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DOCUMENTARY STUDY AND ARCHAEOLOGICAL ASSESSMENT BLOCK 106, LOT 22 BOROUGH OF MANHATTAN CEQR #90-042M

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I. INTRODUCTION

A. Background

The New York City Department of General Services, Division of Real Property, is planning to dispose of property in the Borough of Manhattan designated as block 106, lot 22. The property fronts on Dover Street between Water and Pearl Streets (see Figure 1). This documentary research study and archaeological assessment will assist the DRP to meet the conditions of CEQR certification (CEQR #90-042M) for the proposed action.

The documentary research included review of both secondary and primary documents, including maps, deeds, tax assessments, street directories, and records of the Department of Buildings. A site examination was conducted on April 6, 1990. The study objectives are to determine, to the extent possible, the land use and construction history of the property and to assess its archaeological potential.

B. Changes in Block 106 Configuration

The present lot 22, block 106, as shown on the most recent real estate atlas (Sanborn 1989 - see Figure 2), is an approximately triangular shaped property extending approximately 261 feet along Dover Street from Pearl Street on the northeast to Water Street on the southwest (for ease of reference in the remainder of this report, the Dover Street frontage will be considered the eastern side and the Pearl Street frontage the northern side of the property). The map shows the Pearl Street frontage of lot 22 extending only some il feet nine inches west of Dover Street to the lot 20 boundary at the tip of the "triangle", with the Water Street frontage at the base of the "triangle" extending approximately 32 1/2 feet west of Dover Street to the border of lot 2 (#274 Dover Street). All of the structures which once stood on this property have been demolished. It should be noted that the structures shown on lot 22 on the 1989 map are, in fact, no longer standing. The southern end of the present lot 22 is at the level of Water Street and is used as a parking area (see Plate 1). A small portion of the adjacent fenced area is also within the boundaries of lot 22. The northern portion of lot 22 contains a concrete and asphalt ramp elevated above the level of Dover Street. A fence at the Pearl Street end of the ramp prevents vehicular access (see Plates 2 and 3).

The present configuration of lot 22 is the result of the construction of Brooklyn Bridge access ramps approximately 30 years ago. A 1958 map located in the Borough of Manhattan Topographic Bureau shows the resulting changes in the configuration of the eastern end of block 106. A copy of this map is included here as Figure 3. The map shows the lot configuration

prior to the City of New York's acquisition of property. A tract of land immediately east of the present lot 22 was acquired for the widening of Dover Street necessitated by the construction of the access ramps. The land acquired constituted the eastern portions of lots 22, 23, 26, 27, 1 and 2. The City also acquired the westernmost portions of these lots, which constitute the property now designated as lot 22. Examination of the site indicates that not all of the property acquired for the widening of Dover Street was used for that purpose. Thus there is a narrow strip of vacant land between the present lot 22 and the existing Dover Street sidewalk (see Plates 1-3 and Figures 2 and 3). We have indicated the approximate location of the present Dover Street sidewalk on Figure 3.

Previous consolidations of property had occurred prior to 1958, so that the land shown as lot 23 on Figure 3 at one time included four separate lots, and the ca. 1958 lot 22 previously consisted of two separate lots. Thus the history of the present lot 22 is actually the history of nine separate building lots. As the following discussion indicates, the building frontage and addresses appear to have been consistent from the late 18th through the 20th centuries. The buildings on lots 1 and 2 fronted on Water Street and were numbered 278 and 276 Water Street, the buildings on lot 22 fronted Pearl Street and were numbered 338 and 340 Pearl Street. The buildings on lots 23, 26, and 27 fronted on Dover Street were numbered 2, 4, 6, 8, 10 and 12 Dover Street. The lots will be referenced in this report by street address, rather than by the 20th century lot designations. The present lot 22 will be referred to as the study area. It should be noted that the property at 340 Pearl Street (the easternmost portion of former lot 22), falls entirely outside the boundaries of the present lot 22 and will not be considered in detail in this study.

II. DOCUMENTARY RESEARCH

A. Prehistoric Period

Since lower Manhattan has undergone intensive development within the past 300 years, information on prehistoric sites derives largely from ethnohistoric sources as well as from archaeological remains encountered during construction. A compilation of such data was made by Bolton (1920, 1922) earlier in this century. The nearest prehistoric occupation to the study area shown by Bolton (1922 - see Figure 4) is "Werpoes", located "north of the Collect pond* (in the vicinity of Broadway). According to Bolton (1920:303) shell heaps were reported in this area in colonial times. Masses of shell were apparently also uncovered in this area during street grading (Bolton 1922). Bolton's reconstruction also shows an Indian path leading from the Werpoes area to the shoreline just west of the former location of Roosevelt Street (now the site of the Alfred E. Smith houses), approximately 1 1/2 blocks east of block 106. A stream and marsh area, known as *Wolpherts Vly* bordered this path on the east. The bluff which extended along the shoreline in the vicinity of the present block 106 (see below), may have been attractive to prehistoric peoples as a campsite location since it would have provided access to the subsistence resources of the East River as well as the stream and marsh, and would also have provided an observation point overlooking the River.

B. Seventeenth Century Shoreline Configuration

Beginning in the late 19th century, the East River shoreline of lower Manhattan was extended outward by means of extensive landfilling. The original shoreline extended along the general line of the present Pearl Street, which in the late 17th and 18th centuries was named Queen Street. Several reconstructions of the original shoreline have been made. Stokes' (1918:III) Landmark map (see Figure 5) shows the shoreline passing through the eastern portion of block 106 approximately 1/3 of the way from Pearl Street to Water Street. A New York City Department of Docks Map (1873) shows the high water mark approximately 2/3 of the distance from Pearl to Water Street, with the low water mark at the northern side of Water Street. The ca. 1718 Burgis view (see Figure 8a and discussion below) indicates that the shoreline at the location of the study area was characterized by bluffs overlooking the river. Queen Street (Pearl Street) ran along the top of these bluffs. Consideration of the present Street elevations (see below) suggests that the Burgis view is accurate in this regard. The perspective of the Burgis view does not provide an indication of how far the bluff top extended south of Queen Street. It is likely that prior to landfilling, the land at the bluff base was characterized by a beach environment. The high water mark may have been at the bluff base, or there may have been a strip of dry beach between the bluff base and the high

C. 17th Century

Prior to 1640, the portion of the East River shoreline included within the study area formed part of an approximately 35 acre farm that had been partly cleared and cultivated by David Provoost. This tract extended from the approximate area of City Hall Park to the River and from the vicinity of Ferry and Ann Streets on the south to James Street on the north (Innes 1902:398). This same property was sold in 1642 by Director Kieft and the New Amsterdam Council to Govert Loockermans and Cornelis Leendertsen. The deed conveys 'A dwelling house situated on the East river of New Netherland on the Island of Manhattans, together with the land thereto belonging, as the same is fenced in by David Provocst' (Stokes 1927 VI: 117). Innes (1902:338) places the Provoost farmhouse "at a point which is believed to be in the interior of the block between the modern Pearl and Water streets, Dover Street, and Peck Slip* (i.e. block 106). This author notes that a 'small cherry and apple orchard' covered the land eastward of the house including the later site of Dover Street.

By the late 1630's settlements had been established along the present Brooklyn shoreline of the East River and a ferry was needed to connect these settlements with New Amsterdam. This ferry was established prior to 1643, the New Amsterdam terminus being located on the Loockermans and Leendertsen farm. Cornelis Dircksen served as the first ferryman (Innes 1902:340). Stokes (1922 IV:'143,188) places the site of this first ferry to Long Island at the corner of Dover and Pearl Streets while Innes (1902:6) locates it "near the present Dover Street". However, it should be noted that Booth (1867:262-263) places the site of the first Long Island ferry at a point "below Peck Slip" and Wilson (1893 I:366) locates it at Peck Slip.

In 1646, Loockermans and Dirck Cornelissen (Cornelis Leendertsen's son) sold the portion of their farm which includes the study area to William Goulder. The tract is described by Stokes (1927 VI:117) as extending from Ferry Street on the west to Frankfort and Dover Streets on the east. The Goulder tract apparently reverted to Loockermans' possession, probably due to mortgages which the latter held on the property (Innes 1902:342). In 1653 Loockermans (who had by this time come into sole possession of the property by virtue of his 1649 marriage with the widow of Dirck Cornelissen) sold 'a house and lot by Wolpherts valley now called The Ferry' to Egbert van Borsum. The latter individual had, in 1652, been appointed the master of the ferry to Long Island (Innes 1902:342-343; Stokes 1915 I:245, 1927 VI:177). In 1654, the Director General and Council ordered that the ferryman should "maintain a 'covered Shed or Lodge' on both sides of the river to shelter passengers* (Stokes 1915 I:245). Innes (1902:340,343) states that a farmhouse, presumably the one originally built by David Provoost, served as the ferry house on

the New Amsterdam side of the River and that Van Borsum maintained a tavern in this house.

The 1661 *Duke's Plan* (see Figure 6a and 6b) shows the "passage place" to Long Island. Examination of this map suggests that the ferry may have been closer to Peck Slip than Dover Street. However, this early map is probably not of sufficient accuracy to make this distinction meaningful.

By 1670, the house and the ferry apparently had once more come into the possession of Govert Loockermans (Innes 1902: 343). According to Booth (1867:262-263) the ferry dock was leased in 1699 to Philip French, who soon shortly afterward obtained grants to water lots in this area (see below). It is not certain whether the ferry dock at this time was at the same location as in the mid-17th century. As discussed below, the descriptions given in the water lot grants indicate that at the beginning of the 18th century the ferry house was located near Peck Slip and west of the study area.

D. Early-Mid 18th Century

1. Water Lot Grants

The East River shoreline of lower Manhattan was shifted outward during the 17th and 18th centuries through successive episodes of landfilling. The first of these took place at the end of the 17th and beginning of the 18th centuries. During this period the City of New York made grants of lots of land extending outward from the shoreline to private individuals. The grantee was then usually responsible for building a wharf at the outward end of the granted property and depositing land-fill behind this wharf.

The water lot grants affecting block 106 were made in 1701. Copies of these "Grants to Land Under Water" were examined at the Borough of Manhattan Topographic Bureau. Water lots between Peck Slip and James Street were granted to six individuals (or pairs of individuals. The description of these lots indicate that they extended outward "from the Street or Highway which runs from Queen Street toward the fresh water and from thence to low water mark into the aforesaid East River". The street referred to was an easterly extension of Queen (Pearl) Street which ran along the shoreline east of Wall Street. The fresh water refers to the stream which ran through Wolpherts Vly. The street and the stream are shown on the 1661 Duke's Plan (see Figure 6). Each of the lots had a frontage on Queen Street of 25 feet (except the westernmost lot which had a frontage of 25 1/2 feet. The length of each lot south of Queen Street became greater as the lots proceed eastward, which is in keeping with the divergence of Pearl and Water Streets as seen on maps dating from the 18th century to the present. Figure 7 illustrates the sequence of the block 106 water lots recreated from the grants. The lot numbers are those referenced in the grants.

The westernmost of the block 106 water lots was granted to Johannes Hardenbrook on July 21, 1701 (Liber B:22). This lot (#10, not to be confused with another lot with the same number referenced below) extended 190 feet from the street to the low water mark and was bounded on the east "by Lott #17 belonging to Philip French...[and]...on the west by a Publick Slip or Inlet" (i.e. Peck Slip). East of the Hardenbrook lot #10 and French's lot #17 were two lots (#16 and #15) granted to Daniel Latham and Thomas Richardson on July 29, 1701 (Liber B:16), four lots (#14, #13, #12 and #11) granted to Clement Ellsworth on July 21, 1701 (Liber B:4), an additional lot (#10) also granted to Daniel Latham and Thomas Richardson on July 29, 1701 (Liber B:16), and five lots (#9, #8, #7, #6 and #5) granted to Phillip French and Major Brant Schuyler on August 9, 1701 (Liber B:33).

The 1989 real estate atlas (Figure 2) indicates that the western boundary of lot 22 is located some 250.5 feet east of the Peck Slip sidewalk. Assuming that this sidewalk also represents the western boundary of the Hardenbrook grant, the present lot 22 would include all of the land represented by the water lot #8 granted to French and Schuyler. It would also include a small portion of the southeast corner of water lot #7, also granted to French and Schuyler.

The French and Schuyler grant specifies the distance from Queen Street to the low water mark along the western boundary of lot #9 as 208 feet and along the eastern boundary of lot #5 as 215 feet. Thus the distance from the Street to low water at the location of the study area was approximately 210 feet. The terms of the Schuyler and French grant (which were also included in the other grants referenced above) call for the grantees, at their own expense to "build, erect or make or cause to be built, erected or made on the South side of the said respective lotts or tofts of ground a good sufficient and firme wharf or Street of 30 foot English measure*. The wharf was to be used as a public street and completed within three years after the date of the grant, with an annual penalty of 10 pounds for each subsequent year that the wharf remained incomplete. The present distance from the Pearl Street to the Water Street sidewalk at the western boundary of lot 22 is some 260 feet, suggesting that the original wharf may in, fact be located within the boundaries of the present block, with the present location of Water Street being south of the wharf.

The terms of the water lot grant to French and Schuyler also state that the granted lots (which include two additional lots east of block 106 in addition to lots #5-9 and #17 as noted above) lie "between the land of Richard Sackett and the ferry house fronting to the East River or Harbor". This indicates that in 1701 the ferry house was located west of French's lot #17, which would place it either on the Hardenbrook lot adjacent to Peck Slip (the extreme western portion of the block 106 shoreline) or to the west of Peck Slip.

Philip French, who obtained the grants to these water lots which

constitute the present lot 22 is described in the grant as a "merchant." However, it is interesting to note that in the following year, 1702, French became mayor of New York City (Wilson 1893 II:68).

2. Subsequent Transfers of Water Lots

On September 14, 1701, shortly after obtaining the water lot grants discussed above, Philip French and his wife Anna deeded lots 8 and 9 to Daniel Latham (Manhattan Deeds Liber 25:134), described in the deed as a "shipcarpenter". The deed also transfers to Latham the responsibility for building and maintaining the wharf at the southern boundary of these two lots. As noted above, Latham and Thomas Richardson previously received the grants to lot #10, adjoining these lots to the west, as well as lots #15 and #16, located in the western portion of block 106.

