered, Pernicone's (1973:xv:xviii) study of the manuscript schedules of the 1855 New York State census suggests that the Irish/Irish Americans in the Sixth Ward did not suffer from the disintegration of family relationships assumed by many scholars and observers to be the automatic concommitants of the "uprooting of the immigrant" and the "alienating influences of a large urban center." Scholars studying the transition from enslavement to freedom have also noted that Africans/African Americans waged a successful struggle to reconstruct and maintain stable families.

The expression of gender at the household level will also be considered. A recent study of an archeological assemblage associated with a mid-nineteenth century female-headed household in

Brooklyn included many strong, narcotic-containing medicines and no used smoking pipes (personal communication, Paula Crowley 1993). Other studies (e.g. Wall 1991) have considered artifacts associated with the tea ceremony as expressions of female behavior.

Inquiry pertaining to the following research questions will articulate these issues through an analysis of the material culture found on the Courthouse Block:

- What do the artifact assemblages tell us about the extent to which the inhabitants of the project area were able to maintain stable kinship units even under the conditions of poverty that intensified over time?
- Are we able to determine from a study of the recovered artifacts anything about the size and structure of families living on specific lots?
- Are the artifact assemblages associated with nuclear family units different than assemblages from boarding houses?
- What is the evidence for children's activities in the artifact assemblages?
- Can households headed by women be distinguished archeologically from households headed by men?
- Is there either spatial or temporal variation in the teawares and tablewares within the assemblage that would suggest changing roles for women over time?

Historical methods to address the research questions in Research Domain 3 will include the following:

- Detailed analysis of all federal and New York State census records covering the relevant time period, with particular attention to household organization.
- Close analysis of the 1855 New York State household census, with particular attention to the groups that Pernicone (1973) did not focus on, i.e. African Americans and non-Irish immigrants.

Archeological methods to address the research questions in Research Domain 3 will include the following:

- Functional analysis of selected assemblages associated with documented family types, e.g. nuclear family, extended family, family with boarders.
- Comparative analysis of selected assemblages associated with documented family types dating to different time periods.

- Analysis of all assemblages relating to documented female-headed households.
- Comparative analysis of teawares from households dating to the same time period and to different time periods.

Research Domain 4. Work and industry in a developing capitalist economy

Archeological remains relating to industrial and artisan activities within the project area will add to the growing body of data on work and the emerging working class in nineteenth century New York. Industrial activities along the edge of the Collect Pond preceded the development of the area for residential use. In particular, tanyards lined Pearl Street and, although none was located within the project area, by-products and waste material from the industrial processes were archeologically recovered. Further historical research and a summary of the work to date on the tannery industry in New York City, including a description of the archeological materials recovered, will be completed.

Specific research questions to be addressed include:

- What were the chemical agents used by the tanners who operated in the neighborhood?
- Compared to a modern understanding of the chemistry of tanning, how effective were the materials and methods that were used by these eighteenth century New York City tanneries?
- How do the tanning processes used in New York compare with processes used elsewhere in the same period?

Small artisan operations replaced the tanyards along Pearl Street in the late eighteenth century. Deed research conducted during the Stage IA investigation provided the names and occupations of at least three artisans who bought properties in 1785 that had been tanyards: carpenters Obediah Wells and Henry Lott, and baker Tobias Hoffman (Ingle et al. 1990:121-123). On lots that were occupied by artisans, an attempt will be made to connect specific deposits with specific individuals.

Some other kinds of jobs may also have left evidence in the archeological record. These include the piecework that women did at home for the garment industry and prostitution. Siefert (1991) demonstrated in nineteenth-century Washington, D.C. that it was possible to recognize houses of prostitution and distinguish them from working-class households in the same and other neighborhoods based on the relative representation of specific artifact functional groups. Most historical accounts mention the presence of brothels at Five Points, and it is likely that some archeological deposits and artifact assemblages relating to them were excavated. It has also been suggested that Irish/Irish-American women working as domestics provided "speeded adaptations to American ways" (Fallows 1979: 29), a phenomenon that may have left a material signature.

Research questions to be addressed concerning work are:

- Can any of the archeological features investigated be related to the occupation of the person or people who lived on the lot?
- Do the artifact assemblages include material that may be specific to particular trades or crafts?
- Although the eighteenth century bakery found on Lot 8 (No. 476 Pearl Street) was not thoroughly investigated, what specific features and artifacts appear to relate to that business?
- Do the artifact assemblages give any indication of the character of work women did in their homes?
- Is there any evidence that women were engaged in outwork for New York's garment industry?
- Are artifact assemblages associated with known brothels different than the assemblages from other boarding houses in the neighborhood, either stylistically or socioeconomically?
- Do some artifact assemblages from lots that have not been documented as containing brothels suggest the pattern noticed by Seifert (1991) in Washington? In other words, is it possible to identify a brothel assemblage without documentary data?
- Are the brothels in Five Points more or less affluent than those studied by Seifert (1991)? Is there an economic hierarchy of brothels within Five Points?

Historical methods to address the research questions in Research Domain 4 will include the following:

- Study of business reports and census records.
- Identification of businesses within the project area from city directories.
- Review of literature on the eighteenth century tanning industry.

Archeological methods to address the research questions in Research Domain 4 will include the following:

- Functional analysis of deposits relating to specific artisans identified by historical research.
- Functional analysis of deposits which appear to represent particular trades or work activities.
- Comparison with other New York City deposits representing artisan activities (e.g. the crockery shop at Hanover Square, Rothschild and Pickman 1990; the Daniel Van Voorhees jewelry shop and Bowne's Pharmacy, Louis Berger and Associates 1987; the pipe-maker's dump at Broad Street, Grossman 1985).
- Comparative functional analysis of any assemblages associated with a documented brothel with the brothel profile defined by Siefert (1991) in Washington.
- Chemical analysis of leather fragments and soil samples relating to tanning operations.

Research Domain 5. Health and hygiene in an urban context

For close to two centuries the area surrounding the Collect Pond was the site of several industries that produced noxious by-products whose concentration over time posed a grave hazard to the health of the local inhabitants. One of the most important research domains will be to ascertain whether there is any evidence that the techniques of production and toxic wastes associated with industries in the Collect Pond area had, over time, any affect on the health of Five Points residents. Visual representations of Five Points, most of them dating to the second half of the nineteenth century, show densely packed residential structures and small businesses in a kind of disheveled jumble. But at the beginning of the nineteenth century, the earliest residents probably coexisted with various industrial establishments.

In addition, the infrastructural arrangements for waste disposal, water supply, and housing at Five Points surely contributed to the transmission of disease. The excavations revealed a complex of sanitary facilities including privies, cesspools, school sinks, and drains. There is a record here of the multitude of facilities that was used to dispose of waste on a lot-by-lot basis when laws were passed requiring its disposal. Unlike other blocks that have been excavated in New York City, this block includes facilities designed to service tenements that were already in existence by the middle of the nineteenth century. The elucidation of these infrastructural arrangements, derived from their physical remains, should contribute new information on this aspect of life among the poor in New York City.

Specific research questions to be posed include:

- How did facilities for the disposal of waste evolve over time?
- Can disease and living conditions of the individuals living in the tenements at Five Points be determined through the study of parasitic remains associated with soils from the privies and cesspits?
- What do the medicine bottles and their residues indicate about how people coped with the threat and reality of disease?
- What other alternatives to professional medicine were used?
- How do the remedies used at Five Points compare with remedies used in other New York neighborhoods during the same time periods?
- Do documentary sources such as vital statistics, hospital records, and physician's ledgers reveal the impact of work-related stress and ailments among Five Points working men?
- Are toxic chemical wastes associated with industrial production during the period under investigation present in the soil samples taken from discrete deposits within the Courthouse Block?
- Can any of the ailments known to have afflicted Five Points residents be traced to exposure to toxins associated with the area's industries?

Historical research methods to address the research questions in Research Domain 5 will include the following:

- Review of contemporary and late nineteenth century scientific literature concerning the impact of industrialization and urbanization on the health of the working poor
- Study of New York City's sanitation laws and regulations.
- Review of selected early hospital records.
- Review of selected physicians' journals.

Archeological methods to address the research questions in Research Domain 5 will include the following:

- Identification of particular pollutants (e.g. chrome, mercury, lead) from soil analysis in combination with research on related ailments.
- Analysis of features relating to waste disposal within each lot in terms of how landowners either complied or did not comply with legal requirements and what implications such factors had for the health of the residents.
- Microscopic analysis, as has been used in other archeological investigations (e.g. Bell 1987), to identify parasites in privy deposits.
- Analysis of patent medicine bottles, ointment jars, or any other health-related paraphernalia (e.g. syringes).
- Comparison of courthouse data relating to health with other assemblages (e.g. Howson 1987; Salwen and Yamin 1990).
- Construction of "maps" showing acquisition networks for medicines and how they changed over time.

3.3 Archeological Field Procedures

Rather than using a single excavation grid for the entire block, separate grids were established for each lot within the block (Bianchi 1992). Features and test units were then mapped in relation to extant walls, which were, in turn, tied into the site datum. In most cases, architectural remains were not removed unless the examination of a particular feature required their removal, or if it was not safe to leave them in place.

To control vertical measurements, temporary datum points were arbitrarily established near each excavation unit, usually at one corner of the unit or on an adjacent foundation wall. All measurements for plan views, profiles, and stratification were taken from hand-held, leveled lines attached

to the temporary datum point. The coordinates and elevations of all temporary datum points were later surveyed in relation to the previously established site datum.

Demolition debris from the most recent structures on each lot was cleared by backhoe. All features were excavated stratigraphically by hand, with each stratum defined by changes in soil color, texture, compaction, and concentrations of cultural material. All manually excavated soil was screened through 1/4-inch hardware cloth. Excavated soil from the lower component of one feature on the Courthouse Block was wet-screened.

For strata that obviously represented disturbed or secondary deposits, samples of construction and waste materials (i.e. brick, slate, mortar, building stone, and coal) were retained. Heavy concentrations of brick and shell were sorted, identified, weighed, and discarded in the field. Other materials recovered in these deposits, and material from all primary deposits, were fully collected. All cultural material retained in the field was placed in labeled paper and plastic bags and transported to the project's storage space/laboratory. Bag labels included provenience information as recorded in the project catalog.

Excavation units were numbered consecutively (e.g., E.U. 1, E.U. 2) within each lot. Stratigraphic designations consisted of a Roman numeral given to each layer encountered during the excavation of each excavation unit, i.e. I, II, II, etc. Arbitrary levels within a stratum were numbered consecutively, i.e. I-1, I-2, I-3, etc. Each distinct provenience received a unique catalog number. The sequence of assigned catalog numbers began with 001. Drawings also received catalog numbers. Measurements were made in feet, and tenths and hundredths of feet. Four minimum and maximum opening and closing depths were recorded in the field catalog for each unit.

All archeological features were given an alphabetic designation, beginning with letter A . . . AA, etc. Bulk soil samples (for soil, chemical, and flotation analysis) were collected from all features, generally from those layers identified in the field as primary deposits. Each sample was labeled with the appropriate catalog number.

Stratigraphic profiles and plan views were consistently drawn of all excavation units and features. Photographic documentation of the field work included both 35-mm black and white print and color slide film. All formal photographic records of archeological deposits and features included a scale and north arrow. A computerized photographic catalog was kept for the Courthouse Block.

3.4 Laboratory Processing Procedures

All recovered artifacts will be cleaned and subjected to appropriate conservation treatments in accordance with the procedures outlined here and in Section 4.2.2 below. They will then be catalogued, labeled, and inventoried. Artifact inventory and provenience data will be placed in the Historical Artifact Management System (HAMS) computer data base system developed by JMA to facilitate quantitative analysis.

Artifacts, soil samples, field records, and photographs were moved from where they had been stored by the previous consultant in New Jersey to a facility at 6 World Trade Center (the Foley Square Laboratory) when it was available. Twenty-five shipments of project-related materials were made to the Foley Square Laboratory ending on September 23, 1992. Nearly one thousand boxes of artifacts and soils were delivered for both the Broadway and Courthouse blocks of the Foley Square Project. Over five hundred of these boxes contain Courthouse Block artifacts and about fifty contain Courthouse Block flotation and soil samples. Two freezers of wood, as well as a small amount of other organic material, were part of the final shipment.

Artifact shipments were delivered with transmittal sheets that provided a list of catalog numbers and artifact bags within each box. Some of the material had been evaluated by the previous consultant and a number of artifacts were flagged for conservation and boxed separately. Most of these boxes came with detailed hand-written lists of the artifacts contained in them, as well as the catalog numbers. However, there was no written indication of the extent of this evaluation process nor was there any unified artifact inventory or artifact condition report with any of the boxes.

Part of the accessioning procedure at the Foley Square Laboratory involved the development of a computerized data base to track all artifacts and soils. This program was initiated by the preparation of duplicate index cards, including all field bag provenience information, to be used for data entry and tracking. The tracking program is in the DBase III+ programming language.

One set of index cards remains with the box from which bags are taken for processing and the other travels with the bag. As bags move through washing, labeling, and cataloguing, the data base is updated. To date, 119 bags of artifacts (5%) have been washed; 97 bags have been labeled. An additional 9% of the bags of artifacts were washed, but not labeled, by the previous consultant. The total number of bags of artifacts is 2,242; the total number of catalog numbers assigned in the field was 1,029.

The major classes of artifacts recovered include animal bone, ceramics, glass, metals, and architectural materials. Many vessels (both ceramic and glass) recovered from features are either whole or partially whole and the range of vessels types is striking. In addition to the usual tablewares, a bed pan, a ceramic bank, and a poison bottle are examples of whole vessels that have already been processed.

Artifact processing is organized by lot. Individual catalog numbers and artifact bags from specific lots are identified for processing and then sorted by cleaning method, i.e. water-washing versus dry-brushing, and general artifact type, i.e. ceramic, glass, etc. Should any organic materials or particularly fragile artifacts be present, they are removed for conservation and stabilized according to the conservation procedures detailed below. Appropriate cleaning techniques are applied, as detailed below, and water-washed artifacts are air-dried for at least three days. All ceramic and glass fragments are labeled with indelible ink and coated with B-72, a stable acrylate sealant. Fragments too small to label are bagged together with a tyvek tag indicating provenience. The label written on the artifacts includes the last four digits of the New York State site number written above the catalog number. Artifacts are then sorted into functional categories (e.g. kitchen-glass, architecture-glass) and rebagged in polyethylene zip bags with tyvek tags containing artifact provenience information. The functional categories are the group and class categories (after South 1977) that are the first two fields in the HAMS program (see Figure 4 for a sample from the HAMS artifact coding book). Both the bags and tags are chemically inert and will not adversely affect the artifacts in any way. All cleaned, rebagged artifacts are packed in standard archival quality boxes while awaiting analysis and curation.

Detailed artifact identifications including function, date range, method of production, and decorative motifs will be accomplished during the analysis phase. Analysts for ceramics, glass, architectural remains, and small finds will be drawn from the Foley Square Laboratory staff. The faunal analysis will be done by Pam Crabtree and Julie Zimmerman Holt of New York University. The analysis of floral material from flotation samples will be done by Leslie E. Raymer of New South Associates. Karl Jan Reinhard of the University of Nebraska will analyze privy deposits that may contain parasites.

GROUP	CLASS	TYPE	STYP	TYPE NAME	DESCRIPTION	START DATE	MEDIAN DATE	END DATE	WEIGHT COUNT	USED IN PATTERN
P	B	1	6	FAUNAL	MOTHER OF PEARL JEWELRY	0.00	0.00	0.00	C	Y
P	B	1	7	FAUNAL	*WORKED SHELL OBJECT*	*0.00*	*0.00*	*0.00*	C	Y
P	B	1	8	FAUNAL	TORTOISE SHELL COMB	0.00	0.00	0.00	C	Y
P	B	1	9	FAUNAL	BONE/IVORY HAIR PIN	0.00	0.00	0.00	C	Y
P	B	2	1	FLORAL	CORK & METAL PEN HOLDER	0.00	0.00	0.00	C	Y
P	B	2	2	FLORAL	WOOD FAN PART	0.00	0.00	0.00	C	Y
P	B	2	3	FLORAL	HARD RUBBER HAIR PIN	0.00	0.00	0.00	C	Y
P	B	2	4	FLORAL	CELLULOID HAIR PIN	0.00	0.00	0.00	C	Y
P	B	2	5	FLORAL	CELLULOID COMB	0.00	0.00	0.00	C	Y
P	B	2	50	FLORAL	WOODEN HAIR PIN	0.00	0.00	0.00	C	Y
P	C	1	1	MISCELLANEOUS CERAMIC	FALSE TOOTH (20TH CENTURY)	0.00	0.00	0.00	C	Y
P	C	1	2	MISCELLANEOUS CERAMIC	WIG CURLER	0.00	0.00	0.00	C	Y
P	G	1	1	MISCELLANEOUS GLASS	WATCH BEVEL	0.00	0.00	0.00	C	Y
P	G	1	2	MISCELLANEOUS GLASS	MIRROR	0.00	0.00	0.00	C	Y
P	G	1	3	MISCELLANEOUS GLASS	EYEGLASSES	0.00	0.00	0.00	C	Y
P	G	1	5	MISCELLANEOUS GLASS	GEMSTONE/PASTE	0.00	0.00	0.00	C	Y
P	G	1	10	MISCELLANEOUS GLASS	PIN/BROOCH	0.00	0.00	0.00	C	Y
P	M	1	1	BRASS/COPPER ALLOY	KEY	0.00	0.00	0.00	C	Y
P	M	1	2	BRASS/COPPER ALLOY	WATCH PART	0.00	0.00	0.00	C	Y
P	M	1	3	BRASS/COPPER ALLOY	RING	0.00	0.00	0.00	C	Y
P	M	1	4	BRASS/COPPER ALLOY	UNIDENTIFIED JEWELRY	0.00	0.00	0.00	C	Y
P	M	1	5	BRASS/COPPER ALLOY	BRACELET	0.00	0.00	0.00	C	Y
P	M	1	6	BRASS/COPPER ALLOY	COMPACT OR SMALL CASE	0.00	0.00	0.00	C	Y
P	M	1	7	BRASS/COPPER ALLOY	PURSE OR CASE LATCH	0.00	0.00	0.00	C	Y
P	M	1	8	BRASS/COPPER ALLOY	CANE HEAD	0.00	0.00	0.00	C	Y
P	M	1	9	BRASS/COPPER ALLOY	COINS	0.00	0.00	0.00	C	Y
P	M	1	10	BRASS/COPPER ALLOY	HAIR PIN	0.00	0.00	0.00	C	Y
P	M	1	50	BRASS/COPPER ALLOY	PENCIL HOLDER	0.00	0.00	0.00	C	Y
P	M	1	51	BRASS/COPPER ALLOY	STICK PIN	0.00	0.00	0.00	C	Y
P	M	1	52	BRASS/COPPER ALLOY	MEDAL	0.00	0.00	0.00	C	Y
P	M	2	1	IRON/STEEL	KEY	0.00	0.00	0.00	C	Y
P	M	2	2	IRON/STEEL	WATCH PART	0.00	0.00	0.00	C	Y
P	M	2	3	IRON/STEEL	RING	0.00	0.00	0.00	C	Y
P	M	2	4	IRON/STEEL	PURSE OR CASE LATCH	0.00	0.00	0.00	C	Y
P	M	2	5	IRON/STEEL	*PENCIL PART*	*0.00*	*0.00*	0.00	C	Y
P	M	2	6	IRON/STEEL	PEN PART	0.00	0.00	0.00	C	Y
P	M	2	7	IRON/STEEL	UMBRELLA PART	0.00	0.00	0.00	C	Y

Figure 4. Sample Page from HAMS Coding Book

Generalized classes of artifacts will be processed in the following manner:

Animal Bone - Faunal material will be dry-brushed with soft bristle brushes to minimize abrasions which could obscure butcher or rodent marks. Should particularly fragile pieces relating to significant analytical units be present, they may require special treatment. To prevent any loss of information, direct labels will not be applied to the faunal remains. Instead, they will be rebagged in perforated polyethylene bags with tyvek tags. The initial sort at this level will be into mammal, bird, and fish. If genus level identifications are possible, such identifications will also be undertaken at this phase in order to prepare the faunal material for analysis. Counts will be established for each context.

Shell - Field records indicate that recovered shell was fully retained from some contexts and sampled from others. In order to address the above-noted research questions regarding food consumption patterns, the amount and type of shell from the appropriate contexts will be considered. However, all retained shell will be processed so that future research may address questions related to seasonality or environmental conditions using the Courthouse Block shell collection. The soil matrix surrounding the shell will be saturated in a mixture of ethanol and water (50:50). The soil then easily flakes off from the shell with minimal damage to the diagnostic characteristics. Once completely dried, it will then be sorted by shell type (i.e. clam versus oyster) and by diagnostic element, where possible, counted and rebagged in polyethylene zip bags with tyvek tags.

Ceramics - All ceramic artifacts will be water-washed in a two-step process. Ceramics will first be washed in tepid water with a small amount of Triton-X, a non-ionic detergent, to remove any soil residues. The second step is to rinse in plain water to be certain any residue of the detergent is removed. Most ceramics will be gently cleaned using a soft bristle brush. Certain delicate pieces, such as overglazed decorated sherds, will require more careful treatment and will not be

problems w/ defining "research domains" + questions to mthds?
① "Soc construction" of "Slum"
② race class ethnicity

a lot of probs re "distinctiveness" of this collection + measuring
① variability
② comp collections, local + euro

these are ambitious questions — getting at them properly this poss? will require more effort than I think JMA can expend

Same problem as always — the only way to rectify this would be to simplify research questions

1) role of ethnicity — boundaries mat. cult. indexes race, class + ethnicity
— "possessions," spatial use
(22) + 26

2) Sep. home + workplace
— doc. research

3) modify phys environ, impos. within grid system

4) health + hygiene

31 ff. Sampling? basis?
basically getting at "Soc. constr. of Slum" by looking at chg over time
— what are expectations

(34)

brushed at all. Ceramic pieces from primary deposits that are integral for analysis and that exhibit visual signs of concretions or salts may be conserved using the procedure discussed below in Section 4.2.2. In addition, it may be necessary to apply special treatment to pieces that exhibit a considerable degree of glaze spalling. Intact ceramic smoking pipe bowls may contain tobacco residues, a sample of which will be retained to provide a basis for answering future research questions regarding historic tobacco blends and consumption. Ceramic pieces will be separated by ware types, decorative patterns, vessels, and maker's marks. Any diagnostic pieces from the same vessel will be bagged together. Pieces from different vessels will be bagged separately. Processed ceramics will be kept in perforated polyethylene zip bags. Counts of general artifact types will be recorded for the initial inventory count.

Glass - Glass will also be water-washed using the same method as ceramics. Glass pieces from primary deposits that are integral for analysis and that exhibit visual signs of glass disease may be conserved using the procedures discussed below. Some contexts are expected to contain complete glass bottles. These bottles will be visually examined to determine whether they contain residues of their historic contents. Samples of bottle residues will be retained for analysis. Glass will be separated by color, flat versus curved, patterning, and etching, molding or embossing. Any diagnostic pieces from the same vessel will be bagged together. Pieces from different vessels will be bagged separately. Processed glass will be kept in polyethylene zip bags. Numbers of artifacts within general types will be recorded for the initial inventory count.

Metals - Metals that have not been previously tagged for conservation will be water-washed using the same method as ceramics. The major category of metals is expected to be nails. After they are air dried, nails will be rebagged by type in perforated polyethylene bags with tyvek tags. All round-shanked, square-shanked, or hand wrought nails with heads will be bagged together. A total count of nail and metal artifacts will be taken for the artifact inventory.

Architectural Materials - The major categories of architectural materials are expected to be brick, mortar, nails, and window glass. The processing of the nails and glass was discussed above. Brick and mortar were not uniformly sampled from the field. They were retained completely from some contexts and sampled from others. Brick will be weighed in the lab. Only diagnostic pieces and one sample of each type of brick per catalog number will be retained. Weights will be recorded for the inventory count and the remainder of the brick will be discarded. The same method will be used for mortar. The retained brick samples will be water-washed, as discussed in the ceramics section above, labeled, tagged, and rebagged in perforated polyethylene zip bags.

Soils - Soil samples for flotation and chemical analysis were taken from many contexts. These have not yet been quantified. Soils for flotation processing will be identified based on the specific primary deposits that will be used for analysis to address the appropriate research questions. Soil deposits from privies may also be processed for identification of human parasites. Other analyses of soil from the Courthouse Block may be warranted based upon the assessment of the soil inventory and depositional analysis.

Particular pollutants (e.g. chrome, mercury, lead) and related ailments will be identified from soil analysis. The stratigraphic and depositional analyses in combination with TPQs and artifactual content may allow for the matching of archeological materials with the individuals who created them. Since major events (housecleaning associated with the transferral of property, for instance) are often visible in the archeological record, an attempt will be made to identify these events with specific individuals.

3.5 Historical Analysis Procedures

The historical analysis will consist first and foremost of a broad demographic study across time for the entire project area. In order to reach this goal, secondary sources covering New York

City's development will be reviewed, but most importantly, a detailed study of primary documentary information will be conducted under the direction of the principal historian. After reviewing the previous deed and map research conducted during the Stage IA investigation (Ingle et al. 1990) and during the excavation (Porter 1992) of the Courthouse Block, a study will be made of the changing ownership and occupation of every lot (both those excavated and those not excavated) within the block. An intensive study of deeds and other probate records associated with the site and dating from the seventeenth century to the present will provide the basic data for the site-specific history.

