

U.S. NAVAL BASE, PEARL HARBOR, NAVAL HOUSING AREA MAKALAPA,  
ANGLE THREE-BEDROOM DUPLEX TYPE M HABS No. HI-355-L  
(U.S. Naval Base, Pearl Harbor, Naval Housing Area Makalapa, Facility Nos. 32,  
35, 38, 41, 45 - 51) HABS  
Kamakani and Samoa Places, and Makalapa Drive HI-355-L  
Pearl Harbor  
Honolulu County  
Hawaii

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY  
Pacific Great Basin System Support Office  
National Park Service  
San Francisco, CA 94107

1980-1981  
1982-1983...

## HISTORIC AMERICAN BUILDINGS SURVEY

### U.S. NAVAL BASE, PEARL HARBOR, NAVAL HOUSING AREA MAKALAPA, ANGLE THREE-BEDROOM DUPLEX TYPE M

(U.S. Naval Base, Pearl Harbor, Naval Housing Area Makalapa Facility Nos. 32,  
35, 38, 41, 45 - 51)

HABS No. HI-355-L

Location: The Makalapa Housing Area, located west of Kamehameha Highway and east of the H-1 freeway, is part of the Pearl Harbor Naval Complex, on the south side of the island of Oahu, state of Hawaii. It lies outside the boundary of the Pearl Harbor National Historic Landmark. These Type M buildings are clustered at the south end of the Makalapa Housing Area along Kamakani Place, Makalapa Drive, and Samoa Place (see HABS No. HI-355 for maps and a table of address and facility number correlations). The buildings in this report are located within the UTM coordinates of the Makalapa Housing Area as defined in the location section of the main report HI-355.

Significance: This housing type is significant as an example of Hawaiian residential architecture during the 1940s, in a grouping of related types. The design is notable for the use of new materials and minimal ornamentation, with a traditional overall appearance. The design accommodated prefabricated components and assembly-line building techniques, reflecting the need for rapid construction in this period of build-up to World War II. These duplexes represent the later work of one of Hawaii's master architects, C.W. Dickey. The buildings respond well to Hawaii's temperate environment, although their design was also influenced by the factors mentioned above. The significance of this design also relates to the patterns of military rank, with the junior officers' duplexes having notable differences in size and design elements from the other officer housing.

Description: The Makalapa Housing Area is made up of numerous types of one- and two-story single-family and duplex residences. The Type M buildings include ten duplexes (Facilities 32, 35, 38, 41, and 46 - 51) plus one building (Facility 45) constructed as the same type of duplex, but now containing only one unit, due to a fire. This building type M is described in detail below. For a description of the neighborhood's overall appearance, see HABS No. HI-355.

These two-story duplex buildings are L-shaped in plan. The units are not separated by floor, but at the junction of the L. The maximum dimensions of the unit footprint (each wing of the L) are 51'-0" x 23'-0", not including porches. The net square footage, per unit, for this building type (double for the ten duplexes) is 1,918 square feet. The units in the duplexes are mirror images of each other, although the location of the entry and rear porches varies. The units have abutting storage and utility rooms on the first floor and abutting closets and bedrooms on the second. Each unit has a kitchen, dining room, living room, bathroom, maid's room, hall, closets, storage room, and utility room on the first floor. The second floor of each unit contains three bedrooms, two bathrooms, and two closets in the hall, in addition to the ones in the bedrooms.

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These buildings have post-on-block foundations, which are screened by alternating wide and thin boards, and are constructed entirely of wood. The first-floor exterior walls have horizontal flush siding (either tongue-and-groove or shiplap boards), while the second-floor walls have the 6-½" drop siding, which is used for the second floor throughout the housing area. Like all houses in the neighborhood, these buildings have hipped roofs with wide eaves, overhanging the walls by 3'-0". The original wood-shingle roofing has been replaced by asphalt shingles. Low-slope pent roofs are located between the first and second floors, and are covered with sheet metal roofing. The original drawings for this element call it a "lookout," and show these slightly sloped roofs were originally built with "½" waterproof plywood" and the joints covered with 1" x 2" battens "set in white lead." The 2 x 8s supporting the pent roofs are tapered on the top (about 4" over the 3'-0" width) to provide the slope. The same slight slope is used for the front and rear porch roofs that are supported by wood posts and grid-like trellises. Fascia boards cover the ends of all rafters and pent roof supports. Groupings of small circular screened vents are located between every three rafters to provide ventilation to the attic.

