
**National Park Service
Cultural Landscape Inventory
2006**



**Kilauea Administration and Employee Housing Historic District
Hawaii Volcanoes National Park**

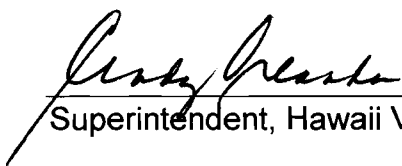
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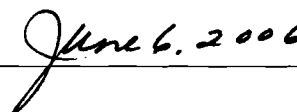
Hawaii Volcanoes National Park concurs with the general findings of this Cultural Landscape Inventory, including the Management Category and Condition Assessment as listed below:

MANAGEMENT CATEGORY: **B: Should be preserved and maintained**

CONDITION ASSESSMENT: **Good**



Superintendent, Hawaii Volcanoes National Park



Date

Please return to:
Erica Owens
CLI Coordinator
National Park Service
Pacific West Regional Office
909 First Avenue

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Executive Summary

General Introduction to the CLI

The Cultural Landscapes Inventory (CLI) is a comprehensive inventory of all historically significant landscapes within the National Park System. This evaluated inventory identifies and documents each landscape's location, physical development, significance, National Register of Historic Places eligibility, condition, as well as other valuable information for park management. Inventoried landscapes are listed on, or eligible for, the National Register of Historic Places, or otherwise treated as cultural resources. To automate the inventory, a web-based, national CLI database was created in 2005. The "Web CLI" provides an analytical tool for querying information associated with the CLI.

The CLI, like the List of Classified Structures (LCS), assists the National Park Service (NPS) in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, NPS Management Policies (2001), and Director's Order #28: Cultural Resource Management (1998). Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report on an annual performance plan that is tied to 6-year strategic plan. The NPS strategic plan has two goals related to cultural landscapes: condition (1a7) and progress on the CLI (1b2b). Because the CLI is the baseline of cultural landscapes in the National Park System, it serves as the vehicle for tracking these goals.

For these reasons, the Park Cultural Landscapes Program considers the completion of the CLI to be a servicewide priority. The information in the CLI is useful at all levels of the park service. At the national and regional levels it is used to inform planning efforts and budget decisions. At the park level, the CLI assists managers to plan, program, and prioritize funds. It is a record of cultural landscape treatment and management decisions and the physical narrative may be used to enhance interpretation programs.

Implementation of the CLI is coordinated on the Region/Support Office level. Each Region/Support Office creates a priority list for CLI work based on park planning needs, proposed development projects, lack of landscape documentation (which adversely affects the preservation or management of the resource), baseline information needs and Region/Support office priorities. This list is updated annually to respond to changing needs and priorities. Completed CLI records are uploaded at the end of the fiscal year to the National Center for Cultural Resources, Park Cultural Landscapes Program in Washington, DC. Only data officially entered into the National Center's CLI database is considered "certified data" for GPRA reporting.

The CLI is completed in a multi-level process with each level corresponding to a specific degree of effort and detail. From Level 0: Park Reconnaissance Survey through Level II: Landscape Analysis and Evaluation, additional information is collected, prior information is refined, and decisions are made regarding if and how to proceed. The relationship between Level 0, I, and II is direct and the CLI for a landscape or component landscape inventory unit is not considered finished until Level II is complete.

A number of steps are involved in completing a Level II inventory record. The process begins when the CLI team meets with park management and staff to clarify the purpose of the CLI and is followed by historical research, documentation, and fieldwork. Information is derived from two efforts: secondary sources that are usually available in the park's or regions' files, libraries, and archives and on-site landscape investigation(s). This information is entered into CLI database as text or graphics. A

park report is generated from the database and becomes the vehicle for consultation with the park and the SHPO/TPO.

Level III: Feature Inventory and Assessment is a distinct inventory level in the CLI and is optional. This level provides an opportunity to inventory and evaluate important landscape features identified at Level II as contributing to the significance of a landscape or component landscape, not listed on the LCS. This level allows for an individual landscape feature to be assessed and the costs associated with treatment recorded.

The ultimate goal of the Park Cultural Landscapes Program is a complete inventory of landscapes, component landscapes, and where appropriate, associated landscape features in the National Park System. The end result, when combined with the LCS, will be an inventory of all physical aspects of any given property.

Relationship between the CLI and a CLR

While there are some similarities, the CLI Level II is not the same as a Cultural Landscape Report (CLR). Using secondary sources, the CLI Level II provides information to establish historic significance by determining whether there are sufficient extant features to convey the property's historic appearance and function. The CLI includes the preliminary identification and analysis to define contributing features, but does not provide the more definitive detail contained within a CLR, which involves more in-depth research, using primary rather than secondary source material.

The CLR is a treatment document and presents recommendations on how to preserve, restore, or rehabilitate the significant landscape and its contributing features based on historical documentation, analysis of existing conditions, and the Secretary of the Interior's standards and guidelines as they apply to the treatment of historic landscapes. The CLI, on the other hand, records impacts to the landscape and condition (good, fair, poor) in consultation with park management. Stabilization costs associated with mitigating impacts may be recorded in the CLI and therefore the CLI may advise on simple and appropriate stabilization measures associated with these costs if that information is not provided elsewhere.

When the park decides to manage and treat an identified cultural landscape, a CLR may be necessary to work through the treatment options and set priorities. A historical landscape architect can assist the park in deciding the appropriate scope of work and an approach for accomplishing the CLR. When minor actions are necessary, a CLI Level II park report may provide sufficient documentation to support the Section 106 compliance process.

Park Information

Park Name: Hawaii Volcanoes National Park
Administrative Unit: Hawaii Volcanoes National Park
Park Organization Code: 8300
Park Alpha Code: HAVO

Property Level And CLI Number

Property Level: Landscape
Name: Kilauea Administration and Employee Housing Historic
District
CLI Identification Number: 975050
Parent Landscape CLI ID Number:

Inventory Summary

Completion Status:

Date Data Collected: 6/20/2005
Data Collection: John Hammond and Gretchen Stromberg
Date Entered: 2/14/2006
Data Entry Recorder: Gretchen Stromberg
Site Visit: Yes
Date of Concurrence

Landscape Description

The Kilauea Administration and Employee Housing Historic District is located along Crater Rim Drive, approximately one quarter-mile west of the Hilo entrance station of Hawaii Volcanoes National Park. Developed along the relatively dormant northeast edge of Kilauea Caldera, this 43-acre historic district is located within a dense, native *ohia* forest.

The period of significance for the Kilauea Administration and Employee Housing Historic District (Kilauea headquarters for short) extends from 1927 to 1942. This time frame encompasses the period of initial development of the National Park and ends with the closing of the Civilian Conservation Corps (CCC) program with the United States entry into World War II. This historic district is significant at the state level under Criterion A for its association with Early Park Planning, and for its association with the CCC. It is also significant at the state level under Criterion C because it embodies distinctive characteristics of the Park Service Rustic Style as expressed during the early development of Hawaii National Park.

The Kilauea headquarters includes a picturesque collection of small-scale, rustic-styled houses and buildings massed along the northeast edge of Kilauea Caldera. Most of the existing structures were sited according to a series of master plans developed from 1931 to 1941 by the Landscape and Engineering Division of the National Park Service, San Francisco Office. Most of the buildings and landscape features were built by CCC crews during this same era.

The National Park Service Western Region Branch of Plans and Design (the successor to the Landscape Engineering Division) completed a comprehensive plan for the headquarters area in the mid-1930s during the period of intensive development at Hawaii National Park (HNP). The rustic-style buildings and structures were designed using an adapted Hawaiian style of building that incorporated tropical design elements such as wider eaves and larger windows that were responsive to the wetter but warmer conditions of the Hawaiian Islands. Both the structures and the landscape were developed following naturalistic principles that advocated the use of native materials and plants. Wood siding was stained or painted grey to blend with the *ohia* forest; and lava rock design elements such as: walkways, planters, and foundation veneers, helped harmonize the built environment with the natural.

The built environment is made up of three distinct functional areas: the administration area, the employee housing area, and the maintenance area. The major historic elements within these areas include the current administration building/visitor center, the original administration building, residences, carports, roads, and maintenance related shops, offices, and grounds.

Today, the headquarters area remains the main administrative and residential area for Hawaii Volcanoes National Park, and landscape characteristics such as spatial organization, cluster arrangement, topography, buildings and structures, circulation, small-scale features, and native vegetation contribute to the historic district's integrity including its setting.

The Kilauea Administration and Employee Housing Historic District continues to convey a rustic and naturalistic association through its architecture and landscape architectural design. As a whole, the historic landscape within the historic district retains integrity, is in good condition, and should be maintained and preserved.

Cultural Landscape Inventory Hierarchy Description

The Kilauea Administration and Employee Housing Historic District contains a designed landscape with no component landscapes. The boundary was established in the draft 2005 National Register nomination, but has been modified for the purposes of this landscape inventory to include all contributing landscape features.

Location Map



Boundary Description

The Kilauea Administration and Employee Housing Historic District boundary encompasses all of the buildings, structures, and roads and other landscape features located within the NPS administration and employee housing village. The incinerator, which was planned and constructed for park staff use during the period of significance, is included as a single contributing structure discontinuous from the rest of the district. The 1877 Volcano House, the 1941 Volcano House, and the Concessioner Garage are outside the boundary of this historic district but are included in the boundary of the Crater Rim Historic District Cultural Landscape Inventory because they are not associated with NPS administrative, residential, or maintenance operations.

The western boundary follows the old Crater Rim Drive until it reaches the residential loop road. From there, it veers to the east then loops south, then east again—around the buildings, structures, and circulation. When it reaches the maintenance area, it continues northeast, then veers northwest continuing around all of the structures. It continues northwest encompassing the rest of the residential area, then follows the Volcano House Road—east—to the existing Crater Rim Drive. From there, it loops around the visitor center and associated maintained landscape until it rejoins the old Crater Rim Drive near the Volcano House.

Regional Context

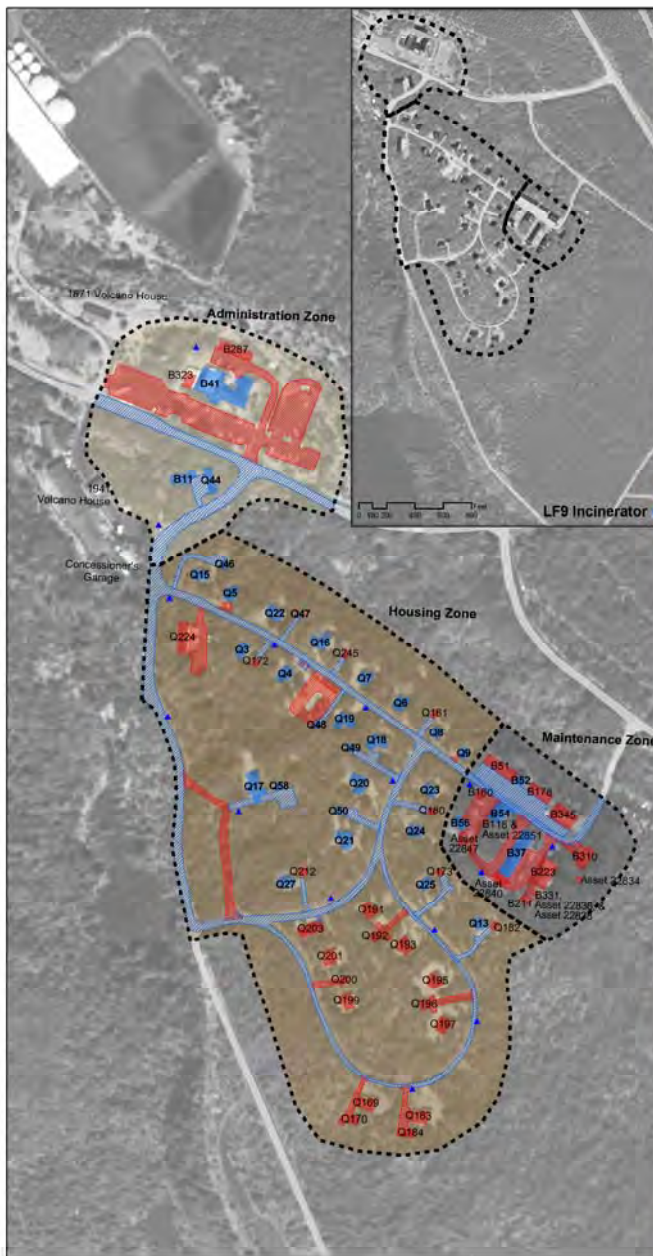
Political Context

The Kilauea Administration and Employee Housing Historic District is located in Hawaii Volcanoes National Park—a park that encompasses 377 square-miles from the coast to the tip of Mauna Loa volcano. The historic district (as well as the entire national park) is located in the county, island, and state of Hawaii. It is in Hawaii's Second Congressional District, which is currently represented by democrat Congressman Ed Case (2005). Hawaii Volcanoes National Park is located approximately 35 miles south-southwest of Hilo, the county seat of Hawaii County and the second largest city in the state of Hawaii.

Physiographic Context

The Kilauea Administration and Employee Housing Historic District is located at the northern edge of Kilauea Caldera—a 2.5-mile long, 2-mile wide, 400-foot deep summit caldera. This caldera was created around 1500 A.D. when the roof caved in after the lava drained from an underground magma chamber, causing the unsupported volcano summit to collapse and various steam explosions to occur. The caldera is much quieter than it was in centuries past, with the most recent lava flows in 1974 and 1982. The 43-acre Kilauea headquarters district is located at 3,940-foot elevation, and is tucked in a native *ohia* forest consisting of *ohia*, *koa*, sandalwood, *hapuu* fern, and *amau* fern. This part of the park averages approximately 100 inches of rain each year; average high temperatures are around 69 degrees and average annual lows are around 52 degrees.

Site Plan



Site Map 1. Buildings and Structures
 Kilauea Administration and Employee Housing Historic District

Structure No.	Structure Name
B11	Ohia Wing
B41	Administration Building
Q44	Carport for Ohia Wing
B323	Restrooms at Admin Building
B287	Vehicle garage at Admin Building
Q3	Quarters 3
Q4	Quarters 4
Q5	Quarters 5
Q6	Quarters 6
Q7	Quarters 7
Q8	Quarters 8
Q9	Quarters 9
Q13	Quarters 13
Q15	Quarters 15
Q16	Quarters 16
Q17	Quarters 17
Q18	Quarters 18
Q19	Quarters 19
Q20	Quarters 20
Q21	Quarters 21
Q22	Quarters 22
Q23	Quarters 23
Q24	Quarters 24
Q25	Quarters 25
Q27	Quarters 27
Q46	Carport for 5, 15
Q47	Carport for 18, 22
Q48	Carport for 19
Q49	Carport for 18
Q50	Carport for 20, 21
Q58	Carport for 17
Q181	Carport for 6, 8
Q178	Carport for 188
Q172	Carport for 3, 4
Q173	Carport for 28
Q180	Carport for 23, 24
Q182	Carport for 13
Q183	Quarters 183
Q184	Carport for 183
Q191	Quarters 191
Q192	Carport for 191, 193
Q193	Quarters 193
Q195	Quarters 195
Q196	Carport for 195, 197
Q197	Quarters 197
Q199	Quarters 199
Q200	Carport for 199, 201
Q201	Quarters 201
Q203	Quarters 203
Q212	Carport for 27
Q245	Carport for 7, 16
Q224	Concessionaire's dorm
B37	Maintenance shops
B52	Fire house/ Paint storage
B54	Storehouse/ Fire cache
B56	Paint storage/ Grounds storage
B118	Fire cache storage
B160	Gas & oil building/ Haz-Mat storage
B176	Chief of Maintenance Office
B211	Carport/storage
B223	Machine repair shop
B268	Vehicle garage or equip storage
B316	Ranger Office
B331	Heavy equipment shop
B345	Pumphouse, Fishhouse
22834	Fire storage shed
22836	Autoshop paint shop
22838	Battery storage/fire shed
22840	Washrack
22847	Paint shop
22851	Fire cache equipment shed

* Blue = Contributing Structure
 * Red = Non-Contributing Structure

Legend

- District Boundary
- Contributing Structure
- Non-Contributing Structure
- Contributing Roads
- Non-Contributing Roads
- Fire Hydrant (contributing)

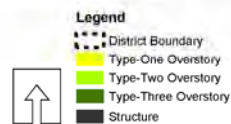
Area

- Administration
- Housing
- Maintenance

Site Plan #1: Buildings and Structures, Kilauea Administration and Employee Housing Historic District. See Supplemental Information for a full-sized map.



Site Map 2. Vegetation Patterns
Kilauea Administration and Employee Housing Historic District



Site Plan #2: Vegetation Patterns, Kilauea Administration and Employee Housing Historic District. See Supplemental Information for a full-sized map.

CHRONOLOGY

Year	Event	Description
1916	Established	Hawaii National Par was established by Congress.
1921	Established	First Superintended (Thomas Boles) was assigned to Hawaii National Park.
Pre-1925	Built	Volcano Road was built connecting the Mamalahoa Road with the volcano observatory near the present day Volcano House.
1925	Built	Employee Quarters #28 was built where Employee Quarters #203 currently is located.
1927	Built	Employee Quarters #3, #8, and #9 were built.
1927	Built	Main residential/maintenance road was built.
1929	Built	Employee Quarters #4 and #5 were built.
Pre-1930	Built	Employee Quarters #10 was built.
1930	Built	Employee Quarters #13 was built at the park entrance.
1930	Built	The storehouse (B54) was built in the maintenance area.
1931-41	Planned	The first master plan for the Kilauea headquarters was developed by the Western Field Office based out of San Francisco. A series of revisions occurred throughout the ten years of development, reflecting the ongoing planning and construction program.
1931	Built	Employee Quarters #6 and #7, designed by Thomas Vint, were built.
1931	Built	Maintenance building B51 was built. It was later destroyed and rebuilt and is now B288.
1932	Built	Employee Quarters #15 was built.
1934	Built	Employee Quarters #16 was built.
1934	Built	The Fire House (B52) was built.
1937	Built	Employee Quarters #17 was built.
1937	Built	The residential loop road was built.
1938	Built	Employee Quarters #18 was built.

1938	Built	Carport for Quarters #17 (Q58) and Carport for Quarters#19 (Q48) were built by the CCC.
Pre-1939	Razed	Employee Quarters #10 was razed to make room for #22.
1939	Built	Employee Quarters #19, #20, #21, #22, #23, and #24 were built.
1939	Built	Carport for Quarters #5, #15 (Q46), Carport for Quarters #16 and #22 (Q47), Carport for Quarters #18 (Q49), and Carport for Quarters #20 and 21 (Q50) were built by the CCC.
1940	Built	Employee Quarters #25 and #27 were built.
1940	Moved	Employee Quarters #13 was moved from the park entrance to its present location.
1940	Built	Maintenance Shop Building (B37) was built by the CCC.
1940	Built	Maintenance Office (B178) was built by the CCC. It was originally built as B60 or B63 and was used as CCC Bachelors Quarters located at the CCC camp. It was relocated to the current location and remodeled in 1953.
1940	Built	A nursery to help propagate native plants was built in the Maintenance Area where the Rangers Office (B310) is now located.
Ca.1940	Built	The CCC built the incinerator (LF9) in between the maintenance area and the CCC camp (the present-day USGS/NPS-Resources Management offices).
1941	Altered	The Crater Rim Drive segment that traveled just south of the Ohia Wing was removed, and turned into a footpath.
1941	Built	The Paint Storage Shed (B56) was built in the maintenance area.
1942	Built	A new administration building/ museum/ naturalist office (B41) was built. This building was under construction when the United States entered into WWII. At this time, the Army requisitioned the building, and with the CCC, completed the structure.
1942	Abandoned	The CCC stopped working in Hawaii National Park.
1943	Transferred	The administration building was transferred back to NPS control after being requisitioned by the Army.
1949	Built	The Administration Building Vehicle Garage (B287) was built.
1951	Built	The Carport for Quarters #6 and #8 (Q161) was built.

1951	Built	The Hazardous Material Storage Building (B160) was built then rebuilt in 1993.
1951	Built	The Fire Shop Equipment Shed (FMSS Asset #22851) was built.
1952	Built	Employee Quarters #169 and associated carport (Q170) were built along the loop road.
1953	Built	The Carport for Quarters #3 and #4 (Q172), Carport for Quarters #25 (Q173), and Carport for Quarters #23 and #24 (Q180) were built.
1953	Moved	B178 was moved from the CCC camp to its present location in the Maintenance Area. It was remodeled at this time.
1954	Built	Employee Quarters #183 and associated carport (Q182) were built along the loop road.
1955	Built	The Carport/tire storage (B211) was built in the Maintenance Area.
1956	Built	The Carport for Quarters #13 (Q182), and Carport for Quarters #27 were built.
1960	Built	The Carport for Quarters #7 and #16 (Q245) was built.
1960	Built	The Machine Repair Shop (B223) was built.
1961	Land Transfer	Hawaii National Park was divided into two national parks: Hawaii Volcanoes National Park and Haleakala National Park.
1962	Razed	Employee Quarters #28 was razed to make room for Quarters #203.
1962	Built	Employee Quarters #191, #193, #199, and #201 were built by Hicks Construction Company, Inc. along the loop road.
1963	Moved	Employee Quarters #203 was moved and remodeled to its present location. Prior to the move, it was referred to as Quarters #328.
1963	Built	The Carport for Quarters #191 and #193 (Q192), Carport for Quarters #199 and #201 (Q200), Employee Quarters #195 and #197, and associated carport (Q196) were built by Hicks Construction Company, Inc. along the loop road.
1963	Destroyed	A storm destroyed several buildings in the Kilauea Administration and Employee Housing Historic District: the Administration Building Vehicle Garage (B45 or B247) was destroyed and rebuilt; and the Maintenance area garage (B51) was destroyed and rebuilt as B288.
1965	Altered	A large auditorium was added and the main lobby was expanded at the Administration Building (B41).

1968	Built	The Ranger Office (B310) was built where the nursery once stood.
1974	Built	The Concessionaire Dormitory (B224) was built.
1976	Built	The Kilauea Visitor Center Comfort Station (B323) was built. A covered walkway connecting it to the Visitor Center was also built.
Ca. 1976	Built	The parking area at the Kilauea Visitor Center/ Administration Building was expanded.
1980s	Altered	The Maintenance Shop Building (B37) was altered: a 12' x 20' shed roof was added to the north end is used as a carport. West side of the building has five 8-15-foot sliding doors modified with translucent fiberglass at the top, fiberglass skylights were added to the roof; the sign shop has been modified with the addition of wooden 4-lite casement windows and a glazed 3-foot wooden door.
1992	Built	The current firehouse (B345) was built in the location of the original fire/pump house originally built in 1932.
1993	Rebuilt	The Hazardous Material Storage (B118) was rebuilt.
2000	Built	A 1,392 square-foot washrack was built south of the Maintenance Shop Building (B37).

Statement of Significance

The Kilauea Administration and Employee Housing Historic District is eligible for listing in the National Register of Historic Places (NRHP) within the multiple property submission entitled “Hawaii National Park: Planning and Development through World War II.” It is significant at the state level under Criterion A, association with a historic event or pattern of events, for its association with early park planning at Hawaii National Park and with the Civilian Conservation Corps (CCC) program which provided the labor for constructing many of the park’s rustic structures. It is also significant at the state level under Criterion C, distinctive architectural design, because its contributing features exemplify the “Park Service Rustic” style. The period of significance spans from 1927 to 1942, covering the years of initial master planning efforts, development, and CCC involvement. Although some of the contributing features have been slightly altered, and non-contributing structures added, the district retains the seven aspects of integrity and is considered eligible for listing as a historic district.

Qualifications for Inclusion within NRHP Multiple Property Submission

The Kilauea Administration and Employee Housing Historic District qualifies as an associated property type primarily under two of the seven functional categories described in Section F of the draft multiple property submission (Carey & Company, 2005). In particular, the district was constructed as institutional housing and for park administration/land management purposes. The district is considered institutional housing because its contributing residences were built for, and occupied by, park staff rather than members of the public. It is also a park administration/land management property type because a number of its contributors were built and used for on-going maintenance of the park’s natural and man-made features.

In addition, the district contains examples of three other property types. The Ohia Wing’s stone guard rail and landscape elements are components of the park’s basic physical infrastructure system. Second, the Administration Building’s original museum function, as well as its strategic siting and Park Service Rustic aesthetic, qualifies it as a property type concerned with accommodating the needs of the visiting public. Finally, because one of the main uses for the Administration Building was as a naturalist’s laboratory, it can also be considered a scientific study property type.

The Kilauea Administration and Employee Housing Historic District is significant under three of the four contexts discussed in section E of the multiple property submission: “Early Development of Hawaii National Park, 1916-1934,” “Early Park Planning and the Park Service Rustic Style, 1916-late 1930s,” and “The Civilian Conservation Corps Program, 1934-1942.”

The first of these contexts describes the existing infrastructure in 1916 and its evolution until the introduction of the CCC in 1934. It is relevant in this case because a number of the district’s contributing features were constructed during the earliest years of the park, serving to establish the location and function of the area before the organized master planning efforts of the 1930s.

The second context summarizes the Park Service’s pre-WWII program of compatible design and planning, outlines master planning efforts at Hawaii National Park, and describes how the “rustic” aesthetic manifested itself in the Hawaiian context. It is relevant to this district in part because the area as seen today was planned and developed during the master planning process of the 1930s. It is also relevant because contributing features embody the distinctive characteristics of the Park Service Rustic style as seen in Hawaii: the widespread use of stone or lava rock for walls, columns, chimneys, or planters; prominent metal-clad hip or gable-on-hip roofs with wide eaves; a large number of windows, usually

casement or double-hung; horizontal wood clapboards in a pattern of alternating sizes; and varying styles of porches.

The third context explains the relationship between the CCC program, NPS, and the park. Over half of the district's contributing features were constructed by CCC crews between 1938 and 1940. It is unclear if this dramatic building boom would have occurred if willing and able laborers had not been made available through the federal government's employment stimulation efforts.

Since the Kilauea Administration and Employee Housing Historic District is historically significant for its association with a number of events and patterns of events that were important to the development of Hawaii National Park, Criterion A applies. Since the Kilauea Administration and Employee Housing Historic District's contributing features also embody the distinctive characteristics of the Park Service Rustic style, it also qualifies as historically significant under Criterion C, for its distinctive design.

Integrity

The Kilauea Administration and Employee Housing Historic District retains overall physical integrity to convey its historical significance. According to the multiple property submission document, resources significant primarily for their role within Hawaii National Park's early planning and development history (Criterion A) should retain a particularly high level of integrity in location, setting, feeling, and association. The district's location near the edge of Kilauea Caldera and the main visitor accommodation facilities, its feeling as a result of early park planning efforts and principles, and its associations with the park as staff housing and park administration/land management facilities are intact. Additional residences located along the internal loop road have been constructed since the end of the district's period of significance have altered the setting to a minor degree by enlarging the area eastward beyond the edges of what existed before the beginning of World War II; however, these newer residences were constructed as a result of 1930s master planning efforts, are architecturally compatible, and do not distract from the overall district experience.

Similarly, the multiple property submission registration requires that resources that are significant primarily for their exemplary Park Service Rustic architecture (Criterion C) should retain a particularly high level of integrity in design, materials, and workmanship. Despite alterations to individual contributing buildings, such as small additions, new roofs, and the replacement of a small number of windows, the district's overall design, materials, and workmanship have not been compromised.

Physical History

When Hawaii National Park was established in 1916, it included Mauna Loa volcano and Kilauea caldera on the island of Hawaii and Haleakala volcano on the island of Maui. None of the park's sites received any notable physical improvements or development until 1922. However, the Kilauea headquarters area had been home to a hotel and volcano observatory prior to any NPS-funded improvements. Since the 1860s, various forms of the privately owned and operated Volcano House offered overnight accommodations for the many visitors who came to see the wonders of Kilauea firsthand. This area also had an early association with volcano research starting in 1910 when Thomas A. Jagger, head of the geology department at Massachusetts Institute of Technology, arrived. He immediately set up an observatory and a residence on the caldera rim in a location now occupied by the current Volcano House.

When the first superintendent, Thomas Boles, arrived at the Kilauea area in 1921, construction of visitor and administration facilities began, but due to lack of funding, progress was slow. When the Great Depression hit, several service-wide changes prompted an increase in development. The first was the establishment of the Landscape Division based out of National Park Service regional offices. The Landscape Division initiated master planning efforts throughout the National Park system at this time. The second change was Franklin D. Roosevelt's creation of the Civilian Conservation Corps (CCC) in 1933. By 1934, CCC camps were created at both parts of Hawaii National Park (on the islands of Maui and Hawaii). These laborers conducted fire prevention, cleanup, and maintenance, and participated directly in constructing buildings, structures, and landscapes as an unprecedented era of master planning and development occurred. The existing configuration of the Kilauea Administration and Employee Housing Historic District is a result of these early and intensive planning and construction efforts. When designed, the new buildings, structures and landscapes reflected "rustic" principles, favored by the National Park Service (NPS) at that time. When World War II began, the CCC camps gradually closed down and the NPS shifted its attention towards aiding in the war effort. For national security reasons associated with Hawaii's strategic location in the Pacific war effort, the army appropriated areas of the park away from park construction projects and constructed new facilities.

In the 1950s and 1960s, a new wave of development prompted by "Mission 66"—the NPS directive to substantially improve and increase park facilities and infrastructure by 1966—added to the built environment within the residential area of the Kilauea headquarters. In 1961, during the Mission 66 period, Congress split Hawaii National Park into two separate parks, known today as Hawaii Volcanoes National Park (located on the island of Hawaii) and Haleakala National Park (located on the island of Maui). Since Mission 66 ended, minor additions and alterations have been made to the Kilauea Administration and Employee Housing Historic District, none of which significantly impacted the district's integrity or ability to convey its historical significance.

The following discussion describes the physical history of the Kilauea Administration and Employee Housing Historic District from the time of initial development in 1927 until the present. The district's contributing resources were constructed between 1927 and 1940, with most dating to the master planning period, 1931-1939.

Early Development 1916-1930

When Hawaii National Park was established in 1916, the Kilauea Caldera area contained most of the park's existing infrastructure because it was easier to access by visitors than the remote Mauna Loa and Haleakala areas. Additionally, Kilauea was considered to be particularly docile when compared to other active volcanoes, and therefore deemed suitable for development. The area contained two major

buildings, both of which had been built using private funds. The Volcano House dated from the 19th century and offered the only overnight visitor accommodations in the park. The Volcano Observatory, Kilauea's other major structure, was perched on the caldera rim directly opposite the grounds of the Volcano House. Also prior to a park service presence at HNP, two roads—one from Hilo to the east and another from Ka'u to the west—met at the Volcano House.

In 1922, six years after HNP was established, the park's first superintendent, Thomas Boles arrived at Kilauea. He found that although HNP now had some money, it continued to suffer from the same "general lack of Congressional appropriations" that was impacting many other parks at the time. Boles stayed at the Volcano House until a superintendent's residence could be built. Perhaps because of the existing development in this area, or perhaps because Boles was actively living and working in this area, the land adjacent to the Volcano House and observatory became the logical choice for siting the new park headquarters. Boles immediately went to work to get an office built, and by June of 1923 a small structure containing space for a museum, office, and a drafting room was completed. This no-longer extant structure was located near the present-day Volcano House.

By the late 1920s, a series of private vacation homes lined the south side of Mamalahoa Highway just east of the Volcano House Hotel, setting a precedent for residential development in the area. In the four years before the first master plan, five small employee homes (Q3, Q4, Q5, Q8, and Q9) with water tanks and two utilitarian structures (B51 and B54) were constructed along a secondary road south of, and parallel to, Mamalahoa Highway (refer to Supplemental Information: Headquarters and Hotel Development Plan—1931 for location information.) This development established the location and function of the historic district before the organized master planning efforts of the 1930s.

Master Planning 1930-1939

By the mid 1920s, NPS landscape architects, architects, and engineers initiated a design philosophy for the development of parks that would provide for the enjoyment of the parks by the public without compromising the natural and scientific attributes. To ensure that the parks were developed according to these principles, comprehensive plans were established that determined the extent and manner of development. Small, concentrated nodes of visitor services were located throughout the parks, connected by scenic highways and surrounded by wilderness. These master plans consisted of many sheets of planning and design drawings as well as textual supplements. The master plans included designs for buildings, roads, parking areas, trails and trailheads, park service areas, residential areas, and utilities. Unified planning ensured that the development would meet visitor needs in the most efficient and least damaging way (Carr 1998).

By the late 1920s, Park Service's Landscape Division had created plans for Mount Rainier and Crater Lake National Parks. Beginning in 1929, the agency launched a three-year system-wide initiative to have master plans for every park (McClelland 1998). These plans consisted of three separate documents: a park development outline, which summarized existing conditions and proposals for future work in outline form; a general plan, which presented current and expected development as a series of drawings; and a six-year plan, which provided a priority ranking, anticipated cost, year of construction, and detailed justification for each desired project. Describing the projected development of a particular park in an organized manner allowed the superintendent, landscape architects, and others within the planning process to devise a program that sensitively blended construction with conservation. Officials hoped that reducing the risk of haphazard development would result in a lessening of negative impacts on important natural resources.

Master plans, updated annually from 1931 to 1942, were created and revised by regional NPS field offices. These field offices were created by the first director of the NPS, Stephen Mather, in 1927. Thomas Vint, chief landscape architect of the Western Field Office, established a central design office of architects, landscape architects, and engineers to meet the increasing demand for these ever-important master plans (McClelland 1998). To further cultivate a consistency of approach and appearance, the agency released several publications in the 1930s, including: *Portfolio of Comfort Stations and Privies* (1934), *Portfolio of Park Structures* (1934), and *Park and Recreation Structures* (1938). In addition to standardization, this formal process also helped parks lobby for their future congressional funding needs.

When Hawaii National Park opened in 1916, the primary attraction was the immensity of the Kilauea Caldera and its associated volcanic activity. Completing visitor and administrative facilities to better accommodate the growing popularity of the park became the park's top priority. Because the Volcano House hotel and the Volcano Observatory had already established the northeast side of the caldera rim as a visitor and administrative zone, those making park development decisions sited the HNP headquarters in this same area.

Full-scale master planning commenced at Hawaii National Park in the early 1930s. By the late 1920s, when initial development of park facilities began, the National Park Service's landscape and architectural NPS Rustic design philosophy had been fully developed and was being implemented throughout the service. Based on eighteenth-century picturesque and nineteenth-century naturalistic design theories, the rustic and naturalistic styles were used extensively in NPS architecture and landscape architecture of the 1920s and 1930s. NPS designers integrated "the natural landform and character of each site" and "native materials and pioneering techniques of a region" into the badly-needed new park buildings and landscape (McClelland 1998). As a result, many park structures built between 1916 and World War II did not appear manufactured intrusions into an otherwise bucolic landscape. Rather, these "rustic" designs complemented their sites, providing points of interest and destination for the visitor. The preference for indigenous materials such as rock, lumber, and plants allowed park architecture and landscape architecture to appear as though it evolved naturally within the landscape.

