

U.S. NAVAL BASE, PEARL HARBOR, STEEL STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Naval Shipyard, Facility No. 13)
Intersection of Seventh Street & Avenue E
Pearl Harbor
Honolulu County
Hawaii

HABS HI-462

HI-462

HABS
HI-462

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
PACIFIC GREAT BASIN SUPPORT OFFICE

National Park Service
U.S. Department of the Interior
1111 Jackson Street
Oakland, CA 94607

HISTORIC AMERICAN BUILDINGS SURVEY

U.S. NAVAL BASE, PEARL HARBOR, STEEL STOREHOUSE (U.S. Naval Base, Pearl Harbor, Naval Shipyard) (Facility No. 13)

HABS
HI-462
HABS No. HI-462
(Page 1)

Location: Intersection of Seventh Street & Avenue E
Pearl Harbor Naval Base
City and County of Honolulu, Hawaii

This building falls within the UTM coordinates of the Pearl Harbor, Naval Shipyard as defined in the location section of the overview report HABS No. HI-483. This building's UTM coordinates are: 04.607980.2361730.

Significance: Facility 13 is located within the Pearl Harbor National Historic Landmark. It is significant as a major component of the ship repair function of the Pearl Harbor Naval Base during World War I, and was part of a core grouping of buildings in the initial base. It was originally constructed in 1916 as a steel storehouse to protect the material used in ship repairs. Facility 13 also supports a grouping of historic facilities visible along Seventh Street outside the Controlled Industrial Area.

Description: This building is a simple storage structure with minimal ornamentation. It is a high one-story, riveted, steel-framed building with an asymmetrical gable roof. It has a concrete slab floor and column footings of reinforced concrete that measure 3'-6" x 4'-6". Narrow gauge railroad tracks originally ran into the building, but the last rails were removed in the 1971 renovation. The original dimensions of the building were 240'-0" in length and approximately 80'-0" in width. The length is divided into 12 20'-0" bays, while the main interior space has a 55'-0" unobstructed width, plus an overhang of 25'-0" along the northwest side. The longer side of the asymmetrical gable roof extends to cover this 25' wide area along the northwest side. There is an unusual pattern of cross-bracing along the sides of the building; the braces are ladder-like Xs with a vertical support in the center of the lower part of the Xs. This cross-bracing is located in the upper portion of bays 1, 3, 5, 8, 10, and 12. At the gable ends (but not in the interior) there are columns dividing the 55'-0" width into a central bay of 20'-0" and two flanking bays of 17'-6". The cross-bracing Xs at the ends are similar to those in the side bays, but simpler (NAVFAC EFD Pacific plan files drawing # 62260). These Xs wrap around the large opening in each center bay. The building is approximately 50' tall. The roof over the 55'-0" main space is supported by double Fink trusses and knee braces. There is a similar but simpler truss supporting the 25'-0" overhanging roof on the west side. The outer portion of the bottom chord of this truss on the west

U.S. NAVAL BASE, PEARL HARBOR, STEEL STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Naval Shipyard)
(Facility No. 13)
HABS No. HI-462 (Page 2)

side is angled, rather than parallel to the ground. In 1971 the building was enlarged slightly along most of the west side by extending its roof to overlap the roof of Facility 4A, about 10' west of the edge of Facility 13. This portion of the roof is at a different pitch from the original roof. Roofing over this space added a strip about 10' wide; added to the existing 25'-0" overhang this created a clear width of about 35' between the row of columns on the west side of the main space of Facility 13 and the wall of Facility 4A.

A 10-ton bridge crane originally ran on girders that are supported on columns about 24' tall, which are attached to the two rows of exterior side columns. This bridge crane was removed in the 1980s. The overhang on the west side covers a 3-ton crane, hung on the exterior of the western row of columns. In various drawings this 3-ton crane is called a wall crane or a trolley beam.