The front entry doors originally had two lights over two panels, but some units have had flush doors installed. Rear doors are typically single-light over single-panel doors. Doors have simple wood casings, and wood framed screen doors on the exterior. All porches have grid-like railings, matching the trellis along one or more sides. The windows mostly have a one-over-one-light, double-hung sash with simple wood casings and wood-framed screens on the exterior. Distinctive elements of the duplex types are the high, narrow, screened openings that ventilate the walk-in closets on the second floor. These horizontally oriented openings have wood louvers on the interior. Some have hopper-style wood covers on the interior that can be used to close the opening.

Facility 45 is the remaining half of a duplex that was originally like Type M. The other half was so badly damaged in a fire that it was not rebuilt. This facility now is classified by the Navy housing office as a Type L, single family dwelling. Construction materials and details match that of the other Type M facilities. The wall surfaces, from first-floor beams to rafters, where this unit formerly joined its duplex twin have been rebuilt with drop siding. This matches the second-floor siding, but contrasts with the first-floor siding.

Facility 47 was the only Type M interior to be observed. It is expected but not certain that all interior elements for other buildings of this type are similar. The interior walls are plywood panels. Simple crown and baseboard moldings are visible through the house; quarter-round shoe molding is a typical feature as well. Window and door casing designs are equally simple. All the original canec ceilings have been replaced with drywall; in the kitchen and bathrooms, the initial ¼" plywood panels are still intact. Vinyl tile has replaced the original wood flooring in the house; bathrooms have linoleum, as stated on the original drawings. Doors are mostly single-panel and retain their original hardware; exceptions in this unit include flush wood doors to the utility room and some upstairs closet doors. At the dining room a single-panel, swinging door opens to the kitchen area. The typical scored wood valances, located at the tops of the windows as a decorative feature, were not seen in this unit. The enclosed stair has wood treads, now covered with carpet, and a wood handrail with metal brackets. A 2" diameter cylindrical wood rail is attached atop a ¾" x 3-½" wood cap on the second-floor solid stair railing.

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There are several interesting closet configurations. The closet in the Maid's room and the one in the middle upstairs bedroom are affected by their location above and below the stair. The height of the maid's closet is limited, and a portion of the upstairs closet does not reach the floor, due to the space required for the stair. The shower stall in the master bathroom intrudes into the master bedroom closet.

The kitchen retains many original elements, including cabinets, built-in breakfast nook, and counters with metal edging over laminate that extends to a 12"-high backsplash. Some new fixtures and counters have been installed. Bathrooms have their original plywood panel walls, but new finishes covering the tempered masonite paneling in the tub/shower stalls. The second-floor hall has an original built-in linen closet with flush wood double doors. Lastly, the living room has its original three-shelf, built-in bookcase, at the foot of the stair.

History: See HABS No. HI-355 for a history of the Makalapa Housing Area. The Type M facilities are one of three examples of duplex housing in the Makalapa Housing Area. These were originally built to house Junior Officers at Pearl Harbor during the World War II period. While the floor plans have not changed, necessary renovations over the years have replaced the wood floors, canec ceilings, kitchen appliances and bathroom fixtures with more modern amenities in many units. The new elements include drywall, vinyl tile, carpet, appliances, and plumbing fixtures. However, a great deal of the historic integrity of this building type is still apparent. A fire afflicted Facility 45 in previous years, and it was repaired as a single-family building, instead of rebuilding the other unit to make it a duplex again. It is now listed as a Type L structure in the housing office, but the remaining unit is just like half of a Type M building.