Because Hawaii's emerging regionalism emphasized climate, landscape, and culture, it provided park service and HNP officials with a local style already conforming to the Park Service Rustic ideology. The Hawaiian style was especially relevant for the considerable amount of employee housing needed in the Kilauea Administration and Employee Housing Historic District. In addition to using indigenous rock as a building material, both the NPS Rustic style and the Hawaiian style espoused the use of native vegetation in landscaping and encouraged minimizing cuts and fills that resulted from road and building construction so they would appear less abrupt and be able to support the growth of new vegetation.

The Western Field Office housed a group of designers who were centrally located and available to advise the director and park superintendents on matters related to park development and management. The Landscape Engineering Division of the Western Field Office, later called the Branch of Plans and Design, was initially staffed by Vint and junior landscape engineer John Wosky. In 1928, Vint hired landscape architect Merel Sager who became the lead designer of the Kilauea headquarters. Although Hawaii was clearly less accessible to Western Field Office personnel than parks on the mainland, Sager, Wosky, and Vint, managed to visit HNP several times throughout the master planning process during the 1930s.

Following a visit by Vint in 1929, Hawaii National Park's first master plan was produced by the Western Field Office in 1931. Prior to his visit, a preliminary plan created by NPS Landscape Architect Daniel Hull for the administrative area suggested a group of buildings on a plaza. In his trip report Vint writes, "It was found that there is little need for a group of buildings on a plaza. The Park administration building

would be about the only building on the plaza that could be foreseen. Since Hull's trip the museum features have been placed at Uwekahuna (visitor center/museum along Crater Rim Road) and the camp or lodge has been located on the Volcano Road, which would remove the need of the store and other commercial buildings... With only the Administration building to consider, a site near the Volcano Road junction seemed more appropriate. A site was selected just north of the Geological Survey buildings, which meets the conditions of being near the Volcano Road junction and at the same time gives a view of the crater." In the same trip report, Vint discusses the siting of the employee housing and maintenance areas. "A location for a government residence area utilizes the present area for that purpose and provides room for growth. It places the houses along a road paralleling and south of the Hilo Entrance Road. It is entered from the Volcano Road. The utility area now in use is in a good location for this purpose. It is on an extension of the road through the residence group." (HAVO Archives: Landscape Architect Report, Feb-Mar 1930)

With Vint's approval of the existing bones of development, the 1931 master plan elaborated on this circulation and structure pattern begun by Boles in the 1920s. This pattern, proposing regularly spaced individual residences, shared garages, an expanded utility area, and two additional parallel secondary roads south toward the caldera. The master plan also proposed to demolish the private residences fronting on Mamalahoa Highway when their leases expired and to allow the last few hundred feet of the road east of the hotel to return to a more natural state. In 1931, two residences (Q6 and Q7), designed by Thomas Vint, were built along the already established roadway connecting the residential area to the maintenance area. The maintenance area developed adjacent to the employee housing village, reflecting an important facet of NPS master planning to separate these functions away from the visitors so that their presence would not visually impact the visitors' experience.

The updated master plans of 1932 and 1935, retained this paradigm with one significant exception, in the 1935 drawings of the area, the superintendent's new residence was shown in a location and orientation that conflicted with the proposed expansion road configuration. The following year the employee housing master plan drawings reflect this intrusion; a loop circulatory system replaced the series of parallel roads that had been previously planned. The new roads curved around the superintendent's residence, creating a wide undeveloped zone between it and the other residences. The 1936 revised master plan also displayed other improvements: there were many more garages, one for each residence or every two residences, as well as larger and more diverse building footprints. From 1932 until 1935, two employee residences were built (Q15 and Q16), CCC crews landscaped six residences (planted lawns and native shrub borders, created lava rock and concrete footpaths, terraces and planters) and surfaced the main residential/maintenance area road, and a fire house was built in the maintenance area (B52)—all of the structures were built along the same road as the prior housing and maintenance area construction. Additionally, the Hilo Electric Company constructed an underground distribution of power through the headquarters area.

Although earlier master plans contributed to the overall development of the area by setting basic parameters of function, location, and design philosophy, it was the curvilinear and enlarged arrangement conceived for the 1936 master plan that was eventually realized in physical form. Construction began in earnest in 1938 and continued for several years. This work was undertaken almost entirely by CCC crews, whose presence and availability may have provided some of the impetus for committing to the 1936 design. By the time the last known pre-World War II master plan drawing of the area was prepared in 1939, all of the streets had been built, but all of the loop residences were still indicated as "expansion." From 1936 until 1939, nine residences (Q9, Q10, Q17, Q18, Q20, Q21, Q22, Q23, and Q24) and five carports were built. The residential loop road was built during this era as well.

The design of the maintenance area also changed in the mid-1930s but to a more subtle degree than what occurred with the residential plan. The first drawings anticipated a “T”-shaped arrangement; however, beginning in 1935 as additional new buildings were planned the maintenance area became less rigorously organized. Indeed, throughout the master planning process of the 1930s this part of the developing employee housing community was treated as the location for a variety of buildings that were not residences but had related functions. These included a proposed mess hall and bunk house from 1936 until 1939 and a proposed “community building” in 1939.

Extensive construction continued from 1940 until the United States entered WWII in 1941. With the destruction of the old Volcano House from fire in 1940, it became imperative that a new observatory be built at another site so that its current site could be used for the new Volcano House. CCC funds were set aside to construct the new observatory further away from the caldera rim. This building, now used as the administration and visitor center, was nearing completion when Pearl Harbor was attacked December 7, 1941. All work halted until the Army requisitioned the building a few months later and completed the construction. (Jackson 1972). Employee Quarters Nos. 25, 27, 13, maintenance shop building (B37), maintenance office (B178), a nursery located in the maintenance area (no longer extant), paint storage shed (B56), and the new Volcano House were all built during this time period.

Utilities and Master Planning

During this decade of master planning, significant progress was made in standardizing and upgrading utilities throughout the village. These upgrades affected the water, electrical, and telephone systems:

Water. There were no streams of running water in the park, and no accessible aquifers from which to draw water. Tank storage of roof and rainshed water, collected throughout the rainy season, became the source of Kilauea’s water supply. Each private residence was supplied with a roof-catchment system feeding to a redwood storage tank for immediate use. To guard against water shortages, a 66,000-gallon underground concrete reservoir was constructed to store surplus water during the rainy season in 1933. A gravity flow system of collecting mains, 2,200-feet long, was also installed. A small pump house was built and a gasoline engine installed for pumping water back to the tanks at each building when needed during periods of low rainfall or when a water shortage existed. The pump also furnished an auxiliary fire protection service. After several years of drought in the early and mid-1940s, Superintendent Oberhansley asked for emergency funds to construct larger concrete storage reservoirs that would allow the “entire mess of assorted unsightly tanks of ancient vintage now dotting the landscape adjacent to park headquarters” to be removed.

Electricity. Until 1934, park electricity was bought from the Volcano House plant. In December of 1934, the Hilo Electric Company line was extended from Olaa. Poles were carefully hidden in the park and the residence area was served by an underground cable which was partially funded with Public Works Administration funds.

Telephone. Prior to 1930, the park did not have a telephone system. By the end of 1931, 37 miles of telephone cable were wired throughout the park. With the development of the headquarters area, the telephone system needed upgrading. By 1937, Mutual Telephone had a line of 264 poles along the main Hilo highway from the Hilo entrance to the Ka’u entrance with a branch line to the CCC camp, headquarters, and Volcano House areas (Jackson 1972). Although NPS landscape architects suggested placing telephone lines underground throughout the headquarters area during the development of the 1930s, this never occurred and the lines remain above ground today.

The Civilian Conservation Corps and Master Planning

Within weeks of his inauguration, Franklin D. Roosevelt meticulously defined the scope of the Emergency Conservation Work program, later called the Civilian Conservation Corps (CCC). The enlisted men were given “work for the prevention of forest fires and for soil erosion, flood control, removal of undesirable plants, insect control, and construction or maintenance of paths, tracks, and fire lanes on public lands.” As compensation, they received “appropriate clothing, daily subsistence, medical attention, hospitalization, and a cash allowance.” (Paige 1985).

As a multi-agency federal program, the CCC was administered by several governmental departments. The Department of Labor organized the recruitment and enrollment component, the Army was in charge of conditioning and transporting the new recruits to the work camps, and the Forest Service and the NPS were in charge of operating the camps, as well as defining and supervising the actual projects to be carried out. However, when the Forest Service and NPS discovered that they did not have the resources or the expertise to run the camps, this role was gradually handed over to the Army. The NPS’ responsibility evolved into identifying needed conservation –based projects that would fit the requirements of the nascent CCC program. Because of the six-year master plans already mandated by the NPS, individual parks found this process considerably easier than might otherwise have been the case.

The Emergency Conservation Work (ECW) program began in the Territory of Hawaii in January 1934. This program was to be administered jointly by the governor of Hawaii and the superintendent of Hawaii National Park, Edward G. Wingate. Before the arrival of this much-needed federal program, the labor situation in the Hawaiian Islands was even more acute than on the mainland. Throughout the early 1930s, critical projects at all sections of HNP had to be continually delayed because of fiscal constraints in the congressional budget.

Once CCC enrollment began in early 1934, NPS officials had no difficulty locating recruits for a proposed 200-men camp at Kilauea. Organization and construction of the camp started immediately, though administrative details and Hawaii’s remoteness slowed the process somewhat. It was decided that the Kilauea Summer Camp property, located along the Byron Ledge trail south of the Volcano House would be leased from the owner and used as the camp’s nucleus. Eventually the camp consisted of 12 cottages with a 500-gallon water tank for each cottage, a central lodge, phones, latrines and a bathhouse, bunkhouses, a mess hall, an electric light plant, two garages, a dispensary, and a recreation hall. This camp remained until early 1938, when it relocated to a site north of Kilauea Iki and southeast of the Volcano House. This camp offered facilities similar to its predecessor, such as a recreation hall, barracks buildings, a bath and laundry house, a mess hall, an employee dormitory, latrines, a garage, and water tanks. Additionally, it featured a range of new resources, including a hospital, an office, bachelor’s quarters, a gas and oil station, a warehouse, a woodshed, a paint storage shed, a pump house, and a switchboard. Some of which were sited in the Kilauea headquarters maintenance yard and shared among NPS and CCC employees.

Projects set aside for the new workers initially concentrated on fire prevention, erosion control, trash cleanup, insect control, reforestation, eradication of exotic species, trail construction and maintenance, and landscaping projects. As their training progressed, CCC work crews were gradually given more construction responsibilities. By the termination of the program in 1942, they had constructed all types of buildings at the park, including comfort stations, employee housing, carports, barracks, trailside shelters, and a visitor center and museum.

In 1940, when President Roosevelt declared a limited national emergency because of the escalating war in Europe, the focus of CCC efforts turned towards national security and military preparedness. While this restructuring of the CCC program was a great benefit to the national defense movement, it became

increasingly difficult for the NPS to find recruits for conservation work. Gradually, the CCC camps at national parks either closed down or transferred to the Department of War. With America's declaration of war after the attack on Pearl Harbor in December, 1941, the NPS was forced to terminate all CCC projects that were not associated with the war effort. By 1943, the era of master planning and unprecedented, CCC-driven, development ended.

1942-1966: WWII and Mission 66 development

During the War, the Army Air Corps wanted to construct a bombing range south of the caldera in the Kau area and along the Hilina Pali cliffs. The bill eventually passed by Congress included about half of this land. The bombing range was constructed and ready by mid-1940. Despite its supposed importance, the Army Air Corps never used the range and the Navy only bombed there for a short time in 1943. At the end of the war, the military claimed to still need the range and was able to delay giving the area back to the park until 1950. Unexploded bombs were still being found five years later, and historian Frances Jackson indicated in his 1976 essay, "Bombs in a National Park," that some damage had not yet been restored.

In addition to the bombing range, NPS officials were notified in April 1942 that the Army needed the almost-completed Volcano Observatory and Naturalist Building at Kilauea Headquarters for their own use. Construction hastened with the help of CCC laborers and the Army began occupying the building soon after. Moreover, between 1941 and 1945 "various Army units" used the Kilauea section for camps, training, and firing practice, often without informing Superintendent Wingate or warning the park of potential dangers to visitors.

After the war was over, Hawaii National Park resumed a second wave of development spurred by the park service-wide push to drastically increase, upgrade, and modernize its facilities by 1966. Known as "Mission 66," this federally-sponsored program to improve visitor services in the national parks was the result of a massive visitor boom after World War II. Mission 66 projects began in 1956 and ended in 1966. During those ten years, more than \$1 billion was spent on infrastructure and other improvements throughout the park-system. Mission 66 represented the largest program for park improvements ever initiated by the National Park Service.

Mission 66 brought several new structures to the residential area. Hicks Construction Company was contracted to construct most of the residences and carports along the loop road—up to this point, only two homes occupied space along this road since it was built twenty years earlier. In addition to the "Hicks Houses," several other housing, administration, and maintenance area structures were built. In total, from 1949 until 1963 the administration building vehicle garage, hazardous material storage building (B160), fire shop equipment shed, 12 carports, maintenance area carport/tire shed, machine repair shop (B223), Employee Quarters Nos. 169, 183, 191, 193, 195, 197, 199, 201, and 203 were all built. Additionally construction during this era included two maintenance buildings that were destroyed during a storm in 1963 then rebuilt (B247 and B51) and B178 was moved from the abandoned CCC camp to its present location in the maintenance area.

A significant improvement in the utility system occurred during this era when in March of 1957, a contract was let for new steel water tanks. These new tanks held 500,000 gallons of water each. When completed, the new water system incorporated the old rainshed building, 14 wood tanks with concrete bottoms for raw water storage and a wood tank for treated water storage; plus the new construction consisting of a new rainshed building, the steel tanks, and a pumphouse. The water distribution system was completed in December of 1957 and all buildings, hydrants and residences were hooked up.

Telephone and electrical service was improved during this time period as well. In 1956, Hawaii Electrical Company revised the park system, which was badly deteriorating by this time. They strung lines from utility poles used jointly with the Hawaiian Telephone Company. The telephone company trimmed trees in the headquarters area to keep the lines clear. By May 1957, the new system was completely installed and the above-ground facilities left over from the old system were removed. (Jackson 1972).

1966-Present

Most of the structures that currently exist in the Kilauea Administration and Employee Housing Historic District had been built by the end of the Mission 66 development—the majority of these were built before World War II. A few additional buildings have been added including: the 1968 Ranger Office (B310) in the maintenance area, the 1974 concessionaire dormitory (B224) in the residential area, the 1976 Kilauea Visitor Center comfort station (B323), the 1992 fire house (B345), and the 2000 washrack located in the maintenance area. Since the 1990s, most of the residences in the housing area have ceased being used for park housing and after their interiors' were reconfigured many have become NPS offices because of increases in staffing as well as increased availability of housing outside of the park.

Analysis and Evaluation

Summary

The landscape characteristics contributing to the district as they relate to the 1927-1942 period of significance include: topography, spatial organization, vegetation, circulation, buildings and structures, small-scale features, and cluster arrangement.

Spatial Organization: The proximity to Kilauea Caldera, the presence of existing development, and the presence of established vegetation all informed the siting and layout of the Kilauea headquarters.

Cluster Arrangement: The master plans developed for the Kilauea headquarters in the 1930s called for the separation of different functions throughout the district. The administrative cluster is the furthest north and encounters the most contact with visitors. The employee housing cluster is adjacent to the administrative cluster, somewhat concealed from public access. The maintenance cluster is located southeast of the housing cluster and is least accessible.

Topography: During the height of development in the 1930s, CCC crews graded road banks to minimize their slope and blend them into their surrounding to create a more natural look. Topography was also manipulated to create building pads of changing elevation that created distinct spaces between residences and enhanced a sense of privacy.

Buildings and Structures: The historic district contains 36 contributing buildings and structures ranging from an administration building/ visitor center, residences, carports, maintenance sheds, and small-scale structures such as planters, retaining walls, and fire hydrants.

Small-Scale Features: Features such as planters, fire hydrants, retaining walls, barbecues, stone stairways, and a footbridge are scattered throughout the historic district. Built by the CCC, the majority of these features retain integrity.

Circulation: The majority of roads, footpaths, driveways, and parking lots still retain their historic alignments and associated features such as curbing, lava rock stairways, and guardrails.

Vegetation: Vegetation patterns such as the integration of buildings into the native *ohia* forest, the use of native plants to create varying levels of vegetative screening, and the development of lawns at each residence are characteristics of the historic planting intent. This vegetation pattern and palette remains intact.

Integrity

Kilauea Administration and Employee Housing Historic District retains all seven aspects of integrity: location, design, materials, workmanship, setting, feeling, and association. The site reflects the spatial organization, physical components, and historic associations that it attained during the period of significance, 1927-1942. The landscape characteristics and associated features convey the significance of the historic site with the majority of historic fabric remaining from the period of significance.

According to the multiple property submission document, resources significant primarily for their role within HNP's early planning and development history (Criterion A) should retain a particularly high level of integrity in:

Location: The district's location near the edge of Kilauea Caldera and the main visitor accommodation facilities has not been altered since the period of significance.

Setting: The setting, as defined by the vegetation patterns and palette, spatial organization, and cluster arrangement remains much the same as it was during the period of significance. The location of the headquarters adjacent to the caldera in an area that is safe from eruptions or flows and sheltered by vegetation is relatively unique to this general vicinity and remains unchanged. The cluster arrangement and function of the site also remain intact. The natural and designed vegetation patterns within each of the three clusters exhibits the same composition and configuration that it had during the period of significance. Residences located along the internal loop road have been constructed since the end of the district's period of significance and have altered the setting to a minor degree by increasing the amount of development eastward beyond the edges of what existed before the beginning of World War II; however, these newer residences were constructed as a result of 1930s master planning efforts and do not distract from the overall district experience.

Feeling: The feeling of the "historic scene" of Kilauea headquarters is still conveyed through the retention of most of the site's original forms and functions that are a result of early park planning efforts and principles is reflected. Contributing landscape characteristics such as circulation, buildings and structures, cluster arrangement, and vegetation express the feeling of a 1930s era NPS rustic village/headquarters.

Association: The district's association with the park as staff housing and park administration/land management facilities is intact. It also still conveys association with the events that make it significant: the presence of the CCC, the early development of HNP, and early park planning.

Similarly, the multiple property submission registration requires that resources that are significant primarily for their exemplary Park Service Rustic architecture (Criterion C) should retain a particularly high level of integrity in:

Design: The buildings, structures, circulation, and cluster arrangement still convey historic design patterns and intentions of the NPS landscape architects from the period of significance.

Materials: Materials such as horizontal redwood siding, lava rock facades, lava rock landscape features, asphalt footpaths and roads, as well as a dominantly native plant palette all date to the period of significance and remain intact.

Workmanship: In addition to the early rustic architecture developed at the park the CCC continued a high level of workmanship during their eight-year tenure in the park which is evident in the existing dry-laid and mortared lava rock masonry, the construction of the buildings, and the thriving vegetative planting borders and screens.

Despite alterations to individual contributing features, such as small additions, new roofs, and the replacement of a small number of windows, the district's overall design, materials, and workmanship have not been compromised. The layout, architectural design, and materials throughout the historic district remain as originally conceived during the master planning era. Furthermore, the setting along the forested edge of the Kilauea Caldera and overall feeling of the Kilauea Administration and Employee Housing Historic District are virtually unchanged since the period of significance.

Spatial Organization

Spatial organization is defined as the three dimensional organization of physical forms and visual associations in the landscape, including the articulation of ground, vertical, and overhead planes that define and create spaces. Spatial organization includes the elements that shape circulation systems, views and vistas, areas of land use, natural features, cluster of structures and division of property.

Kilauea headquarters was a planned development with designs appearing as early as 1931 in the park master plans. These plans continued to be refined throughout the 1930s and incorporated previously constructed buildings and roads built by private concessionaires before the period of significance. The layout of the Kilauea headquarters was based on “park village” philosophy that was the predominant approach to designing national park developments in the 1920s and 1930s. This approach divided the headquarters into three distinct character areas: the administration area, the residential area, and the maintenance area. At Kilauea Headquarters, the residential and maintenance areas were tightly grouped together but they are also buffered from one another by dense native vegetation screens. The administration area is adjacent to the residential area, but is separated by the Volcano House entrance road. All three of these areas are connected by the main residential road that begins at the Volcano House entrance road and terminates at the maintenance area. The level of careful planning and organization by park service designers is still evident in the physical organization of Kilauea headquarters today.

Several factors affected the siting of the Kilauea headquarters area: the proximity to Kilauea Caldera, the presence of existing development, and the presence of vegetation—which not only provided shelter from wind and sun, but also indicated that this area had not been actively threatened by volcanic eruptions for centuries. The Volcano House, volcanologist’s residence, observatory, leased residences, and Crater Rim Drive all existed prior to any master planning of the Kilauea area. When the landscape division started assessing where appropriate sites for the headquarters were, they logically looked to this partially developed area. The site already contained some of the necessary elements of a headquarters: it had an established visitor base due to the presence of a concessioner, it had federal staff (USGS researchers) and their associated equipment and buildings, and it had employees living nearby.

The proximity to Kilauea Caldera and the presence of vegetation also contributed to the siting of the headquarters. Although Kilauea Caldera is enormous, there are only a small number of safely developable sites around its rim. Much of the caldera rim is still actively exposed to eruption and lava flows, and there are few areas where soil has sufficiently developed to support vegetation. The location of Kilauea headquarters is ideally situated safely offset from the caldera’s edge and tucked into a well established *ohia* forest that provides shade, shelter, and a lush backdrop for the headquarters rustic design.

The spatial organization of the Kilauea Administration and Employee Housing Historic District continues to reflect the original siting and park village layout initially conceived during the NPS master planning era of the 1930s and is a contributing landscape characteristic of the Kilauea Administration and Employee Housing Historic District.

Cluster Arrangement

The Kilauea Administration and Employee Housing Historic District was laid out by regional NPS landscape architects within a 43-acre swath of land aligned with the northern edge of Kilauea Caldera. Typical of 1930s park village planning, the designers established three distinct use areas: administration, employee housing, and maintenance. Within these areas buildings were clustered according to their intended function.

Administration and Visitor Services Cluster

The Ohia Wing (the original administration building) was aligned with a no-longer-extant segment of Crater Rim Road. From the time it was built until 1941, the front entrance of the Ohia Wing was only 50-feet to the north of Crater Rim Drive, allowing clear public access to this structure. The Ohia Wing Carport was sited behind the Ohia Wing where it would be less conspicuous to the public. Dense vegetation surrounded the Ohia Wing and carport creating a more secluded setting than the current administration building/visitor center. In 1941, Crater Rim Drive was realigned approximately 100-feet to the northeast of the Ohia Wing. At the same time, the new (current) Volcano House was built between the Ohia Wing and the caldera's edge and the current Kilauea Visitor Center was built. The visitor center became the first structure that visitors would encounter after entering the park. It is still located adjacent to the realigned Crater Rim Drive with a large parking lot in front. It is more formal and open in character than the original administration building (the Ohia Wing). An expansive lawn borders the visitor center to the northwest. A dense *ohia* forest borders the building and parking lot to the north and east. Non-contributing, but compatible structures in the administrative cluster include the employee carport behind the Kilauea Visitor Center and the comfort station adjacent to the visitor center.

Employee Housing Cluster

According to Albert Good's *Park and Recreation Structures* from 1938, "Employee's [sic] quarters should be convenient to, without obtrusively invading, the intensively used areas... Too widespread scattering of quarters to achieve maximum supervision [of the park] can result in unwarrantable modification of the far reaches of the park. It tends, moreover, to place the isolated staff members at the command of the public 24-hours a day, a situation unfair to them and to the best interests of the park" (Good 1938:73).

The result of master planning and subsequent development at Kilauea headquarters successfully achieved the goals that Good and other NPS designers espoused. Located adjacent to the administrative area, the housing area is comprised of 29 residences and 18 carports aligned along the main residential road and a loop road. Although close to the public and administrative facilities, the access road to the housing area is narrow, screened by vegetation, and inconspicuous—allowing the residents to live away from the public realm.

The superintendent's house (currently used as an outdoor education facility) is located within this cluster, but is offset from the others and accessed by a short road that is characteristic more of a private driveway than a residential road. Although nine of the residences and 13 of the carports were built after the period of significance, they are clustered according to the pattern developed during the master planning era of the 1930s and are compatible with the organization of the cluster as established in early master planning efforts.

Maintenance Cluster

During the master planning era an attempt was made to conceal maintenance activities and equipment storage from public view. Based on this philosophy, the maintenance cluster in the Kilauea headquarters is located at the southeast end of the district tucked away from the residential area and well-screened from

visitors. The 1936 master plan closely resembles the existing layout in the maintenance area. Several offices and storage structures are sited on the main road that also travels through the residential area. In addition, a loop road lined with more maintenance structures connects to the main road. Both the loop road and the main road are wider than roads within the residential area, creating rectilinear yards of available surface on which to work. Although only four of the 18 structures in the maintenance area date to the period of significance, the additional 14 structures are sited according to the patterns first drafted in the 1936 master plan and support the historic cluster arrangement.

Incinerator

An incinerator is located approximately one-half mile away from the employee housing cluster (outside of the district boundaries) and is a discontinuous, contributing feature of the historic district. Incinerators were used to burn trash accumulated by the public and employees who resided in the park. They were typically located conveniently near the intensively used areas, yet far enough away that the smoke would not adversely impact the visitors or residents. This particular incinerator was sited equidistant between the NPS housing area and the CCC camp (currently used by the resources management/USGS-BRD staff) and was likely used by both groups until the CCC left in 1942.

Summary

Initial site development within the boundaries of the Kilauea Administration and Employee Housing Historic District occurred during an intensive period of construction from 1934 until 1942. During this era, uses were functionally and physically separated into three clusters. Later additions, including buildings erected as part of the Mission 66 development program, further developed the cluster arrangement established during early master planning efforts, and are compatible with the cluster arrangement that was established during the period of significance. Accordingly, the cluster arrangement of buildings and structures is a contributing landscape characteristic of the Kilauea Administration and Employee Housing Historic District.

Topography

For the purposes of the CLI, topography is defined as the human manipulation of the three-dimensional configuration of the landscape surface characterized by features such as slope and articulation, and orientation, such as elevation and solar aspect.

The Kilauea Administration and Employee Housing Historic District is located on a virtually imperceptible slope oriented to the southwest towards Kilauea Caldera. Although no major grading was required to develop the headquarters in this location, the CCC manipulated the land for a variety of needs, including contouring road prisms, creating building pads to distinguish residential borders, as well as subtle grading between forested borders and lawns to create a more naturalistic appearance and to help subtly define spaces.

Road Prisms

Although the alignments of the roads within the district follow natural contours, some areas required minor cuts or fill. The CCC softened the edges of these cuts and fills throughout the park during their tenure. By flattening the slopes, the cuts and fill became less noticeable, more natural-looking and they also became more capable of supporting the growth of vegetation.

Boundaries between Residences

The residential area gently slopes from the north to the east. Each of the residential sites was graded so that the houses and yards were on relatively flat lots. The flattening of lots created a more noticeable slope change between the residences. Most of these slope changes were also planted with *ohia* and fern—which when combined with the slope change created a distinct boundary between residences and a sense of privacy.

Non-Contributing topographical features include the asphalt parking areas in front of Employee Quarters Nos. 4, 5, and 9 which were added since the period of significance. These parking areas cut into the topography to create a relatively flat parking surface, level with the road.

Summary

Despite these alterations in the residential area, the topography of the site continues to reflect the original landscape design developed during the historic period and is a contributing landscape characteristic.



Figure 1. Photograph from the 1939 landscape architect report showing rounding of road banks (1939 Landscape Architect Report, HAVO Archives).



Figure 2. Photograph from the 1939 landscape architect report showing rounding of road banks (1939 Landscape Architect Report, HAVO Archives).



Figure 3. Lots were graded to create boundaries between the units—Employee Quarters No. 19 (PWR Staff—2005).



Figure 4. Change in elevation between two residences. The grading and lot boundaries are further accentuated with vegetative screening (PWR Staff—2005).

BUILDINGS AND STRUCTURES

The Kilauea Administration and Employee Housing Historic District contains 36 contributing and 38 non-contributing buildings and structures. The contributing features are strong examples of National Park Service rustic architecture, a building style developed for the national parks in the early decades of the twentieth century. Daniel Hull and Thomas Vint, NPS landscape architects during the 1920s and 1930s, felt that structures built in the rustic style “formed one element of a coordinated, understated landscape development scheme, governed above all by the master plan...the scale, location, and character of individual buildings depended on their place as elements of that plan. Each structure, large or small, was calculated as a contribution to the larger master plan” (Carr 1998:124). The buildings in the Kilauea Administration and Employee Housing Historic District were carefully sited to blend into natural topography and vegetation and each of these contributing buildings and structures were designed with similar materials, massing, scale, and finishes to create a unified village.

While the NPS was developing this rustic aesthetic, Hawaiian architects were fully immersed in developing a regional design style that similarly related to local site conditions by considering natural features such as vegetation, wind intensity and direction, sun exposure, rain, and topography. Charles Dickey, one of the pioneers of this style who practiced architecture from 1895-1942, felt that Hawaiian homes needed large openings and comparatively small wall spaces to allow tradewinds to circulate through the home. He also advocated porches and wide, shallow, projecting eaves to shut out frequent showers while allowing the windows to remain open. Also typical of the Hawaiian-style are simple framed homes with lava rock footings and columns, and native tropical vegetation throughout the gardens. The administrative and residential buildings at the Kilauea headquarters are great examples of the marriage between the complementary NPS rustic and Hawaiian design styles.

Because the historic district is comprised of three distinct clusters: the administration area, the housing area, and the maintenance area, the following resource specific descriptions are arranged according to these areas. Refer to *Site Map 1. Buildings and Structures* (in Supplemental Information) for locations of each building and structure.

ADMINISTRATION AREA CONTRIBUTING BUILDINGS AND STRUCTURES

Ohia Wing

LCS ID: 58265

Structure Number: B11

This 3,670 square-foot, wood frame building stands on a site that slopes down from south to north so that the front, south elevation is a single story with a stepped lava stone foundation (with black mortar) and the rear elevation is a full two stories. The building is a modified rectangular plan with a slight projection at the side, east elevation. Featuring a low-sloped, hipped, corrugated metal-clad roof, this building also has alternating six-inch and 12-inch horizontal redwood siding. The projecting eave is enclosed towards the front, however it has exposed rafter tails towards the back. The upper level windows are one-over-one double-hung sash, while the lower level features paired eight-lite casement windows as well as two- and four-lite awning windows. The front entry and west, side entry feature lava stone steps flanked by lava stone planters leading up to a pair of glazed, eight-lite doors with sidelights and a transom. A lava rock chimney protrudes from the east slope of the roof.

The Ohia Wing was completed in June 1932 by the NPS. It appeared in the 1931 master plan drawing as a proposed structure; drawings for the building were completed in December 1931. The 1932 master plan drawing of the area indicate it as the completed Administration Building. Beginning in 1936, the master

plan drawings labeled it as “Park Headquarters.” In 1937 the lobby was repaired and the foundation was vented to help alleviate moisture problems from the rising steam adjacent to the structure. The building was turned over to the Volcano House Hotel in 1949. At this time the concessionaire renamed the building to the Ohia Wing and converted the interior to guestrooms with private baths. The rustic style of the building contributes to the cohesive aesthetic of the park village.

Carport for Ohia Wing
LCS ID: 058416
Structure Number: Q44

This 120 square-foot, one-story, rectangular carport features alternating six-inch and 12-inch horizontal clapboard siding and a low-sloped, side-gabled roof with an open eave and exposed rafter tails. The front, south elevation is plywood with plywood doors and an open shed roofed addition at the west end. Underneath this shed addition the building features corrugated fiberglass cladding. An asphalt parking area sits at the front, while dense vegetation surrounds the building at every other side.

This building was constructed by CCC crews in 1937 as a garage for Administration Building (Ohia Wing). It first appeared in the master plan drawings as a completed building in 1938; however, it was sited in an area that had been gradually developing over the preceding few years. Alterations include the enclosure of the front of the building with plywood walls and doors as well as the subdivision of the interior. These changes likely occurred when use of the Ohia Wing was transferred to the Volcano House Hotel in 1949. The carport now serves as the hotel’s storage and shop space.

Administration Building
LCS ID: 058291
Structure Number: B41

This one-story, wood-frame building features a battered lava stone foundation with white mortar, alternating six-inch and 12-inch horizontal clapboard siding, an asphalt shingle-clad hipped roof, and a projecting eave with an integral gutter. The building is roughly U-shaped in plan with a hipped entry that projects to the south (front elevation). A large, stone chimney rises from the roof ridge. To the east of the entry is a metal flagpole. A covered walkway along this front elevation leads from the main entry projection to the adjacent restroom building and interpretation exhibits to the west. The site includes a large asphalt parking area directly in front of the building and at its east side, and a service driveway that wraps around to the rear of the building where additional employee parking is located. The one-over-one double-hung wood sash windows are arranged in pairs or sets of three with flat wood trim. The main front entry, a pair of glazed aluminum doors, leads into a large visitor center room containing an information desk, a small bookstore/gift shop, and an exhibit/display area to the west. To the north of this room is a large theater, and through a door to the east is an ell-shaped corridor which accesses the administrative offices. The building has a partial basement containing additional offices, a library, and storage space.

This building, located near the Volcano House, was the last large-scale building project conducted by the CCC. It was completed in 1941 with the help of the Army, because, for a short period, they appropriated the building to aid in the war effort. It first appeared as a proposed building in the 1936 master plan, intended as the park’s volcano observatory and naturalist’s office. This project was meant to replace the development at Uwekahuna, which only a few years earlier had been the subject of a large proposed addition. In justifying the effective abandonment of the building at Uwekahuna by a new building near the park’s only hotel, the author of the 1938-1943 Six Year Program wrote:

On July 1, 1935 the functions of the Volcano Observatory, established in 1912, were transferred from the Geological Survey to the National Park Service. The existing observatory building is not only inadequate to meet existing needs but is obsolete and not fireproof. The records, including seismograms, of 25 years of field experiment and research, as well as an extensive library, are priceless. The seismograms are in constant use and cannot be replaced.

The museum development plan for this park as prepared by the naturalist division and the superintendent calls for a central museum lecture hall, offices and laboratory space in close contact with the administrative headquarters. There is at present only one naturalist building, or museum, in the park. It is located several miles from both the hotel and park headquarters. It is already too small to care for immediate needs and its location is unsatisfactory in that transportation is necessary to get to the evening lectures which are our most popular ones. Many people have been prevented from attending evening lectures for lack of transportation and it is not a good policy to make use of the hotel lobby for them. In order to solve the needs of both the naturalist activities and the Volcano Observatory we have combined both activities into one building to be erected opposite the admin. bldg [*sic*].

The museum portion of the administration building was funded by Hui O Pele, a local organization that paid for many park improvements. Later, the building was completely transferred over to the NPS. The rustic style of the building contributes to the overall cohesive design of the park buildings. A large auditorium and theater addition was constructed in 1965, and the main lobby was expanded. In the late 1970s a separate restroom structure was constructed to the west of the visitor center (B323), with a covered walkway connecting it to the adjacent building and covering several outdoor exhibits located in front of the restrooms. In 2001, a second door was added to the front elevation of the building and the exhibit space was enlarged.