Historic photos show that the building originally had siding only in the gable ends, starting at approximately 18' above the ground level. According to original drawings, this exterior skin was corrugated metal. This same material was used when the south, east, and north sides of the building were enclosed in 1971. The 1971 drawings also show that two 5/8" "sag rods" were added on each bay of the three enclosed sides. New gutters and downspouts were also added in 1971. Historic photos also show that, sometime before 1945, expanded metal fencing was installed around the perimeter to provide control over the materials stored here. The same or similar fencing remains on the west side of the building, between Facilities 4A and 8. At some date before 1963 a large wood signboard with safety statistics and patriotic graphics was installed on the south end of the east side of the building. When the corrugated metal siding was installed in 1971, the drawings called for the sign to be removed and reinstalled over the new siding. By 1980 this sign had been permanently removed, although the light fixtures above it remained a little longer. Now only the supports for these fixtures are extant.

The original roofing material was cement asbestos panels. A 1977 drawing shows the roofing had been changed to corrugated metal by that date, and in that year 24 skylights of corrugated translucent fiberglass panels were added.

Originally, there were windows only in the gable ends. These are multi-light steel sash windows. The windows on the north end have been covered by corrugated metal siding, but are visible on the interior. Some of the glass lights in the north end windows have been replaced with plastic ones. The glass in the southern windows has been painted. These end windows appear fixed; operable ones were unnecessary, given the original open sides of the building. Additional windows were added to the building in 1971 when three sides were enclosed. Two rows of windows were installed on the east elevation. The lower row was shorter, due to the sign discussed above, and was interrupted by a new roll-up metal door, which had replaced an earlier

U.S. NAVAL BASE, PEARL HARBOR, STEEL STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Naval Shipyard)
(Facility No. 13)
HABS No. HI-462 (Page 3)

sliding gate. These 1971 steel-sash windows have obscure wired glass, with 4-light awning sections below 4 fixed lights and above 2 fixed lights. The operable sections are connected and have geared mechanisms so that the row can be opened with a pulley. Screens were added over the lower row of windows sometime after 1980. These aluminum-frame screens are triangular in cross section to allow the awning sections to open. A pass-through opening on the south end is located close to the roll-up door.

None of the doors in the building are original. There is a 16'-0" x 12'-0" roll-up door on the east side, one small door on the north end, and two large ones on the south end. The one on the north end is a flush metal door measuring 3'-0" x 7'-0", added in 1971 when three sides were enclosed. Another roll-up door was added then, on the western side of the south end, measuring 18'-0" x 16'-0". In the center of the main bay at the south end, there is a pair of metal-frame sliding gates. In 1971 corrugated metal siding was added on the inside of them. There are gates of expanded metal mesh on the outside of most large doors and on the west side of the building.

The interior has been altered also, with different arrangements of office spaces, toilet rooms, storage partitions, and shop equipment over the years. All shop machinery, including a horizontal bandsaw and a pipe cutting machine noted on a 1971 plan, appears to have been removed, but some of their raised concrete foundations or circular footprints remain. The light fixtures in the building appear historic, although probably are not original. At the north end of the interior is a ladder-like stair up to a platform that juts out into the main space, just under the level of the bridge crane. Except for the skylights added in 1971, the upper portion of the interior retains its original appearance, as the roof trusses and structural framing have not been changed.

Historical Context:

This building was part of a core grouping of buildings in the initial base. Appropriations for Pearl Harbor and specifically for facilities that supported the fleet continued to flow into Hawaii. With war on the horizon, a greater number of ships were anticipated. Pearl Harbor was considered an important support station. The preparedness program of 1916 promoted continued development. When Facility 13 was built, it was located across Seventh Street from the administration building (Fac. 1), near two major shop buildings (Forge Shop in Fac. 5 and Shipfitter & Boiler Shop in Fac. 4), and adjacent to the original power plant (Fac. 8). This steel storehouse was erected by 1916, a few years after the other early buildings. In Navy records the year of construction is listed as 1917, but historic photos show it was completed and in use by February 1916. The U.S. Navy's Bureau of Yards and Docks prepared the original drawings. The building contractor was Lord Young Engineering Company, under Contract

U.S. NAVAL BASE, PEARL HARBOR, STEEL STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Naval Shipyard)
(Facility No. 13)
HABS No. HI-462 (Page 4)

2088. This was a prominent local construction and engineering firm in the early twentieth century.

Another difference from the 1913 Shipyard buildings is that its long axis is oriented at right angles to the others. Originally it was distinctive, also, in being an open-sided building. Over the years, the setting of this building has changed. In the 1920s and 1930s, additions to Facility 8 were built abutting Facility 13 on the north end and west side. A switch house (Fac. 48) was built on the west side of Facility 13 in 1933, but this building was demolished by the late 1990s. In 1941 Facility 4A was built between Facilities 4 and 13. Numerous additions were made over the early decades of the twentieth century to Facility 1 across Seventh Street.

