

4647K
city/scape
2001

**REVISED STAGE 1A
SENSITIVITY ANALYSIS**

BLOCK 2923. LOT 24 & 25

**897-903 Grand Street. Borough of Brooklyn.
Kings County, New York**

Prepared For:

Environmental Project Data Statements Company
185 Great Neck Road, Suite 402
Great Neck, New York 11201

RECEIVED
ENVIRONMENTAL REVIEW

JUL 18 2001

LANDMARKS PRESERVATION
COMMISSION

Prepared By:

CITY/SCAPE: Cultural Resource Consultants

726 Carroll Street

Brooklyn, New York 11215

July 2001

976

Grand St - K
01354038K

Revised Stage 1A
BLOCK 2923. Lot 24 & 25)
897-903 Grand Street. Williamsburg
Borough of Brooklyn. Kings County, New York

TABLE OF CONTENTS

STAGE 1A LITERATURE REVIEW AND SENSITIVITY ANALYSIS

Project Information	1
Environmental Information	2
Document Research.....	4
Recommendations	19
Bibliography.....	21

APPENDICES:

Appendix A: Maps & Figures
Appendix B: Tax Assessment Records
Appendix C: Photographs

REVISED PART 1A:
LITERATURE SEARCH AND REPORT ON
ARCHAEOLOGICAL POTENTIAL

897-903 Grand Street (Block 2923, Lot 24 & 25)
Borough of Brooklyn. Kings County, New York.

Affiliation: **City/Scape: Cultural Resource Consultants**
726 Carroll Street
Brooklyn, New York 11215
718-965-3860

Date: July 12, 2001

A. PROJECT INFORMATION

Prepared by: Gail T. Guillet
City/Scape: Cultural Resource Consultants
726 Carroll Street, Brooklyn, NY 11215

Location of Proposed Action:

The proposed project area is located in Block 2923 and includes present day Lot 24 and 25. Lot 24 is a consolidated lot (as of October 28, 1999) that was formerly identified as 901-3 and 905 Grand Street (Lot 23 & 24). Lot 25 corresponds with 897 Grand Street. All of these lots are located a short distance east of the intersection of Olive Street and Grand Street in the Williamsburgh section of Brooklyn. (Map 1 & 2) In the late 19th century Block 2923 was identified as Block 46, with present-day Lot 24 and 25 corresponding to Lot 3-5. (See Fig. 4) In the 19th century, as now, Block 2923 was an irregularly shaped block that is bounded on the west by Olive Street, on the north by Powers Street, on the east by Catherine Street, and on the south by Grand Street. At the present time the project area is vacant. (See Photos 1-5)

The project area is located on the border between Williamsburgh and Bushwick. Bushwick was originally a separate town, but it was incorporated into Williamsburgh in 1855. The Bushwick area had been occupied from the mid-17th century, but the construction of multi-family residential units began in the 1870's at approximately the same time that water and sewer were made available.

The proposed project is located in an area that today is primarily one of small commercial enterprises, factory buildings, auto repair shops, a public school, a

church and parochial school, and multi-family dwellings. The vast majority of the structures on Block 2923 are in a dilapidated condition. Several are abandoned.

Description of Undertaking:

The project sponsor proposes to construct a 6-story mixed-use building that will contain 11,000 square feet of retail space and 22 studio apartments. The retail space and 2 studio apartments will be located on the 1st floor, the remaining floors will contain 4 units each. The building will be situated on the front of the lot, with a 30 foot rear yard.

Description of Impact:

The proposed project will not result in the demolition or significant physical alteration to any improvement. The site is currently vacant land.

B: ENVIRONMENTAL INFORMATION

Topography:

The project area is located north of the Harbor Hill Moraine, which forms the spine of Long Island. In terms of the present-day topography, the site is located in an urban setting. At the present time the site, which is enclosed by a cyclone fence, is entirely vacant and, with the exception of the cellar hole on Lot 24 (this portion of the lot was, prior to its consolidation identified as Lot 23), generally flat.

The project area is located in the vicinity of the former salt marsh or wetland associated with Newtown Creek; while these wetlands were extensive, they did not extend as far west and south as Block 2923, which was prehistorically fast land (See Map 4-6)

The elevation of the block at the present time is 33.1 feet at the intersection of Grand Street and Olive Street. The block rises slightly from Powers Street to Grand Street. These elevations have not varied between 1888 and the present.

Geology:

In geological terms, the project area is located in the Atlantic Coastal Plain physiographic province. Glaciers helped create much of Long Island's distinctive terrain, which consists of the Ronkonkoma Moraine and the Harbor Hill Moraine. The precise underlying geology of the project area has not been identified, but would be consistent with the types of materials associated with the glacial terminal moraines running east and west along the spine of Long Island. These include unconsolidated gravel, sand and clay deposits.

At street level the soils would today be classified as urban soils, in the sense that the entire site has been disturbed, first by the construction of former structures located on the site, and then by the demolition of the.

Soils:

As with the geology, the underlying soils would be consistent with the types of materials associated with the glacial terminal moraines running east and west along the spine of Long Island. These include unconsolidated gravel, sand and clay deposits.

At street level the soils would today be classified as urban soils, in the sense that the entire site has been disturbed, first by the construction of the dwellings that formerly stood on the site, and then by the demolition of those buildings. It is probably that much of the surface soil is mixed with substantial amounts of rubble from the demolition. There is no substantial vegetation on the site.

Drainage:

Examination of historic maps and atlases indicates that the property was not crossed by any streams or associated with the salt meadows that surrounded the area of Newtown Creek known as English Kills. Drainage from the site would have been into English Kills, which was channelized in the 19th century. As noted above, the salt meadows associated with Newtown Creek and English Kills did not extend as far as Block 2923 (See Map 4-6)

Vegetation:

Visual inspection of the property did not reveal significant trees or other vegetation.

Forest Zone:

The project area lies within the Northern Hardwood Forest zone. Sugar maple, birch, beech and hemlock are the predominant trees in this type of forest. Visual inspection of the property did not reveal significant trees or other vegetation.

Man-Made Features and Alterations:

The site would have experienced a variety of disturbances:

- 1) those that may have been associated with farming activities during the 17th through the early 19th centuries, which are considered minimal;
- 2) disturbances associated with the construction of the various buildings that stood on the property during the 19th century, which included, according to the Tax Assessment Records, a series of sheds and multi-family dwellings;

- 3) disturbances associated with the demolition of the buildings and the construction of a fence to enclose the vacant lot.

C: DOCUMENTARY RESEARCH

1. Site Files

a. New York State Office of Parks Recreation and Historic Preservation (OPRHP)

The project area is located within New York City. Information was not obtained directly from OPRHP; however, copies of the OPRHP Site Maps (USGS Brooklyn Quad, 7.5 Minute Series) examined at the New York City Landmarks Preservation Commission (LPC) show no prehistoric or historic sites associated with the project area. There is mention of Luqueer's Mill, Bushwick Chemical Works and the proximity of reported prehistoric sites, but none of these are located within or immediately adjacent to the project area.

Luqueer's Mill was located on English Kills at the intersection of Grand Street and Metropolitan Avenue. The mill was built by Abraham Jansen in 1664 on the edge of the hamlet of Bushwick. The mill was later referred to as Master's Mill. A mid-19th century map indicates that the land owned by Stephen Masters was located north of Metropolitan Avenue, extending to Orient Avenue. Masters' mill was a tidal mill with a dam extending across the English Kills. (Map 5) The route of Metropolitan Avenue (then the Jamaica Turnpike) crossed English Kills on the dam. The Bushwick Chemical Works, also located on English Kills, was located less than a ¼ of a mile east of the project area. The Bushwick Chemical Works was founded by M. Kalbfleisch in Harlem in 1826, but, after several moves, located in Bushwick in 1851. (Map 6)

One historical archaeological site is listed in the OPRHP files. The Vander Ende-Onderdonk House is located in the Ridgewood section of Queens (listed on the National Register on 1-31-1977). It is described as the remains of an early 18th century Dutch Colonial farmhouse and associated features located on a 2-acre site (Shaver, 1993:134). Neither the Vander Ende-Onderdonk House nor any other identified historic resource will be impacted by the proposed project.

b. New York State Museum Archaeological Site Files

In the course of other work, the archaeological site files at OPRHP and the NYSM have been examined by the consultant. Although not included in the LPC files, there are two prehistoric archaeological sites noted by OPRHP within approximately one mile of the study area. Both were reported by Arthur Parker in the 1920's (Parker 1922:Plate 179). (See Fig. 1) One site, NYSM Site # 3613, is located just over a mile to the northwest of the project area. Parker described the

site as "traces of prehistoric occupation" along Newtown Creek near the East River. The other site is located on the north side of Newtown Creek in the Borough of Queens. It is described as a village site at the mouth of Newtown Creek. Parker sites are often anecdotal rather than sites that have been verified by excavation, but the lands bordering Newtown Creek, including the project area, would, in any case, be considered environmentally sensitive. None of the sites reported are within the boundaries of the project area. None of the sites reported would be impacted by the proposed project.

c. National Register of Historic Places

Several National Register properties are located within an approximately one mile radius of the project area. These include the already mentioned Vander Ende-Onderdonk House, the United States Post Office located at 43 Debevoise Street (listed 11-17-88 as part of a thematic resource survey), the Monsignor McGoldrick Park and Shelter Pavilion in Greenpoint (listed 5-6-1980), the Cypress Avenue West Historic District (part of the Ridgewood Multiple Resource Area, listed 9-30-1983), and the Willoughby Suydam Historic District (a portion of the Ridgewood Multiple Resource Area located in Kings County, listed 9-30-1983). None of these sites will be impacted by the proposed project.

d. New York City Landmarks Preservation Commission

Prior to the involvement of the consultant, the Landmarks Preservation Commission had been consulted. The LPC response indicated that the project area possessed the "potential for the recovery of remains from 19th century occupation." There was no indication that the site was considered to contain prehistoric potential.

2. REFERENCES

a. General Texts (Prehistoric)

Beauchamp, William
1900 *Aboriginal Occupation of New York*. New York State Museum Bulletin No. 32. Albany, NY.

Funk, Robert E.
1976 *Recent Contributions to Hudson Valley Prehistory*. New York State Museum Memoir 22. Albany, NY.

Parker, Arthur
1920 *The Archaeological History of New York*. New York State Museum Bulletin. No. 237 and 238. Albany, NY.

Ritchie, William A.

1969 *The Archaeology of New York State*. Natural History Press: Garden City, NY.

Ritchie, William A.

1973 *Aboriginal Settlement Patterns in the Northeast*. Memoir 20. New York State Museum and Science Service. Albany, NY.

New York City Landmarks Preservation Commission

1979 *A Guide to New York City Landmarks*. Browne & Co.: New York, NY

Other (see Bibliography)

b. Maps (Historic)

Maps examined, not all of which are included in the report.

X **Ryder**

1670 *Map of Long Island*. New York Public Library, Map Division. (Map 3)

This map includes prominent topographical features, streams, wetlands, and roadways, along with the hamlets of Brooklyn Ferry, New Utrecht, Gravesend, Flatlands, Flatbush, and Bedford. The intersection of Cripplebush Road and Bushwick Road is shown on this map. This area was identified as Bushwick Crossroads on several mid-19th century maps. The project area lies west of English Kill (an extension of Newtown Creek and its associated salt meadows) and east of Bushwick Road to the north of Cripplebush Road. This area is shown as open land, as opposed to forested land.

A diagram of Bushwick and its surrounding farmland (c. 1666) is included in Ernest Armbruster's *The Eastern District of Brooklyn* (Armbruster, 1912). (See Fig. 2) Newtown Creek and its "common salt meadow" are shown on the diagram. Bushwick Road ran through the center of the hamlet, which was surrounded by a palisade. On either side of Bushwick Road south of the hamlet was farmland. The project area in the 17th century would have been located on the east side of Bushwick Road in the area of farmland between the road and the "common salt meadow".

Henry R. Stiles' *History of the City of Brooklyn* includes a diagram of Het Dorp, or Bushwick Green. (Fig. 3) On this diagram Olive Street is shown running south from Maspeth Avenue and extending south of Metropolitan Avenue. Olive Street forms the western boundary of Block 2923. Today Bushwick Avenue has been regularized and straightened, but this map shows that it formerly ran between Smith (now Humboldt) Street and Kingsland Avenue. The Bushwick Church, Town Hall and school were located just north of Metropolitan Avenue. A number of dwellings are also indicated on this map. Luqueer's Mill was located southeast

of the area covered by this map, at the intersection of Metropolitan Avenue and Grand Street.

- X Survey of the Coast of the United States
1844 *Map of New-York Bay and Harbor and the Environs*. New York Public Library, Map Division. Scale: Reduced. (Map 4)

The 1844 map of the New York Bay and Harbor includes the hamlet of Bushwick; however on this map the hamlet area appears to be located at the intersection of Bushwick Road and the "road from Bedford," rather than at the intersection of Bushwick Road and Metropolitan Avenue, the location of the historic hamlet shown on Fig. 3. By 1844 Williamsburgh was a substantial village, and development was beginning to extend east of Union Street as far as Ewen (now Manhattan) Street. Several dwellings are shown along Bushwick Road and there are two areas of development south and one north of Metropolitan Avenue on the edge of the English Kills salt meadows. None of this development along Metropolitan Avenue extended south of Devoe Street. Grand Street is three blocks south of this area of development. The project area, located between English Kills and Bushwick Road, appears to be open fields.

Another map, dating from the same year, indicates that development was taking place west of Bushwick Road, but that streets had not yet been laid out in the 18th Ward. When the boundaries of the 18th Ward were laid out Bushwick Avenue (formerly Bushwick Road) was the western boundary and Newtown Creek, marking the boundary between Kings and Queens counties, the eastern. The southern boundary of the 18th Ward was Flushing Avenue, with Meeker Avenue marking the northern boundary. (Fig. 5)

- X Field, Thomas W.
1852 *Map of the City of Williamsburgh and the Town of Bushwick including Greenpoint with Part of the City of Brooklyn*. New York Public Library, Map Division. (Map 5)

The 1852 Field Map of the City of Williamsburgh and the Town of Bushwick provides details of the area surrounding the proposed project, including the location of Master's mill dam and the Stephen Masters property. Jamaica Turnpike (now Metropolitan Avenue) crossed the English Kills on this dam. South of Jamaica Turnpike was the chemical works established there in 1851 by M. Kalbfleisch. The chemical works was later known as the Bushwick Chemical Works. South of the project area were two ropewalks, one owned by J. Thursbee, the other by L. Waterbury. From other maps we know that these ropewalks were located on Remsen (now Maujer) and Ten Eyck Streets. Also between Remsen (now Maujer) and Ten Eyck was a cemetery. This map indicates that Grand Street had not yet been extended as far east as the project area. This map also indicates that as early as 1852 a canal was proposed that would allow the interior of the

Town of Bushwick to have access to Newtown Creek and the East River. This same canal, which was not built as proposed, is shown on a number of other maps from the mid-19th century.

- X Conner, R. F. O.
1852 *Map of Kings and Part of Queens Counties, Long Island, New York*. M. Dripps, New York. Scale: 5.5 feet = 2 Miles. (Map 6)

The 1852 map of portions of Kings and Queens Counties includes the project area. No development had taken place within Block 2923. However, this map is informative, since, besides indicating the layout of the streets, it includes buildings located in the immediate vicinity of the project area. Looking first at the larger area, the historic hamlet of Bushwick, here referred to as Bushwick Green, is located at the intersection of Maspeth, Metropolitan and Bushwick Avenues. South of Metropolitan Avenue (then the Jamaica Turnpike) was the M. Kalbfleish Chemical Works, later known as the Bushwick Chemical Works. The chemical works was located near the intersection of Devoe Street and Morgan Avenue. Several structures are shown associated with the chemical works. The land to the north of Metropolitan Avenue near the English Kills salt meadow was identified as under the ownership of Masters. Masters was one of the owners of the mill that had been built by Luqueer. Jamaica Turnpike (now Metropolitan Avenue) was carried over English Kills on the Masters Mill dam. Powers Street existed on the 1852 map, but it did not extend east of Bushwick Avenue. Likewise, Grand Street existed, but it still ended on the west side of Bushwick Avenue. There were dwellings on both sides of Bushwick Avenue at Grand Street, but these buildings did not extend as far east as Block 2923. At the time, Maujer Street, then called Remsen Street, did extend east of Bushwick Road, as did Ten Eyck, then called Wyckoff Street. Neither of these streets exists today east of Bushwick Avenue. These two street had been laid out on land owned by the Schenck family (containing 45 acres). Development had taken place on both the north and south sides of Maujer (Remsen) Street, and house lots had been laid out, but not yet built upon, on both sides of Wyckoff. Between Maujer (Remsen) Street and Wyckoff Street was a long narrow structure that is not identified, but that would be consistent with a ropewalk. The 1852 Field's map indicates that the L. Waterbury ropewalk was located here. (See Map 5) At the intersection of Flushing Avenue and Bushwick Avenue was an area identified as Bushwick Cross Roads. Just to the north, east of Bushwick Avenue on McKibbin and Marshall (now Siegal) Streets house lots had been laid out, but, as was the case along Wyckoff (later Ten Eyck and no longer extent), no houses appear to have been built. The presence of these house lots indicates, however, that development was beginning in this part of the Town of Bushwick, later to be incorporated into the City of Williamsburgh. English Kills and its associated salt meadows had not yet been channelized, but north of the point where Johnson Street (then the Cypress Hill Plank Road) intersected Vandevoot Avenue there is an "Intended Canal" that cuts diagonally northeast across the salt meadow. As noted above, the final configuration of the

drained and channelized English Kills was significantly more extensive, but this map indicates that as early as 1852 there were plans to drain the salt meadow and provide water access to the interior of the Town of Bushwick.

X Perris, W.
1855 *Plan of the City of Brooklyn*. Scale: Enlarged, no scale. (Map 7)

The 1855 map produced by W. Perris includes the project area. Land ownership and abandoned roadways are shown on this map, but, with the exception of the Bushwick Church, which stood north of Maspeth Avenue, no structures are included. This was a period of time when streets were being regularized and old roads that strayed too far from the grid closed. Two of these roads are shown on the map – the Old Mill Road, also known as the Old Wood Point Road, and a portion of the Bushwick Road. Metropolitan Avenue west of Bushwick Avenue was at this time identified as North 2nd Street. South of Metropolitan Avenue was Devoe Street. South of Devoe Street was Powers Street. Powers Street ran generally northeast from Bushwick Avenue to Olive Street, but then turned to the southeast between Olive Street and Catherine Street. This alignment determined the shape of Block 2923, which narrows significantly at the Catherine Street end of the block. Grand Street in this area runs generally northeast to intersect Metropolitan Avenue just east of Vandevoot Avenue. According to this map, the project area fell within the farm lot of the Van Alst family. This map indicates the location of English Kills and its salt meadows, but includes the route of the proposed canal. Based on another map, also dated 1855, it appears likely that the canal had not yet have been constructed, but, clearly, by 1855 its layout had been determined.