Subsequent deeds, including two dated 1751 (Liber 35:521) and 1759 (Liber 35:125) provide information as to the subsequent history of the Latham water lots. Daniel Latham died prior to 1716. In that year Thomas Richardson sold his half interest in lots 10, 15 and 16 to Joseph Latham, Daniel Latham's brother, and Clement Ellsworth also sold his lots (#11-14) to Latham. Joseph Latham is described in the deeds as a "shipwright." In 1717, Joseph Latham sold lots 10 and 11 to Cornelius van Horne (Liber 28:327), who was a son-in-law of Philip French. In 1718 Latham sold lots 13 and 14 to John Yerworth, a shipwright (Liber 30:69) and Yerworth, in turn, sold these lots to William Walton in 1721 (Liber 30:220). Lots #8 and #9 became the property of Daniel Latham's two daughters, Sarah and Priscilla, upon his death. Sarah and her husband sold lot #9 to John Latham in 1719. Priscilla Latham married William Wiggins and they apparently retained a legal interest in lot #9 as well as having title to lot #8. These interests were inherited by their son, Daniel. The 1751 deed (Liber 35:521) confirmed the division of the two lots, Lot #9 being the property of John Latham and lot #8 of Daniel Wiggins. In summary, lot #8, which constitutes most of the study area, remained in the Latham family through the mid-18th century.

Water lot #7, which includes a small portion of the study area, and the adjacent water lots #5 and #6 (as well as lots #20 and #23, east of block 106) remained the property of the French family through the mid-18th century. By 1723, both Philip French and Brandt Schuyler were deceased. In that year, Schuyler's heirs granted to French's son (also named Philip) and to Joseph Read (a son-in-law of the elder French), their half interest in these lots (Liber 30: 398). In the same year, these properties were divided among the younger French, Read, and Cornelius van Horne, another son-in-law of the elder French (Liber 30:400), who had earlier obtained title to lots #10 and #11, as noted above. Joseph Read received lots #17, #5 and the eastern half of #6. French received lots #17, #5 and the eastern half of #6, and van Horne received lot #23.

A 1761 deed (Liber 208:312) records a subsequent transfer of what

was apparently lot #7 (although reference is not made to this lot number in the deed). The deed transfers a 25 foot lot between Queen and Water Streets from Matthew Clarkson, merchant, to Henry Kip, sailmaker. The lot is bounded on the west by "the ground of Daniel Wiggins" and on the east by lands sold by Clarkson to Elias De Grushe. As noted above, Daniel Wiggins owned lot #8 at this time.

3. The Burgis View

The Burgis view shows the East River shoreline as it appeared ca. 1716-1718. The portion of the shoreline including the study area is shown in Figure 8a. Stokes (1915:I) identifies the structures and other features shown on this view. A portion of his key map is included here as Figure 8b. According to Stokes the coach and horses shown along the shoreline atop the bluffs (key map #103) are standing at the intersection of Pearl and Cherry Streets. Since Dover Street intersected Pearl Street just west of the Cherry Street intersection (see Figure 11), this is also the location of the study area. Stokes identifies the houses which he numbers #99 and #100 as belonging to Gilbert Livingston and located at Beekman Street, with houses #101 and #102 belonging to John Deane and located at Roosevelt and Cherry Street. The road which curves down to the shore east of the bluffs is identified as the line of Cherry Street, with the road meeting the shore near James Street. Stokes notes, however, that if these indentifications are correct. "the artist has evidently not allowed sufficient distance between Livingston's corner at Beekman Street and John Dean's houses at Roosevelt Street* (1915 I:250).

The shoreline south of the bluffs clearly is being used for shipbuilding at the time of the Burgis view, with two ships shown under construction. Since structures are shown along the shoreline south of the bluffs, this lower area evidently does not represent a natural beach, and therefore land-filling has apparently occurred prior to 1716. Stokes notes that "the large ship on the ways, north of No. 101 lies just west of the old ferry point of Egbert van Borsum". If the van Borsum ferry was located at Dover and Pearl Street, as Stokes notes elsewhere (see above), it would place the ship and the adjacent building (Stokes' #102) in or adjacent to the study area. This would be consistent with the later Bradford/Lyne map (see below). However, it is inconsistent with Stokes' identification of the structures cited previously.

4. The Bradford/Lyne Map

Additional information about the study area can be obtained by examining the Bradford-Lyne map of 1728 (Figure 9). This map shows the intersection of Cherry and Queen Streets. Dover Street was not yet in existence, but its location is just west of this intersection. Four structures are shown west of this location, on the land which now constitutes block 106. The structure fronting on Queen street was apparently associated with the Walton ship

yard. This would have been located on lots 13 and 14, which Walton purchased from John Yerworth in 1721. The structure east of the Walton shipyard, fronting on the wharf, is apparently associated with Van Hornes Board Yard. In a deed dated March 13, 1759 (Liber 35:125), the sons and heirs of Cornelius van Horne sold lots 10 and 11 (which van Horne had purchased from Joseph Latham in 1717), to Augustus van Cortlandt. In the deed these lots are described as being "known by hes[?] board yard being the above mentioned Two lotts number ten and number eleven".

The building shown on the 1728 Bradford/Lyne map closest to the present site of Dover Street is apparently associated with the French ship yard. According to the map, this building is approximately 50 feet east of Van Horne's board yard (water lots #10 and #11). Thus, the French ship yard was apparently located on the water lots east of numbers 10 and 11 which include the study area. Depending on the exact location of the Van Horne board yard structure on lots #10 and #11, the French ship yard structure could have been located on lot #8, corresponding with the present study area. As we have seen, at the time the Brandford/Lyne map was drawn, lots #8 and #9 were owned by the family of Joseph and Daniel Latham, ship builders, and the lots to the east were owned by members of the French family. The shipyard may have been known as the French shipyard because of Philip French's initial ownership of the land, and the French family's apparent continuing financial interest. However. it is likely that it was operated by the Latham family.

From the second decade through the end of the 18th century the East River shoreline between Beekman and Catherine Street was a center of ship building activity. "John Dolby, John Rivers and the brothers Joseph and Daniel Latham were, until William Walton eclipsed them all, New York's notable shipwrights" (WPA 1941:61). According to Wilson (1893 II:451; IV:507,523), Walton was the major New York shipbuilder during the 18th century. It would appear from the Bradford/Lyne map that Walton began his operations at the shipyard on block 106 and later expanded his operations. He may have taken over some of the other shipyards later in the 18th century. However, the Latham family apparently also continued in the shipbuilding business, as John Latham is noted as a famous shipbuilder in the immediate post-Revolutionary period (Bank of the Manhattan Co. 1914:31). In 1752 Walton's son built an elaborate house fronting on Queen Street at the present location of #324-326 Pearl Street (Stokes III:953; Townsend 1945; Wilson 1893:304-305), west of the study area. This location corresponds with water lots #13 and #14, which the elder Walton purchased from John Yerworth, as noted above.

5. The Duyckinck/Maerschalck Map

The Duyckinck/Maerschalck map of 1755 (see Figure 10) shows structures in the same locations as those associated in 1728 with the French ship yard and Van Horne board yard. The Walton house is presumably one of the structures shown fronting on Queen Street. This map also shows a structure fronting on Queen Street

directly north of the "French shipyard" structure. This structure also may have been located within the present study area.

The 1755 map as well as the 1766 Ratzer map (see Figure 11) indicate that by this time water lots had been granted and the land filled-in south of the present location of Water Street. Thus, in the later 18th century the focus of shipbuilding activity moved south of Water Street.

According to Stokes (III:998), Dover Street was laid out by 1766 as it is shown on the Ratzer map of this date. According to Moscow (1978) Dover Street was named after the English Channel port of the same name.

E. Late 18th - Mid 19th Century (ca. 1780's-1850's)

1. Late 18th Century Subdivision

By 1789 it appears that the former water lot #7 fronted on Dover Street. Henry Kip must have subdivided this property and constructed buildings prior to this year. The tax assessment records for 1789 indicate that Kip owned lots and buildings on either side of Dover Street; on the west side he was assessed for properties at #6, #8, and #10 Dover Streets. Kip did not reside on this property as, the City directories list his house at 25 King Street. The tax records indicate that tenants occupied buildings at #8 and #10 Dover Street. It is uncertain whether there was a building at #6. Although the house numbering system for Queen and Water Streets was different at this time than in the 19th century, it is probable that the buildings at 98 Water Street and 76 Queen Street correspond to the later #278 Water and 340 Queen Street. These corner lots were also owned by Kip, and tenants resided in buildings on both lots. Numbers 2, 4, and 12 Dover Streets do not appear in the 1789 tax records. However, by 1792 the tax records include listings for #2 and #4 Dover Street with a house indicated on the latter lot. The tax records indicate that a house was located at #12 Dover Street by 1799.

The lots at #96 Water Street and #74 Queen Street correspond with the later #276 Water and #338 Pearl Street. This land previously constituted water lot #8. We have not located the deeds which transferred this water lot from the ownership of Daniel Wiggins. However, the tax records indicate that this property was owned by Thomas Arden by the 1780's. Arden was also an absentee landlord, residing at 23 Beekman Street. The tax records indicate that both of these lots contained buildings with tenants by 1789. By 1800 Arden was deceased, and in that year his executors sold the portion of the property fronting on Pearl Street (#338 Pearl Street) to Frederick Davoue (Liber 58:412) and the portion fronting on Water Street (#276 Water Street) to Anthony Trepan (Liber 60: 420). These lots were described as extending 130 feet back from Pearl and Water Streets, respectively. Therefore, the Kip lots fronting on Dover Street would have only extended back some 25 feet from the Street.

Four of the 1789 tenants are listed in the city directories, John Kelly, a shipwright, resided at #8 Dover Street; William Spread, a shopkeeper, at #96 (#276) Water Street; William Kidson, a cabinet maker at #74 Queen Street (#338 Pearl Street); and Donald McKey, a hairdresser at #76 Queen Street (#340 Pearl Street - not in the study area). Since these individuals did not have separate business listings in the directories, it can be assumed that they both resided and conducted their business activities at these locations, a common practice during this period.

2. Lot Histories

The construction history of each lot between the late 18th century and ca. 1855 must be inferred from the tax assessment records and city directory listings. The former were examined for the years 1789, 1792, 1799, 1802, 1808, 1820, 1825, 1830, 1840 and 1850. The directories were examined for the same years (with the exception of 1825). Due to limitations of time, we were only able to locate some of the land conveyances for this period.

The sequence of occupation of the individual lots is presented in Appendix A and will be summarized here. There would appear to have been at least two building episodes on most of the lots during this period.

a. #2 Dover Street

A house would appear to have been present on this lot from the late 1790's through 1808. The nature of the occupants during this period, including a widow, a mariner and a laborer, indicate that the structure on this lot probably was purely residential during this period and not the location of a commercial operation.

Number 2 Dover Street was apparently unoccupied from sometime subsequent to 1808 through the early 1830's. A second structure was constructed prior to 1840. In common with the other houses fronting on Dover Street after 1830 this structure served solely as a residence. The directories indicate that all of the occupants had separate business addresses during this period (see Appendix A).

b) #4 Dover Street

A residential/commercial structure was apparently present at number 4 Dover Street from 1792 through 1808. Sometime prior to 1820, this house was apparently torn down or destroyed by fire, as there was a stable on the lot from 1820 through 1831, with a second house being constructed prior to 1840. In 1840 Bartholome Blanco resided at #8 Dover Street. By 1850 the houses at #4-#8 Dover Street were all owned by Blanco and his wife, Bertha. The Blancos by this time had shifted their residence to #4 Dover Street and apparently rented out the other buildings. By 1860 the Blancos also owned structures at #10 and #12 Dover Street in addition to the other three structures. By this year, the Blancos

no longer resided on Dover Street, having moved to East 11th Street. By 1870, the Blancos had added #278 Water Street to their real estate holdings.

c. #6 Dover Street

Number 6 Dover Street was apparently owned by John Hertell in 1792. Hertell resided at #7 Dover Street and rented #6 to Martin Lamb. Number 6 Dover Street was also the location of a stable belonging to John Young, who resided on the east side of Dover Street at #3. From 1802 through the early 1820's #6 Dover Street was the site of a boarding house and tavern. By 1825 this property as well as #4 and #8 Dover Street had apparently been purchased by Edmund Elmendorf as a real estate venture, since he had both his home and business office elsewhere. Elmendorf either demolished the residential structures (the buildings could also have been destroyed by fire), or converted them for use as stables. Elmendorf may have sold #4 Dover Street, and this property continued to be used as a stable through the 1830's. The 1831 tax records indicate that Elmendorf was in the process of erecting new buildings on #6, #8 and #10 Dover Street at this time. These latter buildings were used as residential structures.

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d. #8 Dover Street

Number 8 Dover Street was the residence of two shipwrights in the early 1790's. By 1799 John Hertell, who formerly owned #6 Dover Street and resided on the east side of Dover Street at #7, had apparently moved #8 Dover Street. As noted above, this lot contained a stable in the late 1820's and a new structure was then built by Elmendorf in 1831.

e. #10 Dover Street

Number 10 Dover Street contained a house in 1789 as noted above. However, the lot was apparently vacant from 1799 through 1831, when Elmendorf constructed a new structure on it, as it is not listed in the tax records for this period.

f. #12 Dover Street

The first structure at number 12 Dover Street was apparently built between 1792 and 1799. From the latter date though the early 1820's it was the location of a bakery. The lot was apparently vacant from this time through the early 1830's. By 1840 a new residential building had been erected.

g. #338 Pearl Street

The building at #338 Pearl Street was the residence of a cabinet maker and two hatters during the 1789-1800 period. These individuals also apparently carried out their commercial activities at this location. Frederick Devoue, a grocer, who purchased the property in 1800, is not listed in the directories at this address. In the 1830's and 1840's this building served as

a boarding house. However, Samuel Cowdrey, an attorney who was listed at this address in the 1825 tax records, also had his office here in 1930. Cowdrey also owned or leased the stable at #2 Dover Street in 1831. It is uncertain if there was more than one building episode during this period although a back building had been constructed prior to 1855 (see below).

h. #278 Water Street

Number 278 Water Street, at the corner of Dover and Water Streets, was the location of a grocery store through the 1830's, although a shoemaker and tailor are listed at this address in 1820. The building apparently served as both a residence and business location through this period. The property was apparently purchased by John Dunkin during the 1830's since the only John Dunkin listed in the directories had both home and office at other locations. It is not known whether Dunkin erected a new structure after he purchased this property.

