

U.S. NAVAL BASE, PEARL HARBOR, NAVAL HOUSING AREA MAKALAPA,
ANGLE TWO-BEDROOM DUPLEX TYPE N HABS No. HI-355-M
(U.S. Naval Base, Pearl Harbor, Naval Housing Area Makalapa, Facility Nos. 33,
34, 39, 40, 42 - 44)
Kamakani Place and Makalapa Drive
Pearl Harbor
Honolulu County
Hawaii

HABS
HI-355-M

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

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

100-1000
FOLLOWS...

HISTORIC AMERICAN BUILDINGS SURVEY

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34, 39, 40, 42 - 44)

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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 N buildings are clustered in the south end of the Makalapa Housing Area along Kamakani Place and Makalapa Drive (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 N housing facilities are one of the three types of duplex residence in Makalapa. Facilities 33, 34, 39, 40, 42, 43, and 44 are the seven Type N buildings. This building type 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 Type N duplexes is 1,485 square feet (double for the building). 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 two bedrooms, one bathroom, and a closet in the hall, in addition to the ones in the bedrooms. This smaller second-story floor plan results in a more complex three-dimensional form than the Type M duplexes.

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These buildings have post-on-block foundations, which are screened by alternating wide and thin boards. This building type is 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". There are two levels of hipped roofs, due to the smaller second story. The original wood shingle roofing material has been replaced with 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 rear porch roofs. The front porch roof extends from the first-floor hip roof, but at a shallower pitch. Wood posts and grid-like trellises support the front and rear porch roofs. 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 42 was the only Type N interior to be observed. It is expected but not certain that all interior elements for other duplexes of this type are similar. The interior of this house type features plywood panel walls with rectilinear ½" to 1" thick crown and baseboard moldings, plus quarter-round shoe moldings at the floor. Window and door casing designs are equally simple. Vinyl tile has replaced the original wood flooring in most of the house; the upstairs bathroom has a sheet vinyl floor. The original canec ceilings have been replaced with drywall. In the bathrooms and kitchen the original plywood ceilings are still in place. Doors are all single-panel with their original hardware still in place. Between the kitchen and dining room there is a single-panel swinging door. Scored wood valances are located at the tops of the windows as a decorative feature. The stair has an attached 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 stair railing. The closet in the Maid's room, and the one in the smaller 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 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. Bathrooms have their original plywood panel walls but have new finishes covering the Masonite walls in the tub/shower stalls. Though remodeled with

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new fixtures and finishes, the upstairs bathroom still has its original built-in linen closet with two flush wood doors. The living room has a three-shelf, built-in bookcase at the foot of the stair.

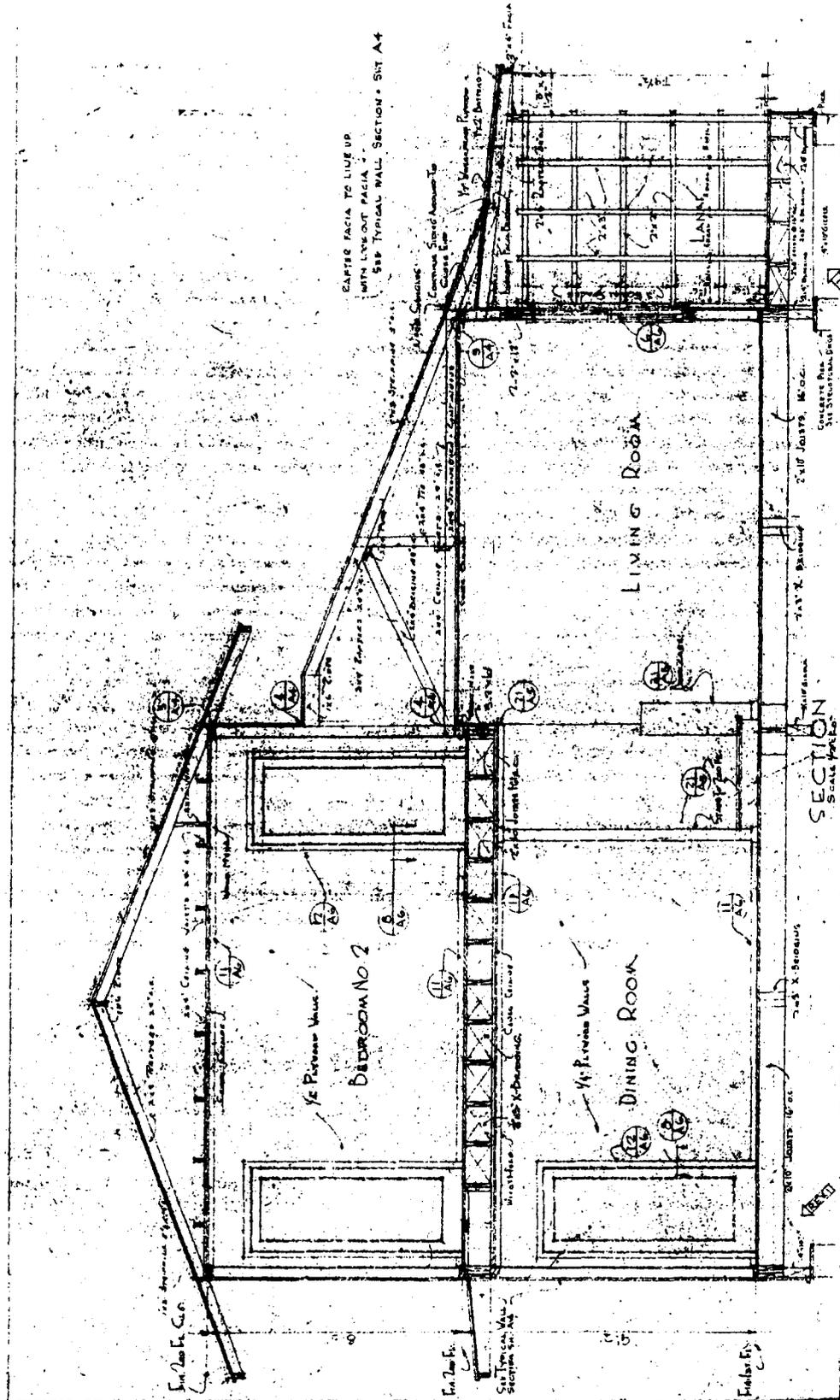
History: See HABS No. HI-355 for a history of the Makalapa Housing Area. The Type N facilities are one of three examples of duplex housing in the Makalapa Housing Area. These were originally built to house Junior Officers at Pearl Harbor during the World War II period. While the floor plans have not changed, necessary renovations over the years have replaced the wood floors, canec ceilings, kitchen appliances and bathroom fixtures with more modern amenities in most 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.