X Dripps, Mathew
1869 *Map of the City of Brooklyn, being formerly the cities of Brooklyn and Williamsburgh and the Town of Bushwick*. M. Dripps, New York. Scale: No scale shown. (Map 8)

The Drips map suggests that by 1869 the salt meadows associated with English Kills had been filled and the canal constructed. However, the canal is shown apparently extending south of Johnson Street (then the Cypress Hill Plank Road), which it did not do. This map shows the south Side Railroad intersecting the English Kills canal. The importance of this link between the East River, the interior of Bushwick and the rest of Long Island were critical to the growth of this part of Brooklyn as an industrial area. This map does not include structures, but the name of an owner to the south of the project area is indicated. The name is “Thursby,” which is shown on a map dated a few years later as J. Thursbee & Son’s Ropewalk. The Waterbury & Co. Ropewalk was immediately south of that operated by Thursbee.

X Fulton, Henry

1874 *Farm Line Map of the City of Brooklyn*. B. Beers & Co., New York.
 Scale: Enlarged, no scale shown. Original scale: 500 parts to the Inch. (Map 9)

The Farm Line Map of the City of Brooklyn identifies the project area as having been owned by the Van Alst family. Their land extended east of Bushwick Avenue between Powers Street and Grand Street to the east side of Morgan Avenue. At the time Block 2923 was identified as Block 291. No structures are shown on this map, but the Noah Waterbury, owner of the Waterbury Cordage Company, is identified as the owner of the land between Remsen (now Maujer) and Ten Eyck on Block 299.

X Sanborn Map Company

1888 *Sanborn Insurance*. Plate 242. Scale: 140 feet to the Inch. (Map 10)

The 1888 Sanborn Map indicates that the project area was located in a section of Bushwick that combined residential and industrial activities. Block 2923, then identified as Block 46, was occupied by dwellings along Powers Street and a combination of residential and businesses along Grand Street. Just as the block numbers were different in 1888, so too were the street numbers. In 1888 the project area was identified as 669-673 Grand Street. These lots were occupied as follows:

Lot 25 (former Lot 3) 897 Grand Street (then 669 Grand Street)	3-story dwelling with shop on ground floor and 2-story stable in rear yard. Open yard between dwelling and stable. Connected to sewer on June 11, 1878.
Lot 24 (former Lot 4) 899-901 Grand Street (then 671 Grand Street)	1-story Soda Water Factory with covered entrance to rear yard; 1-story extension to Soda Water Factory; 1-story stable attached to extension; 1-story stable at rear yard. Open yard on west side of lot.
Lot 23 (former Lot 5) 903 Grand Street (then 673 Grand Street)	2-story stable on east side of lot; 1-story extension at rear; 1-story l-shaped shed at rear lot. Open yard on east side of lot. Identified as Wagon Manufacturer.

The building to the west was a 4-story dwelling with a shop on the ground floor; to the east was a 3-story dwelling with a shop on the ground floor. East of this building (677-679 Grand Street) and occupying two lots was the H. Bahr Soda Water Factory. 681 Grand Street was occupied by a 1-story stable along the southeast edge of the lot with a 1-story stable or shed at the northeast corner of the lot. The lot to the east was occupied by a 1-story structure at the rear of the

lot, but it is identified as vacant. The lot to the east of this (685 Grand Street) was vacant land. A 1-story soap works occupied the building on the corner of Grand Street and Catherine Street (687 Grand Street). At the rear of this 1-story building was a 1-story stable with access from Catherine Street.

The block to the east was in the process of being developed, with a number of lots occupied by 4-story buildings with shops on the ground floor, but a number of the lots were still undeveloped. Opposite the project area, the south side of Grand Street was completely industrial. On the corner of Grand Street and Waterbury Street was John F. Lothar's Ropewalk. Several 1-story sheds and outbuildings were associated with this business. To the east, opposite Catherine Street, was a "Blue Stone Yard. Beyond that, between Catherine Street and Morgan Avenue, was the Bushwick Glass Works, which extended through the block to Maujer Street. Maujer Street (formerly Remsen) combined industrial and residential development. On the south side of Maujer Street was the Waterbury Cordage Company, which had been located on this block as early as 1852. The Bushwick Chemical Works was located on Morgan Avenue at Grand Street. It occupied the entire blocks on both sides of Grand Street.

The 1888 Sanborn map shows a 6" water pipe in Grand Street. No sewer line is shown, but, according to the records of the Brooklyn Sewer Department, sewers were installed on Grand Street between Catherine and Powers "before annexation." The date referred to is not stated, but it is most likely that it refers to 1898, the year when Brooklyn became part of New York City, rather than to 1855, the year the Town of Bushwick and the City of Williamsburgh were consolidated and incorporated. We do know from other work done in the area (CITY/SCAPE: Cultural Resource Consultants, 1995) that water was available east of Union Street (the historic division between the original Village of Williamsburgh and the Town of Bushwick) by the 1870's and that sewers had been installed by the mid-1870's. It appears, therefore, that the area east of Union Street, while experiencing industrial and commercial development, did not experience significant residential development until both water and sewer were available.

Looking at the records of the Sewer Department for the project area (897-903 Grand Street), one finds that only one of the lots was connected to the sewer before 1899. Permit #51825.7 was issued for 669 Grand Street (present day 897 Grand Street) to be connected to the sewer on June 11, 1878. At the time the owner of record was M. Jacobs. The building, as described above, was a 3-story dwelling with shop on ground floor and a 2-story stable in rear yard. There was an open yard between dwelling and stable. Although in 1888 there were 2-story dwellings on Powers Street that may date to an earlier period, based on the description of the building, it seems most probable that 897 (formerly 669) Grand Street was connected to the sewer at the time of its construction.

The balance of the project area was occupied by structures associated with a soda water factory and a wagon manufacturing business. Neither of these business were connected to the sewer in the 1870's, and, indeed, Lot 24 was not connected to the sewer until the end of the 19th century, when the 1-story and 2-story wooden structures were replaced by multi-family dwellings that required plumbing. Lot 23 (now combined with Lot 24) was never connected to the sewer.

- X Bein, J. R. and C. C. Vermeule
1891 *Atlas of the Metropolitan District and Adjacent Country*. J. Bien & Co., New York. Scale: Enlarged, none shown. (Map 11)

The 1891 map of the Metropolitan District includes the project area. At this time it appears that the English Kills channelization was underway, providing water access to the Bushwick industrial area. However, this map suggests that areas of the salt meadows associated with English Kills may still have existed. No structures are shown on this map, but information obtained from other maps indicates that the project area had been developed with residential and commercial structures.

- X Sanborn Map Company
1907 *Sanborn Insurance*. Plate 62. Scale: 60 feet to the Inch. (Map 12)

By 1907 the project area had changed significantly. First, the project area was now identified as located in Block 2923, its present designation, and the house numbers had been changed to those currently in use. Present day Lot 25 was designated 897-899 Grand Street. The building was now shown as a brick veneer structure. There was a shop on either side of the main entrance and apartments above. The building was 3-story. It is not clear whether the building on Lot 25 was an entirely new structure, but whatever the case it now had a different configuration. The structure in the rear yard was no longer standing. Lot 24, location of the soda water factory, was identified as 901-903 Grand Street. While the commercial activity taking place on this lot was the same, the building was completely different. It was a 3-story structure or brick or brick veneer with dwelling units above the ground floor. There was a 1-story shed structure that covered the entire rear yard. According to the Brooklyn Sewer Department records, Lot 24 was connected to the sewer on March 3, 1899 (Permit #1449.13). At the time that the connection was made the owner of the property was a person named Behr. Lot 23 was occupied by 1-story building, but it was vacant. No record of a connection to the sewer was found for Lot 23.

- X Hyde, E. Belcher
1929 *Desk Atlas Borough of Brooklyn City of New York*. E. Belcher Hyde: New York, NY. vol. 2. Plate 40. Scale: 160 Feet to the Inch. (Map 13)

Lot 25 continued to be occupied by a 3-story building. Lot 24 appears to have been combined with Lot 23. Lot 24 was occupied by a 3-story building at the front of the lot and a 2-story structure that covered the entire rear of the lot. Lot 23 was occupied by a 1-story structure that covered the entire lot.

- X Sanborn Map Company
1933 *Sanborn Insurance*. Vol. 9. Plate 24. Scale: 160 feet to the Inch. (Map 14)

Lot 25 continued to be occupied by a 3-story building with two shops on the ground floor. Lot 24 was occupied by a 3-story building at the front of the lot. Connected to that building was a 1-story extension, with a 2-story structure that covered the rear of the lot. A wire chair manufacturing operation occupied the building. Lot 23 was occupied by a 1-story structure that covered the entire lot. This building was occupied by a welding operation.

- X Sanborn Map Company
1951 *Sanborn Insurance*. Vol. 9. Plate 24. Scale: 160 feet to the Inch. (Map 15)

Lot 25 was now identified as 897 Grand Street. One shop now occupied the ground floor. Lot 24 was identified as 901-903 Grand Street. The wire chair manufacturing company still occupied the premises. Lot 23, now 905 Grand Street, was a warehouse.

- X Sanborn Map Company
1965 *Sanborn Insurance*. Vol. 9. Plate 24. Scale: 60 feet to the Inch. (Map 16)

Lot 25 continued to be occupied by a 3-story structure containing a shop on the ground floor. The rear yard was open. Lot 24 was now occupied by a vending machine manufacturing operation. Lot 23 remained a warehouse.

- X Sanborn Map Company
1968 *Sanborn Insurance*. Vol. 9. Plate 24. Scale: 60 feet to the Inch. (Map 17)

Lot 25 was now vacant land. Lot 24 and Lot 23 were being used as they had been in 1965.

- X Sanborn Map Company
1995 *Insurance Map. Borough of Brooklyn, City of New York*. Sanborn Map Company: New York, NY. Vol. 9. Plate 24. Scale: 160 Feet to the Inch. (Map 18)

The project area, occupying Lot 25-23, was configured as it had been in 1968. Today the buildings formerly located on Lot 24 and Lot 23 have also been demolished.

- X United States Geological Survey
1967 *Brooklyn, New York Quadrangle. 7.5 Minute Series. Photorevised 1979.*
Scale: 1:24,000. (Map 1, reproduced at 1:12,000)
- c. **Site Specific Texts**
- Armbruster, Ernest L.
1942 *Brooklyn's Eastern District.* Brooklyn, NY.
- Brooklyn Sewer Department
n.d. *Register of Sewer Connections.* Volumes 5-7 and 9. (Volume 8 is missing but covers 1882-1886).
- Smith, Carlyle S.
1950 *The Archaeology of Coastal New York.* American Museum of Natural History: Anthropological Papers. v. 43. pt. 2.
- Stiles, Henry R.
1867. *History of the City of Brooklyn.* W. W. Munsell and Company: Brooklyn, NY.

3. **PREVIOUS SURVEYS IN VICINITY OF PROJECT**

- CITY/SCAPE: Cultural Resource Consultants
1995 *Stage 1A Literature Review and Archaeological and Historical Sensitivity Evaluation. Nueva Vista Site (Block 3070. Lot 10-14). 140 Johnson Avenue. Williamsburgh. Borough of Brooklyn. Kings County, New York.* Prepared for Pratt Planning and Architectural Collaborative.
- 1997 *Stage 1B Archaeological Field Reconnaissance Survey. Nueva Vista Site (Block 3070. Lot 10-14). 140 Johnson Avenue. Williamsburgh. Borough of Brooklyn. Kings County, New York.* Prepared for Pratt Planning and Architectural Collaborative.
- 1995 *Stage 1A Literature Review and Archaeological and Historic Sensitivity Evaluation. Block 2208. Lot 2 & 16. Williamsburgh. Borough of Brooklyn. Kings County, New York.* NLA/PRE-CEQR-K.
- 1997 *Stage 1A Literature Review and Sensitivity Analysis. Ellery Court Senior Houses. 327-349 Ellery Street, 13 & 15 Beaver Street, Borough of Brooklyn, Kings County, New York (HUD/202-K).*
- Hartgen Archeological Associates, Inc.
1994 *Archeological Sensitivity Assessment. Proposed Solid Waste Processing Building. 222 Morgan Avenue. City of Brooklyn. Kings county, New York.* (98DOS004K)
- TAMS Consultants, Inc.
1989a *Broadway Triangle Industrial Park (86-304K). Brooklyn, New York.*

Cultural Resource Study. Prepared for New York City Public Development Corporation.

1989b *"Second Level" Documentary Study. Broadway Triangle Industrial Park. Brooklyn, New York. (CEQR #86-304K).* Prepared for New York City Public Development Corporation.

Greenhouse Consultants, Inc.

1991 *Broadway Triangle Partnership Housing Project. Brooklyn, New York. Archaeological Testing Report. Blocks 1730 and 1732.*

1992 *Williamsburgh Street West. Block 2203. Lot 10. Borough of Brooklyn. New York, New York. CEQR 91-228K.*

1992 *Broadway Triangle Partnership Housing Project. Brooklyn, New York. Review of Archaeological Potential. Blocks 1721, 1722, 1726 and 1731.*

4. SENSITIVITY ASSESSMENT/SITE PREDICTION

Prehistoric Sensitivity

Regional prehistory currently dates to the first human entry into the area approximately 12,000 years ago. This coincides with the retreat of the Wisconsin glacial advance. At this same time sea levels began to rise along the Atlantic coast inundating the continental shelf off Long Island and the Lower New York Bay. The precise timing of the retreat of the glacial ice and the rise in sea level is a matter of debate, but it had certainly taken place by 15,000 BP.

The earliest occupants of the northeastern United States, called Paleo-Indians by archaeologists, are identified by their distinctive lithic tradition of fluted projectile points. Later cultures occupying the area are broadly termed Archaic (9000 to 3000 BP) and Woodland (3000 BP to 1600 AD). Reliance on cultigens became an increasingly important part of cultural adaptations during the Woodland Period. A Transitional Phase between the Late Archaic and Woodland has been treated by some scholars as a separate cultural period. The Transitional Phase is characterized by the use of soapstone utensils, whereas the Woodland Period is identified in part by the use of pottery.

Two prehistoric archaeological sites are identified in the general vicinity of the project area. The first of these is located at the mouth of Newtown Creek. It is identified by Parker as a "village site." The second, identified as NYSM Site # 3613, is also identified as being on the bank of Newtown Creek. It is described as "traces of occupation." As noted above, Parker sites are generally anecdotal in nature, meaning that they have not been professionally excavated. (See Fig. 1)

Although prehistoric peoples would have ranged over all of Long Island, archaeological investigations indicate that habitation sites were situated in proximity to water sources such as tidal creeks, substantial streams, and wetland

areas. Upland areas, away from water, would have been used for hunting. (Smith 1950: 101) The project area is proximate to a significant stream and associated wetlands.

Based on the predictive model developed by the LPC, the presence of a source of fresh water in the immediate vicinity of the project area certainly increases the likelihood of the project area having been utilized as a camp site by prehistoric peoples. It is probable that the roads in the vicinity of the project area (particularly historic Cripplebush Road and Bushwick Road) correspond with older Indian paths, suggesting that, at the very least, prehistoric peoples passed this way on a regular basis, perhaps on their way to the wetland/salt marsh associated with English Kills. Despite the environmental factors that suggest the potential for prehistoric cultural remains on the project area, the site has been extensively developed over the last 150 years, to the extent that, while the area that overlooked English Kills may have been utilized as a camp site, the likelihood of recovering intact prehistoric cultural resources on the site is statistically slight. Based on the foregoing, it is not anticipated that the project area would yield prehistoric cultural resources.

Historic Sensitivity

The New York City Landmarks Preservation Commission communication identified the project area as possessing the potential to yield archaeological evidence of 19th century occupation. This would be in the form of privies and/or cisterns located behind the buildings that formerly stood on the site.

An examination of the Sensitivity Maps for the Borough of Brooklyn at the LPC indicates that the project area falls within an area considered historically sensitive. The historic hamlet of Bushwick, which dates to the second half of the 17th century, was located immediately to the north, with the Bushwick Church, Town House and school located on the east side of Humboldt (formerly Smith) Street north of Metropolitan Avenue. (See Fig. 3) As noted above, Luqueer's Mill (later known as Master's Mill) was located on the English Kills at the intersection of Metropolitan Avenue and Grand Street. From 19th century maps it appears that the mill site was on the north side of Metropolitan Avenue. While the area in the vicinity of the project area was occupied during the 17th and 18th centuries, it does not appear from the maps that any structures associated with the hamlet of Bushwick extended into the project area. Dwellings were located on the east side of Bushwick Road (later Bushwick Avenue) in the early 19th century, but there is no evidence that structures associated with these dwellings extended eastward into the project area. The project area is identified as farmland and pastureland from the mid-17th through the early years of the 19th century. (See Fig. 3 & Map 4)

Documentary research indicates that although there may have been dwellings built on Powers Street, Grand Street was predominantly commercial until urbanization

began to extend into this area of Bushwick in the 1870's. The maps from the mid-19th century indicate that Block 2923 had not been developed, even though there had been development to the north and south of Grand Street. The initial construction of multi-family buildings on Grand Street suggests a construction date in the 1870's, by which date both sewer and water were available in the area (Sewer Department Records). At the time Block 2923 was identified as Block 46 (See Appendix B: Tax Assessment Records, 1899).

Documentary research further indicates that the buildings located on Grand Street (Lot 23, 24 & 25) were connected to the sewer between 1878 and 1899. Lot 25 (897 Grand Street) was connected to the sewer on June 11, 1878. Based on the timing of residential development in Bushwick, which began in the second half of the 19th century, and, more particularly, the configuration of the building (3-story dwelling with shop on ground floor) it is concluded that the connection to the sewer was made at the time of the construction of 897 Grand Street (formerly 669 Grand Street). By 1888 there were structures on Lot 23 and 24; but the date of their initial construction is uncertain. Both Lot 24 and Lot 23 were initially occupied by commercial enterprises. Lot 24 was not connected to the sewer until 1899, by which time the buildings standing on the property in 1888 had been replaced by new construction. No record of the date at which Lot 23 was connected to the sewer was found, but as late as 1995 the building on the lot was a 1-story warehouse. It is possible that since it was used as a welding shop and later for storage that plumbing was never installed in this building.