A 1916 photograph of the building shows large sheets of metal stored there. During World War II, a Yard Supply report noted that heavy steel racks for double-tiered stowage of bar and rod steel was completed in October 1943. The building has also been used as a pipe warehouse and shop. It now is used for various storage purposes.

For an overview of the Naval Shipyard see HABS No. HI-483.

Sources:

The original 1914 drawings for this building are on digitally scanned images or microfilm at Pacific Division, Naval Facilities Engineering Command (NAVFAC EFD Pacific) Plan Files, under drawing numbers 62260, 62261, 62407, and I-63. A 1916 lighting plan is filed under drawing number 64995. Some 1940s and a 1957 drawings for Facility 13 are also listed in the NAVFAC EFD Pacific microfilm index, under drawing numbers I-NO6-201, I-NO6-257, I-N12-157, and I-NO6-569. The building was renovated in 1971, along with some other buildings in the area, so the 1971 drawings for Facility 13 fall in the set between 1230236 and 1230280. There are a few other minor drawings of the building, from the 1970s and 1980s, for janitorial services or painting projects, also in the microfilm collection.

A few historic photos of this building were found at the National Archives II, Still Photo Collection (RG 71 CA). The Shipyard files also had some photographs of the building taken in 1963 and 1980.

Some information was provided in the Historic Resources Inventory Form for Bldg #13. This was prepared in September 1980 by Frederick Fogel of the Pearl Harbor Naval Shipyard, Facilities Planning & Programming section, using Shipyard property records and drawings.

The Yard Supply report mentioned in the Historical Context section is an undated, anonymous typescript report in the Robert Walden

U.S. NAVAL BASE, PEARL HARBOR, STEEL STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Naval Shipyard)
(Facility No. 13)
HABS No. HI-462 (Page 5)

collection, located at the University of Hawaii Hamilton Library, Hawaii and Pacific section.

Commander, Navy Region Hawaii

2000 Pearl Harbor Naval Complex, Cultural Resources Management Plan, Pearl Harbor, HI.

Commander, Navy Region Hawaii

2002 Integrated Cultural Resources Management Plan, Pearl Harbor Naval Complex, Pearl Harbor, HI.

HABS/HAER Documents

var. dates For those resources on the Navy database at the time the CRMP (Contract No. NB62742-93-D-0502) was prepared, the HABS/HAER numbers assigned have been included in the electronic database as an additional field, as noted in Appendices: Pearl Harbor Naval Complex Cultural Resources Management Plan, 1998, p. A-6.

Pearl Harbor Naval Shipyard

1992 Historic Preservation Documentation Program, photocopied document dated 15DEC92 including Appendix B Historic Inventory.