Additional research will focus on the general architectural history of New York City housing and tenement construction, and on primary documents relating to housing permits and related records specific to the project area. A careful study of probate records and building permits from the early nineteenth century to the present will provide a portrait of land use at the Courthouse Block as well as a general picture of the quality of housing that was reported to have been erected on the site over the years. General research will also be conducted pertaining to New York City's sanitation laws and public health regulations, and on selected hospital records and physician's journals with particular relevance to the project area.

An analysis of the census records for New York City's Sixth Ward, especially the New York State decennial census of 1855, will generate a wealth of information concerning the city residents who lived on the Courthouse Block during the nineteenth century. Age, sex, race, place of birth, occupation, literacy, and date of arrival in New York City if born outside the state are the kinds of data that can be gleaned from a thorough examination of the census records. A review of the city directories from 1787 to 1863 will yield additional data concerning the occupations and addresses of the residents who lived on the Courthouse Block during the processes of urbanization and industrialization.

A study of period engravings, maps, and other symbolic representations of life at the Courthouse Block and the surrounding Five Points neighborhood will reveal stereotypes of working class residents held by elite New Yorkers. A similar study of reform tracts such as *The Old Brewery and the New Mission House at the Five Points* by the Ladies of the Mission and contemporary fiction such as Stephen Crane's *Maggie, A Girl of the Street* will also reveal stereotypes of working class New Yorkers that were encoded in the culture of New York City's bourgeoisie.

A sample of discourse in the working class, ethnic, and foreign language newspapers of the period will reveal the self-perceptions and level of collective identity among residents of the Courthouse Block and the broader Five Points area. These newspapers–for example, *Freedom's Journal* (1827-1829)–will also illuminate important aspects of political activism and an understanding of the causes of poverty and injustice on the part of residents of the Courthouse Block and Five Points more generally.

3.6 Archeological Analysis Procedures

The archeological data collected will be subjected to quantitative and qualitative analyses in support of various behavioral, socio-economic, and socio-cultural interpretations. However, not all archeological data are of equal interpretive value. Artifacts that were only incidentally incorporated into secondary fill deposits, for example, are generally of minimal interpretive value, since their functional and socio-cultural associations cannot readily be documented. Artifacts from secondary fill deposits, therefore, will be described and dated but not further analyzed. Emphasis will be given to artifact assemblages recovered from carefully defined contexts which pertain to the research questions that have been posed. Deposits that can be associated with documented residents on the block will receive priority. Deposits that cannot be specifically associated with individuals will be sampled. It is unlikely that deposits associated with specific individuals will cover the entire period of site occupation and, as in other urban situations (Cheek and Friedlander

1990; Cheek and McCarthy 1990; Rothschild 1990; McCarthy and Roberts 1993), it will be necessary to look at neighborhood trends over time by combining contemporaneous deposits from different lots. An essential first step is a thorough depositional analysis of every feature and every excavation unit that was investigated. Additional analyses will focus on consumer choice, acquisition networks, and function.

3.6.1 *Depositional Analyses*

The entire archeological sample from the Courthouse Block will be subjected to detailed stratigraphic and depositional analysis. Units of deposition must be separated before any conclusions can be drawn regarding the intensification of land use over time, household composition, functional distinctions between deposits, or the relative poverty of residents responsible for the archeological deposits. The stratigraphic relationships for each excavation unit and for each filled feature will be described using an adaptation of the Harris (1975, 1979) Matrix. Adjacent units and features excavated in section will be represented on larger matrices (drawn by hand) which will allow equivalent strata to be graphically connected.

A number of techniques will be used to identify depositional events or processes. The extent of vessel completeness has been suggested as one indicator of depositional process (Blomberg 1991). The occurrence of a large proportion of ceramic vessels that comprise ten percent or less of the entire artifact, for instance, may indicate that the artifacts were stockpiled in a surface midden prior to deposition in a shaft feature. This interpretation is based on an assumed increased occurrence of trampling and other disturbances in an "open air" context relative to the sealed environment of certain features such as privies. In contrast, a high proportion of vessels that are 90 percent or more complete may be an indicator of purposeful deposition of nearly complete ceramic vessels as percolation fill or perhaps deposition as refuse in a house-cleaning event. It has also been suggested that mass disposal of ceramics may be associated with house-cleaning events that occur

after a serious illness or family death due to superstition and/or an imperfect understanding of disease transmission (Doroszenko and Gerrard 1991).

The relative dates of artifact assemblages can identify out-of-sequence filling, i.e., an indication that fill was placed in a single event rather than as a gradual accumulation. Dates are generally provided by ceramics and glass, which were both subject to extensive technological and stylistic change in the eighteenth and nineteenth centuries. Ratios of various artifact categories also provide insights into the nature of infilling episodes. A high proportion of architectural refuse, for instance, usually indicates a destruction episode and is considered a secondary rather than a primary deposit.

While it will most likely not be possible to determine the sequence of construction and retirement of features from stratigraphic analysis alone, the dating of artifacts in feature fills and from builder's trenches will provide additional information. Plan views will then be made showing the relative dates of features and structures. Relevant archeological reports from New York as well as other applicable cities that included residential blocks dating to the late eighteenth and nineteenth centuries will be consulted for comparative data.

In order to understand deposition sequences and to establish units of comparison, artifact deposits will be dated. While mean ceramic dates may be calculated using both South's (1977) formula and the bracketing method outlined by Turnbaugh and Turnbaugh (1977), the principal method of dating individual strata will be by establishing a *terminus post quem* (TPQ) for the deposit. TPQ dates are defined by the most recent beginning date of manufacture for an item in an assemblage. All categories of diagnostic artifacts will be considered in order to arrive at the TPQ. Every effort will be made to identify each maker's mark associated with individual artifacts that derive from controlled contexts (i.e., diagnostic artifacts from secondary fills that do not have specific socio-cultural associations will not be analyzed at this level). It is understood that technological and

stylistic changes in glass were greater in the nineteenth century than in ceramics, therefore making glass a better indicator of chronological change.

Once dated, the changing configurations of features over time will be considered in order to trace the intensification of land use within the neighborhood. Computer-generated maps will be made of the site area showing the organization of space at different intervals in the block's history. These spatial representations will be compared to representations of contemporaneous sites that have been excavated in Manhattan and to graphic representations of the neighborhood published in the nineteenth century.

3.6.2 *Consumer Choice and Acquisition Network Analyses*

Consumer choices are not merely reflections of economic means, and while economic assessments of various assemblages will be calculated, particular emphasis will be placed on identifying alternative criteria for choice, e.g. ethnic preferences, gender-specific preferences, etc.

Several analyses will be conducted that will measure the market value of the recovered material culture, thereby providing information about the socioeconomic position of the people living on the Courthouse Block in the nineteenth century. Such analyses will include evaluations of the relative economic values of the ceramic assemblages, evaluation of food preparation and consumption activities, and evaluation of economic networks. The samples chosen for analysis at this level will be primary deposits only, i.e. deposits that are indisputably associated with residents living on the block.

George Miller (1980, 1991) has developed and refined a series of index values for late eighteenth and nineteenth century ceramics based on merchants' and manufacturers' wholesale pricing records. These values are specific to vessel form and size, decoration, and ware type, and they provide a

means of assessing the relative cost of a ceramic assemblage. In order to apply Miller's method, it is necessary to identify vessel types, a procedure that usually requires cross-mending of ceramic sherds. Vessels will be identified and cross-mended from deposits that can be associated with features relating to residential use of the block. Miller index values and relative ceramic index values (a rank order, weighted mean calculation based on Miller's hierarchical arrangement of decorated whiteware from least expensive to most expensive) will be calculated for key deposits (as described above).

In an earlier attempt to explicate status through ceramics, Otto (1975, 1977) introduced the use of ceramic surface decoration. In general, the more highly decorated a ceramic ware is, the more it cost the consumer. In order to make Courthouse Block material comparable to collections that have been analyzed this way, the ceramic assemblages (particularly those that cannot be mended into vessels but which warrant some level of analysis) will be divided into six classifications based on both sherd and vessel surface decoration, as follows: 1) banded, 2) edge-decorated, 3) hand-painted, 4) transfer-printed, 5) undecorated or plain, and 6) "other". Banded and edge-decorated wares are considered to be moderately decorated, while hand-painted and transfer-printed wares are considered highly decorated. Such analysis excludes redware, yellowware, stoneware, and Rockingham/Bennington wares. The following conventions will be applied: 1) stamped, sponged, and dipped wares will be included in the banded category, 2) molded, embossed, and colored wares will be included in the "other" category, and 3) decal-decorated wares will be included with the transfer-printed wares.

Ceramic analyses will also include vessel- and sherd-level examination of ceramic function. Ceramic function provides an indicator not only of the relative importance of various ceramic-related activities, but it may also provide an indication of consumption patterns. Shephard (1987) has argued that quantity, quality, and variety are better measures of a household's wealth and

income, size, and residential stability than the Miller index alone (only quality is measured by the Miller index). Ceramic vessel function will be divided into eight categories for analysis, as follows: 1) kitchen, including food preparation and storage vessels, 2) table, including plates, bowls, and serving vessels, 3) tea, including tea pots, cups, saucers, and related equipage, 4) toilet, including chamber pots and wash bowls, 5) garden, including flower pots, 6) toys, 7) household decorative items, including ceramic figurines and vases, and 8) "other," including such items as glue pots and ink wells. Any work-related items (revealing occupation) will be recorded in the "other" category. Again, only key deposits will be subjected to this level of analysis.

Glass also provides a rich source of information on consumer patterns. The correlation of bottle shape with contents, as well as the presence of embossments, makes it possible to describe in some detail the products that individual households were consuming and neighborhood-wide consumption patterns. It has also been noted that bottles were reused, especially in poor neighborhoods (Busch 1987). Wear patterns and residues from bottles recovered from key features will be analyzed in order to determine the extent of this practice in the neighborhood.

Table glass will be identified and studied in combination with ceramics from individual deposits in order to get as full a picture as possible of the things associated with meals that were being used in combination. While variety in some instances may indicate status, it is also possible that variety may reflect secondary reuse, a pattern that might be expected in a poor neighborhood. Both ceramic and glass tablewares will be examined from this perspective. Sets of either ceramic or glass tablewares will be identified when present and substitutes for sets will be described in as much detail as possible.

Glass and ceramic vessel forms included in discrete deposits will be compared. Any recurring patterns will be identified and associated with possible household composition. Once deposits have

been dated, it should be possible to equate certain assemblages with specific households identified by the lot-specific documentary research. It is expected that the assemblages from single family households, households including boarders, and houses of prostitution will differ significantly. Comparisons will be made with other sites in New York City (e.g. Sullivan Street, Telco) and other cities (e.g. Wilmington) that included assemblages from boarding houses and with assemblages from houses of prostitution (e.g. Washington). In addition, functional distinctions between assemblages may be revealed by using the artifact pattern analysis approach developed by South (1977). This approach provides a technique for comparing collections in terms of relative proportions of artifacts grouped by function. Because it has been used widely on urban sites, organizing the information in this way will make it comparable with data from many other excavated sites. The HAMS database that will be used to inventory the artifacts is capable of producing reports documenting the functional composition of artifact assemblages.

In addition to analyses of form, function, type, and level of decoration, analyses of ceramics, glass, and various small finds (e.g. religious icons, decorated game pieces) will note decorative motifs and patterns which may have held meaning for the user or affected the choice of that object. The relationship of such data to group membership will be considered and examined quantitatively. Henry Glassie's (1982) study of Irish-American households emphasizes the importance of visiting and its attendant ceramic equipage. The particular elements identified by Glassie will be sought in assemblages recovered at Five Points and at other sites relating to transplanted peoples of Irish extraction (an assemblage recovered in a nineteenth century Irish-American neighborhood in Philadelphia has already proved suggestive; McCarthy et al. 1993). Particular attention will be paid to any changes in the participation in this ritual, and any other activities identified as specifically Irish/Irish American, over time. Through these kinds of comparisons, an attempt will be made to throw some light on the debate over whether acculturation (Fallows 1979) or cultural independence

(Clark 1973, 1986) was responsible for the rapid, successful entry of Irish immigrants into full participation in American society.

Consumer behavior is also reflected in diet. Attempts have been made to correlate the quality and cost of meat with socioeconomic status (Henry 1987; Reitz 1987; Rothschild 1990). Patterns of food preparation and consumption behavior can be identified from several types of data including, in addition to vessel forms, the actual food remains (both faunal and floral). Faunal analysis will focus on the identification of species, the cuts of meat represented, the relative economic value of the cuts, and butchering practices. Floral data, most of it derived from flotation samples taken in privy deposits, will be analyzed to provide additional information on diet.

The study of foodways, as derived from both the faunal and floral assemblage, may also provide information on ethnicity (Kalcik 1985; Cheek and Friedlander 1990). If possible, discrete deposits that can be associated with households of known ethnic identity will be studied in detail and compared. Soil samples from these deposits will be subjected to flotation and all floral remains will be analyzed. It is perhaps in the area of foodways that differences based on exposure to American culture will be most evident. Since ethnic persistence is often expressed in the continuation of traditional foodways, the transformation of those ways might be considered an indicator of acculturation.

While it is not usually possible to define the exact source of consumer goods from household deposits, marked glass bottles (pharmaceutical and beverage) have been used as a means of examining economic networks (e.g. Baugher-Perlin 1982). "Maps" will be made showing the networks of connections between the neighborhood and the wider city indicated by the presence of marked bottles in deposits dating to different periods. The study will be expanded to include any marked artifact, e.g. cosmetic containers, ointment pots, etc.

3.6.3 *Functional Analyses*

Functional analyses will focus on assemblages relating to five categories of activities: work, play, smoking, children, and health and hygiene. The proposed analyses, with the exception of pipes, go beyond the functional groupings defined by South (1977). Any assemblages and/or structural remains that can be associated with specific work activities or shops will be studied in detail. The artifactual material and physical features will be considered in the context of what has been documented about the historic practice of the particular craft or other activity and comparisons will be made to both written records and other published archeological accounts of remains relating to the same activity. Woman's work, including prostitution, will be considered in this category. Evidence relating to work in the garment industry, for instance, will be quantified and described in the context of what is known about the historic practice of that industry. If deposits relating to brothels are identified, comparisons will be made with Siefert's (1991) study of the Hooker's Division in Washington.

Smoking behavior will be studied through the remains of tobacco pipes and residues found in pipebowls. Any other smoking-related artifacts will be considered in this category. Pipes are most often approached as indicators of trade networks (Dallal 1990). However, the focus of the study proposed here is their role in the construction of working class culture (Cook 1989). Once all pipestems from key deposits have been quantified and marked pipebowls have been identified, the role of smoking in the various households and/or shops represented will be considered. The analysis will be done in the context of contemporary writings on the practice of smoking and any recent scholarly work on the subject.

Many game pieces were recovered on the Courthouse Block and a study of games played by the residents and visitors to the area should be possible from the remains. This study, too, will be done in the context of what is known about nineteenth century games and possibly about the

interests of the various immigrant groups who moved into the area during the middle decades of the century.

Children's activities also left a material record on the Courthouse Block. Doll parts and other toys were recovered in quantity and will be studied as a record of this often invisible portion of the population. The analysis, to be carried out by a sub-consultant (Warren Barbour), will be done in conjunction with Sherrill Wilson's ethnohistorical study of the activities of children in the Five Points neighborhood, also proposed as part of the research.

Health and hygiene will be approached from many angles. Dated features relating to waste disposal will be used to describe how landowners either complied or did not comply with legal requirements and what implications such factors had for the health of the residents. As has been accomplished successfully in other archeological investigations (e.g. Bell 1987), microscopic analysis will be used to identify parasites in privy deposits.

Particular pollutants (e.g. chrome, mercury, lead) and related ailments will be identified from soil analysis (Illinois State Museum 1992). The stratigraphic and depositional analyses in combination with TPQs and artifactual content may allow for the matching of archeological materials with the individuals who created them, making it possible to correlate certain activities with certain pollutants. It may also be possible to construct a picture of the hazards in the environment with which people lived besides infectious disease.

In addition, diseases or ailments afflicting Five Points residents may be discerned through the identification of particular remedies as indicated by a careful analysis of the patent medicine bottles recovered. Medicine bottles, ointment jars, or any other health-related paraphernalia (e.g. syringes) will be subjected to detailed analysis. All physical remedies represented in the artifact assemblages

will be researched and described and the sources of the cures will be identified to the degree possible. The medical practices at Five Points will be compared to practices that have been studied elsewhere in New York for this time period (Howson 1987).

4.0 CONSERVATION/CURATION PLAN

4.1 Introduction

This conservation/curation plan outlines procedures for the treatment and care of appropriate Courthouse Block artifacts, addressing their stabilization, care, and curation. However, this plan does not contain a survey of the collection. In preparation for the implementation of an integrated treatment plan for conservation, a survey of the collection to determine its overall physical and chemical condition was conducted.

The conservation objectives outlined herein coincide with the objectives of the American Institute for Conservation of Historic and Artistic Works (AIC). As stated in its Strategic Plan (1990), the objectives of the AIC are:

> to protect, preserve, and maintain the condition and integrity of objects or structures which, because of their history, significance, rarity, or workmanship have a commonly accepted value and importance for the public interest. The term 'conservation' shall mean examination (action taken to determine the nature of properties of materials and the causes of their deterioration and alteration), and preservation (action taken to prevent, stop, or retard deterioration.

It should be made clear that conservation measures will only be undertaken where such conservation of an object is consistent with data needs as they relate to the research questions presented above, or if the object is determined to be suitable for display purposes. That is, if an object is not of display quality, or if data relevant to the research goals of the project will not be lost in the absence of conservation, it will not be subjected to conservation procedures.

4.2 Conservation

4.2.1 *Field Conservation*

Within complex soil environments such as those found at the Courthouse Block, artifacts and animal bone deteriorate at predictable rates. While this deterioration progresses relatively quickly after initial burial, through time the soil compresses around the objects, the high levels of oxygen

become depleted, and the environment becomes anaerobic. At this point, the materials reach a point of stasis within the surrounding environment (due to the depletion of deterioration stimuli) and the rate of deterioration slows. Within this state of equilibrium, most materials can be preserved for hundreds of years, if not longer. In other words, the materials have become relatively acclimated to environmental changes, such as the periodic exposure to water through ground seepage and/or water table fluctuations.

At the time the Courthouse Block was excavated, the artifactual remains were removed from the anaerobic environment in which they had been physically and chemically aligned for up to 250 years. The rapid change into a very different environment, primarily one rich in oxygen, once again accelerated deterioration. In order to minimize the effects of this process, it is advisable to take positive steps in the timely conservation of certain materials, particularly the most fragile items. During field operations, only a few textile and leather fragments from the Courthouse Block received conservation treatment. Ultimately, the aim of conservation will be to raise the level of stability of all appropriate elements of the collection, as noted earlier.

No formal conservation was conducted in the field, although the Conservator advised the archeologists on stabilization procedures for certain categories of material after they had been recovered. As an example, all leather objects were frozen. This method facilitated the stabilization and management of a large volume of artifacts prior to the implementation of a more comprehensive conservation plan.

4.2.2 *Laboratory Conservation*

Once in the laboratory, cultural materials were separated by material type. The material types excavated at the Courthouse Block included ceramics, glass, metals, wood, bone (both bone artifacts and faunal remains), other organic materials (i.e. textile), and architectural elements (i.e.

brick, mortar, etc.). Once categories have been more fully identified, artifacts within each category will be evaluated with regard to their stability. Conservation procedures for generalized categories of artifacts will be as follows:

Animal Bone - Faunal material from significant analytical units (i.e. those relevant to research goals) will be evaluated for its physical and chemical states. If the bone came from a water-saturated environment, it will generally be necessary to treat it with some type of consolidant such as a wax or resin. The use of some of these consolidants hinges on the necessity of keeping the material wet after excavation.

Ceramics - Soluble salt contamination and migration is a major problem in the conservation of ceramics. Salt migration can cause deterioration of the ceramic body, including spalling and devitrification of the glazed surface. The identification and removal of soluble salts is necessary to prevent further deterioration.

For conservation purposes, ceramics will be subdivided into ware types including, but not necessarily limited to, low-fire earthenwares, refined earthenwares, ironstones, stonewares, and porcelains (hard and soft paste). Taking into account the provenience from which the ceramics came, low-fire earthenware or transitional whiteware to ironstone will be tested in order to establish whether chlorides (salts) are at significantly high levels. A standard silver nitrate test or a conductivity meter can be used to determine salt concentration. Stonewares and porcelains are too vitrified for salts to migrate into the paste or clay body. Therefore, it is not usually necessary to test these ware types for chlorides.

If the low-fired earthenwares that are tested show a high concentration of chlorides, it will be necessary to desalinate these artifacts to prevent spalling or crazing of the glaze and decorative

motifs. This is especially important when treating such objects as tin-glazed earthenware, where the glaze and the clay body are poorly adhered to one another. Salts can cause rapid deterioration in these types of ceramics. If the glaze or decorative motif is already spalling, or if there is devitrification of the body, it may be necessary to use a consolidant.

After desalination, any gross concretions still present on the surface of any ceramic type will be evaluated. If it is determined that such concretions may cause further deterioration to the ceramic artifact, it will be necessary to remove them, either by mechanical or chemical measures.

Glass - Glass artifacts from historic sites are usually well-preserved. If the glass has been recovered from an extremely wet context, however, the glass may show signs of devitrification. This is caused by a breakdown of slightly water-soluble additives in the formation of the glass structure. These additives, such as calcium carbonates or heavy metals, were used as fluxes to either lower the melting temperature of the silicas or to add plasticity to the glass batch. If glass from a significant analytical unit includes this form of deterioration, a consolidant will be used. This will be done by either vacuum impregnation or surface application.

Another form of glass deterioration can be sulphide stains within the structure of lead glass. Sulphide staining occurs in anaerobic environments, such as that found at the Courthouse Block. Although this is more an issue of aesthetics than stabilization, treatment will be implemented, if necessary for purposes of exhibition, by the use of hydrogen peroxide as a bleaching agent.

Glass with mixed-media such as metal fittings, caps, or embellishments will be treated as two separate components. Metal components will be subject to treatment as outlined in the metals portion of this conservation/curation plan.

Glass with either mixed-media or labels will be stored differently than the main body of the glass assemblage. These materials will be wrapped in buffered acid-free tissue and placed in perforated polyethylene bags. The perforations are necessary to prevent condensation in the bag. The material will then be placed in acid-free boxes.

Metals - This category takes into consideration artifacts such as coinage, personal items, buttons, etc. The first step in establishing treatment is to separate objects into their metal types and/or alloys such as copper, brass, pewter, silver, tin or iron. These materials are likely to present the greatest need for stabilization. Again, the environment of deposition will be evaluated from field notes and site records. After treatment, a barrier coat that will isolate the object from the surrounding environment will be applied to the surface. The barrier coat prevents moisture penetration and is resistant to environmental pollutants that can reactivate corrosion.

Coppers and copper alloys will be evaluated for physical and chemical stability, particularly with regard to bronze disease. Other forms of corrosion will be identified, and such objects will also be tested for the presence of chlorides. If levels are high, a standard desalination will be carried out. The evaluation of these types of metals will include the use of a corrosion inhibitor, followed by sealing the surface with a barrier such as a lacquer or acrylic resin.

Pewter, tins, and leads will all be evaluated for physical and chemical stability. A visual inspection will determine if such corrosion products as tin pest are present. As in copper alloys, chlorides are a main cause of corrosion in pewter, tins, and lead. If levels are high, desalination will be carried out. If tin pest is present, mechanical cleaning will be carried out, followed by the application of an acrylic barrier coating.

The main cause for silver corrosion is from high levels of sulphur within the environment. Mechanical cleaning will be carried out to remove tarnish, and any silver objects will then be sealed with a barrier coat.

Iron will first be evaluated for its physical stability by testing with X-ray and/or a magnet. The stronger the attraction, the more metal exists. Iron will also be evaluated for the presence of salts, and it may be necessary to perform desalination. Salts can either be removed by soaking in deionized water or by the process of cathodic desalination. The removal of corrosion can be accomplished through several methods, including mechanical, chemical, or electrochemical removal. These treatments will be carried out on a case-by-case basis. After the object has been cleaned and stabilized, a barrier coat of either an acrylic or wax will be placed on the surface.

Wood - Wood will be evaluated for its physical and chemical stability. If wooden artifacts from a significant analytical unit derived from a waterlogged environment, it will generally be necessary to treat them with some type of a consolidant such as a wax or resin. The use of these consolidants hinges on the necessity of keeping the artifact wet after excavation. Wooden artifacts may have biological infestations such as mold or mildew. These will be treated by a topical application of a biocide, and/or immersion, and then returned to their storage facility.

To maximize the preservation of most wooden artifacts recovered from the Courthouse Block, it was necessary to freeze them. Most of the wooden artifacts were packed in freezers to minimize their deterioration while they awaited conservation treatments. Wooden material will be removed from the freezers and submerged in deionized filtered water in order to aid in cleaning and/or desalination. After the artifacts have been cleaned, polyethylene glycol will be introduced into the water in a step progression. This consolidant will aid in minimizing shrinkage, warpage, and cell collapse that may begin to occur during the freeze-drying process.

Other Organic Materials - Leather will be evaluated for its physical, chemical, and biological conditions. If leather from a significant analytical unit derived from a waterlogged environment, it will generally be necessary to treat it with some type of a consolidant such as a wax or resin. The use of these consolidating waxes hinges on the necessity of keeping the artifact wet after excavation. However, like some of the wooden materials, most leather materials were kept frozen to halt deterioration while they awaited treatment. Leather artifacts may also experience biological infestations such as mold, fungus, mildew, or bacteria. Like the wooden artifacts, these will be treated by a topical application of a biocide, and then returned to their storage facility.