The Library of Congress Land Use Maps for Brooklyn were examined at the New York Public Library Map Room. These maps indicate that the lots on Block 2923 were not developed until the third quarter of the 19th century (after 1875). By this date, as noted above, both water and sewer were available in the area.

Development had taken place in the area prior to that time the area, particularly to the east along English Kills and on the block on the south side of Grand Street, but this was industrial rather than residential. The Bushwick Chemical Works, which moved to Bushwick from Harlem in 1851 (Hartgen, 1994:4) was two blocks to the east, while John F. Lothar's Ropewalk and the Waterbury Cordage Company were directly south of the project area. The Bushwick Glass Works was opposite and slightly east of the project area. No structures associated with these enterprises were located on Block 2923.

Records indicate that on Grand Street a 6" water main had been installed prior to 1888. The sewer line is not indicated, but the Brooklyn Sewer Department records indicate that a sewer line was installed by 1878, since Lot 25 (897 Grand Street) was connected to the sewer on June 11th of that year. In 1888 Lot 25 was occupied by a 3 story multi-family building with a shop on the ground floor. Again, the configuration of the building (an old law tenement form) suggests that it was constructed at the time that the connection to the sewer was made. This was

the time when Block 2923 was being developed and there is no indication that structures stood within the project area prior to that date.

Based on work performed by CITY/SCAPE: Cultural Resource Consultants and others in the vicinity of the project area (CITY/SCAPE: Cultural Resource Consultants, 1995, Hartgen, 1994 and others) it appears that development in Block 2923 did not take place prior to the availability of sewer and water. In such a case, neither cisterns or privies would be associated with the structures within the project area.

The following details the information for each of the lots included within the project area:

**Lot 23 (formerly 905 Grand Street/now combined with Lot 24)
Former Lot 5 (673 Grand Street)**

Research indicates that a building stood on this lot by 1888. Water was available at the time, as was the sewer line, but Lot 23 appears to have never been connected to the sewer. It is likely that it was a work space (first a wagon manufacturer, then a welding shop, and finally a warehouse) that did not require water and sewer. Later it may have served as storage or warehouse space for the business located at 901-903 Grand Street – again not requiring connection to the sewer lines. By 1907 the building seen on the 1888 map had either been expanded, or more probably, replaced by another 1-story building covered the entire lot. The construction of these buildings would have destroyed evidence of earlier commercial activities on the site – which might have taken the form of sheet middens or dumps. It is not anticipated that any privy or cisterns would have been located on the site. It is not considered that Lot 23 has archaeological potential.

**Lot 24 (901-903 Grand Street/now combined with Lot 23)
Former Lot 4 (671 Grand Street)**

Research indicates there was a building on this lot by 1888. We know from the 1888 Sanborn that water was available in Grand Street. It appears from information gathered on Lot 25 that sewer was available by 1878, however, Sewer Department records indicate that the building on this lot was not connected to the sewer line until 1899. The 1907 Sanborn map indicates that the building standing on the lot in that year was a completely different structure than that seen on the 1888 Sanborn map. The construction of a building between 1888 and 1907 that effectively covered the entire lot would have destroyed any surface evidence of the earlier structures. Since water and sewer were both available by 1888 there is no reason to suppose the existence of either privies or cisterns on the site, but if such had existed the construction of the new building, which had a cellar, would have destroyed these features. The archaeological potential of this lot is negligible.

**Lot 25 (897 Grand Street)
Former Lot 3 (669 Grand Street)**

Information obtained from the Brooklyn Sewer Department indicates that the building located on Lot 25 was connection to the sewer in 1878. The building was a multi-family dwelling that had a shop on the ground floor. It is probable that it was connected to the sewer at the time of its construction. While there was an open yard at the rear of the house, the availability of both sewer and water in Grand Street in 1878 suggests that the rear yard is unlikely to contain either a privy or a cistern. The demolition of the 3-story building and the 2-story structure in the rear yard further reduces the probability of any intact archaeological resources being present on Lot 25. Again, the fact that this part of Brooklyn was developed for residential use after sewer and water was available indicates that the potential for this lot to contain privies and/or cistern is low. There is no indication that any development had taken place on this site prior to 1878. Lot 25 lacks archaeological potential.

5. RECOMMENDATIONS

Prehistoric Sensitivity

Based on the environmental models promulgated by the New York City Landmarks Preservation Commission and the New York State Museum Archaeological Site Files, the project area would be considered to have a high potential to yield prehistoric cultural material. It is closely associated with English Kills, a fresh water source with associated wetlands. However, the use history of the site, which includes the excavation of basements associated with the buildings on the site, suggests that the likelihood of intact prehistoric cultural resources on the site is virtually non-existent.

Historic Sensitivity

Based on documentary research, including an examination of Sensitivity Maps for the Borough of Brooklyn at the LPC, and an examination of historic maps and atlases of the area, it is concluded that the project area does not contain the potential to yield significant historic archaeological resources dating from the 17th or 18th centuries. Development in this area was strongly associated with the Bushwick Road, with farm fields to the east and west. The project area is located south of the center of the hamlet of Bushwick, one of the 17th century settlements in Brooklyn. The maps examined indicate that the project area lay outside the developed areas and would have been farmland overlooking English Kills. (See Fig. 2 & 3)

With respect to the potential for 19th century cultural remains, it is concluded that development along Grand Street between Olive Street and Catherine Street

development took place in the mid to late 1870's. Sewer and water were available in Grand Street by 1878, the year that Lot 25 was connected to the sewer. The presence of both water and sewer lines in Grand Street at the time that the building was constructed on Lot 25 suggests that potential for the presence of backyard privies and/or cisterns is low, and no further archaeological investigation of Lot 25 is recommended.

Lot 24 was not connected to the sewer until 1899, at which time the buildings located on the lot in 1888 had been replaced by new construction. Since both water and sewer were available by 1878 it is unlikely that any subsurface features would have been located on the site. Furthermore, the entire lot was covered by the new construction, suggesting that any surface deposits associated with the earlier structure would have been destroyed. No further archaeological investigation of Lot 24 is recommended.

Lot 23 (now combined with Lot 24) was, as far as can be determined, never connected to the sewer. It served as a storage and warehouse building for much of the 20th century. While there was a structure on the lot by 1888, examination of the Sanborn Insurance maps indicate that the building on the lot in 1907 was different from that seen in 1888. Visual inspection of the site indicates that this building had a cellar. The presence of a cellar effectively destroys the archaeological potential of Lot 23, and no further investigation is recommended.

End of Part 1A

BIBLIOGRAPHY

Armbruster, Ernest L.

1912 *The Eastern District of Brooklyn*. Private publication: Brooklyn, NY.

1942 *Brooklyn's Eastern District*. Private publication: Brooklyn, NY.

Beauchamp, William

1900 *Aboriginal Occupation of New York*. New York State Museum Bulletin No. 32. Albany, NY.

Bolton, Reginald Pelham

1920 "New York City in Indian Possession". *Indian Notes and Monographs*. v. II. No. 7. Heye Foundation. Museum of the American Indian: NY.

1922 "Indian Paths in the Great Metropolis". *Indian Notes and Monographs*. Misc. No. 23. Heye Foundation. Museum of the American Indian: NY.

1934 *Indian Life of Long Ago in the City of New York*. Joseph Graham: NY.

CITY/SCAPE: Cultural Resource Consultants (Gail T. Guillet & Stephanie Roberg-Lopez)

1997 *Stage 1A Literature Review and Sensitivity Analysis. Ellery Court Senior Houses. 327-349 Ellery Street, 13 & 15 Beaver Street, Borough of Brooklyn, Kings County, New York (HUD/202-K)*. Prepared for Pratt Planning and Architectural Collaborative.

1996 *Stage 1B Archaeological Field Reconnaissance Survey. Nueva Vista Site (Block 3070. Lot 10-14). 140 Johnson Avenue. Williamsburgh. Borough of Brooklyn. Kings County, New York*. Prepared for Pratt Planning and Architectural Collaborative.

1995a *Stage 1A Literature Review and Archaeological and Historical Sensitivity Evaluation. Nueva Vista Site (Block 3070. Lot 10-14). 140 Johnson Avenue. Williamsburgh. Borough of Brooklyn. Kings County, New York*. Prepared for Pratt Planning and Architectural Collaborative.

1995b *Stage 1A Literature Review and Archaeological and Historic Sensitivity Evaluation. Block 2208. Lot 2 & 16. Williamsburgh. Borough of Brooklyn. Kings County, New York. NLA/PRE-CEQR-K*.

Conkey, Laura E. et al.

1978 "Indians of Southern New England and Long Island: Late Period." *Handbook of North American Indians*. Edited by Bruce G. Trigger. v. 15. Smithsonian Institute: Washington, DC. p. 177 - 189.

Dankers, Jasper and Peter Sluyter

1966 *Journal of a Voyage to New York*. Great Americana Series. Readex Microprint Corporation. [Reprint of 1867 translation]

Denton, Daniel

1966 *A Brief Description of New-York: Formerly Called New-Netherlands*. Readex Microprint Corporation reprint of 1670 edition published in London.

Dikeman, John, Jr. (compiler)

1870 *The Brooklyn Compendium; showing the opening, closing and alterations in the lines of various streets, avenues, etc., in the City of Brooklyn*. Published by order of the Brooklyn Common Council.

Disturnell, J.

1843 *A Gazetteer of the State of New York*. C. Van Benthuysen: Albany, NY.

Fagan, Brian M.

1991 *Ancient North America*. Thames and Hudson: New York, NY.

French, J. H.

1860 *Gazetteer of New-York State*. Heart of the Lakes Publishing: Interlaken, NY.
[reprinted 1981]

Funk, Robert E.

1976 *Recent Contributions to Hudson Valley Prehistory*. New York State Museum
Memoir 22. Albany, NY.

Greenhouse Consultants, Inc.

1992a *Broadway Triangle Partnership Housing Project. Brooklyn, New York. Review
of Archaeological Potential. Blocks 1721, 1722, 1726 and 1731.*

1992b *Broadway Triangle Partnership Housing Project. Brooklyn, New York.
Archaeological Testing Report. Blocks 1730 and 1732.*

1991 *Williamsburgh Street West. Block 2203. Lot 10. Borough of Brooklyn. New
York, New York. CEQR 91-228K.*

Hartgen Archeological Associates, Inc.

1994 *Archeological Sensitivity Assessment. Proposed Solid Waste Processing
Building. 222 Morgan Avenue. City of Brooklyn. Kings County, New York.
(98DOS004K)*

Kraft, Herbert C. (editor)

1991 *The Archaeology and Ethnohistory of the Lower Hudson Valley and Neighboring
Regions: Essays in Honor of Lewis A. Bremman*. Occasional Publications in
Northeastern Archaeology. No. 11. Archaeological Services: Bethlehem, CT.

Kraft, Herbert C.

1978 "The Miller Field Site in New Jersey and Its Influence upon the Terminal Archaic
and Transitional Stages in New York State and Long Island." in *Readings in Long
Island Archaeology and Ethnohistory*. v. II. Suffolk County Archaeological
Association: Stony Brook, NY.

Parker, Arthur

1920 *The Archaeological History of New York*. New York State Museum Bulletin. No.
237 and 238. Albany, NY.

Ritchie, William A.

1969 *The Archaeology of New York State*. Natural History press: Garden City, NY.

1965 "The Stony Brook Site and Its Relation to Archaic and Transitional Cultures on
Long Island." *New York State Museum and Science Service Bulletin*. No. 372.
University of the State of New York: Albany, NY. [Reprint of 1959 edition]

1973 *Aboriginal Settlement Patterns in the Northeast*. Memoir 20. New York State
Museum and Science Service. Albany, NY.

Salwen, Bert

1975 "Post-Glacial Environments and Cultural Change in the Hudson River Basin" in
Man in the Northeast: 10.

- 1978 "Indians of Southern New England and Long Island: Early Period." *Handbook of North American Indians*. edited by Bruce G. Trigger. v. 15. Smithsonian Institute: Washington, DC. p. 160 - 176.
- Saxon, Walter
1979 "The Paleo-Indian on Long Island." in *Readings in Long Island Archaeology and Ethnohistory*. v. II. Suffolk County Archaeological Association: Stony Brook, NY.
- Schuberth, Christopher J.
1968 *The Geology of New York City and Environs*. The Natural History Press: Garden City, NY
- Smith, Carlyle S.
1950 "The Archaeology of Coastal New York." *American Museum of Natural History: Anthropological Papers*. v. 43, pt. 2. American Museum of Natural History: New York, NY.
- Snow, Dean R.
1980 *The Archaeology of New England*. Academic press: New York, NY.
- Stiles, Henry R.
1867. *History of the City of Brooklyn*. W. W. Munsell and Company: Brooklyn, NY.
1884 *The Civil, Political, Professional and Ecclesiastical History of the County of Kings and The City of Brooklyn, New York from 1683 to 1884*. W. W. Munsell & Co.: NY.
- TAMS Consultants, Inc.
1989a *Broadway Triangle Industrial Park (86-304K). Brooklyn, New York. Cultural Resource Study*. Prepared for New York City Public Development Corporation.
1989b *"Second Level" Documentary Study. Broadway Triangle Industrial Park. Brooklyn, New York. (CEQR #86-304K)*. Prepared for New York City Public Development Corporation.
- Wolley, Charles
1973 *A Two Years' Journal in New York and part of Its Territories in America*. Harbor Hill Books: Harrison, NY. [Reprint from 1701 Edition]

APPENDICES

LIST OF APPENDICES

Appendix A: Maps & Figures

Appendix B: Tax Assessment Records

APPENDIX A

MAPS & FIGURES

REVISED STAGE 1A SENSITIVITY ANALYSIS

MAP & FIGURE LIST

Maps

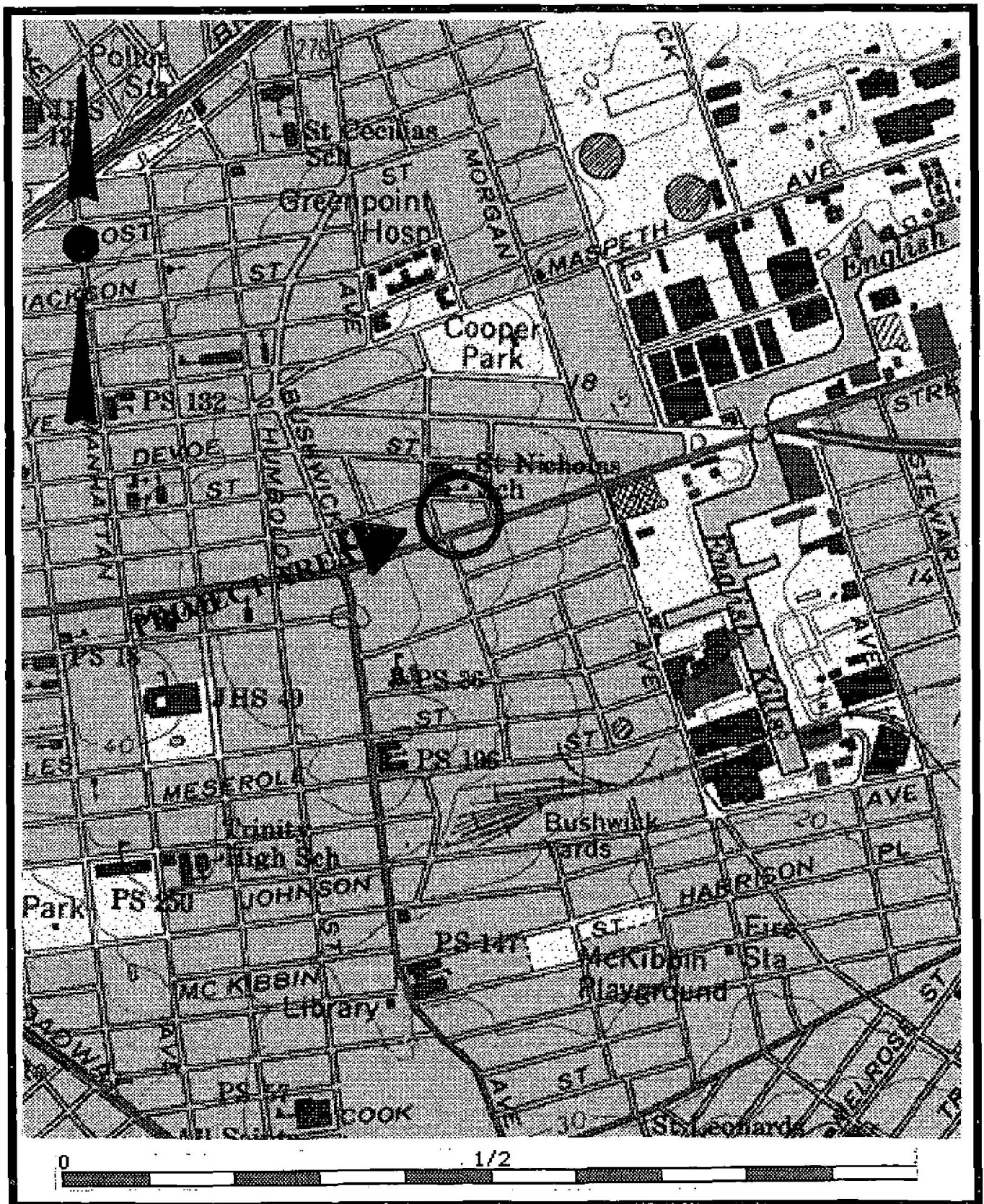
- Map 1 Location Map including Project Area. USGS Topo. 7.5 Minute Series. Brooklyn Quadrangle. Scale: 1:12,000
- Map 2 Location Map including Project Area. From Hagstrom's *New York City 5 Borough Atlas*. Map 11. Scale: 3" = 1 Mile
- Map 3 Detail from Ryder's 1670 *Map of Long Island*. No scale shown.
- Map 4 Detail from Survey of the Coast of the United States, 1844. *Map of New-York Bay and Harbor and Environs*. Scale: reduced
- Map 5 Detail from Thomas Field's 1852 *Map of the City of Williamsburgh and the Town of Bushwick*. . . Scale: Enlarged, no scale shown.
- Map 6 Detail from Connor's 1852 *Map of Kings and Part of Queens Counties, Long Island, New York*. Scale: 5½' = 2 Miles.
- Map 7 Detail of W. Perris' *Plan of the City of Brooklyn*. Scale: Enlarged, no scale shown.
- Map 8 Detail from Mathew Drupp's 1869 *Map of the City of Brooklyn, being formerly the cities of Brooklyn and Williamsburgh and the Town of Bushwick*. Scale: no scale shown.
- Map 9 Detail from Henry Fulton's 1874 *Farm Line Map of the City of Brooklyn*. Original scale: 500 parts to the Inch.
- Map 10 Detail from Sanborn Map Company 1888 *Insurance Map of the City of Brooklyn*. Plate 242. Scale: 140' = 1".
- Map 11 Detail from Bein & Vermeule's *Atlas of the Metropolitan District*. . . Scale: no scale shown.
- Map 12 Detail from Sanborn Map Company 1907 *Insurance Map of the Borough of Brooklyn in the City of New York*. Plate 24. Scale: 60' = 1".
- Map 13 E. Belcher Hyde. 1929 *Desk Atlas/ Borough of Brooklyn, City of New York*. Vol. 2. Plate 40. Scale: 160' = 1".
- Map 14 Sanborn Map Company's 1933 *Sanborn Insurance Map. Borough of Brooklyn. City of New York*. Plate 24. Scale: 60' = 1".
- Map 15 Sanborn Map Company's 1951 *Sanborn Insurance Map. Borough of Brooklyn. City of New York*. Plate 24. Scale: 60' = 1".
- Map 16 Sanborn Map Company's 1965 *Sanborn Insurance Map. Borough of Brooklyn. City of New York*. Plate 24. Scale: 60' = 1".