1. #276 Water Street

Number #276 Water Street was the location of a grocery from the last decade of the 18th century through 1820. Prior to 1830 there may have been a second building episode on the lot, since from this time, the tax assessments and directories list two halfhouses on this property, listed as 276 and 276 1/2 Water Street. In 1830 #276 Water Street is listed as the home and business address of Edward O'Donnell, another grocer, while #276 1/2 is listed as the home and business address of a tailor. In 1840 O'Donnell was still at #276, while #276 1/2 was the business address of Benjamin S. Pier, a coppersmith, Pier's residence was elsewhere in Manhattan. In 1850, William Graves, also a coppersmith is listed at number 276, with Pier at 276 1/2. Graves residence in 1850 was in Brooklyn. From 1858 though 1890, Piers is listed in the tax records at both 276 and 276 1/2 Water Street. However, an advertisement in an 1873 directory (see Figure 12) indicates that Piers and William Graves were apparently partners in a coppersmithing business operated at 276 and 276 1/2 Water Street. Subsequent to 1840, modifications may have been made to the two half-houses to join them. As noted below, a rear extension was also apparently added to the building at some time prior to 1855.

F. Mid-Late 19th Century (ca. 1850's - 1880's)

Beginning in the 1850's, the availability of detailed atlasses and information included in the tax assessment records provide data on building configurations. It should be noted however, that inconsistencies in the records suggest that there were errors made or changes in recording practices.

1. #2 Dover Street

Tax records from 1858 - 1890 describe the 3 1/2 story building at

#2 Dover Street as having a frontage of 19 feet 10 inches on Dover Street and extending 30 feet rearward. The description given in the tax records is consistent with the configuration shown on the 1855/1857 Perris atlasses (Figures 13 and 14). The atlasses show an extension at the rear of the structure and an open backyard area. The records suggest that the structure was owned and/or occupied by William Hall from 1840 until ca. 1880. It is likely that it is the same building constructed during the 1830's.

2. #4 Dover Street

The structure constructed at Number 4 Dover Street ca. 1830 may also have stood through 1880. This brick structure was described in 1858 as a three story building having a 19 foot Dover Street frontage and a 38 foot depth, which corresponds with the configuration shown on the Perris atlasses (Figures 13 and 14). These maps show an open back yard area to the rear of this structure. The 1870 and 1880 tax records show depths of 42 feet and 26 feet, respectively. Building records dating to 1890 (see below) indicate that the depth at that time was 40 feet, suggesting that the 1880 records are probably in error. The other variations probably represent errors in recording or the presence of various building extensions or sheds.

3. #6-#10 Dover Street

Number #6, #8 and #10 Dover Street will be discussed together because of the common history of the backyard area of these structures. In 1858, #6 and #8 Dover Street had a frontage of 19 feet and #10 a 20 foot 2 inch frontage. Number 6 Dover street extended 26 feet, and numbers 8 and 10 extended 28 feet five inches west of Dover Street. It is likely that these three story brick buildings, are the same ones built in 1831.

Prior to ca. 1860, the land immediately west of these structures had a separate ownership from that of the house lots themselves. The earliest available tax assessment map dates to 1856 (see Figure 15). The lot numbered 568 on this map includes a strip of some 8.5 feet extending north of Water Street immediately west of #574 Water Street and a larger rectangular area extending to the rear of #574 and #576 Water Street and #6-#10 Dover Street. The 1840 tax records utilize the same lot numbering system as shown on the 1856 tax map. In 1840 this lot was owned by the estate of Joel Post and the assessment notes "stable in the rear."

By 1850 this odd-shaped rear lot was owned by Bartholome Blanco, who also owned #4-#8 Dover Street at this time. The transfer of title from George D. Post to Blanco occurred on August 1, 1846 (Manhattan Deeds Liber 480:321). The westernmost portion of this property (not within the study area) contained a "drain or water course" which ran southward from #336 Pearl Street to Water Street.

On November 13, 1854 (Manhattan Deeds Liber 673:665) Bartholome

Blanco sold to Benjamin S. Pier, whose coppersmith business adjoined the lot to the south. a small irregularly shaped parcel of land between tax lot #558 and Pier's property at #276 Water Street. The Perris atlas shows a structure located on tax lot #558 and the 1858 tax records indicate that this was a one story building owned by Blanco. The use of this building is unclear, but it is possible that Blanco rented this building to Pier for use in his coppersmithing business.

While the one story building on tax lot #558 is still shown on the 1867 Dripps map (see Figure 17), the 1862 tax map (see Figure 16) no longer shows lot 558 extending to the rear of #276 Water Street. The lots had been reconfigured so that the land formerly occupied by the one story building is once more available to be incorporated into the properties fronting on Dover Street. The tax records suggest that this in fact occurred by 1870, In that year the buildings at #6, #8 and #10 Dover Street are indicated as extending 42 feet west of Dover Street. In 1890 the depths of #6 and #8 are indicated as 36 feet with that of #10 remaining at 39 feet. The 1894 Sanborn map (see Figure 19) is consistent with these figures. It indicates that the three story brick buildings on these lots extended westward to a point north of the rear of #276 Water Street. These data indicate that a third building episode occurred on these three lots between ca. 1860 and 1870. It should be noted that the 1880 tax records indicate that the building depths for #6 and #8 (as well as #4) Dover Street as only 26 feet, which is inconsistent with the earlier and later records. As noted above for #4 Dover Street, it is likely that the 1880 tax records are in error.

4. #12 Dover Street

Number 12 Dover Street is described in all of the tax records examined from 1858 to 1890 as having a Dover Street frontage of 20 feet 2 inches and a depth of 28 feet five inches. It was apparently a 3 1/2 story brick building. This structure was probably the same one which was constructed in the 1830's.

5. 338 Pearl Street

From 1858 through 1890, the tax records indicate two structures at number 338 Pearl Street. The buildings are listed as having a 25 foot frontage and 53 foot depth. It is likely that the second building is the back structure shown on the Perris atlasses of 1855 and 1857 (see Figures 13 and 14). It is not certain whether the building fronting the street was the original building constructed on the property. Both buildings were described as having four stories in the 1858 and 1870 tax records. However in 1880 and 1890 one of the structures was described as a three story building. It is likely that this is due to changes in recording practice, rather than reconstruction of the building. The configuration shown on the Perris atlas indicates that there was an open area in the southwestern portion of the lot. The 1858 tax records for this property list Mrs. Eliza Cowdry (apparently the widow of Samuel Cowdrey, who may have previously owned the

property) and the Protestant Episcopal Mission for Seaman on this property. The 1870 records and subsequent land transfers (see below) suggest that by this time the Mission had purchased both buildings.

6. #278 Water Street

The building at the corner of Dover and Water Streets (#278 Water) is indicated in the 1858 and subsequent tax records as having a Water Street frontage of 27 feet and a 53 foot depth. It was apparently owned by John Dunkin from ca. 1840 though the 1860's when it was purchased by Bartholome Blanco, who by this time also owned #4-#12 Dover Street. This building, which covered the entire lot, was probably constructed during the ca 1840's-1858 period.

7. #276 Water Street

Number 276 Water Street was the location of the Piers and Graves coppersmithing business through this period. This property is listed as containing two 12 1/2 by 69 foot structures in the tax records through this period. The configuration shown on the 1855/57 Perris maps as well as the later 1894 Sanborn map, however, suggest that there was one single building fronting on Water Street and that the rear of this building possibly represents an extension to an earlier building. As noted above, it is likely that the structural modifications occurred in the mid-1840's - mid 1850's period.

8. <u>1880 Census</u>

The 1880 census provides further information about the utilization of the buildings in the study area at that time. The buildings fronting Dover Street were multifamily dwelling units. Number 2 contained five families, #4 four families, #6 nine families, #8 seven families, and #10 six families, while #12 contained two families and a number of single boarders. The residents were predominantly first and second generation Irish immigrants. As noted previously #338 Pearl Street was owned by the Protestant Episcopal Seaman's Mission and is noted in the census records as a Sailors Boarding House.

G. Late 19th - 20th Century (1890-1940's)

1. #338 Pearl Street

Beginning in the 1880's Richard K. Fox began to acquire property in and near the study area. In 1882 he purchased #340 Pearl Street at the corner of Pearl and Dover Street (not in the study area) from Jacob F. Oakley (Manhattan Deeds Liber 1640:5). Fox subsequently erected a seven story brick building on this property. An 1884 Department of buildings alterations application indicates that the building was used as a printing house (presumably for the Police Gazette (see below). In 1893 Fox

purchased 338 Pearl Street from the Protestant Episcopal Church Missionary Society (Liber 17:403) and the City of New York Department of Buildings alterations dockets (1893, #1183) indicate that in the same year he extended the building at #340 Pearl Street so that it now included #338 Pearl Street. The 1894 Sanborn map (Figure 19) shows the seven story building on these two lots. This map indicates an small open area, apparently a shaftway, at the southeast corner of the building. At this time the building housed the offices of the Police Gazette. The 1923 Sanborn atlas (Figure 21) indicates this structure as the *Fox Building. The Buildings Department records indicate that the building extended 94 feet 6 inches south of Pearl Street at #340 Pearl Street and 92 feet, 3 1/2 inches at #338 Pearl Street. The atlasses dating from 1902 through 1950 indicate that the building retained the same configuration through this period. Department of Buildings records indicate that the building was demolished in 1961. At that time the building was being used as a warehouse.

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2. #2-#8 Dover Street

The tax records indicate that Richard K. Fox also purchased #2 and #4 Dover Street during the 1880's. These were apparently the same ca. 1830's structures discussed above. In 1890, Fox modified both buildings (Department of Buildings Alterations 1890; #1273, #1491), raising them from three to four stories. These buildings apparently served at that time as part of the Police Gazette offices. They both extended 40 feet west of Pearl Street and had stone foundation walls and brick superstructures. Number 4 Dover Street was modified again in 1892 (Department of Buildings Alterations 1892, #106) by the addition of a three story extension 15 feet 8 1/2 inches wide and 13 feet 4 1/2 inches deep. The brick foundation walls for the extension were four feet deep. The 1894 Sanborn map (Figure 19) shows this three story extension and it also shows a two story brick extension at the rear of #2 Dover Street.

Richard K. Fox also purchased #6 and #8 Dover Street in 1894 (Liber 25:468) and 1890 (Liber 2281:455) respectively. The 1894 Sanborn map shows that at this time these two structures maintained the mid-19th century configuration discussed above, with open yard areas to the rear of the structures.

The New York City Buildings Department Record of New Buildings (1899, #228) indicates that in 1899 Richard K Fox erected a new building on the former site of #2-#8 Dover Street. The six story building had a brick foundation and superstructure. It measured 77 feet 3 inches fronting on Dover Street and 70 feet 9 inches in the rear. The structure is described as extending fifty two feet three inches west of Dover Street. The building records indicate that the structure was erected as a 40 family tenement with two stores on the ground floor. Construction was completed on March 31, 1900. As shown on the 1920 Bromley (Figure 20) and 1923 Sanborn (Figure 21) atlasses, the building had a "backyard" area or alleyway to the rear and sides and a central courtyard in the rear. The maps indicate that the rear alleyway was approximately

10 feet in width. The structure is indicated as the "Fox Flats" on the former map. Buildings Department records indicate that the building was demolished in 1961. At that time it was recorded as containing 24 apartments.

3. #10 Dover Street

As of 1894 (see Figure 19) #10 Dover Street was a three story brick building which extended 39 feet west of Dover Street. As noted previously this building was probably constructed between 1857 and 1870. A yard area extended some 11 feet west of the northern portion of the building. There was a three story brick extension in the southern portion. While the Sanborn maps (Figures 19 and 21) and the earlier tax records indicate that that this structure had three stories, the Bromley maps (Figure 20) show a four story building. Plans for an alteration of the building filed with the Department of Buildings in 1923 also show a four story structure. The plans called for the building to be extended to cover the former yard area. The maps do not indicate that these alterations were carried out. The 1923 Sanborn map shows that at that time the building was the location of a waste paper warehouse or processing business. Although the 1950 Ullitz map (Figure 22) continues to show this structure, the Buildings Department records indicate that it was demolished in 1943. Prior to demolition the structure was vacant and had been boarded up.

4. #12 Dover Street

Subsequent maps indicate that the same ca. 1830's structure shown on the 1894 Sanborn map (Figure 19) continued to stand at #12 Dover Street through the 1950's. The 1923 atlas (Figure 21) indicates that this building also housed a waste paper business at this time. There are some discrepancies as to the height of the building as shown on the various maps. The Sanborn maps indicate the structure as having three stories while the Bromley maps indicate it as a four story building and the Ullitz map shows it as having 3 1/2 stories. Department of Buildings records indicate that this building, as well as the one at #278 Water Street, was demolished in 1961. It was described at that time as a four story tenement with four apartments.

5. #278 Water Street

The mid-19th century building at #278 Water Street also continued to stand throughout the period. It was described at the time of demolition as a tenement with four apartments. The building had a 27 foot frontage on Water Street and extended 53 feet along Dover Street.

6. #276 Water Street

The 1894 Sanborn atlas indicates that the building at #276 Water Street (the location of the Piers/Graves coppersmith shop) had a main portion with a rear extension. Again there are discrepancies in the building height as shown on the atlasses, with the front

portion shown as 2-3 stories and the rear portion as 1-2 stories in height. Buildings department records indicate that the structure was demolished in 1962. It was described at that time as a 2 1/2 story warehouse with a 25 foot frontage and extending 30 feet north of Water Street. This may indicate that the rear extension had previously been demolished. A wall is visible on the site in the approximate location of the rear wall of the extension to this building, some 69 feet north of Water Street (see Plate 4). Another wall, visible on the surface immediately to the north, may represent the rear extension to #10 Dover Street as shown on Figures 18-22.

III. POSSIBLE ARCHAEOLOGICAL RESOURCES

The history of the study area as outlined above indicates that several types of archaeological resources may be located within the study area. An important factor in assessing the presence of some of these resources is the original topography of the East River shoreline in and near the study area. The ca. 1716 Burgis view and Stokes commentary on it indicate a bluffed shoreline at this location, with the land sloping downward to the east and west of this area. Considerations of the 20th century street grade in this area suggest that the Burgis view is probably accurate in this regard. The grades shown on the 1923 Sanborn map (see Figure 21) are consistent with those shown on other 20th century maps examined and with observations of the area. Thegrade at Dover and Pearl-Street is approximately 23 feet while it is only-12 feet at the corner of Peck Slip and Pearl Street. grades at Water Street and Dover Street and Water Street and Peck Slip are only 8 and 5 feet respectively. This would be consistent with the presence of bluffs along the present course of Pearl Street with subsequent land filling raising the grade near Water Street above the high water mark but not to the level of the bluff-top area.