Textiles will be evaluated for their physical and chemical stability. If textiles derived from a wet environment, they will be dried gradually, preferably between blotter paper. The use of non-ionic detergent will be used to break up dirt and foreign material on the textile. Due to the hostile soil environment from which they were recovered, the textile fragments that have survived are extremely deteriorated and barely recognizable through their fiber and weave structure. Because of this, little can most likely be done to stabilize them.

Organics such as leather and some textiles that were recovered from privy contexts are most likely infested with bacteria. These bacteria have not as yet been identified, and further testing will be necessary before decontamination can be accomplished. Treatments may include using a strong biocide such as ammonium chloride, or periodic exposure to ultraviolet light.

Architectural Materials - Architectural elements such as brick, mortar, and stone are usually very stable. The form of conservation that these materials need is primarily one of storage to prevent breakage, abrasion, and environmental pollutants.

4.3 Curation

Once artifacts have been brought up to a standard level of stability, a second form of conservation, i.e., a passive form, will be implemented. This is carried out by the use of archival storage materials and controlled storage conditions. Artifacts will be housed in buffered archival boxes or polyethylene boxes with a combination of acid-free tissue and/or ethafoam for support. Polyethylene bags will also be used to house artifacts for long-term storage. Archival furniture is best designed around the needs of the eventual recipient of the collection. Metal storage cabinets with baked enamel surfaces may be best-suited for this collection. Storage cabinets made of particle board or formica will not be used due to their propensity to outgas such materials as ether and other solvents.

Curation during the analysis portion of the project is discussed below first in terms of short-term curation. Curation over the long-term, after the project is completed, is also discussed.

4.3.1 *Short-Term Curation*

The laboratory at 6 World Trade Center has some climatic controls: the two major spaces are heated and air-conditioned, and humidity monitoring and control equipment has been installed. The macroenvironment of the laboratory facility will be periodically monitored to ensure that the temperature and humidity levels stay within the desired ranges of 70 (± 5) degrees Fahrenheit (F) and 50 (± 5) percent relative humidity (RH).

4.3.2 *Long-Term Curation*

It is anticipated that in the long-term, that is, following the completion of analysis, the artifacts and associated project records from the Courthouse Block will be placed in an appropriate repository to ensure their preservation, accessibility for use in educational exhibits, and accessibility to

interested scholars. The general nature of the long-term curation facility and curation practices is discussed below.

4.3.3 *Long-Term Curation Facility*

As specified in the Memorandum of Agreement, GSA will conduct a survey to identify an appropriate repository for the long-term curation of the artifacts and associated project records. That facility should be selected based on the following criteria and characteristics:

- The facility should store and maintain other collections from the same site or project and/or from similar historical and cultural associations.
- The facility should have a contractual agreement with the GSA concerning collections storage.
- The facility should have a physical plant which meets building, fire, and safety codes.
- The facility should have a demonstrated ability to maintain collection records, field notes, and other documentation in a complete and accurate manner.
- The facility should have qualified personnel including a director, curatorial staff, and support staff suitable to care for and manage the collection in accordance with the conservation and curation guidelines contained herein.
- The facility should have the ability to accession, curate, and interpret the collection.
- The facility should have the ability to identify, evaluate, and document objects in the collection.
- The facility should have the ability to store and maintain the collection in accordance with the physical and environmental conservation and curation guidelines contained herein.
- The facility should have the ability to utilize the collection for study and interpretation, schedule periodic inspections of the collection, and provide interested researchers with access to the collection.

It is expected that a suitable facility will be identified in New York City with the assistance of the Landmarks Preservation Commission.

For long-term storage, artifacts should be stored according to their material type and provenience in appropriate archival containers. At this point, it is impossible to determine an institution's needs

for establishing proper storage facilities. However, general criteria can be established. For example, a 70 (± 5) degrees Fahrenheit (F) temperature range is optimal. In addition, a 50 (± 5) percent relative humidity (RH) range for the collection is also optimal. It should be noted, however, that small fluctuations in both temperature and humidity are acceptable, depending on the overall physical environment in which the collection is housed.

Special housing should be created for any artifact with questionable stability. Certain organic materials such as bone or leather may also need a more advanced storage facility. Wrapping materials in tissue will prevent abrasion, and housing them in polyethylene boxes with ethafoam liners will aid in the prevention of damage. Use of Art-sorb in such cases will help maximize humidity management.

Architectural elements may require special boxes and/or storage areas because of their size and irregular shapes. A sturdy acid-free box that is rated for at least 40 pounds is desirable.

5.0 PUBLIC EDUCATION PLAN

5.1 Introduction

Because the Courthouse and Broadway Blocks were both archeologically excavated as components of the same construction project proposed by the General Services Administration, both sites were initially integrated in terms of community involvement and educational programs. Public meetings that addressed the importance of the African Burial Ground, remains of which were found on the Broadway Block, have also touched on the significance of the Courthouse Block. There are certain historical connections between the people who used the African Burial Ground and some of the people who lived at Five Points, and these connections promise to enhance the significance of both sites as they are interpreted for the public. Both sites represent little known segments of New York City's eighteenth and nineteenth century population--the enslaved and the urban poor.

5.2 Laboratory Tours and School Programs

Tours of the Foley Square Laboratory will be organized through the Office for Public Education and Interpretation of the African Burial Ground (OPEI). That office, which is in the same building as the laboratory, maintains a staff and facilities geared to educate the lay public and school groups about the African Burial Ground project in particular, but the staff is also prepared to discuss the Five Points project and the historical and archeological methods used to investigate both the Broadway and Courthouse blocks. The laboratory tours will be conducted by laboratory team members under the supervision of the laboratory director and the OPEI director. They will focus on the methods used to conserve and analyze the artifacts recovered from the Broadway and Courthouse blocks. Brief summaries of the projects and their preliminary results will be made available to tour participants, along with written material. This information will be updated on a continuous basis. Laboratory tours will be available for individuals and public groups on an appointment basis.

The OPEI will use a video about Five Points, produced by the American Social History Project (Brown n.d.), to introduce tour groups to the project. With its emphasis on the problem of bias in the historical record, the film will provide a focus for discussions of the difficulty of "knowing" the past. Although the film places particular emphasis on the Irish immigrant experience, it may be used to raise the issue of the experiences of African American and other groups of people in the Five Points District as well.

In order to assure interactive communication between the community and the projects, OPEI staff will record questions posed by tour groups and submit them to the OPEI director to be considered for incorporation into the research goals for the project, particularly as they may relate to documents produced primarily for public dissemination.

5.3 Written Materials

In addition to brief summaries of the archeological projects to be provided on laboratory tours, OPEI staff will also prepare and provide to visitors the following written materials:

- an illustrated booklet on the history and excavation of the Five Points archeological site
- a glossary of relevant archeological terms
- an introductory bibliography on the Five Points neighborhood

These materials will include information on the history of the project, the historic context of the site, the interdisciplinary research approaches taken, the artifacts, and an interpretation of what it all means in lay language. The materials will be available to tour groups before they visit the laboratory and can be coordinated with one or more of the video and/or slide presentations, as appropriate.

6.0 PROJECT DOCUMENTATION AND PROFESSIONAL DISSEMINATION

6.1 Introduction

In addition to programs oriented toward the lay public, several products will be generated that professionally document the project and serve to disseminate its results to interested professional communities. These products will include a technical report on the project and papers presented at professional conferences and published in technical and professional journals of the various disciplines involved in the project. Each of these kinds of products are discussed below.

6.2 Technical Report Preparation

A detailed technical report will be prepared presenting the background, goals, methods, results, interpretations, and conclusions of the Courthouse Block investigations. The report will provide "baseline" documentation of all aspects of the project and will include artifact inventories. The report will be illustrated with appropriate maps, drawings, photographs, tables, and charts. While this document will be targeted toward a professional audience, it will be written in an accessible style so as to be understandable to non-professionals as well. The report will be prepared in draft and final versions, with appropriate agency and technical review of the draft report.

As specified in the Memorandum of Agreement, the GSA shall ensure that all final archeological reports resulting from the project will be provided to the Advisory Council on Historic Preservation, the Landmarks Preservation Commission, the New York State Historic Preservation Officer, the New York City University and Public library systems, the National Park Service, interested parties that participated in the consultation, and to the National Technical Information Service (NTIS). GSA shall ensure that all such reports are responsive to contemporary standards, and to the Department of the Interior's *Format Standards for Final Reports of Data Recovery Programs* (42 FR 5377-79).

6.3 Conference Papers and Technical Publications

In addition to the technical report, it is anticipated that the researchers involved in the project will prepare technical papers for presentation at meetings of various professional and scholarly organizations. It is anticipated that some papers will be published in appropriate technical and scholarly journals. It is further anticipated that substantive multidisciplinary collaboration between project researchers will take place, and that there will be opportunities for appropriate participation by junior researchers in such efforts.

A protocol for these activities will be prepared that outlines procedures for accessing information for the purposes noted above. At a minimum the protocol will include procedures for notification of the project's director, managers, and the GSA of planned uses of project data for appropriate professional dissemination.

7.0 ANTICIPATED SCHEDULE

The anticipated schedule (Fig. 5) for the archeological analysis is based on an appropriate-sized laboratory team, including both full-time professional and part-time student technicians working under the direction of one laboratory director, two assistant laboratory directors, including the conservator, and a data management specialist. The principal investigator will supervise the overall research effort, direct the artifact analysis, and personally do the stratigraphic analysis. The conservation team includes the principal conservator (presently the acting laboratory director) and an assistant conservator. The schedule for the historic research is based on an anticipated staff of several full-time researchers working under the direct supervision of the principal historian.

Subconsultants will be retained to analyze the floral and faunal remains. Based on what has already been processed, it is estimated that there will be approximately 92,000 pieces of mammal bone and about 23,000 pieces of fish bone. The projected time for analyzing floral remains is based on the number of features with dense deposits, believed to be approximately 20. A subconsultant will also be retained to analyze samples from privies that may contain parasites. Estimates are based on at least ten such deposits (three samples from each). Several other specialists (e.g. ceramics, x-ray defraction) will be retained on a very short-term basis for specific objects. Warren Barbour, a subconsultant to this project and the associate scientific director of the Broadway Block project, will analyze artifacts relating to children's behavior.

Project administration will be accomplished by a JMA project director and an assistant project director with appropriate administrative and secretarial assistance. Flotation and drafting will be done by JMA in-house staff. A subconsultant will do the necessary artifact photography for the report and technical papers/presentations.

Figure 5. Anticipated Schedule

YEAR 1	YEAR 2	YEAR 3	YEAR 4
Field record check Creation of data base for tracking artifact processing Artifact cleaning, sorting, and labeling Stratigraphic analysis Flotation of selected soil samples	Artifact cleaning, sorting and labeling, continued Artifact identification and data entry Analysis of flotation samples Chemical and other analysis of soil samples	Artifact identification and data entry, continued Analysis of quantitative data Cross-mend and vessel identification analyses Preparation of profile drawings and maps	Analysis of quantitative data Production of comprehensive artifact inventory Transfer of artifact collection to permanent repository
Lot specific primary source documentation including deeds, census records, and street directories Analysis of New York City housing records and health and sanitation records including hospital records and physician's journals	Analysis of New York City household census data (1855) Study of Jacob Riis papers Study of primary sources related to immigrant groups documented in project area	Analysis of court and police records Review of information pertaining to missionary and reform activities Study of ethnic newspapers and information relating to localized ethnic and racial institutions	Integrate archeological and historical data and interpretations
Conservation survey of collection Stabilization of fragile materials	Conservation of selected artifacts Stabilization of fragile materials, continued	Conservation of selected artifacts, continued Stabilization of fragile materials, continued	Conservation of selected artifacts continued Stabilization of fragile materials, continued
Development of brochures and other written materials Development/implementation of laboratory tours	Laboratory tours, continued Public lectures on request	Laboratory tours, continued	Laboratory tours, continued
Presentation of preliminary papers at professional conferences	Presentation of papers at professional conferences	Presentation of papers at professional conferences	Major symposium on project at professional conference(s) Production and distribution of technical report on project

8.0 REFERENCES CITED

American Institute for Conservation of Historic and Artistic Works (AIC)

1990 *Strategic Plan.* American Institute for Conservation of Historic and Artistic Works, Washington.

Baugher-Perlin, Sherene

1982 Analyzing Glass Bottles for Chronology, Function, and Trade Networks. In *Archaeology of Urban America: The Search for Pattern and Process*, edited by Roy S. Dickens, Jr., pp. 259-290. Academic Press, New York.

Beaudry, Mary C., Lauren J. Cook, and Stephen A. Mrozowski.

1991 Artifacts and Active Voices: Material Culture as Social Discourse. in *The Archaeology of Inequality*, edited by Randall H. McGuire and Robert Paynter, pp.150-191. Basil Blackwell, Oxford.

Bell, Edward L.

1987 A Preliminary Report on Health, Hygiene, and Sanitation at the Boott Mills Boarding Houses: An Historical and Archaeological Perspective. In *Interdisciplinary Investigations of the Boott Mills, Lowell, Massachusetts. Vol I: Life at the Boarding Houses: A Preliminary Report*, edited by Mary C. Beaudry and Stephen A. Mrozowski, 57-68. Cultural Resource Management Study No. 18, U.S. Department of the Interior, National Park Service, North Atlantic Regional Office, Boston.

Bianchi, Leonard

1992 Foley Square - Block 160 - Courthouse Site: Overview of Archaeological Investigations. Manuscript prepared for John Milner Associates, Inc.

Blackmar, Elizabeth

1989 *Manhattan For Rent, 1785-1850.* Cornell University Press, Ithaca.

Blomberg, Belinda

1991 *Archeological Investigations at the Site of the Bourse Garage/Omni Hotel at Independence Park, Philadelphia, Pennsylvania.* Report prepared for Bourse Garage Associates, I.M.H. Partners, L.P., and the Kevin F. Donohoe Company, Inc. John Milner Associates, Inc., Philadelphia.

Boyer, Paul S.

1978 *Urban Masses and Moral Order in America, 1820-1920.* Harvard University Press, Cambridge.

Brieger, Gert H.

1985 Sanitary Reform in New York City: Stephen Smith and the Passage of the Metropolitan Health Bill. In *Sickness and Health in America* (2nd edition), edited by J. W. Leavitt and R. L. Numbers, pp. 399-413. University of Wisconsin Press, Madison.

Brown, Josh
n.d. Five Points, a video program produced by the American Social History Project. American Social History Film Library, 22-D Hollywood Ave., Hoboken, NJ.

Burley, David
1989 Function, Meaning and Context: Ambiguities in Ceramic Use by the Hivernant Métis of the Northwestern Plains. *Historical Archaeology* 23(1):97-106.

Busch, Jane
1987 Second Time Around: A Look at Bottle Reuse. *Historical Archaeology* 21(1):67-80.

Cheek, Charles D., and Amy Friedlander
1990 Pottery and Pig's Feet: Space, Ethnicity, and Neighborhood in Washington, D.C., 1880-1940. *Historical Archaeology* 24(1):34-60.

Cheek, Charles D., and John P. McCarthy
1990 Neighborhood Analysis in Urban Archaeology. Paper presented at the annual meeting of the Society for Historical Archaeology, Tucson.

Clark, Dennis
1973 The Philadelphia Irish: Persistent Presence. In *The Peoples of Philadelphia: A History of Ethnic Groups and Lower Class Life, 1790-1940*, edited by Allen F. Davis and Mark H. Haller, pp. 135-154. Temple University Press, Philadelphia.

1986 *Hibernia America: The Irish and Regional Cultures.* Greenwood Press, Westport, CT.

Cook, Lauren J.
1989 Tobacco-Related Material and the Construction of Working Class Culture. In *Interdisciplinary Investigations of the Boott Mills, Lowell, Massachusetts, Volume III: The Boarding House System as a Way of Life*. edited by Mary C. Beaudry and Stephen A. Mrozowski, pp. 209-229. Cultural Resources Management Study No. 21, Division of Cultural Resources, North Atlantic Regional Office, National Park Service, Boston.

Dallal, Diane
1990 Pipeline to the Past: Smoking Paraphernalia and New York History. Paper presented at the annual meeting of the New York State Archaeological Association, Sparrowbush, NY.

Dickens, Charles
1842 (1985) *American Notes.* St. Martin's Press, New York.

Doroszenko, Dena, and Richard Gerrard
1991 Privies and Mass Disposal Practices: An Example from Perth, Ontario. Paper Presented at the Annual Meeting of the Council for Northeast Historical Archaeology, Newark, DE.

Edwards and Kelcey Engineers, Inc. (Edwards and Kelcey)
1990 *Final Environmental Impact Statement, Foley Square Proposed Federal Courthouse and Federal/Municipal Office Building, New York, New York.* Report prepared for the General Services Administration. Edwards and Kelcey Engineers, Inc., Livingston, NJ.

Ernest, Robert
1949 *Immigrant Life in New York City, 1825-1863.* King's Crown Press, New York.

Fallows, Marjorie R.
1979 *Irish Americans: Identity and Assimilation.* Prentice-Hall, Inc. Englewood Cliffs, NJ.

Gilje, Paul A.
1992 *New York in the Age of the Constitution, 1785-1880.* Fairleigh Dickinson University Press. Rutherford, NJ.

Glassie, Henry
1982 *Passing the Time: Folklore and History of an Ulster Community.* The O'Brien Press, Dublin.

Grossman, Joel W.
1985 *The Excavation of Augustine Heerman's Warehouse and Associated Seventeenth Century Dutch West India Deposits.* Report submitted to Fox and Fowle Architects, PC and HRO International Limited. Greenhouse Consultants, Inc. New York.

Hall, Martin
1993 Small Things and the Mobile, Conflictual Fusion of Power, Fear, and Desire. In *The Art and Mystery of Historical Archaeology: Essays in Honor of James Deetz*, edited by Anne Yentsch and Mary C. Beaudry. CRC Press, Boca Raton, FL.

Harris, Edward C.
1975 The Stratigraphic Sequence: A Question of Time. *World Archaeology* 7:109-121.

1979 *Principals of Archaeological Stratigraphy.* Academic Press, London.

Harris, M. A.
1958 *A Negro History Tour of Manhattan.* Greenwood Publishing Corporation. New York.

Henry, Susan L.
1987 A Chicken in Every Pot: The Urban Subsistence Pattern in Turn-of-the-Century Phoenix, Arizona. In *Living in Cities: Current Research in Urban Archaeology*, edited by Edward Staski, pp. 19-28. Special Publication Series Number 5, Society for Historical Archaeology.

Hodder, Ian
1979 Economic and Social Stress and Material Culture Patterning. *American Antiquity* 44(3):446-454.

Holland, Major
1757 Plan of the Northeast Environs of the City of New York. (Reproduced in Valentine's [1859] *Manual of the Corporation of New York*)

Howson, Jean E.
1987 *The Archaeology of Nineteenth-Century Health and Hygiene: A Case Study from Sullivan Street, Greenwich Village, New York City.* Masters thesis, Department of Anthropology, New York University.

Illinois State Museum
1992 *Historical Hazardous Substance Data Base, Version 2.0.* Illinois State Museum, Geography Program, Springfield, Illinois.

Ingle, Marjorie, Jean E. Howson, and Edward S. Rutsch
1990 *A Stage IA Cultural Resource Survey of the Proposed Foley Square Project in the Borough of Manhattan, New York, New York.* Report prepared for Edwards and Kelcey Engineers, Inc. and the General Services Administration. Historic Conservation and Interpretation, Inc., Newton, NJ.

Kalcik, Susan
1985 Ethnic Foodways in America: Symbol and the Performance of Identity. In *Ethnic and Regional Foodways in the United States*, edited by Linda Keller Brown and Kay Mussell, pp. 37-65. The University of Tennessee Press, Knoxville.

Louis Berger and Associates
1987 *Druggists, Craftsmen and Merchants of Pearl and Water Streets, New York: Cultural Resources Investigations of the Barclay's Bank Site, 75 Wall Street, Borough of Manhattan, New York, New York.* Report submitted to the London and Leeds Corporation and Barclay's Bank DLC. Louis Berger and Associates, Inc., East Orange, NJ.

Maerschalck, F.
1754 *Plan of New York.* On file, Manuscript Division, New York Public Library

McCarthy, John P.
1990 Archeologists and Historians: Working Together in Cultural Resources Management? *Newsletter, Society of Professional Archaeologists* 5(11):2-3.

McCarthy, John P., Billy R. Roulette, Jr., and Thomas A. J. Crist
1993 *Phase IB/II and III Archeological Investigations at the Philadelphia Gateway Development Parcel: An Archeological Perspective on Philadelphia's Nineteenth Century Irish-American Community.* Report prepared for Realen Gateway Development Associates, L. P. John Milner Associates, Inc., West Chester, PA.

McCarthy, John P., and Daniel G. Roberts
1993 A Neighborhood Approach to the Urban Archaeology of Philadelphia. Paper presented at the annual meeting of the Society for Historical Archaeology, Kansas City.

McGuire, Randall H.
1982 The Study of Ethnicity in Historical Archaeology. *The Journal of Anthropological Archaeology* 1:159-178.

Miller, George L.
1980 Classification and Economic Scaling of 19th Century Ceramics. *Historical Archaeology* 14:1-40.

1991 A Revised Set of CC Index Values for Classification and Economic Scaling of English Ceramics from 1787 to 1880. *Historical Archaeology* 25(1):1-25.

Otto, John S.
1975 *Status Differences and the Archaeological Record - A Comparison of Planter, Overseer, and Slave Sites from Cannon's Point Plantation (1794 - 1861), St. Simon's Island Georgia.* Doctoral dissertation, Department of Anthropology, University of Florida, Gainsville. University Microfilms International, Ann Arbor.

1977 Artifacts and Status Differences - A Comparison of Ceramics from Planter, Overseer, and Slave Sites on an Antebellum Plantation. In *Research Strategies in Historical Archeology*, edited by Stanley South, pp. 91-118. Academic Press, New York.

Pernicone, Carol Groneman
1973 *The "Bloody Ould Sixth": A Social Analysis of a New York City Working-Class Community in the Mid-Nineteenth Century.* Doctoral dissertation, Department of History, University of Rochester. University Microfilms International, Ann Arbor.

Porter, Richard L.
1992 Letter Report to John P. McCarthy dated August 28, 1992. On file, John Milner Associates, Inc., West Chester, PA.

Reitz, Elizabeth J.
1987 Vertebrate Fauna and Socioeconomic Status. In *Consumer Choice in Historical Archaeology*, edited by Suzanne M. Spencer-Wood, pp. 101-119. Plenum Press, New York.

Riis, Jacob A.
1890 (1971) *How the Other Half Lives: Studies Among the Tenements of New York.* Edited by Samuel Bass Warner, Jr. The Belknap Press of Harvard University Press. Cambridge, MA. Originally published in 1890.

Rothschild, Nan A.
1990 *New York City Neighborhoods: The 18th Century.* Academic Press, New York.

Rothschild, Nan, and Arnold Pickman
1990 *The Archaeological Evaluation of the Seven Hanover Square Block: a Final Report.* Report submitted to the New York City Landmarks Preservation Commission.

Rutsch, Edward S. and Staff
1992 A Research Design for the Courthouse Block, Including An End-of-Fieldwork Summary Report. Historic Conservation and Interpretation, Inc. Newton, NJ.

Salwen, Bert
1988 Archaeography, Archaeology, Anthropology and History. Paper presented at the annual meeting of the Society for Historical Archaeology, Reno.

Salwen, Bert, and Rebecca Yamin
1990 *The Archaeology and History of Six Nineteenth Century Lots: Sullivan Street; Greenwich Village, New York City.* Report prepared for the New York University Law School. Department of Anthropology, New York University.

Sanborn Map Co.
1894 Insurance Maps of the City of New York, Borough of Manhattan. Sanborn Map Co., New York.

1923 Insurance Maps of the City of New York, Borough of Manhattan. Sanborn Map Co., New York.

Sante, Luc
1991 *Low Life.* Farrar, Strauss, Geroux. New York.

Seasholes, Nancy S.
1992 Questions That Count Revisited, or What Kind of Questions Should We Be Asking? Paper presented at the annual meeting of the Society for Historical Archaeology, Kingston, Jamaica.

Seifert, Donna J.
1991 Within Sight of the White House: The Archeology of Working Women. In *Gender in Historical Archaeology*, edited by Donna J. Seifert. *Historical Archeology* 25(4):82-108.

Shephard, Steven Judd
1987 Status Variation in Antebellum Alexandria: An Archaeological Study of Ceramic Tableware. In *Consumer Choice in Historical Archaeology*, edited by Suzanne Spencer-Wood, pp. 163-198. Plenum Press, New York.

South, Stanley
1977 *Method and Theory in Historical Archeology.* Academic Press, New York.

Stokes, I. Phelps
1915-28 *The Iconography of Manhattan Island, 1498-1909.* 6 volumes. Robert H. Dodd, New York.

Turnbaugh, William, and Sarah Peabody Turnbaugh
1977 Alternative Applications of the Mean Ceramic Date Concept for Interpreting Human Behavior. *Historical Archaeology* 11:90-104.