- Map 17 Sanborn Map Company's 1977 *Sanborn Insurance Map. Borough of Brooklyn. City of New York*. Plate 24. Scale: 60' = 1".
- Map 18 Sanborn Map Company's 1995 *Sanborn Insurance Map. Borough of Brooklyn. City of New York*. Plate 24. Scale: 60' = 1".

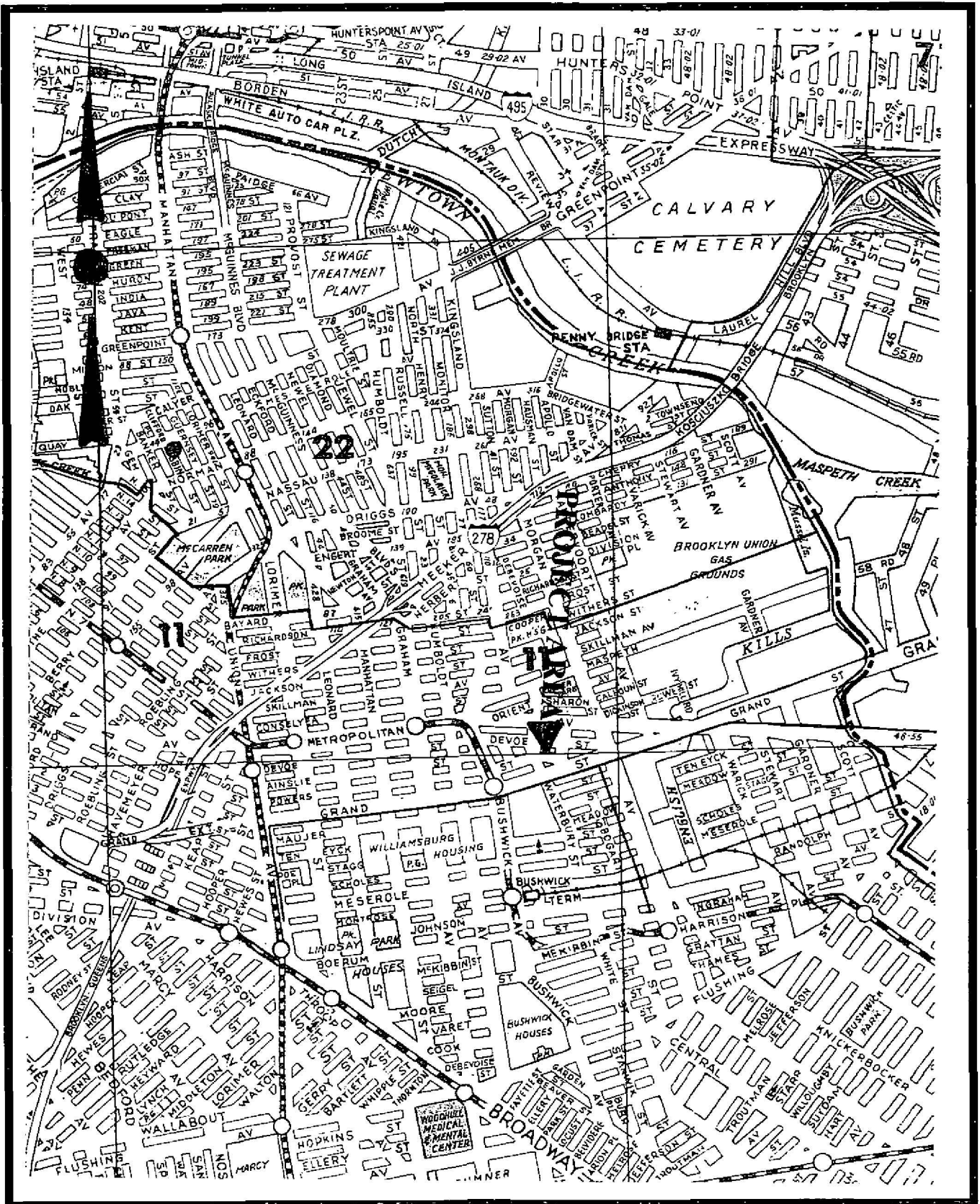
FIGURES

- Fig. 1 Archaeological Sites in the Vicinity of the Project Area. USGS Topo. 7.5 Minute Series. Brooklyn Quad. Scale: 1:24,000.
- Fig. 2 Het Dorp, or Bushwick Green. (taken from Stiles, 1867-69). No scale.
- Fig. 3 Bushwick Village and Surrounding Farm Land (taken from Armbruster, 1912) No scale.
- Fig. 4 Kings County Ward Map of the 18th Ward. 1892. Scale: 1100 feet to the Inch.
- Fig. 5 Lots on Block 2923 showing 1899 Ownership and Assessments (redrawn from current tax map). No scale.

Map 1: Location Map including Project Area. USGS Topo. 7.5 Minute Series. Brooklyn Quad. Scale: 1:12,000
 Block 2923. Lot 24 & 25. 897-903 Grand Street. Williamsburg. Borough of Brooklyn. Kings County, NY.



Map 2: Location Map including Project Area. Hagstrom's New York City 5 Borough Atlas. Map 11. Scale: 3" = 1 Mile.
Block 2923, Lot 24 & 25. 897-903 Grand Street. Williamsburg, Borough of Brooklyn, Kings County, NY.



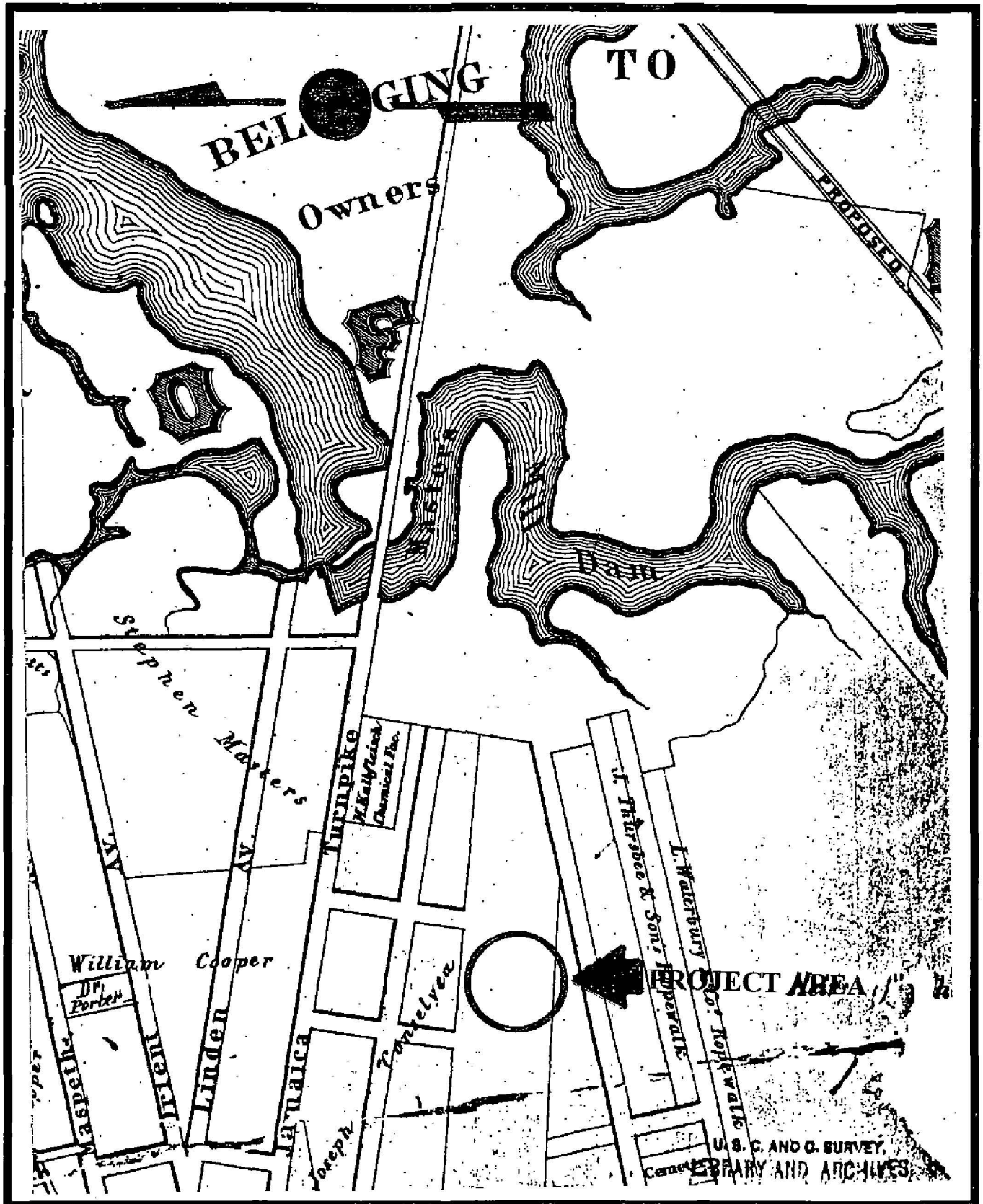
Block 2923, Lot 24 & 25, 897-903 Grand Street, Williamsburg, Borough of Brooklyn, Kings County, NY.

[illegible]

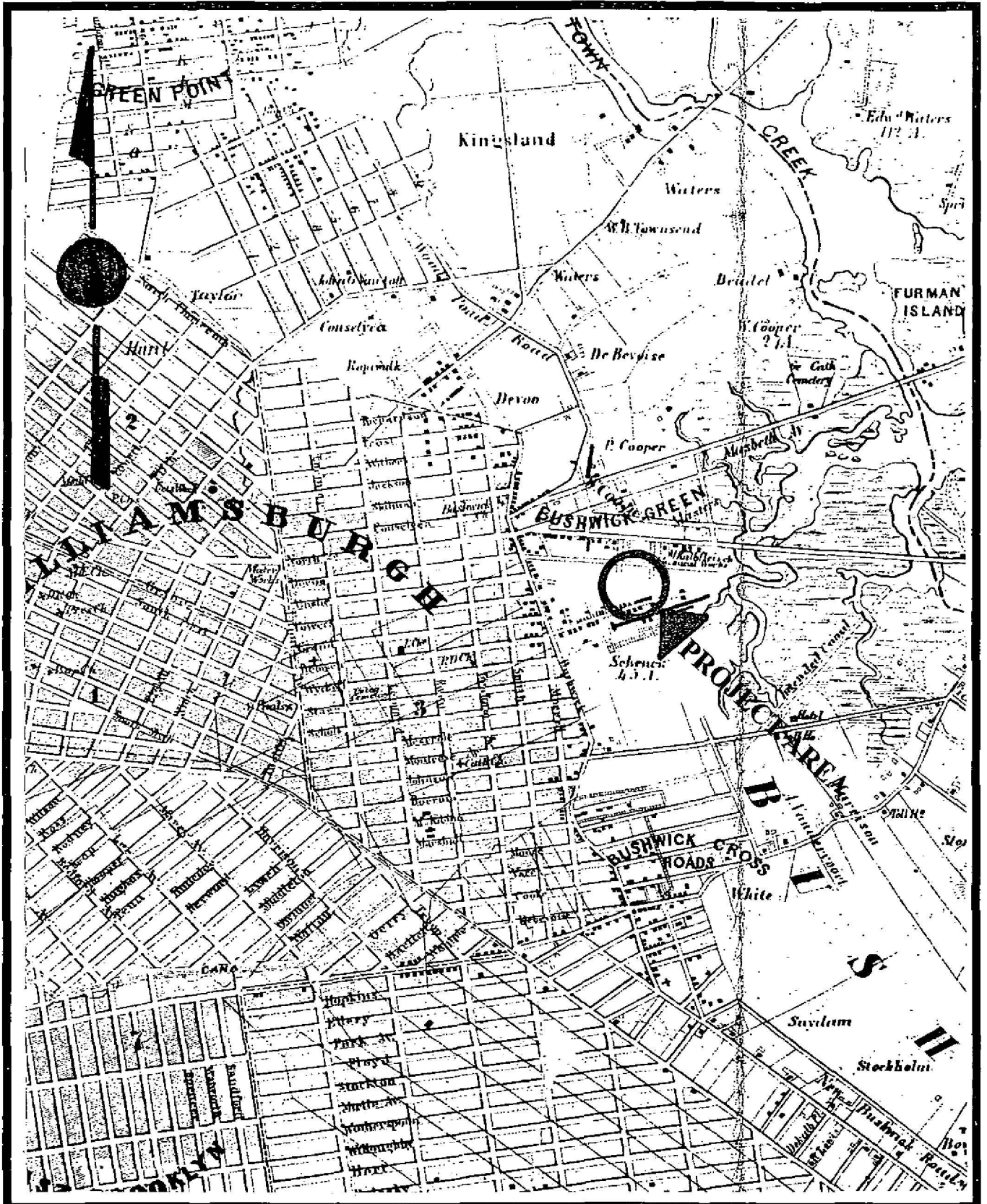
Map 4: Detail from 1844 *Map of New-York Bay and Harbor and Environs*. Scale: Reduced, no scale shown
Block 2923. Lot 24 & 25. 897-903 Grand Street. Williamsburg. Borough of Brooklyn. Kings County, NY.

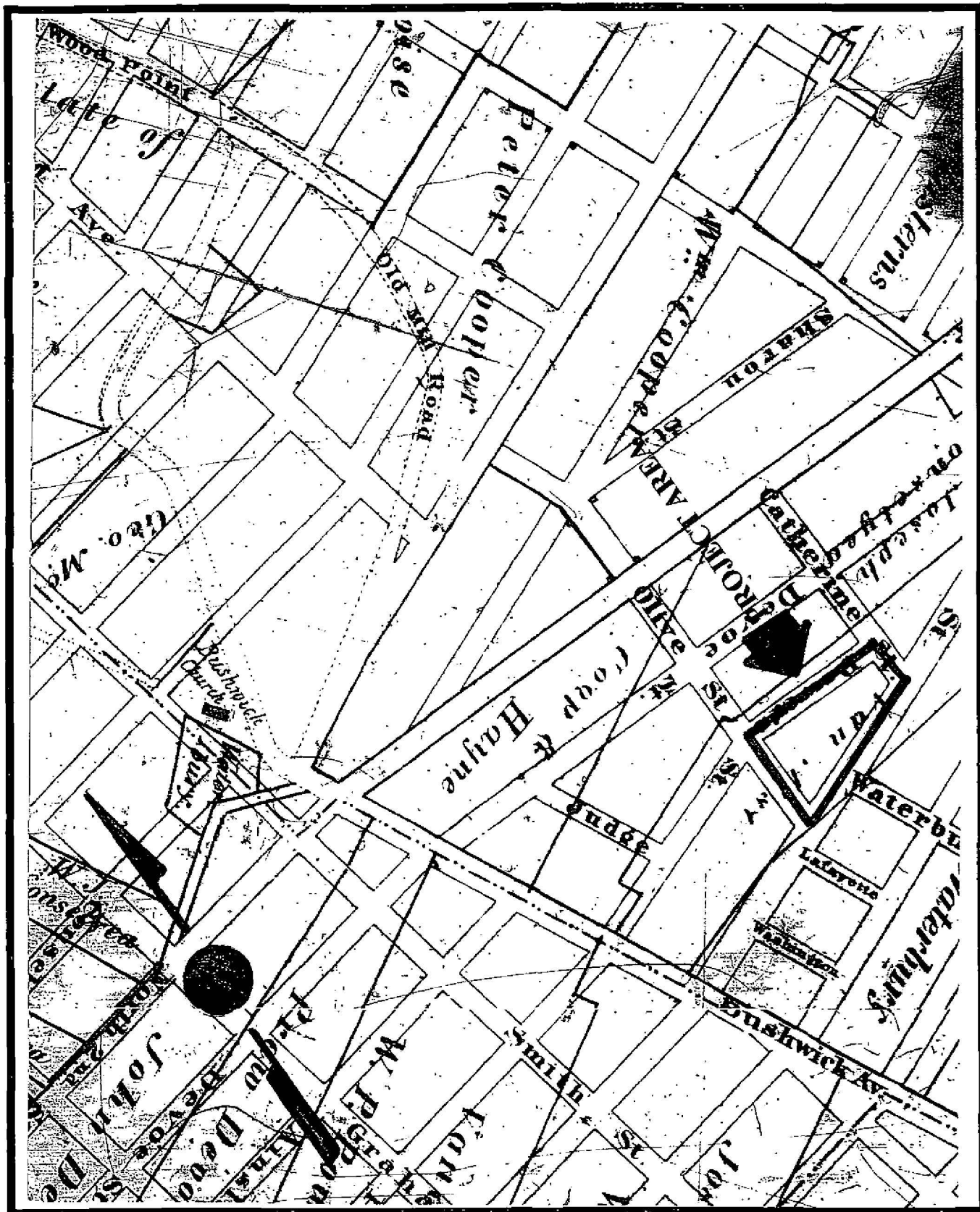


Map 5: Detail from 1852 Map of the City of Williamsburgh and the Town of Bushwick. Scale: Enlarged, no scale shown
 Block 2923. Lot 24 & 25. 897-903 Grand Street. Williamsburg. Borough of Brooklyn. Kings County, NY.