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, a section drawing, and 1959 as-built floor plans are included in this report. Original elevation drawings for this type were not found.

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

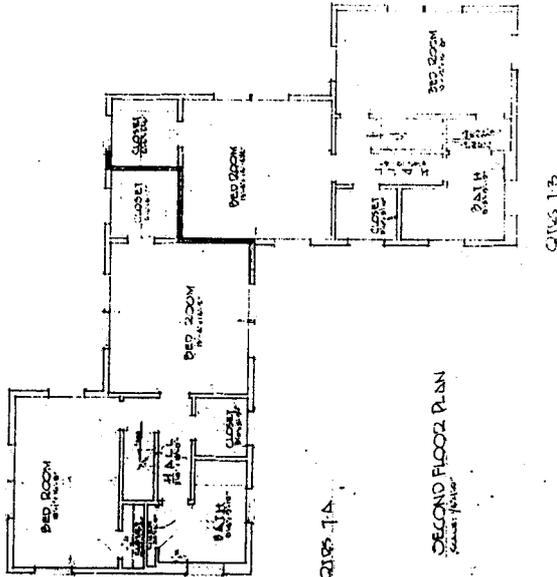
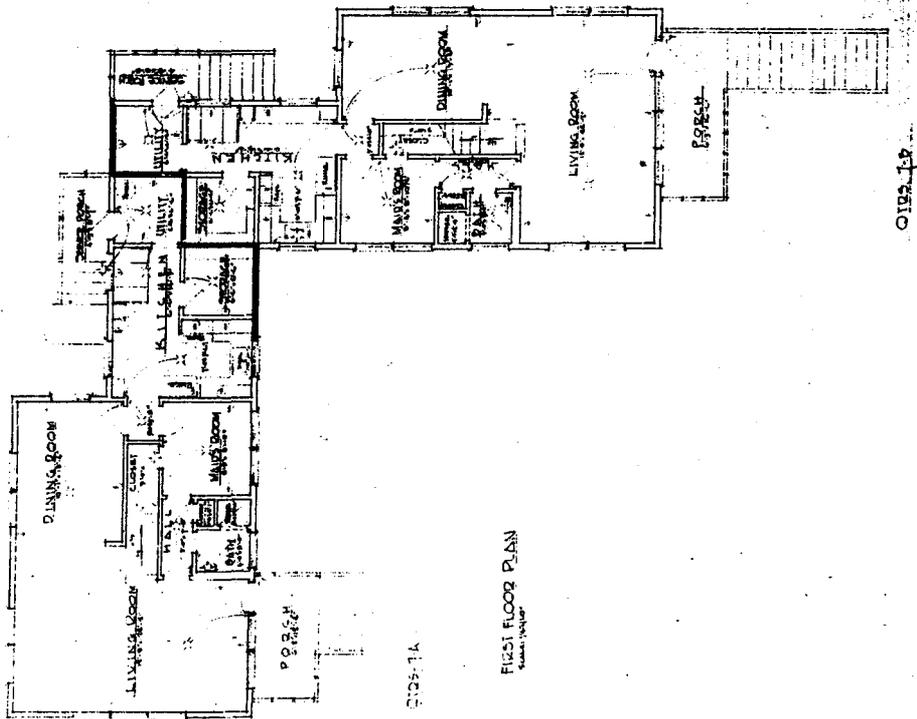
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Building Section, Original Drawing (partial)
 Dwg. No. 2913. Angle 2-Bedroom Sections, Lanais, and Misc. Details, 10/03/41