APPENDIX A: RESUMES

DANIEL G. ROBERTS
Vice President and Director,
Cultural Resources Department
John Milner Associates, Inc.
309 North Matlack Street
West Chester, PA 19380
(215) 436-9000

EDUCATION

B.A.	Beloit College	Anthropology	1969
M.A.	Idaho State University	Anthropology	1976

PROFESSIONAL CERTIFICATION

1985-present Society of Professional Archeologists (certified in Field Research and Historical Archeology)

AWARDS

1993 Presidential Recognition Award of the Society for American Archaeology, in recognition of service above and beyond the call of duty to the Society and the cause of American archaeology

PROFESSIONAL ACTIVITIES

Society for Historical Archaeology

1987-1988	Member, Fund-Raising Task Force
1988-present	Member, Editorial Advisory Committee
1988-present	Associate Editor, *Historical Archaeology*

Society for American Archaeology

1987-1988	Member, Finance Committee
1989-present	Chair, Finance Committee
1990-present	Member, Planning and Budget Committee
1990	Member, Long-Range Planning Task Force
1992	Member, Executive Director Search Committee
1993-present	Member, 2000/Strategic Planning Task Force

Society of Professional Archeologists

1991-present	Member, Grievance and Standards Board, 2nd Alternate

Pennsylvania Archaeological Council

1985-1987	Secretary/Treasurer
1987-1989	President

Society for Pennsylvania Archaeology

1985-present	Member, Editorial Committee
1988-present	Associate Editor, *Pennsylvania Archaeologist*

ARCHEOLOGICAL FIELD AND ANALYTICAL EXPERIENCE

1967	Archeological field and laboratory work at several multi- component prehistoric sites in northern Wisconsin. Beloit College.
1967	Co-directed an independent prehistoric site survey in central South Carolina.
1969	Archeological field and laboratory work at an Archaic shell midden in southern Indiana. Beloit College.
1969	Archeological field and laboratory work at the Cahokia Site, East St. Louis, Illinois. Beloit College.
1972	Archeological field and laboratory work at Franklin Court and Budd's Row, Philadelphia, Pennsylvania. University of Pennsylvania.
1973	Field Supervisor for a prehistoric site survey in the West Branch of the Susquehanna River in central Pennsylvania. Pennsylvania Historical and Museum Commission.
1974-1976	Field and Laboratory Supervisor for a cultural resources inventory of the Camas Creek-Little Grassy Planning Unit of the Bureau of Land Management, southeastern Idaho. Idaho State University.
1976	Archeological field work at the Wasden Site, a deeply stratified cave in southeastern Idaho. Idaho State University.

ARCHEOLOGICAL FIELD AND ANALYTICAL EXPERIENCE
(John Milner Associates, Inc.)

1976	Field Supervisor for a cultural resources inventory of nineteenth century structures at Virginius Island, Harper's Ferry, West Virginia. National Park Service.
1977	Field Supervisor for limited archeological test excavations at the General Von Steuben House, River Edge, New Jersey. State of New Jersey.
1977	Field Supervisor for limited archeological test excavations at the Enameling Furnace, Allaire State Park, Farmingdale, New Jersey. State of New Jersey.
1977	Field and Laboratory Supervisor for excavations at Fort Frederick State Park, Big Pool, Maryland. Maryland Department of Natural Resources.
1977	Principal Investigator for a prehistoric and historic cultural resources inventory of the Gateway National Recreation Area, New York and New Jersey. National Park Service.

1978 Co-Principal Investigator for excavations at Frankford Arsenal, Philadelphia, Pennsylvania. Baltimore District, Corps of Engineers.

1978 Principal Investigator for archeological monitoring and assessment of culturally sensitive areas in Bridgeton, New Jersey in conjunction with a large-scale water system improvement project. City of Bridgeton.

1979 Principal Investigator for an archeological assessment as part of an overall architectural-historical study of an area of center city Philadelphia bounded by Market, Arch, 10th, and 11th Streets. Market Street East Development Corporation.

1979 Principal Investigator for an archeological testing program at various loci in and near Lambertville, New Jersey, in conjunction with a proposed new sewage treatment facility. Glace and Glace, Inc., and the Lambertville Sewerage Authority.

1979 Principal Investigator for extensive excavations in the 11th and Market Streets vicinity of center city Philadelphia in association with the construction of the Gallery, a new shopping facility. Market Street East Development Corporation.

1979 Principal Investigator for an archeological assessment of a portion of the University of Delaware Marine Studies Complex, Lewes, Delaware. Department of Engineering and Construction, University of Delaware.

1980 Principal Investigator for an archeological survey and assessment of selected sectors of the Letterkenny Army Depot, Franklin County, Pennsylvania. Department of the Army, Baltimore District, Corps of Engineers.

1980 Co-Principal Investigator for extensive excavations at the Lambertville Site (28-Hu-468), a deeply stratified, multi- component, prehistoric site in Lambertville, New Jersey. Glace and Glace, Inc. and the Lambertville Sewerage Authority.

1980 Principal Investigator for archeological investigations at Immanuel Church, New Castle, Delaware. Vestry of Immanuel Church.

1981 Co-Principal Investigator for the development of a cultural resources protection plan for the Southeastern Pennsylvania Coastal Zone. In association with C. J. Frederick Associates. Pennsylvania Historical and Museum Commission.

1981 Principal Investigator for an archeological assessment of the Sun Inn, Bethlehem, Pennsylvania. Pennsylvania Department of General Services.

1981 Principal Investigator for archeological investigations at the Pieter Claeson Wyckoff House, Brooklyn, New York. New York City Landmarks and Preservation Commission.

1981 Principal Investigator for an archeological reconnaissance and subsurface testing program in the City Park, Bridgeton, New Jersey. Edward H. Richardson Associates.

ARCHEOLOGICAL PROJECT MANAGEMENT AND ADMINISTRATION
(John Milner Associates, Inc.)

1981	Archeological reconnaissance and subsurface testing program in portions of Berks, Lehigh, Bucks, and Montgomery Counties, Pennsylvania. Texas Eastern Transmission Corporation.
1981	Archeological assessment of Henderson's Wharf, Baltimore, Maryland. Gaylord Brooks Investment Company.
1981	Archeological reconnaissance and subsurface testing program at prehistoric site 33-Lu-247, Maumee Bay, Lucas County, Ohio. Department of the Army, Buffalo District, Corps of Engineers.
1981	Archeological reconnaissance and subsurface testing program in the borough of Towanda, Bradford County, Pennsylvania. CECO Associates, Inc. and the Pennsylvania Department of Transportation.
1982	Archeological survey and assessment of the Growden Mansion, Trevose, Pennsylvania. Board of Supervisors.
1982	Archeological survey and evaluation of the General Services Administration building site, Chester, Pennsylvania. Wagner Associates, Inc.
1982-1984	Archeological survey, evaluation, and excavation of prehistoric and historic archeological sites associated with Interstate 78 improvements, Northampton and Lehigh Counties, Pennsylvania. Betz, Converse, Murdoch, Inc. and the Pennsylvania Department of Transportation.
1982-1984	Prehistoric archeological survey, testing, and data recovery in the lower Schuylkill Valley, Pennsylvania in association with transmission line design. Philadelphia Electric Company.
1983	Archeological survey and testing in association with Interstate 83, Baltimore, Maryland. Maryland Department of Transportation, Interstate Division for Baltimore, Maryland.
1983-1984	Archeological data recovery at the site of a nineteenth century cemetery associated with the First African Baptist Church, Philadelphia, PA. Redevelopment Authority of the City of Philadelphia.
1984	Archeological survey of Pennypacker Mills, Schwenksville, PA. Montgomery County Department of Parks and Historic Sites.
1984	Archeological survey and excavations at Front and Dock Streets, Philadelphia, PA. Rouse and Associates, Inc.
1984	Archeological investigation of burial vaults at Old St. Paul's Church, Philadelphia, PA. J.S. Cornell and Sons.

1984	Archeological investigations of outbuildings at the Peter Wentz Farmstead, Worcester, PA. Montgomery County Department of Parks and Historic Sites.
1984	Archeological survey of a proposed wastewater treatment facility in Red Hill, PA. Betz, Converse, Murdoch, Inc. and the Environmental Protection Agency, Region III.
1984	Archeological testing in association with the Vine Street Expressway Corridor, Philadelphia, PA. Michael Baker, Jr. and the Pennsylvania Department of Transportation.
1984-1985	Archeological excavations at Fort McHenry National Monument and Historic Shrine, Baltimore, Maryland. National Park Service, Mid-Atlantic Region.
1985	Archeological survey in association with proposed new health care facilities at the site of the former Philadelphia General Hospital, Philadelphia, PA. Health Care Facilities Committee, University of Pennsylvania.
1985	Archeological data recovery at Ninth and Vine Streets, Philadelphia, PA. Michael Baker, Jr. and the Pennsylvania Department of Transportation.
1985-1986	Archeological monitoring at the Morton Homestead, Prospect Park, Pennsylvania. Redevelopment Authority of the County of Delaware.
1985-1987	Archeological and architectural/historical survey of Norfolk Corridor, Norfolk, Virginia. DeLeuw/Cather and Company and the Virginia Department of Highways and Transportation.
1986	Archeological survey of Grove Interchange, York and James City Counties, Virginia. Tippetts-Abbett-McCarthy- Stratton and the Virginia Department of Highways and Transportation.
1986	Archeological investigations of the Asbury Heights Development Area, Wilmington, Delaware. Wilmington Office of Planning and AHD Company.
1986	Archeological testing at Block 9, Franklintown, Philadelphia, Pennsylvania. Forest City Dillon, Inc.
1986	Archeological testing at Eckley Miners' Village, Waverly, Pennsylvania. Pennsylvania Historical and Museum Commission.
1986	Archeological survey of the Woonsocket Industrial Highway, Woonsocket, Rhode Island. Vanasse/Hangen and the Rhode Island Department of Transportation.
1986	Archeological survey of the Old Ford Plant site, Alexandria, Virginia. Cook Inlet Region, Inc.
1986-1989	Archeological testing and data recovery at Addison Plantation, Oxon Hill, Prince George's County, Maryland. James T. Lewis Enterprises, Ltd.

1987	Archeological and architectural/historical survey of Route 1, Sussex County, Delaware. Delaware Department of Transportation.
1987	Archeological testing of a prehistoric site at Gray's Landing Lock and Dam, Fayette County, Pennsylvania. Pittsburgh District, Corps of Engineers.
1987	Archeological survey of the Byberry Industrial Development Site, Philadelphia, Pennsylvania. Philadelphia Industrial Development Corporation.
1987	Archeological survey of the Fort Washington Lifecare Retirement Community Site, Prince George's County, Maryland. Marriott Corporation.
1987-1988	Archeological and architectural/historical survey of Routes 4 and 1, North Kingstown and South Kingstown, Rhode Island. Crossman Engineering and the Rhode Island Department of Transportation.
1987-1988	Archeological data recovery at various locations on the Vine Street Expressway, Philadelphia, Pennsylvania. Gaudet/O'Brien-Urban Engineers and the Pennsylvania Department of Transportation.
1987-1989	Archeological testing, evaluation, and data recovery of the Federal Triangle, Washington, DC. TAMS Consultants and the Pennsylvania Avenue Development Corporation.
1988	Archeological data recovery at the Keeler and Joyner Sites, Route 138, Jamestown, Rhode Island. Wilbur Smith and Associates and the Rhode Island Department of Transportation.
1988	Archeological data recovery at the Bourse Garage/Omni Hotel Site, Philadelphia, Pennsylvania. Bourse Garage Associates.
1988	Archeological survey and testing in association with the TL-468 Gas Transmission Pipeline, Jefferson and Oswego Counties, New York. NPW Consultants and CNG Transmission Corporation, Inc.
1988	Archeological survey and testing in association with the TL-473 Gas Transmission Pipeline, Tompkins County, New York. NPW Consultants and CNG Transmission Corporation, Inc.
1988	Archeological survey and testing in association with the TL-474 Gas Transmission Pipeline, Westmoreland and Armstrong Counties, Pennsylvania. NPW Consultants and CNG Transmission Corporation, Inc.
1989	Archeological data recovery in association with the design of Route 19, Paterson, New Jersey. Hardesty and Hanover and the New Jersey Department of Transportation.
1989	Archeological reconnaissance at Point Marion Lock and Dam, Green County, Pennsylvania, and Monongalia County, West Virginia. Pittsburgh District, Corps of Engineers.

1989	Archeological survey and evaluation of the Mad River Valley, Vermont. Mad River Valley Planning District.
1989-1990	Archeological survey in association with the Northeast Settlements Project, Allegheny National Forest and Mercer County, Pennsylvania. Stone & Webster Engineering Corporation and Tennessee Gas Pipeline Corporation.
1990	Evaluation of several prehistoric archeological sites in Randolph and Pocahontas Counties, West Virginia. Monongahela National Forest.
1990	Archeological data recovery of the 10th and Vine Streets First African Baptist Church, Philadelphia, Pennsylvania. Michael Baker, Jr., Gaudet/O'Brien-Urban Engineers and the Pennsylvania Department of Transportation.
1990	Archeological Reconnaissance Survey, Route 9 Bypass, Nelson-Stoddard, New Hampshire. New Hampshire Department of Transportation.
1990	Archeological evaluation of the King of Prussia Technical Corporation Site, a hazardous waste site in Camden County, New Jersey. Environmental Resources Management, Inc.
1990	Archeological evaluation of the Witco Site, a hazardous waste site in Oakland, New Jersey. Roy F. Weston, Inc.
1990-1991	Evaluation of a portion of the Farmington Canal, New Haven County, Connecticut. Stone & Webster Engineering Corporation and Tennessee Gas Pipeline Corporation.
1991	Archeological evaluation of the Lone Pine Landfill, a hazardous waste site in Monmouth County, New Jersey. AWD Technologies, Inc.
1991	Cultural resources survey in association with the relicensing of eight hydroelectric developments in the Deerfield River valley, Massachusetts and Vermont. New England Power Company.
1991	Archeological data recovery of two prehistoric upland sites associated with the final design of Routes 41 and 42, Gloucester County, New Jersey. EMJ/McFarland-Johnson and the New Jersey Department of Transportation.
1991	Archeological data recovery of ten archeological sites along the Iroquois Natural Gas Pipeline, New York and Connecticut. Iroquois Gas Transmission System.
1992	Archeological services for various projects in National Parks in the eastern United States. National Park Service, Denver Service Center and Eastern Applied Archeology Center.
1992	Archeological evaluation of three submerged archeological resources in Lake Champlain, Vermont. United States Coast Guard.

1992-1993 Archeological data recovery in association with design and construction of the Central Artery/Tunnel, Boston, Massachusetts. Timelines, Inc. and the Massachusetts Highway Department

1992-1993 Archeological data recovery at the African Burial Ground and Five Points Site, Foley Square, New York City. Edwards & Kelcey and the General Services Administration, Region 2.

1993 Cultural resources investigation of the Haverhill to Portland Natural Gas Pipeline Project, Massachusetts, New Hampshire, and Maine. Stone & Webster Engineering Corporation and Granite State Gas Transmission, Inc.

1993 Cultural resources support for environmental services, FERC Office of Hydropower Relicensing, nationwide indefinite quantity contract. Stone & Webster Engineering Corporation and the Federal Energy Regulatory Commission.

1993 Archeological and architectural evaluation of the Appalachian Power Company Transmission Line project, in Cloverdale, Virginia to Occana, West Virginia. Woodward-Clyde Consultants, Inc. and the USDA Forest Service, Jefferson National Forest.

1993 Archeological evaluation of the Portland Natural Gas Transmission System Pipeline project, North Troy to the Connecticut River, Vermont. Stone & Webster Engineering Corporation and the Portland Natural Gas Transmission System.

ARCHITECTURAL/HISTORICAL PROJECT MANAGEMENT AND ADMINISTRATION (John Milner Associates, Inc.)

1982 Architectural/historical and archeological survey of the Exton Bypass Corridor, Chester County, Pennsylvania. McCormick, Taylor & Associates, Inc. and the Pennsylvania Department of Transportation.

1982 Architectural/historical and archeological survey in association with the Route 20 Connector, Paterson, New Jersey. URS/Madigan Praeger, Inc. and the New Jersey Department of Transportation.

1982-1985 Architectural/historical and archeological survey of the Vine Street Expressway Corridor, Philadelphia, PA. Gannett, Fleming, Corddry, and Carpenter, Inc. and the Pennsylvania Department of Transportation.

1983 Architectural/historical survey in association with the East Market Street Improvements, Philadelphia, PA. The Delta Group.

1983 Historic American Buildings Survey documentation of the Old Central Police Building, Baltimore, Md. Maryland Department of Transportation, Interstate Division for Baltimore City.

1984	Historical documentation for the Seiple/Shaffer Farmstead, Lehigh County, PA. Pennsylvania Department of Transportation.
1983-1985	Architectural/historical and archeological survey of three proposed convention center sites, Philadelphia, PA. Eastern Real Estate Company and the Philadelphia Industrial Development Corporation.
1984-1985	Architectural/historical and archeological survey in association with the Interstate 95 Access Study, Philadelphia, PA. The Delta Group and the Pennsylvania Department of Transportation.
1984-1985	Architectural/historical and archeological survey of Lock Haven and Lockport, Pennsylvania. Rogers, Golden and Halpern, Inc., and the Department of the Army, Baltimore District, Corps of Engineers.
1985	Architectural/historical survey of the proposed Somerset Expressway, Somerset County, New Jersey. Parsons Brinckerhoff Quade and Douglas, Inc. and the New Jersey Department of Transportation.
1985	Architectural recordation of domestic structures associated with the proposed Stonewall Jackson Lake, Lewis County, West Virginia. Department of the Army, Pittsburgh District, Corps of Engineers.
1985-1986	Architectural/historical survey of Route 1, Mercer and Middlesex Counties, New Jersey. PRC Engineering and the New Jersey Department of Transportation.
1986	Historic Structure Report, Moon-Williamson House, Fallsington, Pennsylvania. Historic Fallsington, Inc.
1986	Architectural/historical survey of the Dover-Chester Road, Morris County, New Jersey. Boswell Engineering Company and the New Jersey Department of Transportation.
1986	Recordation of Stoney Run Aqueduct, Delaware Canal, Bucks County, Pennsylvania. Tri-County Constructors, Inc.
1986	Architectural/historical survey of Route 21, Passaic County, New Jersey. Howard Needles Tammen and Bergendoff and the New Jersey Department of Transportation.
1986	Architectural/historical survey and thematic National Register nomination for Emergency Conservation Work (ECW) architecture in Pennsylvania's State Parks. Pennsylvania Historical and Museum Commission.
1986	National Register Historic District Nomination, Bristol, Pennsylvania. Borough of Bristol.
1986-1987	Historic Structure Report, Ephrata Cloister, Ephrata, Pennsylvania. Pennsylvania Historical and Museum Commission.

1986-1987	Historic Structure Report, Pennsbury Manor, Morrisville, Pennsylvania. The Pennsbury Society.
1987	Historical evaluation of the Bare Hills community, Baltimore, Maryland. Baker, RK&K, Century Joint Venture, and Maryland Department of Transportation, Interstate Division for Baltimore City.
1987	Historical and architectural evaluation of the Fricks Lock Complex, Chester County, Pennsylvania. Philadelphia Electric Company.
1987	Cultural Landscape Study of Wills Farm, Gettysburg National Military Park, Gettysburg, Pennsylvania. National Park Service, Mid-Atlantic Region.
1988	Historic American Buildings Survey of numerous residential and commercial structures, Route 19, Paterson, New Jersey. Hardesty and Hanover and the New Jersey Department of Transportation.
1988	Historic American Buildings Survey of numerous commercial structures, Philadelphia Convention Center, Reading Site, Philadelphia, Pennsylvania. Philadelphia Industrial Development Corporation.
1989	Historic American Buildings Survey recordation of the Aspinwall Veterans Administration Hospital, Pittsburgh, Pennsylvania. Hayes, Large, Suckling, Fruth, and Wedge and the Veterans Administration.
1989	Historic American Buildings Survey recordation of Arlington Hall Station, Arlington, Virginia. Sasaki-Mitchell/Giurgola Joint Venture and the General Services Administration.
1989	Historic American Engineering Record documentation of Pier 35, Philadelphia, Pennsylvania. Asbell and Associates.
1990	Preparation of the Contact Period Historic Context section of the Vermont State Archeological Plan. Vermont Division for Historic Preservation.
1990	National Register Nomination of the Crowe Stone Chamber Site, South Woodstock, Vermont. New England Antiquities Research Association.
1990	Historical documentation for three potential naval base closings (Philadelphia Naval Base, Naval Air Facility, Detroit, and South Weymouth Naval Air Station, Boston). TAMS Consultants and the Northern Division, Naval Facilities Engineering Command.
1991	Historic Resource Study for Capitol Reef National Park, Utah. National Park Service, Rocky Mountain Region.
1992	Architectural and archeological evaluation of the Atwater Kent Radio Factory, Philadelphia, Pennsylvania. H. F. Lenz Company, Geddes Brecher Qualls Cunningham, and the General Services Administration, Region 3.

1993 Architectural and archeological evaluation of portions of the Philadelphia Naval Yard and Naval Hospital, Philadelphia, Pennsylvania. TAMS Consultants, Inc. and the Northern Division, Naval Facilities Engineering Command.

CULTURAL RESOURCES REPORTS

1968 A Site Survey of Chester and Fairfield Counties, South Carolina (co-author). Unpublished manuscript on file at Logan Museum, Beloit College.

1977 An Archeological Survey and Assessment of Virginius Island, Harper's Ferry National Historic Park (co-author). Report prepared for the National Park Service, Denver Service Center.

1977 Archeological Testing at the Enameling Furnace, Allaire State Park, New Jersey. Report prepared for the Department of Environmental Protection, State of New Jersey.

1977 Archeological Test Excavations at the General Von Steuben House. Report prepared for the Department of Environmental Protection, State of New Jersey.

1977 Archeological Investigations at the Saugus Ironworks National Historic Site, 1976 (co-author). Report prepared for the National Park Service, Denver Service Center.

1978 A Cultural Resources Inventory of the Gateway National Recreation Area, New York and New Jersey. Report prepared for the National Park Service, Denver Service Center.

1978 A Report on Archeological Monitoring of the 1978 Water System Improvements, City of Bridgeton, New Jersey. Report prepared for the City of Bridgeton.

1979 Historical and Archeological Survey of Frankford Arsenal, Philadelphia, Pennsylvania (co-author). Report prepared for the Department of the Army, Baltimore District, Corps of Engineers.

1979 Historical and Archeological Study of Market Street East (co-author). Report prepared for the Market Street East Development Corporation.

1979 A Report on Archeological Testing in Conjunction With the Regional 201 Facilities Plan, Lambertville, New Jersey-New Hope, Pennsylvania. Report prepared for Glace and Glace, Inc. and the Lambertville Sewerage Authority.

1979 An Archeological Assessment of a Section of the University of Delaware Marine Studies Complex, Lewes, Delaware (co-author). Report prepared for the University of Delaware.

1979 A Summary Report on Archeological Testing at the University of Delaware Marine Studies Complex, Lewes, Delaware (co-author). Report prepared for the University of Delaware.

1980 The Archeology of the Nineteenth Century in the Ninth Ward, Philadelphia, Pennsylvania (co-author). Report prepared for the Market Street East Development Corporation.

1980 A Preliminary Archeological Investigation at the Site of a Mid-Nineteenth Century Shop and Yard Complex associated with the Belvedere and Delaware Railroad, Lambertville, New Jersey (co-author). Report prepared for Glace and Glace, Inc. and the Lambertville Sewerage Authority.

1980 A Report on an Archeological Survey of Proposed Development Sites at the Letterkenny Army Depot, Chambersburg, Pennsylvania. Report prepared for the Department of the Army, Baltimore District, Corps of Engineers.

1981 A Cultural Resources Reconnaissance of Proposed Development Sites in the City Park, Bridgeton, New Jersey (co-author). Report prepared for Edward H. Richardson Associates, Inc.

1981 A Preliminary Archeological Survey in Selected Areas of the Delaware River Coastal Zone, Southeastern Pennsylvania (co-author). Report prepared for the Pennsylvania Historical and Museum Commission.

1982 A Cultural Resources Reconnaissance of Segments of a Proposed Natural Gas Transmission Line in Berks, Lehigh, Bucks, and Montgomery Counties, Pennsylvania (co-author). Report prepared for Texas Eastern Transmission Corporation.

1982 The Lambertville Site (28-Hu-468): an Early-Middle and Late Woodland Site in the Middle Delaware Valley (co- author). Report prepared for Glace and Glace, Inc. and the Lambertville Sewerage Authority.

1982 Cultural Resources Study, Route 20 Connector from Route I-80 to Paterson Central Business District, Paterson, New Jersey (co-author). Report prepared for URS/Madigan Praeger, Inc.

1982 A Phase I and II Cultural Resources Survey of Two Proposed Alignments for Interstate 78, Lehigh County, Pennsylvania (co-author). Report prepared for Betz, Converse, Murdoch, Inc.

1982 Archeological Resources Technical Basis Report Supporting the Environmental Impact Statement for Vine Street Improvements, Philadelphia, Pennsylvania (co-author). Report prepared for Gannett, Fleming, Corddry, and Carpenter, Inc.

1982 An Archival Investigation of Archeological Resources associated with Interstate Route 83, Gay Street to I-95, Baltimore, Maryland (co-author). Report prepared for the Maryland Department of Transportation, Interstate Division for Baltimore City.

1982 A Report on Archeological Monitoring and Testing at the Luckenbach Grist Mill and Sun Inn, Bethlehem, Pennsylvania (co-author). Report prepared for the Commonwealth of Pennsylvania, Department of General Services.

1983 A Phase I and II Prehistoric Archeological Survey of the Approved Alignment for Interstate 78, Northampton County, Pennsylvania (co-author). Report prepared for Betz, Converse, Murdoch, Inc.