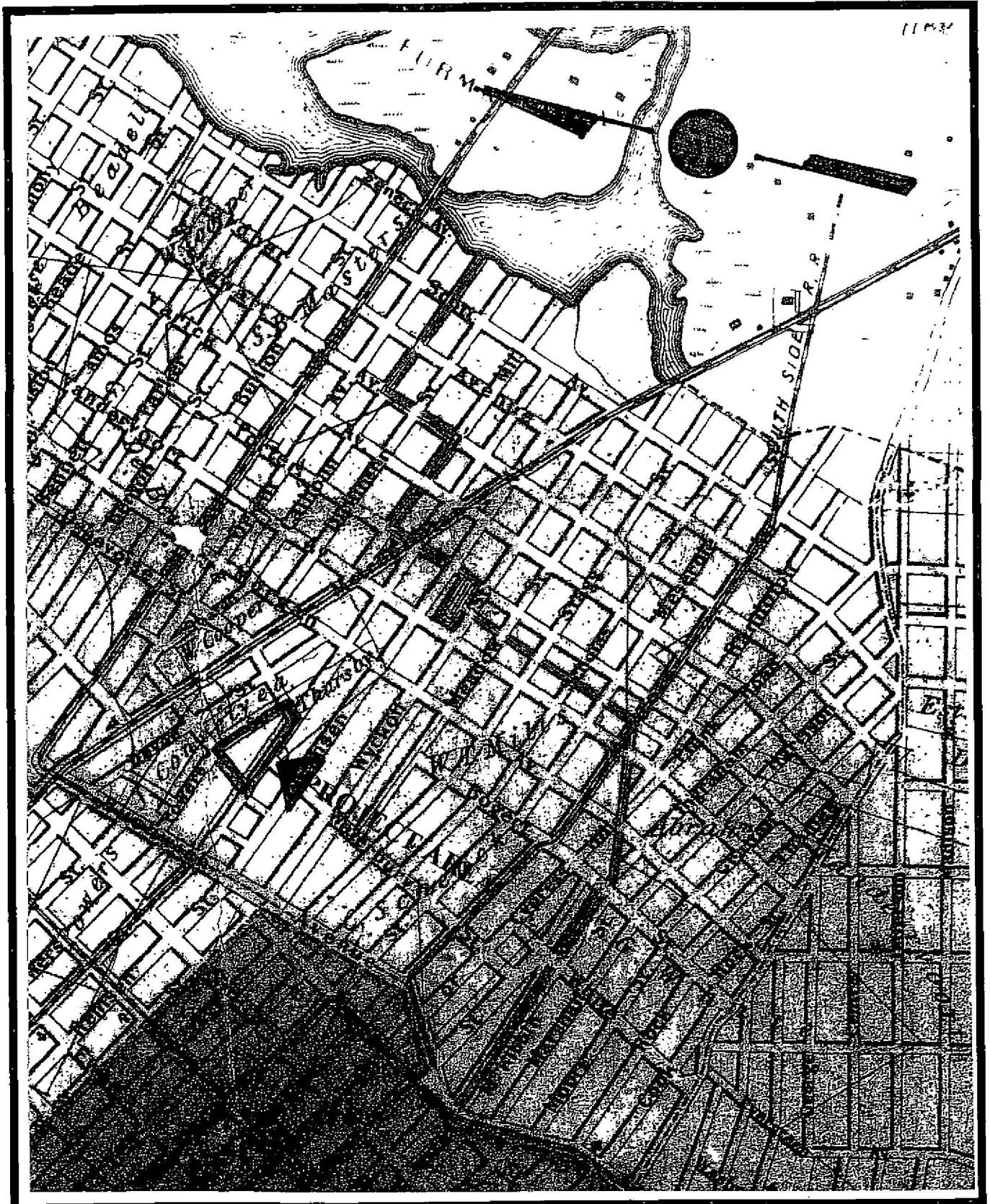


Map 6: Detail from 1852 Map of the Kings and Part of Queens Counties, Long Island, New York. Scale: $5\frac{1}{2}" = 2$ Miles
 Block 2923, Lot 24 & 25, 897-903 Grand Street, Williamsburg, Borough of Brooklyn, Kings County, NY.

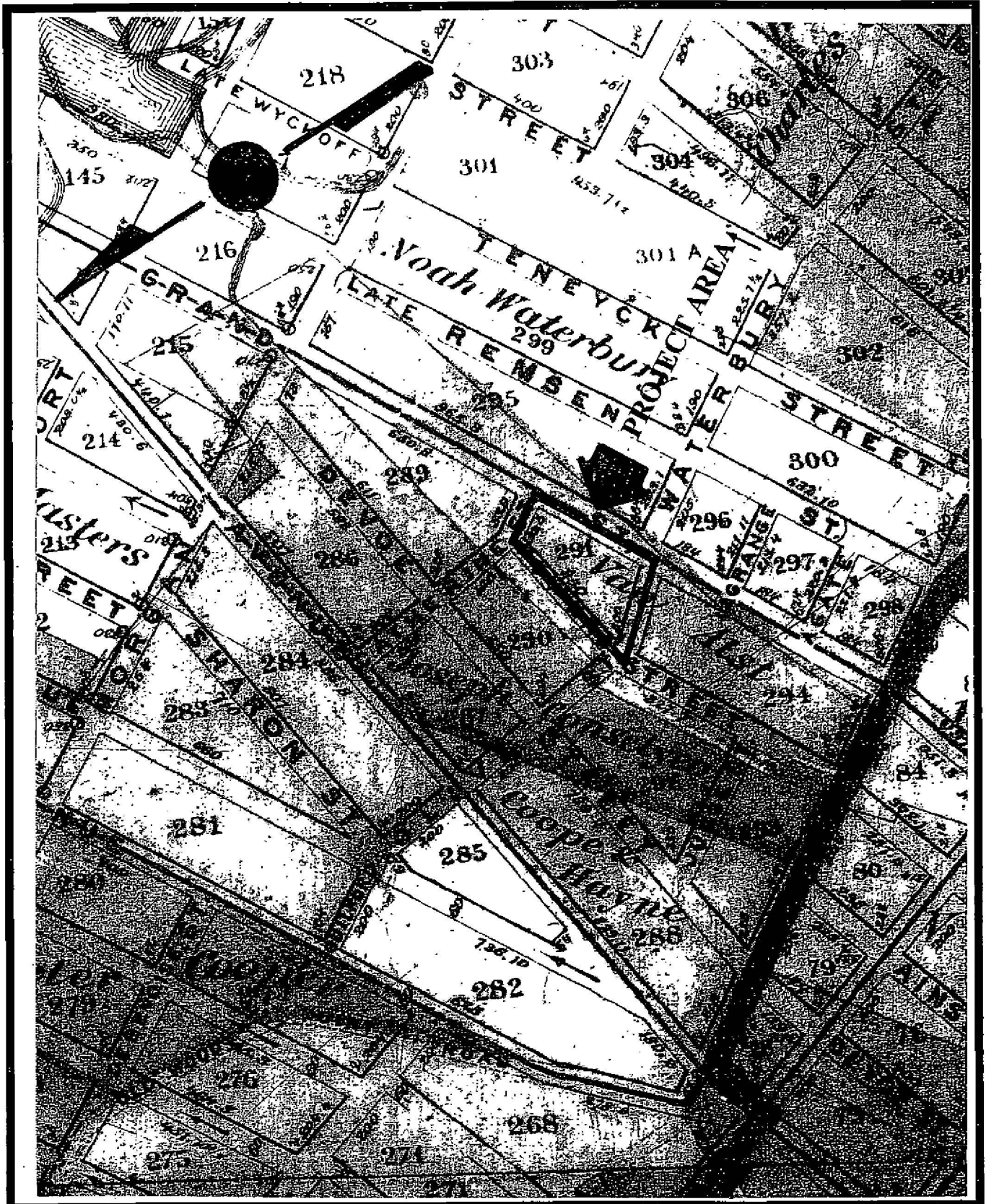




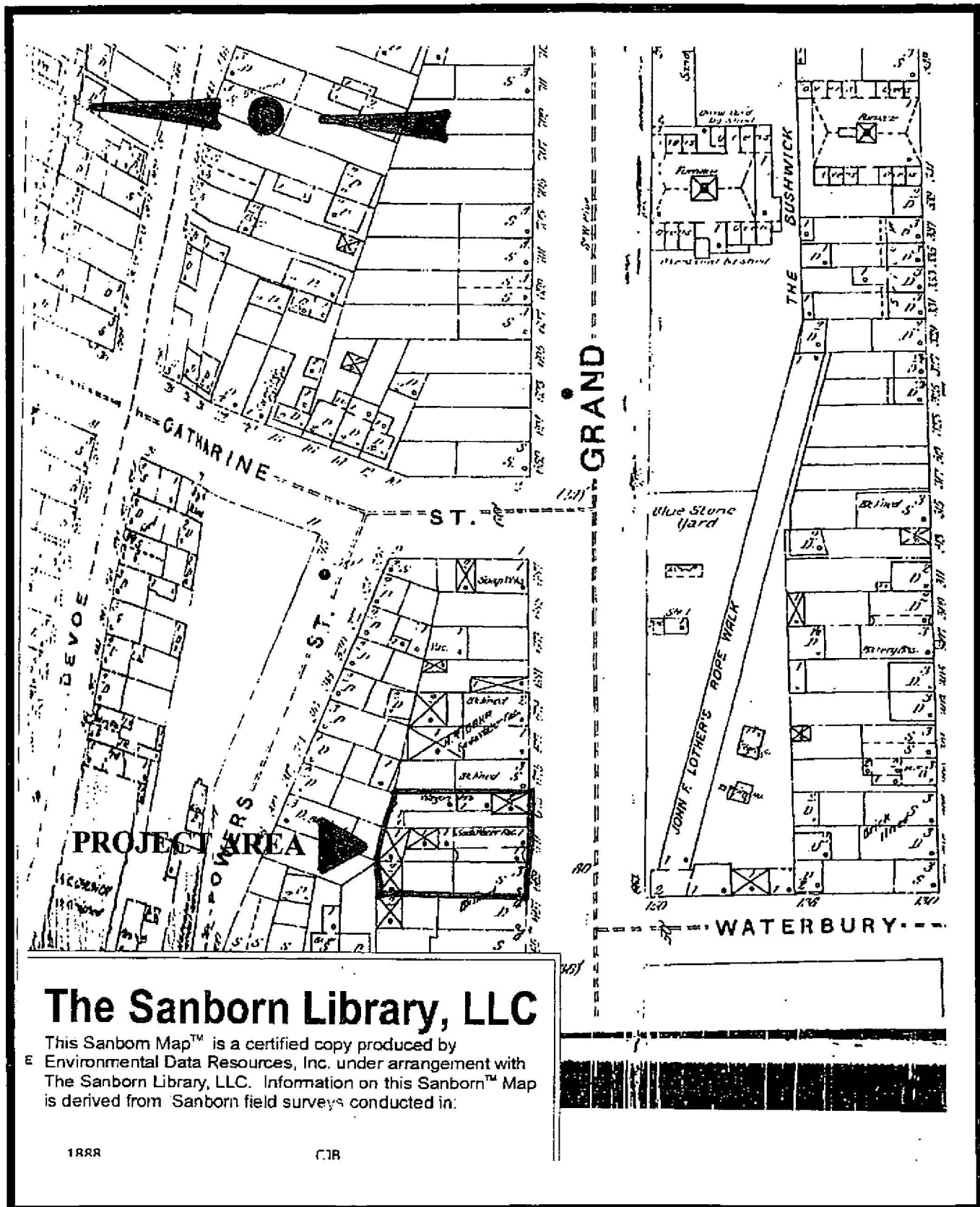
Map 8: Detail from 1869 *Map of the City of Brooklyn* . . . Scale: Enlarged, no scale shown
Block 2923, Lot 24 & 25, 897-903 Grand Street, Williamsburg, Borough of Brooklyn, Kings County, NY.



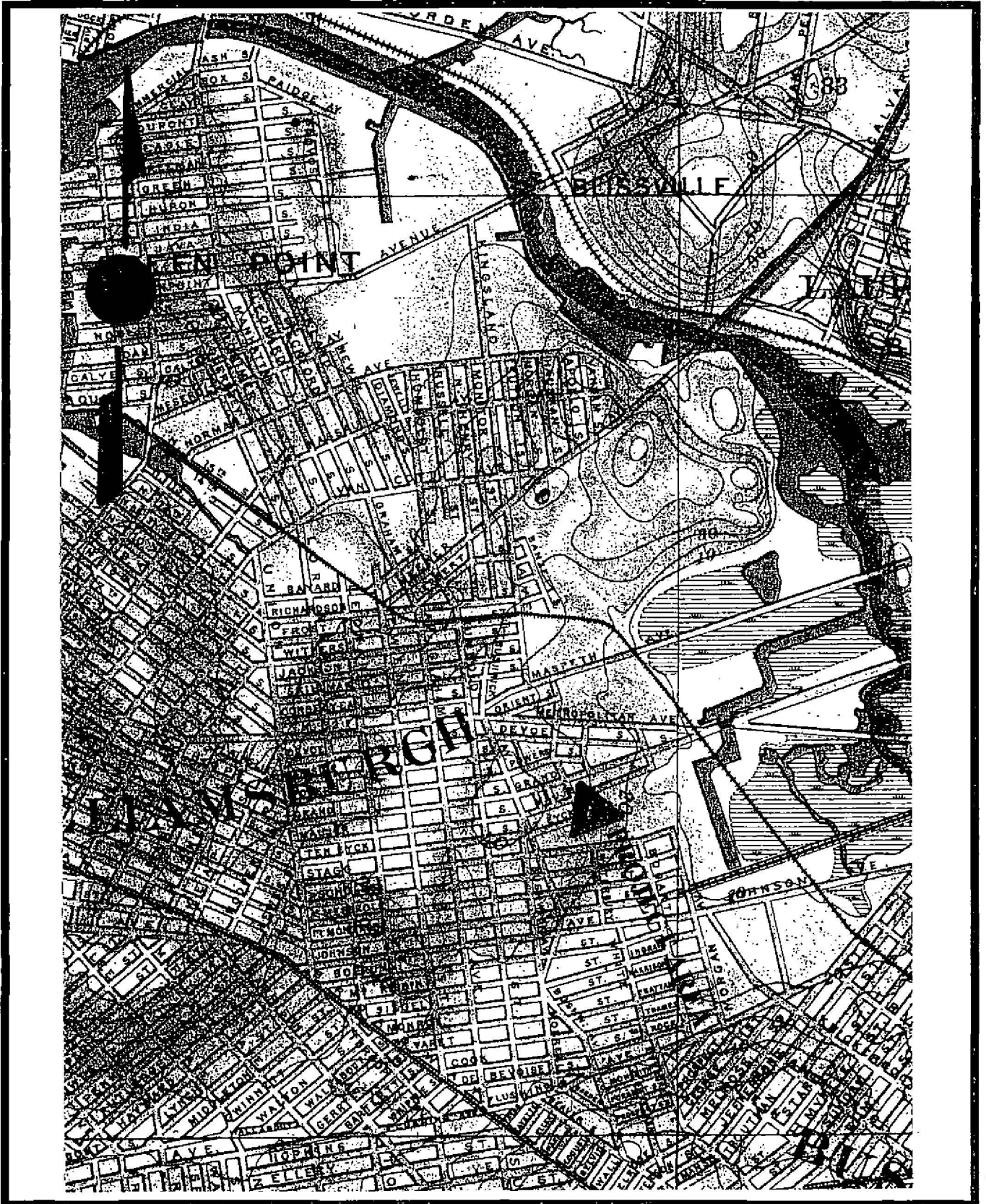
Map 9: Detail from 1874 *Farm Line Map of the City of Brooklyn*. Original scale: 500 Parts = 1 Inch
 Block 2923. Lot 24 & 25. 897-903 Grand Street. Williamsburg. Borough of Brooklyn. Kings County, NY.

