

PIER A, Battery Park, Borough of Manhattan; Begun 1884, completed 1886; engineer, George Sears Greene, Jr.

Landmark Site: Borough of Manhattan, Tax Map Block 16, Lot 1.

On January 27, 1976, the Landmarks Preservation Commission held a public hearing on the proposed designation as a Landmark of Pier A, Battery Park, and the proposed designation of the related Landmark Site (Item No. 3). The hearing had been duly advertised in accordance with the provisions of law. Sixteen witnesses spoke in favor of designation. There was one speaker in opposition to designation.

#### DESCRIPTION AND ANALYSIS

Pier A, a picturesque structure jutting into Upper New York Bay, is the last survivor of a maritime complex in the area that once included a firehouse for the Marine Division of the Fire Department, and a wharf for its boats, a breakwater, a boat landing, and just to the north of Pier A, Pier New 1 with its magnificent granite arches. The building and the pier itself of Pier A are the oldest of their types still standing in Manhattan. For many years distinguished visitors to the city who arrived by sea were officially greeted at Pier A. The clock on the tower, installed in 1919, was the first permanent World War I memorial in the United States. It is one of only two clocks on the eastern seaboard whose chimes ring the hours in ship's time (the other is at the U.S. Naval Academy in Annapolis, Maryland). Long the headquarters of the New York City Department of Docks and the Harbor Precinct of the Police Department, the pier continues to serve today as headquarters of the Marine Division of the Fire Department.

Pier A was built by the New York City Docks Department in 1884-86. The Department had been established by the New York State Legislature in 1870. The next year, under the leadership of its first Chief Engineer, General George McClellan of Civil War fame, a comprehensive plan for the development of the New York City waterfront was drawn up. It was approved by the State Legislature, and consequently any new pier or wharf in the city had to be constructed in accordance with the plan. Since it was not included in the plan of 1871, the construction of Pier A required a special act of the State Legislature.

The attempts of the Docks Department to enforce the City's authority on the waterfront met with a great deal of opposition from entrenched interests who were unaccustomed to municipal regulation. The Department also figured in several scandals. In 1899, for example, Tammany Hall tried to use the Department to obtain a monopoly on ice deliveries for the Ice Truck Company in which several politicians, including Mayor Van Wyck, owned shares. The scheme was exposed, however, and by 1903 Mayor Low could cite the Docks Department as being efficient and revenue-producing.

The Chief Engineer of the Docks Department at the time of the construction of Pier A was George Sears Greene, Jr., a member of an illustrious family. His father, George Sears Greene, Sr., was a distinguished Civil War General, an engineer, and one of the founders of the American Society of Civil Engineers. One brother, Francis Vinton Greene, was also a soldier and engineer, as well as an historian of the Russo-Turkish War and New York City Police Commissioner from 1903 to 1904. Another brother, Samuel Dana Greene, was acting Commander of the Monitor during its engagement with the Merrimac.

George Sears Greene, Jr., (1837-1922) was born in Lexington, Kentucky. He entered Harvard College in 1856, but left before graduating to study engineering under his father. During his apprenticeship, he was assistant engineer on the Croton Aqueduct, and also worked for several Cuban railroads, and mining companies on Lake Superior. While making topographical surveys of Westchester County, New York, and Long Island, he introduced new surveying methods that later became standard. In 1875, he was appointed Chief Engineer of the New York City Docks Department, a position he held for twenty-two years. As Chief Engineer, his greatest challenge was the construction of the series of piers extending from Charles Street to 23rd Street. The bedrock in that area lay too deep to serve as a foundation, so Greene developed a radically new system of support based on the "skin resistance" of the piles-- that is, the friction of their surfaces against the surrounding mud. The piers built using this system moved slightly,

which led to some panic on the part of the public and much criticism of Greene, but in the Twelfth Annual Report of the Department of Docks (1882) they were declared to be structurally sound, and he was vindicated, although this system was not used for Pier A. Later in his life Greene practiced as a private consulting engineer, and was a member of the Board of Advisory Engineers of the New York State Barge Canal. At various times he served as director, treasurer and vice-president of the American Society of Civil Engineers.

In 1884, the New York State Legislature amended the comprehensive plan of 1871, directing the Department of Docks to construct a pier for the use of the Harbor Patrol of the Police Department. On July 3, 1884, the Board of Commissioners of the Docks Department voted unanimously "to proceed with construction of a pier for the uses of this Department and also of the Police Department."

Work on the pier began immediately under the direction of the Chief Engineer Greene. Borings taken the same week indicated that bedrock lay only eighteen feet beneath mean low water level, surmounted by a level of soft mud. This layer of mud did not provide enough holding ground to support piles of wood or metal, so the area was dredged in order that the structure might rest directly on the bedrock.

Structurally, the pier consists of eight subpiers, connected by spans of iron girders and concrete arches. The subpiers were constructed as follows: a wooden crib, fifteen by fifty feet, and five feet high, was sunk by filling it with sand and traprock. This ballast was then removed, and replaced with bags of concrete and concrete blocks, laid by divers. Granite blocks were placed on top of this concrete foundation, and then the entire subpier was faced with stone. The construction of the subpiers began in the summer of 1884 and was finished in the spring of 1885.