ADMINISTRATIVE AREA NON-CONTRIBUTING BUILDINGS AND STRUCTURES

The Kilauea Visitor Center Comfort Station

Structure Number: B323

This 1,475 square-foot structure was built in 1976. This separate restroom structure was constructed to the west of the visitor center, with a covered walkway connecting it to the adjacent building and covering several outdoor exhibits located in front of the restrooms.

Administration Building Vehicle Garage

Structure Number: B247 (formerly B45)

This 2,100 square-foot garage was built in 1949 by NPS, frame-on-concrete foundation, redwood siding, asphalt and concrete flooring, galvanized iron, corrugated roof (Architects files). The carport was destroyed by a storm in 1963; it was torn down and replaced by the existing 10-stall carport.

EMPLOYEE HOUSING AREA CONTRIBUTING BUILDINGS AND STRUCTURES

The residences were designed in three basic building types, with varying floor plans and number of stories. Residences display hipped, corrugated metal-clad roofs with wide overhanging eaves. The majority of the buildings are one-story with a basement, however the three originally constructed as “worker housing” feature a now-enclosed ground-level crawl space reflecting vernacular building styles of the time. All have wood siding, with differences between the siding types based primarily on date and/or type of construction; the earliest residences and the three “worker housing” buildings display six-inch vertical tongue-and-groove wood siding, later residences feature six-inch horizontal lap siding, and

the final residences have alternating six-inch and 12-inch horizontal lap siding. Additionally, most residences have lava stone chimneys, either share or have their own carport, were constructed at approximately the same time, and are almost all architecturally identical. The buildings feature similar street setbacks and have front and rear grass lawns. Solar roof panels were added to the residences ca. 1980 and new, compatible corrugated metal roofs were installed ca. 1990. All of the residences have been altered by the addition of new heating systems with metal flues and masonry chimneys (ca. 1956); many of them have rear porch or bedroom additions; solar roof panels were added to the residences ca. 1980; and new, compatible corrugated metal roofs were installed ca. 1990.

Employee's Quarters #3
LCS ID: 058414
Structure Number: Q3

This one-story, wood-frame building is rectangular in plan and raised on wood piers with concrete footings. The hipped roof has wide overhanging eaves and is clad with corrugated metal; there is an entry porch on the west side with a projecting shed roof and an exterior lava stone chimney at the north elevation. The structure has a horizontal board-and-batten base with vent panels, and the rest of the building is clad in vertical, six-inch tongue-and-groove wood siding. Windows are six-over-six and one-over-one double-hung wood sash with flat trim. The building is surrounded by grass lawn, and dense vegetation grows at the front and north side.

This residence, built in 1927, was one of the first employee homes constructed for the NPS village. It was initially shown as existing residence #4 in the first master plan drawing produced for the area, dating to 1931. It was indicated as a small rectangular building with a nearby water tank. This continued in the drawings for 1932 and 1935, but in 1936 it was drawn with an irregular plan similar to that seen today, it was labeled as residence #3, and its water tank was missing. Known alterations include solar panels added ca. 1980, the addition of a shed at the rear, and a metal vent stack at the east of the stone chimney. The roof was replaced with new corrugated metal ca. 1990.

Employee's Quarters #4
LCS ID: 058415
Structure Number: Q4

This one-story, wood-frame residence is rectangular in plan with a front hipped projection, and sits on a concrete foundation. It features six-inch horizontal clapboard-clad walls, a hipped roof with corrugated metal cladding and open eaves with rafters. There is a recessed entry porch at the northwest corner that is partially enclosed. Windows are paired, multi-lite wood casements with double-hung screens. The wood front door has four panels, and the upper part is glazed with six lites. Notable features include an exterior stone chimney on the west side and a shed-roofed open porch at the rear. The structure is surrounded by a grass lawn, and has an asphalt parking area in front and an asphalt walkway to the porch and around the west side to the rear. In the rear yard there is a lava stone fireplace/grill.

This residence, designed by Thomas Vint and built in 1929, was one of the first employee homes constructed for the NPS village. It is shown in the 1931 master plan drawing as a small rectangular building with a nearby water tank. This continued until 1936, when it was drawn with an irregular footprint, similar to that seen today, and its water tank was missing. Known alterations include an enclosed porch at the north, front elevation with new clapboard walls and a large picture window, three solar roof panels at the rear, an open shed roof at the rear entry, and a metal HVAC vent stack.

Employee's Quarters #5

LCS ID: 058421

Structure Number: Q5

This one-story, wood-frame residence is rectangular in plan, has a concrete foundation, and is clad with six-inch horizontal lap siding. The hipped, corrugated metal-clad roof has a hipped projection at the front elevation and features open eaves with exposed rafter tails—the west elevation has a storage shed projection. There is a recessed entry porch at the southeast corner and an exterior lava stone chimney at the east elevation. The paired, multi-lite casement windows have flat trim with one-over-one double-hung screens. The upper portion of the two-paneled front door is glazed with two lites. A grass lawn surrounds the building, with a small asphalt parking area in the front and an asphalt walk leading from the front porch to the rear along the east side of the building and on to the carport.

This residence, built in 1929, was an early employee home constructed for the NPS village. This building was indicated as “existing” residence #3 in the 1931, 1932, and 1935 master plan drawings. Like the other early residences in this area, it was drawn as a small rectangular building with a nearby water tank. Its number was changed to #5 in 1936, its footprint was indicated as irregular (similar to that seen today), and its water tank was removed. However, maintenance documentation prepared in 1949 for the garage this building shares with residence #15 still referred to residence #5 as #3. Known alterations include the addition of solar panels to the roof, a replacement corrugated metal roof, and the addition of a shed dormer with no window at the west elevation, perhaps to accommodate a new HVAC system.

Employee’s Quarters #6

LCS ID: 058424

Structure Number: Q6

This wood-frame house is rectangular in plan. It has one-story and a concrete foundation/ basement, and is clad with six-inch horizontal lap siding. The hipped roof is clad with corrugated metal and has open eaves with exposed rafters. The recessed front porch features tongue-and-groove wood flooring, chamfered wood posts, and balusters. Flat-trimmed, multi-lite casement windows have double-hung screens. There are six-lite hopper windows at the raised basement level. The four-paneled front door is glazed with four lites. Grass lawn surrounds the building with an asphalt walkway leading to the porch and around the east side of the building to the rear. Notable features include a continuous water table, a concrete chimney at the east slope of the roof, and stone steps that are part of the exterior walkway.

This residence, designed by Thomas Vint and built in 1931, was an early employee home constructed for the NPS village. It is indicated in the first master plan drawings as residence #13, a small rectangular existing structure with a nearby water tank. This continued through the 1932 and 1935 sets but changed in 1936. At this time the building was labeled as #6, it was shown as having an irregular footprint, and its water tank is missing. Known alterations include the addition of three solar panels at the rear roof slope, a replacement corrugated metal roof, a shed projection over the rear entry porch, and a new gutter. A chain link fence surrounds the open stairs to the basement at the rear of the structure.

Employee’s Quarters #7

LCS ID: 058425

Structure Number: Q7

This one-story, wood-frame residence has a concrete foundation and a raised basement level at the rear. It is rectangular in plan and has a hipped roof with a hipped front projection. The building is clad in six-inch horizontal lap siding, and the roof is corrugated metal-clad with open eaves and exposed rafters. A

recessed entry porch at the southeast corner has tongue-and-groove wood flooring with balusters and chamfered wood posts. Paired six-lite casement windows have one-over-one double-hung screens on the interior. The glazed wood entry door has eight lites. Notable features include a water table between levels and a concrete chimney at the east slope of the roof. The grass lawn around the house slopes down at the rear, and there is an asphalt walkway with stone steps which leads to the porch; it continues around the east side of the structure to the rear.

This residence, designed by Thomas Vint and built in 1931, was an early employee home constructed for the NPS village. In the first master plan drawings prepared in 1931, it was shown as residence #11, a small rectangular building with a nearby water tank. In 1936 it was renumbered to #7, it was drawn with an irregular plan, and its water tank is missing. Known alterations include the addition of three solar roof panels, a replacement corrugated metal roof, a shed projection at the rear which covers the wood stairs and a small porch, and a metal HVAC vent stack at the rear.

Employee's Quarters #8
LCS ID: 058426
Structure Number: Q8

This one-story, wood-frame structure is rectangular in plan with a lava stone foundation. It is clad in six-inch, tongue-and-groove vertical wood siding. The roof is side-gabled, clad in corrugated metal, and has very wide overhanging eaves with exposed rafters. There is a central front porch with a flat roof projection, glazed front door, concrete floor and wood balusters. Six-lite wood-sash awning windows have flat trim. There is an additional entry at the west side. The building is surrounded by grass lawn, and there is an asphalt driveway and carport at the west side.

This residence, built in 1927, was one of the first employee homes constructed for the NPS village. According to the master plan drawings of 1931, 1932, and 1935, this building was initially meant to be demolished and replaced by a larger residence. It was first shown as "existing" in 1936. Known alterations include the addition of a storage shed at the northwest corner, a replacement corrugated metal roof, and solar roof panels added ca. 1980.

Employee's Quarters #9
LCS ID: 058427
Structure Number: Q9

This one-story, wood-frame building has a lava stone foundation. It is rectangular in plan and clad with six-inch vertical tongue-and-groove wood siding, and the side-gabled roof is clad with corrugated metal and has wide overhanging eaves with exposed rafter tails. There is an open shed projection at the front entry and a shed projection at the rear. Windows are sliding aluminum sash and have flat trim. Grass lawn surrounds the structure, and there is a concrete parking area at the west side.

This residence, built in 1927, was one of the first employee homes constructed for the NPS village. Like residence #8 described above, this residence was intended for demolition and replacement during the first years of the master planning process at HNP. Beginning in 1936, however, it was shown as existing. Known alterations include a lower gabled addition on the west side, sliding aluminum sash windows, a replacement corrugated metal roof, and a corrugated fiberglass wall at the entry porch.

Employee's Quarters #13
LCS ID: 058401

Structure Number: Q13

This one-story, wood-frame building is ell-shaped in plan and features a hipped, corrugated metal-clad roof with open eaves and exposed rafter tails. Clad with six-inch tongue-and-groove vertical wood siding, this residence features a lava rock foundation with white mortar and paired six-lite casement windows. Concrete steps with chain link railing lead to the glazed side entry door. Grass lawn surrounds the building, with an asphalt driveway along its east side.

This residence, built in 1930, was one of the first employee homes constructed for the NPS village. According to a NPS maintenance record prepared in 1949, it was originally located at the park entrance but was moved to its present location in 1940. Funding for an addition was included in the 1938-1943 Six-Year Program because it was “much too small” for the occupying family. The justification goes on to state that the house “has but one bedroom and the park employee housed there, besides his wife, has two nearly grown children. A glance at the plans of this building shows the existing rooms as being very small. An addition to remedy this demoralizing condition is essential.” It is doubtful that this addition took place, as a maintenance record prepared in the late-1950s indicates the building still had only one bedroom and a total of only 417 square feet of living space. Known alterations include a shed roof projection over the rear entry, a replacement corrugated metal roof, and the addition of three solar roof panels.

Employee’s Quarters #15
LCS ID: 058402
Structure Number: Q15

This one-story, wood-frame building is rectangular in plan with a hipped front projection and a hipped, corrugated metal-clad roof with open eaves and exposed rafter tails. The base is stepped lava stone with built-in planters at the front elevation—the building is clad with alternating six-inch and 12-inch horizontal lap siding. There is a recessed entry porch at the southwest corner. Windows are paired, multi-lite casement with double-hung screens and flat wood trim. The glazed front door has eight lites. The front projection features a centered lava stone chimney and a large picture window flanked by eight-lite casements. The corner porch has a large stone pier. At the rear, a shed roof projects over stairs that lead to the basement. There is a metal vent stack in the northwest corner. The building is surrounded by grass lawn, and a driveway on the west side wraps around the house to the carport in the rear, which faces west.

This building, built in 1932, was an early employee home constructed for the NPS village. It was first included in the master plan drawings as residence #1 and was shown having a rectangular footprint and a nearby water tank. The building with its current irregular footprint does not appear on the master plan drawings as “existing” until 1936. When the 1938-1943 Six-Year Program was written in the spring of 1936, a \$3400 funding request was made for an addition to accommodate the occupying family’s needs. The justification states,

Like all the other quarters in this park, #15 was not designed with a provision for any servant’s room or room for any children in the family. The revised plans call for the addition of a servant’s room and one bedroom with the existing bath relocated in the addition. The servant’s room and relocation of the bath can be considered necessary and the extra bedroom desirable. Estimated cost total addition \$2040, cost servant’s room and bath, \$1400. (Item # ES55P, Employee’s Qtrs., Addition, “Six Year Program—1938-1943 Incl.,” “600-02-Six-year program” Folder, Box 1176, Record Group 79, National Archives and Records Administration at College Park, College Park, Maryland.)

Since maintenance documentation prepared in 1949 included a place for “remodel” information, but does not offer any information, it is likely that the requested changes did not occur. Known alterations of more recent vintage include the addition of three solar roof panels and a replacement corrugated metal roof.

Employee’s Quarters #16
LCS ID: 058403
Structure Number: Q16

This one-story, wood-frame house has a raised basement and a concrete foundation. It is ell-shaped in plan, clad in alternating six-inch and 12-inch horizontal lap siding, and features a hipped front projection. The hipped, corrugated metal-clad roof has open eaves with exposed rafters. The hipped rear projection features a board-and-batten base. There is a recessed entry porch at the southwest corner with wood balusters. The one-over-one double-hung windows and the paired multi-lite casement windows have flat trim, and a continuous water table separates the two levels. The glazed wood entry door has eight lites. The building is surrounded by a grass lawn which slopes down towards the rear; an asphalt walkway leads to the porch, while an asphalt driveway on the west side leads to the carport.

This residence, built in 1934, was an early employee home constructed for the NPS village. In the 1931 master plan drawings this building is indicated as proposed residence #9, located immediately west of a large proposed rectangular garage. In 1935 it was drawn as existing building #9 but beginning in the next year it was labeled as #16. Known alterations include the addition of a HVAC vent stack at the northwest corner and a large rear addition (from 1957) with a secondary entry and a concrete block foundation.

Employee’s Quarters #17
LCS ID: 058404
Structure Number: Q17

This large wood-frame, one-story residential building has a lava rock foundation and is clad with alternating six-inch and 12-inch horizontal lap siding. The hipped, corrugated metal-clad roof features a front hipped projection and a lower, hipped porte-cochere extending to the east. The piers of the porte-cochere are faced with lava stone and a central lava stone chimney rises from the roof ridge. The double-hung windows (both one-over-one and four-over-four) are predominantly arranged in pairs. The main entry is on the side under the porte-cochere. Grass lawn surrounds the building and an asphalt driveway runs through the porte-cochere to the carport and parking area at the rear.

This building was constructed in 1937 with PWA funds as the superintendent’s residence. It first appeared in the 1935 plans as an existing employee’s residence, when it was shown in a location and orientation that conflicted with the proposed expansion road configuration. The following year the employee housing master plan drawings reflect this intrusion; a loop circulatory system replaced the series of parallel roads that had been previously planned. The new roads curved around the residence, creating a wide undeveloped zone between it and the other buildings. The 1936 and 1937 drawings labeled the building as the superintendent’s residence and showed it as a proposed structure however the beginning in 1938 it was drawn as an existing building. Known alterations include the addition of shed roof projections at the rear elevation, three solar roof panels, a replacement corrugated metal roof, and a large picture window in the front projection. This building was converted to the Environmental Education Center ca. 1990.

Employee’s Quarters #18
LCS ID: 058405

Structure Number: Q18

This wood-frame, one-story house has a raised basement, a concrete foundation, and is clad with alternating six-inch and 12-inch horizontal lap siding. The hipped roof is clad with corrugated metal, featuring overhanging eaves with exposed rafters and a central lava rock chimney. The entry porch at the northeast corner has a lower shed roof and ell-shaped concrete stairs. There are one-over-one double-hung windows with flat trim, as well as six-lite hopper windows at the basement level. Grass lawn surrounds the structure with an asphalt walkway and lava stone stairs. The rear carport is accessed via a side driveway at the east side of the residence.

This residence, constructed in 1938, was one of the first employee structures built by the CCC for the NPS village. It first appeared as a proposed building in 1936, along with the reconfigured internal road system. It continued labeled as “proposed” until the 1939 drawing, in which it was indicated as existing. Throughout this period it was shown as residence #19; it is unclear when it was re-numbered as #18. Known alterations include the addition of a large picture window at the center of the front projection, solar roof panels, an HVAC vent stack at the southeast corner, a large rear addition, and a shed in the front yard.

Employee’s Quarters #19

LCS ID: 058406

Structure Number: Q19

This one-story, wood-frame house, with a raised basement and a concrete foundation, is ell-shaped in plan with a hipped front projection. The building is clad with alternating six-inch and 12-inch horizontal lap siding, and the hipped roof is clad with corrugated metal and features open eaves with exposed rafters. A recessed porch at the northeast corner has concrete stairs with wood railing and balusters. At the ridgeline of the front projection there is a lava stone chimney. Windows are one-over-one and four-over-four double-hung sash, with six-lite hoppers at the basement level. The glazed wood entry door has eight lites. The building is surrounded by grass lawn with an asphalt walkway and driveway on the west side leading to the carport.

The CCC constructed this employee residence in 1939 for the NPS village. A number of small rectangular residences were proposed for the south side of the primary internal road beginning in the first master plan drawings of 1931; however, this building was not proposed in its current configuration and location until 1936. It continued as a proposed residence until 1939, when it was drawn as existing. Throughout this period it was labeled as residence #18. It is unclear when its number changed. Known alterations include a hipped addition at the rear with a concrete block base, an HVAC vent stack, a chain-link fence around the basement stairs at the rear, three solar roof panels, a replacement corrugated metal roof, and a shed projection to cover the rear porch and stairs.

Employee’s Quarters #20

LCS ID: 058407

Structure Number: Q20

This one-story, wood-frame building with a raised concrete basement is rectangular in plan, has a hipped, corrugated metal-clad roof and a front hipped projection. It is clad with alternating six-inch and 12-inch horizontal lap siding, and features a central lava rock chimney with black mortar. Concrete stairs with wood railing lead up to a recessed porch at the southeast corner of the residence. The basement level features six-lite hopper windows, while the remainder of the windows are one-over-one double-hung

sash. A grass lawn surrounds the structure with asphalt walkways; the front elevation features planting beds with lava stone borders.

The CCC constructed this employee residence in 1939 for the NPS village. It was first proposed in the 1936 master plan drawing, when the internal road configuration was adjusted to its current loop arrangement. In 1939 it was drawn as an existing residence. Known alterations include a large picture window in the center of the front projection, a large addition at the rear (from 1957), a replacement corrugated metal roof, and an HVAC vent stack at the southwest corner.

Employee's Quarters #21
LCS ID: 058408
Structure Number: Q21

This one-story, wood-frame building has a raised basement and a concrete foundation, a rectangular plan, and a hipped front projection. It is clad with alternating six-inch and 12-inch horizontal lap siding, and the hipped, corrugated metal-clad roof has open eaves with exposed rafters. The building has a recessed porch at the southwest corner entry and the glazed front entry door has eight lites. Windows are one-over-one and four-over-four double-hung sash with flat trim. A lava stone chimney projects from the center of the roof ridgeline, and the rear elevation features a concrete porch with stairs leading to the basement. Grass lawn surrounds the building, and an asphalt walkway leads to the porch and around the south side to the rear.

The CCC constructed this employee residence in 1939 for the NPS village. It was first proposed in the 1936 master plan drawing, when the internal road configuration was adjusted to its current loop arrangement. In 1939 it was drawn as an existing residence. Known alterations include a large rear addition with a concrete block foundation (from 1957), a replacement corrugated metal roof, and three solar roof panels.

Employee's Quarters #22
LCS ID: 058409
Structure Number: Q22

This one-story, wood-frame building has a raised basement and a concrete foundation—it is rectangular in plan with a hipped front projection. It is clad with alternating six-inch and 12-inch horizontal lap siding, and the hipped, corrugated metal-clad roof has open eaves with exposed rafters. The building has a recessed porch at the southwest corner entry and the glazed front entry door has eight lites. Windows are four-over-four double-hung sash with flat trim and set in rows of three at the front, but single and paired at the rest of the building. The basement level features six-lite hoppers. A lava stone chimney projects from the center of the roof ridgeline, and the rear elevation features a concrete porch with stairs leading to the basement. Grass lawn surrounds the building, and an asphalt walkway leads to the porch and around the west side to the rear. Terraced stone planters site on the outside edge of the rear lawn.

The CCC constructed this employee residence in 1939 for the NPS village. This building first appeared in the 1931 master plan drawings as a small rectangular residence proposed as #5. It continued as a proposed structure in the 1932 and 1935 drawings; in 1936 it was drawn with an irregular footprint more similar to that seen today. The residence was first indicated as existing in 1939. Construction of residence #22 may have been delayed as a result of the continued presence of residence #10, a very small pre-1931 building nearby that was planned for demolition throughout the entire 1930s planning process but was not razed. Known alterations to residence #22 include an exterior metal HVAC vent stack at the northwest corner of

the building and attachments for solar panels at the rear slope of the roof. A shed roof projection was added over the rear porch and basement stairs.

Employee's Quarters #23

LCS ID: 058410

Structure Number: Q23

This wood-frame, one-story building is raised on wood piers and features a tongue-and-groove wood skirt enclosing the open storage area under the house. It is rectangular in plan and clad in six-inch vertical wood tongue-and-groove siding, and the hipped, corrugated metal-clad roof has wide overhanging eaves. There is a recessed porch at the southwest corner with wood stairs, railing and balusters. Windows are six-over-six double hung sash with flat trim, with six-lite hoppers at the skirt level. The building is surrounded by a grass lawn, an asphalt walk curves around the front, and stone steps sit near the street.

According to a NPS maintenance document, the CCC constructed this employee residence in 1939. It is one of three raised buildings constructed as "worker housing" that exist within the employee housing area. Its raised ground level originally functioned as an open crawl space, reflecting an established island vernacular building type of the time. The construction of this building may have come about as a result of a funding request made in the 1938-1943 Six-Year Program. In this document, money for two employee's quarters is given the highest priority for the 1940 fiscal year. The justification states,

On the permanent staff of the park are four permanent laborers who have families. Three of these men are furnished with "so-called" quarters, the other must live outside the park as there is no house available. The three quarters in use are hardly fit for human habitation. They were built of old salvaged lumber some years ago and are not worth improving. (Item # ES34P, Employee's Qtrs. (2), "Six Year Program—1938-1943 Incl.," "600-02-Six-year program" Folder, Box 1176, Record Group 79, National Archives and Records Administration at College Park, College Park, Maryland.)

Given the area's high humidity, the enclosing of the building's open crawl space has contributed to problems with moisture and mold. Alterations include shed roofs over the front entry stairs and rear stairs, a replacement corrugated metal roof, and three solar panels on the south slope with a metal chimney flue. This building is in fair condition, and needs to be repainted.

Employee's Quarters #24

LCS ID: 058411

Structure Number: Q24

This two-story, wood-frame building is rectangular in plan and clad in six-inch tongue-and-groove vertical wood siding on the upper level and vertical plywood siding on the lower level. The hipped roof has wide overhanging eaves and is clad with corrugated metal, and side stairs lead to a small entry porch on the second story with a shed roof projection. A covered rear entry accesses the bottom half of the duplex. The windows are non-original sliding aluminum sash windows with flat trim.

The CCC constructed this employee residence in 1939 for the NPS village. It is one of three raised buildings constructed as "worker housing" that exist within the employee housing area. See entry #23 for possible historical background. Like the other two residences having crawl spaces, the area's high humidity has contributed to problems with moisture and mold throughout the life of the building. Alterations to this building include the new aluminum windows, the addition of solar roof panels, a

replacement corrugated metal roof, and interior modifications to convert the residence into a duplex. It is in good condition, but needs to be repainted.

Employee's Quarters #25

LCS ID: 058412

Structure Number: Q25

This wood-frame, one-story building is raised on wood piers and features a tongue-and-groove and slatted wood skirt enclosing the open storage area under the house. It is rectangular in plan and clad in six-inch vertical wood tongue-and-groove siding, and the hipped, corrugated metal-clad roof has wide overhanging eaves. There is a recessed porch at the southeast corner with wood stairs, railing and balusters. Windows are six-over-six double hung sash with flat trim, with multi-lite windows at the skirt level. The building is surrounded by a grass lawn and an asphalt walk leads to the front entry porch and to the carport at the rear.

The CCC constructed this employee residence in 1940 for the NPS village. It is one of three raised buildings constructed as “worker housing” that exist within the employee housing area. See entry #23 for possible historical background. Like the other two residences having crawl spaces, the area’s high humidity has contributed to problems with moisture and mold throughout the life of the building. Alterations to this building include shed roofs over the front entry stairs and rear stairs and railings, replacement windows, a replacement corrugated metal roof, and three solar roof panels with a metal chimney flue.

Employee's Quarters #27

LCS ID: 058413

Structure Number: Q27

This one-story, wood-frame duplex has a lava rock foundation and is clad with alternating six-inch and 12-inch horizontal lap siding. The lava stone foundation has integrated planters. The hipped, corrugated metal-clad roof has open eaves with exposed rafters and the windows are one-over-one double-hung sash with flat trim. The building has recessed porches at the southeast and northeast corners—the piers of both porches are composed of three eight-inch square posts. A large lava stone chimney extends from the roof ridgeline. Grass lawn surrounds the residence and an asphalt driveway runs along the north side to the carport at the rear.

The CCC constructed this employee residence in 1940 for the NPS village; it is the only original duplex building. It was first shown as a proposed structure in 1936, when the area’s internal road configuration was re-arranged. In the master plan drawings produced at the end of the decade, the building was still labeled as proposed. Known alterations include the addition of shed roofs over the side entries and three solar roof panels.

Carports

There are six carports remaining in the area; because they are practically identical and share the same history, their description has been combined. These resources include the following: Carport for Quarters #17, Carport for Quarters #5 & 15, Carport for Quarters #16 & 22, Carport for Quarters #18, Carport for Quarters #19, and Carport for Quarters #20 & 21.

These six wood frame garage structures have alternating six-inch and 12-inch horizontal lap siding, sit on a concrete foundation, and have a gabled, corrugated metal-clad roof with open eaves and exposed rafters.

Carport for Q5 and Q15

LCS ID: 058417

Structure Number: Q46

This structure was built by the CCC in 1939 as the carport for residences #5 and #15. The long driveway was first shown as existing in the 1936 master plan, with the carport structure first proposed in 1938. The carport was drawn as existing in 1939.

Carport for Q16 and Q22

LCS ID: 058418

Structure Number: Q47

This structure was built by the CCC in 1939 as the carport for residences #16 and #22. It was first drawn as proposed in the 1937 master plan set and was shown as existing in 1939.

Carport for Q17

LCS ID: 058423

Structure Number: Q58

This structure was built by the CCC in 1938 as the carport for the superintendent's residence. It was proposed as part of the design of the residence and was indicated as proposed and existing like the main building. Since NPS maintenance records state that the residence was constructed in 1937 and the carport was completed in 1938, likely due to the fact that the residence was funded by the PWA while the garage was under a separate CCC contract.

Carport for Q18

LCS ID: 058420

Structure Number: Q49

This structure was built by the CCC in 1939 as the carport for residences #18 and #20. It was first proposed in the master plan drawings of 1936, when the internal loop road configuration was initially presented. It was shown as existing in 1939. Maintenance documentation prepared by the NPS in 1949 indicates that the occupants of residence #4, located west of #18, and possibly those of residence #6, located across the road from #18, also used this carport. It is unclear when the carport's use was dedicated to residence #18.

Carport for Q19

LCS ID: 058419

Structure Number: Q48

This structure was built by the CCC in 1938 as the carport for residence #19. It was first proposed in 1937 and appears as existing in the 1939 master plan drawing. Maintenance documentation prepared by the NPS in 1949 indicates that the occupants of residence #7, located across the road from #19, also used this carport.

Carport for Q20 and Q21

LCS ID: 058422

Structure Number: Q50

This structure was built by the CCC in 1939 as the carport for residence #21. It was first proposed in 1936 and was first drawn as an existing structure in 1939. Maintenance documentation prepared by the NPS in 1949 indicates that this structure was being shared by residences #20 and #21 within a decade of its construction.

RESIDENTIAL AREA NON-CONTRIBUTING BUILDINGS AND STRUCTURES

Concessioner's Dorm

Structure Number: Q224

This 2,160 square feet, one-story, wood frame structure was built in 1974 to be used for Volcano House employees.

Employee's Quarters #169

Structure Number: Q169

This seven room residence was built by the NPS in 1952. Frame on concrete foundation; 1 x 6-inch and 1 x 12-inch alternating horizontal redwood siding painted white; corrugated galvanized roof. One-story (1,135 square-feet) with a 917 square-foot basement.

Employee's Quarters #183

Structure Number: Q183

This residence was built by the NPS in 1954. It is frame on concrete foundation; it has 1 x 6-inch and 1 x 12-inch horizontal redwood siding. Corrugated, galvanized iron roof; 1,135 square-foot basement, and a 1,135 square-foot first floor. Looks very similar to #169. same floor plan and materials.

Employee's Quarters #191, 193, 195, 197, 199, and 201 (Structure Numbers: B191, B193, B195, B197, B199, B201).

These seven residences each consisted of eight rooms and were built by Hicks Construction Company, Inc. in 1962. They are of single wall construction with $\frac{3}{4}$ -inch redwood siding that is painted white. They have corrugated, galvanized tin roofs, and concrete pier foundations with open slats exposing the underneath portion of the houses. There are no basements.

Employee's Quarters #203

Structure Number: Q203

Employee's Quarters #28 was built in the location of Q203 in 1925, then razed in 1962 (WACC Archeological Survey 1994). Q203 replaced Q28 in 1963. This eight-room, 1,324 square-foot structure has wooden post on concrete footing foundation; redwood siding; and a galvanized iron roof. The carport is attached to the residence. This building was located elsewhere in the park and was referred to as Quarters 328 prior to it being moved to its present location and remodeled in 1963.

Carport for Q3 & Q4

Structure Number: Q172

This 440 square-foot structure was built by the NPS in 1953; It is a wood frame structure on a concrete foundation; stained 1 x 12-inch siding with 3-inch battens. It has a corrugated, galvanized iron roof. Salvaged lumber and galvanized iron from dismantled CCC camp buildings were used in its construction.

Carport for Q16 & Q7

Structure Number: Q245

This 400 square-foot structure was built by the NPS in 1960. It is a wood frame structure on a concrete foundation. It has redwood siding, asphalt and concrete flooring, and a galvanized iron roof.

Carport for Q169

Structure Number: Q170

This 440 square-foot structure was built by the NPS in 1952. It is a wood frame structure on a concrete foundation; stained 1 x 12-inch siding with 3-inch battens. It has a corrugated, galvanized iron roof, and asphalt flooring.

Carport for Q6 & Q8

Structure Number: Q161

This 440 square-foot structure was built by the NPS in 1951. It is a wood frame structure on a concrete foundation; stained 1 x 12-inch siding with 3-inch battens. It has a corrugated, galvanized iron roof, and asphalt flooring. Materials were salvaged from the dismantled CCC latrine building.

Carport for Q25

Structure Number: Q173

This 400 square-foot structure was built by the NPS in 1953. It is a wood frame structure on concrete foundation; and has vertical, corrugated, galvanized iron siding, painted brown; asphalt and concrete flooring; corrugated, galvanized, iron roof and was constructed with salvaged lumber and galvanized iron from dismantled CCC camp buildings.

Carport for Q23 & Q24

Structure Number: Q180

This 452 square-foot carport was constructed by the NPS in 1953. It has 1 x 12-inch Douglas fir siding with 3-inch battens; asphalt flooring; corrugated, galvanized, iron roof. The frame and siding is painted brown and it was constructed with salvaged materials from dismantled CCC camp buildings.

Carport for Q13

Structure Number: Q182

This 280 square-foot carport was constructed by the NPS in 1956. It is a wood frame structure on a concrete foundation. It has stained board and batten siding, asphalt and concrete flooring, and a galvanized, corrugated iron roof.

Carport for Q191 & Q193

Structure Number: Q192

This carport was built by the NPS in 1963. It is a wood frame structure on a concrete foundation. It has 1 x 12-inch and 1 x 6-inch alternating horizontal redwood siding, a painted exterior, asphalt and concrete flooring, and a galvanized, corrugated iron roof.

Carport for Q183

Structure Number: Q184

This 440 square-foot carport was built by the NPS in 1954. It is a wood frame structure on a concrete foundation. It has 12-inch Douglas fir siding with 3-inch battens, asphalt flooring, and a corrugated, galvanized iron roof.

Carport for Q195 & Q197

Structure Number: Q196

This 480 square-foot carport was built by the NPS in 1963. It is a wood frame structure on a concrete foundation. It has painted redwood siding, asphalt and concrete flooring, and a galvanized iron roof

Carport for Q199 and Q201

Structure Number: Q200

This 480 square-foot carport was built by the NPS in 1963. It is a wood frame structure on a concrete foundation. It has painted redwood siding, asphalt and concrete flooring, and a corrugated, galvanized iron roof.

Carport for Q27

Structure Number: Q212

The NPS built this 400 square-foot carport in 1956. It is a wood frame structure on a concrete foundation. The corrugated iron walls are painted white. It has asphalt and concrete flooring and a corrugated, galvanized iron roof.

MAINTENANCE AREA CONTRIBUTING BUILDINGS AND STRUCTURES

Maintenance Shop Building

LCS ID: 444251

Structure Number: B37

This is a 3,450 square-foot wood frame structure on a concrete foundation. It has redwood siding and a corrugated, galvanized iron roof and was built by the CCC in 1940. A metal gable roof addition at the north end of the sign shop has been added. This building has lost some of its integrity because of modifications and settling over the past several decades. Because of this, the building would likely not be eligible for the National Register as a single resource, but because the size, scale, overall design style, and function have stayed the same, it is contributing to the Kilauea Administration and Housing Area Historic District.

Storehouse (Currently used as the Fire Cache)

LCS ID: 058294

Structure Number: B54

This 2,022 square-foot, one-story, wood-frame building is rectangular in plan and features a side-gabled, corrugated metal-clad roof and vertical board-and-batten siding. The front, north elevation has a shed-roofed office addition that projects to the east and a raised concrete loading platform to the west. The office addition features two-over-two double-hung windows, while the original building has multi-lite fixed sash windows. At the loading dock is a large pair of glazed sliding doors that access the main storage space, and a five-panel wood door facing west which accesses the office addition. The side elevations have louvered vent panels at the gable ends. While the original building sits on a concrete foundation, the additions are raised on wood piers. Located in the Maintenance area, the building has asphalt driveways/parking areas on the north and west sides.

This building was constructed in 1930. On the 1931 and 1932 master plan drawings it is labeled as a “warehouse” and is shown as having a proposed addition on its east side that would have approximately doubled its size. In 1935 this addition was not indicated and the area around the building was labeled as a “warehouse yard.” Beginning in 1936 and continuing through the remaining master plan drawings, the addition was again shown as “proposed.” Eventually the rear storage and dry room addition was

constructed in 1950, and the office addition was built in 1954. An enclosed shed addition is attached to the rear, south elevation.