The distance to which the bluff-top area extended southward of the present location of Pearl Street cannot be accurately determined. Stokes' reconstruction indicates the high water mark approximately 85 feet south of Pearl Street, which would place the bluff-base area near the rear of the lot at #338 Pearl Street. The original shoreline is shown on the 1881 Robinson map (Figure 18) as passing through the northern portion of the lot at #4 Dover Street, somewhat south of this point. These shoreline reconstructions are of doubtful accuracy, however.

A. 17th Century Ferry

The location of the first ferry to Long Island, established ca. 1640 was, according to Stokes (1915-1927) and Innes (1902) at Dover and Pearl Street. However, if the Burgis view reconstruction of the shoreline is accurate, the location of a ferry at this site would necessitate passengers ascending and descending the bluffs to the ferry dock. The lower portions of the shoreline east and west of the study area would appear to have been more suitable for the ferry location. If the location of the ferry dock was actually at the location of Dover and Pearl Street as it was located at the time the that Stokes and Innes were writing, the site would have been located some 25 - 50 feet east of the study area. However, it is unlikely that these authors' reconstructions are sufficiently accurate to precisely locate the ferry.

Any archaeological traces of the ferry would be located beneath the later fill deposits (see below). Possible remains would be wooden posts associated with the ferry dock (and preserved in the subsequent anaerobic, water-logged environment), post molds (from decayed posts), and/or refuse possibly discarded by ferry passengers.

The location of the ferry house, which possibly also served as the early 17th century residence of David Provoost, is uncertain. By the end of the 17th century the ferry house was located west of the study area, but the earlier location may have been different. In any event, the ferry house would most likely have been located at the top of the bluffs, closer to Pearl Street, than the actual ferry dock at the base of the bluffs.

B. Early 18th Century Landfill and Wharf

The documentary history indicates that landfill was deposited between the high and low water marks between 1701, when the water lot grants were made, and ca. 1716; the period depicted in the Burgis view. Landfill deposits have been excavated at several locations in lower Manhattan. Many of these deposits have proved to contain quantities of artifacts and faunal remains which have provided information on life in New York City at various periods during the 17th-18th centuries. In some cases it has been possible to make inferences as to the possible sources of landfill material.

Although the grants to lands under water specify the northern limit of the grants as Queen (Pearl) Street, the actual deposits would have been located south of the bluff base. The terms of the Water Lot grants indicate that the southern boundary of the water lots was located approximately 210 feet south of Pearl Street at the study area location. The terms of the grant called for the construction of a 30 foot wharf on the south side of the water lots, which then would constitute the location of a public street. The 1728 Bradford/Lyne map indicates that the filled-in area extended approximately 200 feet south of Pearl Street, which is consistent with the terms of the grants. This map indicates that Water Street was not yet in existence at this location although it is shown further to the west. However, a fillretaining structure must have been constructed at the southernmost extent of the filled-in area. Assuming that the south side of Pearl Street is at the same location as in the early 18th century, the fill-retaining structure would be present within the study area in the northern portion of the lots at #276 and #278 Water Street (210 feet south of the Pearl Street sidewalk). Widening of Pearl Street and the likely addition of a sidewalk since the early 18th century suggests that the northern edge of this structure may actually be located somewhat north of this point. The fill between the location of the early 18th century wharf and the present location of Water Street would have been deposited later in the 18th century.

If, as is likely, the landfill was deposited to create a dry and level area at the base of the bluffs, and the pre-landfilling ground surface sloped downward from the bluff base to the low water mark, the depth of fill would have increased from north to

south. The 20th century street grade at the corner of Dover and Water Street is some 8 feet, and the grade at Peck Slip and Water Street is some five feet above high water. Allowing for some accretion in the surface between the early 17th and the 20th centuries, the depth of fill in the southern portion of the study area should be represented by the difference between the low and high water mark plus an additional amount of fill amounting to less than 8 feet.

It should be noted that the types of fill retaining structures uncovered in previous lower Manhattan excavations vary with the distance from the original shoreline. In the near-shore environment, such as that encountered at the 7 Hanover Square block, landfill was deposited behind stone walls, which were also used as structural foundations. Landfilling further out into the original river was deposited behind massive cobble-filled log cribbing structures like those exposed at the Assay Office site.

At the 175 Water Street site, a ship was used as a fill-retaining structure. However, it is unlikely that this type of fill-retaining structure would have been used at the low water mark which represents the outer margin of the original water lot grants on block 106. More likely structures would be stone walls or cobble-filled log wharves.

1. Depth of Fill Deposits

Records of a series of borings (#173-#178) taken in 1950 along the former course of Dover Street between Pearl and Front Streets were obtained from the Borough of Manhattan Bureau of Topography, Subsurface Exploration Section. These records provide information as to the depths of fill present and the nature of the prelandfilling surface (see Appendix B). The borings show the presence of some 12 feet of fill near the corner of Water Street, with greater amounts of fill, between ca. 18 and 26 feet, both north and south of this point. The greater amounts of fill to the north would have been required to allow the grade of Dover Street to meet that of Pearl Street in the original bluff-top area. Much of this fill was probably deposited at or subsequent to the time that Dover Street was opened in the second half of the 18th century, rather than at the time of the initial landfilling in the early 18th century. As discussed below, the depths of fill deposited on block 106 are probably less than those indicated in the Dover Street borings. The greater amounts of fill to south of Water Street were necessary due to the increasing river-bottom depth.

The changing nature of the sub-landfill surface is indicated in the boring logs. Brown or gray sand is indicated beneath the fill in borings #173-#177, indicating a tidal or near-shore environment. River bottom silts, indicating the presence of deeper waters further from shore do not appear in the borings until #178, taken at Front Street.

Two additional logs represent earlier borings at the corners of

Dover and Pearl, and Dover and Water Streets. The results of these borings are not entirely consistent with the results of the 1950 borings. Boring #37, at the corner of Dover and Water Street indicates the presence of 10 feet of fill, roughly consistent with the results of boring #175. However, the indicated surface elevation of +13 feet is not consistent with the elevation of ca. +10 feet at the location of boring #175 further to the north or with the street grade of ca. 8 feet indicated on various maps. Boring #38 at the corner of Pearl and Dover Streets also indicates the presence of 10 feet of fill, and a surface elevation of +19 feet. The reason for the presence of this amount of fill at the former bluff-top location is uncertain. It could be due to accretion caused by repaving of the street over a period of 200 years. This would indicate that the height of the original bluffs was closer to ca. +10 feet than +20 feet. However, it is possible that the indication of some 10 feet of fill at this location is due to the location of the boring at the former site of some previous disturbance (such as a former basement which extended eastward to the location of the boring) or that the designation of the material as fill was erroneous.

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C. Early-Mid 18th Century Shipyard

The documentary research indicates that a shipyard, known as the French shipyard, but probably operated by the Latham family, was located within the study area prior to 1728. The Bradford/Lyne map of that year indicates that a structure, presumably associated with the shipyard, may have been located in the study area or immediately to the east. The map indicates that the structure would have been situated approximately 1/2 of the distance from Queen Street to the southern margin of the filled-in area. This would place it in the area of #2-#4 Dover Street. Surficial refuse associated with the operation of the shipyard would have accumulated at the surface of the land-fill deposits. Building foundations and "features" such as cisterns, wells and privies associated with the shipyard would have been excavated beneath the surface of the landfill.

D. Domestic/Commercial Deposits: Late 18th - Mid 19th Century

In the late 18th century the land included within the study area was subdivided and used for domestic and/or commercial purposes with the first structures built prior to 1789. Archaeological deposits associated with these structures would most likely be found within "features" such as cisterns, privies and wells, which were most frequently located in backyard areas. Deposits within such features could date to the period of use of the feature, or as is more frequently the case, represent refuse deposited after the feature was no longer in use. It is also possible that archaeological deposits could be present in the form of surface refuse deposits in backyard areas. Deposits in basements, while found less frequently, are also possible especially when earlier structures were destroyed by fire, with later structures built on the rubble of the first structure. In such instances deposits would be present beneath the basement

floors of the later structures.

In addition to domestic refuse, deposits on some of the lots could be associated with late 18th and early 19th century commercial activities. These include a boarding house and tavern at #5 Dover Street, a bakery at #12 Dover street and a grocery store and coppersmith's shop at #276 Water Street. Data indicate that there were at least two separate building episodes on each lot between the late 18th and mid 19th centuries. The data suggest that the second major construction episode occurred between 1830 and 1840 on the lots fronting on Dover Street, with stables present on at least three of these lots between the episodes of domestic construction. The second construction episode on the other lots may have occurred somewhat later. If new cisterns and privies were constructed, those associated with the first building episode may have been filled-in at this time. Features associated with the second construction episode would not have been filled-in until sometime after the completion of the Croton Aqueduct in 1842. After water and sewage lines became available, it became the responsibility of the individual property owner to provide the connection between the building and the public facilities. After this connection was made the backyard features were often filled-in, sometimes with refuse.

The size of the late 18th - mid 19th century structures and the locations of the associated backyard areas and the cisterns, wells and/or privies is not known with certainty and must be inferred from the available data. As discussed in the previous chapters the former water lot #8 was subdivided into two lots fronting Pearl (#338) and Water (#276) Streets. The backyard of the first structure on #276 Water Street and part of the backyard area of #338 Pearl Street are included within the present lot #22. "Features" could have been located anywhere within these yard areas. Since these structures had large backyard areas, it is most likely that cisterns would have been located close to the structure, with the privies located closer to the rear boundary line of the lot.

The first lots to front on Dover Street would have extended back only some 25 feet from the Street to eastern boundary of #276 Water Street and #338 Pearl Street. It is possible that the backyard features associated with the Dover Street structures could have been located west of the actual lot boundary. However, since the lots fronting Water and Pearl Streets had a different owner than those fronting Dover Street, it is more likely that the first structures extended only ca. 20 feet from the Street and that the "features" were located immediately at the rear of the structures and adjacent to the rear boundary of the lot. In this event only a portion of the backyard areas of the first structures built on #8, #10 and #12 Dover Street would be located within the boundaries of the present lot #22 (see Figure 23). Since the features would have been close to the lot line, however, this portion would probably have included at least a portion of the backyard "features". None of the backyard area of the late 18th century structures on #2 or #4 Dover Street would

have extended into the study area.

The available data indicate that the second, ca. 1830's, structures built on the lots fronting on Dover Street are the same ones shown on the 1855/57 Perris maps. These maps and tax records dating to the same year indicate that the structures at #2 and #4 Dover Street extended onto the land previously included within the #338 Pearl Street lot. The backyards of these structures and the associated ca. 1830's features would, therefore, have been located within the boundaries of the present lot 22 (see Figure 23).

The lot configurations and backyard areas for the ca. 1830's construction episode at #6-#12 Dover Street would probably have been similar to those of the late 18th century. The deeds, tax records, and 1855/57 maps indicate that through the 1840's #276 Water Street and the land north of it continued to have separate ownership than the lots fronting Dover Street. The location of backyard features for buildings at #6-#12 Dover Street during this period may have been similar to that of the earlier structures. The 1855/57 Perris maps (Figures 13 and 14) show small open areas at the rear of #8-#12 Dover Street as well as #278 Water Street. These may have been the locations of the privies, and possibly also cisterns and or wells of the ca. 1830's buildings. There is no such open area at the rear of #6 Dover Street. However the open area at northeast corner of #8 Dover Street appears to be larger than those at #8-10 Dover Street, and privies for both the #6 and #8 Dover Street structures may have been located in this area. It should be noted that both of these structures were apparently constructed by the same person (Edmund Elmendorf) in 1831. A portion of the open areas at #10 and #12 Dover Street and at #278 Water Street would fall within the boundaries of the present lot 22. The open area at the rear of #8 Dover Street would appear to be east of the study area boundary.

Since it was the responsibility of each property owner to connect to City water and sewage lines, it is uncertain when cisterns and privies were no longer required on the Dover Street properties. As discussed in the previous chapter, a third building phase apparently occurred on #6-#8 Dover Street subsequent to 1857 and open backyard areas were associated with these structures. It is possible that "features" were located in these backyard areas.

E. Disturbance and Preservation of Deposits

During the mid 1840's - mid 1850's period the buildings at #276 and #278 Water Street were probably extended northward, covering a portion of the previous backyard areas of these lots. The buildings constructed at #6-#10 Dover Street after 1857 would have covered the previous backyard areas although, as noted above new backyard areas were associated with these structures. In the 1880's extensions were built at the rear of #2-#4 Dover Street, affecting the former backyard areas of the ca. 1830's buildings. An extension was also built in the southern portion of the

backyard area of #10 Dover Street.

A final construction phase occurred at the end of the 19th century affecting #338 Pearl Street and #2-#8 Dover Street. A seven story building was constructed on the former lot covering all of the mid-19th century backyard area except for a narrow strip in the southwest portion of the property. The Fox Flats, constructed at #2-#8 Dover Street covered most of the former backyard area except for an approximately 10 foot wide strip at the western portion of these lots and additional strips extending eastward at the northern, southern, and central portions of the building.

2

The extent to which later construction would have affected earlier deposits is usually assessed by determining the depth of the basements of the most recent construction phase, assumed to be the deepest of the basements. Where these basements are relatively shallow, it is assumed that the lower portions of earlier backyard features can be preserved beneath the later basement floors. The Buildings Department records cited previously provided data on foundation and building depths for most of the lots. The extension built at the rear of #4 Dover Street in 1892 (Alterations Docket #106) had foundation walls 4 feet deep; no basement is indicated. This extension was located at the site of the later Fox Flats. The new buildings record for the latter building (1899, #228) indicates that the foundation walls for this building were 10 feet deep. This presumably also indicates the approximate basement depth. The 1923 alteration plans for #10 Dover Street indicate that this structure had a nine foot deep basement. Finally, the plans for the extension of the Fox Police Gazette Building at #338 Pearl Street (1893, #1183) indicates that the foundation walls for this building were 20 feet deep.

The records do not indicate the foundation or basement depths for #12 Dover Street, #276 Water Street or #278 Water Street. The late 19th - 20th century maps (Figures 19-22) indicate that all of these structures had basements, however.

On most sites, basement depths of 9-10 feet would suggest that any features present in former backyard areas would have been either removed entirely or substantially truncated. However, examination of the study area and considerations of site topography and history suggest the liklihood that, with the possible exception of #338 Pearl Street, backyard features in addition to any features associated with the 18th century shipyard may remain largely intact beneath the basements of the later buildings and building extensions.