1983 Exton Bypass (L. R. 1004) Cultural Resources Technical Basis Report, Chester County, Pennsylvania (co-author). Report prepared for McCormick, Taylor & Associates, Inc.

1984 Historic Structures Report, Immanuel Church, New Castle, Delaware: Archeological Considerations (co-author). Report prepared for the Vestry of Immanuel Church.

1985 Archeological Investigations in Association with the Center City Commuter Rail Connector: A Study of Nineteenth Century Urban Development in Philadelphia and Spring Garden (co-editor and assembler). Report prepared for the City of Philadelphia, Department of Public Property.

1985 Cultural Resources Survey, Lock Haven and Lockport, Clinton County, Pennsylvania (editor and assembler). Report prepared for Rogers Golden and Halpern and the Baltimore District, Corps of Engineers.

1986 Archeological Monitoring in Conjunction with the Replacement of Utility Lines at Morton Homestead, Prospect Park, Delaware County, Pennsylvania (co-author). Report prepared for the Redevelopment Authority of the County of Delaware.

1986 An Architectural, Historical, and Oral Historical Study of National Register-Eligible Properties in the Stonewall Jackson Lake Region, Lewis County, West Virginia (co-editor and assembler). Report prepared for the U.S. Army Corps of Engineers, Pittsburgh District.

1986 Archeological Monitoring at the Barns-Brinton House, Pennsbury Township, Chester County, Pennsylvania (co-author). Report prepared for Radnor Restoration and Building Company.

1987 The Bachman Site (36 NM 80): Prehistoric Occupations in the Middle Delaware Valley (co-author). Report prepared for the Pennsylvania Department of Transportation, Engineering District 5-0.

1987 An Evaluation of the Archeological Potential of the Lyman Tract, Pennsbury Township, Chester County, Pennsylvania (co-author). Report prepared for the Buckto Corporation.

1987 An Archeological Reconnaissance Survey of the Church Farm School Property (co-author). Report prepared for Rouse and Associates.

1987 Historic Structures Report for Pennsbury Manor, Morrisville, Pennsylvania (co-editor and assembler). Report prepared for the Pennsbury Society.

1988 Stone Quarries and Human Occupations in the Hardyston Jasper Prehistoric District of Eastern Pennsylvania (co-author). Report prepared for the Pennsylvania Department of Transportation, Engineering District 5-0.

1988 Interstate 78 and Pennsylvania's Prehistoric Heritage (co-author). Public report prepared for the Pennsylvania Department of Transportation, Engineering District 5-0.

1989 The First African Baptist Church Cemetery: Bioarcheology, Demography, and Acculturation of Nineteenth Century Philadelphia Blacks (co-author). Report prepared for the Redevelopment Authority of the City of Philadelphia.

1990 A Phase II Archeological Survey of Site 36 BR 109, The James Crain Property, Bradford County, Pennsylvania (co-author). Report prepared for the Farmer's Home Administration.

1990 The Archeology of the Lower Schuylkill River Valley in Southeastern Pennsylvania (co-author). Report prepared for the Philadelphia Electric Company.

PUBLICATIONS

1976 Final Report on the 1974-1975 Camas Creek-Little Grassy Archaeological Survey. Pocatello: *Archaeological Report No. 5 of the Idaho State University Museum of Natural History.*

1981 *Resource Protection Plan: A Framework for Decision-Making in Protecting the Cultural Resources of the Pennsylvania/ Delaware River Coastal Zone* (with Ray Ott, C. J. Frederick, Julie Martin Cushman, Richard J. Webster, and Betty J. Cosans). Publication of the Pennsylvania Historical and Museum Commission.

1982 The Archeology of Groundbreaking. *Dodge National Forum* 5(2):5-7.

1983 A Preliminary Replicative Analysis of Teshoa Flake Production (with Mark B. Sant). *Pennsylvania Archaeologist* 53(1- 2):28-41.

1984 Nightsoil Disposal Practices of the Nineteenth Century and the Origin of Artifacts in Plowzone Proveniences (with David Barrett). *Historical Archaeology* 18(1):108-115.

1984 The First African Baptist Church Cemetery: An Archaeological Glimpse of Philadelphia's Early Nineteenth Century Free Black Community (with Michael Parrington). *Archaeology* 37(6):26-32.

1984 Management and Community Aspects of the Excavation of a Sensitive Urban Archaeological Resource: An Example from Philadelphia. *American Archeology* 4(3):235-240.

1985 *Archaeological Resources of the Piedmont and Coastal Plain of Southeastern Pennsylvania* (editor and assembler). Contribution to the Comprehensive State Plan for the Conservation of Archaeological Resources, Volume II. Publication of the Pennsylvania Historical and Museum Commission.

1987 The History and Archaeology of Immanuel Episcopal Church, New Castle, Delaware. *Pennsylvania Archaeologist* 57(1):1- 33.

1989 The Obligation to Document: A Consultant's View of Archaeological Reporting and Publishing. *Society for Historical Archaeology Newsletter* 22(3):9-10.

1990 Demographic, Cultural, and Bioanthropological Aspects of a Nineteenth Century Free Black Population in Philadelphia, Pennsylvania (with Michael Parrington). In *A Life in Science: Papers in Honor of J. Lawrence Angel*, edited by Jane E. Buikstra. Center for American Archeology Scientific Papers No. 6, Kampsville, IL, pp. 138-170.

1990 Recent Archaeological Discoveries in the Lehigh Hills of Eastern Pennsylvania (with David W. Anthony). *Proceedings of the Lehigh County Historical Society* 39:296-311.

1992 *The Buried Past: An Archaeological History of Philadelphia* (with John L. Cotter and Michael Parrington). Book on regional archeology. University of Pennsylvania Press.

in press Pennsylvania Archaeology: A Retrospective (transcriber, editor, and assembler). A compilation of revisits to early archaeological projects by several notable Pennsylvania archaeologists. *Pennsylvania Archaeologist.*

BOOK REVIEWS

1984 APT Reprint of the 1734 Builder's Dictionary or Gentleman and Architect's Companion. *Historical Archaeology* 18(2):129-130.

1986 How to Collect North American Indian Artifacts, by Robert F. Brand. *Pennsylvania Archaeologist* 56(3-4): 63-65.

1988 Archaeological Annapolis: A Guide to Seeing and Understanding Three Centuries of Change, by Mark P. Leone and Parker B. Potter, Jr. *Historical Archaeology* 22(1):103-104.

1989 Old Salem: An Adventure in Historic Preservation (Revised Edition), by Frances Griffin. *Historical Archaeology* 23(2):121-123.

1989 The Walnut Street Prison Workshop: A Test Study in Historical Archaeology Based on Field Investigation in the Garden Area of the Athenaeum of Philadelphia, by John L. Cotter, Roger W. Moss, Bruce C. Gill, and Jiyul Kim. *Pennsylvania Archaeologist* 59(1):80-81.

1992 Kansas Preservation Plan, Section on Historical Archeology, by William B. Lees. *Historical Archaeology* 26(2):104-106.

1992 Uncommon Ground: Archaeology and Early African America, 1650-1800, by Leland Ferguson. *Journal of Middle Atlantic Archaeology* 8:170-172.

in press A Small History of the Forgotten and the Never Known, by William M. Gardner and Joan M. Walker. *Historical Archaeology*.

SELECTED PRESENTATIONS AT PROFESSIONAL MEETINGS

1976 Technological Parameters of the Teshoa (with Mark B. Sant). Paper presented at the Northwest Anthropological Conference, Ellensburg, Washington, April 8-10, 1976.

1980 Problems in Archeological Modeling and Sampling in Philadelphia (with Alex H. Townsend). Paper presented at the 45th Annual Meeting of the Society for American Archeology, May 1-3, 1980 in Philadelphia, PA.

1982 Archeological Excavations at the Lambertville Site, Lambertville, New Jersey. Paper presented at the Archaeological Society of New Jersey Meeting, Salem, New Jersey, October 16, 1982.

1984 The First African Baptist Church Cemetery: Adventures in Managing the Excavation of a Sensitive Urban Archeological Resource. Paper presented at the Annual Meeting of the Society for Historical Archaeology, Williamsburg, Virginia, January 5-8, 1984.

1984 Participant in Panel on Archeological Guidelines for Section 106 Compliance in New Jersey. Annual SHPO Conference on Archeology and Historic Preservation, Trenton, New Jersey, March 9, 1984.

1985 Prehistoric Archeological Survey and Excavations in Lehigh and Northampton Counties, Pennsylvania. Paper presented at the Annual Conference on Historic Preservation of the Pennsylvania Historical and Museum Commission, Bethlehem, Pennsylvania, April 11-13, 1985.

1986 Archeological Research in Philadelphia: A Brief Overview. Paper prepared for Urban Archeology Workshop I held at the Annual Meeting of the Society for Historical Archaeology, Sacramento, California, January 8-12, 1986.

1986 Archeological Preservation in Philadelphia: A Brief Overview. Paper prepared for Urban Archeology Workshop II held at the Annual Meeting of the Society for Historical Archaeology, Sacramento, California, January 8-12, 1986.

1986 Archeological Excavations at Front and Dock Streets, Philadelphia, Pennsylvania. Paper presented at the Annual Conference on Historic Preservation of the Pennsylvania Historical and Museum Commission, State College, Pennsylvania, May 13-15, 1986.

1986 Section 106, NEPA, and the Vine Street Expressway Project (with John P. McCarthy). Paper presented at the Summer Meeting of the National Research Council, Transportation Research Board, Philadelphia, Pennsylvania, August 14, 1986.

1987 Urban Geography: A Perspective from Philadelphia (with John P. McCarthy). Synthesis of data prepared for the Urban Archeology Workshop at the Annual Meeting of the Society for Historical Archaeology, Savannah, Georgia, January 7- 11, 1987.

1987 Demographic, Cultural and Bioanthropological Aspects of a Nineteenth Century Free Black Population in Philadelphia, Pennsylvania (with Michael Parrington). Paper presented at the Annual Meeting of the American Anthropological Association, Chicago, Illinois, November 17-22, 1987.

1989 The Obligation to Document: A Consultant's View of Archeological Reporting and Publishing. Paper presented at the Annual Meeting of the Society for Historical Archaeology, Baltimore, Maryland, January 5-9, 1989.

1990 Participant in Session on Issues of Reburial and Repatriation in Contemporary Archeology. Annual Conference on Historic Preservation of the Pennsylvania Historical and Museum Commission, Scranton, Pennsylvania, April 26-28, 1990.

1991 Methods of Overhead Transmission Line Construction and Prevention of Disturbance to the Archeological Record. Paper presented at the annual meeting of the Edison Electric Institute National Land Management Workshop, Conowingo, Maryland, August 26-29, 1991.

1991 A Tale of Two City Cemeteries: The Nineteenth Century Burial Grounds of the First African Baptist Church, Philadelphia, Pennsylvania (with John P. McCarthy and Thomas A. J. Crist). Paper presented at the University of Pennsylvania Museum Symposium on Philadelphia Archeology, November 2, 1991.

1992 Comparative Archaeology and Osteology of the First African Baptist Church Cemeteries: Observations Concerning the Formation of Philadelphia's African-American Community in the Early Nineteenth Century (with Thomas A. J. Crist and John P. McCarthy). Paper presented at the Annual Meeting of the Society for Historical Archaeology, Kingston, Jamaica, January 8-12, 1992.

1993 A Neighborhood Approach to the Urban Archaeology of Philadelphia (with John P. McCarthy). Paper presented at the Annual Meeting of the Society for Historical Archaeology, Kansas City, Missouri, January 6-10, 1993.

SYMPOSIA CHAIRED AT PROFESSIONAL MEETINGS

1980 Urban Archeology in Philadelphia, Pennsylvania (co-chaired with Alex H. Townsend). Symposium presented at the Annual Meeting of the Society for American Archeology, May 1-3, 1980, Philadelphia, PA.

1985 Pennsylvania's Principal Urban Centers: Current Archeological Research in Philadelphia and Pittsburgh. Symposium presented at the Annual Meeting of the Society for Historical Archeology, January 9-13, 1985, Boston, Massachusetts.

1992 Pennsylvania Archaeology: A Retrospective. Symposium presented at the Annual Meeting of the Pennsylvania Archaeological Council and the Society for Pennsylvania Archaeology, May 1, 1992, State College, Pennsylvania.

PROFESSIONAL AFFILIATIONS

Society of Professional Archeologists
Society for American Archaeology
Society for Historical Archaeology
American Society for Conservation Archeology
Society for Industrial Archeology
Society for Pennsylvania Archaeology
New York State Archeological Association
Archeological Society of New Jersey
Council for Maryland Archeology
Pennsylvania Archeological Council
Council for Northeast Historical Archeology

PROFESSIONAL INTERESTS

African-American Archeology
Urban Site Formation Processes
Archeology and Restoration
Changing Patterns of Historic Land Use
Lithic Technology
Settlement Systems
Cultural Ecology
Archeological Applications of Sampling Theory
Cultural Resource Management
Project Planning and Management
North America
Northeast and Mid-Atlantic

EMPLOYMENT HISTORY

1967-1972 Various archeological field and laboratory positions in Wisconsin, Illinois, Indiana, South Carolina, and Pennsylvania.

1973 Archeological Field Supervisor
Pennsylvania Historical and Museum Commission
Harrisburg, Pennsylvania

1974–1975	Research Assistant Department of Anthropology Idaho State University Pocatello, Idaho
1976– present	John Milner Associates, Inc. West Chester, Pennsylvania

JOHN P. McCARTHY
Principal Archeologist/Project Manager
John Milner Associates, Inc.
309 North Matlack Street
West Chester, PA 19380
(215) 436-9000

EDUCATION

B.A.	Temple University	Anthropology/American Studies Magna Cum Laude	1981
M.A.	Temple University	Anthropology	1986
Ph.D. Candidate	Temple University	Anthropology	(ABD 1988)

PROFESSIONAL CERTIFICATION

1990	Society of Professional Archeologists, certified in: Field Research, Museology, and Historical Archeology
1991	OSHA-certified 40-hour hazardous waste training program

HONORS/ASSISTANTSHIPS/FELLOWSHIPS

1979	Phi Alpha Theta, National History Honor Society
1981	Graduate Research Assistantship, Anthropology Department, Temple University
1982	Graduate Research Assistantship, Social Science Data Library, Temple University
1983	Graduate Tuition Fellowship, Anthropology Department, Temple University

PROFESSIONAL ACTIVITIES/APPOINTMENTS

1983-1986	Commissioner, Delaware County Heritage Commission
1985-1986	Program Chairperson, Oliver Evans Chapter, Society for Industrial Archeology
1985,1989-	Manuscript Reviewer, *Historical Archaeology*
1986-1989	Curation Committee, Pennsylvania Archeological Council
1987-1990	Pennsylvania Regional Editor, Newsletter Editorial Board, Council for Northeast Historical Archeology
1988-1991	Membership and Ethics Committee, Pennsylvania Archeological Council

1989-1990 Chairperson, Constitution Committee, Council for Maryland Archaeology

1990- Editorial Committee, *Abstracts in Maryland Archeology*, Council for Maryland Archaeology.

1991- Manuscript Reviewer, *American Antiquity*.

1991- Professional Outreach Committee, National Council for Public History.

1991- Nominations Committee, Council for Maryland Archaeology.

1991 Chairperson, Compliance Committee, Pennsylvania Archeological Council

COMPLIANCE AND REVIEW EXPERIENCE

1983-1984 Senior Environmental Specialist (Archeology), Office of New Jersey Heritage, Department of Environmental Protection. Responsibilities included Section 106 review and compliance, review of Part 2 Tax Act Certification Applications, review of National Register Nominations, and public education. Both Section 106 review and National Register review included interpretation of the Criteria of Eligibility for both structures and archeological sites. Tax Act and 106 reviews included interpretation of the Secretary of the Interior's Standards for Rehabilitation. Liaison with members of the public, representatives of local, state, and federal agencies, and members of the business community. Initiated Guidelines for Archeology in New Jersey. Organized the annual SHPO Conference on Archeology and Historic Preservation. Initiated efforts to develop a State Plan for Historic Preservation based on the National Park Service's RP3 and the Secretary of the Interior's Standards for Preservation Planning.

PROJECT EXPERIENCE

1974 Archeological survey of prehistoric sites in the Coastal Zone, Eastern Shore of Maryland. University of Washington.

1974-1975 Archeological survey of prehistoric sites on Cedar Neck, Delaware. Temple University and the Delaware Division of Archaeology.

1975 Work Study Program in historic archeology and museum interpretation at Belle Grove, Middletown, Virginia. National Trust for Historic Preservation.

1975 Lithic micro-use analysis of materials from the Mispillion Site, Delaware. Temple University and the Delaware Division of Archaeology.

1975-1976 Archeological excavation and architectural research at the Colonial Pennsylvania Plantation, an eighteenth century farm complex near Edgemont, Pennsylvania. Bishop's Mills Historical Institute.

1976 Test excavations and architectural analysis at the Sycamore Mill's Village, Ridley Creek State Park. Bishop's Mills Historical Institute.

1977	Archeological and architectural investigations at Catherine Furnace, Chancellorsville Battlefield, Virginia for the National Park Service. Temple University.
1977	Excavation and mapping at the Oatlands Mill Complex, Oatlands Archeological Survey. National Trust for Historic Preservation.
1977	Survey of archeological and architectural resources for a wastewater treatment plant, Kent County, Delaware. Mid-Atlantic Archaeological Research, Inc.
1977-1978	Supervised restoration-oriented excavations at the Colonial Pennsylvania Plantation. Bishop's Mills Historical Institute.
1978	Conducted a cultural resources survey for a proposed Transco LNG plant, Delaware County, Pennsylvania. Mid-Atlantic Archaeological Research, Inc.
1978	Data recovery excavations at the seventeenth century Morton-Mortonson Historic Site, Delaware County, Pennsylvania. Mid-Atlantic Archaeological Research, Inc.
1978	Test excavations and monitoring of stabilization work at Ellwood Manor on the Wilderness Battlefield, Virginia for the National Park Service. Rockwell Archaeology.
1978	Archeological salvage and stabilization of structural remains at the Wilderness Tavern, Wilderness Battlefield, Virginia for the National Park Service. Rockwell Archaeology.
1978	Assisted in archeological survey of proposed parkland improvements in Mercer County, New Jersey. Temple University.
1979	Cultural Resources Survey of Chatham Manor, Fredericksburg, Virginia for the National Park Service. Mid-Atlantic Archaeological Research, Inc.
1979	Supervised archeological and architectural investigation of the North Stairs, Hampton Manor National Historic Site, Towson, Maryland. Mid-Atlantic Archaeological Research, Inc.
1979	Supervised Phase II test excavations at the Blue Ball Tavern site, New Castle County, Delaware. Mid-Atlantic Archaeological Research, Inc.
1979	Assisted in Phase II level investigations, Delaware Department of Transportation, Wilmington Boulevard Project, Delaware. Mid-Atlantic Archaeological Research, Inc.
1979	Supervised Phase II test excavations at various historic sites, Delaware Department of Transportation Routes 4, 7, and 298 Projects. Mid-Atlantic Archaeological Research, Inc.
1979	Conducted excavations at Check #7, the "Miner's House," U. S. Route 15, Catoctin Furnace, Maryland. Mid-Atlantic Archaeological Research, Inc.

1979 Assisted in excavation of the Slave Cemetery, Catoctin Furnace, Maryland. Mid-Atlantic Archaeological Research, Inc.

1980 Conducted data recovery monitoring program at the construction site of the Federal Reserve Bank, Baltimore, Maryland. Mid-Atlantic Archaeological Research, Inc.

1980 Supervised historic sites field investigations at the Dolores Project, a Bureau of Reclamation water control project. University of Colorado.

1980 Conducted a Phase I cultural resources survey of the proposed headquarters of the Food and Drug Administration, Beltsville, Maryland. Mid-Atlantic Archaeological Research, Inc.

1980 Assisted in archeological investigations at the National Register-listed College Park Airport, Maryland in conjunction with planning for the Washington Metro Subway System. Mid-Atlantic Archaeological Research, Inc.

1980 Assessment of National Register eligibility of selected structures along the Gloucester County Highway Package Right-of-Way, New Jersey. Mid-Atlantic Archaeological Research, Inc.

1980 Phase I survey of proposed student housing, St. Mary's College, Maryland. Mid-Atlantic Archaeological Research, Inc.

1981 Phase II and Phase III investigations of historic archeological sites at the St. Clement's Shore Wastewater Treatment Plant, St. Mary's County, Maryland. Mid-Atlantic Archaeological Research, Inc.

1981 Co-directed test excavations to locate remains of the original building of Washington College, Chestertown, Maryland. Washington College.

1981 Co-directed cultural resources survey of proposed alignments of the Somerset Railroad for New York State Electric and Gas, Niagara County, New York. Cultural Heritage Research Services, Inc.

1981 Co-directed archeological and architectural survey of the Whitall House, National Park, New Jersey for the Baltimore District, Corps of Engineers. Cultural Heritage Research Services, Inc.

1982 Co-directed Phase II and Phase III excavations at the site of the new S & H Bakery, Fells Point Historic District, Baltimore, Maryland. Cultural Heritage Research Services, Inc.

1982 Assisted in Phase II investigations at historic sites in the Right-of-Way of the Somerset Railroad, Niagara County, New York. Cultural Heritage Research Services, Inc.

1983 Assisted in Phase I and II testing for a bridge replacement, Jersey Shore, Pennsylvania for the Pennsylvania Department of Transportation. Cultural Heritage Research Services, Inc.

1983 Conducted archeological and architectural survey of proposed bridge replacement alternatives at Welty's Mill, Franklin County, Pennsylvania. Cultural Heritage Research Services, Inc.

PROJECT MANAGEMENT

1981-1982 Analysis of selected assemblages from the Federal Reserve Bank site, Baltimore, Maryland. Design of exhibit and booklet. Cultural Heritage Research Services, Inc.

1982-1983 Archeological survey of the Task Force Alignment, I-476, Delaware County, Pennsylvania. Cultural Heritage Research Services, Inc.

1983 Archeological and architectural surveys of the Sussex Turnpike, Morris County, New Jersey for the New Jersey Department of Transportation. Cultural Heritage Research Services, Inc.

PROJECT EXPERIENCE (John Milner Associates, Inc.)

1984 Supervised archeological and architectural investigations of selected outbuildings at the Peter Wentz Farmstead, Montgomery County, Pennsylvania. Montgomery County Department of Parks and Historic Sites.

1984 Supervised Phase II archeological excavations at the site of the proposed Society Hill Sheraton, Front and Dock Streets, Philadelphia. Rouse and Associates.

1984 Directed Phase III data recovery at Front and Dock Streets, Philadelphia, a seventeenth and eighteenth century site in Center City Philadelphia, Rouse and Associates.

1984-1985 Directed Phase II and Phase III archeological excavations in association with the Vine Street Improvements, Philadelphia, Pennsylvania. Michael Baker, Jr., Inc. and the Pennsylvania Department of Transportation.

1985 Directed Phase I survey of proposed improvements of the Waterfront Park, Gloucester City, New Jersey. Remington and Vernick Engineers and the City of Gloucester City.

1985-1986 Directed archeological monitoring associated with advance construction activities for the Vine Street Improvements, Philadelphia, Pennsylvania. Michael Baker, Jr., Inc. and the Pennsylvania Department of Transportation.

1985-1986 Directed a historic structure report for the Moon- Williamson House, Fallsington, Pennsylvania. Historic Fallsington, Inc.

1985-1986	Directed Phase II historical and archeological investigations at sites associated with the Mid-County Expressway (I-476), Delaware County, Pennsylvania. Urban Engineers, The Delta Group, and the Pennsylvania Department of Transportation.
1986	Directed an intensive archeological survey of the Addison Plantation Site (Oxon Hill, 18 PR 175) and intensive testing of the Addison Manor foundations, Prince George's County, Maryland. James T. Lewis Enterprises, Ltd.
1986-1987	Assisted in historical and archeological research and analysis for data recovery investigations at sites associated with the Mid-County Expressway (I-476), Delaware County, Pennsylvania. Urban Engineers, The Delta Group, and the Pennsylvania Department of Transportation.
1988-1990	Directed data recovery investigations at the Keeler Site, an eighteenth century Quaker farmstead, Rt. 138, Jamestown, Rhode Island. Wilber-Smith Engineers and the Rhode Island Department of Transportation.
1990	Directed Phase II evaluations of a nineteenth century textile mill and blacksmith shop and an eighteenth century church and cemetery, Route 1/4 improvements, North Kingston, Rhode Island. Crossman Engineers and the Rhode Island Department of Transportation.
1990	Conducted preliminary archeological evaluation in conjunction with the Historic Structures Report for Collenbrook, Delaware County, Pennsylvania. Upper Darby Township.
1990	Directed archeological evaluation and determination of effects, Northeast Settlement projects pipeline crossing of the Farmington Canal, New Haven County, Connecticut. Stone & Webster Engineering Corporation and Tennessee Gas Pipeline Company.
1990	Directed Phase IB investigations of proposed improvements to Maryland Route 439, Baltimore County, Maryland. Maryland Department of Transportation, State Highway Administration.
1990	Directed Phase IB investigations of the Maryland Route 5 Leonardtown By-Pass Wetland Replacement Area, St. Mary's County, Maryland. Maryland Department of Transportation, State Highway Administration.
1990	Directed Phase IB investigations of proposed improvements to Maryland Route 8, south of U.S. Route 50/301, Kent Island, Queen Anne County, Maryland. Maryland Department of Transportation, State Highway Administration.
1991-1992	Directed Phase IB archeological surveys of alternates for the University of Maryland Eastern Shore Access Road, Somerset County, Maryland. Maryland Department of Transportation, State Highway Administration.