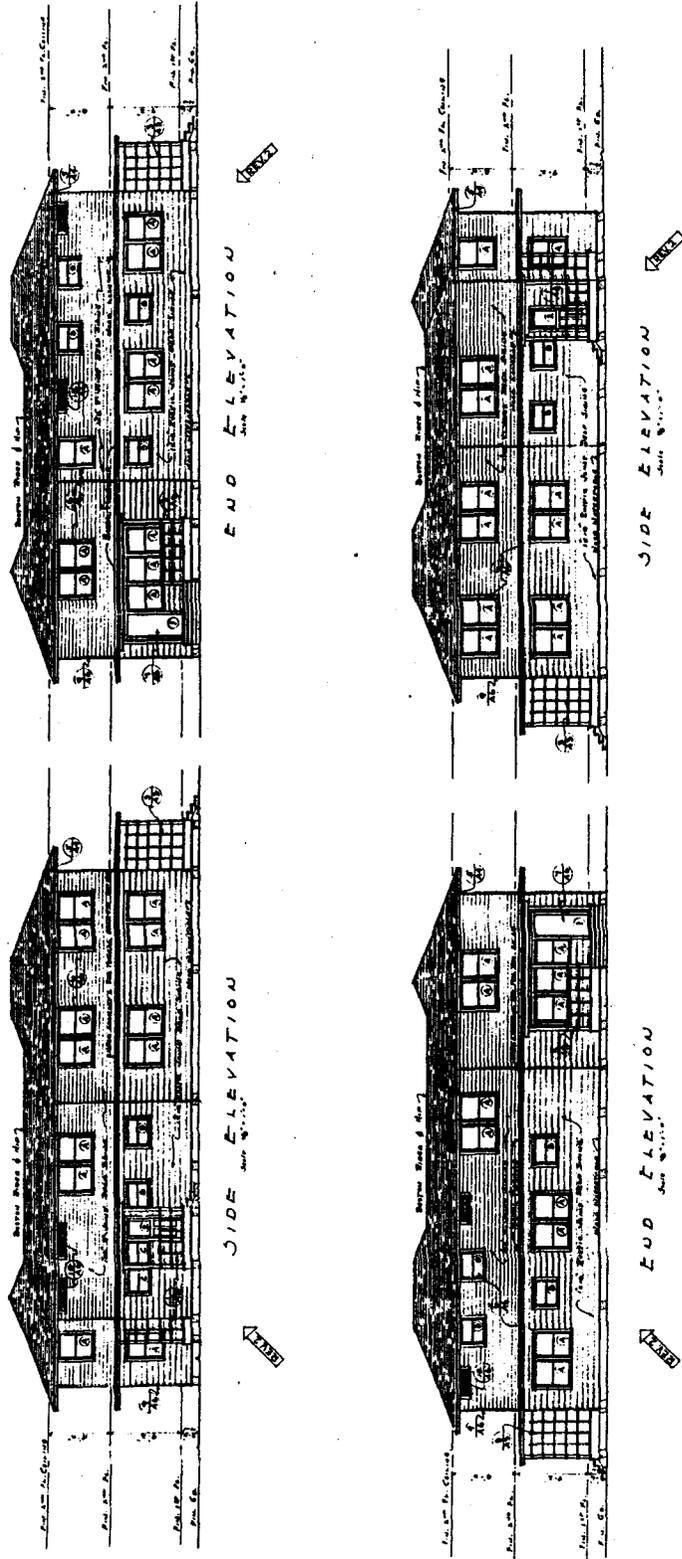
Sources: Architectural Drawings: Original drawings and any drawings completed up to the present for building renovations by the U.S. Navy are located at the Pacific Division Naval Facilities Engineering Command, Plan File Room, Pearl Harbor Hawaii. Copies of the original floor plans, elevations, sections, and details, as well as 1959 as-built floor plans, are included in this report. Note that the wall sections and detail drawings apply to Type N as well as Type M.

Historian: Joanmarie Orlowski, Mason Architects, Inc., June 2000.



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Exterior Elevations, Original Drawing (partial)  
Dwg. No. 2924. Angle 3-Bedroom Roof Plan, Exterior Elevations and Details, 9/11/41