The 1894 Sanborn map (Figure 19) shows an open back yard area at the rear of #274 Water Street and west of #6 Dover Street. The building at #274 Water Street is still standing. The back building north of this open area and at the rear of #336 Pearl Street (see Figure 19) has been demolished and a parking lot is now present on this property but examination of the site

indicates that the open backyard area between the two building sites is still present (see Plate 5). Examination of the site also indicates that the surface of the this backyard area is actually some 12 feet below the surface level of the vacant lot at #6 Dover Street, which is approximately at street grade. The basement level of #274 Water Street is visible on the southern side of this open backyard area with the first floor at the level of Water Street (see Plate 6). The rear basement wall of the former back building at #336 Pearl Street is also visible at the northern side of the open area (see Plate 7). This suggests that the basements of these buildings, rather than being excavated below A surface at street level were built upwards from a surface which was below street level.

Dover Street slopes downward from an elevation of some 23 feet at Pearl Street to some 8 feet at Water Street. Elevations at the Dover Street boring locations discussed above indicate that the street grade east of the open backyard area of #274 Water Street is ca. +16 feet, indicating that the elevation at the base of the open area is some +4 feet. This may be close to the level to which the land at the base of the bluffs was filled in the 17th century. After Dover Street was opened in the mid-18th century, the street location may have been built-up with additional fill, but the entire block was probably not filled level with the street. The first floor of structures would have been at the street level, with basements being built up from the level of the fill to this street level. It is possible that the foundations for these buildings were built in trenches excavated into the fill, since there would have been no need for additional basement depth. The back yards of these and subsequent buildings may have been at or near the original level of the landfill, although some accretion of the back yard surfaces may have occurred over the 200 year period of occupation of the area. If this method of construction was used, the construction of later buildings, even those with deep basements, would probably not have resulted in the destruction earlier backyard features. If accretion of surfaces occurred between construction episodes, surficial deposits also may remain intact.

It should be noted that there is a concrete walkway and metal gate at street level immediately east of the open backyard area north of #224 Water Street discussed above (see Plate 7). A hole in this surface opened by erosion reveals brick rubble beneath the concrete. Examination of the eastern side of the open area revealed, also, the remains of a stone foundation and brick superstructure wall. This probably represents the rear basement wall of the "Fox Flats", built at #2-#8 Dover Street in 1899. The concrete walkway probably represents the "courtyard" shown at the rear of the Fox Flats on the various 20th century maps which was apparently the first floor (street) level. The basement of the building probably extended beneath the "courtyard". We have assumed, however, that the backyard areas of the earlier, smaller structures would have been below the street level, at approximately the level of the remaining open area at the rear of #254 Water Street.

Thus, despite the 9-10 foot basement depths indicated by the records for the latest buildings constructed along Dover Street, it is likely that backyard areas of the earlier structures, and possibly the basement floors of these buildings, remain intact beneath the basement floors of the most recent buildings. This would also be the case for the buildings fronting Water Street (#276 and #278). However, it is uncertain whether any remains of earlier backyard areas would be preserved at #338 Pearl Street. Reconstruction of the original topography suggests that the bluff-top area extended south of the present location of Pearl Street. Excavation of a 20 foot deep basement for the most recent building at #338 Pearl Street would have destroyed any archaeological deposits on or excavated beneath the bluff-top surface.

It should be noted however, that the 20 foot basement depth of the most recent building at #338 Pearl Street is approximately the same as the elevation of the Pearl/Dover Street intersection. This raises the possibility that the front part of this building was constructed in the bluff-top area and involved excavation for the 20 foot basement. However, the rear of the building, which extended some 92 feet south of Pearl Street, may have reached the original bluff-base area. It is uncertain whether the backyards of earlier structures on this lot would have been at the level of Pearl Street or at the lower landfill level. In the former case any backyard archaeological deposits would have been destroyed by construction of the "Police Gazette" building. In the latter case, such deposits may remain beneath the rear portion of the basement floor of this building, as discussed above.

IV. CONCLUSIONS AND RECOMMENDATIONS

As a result of this documentary study and archaeological assessment it is our opinion that block 106, lot 22 is, in general, highly sensitive for the presence of archaeological remains dating from the early 18th century through the 19th century. Such remains could be associated with:

- 1. Landfill deposited and landfill retaining structures constructed between 1701 and ca. 1716. Landfill deposited later in the 18th century may be present in the extreme southern portion of the study area
- 2. A shippard present prior to 1728 through the mid-18th century.
- 3. Domestic, commercial and mixed domestic/commercial occupations of nine separate building lots beginning prior to 1789 and extending through the mid-19th century.

Remains associated with the shippard and the domestic/commercial occupations could be represented by structural features, surface refuse and/or refuse deposited in wells, cisterns, privies and other sub-surface "features".

It is also possible that remains associated with the first ferry which ran from Manhattan to Long Island could be present in the study area, although the precise location of this ferry cannot be accurately determined. Such remains could be in the form of posts and/or post molds associated with the ferry dock and/or refuse deposited by ferry passengers. Any such remains would be present beneath the later landfill deposits.

Examination of the project area and consideration of the original topography suggest that the basements of buildings constructed in most of the study area were built upwards from a surface which may have been near the elevation of the 17th century landfill. It is very likely that this type of construction would have resulted in features and possibly other deposits from earlier construction episodes remaining largely intact.

Any prehistoric remains in the project area would most likely have been present in the northern portion of the study area (later occupied by #338 Pearl Street) which contained the 17th century bluff-top area. Any such deposits would have been destroyed by later construction. Therefore the project area is not considered sensitive for intact prehistoric archaeological sites.

In terms of assessing the relative sensitivity of various portions of the study area, several factors need to be considered. The early 17th century landfill deposits would be present from the bluff base area southward, with depths of landfill increasing to the south. Although the location of the

bluff-base area cannot be precisely determined we have assumed that it was in the vicinity of the southern part of #338 Pearl Street. The initial landfilling episode would appear to have extended to the vicinity of #276 and #278 Water Street, with the first landfill retaining structure constructed south of this point. Therefore, the best location for sampling the landfill deposits and determining the presence of fill retaining structures would appear to be at the rear of #276 Water Street and west of #10-#12 Dover Streets. Landfill landfill deposited south of the retaining structure later the 18th century could be sampled in the southern portion of #276 and #278 Water Street

Any remains associated with the shipyard would probably have extended from the base of the bluffs to the first fill retaining structure (#2-#12 Dover Street). The structure shown on early-mid 18th century maps in or near vicinity of the shipyard may have been in the vicinity of #2-#4 Dover Street.

The most likely locations for deposits associated with the late 18th-19th century domestic occupations are the backyard areas of the buildings which fronted Dover, Pearl and Water Streets. The portions of the present lot 22 where deposits from various periods would most likely be located are summarized in Figure 23.

The last building to stand at #338 Water Street, extending some 90 feet south of Pearl Street, had a 20 foot deep basement. The area covered by this building would have included the original bluff-top, which would have been destroyed by this construction episode. If this building extended to the bluff base, any landfill deposits in this area are likely to have been shallow. The construction of this building would be more likely to have removed such deposits and later features, than the buildings constructed in the other portions of the project area. This area is, therefore, considered less archaeologically sensitive than the remainder of the study area.

It is recommended that a program of sub-surface testing be undertaken on block 106, lot 22 to determine the actual presence or absence of the possible archaeological deposits discussed above. The strategy for such a testing program is discussed in the following section.

V. TESTING STRATEGY

Archaeological testing to determine the actual presence of archaeological remains on block 106, lot 22 is complicated by the presence of an estimated 10-12 feet of rubble within the basements of the last structures to stand on the property. In addition, since each lot has had a different history since the late 18th century the presence of significant deposits in the study area could not be ruled out without examining each lot.

A two step program of testing is recommended. The first step would consist of a program of archaeological borings using a large diameter split-spoon sampler. Such borings could involve continuous sampling from the surface or the driving of a casing to a depth approximating the basement depth of the latest structures to stand on the property with continuous sampling from this depth to the a depth beneath the base of the landfill deposits. An archaeologist should be present during the conduct of the borings to record the stratigraphic column indicated by each sample and to screen the soil recovered to detect the presence of artifacts.

The borings would provide additional information to be used in the selection of areas for further testing. It is anticipated that the borings would enable the determination of the presence or absence of artifact deposits within the landfill, as well as surficial deposits which may have accumulated after the landfilling. It should be noted, however, that this method is of limited use for the detection of archaeological deposits within features, since such features are of limited extent compared with the total study area. Another expected problem with archaeological borings is the penetration of the brick and other rubble contained within the foundations. The cost estimate for the archaeological borings assumes that each boring would reach an average depth of 20 feet and that one boring would be placed in the backyard areas of the each of the nine lots which fall within the boundaries of the present lot 22.

The second step in the testing program would involve the removal, using heavy power equipment, of the rubble from the foundations of the last structures to stand on two of the lots. This would enable the detection and testing of backyard features as well as the testing of deposits detected as a result of the borings. The lots would be selected based on the results of the present assessment as well as the archaeological boring program. After removal of the basement rubble the basement floors of the last buildings constructed would be removed under archaeological supervision. Underlying deposits would be tested manually, and/or backhoe trenches dug to determine the presence of any surficial deposits. Subsequently, additional clearing may be necessary using power equipment (backhoe) to detect the presence of features which would then be manually sampled.

A major cost involved in this type of testing is associated with the removal of the basement rubble. Clearing of the portion of each lot which contains former backyards and which falls within the project area would involve the excavation of approximately 6250 cubic feet of rubble.

Many of the archaeological sites in New York City have been severely disturbed by looters during excavation. Therefore the site should be fenced and night and weekend guards provided during the excavation program.

BLOCK 106, LOT 22 ARCHAEOLOGICAL TESTING PROGRAM - PART I IMPLEMENTATION BUDGET

Archaeological Personnel:

Field Testing \$2500 Laboratory Processing, 1400 Analysis and Report

\$3900

Rental of Boring Rig

4500

and Operators

Miscellaneous Expenses 100

Total \$8500

BLOCK 106, LOT 22 ARCHAEOLOGICAL TESTING PROGRAM - PART II IMPLEMENTATION BUDGET

Archaeological Personnel:

Field Testing \$ 9500 Laboratory Processing, \$14000

Analysis and Report

\$23500

Rental of Heavy Equipment 12000

and Operators, Fencing and Site

Security

Miscellaneous Expenses 4000

\$39500

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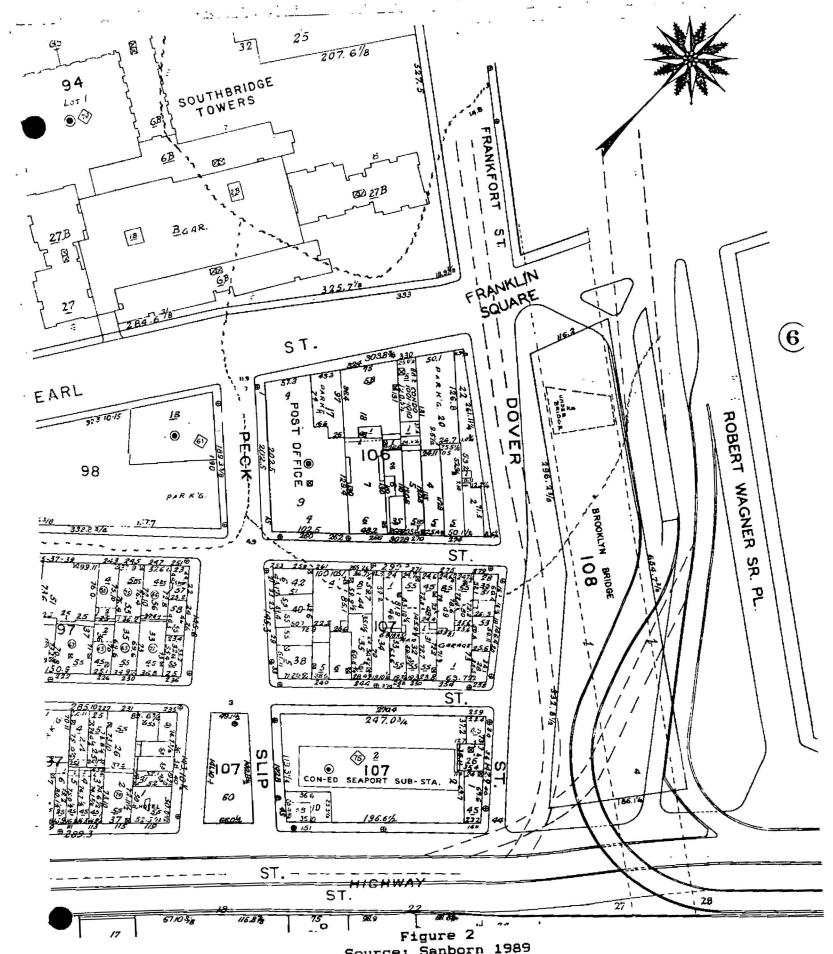
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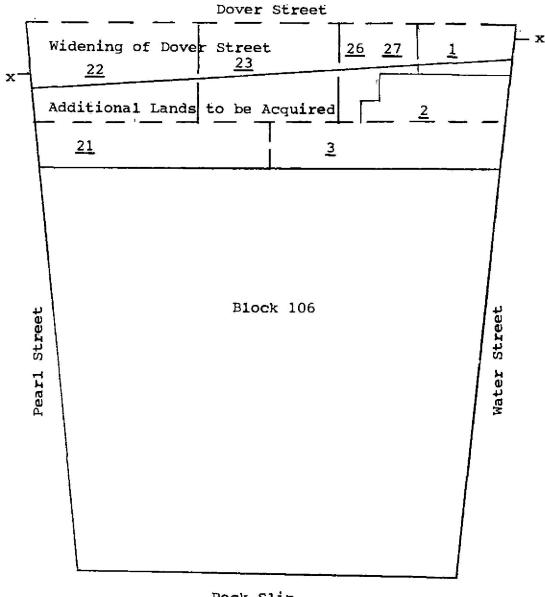
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FIGURES