U. S. Bureau of Yards and Docks.

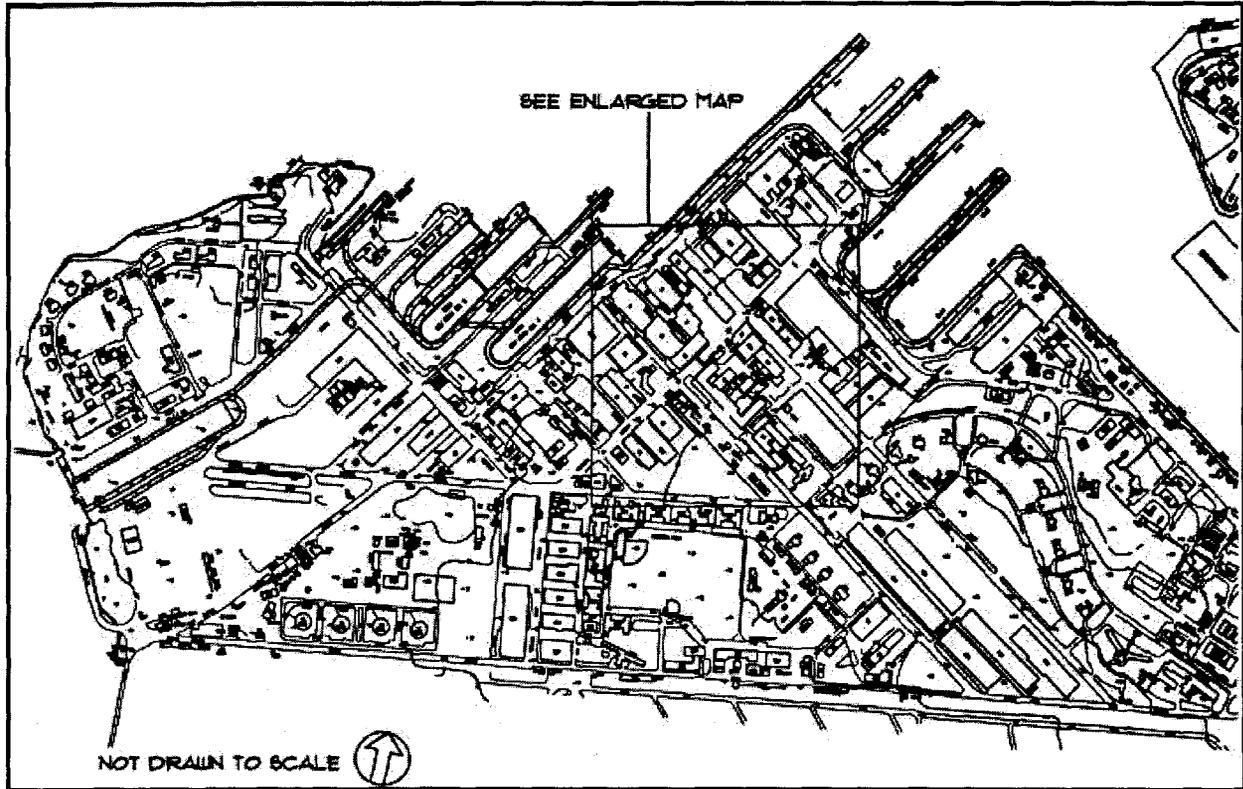
1921 Activities of the Bureau of Yards and Docks, Navy Department World War 1917-1918, Washington: Government Printing Office, p. 317.

Project Information:

Photo documentation and recordation of this facility by the Navy has been done in anticipation of future alterations or potential demolition of the structure. Photo documentation of historic facilities by the Navy assists in expediting planned undertakings by having the documentation prepared prior to taking actions. Also, photo documentation assists the Navy in gaining more information about its historic facilities to assist in making proactive management decisions. This project is being supervised by Jeffrey Dodge A.I.A., Historic Preservation Specialist at the Pacific Division, Naval Facilities Engineering Command (NAVFAC EFD Pacific). The photograph documentation was undertaken by David Franzen, photographer. Lawrence Shelvey and Ann Yoklavich, Architectural Historians, of Mason Architects, Inc. prepared the written documentation. The report was prepared in July 2002.