Fire House (Currently used as Paint Storage Shed)

LCS ID: 058293

Structure Number: B52

This 482 square-foot, one-story, reinforced concrete building is rectangular in plan and features a gable-front, corrugated metal-clad roof and concrete walls with expressed form board lines. The central, metal door at the south, front elevation has been installed within a larger opening infilled with vertical wood siding. The open, overhanging eaves feature exposed steel C-beam purlins and steel rafters. The side, west elevation features a pair of six-lite steel casement windows with a fixed six-lite sash between. The rear elevation has a louvered vent panel in the gable end and a vent stack extends from the roof ridge line.

This building was constructed with Public Works Administration (PWA) funds in 1934 as a fire-equipment shed. It first appeared as a proposed structure in the 1931 and 1932 master plan drawings. In these drawings it was left unlabeled, however the north side of the utility area was indicated as having a proposed reservoir, pump house, and water detention zone. In 1935 the fire house was drawn as an existing “fire shed” and beginning in 1936 it was labeled as the “fire equipment shed.”

Paint Storage Shed

LCS ID: 058295

Structure Number: B56

This 872 square-foot, one-story, wood-frame storage building is rectangular in plan and features a gable-front, corrugated metal-clad roof and corrugated metal siding. The front, east elevation features a large corrugated metal sliding door, and the south elevation has a shed-roofed addition. Along the north elevation are six-lite, fixed sash clerestory windows beneath the open eave with exposed rafter tails. Also located in the Maintenance area, this building has asphalt driveways/parking areas at the north and east sides.

The construction date of this building is unclear. According to a NPS maintenance document dated October 21, 1953, this simple storage shed was constructed in 1931. However, none of the master plan drawings that were produced during the 1930s show it as existing. Furthermore, the 1938-1943 Six-Year Program prioritizes funding for a “paint shop” for the 1941 fiscal year. The way that the justification for this request was written suggests that the park did not have such a building; the statement also describes its physical construction in a manner that is similar to what is seen today:

There is some painting to be done nearly every day—signs, equipment, buildings, etc. A place for the mixing and storing paints and for the painting of signs and equipment, etc., is an urgent necessity and the plan contemplates a building of suitable storage places for sign materials, oils, paints, brushes, and any fixed equipment that the building may require. It is proposed to build it of wood frame with corrugated iron roof and sides and concrete floor. (Item # ES20P, Paint Shop, Kilauea, “Six Year Program—1938-1943 Incl.,” “600-02-Six-year program” Folder, Box 1176, Record Group 79, National Archives and Records Administration at College Park, College Park, Maryland).

The shed addition at the south side was constructed in 1953 with salvaged material from demolished CCC buildings. According to FMSS, the shed is currently used as a grounds shed.

Incinerator

LCS ID: 058397

Structure Number: LF9

This lava stone structure is located in the *ohia* forest west of the road leading to the Research Center. The structure is composed of two sections: a raised, angled ramp that abuts an eight by eight-foot square chimney with battered walls. The chimney is approximately 15 feet high. The lava stone is roughly coursed, laid in a polygonal pattern with flat faces, and features black mortar in recessed joints. At the rear of the structure are narrow stone stairs leading down to the fire pit area, accessing an opening for loading firewood and a second opening for removing ashes. The area around the structure is overgrown with plants and trees, and plant growth is located in some of the mortar joints.

The construction of an incinerator was included in the 1938-1943 Six-Year Program. The structure was slated for construction in the 1940 fiscal year, given a priority ranking of “5” under the “Water & Sewer Systems” heading, and was expected to cost about \$2000. In justifying the need for such a structure, the plan’s author stated, “At the present the only method of disposing of garbage and other refuse has been to dump it into earthquake cracks or burn it in the open. This is often objectionable and in time may prove harmful to health.” (Item # ES176P, Incinerator, “Six Year Program—1938-1943 Incl.,” “600-02-Six-year program” Folder, Box 1176, Record Group 79, National Archives and Records Administration at College Park, College Park, Maryland). NPS records indicate that the building was constructed ca. 1940, possibly by a CCC crew. The incinerator’s native volcanic stone design exemplifies the prevailing “Park Service Rustic” philosophy of the time. It is unclear if the incinerator was used by general park staff and/or by the CCC camp, which stood in the location of the current Research Center or both. It is no longer used.

MAINTENANCE AREA NON-CONTRIBUTING BUILDINGS AND STRUCTURES

Maintenance Garage

Structure Number: B51 same as B288

This 2,600 square-foot garage is currently used by roads and trails. It is a wood frame structure on concrete foundation with a 14-foot ridge height. It has tongue and groove redwood siding, concrete flooring, and a corrugated, galvanized iron roof. It was originally built in 1931, then remodeled in 1948. The building was partially destroyed by storm in 1963, then subsequently torn down and rebuilt. The length and width was extended to house an additional two vehicles, and larger foreman’s office space.

Fire Cache Storage

Structure Number: B118

This storage shed is located next to B54—the storehouse.

Hazardous Materials Storage (old gas and oil building)

Structure Number: B160

This 200 square-foot, one-story building was built in 1951, then rebuilt in 1993. This structure is constructed of hollow tile masonry and has a concrete slab floor and a reinforced concrete slab roof. The porte-cochere is 200 square-feet with a galvanized, corrugated iron roof—painted brown. It used to be the gas and oil building, but is now used as HAZ MAT storage.

Maintenance Offices

Structure Number: B178

This 1,480 square-foot, wood frame structure has a wood post on concrete block foundation. It has 12-inch Douglas fir siding with 3" battens, five-inch tongue and groove flooring and a corrugated, galvanized iron roof. This Maintenance office building was built in 1940 by the CCC. It was originally identified as Building No. 60 and was the Bachelor's Quarters located at the CCC camp. It was relocated to its current location and remodeled in 1953. The front has been modified since 1969; the garage was added in 1973 and remodeled in 1991 to become Maintenance offices.

Carport/ Storage

Structure Number: B211

This 600 square-foot structure was built by the NPS in 1955. It has painted sheet iron siding, gravel flooring, and a sheet iron roof.

Machine Repair Shop—1960

Structure Number: B223

This 3,200 square-foot shop was built in 1960 by the NPS. It is of steel frame construction on a concrete foundation with aluminum siding and an aluminum roof with plastic skylights. The exterior walls are painted white. B14, built in 1932, was replaced by this building.

Ranger Office (from GIS)

Structure Number: B310

This 1,248 square-foot wood frame structure was constructed by the NPS in 1968 in the same location as the dismantled nursery that was built in 1940.

Heavy Equipment Shop

Structure Number: B331

This is a 940 square-foot, one-story, wood frame structure is used by the Maintenance Division.

Firehouse

Structure Number: B345

This 2,520 square-foot, one-story building was built in 1992 in the location of the original fire/ pump house that was built in 1932. It is a wood frame structure with a 70-foot ridge height.

Mechanic Storage Shed

FMSS Asset Number: 22834

This 192 square-foot storage shed is located near where the dismantled nursery—B53 was located.

Machine Shop's Paint Shop

FMSS Asset Number: 22836

This 448 square-foot, steel frame shop is used as the machine shop's painting booth.

Battery Storage/ Tire Shed

FMSS Asset Number: 22838

This 1,148 square-foot shed is adjacent to B331 and is used for storage.

Washrack

FMSS Asset Number: 22840

This 1,392 square-foot structure was built by the NPS in 2000 and is constructed of steel frame and glass. Considerable efforts were made by HAVO's cultural resource group to ensure that it's siting and design did not adversely affect the historic district.

Paint Shop

FMSS Asset Number: 22847

This 320 square-foot wood and metal paint shop is adjacent to B56.

Fire Shop Equipment Shed

FMSS Asset Number: 22851

This 24 square-foot shed was built in 1951.

SUMMARY

Despite alterations over the past several decades, the contributing buildings and structures located within the Kilauea Administration and Employee Housing Historic District still convey the NPS Rustic design style incorporating Hawaiian architectural design techniques from when they were built in the 1930s and 1940s. In total, the district contains 34 contributing structures and 39 compatible, but non-contributing structures. Several of the non-contributing structures such as restrooms, carports, residences, and utility buildings have been added to the district after the period of significance ended in 1942. Most of the non-contributing carports and residences were built in the 1950s and 1960s during the park's era of Mission 66 development and will need to be assessed in the future to determine whether they are eligible for the National Register. The bulk of these structures are located along the loop road that was designed and built during the park's master planning era of the 1930s. The materials, size, siting, and massing of these structures are compatible with the historic district. Likewise, other buildings such as the Kilauea Visitor Center restrooms and the several non-contributing buildings located in the maintenance area have similar siting, materials, and functions to buildings that do contribute and are therefore compatible with the historic district. Because the bulk of the historic buildings and structures still remain intact, and because the newer structures are compatible, buildings and structures are key contributing features within the Kilauea Administration and Employee Housing Historic District.



Figure 1. Employee Residence being built (1945 NPS Travelogue, HAVO Archives).



Figure 2. Example of a typical residence (Employee Quarters No. 22) ca. 1945, approximately six years after it was built. The building was designed to blend in with the surrounding native vegetation. (1945 NPS Travelogue, HAVO Archives).



Figure 3. Stone chimney being added to Employee Quarters No. 5 in 1934—six years after the residence was built (1934 Landscape Architect Report, HAVO Archives).



Figure 4. Employee Quarters No.17, Superintendent's Residence (PWR Staff—2005).



Figure 5. Administration Building after completion in 1942 (1945 NPS Travelogue, HAVO Archives).



Figure 6. Current view of Administration Building (PWR Staff—2005).



Figure 7. South entrance of the Ohia Wing (PWR Staff—2005).



Figure 8. Building No. 52 after completion in 1934. (1934 Landscape Architect Report, HAVO Archives).



Figure 9. Abandoned incinerator located between CCC camp and NPS employee housing area. (PWR Staff—2005).

Small-Scale Features

Small-scale features are defined as the elements which provide detail and diversity for both functional needs and aesthetic concerns in the landscape. Within the Kilauea Administration and Employee Housing Historic District, these features include planters, retaining walls, stairs, barbecues, and a footbridge. Non-contributing features include, fire hydrants, picnic tables and propane tanks.

CONTRIBUTING SMALL-SCALE FEATURES

Stone Landscape Elements at Ohia Wing

LCS ID: 058393

Structure Number: LF5

The stone landscape elements at Ohia Wing include the lava stone planting bed borders, lava stone planters flanking the two entries, and lava stone steps along the west elevation of the building.

1. The stone planters are two to three feet tall, 18-inches wide, and 10-15-feet long.
2. A small, reinforced concrete footbridge supports a curved stone wall at the northwest approach to the Ohia Wing.
3. There is one stone step, 10-inches wide between planter walls at the southwest approach.
4. A six-inch tall stone curb defines the edges of the planter between the stone steps at the Ohia Wing.
5. A set of two stairs, three-feet wide and 12-feet long are located at the northwest side of the building.

These landscape elements were constructed ca. 1935 by the CCC. Master plan drawings dating to 1932, 1935, and 1936 show the immediate setting of the then-park headquarters building steadily evolving from a relatively open area to a designed landscape featuring parking, a number of pathways, and other such elements. It is likely that these resources were constructed as part of this undertaking. The masonry work is characteristic of the work being done throughout Hawaii National Park during this period; it helps naturalistically blend the Ohia Wing and its approaches into the surrounding landscape.

Housing Area Features—Small-Scale Features

LCS ID: 444163

Structure Number: TBD

Contributing small-scale features located in the housing area include lava rock planters, retaining walls, and an outdoor barbecue. The dark lava rock is generally roughly coursed, laid in a polygonal pattern with black (sometimes white) mortar recessed joints. These residential landscape features, most probably constructed ca. 1939 by the CCC, were designed to integrate the buildings with their surroundings and to emphasize the cohesive design elements of the park village. They are not indicated on the master plan drawings prepared for the area throughout the 1930s.

1. Lava Rock Planters

Several of the houses have lava rock planters flanking the front entrance of the house. These planters are typically rectangular in shape and roughly coursed. Most of the existing planters are currently planted with hydrangea, camellia or other exotic ornamentals. The landscape plan developed for Q27 in 1940 indicates native *hapuu* fern to be planted.

2. Lava Rock Planting Bed Borders

Several of the houses also have single or double roughly -coursed, dry-laid lava rock planting bed borders in the backyard.

3. Lava Rock Retaining Walls

Usually found in the backyards, these curvilinear walls with mortar recessed joints help define the useable space adjacent to the residence from the forest beyond.

4. Outdoor Grill

Employee Quarter's #4 contains an outdoor grill in the backyard. It is constructed of lava rock with mortared recessed joints and is located at back of the lawn on the forest edge.

Stone Catchment Basin—Maintenance Area

LCS ID: 058390

Structure Number: LF2

This water catchment basin, approximately two feet wide and eight feet long, is constructed of and lined with roughly coursed lava rock with recessed joints of white mortar. The basin is located in the maintenance area to the west of Building 37.

Stone-Lined Drainage Ditch—Maintenance Area

LCS ID: 058391

Structure Number: LF3

This 20-foot-long drainage ditch, ranging from six inches to two feet deep, is located at the east side of the Fire House. The ditch is lined with roughly coursed lava rock with recessed joints of white mortar.

The stone catchment basin and stone-lined drainage ditch are utilitarian landscape elements and were likely constructed ca. 1939 by the CCC. They exhibit similar rustic design features to other masonry work built during this period. While neither of these items was indicated on the master plan drawings prepared during the 1930s, the utility area, particularly its northwest zone, was shown as having water-related functions such as a reservoir, a pump house, and a water detention zone. This use of native materials also reflects the NPS philosophy of blending park development with the natural surroundings.

Terracing

LCS ID: TBD

Structure Number: TBD

Lava rock terracing remains at B310. This terracing is part of the original greenhouse constructed by the CCC.

NON-CONTRIBUTING SMALL-SCALE FEATURES

Propane tanks and picnic tables exist in several of the residential backyards. They do not date to the period of significance and do not contribute to the historic district. Several fire hydrants dating to the 1940s are located throughout the district. Many of these hydrants have embossing that reads, "M. Greenberg's Sons/ S.F.—L.A./ N-76/ 1943"—dating them to after the period of significance. Although technically non-contributing, these earlier versions of hydrants are compatible with the historic district.

It is unclear from the research conducted for this project whether the clotheslines found in many of the residential backyards date to the period of significance. If future research indicates that they do date to the period of significance, they should be considered contributing features to the historic district.



Figure 1. Example of a mortared lava-rock planter in employee housing area (PWR Staff—2005).



Figure 2. Example of a dry-lay, lava-rock, terraced planting bed in employee housing area (PWR Staff—2005).

Circulation

Circulation is defined as the spaces, features, and applied material finishes that constitute systems of movement in a landscape. The circulation system within the Kilauea Administration and Employee Housing Historic District consists of several components dating to the period of significance. These include the main residential road, residential loop road, the maintenance area road and loop road, the road that access the Ohia Wing, a segment of Crater Rim Drive adjacent to the Administration building and an abandoned segment of Crater Rim Drive that travels south from the Volcano House to the intersection with the main residential road. In addition to roads, several driveways, parking lots, and footpaths date to the period of significance. (Refer to Supplemental Information #1: Site Map).

Contributing circulation

Roads (road names were created for this analysis, these are not official names)

Main Residential/Maintenance Area Road

LCS ID: 4444147

Structure Number: TBD

The main residential/maintenance area road appears in the earliest 1931 master plan. The road is approximately 20-feet in width, is surfaced with asphalt, and has no shoulders. It is the only straight road in the district and it reflects early master plan efforts to create a grid within the residential and maintenance circulation system. The grid system would later be modified.

By 1936, when the superintendent's house was designed in a place that was subsequently not considered compatible with the grid, a new, more curvilinear road-system was designed for future housing. The main residential and maintenance area road was constructed by the time the first structures were built in 1931 and has maintained its original alignment and width. Some segments of the road have lava rock curbing with black mortar recessed joints. Minor alterations such as the addition of adjacent parking areas have minimally affected the historic road.

Loop Road

LCS ID: 444453

Structure Number: TBD

The residential loop road first appeared in the 1936 master plan after the superintendent's house required a reconfiguration of the circulation system. This road was built ca. 1939. and provides access to two historic residences and nine Mission 66 residences. Like the main residential road, the loop road is approximately 20-feet wide, surfaced in asphalt, with no shoulders. The portions of this road that do not have any development adjacent to them are closely bordered by dense, native vegetation. The road has retained its historic alignment and width.

Crater Rim Drive

LCS ID: 4444159

Structure Number: TBD

The administration building/visitor center is accessed by Crater Rim Drive. This segment was built in 1941 and is part of a much larger scenic loop system that encircles the Kilauea Caldera.

The western boundary of the historic district is defined by a segment of Crater Rim Drive that was abandoned for vehicular traffic after it became impassable following a large earthquake in the 1980s. This segment is still accessible by foot or bicycle. The portion within the historic district still retains its

alignment and width from the period of significance, however the asphalt surface is slowly eroding and becoming overgrown with vegetation.

Parking and Driveways:

Housing Area Driveways

LCS ID: 444170

Structure Number: TBD

The asphalt-paved driveways leading into the Ohia Wing Carport and all of the historic residences in the housing area are contributing. The residential driveways are located inbetween two residential “lots,” they are typically 40-100 feet in length and 10-feet wide. They are positioned perpendicular to the road, leading to a carport which is shared among the two houses located on either side of the driveway. These driveways appear in the 1936 master plan, were all built by 1941, and remain relatively unchanged.

Administration Building Parking Area

The asphalt-paved parking area in front of the Administration Building first appears on the 1936 master plan as “proposed.” By 1939, it appears as “existing” on the master plan. The parking area has expanded considerably over the years, doubling in size. The bus parking at the northwest end of the parking area does not date to the period of significance.

Maintenance Parking Area

The main residential/maintenance road shoulders were paved and widened to create parking and open areas for maintenance needs in the maintenance area. The area is characterized by an undifferentiated, open, asphalt-surfaced area that allows for maneuvering and storage of large vehicles and equipment. Its boundaries are defined by buildings and native *ohia* forest. This configuration is present on the earliest master plan from 1931, and despite the additions and alterations of buildings within the maintenance cluster, the parking area along this road has stayed the same since the period of significance.

Footpaths, guardrails, and steps:

Stone Guard Walls at Ohia Wing

LCS ID: 058392

Structure Number: LF4

Lava rock guard walls, constructed by the CCC (ca. 1934), line the asphalt paths that lead to the Ohia Wing and steam vents to the west of the building. The walls are 18-inches high, constructed of roughly coursed lava stones and white recessed mortar. The stones are cut to create a flat face. At the steam vents, the low walls are topped with a metal pipe railing. A small footbridge directly in front of the side, west entry of the Ohia Wing has similar stone walls. The curvilinear, asphalt-surfaced footpath ranges in width from two to six feet.

Housing Area Features—Footpaths

LCS ID: 058387

Structure Number: LF1

All of the contributing residences have historic, narrow, asphalt-paved footpaths leading to the front entrance, connecting to the carports, and/or linking the front and backyards. Generally between two and three-feet in width, these straight paths are sometimes lined with lava rock. Original plans show that they were paved in a “bituminous surface.” Some of the houses also have dry-laid, lava rock footpaths with Bermuda grass planted within the joints—these less formal paths are typically located in back or side yards.

Housing Area Features—Lava Rock Steps

LCS ID: 058388

Structure Number: LF10

Lava rock steps are located along footpaths at several of the employee residences. The lava rock is squared and the face is smoothed and laid in a polygonal pattern with black mortar, recessed joints. These residential landscape features, probably constructed ca. 1939 by the CCC, were designed to integrate the buildings with their surroundings and to emphasize the cohesive design elements of the park village. They are not indicated on the master plan drawings prepared for the area throughout the 1930s. The lava stone masonry work in particular is characteristic of the work being done all over Hawaii National Park during this early development period, and it helps the park village to blend naturalistically into the surrounding landscape. The construction date is uncertain but the work appears to be of the quality consistent with CCC development, the steps should be considered contributing until further research establishes their construction date.

Non-contributing circulation features

Parking areas in the housing area including the concessionaire's dormitory parking lot, the large gravel lot between Q4 and Q19, and the small asphalt surfaced parking areas in front of Q4, Q5, and Q9 were built after the period of significance.

The driveways along the loop road that lead to the Mission 66 residences were designed and built in the 1950s and 1960s. Although they date to after the end of the period of significance and are not contributing, their location, width, and materials are compatible with the historic circulation patterns.

Driveways to Superintendent's Residence: The original driveway to the Superintendent's Residence began at the old Crater Rim Drive and traveled north-northeast for approximately 200' to the *porte cochere* in front of the residence. After this segment of Crater Rim Drive became impassable following an earthquake in the 1980s, the NPS built an alternate driveway to the Superintendent's house originating at the secondary residential road. The asphalt was removed from the approximately 100-foot long unused segment of the old driveway and the area was planted with Bermuda grass. The road trace is clearly defined by the dense vertical vegetation along each side while the mowed lawn defines the historic surface—further distinguishing the segment from its surroundings. The new driveway begins off of the residential loop road then travels approximately 300-feet west where it joins the remaining existing portion of the old driveway (refer to Supplemental Information #1: Site Map for clarification). The footpaths connecting the Administration Building to the Ohia Wing do not date to period of significance.

The parking lot east of the Administration Building built after the period of significance can accommodate 50 vehicles.

Summary

The circulation system established during the historic period to link the administrative, maintenance, and park housing areas continues to function according to its original design intent. Some of the changes to the circulation system which occurred following the period of significance, including the addition of driveways along the loop road complied with the original design intent and are non-contributing but considered compatible with the historic system.

The circulation system within the historic district is a contributing landscape characteristic of the Kilauea Administration and Employee Housing Historic District.



Figure 1. Main Residential/Maintenance Area Road facing maintenance area. Photo taken after surfacing was completed and shoulders were sloped and graded (1934 Landscape Architect Report, HAVO Archives).



Figure 2. Main residential/ maintenance area road facing east from maintenance area (1934 Landscape Architect Report, HAVO archives).



Figure 3. Existing conditions of main residential road facing northeast (PWR Staff—2005).



Figure 4. Existing conditions of residential loop road (PWR Staff—2005).



Figure 5. Example of mortared lava stairs and footpath leading from carport to backdoor of residence (PWR Staff—2005).



Figure 6. Stone curbing, wall and stairs at north entrance of the Ohia Wing (PWR Staff—2005).

VEGETATION

The following section analyzes vegetation such as trees, shrubs, ground cover, herbaceous plants and plant communities, whether indigenous, endemic, or introduced to the landscape. For the purposes of this discussion, the term “native” refers to vegetation that is indigenous, endemic, or Polynesian-introduced; the term “exotic” refers to all other vegetation.

The Kilauea Administration and Employee Housing Historic District is located at 3940’ elevation on the northeast rim of Kilauea Caldera. The native vegetation in this area contains indigenous species such as: *aalii* (*Dodonea viscosa*); endemic species such as: *ohia* (*Metrosideros polymorpha*), *hapuu* tree fern (*Cibotium* sp.), *amau* (sadleria) fern (*Sadleria cyatheoides*), *koa* (*Acacia koa*), sandalwood (*Santalum* spp.), *kopiko* (*Psychotria hawaiiensis*); and Polynesian-introduced species such as: *ti* (*Cordyline fruticosa*).

Park master plans and landscape architect reports, generated by the NPS landscape division in San Francisco’s Western Field Office during the 1930s, reflect the desire for a naturalistic landscape design. To achieve this naturalistic aesthetic in terms of vegetation, NPS landscape architects encouraged the use of vegetative screening to subtly mark boundaries among residences and between public and private space, the retention of natural *ohia* forests, and the use of native plants over exotics for ornamentals with the exception of the addition of lawns at each residence.

VEGETATION PATTERNS

Administration Area

Vegetation patterns vary among the different zones within the historic district. The Kilauea Visitor Center in the administration area is characterized by a large, open planting plan. The visitor center is setback approximately 100-feet from Crater Rim Drive, and other than a narrow planting strip with mown grass and informally aligned *koa* and *ohia* trees, the view from the road to the visitor center is exposed and unvegetated. Several similar planting strips are located throughout the vast parking lots. The front entrance to the visitor center is sparsely vegetated with a small lawn and a few foundation plantings. The back and side of the visitor center is similarly vegetated with lawn and occasional *ohia* trees, and its outer edges are defined by an Ohia/Uluhe fern forest that forms an impenetrable wall adjacent to the lawn.

The Ohia Wing (also in the administration area) is characterized by a lush, native, and dense vegetation pattern. Landscape plans from the 1930s and early 1940s suggest that the area used to be open, with a more accessible, civic feeling than what currently exists. When the current Volcano House was built 250-feet to the south of the Ohia Wing in 1941, the circulation and vegetation patterns around the Ohia Wing changed. The Crater Rim Drive segment that traveled a mere fifty feet to the south of the entrance to the building was removed and replaced by a narrow footpath. *Ohia*, lawn, and native ornamentals were planted adjacent to the new footpath that screened the Ohia Wing from the newly built Volcano House. Combined, these changes transformed the feeling around the Ohia Wing from public to private. Currently, dense, impenetrable *ohia* forest bounds the Ohia Wing and Ohia Wing garage. The short driveway leading to the garage is also bordered by dense native vegetation. The south and west sides of the Ohia Wing, where the two entrances are located, have a slightly more open vegetation pattern. Bermuda grass lawn; foundation plantings such as *hapuu* fern, *ti*, and camellia; and widely spaced *ohia* trees create a more formal pattern than the dense forest along the other edges of the building while screening the Ohia Wing from the road and the Volcano House.

Employee Housing Area

In 1934, CCC crews began landscaping around the residences. The desired affect was to create a naturalistic design while addressing the aesthetic, privacy, and recreational needs of the employees who lived there. The vegetation pattern around each residence is relatively the same: boundaries marked by native *ohia* forest, lawns around the houses, and ornamental foundation plantings. The native *ohia* forest was partially removed and/or thinned to create an open area around each house. For the purposes of this study, three different types of *ohia* communities were defined while in the field. Type-one community is the least dense of the three and consists of widely spaced *ohia* planted on lawn. Type-one forest community is located at the front of many residences to help screen the residence from the road, define private (residence) versus public (street), and while providing filtered views. Type-two community consists of widely spaced *ohia*, *koa*, sandalwood, or other native trees with a low-lying understory consisting of ginger, *ti*, and *hapuu* and *amau* fern. Type-two community is located between many residences to provide clearly defined, yet naturalistic “parcel” boundaries that more completely screen views than type-one community. Type-three community consists of dense native vegetation whose understory and canopy create a uniform and impenetrable wall comprised of *ohia*, *koa*, sandalwood, *hapuu*, *amau*, *ti*, ginger, etc. Type-three community is the most prolific because it is native forest that has not been drastically altered. It is generally located at the back of each residence and creates a border around the entire residential area.

Along the naturalistic boundaries of the varying forest vegetation, CCC crews planted Bermuda grass lawns around each house. Sager recognized that the addition of lawns was an important landscape element to the employees, “the [CCC] project which has made the greatest improvement in appearance and caused the most favorable comment has been the landscaping around the employee residences...to this time there have never been any lawns at the employees’ residences, a thing which most of the employees have always wanted” (Landscape Architect Report May 25 to June 30, 1934; HAVO Archives).

The CCC planted specific native species to function as ornamentals along the foundations, in planter boxes, and as a transition between the lawns and the vegetative screens such as *ti* and fern. Prior to planting, the crews graded and amended the shallow, rocky soil with large amounts of mud press (also known as bagas)—a waste product that was supplied for free from local sugar plantations (Landscape Architect Report May 25 to June 30, 1934, HAVO Archives).

In addition to being used around individual residences, vegetative screening is also present along portions of the residential loop road and the modern driveway to the superintendent’s house. In both of these areas, native fern and *ohia* forest appears to be unaltered, and freely grows as a dense wall to the edges of these roads.

Maintenance Area

Unlike the residential and administrative areas, the maintenance area does not appear to have a designed landscaping plan. The landscape architect reports from the 1930s discuss the intent for the vegetation component of the landscape for all of the historic district’s developed areas except for the maintenance area. Because this zone was to be used solely by NPS, USGS, and CCC employees during work hours, it logically follows that designing a vegetated landscape would not be as important as it was for the housing and administrative areas. Although the maintenance area is similar to the other zones in that type-two and type-three forest communities delineate the boundaries of the area, no formal lawn or planting beds exist and the overall vegetation pattern is natural and informal when compared to any of the other zones. Natural vegetation was left in place at the maintenance area borders to provide screening from the residential and visitor use areas.

PLANTS

Overall

In 1930, when Thomas Vint (Chief Landscape Architect of the NPS Western Field Office) made his first visit to Hawaii Volcanoes to begin efforts on the master plan for the park, he recognized the park's problem with invasive vegetation and encouraged a vigorous removal plan. In his trip report, he also commented on the inappropriateness of exotic ornamentals he observed around the Volcano House, such as nasturtium and blackberry. He recommended that the Volcano House gardeners should slowly replace the ornamental exotics with indigenous or endemic plants. Furthermore, he encouraged the park and its residents to use only native plants in their gardening. He explained, "This question of exotic plants is one that is particularly serious in Hawaii Park. It is one that will not be solved in a short time. It should be considered a permanent problem, and one which every park employee is responsible for." (Landscape Architect Report, February and March 1930, HAVO Archives).

Under the NPS landscape division's direction, indigenous and endemic plants such as: *aalii*, *hapuu* fern, and *amau* fern were the principal plants used by CCC crews as ornamentals in the residential and administration areas. Additionally, several specimen *kopiko* trees were transplanted from the Bird Park area to the Administration building area in 1935. M.S. Sager, the NPS landscape architect orchestrating the landscape design, noted that the "planting project is interesting experimentally as the writer believes that many of the native shrubs of the park have never been transplanted, or certainly not used before in ornamental planting." (Landscape Architects Reports April and May 1934). Images from the late 1930s show that many of the native plants that were transplanted throughout the district, were thriving in their new location. Today, *aalii*, *hapuu* fern, and *amau* fern are well established and appear as though they have always grown here.

Today exotic ornamentals such as: camellia, hydrangea, azalea (*Rhododendron* sp.), fuchsia, rose (*rosa*), iris, and Norfolk pine (*Araucaria heterophylla*); as well as exotic invasives (or potential invasives) such as lacevine (*Polygonum* sp.), avocado, agave, Hilo holly (*Ardisia crenata*), English ivy (*Hedera helix*), sweet pea (*Lathyrus odoratus*), spiderplant (*Chlorophytum cosmosus*), giant reed (*Arundo donax*), daisy fleabane (*Erigeron karvinskianus*), pearl flower (*Heterocaentron subtriplenervum*), common horehound (*Marrubium vulgare*), monstera (*Monstera deliciosa*), Mexican elderberry (*Sambucus mexicana*), dwarf octopus tree (*Schefflera arboricola*), Roving Sailor (*Saxifraga stolonifera*), *Tibouchina* sp., and *Morella faya* exist throughout the historic district. The ornamental camellia, hydrangea, azalea, iris, fuchsia, and rose are especially prominent as foundation or specimen plantings in the residential and administration areas. Sager mentions that fuchsia was one of the only exotic ornamentals that remained after the Volcano House transitioned from a predominantly exotic planting plan to a native planting plan (Landscape Architect Report Dec. 30, 1931-Feb. 16, 1932, HAVO Archives). Neither the landscape architect reports from the 1930s, nor the superintendent's reports from the period of significance mention planting exotics (whether invasive or not). With the exception of fuchsia around the Volcano House, none of these exotic species were identified as part of the planting palette during the period of significance and it is highly unlikely that the NPS landscape architects (Vint and Sager), who espoused the use of native vegetation and control of invasives, would have suggested using these species as ornamentals. Because it is unlikely that these existing exotics date to the period of significance, they are not considered as contributing to the historic district.

Administration Area

The area around the Ohia Wing has a similar plant palette to the housing area. Bermuda grass lawn, dense, native *ohia* forest, and *ti*, *hapuu* ferns, and *amau* ferns used as ornamentals around the main structure and along the paths leading to the building. Ferns are also planted at the entrance of the driveway and at the edge of the *ohia* forest. A few camellia and other exotic ornamentals are tucked among the native vegetation. No evidence has been located indicating that these exotics were part of the original design from the 1930s.

Like the housing area and the Ohia Wing area, the existing plant palette at the Kilauea Visitor Center consists of Bermuda grass lawn, *ohia* forest that defines the edge of the site; *ti*, *hapuu* fern, *amau* fern as well as camellia, *koa*, *ohia*, and *kopiko* used as ornamentals. As with the other areas within the district, no evidence was located to suggest that the exotic ornamentals, such as the camellias, date to the period of significance.

Employee Housing Area

A 1940 landscape plan for Employee Quarters No. 27 states the “entire area is covered with thick growth of *ohia* trees and under cover of ferns and moss. Open areas shown must be cleared with exception of specimen trees shown. No sandalwood trees to be disturbed in any manner” (1940 DSC-TIC, drawing number: HAVO 124 8071). In addition to these notes, the drawing shows that a Bermuda grass lawn was to be planted in the front and backyards and bordered by the existing *ohia* forest. Native ferns were to be planted in the foundation planter boxes, and perennials (unspecified in plan) were to be planted as a transition between the backyard lawn and the existing forest. Although this particular drawing is of Employee Quarters No. 27, the drawing title is “Landscaping Undiff. Employees Quarters,” suggesting that this basic pattern of a planted Bermuda grass clearing within the forest, native ferns used as ornamentals, and the retention of native specimen trees such as sandalwood and *ohia*, is one that was intended to be repeated among all of the employee residences in the Kilauea Section of the park.

Currently, the vegetation at Q27 still reflects portions of this landscape plan; however the planter boxes are now planted with camellia rather than native plants. Likewise, the plant palette at the other residences still generally follows the 1940 landscape plan, with the exception of exotics such as camellia, hydrangea, azalea, fuchsia, iris, and rose supplementing the native ornamentals such as ferns and *aalii*. None of the 1930s NPS landscape architects’ trip reports mention planting any exotic ornamentals—and as previously discussed, these reports encourage the removal of exotic ornamentals from other areas such as the Volcano House.

In 1947, Gunnar Fegerlund (NPS ranger and naturalist) compiled a list of existing exotics in the park. Camellia, hydrangea, azalea, and fuchsia are all listed as being present in the administrative and/or housing area. It is likely that residents and employees planted these exotics despite the NPS landscape architects’ encouragement to use only natives. It is unknown whether these exotics were planted before or after the period of significance ended in 1942, but no evidence has been located to suggest that their presence in the landscape is part of the original design intent of Sager and Vint, or that the CCC crews planted them. Because they are not related to early park planning, master planning, or the CCC, these exotic specimens do not contribute to the historic district.

Maintenance Area

The maintenance area has a less manicured and more natural vegetation style than any of the other developed areas within the historic district. Currently the maintenance area is bounded by dense native *ohia* forest on all sides. The vegetated areas within the maintenance zone are comprised of open *ohia* forest. No formal lawns or other ornamental vegetation exist. Little change to vegetation has occurred since the period of significance. Native vegetation dominates this area.