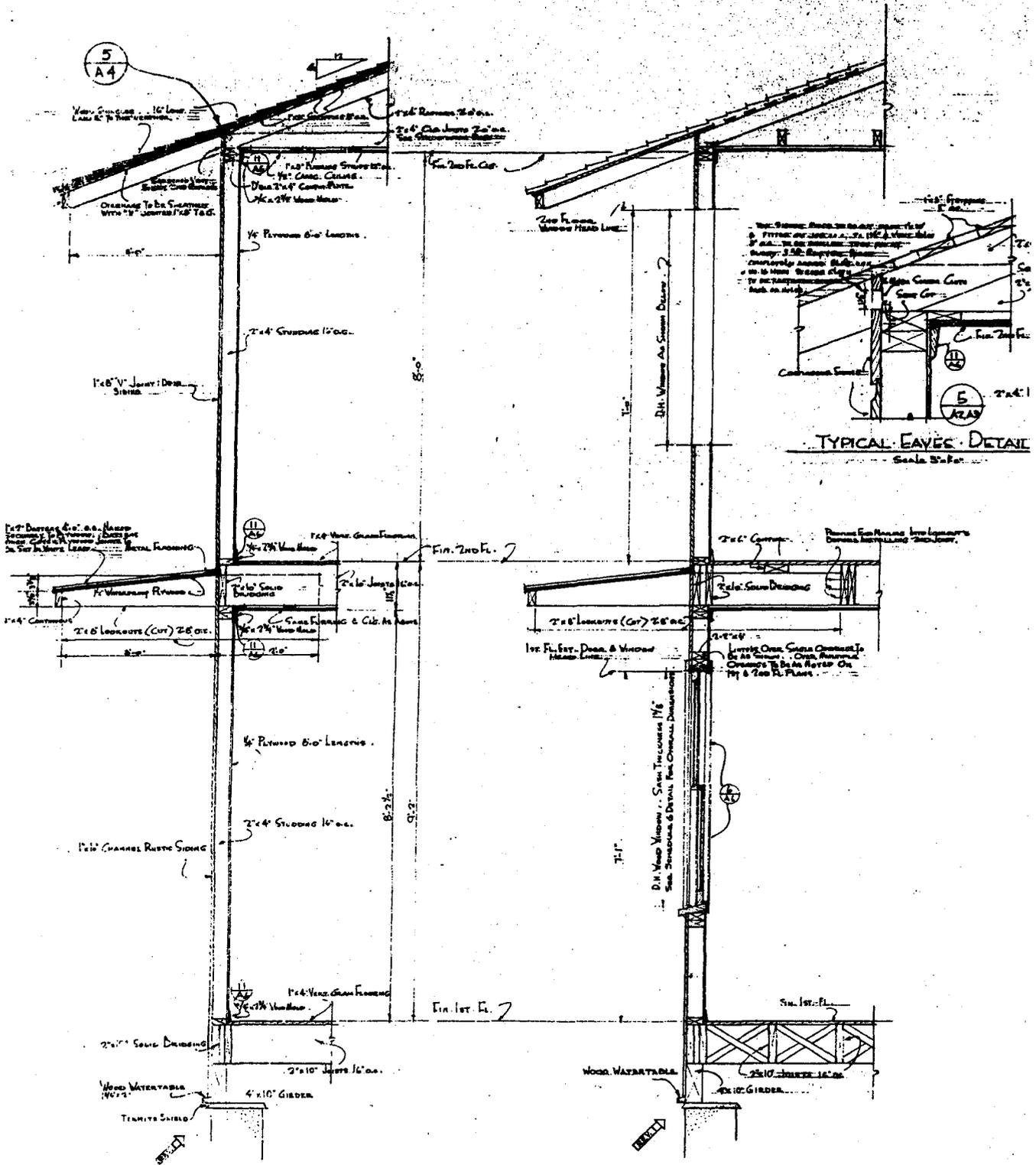






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Typical Wall Sections, Original Drawing (partial)  
 Dwg. No. 2927. Angle 2- and 3-Bedroom, Typical Wall Sections, 9/11/41