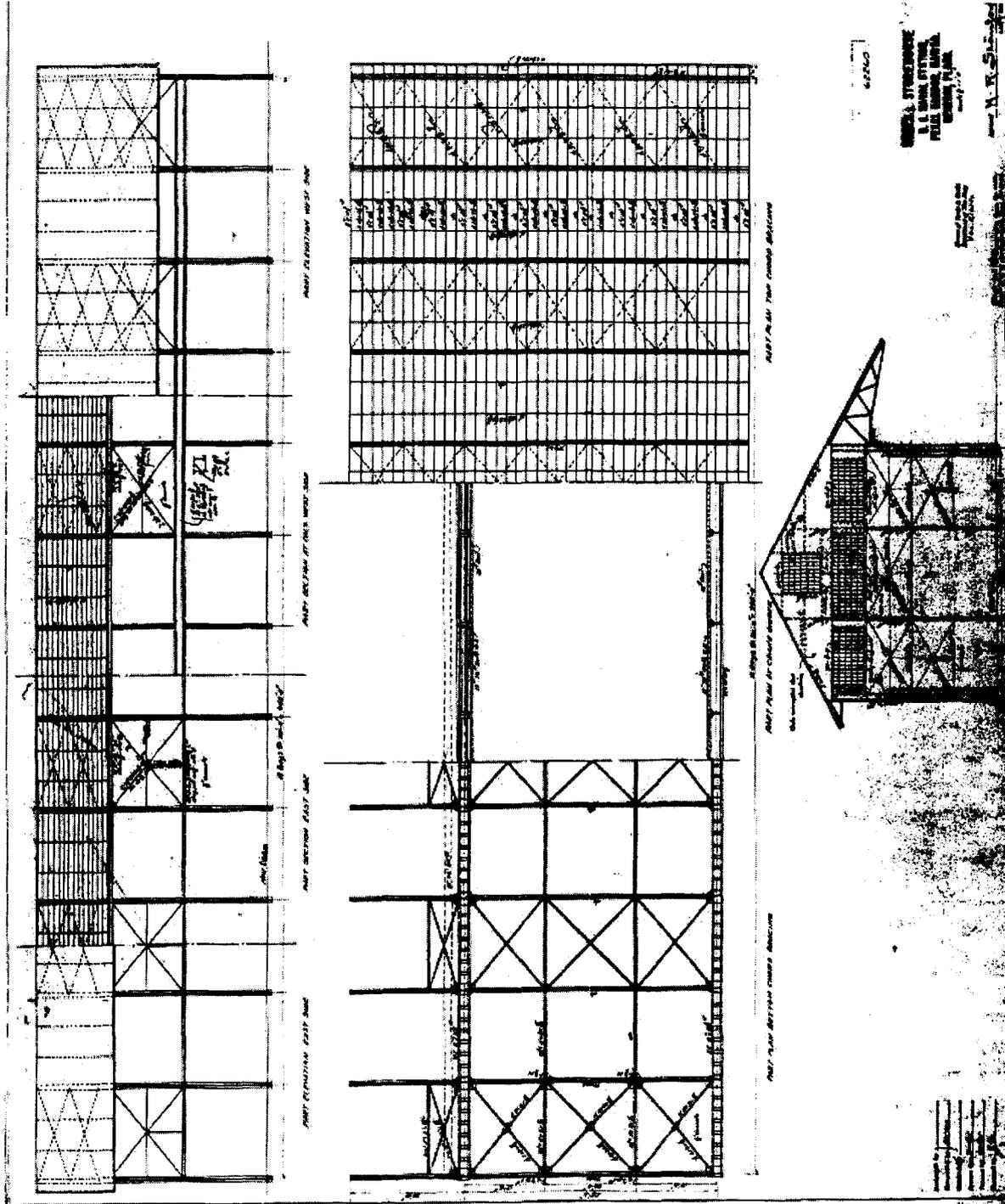
U.S. NAVAL BASE, PEARL HARBOR, STEEL STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Naval Shipyard)
(Facility No. 13)
HABS No. HI-462 (Page 6)