SUMMARY

Overall, the existing vegetation patterns and plant palette is still representative of the patterns and palette that date to the period of significance. Despite some additions of exotic ornamentals and invasive weeds, native vegetation such as dense *ohia* forest and ornamental natives still dominate the landscape. Because the historic vegetation patterns and palette are largely intact, the vegetation landscape characteristic contributes to the setting of the Kilauea Administration and Employee Housing Historic District.



Figure 1. Typical residential landscape. Note how the edge of the natural area is being transitioned into the developed area through the use of tree ferns and other specimen natives. (Landscape Architect Report, August 1934, HAVO Archives).



Figure 2. Planting with native materials in employee housing area. Note distinctive edge with the native forest created by the addition of lawn. (Landscape Architect Report, August 1934, HAVO Archives).



Figure 3. Planting with native material in employee housing area—note amended soil bordering the lawn (1934 Landscape Architect Report, HAVO Archives).



Figure 4. View of three types of overstory vegetation; photograph taken in backyard of Employee Quarters No.17, Superintendent's Residence (PWR Staff—2005).

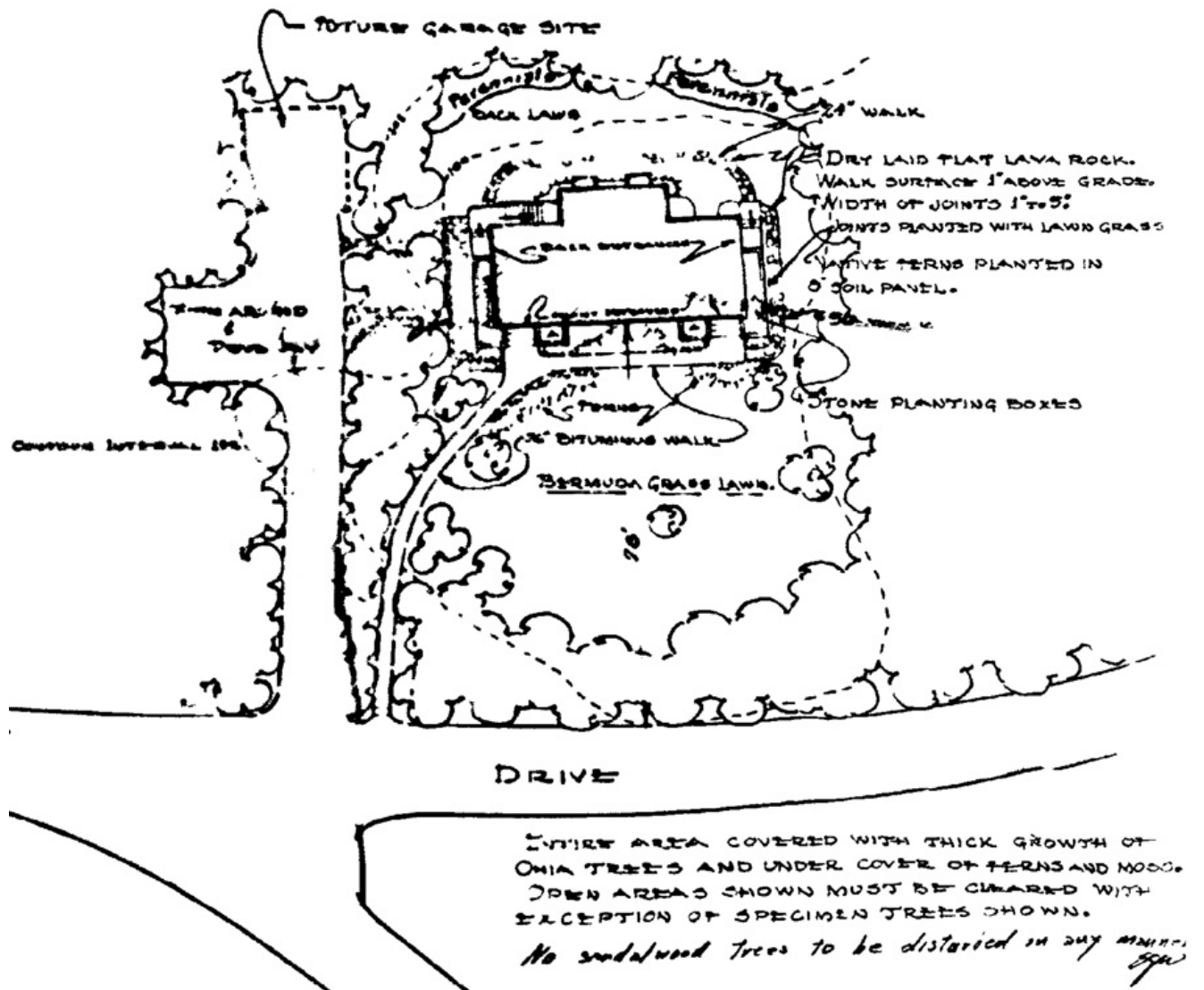


Figure 5. 1940 Landscape Plan for Employee Quarters No. 27. (DSC-TIC: HAVO 124-8071).



Figure 6. Transplanting *kopiko* trees in front of the Administration Building (1934 Landscape Architect Report, HAVO Archives).

Management Information

Descriptive and Geographic Information

Historic Name: Kilauea Headquarters, Hawaii National Park
Current Name: Kilauea Headquarters, Hawaii Volcanoes National Park
Management Unit:
Tract Numbers:
State and County: Hawaii, Hawaii
Size (acres): 43

Boundary UTM

Source	Type	Datum	Zone	Easting	Northing
USGS Map 1:24,000	Area	NAD 83	5	262926	2149977
USGS Map 1:24,000	Area	NAD 83	5	263105	2149921
USGS Map 1:24,000	Area	NAD 83	5	263096	2149812
USGS Map 1:24,000	Area	NAD 83	5	263004	2149800
USGS Map 1:24,000	Area	NAD 83	5	263365	2149520
USGS Map 1:24,000	Area	NAD 83	5	263255	2149422
USGS Map 1:24,000	Area	NAD 83	5	263175	2149247
USGS Map 1:24,000	Area	NAD 83	5	262938	2149802
USGS Map 1:24,000	Point	NAD 83	5	263523	2148903

National Register Information

National Register Documentation: Draft National Register Nomination completed in 2005

Explanatory Narrative:

Carey and Company, a historical architecture firm based out of San Francisco, prepared the multiple property: Hawaii National Park Planning and Development through World War II National Register nomination, the Kilauea Administration and Employee Housing Historic District nomination, and the Crater Rim Drive Historic District nomination. All of these documents are currently (2006) on park review.

National Register Eligibility: Draft nomination

Explanatory Narrative:

Date of eligibility Determination:

National Register Classification: District

Significance Level: Local

Contributing/Individual: Individual

Significance Criteria: C—Inventory unit embodies distinctive characteristics of type/period/method of construction; or represents work of master; or possesses high artistic values; or represents significant/distinguishable entity whose components lack individual distinction.
A—Inventory Unit is associated with events that have made a significant contribution to the broad patterns of our history.

Period of Significance

Time Period: 1927-1942

Historic Context Theme: Expressing Cultural Values
Historic Context Subtheme: Landscape Architecture
Historic Context Facet: The 1930s: Era of Public Works

Historic Context Theme: Expressing Cultural Values
Historic Context Subtheme: Architecture
Historic Context Facet: Rustic Architecture

Area of Significance

Category: Community Planning and Development
Priority: 1

Category: Architecture
Priority: 2

Category: Landscape Architecture
Priority: 3

National Historic Landmark Information

No

World Heritage Site Information

Hawaii Volcanoes National Park was named a World Heritage Site by UNESCO in 1987.

Cultural Landscape Type and Use

Cultural Landscape Type: Historic Designed Landscape

Current and Historic Use/Function:

Use/Function Category: Government

Use/Function:	Administrative Office
Type of Use/Function:	Both Current and Historic
Use/Function Category:	Government
Use/Function:	Maintenance Facility
Type of Use/Function:	Both Current and Historic
Use/Function Category:	Government
Use/Function:	Government Office
Type of Use/Function:	Both Current and Historic
Use/Function Category:	Domestic
Use/Function:	Institutional housing
Type of Use/Function:	Both Current and Historic
Use/Function Category:	Domestic
Use/Function:	Single Family Dwelling
Type of Use/Function:	Both Current and Historic
Use/Function Category:	Domestic
Use/Function:	Secondary Structure
Type of Use/Function:	Both Current and Historic

Ethnographic Information

Ethnographic Survey Conducted: Yes:

An ethnographic study was conducted by Charles M. Langlas, Cultural Anthropologist with the University of Hawaii at Hilo from 1996-2000. The results of the study were completed in 2003: *Native Hawaiian Use of Hawaii Volcanoes National Park: A Historical and Ethnographic Overview*. The purpose of this study was to document traditional Native Hawaiian use of resources on Park lands, both in the past and the present and to examine the relationship between that resource use and Park management. Perhaps most important to mention is that Native Hawaiians view the entire Kilauea Caldera as sacred and as the “origin of new land.” Hawaiians give thanks to Kilauea and the goddess Pele (the maker of land) in sites all over the caldera’s rim. Additionally, Native Hawaiians’ access areas throughout the park, including the Kilauea headquarters area to collect plants for religious purposes. *Aalii* and *liko lehua* (the leaf buds of the *ohia* tree) are two plants that are particularly sought after and available in this area. In addition to plant gathering, the area in front of the 1877 Volcano House—located just outside of the historic district boundaries—is often used for religious rituals.

Adjacent Lands Information

Do Adjacent Lands Contribute: No

General Management Information

Management Category:	Should be preserved and maintained
Management Category Date:	November 27, 2005
Explanatory Narrative:	The Kilauea Administration and Employee Housing Historic District meets the following criteria: it meets National Register criteria (A and C), is compatible with the park's legislated significance, and has a continuing purpose that is appropriate to its traditional use or function.

Condition Assessment and Impacts

The criteria for determining the condition of landscapes is consistent with the Resource Management Plan Guideline definitions (1994) and is decided with the concurrence of park management. Cultural landscape conditions are defined as follows:

Good: indicates the landscape shows no clear evidence of major negative disturbance and deterioration by natural and/or human forces. The landscape's cultural and natural values are as well preserved as can be expected under the given environmental conditions. No immediate corrective action is required to maintain its current condition.

Fair: indicates the landscape shows clear evidence of minor disturbances and deterioration by natural and/or human forces, and some degree of corrective action is needed within 3-5 years to prevent further harm to its cultural and/or natural values. If left to continue without the appropriate corrective action, the cumulative effect of the deterioration of many of the character-defining elements will cause the landscape to degrade to a poor condition.

Poor: indicates the landscape shows clear evidence of major disturbance and rapid deterioration by natural and/or human forces. Immediate corrective action is required to protect and preserve the remaining historical and natural values.

Undetermined: not enough information available to make an evaluation.

Condition Assessment:	Good
Assessment Date:	06/21/2005
Date Recorded:	10/27/2005
Park Management Concurrence:	Pending
Level of Impact Severity:	Low

Stabilization Measures:

Overall, the buildings, structures and landscape features within the historic district are well maintained. The entire district, and all of its contributing features, is used by the NPS, the concessionaire, and/or visitors. Because it is intensely used, the features within the district are subject to cyclic maintenance.

Impact:	
Type of Impact:	Vegetation/Invasive Plants
Internal/External:	Internal

Description: Several species of invasive plants are found throughout the historic district. The most aggressive species include English ivy and ginger HAVO Resources Management staff is actively eradicating several of these species.

Agreements, Legal Interest, and Access

Management Agreement: None
Explanatory Narrative:
NPS Legal Interest: Fee Simple
Explanatory Narrative:
Public Access: Unrestricted

Treatment

Approved Treatment: Preservation
Approved Treatment Document: General Management Plan
Document Date: 1985

Explanatory Narrative:
The current approved treatment of “preservation” was determined in the 1985 General management Plan which states, “Preserve the sites and structural remains of the early Hawaiian period and historical period in cooperation with local Hawaiian interests.”

Approved Treatment Completed: No

Approved Treatment Cost

LCS Structure Approved Treatment Cost: None
Landscape Approved Treatment Cost: None
Cost Date:
Level of Estimate:
Cost Estimate:
Explanatory Description:

Stabilization Costs

Landscape Stabilization Costs: \$0
Cost Date: November 2005
Level of Estimate: Class C
Cost Estimator: CLI Team in communication with Bob Dunkley, HAVO Chief of Maintenance

Explanatory Description:
Because the district is well-used and well-maintained, no stabilization costs were deemed necessary.

Appendix

Bibliography

- Fagerlund, Gunnar. "The Exotic Plants of Hawaii National Park." Natural History Bulletin No. 10. Department of Interior. 62 pp. 1947.
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- "Hawaiian Style Cottages 1995." In State of Hawaii Department of Land and Natural Resources Historic Sites Calendar 1995 [online], ca. 2002 [cited April 3, 2002]. Available at <http://www.Hawaii.gov/dlnr/hpd/hpcal95.htm>.
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- Langlas, Charles M. *Native Hawaiian Use of Hawaii Volcanoes National Park: A Historical and Ethnographic Overview*. University of Hawaii at Hilo, 2003.
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- . *National Register of Historic Places Multiple Property Documentation Form for Historic Park Landscapes in National and State Parks*. Washington, D.C.: U.S. Department of the Interior, National Park Service, 1995.
- Paige, John C. *The Civilian Conservation Corps and the National Park Service, 1933-1942: An Administrative History*. Washington, DC: U.S. Department of the Interior, National Park Service, 1985.
- Sandler, Rob. *Architecture in Hawaii: A Chronological Survey*. Honolulu: Mutual Publishing, ca. 1993.
- Tweed, William C., Laura E. Soulliere and Henry G. Law. *National Park Service Rustic Architecture: 1916-1942*. Western Regional Office: U.S. Department of the Interior, National Park Service, 1977.

Supplemental Information

Title: Supplemental Information #1: Buildings and Structures
Description: Kilauea Administration and Employee Housing Historic District site map showing functional zones, contributing buildings, structures, and roads.

Title: Supplemental Information #2: Vegetation Patterns
Description: Kilauea Administration and Employee Housing Historic District site map showing functional zones, contributing buildings, structures, and roads.

Title: Supplemental Information #3: 1931 Headquarters Master Plan
Description: Headquarters and Hotel Area Development, part of the General Development Plan For Hawaii National Park; drawn by the Landscape Division from NPS Data as of Oct. 1, 1931. Drawing No. 3005.

Title: Supplemental Information #4: 1932 Headquarters Master Plan
Description: Headquarters and Hotel Area Development, part of the Master Development Plan For Hawaii National Park; drawn by branch of Plans and Design from NPS Data as of Oct. 1, 1932. Drawing No. H3005a.

Title: Supplemental Information #5: 1935 Headquarters Master Plan
Description: Headquarters and Hotel Area Development, part of the Master Development Plan For Hawaii National Park; drawn by branch of Plans and Design from NPS Data as of Jan. 1, 1935. Drawing No. H3005b.

Title: Supplemental Information #6: 1936 Headquarters Master Plan
Description: Headquarters and Vicinity, part of the Master Development Plan for Hawaii National Park; drawn by branch of Plans and Design from NPS Data as of Jan. 1, 1936. Drawing No. H3049.

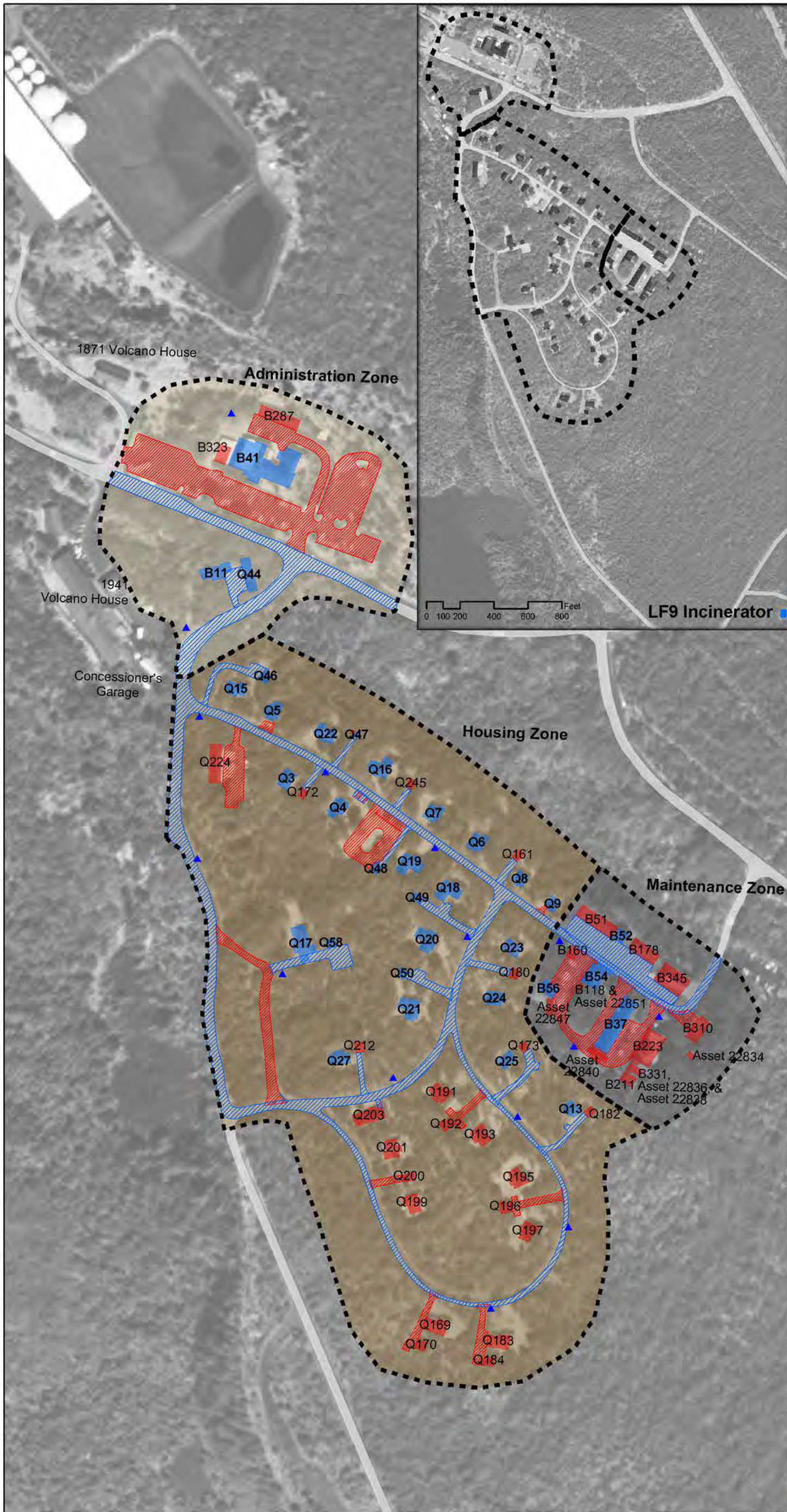
Title: Supplemental Information #7: 1937 Headquarters Master Plan
Description: Headquarters and Vicinity, part of the Master Development Plan for Hawaii National Park; drawn by branch of Plans and Design from NPS Data as of Jan. 1, 1937. Drawing No. H3049a.

Title: Supplemental Information #8: 1938 Headquarters Master Plan
Description: Headquarters and Vicinity, part of the Master Development Plan for Hawaii National Park; drawn by branch of Plans and Design from NPS Data as of Jan. 1, 1938. Drawing No. H3005b.

Title: Supplemental Information #9: 1939 Headquarters Master Plan
Description: Headquarters and Vicinity, part of the Master Development Plan for Hawaii National Park; drawn by branch of Plans and Design from NPS Data as of Jan. 1, 1939. Drawing No. H3049d.

Title: Supplemental Information #10: 1941 Headquarters Master Plan
Description: Headquarters and Vicinity, part of the Master Development Plan for Hawaii National Park; drawn by branch of Plans and Design from NPS Data as of Jan. 1, 1937. Drawing No. H3049e.

Title: Supplemental Information #11: Residential site maps
Description: Site maps for each of the residences. The contributing residences' site maps were created by the CLI team after conducting the fieldwork in 2005, the non-contributing residences' site maps were created by a landscape architect intern in 2004.



Structure No.	Structure Name
Administration	
B11	Ohia Wing
B41	Administration Building
Q44	Carport for Ohia Wing
B323	Restrooms at Admin Building
B287	Vehicle garage at Admin Building
Housing Area	
Q3	Quarters 3
Q4	Quarters 4
Q5	Quarters 5
Q6	Quarters 6
Q7	Quarters 7
Q8	Quarters 8
Q9	Quarters 9
Q13	Quarters 13
Q15	Quarters 15
Q16	Quarters 16
Q17	Quarters 17
Q18	Quarters 18
Q19	Quarters 19
Q20	Quarters 20
Q21	Quarters 21
Q22	Quarters 22
Q23	Quarters 23
Q24	Quarters 24
Q25	Quarters 25
Q27	Quarters 27
Q46	Carport for 5, 15
Q47	Carport for 16, 22
Q48	Carport for 19
Q49	Carport for 18
Q50	Carport for 20, 21
Q58	Carport for 17
Q161	Carport for 6, 8
Q170	Carport for 169
Q172	Carport for 3, 4
Q173	Carport for 25
Q180	Carport for 23, 24
Q182	Carport for 13
Q183	Quarters 183
Q184	Carport for 183
Q191	Quarters 191
Q192	Carport for 191, 193
Q193	Quarters 193
Q195	Quarters 195
Q196	Carport for 195, 197
Q197	Quarters 197
Q199	Quarters 199
Q200	Carport for 199, 201
Q201	Quarters 201
Q203	Quarters 203
Q212	Carport for 27
Q245	Carport for 7, 16
Q224	Concessioner's dorm
Utility Area	
B37	Maintenance shops
B52	Fire house/ Paint storage
B54	Storehouse/ Fire cache
B56	Paint storage/ Grounds storage
B118	Fire cache storage
B160	Gas & oil building/ Haz-Mat storage
B178	Chief of Maintenance Office
B211	Carport/storage
B223	Machine repair shop
B288	Vehicle garage or equip storage
B310	Ranger Office
B331	Heavy equipment shop
B345	Pumphouse, Firehouse
22834	Fire storage shed
22836	Autoshop paint shop
22838	Battery storage/tire shed
22840	Washrack
22847	Paint shop
22851	Fire cache equipment shed

* Blue = Contributing Structure
 * Red = Non-Contributing Structure

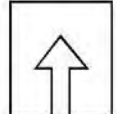
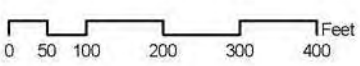
Legend

- District Boundary
- Contributing Structure
- Non-Contributing Structure
- Contributing Roads
- Non-Contributing Roads
- Fire Hydrant (contributing)

Area

- Administration
- Housing
- Maintenance

Site Map 1. Buildings and Structures
Kilauea Administration and Employee Housing Historic District








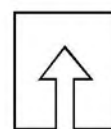


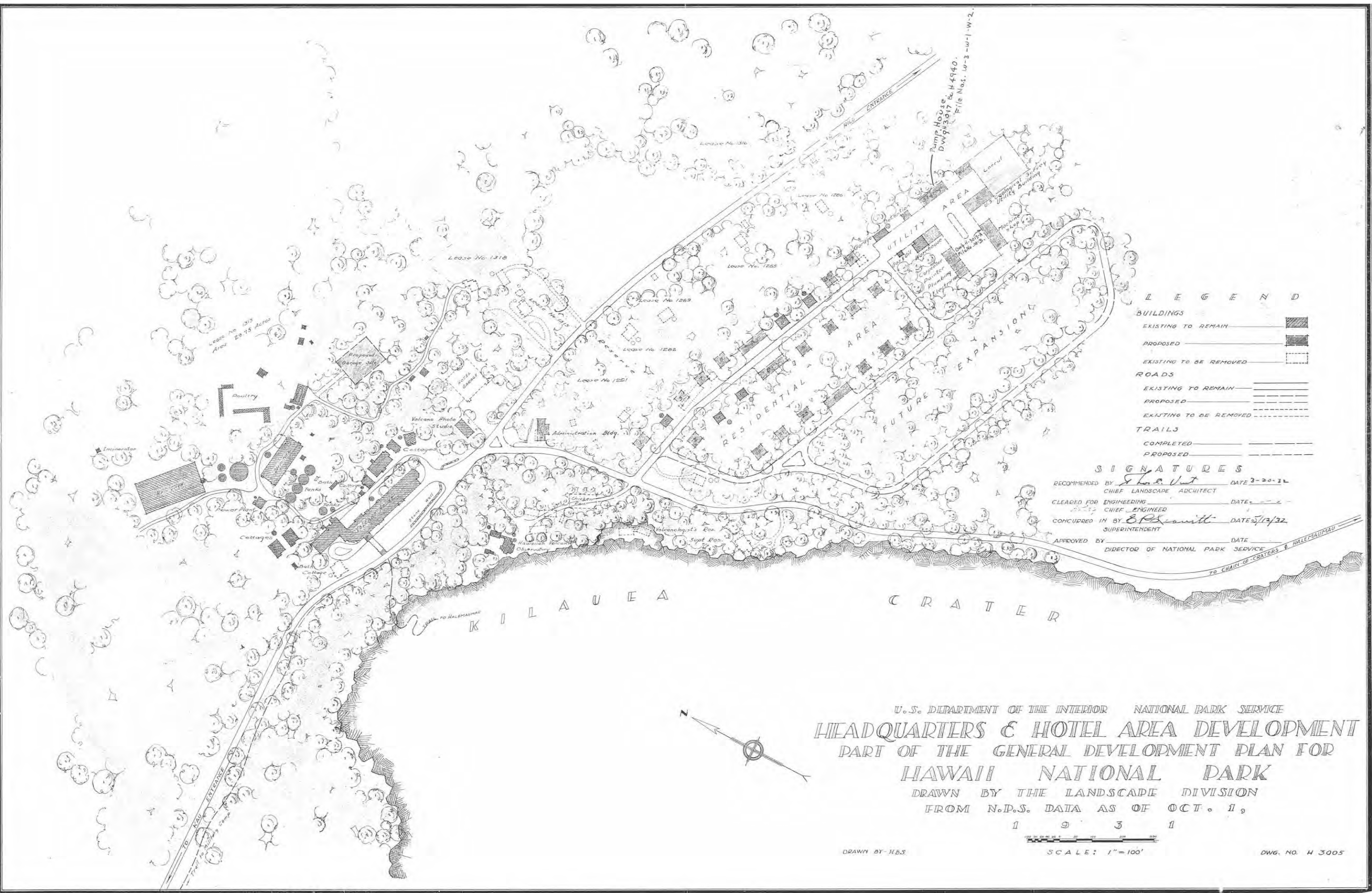
**Site Map 2. Vegetation Patterns
Kilauea Administration and Employee Housing Historic District**



Legend

-  District Boundary
-  Type-One Overstory
-  Type-Two Overstory
-  Type-Three Overstory
-  Structure





L E G E N D

- BUILDINGS**
- EXISTING TO REMAIN
 - PROPOSED
 - EXISTING TO BE REMOVED
- ROADS**
- EXISTING TO REMAIN
 - PROPOSED
 - EXISTING TO BE REMOVED
- TRAILS**
- COMPLETED
 - PROPOSED

SIGNATURES

RECOMMENDED BY *E. L. Vest* DATE 3-20-32
 CHIEF LANDSCAPE ARCHITECT

CLEARED FOR ENGINEERING DATE
 CHIEF ENGINEER

CONCURRED IN BY *E. P. Smith* DATE 5/12/32
 SUPERINTENDENT

APPROVED BY DATE
 DIRECTOR OF NATIONAL PARK SERVICE

U.S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE
HEADQUARTERS & HOTEL AREA DEVELOPMENT
 PART OF THE GENERAL DEVELOPMENT PLAN FOR
HAWAII NATIONAL PARK

DRAWN BY THE LANDSCAPE DIVISION
 FROM N.P.S. DATA AS OF OCT. 1,

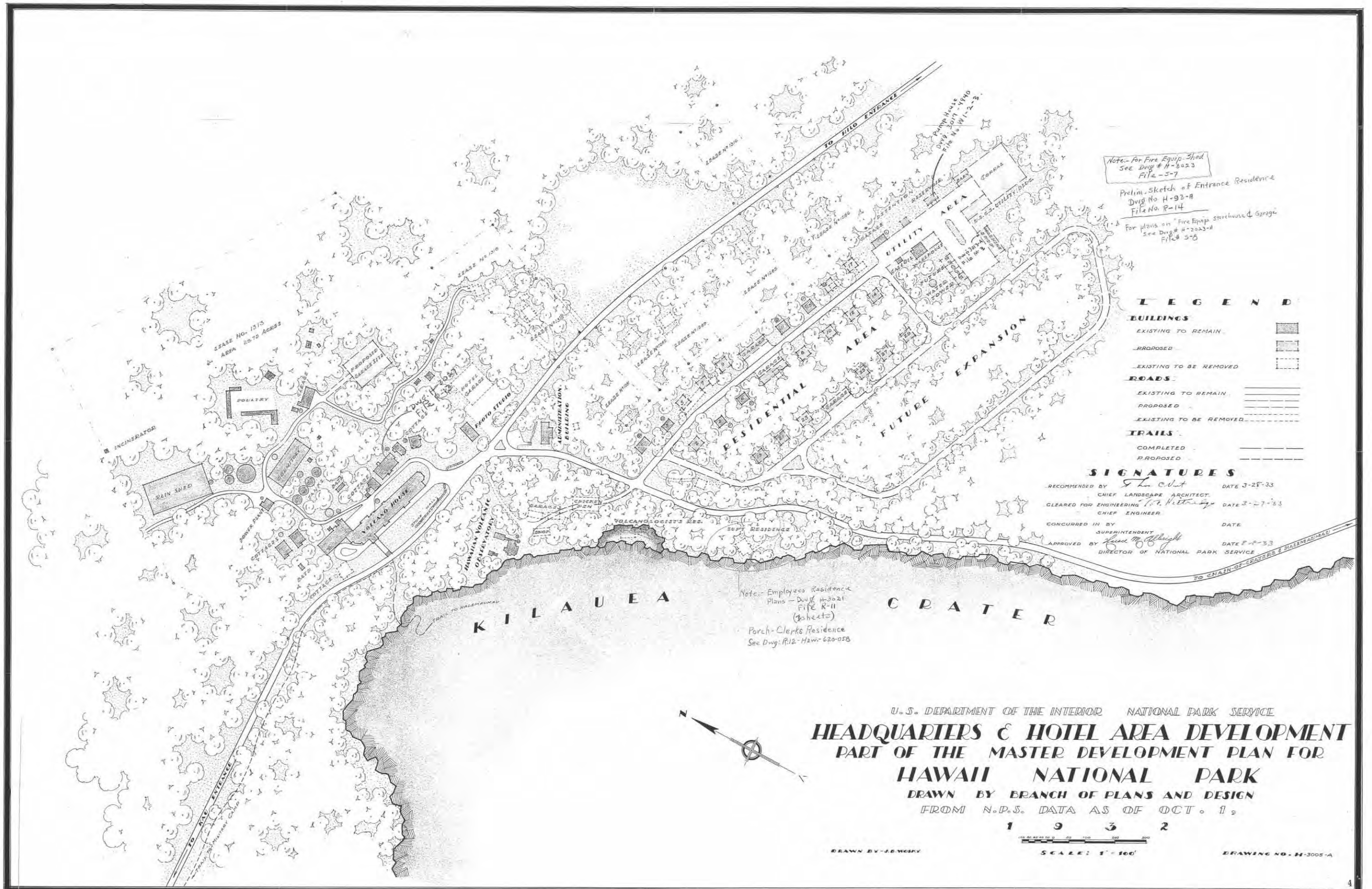
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SCALE: 1"=100'

DRAWN BY-H.B.S.