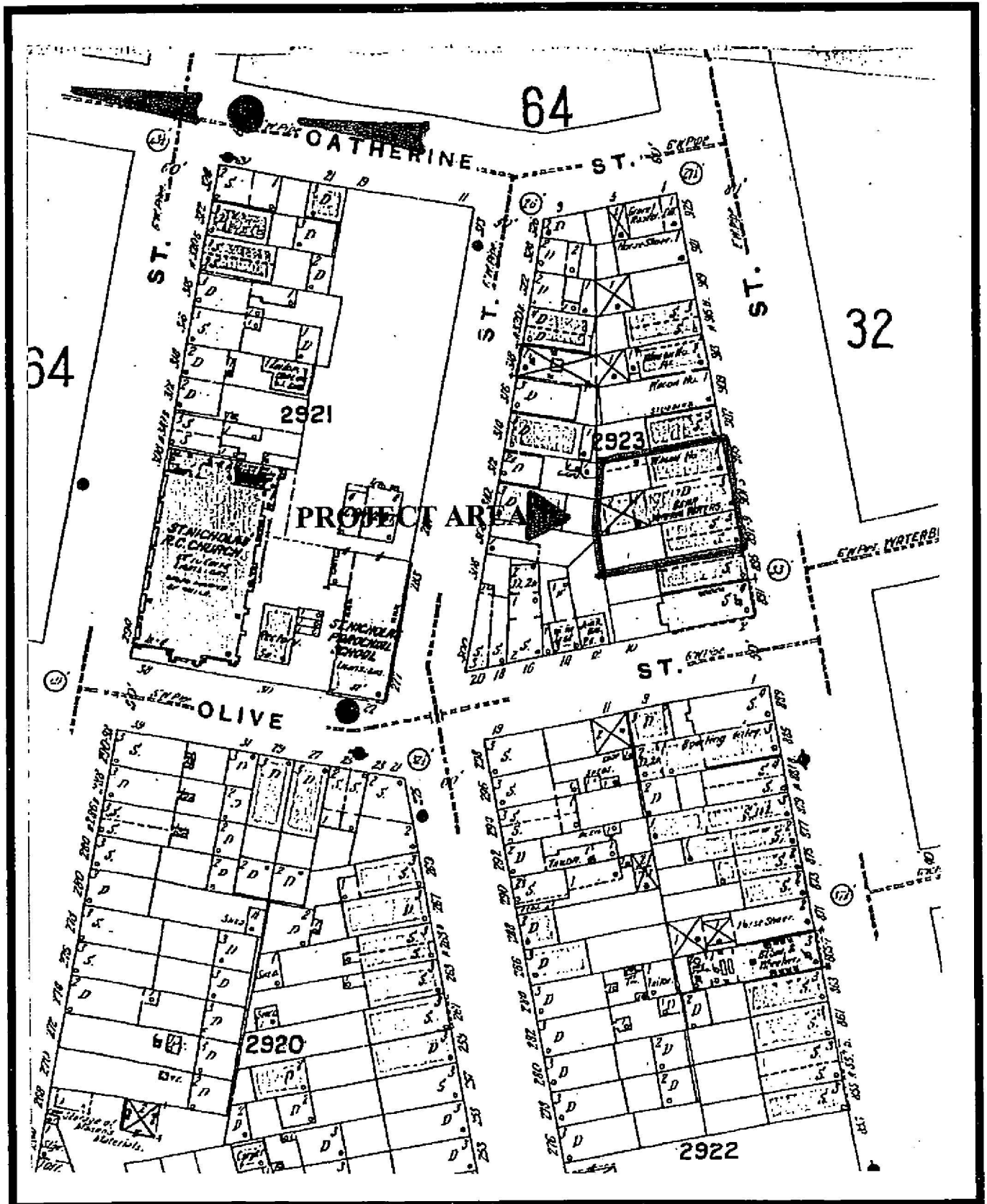


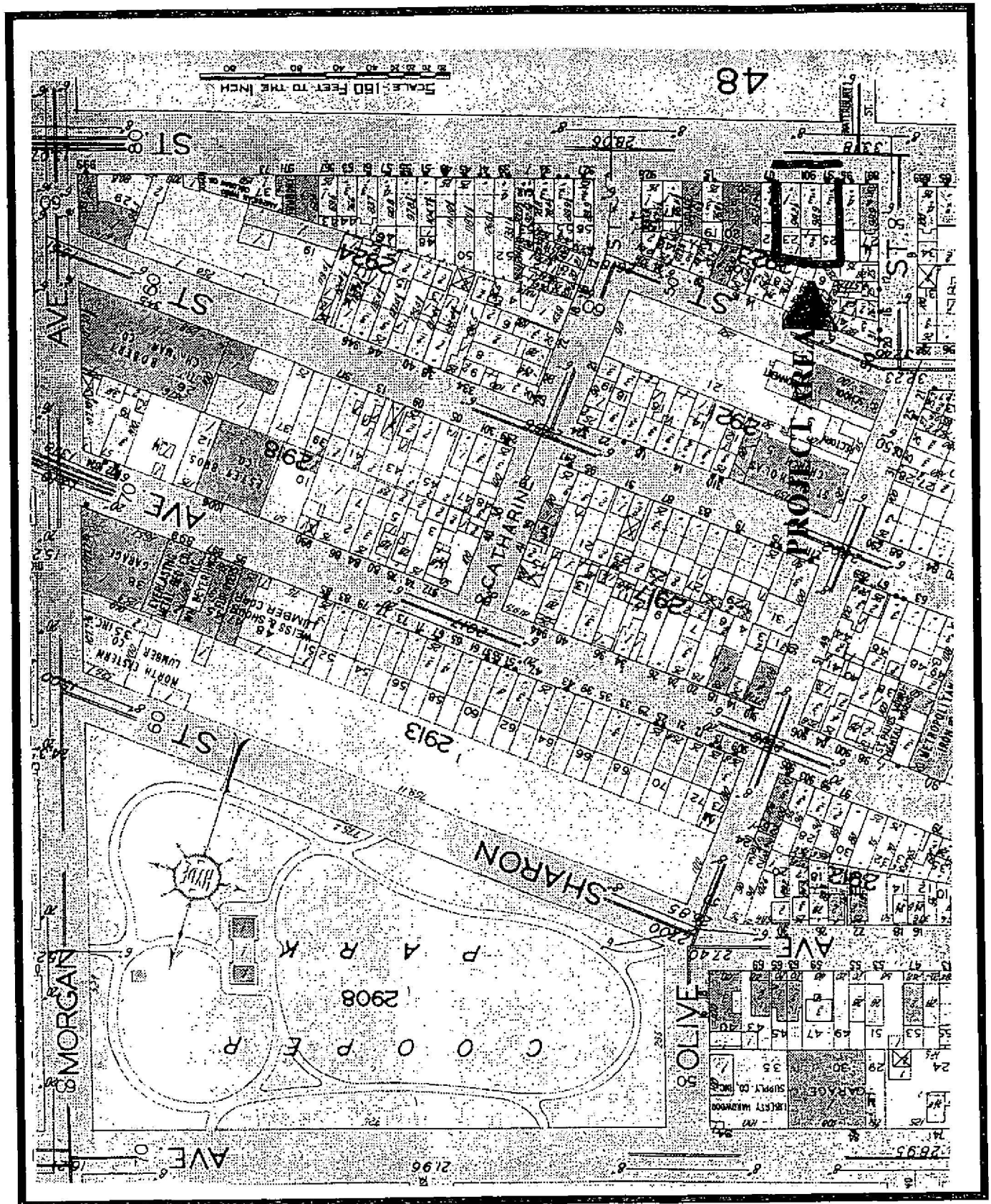
Map 10: Detail from 1888 Sanborn Insurance Map of the City of Brooklyn. Plate 242. Scale: 140' = 1"
 Block 2923. Lot 24 & 25. 897-903 Grand Street. Williamsburg, Borough of Brooklyn. Kings County, NY.



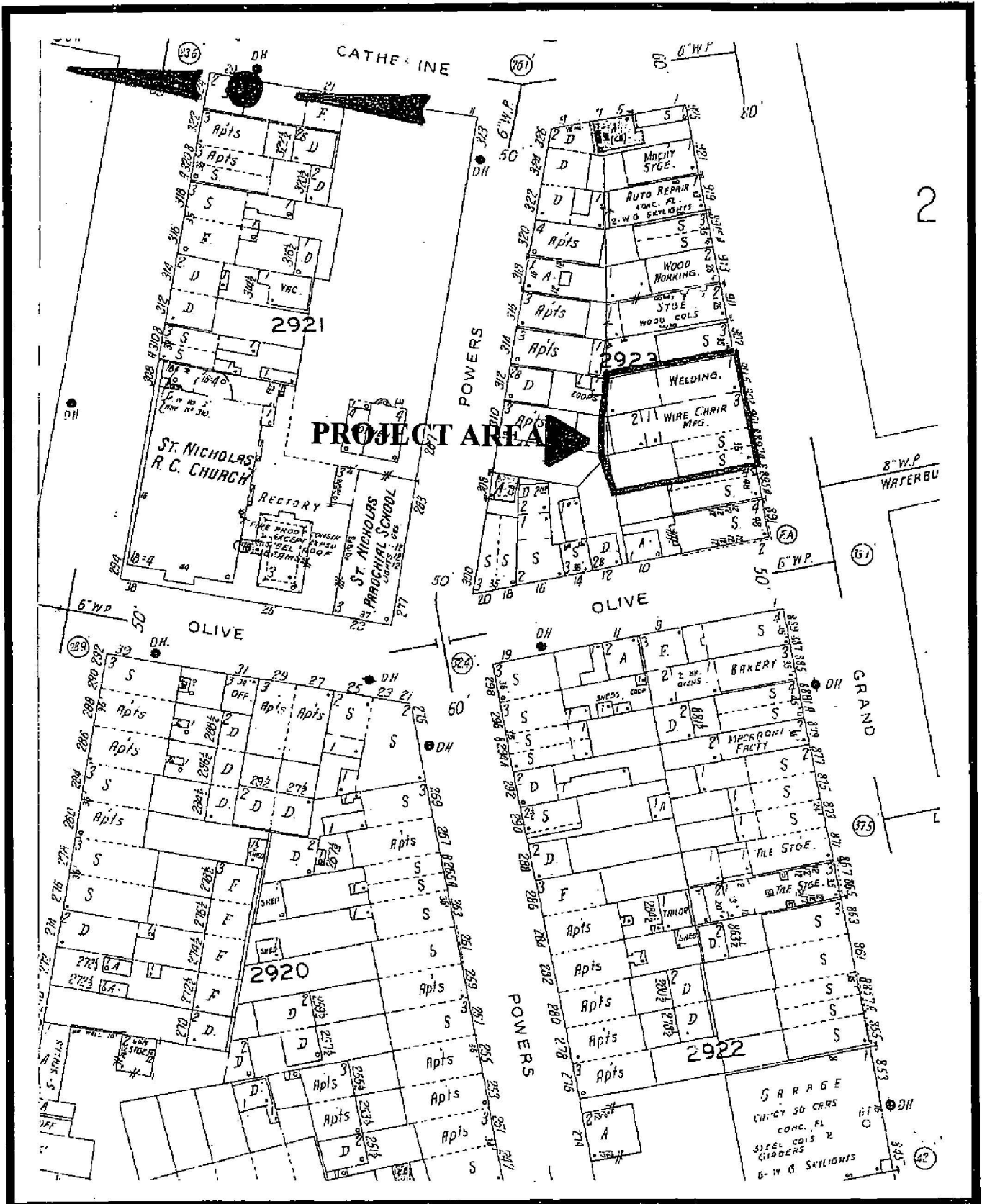
Map 11: Detail from 1891 *Atlas of the Metropolitan District*. . . Scale: Enlarged, no scale shown
 Block 2923, Lot 24 & 25, 897-903 Grand Street, Williamsburg, Borough of Brooklyn, Kings County, NY.



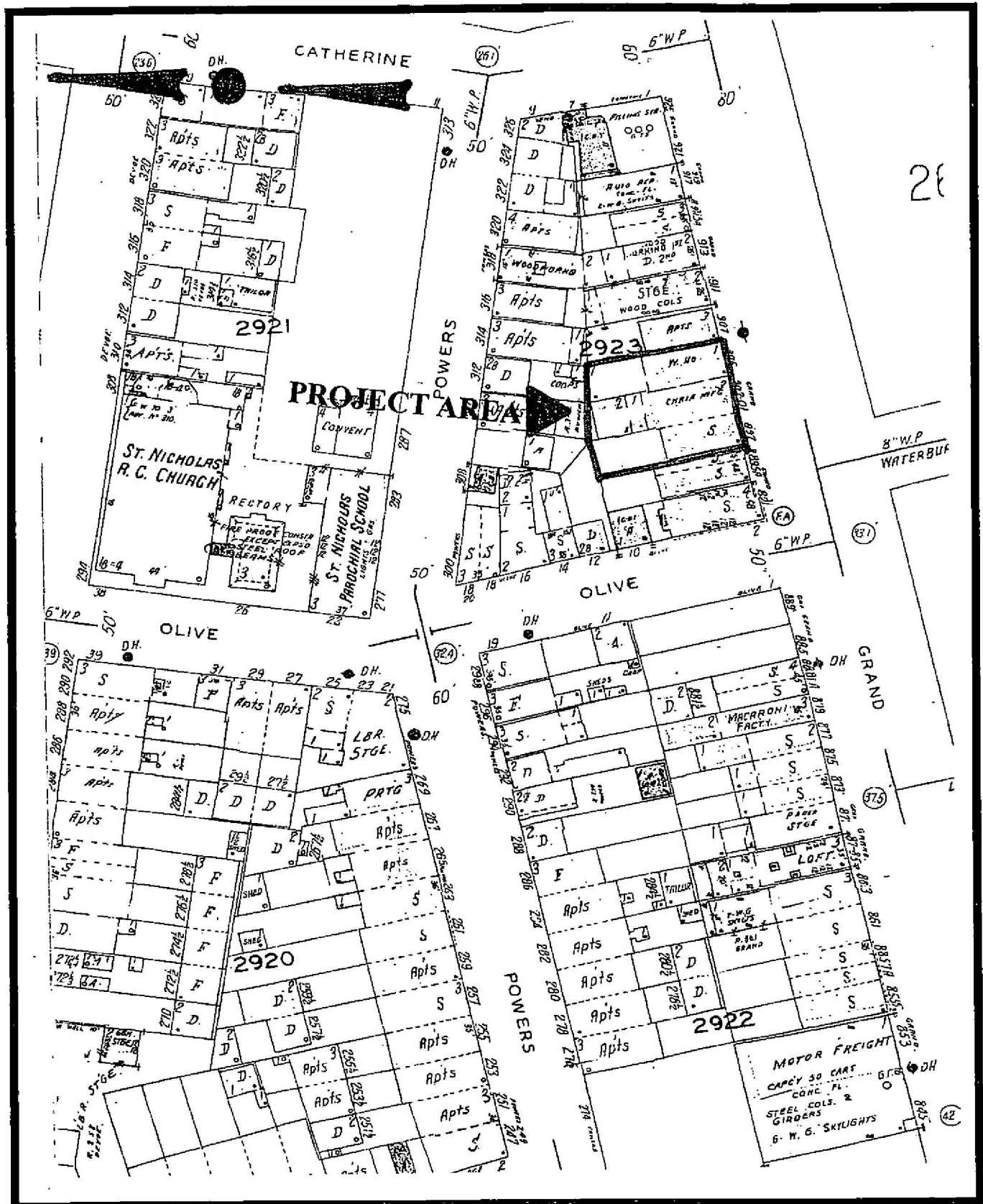




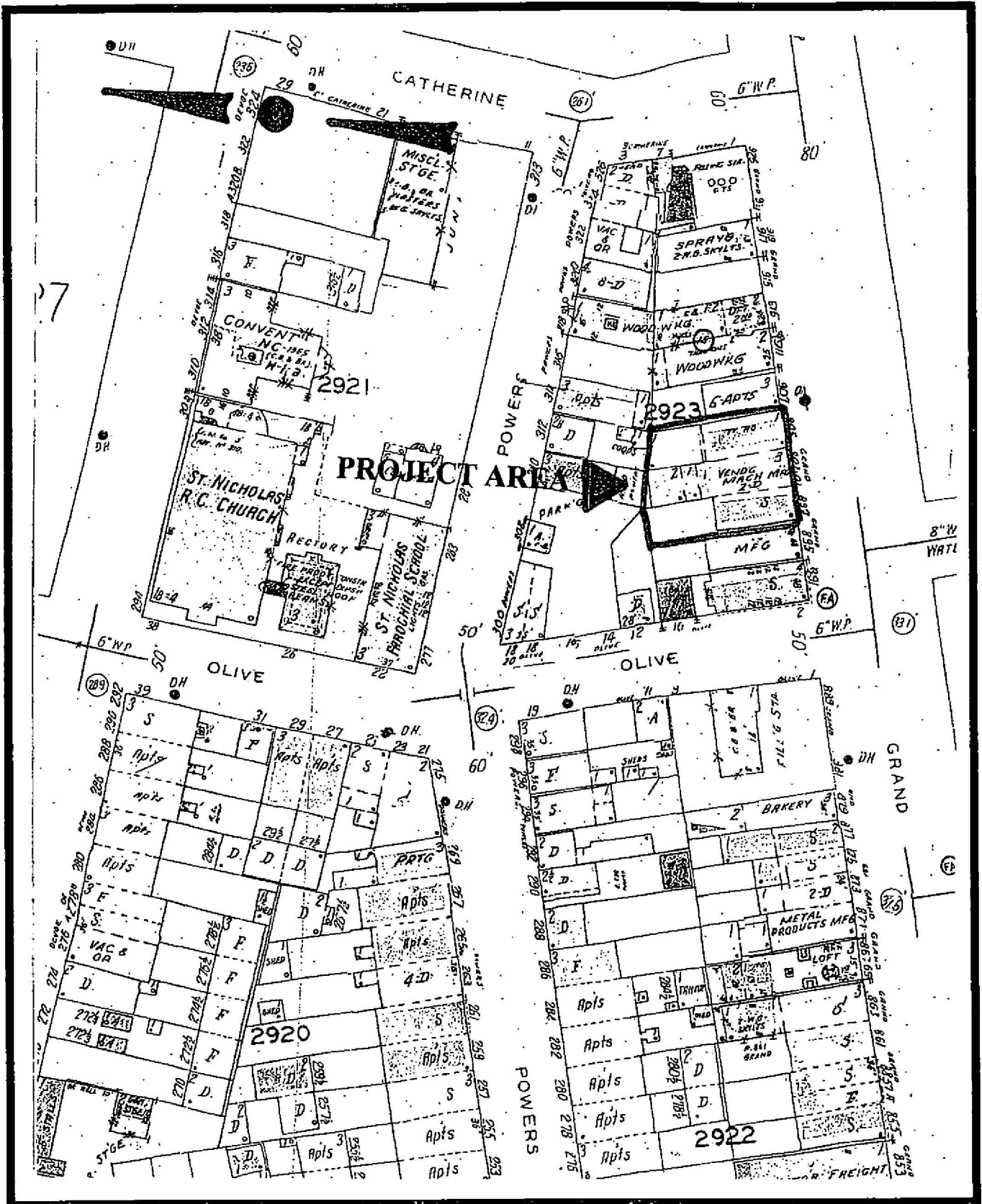
Map 14: Detail from 1933 Sanborn Insurance Map of the City of Brooklyn. Plate 24. Scale: 60' = 1"
 Block 2923. Lot 24 & 25. 897-903 Grand Street. Williamsburg. Borough of Brooklyn. Kings County, NY.