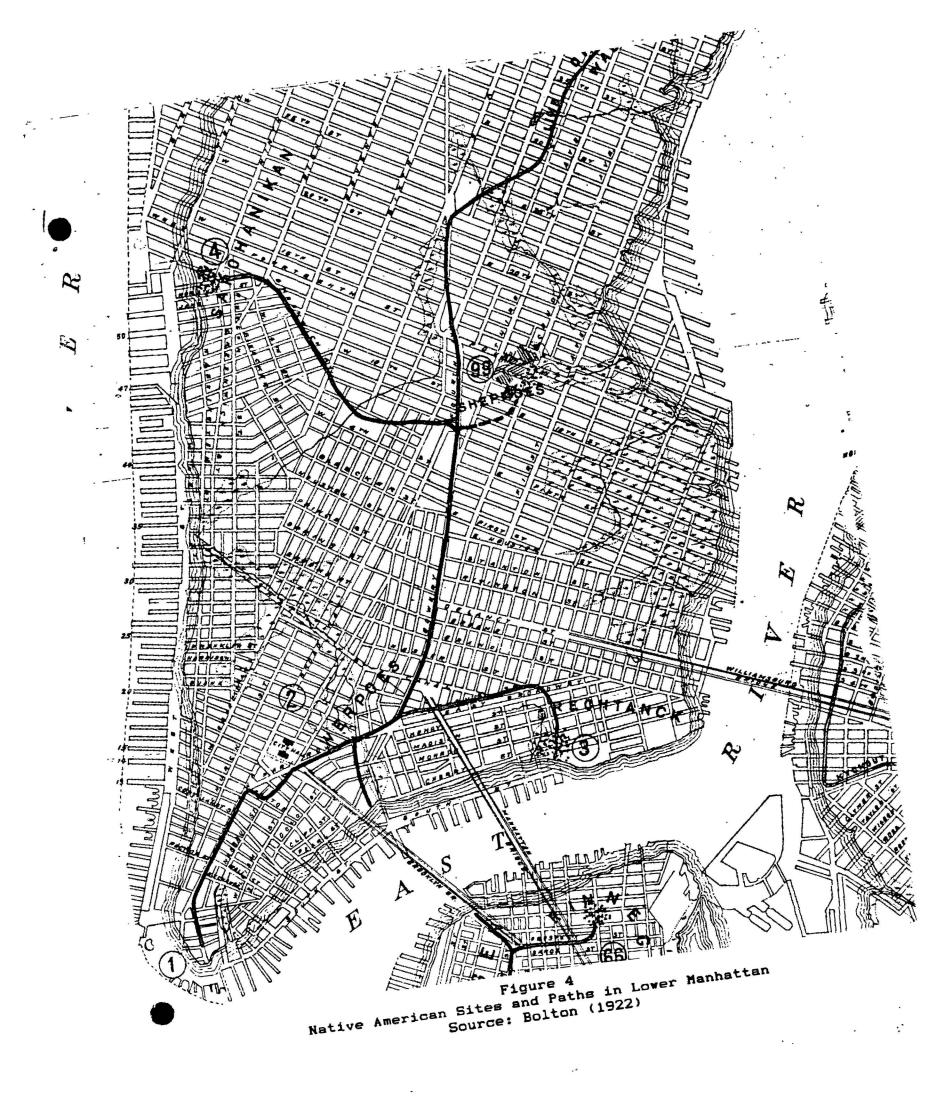
Source: Sanborn 1989 Scale: 1"=120'



Peck Slip

Figure 3
Source: Borough of Manhattan (1958)
Scale: 1*==50'

Notes: Additional Lands to be Acquired = Present Lot 22 x - Indicates Approximate Present Location of Dover Street Sidwalk (Not on Original Map)



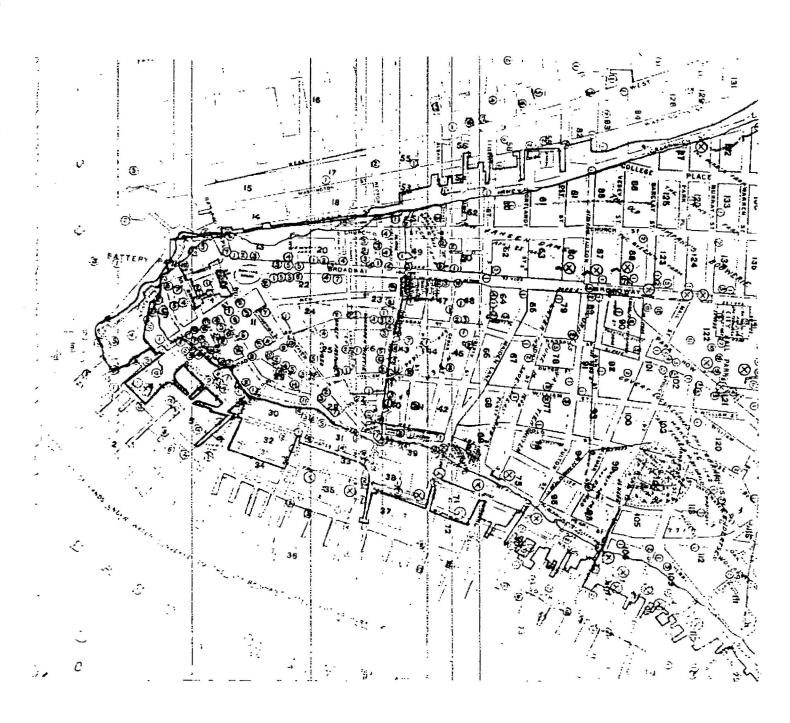


Figure 5
Map Showing New York City Landmarks
and Original Shoreline
Source: Stokes (1916, III)

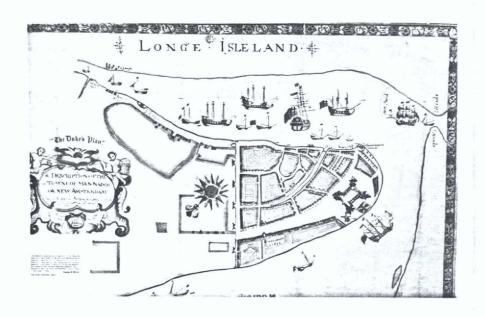


Figure 6a
The Duke's Plan (1664)
Scale of Original: 1"=200'

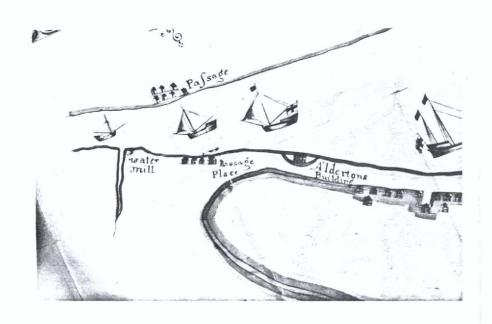


Figure 6b
The Duke's Plan (1664) - Detail
Scale of Original: 1*=200'

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Figure 7 1701 Water Lot Grants - Block 106 Not to Scale

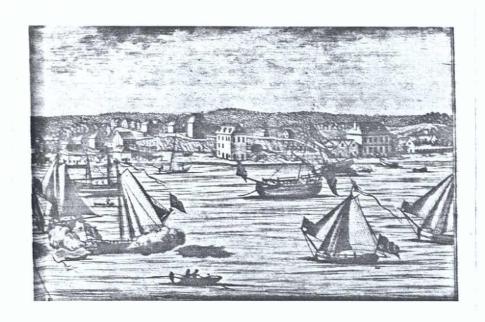


Figure 8a
The Burgis View (1719-1721)
Source: Stokes (1915 I:Plate 25)

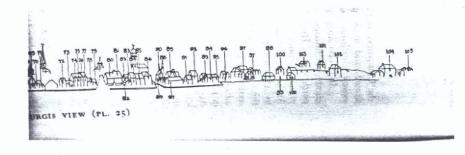


Figure 8b Key to Burgis View Source: Stokes (1915 I:132)

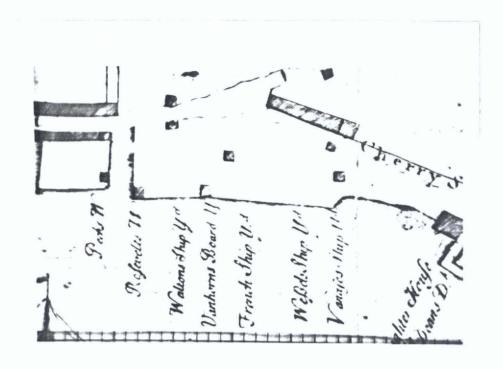


Figure 9
Source: Lyne 1728
Scale of Original: 1"=ca. 260'

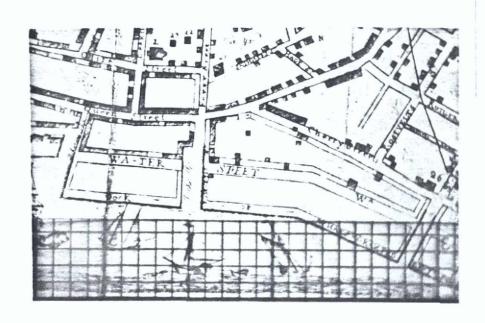


Figure 10 1755 Duyckinck/Maerschalck Map Source: Andrews (1900)

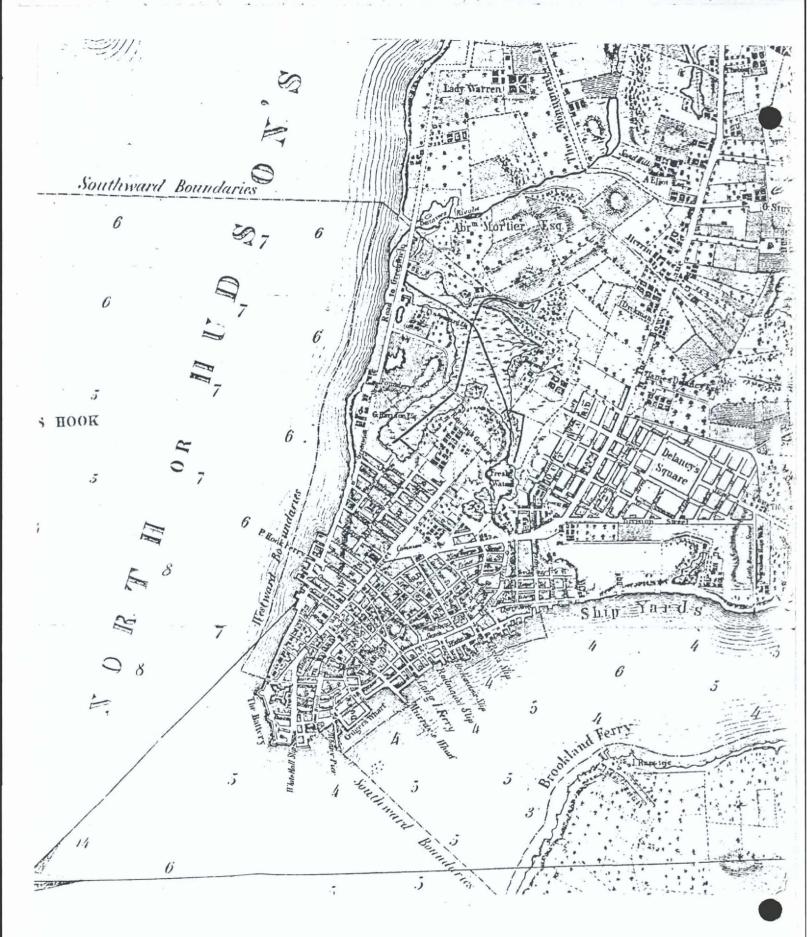


Figure 11 Source: Ratzer (1766)

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GRAVES & PIER,

Coppersmiths,

276 WATER STREET, NEW YORK.

Detalled, Ricewood, Hatters, Dayed, and Vacanch Makerd Kerties, &c. Whole ale Conferencers to solving Pane, &c., at short nonce. Also, Vacanin and so, far Pane

THOMAS HARRISON'S SON,

In 1 M guifacturer of Copper and Castifron Vacuum Pans, Hough Patent Surface Condensers, all kinds of Copper the line to the senar Lecture on Distilleries Removeres, Stramschop, and Steum-less Works. Estimates and Drawings furnished for Machinery, &c.

260 & 261 WEST STREET, between Laight & Vestry Sts., NEW YORK.

Fear Perk S. p.

DONECAN & REILLY,
Coppersmiths & Plumbers,
Sitain & Gas Fitters, Bross Funders & Philishers,
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Ladies, Tarners' Heaters, Dunner and Ladies,
Lapar Philips, Ac. Also, Diambons and Ladies,
To Cappy Work made to order,

And 269 Water Street, 206 EAST 47th STREET, near 3d Ave.

Figure 12 Advertisement for Pier/Graves Coppersmiths Source: Trow's New York City Commercial Report (1873:39)



Figure 13 Source: Perris (1855)

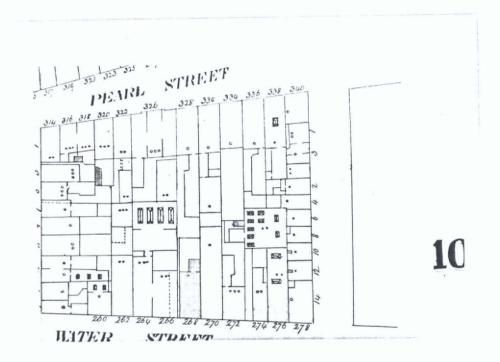


Figure 14 Source: Perris (1857)



Figure 15 Source: Morgan (1856)

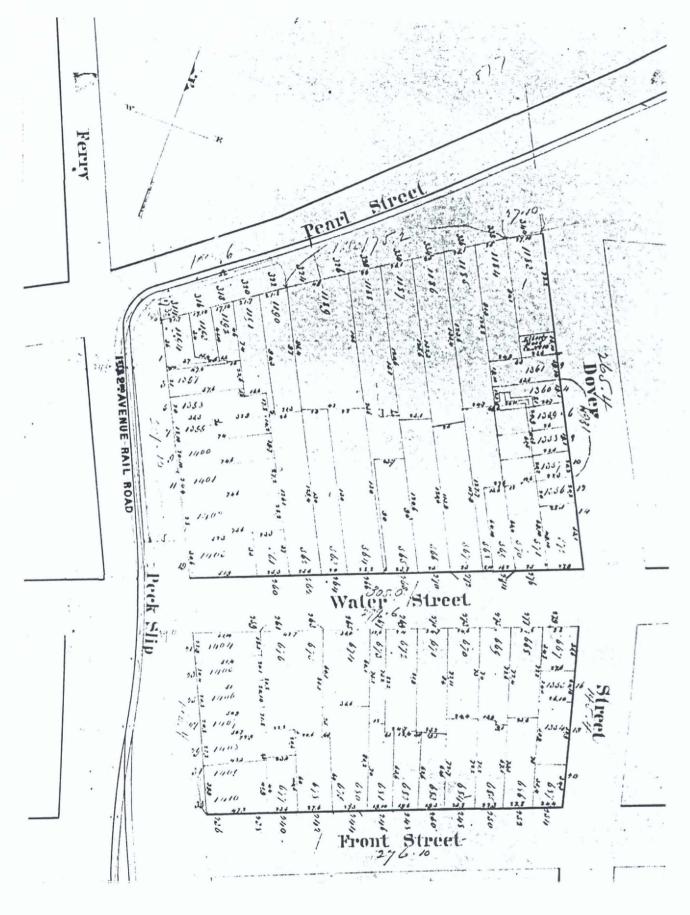


Figure 16 Source: Prine (1862)

