

United Engineering Company Shipyard,
Warehouse
(United Engineering Company Shipyard,
Storage Building for Long Crane)
(Building No. 6)
2900 Main Street
Alameda
Alameda County
California

HAER No. CA-295-F

HAER
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1-ALAM,
4F-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
San Francisco, California

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HISTORIC AMERICAN ENGINEERING RECORD

UNITED ENGINEERING COMPANY SHIPYARD, WAREHOUSE (United Engineering Company Shipyard, Storage Building for Long Crane) (Building No. 6)

HAER No. CA-295-F

Location: 2900 Main Street
Alameda
Alameda County
California

U.S.G.S. 7.5 minute Oakland West, Calif. quadrangle.
Universal Transverse Mercator Coordinates: 10.562530.41842410

Present Owners: 074-0891-003 074-0905-001-04
City of Alameda Alameda Gateway Ltd.
City Hall 2900 Main Street
Alameda, CA 94501 Alameda, CA 94501

Present Occupant: Alameda Gateway Ltd.

Present Use: Storage

Significance: The warehouse is a contributing structure in the United Engineering Company Shipyard historic district that has been determined eligible for the National Register of Historic Places. The United Engineering Company Shipyard, established in 1941 to build and repair ships for the U.S. Navy, is the last surviving of several large World War II shipyards in Alameda. United Engineering built 21 tugboats and repaired hundreds of ships during the war. The facility was one of the largest employers in Alameda and played an important economic and social role in the city. This large warehouse played an important function in the efficient operation of the shipyard by providing an on-site depot for necessary materials and supplies.

UNITED ENGINEERING COMPANY SHIPYARD, WAREHOUSE
(Storage Building for Long Crane, Building No. 6)
HAER No. CA-295-F (Page 2)

PART I. HISTORICAL INFORMATION

A. Physical History

1. **Date of erection:** the warehouse was built in 1943.
2. **Architects and engineers:** unknown.
3. **Original and subsequent owners, occupants, and uses:** the warehouse was constructed while United Engineering owned the shipyard. Early plans for the building also called it the "Main Storehouse." In 1946, Matson Navigation purchased the yards, including the warehouse. Todd Shipyards Corporation leased the property in 1948 and bought it in 1959. Finally, the current owner, Alameda Gateway, bought the property in 1983.

The warehouse was built to store materials and equipment needed to build and repair sbips. A sign banging on the only remaining interior wall lists a past occupant, "No Trespassing/Harbor Tug & Barge Co.", although it is not clear for what purpose the company used the building. At the time that Todd Shipyards bought the property in 1959, Alameda County records labeled this as building no. 3. While it was owned by Todd Shipyards before 1984, the structure was called Building 123, Warehouse #1.¹ The north end of the warehouse is currently used for storage but the rest of the building is mostly vacant.

4. **Builder, contractor, suppliers:** unknown
5. **Original plans and construction:** early plans for the sewer connections for the warehouse were drawn in May 1942.² Almost as soon as it was designed, plans were begun to roughly double it in size. Under separate contracts, the original building was labeled building no. 22a and the extension was labeled building no. 22m. On 7 October 1943, the plans and sections for the building were finalized. The U.S. Navy - Bureau of Yards and Docks, approved all plans on 9 October 1943.

The building was constructed as a one-story structure with a long rectangular plan. The warehouse had a tall central bay with shorter side aisles and was half its current length. According to early plans, there was a one-story office addition and loading dock on the northwest corner of the building. At the

¹ "Insurance Recap and Allocation - All Properties" (On file at Alameda Gateway Ltd., Alameda, CA, April, 1995).

² *Office and Warehouse Sewer Connections* (Alameda, CA: United Engineering Co. Ltd. Alameda Shipyard, 14 May 1942) sheet I.

UNITED ENGINEERING COMPANY SHIPYARD, WAREHOUSE
(Storage Building for Long Crane, Building No. 6)
HAER No. CA-295-F (Page 3)

south end of the building there were offices, scales, and restrooms. Through the doors on the north end, a pair of standard gauge railroad tracks ran into the building 50 feet. The northwest loading dock, offices, restrooms, and railroad tracks no longer exist, and it is not clear when they were removed. It is likely that some changes were made when the large extension was built on the south end of the building.

6. **Alterations and additions:** at some point, probably in the late 1940s, a extension (70 by 150 feet) was built on the south end of the warehouse. The construction of the additional twelve bays doubled the building's size. Aside from a slight different in the heights of the aisle roofs, the addition closely matched the original in form, size, and materials. Over the years the exterior corrugated panels on the exterior walls and aisles roofs have been removed. As a result the building is now an open frame structure covered with a corrugated steel roof.