Shipyard Map



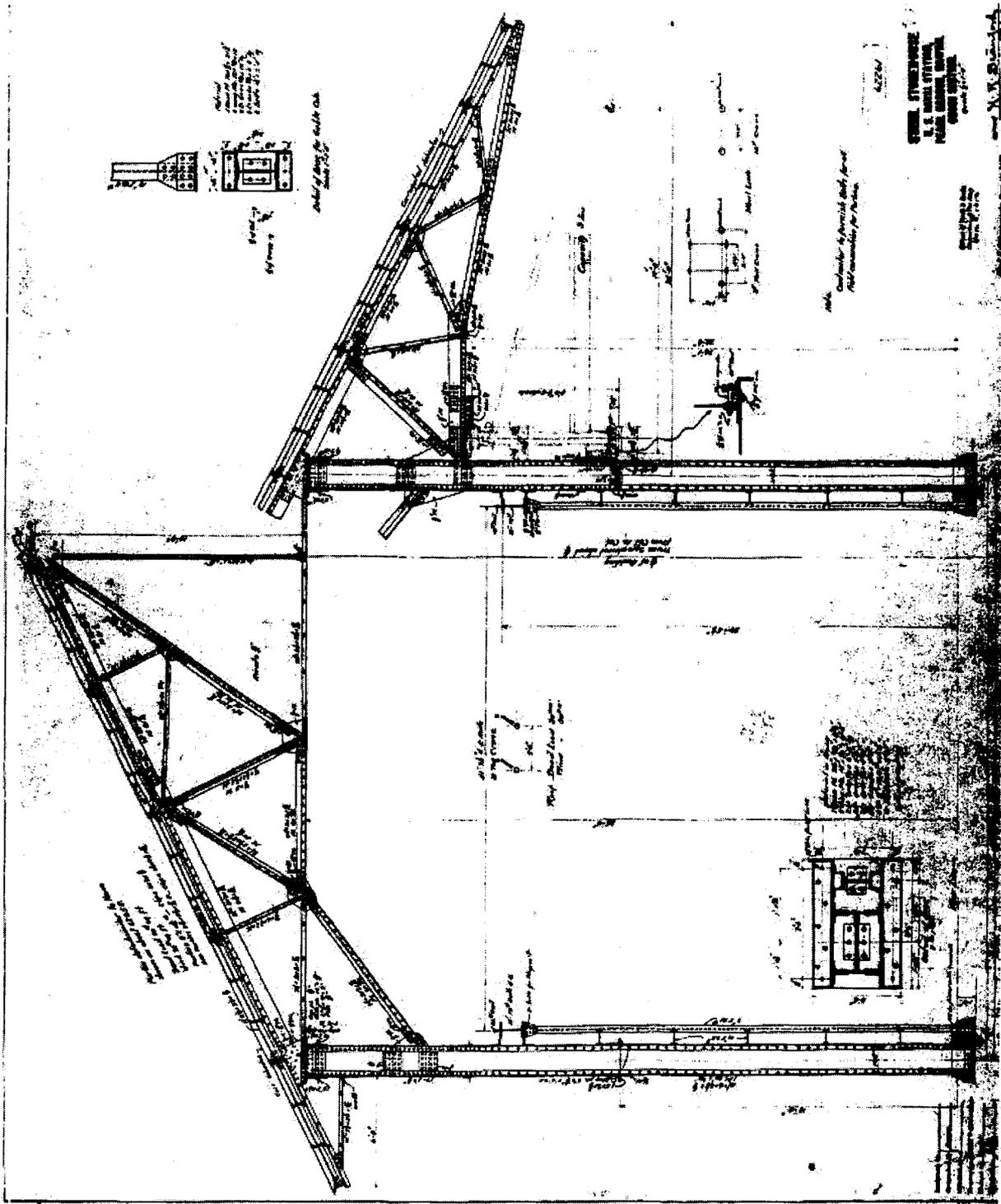
U.S. NAVAL BASE, PEARL HARBOR, STEEL STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Naval Shipyard)
(Facility No. 13)
HABS No. HI-462 (Page 8)

1914 Elevation, partial sections and plans (Y&D Drawing No. 622260) (reduced, not to scale)



U.S. NAVAL BASE, PEARL HARBOR, STEEL STOREHOUSE
(U.S. Naval Base, Pearl Harbor, Naval Shipyard)
(Facility No. 13)
HABS No. HI-462 (Page 9)

1914 Cross Sections (Y&D Drawing No. 62261) (reduced, not to scale)



U.S. NAVAL BASE, PEARL HARBOR, STEEL STOREHOUSE
 (U.S. Naval Base, Pearl Harbor, Naval Shipyard)
 (Facility No. 13)
 HABS No. HI-462 (Page 10)

1971 Elevations and sections (NAVFAC Drawing No. 1230241) (reduced, not to scale)