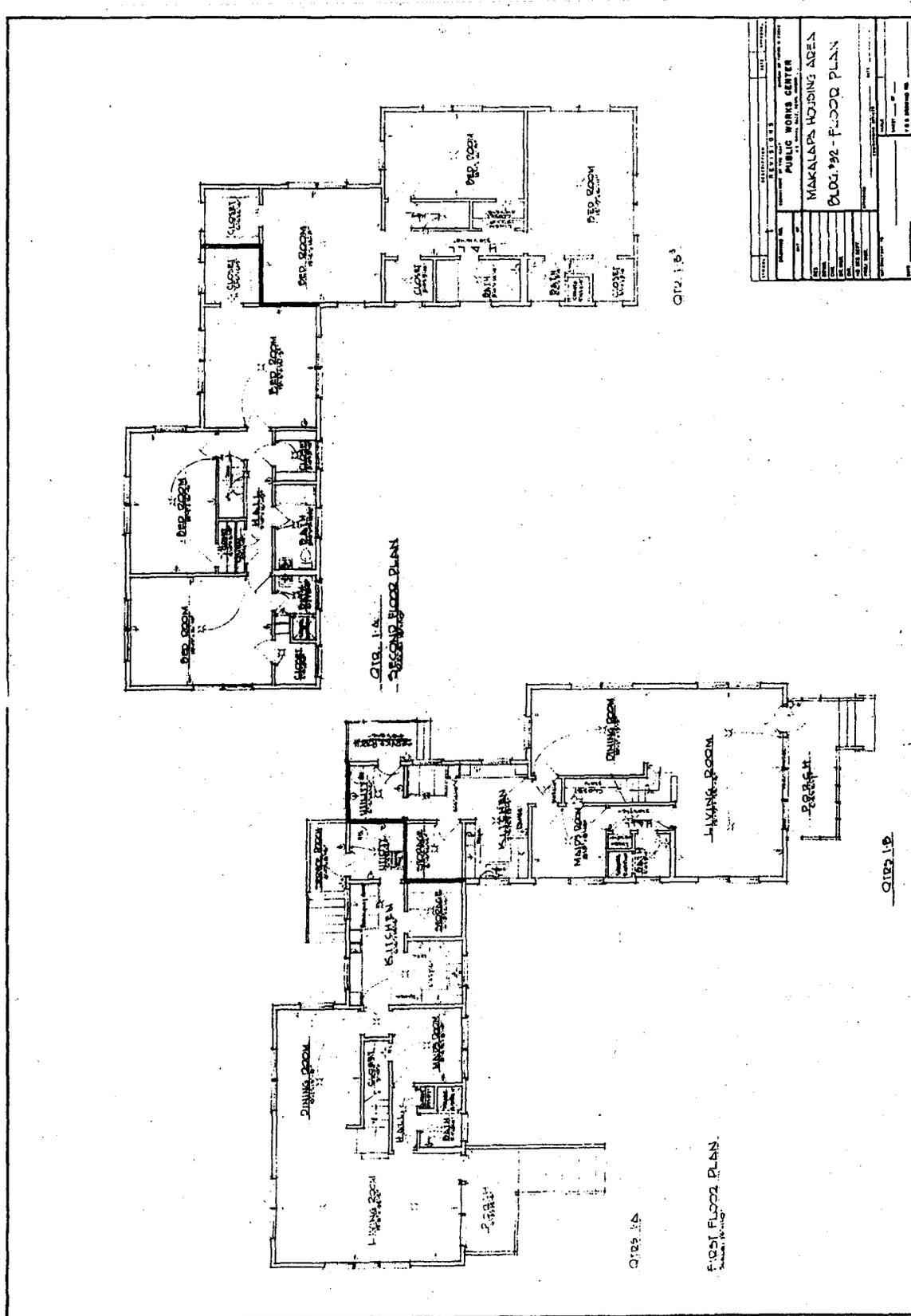


TYPICAL WALL SECTION  
 WITH JOISTS PERPENDICULAR TO OUTSIDE WALL  
 SCALE 1" = 4"

TYPICAL WALL SECTION  
 WITH JOISTS PARALLEL TO OUTSIDE WALL  
 SCALE 1" = 4"

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Facility 32. First- and Second-Floor Plans, As-Built Drawing  
 Dwg. No. 9803. Bldg. 32 Floor Plan, 8/11/59



Addendum to  
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BLACK & WHITE PHOTOGRAPHS  
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U.S. Department of the Interior  
National Park Service  
Oakland, California

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The drawings of this report are an addendum to a nine-page report previously transmitted to the Library of Congress

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**Date of Construction:** 1941-1942