This extension was discussed, along with a request for \$50,000.00, in a memo of 20 December 1942 from United Engineering to the Bureau of Ships:

The present warehouse ... a Navy owned facility for which funds were provided in the original contract (item 22-a), has been found inadequate in space. It is already crowded and we have been forced to rent space in a location four (4) miles away, resulting in inconvenience and delay in supplying needed material. It is proposed to extend the present warehouse building 150 x 70 feet, extending the crane rails in the center bay and providing bins and gallery floors in the wings.

B. Historical Context

In 1941, United Engineering purchased an existing rail maintenance and repair yard and converted the facility to a shipyard. Shortly thereafter, the company secured contracts from the United States Navy to build tugboats for the war effort and later to repair larger ships. The property continued in use exclusively as a shipyard until 1984. Since that time, it has been used primarily as a shipyard and for other marine and industrial purposes.

In recent years the building has been used for storage of shipyard equipment.

UNITED ENGINEERING COMPANY SHIPYARD, WAREHOUSE
(Storage Building for Long Crane, Building No. 6)
HAER No. CA-295-F (Page 4)

PART II. ARCHITECTURAL INFORMATION

A. General Statement

1. **Architectural character:** the warehouse is utilitarian in appearance.
2. **Condition of fabric:** although the structural frame is intact, the corrugated steel panels that covered the exterior walls and side aisle roofs have all been removed.

B. Description of Exterior

1. **Overall dimensions:** the Warehouse is a one-story building with a long, rectangular plan. The building measures 432 feet across the east and west sides and 70 feet across the north and south ends. The building has a total area of 30,250 square feet.³
2. **Foundation:** the foundation is made of reinforced concrete. Rebar, which probably originally tied the foundation to a raised floor, projects through the foundation, and is exposed. Three by six inch nailer boards are bolted to the top of the foundation. Framing for the exterior siding was once attached to these nailers.
3. **Walls:** the exterior walls of the 1943 building and later addition were originally covered with galvanized, corrugated iron panels. (The nails and nail holes are visible). However, the siding has since been removed, and the wood frame is exposed.
4. **Structural system, framing:** both the original section of the building and the extension are wood frame structures with heavy timber posts and lighter infill. The original building and the extension each have twelve bents. Many of the smaller 2 by 4 and 2 by 6 framing members have been removed.

The twelve bays of the original building are divided by ten exterior posts, and ten interior posts along both sides of the central bay. The interior wooden posts measure 12 by 12 inches and are secured to 18 by 18 inch concrete bases with metal ties. The exterior columns are aligned with the interior posts and measure 8 by 12 inches. They sit on the concrete foundation. Ten trusses rest on the beams and support the roof. The trusses are made of 2 by 8 inch, 4 by 6 inch, and 6 by 8 inch boards. Joints are covered with wood gussets attached by large bolts.

³ "Insurance Recap and Allocation - All Properties."

UNITED ENGINEERING COMPANY SHIPYARD, WAREHOUSE
(Storage Building for Long Crane, Building No. 6)
HAER No. CA-295-F (Page 5)

The structure of the extension is very similar to that of the original. Each of the twelve bents of the extension have large posts along the exterior wall that align with interior posts along the central longitudinal bay. The interior posts are quite thick and are made of two 3 by 18 inch boards with a 8 by 12 inch post in between and a box beam comprised of 3 by 12 inch boards. Each of these interior posts is secured with steel ties and bolts to a 2½ foot by 2½ foot concrete base. The exterior wall posts are box beams made of 2 by 6 inch boards. Like the 1943 section of the building, ten trusses, which rest on the interior columns, support the addition's central roof. The trusses are made of 2 by 6 inch and 2 by 10 inch boards. The trusses are similar to those of the original building except fewer gussets were used.

5. Openings:

- a. **Doorways and doors:** the doors have all been removed but the doorways remain. There is a gap in the side aisles from the thirteenth to sixteenth bays (from the north end) providing access to a large opening. The thirteenth bay does not have a raised concrete foundation and was likely an original entrance. According to plans for the building there were large "accordion doors" on this side. There is another doorway on the north end, which has been enlarged from its original size. When first built, this opening had large wooden sliding doors with galvanized iron paneling. There was a single door on the south elevation.⁴
- b. **Windows:** according to the plans for the warehouse, the building was to have ribbon windows beneath the eaves of the central roof (above the side aisles), and along the side aisles. If these were built, they are no longer extant.