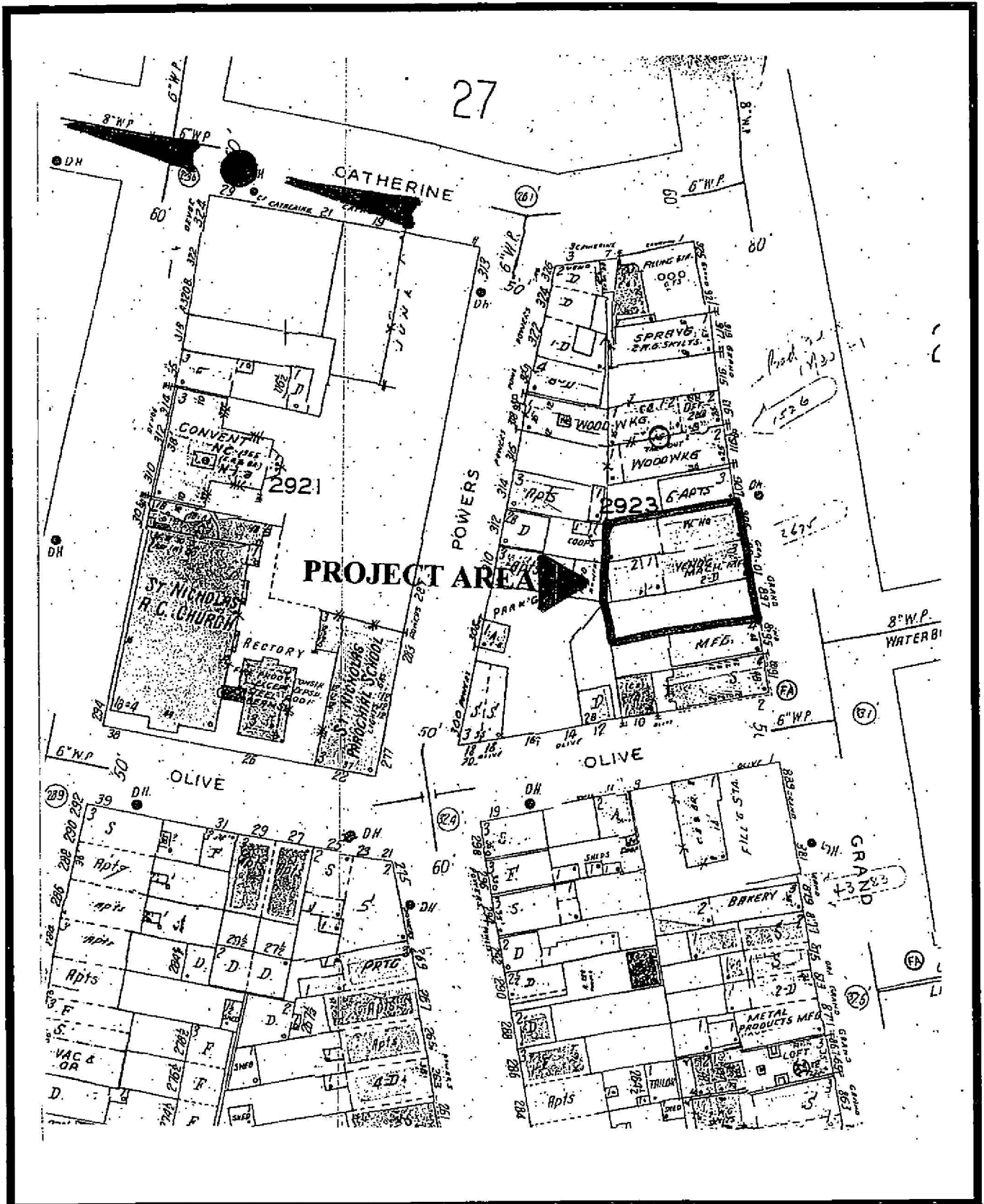
Map 15: Detail from 1951 Sanborn Insurance Map of the City of Brooklyn. Plate 24. Scale: 60' = 1"
 Block 2923. Lot 24 & 25. 897-903 Grand Street, Williamsburg, Borough of Brooklyn, Kings County, NY.



Map 16: Detail from 1965 Sanborn Insurance Map of the City of Brooklyn. Plate 24. Scale: 60' = 1"
 Block 2923. Lot 24 & 25. 897-903 Grand Street. Williamsburg. Borough of Brooklyn. Kings County, NY.



Map 17: Detail from 1977 Sanborn Insurance Map of the City of Brooklyn. Plate 24. Scale: 60' = 1"
 Block 2923. Lot 24 & 25. 897-903 Grand Street. Williamsburg. Borough of Brooklyn. Kings County, NY.



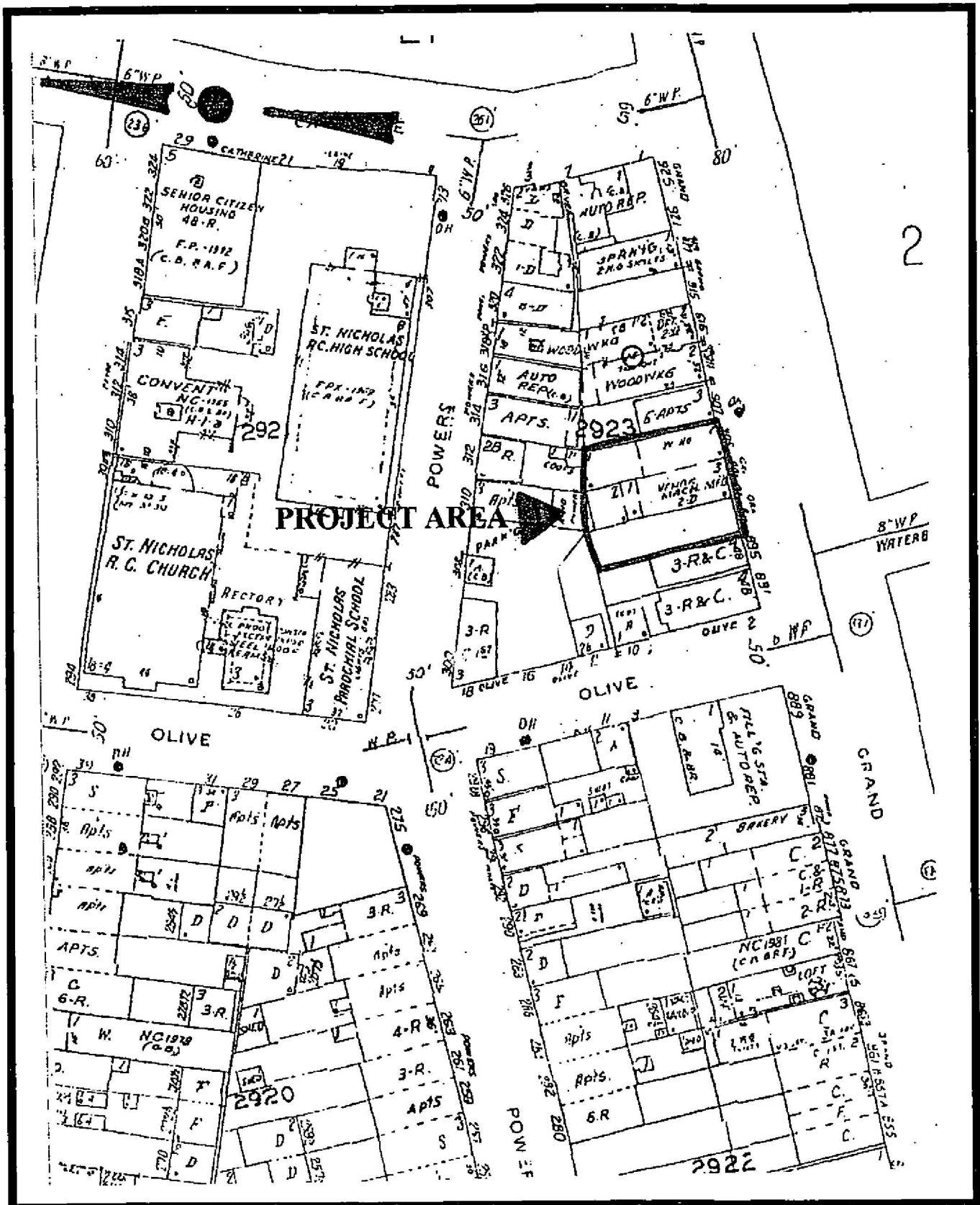


Fig. 1 Archaeological Sites in Vicinity of Project Area.

Block 2923, Lot 24 & 25, 897-903 Grand Street, Williamsburg, Borough of Brooklyn, Kings County, NY

Archaeological Sites in Vicinity of Project Area			
Map No.	Site Number	Identifier	Site Description
1	NYSM 3613	ACP Kings	Traces of prehistoric occupation
2	NYSM 4536	ACP Queens	Prehistoric village on Maspeth hills at head of Newtown Creek
3	OPRHP A083-01-0108	Vander Ende-Onderdonk House Site	Early 18 th century Dutch colonial farmhouse, NR 1-31-77

Fig. 1: Archaeological Sites in Vicinity of Project Area. USGS Topo. 7.5 Minute Series. Brooklyn Quad. Scale: 1:24,000
Block 2923, Lot 24 & 25, 897-903 Grand Street, Williamsburg, Borough of Brooklyn, Kings County, NY.

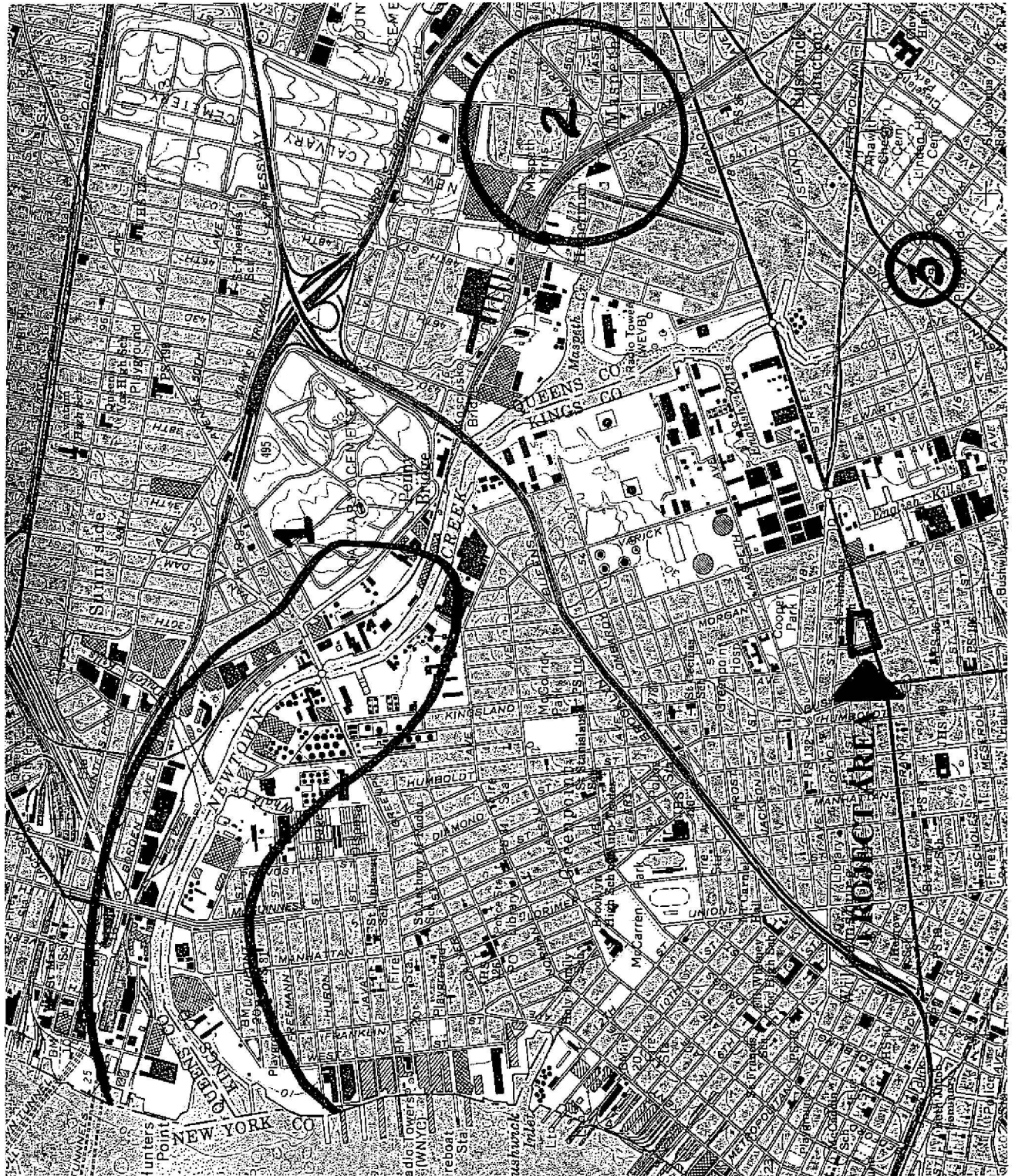
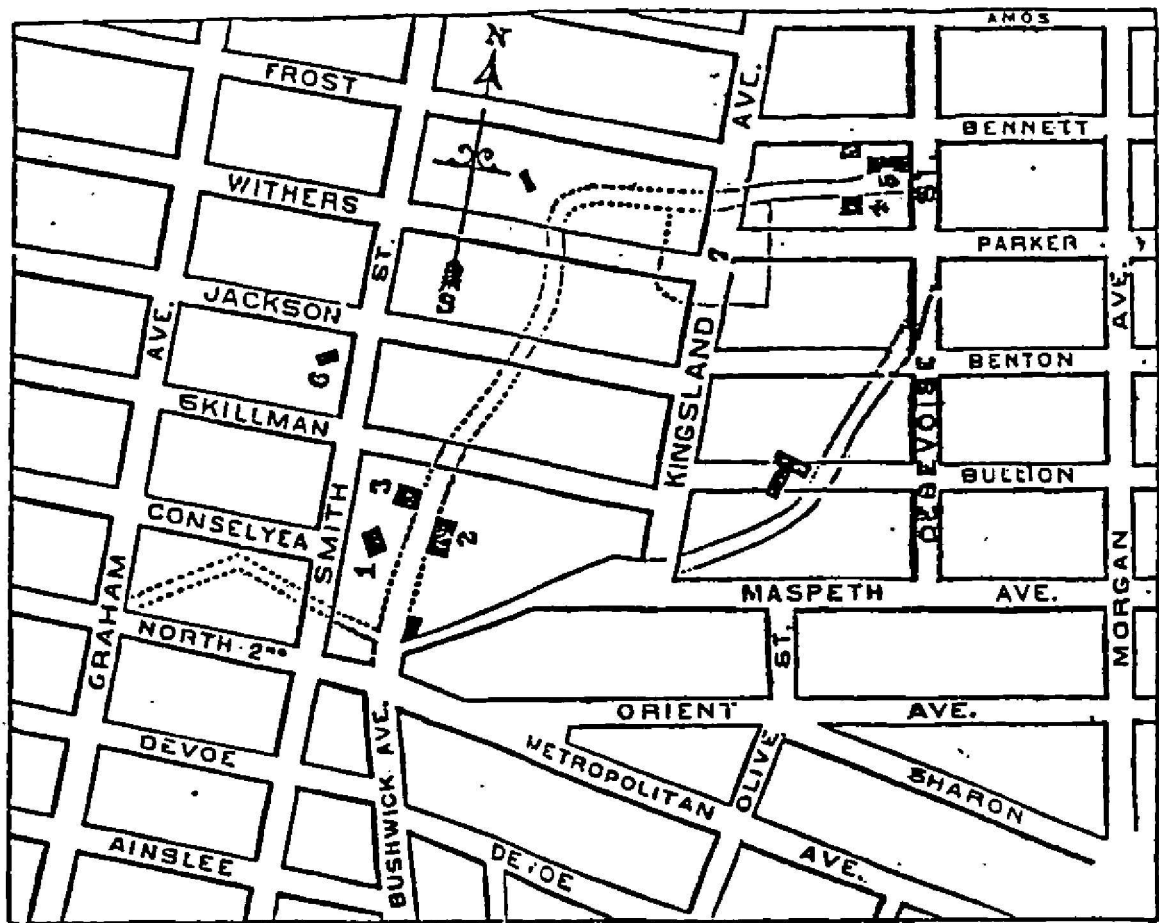


Fig. 2: Het Dorp, or Bushwick Green (taken from Stiles, 1867-69) No scale.

Block 2923. Lot 24 & 25. 897-903 Grand Street. Williamsburg. Borough of Brooklyn. Kings County, NY.



HET DORP, OR BUSHWICK GREEN.

1. Bushwick Church.
2. Town House.
3. School House.
4. } De Voce Houses. (See page 374).
5. }
6. Conselyea House. (See pp. 373, 374).
7. Old Bushwick graveyard (see page 374), shown by dotted line.

Fig. 3: Bushwick Village and Surrounding Farmland. (taken from Armbruster, 1912) Scale: No scale
 Block 2923. Lot 24 & 25. 897-903 Grand Street. Williamsburg. Borough of Brooklyn. Kings County, NY.

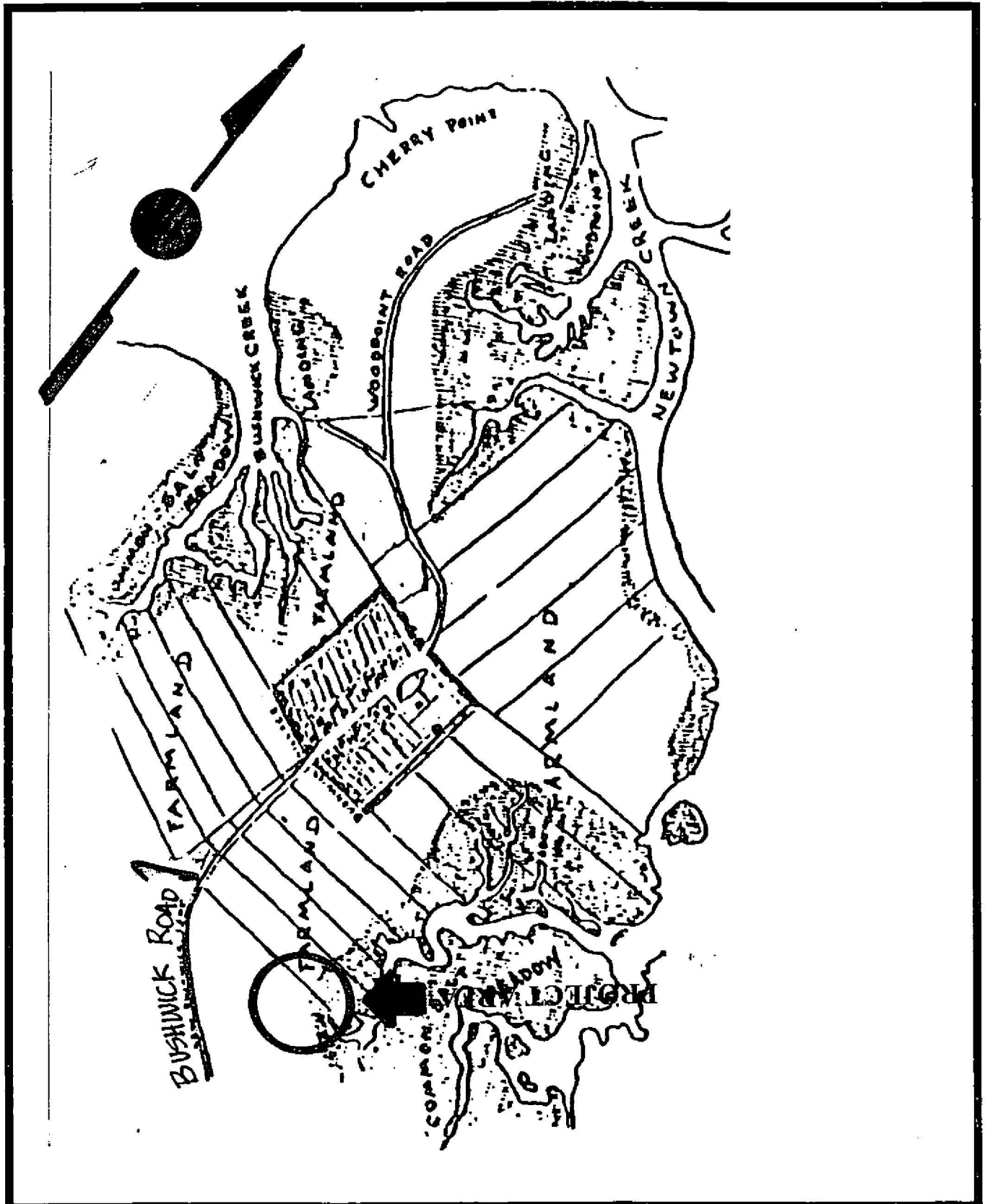


Fig. 4: 1892 Kings County Ward Map of 18th Ward. Scale: 1100' = 1"

Block 2923. Lot 24 & 25. 897-903 Grand Street. Williamsburg. Borough of Brooklyn. Kings County, NY.