The next major task was the construction of the spans between the subpiers. The first step in this process was the placing of special granite seats atop the subpiers. These were specially cut to accommodate the iron girders which were placed between the subpiers by a ten-ton derrick. Concrete arches were then placed inbetween the girders. This work took up the late spring and summer of 1885. The top of the pier was then covered with three inches of mortar, and various special features--fender piles, mooring blocks, and automatic tidal gauge--were installed. The pier itself was then complete and was ready for the construction of the proposed building.

Construction of this building began in September of 1885. The inshore end which had to be fireproofed to serve as a storehouse for Docks Department maps and records, was constructed with brick and terra cotta walls and an iron roof truss to support the tin roof. The offshore end with the tower was built with a conventional wood-frame skeleton and was clad with galvanized iron siding. It was separated from the fireproof portion by a 20-inch thick brick firewall.

The police occupied the northern side of the first story of the building, near to where their steamboat, the Patrol, was customarily berthed. They also had a look-out stationed in the tower. The Docks Department occupied the rest of the building.

The building was provided with central steam heating, gas lighting, and water from the Croton Aqueduct. A special steam pipe ran alongside the pipe conveying the water in order to keep it from freezing. The building was insulated with two thicknesses of tar paper and one of tongue-and-groove boarding, as well as mineral wool in the space between the studs. As a result, according to Chief Engineer Greene, "It was found in the severe blizzard in the first few days in March (1886) that all the rooms could be kept at a temperature of 85 degrees, with a pressure of 60 pounds in the boiler, which is licensed to carry 100 pounds."

Since its original construction, three major alterations have been made to the building. In 1900, an addition was constructed. This consisted of the three-story structure that occupies the inshore end of the pier. In 1904, an additional story was built towards the inshore end of the building. Both of these additions were made to provide the Docks Department with needed space.

The last major alteration occurred in 1919. The annual report of the Docks Department for that year described it as follows:

Through the munificence of Mr. Daniel G. Reid, there has been installed in the tower at the outer end of Pier A, a great clock which strikes ship's time. Mr. Reid presented this clock to the City as a memorial to the soldiers, sailors, and marines who gave their lives in the great struggle for Democracy, and it is the first permanent memorial of the World War erected in the United States. To be in keeping therewith the shed on this pier has recently been painted at a cost of \$2,280.

The eastern inshore end of the structure has a simple facade, three stories high and three bays wide. The ground floor has small, pedimented enclosed entranceways that project out from the building, giving protection from the weather, and at the center a single large opening that formerly provided a means of access for carriages. The top two stories contain a single window in each of the side bays above the entranceways and a triple window in the center bay. Above the third story a crowning gable is enhanced by a sea-shell containing the letter "A".

From the south, the structure appears especially interesting, as it is clearly divided into volumetric masses. Closest to shore is the 1900 addition, a cubic portion, three stories high and three bays wide, with a peaked roof. To the west there is another three-story section, differentiated from the first by a flatter roof; the third story was added in 1904. Then there is the long, two-story section that extends into the water. It retains much of its original appearance; the first story is characterized by an arcade enclosing an interesting variety of window sizes and shapes in each of the bays. The second story features more regular fenestration and is characterized by projecting, three-sided bays. The peaked roof is marked by several small monitors, and towards the offshore end, by a transverse gable. Finally, at the southwest corner, a fourth volumetric mass, the tower, rises to a height of four stories and is capped by a pyramidal roof. On each side of the tower, at the third-story level, there is a single round-arched window, while the fourth story, which was originally used by the police as an observatory, now contains the famous memorial clock. The northern facade is similar to the southern, with the exception of the tower.

When built, the facades of the 1900 addition boasted a great deal of Beaux-Arts ornamentation--foliate scrolls, pilasters, and wrought-iron lamps flanking the main entrance--now removed. (In 1964, the building was entirely reclad in aluminum corrugated siding.) The variety of the volumes composing the building helps to make it a picturesque visual element, and it effectively closes the northern end of Battery Park. With its distinctive tower, it is truly a landmark.

#### FINDINGS AND DESIGNATIONS

On the basis of a careful consideration of the history, the architecture, and other features of this building, the Landmarks Preservation Commission finds that Pier A, Battery Park, has a special character, special historical and aesthetic interest and value as part of the development, heritage and cultural characteristics of New York City.

The Commission further finds that, among its important qualities, Pier A is the last survivor of an impressive maritime complex on the site, that it is the oldest of its type still standing in Manhattan, that it long served the city as an official greeting-point for distinguished visitors, and as the headquarters of the Department of Docks, the Harbor Precinct of the Police Department and now the Marine Division of the Fire Department, that it is the work of the noted engineer George Sears Greene, Jr., that it is a visually interesting composition in the variety of volumes that comprise it, and that its silhouette serves as an important and picturesque visual boundary to the northern edge of Battery Park.

Accordingly, pursuant to the provisions of Chapter 63 of the Charter of the City of New York, and Chapter 8-A of the Administrative Code of the City of New York, the Landmarks Preservation Commission designates as a Landmark, Pier A, Battery Park, Borough of Manhattan, and designates Tax Map Block 16, Lot 1, Borough of Manhattan, as its Landmark Site.