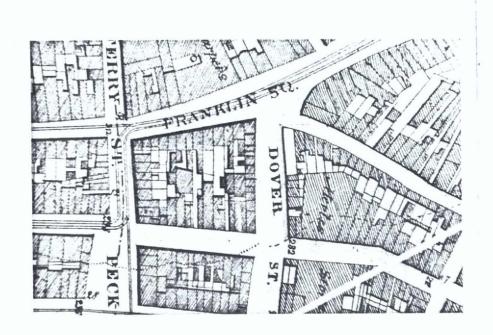


Figure 17 Source: Dripps (1867)

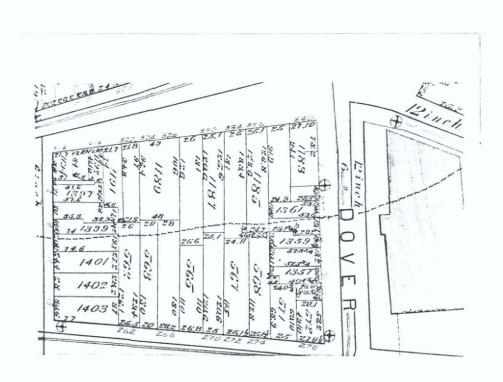
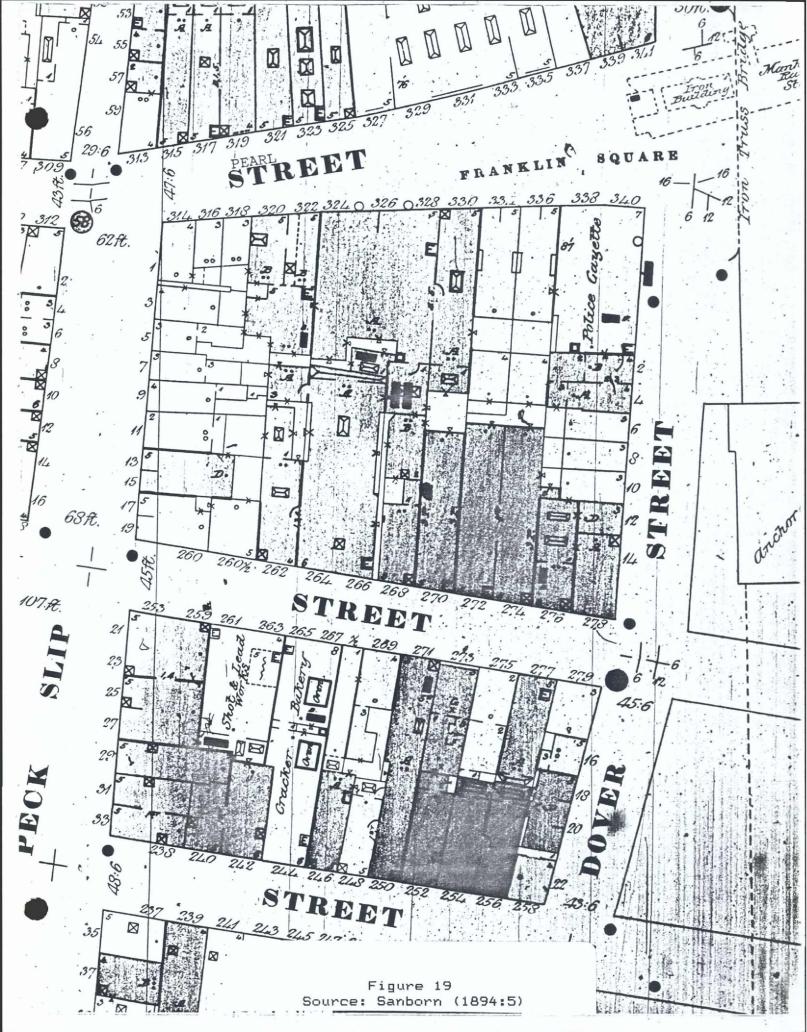


Figure 18 Source: Pidgeon (1881: Plate 4)



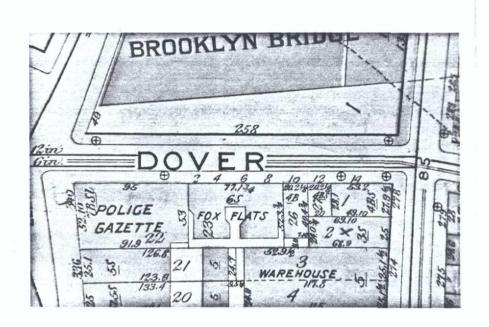
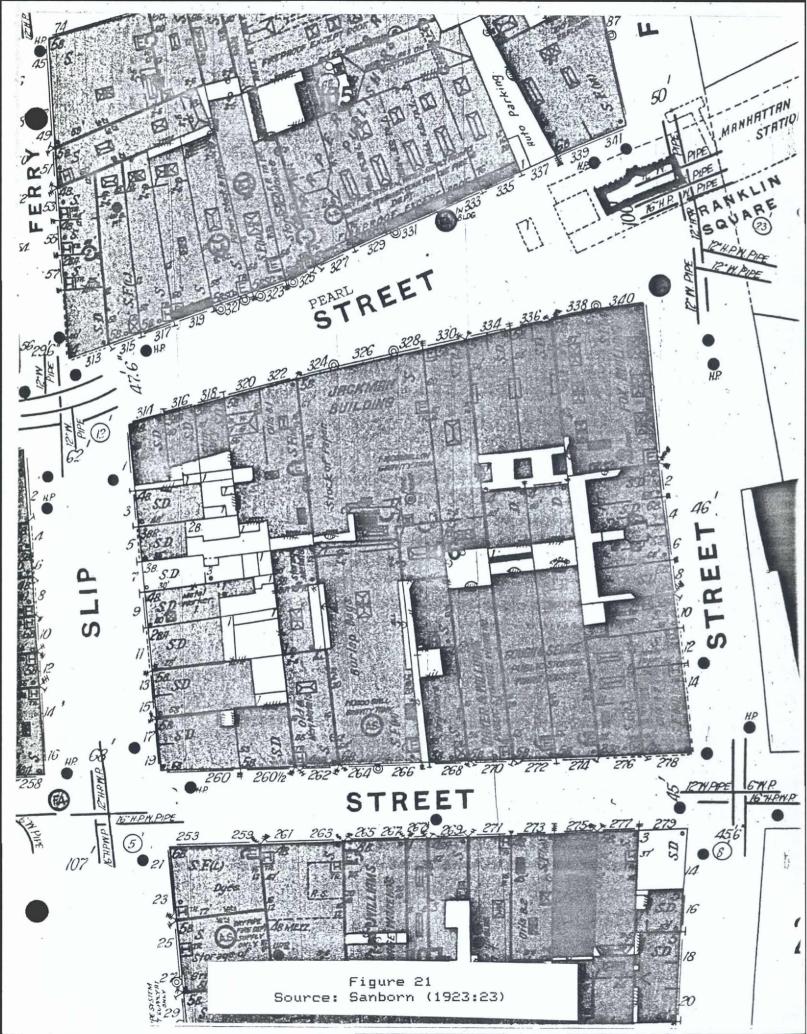


Figure 20 Source: Bromely (1920)



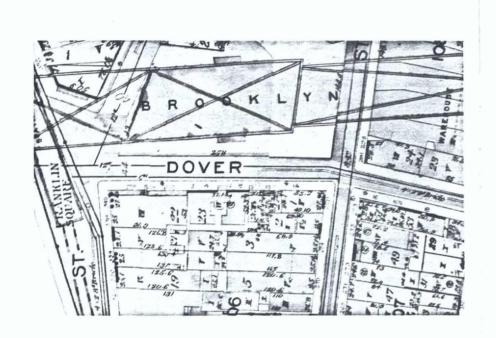
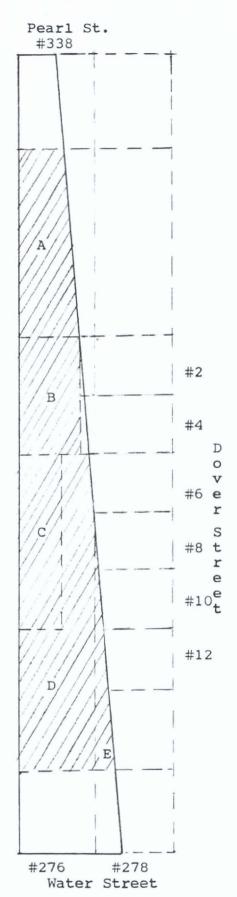


Figure 22 Source: Ullitz (1950)



- A 338 Pearl St. ca. 1780's-1880's
- B 338 Pearl St. ca. 1780's-1880's and #2-#4 Dover St. ca. 1830's-1890's
- C 276 Water St. ca. 1780's-1840's and #6-#10 Dover St. ca. 1860's-1890's.
- D 276 Water St. ca. 1780's-1840's
- E 278 Water St. ca 1780's-1860's and #8-#12 Dover St.
 - ca. 1780's/90's-1860's

Figure 23
Backyard Areas Within Block 106, Lot 22
Scale: 1"=30'

Backyard Areas
Present Lot 22 Boundaries

PLATES

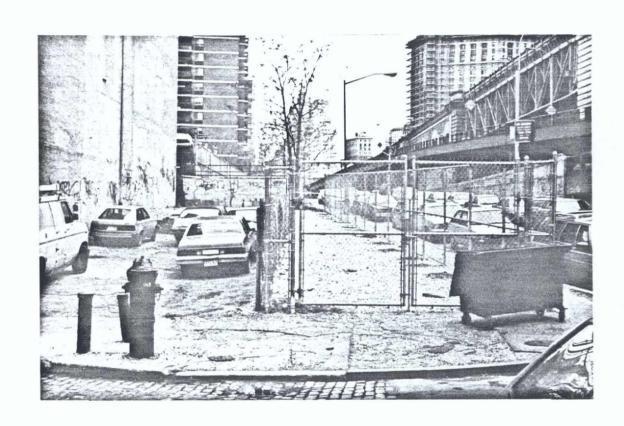


Plate 1 South End of Study Area View North from South of Side Water Street

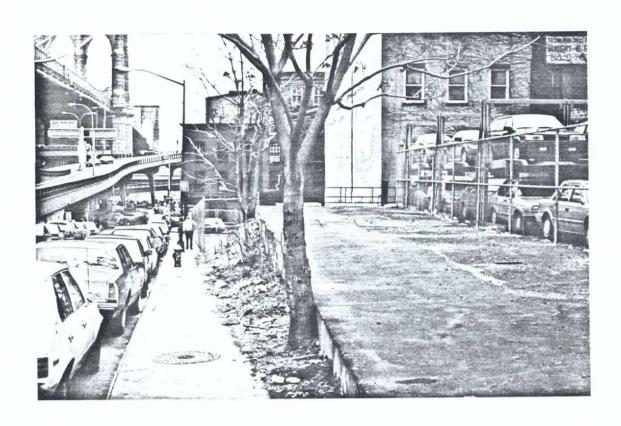


Plate 2
North End of Study Area
View South from West Side of Dover Street



Plate 3 North End of Study Area View South from North Side of Pearl Street



Plate 4
Foundation Wall - North Portion of Former
Site of #276 Water Street
View North



Plate 5
Former Location of #6 Dover Street
Backyard area of #274 Water Street in Backgound
View Northwest

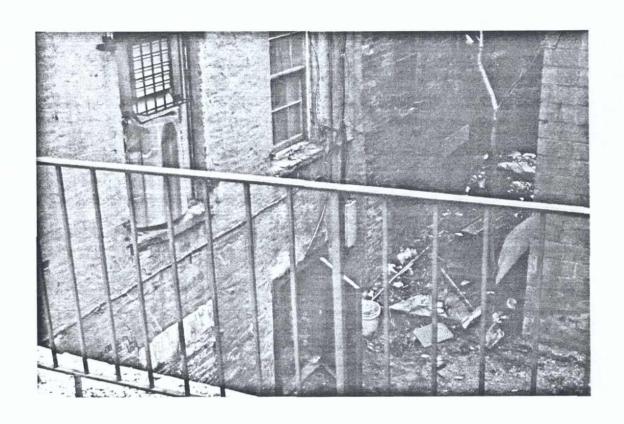


Plate 6
Open Backyard Area at Rear of #274 Water Street
Showing Basement of #274 Water Street
View Southwest from Rear of #6 Dover Street

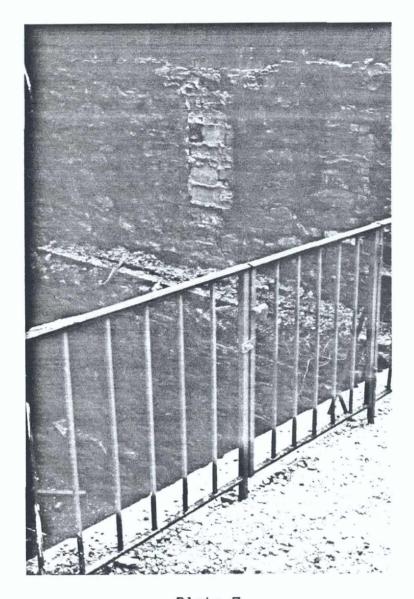


Plate 7
Open Backyard Area at Rear of #274 Water Street
Showing Basement Wall of Former Back Building at #336 Pearl Street
View Northwest from Rear of #6 Dover Street

APPENDIX A

LOT OCCUPATION HISTORIES: 1789 - 1850

#2 DOVER STREET

<u>Year</u>	<u>Tax Assessments</u>	Directories
1789	n.1.	
1792	Samuel Osgood	3 Cherry Street
1799	Sarah Dawson h&I	widow of Abraham Dawson
1802	George Stavers h&l? John Sweeny	mariner laborer
1808	Widow Stavers	n.r
1820	n. 1.	
1825	n.1.	
1830	n.1.	
1840	William Hall h&l	musical instrument maker 1 Franklin Sq., h. 2 Dover St.
1850	William Hall h&l	n.1.