1991 Conducted archeological monitoring of core testing and analysis of archeological sensitivity at the U.S. Army Materials Testing Laboratory, Watertown Arsenal, Massachusetts. Timelines, Inc., Roy F. Weston, Inc. and the U.S. Army Corps of Engineers.

1992 Directed the completion of a Phase II archeological evaluation of the Wal-Mart Retail Store Site (36TI79), Tioga County, Pennsylvania. Wolverton & Associates, Inc.

PROJECT MANAGEMENT (John Milner Associates, Inc.)

1985-1986 Historic structure report for the Moon-Williamson House, Fallsington, Bucks County, Pennsylvania. Historic Fallsington, Inc.

1986-1987 Historic structure report for Pennsbury Manor, Bucks County, Pennsylvania. Pennsbury Society and the Pennsylvania Historical and Museum Commission.

1986- Data recovery archeological field investigations at the Addison Plantation Site (Oxon Hill, 18 PR 175), Prince George's County, Maryland. James T. Lewis Enterprises, Ltd.

1987 Phase II archeological investigation of a historic site associated with the Dorneyville Access Improvement, Lehigh County, Pennsylvania. BCM Eastern and the Pennsylvania Department of Transportation.

1987-1989 Archeological monitoring and evaluative testing of an eighteenth century tavern site associated with the construction of a new post office, Upper Marlboro, Maryland. Hayes, Seay, Mattern, and Mattern and the United States Postal Service.

1988 Phase II evaluation of the Hershey Farmstead Site (18 WA 432) and coordination of multi-phase cultural resources reporting for the completion of Wesel Boulevard, City of Hagerstown and Washington County, Maryland. Maryland Department of Transportation.

1988-1989 Data recovery investigation of a tenant farm, Dorneyville Access Improvement, Lehigh County, Pennsylvania, BCM Engineers and the Pennsylvania Department of Transportation.

1988-1990 Cataloging of the artifact collection at Hopewell Furnace National Historic Site and computerization of resulting records. National Park Service.

1989-1990 Directed Phase I archeological survey and coordinated determination of effect for cultural resources associated with the Replacement of the Lehigh Canal Bridge, Catasauqua, Pennsylvania. Greenhorne and O'Mara and the Pennsylvania Department of Transportation.

1989 Directed archeological survey and historic resources evaluation of the Bedford Chase Development, Dege Farm, Tewksbury, New Jersey. Custom Living Homes and Communities.

1989	Survey and evaluation of reported prehistoric archeological resources, Sutton Farm, Block 14, Lot 17, Tewksbury, New Jersey. Planned Residential Communities, Inc.
1989-1990	Data recovery of prehistoric archeological resources, Mayview Wetland Replacement Area, Allegheny County, Pennsylvania. Pennsylvania Department of Transportation.
1989-1991	Archeological monitoring and data recovery associated with the construction of the Vine Expressway, Philadelphia, Pennsylvania. Gaudet/O'Brien/Urban Engineers, Joint Venture, Baker Engineers, and the Pennsylvania Department of Transportation.
1989-	Archeological survey and evaluations associated with the replacement of the Bridgetown Road bridge over Neshaminy Creek, Bucks County, Pennsylvania. Blauvelt Engineers and the Pennsylvania Department of Transportation.
1989-	Archeological data recovery excavations at nineteenth century working class residences, Route 19 Connector, Paterson, New Jersey, Hardesty and Hanover and the New Jersey Department of Transportation.
1989-1990	Archeological evaluation of a portion of the site of the former Philadelphia General Hospital. University of Pennsylvania.
1989-1991	Archeological evaluation and determination of effects at the eighteenth century King of Prussia Inn, Montgomery County, Pennsylvania. Pickering, Corts and Summerson, Inc., BCM Engineers, and the Pennsylvania Department of Transportation.
1990-	Archeological, historical and osteological investigation and analysis of the 1810-22 First African Baptist Church Cemetery at 10th and Vine Streets, Philadelphia, Pennsylvania. Gaudet/O'Brien/Urban Engineers, Joint Venture, Baker Engineers, and the Pennsylvania Department of Transportation.
1990	Stage IA archeological sensitivity study, King of Prussia Technical Corporation hazardous waste site, Winslow Township, New Jersey. Environmental Resources Management, Inc.
1990-1992	Directed and managed Phase IA background investigations, Phase IB/II evaluation, and Phase III data recovery investigations of a nineteenth century Irish immigrant community at the Philadelphia Gateway Development Parcel, Philadelphia, Pennsylvania. Realen Gateway Development Associates.
1990-1991	Directed and managed Phase I survey of the Cedar Acres East development, East Lampeter Township, Lancaster County, Pennsylvania. E. James Hogan and Associates.
1990-1991	Managed a Phase IB archeological survey of the BATCS D1 and D2 Wetlands Replacement Area. Maryland Department of Transportation, State Highway Administration.

1991	Directed and managed Stage IA and IB archeological investigations at the Lone Pine Landfill Superfund site, Monmouth County, New Jersey. AWD Technology, Inc.
1991	Assisted in the management of archeological data recovery investigations at ten sites in the right-of-way of the Iroquois Gas Pipeline, New York and Connecticut.
1991-1992	Managed archeological monitoring and recordation at the Northeast Settlement projects pipeline crossing of the Farmington Canal, New Haven County, Connecticut. Stone & Webster Engineering Corporation and Tennessee Gas Pipeline Company.
1991-1992	Managed a Stage IA evaluation of cultural resources sensitivity and Stage IB archeological survey of the L & D Landfill site, Mt. Holly, New Jersey. Geo Syntec Consultants.
1991	Managed and directed Phase I archeological evaluation of the Delaware Avenue Extension, Philadelphia, Pennsylvania. Urban Engineers, Inc., and the Pennsylvania Department of Transportation.
1991	Managed and directed a Stage IA evaluation of the L. E. Carpenter Co. property, Wharton, New Jersey. M. A. Hanna, Inc., and Roy F. Weston, Inc.
1991	Managed and directed a Stage IA archeological survey of the WITCO Corporation property, Bergen County, New Jersey. Roy F. Weston, Inc. and the Witco Corporation.
1991-	Managed and directed Phase I archeological evaluations for various bridge replacement and transportation improvement projects throughout northeastern Pennsylvania. Pennsylvania Department of Transportation, Engineering District 4-0.
1991-1992	Managed and directed a Stage IA cultural resources evaluation of the NSNJ/NL Property Superfund site, Salem County, New Jersey. O'Brien & Gere Engineers, Inc. and NL Industries, Inc.
1991-	Managed and directed cultural resources surveys and evaluations for the Radnor I-476 Park and Ride Facility. BCM Engineers, Inc. and the Pennsylvania Department of Transportation.
1992	Managed and directed a Stage IA cultural resources survey of the Ellis Property Superfund site, Burlington County, New Jersey. Roy F. Weston, Inc. and the New Jersey Department of Environmental Protection and Energy.
1992	Managed a Stage IA cultural resources survey of the Pine Street Canal Superfund site, Burlington, Vermont. Metcalf & Eddy, Inc. and the U.S. Environmental Protection Agency.

1992 Managed and directed a Phase IA archeological survey of the C&D Recycling Property, Luzerne County, Pennsylvania. McLaren/Hart Environmental Engineering and AT&T Nassau Metals Corporation.

1992 Managed and directed a Phase IA archeological survey of the Camden Lateral Loop and Meter Station, Camden County, New Jersey. Transcontinental Gas Pipe Line Corporation.

1992- Assisted in the management of the archeological, historical, and bioanthropological investigations of the African Burial Ground and Five Points Area, Foley Square, New York, New York. Edwards & Kelcey Engineers, Inc. and the U.S. General Services Administration.

MUSEUM DESIGN

1978 Archaeology in Ridley Creek State Park, An Exhibit of Artifacts Recovered at the Colonial Pennsylvania Plantation. Headquarters, Ridley Creek State Park.

1979 Everyday Life in Colonial Philadelphia. A Design for the Second Floor, Old City Hall, Independence National Historic Park, Philadelphia (with W. James Moffet).

1982 Archaeology at the Federal Reserve Bank Site: A Glimpse of Otterbein's Past. Baltimore (with Kenneth J. Basalik).

MUSEUM DESIGN (John Milner Associates, Inc.)

1986-1987 Archeology at the Sheraton Society Hill, Front and Dock Streets. Philadelphia.

CULTURAL RESOURCES REPORTS

1978 Ellwood Manor and Folk Architecture. *In*: Ellwood Manor (Lacy House) by Tim O. Rockwell.

1978 An Archaeological Reconnaissance of the Transco Energy Co. Property, Delaware County, Pennsylvania (co-author).

1979 Architectural and Archaeological Investigation of the North Stairs, Hampton Manor National Historic Site, Towson, Maryland.

1980 Architectural Assessment of Selected Structures Along the Right-of-Way, Gloucester County, New Jersey Highway Improvements.

1980 Archaeological Investigation of the Blue Ball Tavern. *In*: A Cultural Resources Assessment of Concord Pike (Route 202), edited by Ronald A. Thomas.

1980 Excavations at Check No. 7: The Miner's House. *In*: Archaeological Investigations at Catoctin Furnace, Maryland, edited by Ronald A. Thomas.

1980 Data Recovery at 5 MT 5166: The Dickenson Homestead.

1980 Preliminary Investigations at 5 MT 4571, Area 1: Mexican Town, McPhee, Colorado.

1981 An Archaeological Survey of the Proposed Headquarter Facilities of the Food and Drug Administration, Beltsville, Maryland.

1981 Archaeological Investigations at the St. Clement's Shore Wastewater Treatment Plant (Data Recovery) (co-author).

1982 Cultural Resources Basis Report, Supplemental EIS, Proposed Alignments of the Somerset Railroad, Niagara County, New York (co-author).

1983 Archaeological Survey Report: Task Force Alignment, I-476, Delaware County, Pennsylvania (co-author).

1983 Cultural Resources Survey: Welty's Mill Bridge Replacement, Franklin County, Pennsylvania (co-author).

1983 Archaeological Survey, Sussex Turnpike, Morris County, New Jersey (co-author).

1984 Archeological and Architectural Investigations of Selected Outbuildings at the Peter Wentz Farmstead, Worcester Township, Montgomery County, Pennsylvania. Report prepared for Montgomery County Department of Parks and Historic Sites.

1984 Phase II Archeological Investigations at the Site of the Proposed Society Hill Sheraton Hotel, Front and Dock Streets, Philadelphia, Pennsylvania. Report prepared for Rouse and Associates.

1984 Data Recovery Plan for Archeological Resources at the Site of the Proposed Society Hill Sheraton Hotel, Front and Dock Streets, Philadelphia, Pennsylvania. Report prepared for Rouse and Associates.

1984 Vine Street Expressway, L.R. 67045: Phase II Archeological Investigations in the Block Bounded by Ninth, Tenth, Vine, and Winter Streets, Philadelphia, Pennsylvania. Report prepared for Michael Baker, Jr., and the Pennsylvania Department of Transportation.

1985 Vine Street Expressway, L.R. 67045: Phase II Archeological Investigations in the Block Bounded by Vine, Callowhill, Seventh, and Eighth Streets, Philadelphia, Pennsylvania (co-author). Report prepared for Michael Baker, Jr., Inc. and the Pennsylvania Department of Transportation.

1985 Study Design for Phase II Archeological Investigations, Sections 300 and 400, Mid-County Expressway, Delaware County, Pennsylvania (co-author). Report prepared for Urban Engineers, Inc. and the Pennsylvania Department of Transportation.

1985 Stage I Archeological Survey of Proposed Improvements at Waterfront Park, Gloucester City, Camden County, New Jersey (co-author). Report prepared for Remington and Vernick Engineers.

1985 Study Design for Phase II Archeological Investigations, Section 500, Mid-County Expressway, Delaware County, Pennsylvania (co-author). Report prepared for the Delta Group, Inc. and the Pennsylvania Department of Transportation.

1986 Determination of Eligibility Report for Archeological Resources Associated with the Mid-County Expressway, L.R. 1010, Sections 300 and 400, Delaware County, Pennsylvania. Report prepared for Urban Engineers, Inc. and the Pennsylvania Department of Transportation.

1986 Historic Structure Report for the Moon-Williamson House, Fallsington, Bucks County, Pennsylvania (editor and compiler). Report prepared for Historic Fallsington, Inc.

1986 Determination of No Adverse Effect Report and Data Recovery Plan for Archeological Resources Associated with the Mid-County Expressway, L.R. 1010, Sections 300 and 400, Delaware County, Pennsylvania. Report prepared for Urban Engineers, Inc. and the Pennsylvania Department of Transportation.

1986 Determination of Eligibility Report for Archeological Resources Associated with the Mid-County Expressway, L. R. 1010, Section 500, Delaware County, Pennsylvania (co-author). Report prepared for the Delta Group, Inc. and the Pennsylvania Department of Transportation.

1986 Management Summary and Data Recovery Recommendations for the Intensive Archeological Survey of the Addison Plantation Site and Intensive Archeological Testing of the Addison Manor Foundations, Prince George's County, Maryland (co-author). Report prepared for James T. Lewis Enterprises, Ltd.

1987 Vine Street Expressway, L. R. 67045: Archeological Data Recovery Investigations in the Block Bounded by Ninth, Tenth, Vine and Winter Streets, Philadelphia, Pennsylvania (co-author). Report prepared for Michael Baker, Jr., Inc. and the Pennsylvania Department of Transportation.

1987 Vine Street Expressway, L.R. 67045: Archeological Monitoring in the Block Bounded by Vine, Race, Thirteenth, and Broad Streets, Philadelphia, Pennsylvania (co-author). Report prepared for Michael Baker, Jr., Inc. and the Pennsylvania Department of Transportation.

1987 Historic Structures Report for Pennsbury Manor (co-editor and compiler). Report prepared for the Pennsbury Society.

1987 Dorneyville Phase II Level Archeological Field Investigations. Summary Letter Report dated September 4, 1987. Report prepared for BCM Eastern, Inc., and the Pennsylvania Department of Transportation.

1989 Cultural Resources Survey and Evaluation, Wesel Boulevard, City of Hagerstown and Washington County (co-author). Report prepared for the Maryland Department of Transportation.

1989 Archeological Evaluation and Data Recovery at the Northwest Corner of the Dorneyville Intersection, Hamilton Boulevard and Cedar Crest Boulevard, L.R. 157, Section D32, Dorneyville Access, Lehigh County, Pennsylvania (co-author). Report prepared for BCM Engineers and the Pennsylvania Department of Transportation.

1989 An Archeological and Historical Reconnaissance of the Dege Farm Property (Bedford Chase Development), Tewksbury Township, Hunterdon County, New Jersey (co-author). Report prepared for Custom Living Homes and Communities.

1989 A Prehistoric Archeological Survey of Sutton Farm, Block 14, Lot 17, Tewksbury Township, Hunterdon County, New Jersey (co-author). Report prepared for Planned Residential Communities, Inc.

1989 Interim Report, Stage I Data Recovery, The Addison Plantation Site, 18 PR 175, Beltway Parcel, PortAmerica Development, Oxon Hill, Prince George's County, Maryland (co-author). Report prepared for James T. Lewis Enterprises, Ltd.

1990 An Archeological Evaluation of a Portion of the Site of the Former Philadelphia General Hospital, Philadelphia, Pennsylvania (co-author). Report prepared for the University of Pennsylvania.

1990 Lehigh County, S.R. 1004, Section 01B, Lehigh Canal Bridge Replacement, Phase I Archeological Survey (co-author). Report prepared for Greenhorne & O'Mara, Inc. and the Pennsylvania Department of Transportation.

1990 An Evaluation of Effect(s), Northeast Settlement Projects Pipeline Crossing of the Farmington Canal, New Haven County, Connecticut (co-author). Report prepared for Stone & Webster Engineering Corporation and the Tennessee Gas Pipeline Company.

1990 A Phase IB Archeological Reconnaissance: Improvements to Maryland Route 439 from Maryland Route 45 to the Harford County Line, Baltimore County, Maryland (co-author). Report prepared for the Maryland Department of Transportation, State Highway Administration.

1990 A Phase I and Phase II Archeological Investigation of the Neshaminy Creek Bridge Replacement: S.R. 2010 (L.R. 09028), Section 08B, Bucks County, Pennsylvania (co-author). Report prepared for Blauvelt Engineers, P.C. and the Pennsylvania Department of Transportation.

1990 The Keeler Site: The Historic Archeology of a Quaker Farmstead on Conanicut Island, Rhode Island. Archeological Data Recovery in Association with the Final Design of Route 138, Jamestown, Rhode Island (co-author). Report prepared for Wilbur Smith and Associates and the Rhode Island Department of Transportation.

1990 A Phase IB Archeological Survey: Maryland Route 5 Leonardtown By-Pass Wetland Replacement Areas, St. Mary's County, Maryland (co-author). Report prepared for the Maryland Department of Transportation, State Highway Administration.

1990 Phase IB Archeological Survey Improvements to Maryland Route 8 from Old Matapeake Ferry Road to South of Route 50/301, Queen Anne's County, Maryland (co-author). Report prepared for the Maryland Department of Transportation, State Highway Administration.

1991 A Phase I Archeological Survey of Cedar Acres East, East Lampeter Township, Lancaster County, Pennsylvania (senior author). Report prepared for E. James Hogan and Associates.

1991 A Historical Archeological Evaluation of the Philadelphia Gateway Development Parcel (Vine Street Block 32), Vine (Summer) to Spring Streets and 15th to 16th Streets, Philadelphia, Pennsylvania (senior author). Report prepared for Realen Gateway Development Associates.

1991 Stage IA and IB Archeological Investigations at the Lone Pine Landfill, Freehold Township, Monmouth County, New Jersey (co-author). Report prepared for AWD Technologies, Inc.

1991 A Phase IB Archeological Survey, BATCS D1 and D2 Wetlands Replacement Area at the Chesapeake Baptist Church Property, Anne Arundel County, Maryland (co-author). Report prepared for the Maryland Department of Transportation, State Highway Administration.

1991 Phase IB Archeological Survey of Alternates for the University of Maryland Eastern Shore Access Road, Somerset County, Maryland (co-author). Report prepared for the Maryland Department of Transportation, State Highway Administration.

1991 A Stage IA Archeological Survey of the L. E. Carpenter Company Property, Wharton Borough, Morris County, New Jersey (senior author). Report prepared for the M. A. Hanna Company and Roy F. Weston, Inc.

1991 Stage IA and IB Archeological Investigations Associated with Remedial Studies at the L & D Landfill Site, Burlington County, New Jersey (co-author). Report prepared for GeoSyntec Consultants, Inc.

1991 Archeological Monitoring and Evaluation of the Brooks Inn Site in Conjunction with the Construction of the New United States Post Office, Upper Marlboro, Maryland (senior author). Report prepared for Hayes, Seay, Mattern & Mattern and the U.S. Postal Service.

1991 A Stage IA Archeological Survey of the WITCO Corporation Property, Oakland Borough, Bergen County, New Jersey (co-author). Report prepared for Roy F. Weston, Inc. for the WITCO Corporation.

1992 A Stage IA Cultural Resources Survey of the NSNJ/NL Property, Oldmans Township, Salem County, New Jersey (senior author). Report prepared for O'Brien and Gere Engineers, Inc. and NL Industries, Inc.

1992 A Stage IA Archeological Survey of the Ellis Property Site, Evesham and Medford Townships, Burlington County, New Jersey (senior author). Report prepared for Roy F. Weston, Inc. and the New Jersey Department of Environmental Protection and Energy.

1992 Delaware County, L.R. 1010 (I-476), Section 675, Radnor Park and Ride Facility, Phase I Archeological Survey Report (co-author). Report prepared for BCM Engineers, Inc. and the Pennsylvania Department of Transportation.

1992 A Phase IA Archeological Survey of the C & D Recycling Property, Foster Township, Luzerne County, Pennsylvania (senior author). Report prepared for McLaren/Hart Environmental Engineering and AT&T Nassau Metals Corporation.

1992 A Stage IA Cultural Resources Survey of the Pine Street Canal Superfund Site, Burlington, Vermont (co-author). Report prepared for Metcalf & Eddy, Inc. and the U.S. Environmental Protection Agency.

1992 Completion of A Phase II Archeological Evaluation of the Wal-Mart Retail Store Site (36 TI 79), Richmond Township, Tioga County, Pennsylvania. Report prepared for Wolverton & Associates, Inc.

1992 Phase IA Archeological Survey of the Sixteen-inch Camden Lateral Loop and Meter Station, Cities of Camden and Gloucester, Camden County, New Jersey (co-author). Report prepared for Transcontinental Gas Pipe Line Corporation.

1992 Phase IB Archeological Survey of Alternates 6/6A Revised and 6/6A Modified for the University of Maryland Eastern Shore Access Road, Somerset County, Maryland (co-author). Report prepared for the Maryland Department of Transportation.

1992 Research Design for Archeological, Historical, and Bioanthropological Investigations of the African Burial Ground and Five Points Area, New York, New York (contributor and co-editor). Draft report prepared for Edwards & Kelcey Engineers, Inc. and the U.S. General Services Administration.

PUBLICATIONS

1980 Summary Report of Archaeological Investigations: The Federal Reserve Bank Site, Baltimore, Maryland (co-author). *Maryland Historical Trust Occasional Papers*, Vol. 15, Annapolis.

1981 *Archaeological Investigations at the Original Site of Washington College.* Washington College, Chestertown, Maryland.

1981 Discerning Patterns in an Urban Context: An Example from Philadelphia (co-author). *The Conference on Historic Sites Archaeology Papers*, Vol. 14:3-27.

1982 *Archaeology at the Federal Reserve Bank Site: A Glimpse of an Otterbein's Past* (co-author). Museum Booklet. Federal Reserve Bank of Richmond, Baltimore Branch, Baltimore.

1983 Polities in the Lurin Valley, Peru, During the Early Intermediate Period (co-author). *Nawpa Pacha*, Vol. 20:61- 82.

1983 Urban Archeology: Digging New Jersey's Cities. *Preservation Perspective NJ* 3(1):5.

1984 *Guidelines for Archaeological Investigations in Cultural Resources Management in New Jersey*. Department of Environmental Protection, Trenton.

1984 Digging the City: Urban Archaeology in the Era of Cultural Resources Management. In: *The 1983 Middle Atlantic Archaeological Conference Proceedings*, edited by June Evans, American University, pp. 134-142.

1985 Book Review: *Farm Servants and Labour in Lowland Scotland, 1770-1914*, T. M. Devine, editor, 1984. *Anthropology of Work Review*, 6(4):48-50.

1990 An Archeologist's Thoughts on History in Cultural Resources Management. *Public History News* 10(2):3, 11.

1990 Review: Three Cultural Resource Management Reports in the Delaware Department of Transportation's Archaeological Series. *The Public Historian* 12(3):140-143.

1990 *Abstracts in Maryland Archeology* 6(1 & 2) (co-editor). Council for Maryland Archeology.

1990 Archeologists and Historians: Working Together in Cultural Resources Management? *Society of Professional Archeologists Newsletter* 15(11):2-3.

1991 Book Review: *Material Culture and Mass Consumption*, David Miller 1987. *Historical Archaeology* 25(2):115-116.

1991 Arms from Addison Plantation and the Maryland Militia on the Potomac Frontier (senior author). *Historical Archaeology* 25(1):66-79.

1991 Book Review: *A History of Archaeological Thought*, Bruce G. Trigger, 1989. *American Antiquity* 56(1):161-162.

1991 *Abstracts in Maryland Archeology* 7(1 & 2) (co-editor). Council for Maryland Archeology.

In Press Militia: The Archaeological Record (co-author). In *The Encyclopedia of the Colonial Wars of America*, edited by Alan Gallay.

SELECTED PAPERS PRESENTED AT PROFESSIONAL MEETINGS

1976	Archaeology: An Educational Outlook. American Folklore Society, Philadelphia, Pennsylvania.
1978	An Approach to Archaeology in Secondary Schools. Society for Historical Archaeology, San Antonio, Texas.
1979	Discerning Patterns in the Urban Context: An Example from Philadelphia (co-author). Conference on Historic Sites Archaeology, St. Augustine, Florida.
1980	Data Recovery Excavations at the Federal Reserve Bank Site, Baltimore, Maryland. Mid-Atlantic Archaeological Conference, Dover, Delaware.
1980	Differential Mortality and Status: Implications for Archaeology. Society for American Archaeology, Philadelphia, Pennsylvania.
1980	An Unusual Loghouse Type: An Example of Above Ground Archaeology. Council for Northeast Historical Archaeology, Albany, New York.
1981	Salvage Archaeology in Baltimore: Providing the Data with Bulldozer and Trowel (co-author). Society for Historical Archaeology, New Orleans, Louisiana.
1981	Investigating Variation in the Urban Context: A Problem of Strategy. Council for Northeast Historical Archaeology, Windsor, Connecticut.
1982	Artifact Distribution at "Roundabout" (18ST271): A Case for Plow-zone Archaeology. Society for Historical Archaeology, Philadelphia, Pennsylvania.
1982	Examining Socio-cultural Variation: An Approach to the Archaeology of Urban America. Society for American Archaeology, Minneapolis, Minnesota.
1982	Preserving the Whitemore Quarry: Managing Resources Outside the Right-of-Way. Council for Northeast Historical Archaeology, Amherst, Massachusetts.
1983	Digging the City: Urban Archaeology in the Era of Cultural Resources Management. Mid-Atlantic Archaeological Conference, Rehoboth Beach, Delaware.
1983	The Implications of Differential Mortality: Toward an Understanding of Status and Class Relations. American Anthropological Association, Chicago, Illinois.
1984	The Context of Baltimore: Social and Economic History in Archaeological Research. Society for Historical Archaeology, Williamsburg, Virginia.
1984	Subsistence and Commodity in Colonial Pennsylvania: The Frontier and the Market Economy. Mid-Atlantic Archaeological Conference, Rehoboth Beach, Delaware.