DWG. NO. H 3005



Note - For Fire Equip. Shed
See Dwg # H-3023
File # 5-7

Prelim. Sketch of Entrance Residence
Dwg No. H-93-A
File No. R-14

For plans on Fire Equip. Storeroom & Garage
See Dwg # H-2023-d
File # 5-8

LEGEND

BUILDINGS

EXISTING TO REMAIN [Symbol]

PROPOSED [Symbol]

EXISTING TO BE REMOVED [Symbol]

ROADS

EXISTING TO REMAIN [Symbol]

PROPOSED [Symbol]

EXISTING TO BE REMOVED [Symbol]

TRAILS

COMPLETED [Symbol]

PROPOSED [Symbol]

SIGNATURES

RECOMMENDED BY *[Signature]* DATE 3-25-33
CHIEF LANDSCAPE ARCHITECT

CLEARED FOR ENGINEERING *[Signature]* DATE 3-27-33
CHIEF ENGINEER

CONCURRED IN BY _____ DATE _____
SUPERINTENDENT

APPROVED BY *[Signature]* DATE 4-8-33
DIRECTOR OF NATIONAL PARK SERVICE

Note - Employees Residence
Plans - Dwg # H-3021
File # R-11
(sheets)

Porch-Clerks Residence
See Dwg # R12-Haw-620-05B

U. S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

HEADQUARTERS & HOTEL AREA DEVELOPMENT

PART OF THE MASTER DEVELOPMENT PLAN FOR

HAWAII NATIONAL PARK

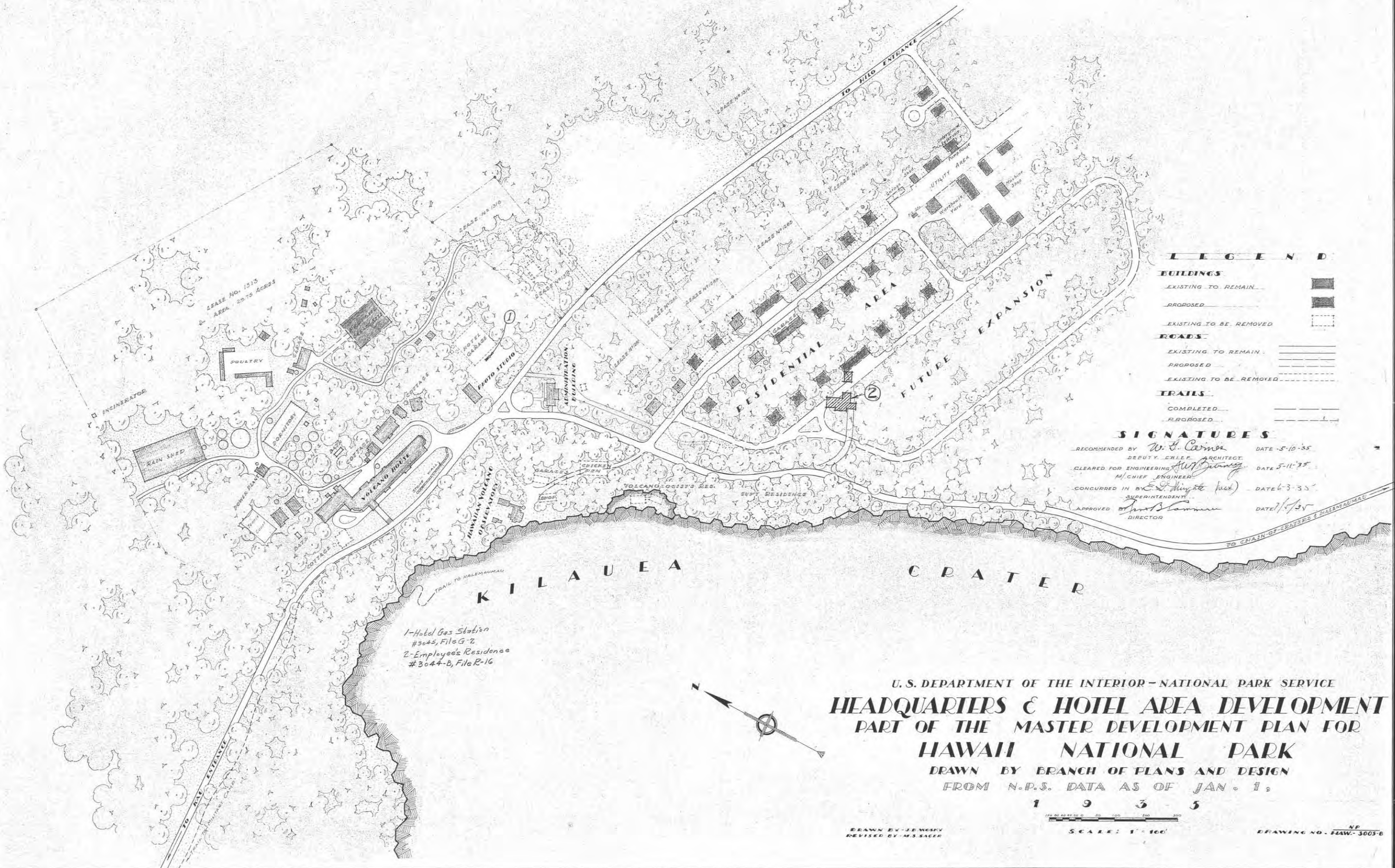
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DRAWING NO. H-3005-A



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 - PROPOSED [Hatched square]
 - EXISTING TO BE REMOVED [Dashed square]
- ROADS**
- EXISTING TO REMAIN [Solid line]
 - PROPOSED [Dashed line]
 - EXISTING TO BE REMOVED [Dotted line]
- TRAILS**
- COMPLETED [Solid line with cross-ticks]
 - PROPOSED [Dashed line with cross-ticks]

SIGNATURES

RECOMMENDED BY *W. S. Carner* DATE 5-10-35
 DEPUTY CHIEF ARCHITECT
 CLEARED FOR ENGINEERING *W. J. Dunning* DATE 5-11-35
 M/CHIEF ENGINEER
 CONCURRED IN BY *E. H. ...* DATE 6-3-35
 SUPERINTENDENT
 APPROVED BY *John ...* DATE 7/1/35
 DIRECTOR

1-Hotel Gas Station
 #3045, File G-2
 2-Employee's Residence
 #3044-B, File R-16

U. S. DEPARTMENT OF THE INTERIOR - NATIONAL PARK SERVICE
HEADQUARTERS & HOTEL AREA DEVELOPMENT
 PART OF THE MASTER DEVELOPMENT PLAN FOR
HAWAII NATIONAL PARK

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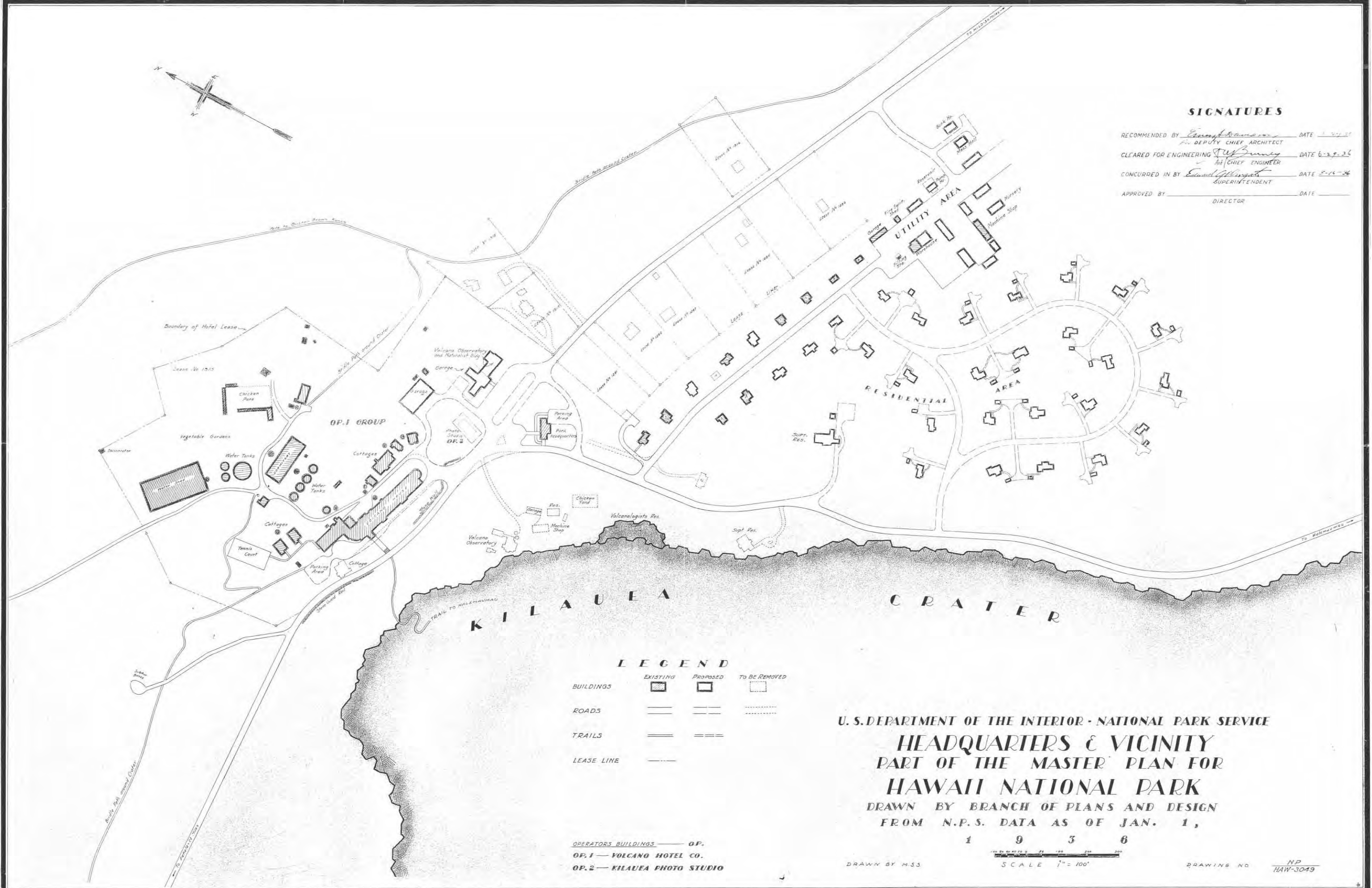
DRAWN BY JE WESKY
 REVISED BY M.S. SACER

DRAWING NO. HAW-3005-B



SIGNATURES

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 AS DEPUTY CHIEF ARCHITECT
 CLEARED FOR ENGINEERING BY *[Signature]* DATE 6-22-36
 AS CHIEF ENGINEER
 CONCURRED IN BY *Edward J. [Signature]* DATE 5-16-36
 SUPERINTENDENT
 APPROVED BY _____ DATE _____
 DIRECTOR



LEGEND

	EXISTING	PROPOSED	TO BE REMOVED
BUILDINGS			
ROADS			
TRAILS			
LEASE LINE			

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 OP. 1 — VOLCANO HOTEL CO.
 OP. 2 — KILAUEA PHOTO STUDIO

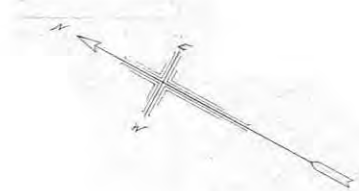
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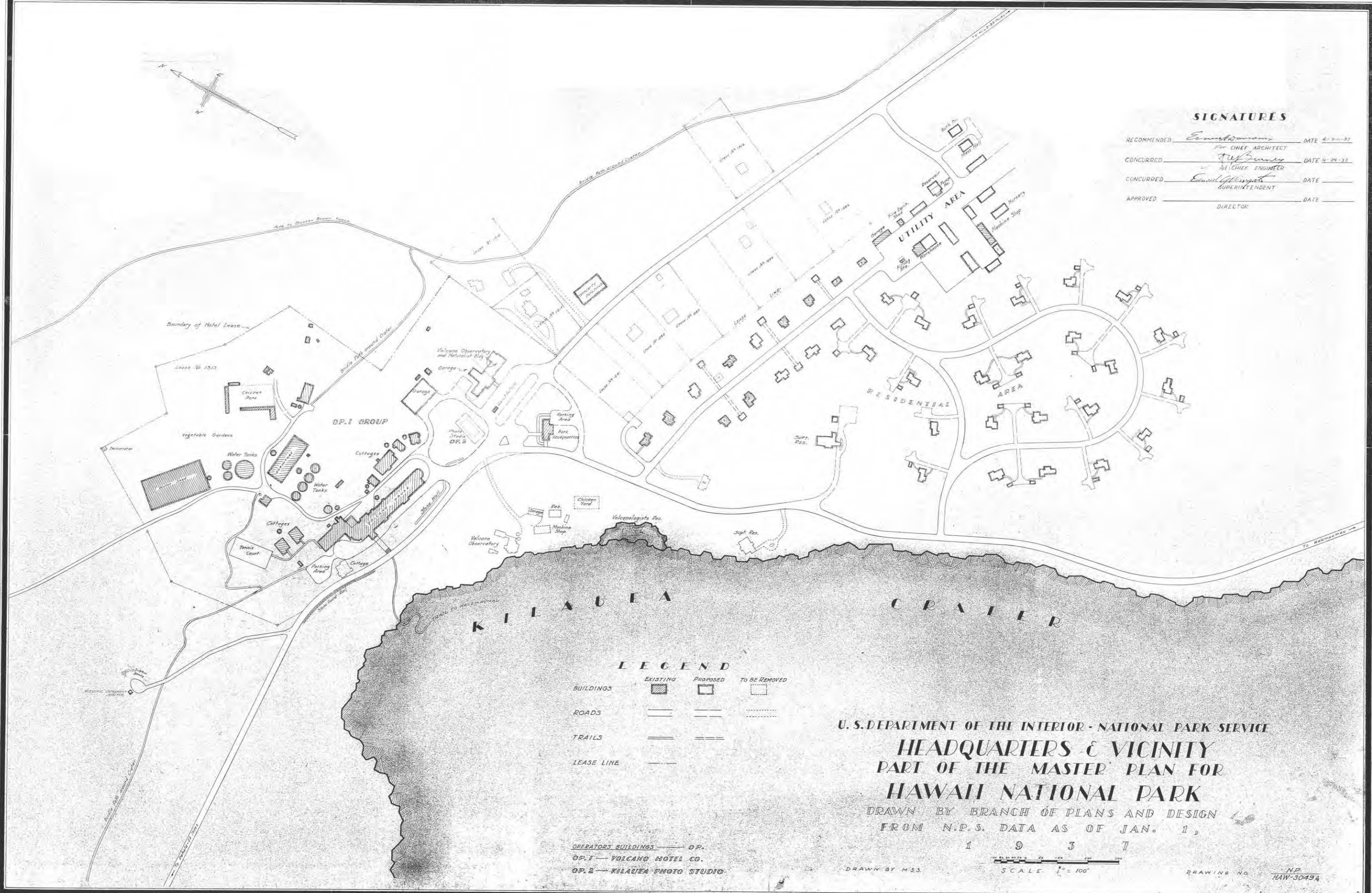
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DRAWING NO. NP HAW-3049



SIGNATURES

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 FOR CHIEF ARCHITECT
 CONCURRED *F. W. Benson* DATE 4-24-37
 CHIEF ENGINEER
 CONCURRED *Edward Gillespie* DATE _____
 SUPERINTENDENT
 APPROVED _____ DATE _____
 DIRECTOR



LEGEND

	EXISTING	PROPOSED	TO BE REMOVED
BUILDINGS			
ROADS			
TRAILS			
LEASE LINE			

OPERATORS BUILDINGS — OP.
 OP. 1 — VOLCANO HOTEL CO.
 OP. 2 — KILAUEA PHOTO STUDIO

U. S. DEPARTMENT OF THE INTERIOR · NATIONAL PARK SERVICE
HEADQUARTERS & VICINITY
PART OF THE MASTER PLAN FOR
HAWAII NATIONAL PARK

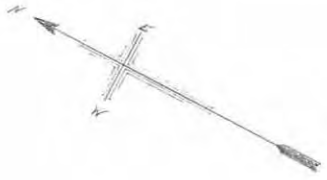
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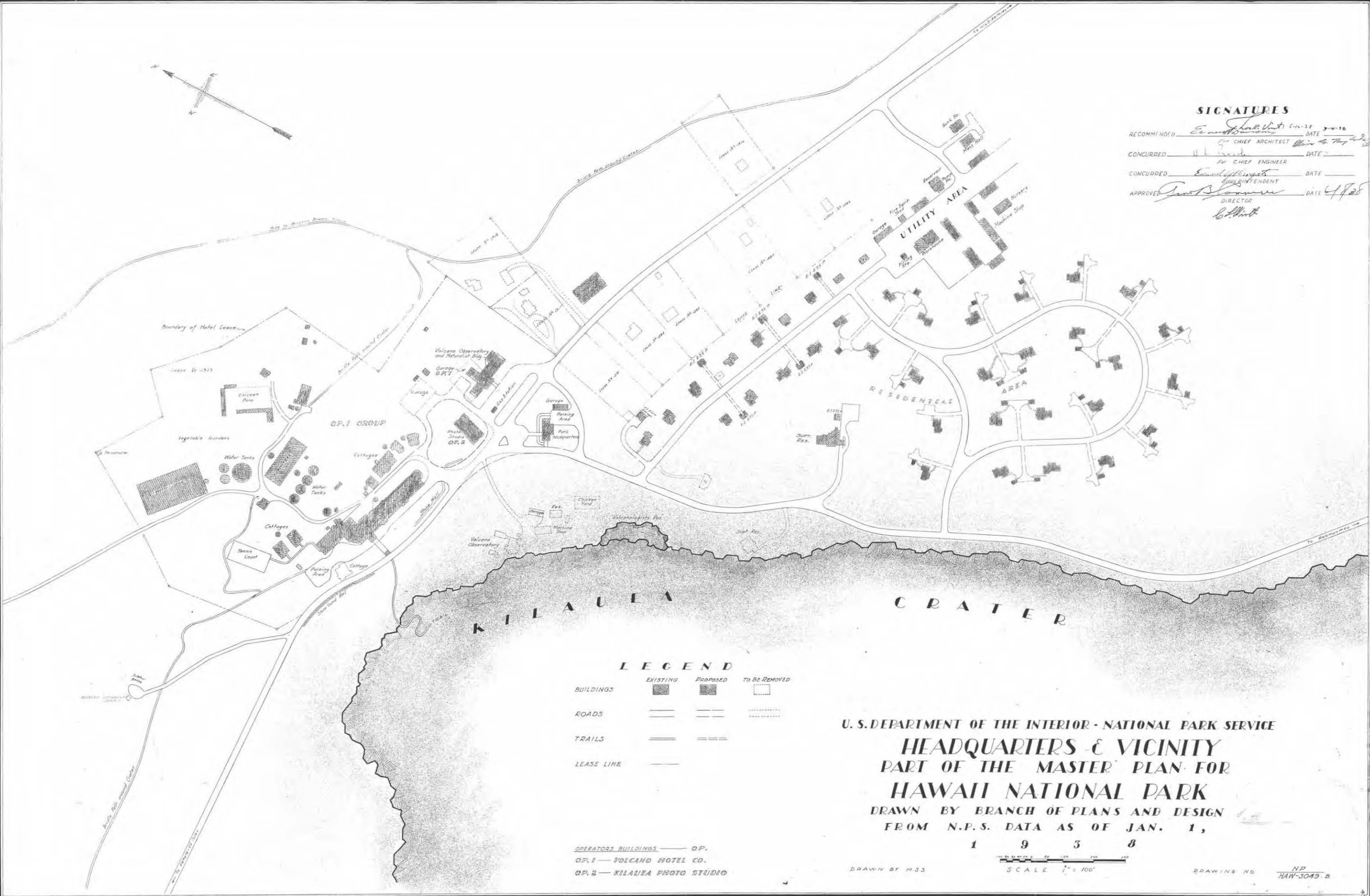
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DRAWING NO. NP HAW-30494



SIGNATURES

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 FOR CHIEF ARCHITECT
 CONCURRED *W. L. ...* DATE ...
 FOR CHIEF ENGINEER
 CONCURRED *Ernest L. Smith* DATE ...
 SUBSISTENT
 APPROVED *James B. ...* DATE 4/1/38
 DIRECTOR
L. H. ...



LEGEND

	EXISTING	PROPOSED	TO BE REMOVED
BUILDINGS			
ROADS			
TRAILS			
LEASE LINE			

OPERATORS BUILDINGS — OP.
 OP. 1 — VOLCANO HOTEL CO.
 OP. 2 — KILAUEA PHOTO STUDIO

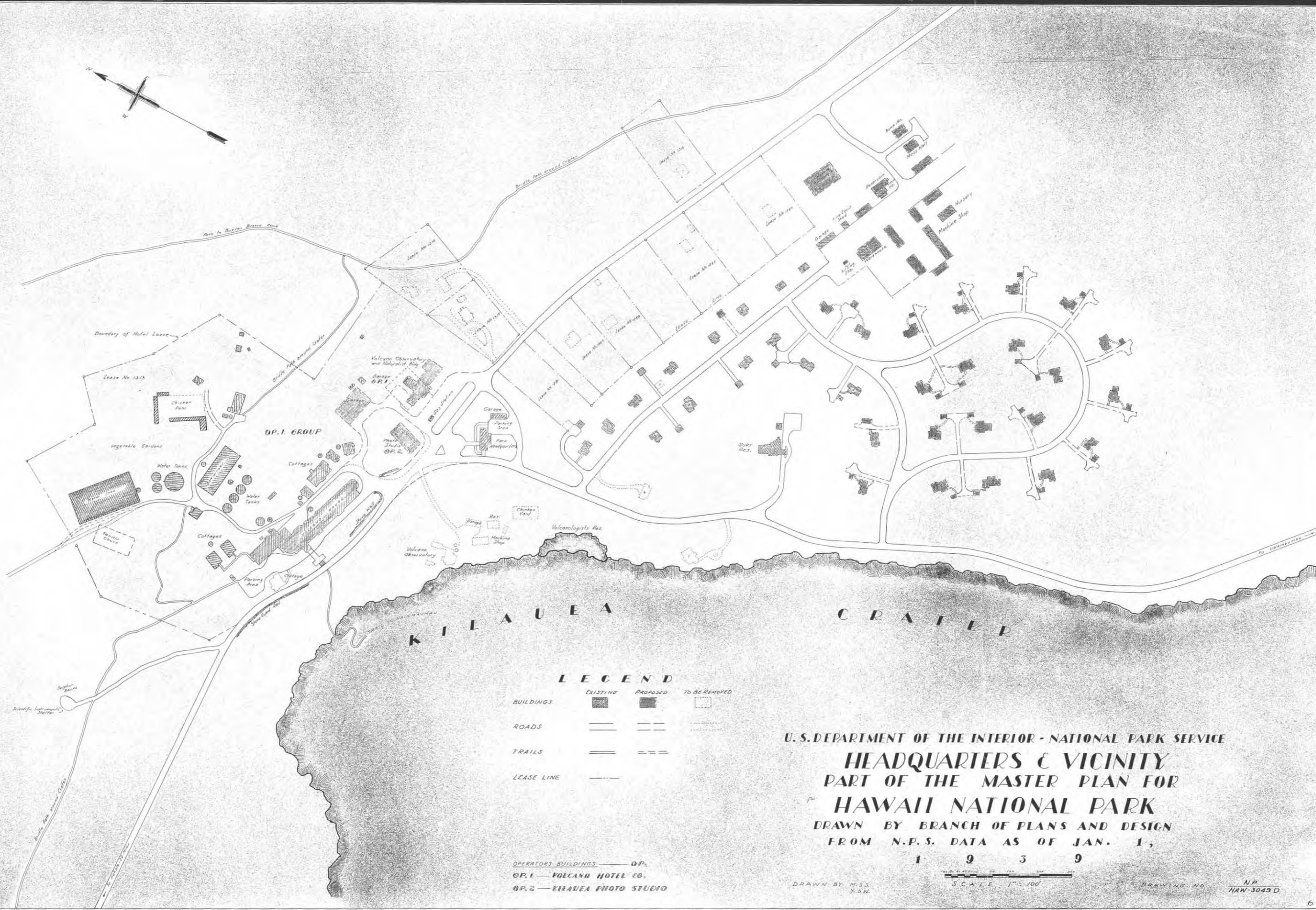
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HEADQUARTERS & VICINITY
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HAWAII NATIONAL PARK
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 FROM N.P.S. DATA AS OF JAN. 1,

1 9 3 8

SCALE 1" = 100'

DRAWN BY M.S.S.

DRAWING NO. NP HAW-3049 B



LEGEND

	EXISTING	PROPOSED	TO BE REMOVED
BUILDINGS			
ROADS			
TRAILS			
LEASE LINE			

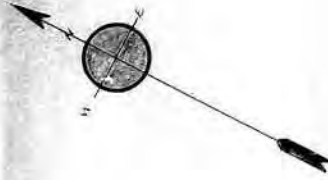
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 OP. 1 — VOLCANO HOTEL CO.
 OP. 2 — KILAUEA PHOTO STUDIO

U. S. DEPARTMENT OF THE INTERIOR - NATIONAL PARK SERVICE
HEADQUARTERS & VICINITY
 PART OF THE MASTER PLAN FOR
HAWAII NATIONAL PARK
 DRAWN BY BRANCH OF PLANS AND DESIGN
 FROM N. P. S. DATA AS OF JAN. 1,
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DRAWN BY M. S. Y. S. H.

SCALE 1" = 100'

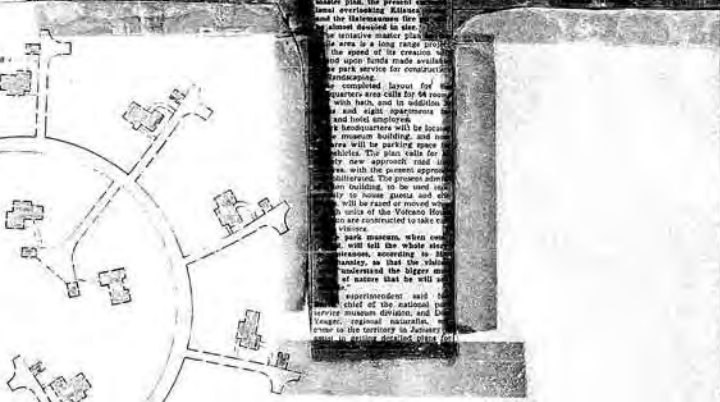
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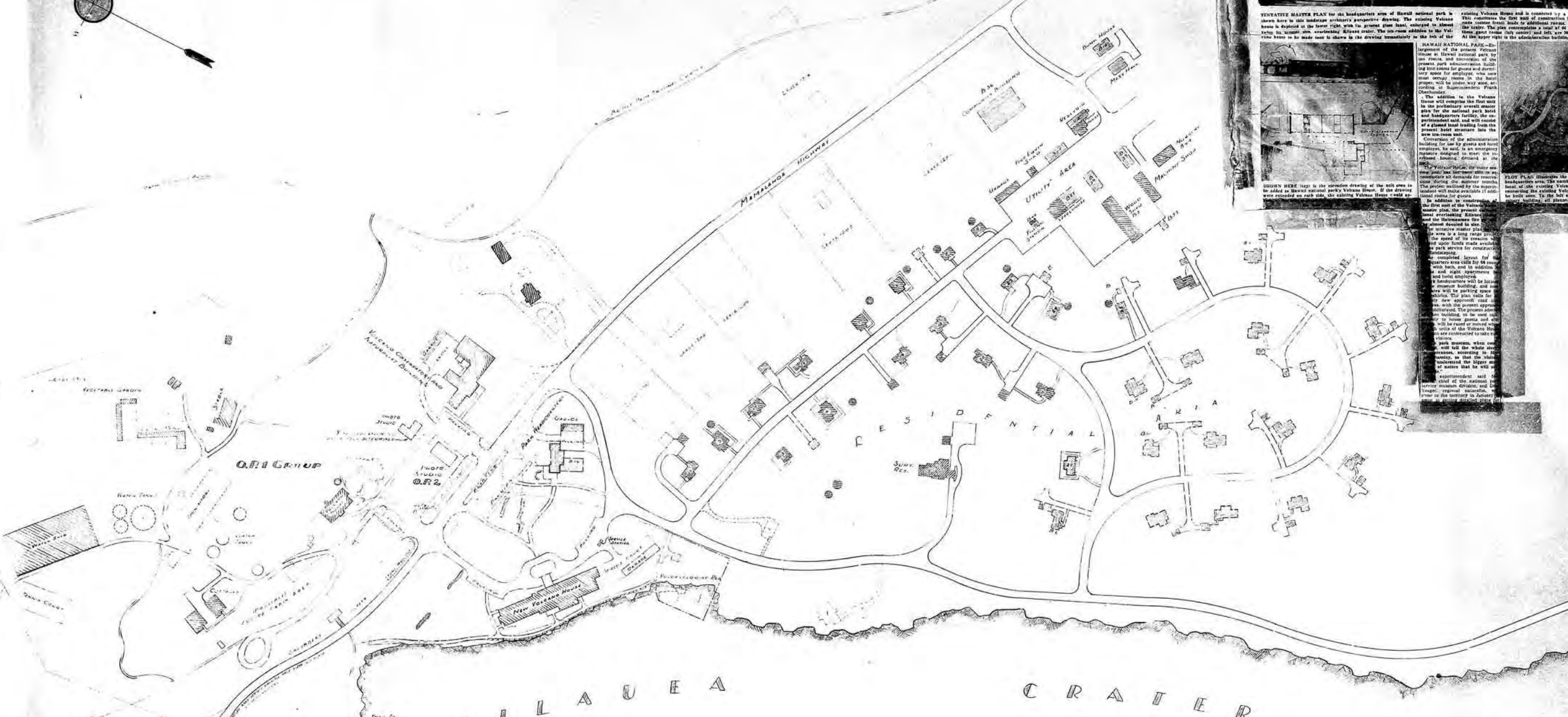
EXISTING MASTER PLAN for the headquarters area of Hawaii National Park is shown here in this landscape architectural perspective drawing. The existing Volcano House is depicted at the lower right, with its ground floor level, colored in brown, to be removed and replaced by a new building. The new building is shown in white and is to be constructed on the site of the existing Volcano House and is to be constructed in a landscape architectural style. This contains the first part of construction in the master plan. A revised ground plan is shown at the lower right, with its ground floor level, colored in brown, to be removed and replaced by a new building. The new building is shown in white and is to be constructed on the site of the existing Volcano House and is to be constructed in a landscape architectural style. At the upper right is the administration building, which will include the park museum.



HAWAII NATIONAL PARK—Development of the present Volcano House at Hawaii National Park by the present park administration building and a new building for the park museum. The new building will be constructed on the site of the existing Volcano House and is to be constructed in a landscape architectural style. The present park administration building will be converted into a museum and will contain a museum of the park's history. The new building will be constructed on the site of the existing Volcano House and is to be constructed in a landscape architectural style. The present park administration building will be converted into a museum and will contain a museum of the park's history. The new building will be constructed on the site of the existing Volcano House and is to be constructed in a landscape architectural style.



EXISTING MASTER PLAN (top) is the present drawing of the site area as it is now. The present drawing of the site area as it is now is shown in brown. The new building is shown in white and is to be constructed on the site of the existing Volcano House and is to be constructed in a landscape architectural style. The present drawing of the site area as it is now is shown in brown. The new building is shown in white and is to be constructed on the site of the existing Volcano House and is to be constructed in a landscape architectural style.



LEGEND

	EXISTING	PROPOSED	TO BE REMOVED
BUILDINGS			
ROADS			
TRAILS			
LEASE LINE			
GUARD RAIL			
FENCE			

OPERATORS BUILDINGS O.P.
 O.P. 1 VOLCANO HOTEL CO.
 O.P. 2 KILAUEA PHOTO STUDIO

**U.S. DEPARTMENT OF THE INTERIOR - NATIONAL PARK SERVICE
 HEADQUARTERS & VICINITY
 PART OF THE MASTER PLAN FOR
 HAWAII NATIONAL PARK
 DRAWN BY BRANCH OF PLANS AND DESIGN
 FROM N.P.S. DATA AS OF JAN. 1,
 1941**

Drawn By M. S. L.M. 11

Scale 1" = 100'

Drawing No.

3049E
 NP
 HAW-3049E



Azalea sp. (exotic)



Fuschia sp. (exotic)



Camelia sp. (exotic)



Iris sp. (exotic)

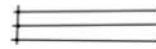


Hapu'u (Cibotium sp.) (endemic)

FH fire hydrant



Hydrangea (H. macrophylla) (exotic)



clothesline



Koa (Acacia koa) (endemic)



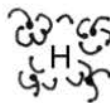
propane tank



O'hia (Metrasideros polymorpha) (endemic)



picnic table



Hibiscus sp. (endemic)



water line



Ti/Ki (Cordyline fruticosa) (Polynesian introduced)



Sandalwood/Illiahi (Santalum sp.) (endemic)



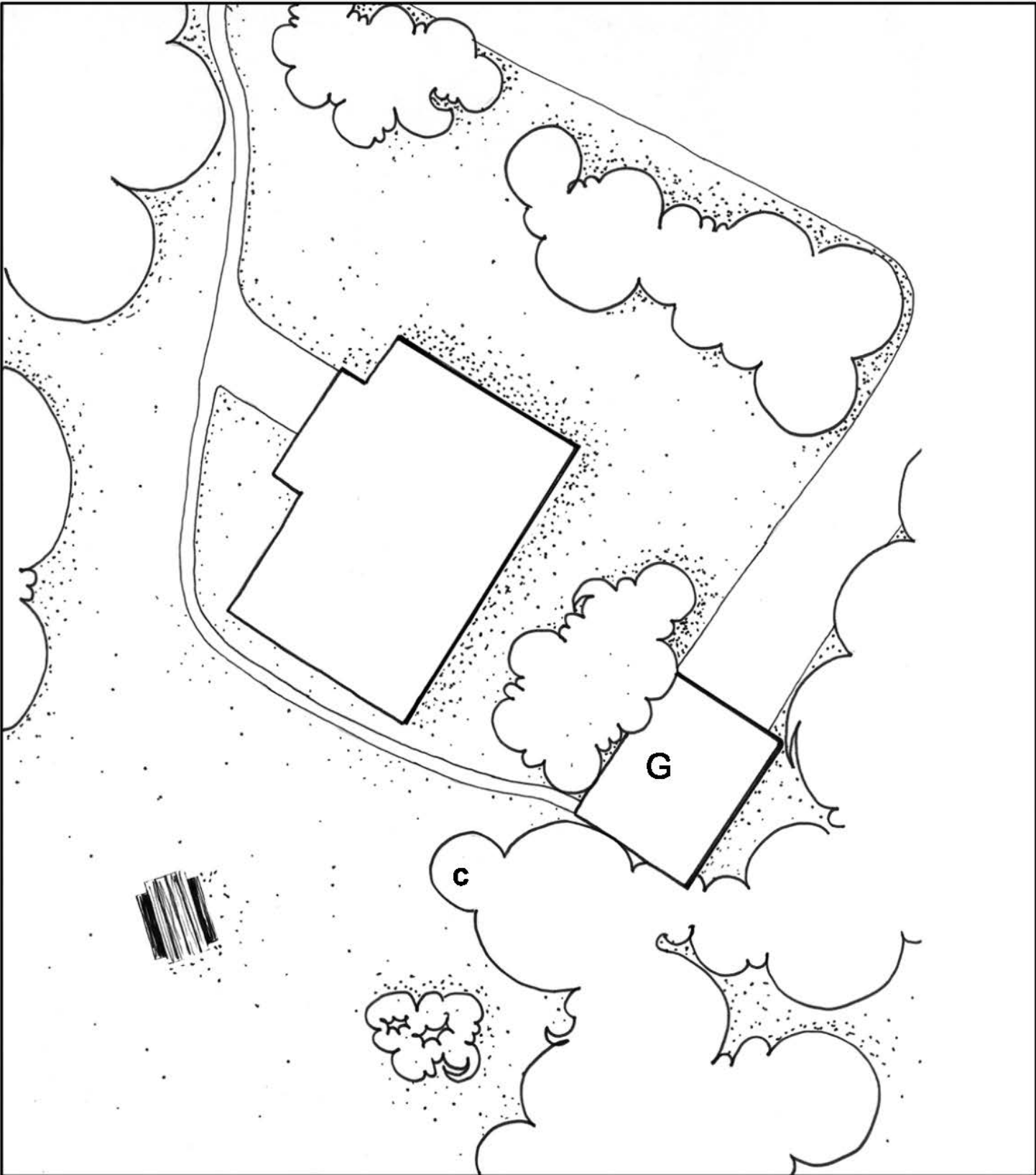
Rosa sp. (exotic)



Lawn (exotic)

Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Site Map Legend

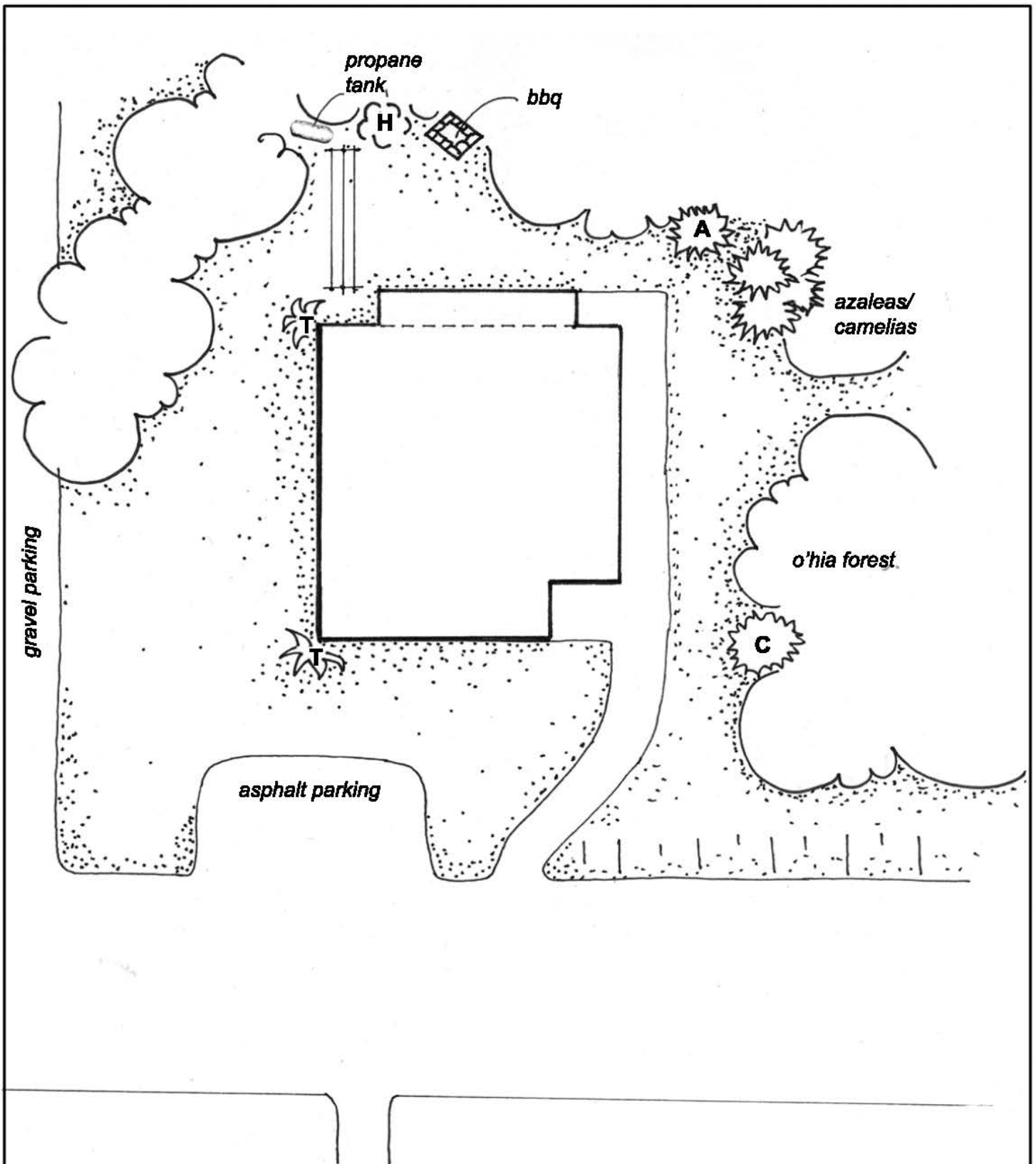


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 3



not to scale

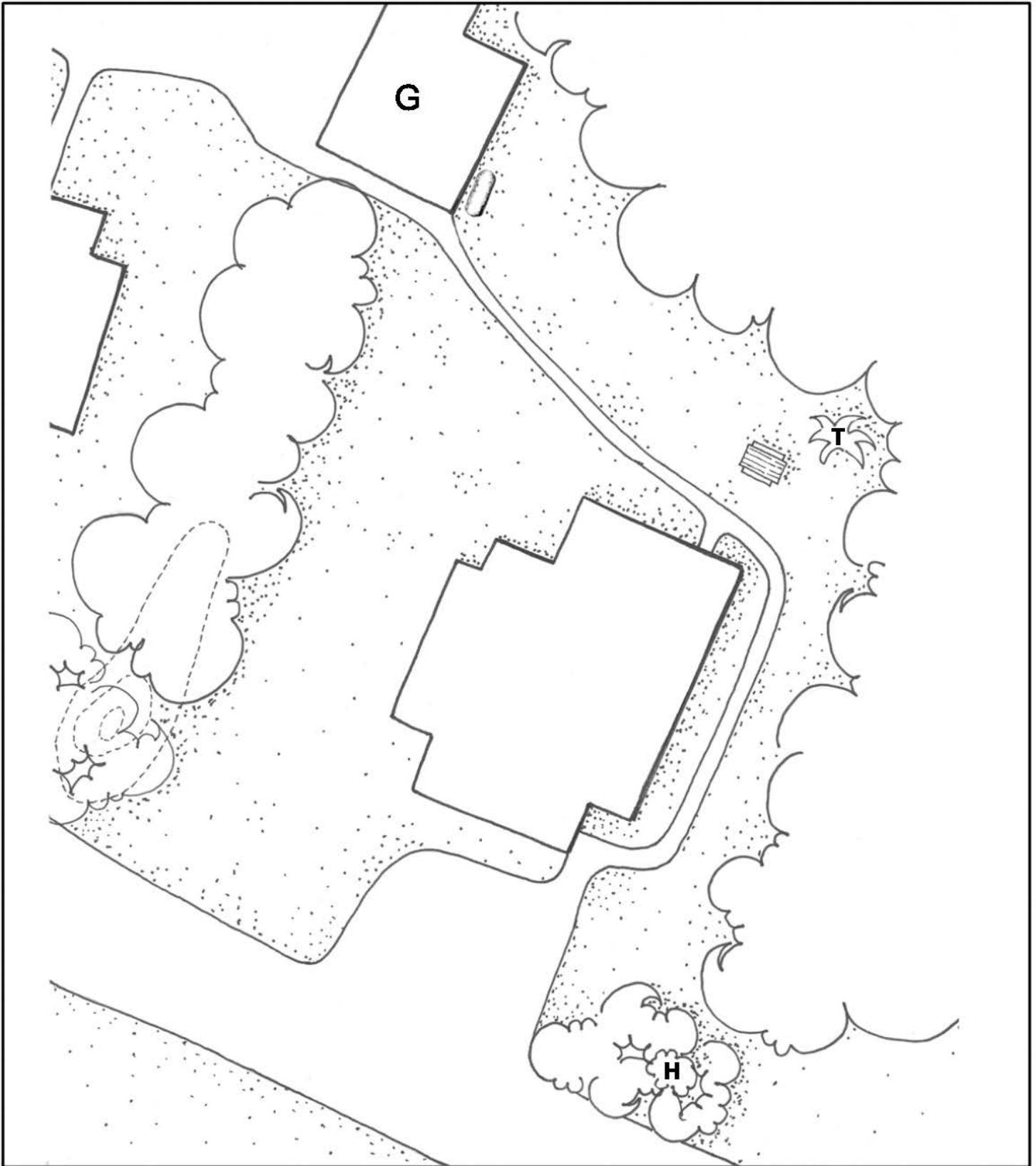


Hawaii Volcanoes National Park
 Kilauea Employee Housing and Administration Historic District

Employee Quarters 4



not to scale

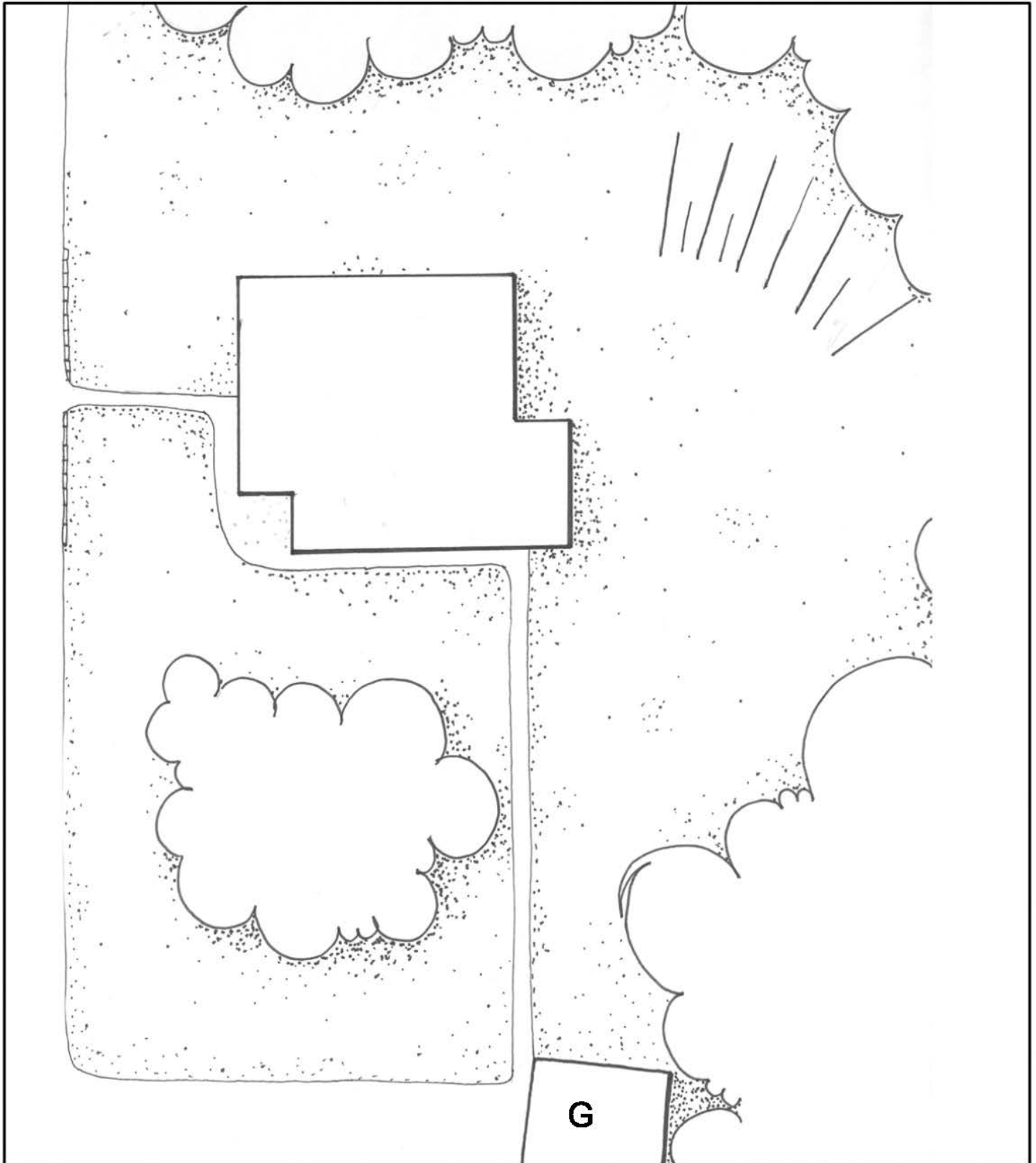


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 5



not to scale

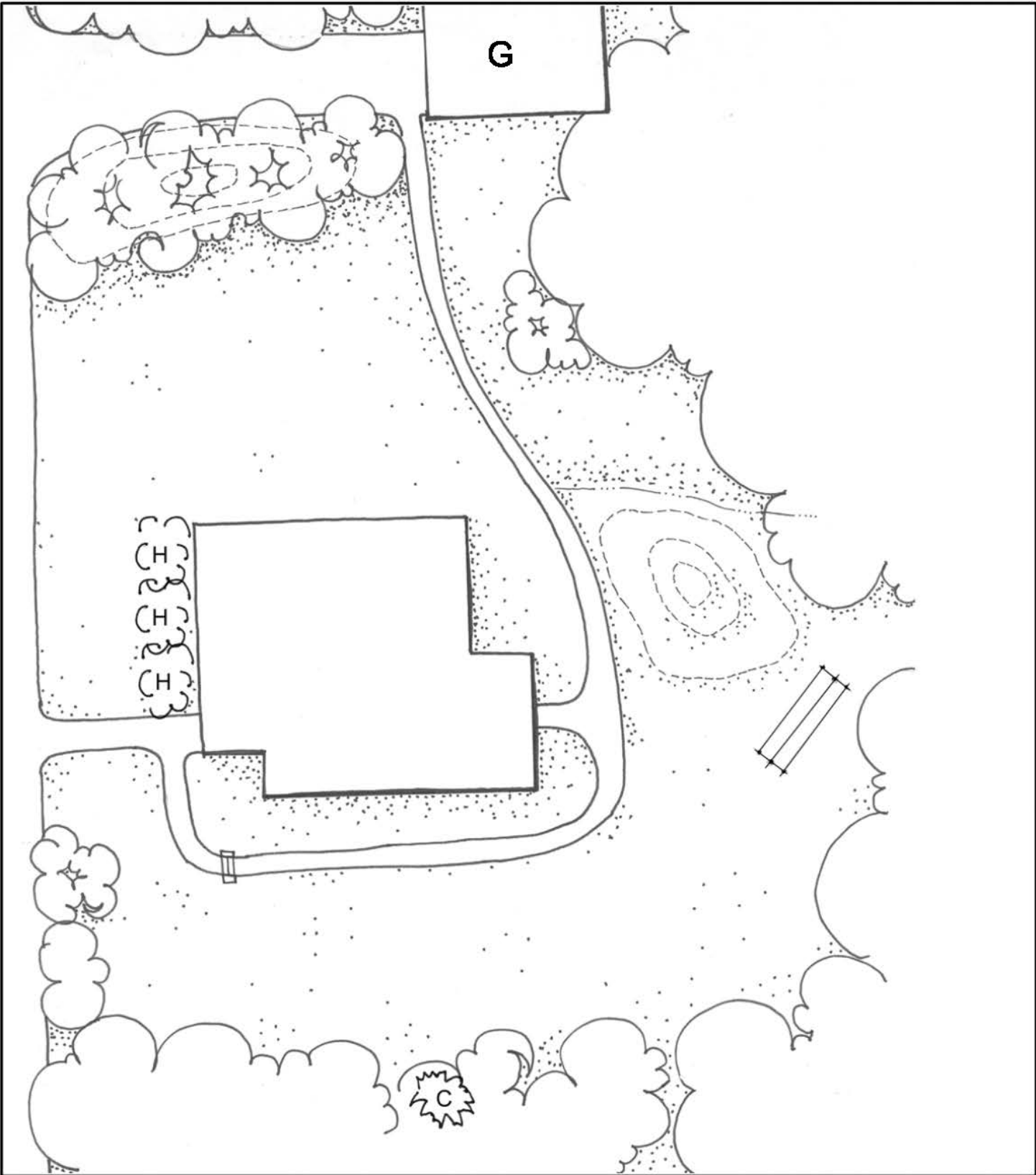


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 6



not to scale

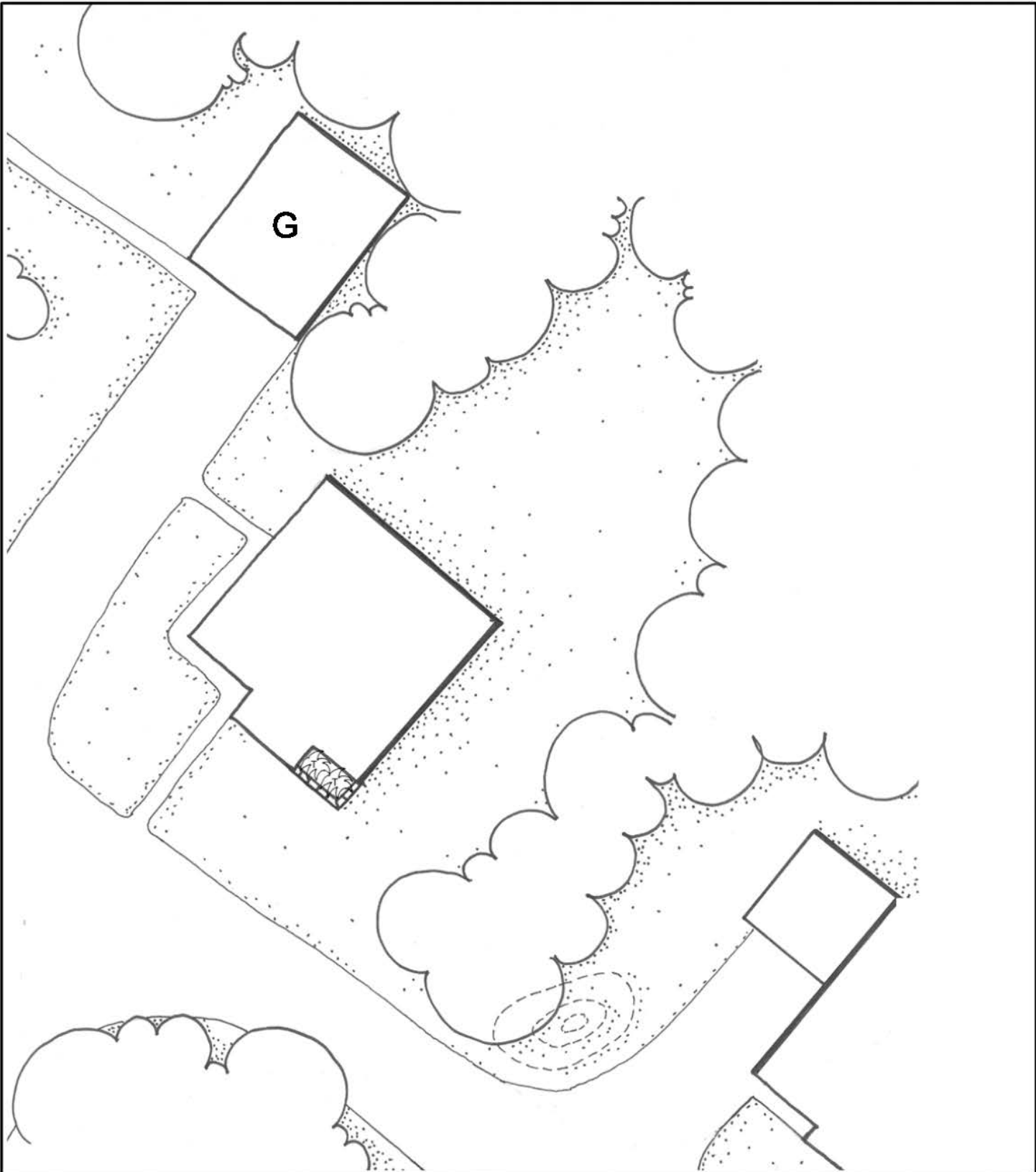


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 7



not to scale

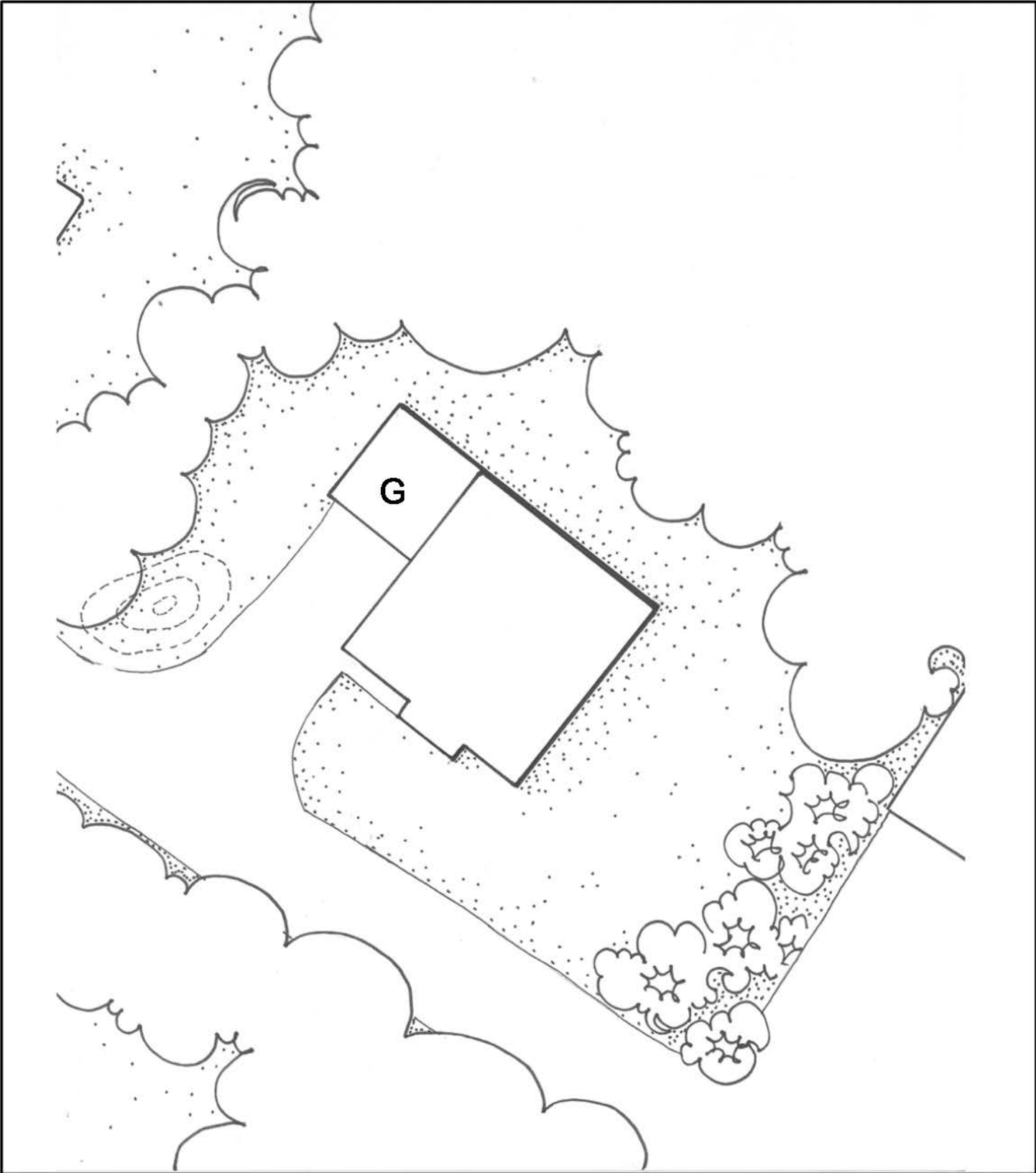


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 8



not to scale

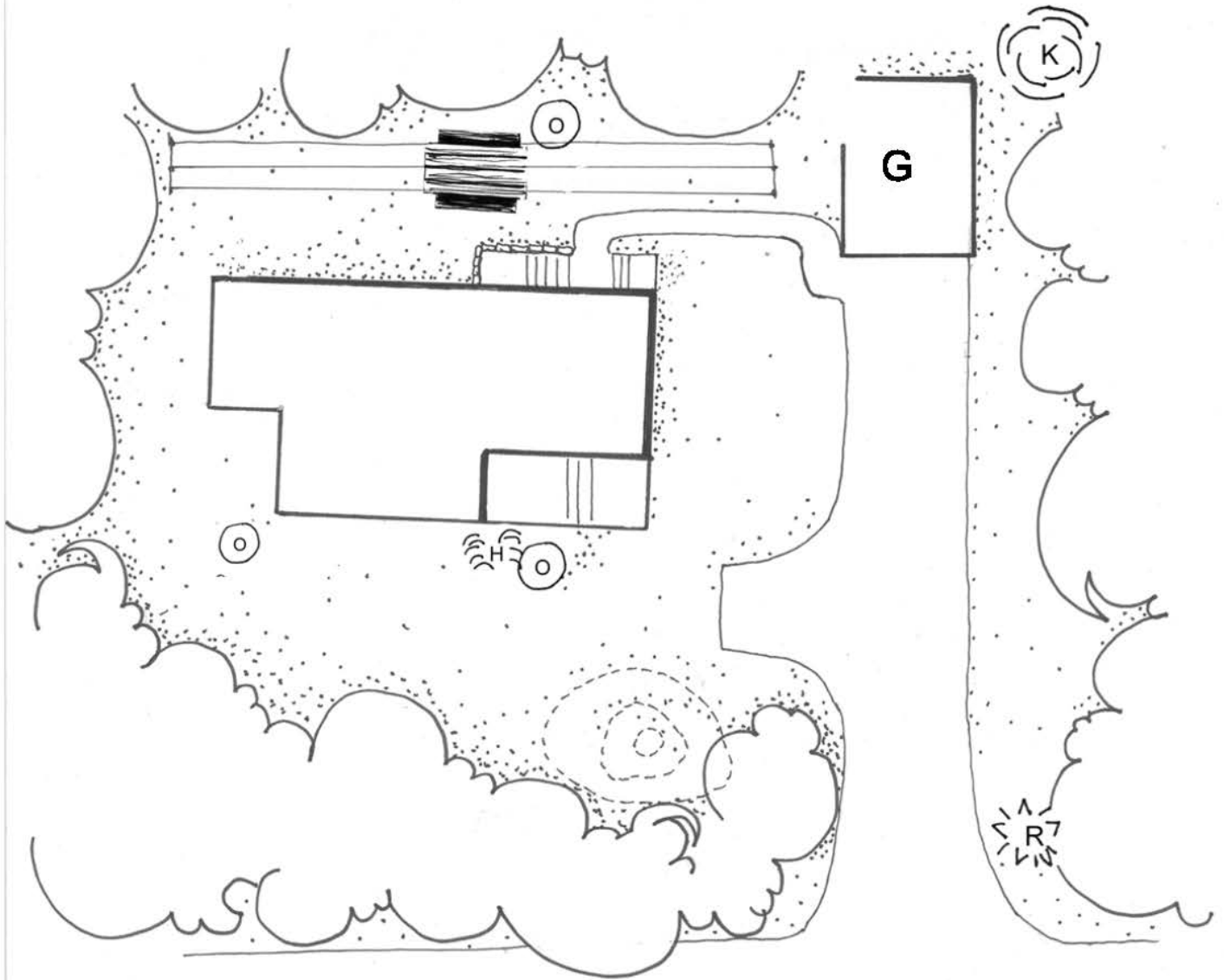


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 9



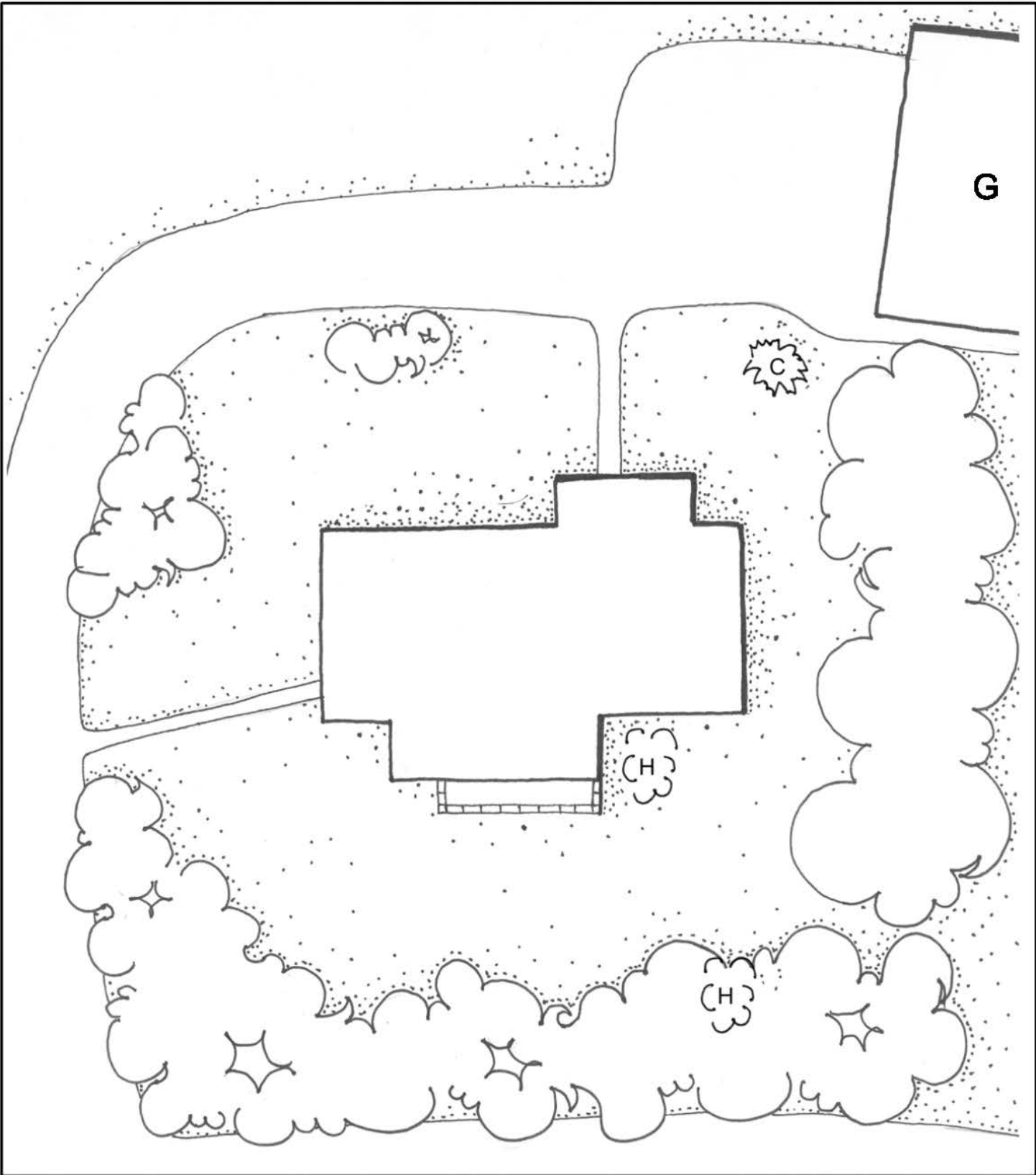
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Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 13



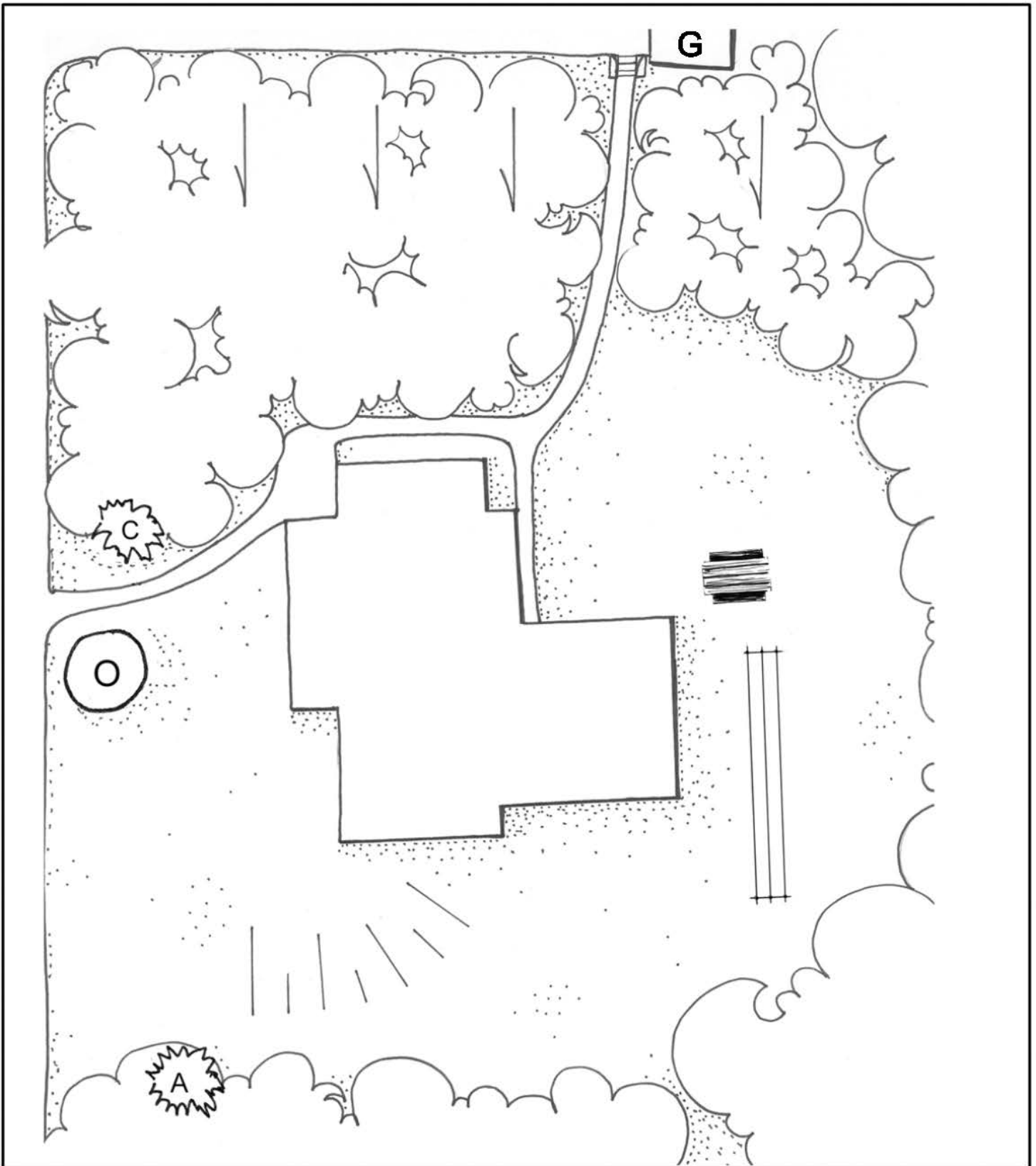


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 15



not to scale

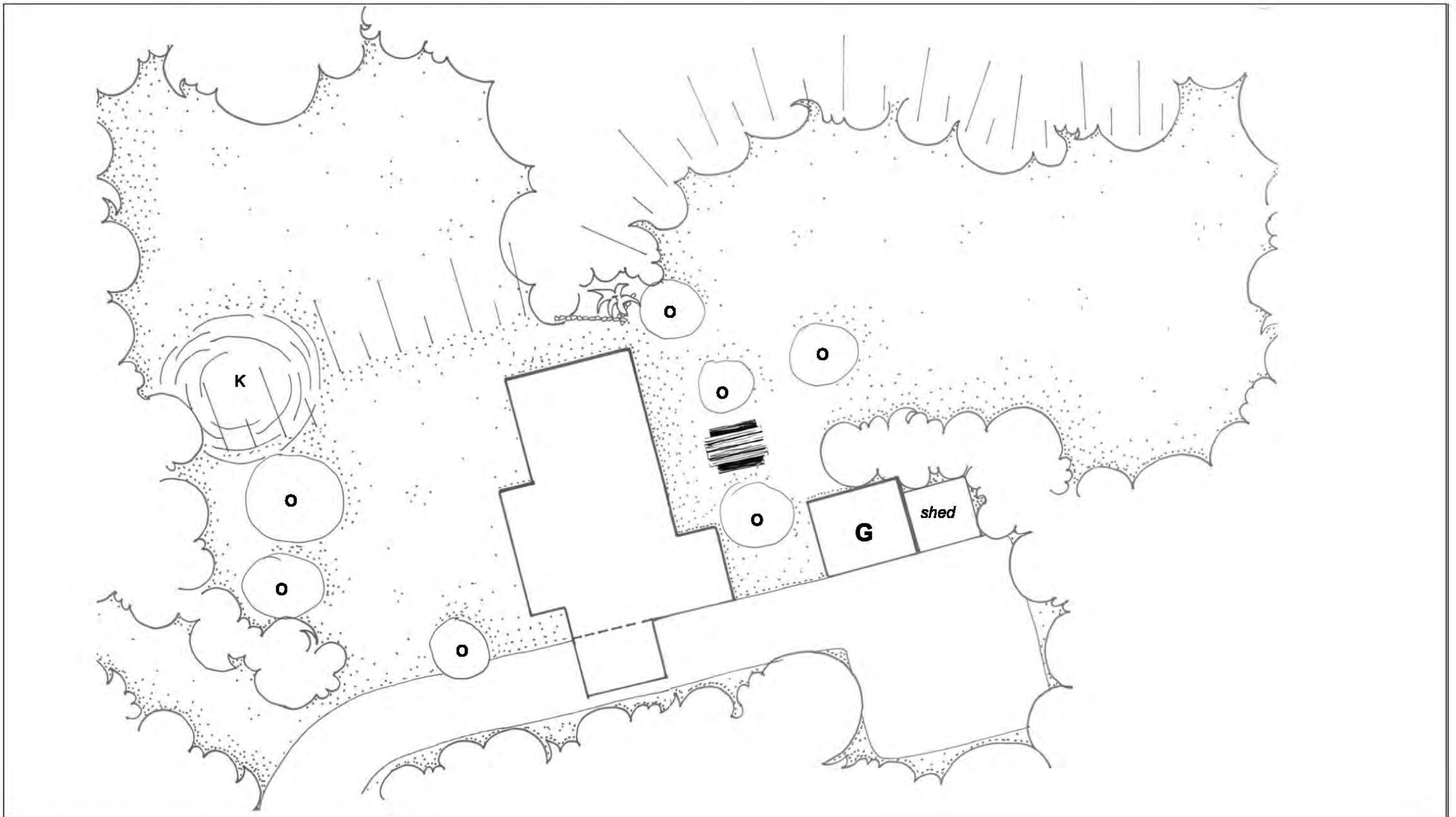


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 16



not to scale



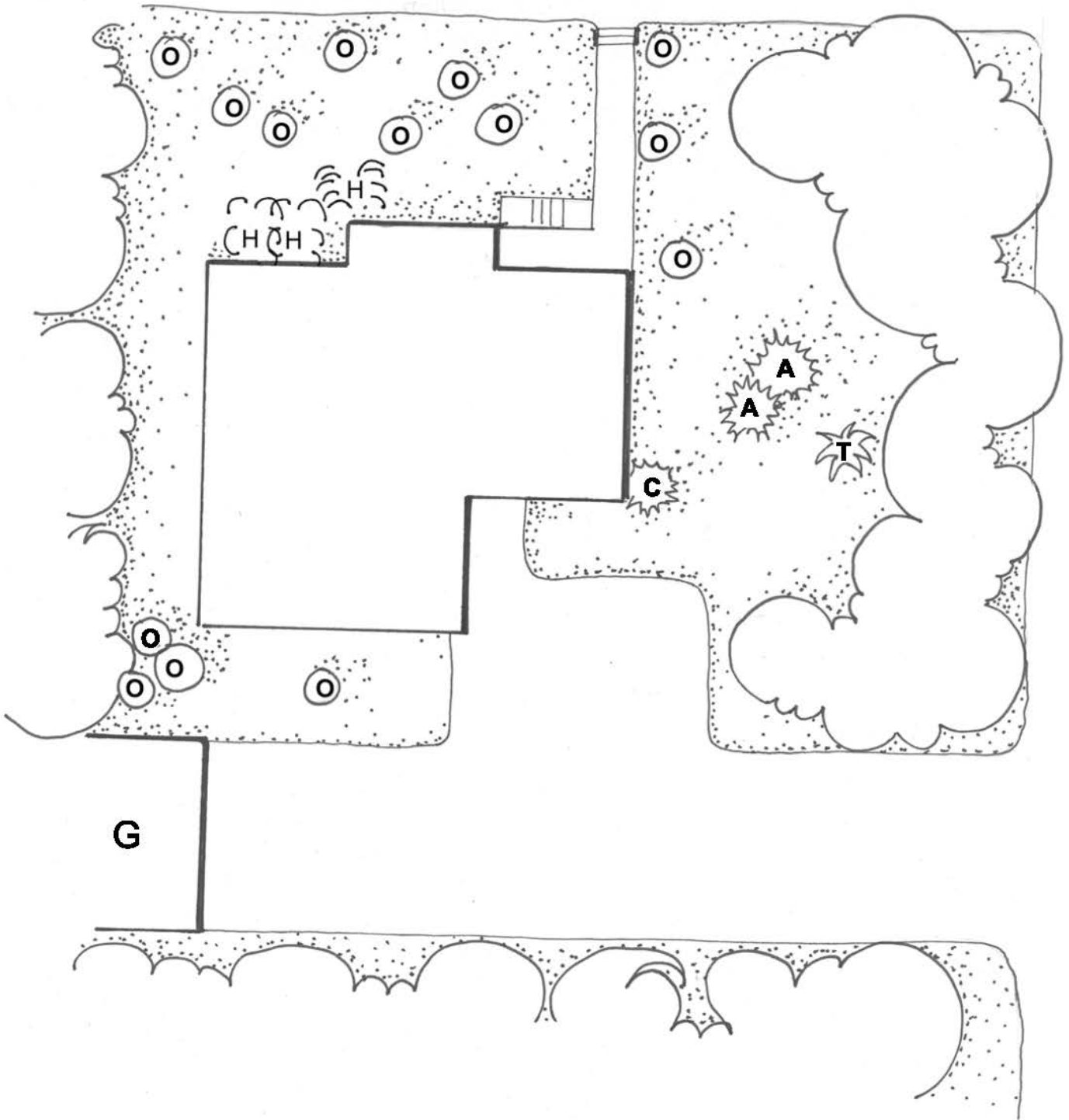
Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 17