6. Roof:

- a. **Shape, covering:** the building can be divided lengthwise into three sections. The center section is the tallest. It has a gabled roof covered with corrugated, galvanized iron panels. There is a gap in the roof covering along the ridgeline, ostensibly to allow in light and to provide ventilation. The side sections or aisles have lean-to roofs, which are lower than the main roof and abut the vertical walls of the center section. The lean-to roofs on the addition are several feet higher than

⁴ *Plans and Elevations Warehouse Bldg #2 (Alameda, CA: United Engineering Co. Ltd. Alameda Shipyards, 7 October 1943) plan no.2 n3.*

UNITED ENGINEERING COMPANY SHIPYARD, WAREHOUSE
(Storage Building for Long Crane, Building No. 6)
HAER No. CA-295-F (Page 6)

those of the original building. The lean-tos were also covered with corrugated, galvanized iron panels, but much of this is now gone.

- b. **Cornice, eaves:** the center section and side aisles have overhanging eaves.
- c. **Dormers, cupolas, towers, vents:** none visible.

C. Description of Interior

- 1. **Floor plan:** the warehouse is a single enormous open space. The interior posts that support the main roof also divide the building into a central longitudinal bay and side aisles and twenty-four bents.
- 2. **Stairways:** none
- 3. **Flooring:** the center section has a concrete floor, and the side aisles have asphalt floors. Reinforcing rods that project out of the raised foundation indicate that the current floor is lower than the original.
- 4. **Wall and ceiling finish:** the walls and ceilings of the warehouse were most likely unfinished, with exposed framing and trusswork. Since the exterior siding has been removed, there aren't any walls.

There is one wall in the interior of the building that has its original wood diagonal siding. This was originally the southern exterior wall of the 1943 building. A sign that reads, "No Trespassing/Harbor Tug & Barge Co." is posted on this wall.

- 5. **Openings:**
 - a. **Doorways and doors:** there are no interior doors
 - b. **Windows:** the warehouse does not have any windows.
- 6. **Hardware:** there is no hardware left.
- 7. **Mechanical equipment:**
 - a. **Heating, air conditioning, ventilation:** there are no heating or air conditioning systems. At the time of the construction of the warehouse, the ventilation was probably through windows and the gap in the roof. Since the removal of the siding, the building has been open to the exterior.

UNITED ENGINEERING COMPANY SHIPYARD, WAREHOUSE
(Storage Building for Long Crane, Building No. 6)
HAER No. CA-295-F (Page 7)

- b. **Lighting:** the building was wired for electricity at the time of its construction. The original incandescent fixtures hang in two rows along the central section of the building and along the aisles.
- c. **Plumbing:** the building does not currently have plumbing, but early plans show that a small room on the north end of the west side (no longer extant) had plumbing and that there were restrooms in the southeast corner of the building.⁵
- d. **Equipment:** at the time of its construction, the building housed equipment used for moving and storing materials such as an overhead crane, railroad tracks, and bins for parts. The crane had a capacity of 5 tons.⁶ A steel pipe runs along the center of the trusses.

D. Site

- 1. **General setting and orientation:** the Warehouse is located southeast of the large Inspection and Repair Shops building and east of the boiler house. The long rectangular building is oriented southwest to northeast.

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings, Maps and Plans

Alameda Gateway. *Existing Site Plan*. 30 January 1984.

Edward K. Hussey Engineering Corporation. Survey No. 4050, plan. Prepared for United Engineering Company Ltd. 24 January 1942.

Insurance Recap and Allocation – All Properties.” On file at Alameda Gateway Ltd., Alameda, CA, April, 1995.

Kennedy, Clyde C., Engineering Office of. “Area Plan and Interceptor Profile: Improvements to Sewer System for Properties Occupied by Todd Shipyards Corp., Alameda, Calif.” Prepared for Matson – United Properties, Inc. 9 August 1951.

Office and Warehouse Sewer Connections. Alameda, CA: United Engineering Co. Ltd. Alameda Shipyard, 14 May 1942.

⁵ Ibid.

⁶ Ibid. plan no.2 ne12.

UNITED ENGINEERING COMPANY SHIPYARD, WAREHOUSE
(Storage Building for Long Crane, Building No. 6)
HAER No. CA-295-F (Page 8)

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Sanborn Map Company. *Insurance Maps of Alameda, California*, p. 93. New York: 1948.

United Engineering Company Ltd. *Alameda Shipyard, San Francisco Area*, Sketch No. 48. 10 February 1944.

United Engineering Company Ltd. *Alameda Shipyard: Map Showing Existing Facilities and Those Under Construction.* 22 October 1942.

United Engineering Company Ltd. *Map of Alameda Shipyard Showing Existing and Proposed Additional Facilities.* Plan no. UEC-A-1-7. 14 June 1943.

B. Bibliography

Alameda County Recorder. Grant Deed. Matson Navigation Company to Todd Shipyards Corporation 6 March 1959, including List of Buildings, Fixtures, and Improvements.

Thompson, Richard G., Lieutenant Colonel, San Francisco District, Corps of Engineers. Letter to Cherilyn Widell, State Historic Preservation Officer, requesting Determination of Eligibility. 30 April 1998.