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Facility 44. First- and Second-Floor Plans, As-Built Drawing
 Dwg. No. 9852. Bldg. 44 Floor Plans, 8/24/59



U.S. NAVAL ARCHITECTURE CENTER	
PROJECT NO.	9852
DATE	8/24/59
DESIGNED BY	...
CHECKED BY	...
APPROVED BY	...
SCALE	AS SHOWN
PROJECT TITLE	...
LOCATION	...
CONTRACT NO.	...
CONTRACT DATE	...
CONTRACT VALUE	...
CONTRACT TYPE	...
CONTRACT NO.	...
CONTRACT DATE	...
CONTRACT VALUE	...
CONTRACT TYPE	...

CROSS 1A MAKALAPA DRIVE, AS BUILT, 8/24/59
 CROSS 1B MAKALAPA DRIVE, AS BUILT, 8/24/59

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U.S. Department of the Interior
National Park Service
Oakland, California

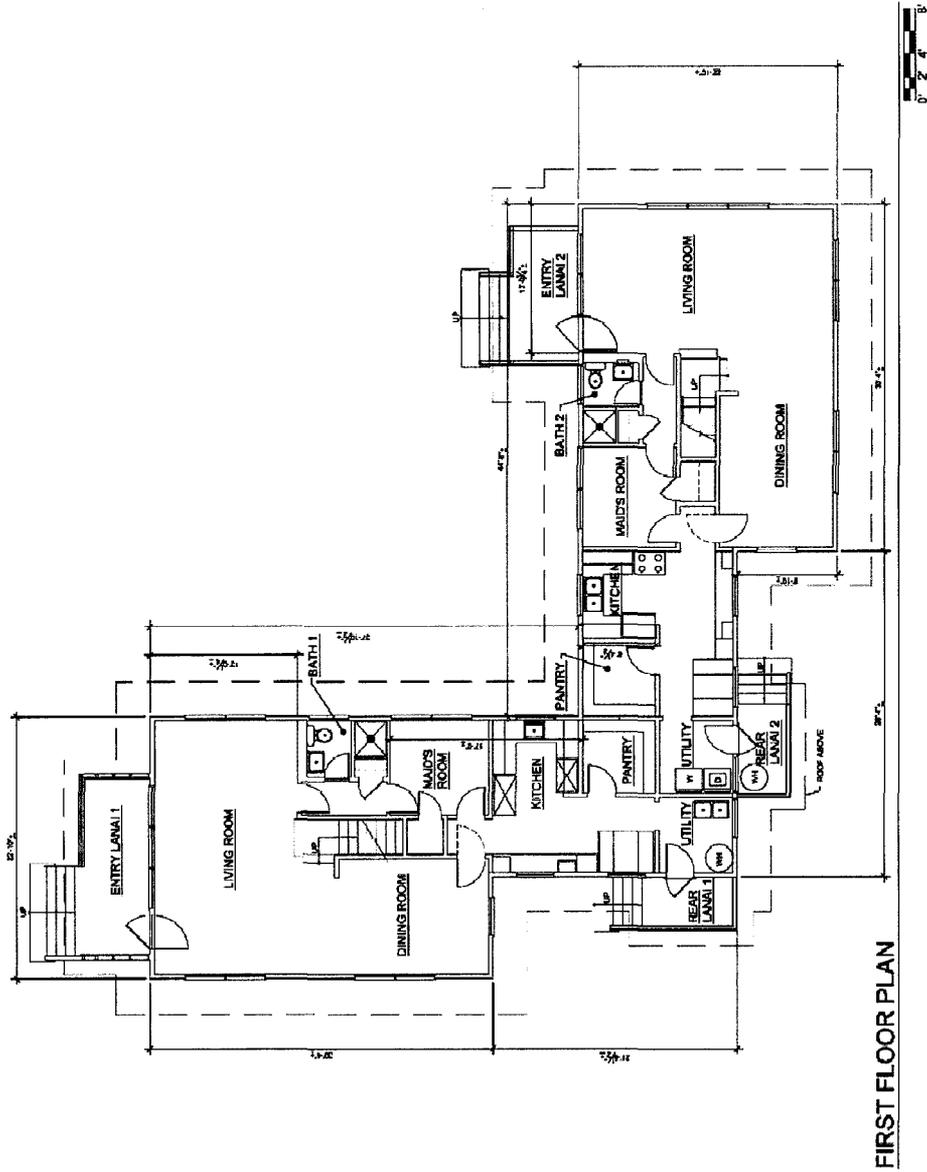
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The drawings of this report are an addendum to a six page report previously transmitted to the Library of Congress.

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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 patters 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 N.



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Second-Floor Plan, Type N.