not to scale

⊕ FH

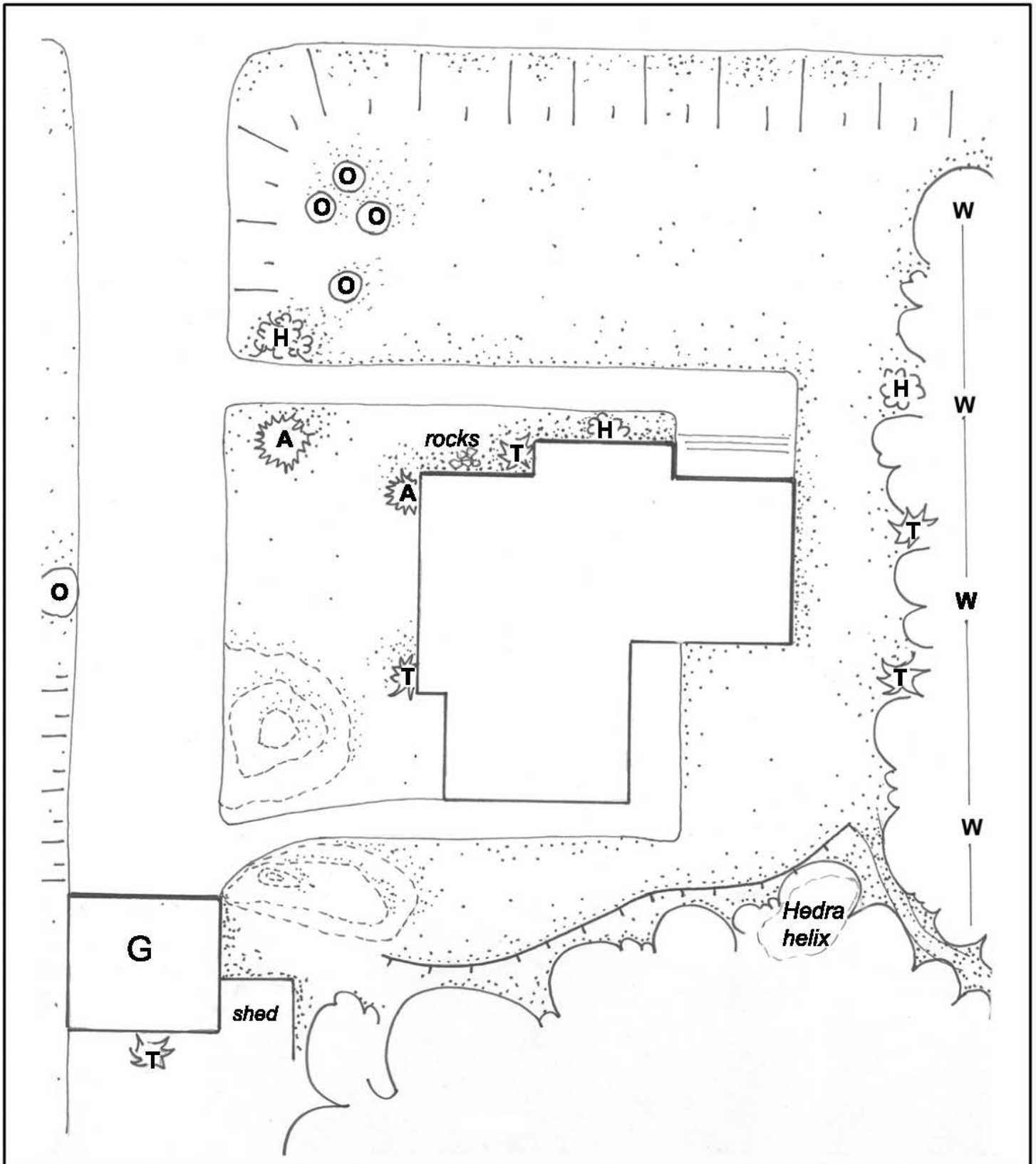


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 18



not to scale

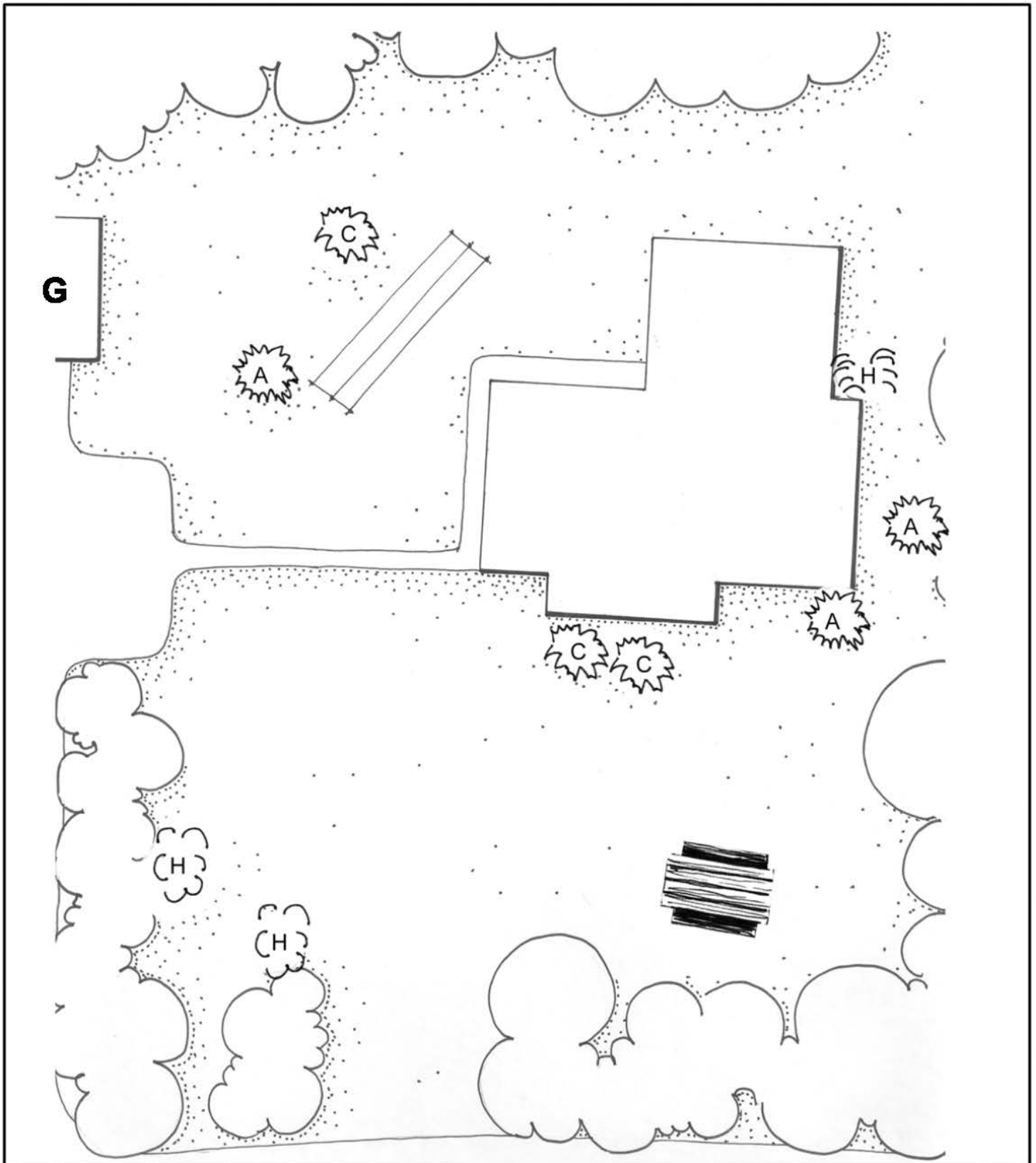


Hawaii Volcanoes National Park
 Kilauea Employee Housing and Administration Historic District

Employee Quarters 19



not to scale

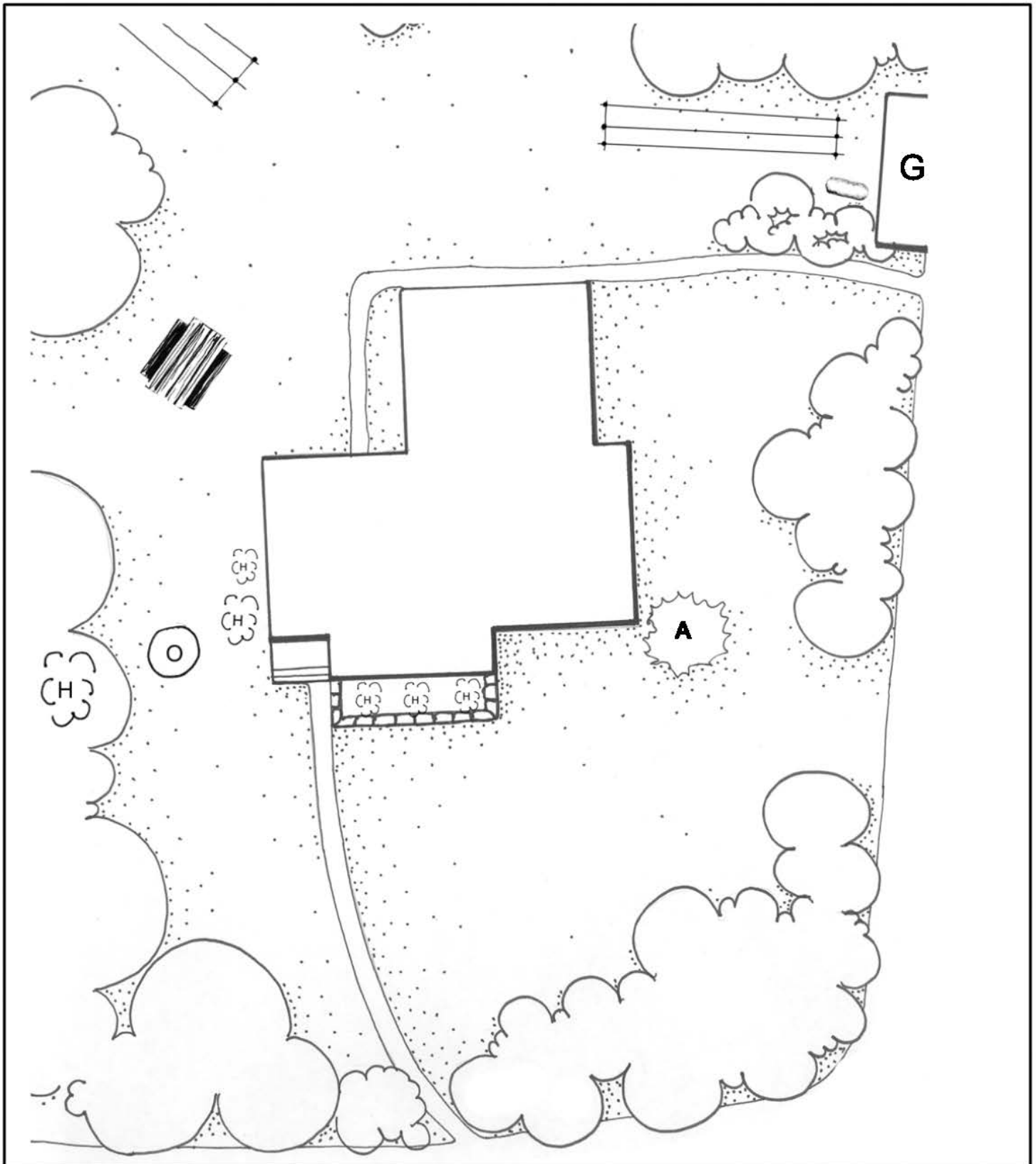


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 20



not to scale

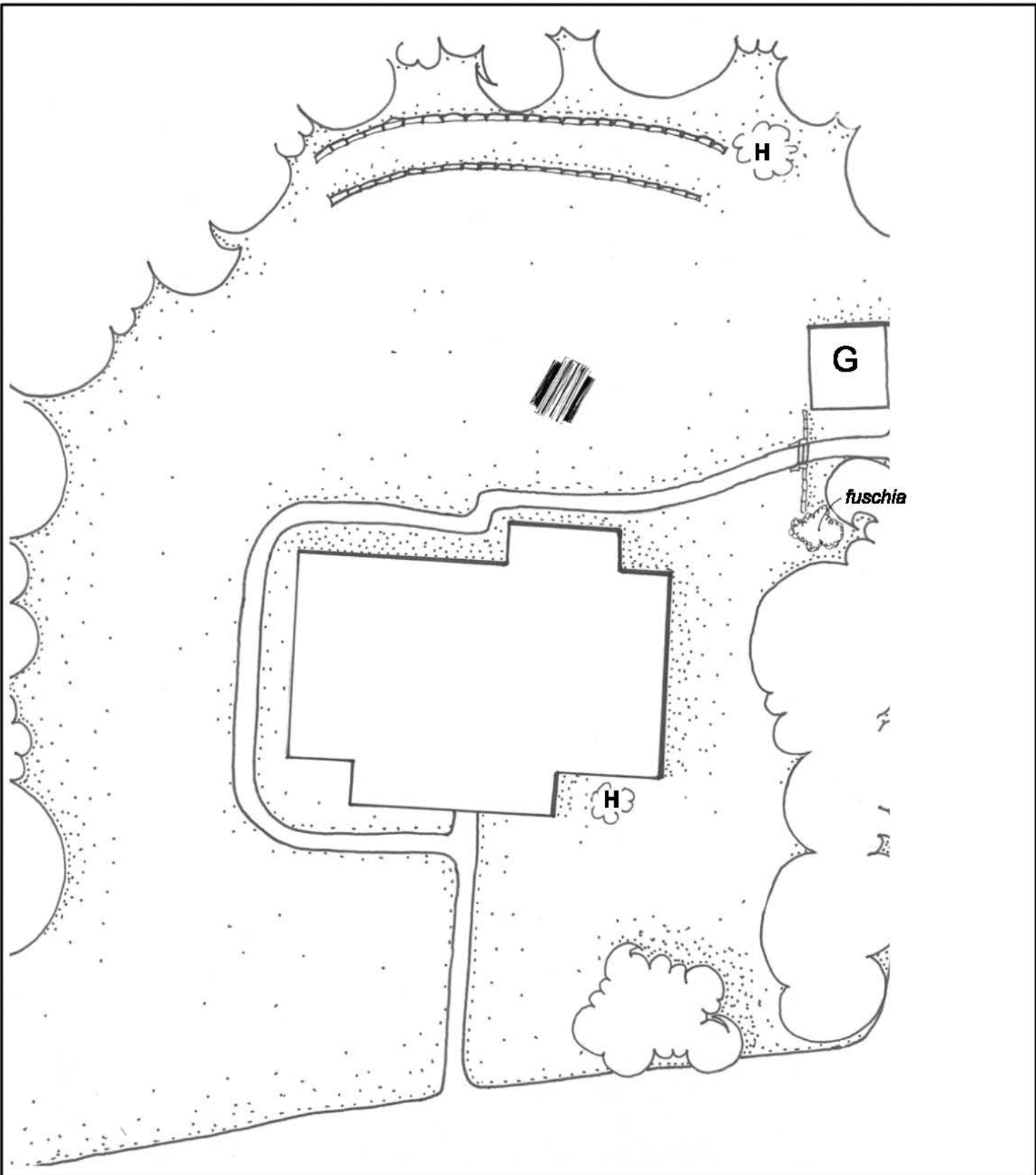


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 21



not to scale

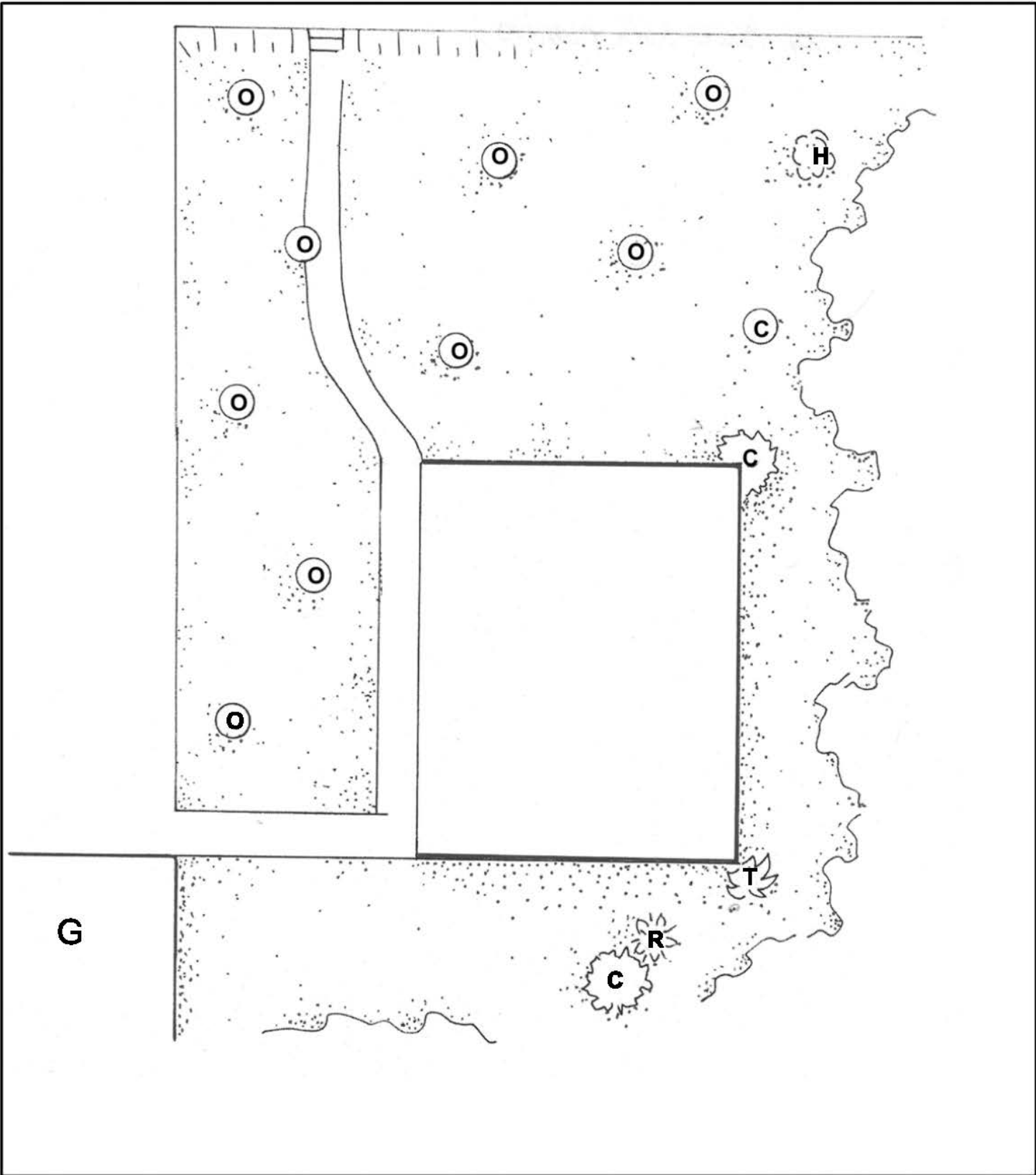


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 22



not to scale

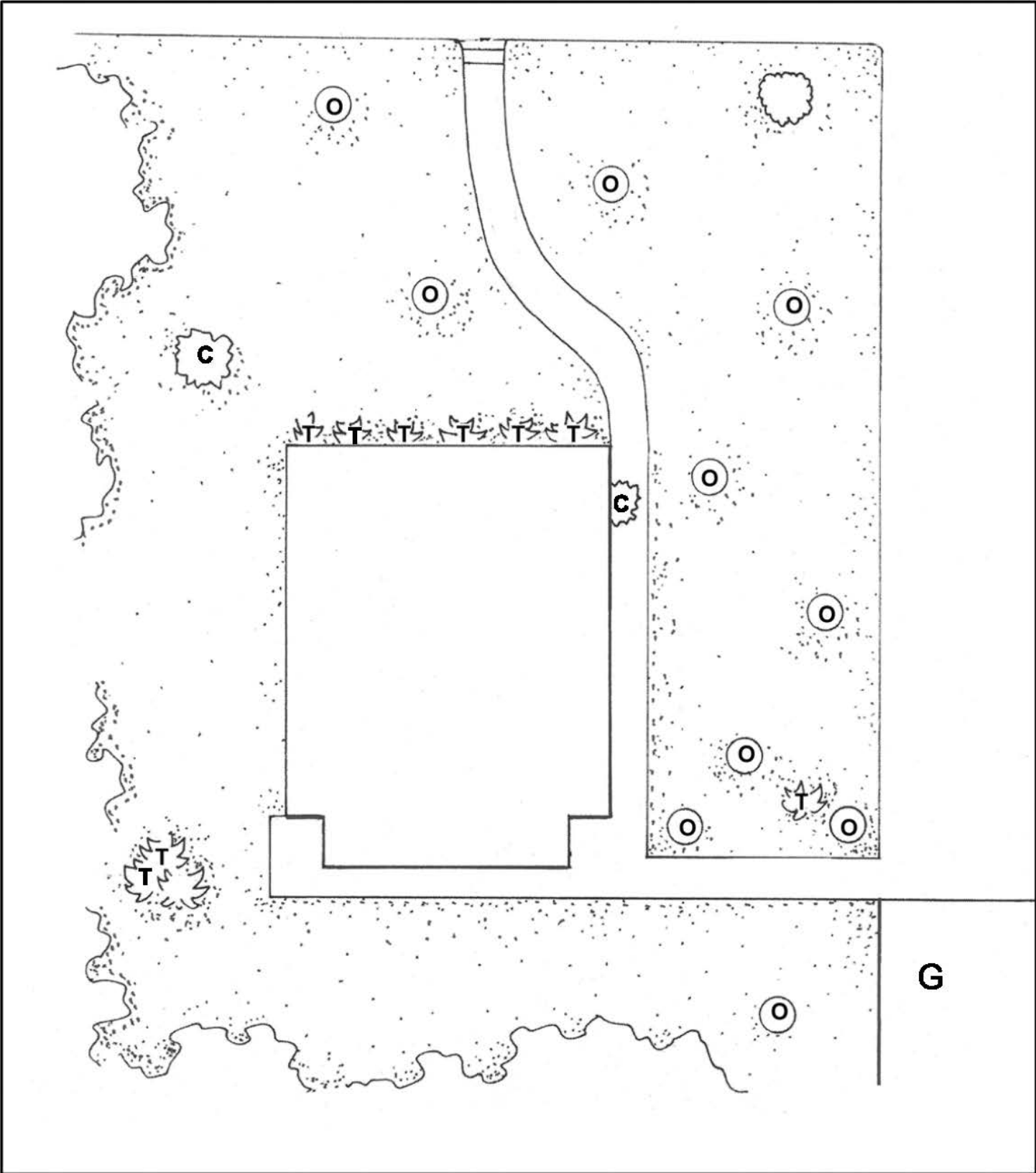


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 23



not to scale

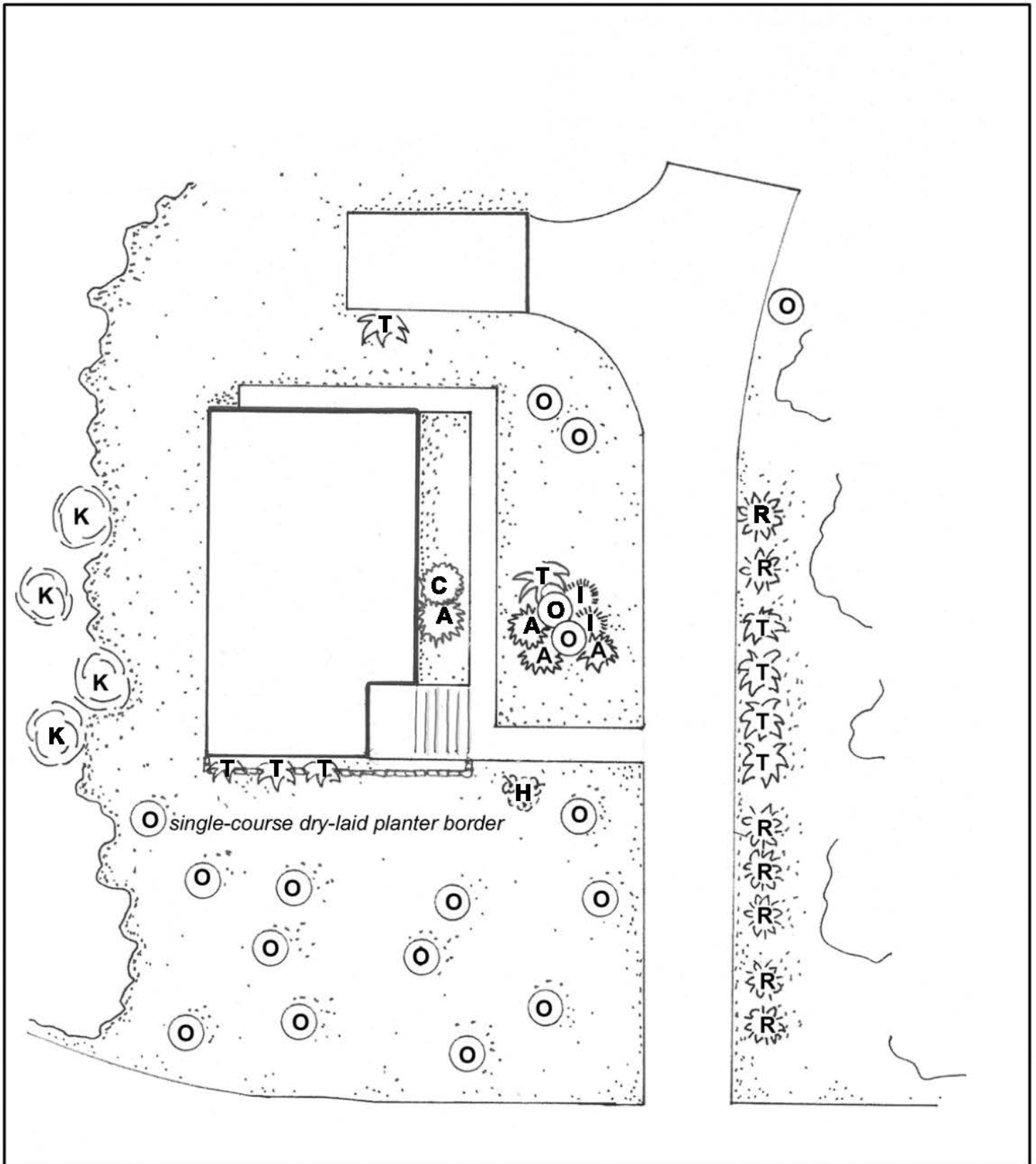


Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 24



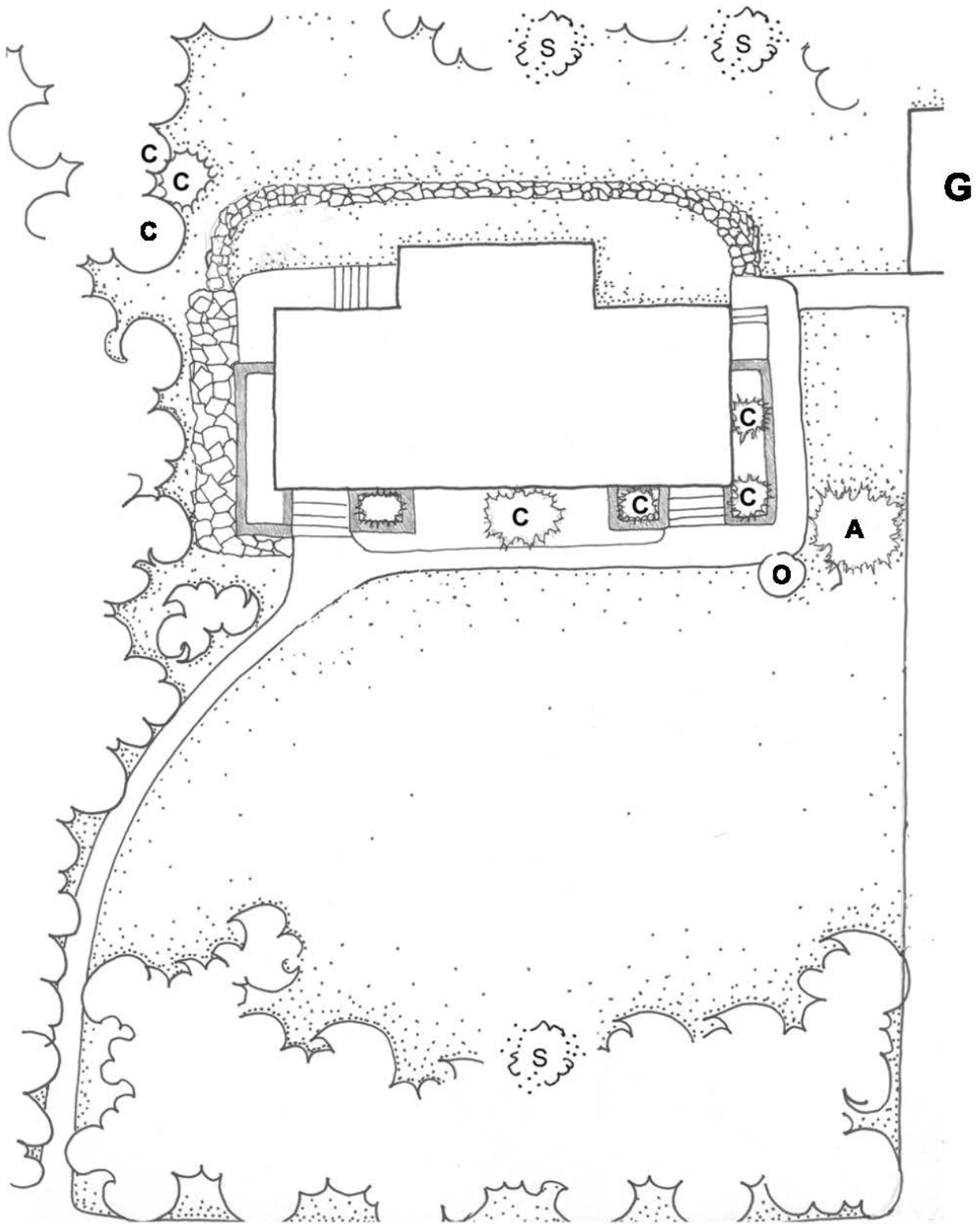
not to scale



Hawaii Volcanoes National Park
 Kilauea Employee Housing and Administration Historic District

Employee Quarters 25





Hawaii Volcanoes National Park
Kilauea Employee Housing and Administration Historic District

Employee Quarters 27



not to scale