United Engineering Company Ltd. Memo to Bureau of Ships, Washington DC. "Contract NObs-76 - Funds for completion of plant facilities". 20 December 1942.

United Engineering Company Ltd. Memo to Chief of the Bureau of Yards and Docks. "Reproduction Costs and Market Value to Third Parties of 'Civil Works'", with Estimated Schedule of "Civil Works" Facilities. 8 February 1946.

United States. Army Corps of Engineers - San Francisco District and California. State Historic Preservation Officer. Memorandum of Agreement Regarding the Oakland Harbor Navigation Improvements Project, Alameda County, California. Signed 31 January 2001 and 22 January 2001.

Widell, Cherilyn, State Historic Preservation Officer. Letter to Richard G. Thompson, Lieutenant Colonel, San Francisco District, Corps of Engineers, Regarding Oakland Harbor Ship Channel Deepening and Improvements, Alameda County [Determination of Eligibility Concurrence]. 9 June 1998.

UNITED ENGINEERING COMPANY SHIPYARD, WAREHOUSE
(Storage Building for Long Crane, Building No. 6)
HAER No. CA-295-F (Page 9)

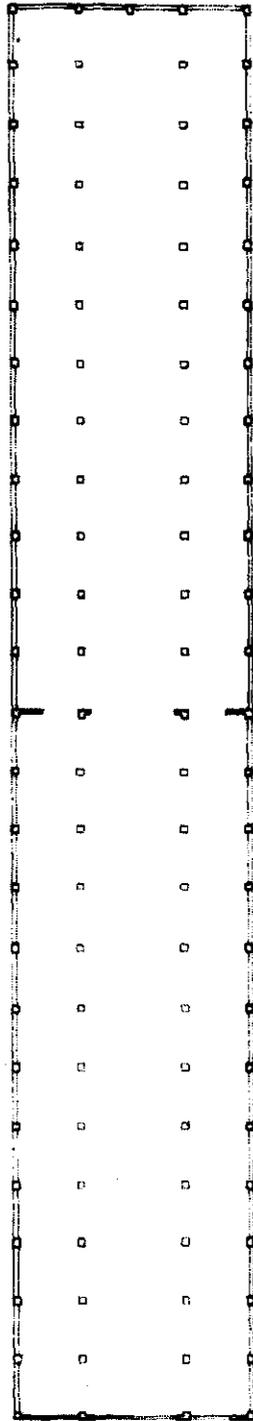
PART IV. PROJECT INFORMATION

This report was prepared for the U.S. Army Corps of Engineers and the Port of Oakland in accordance with a Memorandum of Agreement (MOA) between the U.S. Army Corps of Engineers, San Francisco District and the California State Historic Preservation Officer concerning the former United Engineering Company shipyard. The Port of Oakland and the City of Alameda were concurring parties to the MOA. The MOA was created because of a proposal by the U.S. Army Corp of Engineers in partnership with the Port of Oakland to sponsor the Oakland Harbor Navigation Improvements Project. This project "would deepen Oakland Harbor channels and berth areas from -42 feet mean lower low water (MLLW) to -50 feet MLLW, with 2 feet overdredge allowance" and widen some portions of the channels. These actions, which would constitute an Undertaking under Section 106, would result in the demolition of several buildings and structures at the former United Engineering Company Shipyard. Because the shipyard had been determined eligible for the National Register of Historic Places, the Undertaking would have an adverse effect on the property. Under the MOA, the following HAER documentation has been prepared: a written historic and descriptive report on the shipyard as a whole, seventeen separate reports on individual buildings and structures in the shipyard, including this report, and photographic documentation.

This building will not be demolished by the federal undertaking.

This report was prepared by Jody Stock, architectural designer, and Michael R. Corbett, architectural historian. Corbett was a subcontractor to Basin Research Associates of San Leandro. Basin Research was under contract to g. borchard & associates.

UNITED ENGINEERING COMPANY SHIPYARD, WAREHOUSE
(Storage Building for Long Crane, Building No. 6)
HAER No. CA-295-F (Page 10)



BUILDING NO. 6: WAREHOUSE

Prepared by Jody R. Stock
1/11/01



0 8 16 32 48 feet

*Plan is based on scaled drawings, *Office and Warehouse Sewer Connections*. Alameda, CA: United Engineering Co. Ltd. Alameda Shipyard, 14 May 1942, and *Plans and Elevations Warehouse Bldg #2*. Alameda, CA: United Engineering Co. Ltd. Alameda Shipyard, 7 October 1943. The plan has been altered to reflect current field conditions. The wood siding has been removed for the exterior of the building and only the frame structure, foundation, and roof remains.