1984 Industry, Community, and Ideology: The Transformation of the Ideology of Industry in the Early Nineteenth Century. Fifth International Conference on the Conservation of the Industrial Heritage, Lowell, Massachusetts.

1984 Community and Ideology in the Industrialization of Southeastern Pennsylvania. American Anthropological Association, Denver, Colorado.

1985 Archeological Investigation of Seventeenth Century Philadelphia: Excavations at the Front and Dock Streets Site. Society for Historical Archeology, Boston, Massachusetts.

1985 Philadelphia Privies and Their Fills: A Consideration of Their Interpretative Value (co-author). Mid-Atlantic Archeological Conference, Rehoboth Beach, Delaware.

1985 Traces of Early Philadelphia: Sealed Seventeenth Century Contexts Recovered at the Front and Dock Site (co-author). Council for Northeast Historical Archeology, Ottawa, Ontario.

1985 Family, Farm, and Market: Archeology and the Transformation of the Rural Economy of Southeastern Pennsylvania (co-author). American Anthropological Association, Washington, D.C.

1986 Urban Archeology and the Vine Street Expressway Project (co-author). National Research Council, Transportation Research Board, Environmental Analysis in Transportation Committee, Philadelphia.

1986 Plantation Households: Defining Foci of Domestic Activity at the Addison Plantation Site, Prince George's County, Maryland (co-author). Eastern States Archeological Federation, Wilmington, Delaware.

1987 Farm, Craft, and Market: Archaeological Reflections of the Transformation of Rural Life in Southeastern Pennsylvania. Society for Historical Archaeology, Savannah, Georgia.

1987 The Research Potential of Historic Farmsteads in Southeastern Pennsylvania. Pennsylvania Archeological Council Symposium, Society for Pennsylvania Archeology, Greensburg, Pennsylvania.

1987 Excavations at the Addison Plantation Manor House(s): Oxon Hill, Maryland (co-author). Council for Northeast Historical Archeology, St. Mary's City, Maryland.

1987 Addison Plantation Progress Report. Jamestown Conference on Archaeology, Williamsburg, Virginia.

1988 Militia on the Potomac "Frontier": An Analysis of Flintlock Mechanisms Recovered From Colonel Thomas Addison's "Other" Store (co-author). Mid-Atlantic Archeological Conference, Rehoboth Beach, Delaware.

1988 Piecing Together Colonel John's Pots: Ceramic Crossmends and Site Formation Processes at the Early Manor House at Addison Plantation, Oxon Hill, Maryland (co-author). Jamestown Conference on Archaeology, Pope's Creek, Virginia.

1989 Artificial Landscapes: The Evaluation of Cultural Landforms at Addison Plantation, Oxon Hill, Maryland (co-author). First Joint Archeological Congress, Baltimore, Maryland.

1989 Recent Archeological Investigations of the Urban Working Class, Paterson, New Jersey (co-author). Council for Northeast Historical Archeological, Morristown, New Jersey.

1990 Neighborhood Analysis in Urban Archeology (co-author). Society for Historical Archeology, Tucson, Arizona.

1990 The Archeology of the Formation of the Industrial Working Class in the Nineteenth Century: Southeastern Pennsylvania (co-author). Mid-Atlantic Archeological Conference, Ocean City, Maryland.

1990 African-American Acculturations as Reflected in the Cemeteries of the First African Baptist Church, Philadelphia: Population Dynamics and Social Stress in the Early Nineteenth Century. Council for Northeast Historical Archeology, Kingston, Ontario.

1991 The "Georgian" Manor House and the Tobacco Coast Planters: Thoughts on an Architectural Form and the Development of a Native Elite (senior author). Mid-Atlantic Archeological Conference, Ocean City, Maryland.

1991 The Cemetery Under Vine Street: The 1810 First African Baptist Church Site, Philadelphia (co-author). Society for Historical Archaeology, Richmond, Virginia.

1991 Moderator: Discussion of Predictive Modeling. Council for Maryland Archeology, Common Ground Conference, St. Leonard's, Maryland.

1991 Community Household, and Privy: Interpretive Contexts of a Nineteenth Century Irish Neighborhood in Philadelphia (senior author). Council for Northeast Historical Archeology, Newark, Delaware.

1992 Comparative Archeology and Osteology of the First African Baptist Church Cemeteries: Observations Regarding the Formation of Philadlephia's Early Nineteenth Century African-American Community (co-author). Society for Historical Archaeology, Kingston, Jamaica.

1992 Commentator: Competition or Complement? The Relationship Between Historians and Archeologists. Society for Historical Archaeology, Kingston, Jamaica and the National Council on Public History, Columbia, South Carolina.

1992 Wither the Earthfast House: A Consideration of the Rise of the Brick Manor House in the Context of Social Differentiation on the Tobacco Coast in the Late Seventeenth Century. Mid-Atlantic Archeological Conference, Ocean City, Maryland.

1992 Burial Practices at the Cemeteries of the First African Baptist Church, Philadlephia: Social Identity in the African-American Community in the Early Nineteenth Century. Council for Maryland Archeology Symposium on the Analysis of Human Skeletal Remains, College Park, Maryland.

PROFESSIONAL AFFILIATIONS

Council for Maryland Archaeology
Council for Northeast Historical Archaeology
National Council on Public History
Organization of American Historians
Pennsylvania Archaeological Council
Society for American Archaeology
Society for Historical Archaeology
Vernacular Architecture Forum
Vernacular Architecture Group
Society for Post-Medieval Archeology
Friends (Quaker) Historical Association
Social Science History Association

PROFESSIONAL INTERESTS

Archeology of industrial society
Evolution of farmsteads and plantations
Prehistoric settlement and resource procurement
Vernacular architecture
Socio-cultural variation and its archeological expression
Cultural resources management

EMPLOYMENT HISTORY

1977 Field Archeologist (Intern)
National Trust for Historic Preservation
Leesburg, Virginia

1978 Field Archeologist
Temple University
Philadelphia, Pennsylvania

1978 Field Archeologist
Rockwell Archaeology
Mercersburg, Pennsylvania

1978-1981	Supervisory Archeologist Mid-Atlantic Archaeological Research, Inc. Newark, Delaware
1980	Supervisory Archeologist University of Colorado Mesa Verde Archaeological Research Center Dolores, Colorado
1981-1983	Vice President Cultural Heritage Research Services, Inc. Brookhaven, Pennsylvania
1983-1984	Senior Environmental Specialist (Archeology) Office of New Jersey Heritage Department of Environmental Protection Trenton, New Jersey
1984-present	Principal Archeologist/Project Manager John Milner Associates, Inc. West Chester, Pennsylvania

REBECCA YAMIN
Principal Archeologist/Project Manager
John Milner Associates, Inc.
1216 Arch Street, 5th Floor
Philadelphia, PA 19107
(215) 561-7637

EDUCATION

B.A.	University of Pennsylvania	Anthropology	1964
M.A.	New York University	Anthropology	1969
Ph.D.	New York University	Anthropology (Historical Archeology)	1988

PROFESSIONAL CERTIFICATION

1992	Society of Professional Archeologists (certified in Field Research and Historical Archaeology)

HONORS/FELLOWSHIPS/GRANTS

1964	B.A. with Honors in Anthropology, University of Pennsylvania
1982	Grant-in-Aid for Research in New Jersey History, New Jersey Historical Commission
1985-1986	Financial Aid Awards, Graduate School of Arts and Sciences, New York University

COMPLIANCE AND REVIEW EXPERIENCE

1989-1992	Under a task order-type contract between Ebasco Environmental and the Federal Energy Regulatory Commission (FERC), assisted and supported FERC headquarters staff in satisfying agency obligations under Section 106 of the National Historic Preservation Act. Responsible for review of cultural resources reports submitted to FERC as part of applications for gas pipeline licenses; preparation of NHPA compliance documents; and coordination of NHPA compliance with State Historic Preservation Officers. Oversaw two major multi-applicant gas pipeline projects through compliance, including data recovery quality control.

TEACHING EXPERIENCE

1970-1975	Rutgers University, Department of Anthropology
1976,1977	Middlesex County College, Department of Social Sciences
1977	Trenton State College, Department of Sociology and Anthropology
1981	Rutgers University, Department of Anthropology

1986-1987	Fairleigh Dickinson University, Department of Social Sciences
1986-1987	Rutgers University, Department of Sociology
1992-1993	Rutgers University, Department of Anthropology

PROJECT EXPERIENCE

1976,1977	Field school, New York University, Fort Ninigret, RI.
1976	Phase Ia and Phase Ib archeological survey, Edison Sewer Authority, Edison, NJ.
1977	Phase Ib archeological survey, Nassau County Expressway, NY.
1977	Phase Ib archeological survey, Route 25A, Northport, Long Island, NY.
1977	Phase Ib archeological survey, Sandy Hook Power Line, Sandy Hook, Fort Hancock, NJ.
1978	Phase Ia archeological and historical investigation, Oakwood Beach Water Pollution Control Project, Staten Island, NY. Wapora, Inc.
1978	Cultural resources survey, Manasquan River Basin Water Resource System Environmental Impact Analysis, Monmouth County, NJ. Rutgers Archaeological Survey Office.
1979	Monitoring of ongoing construction, Middlesex County Sewerage Authority Trunk Line Sewer, Piscataway, NJ. Charles J. Kupper, Inc. Rutgers Archaeological Survey Office.
1979	Archeological testing, Raritan Landing, Piscataway, NJ. Charles J. Kupper, Inc. Rutgers Archaeological Survey Office.
1979	Ground penetrating radar survey, Raritan Landing, Piscataway, NJ. Middlesex County Sewerage Authority. Rutgers Archaeological Survey Office.
1979	Phase I and Phase II cultural resources surveys for the proposed alignment of Route I-195, Section 6C7A, 7B from west of Preventorium Road to the Route 38/Route 34 Interchange, Howell Township, Monmouth County, NJ. New Jersey Department of Transportation. Rutgers Archaeological Survey Office.
1980	Phase I and Phase II cultural resources surveys for the proposed Raritan Confluence Reservoir, NJ. New Jersey Institute of Technology. Rutgers Archaeological Survey Office.
1980	Data recovery, Raritan Landing, Piscataway, NJ. Middlesex County Sewerage Authority. Rutgers Archaeological Survey Office.
1984	Co-directed Phase Ib cultural resources survey, Oakwood Beach Water Poilution Control Project, Staten Island, NY. Center for Building Conservation.

1986	Phase Ia cultural resources survey, Block 679, New York, NY. Parsons Brinckerhoff, Inc.
1986	Archeological evaluation of River Rock Island project, Pohatcong Township, Warren County, NJ. B. Ryland Wiggs, Bethlehem, PA.
1986	Co-directed Phase I cultural resources survey, Clay Pit Pond State Park Preserve, Staten Island, NY. New York State Office of Parks, Recreation and Historic Preservation.
1987	Co-directed archeological resource planning for Conference House Park, Staten Island, New York. Park includes the Wards Point Archaeological District (a multi-component prehistoric cemetery and habitation area) and a national landmark historic house. Department of Parks and Recreation, City of New York.
1985-1987	Directed data recovery analysis, Sullivan Street archeological project, Greenwich Village, NY. New York University Law School.
1987-1988	Directed archeological interpretation and education program for Morven landscape archeology project, Princeton, NJ. New Jersey State Museum.
1988	Cultural resource assessment for a proposed solid waste disposal facility, Hackensack Meadowlands, NJ. NY-HK Energy Investment Corporation. Ebasco Environmental.
1989	Coordinated and provided quality control for cultural resources survey of proposed expansion of a coal-fired power plant in Martin County, Florida. Florida Power and Light Company. Ebasco Environmental.
1989	Provided cultural resources input to a site selection analysis for a Florida Power and Light Company coal terminal. Ebasco Environmental.
1989	Conducted industrial and historical review for planning of site investigation of Jersey Central Power and Light site in Lambertville, NJ. Ebasco Environmental.
1989	Co-directed survey of potential historic period sites in three townships in Monmouth County, NJ. Monmouth County Park System. Ebasco Environmental.
1989-1991	Directed data recovery and analysis of nineteenth century farmstead site in Fair Lawn, Bergen County, NJ. New Jersey Department of Transportation. Ebasco Environmental.

1990 Prepared evaluations of National Register eligibility for submerged shipwrecks located within the impact area associated with the Asbury Park to Manasquan, NJ segment of a beachfront erosion control project and evaluations of National Register eligibility for two shipwrecks within the Highland Beach to Sea Bright section of the beachfront erosion control project. Army Corps of Engineers, New York District. Ebasco Environmental under subcontract to Alpine Ocean Seismic Survey, Inc.

1991 Map research associated with identifying dredging history around David's Island, New Rochelle, NY. Xanadu Properties Associates. Ebasco Environmental.

1991 Directed Phase Ib cultural resources investigation for West Trunk Sewer Line Interceptor, Bergen County, NJ. Borough of Parasmus. Ebasco Environmental.

1991 Directed Phase Ia and Phase Ib cultural resources investigation for Lumberville Wing Dam rehabilitation project, Bulls Island, NJ. New Jersey Water Supply Authority. Ebasco Environmental.

1992 Phase I and Phase II cultural resources investigations for Crown/Vista Energy project, West Deptford Township, Gloucester County, NJ. Ebasco Environmental.

1992 Visual impact analysis, Cobb County East-West connector environmental assessment in the area of the Concord Covered Bridge, Cobb County Department of Transportation. Ebasco Environmental.

1992 Directed archeological borings program on proposed site of Brooklyn Bus Garage, City of New York. Ebasco Environmental.

1992 Cultural resources investigation, wetlands replacement project, Newbold Island, Burlington County, NJ. PSE&G. Ebasco Environmental.

1992-1993 Directed archeological investigations at Walnford, an eighteenth-nineteenth century milling community in Monmouth County, NJ. Rutgers University field school in historical archeology.

PROJECT EXPERIENCE (John Milner Associates, Inc.)

1992 Principal archeologist for Foley Square project in New York City, including the Courthouse Block (historically part of Five Points) and non-cemetery features within the Broadway Block (site of the eighteenth century 'Negro Burying Ground'). General Services Administration, Region 2.

1992 Co-principal investigator for Phase II and III investigations at Station Square in Cumberland, Maryland. Site includes backyards and features relating to workers' houses dating to the first half of the nineteenth century. State Highway Administration, Maryland.

1993 Principal investigator for archaeological investigations associated with restoration of the stable, horse barn, and main house at Walnford, an eighteenth-nineteenth century milling community in Monmouth County, NJ.

MUSEUM DESIGN

1982-1983 Life at Raritan Landing. An exhibit of artifacts from the 1980 excavations at Raritan Landing. Program included hands-on teaching exercise, an audiovisual presentation, and a symposium series. The Cornelius Low House, Museum of the County of Middlesex, Piscataway, NJ.

1985 William Barclay Parsons. An exhibit of books and artifacts belonging to Parsons, who designed New York City's first subway system. The Museum of the City of New York. Parsons Brinckerhoff, Inc.

1985 Rapid Transit Technology: A Time Line. Museum of Science and Industry, Los Angeles, CA. Parsons Brinckerhoff, Inc.

1988-1990 Archaeology in the Garden. An interpretive exhibit of finds and techniques relating to the first season of landscape archeological work at Morven, Princeton, NJ. The New Jersey State Museum.

CULTURAL RESOURCES REPORTS

1978 Phase Ia Archaeological Investigations, Oakwood Beach Water Pollution Control Project, Staten Island, New York (co-author).

1978 Cultural Resources. In: Manasquan River Basin Water Resource System Environmental Impact Analysis.

1979 The Ground-Penetrating Radar Survey of Raritan Landing: Archaeological Findings, Documentary Evidence, and Data Recovery Options (editor).

1979 Cultural Resource Investigations: Route I-195, Section 6C7A, 7B from West of Preventorium Road to the Route 38/Route 34 Interchange, Howell Township, Monmouth County, New Jersey (author of stratigraphic analysis sections and editor of the report).

1982 Chapter IV, The Stratigraphic Analysis (co-author) and Chapter VI, Historical Background and Documentary Record. In: Raritan Landing: The Archaeology of a Buried Port.

1984 A Phase Ib Cultural Resources Survey, Oakwood Beach Water Pollution Control Project, Staten Island, New York (co-author).

1986 Phase I Cultural Resources Survey, Clay Pit Pond State Park Preserve, Staten Island, New York (co-author).

1989	Cultural Resources. In: Site Selection Analysis for Coal Terminal Associated with Florida Power and Light Company Expansion, Martin County, Florida.
1989	Historic Period Archeological Survey Initial Phase, Including Freehold, Howell, and Upper Freehold Townships, Monmouth County, New Jersey (co-author).
1990	The Archaeology and History of Six Nineteenth Century Lots: Sullivan Street, Greenwich Village, New York City (co-author and editor).
1991	The Henry A. Hopper House, An Archeological Study of Nineteenth Century Suburbanization in Bergen County, New Jersey.
1991	Archeology in Fair Lawn, The Henry A. Hopper House Project.
1991	Stage Ib Cultural Resource Investigation Borough of Paramus, West Trunk Sewer Line Interceptor, Bergen County, New Jersey.
1991	Stage Ib Cultural Resource Investigation, Lumberville Wing Dam Rehabilitation Project, Bulls Island, New Jersey (co-author).
1992	The Documentary Record. In: Phase I and Phase II Cultural Resources Investigations for Crown/Vista Energy Project.
1992	Historical Background and Visual Impact Analysis sections. In: Cobb County East-West Connector Environmental Assessment in the Area of the Concord Covered Bridge.
1992	Cultural Resources. In: Environmental Assessment for Wetlands Replacement Project, Newbold Island, Burlington County, NJ.

PUBLICATIONS

1988	*The Raritan Landing Traders: Local Trade in Pre-Revolutionary New Jersey.* Doctoral dissertation, New York University. Available from University Microfilms, Ann Arbor.
1989	*Squeezing Ceramics for More Than Their Worth:* Boundary Maintenance at an Eighteenth Century Port in New Jersey. *Northeast Historical Archaeology*, 18:49-69.
1989	The Public and the Private Mr. Stockton-Morven's Commodore. *The New Jersey Folk Society Review*, 10(2-3), Fall-Winter.
1991	Letter from Princeton: A Journey Through Time. *Archaeology*, 44(2):46-49.
forthcoming	A "Museum in the Making" and Landscape Archaeology: The Morven Project. To be included in *Digging for the Truth*, John H. Jameson, editor.
forthcoming	Local Trade in Pre-Revolutionary New Jersey. To be included in a special edition of *Northeast Historical Archaeology* honoring Bert Salwen.

forthcoming — *Case Studies in Landscape Archaeology: Methods and Meanings* (co-editor). To be published by CRC Press, 1993.

forthcoming — Farmers and Gentlemen Farmers: The Nineteenth Century Suburban Landscape (with Sarah Bridges). To be included in *Case Studies in Landscape Archaeology: Methods and Meanings.*

PAPERS PRESENTED AT PROFESSIONAL MEETINGS

1988 — Squeezing Ceramics for More Than Their Worth: Boundary Maintenance at an Eighteenth Century Port in New Jersey. The Council for Northeast Historical Archaeology, St. Mary's City, Maryland.

1989 — Interpretation in the Ethnographic Present, Morven, Princeton, New Jersey. First International Archaeological Congress, Baltimore, Maryland.

1989 — Trade in Pre-Revolutionary New Jersey, What It Was Instead of What It Wasn't. First International Archaeological Congress, Baltimore, Maryland.

1989 — Symbols in the Garden - Interpretation at Morven (co-author). Council for Historical Archaeology, Morristown, New Jersey.

1989 — Archaeology and Authenticity: What People See at Morven. American Society of Landscape Architects/New Jersey section, Atlantic City, New Jersey.

1990 — Oral History as Context: The Legacy of Henry A. Hopper (co-author). Society for Historical Archaeology, Tucson, Arizona.

1990 — Windshield Survey Reconsidered: The Monmouth County, New Jersey Historic Period Archaeological Survey. Council for Northeast Historical Archaeology, Kingston, Ontario.

1991 — Hands-On and the Hidden Agenda - Problems with Sandbox Archaeology and Other Public Participation Programs. Society for Historical Archaeology, Richmond, Virginia.

1992 — The River, the Dutch, the District, and the Corporate Giant: 300 Years of New Brunswick History. Society for Historical Archaeology, Kingston, Jamaica.

1992 — New Jersey, The Invisible Middle Colony. Session presented at the annual meeting of the Society for Historical Archaeology, Kingston, Jamaica. To be published as a special issue of *New Jersey History.*

PROFESSIONAL AFFILIATIONS

Archaeological Society of New Jersey
Council for Northeast Historical Archaeology, Board of Directors
Society for Historical Archeology
Professional Archaeologists of New York City, Newsletter Editor

PROFESSIONAL INTERESTS

Landscape archeology
Urban archeology/industrialization
Nineteenth century suburbanization
Eighteenth century trade networks
Ceramic analysis
Boundary maintenance

EMPLOYMENT HISTORY

1970-1975	Instructor, Department of Sociology/Anthropology Rutgers University New Brunswick, New Jersey
1976	Field School Assistant to Bert Salwen New York University Fort Ninigret, Rhode Island
1978-1981	Supervisory Archeologist and Assistant to the Director Rutgers Archaeological Survey Office, Cook College Rutgers University New Brunswick, New Jersey
1982-1987	Technical Editor/Archivist Historian Parsons Brinckerhoff, Inc. New York, New York
1987-1988	Assistant Curator New Jersey State Museum Princeton, New Jersey
1988-1992	Associate Archeologist Ebasco Environmental Lyndhurst, New Jersey
1992-present	Principal Archeologist/Project Manager John Milner Associates, Inc. Philadelphia, Pennsylvania

CURRICULUM VITAE

Thelma Wills Foote

Department Address:
Department of History
Humanities Building, Rm. 300
University of California at Irvine
Irvine, CA 92717
714-856-6522

Home Address:
P.O. Box 182
Esopus, NY 12429
914-384-6498
or
308 W. 30th Street, 3E
New York, NY 10001
212-695-1805

Degrees:

Ph.D., American Civilization, Harvard University, 1991.
B.A., American Studies (American History and Literature), University of Texas at Austin, 1979.

Publications:

books:

Black and White Manhattan: Race Relations and Collective Identity in Colonial Society (forthcoming, 1993).

articles:

"The Abolitionists of New York City," in Encyclopedia of New York City (forthcoming, Yale University Press, 1993).

"Crossroads or Settlement?: The Freedmen's Community in Historic Greenwich Village, 1644-1855," in Greenwich Village: Culture and Counterculture (forthcoming, Rutgers University Press, 1993).

"'Some Hard Usage': New York City's Slave Revolt of 1712," New York Folklore (Spring, 1993).

reviews:

"A Review of Shane White's Somewhat More Independent: The End of Slavery in New York City, 1770-1810," North Carolina Historical Review (November, 1991).

Appointments:

July, 1992-	Assistant Professor, University of California at Irvine.
July, 1991/June, 1992	Assistant Professor, New York University.
July, 1989/June, 1991	Lecturer in History, New York University.
July, 1985/June, 1989	Tutor in Social Studies, Harvard University.
July, 1982/June, 1985	Leave of Absence.

Fellowships & Grants:

Fall, 1992	Vladeck Fellowship for Labor History New York University (declined)
1985-1989	Harvard University Graduate School of Arts & Sciences Scholarship

Professional Committees and Editorial Boards:

1991-	Board of Directors for the Media Alternative Project. NYC.

University Service:

Summer, 1992	Faculty Mentor Program for Undergraduates at New York University. MOST Program.
Fall, 1990/June, 1992	Undergraduate Curriculum Committee, New York University.
Summer, 1990	Faculty Mentor Program for Undergraduates at New York University, MOST Program.

Extracurricular Activities:

Tennis, squash, film, jazz, blues, antique and wine collecting.

Sherrill D. Wilson, Ph.D.
Urban Anthropologist
40-42 Richman Plaza #42C
Bronx, New York 10453
212-299-7011

EDUCATION

Spring 1991 Received Ph.d in Anthropology

NEW SCHOOL FOR SOCIAL RESEARCH
GRADUATE FACULTY
65 FIFTH AVENUE
NEW YORK, NEW YORK 10003

AREA OF CONCENTRATION: African-America Diaspora
TRACK: Urban Anthropology
DISSERTATION TITLE: Black Slave Owners of New York City: A Social and Material History:1681-1830

RESEARCH AND TEACHING INTERESTS:
Anthropology of Women: Issues of Class, Gender and Race
Medical Anthropology: Community Health Care: Policies and Practices
Historical Archaeology: Afro-American Archaeology and it's Significance in Ethnohistorical Theory
Material Culture Studies in America
Oral History Research As collaborative learning
Urban Anthropology: Complex Societies, Kin and Non-kin Networks, Community Studies, Ethnicity and Race Relations
Studies of Poverty among minority women and children

SPRING 1983
RECEIVED MASTERS OF ARTS DEGREE IN ANTHROPOLOGY from the NEW SCHOOL FOR SOCIAL RESEARCH/GRADUATE FACULTY

SPRING 1979
RECEIVED BACHELOR OF ARTS DEGREE IN RELIGION [Major] ENGLISH [Minor] FROM HUNTER COLLEGE
695 PARK AVENUE
NEW YORK, NEW YORK 10022

PUBLICATIONS

"LEARNING BY DOING: ORAL HISTORY AS AN INTRODUCTION TO SOCIAL SCIENTIFIC RESEARCH" THE COMMON GROUND, BLOOMFIELD COLLEGE, BLOOMFIELD, N.J.