**Designer:** Charles William Dickey

**Builder:** Contractors, Pacific Naval Air Bases

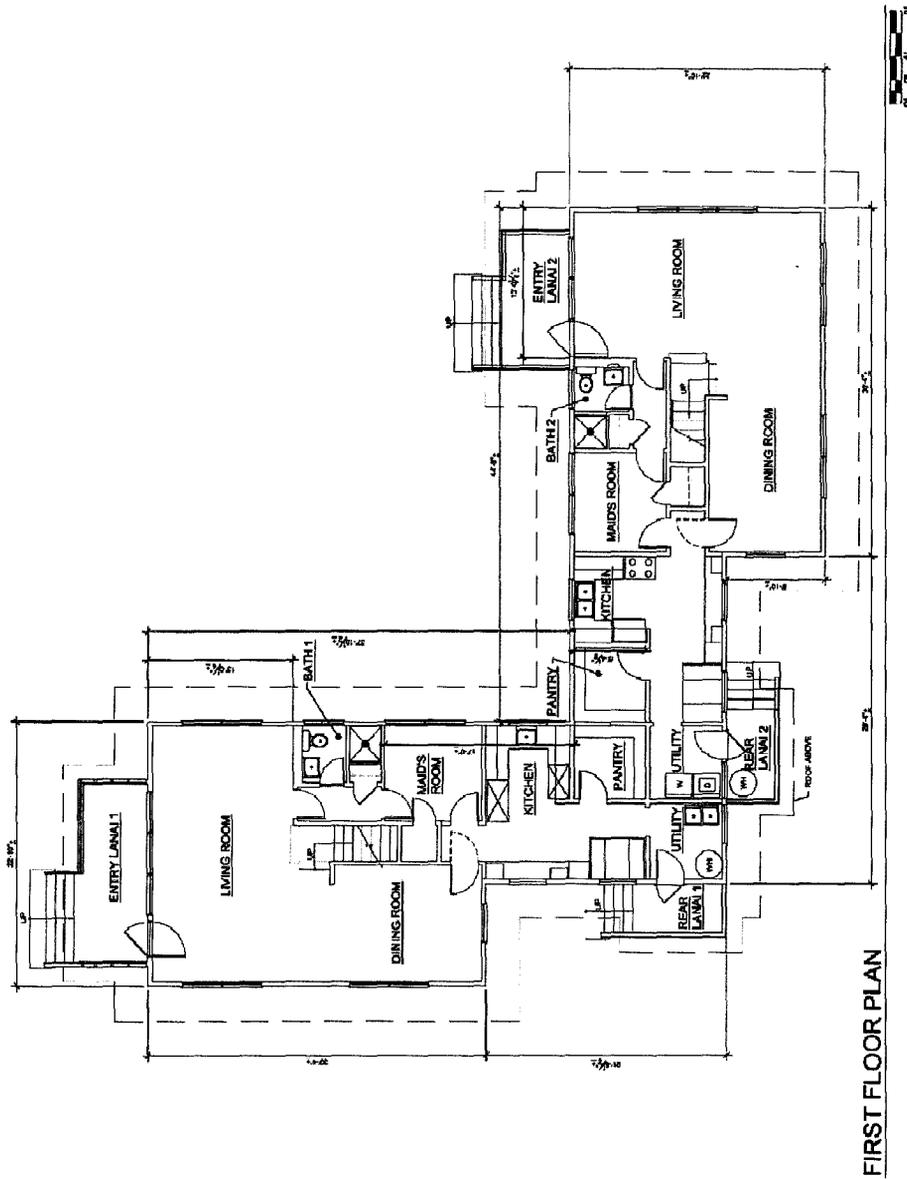
**Present Owner:** U.S. Navy

**Present Use:** Military housing

**Significance:** This housing type is significant as an example of Hawaiian residential architecture during the 1940s, in a grouping of related types. The design is notable for the use of new materials and minimal ornamentation, with a traditional overall appearance. The design accommodated prefabricated components and assembly-line building techniques, reflecting the need for rapid construction in this period of build-up to World War II. These duplexes represent the later work of one of Hawaii's master architects, C. W. Dickey. The buildings respond well to Hawaii's temperate environment, although their design was also influenced by the factors mentioned above. The significance of this design also relates to the patterns of military rank, with the junior officers' duplexes having notable differences in size and design elements from the other officer housing.

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First -Floor Plan, Type M.



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Second-Floor Plan, Type M.