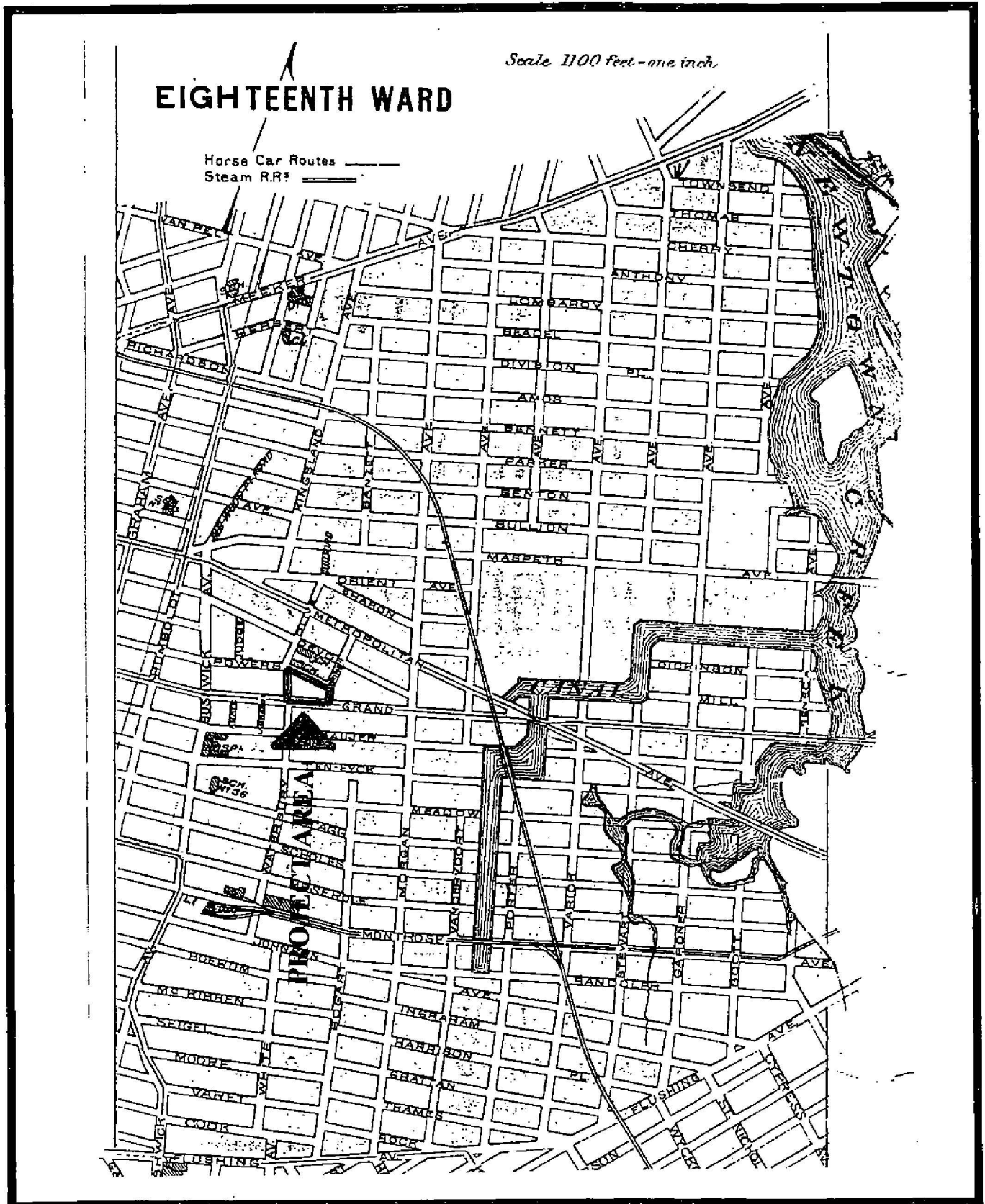
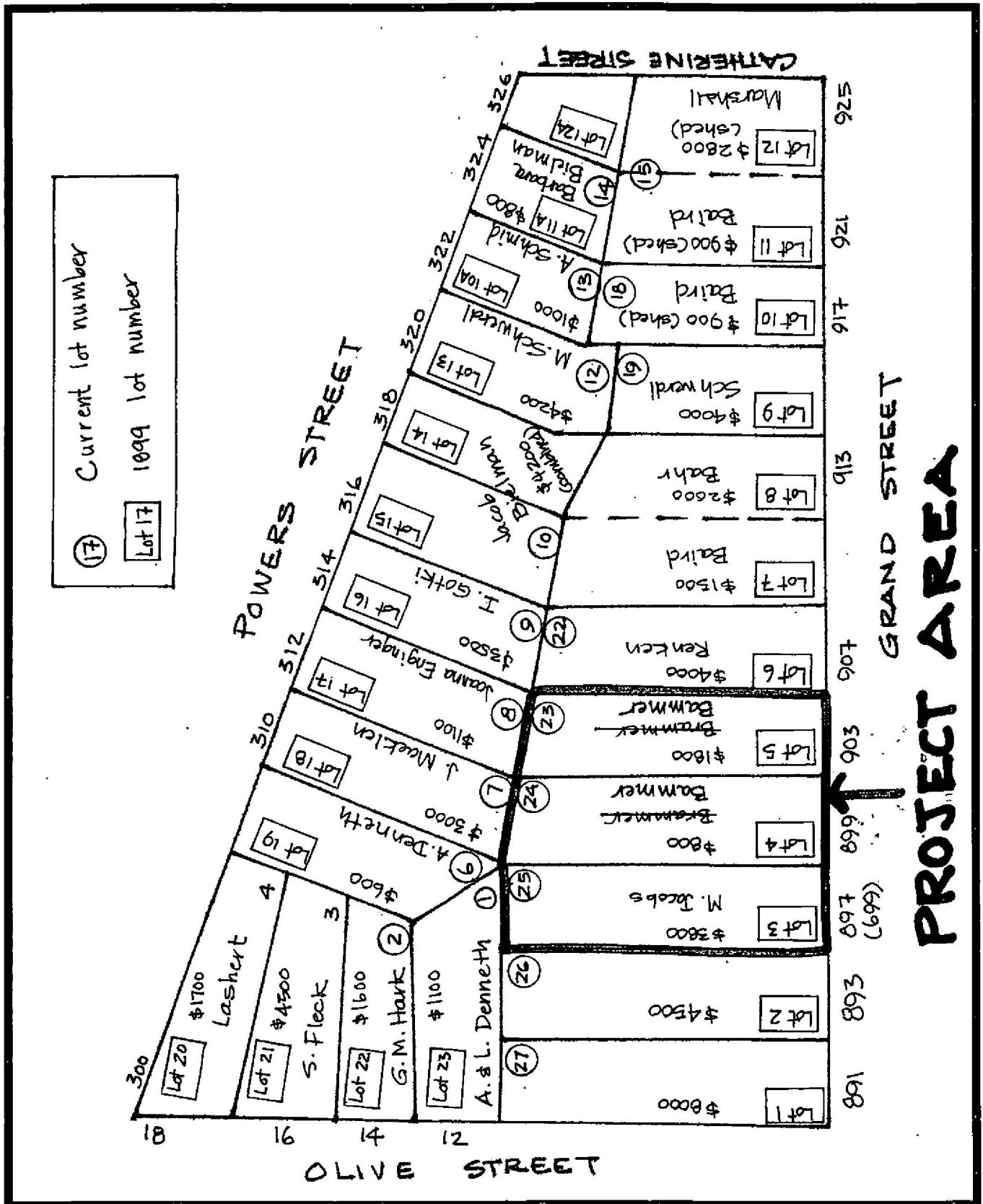


Fig. 5: Lots on Block 2923 showing 1899 Ownership and Assessments (redrawn from current tax map) Scale: No scale
 Block 2923, Lot 24 & 25, 897-903 Grand Street, Williamsburg, Borough of Brooklyn, Kings County, NY.



APPENDIX B

TAX ASSESSMENT RECORDS

ANNUAL RECORD OF ASSESSED VALUATION OF REAL ESTATE
18TH WARD –FORMER BLOCK 46 (CURRENT BLOCK 2923)

Owner	Street Name & House Number	Size of Lot	Size of House	Details	Ward Map Number	1899	Remarks
Powers Street between Olive & Catherine							
Adolph Denneth	Powers Street	25 x 75	No bldg.	none	Lot 19	\$600	
Jacob Macklen	310 Powers Street	25 x 75	3-story	none	Lot 18	\$3000	
Joanna W. Enginger	Powers Street	25 x 70.5	3-story	none	Lot 17	\$1100	
Ignatz Gotki	Powers Street	25 x 65	3-story	none	Lot 16	\$3500	
Jacob Bielman	Powers Street	25 x 61.4	3-story	none	Lot 15	\$4200*	* - Combined with Lot 14
Jacob Bielman	Powers Street	25 x 56	2-story	none	Lot 14	*	* - Combined with Lot 15
Martin Schwendel	Powers Street	25 x 52	4-story	none	Lot 13	\$4200	
Anson Schmid	322 Powers Street	25 x 47.9	2-story	none	Lot 10A	\$1000	
Barbara Bielman	324 Powers Street	25 x 43.7	2-story		Lot 11A	\$800	
Grand Street between Catherine & Olive							
Andrew Marshall	Grand Street	25 x 93.5	shed	none	Lot 12	\$2800	
James Baird	Grand Street	25 x 66	shed	none	Lot 11	\$900	
James Baird	Grand Street	25 x 71.6	shed	none	Lot 10	\$900	
Mary W. Schwendel	Grand Street	25 x 76	25 x 63	none	Lot 9	\$4000	
Henry Bahr	Grand Street	25 x 80.7	25 x 47	none	Lot 8	\$2000	
James Baird	Grand Street	25 x 85	1-story	none	Lot 7	\$1500	

Addendum to Stage 1A Sensitivity Analysis for Current Block 2923 (Lot 24 & 25)

18th Ward Tax Assessment Records

Owner	Street Name & House Number	Size of Lot	Size of House	Details	Ward Map Number	1899	Remarks
Charles Renken	Grand Street	25 x 89.8	3-story	none	Lot 6	\$4000	
Louisa Bammer	Grand Street	25 x 94.2	1-story	none	Lot 5	\$1800	
Louise Bammer	Grand Street	25 x 98.9	24 x 25 25 x 60	shed/ 3-story	Lot 4	\$800	Corrected amount \$5000 Shed replaced by 3-story
M. Jacob	Grand Street	25 x 98.9	3-story	none	Lot 3	\$3800	669 Grand Street/now 897 Grand Street - See note
Ludwig Frank	Grand Street	25 x 98.9	4-story	2 houses on lot	Lot 2	\$4500	
B. Gallagher	Grand Street	25 x 98.9	4-story (brick)	none	Lot 1	\$8000	
Olive between Grand and Powers							
Philip Flech	Olive Street	31 x 82.2	3-story	none	Lot 21	\$4500	
Loius Lashert	Olive Street	26.7 x 75	2-story	none	Lot 20	\$1700	
G. M. Hark	14 Olive Street	25 x 64	3-story	none	Lot 22	\$1600	
Adolph & Lewis Denneth	12 Olive	25 x 75	2-story	none	Lot 23	\$1100	

NOTE: Location of the lots on Block 2923 (formerly Block 46) is derived from those instances where the house numbers are included on the Tax Assessment records. The only lots identified by house number in the 1899 Tax Assessment records are 310, 322 and 324 Powers Street and 12 and 14 Olive Street. The location of Lot 3 (now Lot 25) is based on the fact that M. Jacobs owned the property in 1878 when the connection to the sewer was made. He still owned the property in 1899. When the block was redrawn with 669 Grand Street (then Lot 3) corresponding to 897 Grand Street (now Lot 25) the assessments were more in line with the types of buildings shown on the lot on the 1888 Sanborn Insurance Map. (See Fig. 5) Fig. 5 is redrawn from the current tax map. Current lot numbers are shown within a circle. The old lot numbers (1899) are enclosed within a rectangle. The names of the owners and the assessment for each lot are included on the map.

APPENDIX C

PHOTOGRAPHS



Photo 1: View of corner of Grand Street and Olive Street. Building is type of “old law tenement” that would have been built on Lot 25 in late 1870’s. View to northeast.



Photo 2: Lot 25 looking north. Today it is vacant. Formerly occupied by 3-story multi-family dwelling. Basement would correspond with that seen in Photo 3 & 4.



Photo 3: View of cellar hole on portion of Lot 24 (formerly Lot 23). Lot was covered by a single story warehouse/storage structure. View to northeast.



Photo 4: Detail of cellar hole on portion of Lot 24 (formerly Lot 23).

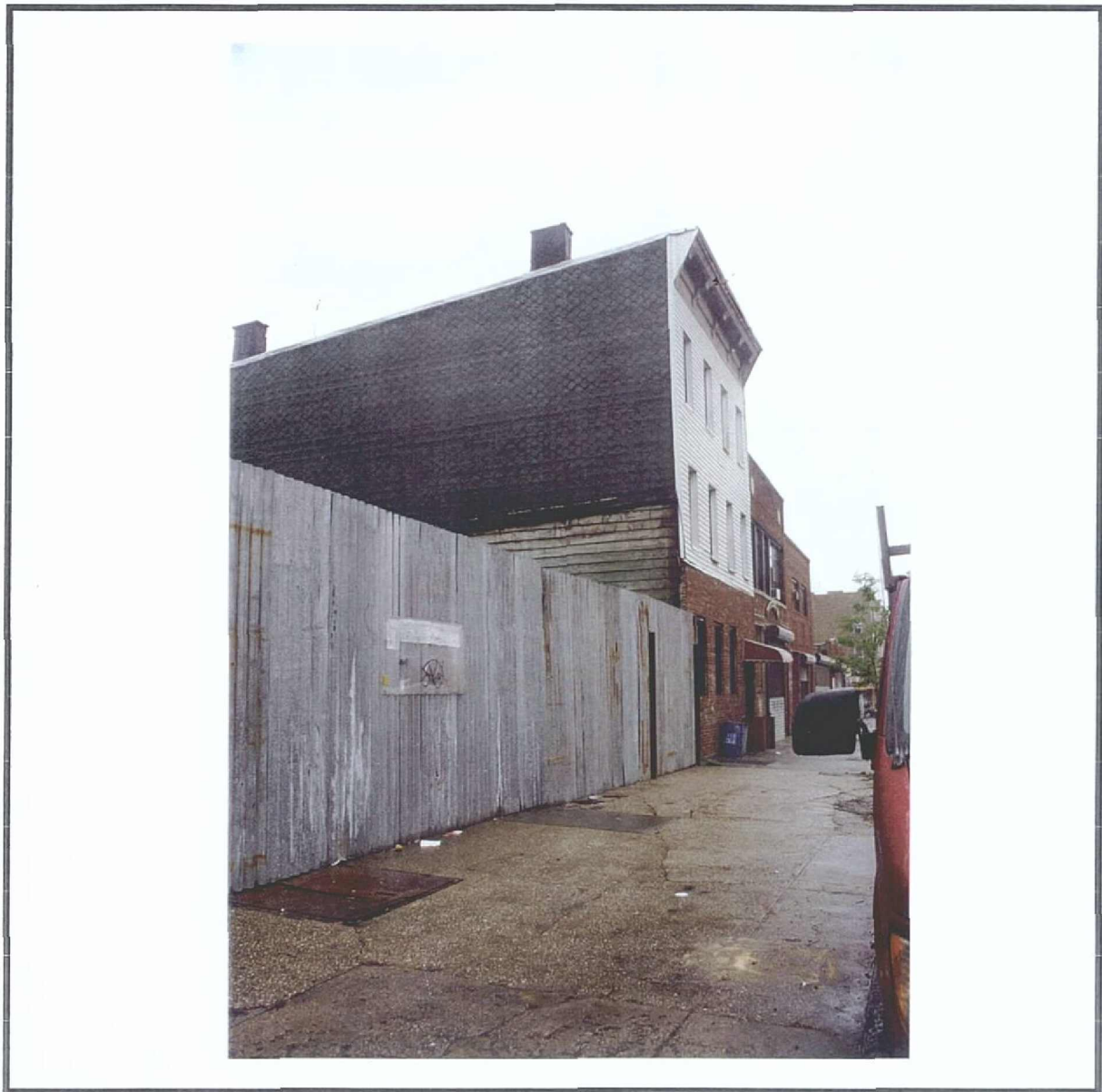


Photo 5: Multi-family building located at 907 Grand Street. Building is east of project area. This building is similar to the structures that would have occupied the western portion of Lot 24. The eastern portion of Lot 24 was formerly Lot 23. Lot 23 was occupied by a single story warehouse/ storage building with a basement (See Photo 3 & 4). The type of building at 907 Grand Street dates from the 1870's, the time when this part of Bushwick was being developed.