IN-PROGRESS, BLACK HISTORY GUIDEBOOK OF MANHATTAN IN ASSOCIATION WITH THE LOWER EAST SIDE HISTORIC CONSERVANCY AT 97 ORCHARD STREET, NEW YORK, N.Y. 10002

Employment:
January 1991-
December 1991

Position: Research Associate

FAMILIES AND WORK INSTITUTE
330 Seventh Avenue
New York, N.Y. 10001

Research Father involvement in nationwide study of early childhood education and head start institutions. Co-author how-to increase manual for head start and early childhood education centers.

Fall 1990

Position: Visiting Lecturer

CORNELL UNIVERSITY
School of Human Ecology
Field and International Studies Program
New York City Field School
45 John Street
New York, N.Y. 10038

Lecture class of interns from Ithaca campus in N.Y.C. for fall semester on 'Ecology of Urban Organizations'. Counseled and advised students in placement problems etc. Visited and interviewed job site supervisors. Conducted and planned tours of New York City neighborhoods for students. Utilized N.Y.C. as a classroom.

February-June 1990

Position: Historical Researcher

ROBERTO CLEMENTE STATE PARK
Bronx, New York 10453

Conducted historic research on the history of three West Bronx communities from the pre-historic period, through the period of Dutch/British colonization, to the present period, including the history of New York University's Bronx Campus. Provide workshops on same research for local school classes, and teachers.

Spring 1990

Position: Lecturer

SAINT PETERS COLLEGE
Jersey City, New Jersey

Lectured in Urban Anthropology

Spring/Fall 1990

Position: Lecturer/Tour Guide

LEARNING ALLIANCE
NEW YORK, N.Y.
Taught Black History seminar and conducted Black History Tours.

FALL 1988/SPRING 1989

Position: Lecturer

BLOOMFIELD COLLEGE
BLOOMFIELD, N.J.
Taught two undergraduate level courses SOCIOLOGY 241: THE AFRICAN DIASPORA AND SOCIOLOGY 333:

MINORITIES AND RACE RELATIONS (FALL 88)
COURSES:PSYCH/SOCIOLOGY 247: HUMAN GROWTH AND AGING
APG 111:INTRODUCTION TO CULTURAL ANTHROPOLOGY

SUMMER/FALL 1988

POSITION: Interviewer

COMMUNITY SERVICE SOCIETY
106 E. 22ND STREET
NEW YORK, N.Y.

Contracted to interview public assistance clients and working class women in a study of URBAN POVERTY

SPRING/FALL 1988-SUMMER 1988

Position: Researcher

LOWER EAST SIDE HISTORIC CONSERVANCY
97 ORCHARD STREET
NEW YORK, N.Y. 10002

Researcher working on Ford Foundation grant to research and develope the LOWER EAST SIDE BLACK HERITAGE TRAIL AND GUIDE

FALL 1987

Position: Lecturer
ROCKLAND COMMUNITY COLLEGE
SUFFERN, NEW YORK
Adjunct position teaching two classes in Cultural Anthropology

SPRING 1987/Fall 1988

Participated at EUGENE LANG COLLEGE as a graduate intern. Co-taught a course, "HISTORY: AS A WAY OF KNOWING" (Spring) Taught a course of my own design entitled, "SEMINAR IN URBAN ANTHROPLOGY: AN ETHNOHISTORICAL APPROACH TO AFRO-AMERICA". (Fall)

FALL 1988

POSITION: Lecturer

NEW YORK UNIVERSITY
SCHOOL OF CONTINUING EDUCATION
LIBERAL ARTS DIVISION
60 WEST 4TH STREET
NEW YORK, NEW YORK 10003

Taught undergraduate course "RACE AND ETHNIC RELATIONS"

Position: Teaching Assistant

GRADUATE FACULTY
NEW SCHOOL FOR SOCIAL RESEARCH
66 FIFTH AVENUE
NEW YORK, N.Y. 10003

Anthropology graduate level core course: "CULTURAL EVOLUTION"

Position: Lecturer

BLOOMFIELD COLLEGE
BLOOMFIELD, NEW JERSEY
Taught SOCIOLOGY 333, SPECIAL TOPICS IN SOCIOLOGY: "THE AFRO-AMERICAN EXPERIENCE"

SPRING 1986

Position: Lecturer

BLOOMFIELD COLLEGE
BLOOMFIELD , NEW JERSEY
Taught ANTHROPOLOGY 111: "INTRODUCTION TO CULTURAL ANTHROPOLOGY, UNDERGRADUATE LEVEL

SPRING 1986

POSITION: Teaching Assistant
GRADUATE FACULTY, NEW SCHOOL FOR SOCIAL RESEARCH

Anthropology graduate level course: PRIMITIVE SOCIAL ORGANIZATION"

FALL 1985

Position: Teaching Assistant

GRADUATE FACULTY, NEW SCHOOL FOR SOCIAL RESEARCH
Anthropology Graduate Level Core Course:"INTRODUCTION TO CULTURAL ANTHROPOLOGY"

3/83-9/83
3/82-9/82
3/81-9/81

Position: Project Director

COMMUNITY PLANNING BOARD #4
(SUMMER YOUTH EMPLOYMENT PROGRAM)
1650 SELWYN AVENUE, SUITE 8B
BRONX, NEW YORK 10457

RESPONSIBILITIES: To act as a primary liaison between the Federal SYEP headquarters, operatives, contractor [Community School Board #4] and work sponsors. To recruit and negotiate contracts with local work sponsors. To train and evaluate same work sponsors in their abilities to provide employment, counseling,training and evaluation for two hundred plus summer youth employees. To supervise, train, and evaluate a staff of four to eight on site supervisors, monitors, and crew chiefs. To oversee and submit time and attendance records for payroll of all staff. To provide ongoing site monitoring for work sponsors' adhearance to SYEP policies and procedures. To supervise the publication and distribution of an SYEP newsletter. To provide individual, group and family counseling to SYEP participants. To develope work programs and assignments as needed for youth employees.

3/77-8/83

Position: Free Lance Tutor

Responsibilities: To provide one-to-one tutoring for students age seven through college level, and some adult education level students. Intensive tutorial assistance provided to twenty plus adults returning to college and preparing for qualifying/evaluative exams and papers. Tutoring provided in remedial mathematics, reading comprehension, history, Spanish, English grammar and comprehension.

SUMMERS
1979/1980

Position: Senior Field Supervisor [Summer Youth Employment Program]

School District #9
1367 Jerome Avenue
Bronx, New York 10457
Responsibilities: To supervise youth at various sites, and to monitor sites for adherence to SYEP policies and procedure.

10/78 - 8/79

Position: College Assistant [English Tutor]

BARUCH COLLEGE
17 Lexington Avenue
New York, New York 10010
Responsibilities: To tutor in a group setting , five to nine students [incoming Freshmen] who have failed and must retake the CUNY minimum proficiency exam in English.

1/78 - 2/78
Position: Housing Interviewer

Burr Manor Associates
1135 Manor Avenue
Bronx, New York 10452
Responsibilities: To interview prospective tenants to determine eligibility for Section 8 housing.

7/77 - 9/78
Position: Community Youth Program Coordinator Volunteer

St. Matthews, A.M.E. Church
1788 Sedgwick Avenue
Bronx, New York 10453

10/78 -3/77

Position: Administrative Assistant/ Accounts Payable Bookkeeper

Grenadier Realty Corporation
308 Third Avenue
Bronx, New York
Responsibilities: To maintain accounts for ten housing companies.

Summers
1975/1978

Position: Executive Director
River Park Towers Youth Activities Program
16 Richman Plaza
Bronx, New York 10453
Responsibilities: To hire, train and orientate staff of thirty, including allocated Neighborhood Youth Corporation., workers, peers, parents and volunteers. Acted as Program Administrator, coordinated trips, and events for program participants and on-going workshops for counselors in training [Neighborhood Corp. Workers]. Submitted time and attendance for all staff.

10/74 - 6/75

Position: Home Investigator/General Assistant to Housing Manager

U/A Management Corporation
32 Broadway
New York, New York
Responsibilitites: Assisted in managing the day to day activities of the management office of the Rive Park Towers Housing Complex

CURRICULUM VITÆ

WARREN T.D. BARBOUR
762 Auburn Avenue
Buffalo, New York,14222-1417
(716) 885-0259 (Home)
June 10th, 1992

SOCIAL SECURITY # 188-34-4922

ACADEMIC TRAINING

1961-65 Bachelor of Arts degree in Anthropology, Pennsylvania State University

1965-66 One year of work toward Master of Arts degree in Anthropology at Pennsylvania State University

1966-70 Master of Arts degree in Anthropology at the Univesity of Rochester. Courses in British Social Anthropology and Archæology

1970-76 Ph.D University of Rochester

Dissertation Title: The Figurines and Figurine Chronology of Ancient Teotihuacán, Mexico

PRINCIPAL FIELDS OF INTEREST

Archæology, Prehispanic Mesoamerica
Prehistoric State Formation and Collapse
Paleodermatoglyphics
Historic archæology, Northeastern and Southeastern United States
Cultural Resource Mangement Northeastern United States
Computer Applications in archaeology

PROFESSIONAL POSITIONS

1977-present Associate Professor, Department of Anthropology, State University of New York, Buffalo

1991-present Director, Graduate Studies, Department of Anthropology, State University of New York, Buffalo

1988-present Curator - Mesoamerican Collection Museum of the Department of Anthropology. University at Buffalo, SUNY.

1988-present Consultant for the de Young Museum (San Fransisco Museum of fine Arts) on Highland Mesoamerican Figurines

1987-1990 Director, Undergraduate Studies, Department of Anthropology,State University of New York, Buffalo

1986-present Senior Member The University Undergraduate College State University of New York at Buffalo.

1985-86 Visiting Research Associate, Department of Anthropology, American Museum of Natural History,New York. Research on the unpublished excavation material of George Clapp Vaillant from Teotihuacán, Mexico.

1981-82 Visiting Senior Scholar, Instituto de Investigaciones Antropologicas at the Universidad Nacional Autonoma de Mexico.Sabbatical year. Besides continuing research on the figurines of Teotihuacan, I was involved with the development of software (and the adaptation of existing software) for use in the archaeological field and laboratory environment.

1978-80 The founder and first Director of the Marian E. White Research Museum of Anthropology, State University of New York at Buffalo.

1977-79 Master (Chief Executive Officer), College of Urban Studies, State University of New York, Buffalo.

1970-77 Assistant Professor, Department of Anthropology, State University of New York, Buffalo.

1972-73 Director/Chairman, Afro-American Studies Department, State University of New York at Buffalo. Responsible for the transition from program to department status.

1971-present Fellow, Clifford Furnas Science College, State University of New York, Buffalo.

1966-69 Research Assistant for the Teotihuacan Mapping Project, University of Rochester, under the direction of René Millon.

1965-66 Graduate Teaching and Research Assistant, Department of Anthropology, Pennsylvania State University.

1965-67 Intensive surface survey and excavations for the Teotihuacan Mapping Project, Teotihuacan, Mexico.

1964 Extensive archaeological surface survey in the Teotihuacan Valley, Mexico. Participated in Aztec site survey for the Teotihuacan Valley Project under the direction of William T. Sanders, Pennsylvania State University.

1963 Excavation in Historic Archaeology at Ephrata, Pennsylvania, with John Witthoff, State Archaeologist.

1963-64 Lab assistant on various projects in Physical Anthropology for Paul T. Baker, Pennsylvania State University.

PUBLICATIONS AND MANUSCRIPTS

1988 Review of Architecture and Urbanization in Colonial Chiapas, Mexico by Sidney David Markman, in the Journal of the Society of Architectural Historians. September 1988

1987 "Ceramic Figurines from Oxtotipac" in The Teotihuacan Valley Project Final Report-- Volume 4, Part 2. Chapt. 13 Surface Survey and Special Studies. William T. Sanders ed. Occasional Papers in Anthropology, Department of Anthropology, The Pennsylvania State University. University Park, Pennsylvania.

1977 The Figurines and Figurine Chronology of Ancient Teotihuacán, Mexico University of Michigan Microfilm, Ann Arbor.

in press "The Figurines from the Tlajinga Excavations at Teotihuacan, Mexico: an Overview." The XXI Mesa Redonda, Sociedad Mexicana de Antropologia. Taxco, Mexico. (1983).

Report " Gender and Division of Labor among three figurine types: The value of paleodermatoglyphics for longitudinal study of prehistoric ceramic Production."for completion of grant requirement National Endowment to the Humanities

1991 "A manual for the Collection of Paleodermatoglyphs from Ceramic Surfaces." second revised ed. Department of Anthropolgy SUNY Buffalo. (DTP)

MS " The Ceramic Figurines of Ancient Teotihucan, Mexico . The Teotihucan Mapping Project Vol.4 (Due for submission to Univ, Utah Press Nov 1992)

MS "Shadow and Substance: The Iconography of Host Figurines Associated with Ancient Teotihuacan, Mexico." Department of Anthropology SUNY Buffalo.

MS "The Division of Labor in the Figurine Industry of Ancient Teotihuacan, Mexico." Department of Anthropology, SUNY Buffalo.

PAPERS AND LECTURES

1992 New Thoughts on Multiculturalism in the Undergraduate Curriculum. Lecture give to the Undergraduate College SUNY at Buffalo, May 9th

1991 Participation in the Maya Ceramic Workshop San Ignacio Belize, Central America June 19 27

1991 The Introduction of Pre-Hispanic material into World Civilization courses. Given to the Undergraduate College April 1991

1990 Paleodermatoglyphics: A new field and it's implications for archaeology. Lecture given at Wesleyn University Conn. Oct.

1990 "Colonial Tidewater Potters: A link between dermatoglyphic studies of modern and ancient populations." A presentation to the National Park Service, Yorktown-Jamestown National Historic Park, May

1990 "Paleodermatoglyphics: Direct evidence for the study of the division of labor in Prehistoric Societys." Lecture delivered at Cornell University Department of Anthropology, April

1988 "New Discoveries and New Interpretations at Ancient Teotihuacan, Mexico" Lecture for the Houghton Chapter of the New York Archaeological Association. Buffalo, New York, November

1986 "Gender and Role in Teotihuacan Figurines." Paper presented at the University Seminar on Africa, Oceania and the Americas, Columbia University, December.

1986 "The Processes of Histories: Historical Approaches to Material Culture Change." Northeastern Anthropological Association Annual Meetings, Buffalo, New York, March .

1986 "Shadow and Substance: The Iconography of Host Figurines Associated with Ancient Teotihuacan, Mexico." Society for American Archaeology, Annual Meetings, April.

1985 Symposium discussant at the University Seminar on Africa, Oceania and the Americas, Columbia University. Topic: Rulership and the Ciudadela: Political Inferences from Architecture at Ancient Teotihuacán, Mexico, November.

1984 "The Use of Microcomputers in Archaeology: Lessons Learned in Setting up the Teotihuacan Figurine Data Base." Lecture presented at the Massachusetts Institute of Technology, Department of Anthropology, March.

1984 "Uses of Microcomputers in Anthropology: A General Introduction." Department of Anthropology, University of Massachusetts, Boston Harbor Campus, April.

1984 "Teotihuacan: An Ancient Mesoamerican Metropolis." The Houghton Chapter Annual Meeting at the Buffalo Museum of Science, May.

1983 "The Figurines from the Tlajinga Excavations at Teotihuacan, Mexico: an Overview." Society for Mexican Anthropology, Roundtable, Taxco, Mexico, August.

1983 "The Revised Figurine Chronology for Teotihuacan, Mexico." Seminar series of Mexican and North American archaeologists held at the archaeological zone, August.

1982 "The Division of Labor in Figurine Manufacture at Teotihuacan, Mexico: Results from a Study of the Dermatoglyphs (Fingerprints) Impressed in Clay figurines over a Thousand Year Period." Paper presented at the Instituto de Investigaciones Antropologicas, the National University of Mexico, August.

1982 "The Figurines from the Cave at Huecxtoc, Oxtotipac, Mexico." Paper presented at the Instituto Investigaciones Antropologicas, the National University of Mexico, June.

1981 "Puppets and Portraits: Sexual Identification in the Figurines of Teotihuacan." Paper presented at a symposium on Mesoamerican figurines, Columbia University, New York, April.

1981 "Asymmetrical Rates of Change in the Figurines of Teotihuacan: New Data, New Synthesis, New Problems." National University of Mexico, Mexico City, October.

MEMBERSHIP IN SCHOLARLY AND PROFESSIONAL SOCIETIES

American Anthropological Association
American Association for the Advancement of Science
American Association of Physical Anthropologists
American Dermatoglyphic Association
American Institute of Archaeology (V. President Western N. Y. Chapt. 87-88)
Association of Black Anthropologists
New York Archaeological Council (Executive Committee, 1975-77)
Sigma Xi (Chapter Secretary, September 1972-June 1974)
Society for American Archaeology
Society of State University Latin Americanists (Executive Committee, 1977-79)
Society for Mexican Anthropology

UNIVERSITY SERVICE

Hearing Committee For The Maintainance of Public Order 1971-76
Department of Sociology Chairman Search Committee, 1971
Faculty Senate Committee on Promotion and Tenure, 1975-76
Policy Committee, Faculty of Social Sciences, 1975-78
Academic Vice-Presidential Advisory Committee on General Education, 1976-79
General Education Committee, 1981-82
Faculty Senate Executive Committee, 1980-81
Senator, University Faculty Senate, 1978-81
University President's Advisory Committee on Equal Rights, 1980-81
Minority Faculty Staff Association, Chairman, 1981-82
University-wide Committee on Academic Computing, 1984-86
Faculty of Social Sciences Sub-Committee for Committees, 1985-87
Faculty Senate Committee on Freedom and Responsibility, 1985-89
Faculty of Social Sciences Committee to Review College H and
Rachel Carson College, Spring 1986
Faculty Divisional Committee for Graduate Education 1987-1992
Senior Member The Undergraduate College, SUNY at Buffalo.
Executive Committee of the Faculty Senate, SUNY at Buffalo 1992-

FIELD AND PROFESSIONAL EXPERIENCE

1991 to Present — Research and analysis of the Figurines from the 1989-90 excavations in the Temple of Quetzalcoatl, Teotihuacan, Mexico. National Geographic Grant P.I. George L. Cowgill, Arizona State University.)

1990 — Research, by invitation at National Aeornautics and Space Administration Material Research Laboratory at Langley Airforce Base to explore various materials and equipment of use in Paleodermatoglyphic research. (Breakthroughs in both quality of recovery and measurement of prints occurred.) July

1990 — Collection of dermatoglyphs from colonial Jamestown and Yorktown pottery, May 1990 to Feb. 1991

1988 — Research Teotihuacan Archaeological Research Center, Teotihuacan, Mexico. A Study of the distribution of three figurines types in ancient Teotihuacan. Supported by an National Endowment for the Humanities Travel to Collections Grant, and a matching grant from the University at Buffalo, SUNY.

1986 — Research trip to Southern Mexico and Guatemala to study Mayan collections of figurines from the site of Largatero that have extensive dermatoglyphs. Also interviewed Edwin Shook and Vivian Broman-Morales

1983-84 — Summer:Research Associate on a National Science Foundation Grant given to Brandeis University. Work involved the reanalysis of the figurines of Teotihuacan and the reorganization of the terracotta figurine material, as well as adapting a micro computer for data input and processing.

1974 — Summer fieldwork in Indicators of Social Mobility in Ancient Teotihuacan. Research project funded by the State University of New York Research Foundation.

1972 — Summer research on the iconographic relationships among the sculpture, mural paintings and figurines at Teotihuacan, Mexico.

1971 — Summer fieldwork involving the analysis of the terracotta figurines of Teotihuacan.

1969-70 — Research Assistant, Teotihuacan Mapping Project, Teotihuacan, Mexico. Responsible for the analysis of the figurine material. This work formed the basis for the dissertation.

GARY S. McGOWAN
Principal Conservator
John Milner Associates, Inc.
309 North Matlack Street
West Chester, PA 19380
(215) 436-9000

EDUCATION

BFA	Philadelphia College of Art		1985
M.Museum Studies	Fashion Inst. of Technology/ State University of New York	Conservation	1988

PROFESSIONAL CERTIFICATIONS/SEMINARS

1982 Johnson Atelier, Princeton, New Jersey - bronze casting certificate
1992 George Miller Seminar - ceramic history and technology
1992 New York Microscopical Society - pigment analysis

PROFESSIONAL ACTIVITIES

1991-present Steering Committee Member of New York Conservation Society
1991-present Thesis Committee Member, F.I.T., New York

PROJECT EXPERIENCE

1987 Assisted in conservation and restoration of twentieth century sculpture at Pepsico Sculpture Park.

1988 Conserved objects from the Rogers Collection at the Decorative Arts Department of The Museum of the City of New York, NY.

1988 Conserved and restored eighteenth century objects from the collections of The Museum of the City of New York, NY.

1988 Prepared archeological material for the museum's "Beneath the City Streets" Exhibition. Stabilized, maintained and conserved the South Street Seaport Museum's archeological collection. Also performed objects analysis/identification, New York, NY.

1988 Conserved and prepared archeological objects in the collection of Barclay's Bank Permanent Exhibition at 75 Wall Street, New York, NY.

1988 Assisted in the mounting and display of the objects in "Beneath the City Streets and Barclay's Bank Permanent Exhibition, New York, NY.

1989-1990 Treated and maintained archeological materials of the Cultural Resource Group at Louis Berger, International for both historic and prehistoric sites. Performed object analysis of archeological material, NJ.

1990	Conservation and restoration for the exhibit, "In 1990" for Fraunce's Tavern Museum, NY.
1990	Performed objects conservation and restoration on Greek and Roman Statuary. Assisted in the installation and mount making for the exhibit, "IDOLS, The Beginning of Abstract Form;" Ariadne Galleries, NY.
1990	Participated in excavation and carried out conservation treatments in eighteenth and nineteenth century historical materials from New York City; Cooper Union, NY.
1990	Assisted in the installation and fabrication of mounts for the "Gardens and Ghettos: The Art of Jewish Life in Italy;"
1990	Developed and implemented the plan for the creation of a conservation lab at The South Street Seaport Museum, designed the conservation educational component of the laboratory for the exhibit for The South Street Seaport Museum, New York, NY.
1990-1992	Treated and stabilized both historic and prehistoric archeological materials for The South Street Seaport Museum, New York, NY.
1990-1992	Managed the Urban Archaeology Center Laboratory for The South Street Seaport Museum, New York, NY.
1990-1992	Actively participated as part of a "living exhibit" where the general public and scheduled school groups are able to view conservation and ask questions of the conservation laboratory personnel for The South Street Seaport Museum, New York, NY.
1991	Carried out conservation assessment for the stabilization of the Metrotech Project; Greenhouse Associates, NY.
1992	Performed conservation prep for the archeological collection and the historic collection of the 25th Anniversary Show, "From Sailing Ships to Sealing Wax" for The South Street Seaport Museum, New York, NY.
1992	Created exhibition mounts for the 25th Anniversary Show, "From Sailing Ships to Sealing Wax" for The South Street Seaport Museum, New York, NY.
1992	Conserved artifacts from the Faneuil Hall, Boston for Louis Berger Associates, NJ.
1992	Stabilized and repacked archeological collection for both historic and prehistoric sites; Staten Island Historical Society, Richmondtown Restoration, NY.
1992	Initial stabilization of cultural material associated with the "Five Points and Afro-American burial" project, New York; Historic Conservation and Interpretation, New Jersey.

1992 Created exhibit mounts for traveling show of archeological objects for the New York State Park's Bureau of Historic Sites, NY.

PROJECT EXPERIENCE (John Milner Associates, Inc.)

1992- Developed and implemented conservation treatment for artifacts from the 10th Street First African Baptist Church Cemetery, Philadelphia, PA.

PROFESSIONAL PAPERS AND PRESENTATIONS

1989 Window Glass Technology, Analytical Findings (co-author). Mid-Atlantic Archeological Conference, Ocean City, MD.

1989 To Conserve or Not to Conserve. Council for Northeast Historical Archaeology, Morristown, NJ.

1990 History of Window Glass Technology (co-author). Society for Industrial Archaeology, Keene, NH.

PROFESSIONAL AFFILIATIONS

1987-present Member of the American Institute of Conservation
1988-present Member of Council for Northeast Historic Archaeology
1992-present Member of Professional Archaeologists of New York City

EMPLOYMENT HISTORY

1984-1986 Gallery Owner
50 West Gallery, NY

1985 Sculpture Technician
Parson's School of Design, NY

1987 Field Conservation/Archeology
Shiqmim Site
Northern Negev, Israel

1988 Archeological Conservator
South Street Seaport Museum, NY

1988 Objects Conservator Intern
Museum of the City of New York, NY

1989-1990 Archeological Conservator
Louis Berger International
East Orange, NJ

1990-1992	Instructor New Jersey Center for the Visual Arts Sculpture in all media and levels Summit, NJ
1990-present	Adjunct Faculty Fashion Institute of Technology, Graduate Division Analysis and Technology Conservation Laboratory New York, NY
1990-1992	Senior Conservator and Laboratory Director South Street Seaport Museum, NY
1992	President and Archeological Conservator Cultural Preservation and Restoration, Inc., New Jersey
1992-present	Principal Conservator John Milner Associates, Inc. West Chester, PA