#4 DOVER STREET

Āēāī	Tex Assessments	Directories
1789	n.1.	
1792	Hardenbrook Estate (house) Joseph Conkiline in do.	n. r
1799	Christian Claus h&l	musical instrument maker
1802	William Shaw h&1?	tobacconist
1808	John Dun h&l Arthur Oliver	n.l. n.l.
1820	Henry Fanning (stable)	merchant 183 Pearl St., h. 21 Provocat St.
1825	Edmund Elmendorf (stable)	
1830	Joseph Curtis (stable)	
1831	Samuel Cowdrey, Esq. (stable)	
1840	E. Porter h&l, merchant	Eleazar Porter, merchant 212 Water St., h. 4 Dover St.
1850	Bertha Blanco h&l	Bartholome Blanco, importer 107 Pearl St., h. 4 Dover St.

#6 DOVER STREET

Year	Tax Assessments	<u>Directories</u>
1789	Henry Kip	merchant, 25 King St.
1792	John Hertell Martin Lamb Jos. Youngs stable	gauger, 7 Dover St. painter and glazer physician, 3 Dover St.
1799	Henry Thorne h&1	boat builder, 280 Water St. & 6 Dover St.
1802	Robert Wright h&l	boarding house
1808	Richard Chew h&l	Tavern and Boarding House
1820	Thomas Williams	Boarding House
1825	Edmund Elmendorf h&l	n.r.
1830	Edmund Elmendorf (stable)	48 Lispenard, h. Red Hook Landing
1831	Edmund Elmendorf (buildings erecting)	n.r.
1840	Francis Dubois h&l, watchmaker	Engine Turner 199 Fulton h. 6 Dover
1850	Bertha Blanco h&l	Bartholome Blanco, importer 107 Pearl St., h. 4 Dover St.

#8 DOVER STREET

Year	Tax Assessments	Directories
1789	Henry Kip Kelly in do.	merchant, 25 King St. shipwright
1792	Kips Estate John Allen in do.	 shipwright
1799	John Hertell Sr. h&l	gauger & John Hertell Jr.
1802	John Hertell	gauger
1808	Frederick Devoe	n.1.
1820	Alip Taylor	Ann Taylor, widow, #8 Dover
1825	Edmund Elmendorf h&1	n.r.
1830	Edmund Elmendorf (stable)	48 Lispenard, h. Red Hook Landing
1831	Edmund Elmendorf (buildings erecting)	n.r.
1840	Bertha Blanco h&l	Bartholome Blanco, merchant 87 Front, h. 8 Dover
1850	Bertha Blanco h&l	Bartholome Blanco, importer 107 Pearl St., h. 4 Dover St.

#10 DOVER STREET

Year	Tax Assessments	<u>Directories</u>
1789	Henry Kip T. Johnson in do.	merchant, 25 King St. n.l.
1792	Kips Estate	
1799	n. 1	
1802	n.1.	
1808	n.1.	
1820	n.1.	
1825	n.1.	
1830	n.1.	
1831	Edmund Elmendorf (buildings erecting)	n.r.
1840	R. Leggett h&l	Mary Leggett, widow of Reub., drygoods, 432 Pearl, h. 10 Dover
1850	Adams h&1	n. 1.

n.l. - not listed

n.r. - data not recorded h&l - house and lot

#12 DOVER STREET

Year	Tax Assessments	<u>Directories</u>
1789	n.l.	
1792	n.1.	
1799	Wm. Hertell store & lot	baker, 12 Dover & 3 Skinner
1802	Hamilton Hunter, baker	baker, 3 Cliff & 12 Dover
1808	Hamilton Hunter, bake shop	hard bread baker
1820	John Brown, bake h.	n. 1.
1825	n.1.	
1830	Robert Gracie, lot	
1831	Robert Gracie, lot	
1836	n.r.	Hezekiah Williams, provisioner 365 Pearl, h. 12 Dover
1840	H. Williams, gentleman	Hezekiah Williams, 12 Dover
1850	Adams h&l	n.1.

. ₹5×5 - £5 - 2*** - -1*.

#278 WATER STREET

Year	Tax Assessments	<u>Directories</u>
1789	Henry Kip	merchant, 25 King St.
1792	n.r.	
1799	George Mills h&l John Thorpe in do.	grocer tailor
1802	John B. Gilliotti h&l (listed at 276 Water - possibly an error)	n. 1.
1808	John B. Ghighotty	grocer, 270 Water
1820	David Adams John Morrow	shoemaker tailor
1825	Augustus Heath h&l	n.r.
1830	Augustus Heath h&l	grocer .
1840	John Dunkin	152 Front, h. 70 Amity
1850	John Dunkin	n.r.

#276 WATER STREET

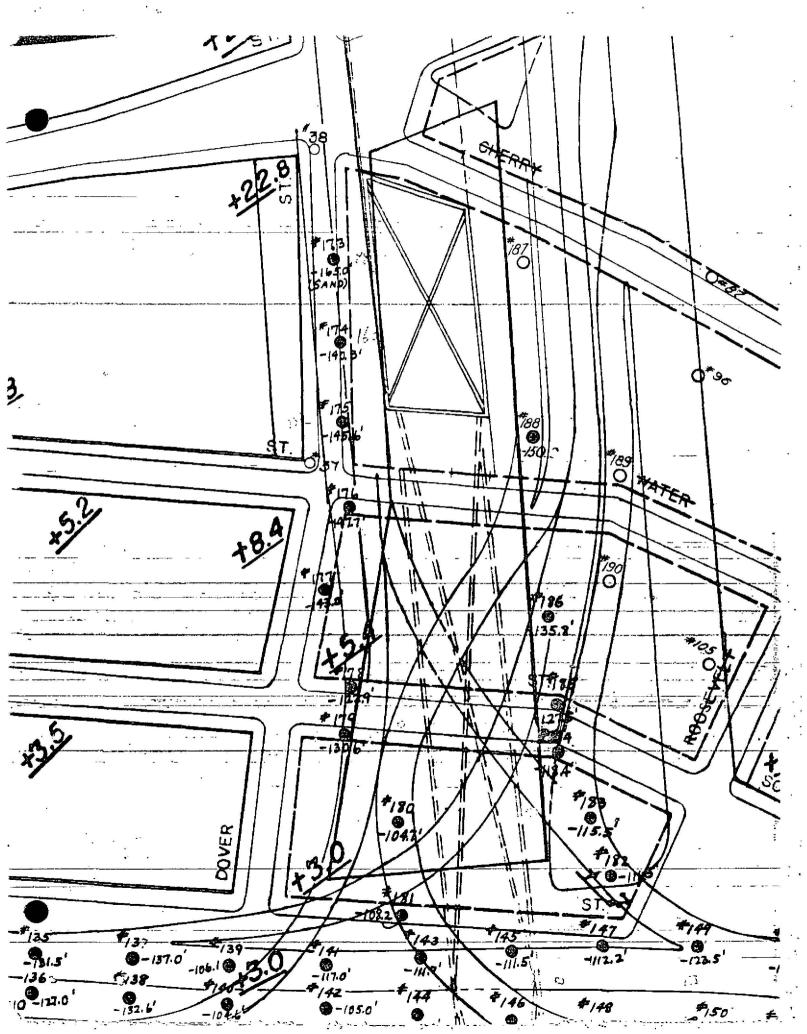
Year	Tax Assessments	Directories
1789	Thomas Arden Wm. Spread in do.	merchant, 23 Beekman shopkeeper
1792	n.r.	
1799	Jacob Friday h&l	grocer
1802	John B. Gilliotti h&l	n.1.
1808	Jacob Friday h&l	grocer & 274 Water
1820	George Hamilton	grocer, 276 Water, h. 288 Broadway
1825	F.H. Smith h&l H. Hamon h&l	n.r. n.r.
1830	Edward O'Donnell h&l H. Hitchcock h&l	shoemaker grocer
1836	n.r.	Benjamin F. Pier coppersmith 276 1/2 Water, h. 86 Stanton (Sylvester Pier coppersmith, 86 Stanton)
1840	Edward O'Donnell h&l 276 Water Benjamin F. Pier h&l 276 1/2 Water Estate of Joel Post (stable in rear - tax lot 568)	shoemaker 276 Water coppersmith 276 1/2 Water, h. 18 Ridge
	W.H. Graves h&l 276 Water Benj. S. Pier 276 1/2 Water Barth. Blanco Rear (tax lot 568) not listed tax not recorded	William H. Graves, coppersmith 276 1/2 Water, h. Bklyn n.l. (Sylvester Pier, late coppersmith, 86 Stanton)
h&1 - 1	nouse and lot	

#338 PEARL STREET

Year	Tax Assessments	Directories
1789	Thomas Arden Wm. Kidd in do.	merchant, 23 Beekman William Kidson, cabinet maker
1792	Thomas Arden Wm Kidson in do.	n.r. n.r.
1799	Robert de Grove h&l Adolph de Grove in do. John Hall in do.	hatter hatter n.l.
1802	Frederick Devou	n.l. (mentioned in an 1808 deed (Liber 98:91) as a grocer
1808	John L. Norton h&l	338 Pearl St.
1820	Henry Fanning h&l	merchant, 183 Pearl, h. 21 Provoost
1825	Samuel Cowdrey h&l	n.r.
1830	Hannah B. Hawthurst h&l Gideon Howland	boardinghouse, 338 Pearl merchant 172 Front, h. 338 Pearl
	Daniel Trimble Samuel Cowdrey	merchant 74 Pine, h. 338 Pearl Attorney & couns. 338 Pearl, h. 29 Bond
1840	A. Bunce h&l	boardinghouse, 338 Pearl
1850	Mrs. Eliza Cowdrey h&l	n.1.
n.r c	not listed : Nata not recorded Nouse and lot	

APPENDIX B

DOVER STREET BORING LOCATIONS AND LOGS



9.7	17	3	1	73 C	ONT.
		EL. + /7.5	, -66.5		
18.3	30,300,383030	MISC.	21.0'		MED. TO COARSE BROWN SAND
	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		-87.5		MEDIUM GRAY SAND
		MEDIUM	38.0'		MEDIUM BROWN
65.0'		BROWN	-/36,5°		SAND SAND,
		SAND.	-149 <u>-</u> 5		CLAY,¢ GRAVEL
			-1508'3		DRILLED DER
İ			-/52.5	0%	HARD-PAN BOULDER
-64.5			-/56, 2 rd		SAND
	. Harin		RAYA	1,=1	1950
2.	İ		B. P. M.	CONT.#	± 42 89

ROCK DATA VOL. I, SHEET 5

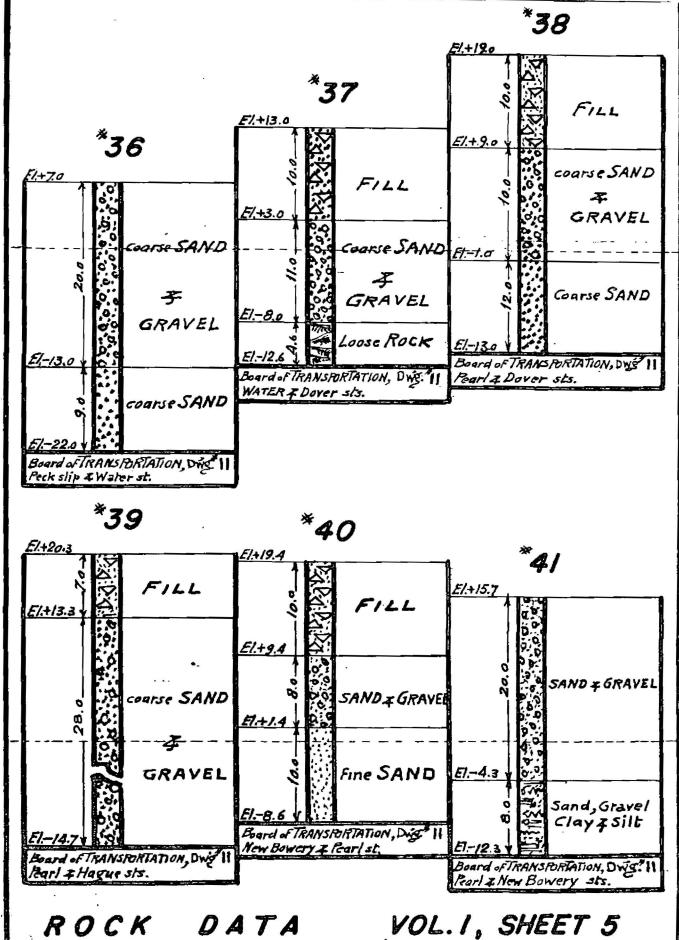
a,1,	74 EL.+/3.9'		FCONT.	,1:0	175 EL.+ 10.4'	
+1.9'	MISC.		MEDIUM BROWN	12,3'	MISC.	
-11.1'	MISC. FILL, GRAVELE SAND	-88	GREY	-2.6' '0' -//.6'	DARK GREY SAND	
	BROWN	-93.1	FINE BR. GRAY SAND	55.0'	MEDIUM BROWN-	
32.0	SAND	-100.1	BR. SAND G GRAVEL MEDIUM GRAY GRAY SAND	-66.6	SAND	g.
-43.1'		-/12.	GRAVEL	71.0'	FINE	
, o . 9/	GREY	25.2	BROWN SAND	-137,6	SAND	
	1629	-137.3'. -138.25: -1403' \(\dagger\)	CID DRILLED BOWDER A MED. BR. SAND, GRAYBLE ROMOGE ROCK	! ~	GRBY SAND, G GRAVEL ROCK REC, I'-II'	
		RAYMO 8. P.M. CO		RAYM	OND 1950 ONT.#42 91	*3

ROCK DATA

VOL. I SHEET S

0.8	76 EL. + 8.3'	a 8 ′	177 EL.+6.5'	178 EL.+5.6'
7,7,7	MISC,	2′	MISC.	MISC.
,0'9,	MEDIUM	2.2.	FILL O	-13.4' ORGANIC
-34.7'	SAND	-16.51	FINE	RIVER SILT
-56.7'	BROWN	100.00	BROWN	MED. BROWN
17.0'	MEDIUM BROWN SILTY		SAND	-48.4' FINE
-73.7'	SAND	-316.51	MED.	BROWN
74.0'	BROWN	26.5	BROWN	SAND
141.7'	ROCK	-143.0	S SOFT	-120.9' BOULDER -122.9' ROCK
RAYMO	REC, 5'-0'	-153.0' T		REC. 2'-6" RAYMOND 1950
B.P.M. CO.			10NT.#42 93	B.P.M. CONT.#42 94

ROCK DATA VOL. I, SHEET 5



VOL. I, SHEET 5